STORM SEWER STRUCTURE TABLE

LABEL	STRUCTURE TYPE	Top of Casting or Working Point** Elevation (ft)	Invert Elevation (ft)	INVERTS(ft)					COMMENTS
				8" PVC	15" RCP	23"X14" ELLIPTICAL RCP	18" RCP	30" RCP	
A1	OPEN GRATE INLET	650.40	647.25			647.25			
A2	OPEN GRATE INLET	650.50	646.76			646.76	646.76		
A3	SINGLE CURB INLET	649.75	646.34						
A4	EXISTING JUNCTION BOX	649.66	646.19				646.19		
A5	OPEN GRATE INLET	651.00	647.25			647.25			
A6	OPEN GRATE INLET	650.50	647.16	647.66		647.16			
A7	SINGLE CURB INLET	650.00	646.75		647.00		646.75		
A8	OPEN GRATE INLET	651.25	648.00		648.00				
B1	SLOPED PAVED HEADWALL		651.40				651.40		
B2	SLOPED PAVED HEADWALL		651.15				651.15		CLASS 1 RIRPAP PAD AT OUTLET (5' WIDE' x 10' LONG)

** WORKING POINT ELEVATIONS ARE FOR CURB INLETS ONLY. ELEVATION OCCURS WHERE PAVEMENT MEETS INLET FACE.

STORM SEWER PIPE TABLE

UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	LENGTH (ft)	PIPE SIZE (in)	MATERIAL	UPSTREAM INVERT ELEVATION (ft)	DOWNSTREAM INVERT ELEVATION (ft)	SLOPE (%)
A1	A2	96	23"x14"	CLASS III ERCP	647.25	646.76	0.51
A2	A3	81	23"x14"	CLASS III ERCP	646.76	646.35	0.51
A3	A4	21	18	CLASS III RCP	646.35	646.19	0.76
A5	A6	110	23"x14"	CLASS III ERCP	647.72	647.16	0.51
A6	A7	82	23"x14"	CLASS III ERCP	647.16	646.75	0.50
A8	A7	58	15	CLASS III RCP	648.00	647.00	1.72
A7	A3	81	18	CLASS III RCP	646.75	646.34	0.51
B1	B2	48	18	CLASS III RCP	651.40	651.15	0.52

