CIVIL CONSTRUCTION PLANS
FOR:
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579

PARCEL ID NUMBER U-08-31-20-9NJ-000000-00002.0 | FOLIO NUMBER: 077681-9614

SECTION 08, TOWNSHIP 31 SOUTH, RANGE 20 EAST

DESIGN AND DEVELOPMENT CONTACTS:

OWNER:	BIG BEND GROUP FOUR, LLC 8902 N DALE MABRY HWY, SUITE 200 TAMPA, FL 33614 CONTACT: MICHAEL LEEDS TEL: 813-766-7018 EMAIL: MICHAEL@SHAGBARKFL.COM
DEVELOPER:	STARBUCKS CORPORATION 2401 UTAH AVENUE SOUTH, SUITE 800 SEATTLE, WA 98134 CONTACT: MICHAEL PAPRELLA, CCIM TEL: 321-506-9137 EMAIL: MPAPREL@STARBUCKS.COM
CIVIL ENGINEER:	BOWMAN CONSULTING GROUP, LTD. 5404 CYPRESS CENTER DR. STE. 140 TAMPA, FL 33609 CONTACT: ERIK D. JULIANO P.E. TEL: 813-736-2114
LANDSCAPE ARCHITECT:	EVERGREEN DESIGN GROUP 8270 WOODLAND CENTER BLVD TAMPA, FL 33614 CONTACT: KENN BATES, FASLA, PLA TEL: 800-680-6630
SURVEYOR:	EXTREME SURVEYING OF FLORIDA, INC. 29340 RHODIN PLACE WESLEY CHAPEL, FL 33545 CONTACT: ALEX B. THOMPSON JR., P.L.S. TEL: 813-973-2092

GOVERNING AGENCIES CONTACTS:

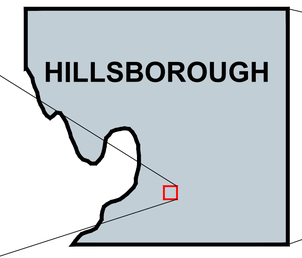
PLANNING AND ZONING:	HILLSBOROUGH COUNTY ZONING 601 E KENNEDY BOULEVARD, 19TH FLOOR TAMPA, FL 33602 TEL: 813-272-5600
BUILDING DEPARTMENT:	HILLSBOROUGH COUNTY DEVELOPMENT SERVICES 601 E KENNEDY BOULEVARD TAMPA, FL 33602 CONTACT: ADAM GORMLY TEL: 813-272-5600
FIRE DEPARTMENT:	HILLSBOROUGH COUNTY FIRE RESCUE 9450 E COLUMBUS DRIVE TAMPA, FL 33619 CONTACT: DENNIS JONES TEL: 813-272-6600
TRANSPORTATION DEPARTMENT:	HILLSBOROUGH COUNTY PUBLIC WORKS 601 E KENNEDY BOULEVARD TAMPA, FL 33602 CONTACT: JOSH BELLOTTI TEL: 813-635-5400
WATER/WASTEWATER:	HILLSBOROUGH COUNTY WATER RESOURCES 925 E TWIGGS STREET TAMPA, FL 33602 TEL: 813-272-5977 EMAIL: WATERDEPT@HCFLGOV.NET
STORMWATER	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT 7601 US HWY 301 TAMPA, FL 33637 TEL: 813-985-7481

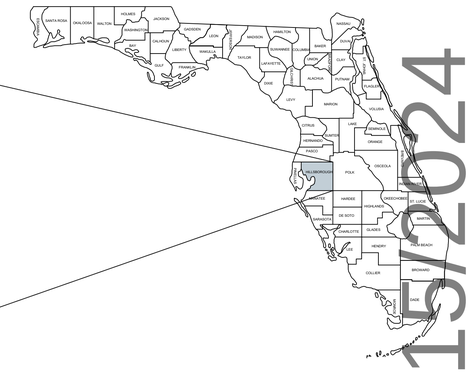
UTILITY CONTACTS:

ELECTRIC COMPANY:	TAMPA ELECTRIC COMPANY P.O. BOX 111 TAMPA, FL 33601-0111 TEL: 866-832-6249
GAS COMPANY:	TECO PEOPLES GAS P.O. BOX 2562 TAMPA, FL 33601-2562 TEL: 877-832-6747
TELEPHONE / INTERNET	SPECTRUM 12970 US-301 SOUTH, SUITE 105 RIVERVIEW, FL 33579 TEL: 888-406-7063
SOLID WASTE:	HILLSBOROUGH COUNTY SOLID WASTE MANAGEMENT 332 NORTH FALKENBURG ROAD BRANDON, FL 33619 TEL: 813-272-5680 EMAIL: SWMDDIRECTOR@HCFLGOV.NET

SITE LOCATION MAP

SCALE: 1" = 1,000'





LEGAL DESCRIPTION:

LOT 2, BIG BEND OUTPARCELS-PHASE 3, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 117, PAGE 175, OF THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA.

GENERAL STATEMENT:

THE PROJECT CONSISTS OF THE COMMERCIAL REDEVELOPMENT OF 1.22 ± ACRES OF EXISTING VACANT LAND FOR THE USE OF 2,750 ± SF OF DRIVE-THROUGH COFFEE SHOP WITH ASSOCIATED PARKING AND APPURTENANCES.

ALERT TO CONTRACTOR:

1. THE SITE WORK FOR THE PROPOSED DEVELOPMENT SHALL MEET OR EXCEED ALL CITY AND/OR COUNTY AND STATE STANDARDS FOR SITE WORK.
2. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO PROJECT COMPLETION.

DATUM NOTE:

ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). THE SURVEY BENCHMARK IS BASED ON HILLSBOROUGH COUNTY BENCHMARK "VC-287," PUBLISHED ELEVATION = 68.25 FEET. SITE BENCHMARKS ARE SHOWN AND DESCRIBED GRAPHICALLY ON THE SURVEY.

FLOOD NOTE:

PARCEL IS LOCATED IN FLOOD ZONE "X" ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (FIRM) MAP NUMBERS 12057C0515H, DATED 8/28/2008.

SHEET LIST TABLE

WTR MGMT DIST	CITY / COUNTY	SHEET TITLE	SHEET NUMBER	REV 1	REV 2	REV 3	REV 4
X	X	COVER SHEET	C1.0				
X	X	GENERAL NOTES	C1.1	X	X		
X	X	EROSION CONTROL PLAN - PHASE I	C2.0	X	X	X	X
X	X	EROSION CONTROL PLAN - PHASE 2	C2.1	X	X	X	X
X	X	EROSION AND SEDIMENTATION CONTROL DETAILS	C2.2				
X	X	DEMOLITION PLAN	C3.0	X	X	X	X
X	X	SITE PLAN	C4.0 - C4.1	X	X	X	
X	X	GRADING AND DRAINAGE PLAN	C5.0 - C5.1	X	X	X	X
	X	UTILITY PLAN	C6.0	X	X	X	
	X	UTILITY PROFILES	C6.1	X		X	
	X	GARBAGE TRUCK PLAN	C7.0	X			
	X	STORE DELIVERY TRUCK PLAN	C7.1	X	X		
	X	VEHICLE STACKING PLAN	C7.2		X		
X	X	CONSTRUCTION DETAILS	C8.0				
X	X	CONSTRUCTION DETAILS	C8.1				
X	X	CONSTRUCTION DETAILS	C8.2	X		X	
X	X	CONSTRUCTION DETAILS	C8.3	X			
X	X	CONSTRUCTION DETAILS	C8.4				
X	X	CONSTRUCTION DETAILS	C8.5				
X	X	CONSTRUCTION DETAILS	C8.6	X			
X	X	CONSTRUCTION DETAILS	C8.7	X			
	X	LANDSCAPE AND IRRIGATION PLAN (BY OTHERS)	LP-1 THRU LI-3	X	X	X	
	X	PHOTOMETRIC PLAN (BY OTHERS)	1 OF 1	X	X		

Bowman

BID SET 02/15/2024

NOT FOR CONSTRUCTION

Bowman

CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

BOWMAN CONSULTING GROUP, LTD.
5404 CYPRESS CENTER DR.,
SUITE 140
TAMPA, FL 33609
PHONE: (813) 736-2114
LICENSE NO. 30462
BOWMAN.COM

COVER SHEET
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE AS NOTED

JOB No. 011045-01-001

DATE 09/23/2022

SHEET C1.0

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.

USER: MMXIBAM PLOT DATE/TIME: Feb. 09, 24 - 13:08:46 DRAWING: C:\Temp\AcPublish_8124\011045-01-001-C1.0-COVR.dwg ,C1.0 COVER SHEET

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.

GENERAL DEMOLITION NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL (IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES) ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
3. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
4. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES.
5. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED.
6. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION. CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT-OF-WAY DURING CONSTRUCTION.
7. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES) AS APPROVED BY OWNER.
8. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
9. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
10. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FENCING, LIGHTING AND/OR ANY OTHER APPURTENANCES, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/ STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS PLAN, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.
11. CONTRACTOR SHALL LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IT'S REMOVAL AND REPAIR.
12. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND THE CITY/COUNTY UTILITY DEPARTMENT TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO SITE THROUGHOUT THIS SPECIFIC WORK AND THROUGH ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH THE CITY/COUNTY DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
13. DAMAGE TO ALL EXISTING CONDITIONS SHOWN TO REMAIN IN THESE PLANS WILL BE REPLACED AT CONTRACTOR'S EXPENSE.

GENERAL SITE NOTES:

1. ALL CONSTRUCTION MATERIALS AND TECHNIQUES OF INSTALLATION SHALL MEET PERFORMANCE VALUES OF THE MATERIALS SPECIFIED AND COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT THIS PROJECT IS CONSTRUCTED IN ACCORDANCE WITH THESE DOCUMENTS AND IN COMPLIANCE WITH CODES INDICATED HEREIN. THE QUALITY OF WORKMANSHIP AND INSTALLATION OF MATERIALS SPECIFIED BY THE ARCHITECT/ENGINEER ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE ARCHITECT/ENGINEER WILL NOT BE HELD RESPONSIBLE FOR ANY SUBSTANDARD OR INSUFFICIENT WORKMANSHIP, MATERIALS, OR SERVICES PROVIDED IN THE EXECUTION OF ANY PHASE OF CONSTRUCTION OF THIS PROJECT.
3. ALL MATERIALS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS. THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL MANUFACTURER'S WARRANTIES WILL BE HONORED.
4. ALL CONDITIONS SHOWN TO BE "EXISTING" SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE NOTED AND SUBMITTED TO THE OWNER AND THE ARCHITECT/ENGINEER FOR REVIEW. CHANGES TO THE ORIGINAL DESIGN OF THE PROJECT DUE TO EXISTING SITE CONDITIONS MUST BE APPROVED BY BOTH THE OWNER AND THE ARCHITECT/ENGINEER PRIOR TO MAKING ANY CHANGES.
5. CONTRACTOR TO REVIEW AND FOLLOW CONSTRUCTION TECHNIQUES/SPECIFICATIONS OUTLINED IN THE SITE GEOTECHNICAL REPORT. ANY CONFLICTS WHICH MAY ARISE SHALL BE NOTED AND SUBMITTED TO THE OWNER AND THE ARCHITECT/ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF EXISTING FIELD CONDITIONS AND OF ALL DRAWINGS AND SPECIFICATIONS RELATED TO THEIR FIELD. THE FAILURE TO ACQUAINT HIMSELF WITH THIS PROJECT AND HIS FIELD OF SERVICE SHALL NOT RELIEVE HIM OF ANY RESPONSIBILITY FOR PERFORMING HIS WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED DUE TO THE GENERAL CONTRACTOR'S FAILURE TO CONVEY THE NECESSARY KNOWLEDGE TO FAMILIARIZE WORKERS AND SUBCONTRACTORS WITH THIS PROJECT.
7. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE SAFETY OF ALL PERSONS ON THE JOB SITE AT ALL TIMES INCLUDING (BUT NOT LIMITED TO) SUBCONTRACTORS, FACILITY EMPLOYEES, VENDORS, DESIGN STAFF PROFESSIONALS AND INSPECTION PERSONNEL.
8. THE GENERAL CONTRACTOR SHALL PROVIDE DUMPSTERS, PORTABLE TOILETS AND TEMPORARY POWER FOR UNRESTRICTED PROJECT RELATED USE BY OTHERS FOR THE DURATION OF THE PROJECT.
9. THE GENERAL CONTRACTOR SHALL COORDINATE PROJECT PHASING AND STORAGE OF MATERIALS WITH THE OWNER.
10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR RECEIVING, UNLOADING, STORING AND PROTECTING OF MATERIALS AND EQUIPMENT SUPPLIED BY THE OWNER UNTIL IT HAS BEEN INSTALLED AND ACCEPTED BY THE OWNER.
11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE AREA CLEAN AND FREE OF DEBRIS AT ALL TIMES DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL POWER WASH THE ENTIRE CONSTRUCTION AREA PRIOR TO TURNOVER TO THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING DESIGNATED WASH-OUTS FOR CONCRETE, STUCCO, ETC. THESE SHOULD BE DESIGNATED PRIOR TO CONSTRUCTION ON THE PLANS AND ESTABLISHED AT THE PRE-CONSTRUCTION MEETING.
12. EXISTING PAVING THAT WILL REMAIN AFTER CONSTRUCTION SHALL BE PROTECTED FROM DAMAGE. AREAS OF EXISTING PAVING THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE SAWCUT, THEN REMOVED AND REPLACED.
13. THE GENERAL CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL PUBLIC AND PRIVATE UTILITIES, INCLUDING IRRIGATION, SPECIFIC TO THIS PROJECT PRIOR TO THE START OF ANY DEMOLITION OR CONSTRUCTION. SHOULD ANY UTILITY REQUIRE RELOCATION, CONTRACTOR SHALL COORDINATE WITH THE OWNER AND THE ARCHITECT/ENGINEER.
14. SAWCUT AND REMOVE PORTIONS OF EXISTING PAVING ONLY AS REQUIRED TO INSTALL NEW UTILITIES OR TO CONSTRUCT PROPOSED FACILITIES PER THIS PLAN. REPLACE PORTIONS REMOVED TO MATCH EXISTING FLUSH AND SMOOTH.
15. IF REQUESTED BY THE OWNER, PROVIDE TEMPORARY CONSTRUCTION FENCING, MINIMUM 6'-0" HIGH, AROUND ENTIRE AREA OF CONSTRUCTION OR PER THE CLIENTS STANDARDS. FIELD VERIFY EXACT LOCATION AND SPECIFICATIONS OF FENCE WITH THE OWNER PRIOR TO START OF CONSTRUCTION. REMOVE FENCING AT COMPLETION OF PROJECT AND PATCH PAVING AS REQUIRED AT FENCE POST HOLES.
16. ALL DIMENSIONS ARE TO GROUND LEVEL IMPROVEMENTS (FACE OF CURB, CONCRETE SLAB, ETC UNLESS NOTED OTHERWISE).
17. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS.
18. CONTRACTOR SHALL MATCH PROPOSED CURB AND GUTTER, CONCRETE, AND PAVEMENT TO EXISTING IN GRADE AND ALIGNMENT.
19. CONTRACTOR SHALL PROVIDE PIPE BOLLARDS FOR PROTECTION OF ALL ABOVE GROUND UTILITIES AND APPURTENANCES IN DRIVE AREA.
20. CONSTRUCTION SHALL COMPLY WITH ALL GOVERNING CODES AND BE CONSTRUCTED TO SAME.
21. CONTRACTOR IS RESPONSIBLE FOR REPAIRING THE DAMAGE DONE TO ANY EXISTING ITEM TO REMAIN DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. REPAIRS SHALL BE EQUAL TO, OR BETTER THAN, EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY OWNER PRIOR TO CONSTRUCTION START.
22. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF BUILDING APPURTENANCES, STAIRS, RAMPS, SLOPE PAVING, SIDEWALKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.
23. ALL DISTURBED AREAS ARE TO RECEIVE FOUR INCHES OF TOPSOIL, SEED OR SOD, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
24. EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE ABANDONED, REMOVED OR RELOCATED AS NECESSARY. ALL COST SHALL BE INCLUDED IN BASE BID.
25. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITE WORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
26. THE SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE SPECIFICATIONS IN THE CONTRACT DOCUMENTS.
27. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER OF RECORD BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL.
28. IN THE EVENT THE CONSTRUCTION IS ABANDONED PRIOR TO THE COMPLETION OF THE PROJECT, ALL CONSTRUCTION AND STOCKPILED VEGETATIVE DEBRIS AND FILL SHALL BE REMOVED FROM THE SITE AND THE SITE SHALL BE STABILIZED PER THE PERMIT FOR STORM WATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (NPDES).
29. THESE PLANS ARE INTENDED TO AND SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT.
30. ALL VEGETATION FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF-SITE.
31. CONTRACTOR IS RESPONSIBLE FOR PERMITTING, INSTALLATION AND MAINTENANCE OF ALL MAINTENANCE OF TRAFFIC OPERATIONS DURING CONSTRUCTION. MAINTENANCE OF TRAFFIC SHALL CONFORM TO GOVERNING AGENCY STANDARDS.
32. ALL DESIGN AND CONSTRUCTION MUST CONFORM TO THE MINIMUM STANDARDS SET DOWN IN THE CITY/COUNTY DEVELOPMENT CODE, ZONING, AND/OR RELATED ORDINANCES, AND MINIMUM TESTING FREQUENCY REQUIREMENTS.
33. ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
34. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE UNLAWFUL TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE COUNTY.
35. IN ORDER TO COMPLY WITH SECTION 4.01.05.OF THE HILLSBOROUGH COUNTY LAND DEVELOPMENT CODE TO MINIMIZE SOIL EROSION PROPOSED LAND ALTERATION ACTIVITIES SHALL NOT UNNECESSARILY REMOVE EXISTING VEGETATION AND ALTER EXISTING TOPOGRAPHY. ADEQUATE PROTECTION MEASURES (I.E., HAY BALES, BAFFLES, SODDING, AND SAND BAGGING) SHALL BE PROVIDED, AS NECESSARY, TO MINIMIZE EROSION AND DOWNSTREAM SEDIMENTATION CAUSED BY SURFACE WATER RUN-OFF ON EXPOSED LAND SURFACES.
36. ANY AREAS SUBJECT TO EROSION MUST BE ADEQUATELY STABILIZED WITH VEGETATIVE MATERIAL THAT WILL, WITHIN A REASONABLE TIME, DETER SOIL DISTURBANCE. SODDING, PLUGGING, SPRIGGING OR SEEDING IS ACCEPTABLE FOR STABILIZATION; HOWEVER, SODDING MAY BE REQUIRED IN AREAS OF EROSION-PRONE SOILS OR WHERE SLOPES ARE GREATER THAN 5:1. VEGETATION OTHER THAN GRASS IS ACCEPTABLE UNLESS OTHERWISE SPECIFIED.

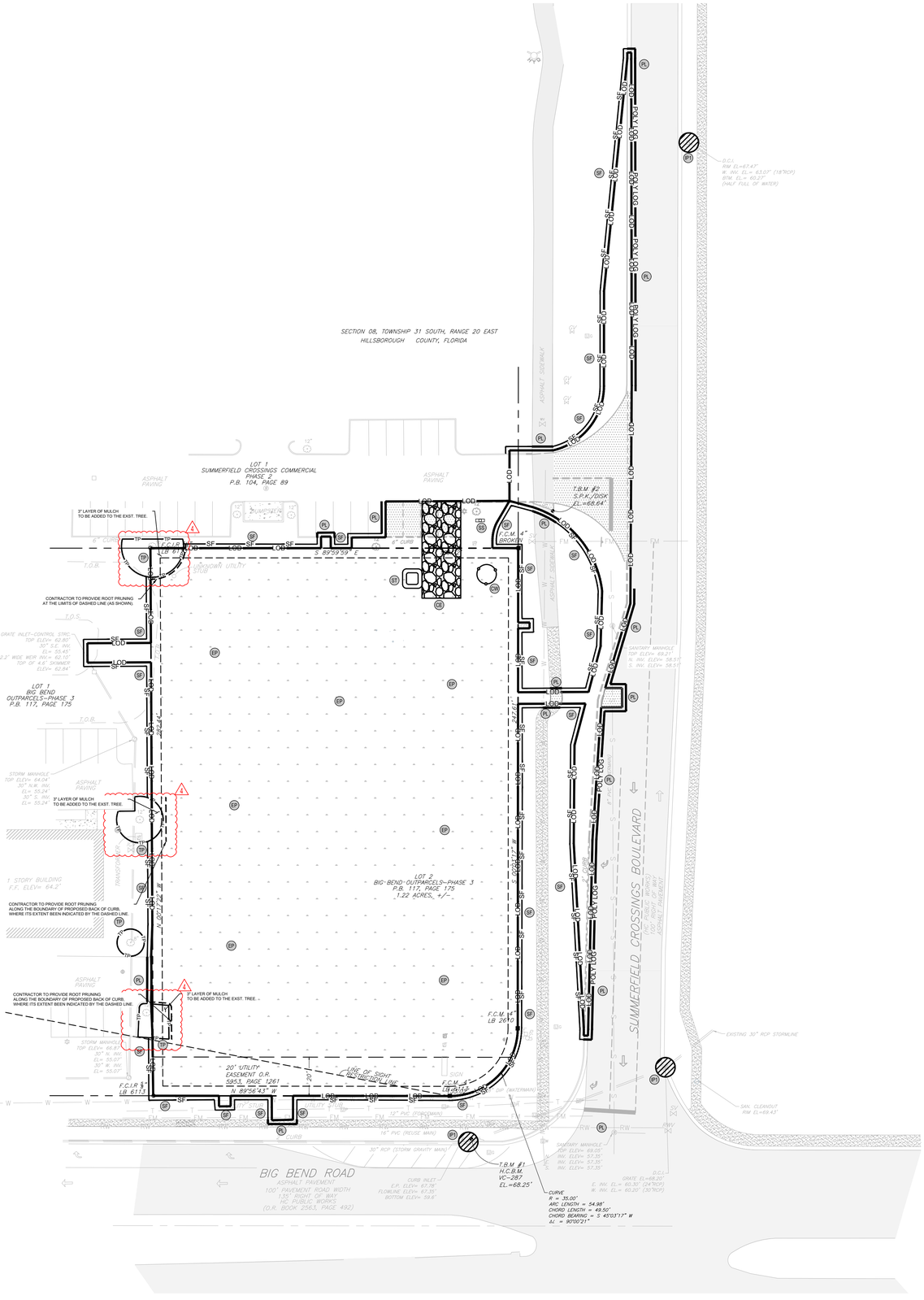
GENERAL PAVING AND GRADING NOTES:

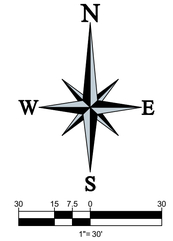
1. ALL PAVING AND GRADING CONSTRUCTION MATERIALS AND METHODS SHALL MEET THE STANDARD SPECIFICATIONS AND REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
2. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY, UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
5. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION AND SHALL MEET ALL AUTHORITY HAVING JURISDICTION REQUIREMENTS/SPECIFICATIONS AT A MINIMUM.
6. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
7. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA AND/OR APPLICABLE STATE GENERAL NPDES PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
8. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
9. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
10. TOPOGRAPHIC INFORMATION IS TAKEN FROM A TOPOGRAPHIC SURVEY BY A LICENSED PROFESSIONAL SURVEYOR AND MAPPER. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE ARCHITECT/ENGINEER OF RECORD AND OWNER FOR REVIEW.
11. ALL UNSURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
12. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
13. ALL PAVING, CONSTRUCTION MATERIALS, AND WORKMANSHIP WITHIN RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION SPECIFICATIONS AND STANDARDS (LATEST EDITION) RESPECTIVELY.
14. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED AND INSTALLED IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES LATEST REQUIREMENTS AND SPECIFICATIONS OR AUTHORITY HAVING JURISDICTION SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
15. ALL CONCRETE USED ON THE SITE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI IN 28 DAYS. ALL CONCRETE SIDEWALKS SHALL HAVE CONTROL JOINTS CUT ON 5-FOOT CENTERS AND EXPANSION JOINTS PLACED ON 60-FOOT CENTERS, CHANGES IN DIRECTION, AND ABUTTING SEPARATE POURS. CONTRACTION JOINT SPACING MATCHES WIDTH OF SIDEWALK AND EXPANSION JOINTS ARE REQUIRED AT A MAXIMUM OF 25 FEET. THIS WOULD MEAN 24 FEET FOR A 6 INCH CURB. PAVEMENT JOINTS SHALL BE SPACED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND/OR DETAILS.
16. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS AND GEOTECHNICAL REPORT.
17. THE CONTRACTOR SHALL ENSURE THAT ALL PLANTING AREAS (INTERIOR ISLANDS, FOUNDATION PLANTING AREAS, ETC.) ARE NOT COMPACTED AND DO NOT CONTAIN LIMEROCK OR OTHER MATERIAL (CLAY, SUBGRADE MATERIAL, MARL, ETC.) WHICH MAY ADVERSELY AFFECT DRAINAGE OF GREEN AREAS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND BACKFILL WITH CLEAN, FREE DRAINING TOPSOIL.
18. CONTRACTOR IS SPECIFICALLY CAUTIONED, DEPENDING ON THE TIME OF YEAR AND PROJECT LOCATION, DEWATERING MAY BY REQUIRED.
19. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND ARCHITECT/ENGINEER PRIOR TO EXCAVATION.
20. STRIP TOPSOIL AND ORGANIC MATTER AND PAVING MATERIAL FROM ALL AREAS TO BE IMPERVIOUS. TOPSOIL SHALL BE STOCKPILED ON SITE FOR REPLACEMENT ON SLOPES AND ALL OTHER GREEN AND LANDSCAPE AREAS.
21. FIELD DENSITY TESTS SHALL BE TAKEN AT FREQUENCY AS REQUIRED IN THE SPECIFICATIONS OR AS REQUIRED BY THE GOVERNING REGULATORY AGENCY, WHICH EVER IS MORE STRINGENT.
22. CONTRACTOR SHALL ENSURE POSITIVE FLOW TO ALL INLETS WITHIN DRAINAGE BASINS TO PRECLUDE PONDED WATER.
23. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO CONTROL SEDIMENT, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED.

GENERAL UTILITY NOTES:

1. CONTRACTOR SHALL COORDINATE ANY DISRUPTIONS TO EXISTING UTILITY SERVICES WITH ADJACENT PROPERTY OWNERS.
2. ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS (INCLUDING SERVICE LINES) SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE DESIGNATED UTILITY COMPANIES.
3. CONSTRUCTION SHALL NOT START ON ANY PUBLIC UTILITY SYSTEM UNTIL WRITTEN APPROVAL HAS BEEN RECEIVED BY THE ENGINEER FROM THE APPROPRIATE GOVERNING AUTHORITY AND CONTRACTOR HAS BEEN NOTIFIED BY THE ENGINEER.
4. PRIOR TO THE CONSTRUCTION OF OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, WATER MAIN OR ANY OF THE DRY UTILITIES, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTION AND ALL UTILITY CROSSINGS AND INFORM THE ENGINEER AND THE OWNER/DEVELOPER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. NOTIFICATION SHALL BE MADE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. THE ENGINEER AND ITS CLIENTS SHALL BE HELD HARMLESS IN THE EVENT THAT THE CONTRACTOR FAILS TO MAKE SUCH NOTIFICATION.
5. PRIOR TO CONSTRUCTION, THE GENERAL CONTRACTOR SHALL VERIFY THAT "STUB OUTS" FOR POWER, TELEPHONE, FIBER OPTICS, WATER AND SEWER (IF APPLICABLE) HAVE BEEN PROVIDED BY OTHERS AT THE AREA ADJACENT TO THE PROPOSED BUILDING. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CONNECTIONS AT THE BUILDING.
6. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE SCHEDULE FOR INSTALLATION WITH THE UTILITY COMPANIES AND THE OWNER. ALL EXISTING CONDITIONS THAT ARE REMOVED OR DISRUPTED DURING THE PLACEMENT OF NEW UTILITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL CONDITIONS. ANY EXISTING UTILITIES DISRUPTED DURING PLACEMENT OF NEW UTILITIES SHALL BE REPAIRED AND OPERATING NORMALLY THE SAME DAY OF DISRUPTION. ITEMS THAT MAY NEED TO BE REPLACED OR REPAIRED INCLUDE BUT ARE NOT LIMITED TO: EXISTING ASPHALT PAVING, EXISTING CONCRETE PAVING, WATER LINES, IRRIGATION LINES, GRASS AREAS, LANDSCAPING, AND SITE LIGHTING. THE GENERAL CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION OF ALL EXISTING ITEMS THAT WILL BE DISRUPTED DURING THE PLACEMENT OF NEW UTILITIES AND PROVIDE THE OWNER A DETAILED PHASING SCHEDULE OUTLINING THE TIMELINE FOR INSTALLATION OF NEW UTILITIES INCLUDING THE PROPOSED TIMES THAT EXISTING ITEMS WILL BE DISRUPTED. THE NEW UTILITIES TRENCH WIDTH AND DEPTH SHALL MEET ALL LOCAL AND STATE REQUIREMENTS FOR THE DISPLACEMENT OF ALL UTILITIES. IF DIRECTIONAL BORING IS USED FOR INSTALLATION, THE ABOVE LISTED ITEMS ARE STILL REQUIRED TO BE SUBMITTED TO THE OWNER.
7. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
8. ALL SANITARY SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RINGS & COVERS. SANITARY MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE WITH WATER TIGHT LIDS.
9. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
10. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
11. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 4000 P.S.I.
13. REFER TO ARCHITECTURAL PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
14. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
15. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
16. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
17. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
18. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES, GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE IN ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
19. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
20. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
21. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACKFILLED AND COMPACTED IN ACCORDANCE WITH SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
22. SHOP DRAWINGS FOR ALL MATERIALS AND APPURTENANCE SHALL BE SUBMITTED TO AND APPROVED BY THE GOVERNING UTILITY DEPARTMENT. CONTRACTOR TO COPY THE ENGINEER OF RECORD WITH APPROVED DRAWINGS AS REQUIRED. NO WORK IS TO BEGIN UNTIL SHOP DRAWINGS HAVE BEEN REVIEWED, APPROVED AND RETURNED TO THE CONTRACTOR.
23. AT LEAST THREE WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY/COUNTY AND THE UTILITY COMPANY AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.





