

<u>NEW</u>	<u>EXISTING</u>
TOC	
-SS-	SS
-SD-	SD
-W-	W
-IRR-	IRR
-OHP-	OHP
-UG-	UG
-GAS-	GAS
-T-	T
CATV	CATV
FO	FO

NEW	EXISTING

BOC	BAR & CAP	PUE	PUBLIC UTILITY EASEMENT
BOW	BOTTOM OF VISIBLE WALL	R	RADIUS OF CURVE
COR.	SECTION CORNER	RR	RAILROAD
CB	CATCH BASIN	ROW	RIGHT-OF-WAY
CF	CUBIC FEET	R/W	RIGHT-OF-WAY
D	DELTA ANGLE	SSMH	SEWER MANHOLE
EGW	EXISTING GROUND	SD	STORM DRAIN
EOA	EDGE OF ASPHALT	SF	SQUARE FEET
EOC	EDGE OF CONCRETE	TBC	TOP BACK OF CURB
EX	EXISTING	TMH	TELEPHONE MANHOLE
FFE	FINISH FLOOR ELEVATION	TOA	TOP OF ASPHALT
FG	FINISHED GRADE	TOC	TOP OF CONCRETE
FH	FIRE HYDRANT	TOF	TOP OF FOOTING
FL	FLOW LINE	TOE	TOE OF SLOPE
GB	GRADE BREAK	TOG	TOP OF GRATE
GW	GUY WIRE	TOP	TOP OF SLOPE
HW	HEAD WALL	TOW	TOP OF WALL
I.E.	INVERT ELEVATION	TR	TELEPHONE RISER
LP	LENGTH OF CURVE	UGP	UNDERGROUND POWER
L	LIP OF CURB	VPC	VERTICAL POINT OF CURVATURE
LF	LINEAR FEET	VPI	VERTICAL POINT OF INTERSECTION
LP	LOW POINT		
M-M	MONUMENT TO MONUMENT		
MH	MANHOLE	VPT	VERTICAL POINT OF TANGENCY
MON.	SURVEY MONUMENT	WM	WATER METER
OHP	OVERHEAD POWER	WW	WATER VALVE
PVC	POINT OF CURVATURE		
PVI	POINT OF INTERSECTION		
PP	POWER POLE		
PVT	POINT OF TANGENCY		

ALL MATERIALS AND CONSTRUCTION IN THE PUBLIC RIGHT OF WAY SHALL BE IN ACCORDANCE WITH RESPONSIBLE DESIGN OR AGENCY.

2. CONTRACTOR AND APPLICABLE SUBCONTRACTORS SHALL ATTEND ALL PRE-CONSTRUCTION CONFERENCES AND PERIODIC PROGRESS MEETINGS. FOR ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT RESPONSIBLE DISTRICT OR AGENCY FOR A PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL ALSO NOTIFY THE APPROPRIATE PROJECT CONTRACTS (48) HOURS IN ADVANCE OF ANY MEETING.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC SAFETY AND OSHA STANDARDS.

4. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS, THE GEOLOGY REPORTS AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK. CONTRACTOR SHALL INSPECT THE SITE OF WORK PRIOR TO BIDDING TO SATISFY HIMSELF AS TO THE ACCURACY OF THE INFORMATION AND/OR SURVEY DATA, THE PRESENCE OR THE LOCATION OF PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK.

CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR COMMENTS.

SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT: IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF: (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATERIALS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.

THE INFORMATION PROVIDED BY THE OWNER OR 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 THEY HAVE NO RELIANCE UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.

5. ALL WORK SHALL COMPLY WITH THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA) MANUAL OF STANDARD SPECIFICATIONS 2017 EDITION AND THE MANUAL OF STANDARD PRACTICES 2017 EDITION, SA2 STANDARD SPECIFICATIONS AND PLANS SHALL BE SUBSIDIARY TO MORE STRINGENT REQUIREMENTS BY APPLICABLE LOCAL JURISDICTION.

6. THE 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. IT SHALL BE EXPECTED THAT THE 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 THEIR TRUE INTENT AND PURPOSE.

THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS ON THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN CRITICAL AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE CHALLENGES TO THE CONSTRUCTION PROGRAM. UNUSUAL, OR PRACTICALLY UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO DEVELOP AND APPLY APPROPRIATE PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLY WITH STANDARD SPECIFICATIONS AND PLANS PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY RIGHT-OF-WAY, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL OBTAIN WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE. THE CONTRACTOR SHALL NOTIFY CITY, COUNTY, AND/OR STATE, 24 HOURS IN ADVANCE OF COMMUNICATING THE WORK, AND/OR AS REQUIRED BY SADO PERMITS.

CONCRETE PLACEMENT SHALL BE CONTINUOUS BETWEEN CONSTRUCTION JOINTS. CONSTRUCTION JOINTS SHALL BE PLACED FOR SLAB-ON-GRADE SUCH THAT THE MAXIMUM DISTANCE BETWEEN JOINTS IS 20 FEET IN EITHER DIRECTION FOR LIGHT DUTY TRAFFIC AND 12 FEET IN EITHER DIRECTION FOR HEAVY DUTY TRAFFIC.

IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER AND/OR ENGINEER.

ALL WORK OUTSIDE THE SCOPE OF THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RESPONSIBLE DESIGN. THESE PLANS DO NOT REPLACE ANY STRUCTURAL, ARCHITECTURAL, OR MECHANICAL PLANS. SHOULD A DISCREPANCY EXIST BETWEEN THESE PLANS AND THE SET, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT BOTH PARTIES TO DETERMINE WHAT SHOULD BE CONSTRUCTED.

ALL STAIRS AND RAILINGS ARE DESIGNED BY OTHERS AND MUST COMPLY WITH THE ADA STANDARDS FOR ACCESSIBLE DESIGN. SA2 STANDARD SPECIFICATIONS AND PLANS SHALL BE SUBSIDIARY TO MORE STRINGENT REQUIREMENTS BY APPLICABLE LOCAL JURISDICTION.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES AND MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER. ALL RE-TESTING AND/OR REINSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

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 FOR THE WORK COVERED BY THESE PLANS. IF EXISTING IMPROVEMENTS AND ANYTHING THAT HAS ALREADY BEEN CONSTRUCTED, THERE WILL BE NO EXTRA COST TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS, WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SA2 PLANS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO, OR BETTER THAN THE MATERIALS REMOVED OR DAMAGED. BUILDING RECORD DRAWINGS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE LOCATION OF ALL MECHANICAL, ELECTRICAL, AND INSTRUMENTATION EQUIPMENT, PIPES AND CONDUITS, STRUCTURES AND OTHER FACILITIES. THE AS-BUILTS OF THE ELECTRICAL SYSTEM SHALL INCLUDE THE STREET LIGHT LAYOUT PLAN SHOWING LOCATION OF LIGHTS, CONDUCITS, CONDUCTORS, POINTS OF CONNECTIONS TO SERVICES, PULLBOARDS, AND THE LOCATION OF ALL ELECTRICAL EQUIPMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

15. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO ENGINEER ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND BUILD RECORD DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE ENGINEER. CHANGES AND DEVIATION REQUIRES AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

UTILITIES

16. CONTRACTOR TO SPACE UTILITIES TO PROVIDE MINIMUM DISTANCES AS REQUIRED BY LOCAL, COUNTY, STATE, AND INDIVIDUAL UTILITY CODES.

ALL SEWER LINE TO BE 12" DIA. PRESSURE TESTED TO 5 PSI VIDEO INSPECTED AND OTHERWISE TESTED IN ACCORDANCE WITH SEWER STANDARDS PRIOR TO PLACING IN SERVICE.

33. ALL SEWER PIPES ARE TO BE SDR 35 PVC PIPE.

34. SEWER MANHOLES, LATERALS & CLEANOUTS TO BE INSTALLED PER RESPONSIBLE DISTRICT OR AGENCY STANDARDS. THE COST OF ALL SEWER LATERALS, INCLUDING CONNECTION TO THE SEWER MAIN. THE CLEANOUT RISER FOR EACH SERVICE SHALL BE INSTALLED BY THE CONTRACTOR.

35. SEWER CLEANOUTS MUST BE INSTALLED AT A MINIMUM OF EVERY 50 L.F. FOR 4 INCH & LATERALS AND EVERY 100 L.F. FOR 6 INCH & LATERALS, OR PER THE RESPONSIBLE DISTRICT OR AGENCY STANDARDS, WHICHEVER IS MORE FREQUENT.

36. A SEWER CLEANOUT MUST BE INSTALLED 5 L.F. TO 10 L.F. FROM ANY PROPOSED STRUCTURE, OR PER THE RESPONSIBLE DISTRICT OR AGENCY STANDARDS.

37. ALL SEWER LATERAL BENDS AND ANGLES TO BE INSTALLED AS SWEEPING BENDS WITH SEWER CLEANOUTS.

38. DURING CONSTRUCTION OF THE SEWERLINE, WYES NEED TO BE INSTALLED FOR THE LATERALS. LATERALS ARE 4" AND NEED TO BE AT THE TOP OF THE PIPE WITH A WYE. (SEE RESPONSIBLE DISTRICT OR AGENCY STANDARDS)

39. IT IS THE INTENT ON THESE PLANS THAT ALL SEWER PIPES SHALL SLOPE TO AN EXISTING SEWER CONNECTION VIA GRAVITY FLOW. CONTRACTOR TO START AT THE LOW END OF GRAVITY UTILITY LINES AND VERIFY THAT ALL INVERT ELEVATIONS PROVE SLOPE TO EXISTING CONNECTION VIA GRAVITY. SLOPES MUST MEET OR EXCEED THE SEWER DISTRICT'S MINIMUM STANDARDS. NOTIFY ENGINEER IF THERE ARE DISCREPANCIES THAT WOULD CAUSE THE SEWER UTILITY NOT TO DRAIN VIA GRAVITY ON THE SITE.

WATER

40. WATERLINES TO BE PVC 8"00. WATER LINES SHALL BE A MINIMUM OF 10' HORIZONTALLY FROM SEWER MAINS. CROSSINGS SHALL MEET STATE HEALTH STANDARDS. (MECHANICAL JOINTS REQUIRED WHEN LESS THAN 18" VERTICAL OR TEN FEET HORIZONTAL SEPARATION FROM SEWERLINE.)

41. ALL WATERLINES SHALL BE 8" MINIMUM SIZE AND SERVICE LATERALS SHALL BE 1-1/2" MINIMUM UNLESS OTHERWISE NOTED.

42. WATER SERVICE LATERALS TO INCLUDE ALL BRASS BASKET, CORP. STOP LATERAL, DOUBLE CHECK VALVE AND BACKFLOW PREVENTION DEVICE. AND SHUTOFF VALVE IN BOX NEAR BUILDING EDGE.

43. ALL WATERLINES SHALL BE 48" BELOW FINISH GROUND TO TOP OF PIPE. ALL WATER BOXES AND MANHOLES SHALL BE RAISED TO FINISH GROUND AND SHALL INCLUDE A CONCRETE COLLAR IN PAVED AREAS. ALL WATER LINES SHALL BE PERFORMED ABOVE GROUND UTILITY OR ROPED PER RESPONSIBLE DISTRICT OR AGENCY INSPECTOR.

