

RESOLUTION No. 23-168

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, APPROVING THE SITE PLAN FOR CHICK FIL-A, FOR THE PROPERTY LOCATED AT 8705 NW 35 LANE, DORAL, FLORIDA, PURSUANT TO SECTION 53-184(F) OF THE CITY'S LAND DEVELOPMENT CODE; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, Article III of Chapter 53 of the Land Development Code of the City of Doral ("City") establishes procedures for Mayor and City Council site plan review and approval; and

WHEREAS, Chick-fil-A, Inc., (the "Applicant") is seeking site plan approval for the property located at 8705 NW 35 Lane, further identified by the Miami-Dade County Property Appraiser by Folio No. 35-3028-018-0010 (the "Property"), as legally described in "Exhibit A" (the "Project"); and

WHEREAS, City staff finds that the proposed site plan, attached hereto as "Exhibit B," complies with the requirements and standards of the City's Land Development Code and Comprehensive Plan; and

WHEREAS, a zoning workshop was held on January 12, 2023, during which the public was afforded an opportunity to examine the Project and provide feedback; and

WHEREAS, after notice of public hearing duly published and notifications of all property owners of record within 500-foot radius, a public hearing was held before the Mayor and City Council on September 27, 2023, during which all interested persons were afforded the opportunity to be heard, and due and proper consideration was given to the matter, including the recommendations contained in the City's Planning and Zoning Staff Report; and

WHEREAS, the City Council reviewed the site plan, the written and oral

recommendations of the Planning and Zoning Department, including the recommended conditions, and hereby finds competent substantial evidence to find the site plan is in compliance with the City's Comprehensive Plan and Land Development Regulations, and that the site plan maintains the basic intent and purpose of the zoning, subdivision or other land use regulations, which is to protect the general welfare of the public, and further finds that the site plan application should be granted, subject to the conditions described herein.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, AS FOLLOWS:

Section 1. Recitals. The foregoing recitals are confirmed, adopted, and incorporated herein and made as part hereof by this reference.

Section 2. Findings and Conclusions. Based upon an analysis of the site plan application and standards for approval of a site plan under the City's Land Development Regulations, the City Council hereby finds and concludes that the Applicant's request for site plan, as more particularly set forth in "Exhibit B," is in compliance with the Comprehensive Plan and the Land Development Regulations of the City, and there is substantial competent evidence to support approval of the Application.

Section 3. Approval. The Mayor and City Council hereby approve the site plan for Chick-fil-A, Inc., for the property located at 8705 NW 35 Lane, further identified by a portion of folio number 35-3028-018-0010, as legally described in "Exhibit A." The site plan consists of a property of ±1.11 acres occupied by a single-story fast-food restaurant with a drive-thru only (no interior seating) and a limited number of exterior seating (approximately 16 seats and 4 tables). A copy of the site plan is provided in "Exhibit B."

The approval of the site plan is subject to the following conditions:

1. The Project shall be built in substantial compliance with the plans entitled "Chick-Fil-A East Doral," prepared by Bowman Consulting Group Ltd., dated stamped received January 13, 2023.
2. The Project shall be landscaped in accordance with the landscape plan, prepared by Manley Land Design, Inc., dated stamped received January 13, 2023, as amended, and included with the site plan submittal.
3. Prior to the issuance of building permit, the Applicant must obtain approval from Miami-Dade County (MDC) Traffic Engineering Division. Note that any changes to the site plan requested by MDC that may trigger changes to traffic analysis, submittal to the city for review is required.
4. Approval of the traffic signal at NW 87 Ave and NW 35 Lane by the City of Doral and Miami-Dade County will require coordination between Miami-Dade County and the Applicant.
5. In the event the drive-thru queue from Chick-Fil-A extends to the public right-of-way, the City of Doral reserves the right to request that the Applicant provide additional staff to improve the processing rate.
6. The Applicant shall comply with Ordinance No. 2015-09 "Public Arts Program," as amended, at the time of building permit.
7. The Applicant shall comply with Chapter 63, "Green Building Incentives," of the City's Land Development Code at the time of building permit.
8. The Applicant shall comply with the City's Floodplain Management regulations (Chapter 23, Article II, Floodplain Management) of the City's Code.
9. The Applicant shall provide the Building Department a certified drainage inspection report prior to the issuance of a certificate of occupancy.
10. The property owner shall maintain the landscaping within the public rights-of-way adjacent to the property. Maintenance includes trees, plants, sod, and other landscape material.
11. The Applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) at time of building permit. The Plan should provide guidelines for implementing an erosion and sedimentation control program before the site is cleared or graded, including areas where topsoil will be removed, and contours of slopes will be cleared. The Plan shall also

include location and type of erosion control measures, storm water and sediment management systems, and a vegetative plan for temporary and permanent stabilization. The Plan shall remain on-site for the duration of the construction activity.

12. If more than one (1) acre of land is disturbed during construction the Contractor/Developer is responsible to obtain NPDES Stormwater permit coverage through the Florida Department of Environmental Protection (FDEP), Construction Generic Permit (CGP). If the project is less than one (1) acre, but part of a larger common plan of development or sale that will ultimately disturb one or more acres, permit coverage is also required. Instruction to request and obtain a CGP can be found at: <http://www.dep.state.fl.us/water/stormwater/npdes/docs/cgp.pdf>. Contractor/Developer should submit the Notice of Intent (NOI) with the appropriate processing fees to the NPDES Stormwater Notices Center. Contractor/Developer must apply for permit coverage at least two (2) days before construction begins.
13. Construction shall be permitted only during the hours set forth in Ordinance No. 2011-01 "Noise Ordinance."
14. The Applicant shall comply with all applicable conditions and requirements of the Miami-Dade County Department of Regulatory and Economic Resources.
15. The Applicant shall comply with all applicable conditions and requirements of the Miami-Dade County Fire Rescue Department.
16. All applicable local, state, and federal permits must be obtained before commencement of the development.
17. Issuance of this development permit by the City of Doral does not in any way create any right on the part of an Applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City of Doral for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.
18. The Applicant must obtain a Certificate of Occupancy and a Certificate of Use from the City upon compliance with all terms and conditions. The Certificate of Occupancy and Certificate of Use shall be subject to cancellation upon violation of any of the conditions.


FAILURE BY THE CITY TO TIMELY ENFORCE ANY OF THE ABOVE CONDITIONS DOES NOT CONSTITUTE A WAIVER OF THE SAME AND IF THE APPLICANT, ITS SUCCESSORS, OR, ASSIGNS, DOES NOT PERFORM SUCH CONDITIONS WITHIN FIVE (5) DAYS AFTER WRITTEN NOTICE, THE CITY RETAINS THE RIGHT TO STOP CONSTRUCTION, IF NECESSARY, UNTIL THAT CONDITION IS MET. THE CITY RESERVES THE RIGHT TO ENFORCE THESE CONDITIONS BY ISSUING A CODE COMPLIANCE CITATION, REVOKING THIS RESOLUTION, AND/OR AVAILING ITSELF OF ANY AND ALL REMEDIES AVAILABLE AT LAW OR IN EQUITY. BY ACTING UNDER THIS APPROVAL, THE APPLICANT HEREBY CONSENTS TO ALL THESE TERMS AND CONDITIONS.

Section 4. Effective Date. This Resolution shall become effective immediately upon its adoption.

The foregoing Resolution was offered by Councilmember Puig-Corve who moved its adoption. The motion was seconded by Vice Mayor Pineyro and upon being put to a vote, the vote was as follows:

Mayor Christi Fraga	Yes
Vice Mayor Rafael Pineyro	Yes
Councilwoman Digna Cabral	Yes
Councilwoman Maureen Porras	Absent/Excused
Councilman Oscar Puig-Corve	Yes

PASSED AND ADOPTED this 27 day of September, 2023.



CHRISTI FRAGA, MAYOR

ATTEST:



CONNIE DIAZ, MMC
CITY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY
FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:



VALERIE VICENTE, ESQ. for
NABORS, GIBLIN & NICKERSON, P.A.
CITY ATTORNEY

EXHIBIT “A”



City of Doral Planning and Zoning Department
8401 NW 53rd Ter, 2nd Floor, Doral, FL 33166

Chick-Fil-A East Doral

Jurisdiction: City of Doral

Folio #: 35-3028-018-0010

Project Location: 8705 NW 35th Ln, Doral, FL 33172

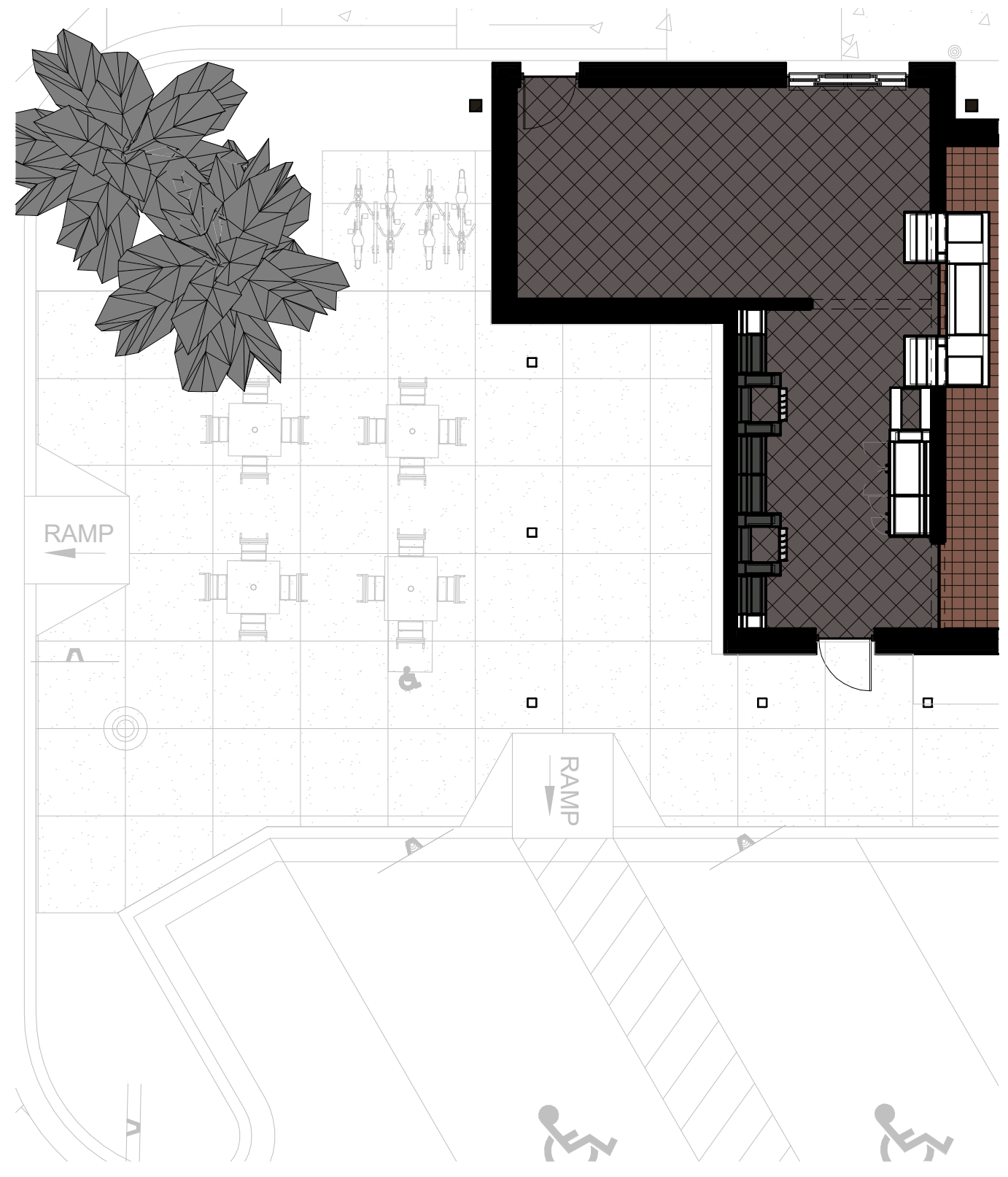
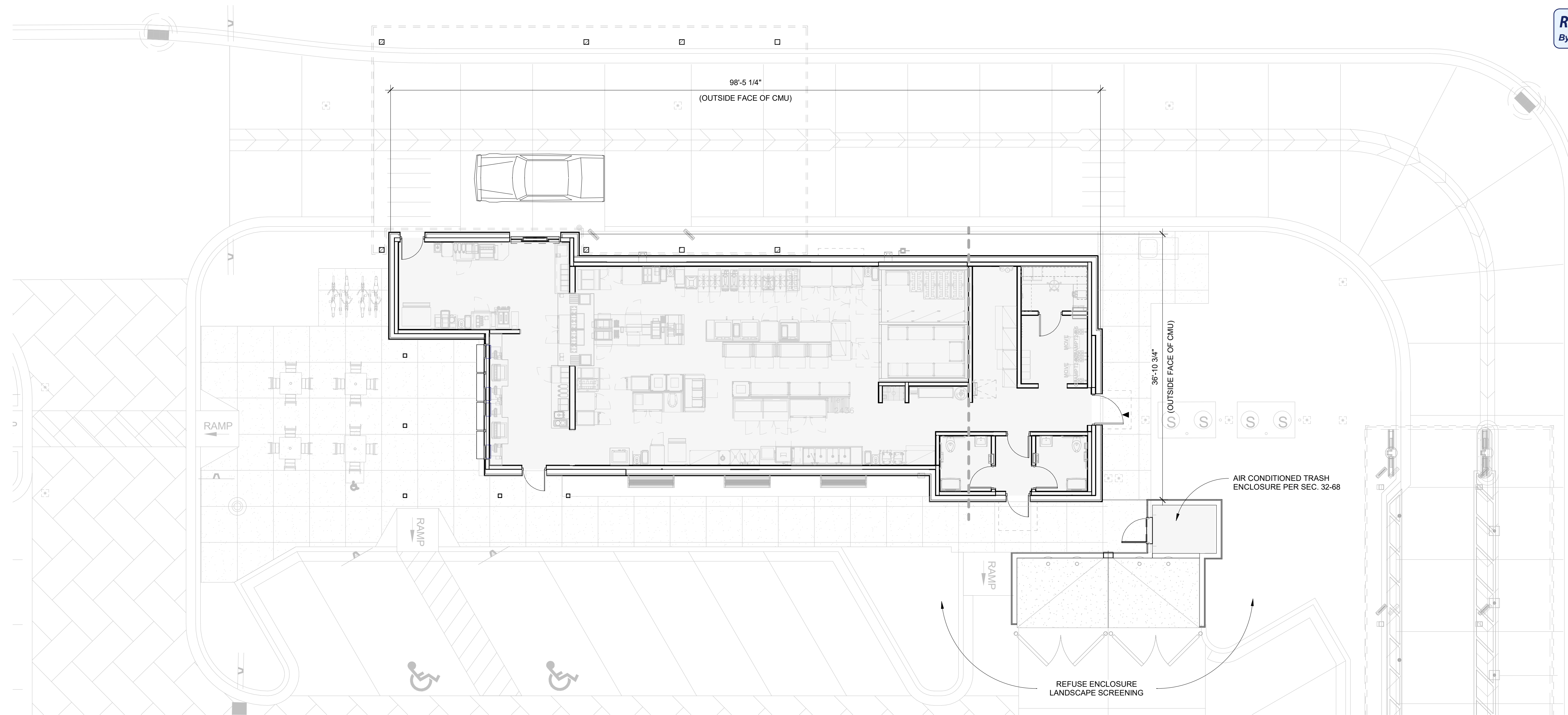
Project Description: Redevelopment of existing bank with drive thru to Chick-fil-a fast food restaurant drive-thru only

Legal Description

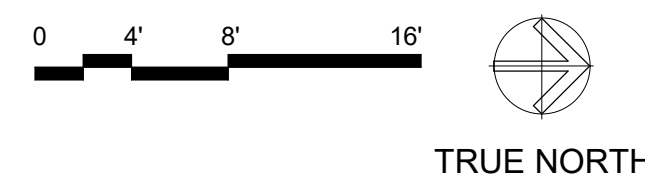
LOT 1, IN BLOCK 1, "WESTPOINTE BUSINESS PARK", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 147, PAGE 25, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF LOT 1 BLOCK 1 OF SAID PLAT; THENCE NORTH 00'30'44" WEST ALONG THE WEST LINE OF SAID LOT 252.15 FEET TO THE NORTH LINE OF SAID LOT; THENCE NORTH 89'31'35" EAST 185.00 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF NORTHWEST 87TH AVENUE; THENCE SOUTH 01'44'50" EAST ALONG SAID RIGHT-OF-WAY 226.53 FEET TO A POINT OF CURVATURE OF A SOUTHWESTERLY CURVE HAVING A CENTRAL ANGLE OF 91'14'06", A RADIUS OF 25.00 FEET AND AN ARC LENGTH OF 39.81 FEET TO A POINT OF TANGENCY LYING ON THE NORTH RIGHT-OF-WAY LINE OF NORTHWEST 35TH LANE; THENCE SOUTH 89'29'16" WEST 164.80 FEET ALONG SAID RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING.