EROSION CONTROL LEGEND

- LOD — LIMITS OF DISTURBANCE
- SF — SILT FENCE
- PL — POLY LOG
- IP# — INLET PROTECTION
- TP — TREE PROTECTION
- CW — CONCRETE WASHOUT
- ST — SEDIMENT TRAP
- SS — SWPPP INFORMATION SIGN
- CE — CONSTRUCTION ENTRANCE
- EP — EXISTING PERVIOUS
- ROOT PRUNING LIMIT OF EXTENT

NOTE:
SILT FENCE IS SHOWN OUTSIDE LIMITS OF DISTURBANCE FOR CLARITY ONLY. ALL SIT FENCE TO BE INSTALLED ON SITE.

NOTE:
DO NOT INSTALL TREE BARRICADES (SPECIFICALLY SILT FENCING MATERIAL) BY TRENCHING WITHIN THE DRIPLINE OF EXISTING TREES.

MAINTENANCE

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY.

SEQUENCE OF CONSTRUCTION

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAY DOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, MASON'S AREA, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

PHASE I
1. INSTALL STABILIZED INSTALL STABILIZED CONSTRUCTION EXIT(S).
2. INSTALL SILT FENCE(S) AND SILT DIKE(S) ON THE SITE, AND INLET PROTECTION(S) (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SILT FENCE).
3. PREPARE TEMPORARY PARKING AND STORAGE AREA.
4. HALT ALL ACTIVITIES AND CONTACT THE ENGINEER OF RECORD TO PERFORM INSPECTION OF BMP'S.
5. BEGIN DEMOLITION ACTIVITIES AND CLEARING AND GRUBBING THE SITE.
6. BEGIN GRADING THE SITE.
7. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES

PHASE II
1. TEMPORARILY SEED, THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE.
2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
3. INSTALL RIP RAP AROUND OUTLET STRUCTURES AS EACH OUTLET STRUCTURE IS INSTALLED.
4. INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
5. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
6. PREPARE SITE FOR PAVING.
7. PAVE SITE.
8. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
9. COMPLETE GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS INCLUDING OUT LOTS.
10. CALL ENGINEER OF RECORD AFTER THE SITE APPEARS TO BE FULLY STABILIZED FOR AN INSPECTION.
11. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER APPROVAL OF THE ENGINEER OF RECORD AND STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF THE BMP.
12. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION IS SIGNED OFF BY THE OWNER THAT THE SITE IS FULLY STABILIZED AND THE PERMIT MAY BE TERMINATED.
13. CONTRACTOR TO FILE NOTICE OF TERMINATION APPLICATION TO THE FDEP AND SHALL PROVIDE A COPY OF FDEP APPROVAL TO THE OWNER AND ENGINEER OF RECORD.

NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPS HAVE BEEN COMPLETELY INSTALLED.

SHEET NOTES:

1. REFER TO SHEET C1.1 FOR GENERAL NOTES.
2. REFER TO SHEET C3.0 FOR DEMOLITION PLAN.
3. REFER TO SHEET C5.0 FOR GRADING AND DRAINAGE PLAN.
4. REFER TO SHEET C6.0 FOR UTILITY PLAN.
5. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.

BEST MANAGEMENT PRACTICES:

1. STRUCTURAL MEASURES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN EFFECTIVE OPERATING CONDITION.
2. DOCUMENTATION OF MAINTENANCE ACTIVITIES INCLUDING FREQUENCY, LOT DESIGNATION, INSPECTION OF STRUCTURAL CONTROLS, MATERIAL STORAGE AREAS, VEHICLE ENTRANCES AND EXITS: ACTIONS TAKEN AND INSPECTORS NAME.
3. CONSTRUCTION SITE NOTICE WILL BE MAINTAINED ON SITE
4. COPY OF SWPPP SHALL BE KEPT ON SITE
5. PERIMETER MUST RETAIN THE SWPPP, NOI AND INSPECTION LOG FOR A MINIMUM OF 3 YEARS FROM THE TERMINATION AND FINAL STABILIZATION OF PROJECT

A. WASTE MATERIALS ALL WASTE MATERIALS INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURED LIDDED METAL DUMPSTER. NO CONSTRUCTION MATERIALS SHALL BE BURIED ON SITE. THE DUMPSTER SHALL BE EMPTIED AS NECESSARY OR AS REQUIRED BY ORDINANCE 9.04 (SOLID WASTE MANAGEMENT AND THE TRASH BE HAULED TO A LICENSED LANDFILL.)

B. HAZARDOUS WASTE AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS: PAINT, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS. ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SPILL STABILIZATION, CURING, COMPOUNDS AND ADDITIVES. IN EVENT OF SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION AND CONTACT THE FIRE DEPARTMENT AND GOVERNING AUTHORITIES.

C. SANITARY WASTE ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

D. SPILL PREVENTION THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.

E. GOOD HOUSEKEEPING
- E.A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB
- E.B. NEATLY STORE MATERIALS ON-SITE IN A SECURE MANNER
- E.C. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER
- E.D. DO NOT MIX SUBSTANCES WITH ANOTHER, UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER.
- E.E. USE ENTIRE CONTENTS OF A PRODUCT BEFORE DISPOSING F THE CONTAINER
- E.F. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROP USE AND DISPOSAL

F. HAZARDOUS CONDITIONS
PRACTICES TO REDUCE RISKS:
- F.A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE
- F.B. RETAIN ORIGINAL LABELS, PRODUCT INFORMATION AND MATERIAL SAFETY DATA SHEETS (MSDS)
- F.C. DISPOSE SURPLUS PRODUCT IN ACCORDANCE WITH MANUFACTURERS

G. PETROLEUM PRODUCTS
PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER RECOMMENDATION.

H. SPILL CONTROL PRACTICES:
- H.A. MANUFACTURERS RECOMMENDED METHODS FOR SPILL CLEAN UP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE WARE OF THE PROCEDURE
- H.B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE
- H.C. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY
- H.D. SPILL AREA SHALL BE WELL VENTILATED AND APPROPRIATE CLOTHING WILL BE WORN
- H.E. ANY SPILL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY
- H.F. MEASURES SHALL BE TAKEN TO PREVENT A SPILL FROM REOCCURRING

I. MAINTENANCE AND INSPECTION PROCEDURES ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY 14 DAYS AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR MORE BEST MANAGEMENT PRACTICES AND POLLUTION CONTROL PROCEDURES SHALL BE INSPECTED FOR ADEQUACY. A RECORD OF THE RESULTS OF THE INSPECTIONS OF THE SITE SHALL BE KEPT ON-SITE

J. REMARKS DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS, CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS

ACREAGE SUMMARY

TOTAL PARCEL AREA	1.219
TOTAL PROJECT AREA	1.446
ON-SITE DISTURBED AREA	1.219
OFF-SITE DISTURBED AREA	0.227
TOTAL DISTURBED AREA (MUST MATCH NOI)	1.446
IMPERVIOUS AREA AT COMPLETION	0.714
PERVIOUS/ SEEDED AREA AT COMPLETION	0.505

SIDE - 02/15/2024

NOT FOR CONSTRUCTION

Bowman
CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

BOWMAN CONSULTING GROUP, LTD.
5404 CYPRESS CENTER DR.,
SUITE 140
TAMPA, FL 33609
PHONE: (813) 796-2114
LICENSE NO. 30462
BOWMAN.COM

EROSION CONTROL PLAN - PHASE I
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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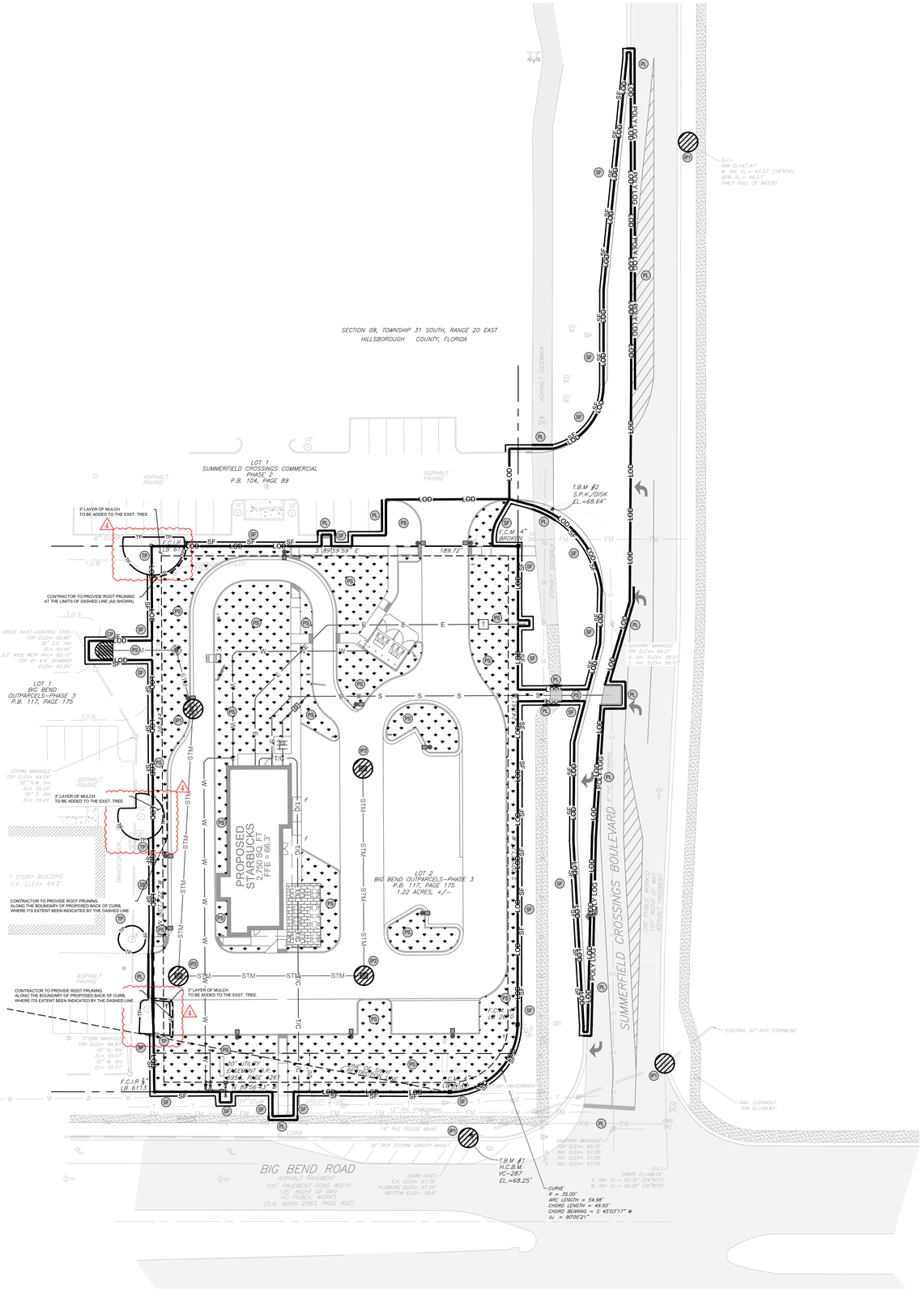
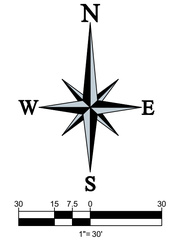
PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM DESIGN	RJD DRAWN	CED CHKD
SCALE	1" = 30'	
JOB No.	011045-01-001	
DATE	09/23/2022	

SHEET C2.0





EROSION CONTROL LEGEND

LOD	LIMITS OF DISTURBANCE
SF	SILT FENCE
POLY LOG	POLY LOG
IP#	INLET PROTECTION
CP	CULVERT PROTECTION
TP	TREE PROTECTION
PS	PERMANENT SODDING
	ROOT PRUNING LIMIT OF EXTENT

NOTE:
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MAINTENANCE

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3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT OF WAY.

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4. HALT ALL ACTIVITIES AND CONTACT THE ENGINEER OF RECORD TO PERFORM INSPECTION OF BMP'S.
5. BEGIN DEMOLITION ACTIVITIES AND CLEARING AND GRUBBING THE SITE.
6. BEGIN GRADING THE SITE.
7. START CONSTRUCTION OF BUILDING PAD AND STRUCTURES

PHASE II
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2. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, CURBS AND GUTTERS.
3. INSTALL RIP RAP AROUND OUTLET STRUCTURES AS EACH OUTLET STRUCTURE IS INSTALLED.
4. INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET STRUCTURE IS INSTALLED.
5. PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
6. PREPARE SITE FOR PAVING.
7. PAVE SITE.
8. INSTALL APPROPRIATE INLET PROTECTION DEVICES FOR PAVED AREAS AS WORK PROGRESSES.
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11. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER APPROVAL OF THE ENGINEER OF RECORD AND STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF THE BMP.
12. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION IS SIGNED OFF BY THE OWNER THAT THE SITE IS FULLY STABILIZED AND THE PERMIT MAY BE TERMINATED.
13. CONTRACTOR TO FILE NOTICE OF TERMINATION APPLICATION TO THE FDEP AND SHALL PROVIDE A COPY OF FDEP APPROVAL TO THE OWNER AND ENGINEER OF RECORD.

NOTE: THE GENERAL CONTRACTOR MAY COMPLETE CONSTRUCTION-RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPS HAVE BEEN COMPLETELY INSTALLED.

SHEET NOTES:

1. REFER TO SHEET C1.1 FOR GENERAL NOTES.
2. REFER TO SHEET C3.0 FOR DEMOLITION PLAN.
3. REFER TO SHEET C5.0 FOR GRADING AND DRAINAGE PLAN.
4. REFER TO SHEET C6.0 FOR UTILITY PLAN.
5. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.

BEST MANAGEMENT PRACTICES:

1. STRUCTURAL MEASURES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT IN EFFECTIVE OPERATING CONDITION.
2. DOCUMENTATION OF MAINTENANCE ACTIVITIES INCLUDING FREQUENCY, LOT DESIGNATION, INSPECTION OF STRUCTURAL CONTROLS, MATERIAL STORAGE AREAS, VEHICLE ENTRANCES AND EXITS: ACTIONS TAKEN AND INSPECTORS NAME.
3. CONSTRUCTION SITE NOTICE WILL BE MAINTAINED ON SITE
4. COPY OF SWPPP SHALL BE KEPT ON SITE
5. PERIMETER MUST RETAIN THE SWPPP, NOI AND INSPECTION LOG FOR A MINIMUM OF 3 YEARS FROM THE TERMINATION AND FINAL STABILIZATION OF PROJECT

A. WASTE MATERIALS ALL WASTE MATERIALS INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURED LIDDED METAL DUMPSTER. NO CONSTRUCTION MATERIALS SHALL BE BURIED ON SITE. THE DUMPSTER SHALL BE EMPTIED AS NECESSARY OR AS REQUIRED BY ORDINANCE 9.04 (SOLID WASTE MANAGEMENT AND THE TRASH BE HAULED TO A LICENSED LANDFILL.)

B. HAZARDOUS WASTE AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS: PAINT, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS. ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SPILL STABILIZATION, CURING, COMPOUNDS AND ADDITIVES. IN EVENT OF SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION AND CONTACT THE FIRE DEPARTMENT AND GOVERNING AUTHORITIES.

C. SANITARY WASTE ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

D. SPILL PREVENTION THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.

E. GOOD HOUSEKEEPING
- E.A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB
- E.B. NEATLY STORE MATERIALS ON-SITE IN A SECURE MANNER
- E.C. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER
- E.D. DO NOT MIX SUBSTANCES WITH ANOTHER, UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER.
- E.E. USE ENTIRE CONTENTS OF A PRODUCT BEFORE DISPOSING F THE CONTAINER
- E.F. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROP USE AND DISPOSAL

F. HAZARDOUS CONDITIONS
PRACTICES TO REDUCE RISKS:
- F.A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE
- F.B. RETAIN ORIGINAL LABELS, PRODUCT INFORMATION AND MATERIAL SAFETY DATA SHEETS (MSDS)
- F.C. DISPOSE SURPLUS PRODUCT IN ACCORDANCE WITH MANUFACTURERS

G. PETROLEUM PRODUCTS
PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED, ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER RECOMMENDATION.

H. SPILL CONTROL PRACTICES:
- H.A. MANUFACTURERS RECOMMENDED METHODS FOR SPILL CLEAN UP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE WARE OF THE PROCEDURE
- H.B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE
- H.C. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY
- H.D. SPILL AREA SHALL BE WELL VENTILATED AND APPROPRIATE CLOTHING WILL BE WORN
- H.E. ANY SPILL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY
- H.F. MEASURES SHALL BE TAKEN TO PREVENT A SPILL FROM REOCCURRING

I. MAINTENANCE AND INSPECTION PROCEDURES ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY 14 DAYS AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR MORE BEST MANAGEMENT PRACTICES AND POLLUTION CONTROL PROCEDURES SHALL BE INSPECTED FOR ADEQUACY. A RECORD OF THE RESULTS OF THE INSPECTIONS OF THE SITE SHALL BE KEPT ON-SITE

J. REMARKS DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS, CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS

ACREAGE SUMMARY

TOTAL PARCEL AREA	1.219
TOTAL PROJECT AREA	1.446
ON-SITE DISTURBED AREA	1.219
OFF-SITE DISTURBED AREA	0.227
TOTAL DISTURBED AREA (MUST MATCH NOI)	1.446
IMPERVIOUS AREA AT COMPLETION	0.714
PERVIOUS/ SEEDED AREA AT COMPLETION	0.505

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EROSION CONTROL PLAN - PHASE 2
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 30'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C2.1

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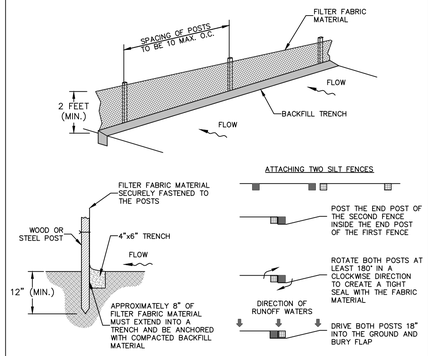
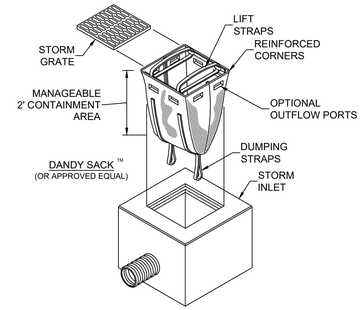
USER: MMAISAM PLOT DATE/TIME: Feb. 09, 24 - 12:32:35 DRAWING: C:\Temp\AcPublish_8124\011045-01-001-C2.5-EROS.dwg ,C2.1 EROSION CONTROL PLAN - PHASE 2



DETAIL NOTES:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

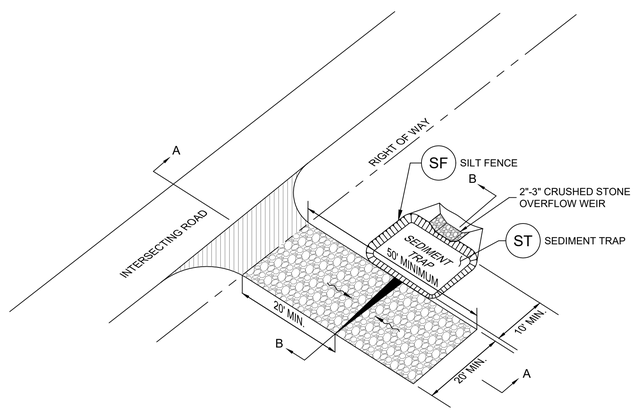
SILT FENCE INSTALLATION (SF)



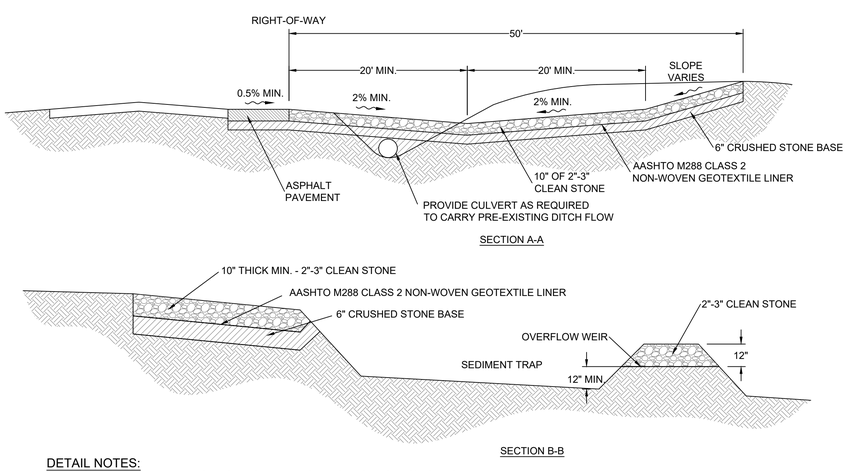
LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

DETAIL NOTES:
1. FOR TEMPORARY USE TO CAPTURE LARGER DIAMETER SEDIMENTS. NOT TO BE UTILIZED AS THE ONLY SEDIMENT CONTAINMENT SYSTEM
2. GEOTEXTILE WILL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEED REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. AN OIL ADSORBENT PAD OR PILLOW CAN BE PURCHASED WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.

INLET PROTECTION: CATCH BASIN (IP2)



VIEW

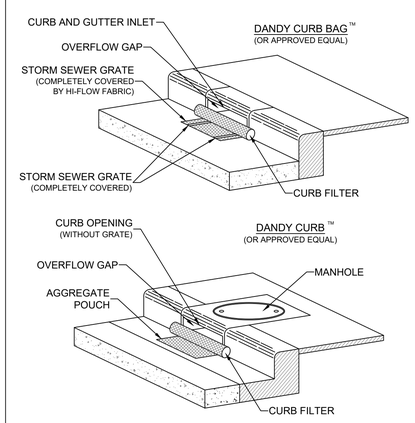


SECTION A-A

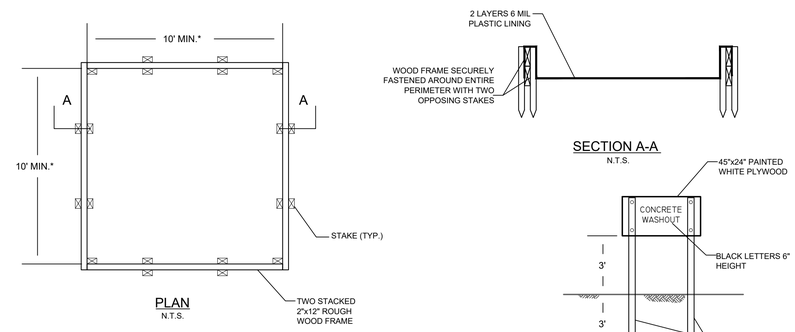
SECTION B-B

DETAIL NOTES:
1. PROVIDE SEDIMENT TRAP ON DOWN GRADIENT SIDE (OR BOTH SIDES) AS REQUIRED.
2. FLUSH SURFACE STONE TOWARD SEDIMENT TRAP WITH HIGH VOLUME WATER FLOW AS NEEDED TO MAINTAIN CLEAN SURFACE STONE.
3. PLACEMENT OF SEDIMENT TRAP SHALL BE AT LEAST THE MINIMUM DISTANCE FROM THE RIGHT OF WAY AS REQUIRED BY LOCAL JURISDICTION.

CONSTRUCTION ENTRANCE / EXIT (CE)

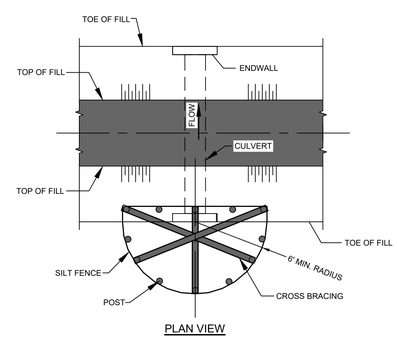


INLET PROTECTION: CURB INLET (IP1)



DETAIL NOTES:
1. *DENOTES THE INTERIOR DIMENSION.
2. CONCRETE WASHOUT SHALL BE AT LEAST 50 FT. FROM ANY STORM SEWER INLET.
3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

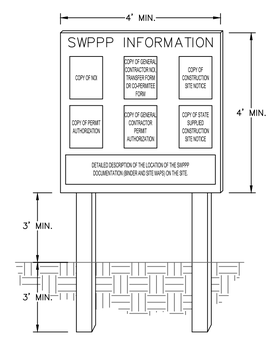
TEMPORARY CONCRETE WASHOUT (ABOVE GRADE) (CW)



PLAN VIEW

DETAIL NOTES:
1. THE SILT FENCE SHALL MEET THE REQUIREMENTS AS SHOWN ON SILT FENCE DETAIL EXCEPT THE MAXIMUM POST SPACING SHALL BE 3 FEET AND THE TOPS OF POSTS SHALL BE CROSS BRACED.
2. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE HEIGHT OF THE SILT FENCE.
3. THE MAXIMUM DRAINAGE AREA TO THE CULVERT BEING PROTECTED IS 1 ACRE.

INLET PROTECTION: CULVERT (CP)



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

SWPPP INFORMATION SIGN (SS)

BID SET 02/15/2024

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EROSION AND SEDIMENTATION CONTROL DETAILS
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10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE NONE
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C2.2

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USER: MMAISAM PLOT DATE/TIME: Feb. 09, 24 - 12:32:36 DRAWING: C:\Temp\AcPublish_8124\011045-01-001-C2.0-EROS.dwg ;C2.2 EROSION AND SEDIMENTATION CONTROL DETAILS

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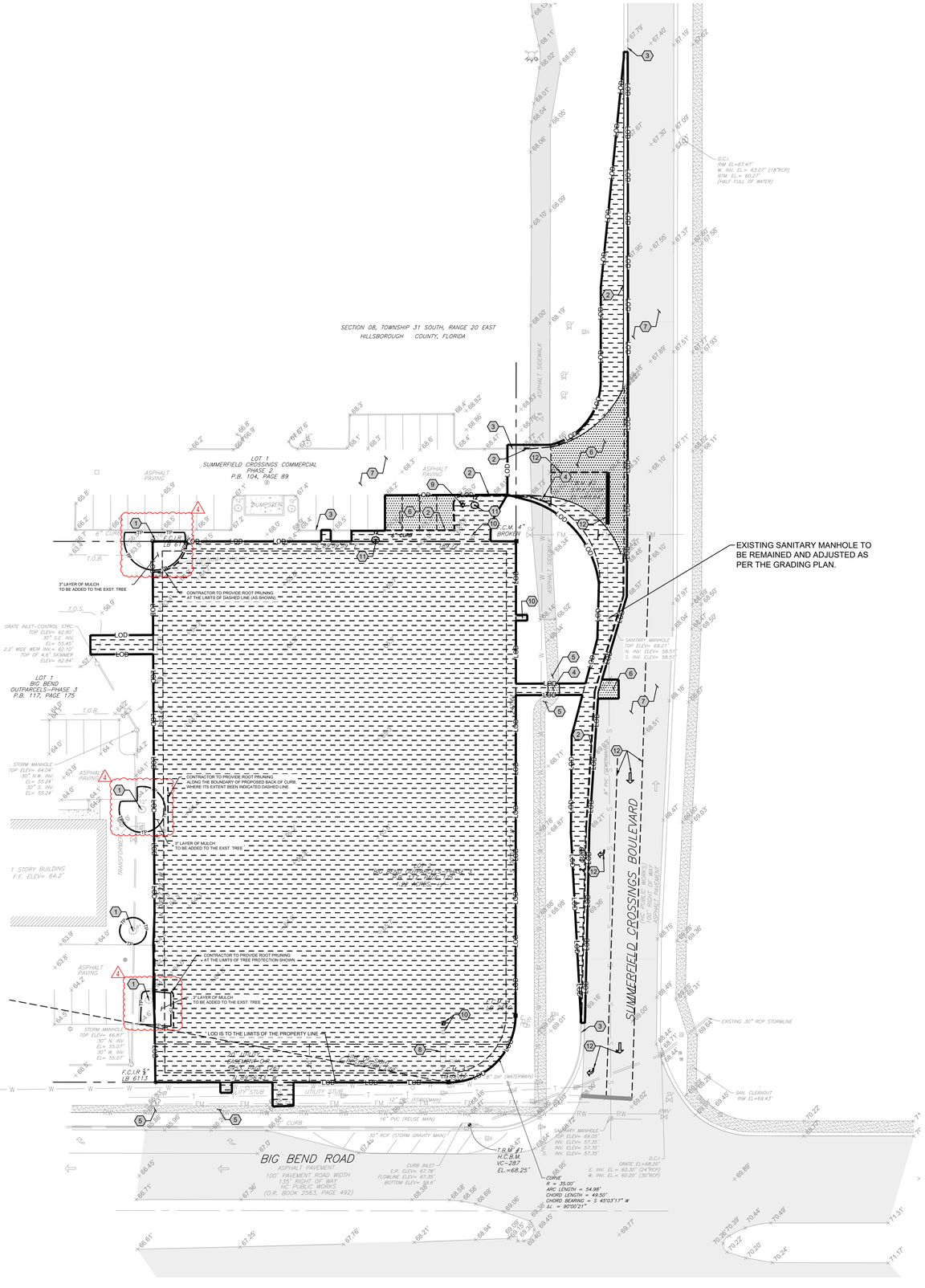

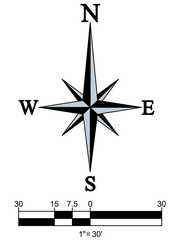

DEMOLITION LEGEND

- PROPERTY BOUNDARY LINE
- CENTER LINE OF EXISTING ROADWAY
- ADJOINING PROPERTY LINE
- EXISTING CURB AND GUTTER
- EXISTING CURB
- EXISTING EDGE OF PAVEMENT
- EXISTING FENCE
- BLOCK 101 / LOT 7 — EXISTING BLOCK NUMBER / EXISTING LOT NUMBER
- EXISTING WATER MAIN
- EXISTING UNDERGROUND ELECTRIC
- EXISTING TELEPHONE
- EXISTING OVERHEAD WIRES
- EXISTING SANITARY
- EXISTING STORM
- EXISTING FORCEMAIN
- EXISTING REUSE MAIN
- EXISTING LIGHT FIXTURE
- EXISTING UTILITY POLE
- EXISTING SANITARY STRUCTURES
- EXISTING STORM STRUCTURES
- EXISTING WATER/FIRE STRUCTURES
- EXISTING TREE
- DEMO CURB
- DEMO GRAVEL ROAD
- DEMO ASPHALT
- DEMO PROPERTY LINE
- DEMO UTILITY POLE
- DEMO TREE
- DEMO ELECTRIC
- PROPOSED SAWCUT LINE
- LIMITS OF DISTURBANCE
- ROOT PRUNING LIMIT OF EXTENT
- LAND TO BE CLEARED AND GRUBBED
- DEMO ASPHALT PAYMENT
- DEMO CONC. SIDEWALK
- EXISTING ASPHALT PAYMENT

DEMOLITION NOTES:

1. CONTRACTOR TO FIELD LOCATE ALL EXISTING ON-SITE UTILITIES PRIOR TO DEMOLITION ACTIVITIES.
2. ALL ITEMS DARK AND DASHED TO BE REMOVED OR REPLACED PER KEYED NOTES.
3. ALL PROPER EROSION CONTROL METHODS SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO THE DISTURBANCE OF ANY EXISTING SURFACE.
4. ALL DIMENSIONS FROM PROPERTY LINES ARE PERPENDICULAR UNLESS OTHERWISE NOTED.
5. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.
6. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.