SITE GRADING & EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL OR ROOF PLANS FOR THE EXACT NUMBER, SIZE AND LOCATION OF ROOF DRAINS AND DOWNSPOUTS. ALL ROOF DRAINS AND DOWNSPOUTS SHALL CONNECT TO UNDERGROUND STORM DRAIN SYSTEM.
2. THE CONTRACTOR SHALL REFER TO MECHANICAL AND PLUMBING PLANS FOR THE EXACT NUMBER, SIZE AND LOCATION OF CONDENSATE DRAINS. THE CONTRACTOR SHALL ALLOW FOR STORM DRAIN LINES TO INTERCEPT ALL CONDENSATE DRAINS AND DIRECT THEM TO DRAIN AS SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL USE THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS AS A GUIDE FOR MEASURES FOR EROSION AND SEDIMENT CONTROL.
4. CONSTRUCT SILT BARRIERS BEFORE BEGINNING GRADING OPERATIONS. ALL SILT FENCES TO BE INSTALLED WITHIN THE PROJECT PROPERTY. IF ENCROACHMENT IS REQUIRED TO INSTALL THE SILT FENCES, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE PROPERTY OWNER PRIOR TO PLACEMENT.
5. ALL DISTURBED AREAS BY CONSTRUCTION SHALL BE GRADED SMOOTH AND 4" OF TOPSOIL, UNLESS OTHERWISE NOTED IN LANDSCAPING PLANS OR SPECIFICATION, APPLIED. THESE AREAS SHALL THEN BE SODDED, FERTILIZED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS (SEE LANDSCAPE PLANS OR SPECIFICATIONS FOR SEED MIX AND PROPER APPLICATION RATE)). ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE PROJECT SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR ALL INLETS IN GRASS AREAS UNTIL THE SOIL HAS BEEN STABILIZED AND/OR ALL INLETS IN PAVED AREAS UNTIL GRADED AND STABILIZED WITH THE STONE BASE PER THE DETAILS.
7. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION CONTROL MEASURES AT THE CLOSEOUT OF PROJECT.
8. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. REPAIR ANY DAMAGE ACCORDING TO LOCAL STANDARDS AND AT THE CONTRACTOR'S EXPENSE. COORDINATE ALL CONSTRUCTION WITH THE APPROPRIATE UTILITY COMPANY.
9. ALL DIMENSIONS AND LENGTHS FOR STORM SEWERS ARE TO THE CENTER OF THE STRUCTURES. WORKING POINT ELEVATIONS FOR CURB INLETS OCCURS WHERE THE PAVEMENT MEETS CURB AND GUTTER. WORKING POINT ELEVATIONS FOR GRATED INLETS AND JUNCTIONS BOXES OCCURS AT THE CENTER OF THE GRATE ON THE STRUCTURE.
10. PROVIDE TEMPORARY CONSTRUCTION ACCESS(ES) AT THE POINT(S) WHERE CONSTRUCTION VEHICLES EXIT THE CONSTRUCTION AREA. MAINTAIN PUBLIC ROADWAYS FREE OF TRACKED MUD AND DIRT.
11. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF THE STORM DRAIN CONNECTIONS AT THE BUILDING WITH THE PLUMBING PLANS.
12. THE CONTRACTOR SHALL CHECK ALL EXISTING GRADES AND DIMENSIONS IN THE FIELD PRIOR TO BEGINNING WORK AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
13. THE CONTRACTOR SHALL ADJUST THE CASTINGS OF ALL NEW AND EXISTING STRUCTURES TO MATCH PROPOSED FINISH GRADES.
14. ALL STORM SEWER PIPES SHALL BE BEDDED ACCORDINGLY TO LOCATION IN PAVEMENT OR OUT OF PAVEMENT. ALL PIPE, WHEN UNDER PAVEMENT, SHALL BE BACKFILLED WITH GRANULAR BACKFILL TO A POINT 5' OUTSIDE OF PAVEMENT, BACK OF CURB OR SIDEWALK. CONTRACTOR SHALL PROVIDE STONE BACKFILL WHEN THE INNER EDGE OF TRENCH OR MANHOLE EXCAVATION IS WITHIN 5' OF ANY PROPOSED OR EXISTING PAVEMENT, CURB, OR SIDEWALK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR THIS WORK. SEE DETAIL FOR BACKFILL UNDER PAVEMENT.
15. THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE MANUAL OF ACCIDENT PREVENTION AND CONSTRUCTION ISSUED BY AGC OF AMERICA, INC. AND THE SAFETY AND HEALTH REGULATIONS OF CONSTRUCTION ISSUED BY THE U.S. DEPARTMENT OF LABOR.
16. PROPOSED CONTOUR LINES AND SPOT ELEVATIONS ARE THE RESULT OF AN ENGINEERED GRADING DESIGN AND REFLECT A PLANNED INTENT WITH REGARD TO DRAINAGE AND MOVEMENT OF MATERIALS. SHOULD THE CONTRACTOR HAVE ANY QUESTION OF THE INTENT OR ANY PROBLEM WITH THE CONTINUITY OF GRADES, THE ENGINEER SHALL BE CONTACTED IMMEDIATELY.
17. ALL CUT AND FILL SLOPES SHALL BE 3 HORIZONTAL TO 1 VERTICAL OR FLATTER UNLESS OTHERWISE INDICATED ON THE PLANS.
18. THE MAXIMUM GRADES WITHIN ACCESSIBLE SPACES SHALL BE 2% IN ANY DIRECTION.
19. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 1:50 (2.0%) AND A MAXIMUM LONGITUDINAL (RUNNING) SLOPE OF 1:20 (5.0%).