EXHIBIT “B”

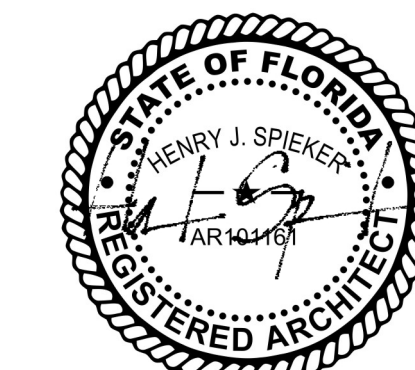


FLOOR PLAN



PATIO SEATING SCHEDULE									
Mark	Type	Count	Manufacturer	Model	Width	Depth	Height	Material	Finish
1	Patio Chair	16	Benchmark Design Group	WENDOVER CHAIR					
2	Patio Table - 4 Top	2	Benchmark Design Group	TAB3055-3636-AAL-WJ-UH-BDT	3'-0"	3'-0"	2'-5 1/4"	Aluminum - Dark Bronze	RAL 49/66220 (C34 Bronze One Coat)
3	Patio Table - 4 Top - ADA	2	Benchmark Design Group	TAB3055-3644-AAL-WJ-UH-BDT	3'-8"	3'-0"	2'-5 1/4"	Aluminum - Dark Bronze	RAL 49/66220 (C34 Bronze One Coat)
5	Patio Umbrella	4	Benchmark Design Group	OCEAN MASTER PARASOL					
6	Trash Receptacle	2	Benchmark Design Group	CFA-AL-2444	2'-0"	2'-0"	3'-11"	Black Powder Coated	Black Powder Coated
8	Bike Rack - Surface Mount	2	Belson Outdoors	ORN-2-SF-P	3'-4"	2 3/8"	2'-9"	Steel	Black Powder Coated

DINING PATIO PLAN



12/14/2022

OP CANOPY FINISHES

(CP-1)
 PREFINISHED METAL COPING
 COLOR: DARK BRONZE

(CP-2)
 METAL DECKING
 COLOR: WHITE

EXTERIOR FINISHES

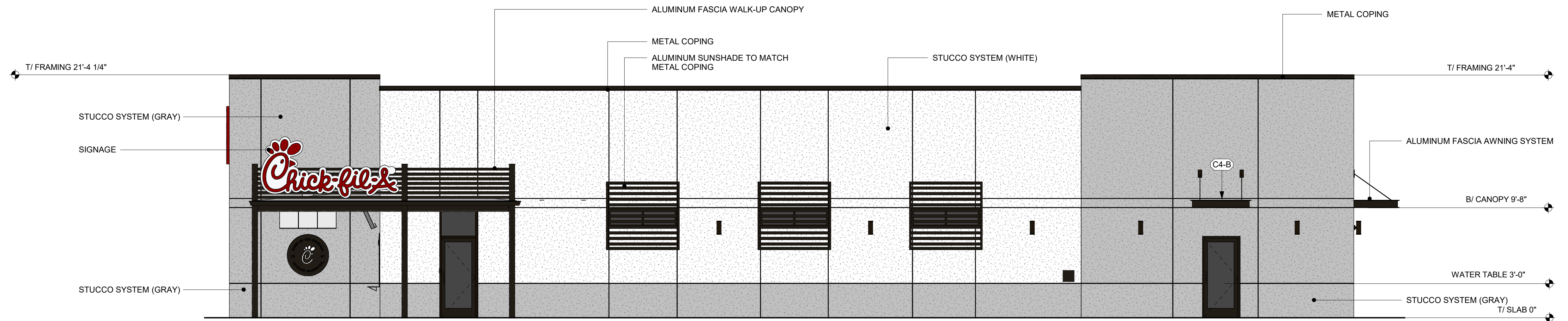
(SC-1)
 STUCCO SYSTEM (WHITE)
 COLOR: STO WHITE
 FINISH: SAND MEDIUM

(SC-2)
 STUCCO SYSTEM (GREY)
 COLOR: BRUSHED PEWTER
 FINISH: SAND MEDIUM

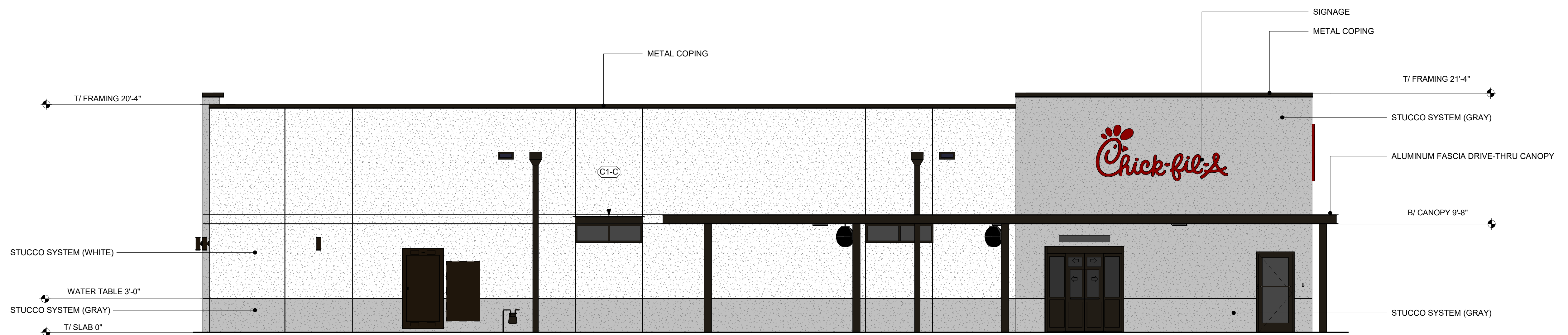
(EC-1)
 PREFINISHED METAL COPING
 COLOR: DARK BRONZE

(PT-113)
 EXTERIOR PAINT
 COLOR: DARK BRONZE
 PAINT CAVIER SW 6590
 FINISH: SEMI-GLOSS

(ST-1)
 STOREFRONT
 COLOR: DARK BRONZE
 ALUMINUM



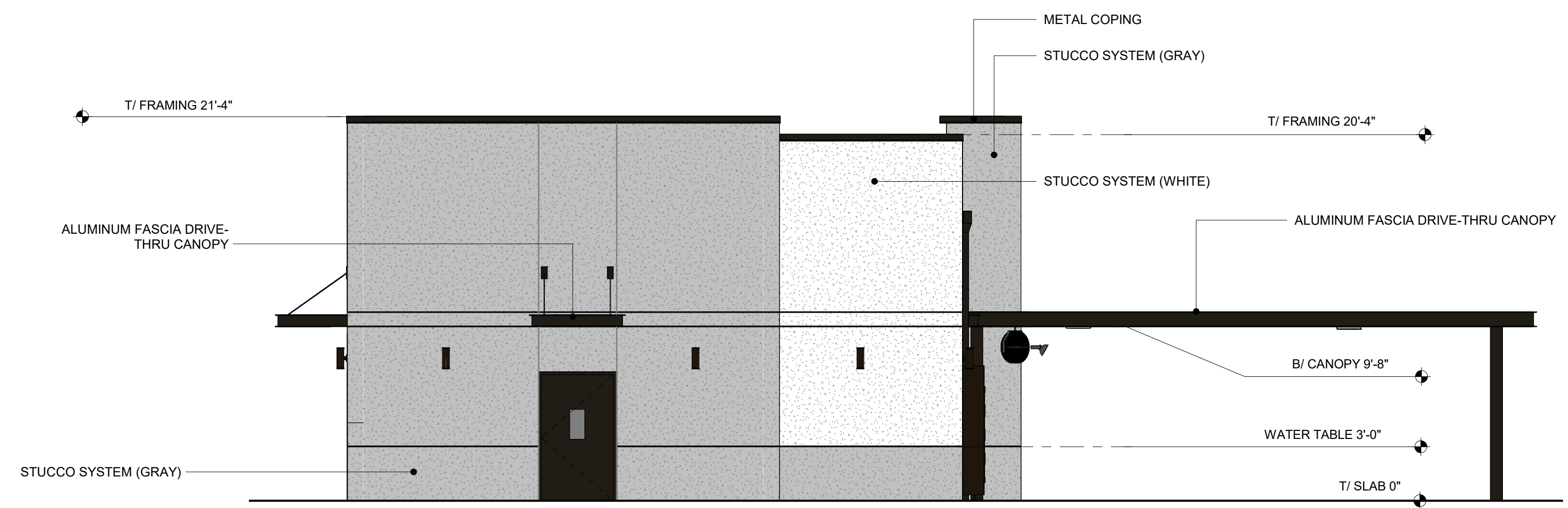
EXTERIOR ELEVATION



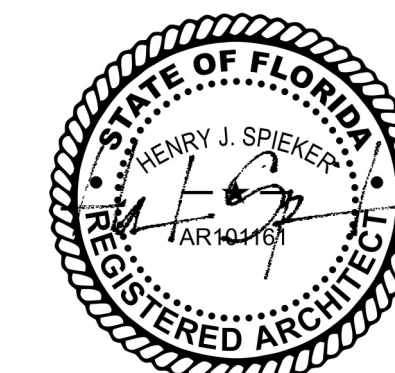
EXTERIOR ELEVATION



EXTERIOR ELEVATION



EXTERIOR ELEVATION





PERSPECTIVE VIEW - REFUSE ENCLOSURE



PERSPECTIVE VIEW



PERSPECTIVE VIEW - OP CANOPY



PERSPECTIVE VIEW



PERSPECTIVE VIEW - PATIO

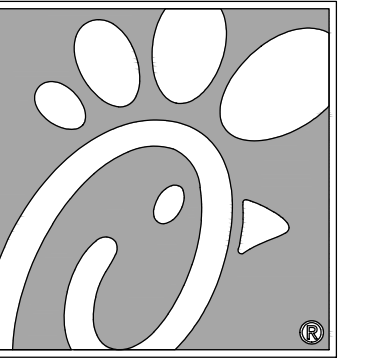


PERSPECTIVE VIEW

SITE DEVELOPMENT PLANS FOR EAST DORAL CHICK-FIL-A

FOLIO: 35-3028-018-0010
STORE #5069
8705 NW 35TH LANE
DORAL, FLORIDA 33172
SECTION 28, TOWNSHIP 53 S, RANGE 40 E

RECEIVED
By Stephanie Puglia at 10:29 am, Jan 13, 2023



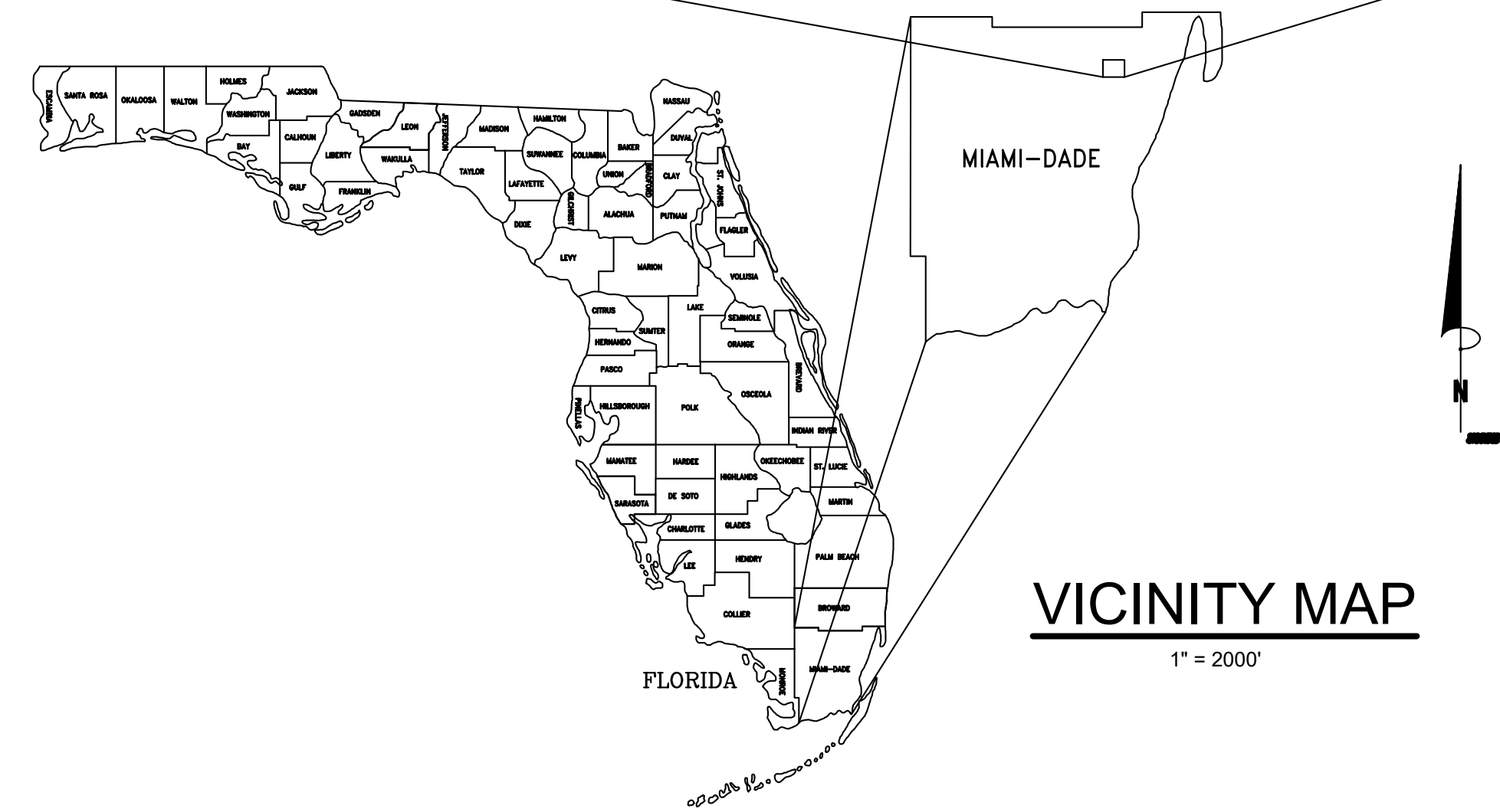
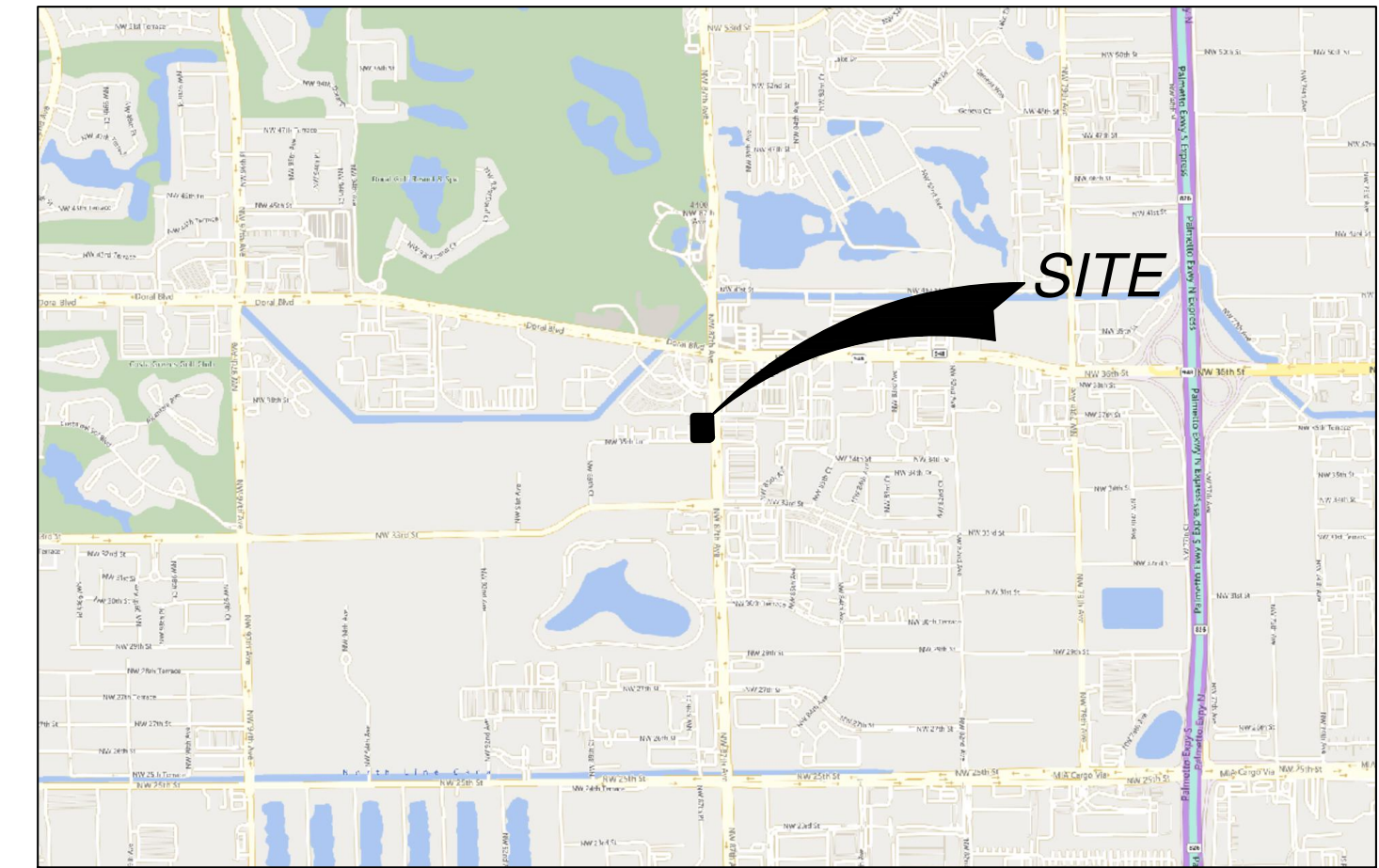
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 5045
810 SE 17th St, Suite 302
Fort Lauderdale, FL 33316
Phone: (954) 214-8466
www.bowman.com
© 2021 Bowman Consulting Group LLC

Seal

ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 52421



VICINITY MAP
1" = 2000'

LEGAL DESCRIPTION (SITE CONTAINS 1.083 ACRES)

LOT 1, IN BLOCK 1, "WESTPOINTE BUSINESS PARK", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 147, PAGE 25, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

BEGIN AT THE SOUTHWEST CORNER OF LOT 1 BLOCK 1 OF SAID PLAT; THENCE NORTH 00°30'44" WEST ALONG THE WEST LINE OF SAID LOT 252.15 FEET TO THE NORTH LINE OF SAID LOT; THENCE NORTH 89°31'35" EAST 185.00 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF NORTHWEST 87TH AVENUE; THENCE SOUTH 01°44'50" EAST ALONG SAID RIGHT-OF-WAY 226.53 FEET TO A POINT OF CURVATURE OF A SOUTHWESTERLY CURVE HAVING A CENTRAL ANGLE OF 91°14'06", A RADIUS OF 25.00 FEET AND AN ARC LENGTH OF 39.81 FEET TO A POINT OF TANGENCY LYING ON THE NORTH RIGHT-OF-WAY LINE OF NORTHWEST 35TH LANE; THENCE SOUTH 89°29'16" WEST 164.89 FEET ALONG SAID RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING.