KEYED NOTES:

1. EXISTING TREE TO REMAIN PROTECTED IN PLACE. CONTRACTOR TO PROVIDE ROOT PRUNING AT THE LIMITS OF TREE PROTECTION AREA SHOWN.
2. EXISTING CURB AND GUTTER TO BE REMOVED.
3. EXISTING CURB TO REMAIN PROTECTED IN PLACE.
4. EXISTING SIDEWALK TO BE REMOVED.
5. EXISTING SIDEWALK TO REMAIN PROTECTED IN PLACE.
6. EXISTING ASPHALT PAVEMENT TO BE REMOVED.
7. EXISTING ASPHALT PAVEMENT TO REMAIN PROTECTED IN PLACE.
8. EXISTING SIGN TO REMAIN PROTECTED IN PLACE.
9. EXISTING LIGHT POLE TO BE RELOCATED.
10. EXISTING ELECTRICAL STRUCTURE TO REMAIN PROTECTED IN PLACE.
11. EXISTING TREE TO BE REMOVED.
12. EXISTING PAYMENT MARKING TO BE REMOVED.

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DESIGN	DRAWN	CHKD

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JOB No. 011045-01-001

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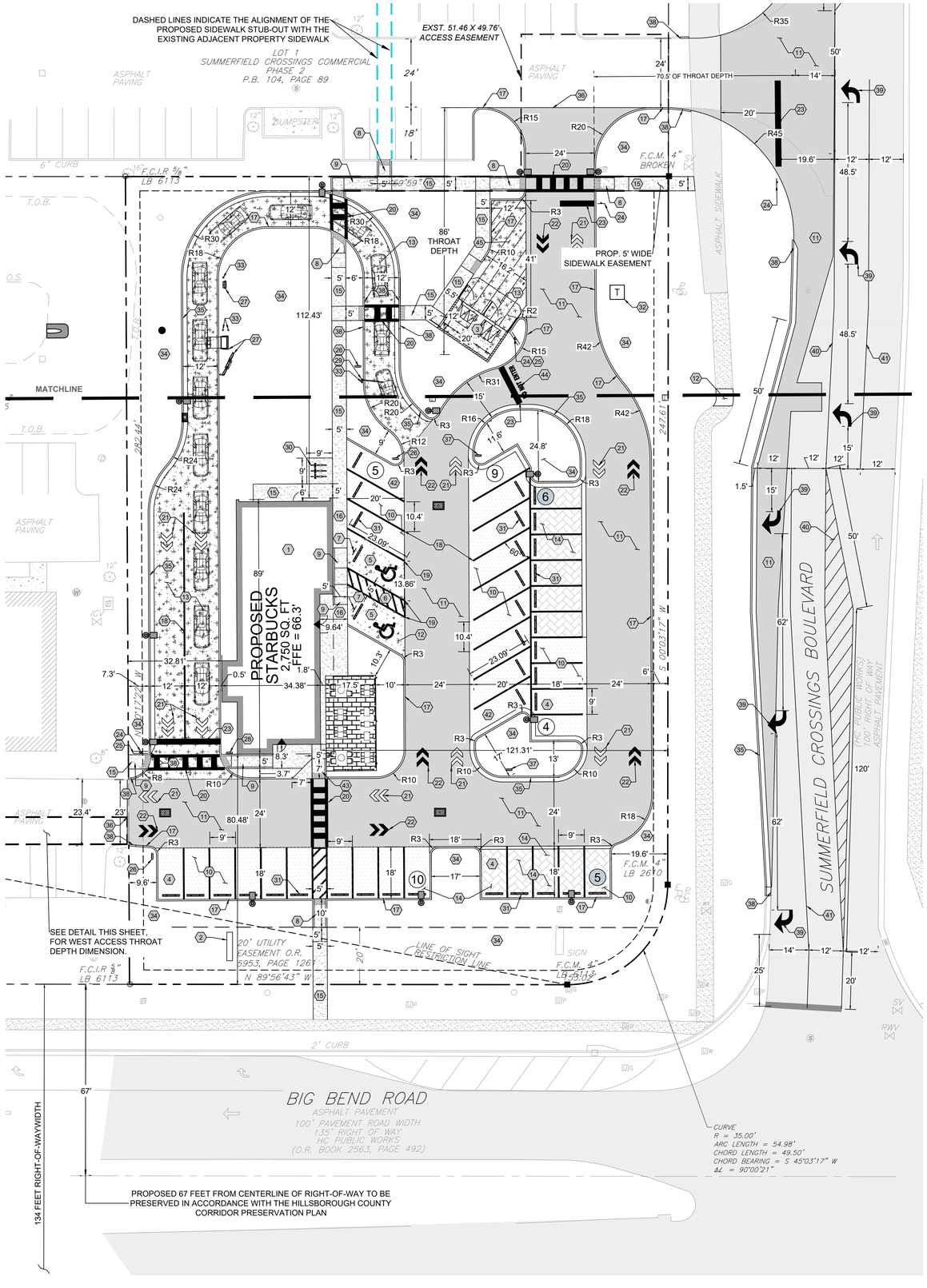
SHEET C3.0



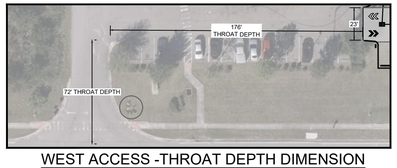
N
W E
S
20 10 5 0 20
1"= 20'

LEGEND

- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING UTILITY EASEMENT LINE
- PROPOSED BUILDING SETBACK
- PROPOSED LANDSCAPE SETBACK
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB
- PROPOSED BUILDING OUTLINE
- PROPOSED MATCHLINE
- PROPOSED STANDARD PARKING COUNT
- PROPOSED PERVIOUS PARKING COUNT
- PROPOSED SIGN
- CONCRETE SIDEWALK
- HEAVY DUTY ASPHALT PAVEMENT
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- STANDARD DUTY CONCRETE PAVEMENT
- PERVIOUS PAVEMENT
- STRIPING
- STARBUCKS DIRECTIONAL ARROW
- UTILITY STRUCTURES
- WATER/FIRE STRUCTURE
- SITE SIGNAGE
- LIGHT POLE AND GROUND VAULT
- BUILDING ENTRANCE

KEYED NOTES:

1. 2,750 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS AND ELEVATIONS.
2. MONUMENT SIGN TO BE PROVIDED AND INSTALLED BY OTHERS. REFER TO SIGNAGE PACKAGE BY VENDOR. SIGNAGE PERMIT TO BE PROCURED BY SIGNAGE VENDOR.
3. TRASH ENCLOSURE LOCATION. SEE ARCHITECTURAL PLANS FOR ELEVATIONS AND DETAILS.
4. 9' X 18' PARKING SPACE (TYPICAL).
5. 13.86' X 23.09' ADA PARKING SPACE, PER FDOT STANDARD PLANS INDEX 711-001.
6. 5' WIDE ADA COMPLIANT LOADING AREA.
7. ADA PARKING SIGN, PER FDOT STANDARD PLANS INDEX 700-102, MAX FINE $100.00.
8. ADA COMPLIANT TYPE "CR-E" CURB RAMP (PER FDOT STANDARD PLANS 522-002)
9. ADA COMPLIANT TYPE "CR-C" CURB RAMP (PER FDOT STANDARD PLANS 522-002)
10. STANDARD DUTY ASPHALT PAVEMENT.
11. HEAVY DUTY ASPHALT PAVEMENT.
12. STANDARD DUTY CONCRETE PAVEMENT.
13. HEAVY DUTY CONCRETE PAVEMENT.
14. PROPOSED PERVIOUS PAVEMENT.
15. CONCRETE SIDEWALK.
16. TURNED DOWN EDGE CONCRETE SIDEWALK.
17. TYPE "D" CURB.
18. 6" SOLID WHITE PAINTED STRIPE (TYPICAL).
19. 6" SOLID BLUE PAINTED STRIPE.
20. PROPOSED CROSSWALK STRIPING.
21. WHITE STARBUCKS DIRECTIONAL ARROW
22. PANTONE 369C STARBUCKS DIRECTIONAL ARROW
23. 24" WHITE THERMOPLATIC STOP BAR.
24. 36" x 36" STOP SIGN, PER MUTCD STANDARD R1-1.
25. 30" X 30" DO NOT ENTER SIGN, PER MUTCD STANDARD R5-1.
26. DRIVE THRU ENTRANCE SIGN. REFER TO SIGNAGE VENDOR PLANS.
27. DRIVE THRU ORDER BOARD AND SPEAKER BOX.
28. THANK YOU / EXIT SIGN. REFER TO SIGNAGE VENDOR PLANS.
29. CLEARANCE BAR.
30. BIKE RACK.
31. WHEEL STOP (TYPICAL).
32. TRANSFORMER PAD. REFER TO ARCHITECTURAL PLANS FOR DETAILS. LOCATION TO BE DETERMINED BY ELECTRIC COMPANY.
33. BOLLARD (TYPICAL).
34. LANDSCAPE AREA (SEE LANDSCAPE PLANS).
35. TYPE "F" CURB.
36. SHARED CROSS ACCESS.
37. DRIVE THRU KEEP LEFT SIGN.
38. 3 FEET CURB TRANSITION.
39. DIRECTIONAL PAVEMENT MARKING (TYPICAL), PER FDOT STANDARD PLANS INDEX 711-001.
40. YELLOW STRIPING (TYPICAL), PER FDOT STANDARD PLANS INDEX 711-001.
41. WHITE STRIPING (TYPICAL), PER FDOT STANDARD PLANS INDEX 711-001.
42. ANGLED PARKING SPACE (TYPICAL), MIN. DIMS 10.4' X 23.09'.
43. ADA COMPLIANT TYPE "CR-A" CURB RAMP (PER FDOT STANDARD PLANS 522-002)
44. "DO NOT ENTER" PAVEMENT MARKING.
45. LOADING ZONE AREA FOR LOCAL DELIVERIES.



WEST ACCESS -THROAT DEPTH DIMENSION
SCALE: 1" = 50'

SITE DATA TABLE

PARCEL NUMBER	U-08-31-20-9NJ-000000-00002.0
SITE ADDRESS	10754 BIG BEND ROAD RIVERVIEW, FLORIDA 33579
FUTURE LAND USE	(COMMERCIAL)
ZONING DISTRICT	(PD) PLANNED DEVELOPMENT
EXISTING LAND USE	VACANT
PROPOSED LAND USE	RESTAURANT WITH DRIVE-UP FACILITIES
PROPOSED BUILDING AREA	2,750 SF (0.063 AC)
PARCEL AREA	53,098 SF (1.219 AC)
EXISTING GREEN SPACE	53,098 SF (100.00%)
EXISTING IMPERVIOUS AREA	0 SF (0.00%)
MAXIMUM BUILDING HEIGHT	35 FT
PROPOSED BUILDING HEIGHT	19 FT
MAXIMUM IMPERVIOUS AREA	37,169 SF (70.00%)
PROPOSED PERVIOUS AREA	20,250 SF (38.14%)
PROPOSED PERVIOUS PAVEMENT	1,720 SF (3.24%)
PROPOSED IMPERVIOUS AREA	31,130 SF (58.6%)
LIMITS OF DISTURBANCE	63,000 (1.446 AC)
REQUIRED PARKING SPACES	28 (10 PER 1,000 SF BLDG GFA 2,750 SF / 1000SF = 2.75*10=28)
PROVIDED STANDARD SPACES	28
PROVIDED ADA SPACES	2
PROVIDED PERVIOUS SPACES	11
TOTAL SPACES PROVIDED	39 TOTAL (INCLUDES ADA SPACES)
REQUIRED BICYCLE PARKING	N/A
PROVIDED BICYCLE PARKING	3
MAXIMUM FLOOR AREA RATIO	0.27
PROVIDED FLOOR AREA RATIO	0.052

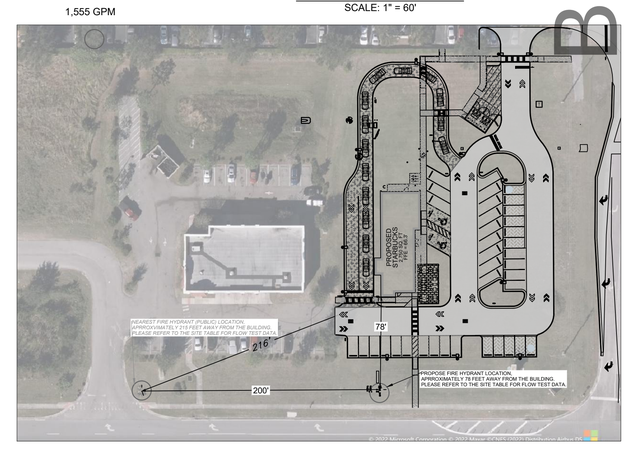
PROPOSED BUILDING SETBACKS	REQUIRED	PROPOSED
FRONT (SOUTH)	25 FT	80.48 FT
FRONT (EAST)	25 FT	121.31 FT
SIDE (NORTH)	0 FT	112.43 FT
REAR (WEST)	0 FT	32.81 FT

PROPOSED LANDSCAPE BUFFERS	
FRONT (SOUTH)	5 FT
FRONT (EAST)	5 FT
SIDE (NORTH)	5 FT
REAR (WEST)	5 FT

HYDRANT FLOW TEST DATA	
BUILDING CONSTRUCTION TYPE	V-B
REQUIRED FIRE FLOW (PER NFPA)	1,500 GPM
HYDRANTS REQUIRED	EXIST. (PUBLIC): 216 FT; 55 GPM PROP. (PRIVATE): 77 FT; 1,500 GPM
AVAILABLE FIRE FLOW	1,555 GPM

FIRE HYDRANT DETAIL

SCALE: 1" = 60'



SHEET NOTES:

1. REFER TO SHEET C1.1 FOR GENERAL NOTES.
2. REFER TO SHEET C3.0 FOR DEMOLITION PLAN.
3. REFER TO SHEET C5.0-5.1 FOR GRADING AND DRAINAGE PLAN.
4. REFER TO SHEET C6.0 FOR UTILITY PLAN.
5. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.

GENERAL SITE NOTES:

1. ALL DIMENSIONS ARE TO GROUND LEVEL IMPROVEMENTS (FACE OF CURB, CONCRETE SLAB, ETC.) UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL PLANS FOR BUILDING DETAILS.
2. ALL DIMENSIONS FROM PROPERTY LINES ARE PERPENDICULAR UNLESS OTHERWISE NOTED.
3. ALL RADII DIMENSIONS ARE 3' TO FACE OF CURB UNLESS OTHERWISE NOTED.
4. ALL DIRECTIONAL PAVEMENT MARKINGS MUST BE THERMOPLASTIC.
5. WHITE PAVEMENT MARKINGS ON CONCRETE TO HAVE BLACK OUTLINE.
6. ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," LATEST EDITION; AND OSCEOLA COUNTY LAND DEVELOPMENT CODE.
7. FREE STANDING SIGNAGE SHOWN ONLY FOR REPRESENTATIONAL PURPOSES, AND SHALL BE PERMITTED SEPARATELY.
8. A RIGHT-OF-WAY PERMIT WILL BE REQUIRED FOR ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY. SPECIFIC STIPULATIONS OR CONDITIONS WILL BE IMPOSED AT THE TIME OF PERMIT APPLICATION.
9. CONSTRUCTION PLAN APPROVAL DOES NOT EXEMPT THE CONTRACTOR FROM OBTAINING THE REQUIRED BUILDING, ELECTRICAL, PLUMBING AND MECHANICAL PERMITS. THESE INCLUDE BUT ARE NOT LIMITED TO ANY STRUCTURE, SIGN, WALL, ENCLOSURE OR SCREENING, ETC
10. IN THE EVENT THE PROJECT IS TERMINATED PRIOR TO CONSTRUCTION COMPLETION, THE PROJECT SHALL BE BROUGHT TO GRADE, SEEDED AND ALL DEBRIS AND MATERIALS SHALL BE HAULED OFF-SITE AND DUMPED AT A STATE APPROVED FACILITY. ANY DAMAGED SIDEWALK OR CURB WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE REMOVED AND REPLACED.
11. ALL DISTURBED AREAS WITHIN THE PUBLIC RIGHT-OF-WAY WILL BE SODDED.
12. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.
13. STANDARD PLAN INDICES REFER TO THE LATEST VERSION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
14. THE CONSTRUCTION OF ALL ABOVE GROUND UTILITY APPURTENANCES VISIBLE FROM THE PUBLIC RIGHT-OF-WAY SUCH AS PEDESTALS, UTILITY METERS, TRANSFORMERS, BACK-FLOW PREVENTION DEVICES, ETC. FOR NEW DEVELOPMENT OR REDEVELOPMENT ACTIVITIES SHALL CONFORM TO SCREENING REQUIREMENTS AS OUTLINED IN SECTION 6.06.06.C.10 OF THE LAND DEVELOPMENT CODE. PLAN LOCATION OR OTHER SCREENING MUST BE CONSIDERATE OF REQUIRED SPATIAL SEPARATIONS FROM A FIRE FLOW PROTECTION APPLIANCE IN ACCORDANCE TO THE UNIFORM FIRE CODE, AND PER WATER, WASTEWATER AND RECLAIMED WATER TECHNICAL SPECIFICATIONS SPEC 331001, PART 2.6.4.2, MUST BE LOCATED A MINIMUM OF 5' FROM UTILITY SLABS AND 3' FROM UNDERGROUND VALVES. TREES MUST BE LOCATED A MINIMUM OF 8' FROM UTILITY SLABS, FOR ABOVE GROUND UTILITY APPURTENANCES ILLUSTRATED ON THE PLANS, THE TYPE OF SCREENING MUST BE CLEARLY NOTED TO MATCH THE OVERALL HEIGHT FOR THE TYPE OF ABOVE GROUND UTILITY SPECIFIED ON THE PLANS. UTILIZATION OF EVERGREEN PLANT MATERIAL MUST BE DESCRIBED BY SPECIES, SPACING, AND OVERALL HEIGHT FOR THE TYPE OF UTILITY TO BE SCREENED. UTILIZATION OF OPAQUE FENCING OR OTHER SCREENING MATERIAL IS PERMITTED. THE METER ASSEMBLY MUST BE ACCESSIBLE BY BOOM TRUCK OFF COUNTY RIGHT-OF-WAY OR AN INTERIOR PAVED ACCESS ROAD AT LEAST 12' IN WIDTH PER SPEC 331001, PART 2.6.4. DO NOT INSTALL ANY SCREENING THAT WILL HINDER ACCESS IN THE FUTURE TO THE METER ASSEMBLY FROM THE INTERIOR OF THE SITE.

ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8.33% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8.33% RUNNING SLOPE OR 2% CROSS SLOPE.

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.

Bowman
CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

BOWMAN CONSULTING GROUP, LTD.
5404 CYPRESS CENTER DR.,
SUITE 140
TAMPA, FL 33609
PHONE: (813) 736-2114
LICENSE NO. 30462
BOWMAN.COM

SITE PLAN
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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BID SET
NOT FOR CONSTRUCTION

PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C4.0

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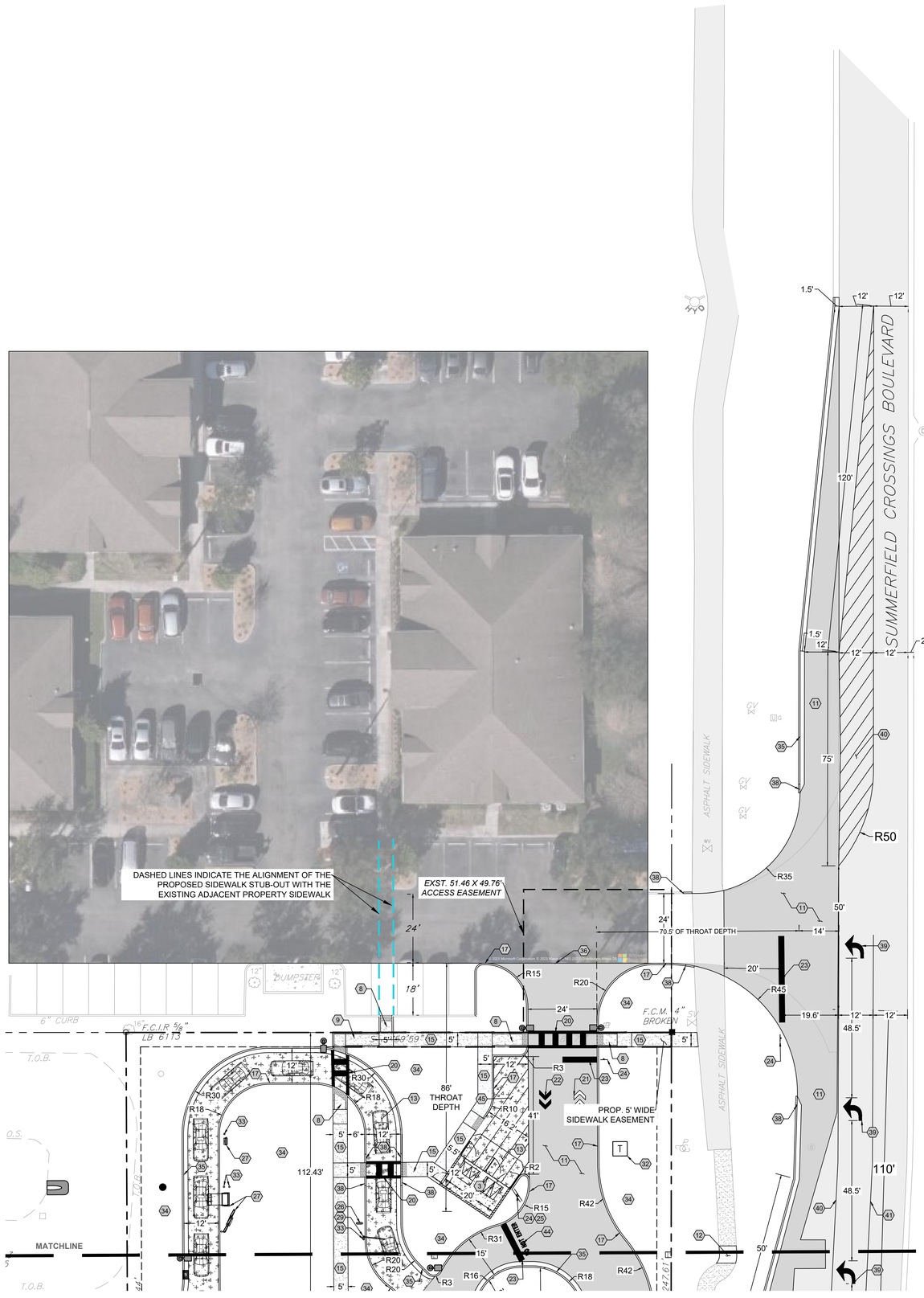

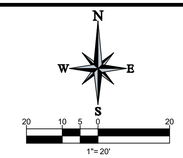

LEGEND

- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING UTILITY EASEMENT LINE
- PROPOSED BUILDING SETBACK
- PROPOSED LANDSCAPE SETBACK
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB
- PROPOSED BUILDING OUTLINE
- PROPOSED MATCHLINE
- PROPOSED STANDARD PARKING COUNT
- PROPOSED PERVIOUS PARKING COUNT
- PROPOSED SIGN
- CONCRETE SIDEWALK
- HEAVY DUTY ASPHALT PAVEMENT
- STANDARD DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- STANDARD DUTY CONCRETE PAVEMENT
- PERVIOUS PAVEMENT
- STRIPING
- STARBUCKS DIRECTIONAL ARROW
- UTILITY STRUCTURES
- WATER/FIRE STRUCTURE
- SITE SIGNAGE
- LIGHT POLE AND GROUND VAULT
- BUILDING ENTRANCE

KEYED NOTES:

1. 2,750 SF BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS AND ELEVATIONS.
2. MONUMENT SIGN TO BE PROVIDED AND INSTALLED BY OTHERS. REFER TO SIGNAGE PACKAGE BY VENDOR. SIGNAGE PERMIT TO BE PROCURED BY SIGNAGE VENDOR.
3. TRASH ENCLOSURE LOCATION. SEE ARCHITECTURAL PLANS FOR ELEVATIONS AND DETAILS.
4. 9' X 18' PARKING SPACE (TYPICAL).
5. 13.86' X 23.09' ADA PARKING SPACE, PER FDOT STANDARD PLANS INDEX 711-001.
6. 5' WIDE ADA COMPLIANT LOADING AREA.
7. ADA PARKING SIGN, PER FDOT STANDARD PLANS INDEX 700-102, MAX FINE $100.00.
8. ADA COMPLIANT TYPE "CR-E" CURB RAMP (PER FDOT STANDARD PLANS 522-002)
9. ADA COMPLIANT TYPE "CR-C" CURB RAMP (PER FDOT STANDARD PLANS 522-002)
10. STANDARD DUTY ASPHALT PAVEMENT.
11. HEAVY DUTY ASPHALT PAVEMENT.
12. STANDARD DUTY CONCRETE PAVEMENT.
13. HEAVY DUTY CONCRETE PAVEMENT.
14. PROPOSED PERVIOUS PAVEMENT.
15. CONCRETE SIDEWALK.
16. TURNED DOWN EDGE CONCRETE SIDEWALK.
17. TYPE "D" CURB.
18. 6" SOLID WHITE PAINTED STRIPE (TYPICAL).
19. 6" SOLID BLUE PAINTED STRIPE.
20. PROPOSED CROSSWALK STRIPING.
21. WHITE STARBUCKS DIRECTIONAL ARROW
22. PANTONE 369C STARBUCKS DIRECTIONAL ARROW
23. 24" WHITE THERMOPLATIC STOP BAR.
24. 36" x 36" STOP SIGN, PER MUTCD STANDARD R1-1.
25. 30" X 30" DO NOT ENTER SIGN, PER MUTCD STANDARD R5-1.
26. DRIVE THRU ENTRANCE SIGN. REFER TO SIGNAGE VENDOR PLANS.
27. DRIVE THRU ORDER BOARD AND SPEAKER BOX.
28. THANK YOU / EXIT SIGN. REFER TO SIGNAGE VENDOR PLANS.
29. CLEARANCE BAR.
30. BIKE RACK.
31. WHEEL STOP (TYPICAL).
32. TRANSFORMER PAD. REFER TO ARCHITECTURAL PLANS FOR DETAILS. LOCATION TO BE DETERMINED BY ELECTRIC COMPANY.
33. BOLLARD (TYPICAL).
34. LANDSCAPE AREA (SEE LANDSCAPE PLANS).
35. TYPE "F" CURB.
36. SHARED CROSS ACCESS.
37. DRIVE THRU KEEP LEFT SIGN.
38. 3 FEET CURB TRANSITION.
39. DIRECTIONAL PAVEMENT MARKING (TYPICAL), PER FDOT STANDARD PLANS INDEX 711-001.
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41. WHITE STRIPING (TYPICAL), PER FDOT STANDARD PLANS INDEX 711-001.
42. ANGLED PARKING SPACE (TYPICAL), MIN. DIMS 10.4' X 23.09'.
43. ADA COMPLIANT TYPE "CR-A" CURB RAMP (PER FDOT STANDARD PLANS 522-002)
44. "DO NOT ENTER" PAVEMENT MARKING.
45. LOADING ZONE AREA FOR LOCAL DELIVERIES.

SITE DATA TABLE

PARCEL NUMBER	U-08-31-20-9NJ-000000-00002.0
SITE ADDRESS	10754 BIG BEND ROAD RIVERVIEW, FLORIDA 33579
FUTURE LAND USE	(COMMERCIAL)
ZONING DISTRICT	(PD) PLANNED DEVELOPMENT
EXISTING LAND USE	VACANT
PROPOSED LAND USE	RESTAURANT WITH DRIVE-UP FACILITIES
PROPOSED BUILDING AREA	2,750 SF (0.063 AC)
PARCEL AREA	53,098 SF (1.219 AC)
EXISTING GREEN SPACE	53,098 SF (100.00%)
EXISTING IMPERVIOUS AREA	0 SF (0.00%)
MAXIMUM BUILDING HEIGHT	35 FT
PROPOSED BUILDING HEIGHT	19 FT
MAXIMUM IMPERVIOUS AREA	37,169 SF (70.00%)
PROPOSED PERVIOUS AREA	20,250 SF (38.14%)
PROPOSED PERVIOUS PAVEMENT	1,720 SF (3.24%)
PROPOSED IMPERVIOUS AREA	31,130 SF (58.6%)
LIMITS OF DISTURBANCE	63,000 (1.446 AC)
REQUIRED PARKING SPACES	28 (10 PER 1,000 SF BLDG GFA 2,750 SF / 1000SF = 2.75*10=28)
PROVIDED STANDARD SPACES	28
PROVIDED ADA SPACES	2
PROVIDED PERVIOUS SPACES	11
TOTAL SPACES PROVIDED	39 TOTAL (INCLUDES ADA SPACES)
REQUIRED BICYCLE PARKING	N/A
PROVIDED BICYCLE PARKING	3
MAXIMUM FLOOR AREA RATIO	0.27
PROVIDED FLOOR AREA RATIO	0.052

PROPOSED BUILDING SETBACKS	REQUIRED	PROPOSED
FRONT (SOUTH)	25 FT	80.48 FT
FRONT (EAST)	25 FT	121.31 FT
SIDE (NORTH)	0 FT	112.43 FT
REAR (WEST)	0 FT	32.81 FT

PROPOSED LANDSCAPE BUFFERS	
FRONT (SOUTH)	5 FT
FRONT (EAST)	5 FT
SIDE (NORTH)	5 FT
REAR (WEST)	5 FT

HYDRANT FLOW TEST DATA	
BUILDING CONSTRUCTION TYPE	V-B
REQUIRED FIRE FLOW (PER NFPA)	1,500 GPM
HYDRANTS REQUIRED	EXIST. (PUBLIC): 216 FT; 55 GPM PROP. (PRIVATE): 77 FT; 1,500 GPM
AVAILABLE FIRE FLOW	1,555 GPM

SHEET NOTES:

1. REFER TO SHEET C1.1 FOR GENERAL NOTES.
2. REFER TO SHEET C3.0 FOR DEMOLITION PLAN.
3. REFER TO SHEET C5.0-5.1 FOR GRADING AND DRAINAGE PLAN.
4. REFER TO SHEET C6.0 FOR UTILITY PLAN.
5. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.