44. CONTRACTOR TO NOTIFY RESPONSIBLE DISTRICT OR AGENCY FOR CHLORINE TEST PRIOR TO FLUSHING LINES. CHLORINE LEFT IN PIPE 24 HOURS. MINIMUM WITH 25 PPM RESIDUAL. ALL TURNING OF MAINLINE VALVES, CHLORINATION, FLUSHING, PRESSURE TESTING, BACKFLUSH TESTING, ETC. TO BE COORDINATED WITH RESPONSIBLE DISTRICT OR AGENCY. ALL TESTS TO BE IN ACCORDANCE WITH RESPONSIBLE DISTRICT OR AGENCY.

45. BOTTOM FLANGE OF FIRE HYDRANTS TO BE SET TO APPROXIMATELY 4 INCHES ABOVE BACK OF CURB ELEVATION. HYDRANTS TO INCLUDE TEE, 6" LINE VALVE, AND HYDRANT COMPLETE TO MEET RESPONSIBLE DISTRICT OR AGENCY STANDARDS UNLESS OTHERWISE NOTED ON PLANS.

EXISTING UTILITIES

46. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITIES SHOWN OR NOT SHOWN. THE INFORMATION SHOWN ON THE PLANS WITH REGARDS TO THE EXISTING UTILITIES AND/OR IMPROVEMENTS WAS DERIVED FROM FIELD INVESTIGATION AND/OR RECORD INFORMATION. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE FACILITIES SHOWN AND ANY OTHER FACILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. PRIOR TO CONSTRUCTION OR FABRICATION, IT SHALL BE THE CONTRACTORS SOLE RESPONSIBILITY TO VERIFY ALL EXISTING IMPROVEMENT AND TO EXPOSE ALL EXISTING UNDERGROUND UTILITIES RELATED TO THE PROJECT, INCLUDING BUT NOT LIMITED TO, SEWER, STORM DRAIN, WATER, IRRIGATION, GAS, ELECTRICAL, ETC. AND SHALL NOTIFY THE ENGINEER IN WRITING FORTY-EIGHT (48) HOURS IN ADVANCE OF EXPOSING UTILITIES. THE EXACT LOCATION, 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 CONTRACTORS AND UTILITIES COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

47. PRIOR TO COMMENCING ANY WORK, IF IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES 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 CONTRACTORS SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO ADHERE TO THE RECOMMENDATIONS DETAILED BY THE PROFESSIONAL REPORT DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTORS AND UTILITIES COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

48. ALL MANHOLE RIMS, LAMPHOLES, VALVE BOX COVERS, MONUMENT BOXES AND CATCH BASIN GRATES ARE TO BE ADJUSTED TO FIT THE FINISHED GRADE AFTER PAWING, UNLESS OTHERWISE NOTED. COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR SAIL FACILITIES.

49. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT ALL PIPES, WALLS, ETC. ARE ADEQUATELY BRICKED DURING CONSTRUCTION.

CLEARING AND GRADING

50. CONTRACTOR SHALL PERFORM EARTHWORK IN ACCORDANCE WITH APWA 2017 STANDARD DRAWINGS AND STANDARD SPECIFICATIONS AND THE RECOMMENDED EARTHWORK SPECIFICATION FOUND IN THE PROFESSIONALLY PREPARED REPORT OF GEOTECHNICAL INVESTIGATION.

51. THE CONTRACTOR SHALL REMOVE ALL VEGETATION AND DELETERIOUS MATERIALS FROM THE SITE UNLESS NOTED OTHERWISE. EXISTING BELLS AND SEPTIC TANKS SHALL BE REMOVED AND/OR ABANDONED PER THE REQUIREMENTS OF ALL LOCAL, STATE AND FEDERAL REGULATIONS. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

52. SUBSOIL INVESTIGATIONS MUST BE CONDUCTED AT THE SITE OF THE WORK. ALL FOOTING, FOUNDATION OR STRUCTURAL INVESTIGATIONS MUST ADHERE TO THE RECOMMENDATIONS DETAILED BY THE PROFESSIONAL REPORT OF THESE INVESTIGATIONS. CREATED BY A LICENSED GEOTECHNICAL ENGINEER.

68. SITE WORK SHALL MEET OR EXCEED OWNER'S SITE SPECIFICATIONS.

69. ALL SITE CONCRETE OR CONCRETE EMBEDMENTS SHALL NOT SPECIFICALLY SHOWN AND DETAILED ON STRUCTURAL DRAWINGS. TO HAVE A MINIMUM OF 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.

68. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING PROJECT.

69. ALL DESIGN SLOPES AND TIE-IN SLOPES SHALL CONFORM TO THE FOLLOWING LIMITATIONS. CONTRACTOR SHALL NOTIFY ADJOINING PROPERTY FOR REDDESIGN IF ANY AREAS EXCEED THE FOLLOWING SLOPES PRIOR TO FORMING, POURING OR PAVING ANY LANDSCAPE.

69.1. LANDSCAPING SHALL SLOPE AT A MINIMUM OF 2% AND MAXIMUM OF 3% IN ANY DIRECTION

69.2. ASPHALT SHALL SLOPE AT A MINIMUM OF 1.5% AND MAXIMUM OF 6% IN ANY DIRECTION. SEE 68.6

69.3. CONCRETE FLATWORK SHALL SLOPE AT A MINIMUM OF 1% AND MAXIMUM OF 5% IN ANY DIRECTION. SEE 68.6

69.4. CURB AND GUTTER SHALL SLOPE AT A MINIMUM OF 0.5% AND MAXIMUM OF 5% IN THE LONGITUDINAL DIRECTION

69.5. ROADWAY CROSS SLOPES SHALL BE BETWEEN 2% AND 4% OR WITHIN THE RESPECTIVE DISTRICT OR AGENCY'S LIMITS

69.6. ALL SLOPES SHALL BE PROTECTED FROM EROSION BY BUILDING AT A MINIMUM OF 10 FEET WITH THE FOLLOWING SLOPES: LANDSCAPING AT A MINIMUM OF .5% AND IMPERVIOUS SURFACES AT A MINIMUM OF .2%

69.7. ALL ADA COMPLIANCE SHALL MEET CURRENT ADA AND APWA SLOPE REQUIREMENTS

DEWATERING

70. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE AND MAINTAIN ALL MACHINERY, APPLIANCES AND EQUIPMENT TO MAINTAIN ALL EXCAVATIONS FREE FROM WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL DISPOSE OF THE WATER SO AS NOT TO CAUSE DAMAGE TO PUBLIC OR PRIVATE PROPERTY OR TO CAUSE AN ALLEGED OR PERCEIVED VIOLATION OF THE LAW. THE DEWATERING SYSTEM SHALL BE INSTALLED AND OPERATED SO THAT THE GROUND LEVEL OUTSIDE THE EXCAVATION IS NOT REDUCED TO THE EXTENT WHICH WOULD CAUSE DAMAGE OR ENDANGER ADJACENT STRUCTURES OR PROPERTIES. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18 INCHES OF COVER OVER THE EXCAVATION. THE STATIC WATER LEVEL SHALL BE DRAWN DOWN A MINIMUM OF 1 FOOT BELOW THE BOTTOM OF EXCAVATIONS TO MAINTAIN THE UNDISTURBED STATE OF NATURAL SOILS AND ALLOW THE SETTLEMENT OF ANY FILL TO THE SPECIFIED DENSITY. THE CONTRACTOR SHALL HAVE ON HAND, PUMPING EQUIPMENT AND MACHINERY IN GOOD CONDITION FOR EMERGENCIES AND SHALL HAVE WORKMEN AVAILABLE FOR ITS OPERATION. DEWATERING SYSTEM SHALL OPERATE CONTINUOUSLY UNTIL BACKFILL HAS BEEN COMPLETED TO 1 FOOT ABOVE THE NORMAL STATIC GROUNDWATER LEVEL.

71. THE CONTRACTOR SHALL CONTROL SURFACE WATER TO PREVENT ENTRY INTO EXCAVATIONS. AT EACH EXCAVATION, A SUFFICIENT NUMBER OF TEMPORARY OBSERVATION WELLS MUST CONTINUOUSLY CHECK THE GROUNDWATER LEVEL. SHALL BE PROVIDED.

72. SLUMPS SHALL BE NO DEEPER THAN 5 FEET AND SHALL BE AT THE LOW POINT OF EXCAVATION. EXCAVATION SHALL BE GRADED TO DRAIN TO THE SLUMPS.

73. THE CONTROL OF GROUNDWATER SHALL BE SUCH THAT SORFENING OF THE BOTTOM OF EXCAVATIONS, OR FORMATION OF "QUICK" CONDITIONS OR "BOILS," DOES NOT OCCUR. DEWATERING SYSTEMS SHALL BE DESIGNED AND OPERATED SO AS TO PROTECT THE GROUNDWATER TABLE AND PREVENT UNDESIRABLE BLEEDING OF WATER FROM THE EXCAVATION. IN SUCH MANNER AS TO MAINTAIN THE UNDISTURBED STATE OF NATURAL FOUNDATION SOILS. PREVENT DISTURBANCE OF COMPACTED SOILS AND PREVENT FLOATION OR MOVEMENT OF STRUCTURES, PIPELINES AND SEWERS. IF A UPDES LUTAM POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR DISPOSAL OF WATER FROM CONSTRUCTION DEWATERING ACTIVITIES, IT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY Dewatering ACTIVITIES.

74. ONE HUNDRED PERCENT STANDBY PUMPING CAPACITY SHALL BE AVAILABLE ON SITE AT ALL TIMES AND SHALL BE CONNECTED TO THE DEWATERING SYSTEM PRIMING AS TO PERMIT IMMEDIATE USE. IN ADDITION STANDBY EQUIPMENT AND APPLIANCES FOR ALL ORDINARY EMERGENCIES, AND COMPETENT WORKMEN FOR OPERATION AND MAINTENANCE OF ALL DEWATERING EQUIPMENT SHALL BE ON SITE AT ALL TIMES. STANDBY EQUIPMENT SHALL INCLUDE EMERGENCY POWER GENERATION AND AUTOMATIC SWITCH OVER TO THE EMERGENCY GENERATOR WHEN NORMAL POWER FAILS. DEWATERING SYSTEMS SHALL NOT BE SHUT DOWN BETWEEN SHIFTS, ON HOLIDAYS, ON WEEKENDS, OR DURING WORK STOPPAGES.

SITE SAFETY AND MAINTENANCE

75. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT INCLUDES THE CONTRACTOR'S OBLIGATION TO CONSTRUCT AND MAINTAIN A SAFE WORKING ENVIRONMENT. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ALL AND LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.

76. THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTOR SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.

E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND REINSPECTIONS AT THEIR OWN EXPENSE.

F. UNLESS OTHERWISE NOTED, ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OFF SITE AT THE CONTRACTOR'S EXPENSE.

G. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

H. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.

I. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.

78. FOR ALL WORK WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS, THE CONTRACTOR SHALL PRESERVE THE INTEGRITY AND MAINTAIN ACCESS TO ALL PUBLIC UTILITIES AND PROVIDE THE NECESSARY CONSTRUCTION TRAFFIC CONTROL. THE CONTRACTOR SHALL, THROUGH THE ENFORCEMENT PERMIT PROCESS, VERIFY WITH THE NECESSARY REGULATORY AGENCIES, THE NEED FOR ANY TRAFFIC ROUTING PLAN. IF A PLAN IS REQUIRED, CONTRACTOR SHALL PROVIDE PLAN AND RECEIVED APPROVAL FROM THE NECESSARY AGENCIES PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL OBTAIN THE NECESSARY APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID AND/OR ADJACENT PUBLIC UTILITIES PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SITE AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT INSPECTIONS TAKE PLACE WHERE AND WHEN REQUIRED AND TO INSURE THAT ALL WORK IS COMPLETED TO USUAL STANDARDS.