DATUM NOTE

- ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929, MIAMI-DADE COUNTY BENCHMARK #515; ELEVATION 7.43 FEET
- ELEVATION DATUM CONVERSION NAVD88 = NGVD29 - 1.663'

FLOOD ZONE NOTE

FLOOD ZONE: X; BASE FLOOD ELEVATION: NONE; PANEL #12086C0287L; COMMUNITY # 120041; MAP DATE: 09/11/09

GENERAL NOTES

- CONTRACTOR SHALL HAVE ONE SIGNED COPY OF THE APPROVED PLANS AND THE APPROPRIATE STANDARDS AND SPECIFICATIONS ALONG WITH A COPY OF ANY PERMITS AND AGREEMENTS NEEDED FOR THE JOB ON-SITE AT ALL TIMES.
- CONTRACTOR SHALL MEET OR EXCEED ALL SITE WORK SPECIFICATIONS AND APPLICABLE STATE AND FEDERAL REGULATIONS FOR ALL MATERIALS AND CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY DURING CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS IS ENCOUNTERED.
- NO REVISION SHALL BE MADE TO THESE PLANS WITH OUT THE APPROVAL OF THE ENGINEER OF RECORD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
- ANY REFERENCE TO PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICES.

CONTACTS

OWNER/TENANT
CHICK-FIL-A
5200 BUFFINGTON ROAD
ATLANTA, GA 30349

ENGINEER
BOWMAN CONSULTING GROUP
910 SE 17TH ST, SUITE 300
FORT LAUDERDALE, FL 33316
JENNY BAEZ, BRANCH MANAGER
954.314.8466
JBAEZ@BOWMAN.COM

SURVEYOR
PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FL 33351
954.572.1777

WATER
MIAMI DADE COUNTY WATER AND SEWER DEPARTMENT
3071 SW 38TH AVE, RM 316
MIAMI, FL 33146
RODOLFO ULLOA
786.268.5332

STORMWATER
MIAMI DADE COUNTY DERM
701 NW 1ST COURT
MIAMI, FL 33136
CHRISTOPHER CAPORALE
305.372.6715
CHRISTOPHER.CAPORALE@MIAMIDADE.GOV

TELEPHONE / INTERNET
AT&T
FRANCK FONTE
786.804.2985
FF1905@ATT.COM

HEALTH DEPARTMENT
DEPT OF BUSINESS AND PROFESSIONAL REGULATIONS DIVISION OF HOTELS AND RESTAURANTS
1940 NORTH MONROE STREET
TALLAHASSEE, FL 32399-1011
DHR.PLANREVIEW@MYFLORIDALICENSE.COM

SANITARY SEWER
MIAMI DADE COUNTY WATER AND SEWER DEPARTMENT
3071 SW 38TH AVE, RM 316
MIAMI, FL 33146
RODOLFO ULLOA
786.268.5332

ELECTRIC
FPL
DREW MOORE
305.599.2405
ANDRE.MOORE2@FPL.COM

GAS SERVICE
FLORIDA CITY GAS
PETER FERRALLS
786.218.1089
PETER.FERRALLS@NEXTERAENERGY.COM

EROSION CONTROL
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
2600 BLAIR STONE ROAD
TALLAHASSEE, FL 32399
NPDES STORMWATER PROGRAM
866.336.6312
NPDES-STORMWATER@DEP.STATE.FL.US

TRAFFIC
DEPARTMENT OF PLANNING AND ZONING
8401 NW 53 TR.
DORAL, FL 33166
STEPHANIE PUGLIA
305.593.6630 EXT.3003
STEPHANIE.PUGLIA@CITYOFDORAL.COM

SHEET INDEX

SHEET NUMBER	SHEET TITLE
C-1.0	COVER SHEET
C-1.1	EXISTING CONDITIONS PLAN
C-1.2	DEMOLITION PLAN
C-2.0	SITE PLAN
C-3.0	GRADING AND DRAINAGE PLAN
C-3.1	EROSION CONTROL PLAN - PHASE I
C-3.2	EROSION CONTROL PLAN - PHASE II
C-3.3	EROSION CONTROL DETAILS
C-4.0	CHICK-FIL-A STANDARD DETAILS
C-4.1	CHICK-FIL-A STANDARD DETAILS
C-4.2	CHICK-FIL-A STANDARD DETAILS
C-5.0	SITE AND DRAINAGE DETAILS
C-5.1	SITE AND DRAINAGE DETAILS
C-5.2	SITE AND DRAINAGE DETAILS
C-5.3	SITE AND DRAINAGE DETAILS
PS-1.0	UTILITY PLAN
PS-1.1	UTILITY DETAILS
PS-1.2	UTILITY DETAILS

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

REVISION SCHEDULE

NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

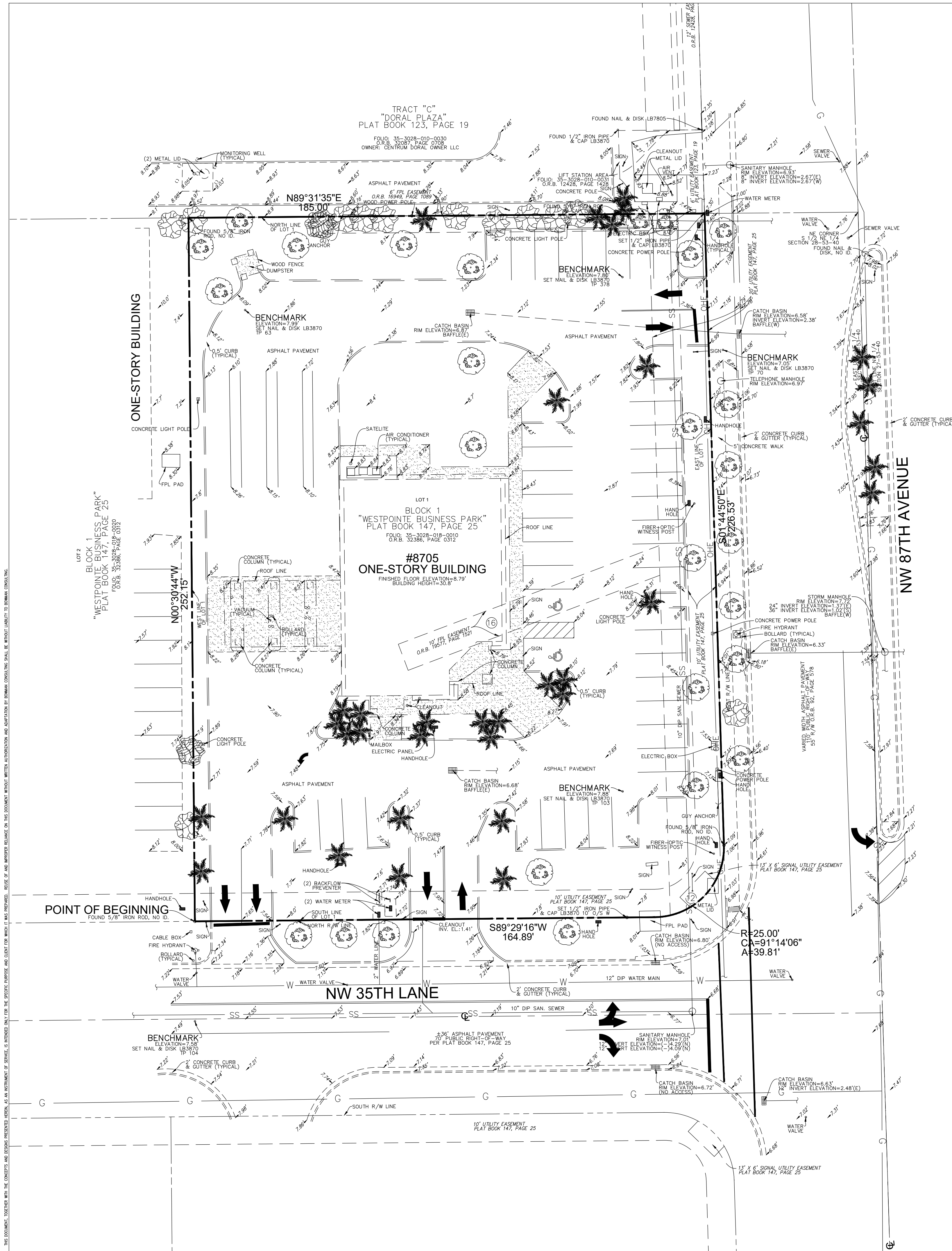
CURRENT DESIGN: 2021-005
NOTE APPLIED: _____
PROJECT #: 010014-01-149
PRINTED FOR: PERMIT
DATE: 12/15/2022
DRAWN BY: JP

Information contained on this drawing and in all digital files produced for above project are the property of the engineer and shall remain confidential and shall not be reproduced or used for any other project without express written or verbal consent from the authorized project representatives.

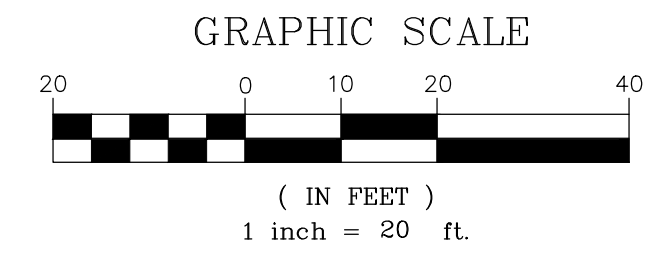
PERMIT
SHEET
COVER SHEET
SHEET NUMBER

C-1.0

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN INFORMATION HEREIN, IS AN INSTRUMENT OF SERVICE, AS DEFINED IN THE PROFESSIONAL ENGINEERING AND ARCHITECTURE ACT, CHAPTER 481, F.S., AND IS TO BE USED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY PORTIONS HEREOF IN ANY DOCUMENT, WITHOUT THE WRITTEN AUTHORIZATION AND SUPERVISION OF BOWMAN CONSULTING GROUP, IS STRICTLY PROHIBITED. TO BOWMAN CONSULTING GROUP.



LEGEND	
PROPERTY LINE	---
EX. CONCRETE SIDEWALK	---
EX. CONCRETE D CURB	---
EX. EDGE OF SIDEWALK	---
EX. POWER POLE	---
EX. SIGN	---
EX. STORM TYPE C INLET	---
EX. STORM TYPE 9 CURB INLET	---
EX. STORM MANHOLE	---
EX. FIRE HYDRANT	---
EX. SANITARY MANHOLE	---
OVERHEAD LINES	---
WATER LINE	---
SEWER LINE	---



FLOOD ZONE NOTE

FLOOD ZONE: X; BASE FLOOD ELEVATION: NONE; PANEL #12086C0287L; COMMUNITY # 120041; MAP DATE: 09/11/09

DATUM NOTE

- ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. MIAMI-DADE COUNTY BENCHMARK #515; ELEVATION 7.43 FEET
- ELEVATION DATUM CONVERSION NAVD88 = NGVD29 - 1.663'

SOIL CLASSIFICATION

THE SOIL SURVEY OF MIAMI-DADE COUNTY, FLORIDA AS PREPARED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA), SOIL CONSERVATION SERVICE (SCS; LATER RENAMED THE NATURAL RESOURCE CONSERVATION SERVICE NRCS) IDENTIFIES THE SOIL TYPE AT THE SUBJECT SITE AS 7.8% (15) URBAN LAND, 0 TO 2% SLOPES AND 92.2% (34) HALLANDALE FINE SAND-URBAN LAND COMPLEX, 0 TO 2% SLOPES.



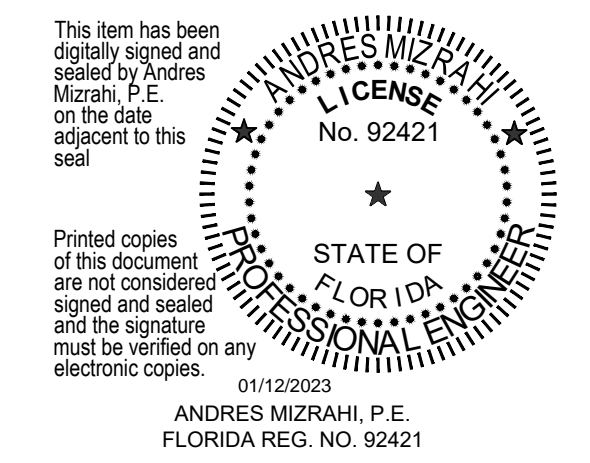
5200 Buffington Rd.
Atlanta Georgia,
30349-2998

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 26482
P.O. Box 174, Tallahassee, FL 32304
Phone: (904) 244-8488
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



Printed copies of this document are not considered signed and sealed on the date adjacent to this seal.
01/12/2023
ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

REVISION SCHEDULE	NO.	DATE	DESCRIPTION
	1	05/09/2022	ADD GAS AND CO

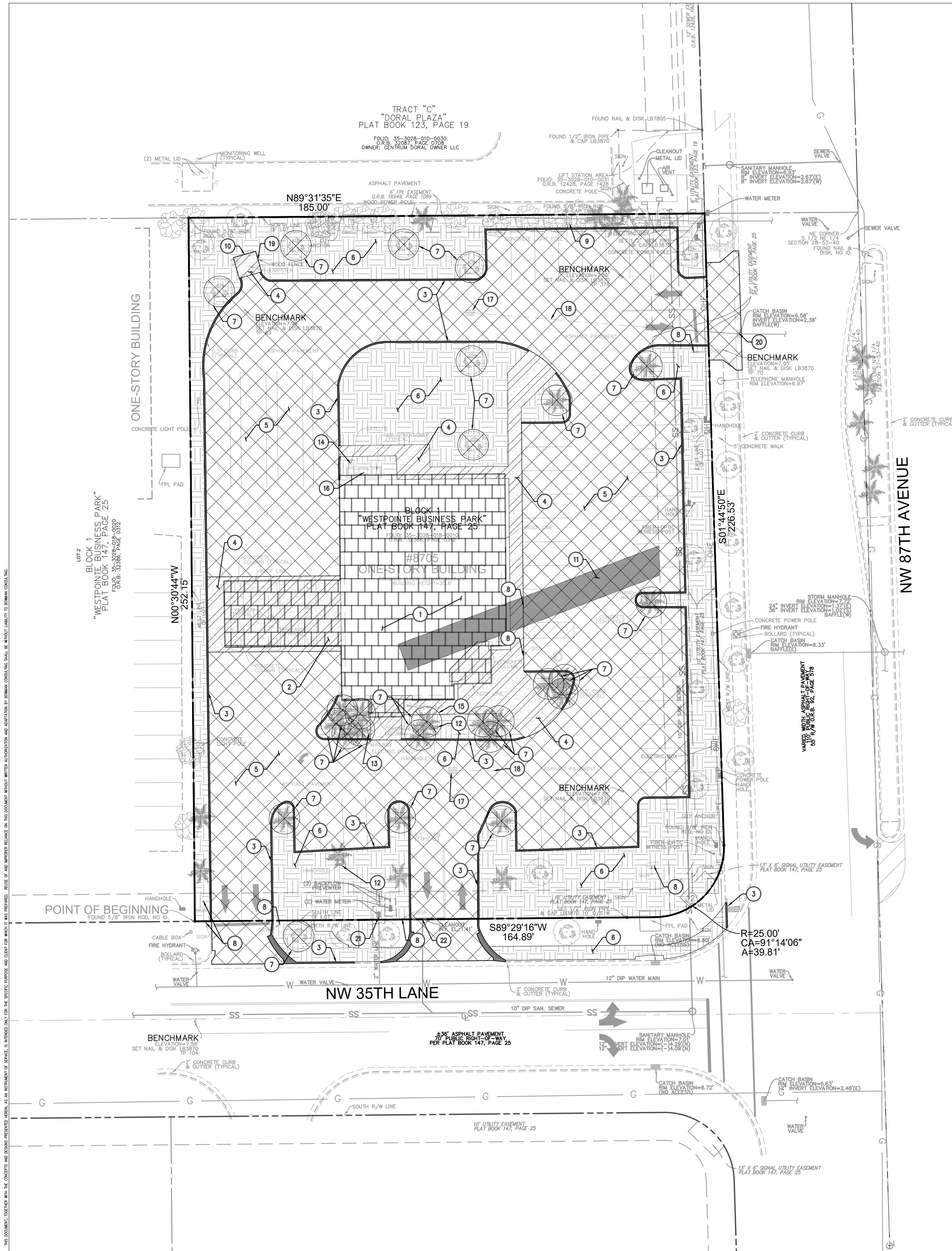
CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

Information contained on this drawing and all digital files produced for drive cannot be used or reproduced in any manner without express written or verbal consent from author and project representatives.

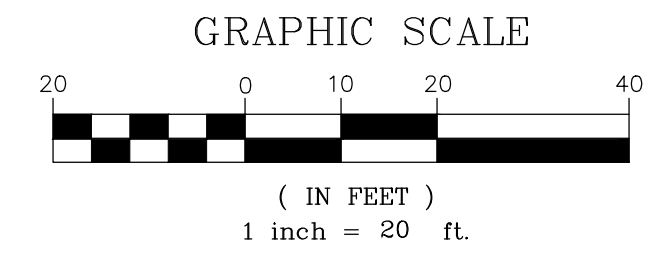
SHEET
EXISTING CONDITIONS PLAN
SHEET NUMBER

C-1.1

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN INTERPRETATIONS HEREIN, AS AN INSTRUMENT OF SERVICE, OR INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY INSTRUMENT OF SERVICE OR INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY INSTRUMENT OF SERVICE OR INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED.