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1. ALL DIMENSIONS ARE TO GROUND LEVEL IMPROVEMENTS (FACE OF CURB, CONCRETE SLAB, ETC.) UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL PLANS FOR BUILDING DETAILS.
2. ALL DIMENSIONS FROM PROPERTY LINES ARE PERPENDICULAR UNLESS OTHERWISE NOTED.
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ADA ACCESSIBILITY NOTES:

1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
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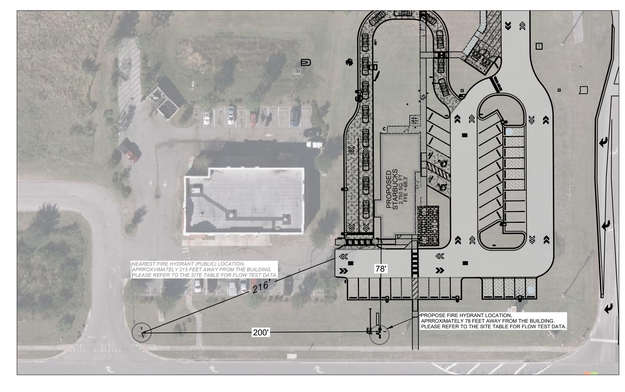
FIRE HYDRANT DETAIL

SCALE: 1" = 60'



BID SET

NOT FOR CONSTRUCTION

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SITE PLAN
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RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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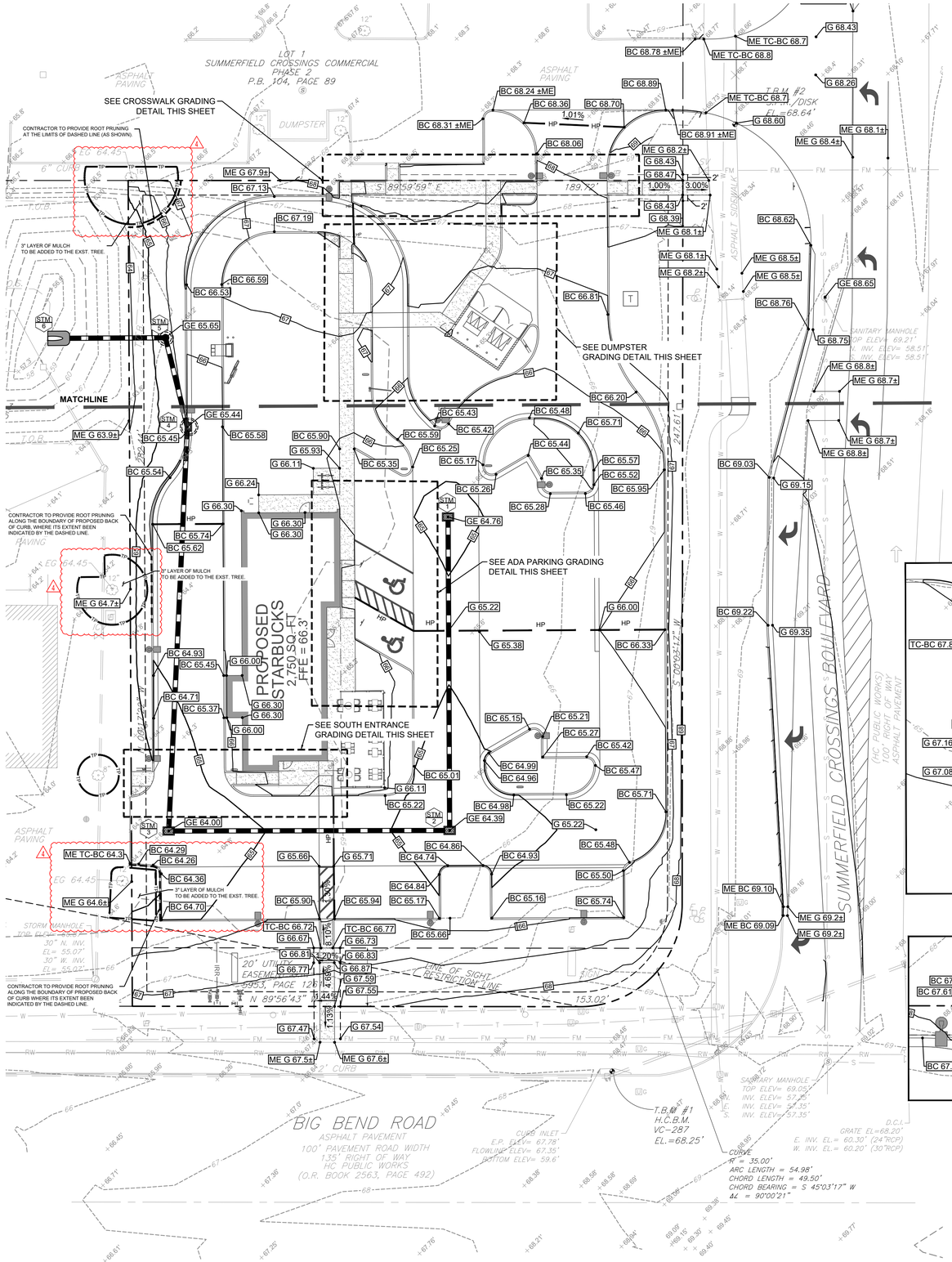
PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

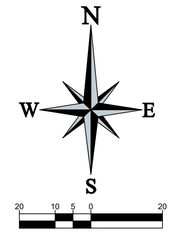
MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C4.1



LEGEND

- PROPOSED PROPERTY BOUNDARY LINE
- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- PROPOSED BUILDING SETBACK
- PROPOSED LANDSCAPE SETBACK
- EXISTING 5' INTERVAL CONTOUR LINE
- EXISTING 1' INTERVAL CONTOUR LINE
- PROPOSED 5' INTERVAL CONTOUR LINE
- PROPOSED 1' INTERVAL CONTOUR LINE
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB
- PROPOSED BUILDING OUTLINE
- PROPOSED CURB
- PROPOSED SPOT SHOTS
- PROPOSED STORM STRUCTURES NAME
- PROPOSED SIGN
- PROPOSED BUILDING ENTRANCES
- PROPOSED LIGHT STRUCTURE
- PROPOSED WATER STRUCTURES
- SANITARY STRUCTURES
- STORM STRUCTURES
- WATER/FIRE STRUCTURE
- SITE SIGNAGE
- LIGHT POLE AND GROUND VAULT
- TREE
- ROOT PRUNING LIMIT OF EXTENT
- PROPOSED HIGHPOINT / RIDGELINE
- PROPOSED IRRIGATION
- PROPOSED WATER
- PROPOSED SANITARY
- PROPOSED STORM
- PROPOSED ELECTRIC
- PROPOSED TELECOM
- EXISTING WATER
- EXISTING SANITARY
- EXISTING STORM
- MATCHLINE



FEMA NOTES:

1. FEMA ZONE: X, 1257C0515H
2. FLOODPLAIN MITIGATION: NA
3. BASIN CAPACITY: PEAK SENSITIVE
4. BASIN NAME: BULLFROG CREEK (SMALL SITE BUT PART OF A PREVIUOSLY PERMITTED MASTER PLAN)
5. DATUM: NAVD 1988

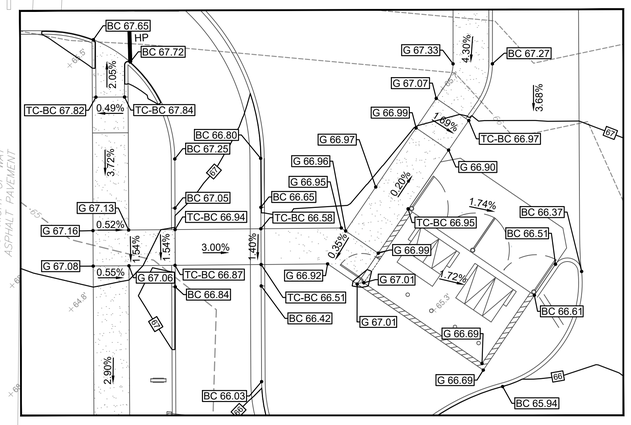
NOTE:
ROOT PRUNING EQUIPMENT SELECTED WILL BE EQUIVALENT TO A DOSCO ROOT CUTTER. PRIOR TO BACKFILLING THE ROOT PRUNING TRENCHES, SCHEDULE THE ROOT PRUNING INSPECTION (NRC-ROOT PRUNING) THROUGHR HILLSGOVHUB.COM IN THE RECORD FOR THE BUILDING PERMIT OR BY TEXTING S OR SCHEDULE TO (844)529-6141, WHEN PROMPTED USE CODE 932.

SHEET NOTES:

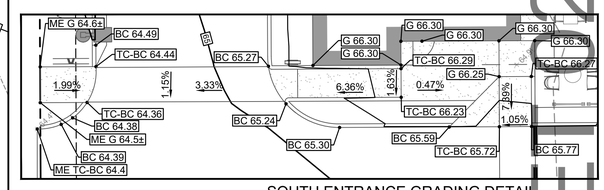
1. REFER TO SHEET C1.1 FOR GENERAL NOTES.
2. REFER TO SHEET C3.0 FOR DEMOLITION PLAN.
3. REFER TO SHEET C4.0 FOR SITE PLAN.
4. REFER TO SHEET C6.0 FOR UTILITY PLAN.
5. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.
7. ALL DIMENSIONS ARE TO GROUND LEVEL IMPROVEMENTS (FACE OF CURB, CONCRETE SLAB, ETC.) UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL PLANS FOR BUILDING DETAILS.
8. ALL DIMENSIONS FROM PROPERTY LINES ARE PERPENDICULAR UNLESS OTHERWISE NOTED.
9. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.
10. ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). THE SURVEY BENCHMARK IS PER HILLSBOROUGH COUNTY BENCHMARK SYSTEM, BENCHMARK "VC-287", ELEVATION 68.25' (NAVD 88). SITE BENCHMARKS ARE SHOWN AND DESCRIBED GRAPHICALLY ON THE SURVEY.
11. ALL ONSITE WATER & SEWER DISTRIBUTION/COLLECTION LINES/MAINS TO BE PRIVATELY OWNED & MAINTAINED UNLESS OR UNTIL A UTILITY EASEMENT IS DESCRIBED & APPROVED BY ALL INVOLVED PARTIES.
12. ALL FACE OF CURB SPOT ELEVATIONS ARE TO BOTTOM OF CURB. REFER TO CURB DETAIL FOR TYPICAL CURB HEIGHTS UNLESS STATED OTHERWISE.

ADA ACCESSIBILITY NOTES:

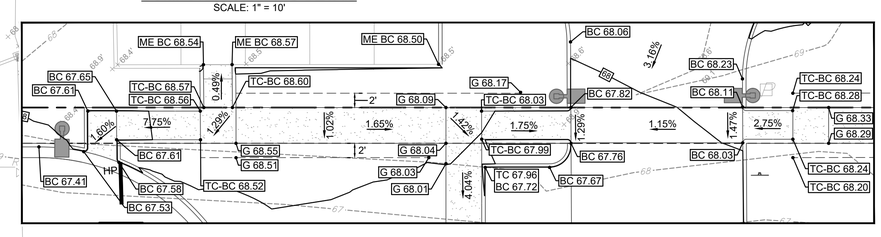
1. ALL HANDICAPPED PARKING SPACES AND ACCESS AISLES ADJACENT TO THE HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% SLOPE IN ALL DIRECTIONS (THIS INCLUDES RUNNING SLOPE AND CROSS SLOPE).
2. AN ACCESSIBLE ROUTE FROM THE PUBLIC STREET OR SIDEWALK TO ALL BUILDING ENTRANCES MUST BE PROVIDED. THIS ACCESSIBLE ROUTE SHALL BE A MINIMUM OF 60" WIDE. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%.
3. SLOPES EXCEEDING 5% BUT LESS THAN 8.33% WILL REQUIRE A RAMP AND MUST CONFORM TO THE REQUIREMENTS FOR RAMP DESIGN (HANDRAILS, CURBS, LANDINGS). NO RAMP SHALL EXCEED AN 8.33% RUNNING SLOPE OR 2% CROSS SLOPE.
4. IN THE CASE THAT A NEW SIDEWALK WILL BE CONSTRUCTED IN THE RIGHT-OF-WAY OF A SITE THE RUNNING SLOPE OF THE SIDEWALK SHALL NOT EXCEED 5% AND THE CROSS SLOPE SHALL NOT EXCEED 2%. THIS STANDARD APPLIES TO CROSS WALKS IN THE DRIVEWAY AS WELL AND WILL REQUIRE SPECIAL ATTENTION DURING STAKING TO MAKE SURE THE 2% CROSS SLOPE IS MET IN THE CROSS WALK.
5. IT WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE THAT THE HANDICAP PARKING SPACES, ACCESSIBLE ROUTES, AND SIDEWALKS/CROSSWALKS ARE CONSTRUCTED TO MEET ADA REQUIREMENTS.
6. ANY REQUIREMENTS LISTED ABOVE THAT CAN NOT BE MET SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY. ANYTHING NOT BUILT TO THE ABOVE STANDARDS WILL REQUIRE REMOVAL AND REPLACEMENT OF THE NON COMPLIANT AREAS AT THE GENERAL CONTRACTORS COST.



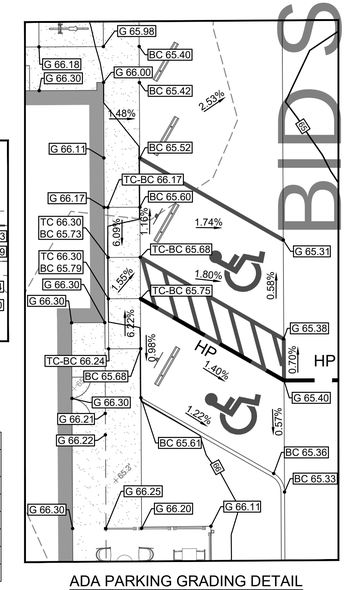
DUMPSTER GRADING DETAIL
SCALE: 1" = 10'



SOUTH ENTRANCE GRADING DETAIL
SCALE: 1" = 10'



CROSSWALK GRADING DETAIL
SCALE: 1" = 10'



ADA PARKING GRADING DETAIL
SCALE: 1" = 10'

STORM STRUCTURE TABLE

STRUCTURE NAME	STRUCTURE TYPE	DRAINAGE AREA TO STRUCTURE	RIM	UPSTREAM PIPE NAME	UPSTREAM PIPE INV	DOWNSTREAM PIPE NAME	DOWNSTREAM PIPE INV	DOWNSTREAM PIPE LENGTH	DOWNSTREAM PIPE SIZE AND TYPE	DOWNSTREAM PIPE SLOPE
1	FDOT TYPE C INLET	0.35 AC	64.76			STM 1 - STM 2	60.04'	107.25'	18" HP	0.50%
2	FDOT TYPE C INLET	0.33 AC	64.39	STM 1 - STM 2	59.51'	STM 2 - STM 3	59.51'	96.09'	18" HP	0.50%
3	FDOT TYPE C INLET	0.12 AC	64.00	STM 2 - STM 3	59.03'	STM 3 - STM 4	59.03'	138.38'	18" HP	0.50%
4	FDOT TYPE 9 INLET	0.23 AC	65.44	STM 3 - STM 4	58.33'	STM 4 - STM 5	58.33'	31.36'	18" HP	0.50%
5	FDOT 4' Ø MH	0.00 AC	65.65	STM 4 - STM 5	58.18'	STM 5 - STM 6	58.18'	40.26'	18" HP	0.50%
6	18" MES	0.00 AC	57.09	STM 5 - STM 6	57.98'					

Bowman
CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

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5404 CYPRESS CENTER DR., SUITE 140
TAMPA, FL 33609
PHONE: (813) 736-2114
LICENSE NO. 30462
BOWMAN.COM

GRADING AND DRAINAGE PLAN
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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www.callsunshine.com

BID SET 12/15/24

NOT FOR CONSTRUCTION

PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C5.0

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.

USER: MMASAM PLOT DATE/TIME: Feb. 09, 24 - 12:53:50 DRAWING: V:\011045 - NORR, LLC\011045-01-001 (ENG) - Starbucks - Riverview, FL (Big Bend Rd.)\Engineering\Engineering Plans\Plan Sets\011045-01-001-C5.0-GRAD.dwg ,C5.0 GRADING AND DRAINAGE PLAN

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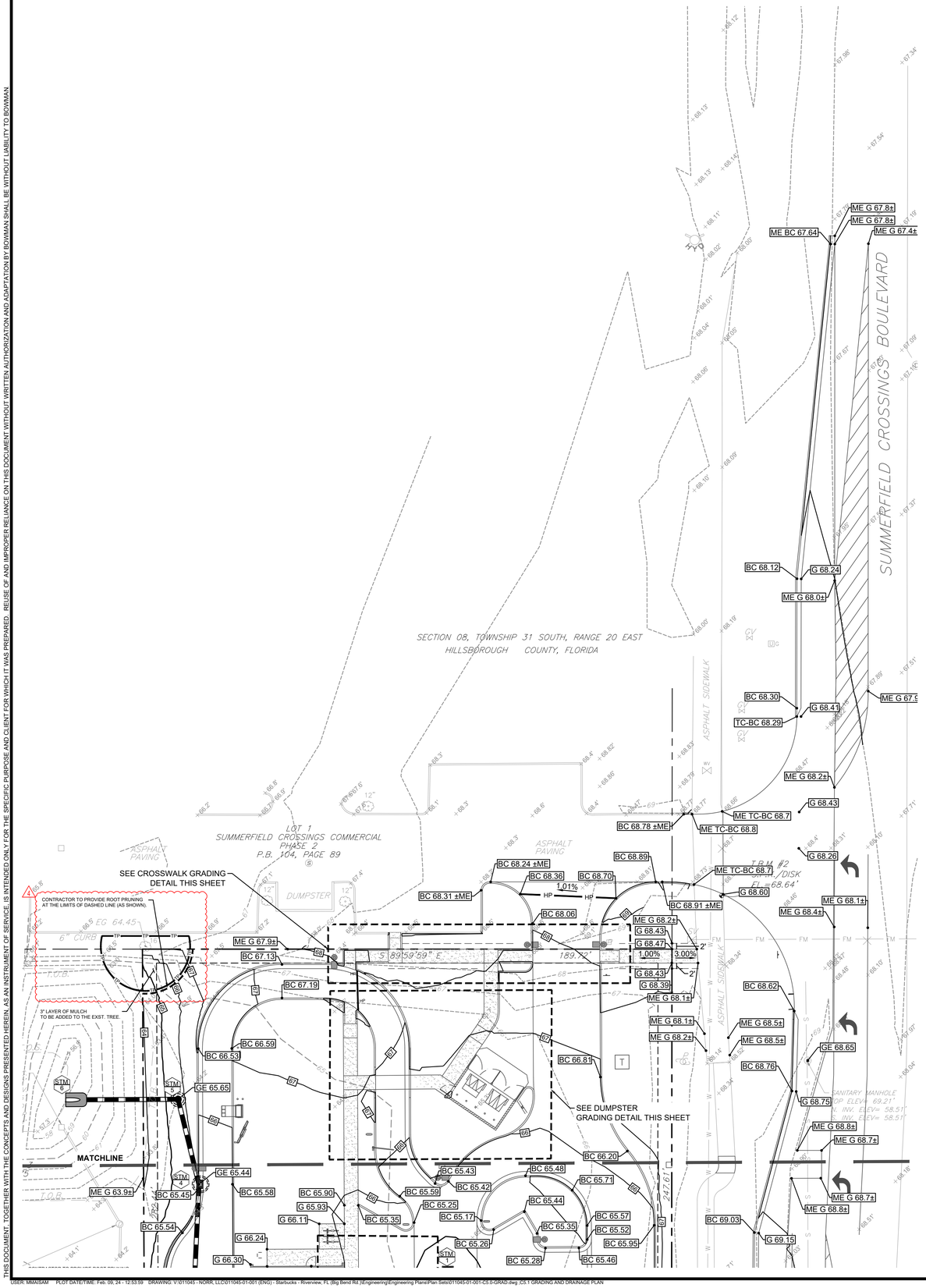

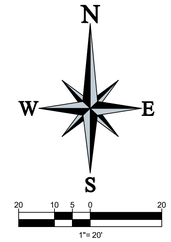

LEGEND

- PROPOSED PROPERTY BOUNDARY LINE
- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- PROPOSED BUILDING SETBACK
- PROPOSED LANDSCAPE SETBACK
- EXISTING 5' INTERVAL CONTOUR LINE
- EXISTING 1' INTERVAL CONTOUR LINE
- PROPOSED 5' INTERVAL CONTOUR LINE
- PROPOSED 1' INTERVAL CONTOUR LINE
- PROPOSED EDGE OF PAVEMENT
- EXISTING EDGE OF PAVEMENT
- EXISTING CURB
- PROPOSED BUILDING OUTLINE
- PROPOSED CURB
- G XX.XX / RIM XX.XX / BC XX.XX — PROPOSED SPOT SHOTS
- STM — PROPOSED STORM STRUCTURES NAME
- PROPOSED SIGN
- PROPOSED BUILDING ENTRANCES
- PROPOSED LIGHT STRUCTURE
- PROPOSED WATER STRUCTURES
- SANITARY STRUCTURES
- STORM STRUCTURES
- WATER/FIRE STRUCTURE
- SITE SIGNAGE
- LIGHT POLE AND GROUND VAULT
- TREE
- ROOT PRUNING LIMIT OF EXTENT
- HP — PROPOSED HIGHPOINT / RIDGELINE
- IRR — PROPOSED IRRIGATION
- W — PROPOSED WATER
- S — PROPOSED SANITARY
- PROPOSED STORM
- E — PROPOSED ELECTRIC
- T/C — PROPOSED TELECOM
- W — EXISTING WATER
- S — EXISTING SANITARY
- EXISTING STORM
- MATCHLINE

FEMA NOTES:

1. FEMA ZONE: X, 1257C0515H
2. FLOODPLAIN MITIGATION: NA
3. BASIN CAPACITY: PEAK SENSITIVE
4. BASIN NAME: BULLFROG CREEK
   (SMALL SITE BUT PART OF A PREVIUOSLY PERMITTED MASTER PLAN)
5. DATUM: NAVD 1988

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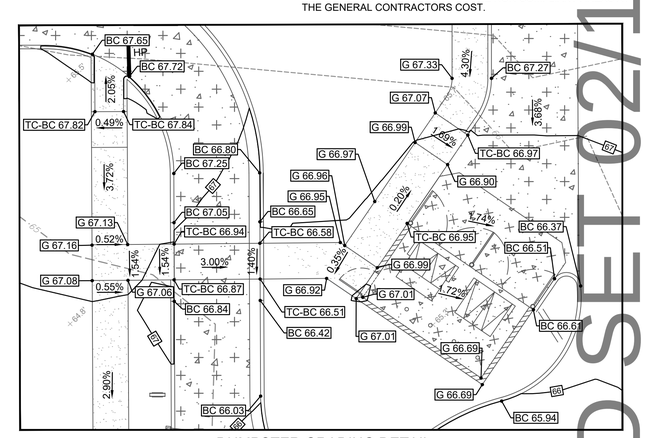
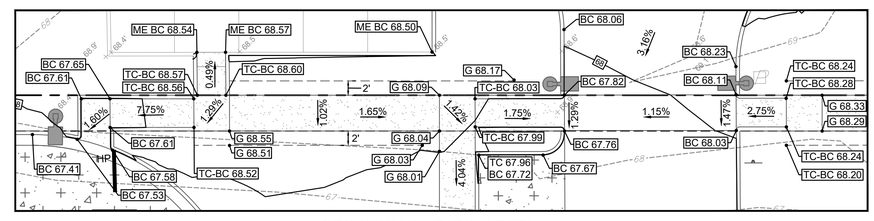


DUMPSTER GRADING DETAIL
SCALE: 1" = 10'



CROSSWALK GRADING DETAIL
SCALE: 1" = 10'

STORM STRUCTURE TABLE										
STRUCTURE NAME	STRUCTURE TYPE	DRAINAGE AREA TO STRUCTURE	RIM	UPSTREAM PIPE NAME	UPSTREAM PIPE INV	DOWNSTREAM PIPE NAME	DOWNSTREAM PIPE INV	DOWNSTREAM PIPE LENGTH	DOWNSTREAM PIPE SIZE AND TYPE	DOWNSTREAM PIPE SLOPE
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2	FDOT TYPE C INLET	0.33 AC	64.39	STM 1 - STM 2	59.51'	STM 2 - STM 3	59.51'	96.09'	18" HP	0.50%
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5	FDOT 4' 0' MH	0.00 AC	65.65	STM 4 - STM 5	58.18'	STM 5 - STM 6	58.18'	40.26'	18" HP	0.50%
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HILLSBOROUGH COUNTY, FL

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BID SET 02/15/24

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PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022

SHEET C5.1

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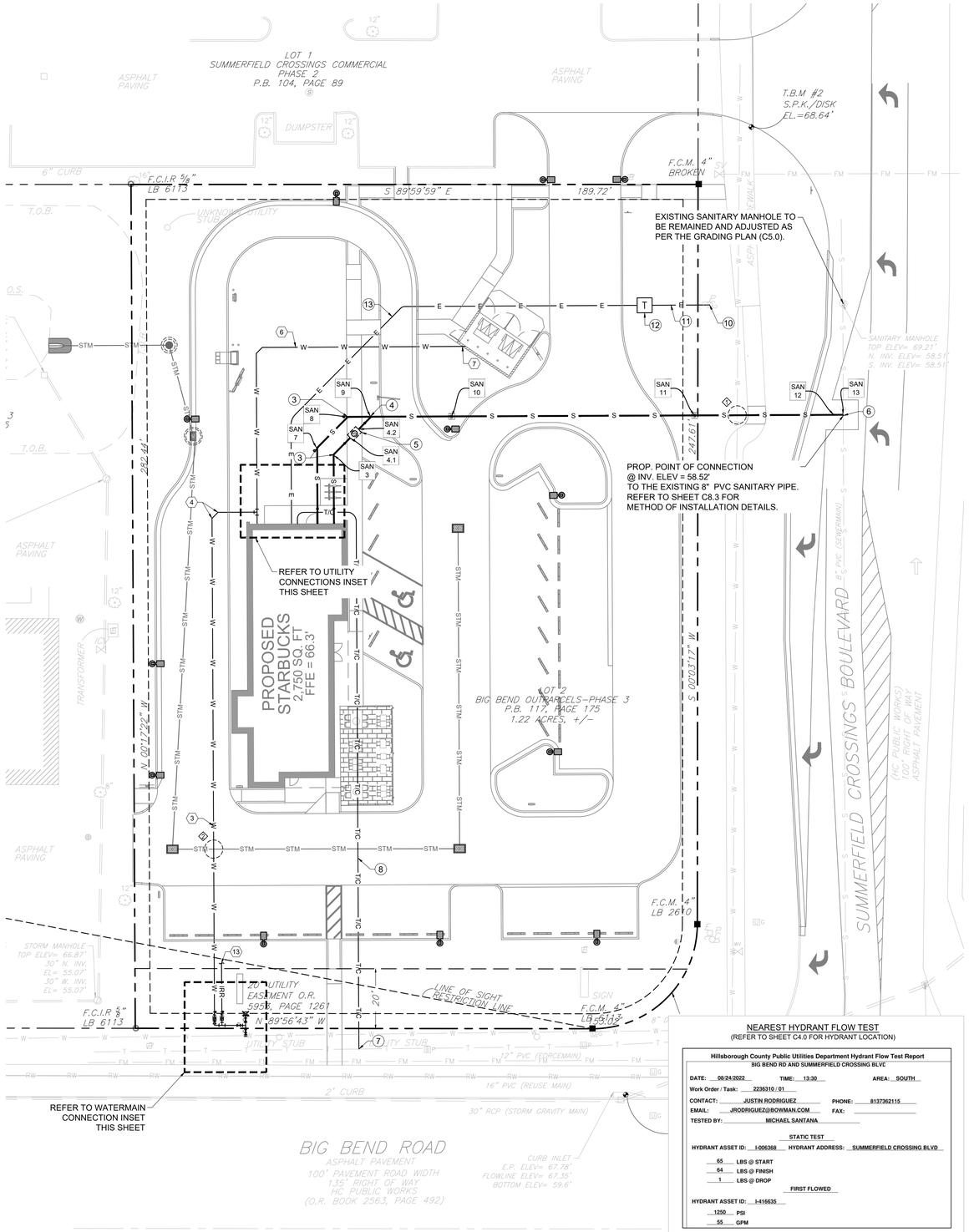
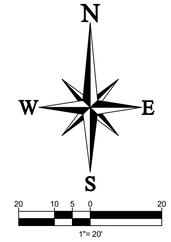




UTILITY LEGEND

- EXISTING PROPERTY BOUNDARY LINE
- EXISTING ADJOINING PROPERTY LINE
- EXISTING ACCESS EASEMENT
- EXISTING 5' INTERVAL CONTOUR LINE
- EXISTING 1' INTERVAL CONTOUR LINE
- PROPOSED 5' INTERVAL CONTOUR LINE
- PROPOSED 1' INTERVAL CONTOUR LINE
- EXISTING CURB
- PROPOSED UTILITY EASEMENT
- PROPOSED CURB AND GUTTER
- PROPOSED CURB
- PROPOSED DEPRESSED CURB
- PROPOSED BUILDING
- PROPOSED WATER STRUCTURES
- PROPOSED STORM STRUCTURES
- PROPOSED SANITARY STRUCTURES
- EXISTING SANITARY STRUCTURES
- EXISTING WATER STRUCTURES
- EXISTING GAS MAIN
- EXISTING WATER MAIN
- EXISTING UNDERGROUND ELECTRIC
- EXISTING TELEPHONE
- EXISTING OVERHEAD WIRES
- EXISTING SANITARY
- EXISTING STORM
- PROPOSED STORM PIPE
- PROPOSED WATER
- PROPOSED SANITARY

UTILITY KEYED NOTES:

1. PROPOSED LOCATION FOR SANITARY SEWER TIE IN TO THE BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
2. PROPOSED 6" GREEN PVC (SDR 26) SANITARY SEWER SERVICE. SANITARY SEWER PIPE TO BE RUN AT MINIMUM SLOPE OF 1.04% AND 36" MINIMUM PIPE COVER.
3. PROPOSED 6" GREEN PVC (SDR 26) - WYE WITH CLEANOUT. REFER TO SHEET C8.3 FOR DETAIL.
4. PROPOSED 6" GREEN PVC (SDR 26) - WYE CONNECTION. REFER TO SHEET C8.3 FOR DETAIL.
5. PROPOSED GALLON GREASE INTERCEPTOR LOCATION. REFER TO BUILDING PLANS FOR DETAIL.
6. PROPOSED 6" X 8" TAPPING SLEEVE TO EXISTING 8" PVC SEWER PIPE.
7. PROPOSED POINT OF CONNECTION FOR UNDERGROUND TELEPHONE/CABLE SERVICE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY (SPECTRUM).
8. PROPOSED TELEPHONE/CABLE SERVICE (2) 4" UNDERGROUND CONDUITS. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY FOR SERVICE SPECIFICATIONS (SPECTRUM).
9. PROPOSED LOCATION FOR UNDERGROUND TELEPHONE/CABLE TIE IN TO THE BUILDING. REFER TO ELECTRICAL PLANS FOR DETAILS.
10. PROPOSED POINT OF CONNECTION FOR UNDERGROUND ELECTRIC SERVICE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY (TAMPA ELECTRIC).
11. PROPOSED PRIMARY CONDUITS FOR ELECTRICAL SERVICE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY (TAMPA ELECTRIC).
12. PROPOSED TRANSFORMER LOCATION. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY (TAMPA ELECTRIC).
13. CONTRACTOR SHALL PROVIDE (2) 4" UNDERGROUND SECONDARY CONDUITS FOR ELECTRICAL SERVICE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY (TAMPA ELECTRIC).
14. PROPOSED WALL MOUNTED ELECTRIC METER AND MANUAL TRANSFER SWITCH. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL COMPANY (TAMPA ELECTRIC). REFER TO ELECTRICAL PLANS FOR DETAILS.