SURFACE IMPROVEMENTS:

SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.

76. THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTOR SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.

E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND REINSPECTIONS AT THEIR OWN EXPENSE.

F. UNLESS OTHERWISE NOTED, ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF SITE AT THE CONTRACTORS EXPENSE.

G. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

H. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.

I. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.

78. FOR ALL WORK WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS, THE CONTRACTOR SHALL PRESERVE THE INTEGRITY AND LOCATION OF ANY AND ALL PUBLIC UTILITIES AND PROVIDE THE NECESSARY CONSTRUCTION MATERIAL CONTROL. CONTRACTOR SHALL, THROUGH THE ENCROACHMENT PERMIT PROCESS, VERIFY WITH THE NECESSARY REGULATORY AGENCIES, THE NEED FOR ANY TRAFFIC ROUTING PLAN. IF A PLAN IS REQUIRED, CONTRACTOR SHALL PROVIDE PLAN AND RECEIVED PROPER APPROVALS PRIOR TO BEGINNING CONSTRUCTION. ANY CHANGING AND/OR CLOSING OF HIGHWAY SHALL BE SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID ROAD OR HIGHWAY. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE STATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT INSPECTIONS TAKE PLACE WHERE AND WHEN REQUIRED AND TO INSURE THAT ALL WORK IS COMPLETED TO UDOT STANDARDS.

SURFACE IMPROVEMENTS:

50. CONTRACTOR SHALL PERFORM EARTHWORK IN ACCORDANCE WITH AWWA 2017 STANDARD DRAWINGS AND STANDARD SPECIFICATIONS AND THE RECOMMENDED EARTHWORK SPECIFICATION FOUND IN THE PROFESSIONALLY PREPARED REPORT OF GEOTECHNICAL INVESTIGATION.

51. THE CONTRACTOR SHALL REMOVE ALL VEGETATION AND DELETERIOUS MATERIALS FROM THE SITE UNLESS NOTED OTHERWISE. UNDESIRABLE AND SEPTIC TANKS SHALL BE REMOVED AND/OR ABANDONED PER THE REQUIREMENTS OF ALL LOCAL, STATE AND FEDERAL REGULATIONS. THE COST TO PERFORM THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

52. SUBSOIL INVESTIGATIONS MUST BE CONDUCTED AT THE SITE OF THE WORK, ALL FOOTING, FOUNDATION OR STRUCTURAL FOUNDATION CONTRACTOR MUST ADHERE TO THE RECOMMENDATIONS DETAILED BY THE PROFESSIONAL REPORT OF THESE INVESTIGATIONS.

NOTE:

IN THE EVENT THAT THE CONSTRUCTION NOTES CONFLICT WITH RESPONSIBLE DISTRICT OR AGENCY STANDARDS NOTES AND SPECIFICATIONS, THE DISTRICT OR AGENCY STANDARD NOTES AND SPECIFICATIONS GOVERN.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, FIELD SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO ANY EXCAVATION OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND VERIFY ALL UTILITIES TO AVOID CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONJUNCTIVELY AND NOT BE LIMITED TO THE NORMAL COURSE OF WORK, INCLUDING BUT NOT LIMITED TO THE NORMAL COURSE OF WORK OF THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, INCLUDING LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO THE NORMAL WORKING HOURS; AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE 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 SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

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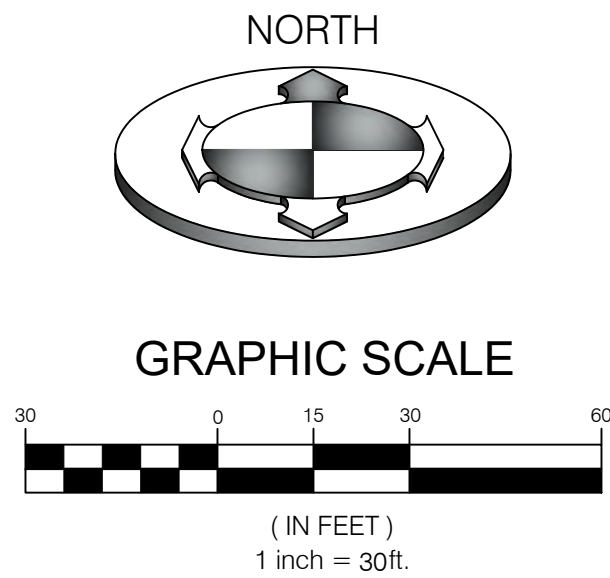
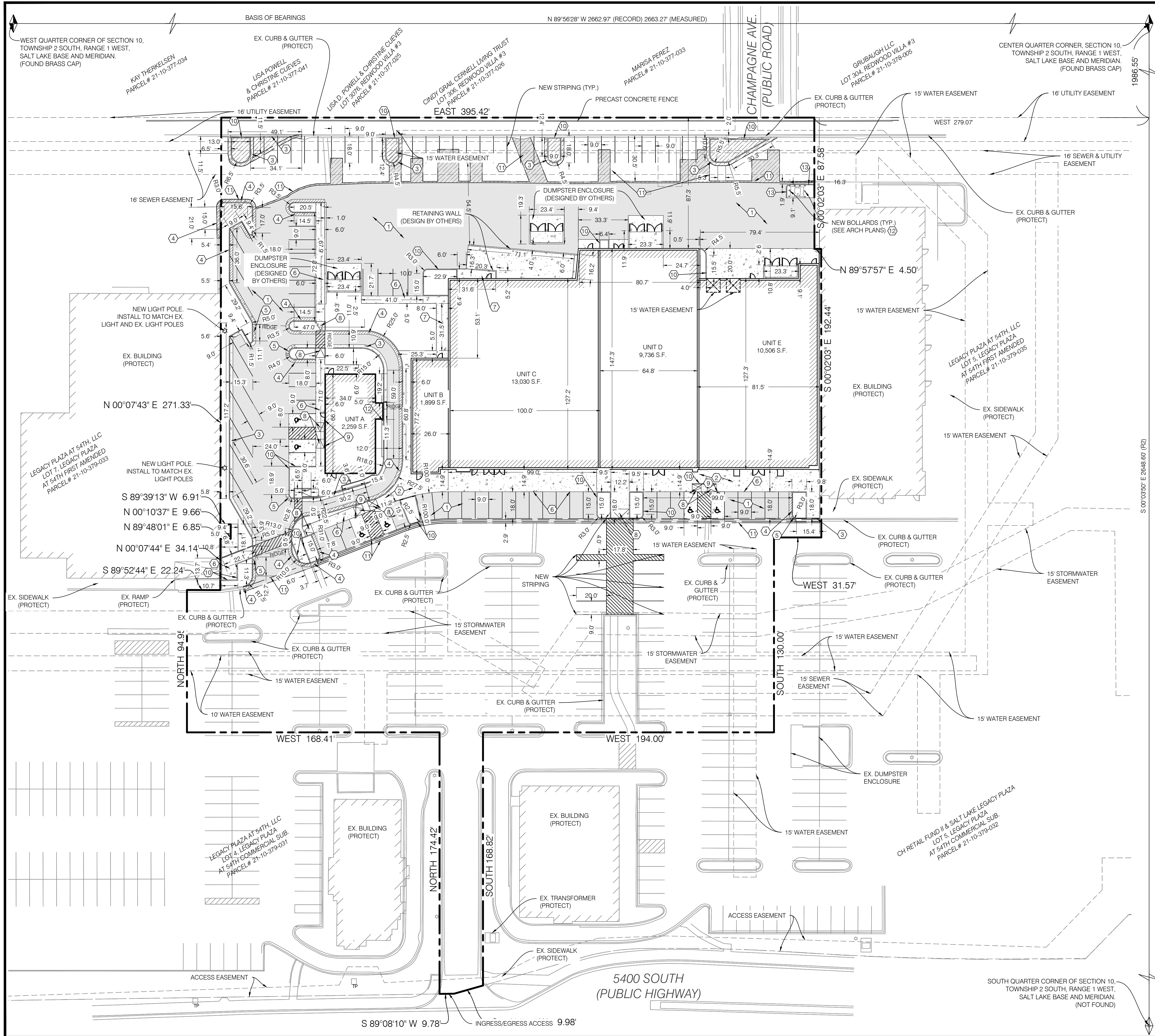
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BENCHMARK
CIVIL

PROJECT NO. 2301005

GEN. NOTES
LEGEND &
ABBREV.

CGN.01
2 OF 11



CONSTRUCTION KEY NOTE REFERENCE		
NO	DESCRIPTION	DETAIL
①	ASPHALT PAVEMENT WITH GRANULAR BASE	1/CDT.01
②	CONCRETE PAVEMENT WITH GRANULAR BASE	1/CDT.01
③	CONCRETE CURB AND GUTTER PER APWA #205 TYPE 'A'	
④	RELEASE CURB & GUTTER	2/CDT.01
⑤	TRANSITION CURB & GUTTER	
⑥	SIDEWALK THICKENED EDGE	2/CDT.02
⑦	SIDEWALK PER APWA #231	
⑧	ADA RAMP	1/CDT.02
⑨	ADA SIGN (MOUNTED TO BUILDING)	1/CDT.02
⑩	CURB WALL	4/CDT.02
⑪	SAWCUT	
⑫	BOLLARDS (DESIGNED BY OTHERS)	
⑬	6" CONCRETE CURB PER APWA #209 TYPE 'P'	

AREA TABLE		
PARTICULARS	S.F.	%
BUILDING	37,531	22.5
HARDSCAPE	117,854	70.7
LANDSCAPE	11,353	6.8
TOTAL	166,738	100.0

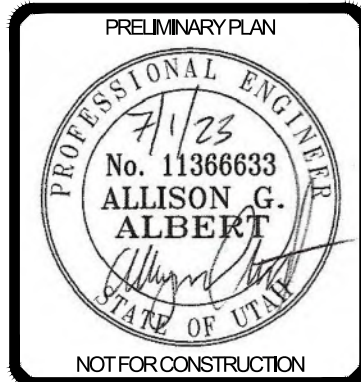
NOTE:
SLOPE ACROSS THE ACCESSIBLE PARKING STALLS & ACCESS ISLE SHALL NOT EXCEED A 1:48 (2.00%) SLOPE. THE MAX GRADE DIFFERENCE BETWEEN THE ASPHALT SURFACE, ACCESSIBLE RAMP, AND SIDEWALK SHALL NOT EXCEED 1/4 INCH VERTICAL OR 1/2 INCH WHEN BEVELED. THE ACCESSIBLE MEANS OF EGRESS INCLUDING THE DRIVEWAY PORTION SHALL NOT EXCEED A SLOPE OF 1:20 (5.0%) & A CROSS SLOPE OF 1:48 (2.0%). ALL EXTERIOR DOOR WAY ACCESS REQUIRE AN EXTERIOR LANDING 60 INCHES IN LENGTH WITH A SLOPE NOT EXCEEDING A 1:48 (2.0%) SLOPE

PARKING COUNT		
PARTICULARS	PROVIDED	
	STANDARD	ADA
PARKING STALLS	84	6
TOTAL	90	

NOTE:
SAWCUT WIDTH, LOCATIONS AND TIE-IN ELEVATIONS TO EXISTING GRADE ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION, EXTENT OF SAWCUTTING, AND TIE-IN SLOPES TO EXISTING GRADE PRIOR TO CONSTRUCTION. IT IS THE INTENT ON THESE PLANS THAT ALL PAVEMENT SHALL TIE INTO EXISTING GRADE PER SLOPES LISTED ON CGN.01 NOTE 70. SEE NOTES 66, 70, 82, & 83 ON CGN.01 FOR FURTHER DETAIL.