LEGEND			
DEMO ASPHALT DRIVE		PROPERTY LINE	
DEMO CONCRETE		EX. CONCRETE SIDEWALK	
DEMO OPEN SPACE		EX. CONCRETE D CURB	
DEMO BUILDING		EX. EDGE OF SIDEWALK	
LIMIT OF DISTURBANCE		EX. POWER POLE	
DEMO CURB		EX. SIGN	
		EX. STORM TYPE C INLET	
		EX. STORM TYPE 9 CURB INLET	
		EX. STORM MANHOLE	
		EX. FIRE HYDRANT	
		EX. SANITARY MANHOLE	
		OVERHEAD LINES	
		WATER LINE	
		SEWER LINE	



DEMOLITION NOTES

- | | |
|--|---|
| 1 BUILDING TO BE REMOVED | 12 HANDHOLE TO BE REMOVED |
| 2 OVERHEAD CANOPY TO BE REMOVED | 13 MAILBOX TO BE REMOVED |
| 3 CONCRETE CURB TO BE REMOVED | 14 SATELLITE TO BE REMOVED |
| 4 CONCRETE PAVEMENT / SIDEWALK TO BE REMOVED | 15 ELECTRIC PANEL TO BE REMOVED |
| 5 ASPHALT PAVEMENT TO BE REMOVED | 16 AIR CONDITIONING UNIT TO BE REMOVED |
| 6 OPEN SPACE TO BE CLEARED AND GRUBBED | 17 STORM INLET TO BE REMOVED |
| 7 TREE TO BE REMOVED | 18 STORM PIPE TO BE REMOVED |
| 8 SIGN TO BE REMOVED | 19 WOOD FENCE TO BE REMOVED |
| 9 CONCRETE POLE TO BE REMOVED | 20 CATCH BASIN TOP TO BE REPLACED WITH P-S TOP |
| 10 DUMPSTER TO BE REMOVED | 21 CONTRACTOR TO DEMO ALL WATER SERVICES UP TO THE RPZ. METERS AND RPZ TO REMAIN |
| 11 PORTION OF FPL EASEMENT TO BE VACATED | 22 CONTRACTOR TO DEMO ALL SANITARY SERVICE UP TO THE CLEANOUT AND SERVICE IN R.O.W. TO REMAIN |

GENERAL DEMOLITION NOTES

- THE LOCATION OF THE UTILITIES SHOWN HAVE BEEN DETERMINED BY INFORMATION GATHERED AND SHALL NOT BE USED AS EXACT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO VERIFY EXACT LOCATIONS PRIOR TO DEMOLITION.
- THE CONTRACTOR SHALL COORDINATE WITH THE PROPER UTILITY COMPANIES FOR REMOVAL AND RELOCATIONS OF THE RESPECTIVE UTILITY. THE CONTRACTOR SHALL VERIFY ANY WORK THAT MAY BE DONE BY THE UTILITY COMPANIES.
- CONTRACTOR SHALL PROTECT THE PUBLIC WITH BEST MANAGEMENT PRACTICES.
- CONTRACTOR SHALL PROTECT AND MAINTAIN ALL STRUCTURES, PAVEMENT, AND VEGETATION THAT IS NOT TO BE DISTURBED AND IS RESPONSIBLE FOR ANY DAMAGES TO THEM.
- THE CONTRACTOR SHALL PROPERLY DISPOSE OF ALL MATERIALS RESULTING FROM THE WORK, ACCORDING TO GOVERNING AUTHORITIES AND SHALL OBTAIN THE PROPER PERMITS REQUIRED FOR DISPOSAL AND DEMOLITION.
- THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL DEVICES PRIOR TO DEMOLITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SERVICES TO ANY NECESSARY UTILITIES DURING CONSTRUCTION.
- FOR ALL ITEMS NOTED TO BE REMOVED, REMOVE NOT ONLY THE ABOVE GROUND ELEMENTS, BUT ALSO REMOVE ALL UNDERGROUND ELEMENTS AS WELL INCLUDING, BUT NOT LIMITED TO: FOUNDATIONS, GRAVEL FILLS, TREE ROOTS, PIPES, TANKS, ETC.
- BACKFILL ALL EXCAVATIONS RESULTING FROM THE DEMOLITION WORK MEETING THE REQUIREMENTS FOR FILL OUTLINED IN THE GEOTECHNICAL INVESTIGATION REPORT FOR THIS SITE.
- ASBESTOS AND ANY OTHER HAZARDOUS MATERIAL SHALL BE PROPERLY PERMITTED AND REMOVED BY THE CONTRACTOR. CONTRACTOR SHALL SECURE ALL PERMITS FOR DEMOLITION AND REMOVAL OF MATERIALS FROM THE SITE.
- LIMIT SAW-CUT AND PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE PLANS. ANY DAMAGE TO ANY SURROUNDING AREAS SHALL BE REPAIRED / REPLACED AT THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROTECT ADJACENT STRUCTURES, PAVEMENT, UTILITIES, LANDSCAPE, ETC. FROM DAMAGE DURING CONSTRUCTION.
- CONTRACTOR SHALL ENSURE THAT SERVICES TO ALL UTILITIES TO BE REMOVED HAS BEEN DISCONTINUED AND SHUT OFF. ALL UTILITY LINES SHALL BE CAPPED PER UTILITY COMPANY STANDARDS.
- PERIMETER TREES & LANDSCAPING TO REMAIN WHEREVER POSSIBLE.

LANDLORD RESPONSIBILITIES

- INSTALLATION OF ALL UTILITIES TO A POINT WITHIN FIVE FEET INSIDE OF THE PROPERTY LINE (WHICH UTILITIES MUST BE FULLY FUNCTIONAL AND IN CAPACITIES SUFFICIENT FOR CFA'S USE)
- COMPLETION OF ALL NECESSARY AND APPROPRIATE ACCESS DRIVES AND CURB CUTS
- DEMOLITION OF EXISTING IMPROVEMENTS AND REMOVAL OF ALL DEBRIS INCLUDING ANY UNDERGROUND FOUNDATIONS OR FOOTINGS

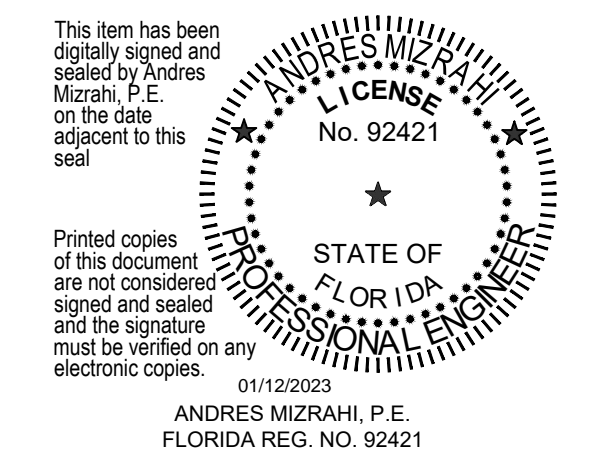


5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 5942
915 SE 17th St. Suite 302
Fort Lauderdale, FL 33316
Phone: (954) 344-8468
www.bowman.com
© 2021 Bowman Consulting Group LLC

Seal



CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

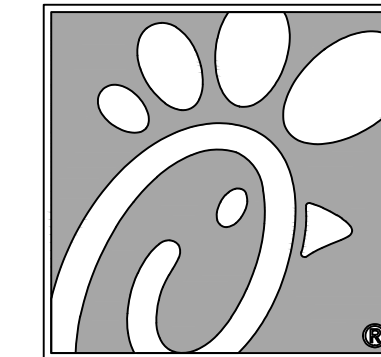
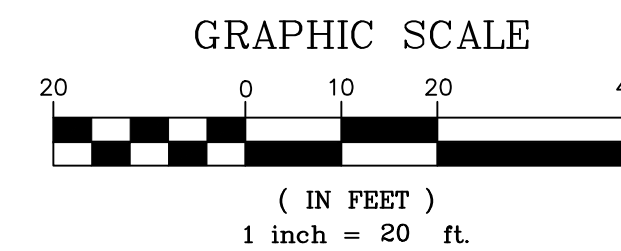
REVISION SCHEDULE		DESCRIPTION
NO.	DATE	
1	05/09/2022	ADD GAS AND CO

CURRENT DESIGN NOTE APPLIED	2021-005
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

SHEET
DEMOLITION PLAN
SHEET NUMBER

C-1.2

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN INTENTIONS HEREIN, IS AN INSTRUMENT OF SERVICE, AS DEFINED IN THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY PORTION HEREIN IN ANY DOCUMENT, WITHOUT THE WRITTEN AUTHORIZATION AND SUPERVISION OF BOWMAN CONSULTING GROUP, INC., IS PROHIBITED. BOWMAN CONSULTING GROUP, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT. BOWMAN CONSULTING GROUP, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT. BOWMAN CONSULTING GROUP, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT.

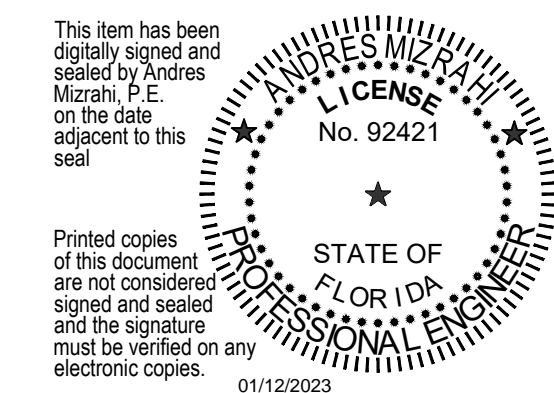


5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 3042
810 SE 17th St, Suite 300
Fort Lauderdale, FL 33316
Phone: (954) 344-8888
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

LEGEND	
PROP. TYPE 'F' CURB	PROPERTY LINE
PROP. CATCH BASIN	EX. CONCRETE SIDEWALK
PROP. CURB INLET	EX. CONCRETE D CURB
PROP. MANHOLE	EX. EDGE OF SIDEWALK
PROP. STORM SEWER	EX. POWER POLE
PROP. SANITARY SEWER	EX. SIGN
PROP. POTABLE WATER	EX. STORM TYPE C INLET
PROP. ELECTRIC SERVICE	EX. STORM TYPE 9 CURB INLET
PROP. SANITARY CLEANOUT	EX. STORM MANHOLE
PROP. GREASE TRAP	EX. FIRE HYDRANT
PROP. TRANSFORMER	EX. SANITARY MANHOLE
	OVERHEAD LINES
	WATER LINE
	SEWER LINE

PROPOSED DRAINAGE STRUCTURE TABLE

STRC. NUMBER	BOTTOM STRC. TYPE	TOP TYPE	RIM	N INV.	S INV.	E INV.	W INV.	NE INV.	SW INV.	NW INV.	SE INV.	REMARKS
I-1	4' DIA. TYPE P	TYPE 9 INLET	7.82	-----	-----	-----	4.24	-----	-----	-----	-----	4' DIA. TYPE P BOTTOM W/ TYPE 9 TOP
I-2	4' DIA. TYPE P	TYPE 'C' INLET	7.25	2.75	-----	2.75	-----	-----	-----	-----	-----	4' DIA. TYPE P BOTTOM W/ TYPE C TOP
I-3	6' DIA. TYPE P	TYPE 9 INLET	7.35	-----	2.75	-----	2.75	-----	-----	-----	-----	6' DIA. TYPE P BOTTOM W/ TYPE 9 TOP
I-4	4' DIA. TYPE P	TYPE 9 INLET	7.34	-----	4.13	2.75	-----	-----	-----	-----	-----	4' DIA. TYPE P BOTTOM W/ TYPE 9 TOP
MH-1	4' DIA. TYPE P	MANHOLE	7.52	2.75	2.75	2.75*	-----	-----	-----	-----	-----	4' DIA. TYPE P BOTTOM W/ MANHOLE TOP CONNECT TO EXISTING 12" DRAINAGE PIPE WEIR EL = 6.50' (6" ORIFICE)
MH-2	4' DIA. TYPE P	MANHOLE	8.26	-----	2.75	-----	-----	-----	-----	-----	-----	4' DIA. TYPE P BOTTOM W/ MANHOLE TOP
MH-3	4' DIA. TYPE P	MANHOLE	8.01	2.75	-----	2.75	2.75	-----	-----	-----	-----	4' DIA. TYPE P BOTTOM W/ MANHOLE TOP
EL-1	EXISTING	TYPE 5	6.58	-----	-----	2.38	2.38	-----	-----	-----	-----	CONTRACTOR REPLACE CATCH BASIN TOP TYPE 5 TOP

*CONTRACTOR TO VERIFY EXISTING INVERT ELEVATION

GRADING AND DRAINAGE NOTES

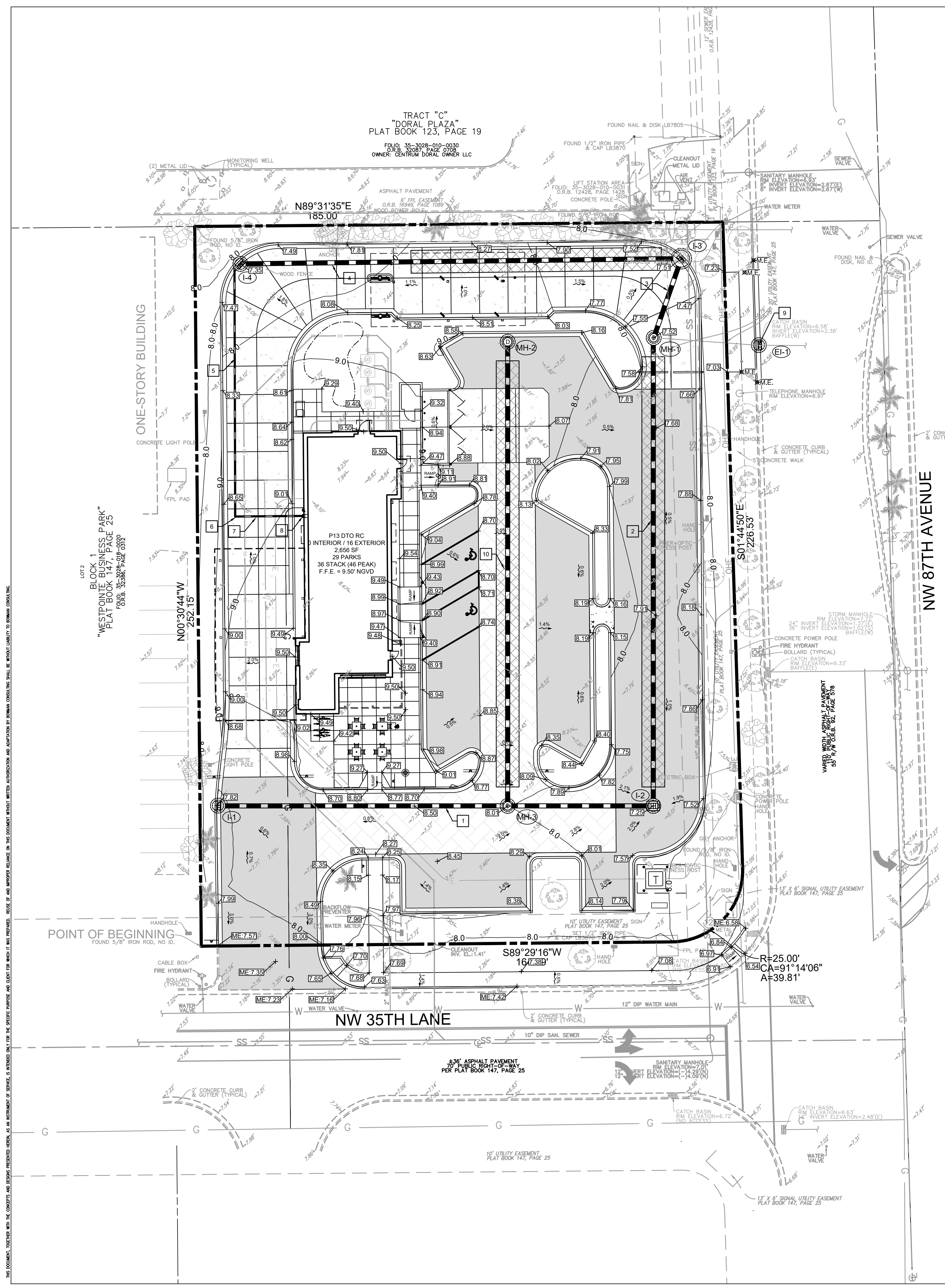
- CONST. 147 LF OF 18" HDPE @ 1.0% SLOPE
- CONST. 159 LF OF 18" HDPE @ 0% SLOPE WITH 151 LF OF EXFILTRATION TRENCH
- CONST. 25 LF OF 18" HDPE @ 0% SLOPE
- CONST. 150 LF OF 18" HDPE @ 0% SLOPE WITH 90 LF OF EXFILTRATION TRENCH
- CONST. 87 LF OF 6" PVC @ 1.0% MINIMUM SLOPE
- CONST. CLEANOUT WITH INV. ELEV. = 5.0'
- CONST. 24 LF OF 6" PVC @ 1.0% SLOPE
- CONNECT TO ROOF DOWNSPOUTS
- CONTRACTOR TO REPLACE STRUCTURE TOP WITH CURB INLET TOP
- CONST. 158 LF OF 18" HDPE @ 0% SLOPE WITH 152 LF OF EXFILTRATION TRENCH

FLOOD ZONE NOTE

- FLOOD ZONE: X; BASE FLOOD ELEVATION: NONE; PANEL #12086C0287L; COMMUNITY #120041; MAP DATE: 9/11/09.