20. LONGITUDINAL (RUNNING) SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED A 1:20 (5.0%) SLOPE EXCEPT AT HANDICAP OR CURB RAMPS WHICH SHALL NOT EXCEED A 1:12 (8.33%) SLOPE. CROSS SLOPES ALONG THE ACCESSIBLE ROUTE SHALL NOT EXCEED A 1:50 (2.0%) SLOPE.
21. SLOPES IN ANY DIRECTION WITHIN THE ACCESSIBLE PARKING SPACES OR ACCESS AISLES SHALL NOT EXCEED A 1:50 (2.0%) SLOPE.
22. CONTRACTOR SHALL CONFORM TO ALL APPLICABLE CODES AND OBTAIN APPROVAL AS NECESSARY BEFORE BEGINNING CONSTRUCTION.
23. ALL EARTHWORK, INCLUDING THE EXCAVATED SUBGRADE AND EACH LAYER OF FILL, SHALL BE MONITORED AND APPROVED BY A QUALIFIED GEOTECHNICAL ENGINEER, OR HIS REPRESENTATIVE.
24. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO COMPACT FILL SUFFICIENTLY AROUND AND OVER ALL PIPES, STRUCTURE, VALVE STEMS, ETC., INSIDE THE PROPOSED FILLED AREAS TO AVOID SETTLEMENT. ANY SETTLEMENT OCCURRING THE WARRANTY PERIOD SHALL BE RESTORED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
25. IN NO CASE SHALL SLOPE, HEIGHT, SLOPE INCLINATION, OR EXCAVATION DEPTH, INCLUDING TRENCH CONSTRUCTION, EXCEED THOSE SPECIFIED IN LOCAL, STATE AND FEDERAL REGULATIONS, SPECIFICALLY THE CURRENT OSHA HEALTH AND SAFETY STANDARDS FOR EXCAVATIONS (29 CRF PART 1926) SHALL BE FOLLOWED.
26. DO NOT DISTURB VEGETATION EXCEPT WHEN NECESSARY FOR GRADING PURPOSES.
27. STRIP TOPSOIL FROM ALL CUT AND FILL AREAS AND STOCKPILE UPON COMPLETION OF GENERAL GRADING OVER ALL DISTURBED AREAS, TO A MINIMUM DEPTH OF 4". CONTRACTOR SHALL SUPPLY ADDITIONAL TOP SOIL IF INSUFFICIENT QUANTITIES EXIST ON SITE.
28. ALL DRAINAGE CONSTRUCTION MATERIALS AND INSTALLATION SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE LOCAL GOVERNING AGENCY.
29. POSITIVE DRAINAGE SHALL BE ESTABLISHED AS THE FIRST ORDER OF WORK AND SHALL BE MAINTAINED AT ALL TIMES DURING AND AFTER CONSTRUCTION. SOIL SOFTENED BY PERCHED WATER IN FOUNDATION AND PAVEMENT AREAS MUST BE UNDERCUT AND REPLACED WITH SUITABLE FILL MATERIALS APPROVED BY THE GEOTECHNICAL ENGINEER. GROUNDWATER INFILTRATION INTO EXCAVATIONS SHOULD BE EXPECTED, AND THE WATER SHALL BE REMOVED USING GRAVITY DRAINAGE OR PUMPING.
30. REINFORCED CONCRETE STORM DRAINAGE PIPE SHALL BE CLASS III, WALL "B". HDPE STORM DRAINAGE PIPE SHALL BE ADS N-12, SMOOTH INTERIOR PIPE, OR EQUIVALENT. PVC STORM DRAINAGE PIPE SHALL BE SDR-35.
31. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS. RELOCATION OF BENCHMARK SHALL ONLY BE BY AN ALABAMA REGISTERED SURVEYOR.
32. ALL FILL MATERIAL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THIS MATERIAL SHALL BE PLACED IN LIFTS DIRECTED BY THE GEOTECHNICAL ENGINEER AND COMPACTED AS SPECIFIED BY THE GEOTECHNICAL ENGINEER OR HIS REPORT.
33. STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS.
34. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO WASTE EXCESS EARTH MATERIAL OFF SITE AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL FIRST OFFER THE EXCESS MATERIAL TO THE OWNER. IF NOT ACCEPTED BY THE OWNER, THE CONTRACTOR SHALL DISPOSE OF EARTH MATERIAL OFF SITE. IT SHALL ALSO BE THE CONTRACTOR'S RESPONSIBILITY TO IMPORT SUITABLE MATERIAL (AT NO ADDITIONAL COST TO THE OWNER) FOR EARTHWORK OPERATIONS IF SUFFICIENT AMOUNTS OF EARTH MATERIAL ARE NOT AVAILABLE ON SITE.
35. IF ADVERSE CONDITIONS ON SITE ARE UNCOVERED DURING CONSTRUCTION, THE CITY ENGINEER MAY REQUIRE MODIFICATION OF THESE PLANS TO THE EXTENT NECESSARY TO ASSURE COMPLIANCE WITH THE CITY'S CONSTRUCTION SPECIFICATIONS MANUAL.
36. ALL DRAINAGE DITCHES ARE TO BE CENTERED ON PROPERTY LINES UNLESS OTHERWISE SHOWN.
37. ALL LOTS SHALL BE GRADED SO THAT RUN-OFF WILL BE DIRECTED TO THE STREET OR TO DRAINAGE WAYS IN A DEDICATED EASEMENT.

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NO.	DATE	DESCRIPTION		
2	4-27-2020	CITY'S FINAL TECHNICAL REVIEW	BW	APV
1	4-7-2020	CITY'S TECHNICAL REVIEW	HW	CHK
			BW	BY

GRADING NOTES AND STORM SEWER INFORMATION

CONSTRUCTION DOCUMENTS
BOJANGLES - J.E. BRISCOE WAY & MADISON BLVD.
MADISON, MADISON COUNTY, ALABAMA

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