NOTE:
ALL WORK WITHIN PUBLIC ROADS TO BE DONE IN STRICT ACCORDANCE WITH CURRENT CITY/UDOT STANDARDS AND SPECIFICATIONS

DESCRIPTION	
NO.	DATE
TBM	
CHECKED BY	AGA
DRAWN BY	JMD/DMO
DATE	07/01/2023
TITLE	2301005 SITE
SCALE	AS SHOWN

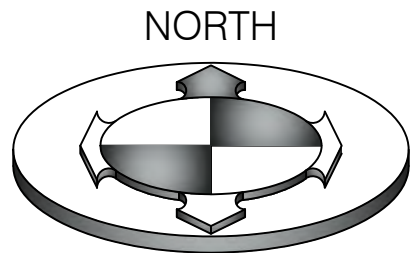
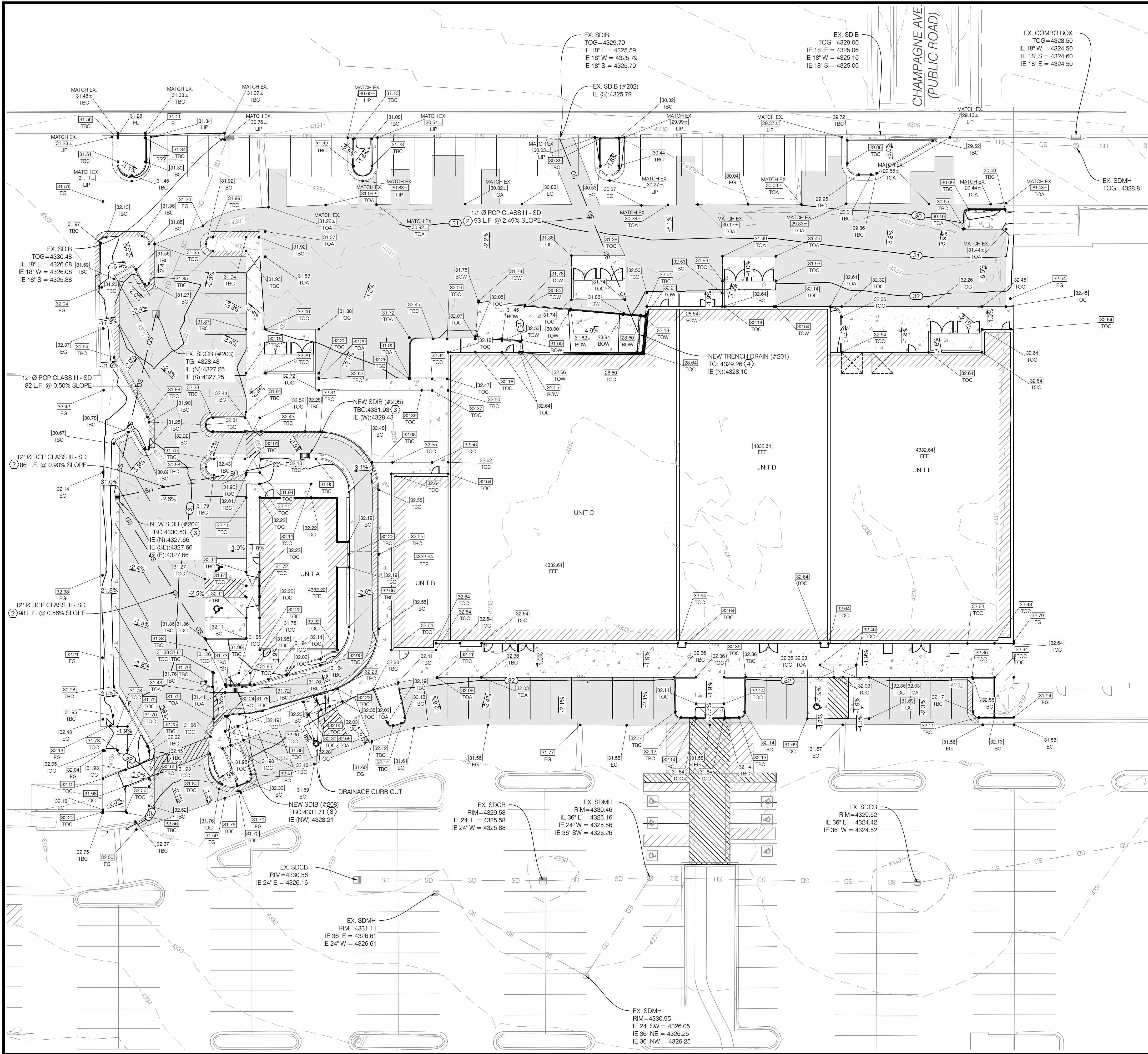


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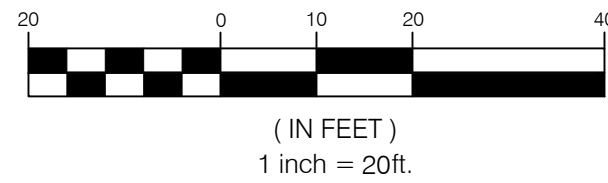
LEGACY PLAZA
1758 WEST 5400 SOUTH
TAYLORSVILLE CITY, UTAH

PROJECT NO. 2301005
SITE
PLAN
CSP.01
4 OF 11





GRAPHIC SCALE



GRADING AND DRAINAGE KEY NOTE REFERENCE		
NO.	DESCRIPTION	DETAIL
①	GRADE SITE TO ELEVATIONS SHOWN ON PLAN	
②	12" DIAMETER HDPE ADS N-12 STORM DRAIN LINE	
③	STORM DRAIN INLET BOX PER APWA #315	
④	TRENCH DRAIN (ZURN OR ENGINEER APPROVED EQUAL)	

ALL HDPE/RCP CLASS III PIPE TO HAVE SOIL TIGHT JOINTS

NOTE:
POTHOLE TO IDENTIFY ANY CONFLICTS BEFORE ANY PIPE INSTALLATION. CONTACT ENGINEER IF ANY CONFLICTS ARE IDENTIFIED.

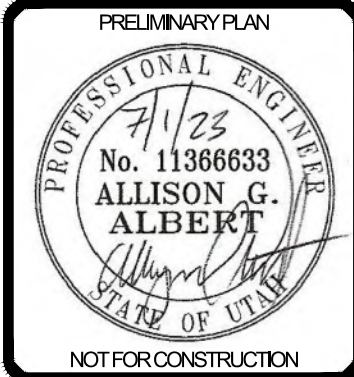
NOTE:
PRIOR TO FABRICATION OR CONSTRUCTION, BEGIN AT THE LOW END OF ALL GRAVITY UTILITY LINES AND VERIFY THE INVERT ELEVATION OF THE POINT OF CONNECTION. NOTIFY ENGINEER FOR REDESIGN IF CONNECTION POINT IS HIGHER THAN SHOWN OR IF ANY UTILITY CONFLICTS OCCUR. GRAVITY CONNECTIONS MUST BE DONE PRIOR TO BUILDING FOOTINGS AND ROUGH PLUMBING ARE CONSTRUCTED.

SURVEY CONTROL NOTE:
THE CONTRACTOR OR SURVEYOR PERFORMING THE CONSTRUCTION SURVEYING SHALL BE RESPONSIBLE TO PROVIDE CONSTRUCTION LAYOUT PER THE APPROVED PLANS ONLY. THE SURVEYOR SHALL ALSO BE RESPONSIBLE FOR VERIFYING HORIZONTAL CONTROL FROM THE SURVEY MONUMENTS AND FOR VERIFYING ANY ADDITIONAL CONTROL POINTS SHOWN ON THE SURVEY OR IMPROVEMENTS PLANS OR ON ELECTRONIC DATA PROVIDED BY BENCHMARK ENGINEERING AND LAND SURVEYING. THE SURVEYOR SHALL ALSO USE THE BENCHMARKS AS SHOWN ON THE PLAN, AND VERIFY THEM AGAINST NO LESS THAN THREE EXISTING HARD IMPROVEMENT ELEVATIONS INCLUDED ON THESE PLANS OR ON ELECTRONIC DATA PROVIDED BY BENCHMARK ENGINEERING AND LAND SURVEYING. IF ANY DISCREPANCIES ARE ENCOUNTERED, THE SURVEYOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND RESOLVE THE DISCREPANCIES BEFORE PROCEEDING WITH ANY CONSTRUCTION SURVEYING. IT IS ALSO THE RESPONSIBILITY OF THE SURVEYOR TO VERIFY ANY ELECTRONIC DATA WITH THE APPROVED STAMPED AND SIGNED PLANS AND NOTIFY THE ENGINEER WITH ANY DISCREPANCIES.

NOTE:
SAWCUT WIDTH, LOCATIONS AND TIE-IN ELEVATIONS TO EXISTING GRADE ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY LOCATION, EXTENT OF SAWCUTTING, AND TIE-IN SLOPES TO EXISTING GRADE PRIOR TO CONSTRUCTION. IT IS THE INTENT ON THESE PLANS THAT ALL PAVEMENT SHALL TIE INTO EXISTING GRADE PER SLOPES LISTED ON CGN.01 NOTE 70. SEE NOTES 66, 70, 82, & 83 ON CGN.01 FOR FURTHER DETAIL.

BENCHMARK:
CENTER QUARTER CORNER OF SECTION 10,
TOWNSHIP 2 SOUTH, RANGE 1 WEST, SALT LAKE
BASE AND MERIDIAN. ELEVATION = 4309.74

NO.	DATE	DESCRIPTION
1	07/01/2023	ISSUED FOR PERMIT
2	07/01/2023	ISSUED FOR PERMIT
3	07/01/2023	ISSUED FOR PERMIT
4	07/01/2023	ISSUED FOR PERMIT
5	07/01/2023	ISSUED FOR PERMIT
6	07/01/2023	ISSUED FOR PERMIT
7	07/01/2023	ISSUED FOR PERMIT
8	07/01/2023	ISSUED FOR PERMIT
9	07/01/2023	ISSUED FOR PERMIT
10	07/01/2023	ISSUED FOR PERMIT
11	07/01/2023	ISSUED FOR PERMIT
12	07/01/2023	ISSUED FOR PERMIT
13	07/01/2023	ISSUED FOR PERMIT
14	07/01/2023	ISSUED FOR PERMIT
15	07/01/2023	ISSUED FOR PERMIT
16	07/01/2023	ISSUED FOR PERMIT
17	07/01/2023	ISSUED FOR PERMIT
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20	07/01/2023	ISSUED FOR PERMIT

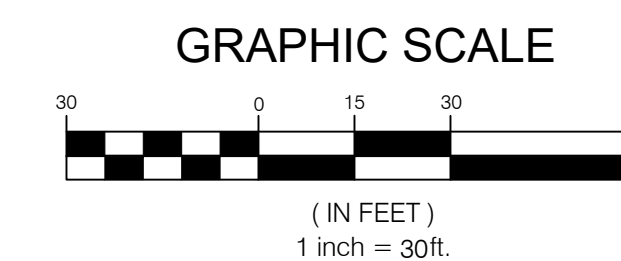


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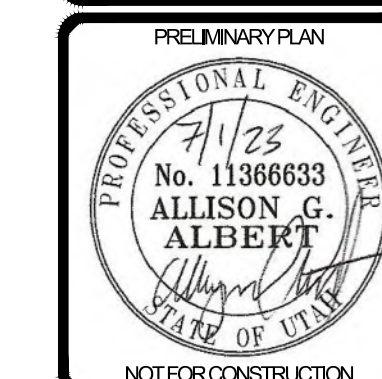
PROJECT NO. 2301005
GRADING & DRAINAGE PLAN
CGD.01
6 OF 11





SWPPP KEY NOTES REFERENCE		
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.		
NO	DESCRIPTION	DETAIL
①	CONCRETE WASTE MANAGEMENT	1/CEP.C
②	INLET PROTECTION WATTLE	2/CEP.C
③	MATERIALS STORAGE	3/CEP.C
④	PORTABLE TOILETS	4/CEP.C
⑤	SILT FENCE	6/CEP.C
⑥	TEMPORARY CONSTRUCTION ENTRANCE	7/CEP.C

NOTE: CONTRACTOR SHALL INSTALL EROSION CONTROLS (SILT FENCES, STRAW BALES, ETC) AS REQUIRED BY REGULATORY AGENCIES. SAID CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH AGENCY STANDARDS AND FOLLOW THE BEST MANAGEMENT PRACTICES FOR AGRICULTURAL CEMENT ON SITE. STRAW BALES SHOWN ON THESE DRAWINGS ARE INTENDED AS A MINIMUM REQUIREMENT. ADDITIONAL CONTROLS REQUESTED BY AGENCY INSPECTORS SHALL BE REQUIRED. DUST CONTROL SHALL BE PROVIDED AT ALL TIMES. AT THE CONTRACTORS EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY.