DATUM NOTE

- ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. MIAMI-DADE COUNTY BENCHMARK #515 - ELEVATION: 7.43 FEET.



THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, IS AN INSTRUMENT OF SERVICE. IT IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY INFORMATION CONTAINED ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

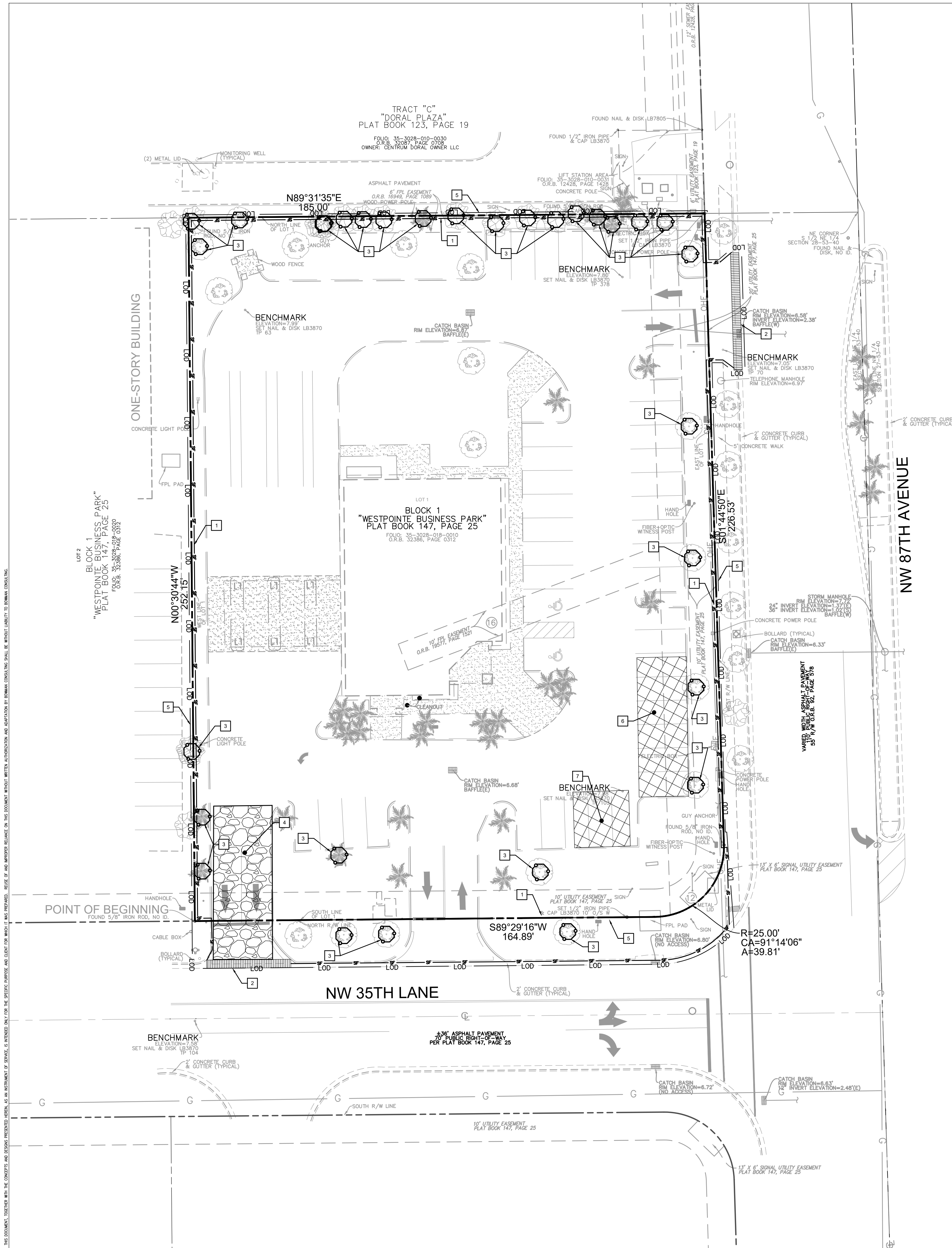
NO.	DATE	DESCRIPTION
△	05/09/2022	ADD GAS AND CO

CURRENT DESIGN NOTE APPLIED	2021-005
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

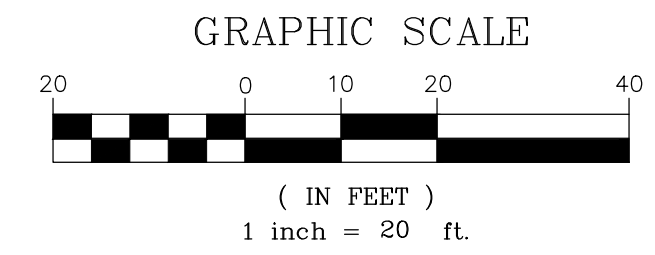
Information contained on this drawing and in all digital files provided for these services projects may not be reproduced or any manner without express written or verbal consent from authorized project representatives.

SHEET
Grading and Drainage Plan
SHEET NUMBER

C-3.0



LEGEND	
LIMIT OF DISTURBANCE	LOD
PROP. SILT DIKE ON PAVEMENT	[Symbol]
PROP. SILT FENCE	SF
TEMPORARY PARKING AND STAGING AREAS	[Symbol]
PROP. TREE BARRIER	[Symbol]
PROPERTY LINE	[Symbol]
EX. CONCRETE SIDEWALK	[Symbol]
EX. CONCRETE D CURB	[Symbol]
EX. EDGE OF SIDEWALK	[Symbol]
EX. POWER POLE	[Symbol]
EX. SIGN	[Symbol]
EX. STORM TYPE C INLET	[Symbol]
EX. STORM TYPE 9 CURB INLET	[Symbol]
EX. STORM MANHOLE	[Symbol]
EX. FIRE HYDRANT	[Symbol]
EX. SANITARY MANHOLE	[Symbol]
OVERHEAD LINES	[Symbol]
WATER LINE	[Symbol]
SEWER LINE	[Symbol]



EROSION CONTROL NOTES

- 1 CONST. SILT FENCE
- 2 CONST. SILT DIKE ON PAVEMENT
- 3 CONST. TREE BARRIER
- 4 CONST. STABILIZED CONSTRUCTION EXIT
- 5 LIMIT OF DISTURBANCE
- 6 TEMPORARY PARKING AREA
- 7 TEMPORARY STORAGE AREA

GENERAL EROSION CONTROL NOTES

1. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED AND THAT CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DIRECTED BY PERMITTING AGENCY AND OWNER OR AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
2. PERMIT(S) FOR ANY CONSTRUCTION ACTIVITY MUST BE MAINTAINED ON SITE AT ALL TIMES.
3. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE FDEP GENERIC PERMIT.
4. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
5. ALL WASH WATER SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
6. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
7. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
8. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
9. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.
10. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY STOPPED FOR AT LEAST 7 DAYS, SHALL BE TEMPORARILY SEEDDED.
11. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE SODDED/LANDSCAPED PER PLANS. THESE AREA SHALL BE SODDED/LANDSCAPED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
12. IF THE ACTION OF VEHICLES TRAVELING OVER THE CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
13. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
14. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
15. ON-SITE AND OFF-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH FDEP GENERIC PERMIT REQUIREMENTS.
16. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
17. DUE TO CONSTRUCTION ACTIVITIES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION AND SEDIMENT CONTROL MEASURES TO PREVENT EROSION AND SEDIMENTATION.
18. CONTRACTOR SHALL DESIGNATE/IDENTIFY AREAS INSIDE THE LIMITS OF DISTURBANCE, FOR WASTE DISPOSAL AND DELIVERY AND MATERIAL STORAGE.
19. CONTRACTOR TO LIMIT DISTURBANCE OF SITE IN STRICT ACCORDANCE WITH THE EROSION CONTROL SEQUENCING SHOWN ON THIS PLAN. NO UNNECESSARY OR IMPROPERLY SEQUENCED CLEARING AND/OR GRADING SHALL BE PERMITTED.
20. ALL EXISTING SIGNALIZATION EQUIPMENT TO REMAIN IS ASSUMED TO BE IN GOOD WORKING ORDER UNLESS PALM BEACH COUNTY IS NOTIFIED IN WRITING PRIOR TO THE START OF CONSTRUCTION. ANY SUBSEQUENT DAMAGE TO THE SIGNAL EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
21. THE CONTRACTOR SHALL ENSURE THAT A FOREMAN OR SUPERVISOR WHO HAS BEEN CERTIFIED UNDER FLORIDA STORMWATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR TRAINING PROGRAM IS AVAILABLE IN PERSON OR BY PHONE AT ALL TIMES DURING THE CONSTRUCTION ACTIVITIES. (ONCE CONTRACTOR IS SELECTED, A QUALIFIED FOREMAN/SUPERVISOR WILL BE DESIGNATED AND AVAILABLE AT THE PRE-CONSTRUCTION MEETING).
22. ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE REQUIRED, DURING ANY PHASE OF DEVELOPMENT, AT THE DISCRETION OF THE COUNTY'S INSPECTOR.

CONSTRUCTION SEQUENCE

1. CONDUCT PRE-CONSTRUCTION MEETING WITH THE COUNTY TO DISCUSS EROSION AND SEDIMENT CONTROLS AND CONSTRUCTION PHASING.
2. INSTALL AND POST SWPPP AND SITE COMPLIANCE SIGMAGE PUBLICLY VISIBLE.
3. INSTALL INLET PROTECTION, SILT DIKES, AND SILT FENCE ON THE SITE AS SHOWN.
4. INSTALL CONSTRUCTION FENCES AND TEMPORARY TRAFFIC AND PEDESTRIAN CONTROL DEVICES.
5. PREPARE TEMPORARY PARKING AND STORAGE AREAS.
6. DEMO EXISTING STRUCTURES, PAVEMENT, AND SPECIFIED UTILITIES.
7. BEGIN GRADING THE SITE.
8. BEGIN CONSTRUCTION OF UTILITIES.
9. BEGIN SUBGRADE PREPARATION AND CONSTRUCTION OF STRUCTURES.
10. BEGIN INSTALLATION OF CURB, GUTTER, AND PAVING.
11. COMPLETE PERMANENT STABILIZATION ON AREAS WHERE CONSTRUCTION HAS BEEN COMPLETED.
12. COMPLETE FINAL GRADING AND INSTALLATION OF PERMANENT STABILIZATION OVER ALL AREAS.
13. OBTAIN CONCURRENCE FROM THE OWNER AND THE COUNTY THAT THE SITE HAS BEEN FULLY STABILIZED.
14. REMOVE ALL REMAINING TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES.
15. STABILIZE ALL AREAS DISTURBED BY BMP REMOVAL.

CONTRACTOR MAY COMPLETE CONSTRUCTION RELATED ACTIVITIES CONCURRENTLY ONLY IF ALL PRECEDING BMPs HAVE BEEN COMPLETELY INSTALLED.

THE ACTUAL SCHEDULE FOR IMPLEMENTING POLLUTANT CONTROL MEASURES WILL BE DETERMINED BY THE PROJECT CONSTRUCTION PROGRESS AND RECORDED BY THE GENERAL CONTRACTOR ON THESE PLANS.

BMP MAINTENANCE NOTES

- ALL MEASURES STATED ON THESE PLANS SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR COMPLETED PHASE OF WORK OF FINAL STABILIZATION OF THE SITE.
1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF DETERIORATION.
 2. ALL SEEDED/SODDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND OF GRASS IS MAINTAINED. AREAS SHALL BE FERTILIZED, WATERED AND REPAIRED AS NEEDED.
 3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCE WHEN IT REACHES ONE-HALF THE HEIGHT OF THE FENCE.
 4. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF SEDIMENT FROM THE SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE EXIT AS CONDITIONS DEMAND.
 5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN A GOOD CONDITION. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE AREA AS CONDITIONS DEMAND.
 6. PRIOR TO LEAVING THE SITE, ALL VEHICLES SHALL BE CLEANED OF DEBRIS. ANY DEBRIS AND/OR SEDIMENT LEAVING THE SITE SHALL BE CLEANED IMMEDIATELY.
 7. ALL INLETS AND STORM DRAINS SHALL BE KEPT CLEAN OF DEBRIS AND SEDIMENT. ANY DEBRIS AND/OR SEDIMENT THAT ENTERS ANY INLET OR STORM DRAIN SHALL BE CLEANED IMMEDIATELY. FLUSHING SHALL NOT BE USED TO CLEAN DEBRIS AND/OR SEDIMENT FROM STORM DRAINS.

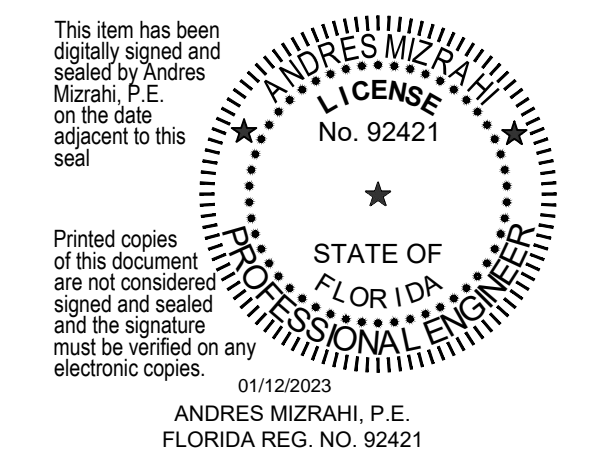


5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 5942
P.O. Box 174, St. Cloud, FL 32929
Fort Lauderdale, FL 33316
Phone: (954) 344-8668
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



01/12/2023
ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

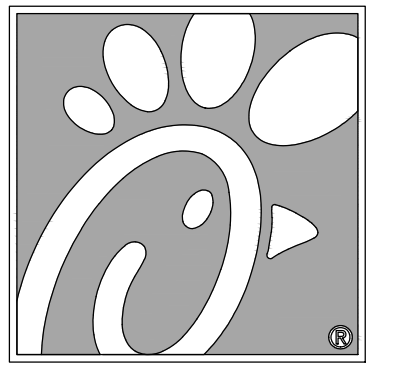
FSU# 5069

NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

PERMIT
EROSION CONTROL PLAN -
PHASE I
SHEET NUMBER

C-3.1



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 9421
P.O. Box 179, St. Cloud, FL 32916
Phone: (888) 234-8468
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal

This item has been digitally signed and sealed by Andres Mzrahi, P.E. on the date adjacent to this seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