WATER KEYED NOTES:

1. PROPOSED 8"X6" TAPPING SLEEVE AND VALVE. REFER TO SHEET C8.2 FOR DETAIL.
2. PROPOSED 1.5" WATER METER AND REDUCED PRESSURE BACKFLOW PREVENTER FOR DOMESTIC SERVICE. REFER TO SHEET C8.2 FOR DETAIL.
3. PROPOSED 185 LF OF 1.5" BLUE P.E. DOMESTIC WATER SERVICE.
4. PROPOSED 1.5" BLUE P.E. - 45° BEND.
5. PROPOSED 1.5" X 1.5" X 3/4" TEE CONNECTION.
6. PROPOSED 52 LF OF 3/4" BLUE P.E. DOMESTIC WATER SERVICE.
7. PROPOSED HOSE BIBB CONNECTION.
8. PROPOSED LOCATION FOR POTABLE WATER TIE IN TO THE BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
9. PROPOSED 2" X 2" X 1" TEE CONNECTION.
10. PROPOSED 2" X 1.5" REDUCER.
11. PROPOSED 2" BLUE P.E - 90° BEND.
12. PROPOSED 1" WATER METER AND REDUCED PRESSURE BACKFLOW PREVENTER FOR IRRIGATION SERVICE .
13. PROPOSED 1" PVC IRRIGATION WATER SERVICE. REFER TO IRRIGATION PLANS FOR CONTINUATION.
14. PROPOSED FIRE HYDRANT ASSEMBLY WITH A 6" GATE VALVE (SEE SHEET 8.2 FOR DETAILS)
15. PROPOSED 6" D.I.P WATER MAIN. REFER TO SHEET C8.3 FOR DETAIL.
16. PROPOSED 6" X 6" X 2" TEE CONNECTION.
17. PROPOSED 2" BLUE P.E - 90° BEND.
18. PROPOSED ADJUSTABLE GATE VALVE.
19. PROPOSED 2" BLUE P.E DOMESTIC WATER SERVICE.

UTILITY NOTES:

1. REFER TO SHEET C1.1 FOR GENERAL NOTES.
2. REFER TO SHEET C2.0, C2.1, & C2.2 FOR EROSION AND SEDIMENTATION CONTROL PLANS.
3. REFER TO SHEET C3.0 FOR DEMOLITION PLAN.
4. REFER TO SHEET C4.0 FOR SITE PLAN.
5. REFER TO SHEET C5.0-C5.1 FOR GRADING AND DRAINAGE PLAN.
6. ALL DIMENSIONS ARE TO GROUND LEVEL IMPROVEMENTS (FACE OF CURB, CONCRETE SLAB, ETC.) UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL PLANS FOR BUILDING DETAILS.
7. ALL DIMENSIONS FROM PROPERTY LINES ARE PERPENDICULAR UNLESS OTHERWISE NOTED.
8. CONTRACTOR TO SEED ALL DISTURBED AREA UNLESS NOTED OTHERWISE.
9. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING COMPLETE OR EXACT. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
10. CONTRACTOR MUST COORDINATE THE SHUTDOWN OF THE EXISTING POTABLE WATER, WASTEWATER FORCE MAIN, OR RECLAIMED WATER MAIN WITH HILLSBOROUGH COUNTY FIELD MAINTENANCE SERVICES. CONTACT THE NORTHWEST UNIT AT 813-5545-5010 OR THE SOUTH/CENTRAL UNIT AT 813-671-7604.
11. THE LOCATION OF ALL NEWLY FIRE HYDRANTS SHALL BE IDENTIFIED WITH BLUE REFLECTIVE PAVEMENT MARKER INSTALLED ON THE ROADWAY, PERPENDICULAR TO THE FIRE HYDRANT. THE REFLECTIVE MARKER WILL BE LOCATED IN THE CENTER OF THE LANE CLOSEST TO THE HYDRANT.
12. THE CONTRACTOR/ENGINEER OF RECORD MUST CONTACT HILLSBOROUGH COUNTY PUBLIC UTILITY DEPT. INSPECTION SECTION AND LINE MAINTENANCE TO SET UP THE PRE-CONSTRUCTION MEETING.
13. CONTRACTOR TO EXPOSE WATER MAIN AND FURNISH TAPPING SLEEVE AND VALVE FOR WATER METER TAP AND INSTALL 2" POLYETHYLENE (P.E.) WATER SERVICE LINE FROM MAIN TO METER.
14. ALL NON-METALLIC PIPE WILL BE INSTALLED WITH 2 PAIR, 10 GAUGE, COPPER TRACER WIRE.
15. REFER TO ARCHITECTURAL PLANS FOR SITE ELECTRICAL PLANS.
16. THE CONSTRUCTION OF ALL ABOVE GROUND UTILITY APPURTENANCES VISIBLE FROM THE PUBLIC RIGHT-OF-WAY SUCH AS PEDESTALS, UTILITY METERS, TRANSFORMERS, BACK-FLOW PREVENTION DEVICES, ETC. FOR NEW DEVELOPMENT OR REDEVELOPMENT ACTIVITIES SHALL CONFORM TO SCREENING REQUIREMENTS AS OUTLINED IN SECTION 6.06.06.C.10 OF THE LAND DEVELOPMENT CODE. PLAN LOCATION OR OTHER SCREENING MUST BE CONSIDERATE OF REQUIRED SPATIAL SEPARATIONS FROM A FIRE FLOW PROTECTION APPLIANCE IN ACCORDANCE TO THE UNIFORM FIRE CODE, AND PER WATER, WASTEWATER AND RECLAIMED WATER TECHNICAL SPECIFICATIONS SPEC 331001, PART 2.6.4.2, MUST BE LOCATED A MINIMUM OF 5' FROM UTILITY SLABS AND 3' FROM UNDERGROUND VALVES. TREES MUST BE LOCATED A MINIMUM OF 8' FROM UTILITY SLABS, FOR ABOVE GROUND UTILITY APPURTENANCES ILLUSTRATED ON THE PLANS, THE TYPE OF SCREENING MUST BE CLEARLY NOTED TO MATCH THE OVERALL HEIGHT FOR THE TYPE OF ABOVE GROUND UTILITY SPECIFIED ON THE PLANS. UTILIZATION OF EVERGREEN PLANT MATERIAL MUST BE DESCRIBED BY SPECIES, SPACING, AND OVERALL HEIGHT FOR THE TYPE OF UTILITY TO BE SCREENED. UTILIZATION OF OPAQUE FENCING OR OTHER SCREENING MATERIAL IS PERMITTED. THE METER ASSEMBLY MUST BE ACCESSIBLE BY BOOM TRUCK OFF COUNTY RIGHT-OF-WAY OR AN INTERIOR PAVED ACCESS ROAD AT LEAST 12' IN WIDTH PER SPEC 331001, PART 2.6.4. DO NOT INSTALL ANY SCREENING THAT WILL HINDER ACCESS IN THE FUTURE TO THE METER ASSEMBLY FROM THE INTERIOR OF THE SITE.

GENERAL NOTES:

1. ELEVATIONS SHOWN HEREON ARE BASED ON NATIONAL AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). PLEASE REFER TO COVER SHEET FOR VERTICAL DATUM NOTE).

SANITARY STRUCTURE TABLE

STRUCTURE NAME	STRUCTURE TYPE	RIM	UPSTREAM PIPE NAME	UPSTREAM PIPE INV	DOWNSTREAM PIPE NAME	DOWNSTREAM PIPE INV	DOWNSTREAM PIPE LENGTH	DOWNSTREAM PIPE SIZE AND TYPE	DOWNSTREAM PIPE SLOPE
1	BUILDING STUB	66.17			SAN 1 - SAN 2	61.52'	5.00'	6" PVC	1.04%
2	6" PVC - TWO-WAY CO	66.09	SAN 1 - SAN 2	61.47"	SAN 2 - SAN 3	61.47"	18.12'	6" PVC	1.04%
3	6" PVC - WYE W/CO	66.14	SAN 2 - SAN 3	61.28'	SAN 3 - SAN 4.1	61.28'	7.92'	6" PVC	1.04%
4.1	GI IN	66.09	SAN 3 - SAN 4.1	61.20'					
4.2	GI OUT	66.14			SAN 4.2 - SAN 9	60.95'	5.99'	6" PVC	1.04%
5	BUILDING STUB	66.30			SAN 5 - SAN 6	61.40'	5.00'	6" PVC	1.04%
6	6" PVC - TWO-WAY CO	66.20	SAN 5 - SAN 6	61.35'	SAN 6 -SAN 7	61.33'	20.41'	6" PVC	1.04%
7	6" PVC - WYE W/CO	66.13	SAN 6 -SAN 7	61.12'	SAN 7 - SAN 8	61.12'	14.60'	6" PVC	1.04%
8	6" PVC - WYE W/CO	66.30	SAN 7 - SAN 8	60.97"	SAN 8 - SAN 9	60.97"	7.78'	6" PVC	1.04%
9	6" PVC - WYE	66.37	SAN 4.2 - SAN 9 SAN 8 - SAN 9	60.89' 60.89'	SAN 9 - SAN 10	60.89'	26.97'	6" PVC	1.04%
10	6" PVC - TWO WAY CO	66.09	SAN 9 - SAN 10	60.61'	SAN 10 - SAN 11	60.61'	81.34'	6" PVC	1.04%
11	6" PVC - TWO WAY CO	67.58	SAN 10 - SAN 11	59.76'	SAN 11 - SAN 12	59.76'	46.68'	6" PVC	1.04%
12	6" PVC - 45° VERTICAL BEND	68.80	SAN 11 - SAN 12	59.27"	SAN 12 - SAN 13	59.27"	3.00'	6" PVC	25.00%
13	EXST. 8" PVC SAN PIPE CONNECTION	68.77	SAN 12 - SAN 13	58.52'					

NEAREST HYDRANT FLOW TEST

(REFER TO SHEET C4.0 FOR HYDRANT LOCATION)

Hillsborough County Public Utilities Department Hydrant Flow Test Report
BIG BEND RD AND SUMMERFIELD CROSSING BLVD

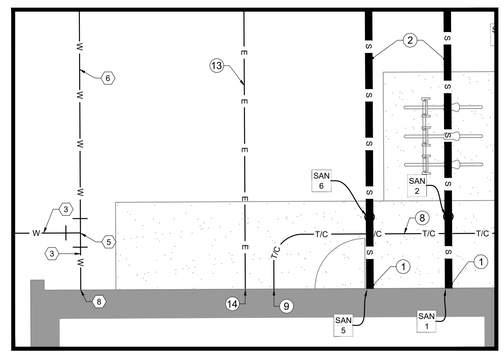
DATE: 08/24/2022 TIME: 13:30 AREA: SOUTH
Work Order / Task: 2236310 / 01
CONTACT: JUSTIN RODRIGUEZ PHONE: 8137362115
EMAIL: JRODRIGUEZ@BOWMAN.COM FAX:
TESTED BY: MICHAEL SANTANA

STATIC TEST
HYDRANT ASSET ID: I-006368 HYDRANT ADDRESS: SUMMERFIELD CROSSING BLVD
65 LBS @ START
64 LBS @ FINISH
1 LBS @ DROP

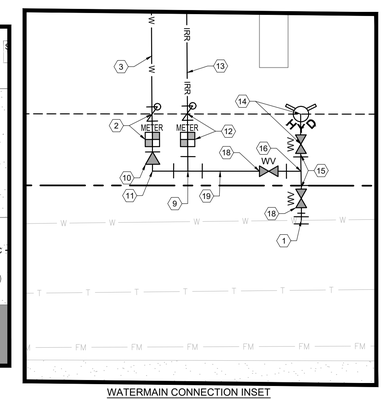
FIRST FLOWED
HYDRANT ASSET ID: I-416635
1250 PSI
55 GPM

HYDRANT FLOW TEST DATA

BUILDING CONSTRUCTION TYPE	V-B
REQUIRED FIRE FLOW (PER NFPA)	1,500 GPM
HYDRANTS REQUIRED	EXIST. (PUBLIC): 216 FT; 55 GPM
	PROP. (PRIVATE): 77 FT; 1,500 GPM
AVAILABLE FIRE FLOW	1,555 GPM



UTILITY CONNECTIONS INSET
SCALE: 1" = 5'



WATERMAIN CONNECTION INSET
SCALE: 1" = 5'

PIPE CONFLICT DATA

1. WATER OVER SANITARY
EX. 8" PVC B.O.P.= 63.93'
PROP. 6" PVC T.O.P. = 59.93'
CLEARANCE = 4.00'

2. STORM OVER WATER
PROP. 18" HP B.O.P. = 59.03'
PROP. 1-1/2" PVC T.O.P.= 57.49'
CLEARANCE = 1.55'

LEGEND
B.O.P. - BOTTOM OF PIPE
T.O.P. - TOP OF PIPE
C.E. - CONCRETE ENCASEMENT
* PIPE CLEARANCES THAT ARE LESS THAN 1.00' SHALL BE CONCRETE ENCASED

BID SET

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02/15/2024

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C6.0

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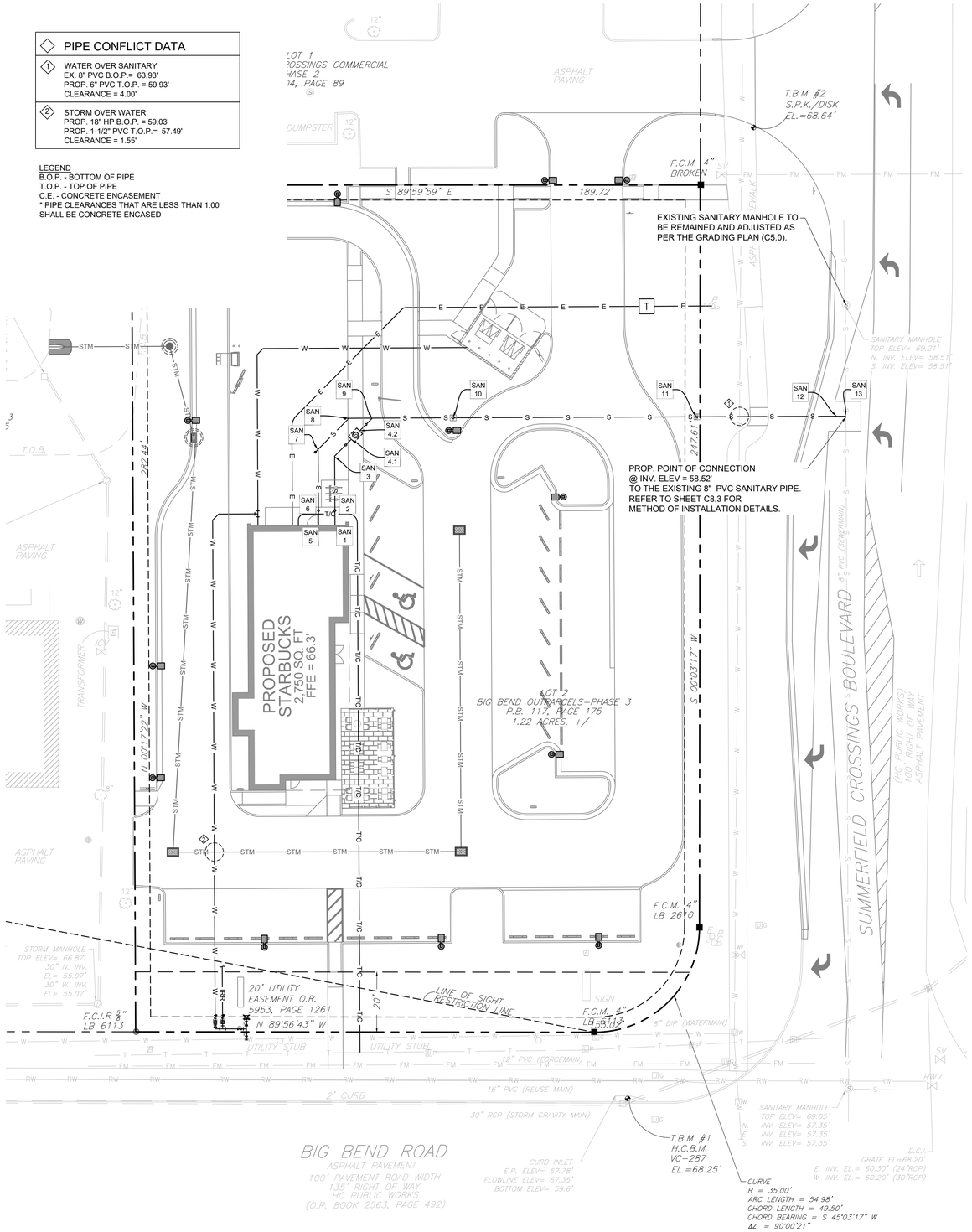
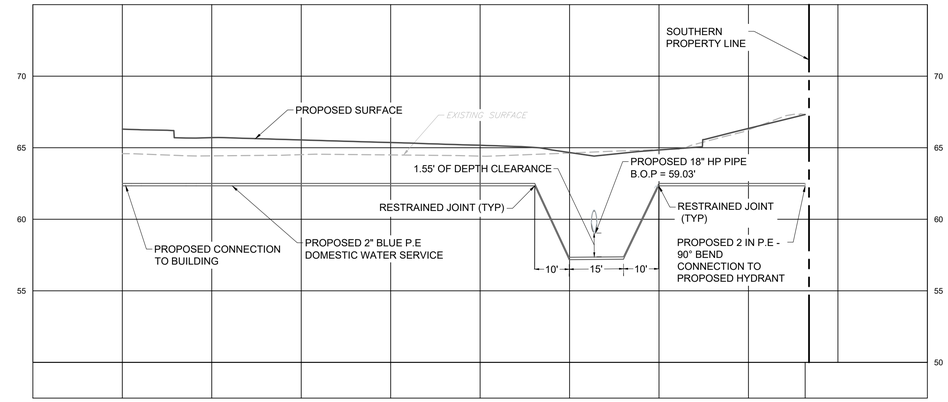
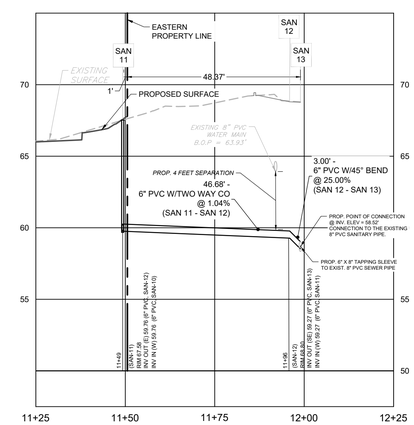




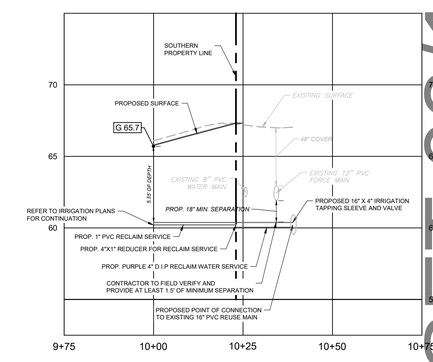
PROP. WATER MAIN

SCALE
VERTICAL 1" = 5'
HORIZONTAL 1" = 20'



SAN 11 - SAN 13

SCALE
VERTICAL 1" = 5'
HORIZONTAL 1" = 20'



PROP. IRRIGATION MAIN

SCALE
VERTICAL 1" = 5'
HORIZONTAL 1" = 20'

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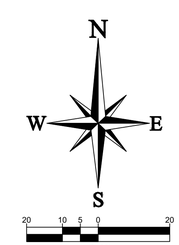

BID SET 02/15/2024

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UTILITY PROFILES
STARBUCKS - RIVERVIEW
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HILLSBOROUGH COUNTY, FL

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MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C6.1

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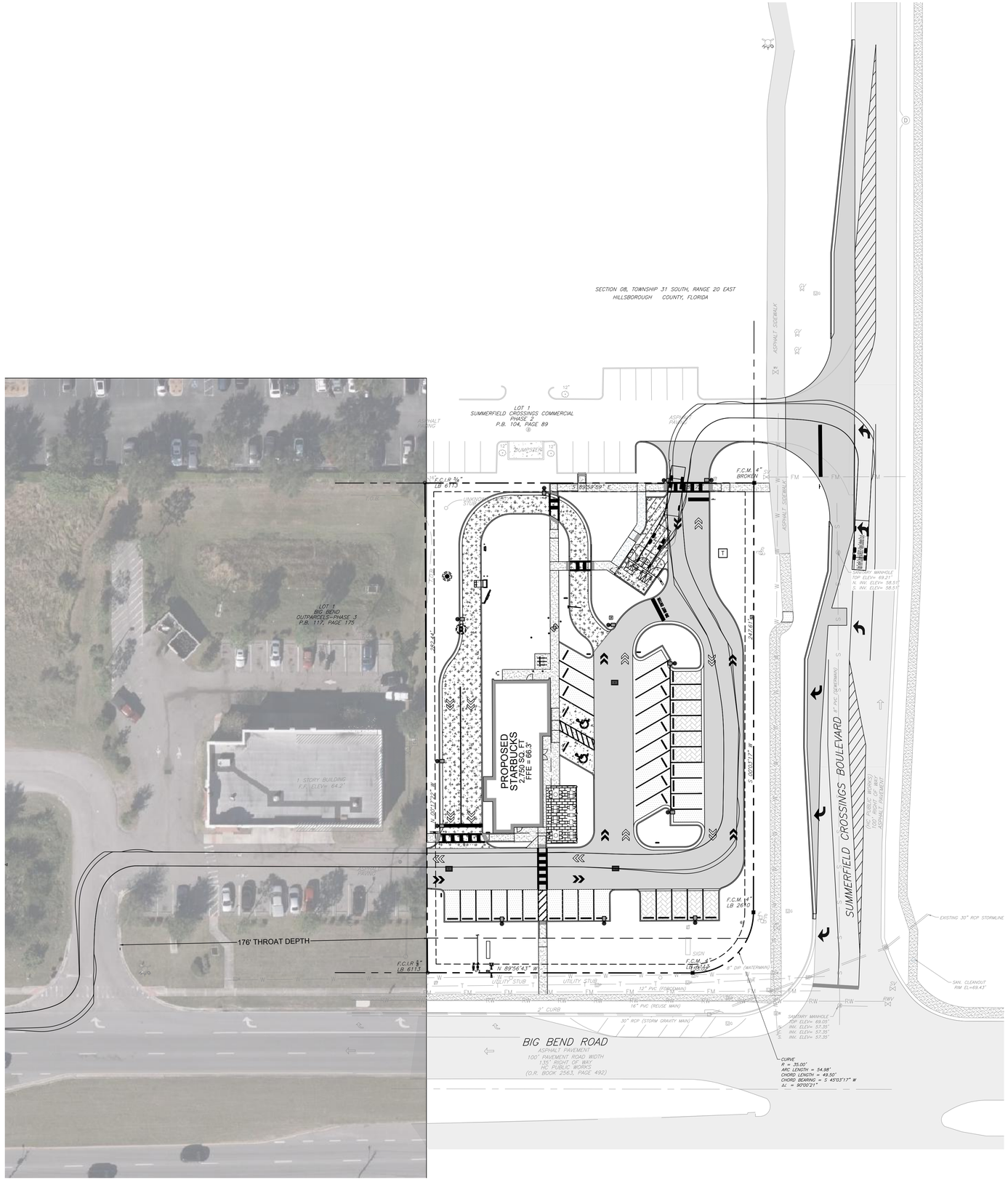

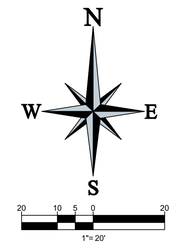

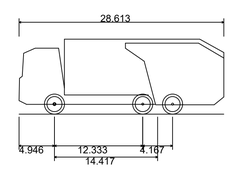

Mack TerraPro Cabover 6x4 MRU613 + Wayne Curbtender 31cu yd	
Overall Length	28.613ft
Overall Width	8.000ft
Overall Body Height	10.481ft
Min Body Ground Clearance	1.311ft
Track Width	8.000ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	33.500ft

GARBAGE TRUCK ROUTE

SCALE: 1 = 20'

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GARBAGE TRUCK PLAN
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DESIGN	DRAWN	CHKD

SCALE 1" = 20'

JOB No. 011045-01-001

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SHEET C7.0

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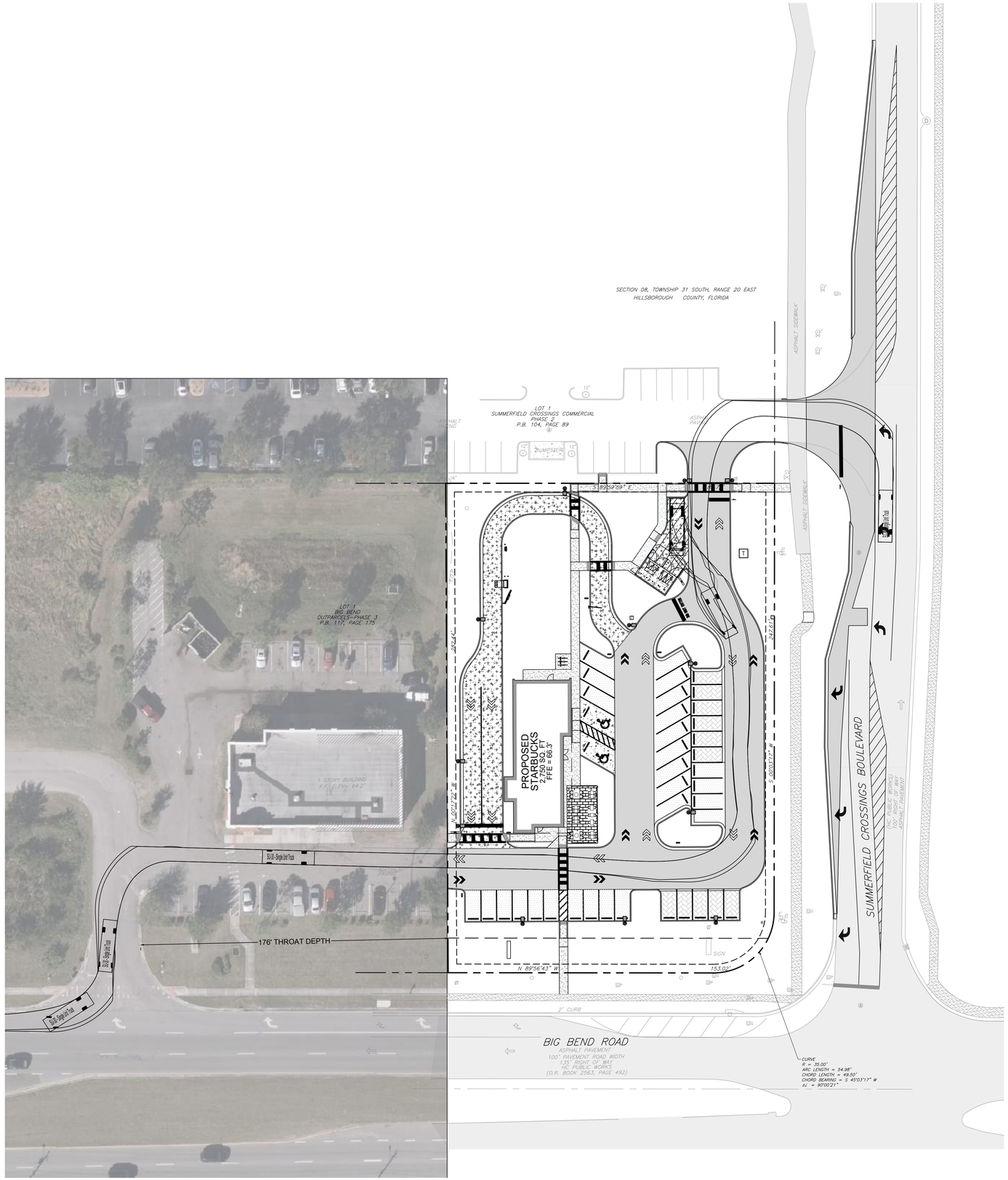

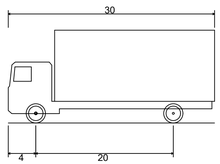

SU-30 - Single Unit Truck	
Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

STORE DELIVERY TRUCK ROUTE

SCALE: 1 = 10'