[illegible]

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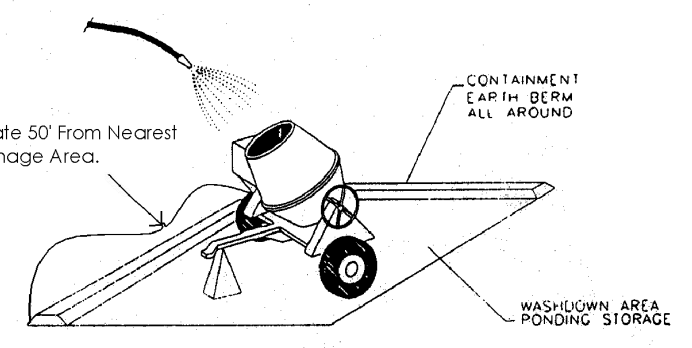
LEGACY PLAZA

1758 WEST 5400 SOUTH
TAYLORSVILLE CITY, UTAH

PROJECT NO. 2301005
**EROSION
CONTROL
PLAN**
CEP.01
7 OF 11



BMP: Concrete Waste Management



Locate 50' from Nearest Drainage Area.

CONTAINMENT CAP IN BERM ALL AROUND

WASHOUT AREA PONDING STORAGE

DESCRIPTION:
Prevent or reduce the discharge of pollutants to storm water from concrete waste by conducting washout off-site, performing on-site washout in a designated area, and training employees and subcontractors.

APPLICATIONS:
This technique is applicable to all types of sites.

INSTALLATION/APPLICATION CRITERIA:

- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement on-site.
- Perform washout of concrete trucks off-site or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped on-site, except in designated areas.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water within a bermed or level area. (See Earth Berm Barrier information sheet.)
- Train employees and subcontractors in proper concrete waste management.

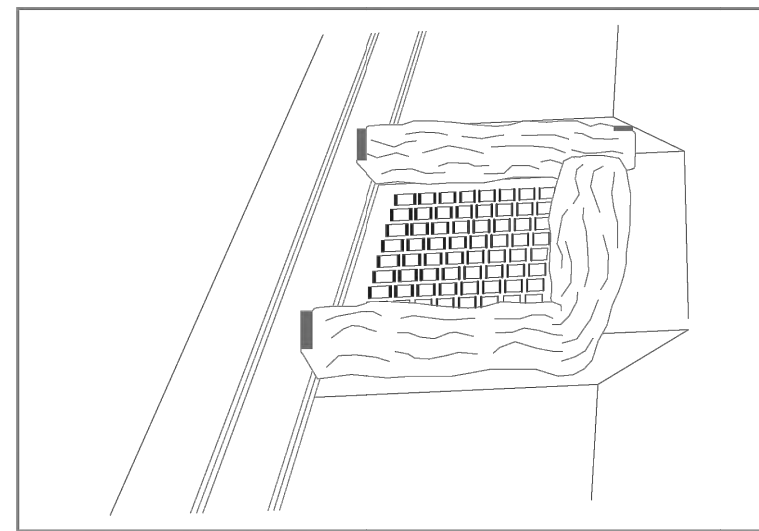
LIMITATIONS:

- Off-site washout of concrete wastes may not always be possible.

MAINTENANCE:

- Inspect subcontractors to ensure that concrete wastes are being properly managed.
- If using a temporary pit, dispose hardened concrete on a regular basis.

BMP: Inlet Protection – Wattle



IP-W
CONSTRUCTION

DESCRIPTION:
Sediment barrier erected around storm drain inlet.

APPLICATION:
Construct at storm drainage inlets located down-gradient of areas to be disturbed by construction.

INSTALLATION/APPLICATION CRITERIA:

- ◆ Provide up-gradient sediment controls, such as silt fence during construction of inlet
- ◆ When construction of curb and gutter and roadways is complete, install gravel filled wattles around perimeter of inlet

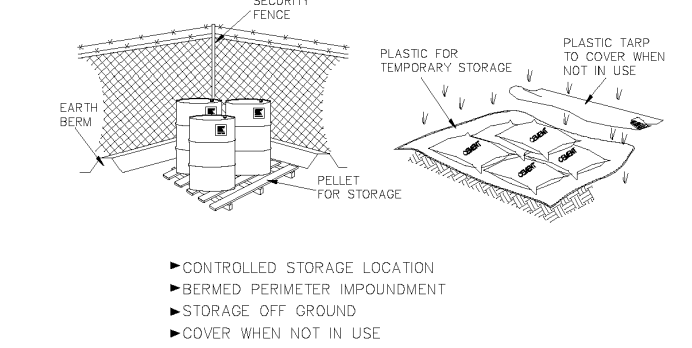
LIMITATIONS:

- ◆ Recommended maximum contributing drainage area of one acre
- ◆ Requires shallow slopes adjacent to inlet

MAINTENANCE:

- ◆ Inspect inlet protection following storm event and at a minimum of once every 14 days.
- ◆ Remove accumulated sediment when it reaches 4 inches in depth.
- ◆ Look for bypassing or undercutting and repair or realign as needed.

BMP: Materials Storage



SECURITY FENCE

EARTH BERM

PLASTIC TARP TO COVER WHEN NOT IN USE

PLASTIC TARP TO COVER WHEN NOT IN USE

COLLECT TOP STORAGE

DESCRIPTION:
Controlled storage of on-site materials.

APPLICATION:

- Storage of hazardous, toxic, and all chemical substances.
- Any construction site with outside storage of materials.

INSTALLATION/APPLICATION CRITERIA:

- Designate a secured area with limited access as the storage location. Ensure no waterways or drainage paths are nearby.
- Construct compacted earthen berm (See Earth Berm Barrier Information Sheet), or similar perimeter containment around storage location for impoundment in the case of spills.
- Ensure all on-site personnel utilize designated storage area. Do not store excessive amounts of material that will not be utilized on site.
- For active use of materials away from the storage area ensure materials are not set directly on the ground and are covered when not in use. Protect storm drainage during use.

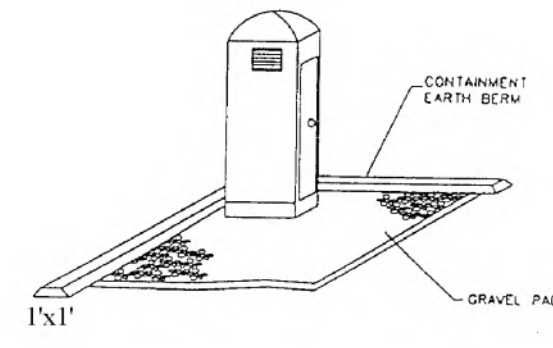
LIMITATIONS:

- Does not prevent contamination due to mishandling of products.
- Spill Prevention and Response Plan still required.
- Only effective if materials are actively stored in controlled location.

MAINTENANCE:

- Inspect daily and repair any damage to perimeter impoundment or security fencing.
- Check materials are being correctly stored (i.e. standing upright, in labeled containers, lightly capped) and that no materials are being stored away from the designated location.

BMP: Portable Toilets



CONTAINMENT CAP IN BERM

GRAVEL PAD

DESCRIPTION:
Temporary on-site sanitary facilities for construction personnel.

APPLICATION:
All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

INSTALLATION/APPLICATION CRITERIA:

- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.

LIMITATIONS:
No limitations.

MAINTENANCE:

- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collection should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

BMP: Spill Clean-Up



DESCRIPTION:
Practices to clean-up leakage/spillage of on-site materials that may be harmful to receiving waters.

APPLICATION:
All sites

GENERAL:

- Store controlled materials within a storage area.
- Educate personnel on prevention and clean-up techniques.
- Designate an Emergency Coordinator responsible for employing preventative practices and for providing spill response.
- Maintain a supply of clean-up equipment on-site and post a list of local response agencies with phone numbers.

METHODS:

- Clean-up spills/leaks immediately and remediate cause.
- Use as little water as possible. NEVER HOSE DOWN OR BURY SPILL.
- CONTAMINATED MATERIAL.
- Use rags or absorbent material for clean-up. Excavate contaminated soils.
- Dispose of clean-up material and soil as hazardous waste.
- Document all spills with date, location, substance, volume, actions taken and other pertinent data.
- Contact local Fire Department and State Division of Environmental Response and Remediation (Phone #536-4100) for any spill of reportable quantity.