01/12/2023
ANDRES MZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

REVISION SCHEDULE
NO. DATE DESCRIPTION
1 05/09/2022 ADD GAS AND CO

CURRENT DESIGN 2021-005
NOTE APPLIED
PROJECT # 010014-01-149
PRINTED FOR PERMIT
DATE 12/15/2022
DRAWN BY JP

PERMIT SHEET
EROSION CONTROL
DETAILS
SHEET NUMBER

C-3.3

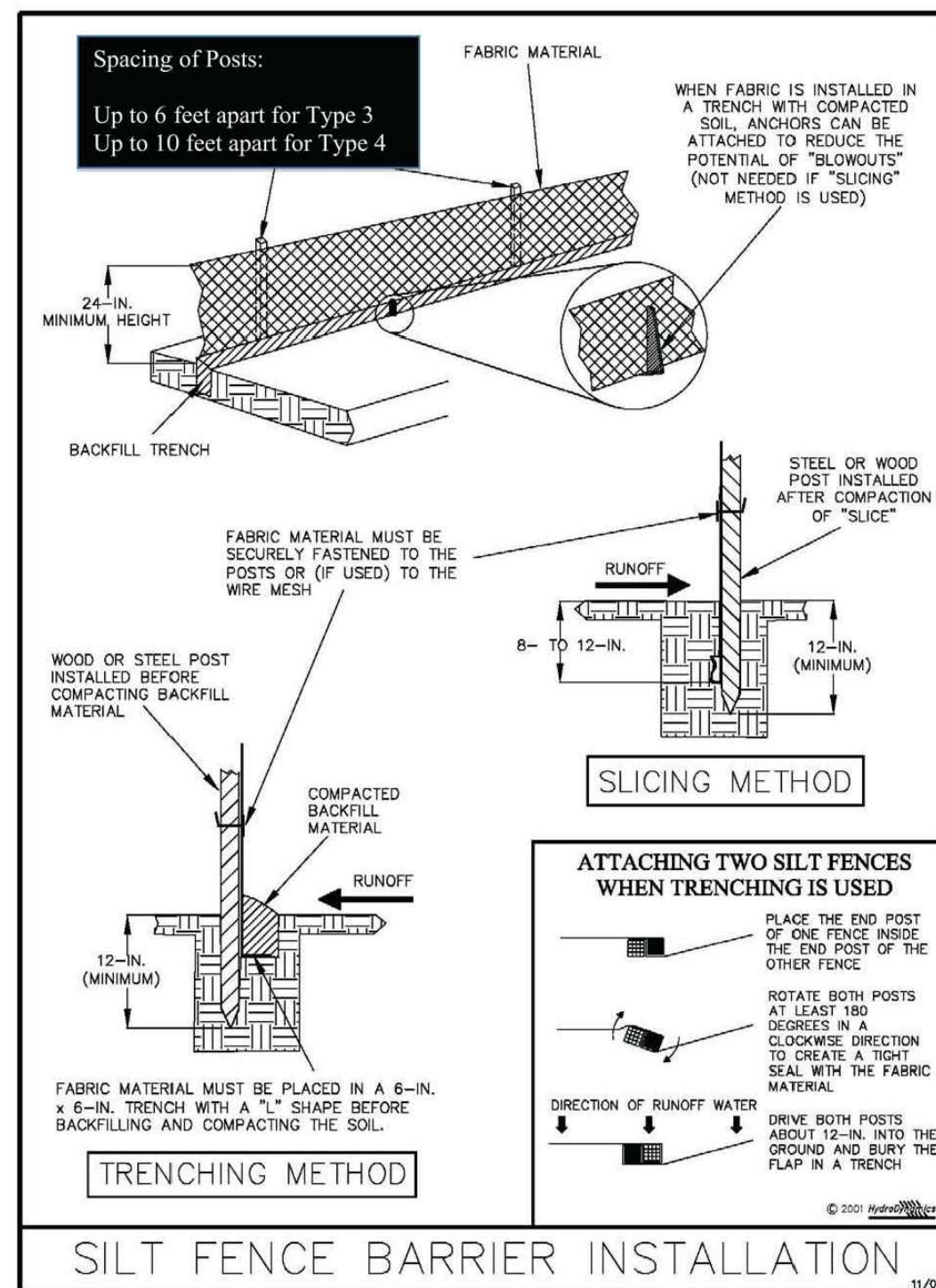
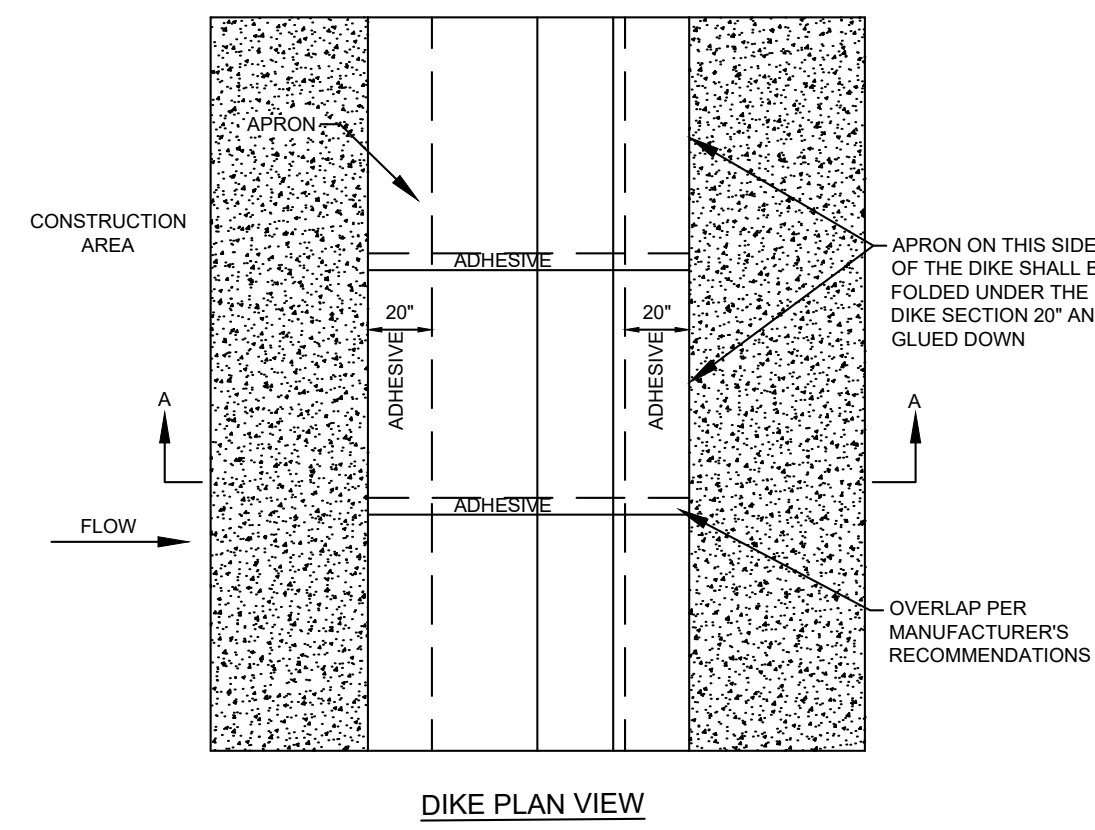


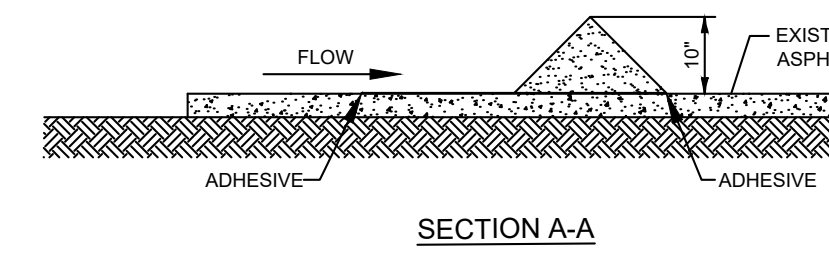
Figure V-2: Illustration of a Silt Fence Barrier

V-7

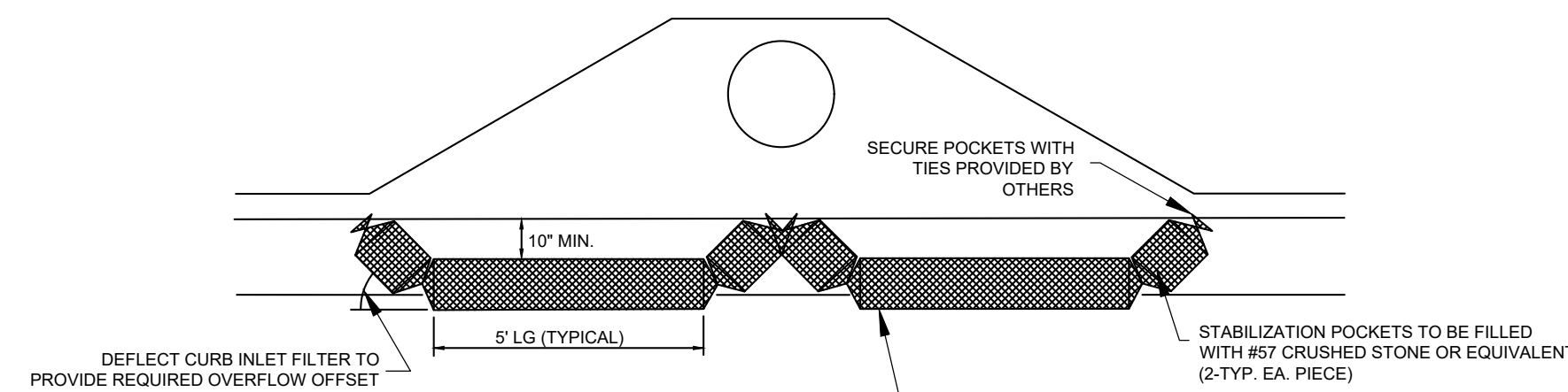
1 SILT FENCE DETAIL
C-3.3 NOT TO SCALE



- NOTES:
1. INSTALLED SILT DIKE UNIT SHALL HAVE CONTINUOUS AND FIRM CONTACT WITH PAVEMENT.
 2. ADHESIVES SHALL BE LIQUID NAIL OR APPROVED EQUAL FOR CONCRETE PAVEMENT APPLICATIONS AND EMULSIFIED ASPHALT FOR ASPHALT APPLICATIONS. ADHESIVE SHALL BE PLACED WHERE THE UNITS OVERLAP AND A 20" STRIP ALONG BOTH EDGES.

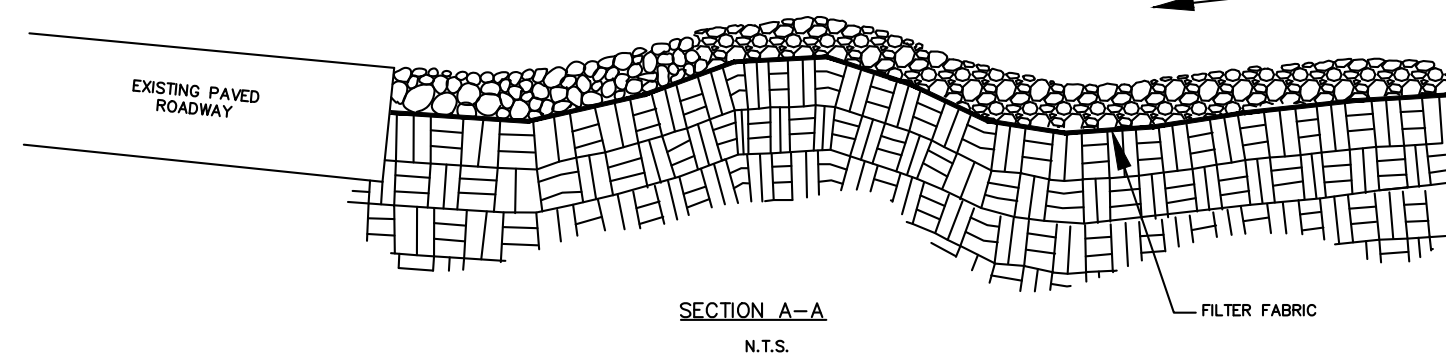
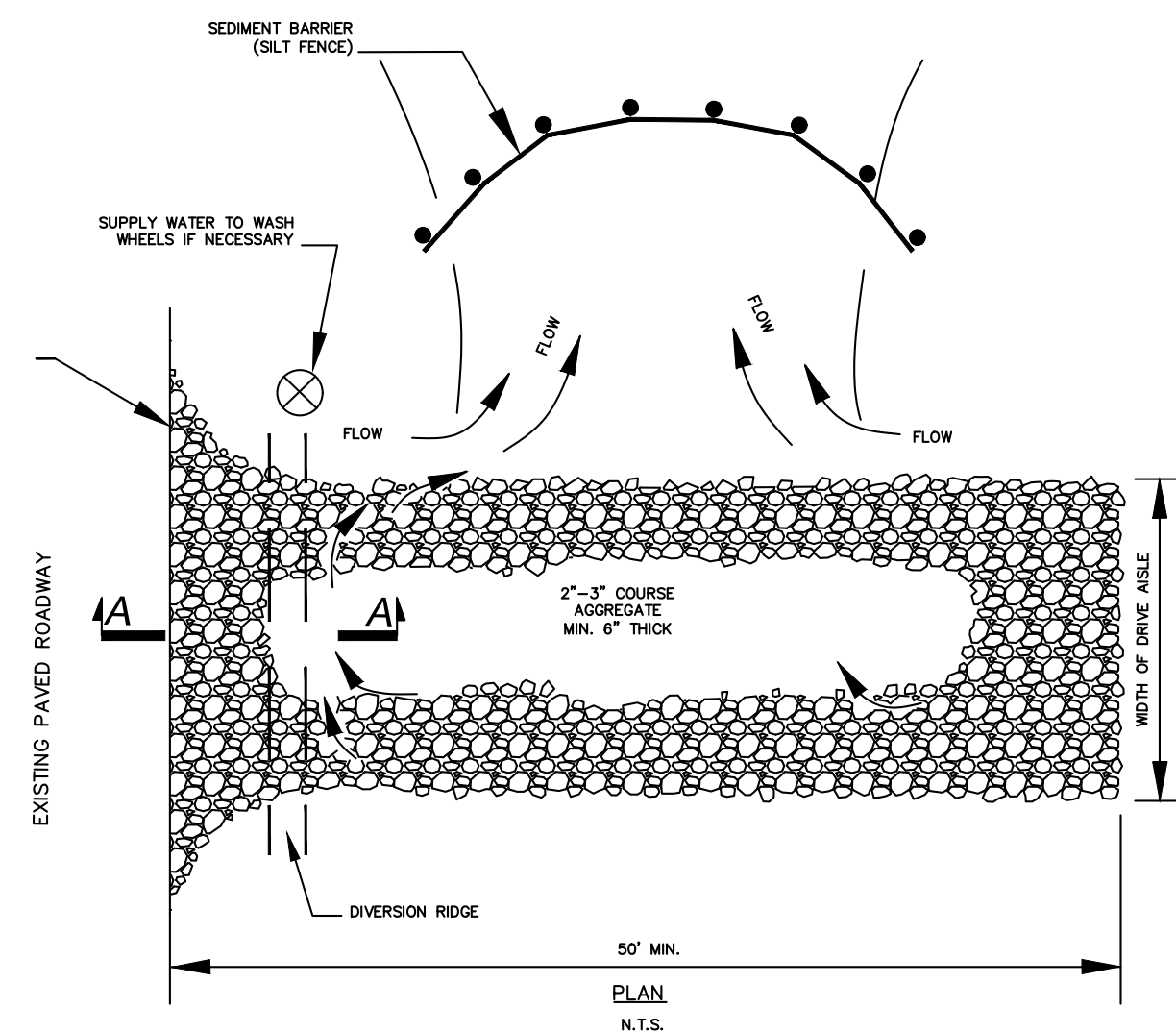


2 SILT DIKE ON EXISTING PAVEMENT
C-3.3 NOT TO SCALE



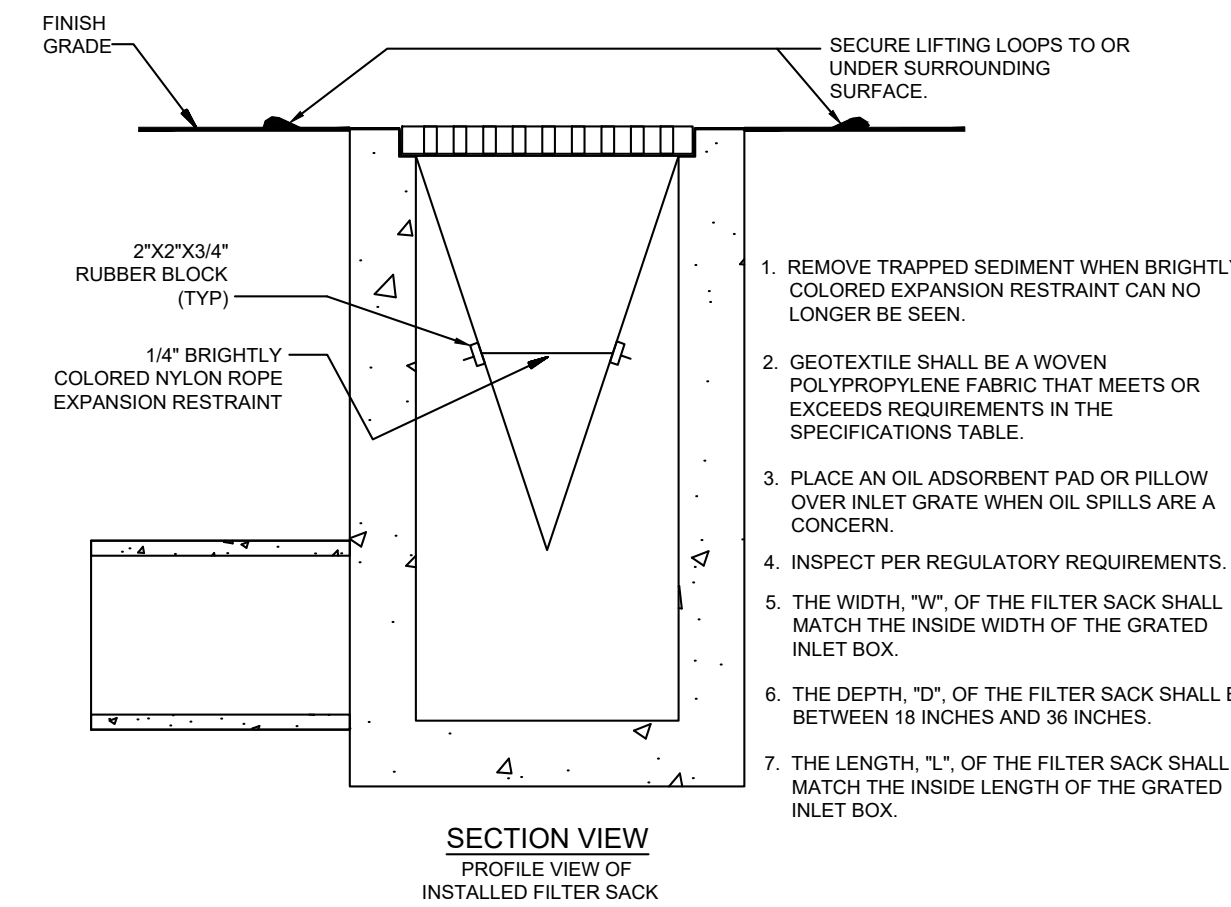
- NOTE: ILLUSTRATED APPLICATION REQUIRED TWO (2) SS-300 CURB INLET FILTERS
- INSTALLATION PROCEDURE:
1. IDENTIFY OPENING DIMENSIONS TO DETERMINE THE NUMBER OF SS-300 CURB INLET FILTERS THAT WILL BE REQUIRED.
 2. COMPLETELY FILL THE STABILIZATION CHAMBER ON EACH END OF EACH SS-300 CURB INLET FILTER WITH #57 CRUSHED STONE.
 3. SECURE ENDS OF THE STABILIZATION CHAMBER WITH TIES TO BE PROVIDED BY OTHERS.
 4. PLACE THE SS-300 CURB INLET FILTER(S) IN FRONT OF THE CURB INLET OR OPENING TO PREVENT THE MIGRATION OF SILT INTO THE STORM DRAIN SYSTEM.