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MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 30'

JOB No. 011045-01-001

DATE 09/23/2022

SHEET C7.1

USER: MMASAM PLOT DATE/TIME: Feb. 09, 24 - 12:32:58 DRAWING: V:\011045 - NORR, LLC\011045-01-001 (ENG) - Starbucks - Riverview, FL (Big Bend Rd.)\Engineering\Engineering Plans\Plan Sets\011045-01-001-C7.0-TRUCK.dwg ;C7.1 STORE DELIVERY TRUCK PLAN

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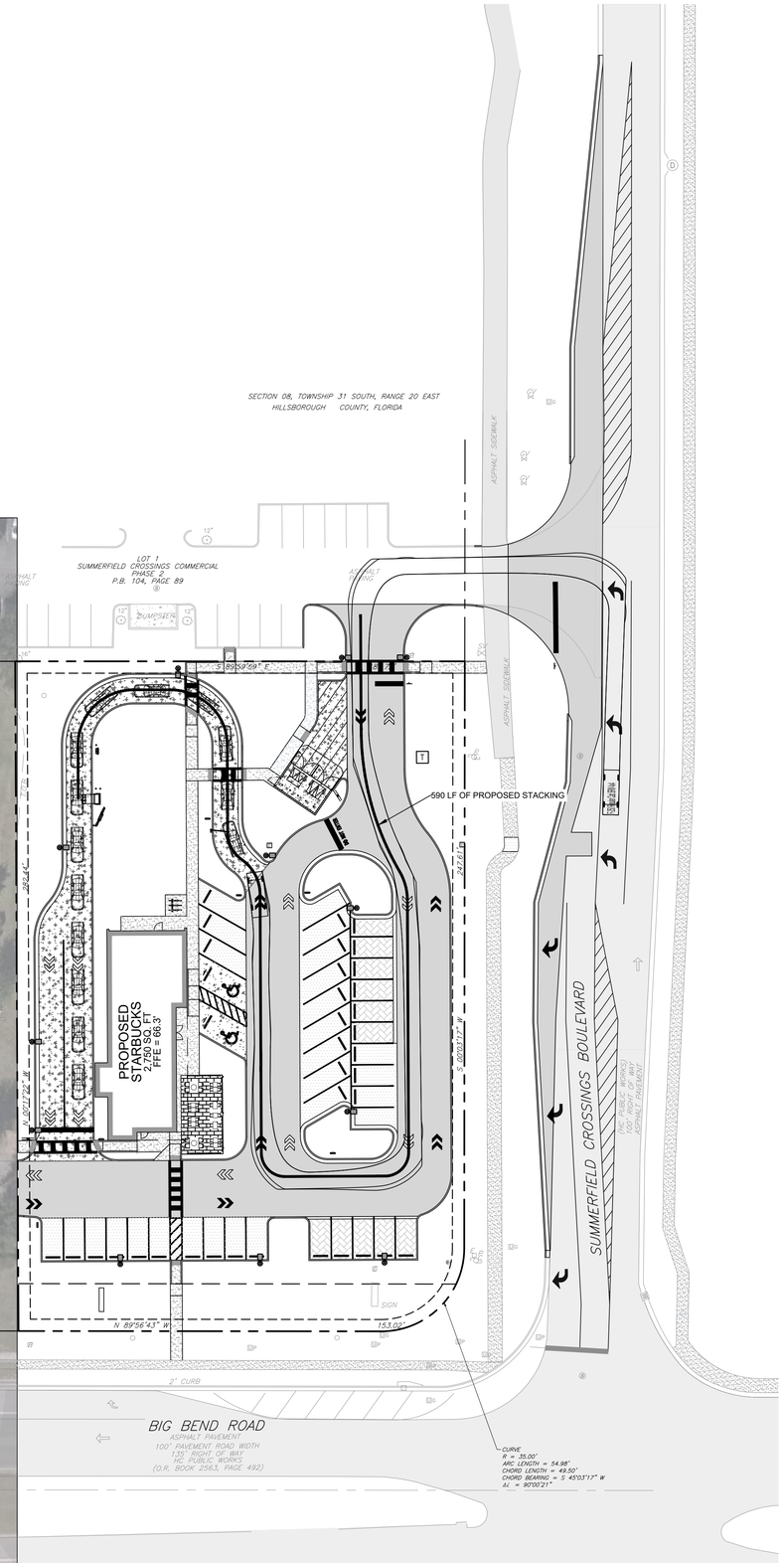
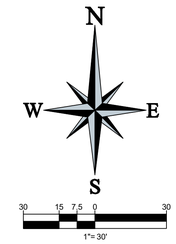
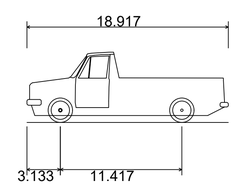




PROPOSED STACKING LENGTH = 590 LF



F-250 Regular Cab SRW 4x4

Overall Length	18.917ft
Overall Width	6.658ft
Overall Body Height	6.600ft
Min Body Ground Clearance	0.650ft
Track Width	6.658ft
Lock-to-lock time	5.00s
Curb to Curb Turning Radius	23.050ft

STORE DELIVERY TRUCK ROUTE

SCALE: 1 = 10'

BID SET 02/15/2024

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VEHICLE STACKING PLAN
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MM	RJD	CED
DESIGN	DRAWN	CHKD

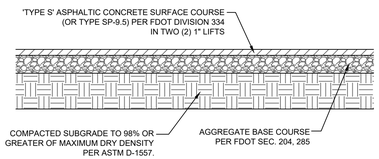
SCALE 1" = 30'

JOB No. 011045-01-001

DATE 09/23/2022

SHEET C7.2

	LAYER DEPTH	
ASPHALT TYPE	STANDARD DUTY	HEAVY DUTY
ASPHALT LOCATION	PARKING SPACES	DRIVE AISLES
AGGREGATE CONCRETE SURFACE COURSE	1.5"	2.0"
AGGREGATE BASE COURSE	6"	8"
COMPACTED SUBGRADE	12"	12"

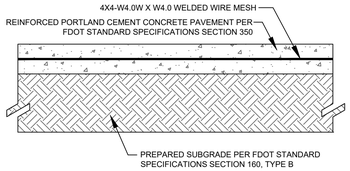


DETAIL NOTES:

1. AGGREGATE BASE COURSE CAN BE LIMEROCK OR CRUSHED CONCRETE (LBR = 100). COMPACT BASE COURSE TO 98% OF THE MATERIALS MAXIMUM DRY DENSITY PER ASTM D-1557.
2. COMPACTED SUBGRADE TO ACHIEVE A MINIMUM LBR OF 40.

ASPHALT PAVING DETAIL

	CONCRETE SLAB TYPE	
SLAB COMPONENT	STANDARD DUTY	HEAVY DUTY
CONCRETE LOCATION	PARKING SPACES	TRASH ENCLOSURE & DRIVE THRU
CONCRETE PAVEMENT	5"	6"
COMPACTED SUBGRADE	12"	12"
MINIMUM 28 DAY STRENGTH	4,000 PSI	4,000 PSI
MAX JOINT CONTROL SPACING	10' x 10'	12' x 12'
RECOMMENDED SAW-CUT DEPTH	1.25"	1.5"

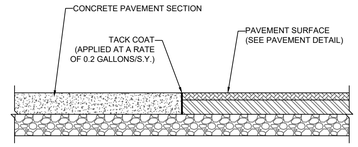


NOTE: THESE ARE MINIMUM SPECIFICATIONS. REFER TO GEOTECHNICIAL REPORT FOR FINAL SPECIFICATIONS.

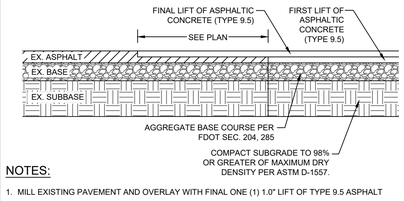
DETAIL NOTES:

1. SUBGRADE MATERIALS SHALL MEET FDOT REQUIREMENTS INCLUDING COMPACTION TO 98% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557.
2. CONCRETE PAVEMENT SHALL MEET THE MORE STRINGENT REQUIREMENT OF EITHER THE SPECIFICATIONS PROVIDED BY THE OWNER, LOCAL CITY/COUNTY REQUIREMENTS, OR FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. CONTRACTOR TO CONSTRUCT CONCRETE PAVEMENT WITH TRANSVERSE JOINTS AT 10' O.C. JOINTS TO BE CONSTRUCTED PER DETAIL ON THIS PAGE.
4. CONTRACTOR TO DOWEL AND JOINT BETWEEN CONCRETE SLAB AND CURB.

CONCRETE SLAB DETAIL



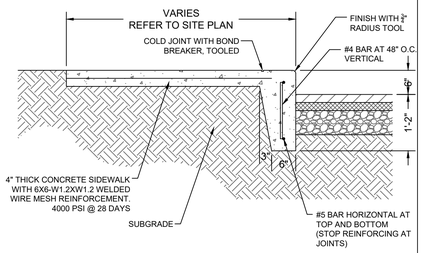
CONCRETE-TO-ASPHALT DETAIL



NOTES:

1. MILL EXISTING PAVEMENT AND OVERLAY WITH FINAL ONE (1) 1.0" LIFT OF TYPE 9.5 ASPHALT

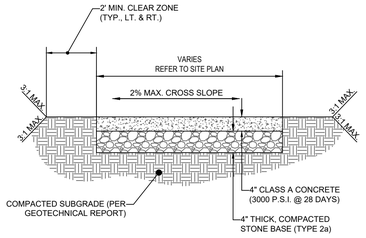
MILL AND OVERLAY DETAIL



DETAIL NOTES:

1. PROVIDE 1/2" PREMOLDED EXPANSION JOINT FILLER AT 60' CENTERS, CHANGES IN DIRECTION, AND ABUTTING SEPARATE POURS.
2. PROVIDE TOOLED CONTRACTION JOINTS AT 10' CENTERS.
3. SUBGRADE TO BE COMPACTED TO 95% OR GREATER OF MAX. DRY DENSITY PER ASTM D-1557

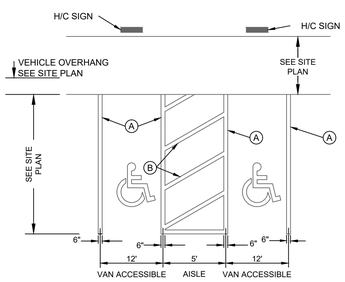
TURNED DOWN CONCRETE WALK DETAIL



DETAIL NOTES:

1. EXPANSION JOINTS 1/2" WIDE PREMOLDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS, CRACK CONTROL JOINTS TO BE SPACED AT INTERVALS EQUAL TO SIDEWALK WIDTH.

CONCRETE SIDEWALK DETAIL

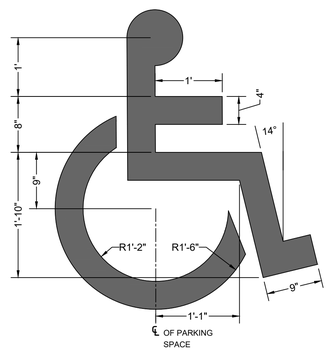


ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE LEVEL WITH SURFACE SLOPES NOT EXCEEDING 1:50 (2%) IN ALL DIRECTIONS

STRIPING LEGEND

(A) 6" BLUE
(B) 6" BLUE @ 60°

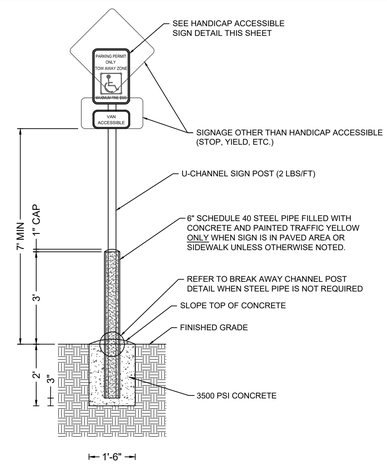
ADA ACCESSIBLE STRIPING DETAIL

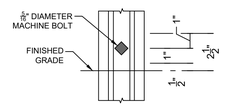


DETAIL NOTES:

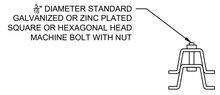
1. STRIPING TO BE PAINTED 4" WIDE WHITE OR AS REQUIRED BY STATE OR LOCAL CODE.

ADA SYMBOL STRIPING DETAIL





BREAK AWAY POST (ELEVATION)

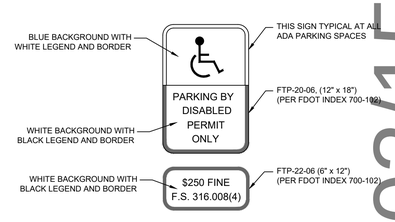


BREAK AWAY POST (PLAN)

DETAIL NOTES:

1. ALL SIGNS SHALL COMPLY WITH THE UNITED STATES DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" (LATEST EDITION), AND LOCAL CODES AS SPECIFIED.
2. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.

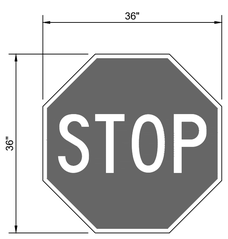
SIGN POST DETAIL



DETAIL NOTES:

1. ALL SIGN BACKGROUNDS SHALL BE RETROREFLECTIVE.
2. ALL SIGN LEGENDS AND BORDERS SHALL BE RETROREFLECTIVE.
3. REFER TO FDOT INDEX 700-102 FOR SPECIFICATIONS.

ADA ACCESSIBLE SIGN DETAIL

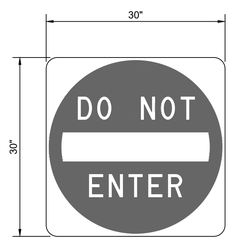


R1-1

DETAIL NOTES:

1. LEGEND AND BORDER SHALL BE WHITE (RETROREFLECTIVE).
2. BACKROUND SHALL BE RED (RETROREFLECTIVE).

"STOP" SIGN DETAIL

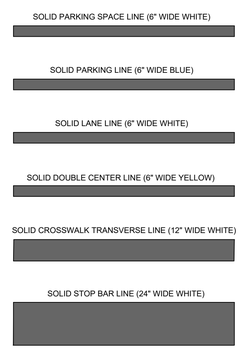


R5-1

DETAIL NOTES:

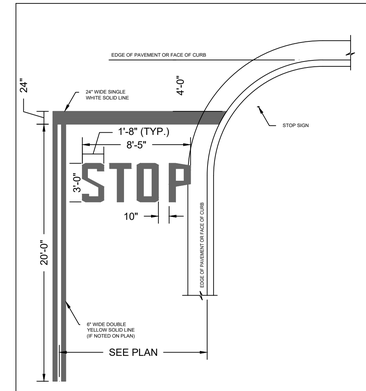
1. LEGEND AND SYMBOLS SHALL BE WHITE (RETROREFLECTIVE).
2. BACKGROUND SHALL BE RED (RETROREFLECTIVE).

"DO NOT ENTER" SIGN DETAIL



NOTE: ALL STRIPING SHALL BE PAINTED UNLESS OTHERWISE SPECIFIED ON THE SITE PLAN AND SHALL MEET THE CRITERIA OF STATE AND LOCAL AUTHORITIES HAVING JURISDICTION.

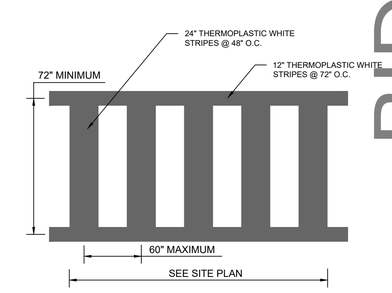
STRIPING DETAIL



DETAIL NOTES:

1. STOP BAR ONLY TO BE THERMOPLASTIC PAINTED REFLECTIVE WHITE.

STOP BAR DETAIL



DETAIL NOTES:

1. MARKINGS FOR STREET SHALL BE ACCORDING TO LOCAL CODE REQUIREMENTS AND AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. MARKINGS WITHIN PRIVATE PARKING LOT SHALL BE PER THIS DETAIL.
3. MARKINGS ARE TO BE THERMOPLASTIC PAINTED REFLECTIVE WHITE.
4. CROSSWALKS IN PUBLIC RIGHTS-OF-WAY SHALL BE STRIPED IN ACCORDANCE WITH STATE OR LOCAL REQUIREMENTS.

PEDESTRIAN CROSSING DETAIL

BID SET 02/15/2024

NOT FOR CONSTRUCTION

Bowman
CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

BOWMAN CONSULTING GROUP, LTD.
5404 CYPRESS CENTER DR., SUITE 140
TAMPA, FL 33609
PHONE: (813) 796-2114
LICENSE NO. 30462
BOWMAN.COM

CONSTRUCTION DETAILS
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

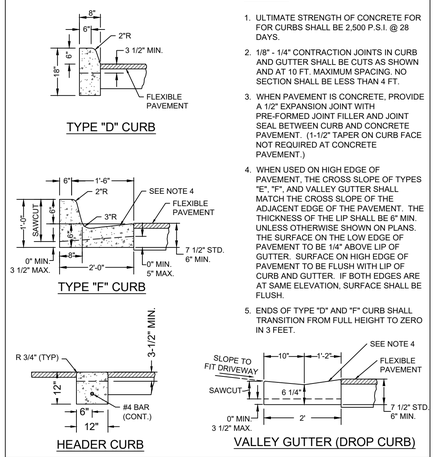
MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C8.0

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.

USER: MMAISAM PLOT DATE/TIME: Feb. 09, 24 - 11:55:36 DRAWING: V:\011045 - NORR, LLC\011045-01-001 (ENG) - Starbucks - Riverview; FL (Big Bend Rd.)\Engineering\Engineering Plans\Plan Sets\011045-01-001-C8.0-DETL.dwg :C8.0 CONSTRUCTION DETAILS

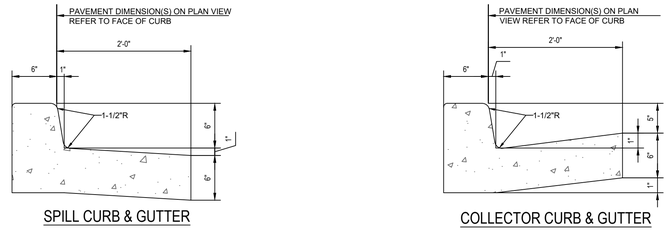
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.



NOTES:

1. ULTIMATE STRENGTH OF CONCRETE FOR FOR CURBS SHALL BE 2,500 P.S.I. @ 28 DAYS.
2. 1/8" - 1/4" CONTRACTION JOINTS IN CURB AND GUTTER SHALL BE CUTS AS SHOWN AND AT 10 FT. MAXIMUM SPACING. NO SECTION SHALL BE LESS THAN 4 FT.
3. WHEN PAVEMENT IS CONCRETE, PROVIDE A 1/2" EXPANSION JOINT WITH PRE-FORMED JOINT FILLER AND JOINT SEAL BETWEEN CURB AND CONCRETE PAVEMENT. (1-1/2" TAPER ON CURB FACE NOT REQUIRED AT CONCRETE PAVEMENT.)
4. WHEN USED ON HIGH EDGE OF PAVEMENT, THE CROSS SLOPE OF TYPES "E", "F", AND VALLEY GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT EDGE OF THE PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6" MIN. UNLESS OTHERWISE SHOWN ON PLANS. THE SURFACE ON THE LOW EDGE OF PAVEMENT TO BE 1/4" ABOVE LIP OF GUTTER. SURFACE ON HIGH EDGE OF PAVEMENT TO BE FLUSH WITH LIP OF CURB AND GUTTER. IF BOTH EDGES ARE AT SAME ELEVATION, SURFACE SHALL BE FLUSH.
5. ENDS OF TYPE "D" AND "F" CURB SHALL TRANSITION FROM FULL HEIGHT TO ZERO IN 3 FEET.

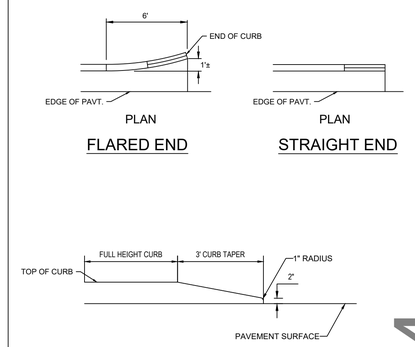
CONCRETE CURB DETAILS



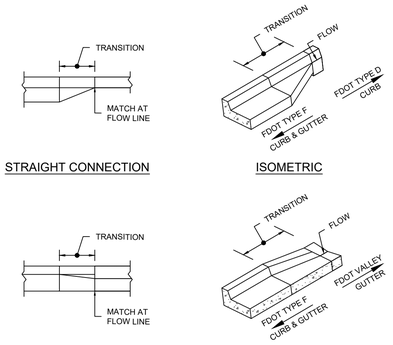
DETAIL NOTES:

1. CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
2. CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
3. AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
4. CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.'S.
5. GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.

CONCRETE CURB AND GUTTER DETAIL



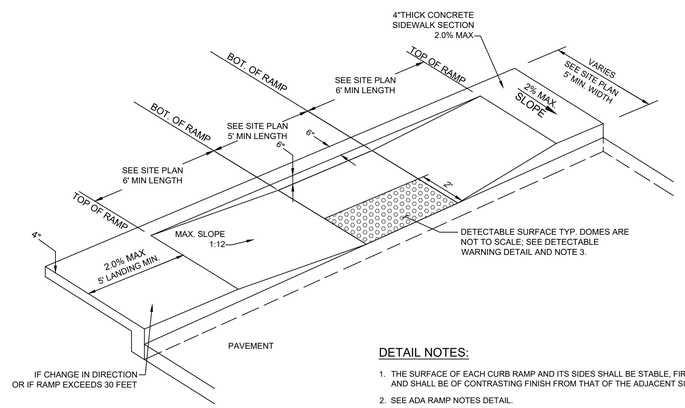
CURB TRANSITION DETAIL



NOTES:

1. TRANSITION SHALL BE 3' IN LENGTH.

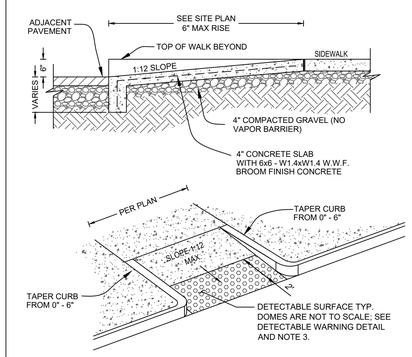
CURB TRANSITION DETAIL



DETAIL NOTES:

1. THE SURFACE OF EACH CURB RAMP AND ITS SIDES SHALL BE STABLE, FIRM AND SLIP-RESISTANT AND SHALL BE OF CONTRASTING FINISH FROM THAT OF THE ADJACENT SIDEWALK.
2. SEE ADA RAMP NOTES DETAIL.
3. THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.

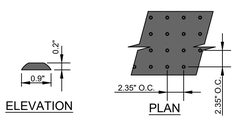
PARALLEL CURB RAMP DETAIL



NOTES:

1. THE SURFACE OF EACH CURB RAMP AND ITS SIDES SHALL BE STABLE, FIRM AND SLIP-RESISTANT AND SHALL BE OF CONTRASTING FINISH FROM THAT OF THE ADJACENT SIDEWALK.
2. SEE ADA RAMP NOTES DETAIL.
3. THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.

PERPENDICULAR CURB RAMP DETAIL



NOTE:
PREFABRICATED PANELS PER A.D.A. ACCESSIBILITY GUIDELINES SECTION 4.29.2 & A4.29.2 SHALL BE USED.

DETAIL NOTES:

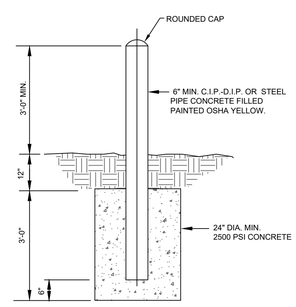
1. CONSTRUCT PER A.D.A. STANDARDS AND FLORIDA BUILDING CODE STANDARDS.

DETECTABLE WARNING DETAIL

DETAIL NOTES:

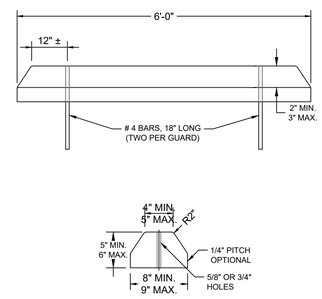
1. THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
2. CONSTRUCT PER A.D.A. STANDARDS AND FLORIDA BUILDING CODE STANDARDS.
3. REFER TO PLANS FOR ADJACENT SLOPES.
4. THE CROSS SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 1.5 %. SHOULD THE CROSS SLOPE EXCEED 2% THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE SIDEWALK AND CURB RAMP AS NECESSARY TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITY ACT AND THE FLORIDA BUILDING CODE.
5. THE LONGITUDINAL SLOPE OF THE RAMP SURFACE SHALL BE NO GREATER THAN 8.33%. SHOULD THE LONGITUDINAL SLOPE EXCEED 8.33%, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE SIDEWALK AND CURB RAMP AS NECESSARY TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITY ACT AND THE FLORIDA BUILDING CODE.
6. ALL ADA ACCESSIBLE RAMPS TO BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE FLORIDA ACCESSIBILITY CODE.
7. SEE DETAIL FOR DETECTABLE WARNING LOCATION, TYPE, AND EXTENTS.
8. ALL RAMPS OUTSIDE THE PROPERTY SHALL CONFORM TO THE STANDARDS OF THE GOVERNING REGULATING AGENCY.

ADA RAMP NOTES



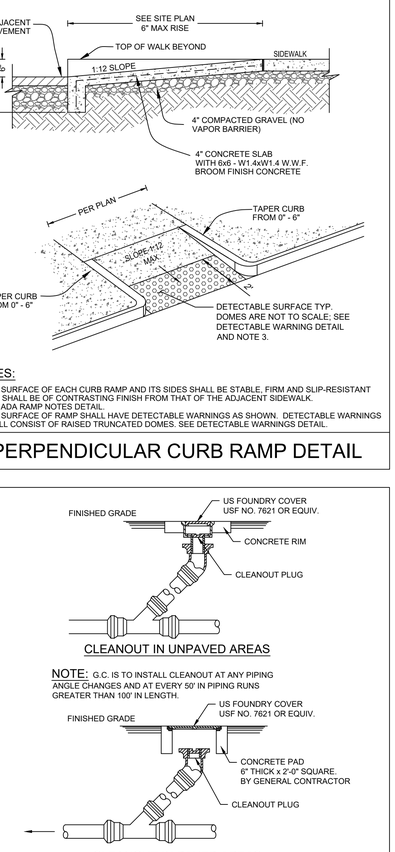
DEPENDING UPON THE FACILITY/DEVICE TO BE PROTECTED LARGER BOLLARDS AND CONCRETE ANCHORS MAY BE REQUIRED.

UTILITY PROTECTION BOLLARD DETAIL



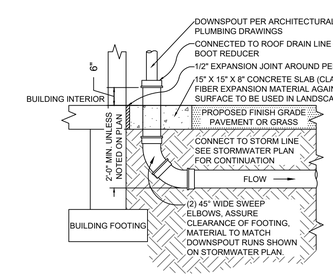
DETAIL NOTES:
1. ULTIMATE STRENGTH OF CONCRETE FOR WHEEL STOPS SHALL BE 2,500 P.S.I. @ 28 DAYS.

WHEEL STOP DETAIL



NOTE: REFER TO HILLSBOROUGH COUNTY CLEANOUT DETAIL THIS SHEET FOR CLEANOUT PROPOSED 1-FOOT FROM THE PROPERTY LINE.

CLEANOUT DETAIL



EXTERIOR DOWNSPOUT BOOT DETAIL

BID SET 02/15/2024

NOT FOR CONSTRUCTION

Bowman
CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

BOWMAN CONSULTING GROUP, LTD.
5404 CYPRESS CENTER DR., SUITE 140
TAMPA, FL 33609
PHONE: (813) 796-2114
LICENSE NO. 30462
BOWMAN.COM

CONSTRUCTION DETAILS
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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PLAN STATUS

REV	DATE	COMMENT
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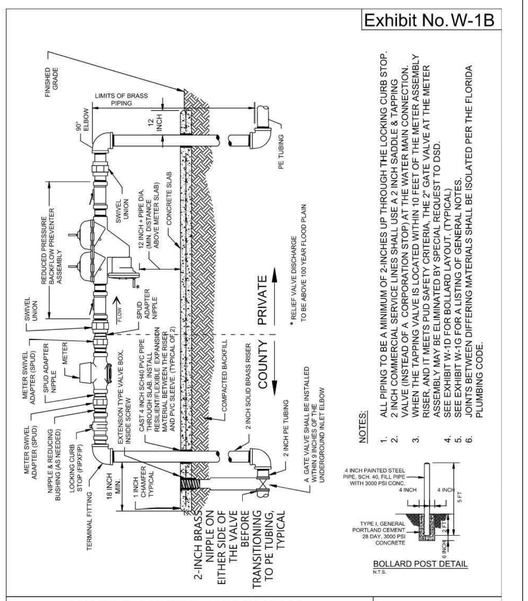
4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C8.1

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.

Exhibit No. W-1B



NOTES:

1. ALL PIPING TO BE A MINIMUM OF 2-INCHES UP THROUGH THE LOCKING CURB STOP.
2. 2 TYPE COMPLIANT LOCKING CURB STOPS SHALL BE INSTALLED ON THE 2 INCH VALVE (INSTEAD OF A CORPORATION STOP) AT THE WATER MAIN CONNECTION.
3. WHEN THE TAPPING VALVE IS LOCATED WITHIN 10 FEET OF THE METER ASSEMBLY RISER, AND IT MEETS PUD SAFETY CRITERIA, THE 2" GATE VALVE AT THE METER MAY BE REPLACED WITH A TAPPING VALVE AS ALLOWED BY DSD.
4. SEE EXHIBIT W-1D FOR BOLLARD LAYOUT. (TYPICAL)
5. SEE EXHIBIT W-1G FOR A LISTING OF GENERAL NOTES.
6. JOINTS BETWEEN DIFFERING MATERIALS SHALL BE ISOLATED PER THE FLORIDA PLUMBING CODE.