CONCRETE WASTE MANAGEMENT 1

SCALE: NTS

INLET PROTECTION WATTLE 2

SCALE: NTS

MATERIALS STORAGE 3

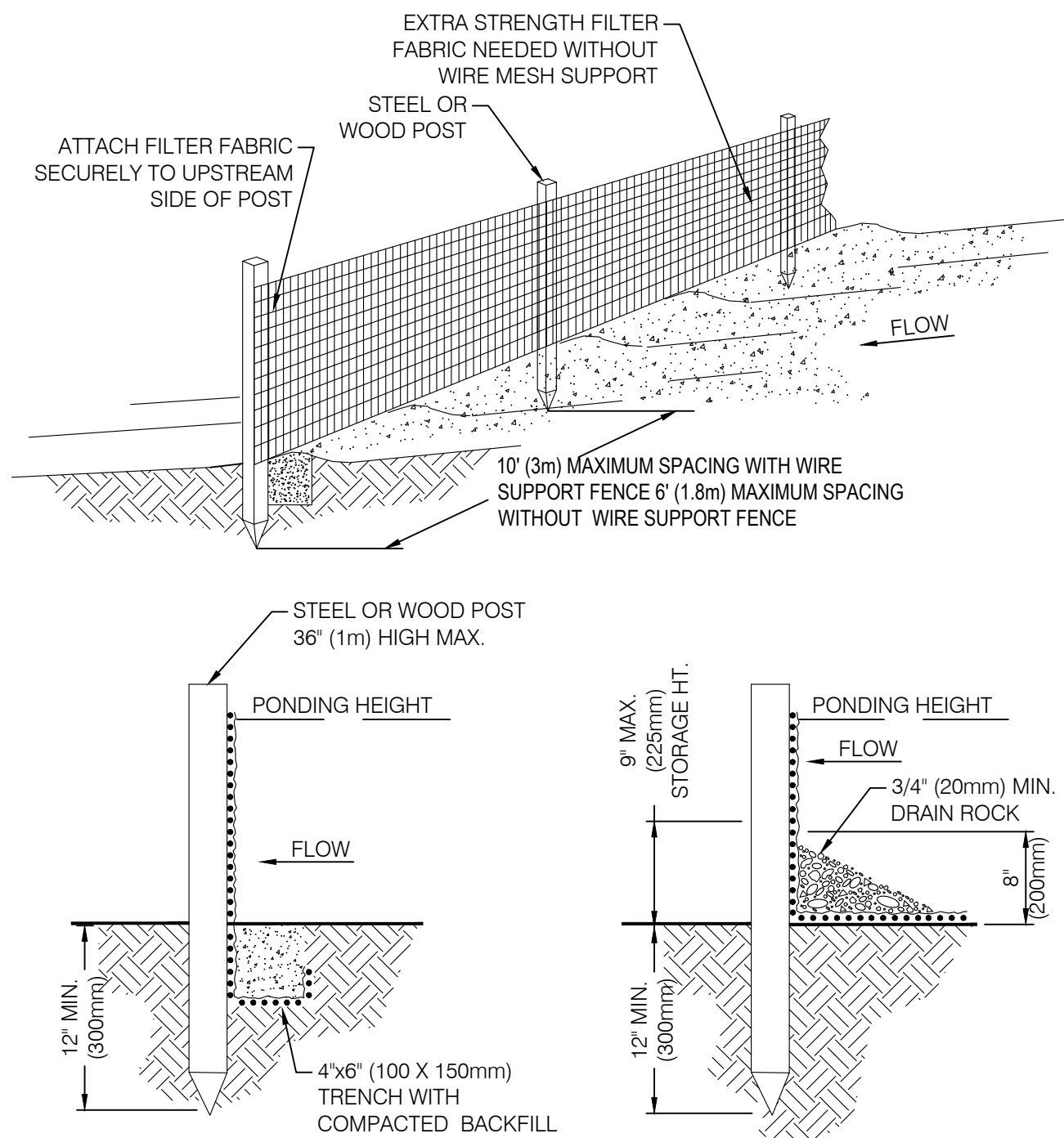
SCALE: NTS

PORTABLE TOILETS 4

SCALE: NTS

SPILL CLEAN UP 5

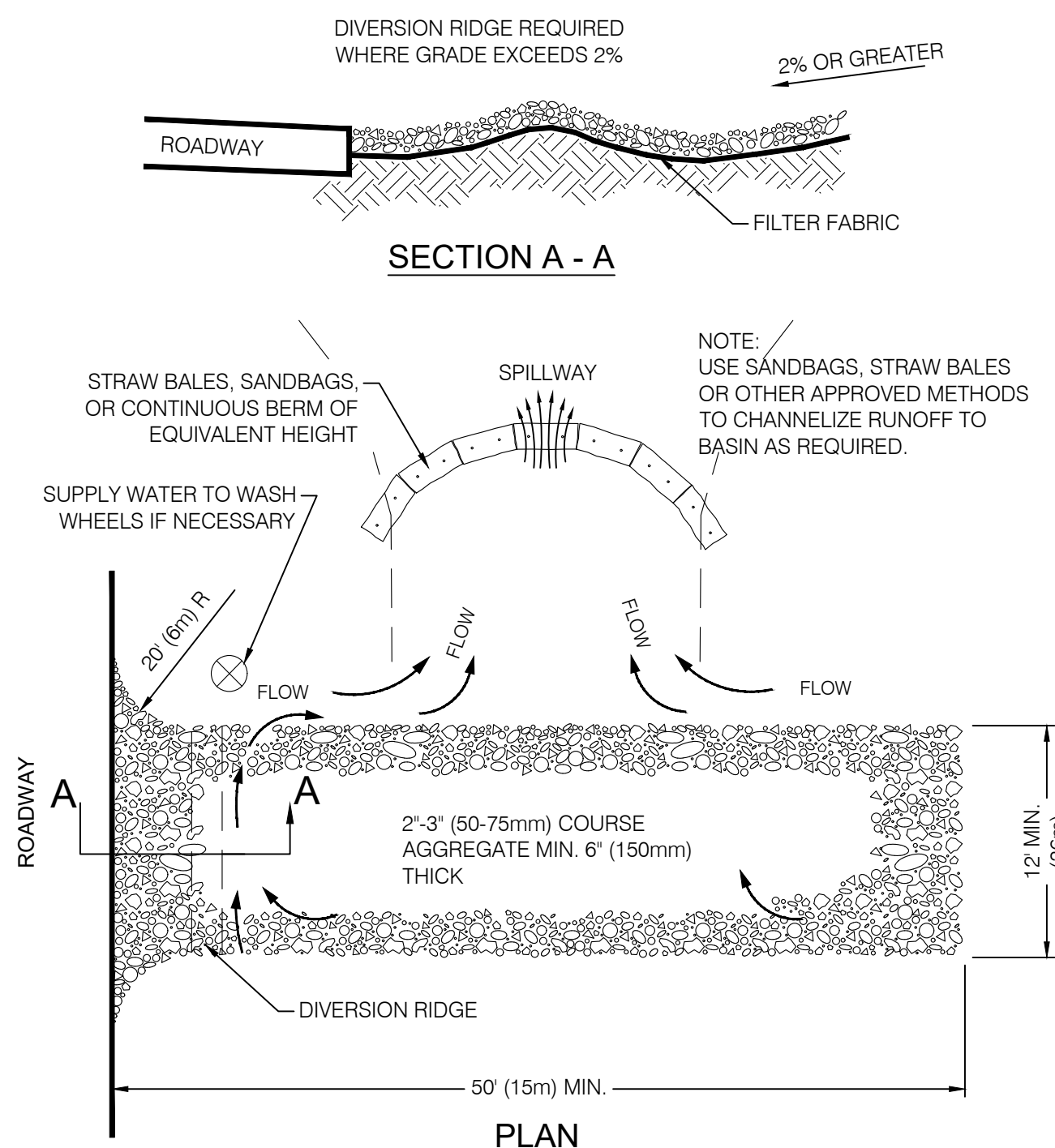
SCALE: NTS



NOTES:

1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

REF. FROM 1994 JOHN McCULLAH



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

REF. FROM 1994 JOHN McCULLAH

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT 7

SCALE: NTS

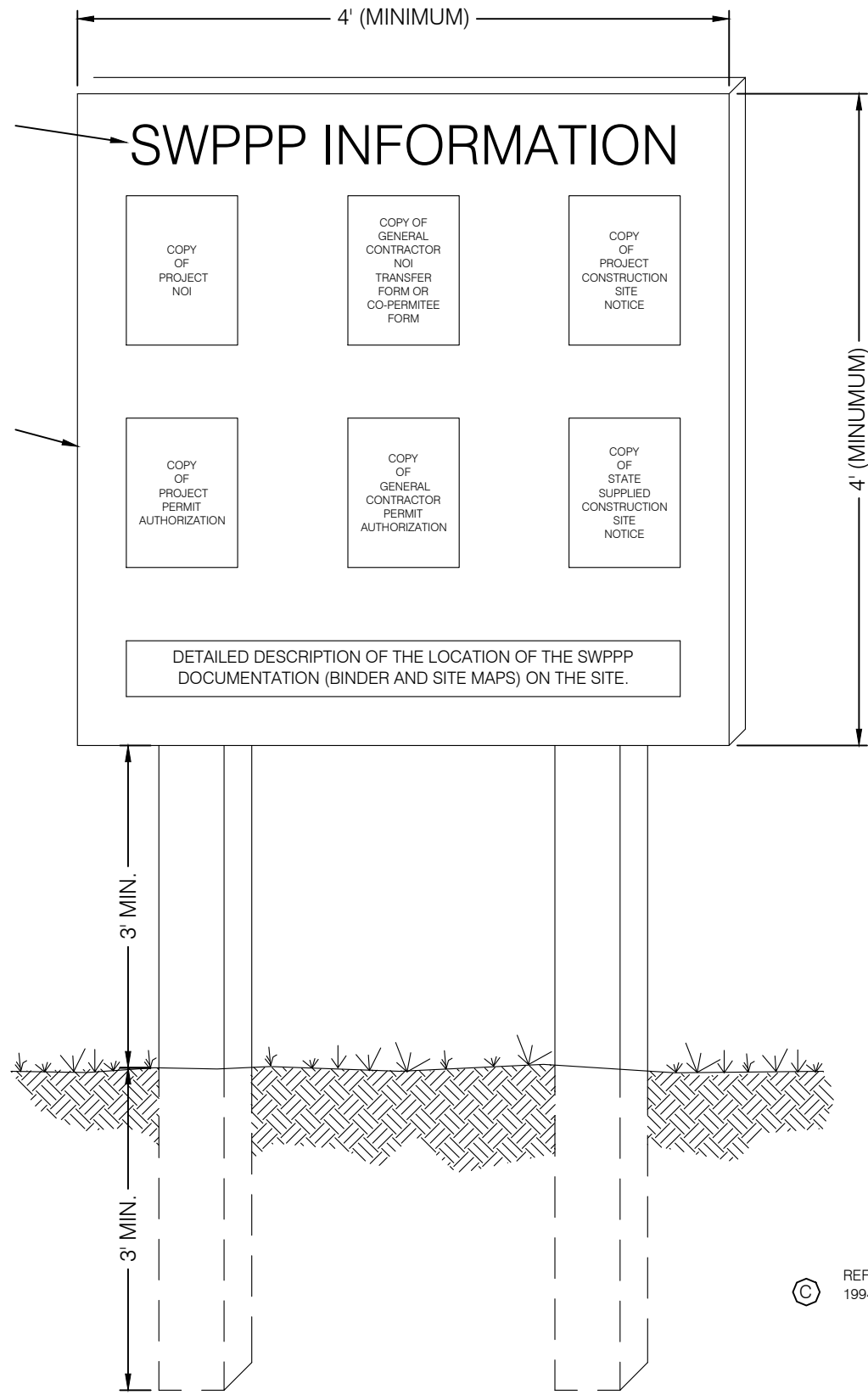


"SWPPP INFORMATION" MUST BE DISPLAYED PROMINENTLY ACROSS THE TOP OF THE SIGN, AS SHOWN IN THE DETAIL.

SIGN TO BE CONSTRUCTED OF A RIGID MATERIAL, SUCH AS PLYWOOD OR OUTDOOR SIGN BOARD. SIGN MUST BE CONSTRUCTED IN A MANNER TO PROTECT DOCUMENTS FROM DAMAGE DUE TO WEATHER (WIND, SUN, MOISTURE, ETC.)

NOTES:

- 1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
- 2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE TO TERMINATION (NOT) IS FILED FOR THE PERMIT.
- 3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
- 4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
- 5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY IF THE SWPPP INFORMATION SIGN.