5 CURB INLET FILTER
C-3.3 NOT TO SCALE



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

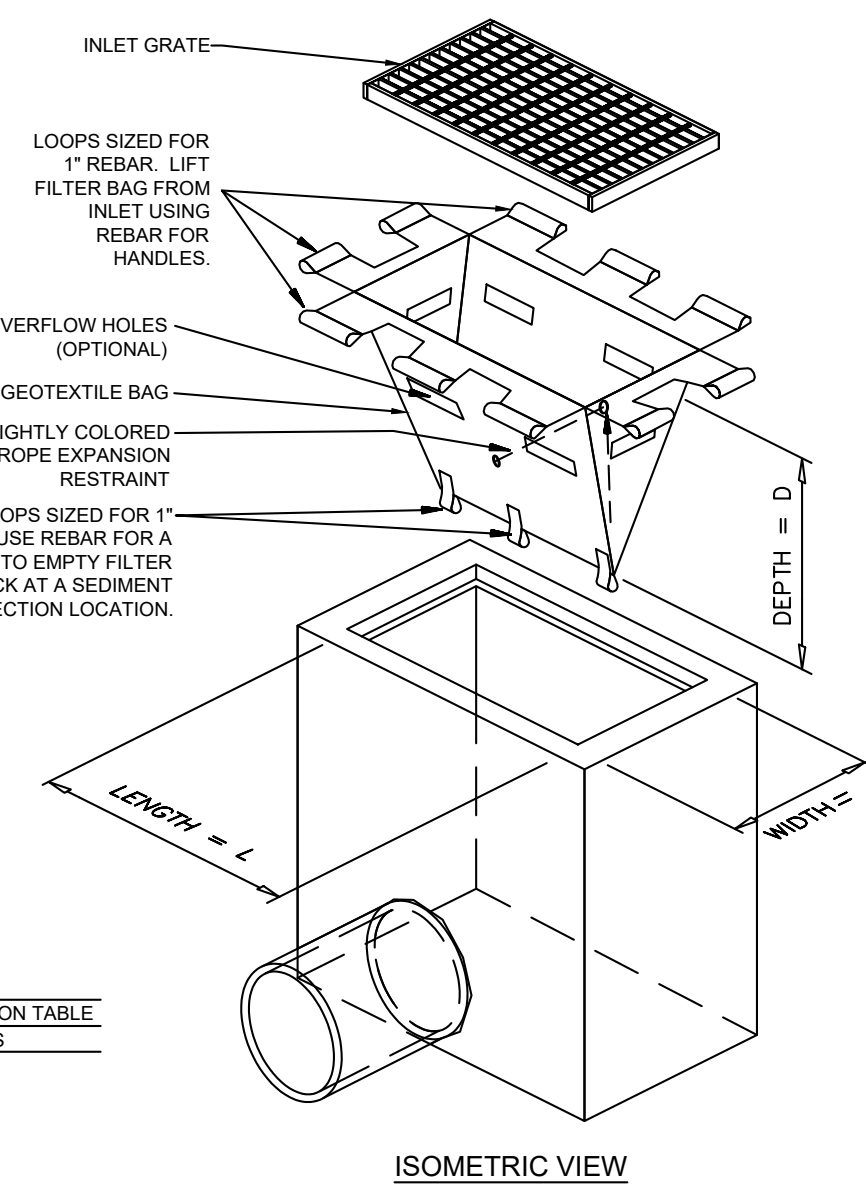
4 STABILIZED CONSTRUCTION EXIT
C-3.3 NOT TO SCALE



1. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
2. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
3. PLACE AN OIL ADSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
4. INSPECT PER REGULATORY REQUIREMENTS.
5. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
6. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
7. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.

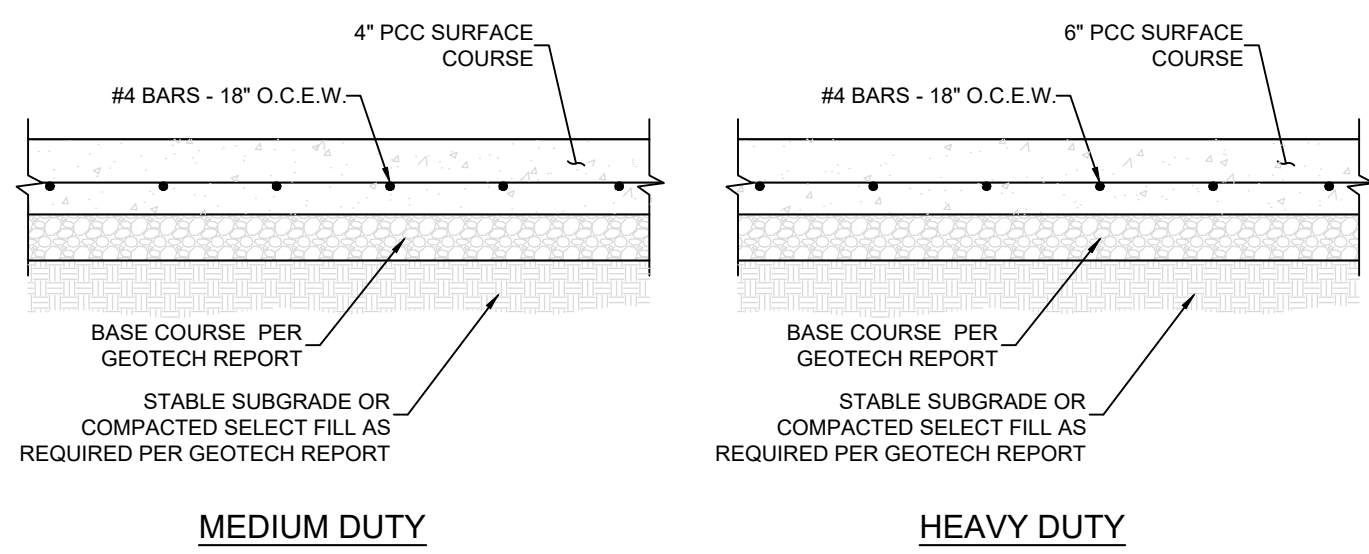
LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
FUNCTIONALITY	ASTM D-4633	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4633	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US Sieve
FLOW RATE	ASTM D-4491	40 GAL/MIN/50 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 %
FUNCTIONALITY	ASTM D-4633	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4633	40 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US Sieve
FLOW RATE	ASTM D-4491	200 GAL/MIN/50 FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

6 INLET FILTER DETAIL
C-3.3 NOT TO SCALE



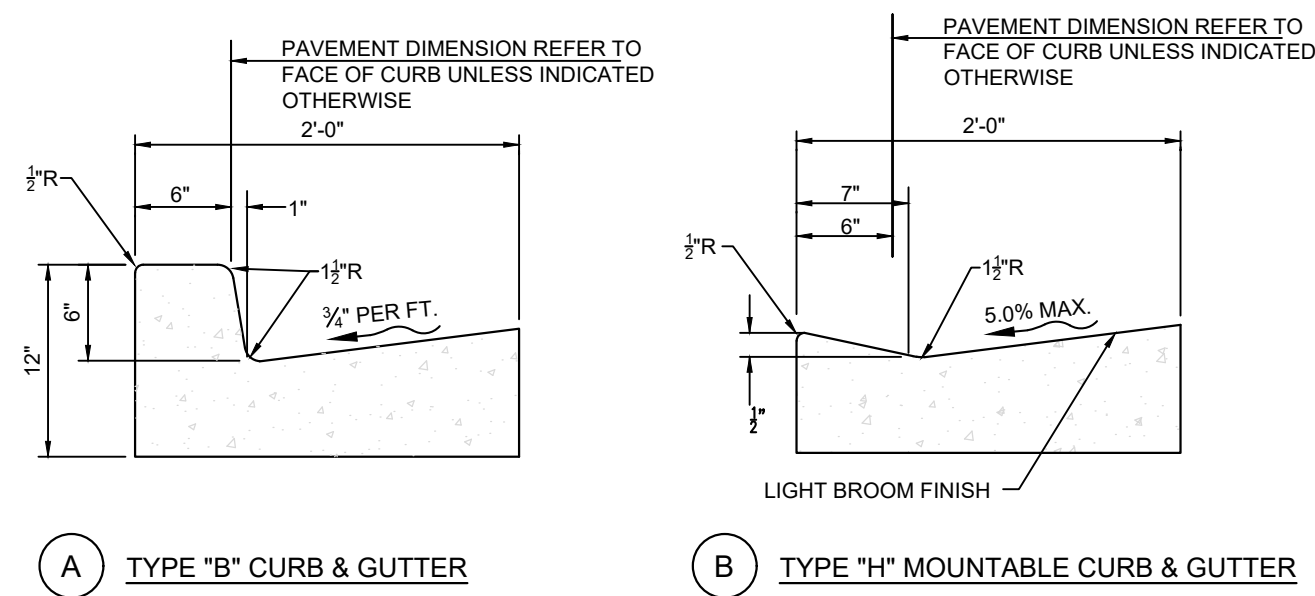
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY PORTIONS HEREIN FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION AND SUPERVISION OF BOWMAN CONSULTING GROUP, INC. IS STRICTLY PROHIBITED. BOWMAN CONSULTING GROUP, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT. BOWMAN CONSULTING GROUP, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT. BOWMAN CONSULTING GROUP, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT.

- NOTES:**
- DESIGN PER GEOTECH REPORT BY COLLIER'S ENGINEER & DESIGN, DATED APRIL 12, 2022.
 - PAVEMENTS & SUBGRADES INCLUDING MATERIALS & COMPACTION SHALL MEET STANDARDS & SPECIFICATIONS OF THE GOVERNING DEPARTMENT OF TRANSPORTATION.
 - JOINTING & SPACING SHALL BE PER CONCRETE JOINT DETAILS.
 - CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3,500 PSI @ 28 DAYS.



MEDIUM DUTY **HEAVY DUTY**

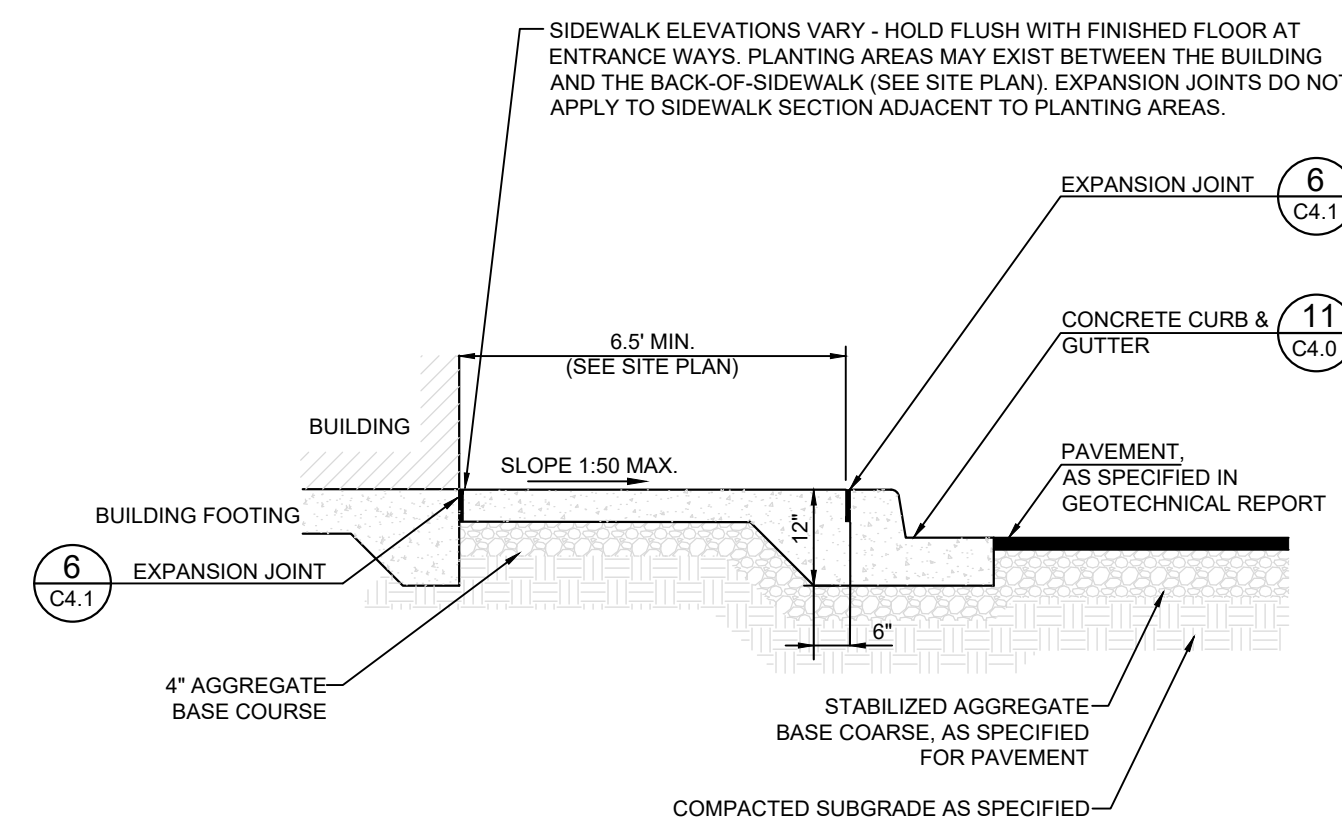
12 CONCRETE PAVEMENTS
C4.0 NOT TO SCALE



A TYPE "B" CURB & GUTTER **B TYPE "H" MOUNTABLE CURB & GUTTER**

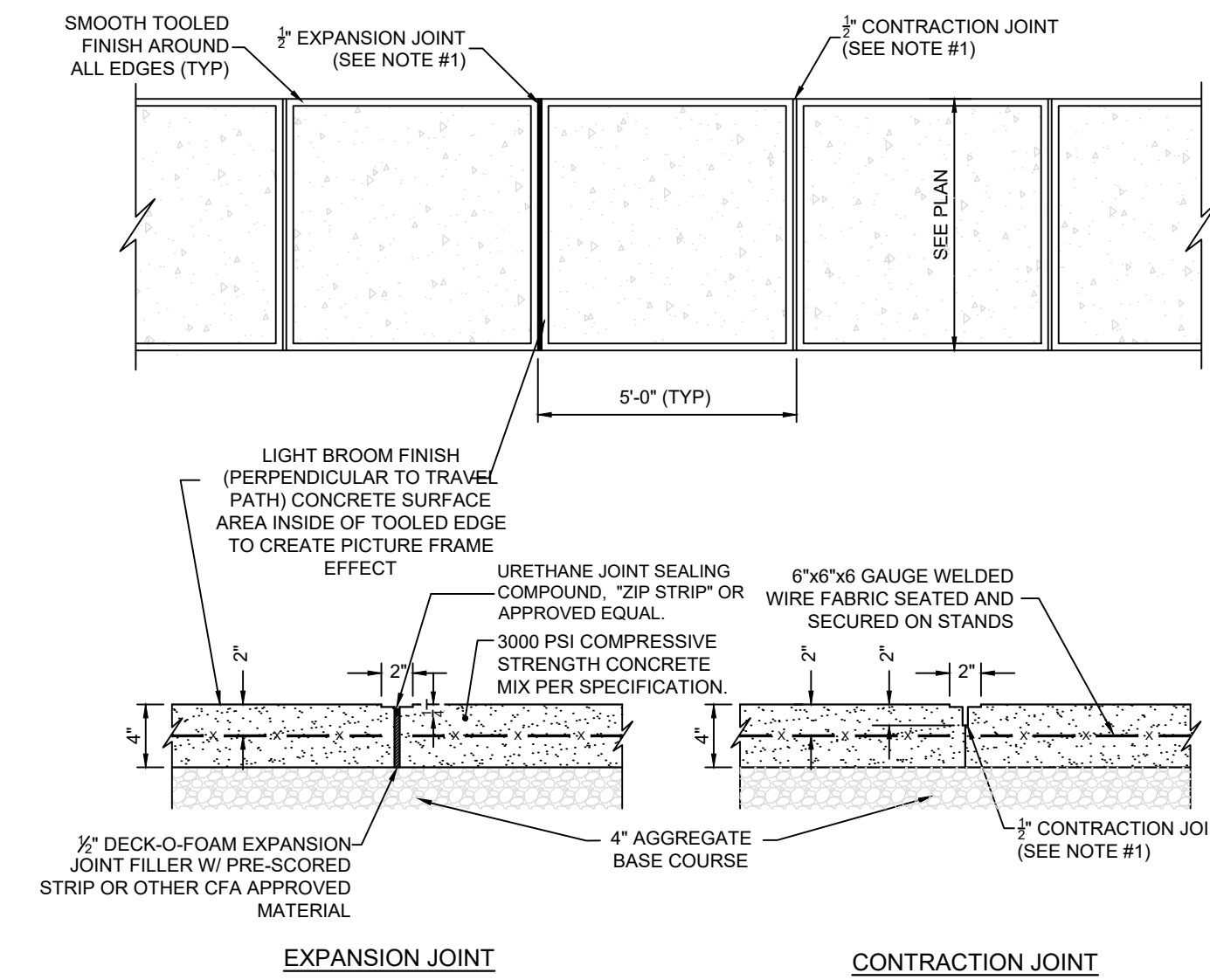
- NOTES:**
- CONC. FOR CURBING SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 3,500 PSI @ 28 DAYS
 - CONTRACTION JOINTS @ 1'-0" O.C. TOOLED 1/2" (± 1/4" - 0) WIDE, 1" OR MAX. DIA DEPTH WHICHEVER IS GREATER. EXPANSION JOINTS @ 40'-0" MAX. UNLESS NOTED OTHERWISE ON PLANS. IF NEEDED, DOWEL INTO ADJACENT CONC. SLAB PER THE EXPANSION JOINT DETAIL.
 - GUTTER SLOPE TO MATCH ADJACENT PAVEMENT, TRAVERSE & LONGITUDINAL.