WATER METER ASSEMBLY COMMERCIAL - 1-1/2 INCH & 2 INCH METERS	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-1G

GENERAL NOTES:

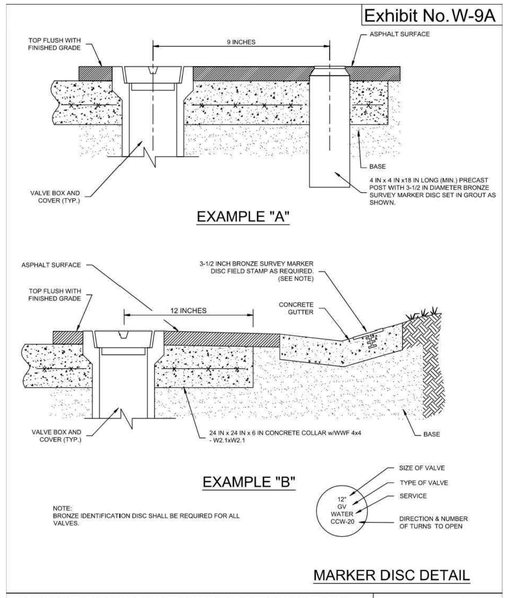
1. A MASTER METER ASSEMBLY SHALL BE DIRECTLY ACCESSIBLE BY A MAINTENANCE VEHICLE OFF A COUNTY ROW, OR BY AN INTERIOR ROAD THAT IS NOT BLOCKED BY A WALL OR GATE. THE TRUCK ACCESS ROAD SHALL BE 12 FT WIDE (MIN.) AND PAVED (CONCRETE OR ASPHALT)
2. ALL ABOVE GROUND PIPES AND FITTINGS SHALL BE CLASS 53 D.I.P. FOR 4 INCH AND LARGER PIPE.
3. CERTIFICATION OF PROPER OPERATION WILL BE REQUIRED FROM A CERTIFIED BACKFLOW TESTER PRIOR TO THE WATER MAIN ACCEPTANCE BY THE HILLSBOROUGH COUNTY PUBLIC UTILITIES DEPARTMENT.
4. ALL BACKFLOW ASSEMBLIES OR DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH AND SHALL MEET THE REQUIREMENTS FOUND IN CHAPTER 121 OF THE HILLSBOROUGH COUNTY CODE OF ORDINANCES, PART B, PUBLIC UTILITIES.
5. THE PROPER OPERATION, MAINTENANCE, AND TESTING OF THE BACKFLOW PREVENTION ASSEMBLY, SHALL BE IN ACCORDANCE WITH CHAPTER 121 OF THE HILLSBOROUGH COUNTY CODE OF ORDINANCES PART B, PUBLIC UTILITIES.
6. THE 6 INCH CONCRETE SLAB SHALL BE REINFORCED WITH 6x6-W1.4xW1.4 WELDED WIRE FABRIC AND SHALL BE TYPE I, PORTLAND CEMENT WITH A MINIMUM 28-DAY STRENGTH OF 3000psi.
7. SLAB WIDTH AND LENGTH SHALL VARY WITH ASSEMBLY. THE TOP OF SLAB SHALL BE 2 INCHES ABOVE FINISHED GRADE.
8. THE METER ASSEMBLY & BOLLARDS SHALL BE PAINTED IN ACCORDANCE WITH SPECIFICATION 331001, PART 2.6.
9. IF THE METER ASSEMBLY IS LOCATED WITHIN OR ADJACENT TO A TRAFFIC/VEHICLE AREA (PARKING LOT, DRIVEWAY, OR WITHIN 15 FT OF EDGE OF PAVEMENT/BACK OF CURB), METERS UP TO 2 INCHES SHALL HAVE A MINIMUM OF 4 TRAFFIC BOLLARD PROTECTION POSTS, AND FOR METERS 3 INCHES & LARGER A MINIMUM OF 6 TRAFFIC BOLLARDS ARE REQUIRED.

TEMPORARY CONSTRUCTION BACKFLOW ASSEMBLY (TCA) NOTES:

1. THE IN-LINE VALVE IS TO REMAIN CLOSED UNTIL AFTER THE CONSTRUCTION AND FINAL ACCEPTANCE OF THE DEVELOPMENT WATER DISTRIBUTION SYSTEM. NO DOWNSTREAM TIE-INS TO THE WRD WATER DISTRIBUTION SYSTEM ARE ALLOWED UNTIL AFTER A PASSING PRESSURE TEST AND 2 BAC-T TESTS ARE CERTIFIED BY THE EOR AND SUBMITTED TO PUD INSPECTION. ONCE FINAL TIE-INS ARE MADE 2 ADDITIONAL BAC-T TESTS ARE REQUIRED FOR EACH TIE-IN BEFORE SUBMITTING TO THE DOH FOR FINAL CLEARANCE.
2. THE BACKFLOW ASSEMBLY IS TO BE REMOVED BY THE CONTRACTOR AFTER FINAL ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM BY BOTH THE HILLSBOROUGH COUNTY DOH AND HILLSBOROUGH COUNTY DSD.
3. ALL CONSTRUCTION MUST MEET APPLICABLE STATE AND/OR LOCAL ROADWAY/ROADSIDE DESIGN STANDARDS INCLUDING, BUT NOT LIMITED TO, CLEAR ZONE REQUIREMENTS.

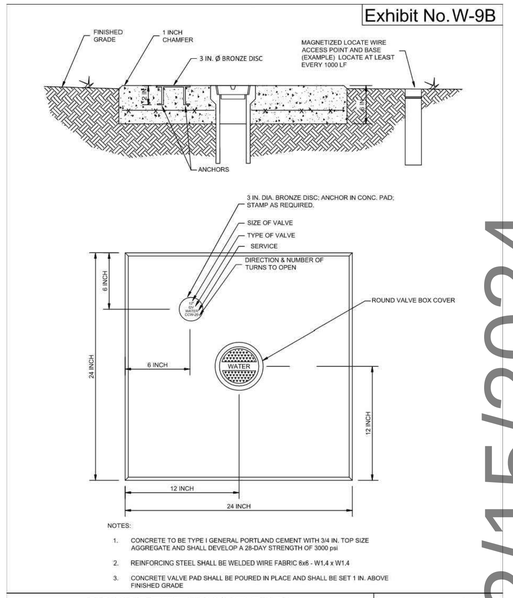
NOTES WATER METER ASSEMBLIES	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-9A



VALVE BOX & MARKER INSTALLATION FOR PAVED AREAS	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-9B

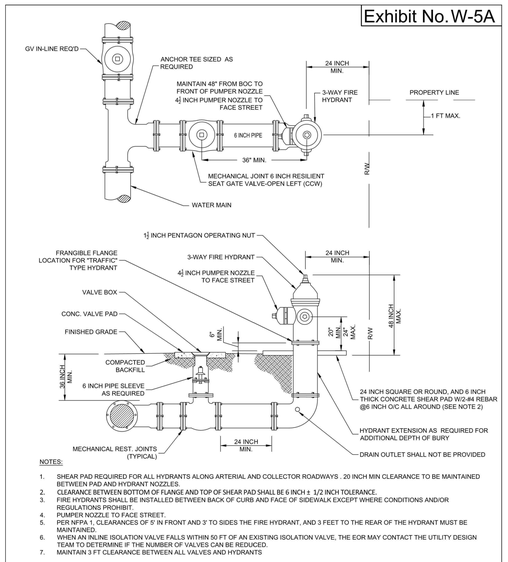


NOTES:

1. CONCRETE TO BE TYPE I GENERAL PORTLAND CEMENT WITH 3/4 IN. TOP SIZE AGGREGATE AND SHALL DEVELOP A 28-DAY STRENGTH OF 3000 psi
2. REINFORCING STEEL SHALL BE WELDED WIRE FABRIC 6x6 - W1.4 x W1.4
3. CONCRETE VALVE PAD SHALL BE POURED IN PLACE AND SHALL BE SET 1 IN. ABOVE FINISHED GRADE

CONCRETE VALVE PAD (FOR UNPAVED AREAS)	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-5A

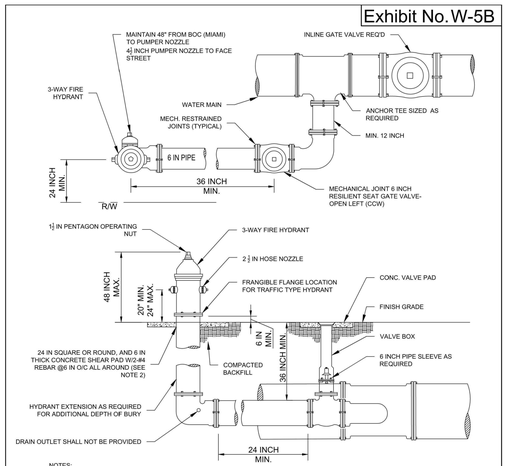


NOTES:

1. SHEAR PAD REQUIRED FOR ALL HYDRANTS ALONG ARTERIAL AND COLLECTOR ROADWAYS . 20 INCH MIN CLEARANCE TO BE MAINTAINED BETWEEN PAD AND HYDRANT NOZZLES.
2. CLEARANCE BETWEEN BOTTOM OF FLANGE AND TOP OF SHEAR PAD SHALL BE 6 INCH ± 1/2 INCH TOLERANCE.
3. FIRE HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK EXCEPT WHERE CONDITIONS AND/OR REGULATIONS PROHIBIT.
4. PUMPER NOZZLE TO FACE STREET.
5. PER NFPA 1, CLEARANCES OF 3' IN FRONT AND 3' TO SIDES THE FIRE HYDRANT, AND 3 FEET TO THE REAR OF THE HYDRANT MUST BE MAINTAINED.
6. WHEN AN INLINE ISOLATION VALVE FALLS WITHIN 50 FT OF AN EXISTING ISOLATION VALVE, THE EOR MAY CONTACT THE UTILITY DESIGN TEAM TO DETERMINE IF THE NUMBER OF VALVES CAN BE REDUCED.
7. MAINTAIN 3 FT CLEARANCE BETWEEN ALL VALVES AND HYDRANTS

FIRE HYDRANT (RESTRAINED)	3/2020
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-5B

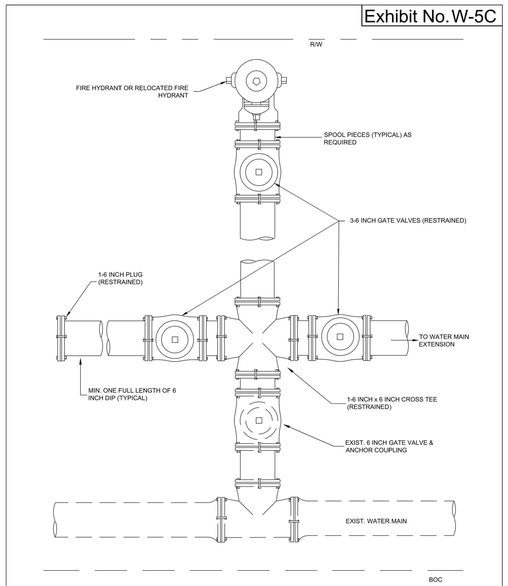


NOTES:

1. SHEAR PAD REQUIRED FOR ALL HYDRANTS ALONG ARTERIAL AND COLLECTOR ROADWAYS. 20 IN MIN CLEARANCE TO BE MAINTAINED BETWEEN PAD AND HYDRANT NOZZLES.
2. CLEARANCE BETWEEN BOTTOM OF FLANGE AND TOP OF SHEAR PAD SHALL BE 6 INCH ± 1/2 IN TOLERANCE.
3. FIRE HYDRANTS SHALL BE INSTALLED BETWEEN BACK OF CURB AND FACE OF SIDEWALK EXCEPT WHERE CONDITIONS AND/OR REGULATIONS PROHIBIT.
4. PUMPER NOZZLE TO FACE STREET.
5. PER NFPA 1, CLEARANCES OF 5 FEET TO FRONT AND 3 FT TO SIDES, AND 3 FT TO THE REAR OF THE HYDRANT MUST BE MAINTAINED.
6. WHEN AN INLINE ISOLATION VALVE FALLS WITHIN 50 FT OF AN EXISTING ISOLATION VALVE, THE EOR MAY CONTACT THE UTILITY DESIGN TEAM TO DETERMINE IF THE NUMBER OF VALVES CAN BE REDUCED.
7. MAINTAIN 3 FT CLEARANCE BETWEEN ALL VALVES AND HYDRANTS

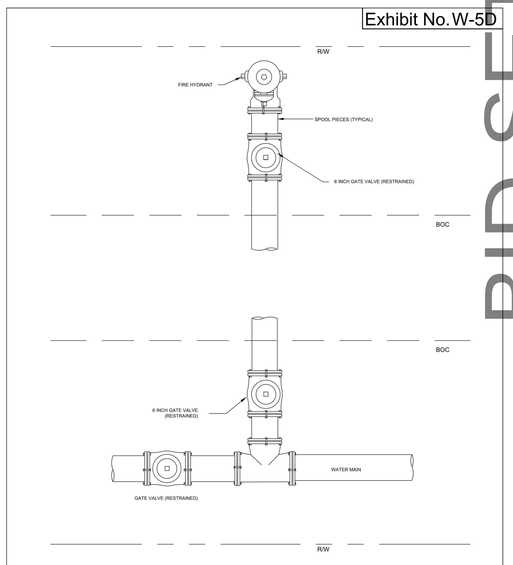
FIRE HYDRANT FOR LIMITED SPACE (RESTRAINED)	3/2020
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-5C



WATER MAIN EXTENSION WITH HYDRANT DETAIL	3/2020
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-5D



FAR SIDE HYDRANT DETAIL	3/2020
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

BID SET 02/15/2024

NOT FOR CONSTRUCTION

CONSTRUCTION DETAILS
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

Bowman
CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

BOWMAN CONSULTING GROUP, LTD.
5404 CYPRESS CENTER DR.,
SUITE 140
TAMPA, FL 33609
PHONE: (813) 736-2114
LICENSE NO. 30462
BOWMAN.COM

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PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM DESIGN	RJD DRAWN	CED CHKD

SCALE 1" = 20'

JOB No. 011045-01-001

DATE 09/23/2022

SHEET C8.2

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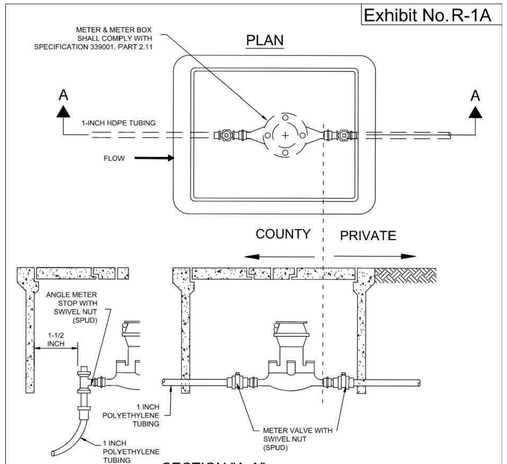
Exhibit No. R-1A

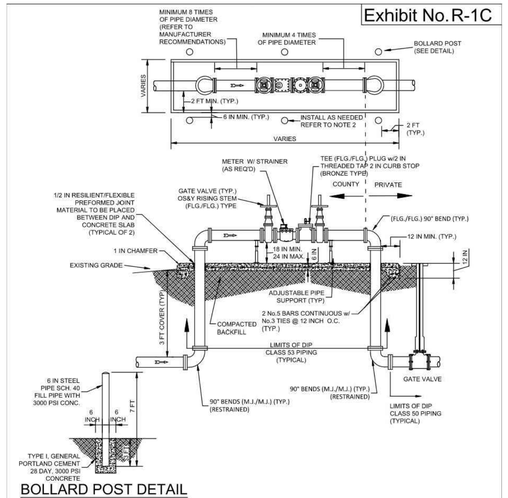


NOTES:

1. TEMPORARY INDENTIFICATION:EACH SERVICE SHALL TERMINATE AT A METER VALVE WHICH SHALL BE BURIED 6 INCHES, + 1 INCH, BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2 INCH x 2 INCH x 18 INCH STAKE WITH THE TOP PAINTED PURPLE IN ACCORDANCE WITH SPECIFICATION 339001, PART 2.11.
2. PERMANENT IDENTIFICATION: WHEN THE ROADWAY IS COMPLETE, INSTALL A PERMANENT MARKER (DAS TYPE) ON THE ROADWAY CURB TO IDENTIFY THE LOCATION OF THE METER VALVE AND SERVICE CONNECTION.
3. ALL PIPING, TUBING AND ADAPTERS TO BE DEVELOPER INSTALLED.

RECLAIMED WATER METER ASSEMBLY COMMERCIAL - 1 INCH AND LESS	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. R-1C

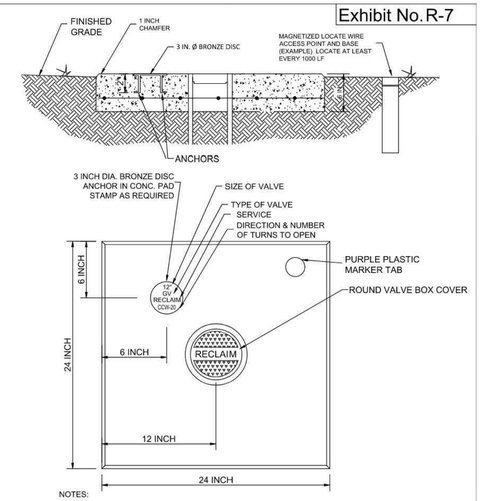


NOTES:

1. ALL PIPE SHALL BE DUCTILE IRON CLASS 53, CEMENT LINED WITH FLANGE FITTINGS FOR ABOVE GROUND USE. UNDERGROUND PIPE SHALL BE CLASS 50 DUCTILE IRON WITH RESTRAINED JOINTS. (REFER TO DETAIL FOR LIMITS).
2. CONCRETE SLAB AND BOLLARD POSTS SHALL COMPLY WITH MINIMUM DIMENSIONS AS SHOWN IN DETAIL. IF LENGTH OF SLAB EXCEEDS 10 FEET AN ADDITIONAL 2 BOLLARDS SHALL BE ADDED IN THE MIDDLE FOR PROTECTION.
3. CONCRETE SLAB SHALL BE REINFORCED WITH 6x6-W1.4 x W1.4 WELDED WIRE FABRIC AND SHALL BE TYPE 1, PORTLAND CEMENT WITH A MINIMUM 28-DAY STRENGTH OF 3000psi.

3, 4 AND 6-INCH (NON-TELEMETRY) RECLAIMED WATER METER ASSEMBLY	3/2020
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. R-7

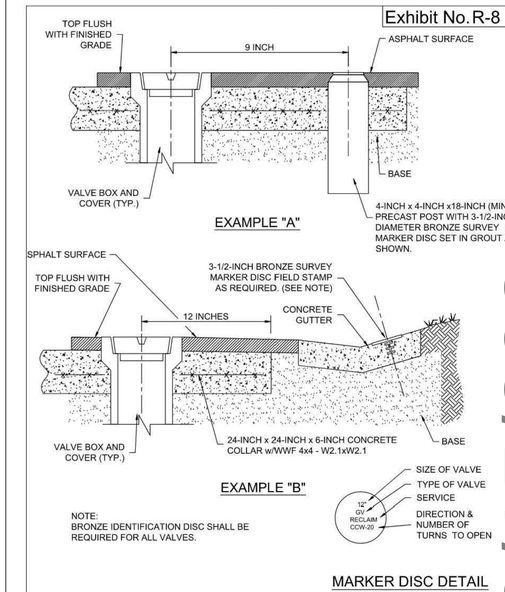


NOTES:

1. CONCRETE TO BE TYPE I GENERAL PORTLAND CEMENT WITH 3/4" TOP SIZE AGGREGATE AND SHALL DEVELOP A 28-DAY STRENGTH OF 3000 P.S.I.
2. REINFORCING STEEL SHALL BE 6x6 - W 1.4 x W 1.4
3. CONCRETE VALVE PAD SHALL BE POURED IN PLACE AND SHALL BE SET 1/2 INCH ABOVE FINISHED GRADE

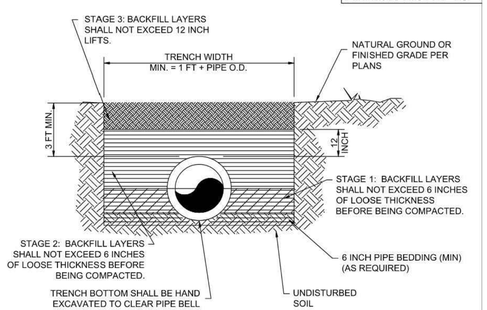
CONCRETE VALVE PAD (FOR UNPAVED AREAS)	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. R-8



VALVE BOX AND MARKER INSTALLATION FOR PAVED AREAS	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. R-15

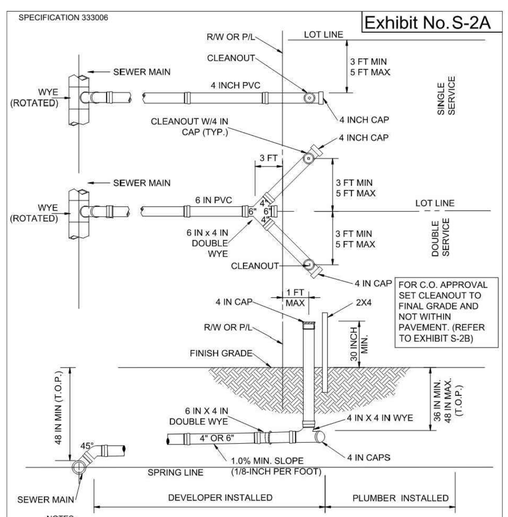


NOTES:

1. TESTING: SEE 339001, SECTION 4.12 FOR TESTING REQUIREMENTS.
2. BEDDING: 6 INCH BEDDING (MIN) AS REQUIRED. IN THE EVENT UNSUITABLE OR UNSTABLE SOIL IS ENCOUNTERED, REMOVE IT AND REPLACE WITH MATERIAL MEETING AASHTO SOIL CLASSIFICATION A-1, A-2, OR A-3. SEE 339001, SECTION 4.4.
3. STAGE 1: ADEQUATE COMPACTED FILL SHALL BE PLACED ABOVE THE BEDDING MATERIAL AND BENEATH THE HAUNCHES OF THE PIPE. BACKFILL LAYERS SHALL NOT EXCEED 6 INCHES OF LOOSE THICKNESS BEFORE BEING COMPACTED.
4. STAGE 2: BACKFILL LAYERS SHALL NOT EXCEED 6 INCHES OF LOOSE THICKNESS BEFORE BEING COMPACTED. COMPACTION SHALL BE 98% OF THE MAXIMUM DENSITY (AASHTO T-180/ASTM D1557) TO A POINT 1 FT ABOVE THE PIPE (OR AS STATED IN THE SPECIFICATION).
5. STAGE 3: BACKFILL LAYERS SHALL NOT EXCEED 12 INCH LIFTS. COMPACTION SHALL BE 98% OF THE MAXIMUM DENSITY (AASHTO T-180/ASTM D1557) OR AS STATED IN THE SPECIFICATION.

TRENCH DETAIL BACKFILL & COMPACTION	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. S-2A

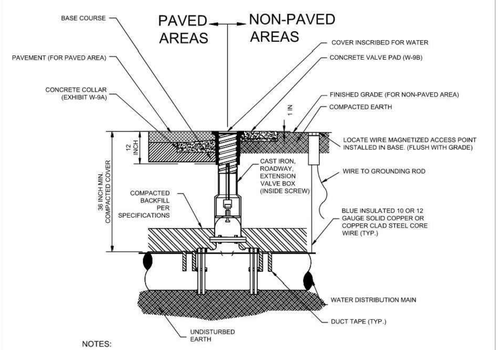


NOTES:

1. CENTER A DOUBLE WYE FITTING ON THE LOT LINE.
2. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER BELOW SPRING LINE.
3. THE TOP OF THE CLEANOUT SHALL TERMINATE 30 TO 40 INCHES ABOVE DESIGN GRADE UNTIL CONNECTION TO A STRUCTURE IS MADE.
4. ALL LATERALS PIPING AND FITTINGS SHALL BE GASKETED SDR 26 PVC.
5. ALL LATERAL LOCATIONS SHALL BE MARKED WITH AN "S" SAW CUT INTO THE TOP OF CURB.
6. CLEANOUTS SHALL NOT BE INSTALLED IN CONCRETE (NO DRIVEWAYS OR SIDEWALKS).

TYPICAL PVC SANITARY SEWER NEW CONNECTION W/CLEANOUT	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-12A

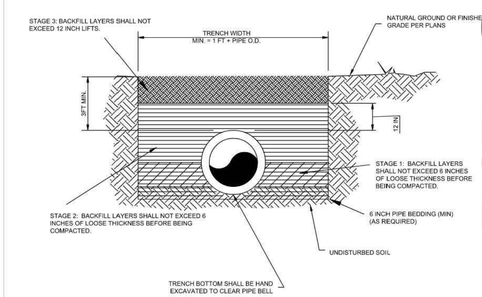


NOTES:

1. VALVE BOX EXTENSIONS MUST BE SET SO AS TO RESERVE 1/2 OF THE ADJUSTMENT LENGTH FOR FUTURE USE. VALVE BOX EXTENSIONS MUST BE CAST IRON.
2. THE VALVE OPERATING NUT MUST BE WITHIN 12 INCHES OF FINAL GRADE. A VALVE EXTENSION MUST BE INSTALLED AS NEEDED. REFER TO EXHIBIT W-12B.
3. ALL PIPE MUST BE INSULATED WITH 10 OR 12 GAUGE SOLID COPPER OR COPPER CLAD STEEL CORE LOCATING WIRE TAPED WITH 2 INCH WIDE DUCT TAPE AT THE 10:00 OR 2:00 POSITION ON THE PIPE AT EVERY JOINT AND 4 TO 5 FEET SPACING. REFER TO 331001 PART 4.3.13.
4. LOCATING WIRES TO TERMINATE AT MAGNETIZED ACCESS POINTS IN A BASE LOCATED NO MORE THAN OF 1000 LF APART. ACCESS POINTS TO BE TWO TERMINALS (MIN.) AND HAVE A GROUNDING ROD AT EACH ACCESS POINT AND BASE.
5. LOCATING WIRES MUST BE CAPABLE OF DETECTION BY A CABLE LOCATOR AND PASS A FIELD LOCATE TEST FROM THE POINT OF CONNECTION TO END OF WIRES THAT IS CERTIFIED BY THE EOR. THE TEST MUST BE BY THE CONTRACTOR OR BY A SUE FIRM.
6. SPLICES MUST BE CAPABLE OF COMPLETE SUBMERSION.
7. NO MORE THAN 6 SPLICES BETWEEN ACCESS POINTS.

VALVE AND TRACER WIRE PAVED OR NON-PAVED AREAS	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

Exhibit No. W-14



NOTES:

1. TESTING: SEE SPECIFICATION 331001, PART 4.12 FOR TESTING REQUIREMENTS.
2. BEDDING: 6 INCHES BEDDING (MIN) AS REQUIRED. IN THE EVENT UNSUITABLE OR UNSTABLE SOIL IS ENCOUNTERED, REMOVE IT AND REPLACE WITH MATERIAL MEETING AASHTO SOIL CLASSIFICATION A-1, A-2, OR A-3. SEE SPECIFICATION 331001 PART 4.4.
3. STAGE 1: ADEQUATE COMPACTED FILL SHALL BE PLACED ABOVE THE BEDDING MATERIAL AND BENEATH THE HAUNCHES OF THE PIPE. BACKFILL LAYERS SHALL NOT EXCEED 6 INCHES OF LOOSE THICKNESS BEFORE BEING COMPACTED.
4. STAGE 2: BACKFILL LAYERS SHALL NOT EXCEED 6 INCHES OF LOOSE THICKNESS BEFORE BEING COMPACTED. COMPACTION SHALL BE 98% OF THE MAXIMUM DENSITY (AASHTO T-180/ASTM D1557) TO A POINT 1 FT ABOVE THE PIPE (OR AS STATED IN THE SPECIFICATION).
5. STAGE 3: BACKFILL LAYERS SHALL NOT EXCEED 12-INCH LIFTS. COMPACTION SHALL BE 98% OF THE MAXIMUM DENSITY (AASHTO T-180/ASTM D1557) OR AS STATED IN THE SPECIFICATION

TRENCH DETAIL BACKFILL & COMPACTION	10/2021
HILLSBOROUGH COUNTY, FLORIDA	SCALE: N.T.S.

BID SET 02/15/2024

NOT FOR CONSTRUCTION

Bowman
CERTIFICATE OF AUTHORIZATION LICENSE NO. 30462

BOWMAN CONSULTING GROUP, LTD.
5404 CYPRESS CENTER DR., SUITE 140
TAMPA, FL 33609
PHONE: (813) 736-2114
LICENSE NO. 30462
BOWMAN.COM

CONSTRUCTION DETAILS
STARBUCKS - RIVERVIEW
10754 BIG BEND ROAD
RIVERVIEW, FL 33579
HILLSBOROUGH COUNTY, FL

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PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022

SHEET C8.3

USER: MMASAM PLOT DATE/TIME: Feb. 09, 24 - 11:55:37 DRAWING: V:\011045 - NORR, LLC\011045-01-001 (ENG) - Starbucks - Riverview, FL (Big Bend Rd.)\Engineering\Engineering Plans\Plan Sets\011045-01-001-C8.0-DETL.dwg ;C8.3 CONSTRUCTION DETAILS

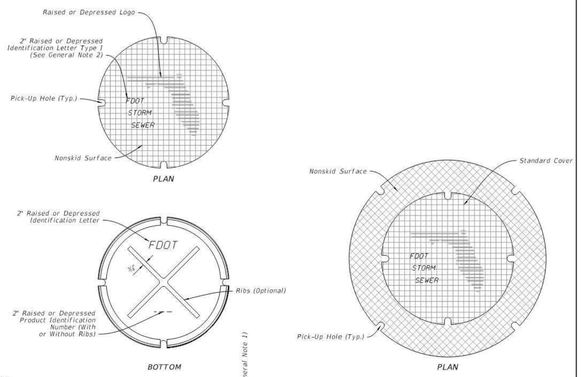
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN SHALL BE WITHOUT LIABILITY TO BOWMAN.