REF. FROM 1994 JOHN McCULLAH

SWPPP INFORMATION SIGN 8

SCALE: NTS

PROJECT NO. 2301005

EROSION CONTROL DETAILS

CEP.02 8 OF 11

BENCHMARK ENGINEERING & LAND SURVEYING

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PROFESSIONAL ENGINEER

No. 11366633

ALLISON G. ALBERT

STATE OF UTAH

NOT FOR CONSTRUCTION

LEGACY PLAZA

1758 WEST 5400 SOUTH

TAYLORSVILLE CITY, UTAH

SCALE MEASURES WHICH ON FULL SIZE SHEETS

ADJUST ACCORDINGLY FOR REDUCED SIZE SHEETS

DATE 07/01/2023

SCALE 2301005 SITE

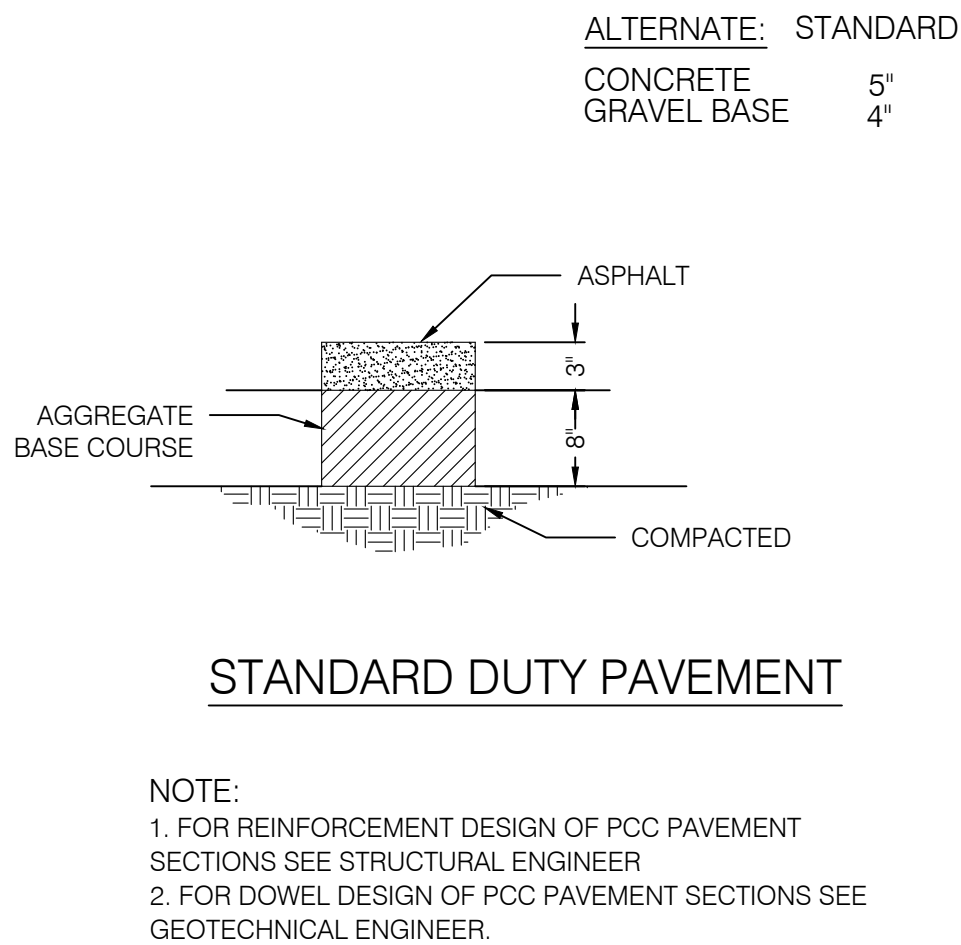
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DESIGNER JMD/WHO

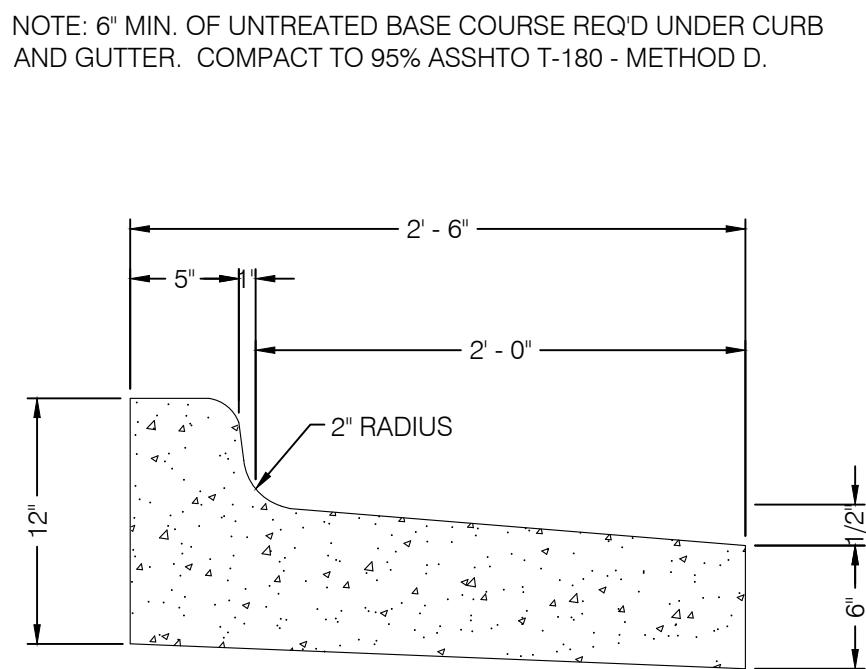
CHECKED BY AGA

DRAWN BY TBM

NO. DATE



PAVEMENT SECTIONS 1
SCALE: NTS

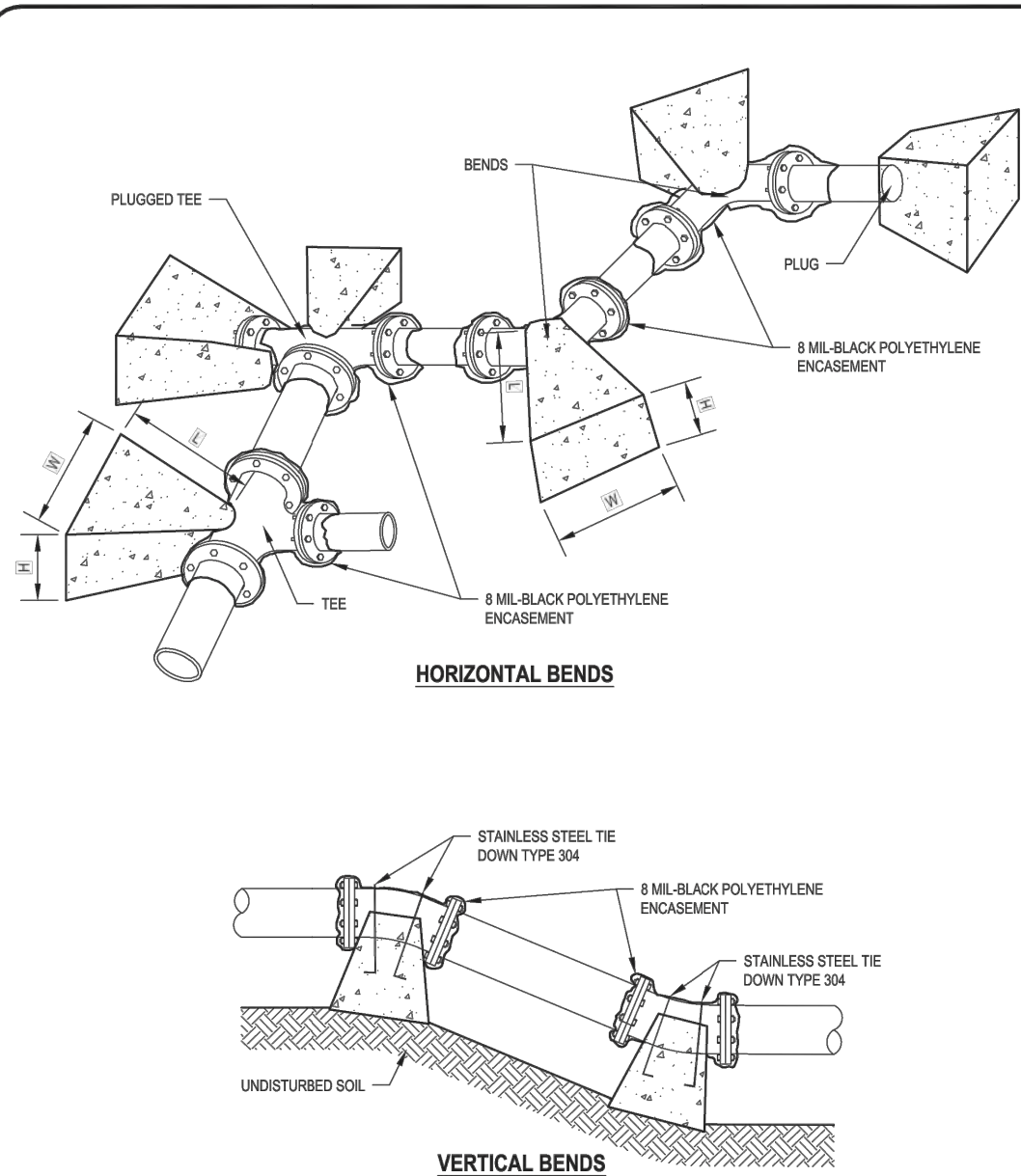


TYPICAL RELEASE CURB & GUTTER 2
SCALE: NTS

- THRUST BLOCKING DETAIL NOTES:**
- 8 MIL-BLACK POLYETHYLENE ENCASEMENT SHALL BE PROVIDED FOR ALL FITTINGS, VALVES, FIRE HYDRANTS, AND COUPLINGS IN ACCORDANCE WITH AWWA C105.
 - FM GREASE REQUIRED ON ALL BOLTS.
 - SIZE BLOCKS BASED UPON 200 PSI LINE PRESSURE AND SPECIFIC SOIL BEARING VALUE OF CONSTRUCTION SITE.
 - ALL THRUST BLOCK BEARING FACES SHALL BE POURED AGAINST UNDISTURBED SOIL OR AN APPROVED, COMPACTED BACKFILL.
 - THRUST BLOCK SIZES SHOWN IN THE TABLE BELOW ARE FOR HORIZONTAL BENDS BASED ON 200PSI OPERATING PRESSURE AND 1500 LBS/SQ FT SOIL BEARING PRESSURE. THRUST BLOCK SIZES MAY NEED TO BE ADJUSTED TO CONFORM WITH PROJECT SPECIFIC CONDITIONS. THRUST BLOCKS FOR VERTICAL BENDS TO BE DESIGNED BY ENGINEER.