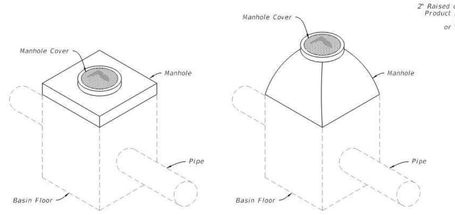
GENERAL NOTES:

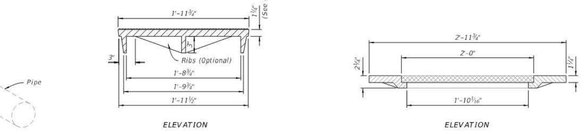
1. Use a 1-piece cover, unless the 2-piece cover is called for in the Plans, except at inlets and manholes with sump bottoms. Use the 2-piece cover when the sump depth exceeds 2', unless otherwise noted.
2. Include "Adjustable" on the cover for Type I manhole adjustable frames.
3. For square or rectangular precast drainage structures, use either deformed or smooth WWR meeting the requirements of Specification 931. WWR must be continuous around the box and lapped in accordance with Option 1 or 3 as shown in the Wall Reinforcing Splice Details.
4. Lap splice horizontal steel in the walls of rectangular structures in accordance with Option 1, 2 or 3 as shown in the Wall Reinforcing Splice Details.
5. Welding of splices and laps is permitted. Use AASHTO M259 requirements and restrictions on welds.
6. Rebar straight end embedment of peripheral reinforcement may be used in lieu of ACI standard hooks for top and bottom slabs, except when hooks are specifically called for in the Plans.
7. Precast opening for pipe must be the pipe OD plus 6" (± 2" tolerance). Use mortar to seal the pipe into the opening of such a mix that shrinkage will not cause leakage into or out of the structure. Dry-pack mortar may be used to seal openings less than 2½" wide.

TABLE OF CONTENTS:

Sheet	Description
1	General Notes, Contents, Manhole Top Overview, and Manhole Covers
2	Manhole Frames and Manhole Tops
3	Inlet Locking Grates, Subgrade and Base Temporary Drains, and Pipe to Structure Filter Fabric Wrap
4	Drainage Structure Invert, Sump Bottom, Wall Reinforcing Splice Details, and Typical Slab to Wall Details
5	Precast Option and Equivalent Reinforcement substitution
6	Construction Joints and Minimum Box Riser Segment Dimensions
7	Skewed Pipe in Rectangular Structures
8	Miscellaneous Pipe Connection Details







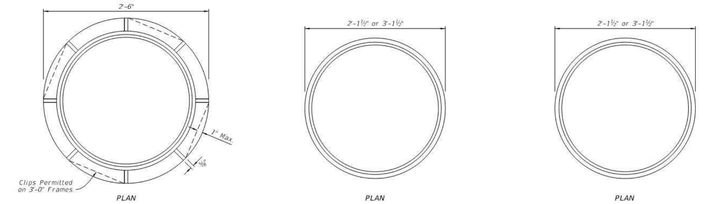
MANHOLE TOPS — MANHOLE COVERS

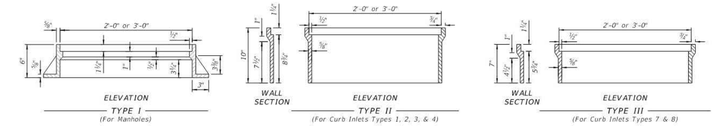
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20			FY 2023-24 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	425-001	1 of 8

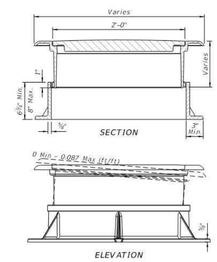
TABLE 1
WEIGHT OF CASTINGS (lb)

Frame Type	2'-0" OPENING Frame	2'-0" OPENING Cover (Std.)	3'-0" OPENING Frame	3'-0" OPENING 2-Piece Cover Inside	3'-0" OPENING 2-Piece Cover Outside	3'-0" OPENING 2-Piece Cover Total
I	155	190	220	190	220	410
II	145	190	255	190	220	410
III	90	190	180	190	220	410

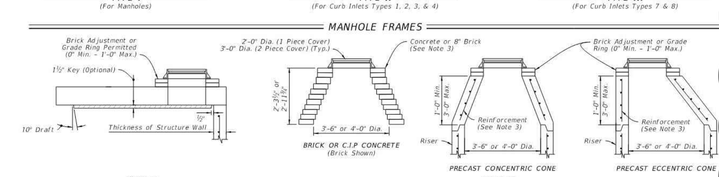
NOTE:
Frame Type I in Table 1, includes Adjustable frames.







MANHOLE FRAMES — TYPE I ADJUSTABLE FRAME

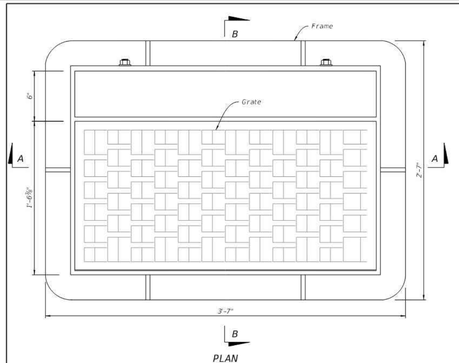


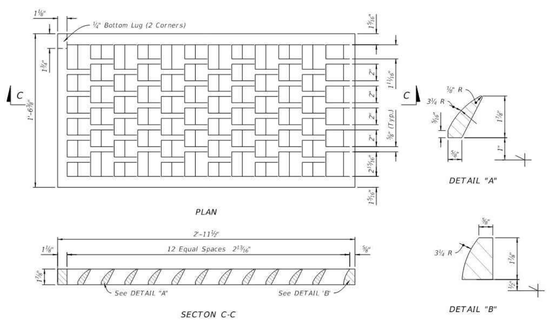
TYPE 7 — TYPE 8

NOTES:
1. Use Class II concrete for Manhole top Type 7 slabs.
2. Manhole top Type 7 slabs may be of cast-in-place or precast construction. The optional key is for precast tops and in lieu of dowels. Omit frame and slab openings when top is used over a junction box.
3. Manhole top Type 8 may be of cast-in-place, precast concrete construction, or brick construction. For concrete construction, use the same concrete and steel reinforcement as the supporting wall unit. An eccentric cone may be used.
4. Use construction joint options, as shown on Sheet 6 to secure manhole tops to structures.
5. Frames may be adjusted to a maximum 12" height with brick or precast ASTM C478 grade rings.
6. Manhole top Type 8 may be substituted for a Type 7, if the minimum dimensions are not reduced.
7. Manhole top Type 7 may be substituted for Type 8, if the minimum thickness (h) above pipe opening cannot be maintained with Type 8.

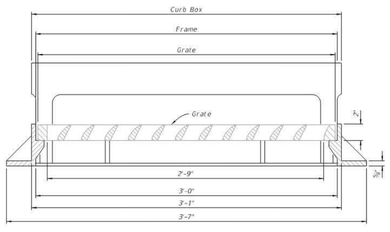
MANHOLE TOPS — MANHOLE FRAMES AND MANHOLE TOPS

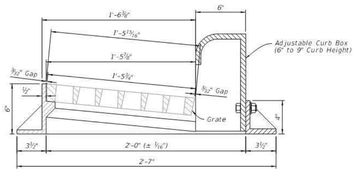
LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20			FY 2023-24 STANDARD PLANS	SUPPLEMENTARY DETAILS FOR DRAINAGE STRUCTURES	425-001	2 of 8





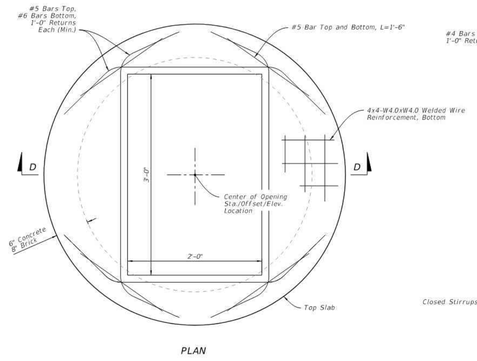
GRATE DETAILS

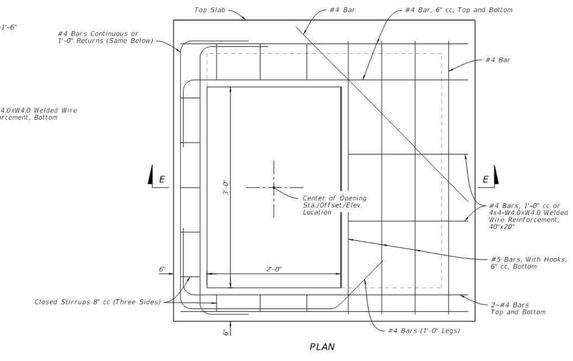


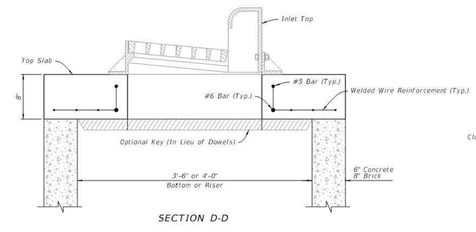


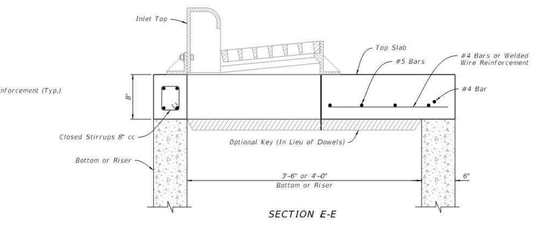
FRAME AND GRATE DETAILS — FRAME AND GRATE DETAILS

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
10/01/20			FY 2023-24 STANDARD PLANS	CURB INLET TYPE 9	425-024	2 of 3









TOP SLAB DETAILS

LAST REVISION	REVISION	DESCRIPTION:			INDEX	SHEET
10/01/20			FY 2023-24 STANDARD PLANS	CURB INLET TYPE 9	425-024	3 of 3

BID SET 02/15/2024

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PLAN STATUS

REV	DATE	COMMENT
1	06/27/23	AHJ COMMENTS
2	11/07/23	AHJ COMMENTS
3	02/07/24	AHJ COMMENTS
4	02/09/24	AHJ COMMENTS

MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C8.4

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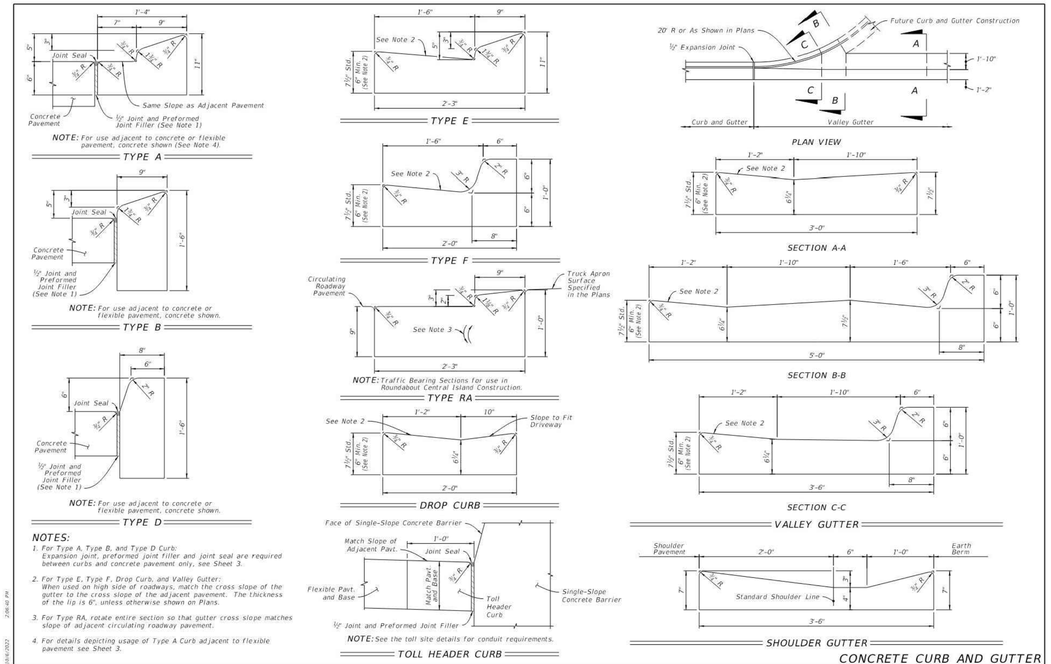

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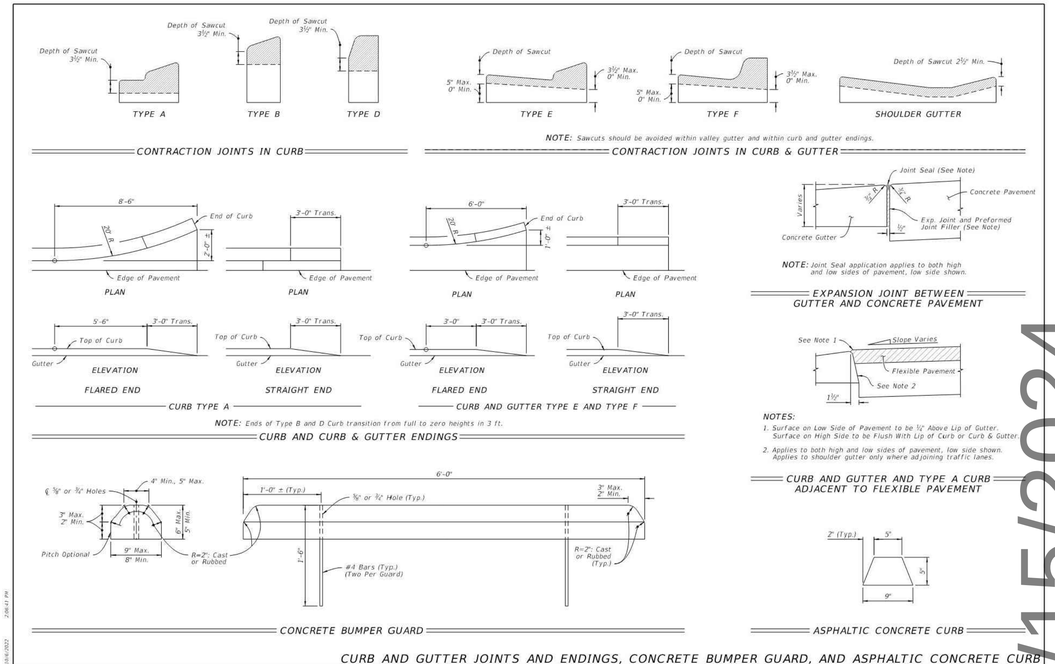
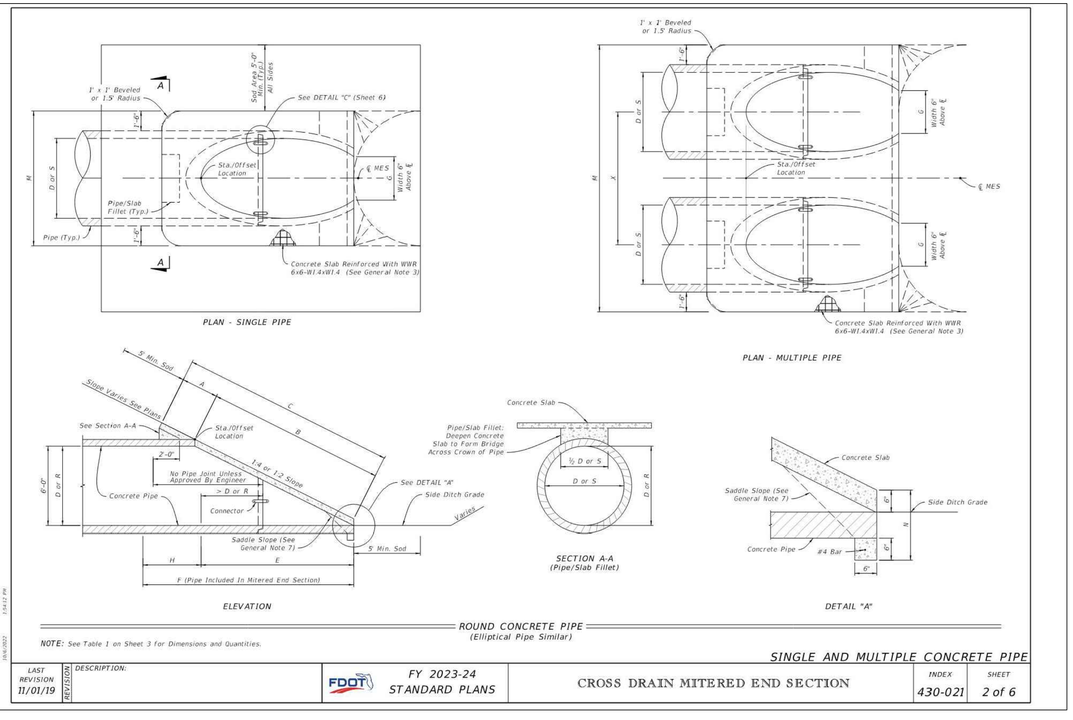
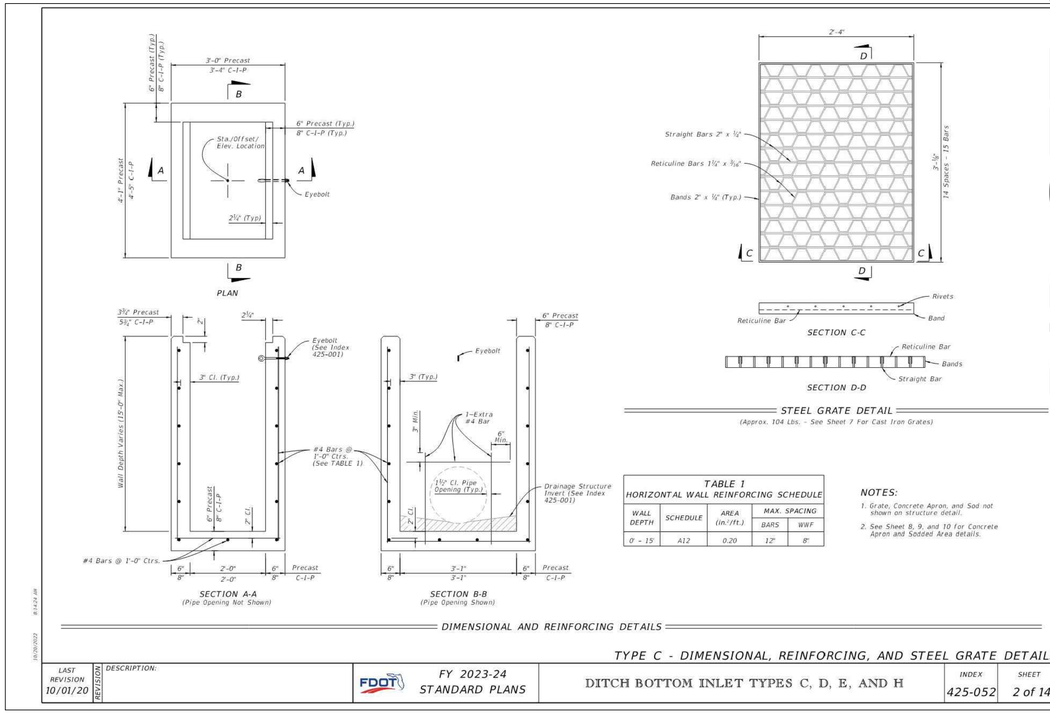
11/01/21		FY 2023-24 STANDARD PLANS	CURB AND GUTTER	INDEX 520-001	SHEET 2 of 3



LAST REVISION	DESCRIPTION:				
11/01/21		FY 2023-24 STANDARD PLANS	CURB AND GUTTER	INDEX 520-001	SHEET 3 of 3



LAST REVISION	DESCRIPTION:				
11/01/19		FY 2023-24 STANDARD PLANS	CROSS DRAIN MITERED END SECTION	INDEX 430-021	SHEET 2 of 6



LAST REVISION	DESCRIPTION:				
10/01/20		FY 2023-24 STANDARD PLANS	DITCH BOTTOM INLET TYPES C, D, E, AND H	INDEX 425-052	SHEET 2 of 14

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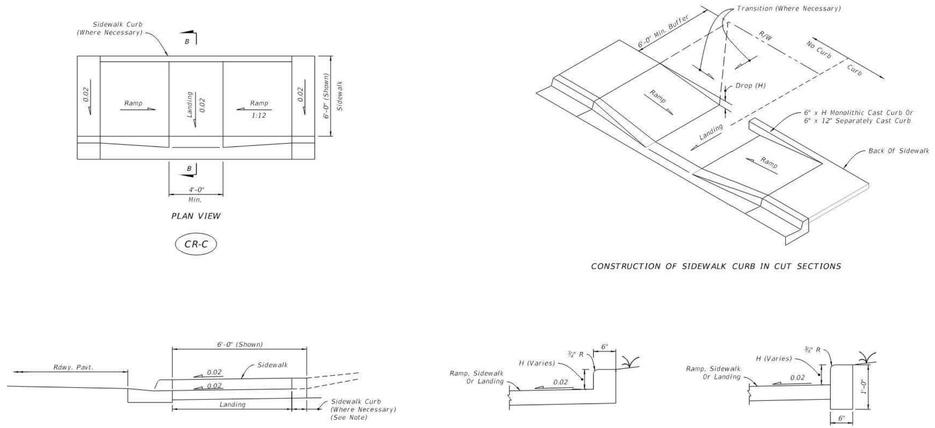
MM	RJD	CED
DESIGN	DRAWN	CHKD

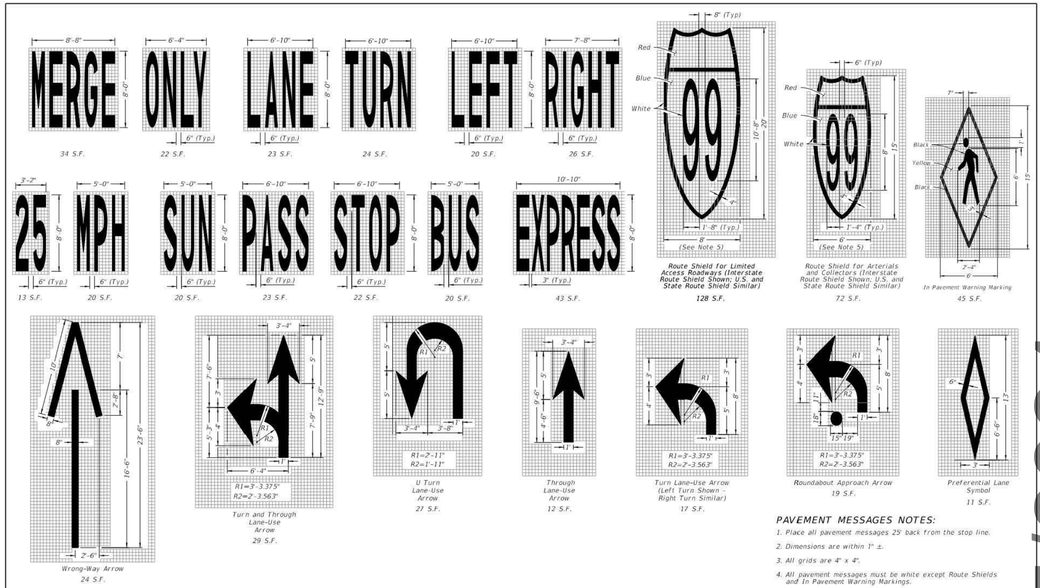
SCALE 1" = 20'
JOB No. 011045-01-001
DATE 09/23/2022
SHEET C8.5

USER: MMXIBAM PLOT DATE/TIME: Feb. 09, 24 - 11:55:39 DRAWING: V:\011045 - NORR, LLC\011045-01-001 (ENG) - Starbucks - Riverview, FL (Big Bend Rd.)\Engineering\Engineering Plans\Plan Sets\011045-01-001-C8.0-DETL.dwg ,C8.5 CONSTRUCTION DETAILS

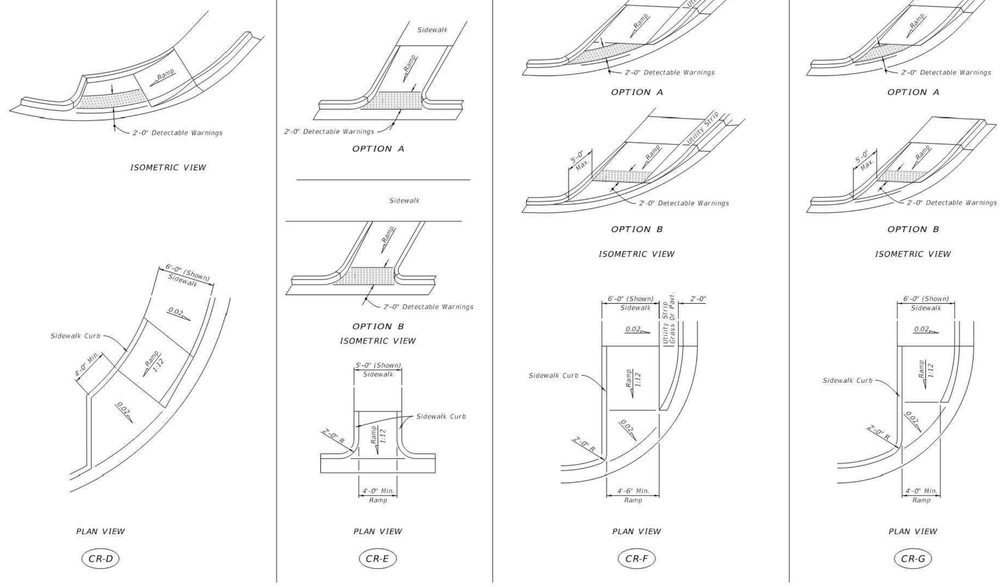


SIDEWALK CURB RAMPS CR-C AND SIDEWALK CURB

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/20		FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002	3 of 7

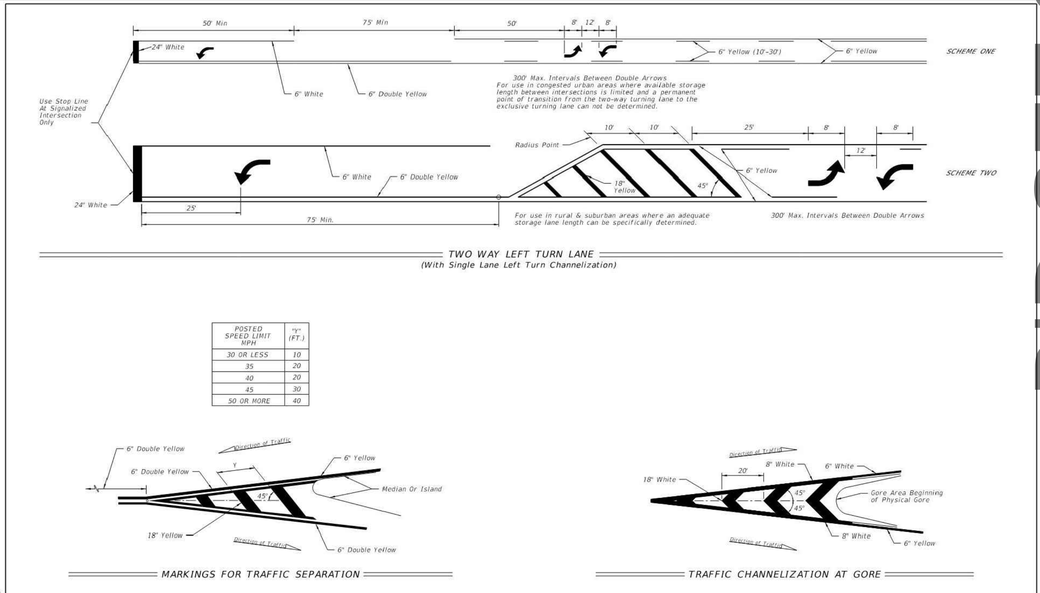


LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21		FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	711-001	1 of 13



SIDEWALK CURB RAMPS CR-D, CR-E, CR-F & CR-G

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21		FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	522-002	4 of 7



POSTED SPEED LIMIT MPH	"Y" (FT.)
30 OR LESS	10
35	20
40	20
45	30
50 OR MORE	40

LAST REVISION	DESCRIPTION:			INDEX	SHEET
11/01/21		FY 2023-24 STANDARD PLANS	PAVEMENT MARKINGS	711-001	8 of 13

BID SET 02/15/2024

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MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

JOB No. 011045-01-001

DATE 09/23/2022

SHEET C8.6

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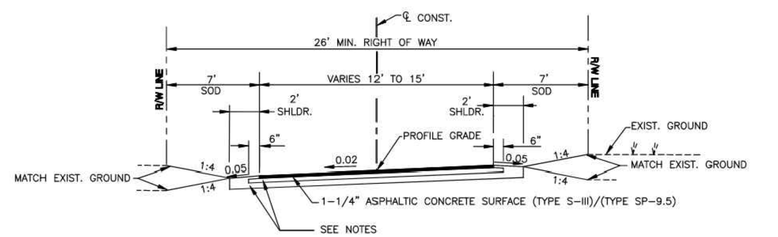
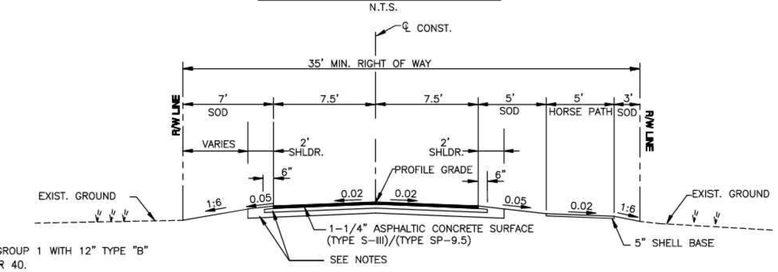


SHARED USE PATH TYPICAL SECTION 1

N.T.S.



SHARED USE PATH TYPICAL SECTION 2

N.T.S.

NOTES:

1. OPTIONAL BASE GROUP 1 WITH 12" TYPE "B" STABILIZATION LBR 40.
2. OPTIONAL BASE GROUP 6 WITH COMPACTED SUBGRADE.
3. ALL DIMENSIONS SHOWN ARE MINIMUM.
4. SEE APPROPRIATE SECTION OF TECHNICAL MANUAL FOR DESIGN PARAMETERS.
5. SOD SHALL BE PLACED IN TWO ROWS STAGGERED. (BOTH TEMPORARY AND PERMANENT)

REVISION DATE:	TRANSPORTATION TECHNICAL MANUAL	Hillsborough County Florida	SHARED USE PATHS TYPICAL SECTIONS	DRAWING NO. TS-2
10/21				SHEET NO. 1 OF 1

BID SET 02/15/2024

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MM	RJD	CED
DESIGN	DRAWN	CHKD

SCALE 1" = 20'

JOB No. 011045-01-001

DATE 09/23/2022

SHEET C8.7