	11.25" BEND			22.5" BEND			45° BEND			90° BEND			TEE			DEAD END		
	L	W	H	L	W	H	L	W	H	L	W	H	L	W	H	L	W	H
6-INCH	0.8'	1.0'	1.0'	1.2'	1.3'	1.3'	1.8'	1.9'	1.9'	2.2'	2.5'	2.5'	1.8'	2.1'	2.1'	1.8'	2.1'	2.1'
8-INCH	1.1'	1.3'	1.3'	1.5'	1.8'	1.8'	2.1'	2.5'	2.5'	2.9'	3.3'	3.3'	2.4'	2.8'	2.8'	2.4'	2.8'	2.8'
10-INCH	1.4'	1.6'	1.6'	1.8'	2.2'	2.2'	2.8'	3.0'	3.0'	3.6'	4.1'	4.1'	3.0'	3.6'	3.6'	3.0'	3.6'	3.6'
12-INCH	1.8'	1.9'	1.9'	2.3'	2.6'	2.6'	3.1'	3.6'	3.6'	4.5'	4.8'	4.8'	3.8'	4.1'	4.1'	3.8'	4.1'	4.1'

THRUST BLOCKING
NOTES
TB-202
PAGE 1 OF 2

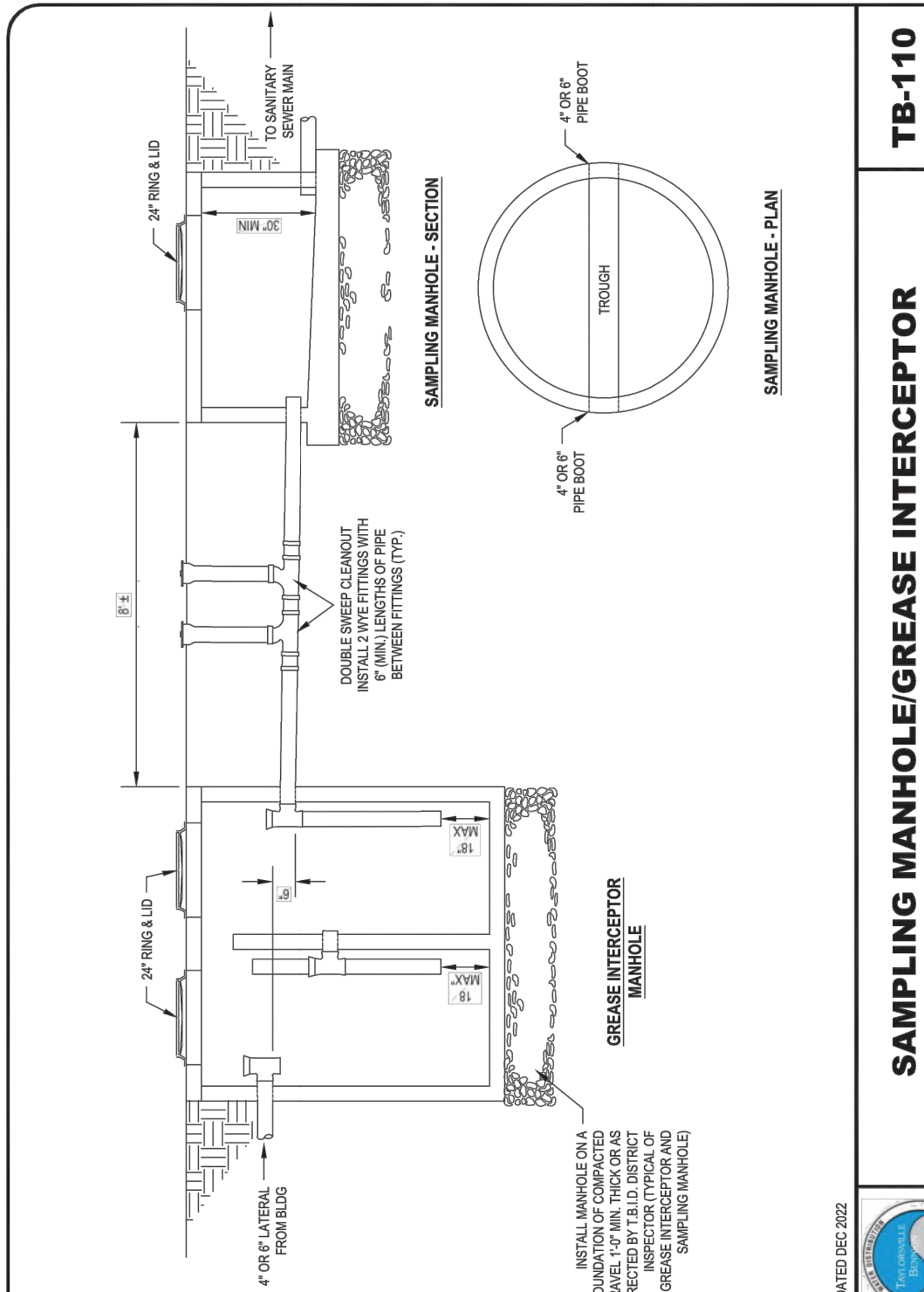


THRUST BLOCKING
NOT TO SCALE
TB-202
PAGE 2 OF 2

TRHUST BLOCK 3
SCALE: NTS

- SAMPLING MANHOLE/GREASE INTERCEPTOR NOTES:**
- SAMPLING MANHOLE AND GREASE INTERCEPTOR ARE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.
 - SAMPLING MANHOLE AND GREASE INTERCEPTOR TO BE DESIGNED FOR HS-20 LOAD.
 - ALL PIPE AND FITTINGS TO BE SDR-35. ALL FITTINGS TO BE GASKETED.
 - PIPE BOOTS AND WATER TIGHT GROUT REQUIRED AT ALL PIPE CONNECTIONS TO MANHOLES.
 - SAMPLING MANHOLE AND GREASE INTERCEPTOR MUST BE ACCESSIBLE AND MUST NOT BE PLACED IN PARKING STALLS.
 - THE SIZE AND CAPACITY OF GREASE INTERCEPTORS SHALL BE DETERMINED BY A CERTIFIED PROFESSIONAL.
 - SEE TB-102 FOR ADDITIONAL SEWER LATERAL REQUIREMENTS AND INFORMATION.

SAMPLING MANHOLE/GREASE INTERCEPTOR
NOTES
TB-110
PAGE 1 OF 2

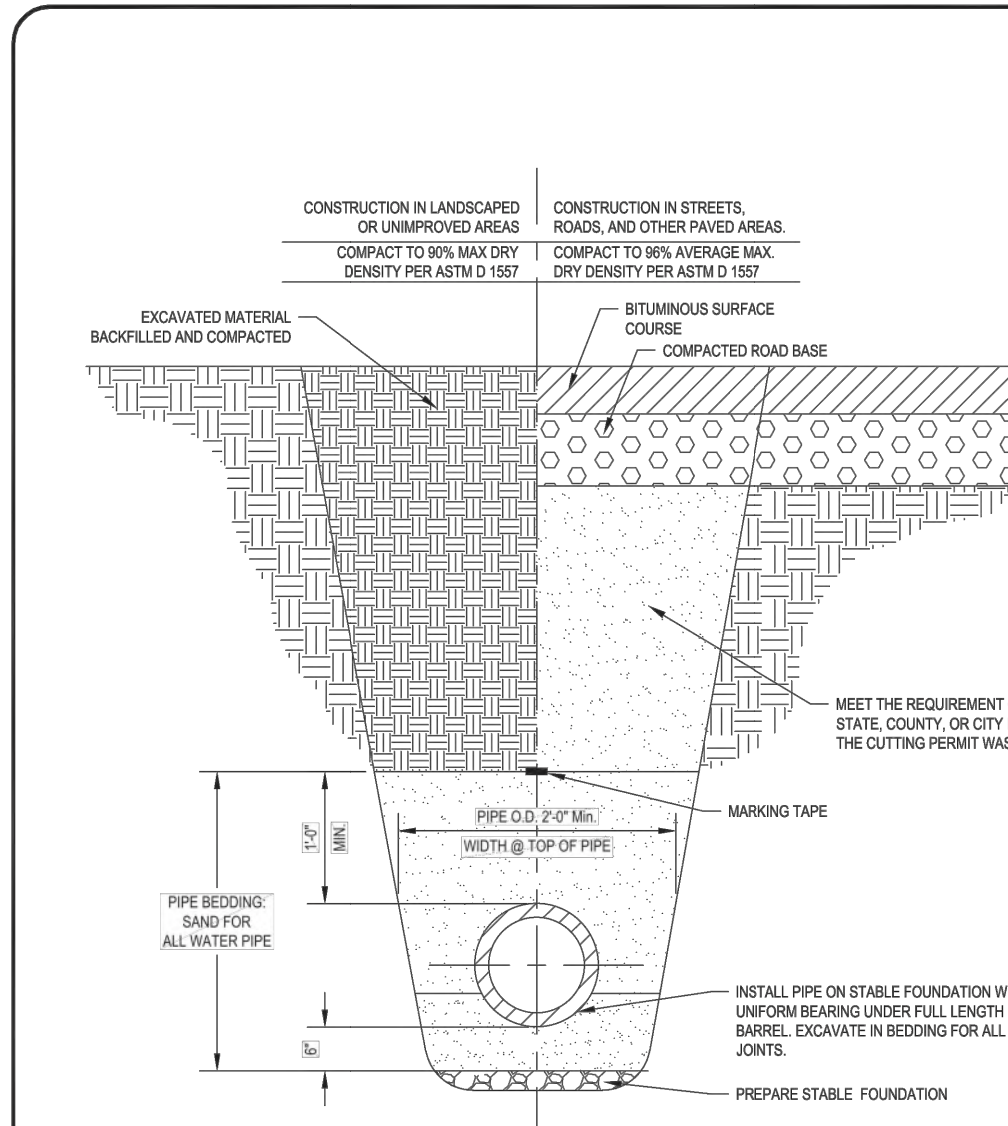


SAMPLING MANHOLE/GREASE INTERCEPTOR
NOT TO SCALE
TB-110
PAGE 2 OF 2

SAMPLING MANHOLE/GREASE TRAP 4
SCALE: NTS

- TYPICAL WATER TRENCH:**
- BLUE STAKES SHALL BE CONTACTED 48 HOURS BEFORE ANY EXCAVATION IS COMMENCED.
 - BACKFILL, ROAD BASE, AND PAVEMENT CONSTRUCTION SHALL CONFORM TO REQUIREMENTS, STANDARDS, AND REGULATIONS OF THE ROADWAY JURISDICTION.
 - TBID RECOMMENDS THE CONTRACTOR MEET ALL TRENCH SAFETY REQUIREMENTS ESTABLISHED BY OSHA & UOSHA.
 - THE DISTRICT INSPECTOR MAY REQUIRED UNSUITABLE MATERIALS BENEATH THE PIPE ZONE TO BE OVER-EXCAVATED, BACKFILLED, AND COMPACTED TO 95% MAX DENSITY.
 - EXCAVATE AT PIPE BELLS TO ENSURE PIPE IS SUPPORTED PROPERLY ALONG ITS ENTIRE LENGTH
 - PERMITS SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.

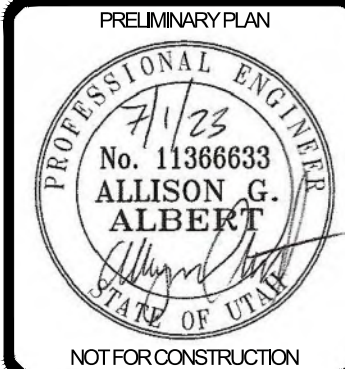
TYPICAL WATER TRENCH SECTION
NOTES
TB-201
PAGE 1 OF 2



TYPICAL WATER TRENCH SECTION
NOT TO SCALE
TB-201
PAGE 2 OF 2

TRENCH DETAIL 5
SCALE: NTS

PROJECT NO.	2301005
DATE	07/01/2023
SCALE	2301005 SITE
SCALE MEASURES	1 INCH ON FULL SIZE SHEETS ADJUST ACCORDANCE FOR REDUCED SIZE SHEETS



BENCHMARK ENGINEERING & LAND SURVEYING
9138 SOUTH STATE STREET SUITE #100
SANDY, UTAH 84070 (801) 542-7192
www.benchmarkcivil.com

LEGACY PLAZA
1758 WEST 5400 SOUTH
TAYLORSVILLE CITY, UTAH

DETAIL SHEET
CDT.01
9 OF 11

CDT.02
10 OF 11