11 CONCRETE CURB & GUTTER
C4.0 NOT TO SCALE



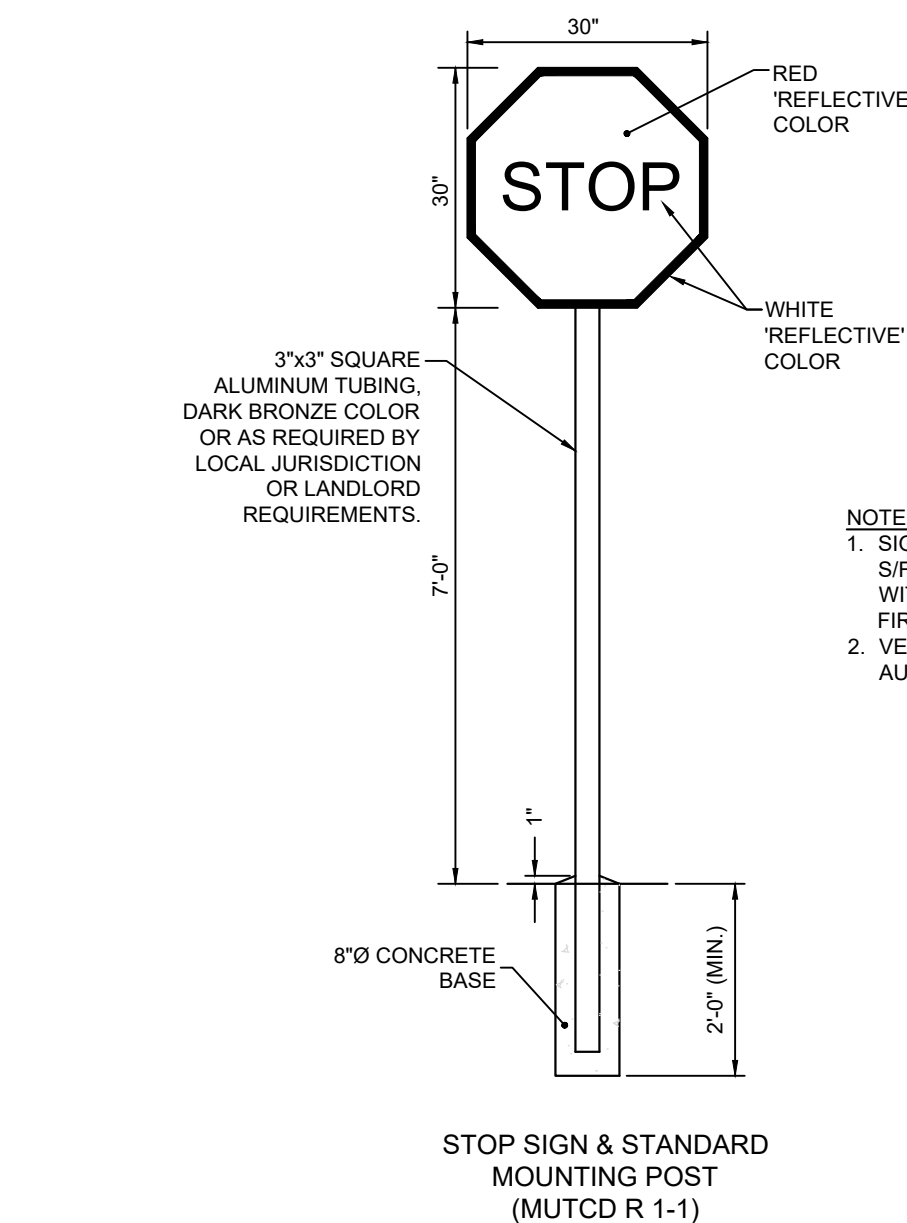
NOTICE: ALWAYS ALIGN CURB AND SIDEWALK JOINTS.

10 SIDEWALK W/ CURB & GUTTER
C4.0 NOT TO SCALE



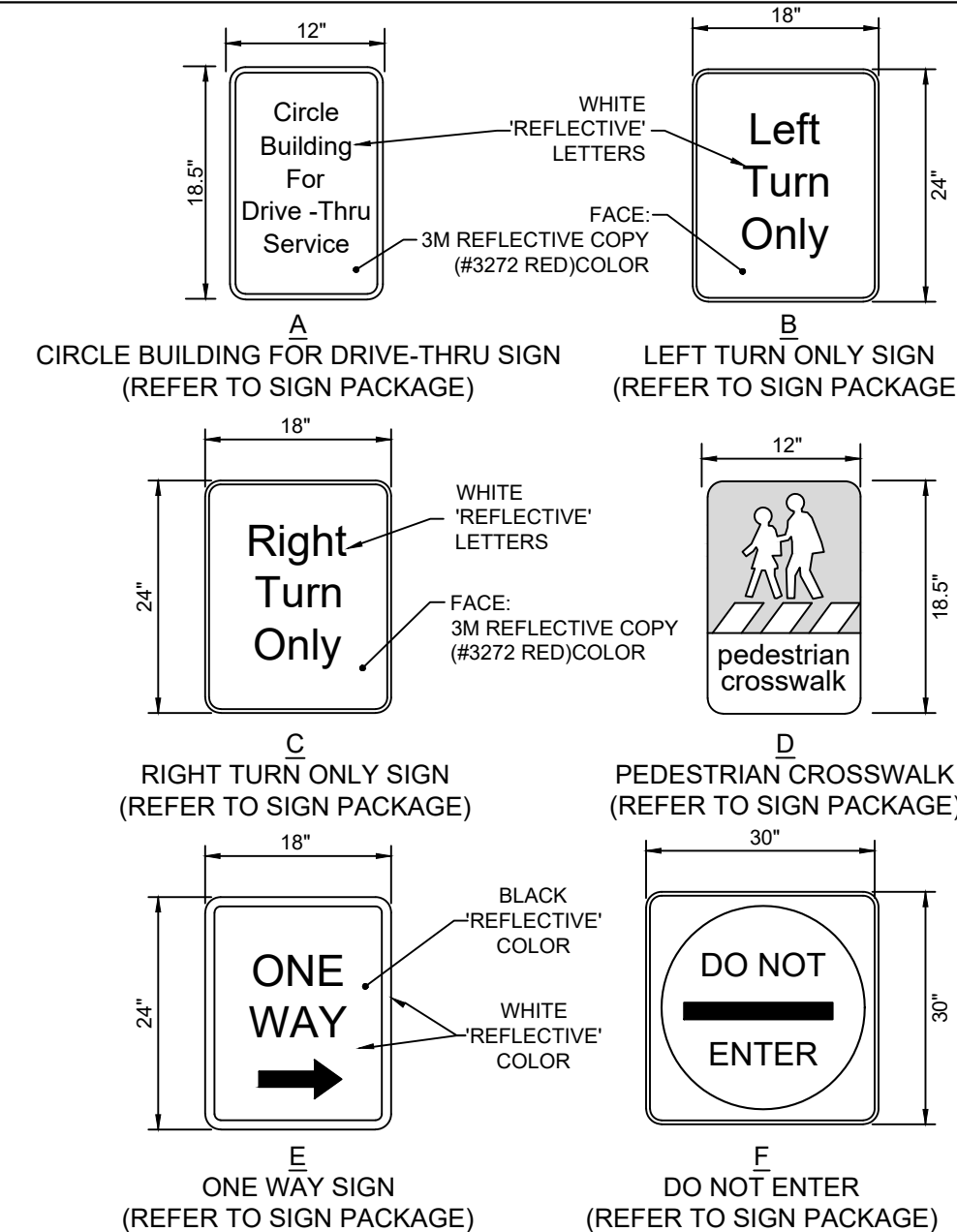
- NOTES:**
- JOINTS AT 5'-0" O.C. TOOLED 1/2" WIDE, 1" DEEP OR MAX. 1/2" DEEP WHICHEVER IS GREATER. EXPANSION JOINTS AT 20' MAX. & ALL P.C.s, UNLESS APPROVED OR INDICATED OTHERWISE ON PLAN VIEW JOINT PATTERN.

9 CONCRETE SIDEWALK
C4.0 NOT TO SCALE

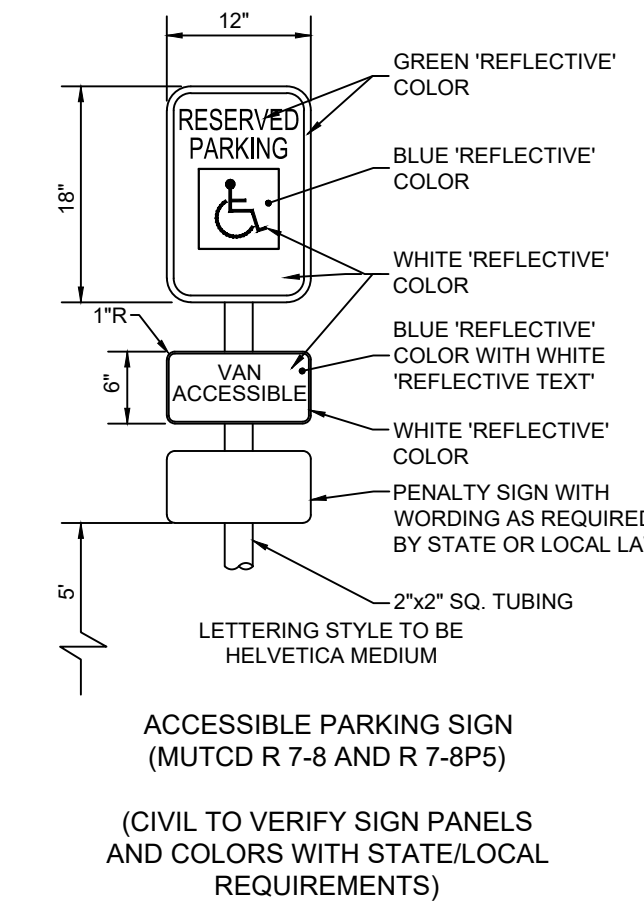


- NOTES:**
- SIGNS SHALL BE FABRICATED USING S/F 0.08 NON-ILLUMINATED ALUMINUM WITH VINYL COPY APPLIED TO THE FIRST SURFACE.
 - VERIFY COLORS WITH JURISDICTIONAL AUTHORITIES.

8 STOP SIGN
C4.0 NOT TO SCALE

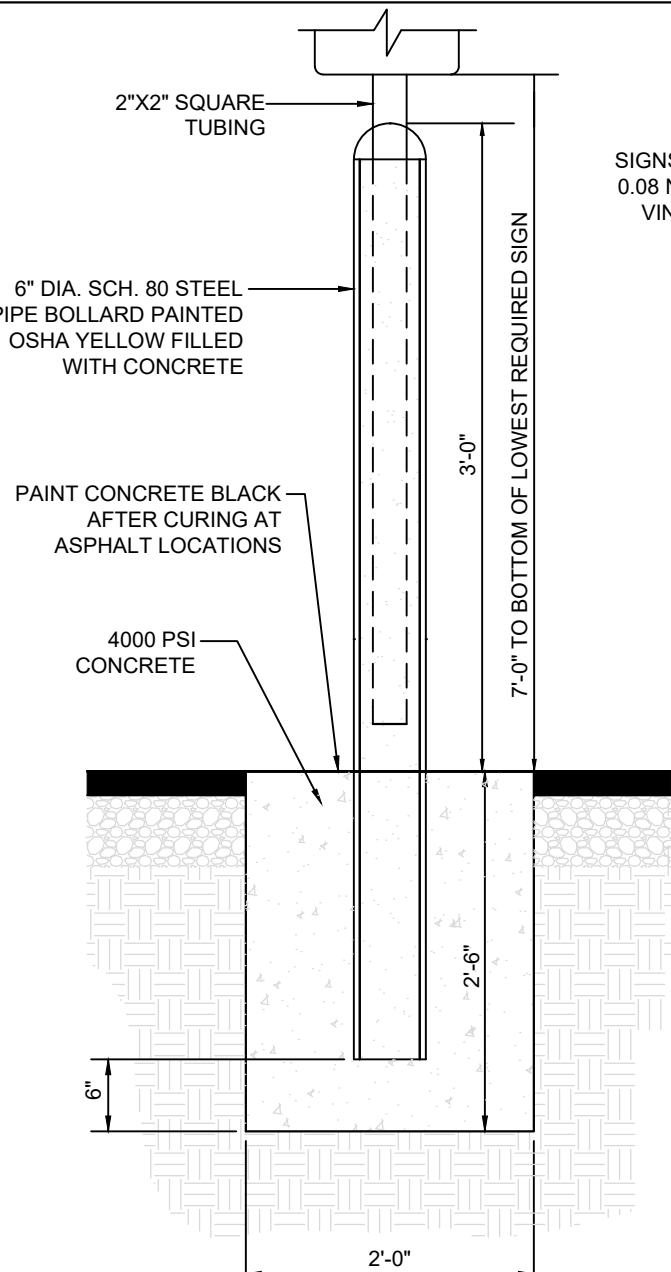


7 DIRECTIONAL SIGNAGE
C4.0 NOT TO SCALE



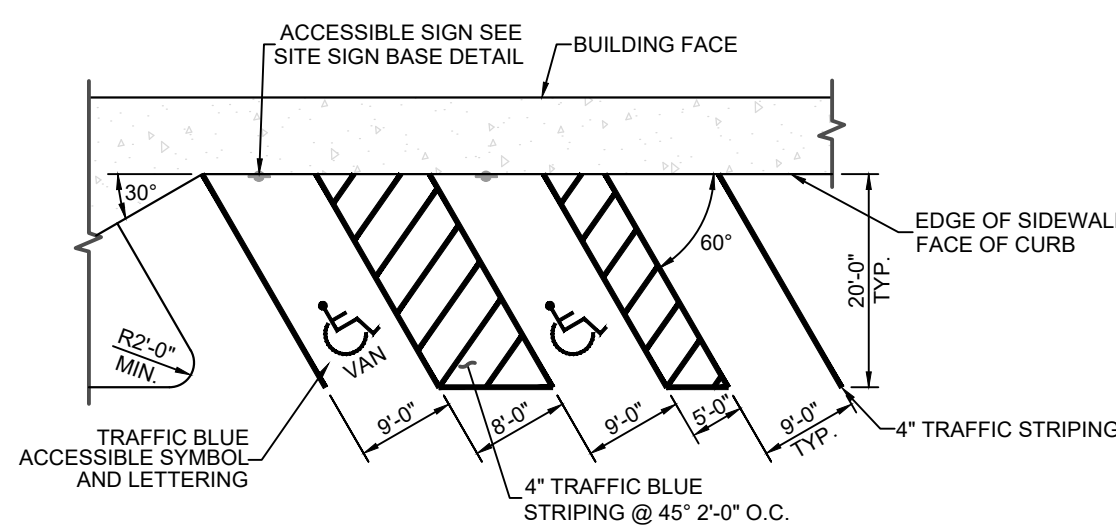
ACCESSIBLE PARKING SIGN (MUTCD R 7-8 AND R 7-8PS) (CIVIL TO VERIFY SIGN PANELS AND COLORS WITH STATE/LOCAL REQUIREMENTS)

6 ACCESSIBLE PARKING SIGN
C9.0 NOT TO SCALE



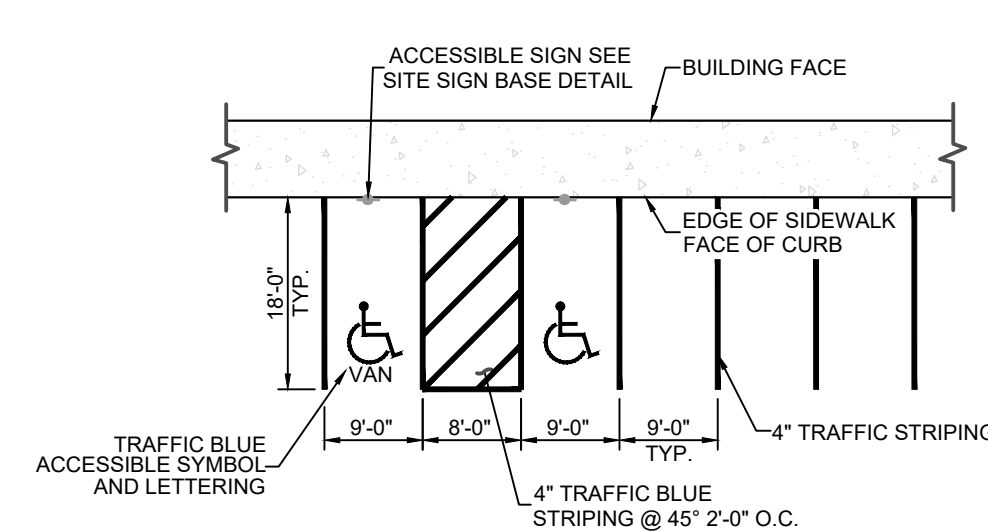
- NOTE:** SIGNS SHALL BE FABRICATED USING S/F 0.08 NON-ILLUMINATED ALUMINUM WITH VINYL COPY APPLIED TO THE FIRST SURFACE.
- NOTE:** VERIFY COLORS WITH LOCAL MUNICIPALITY.

5 BOLLARD MOUNTED SIGN
C9.0 NOT TO SCALE



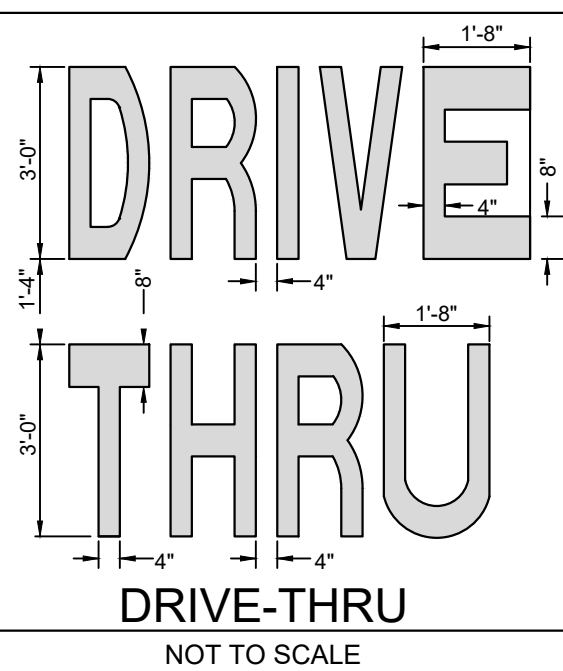
- NOTES:**
- ACCESSIBLE PARKING AND ACCESSIBLE AISLES SHALL NOT EXCEED 2% IN SLOPE IN ANY DIRECTION. IF ONLY ONE ACCESS ISLE IS INSTALLED, IT IS TO BE A VAN SIZE.
 - PARKING STALL DIMENSIONING SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITIES & ADA STANDARDS. SEE SITE PLAN FOR COMPLETE STRIPING LAYOUT.
 - GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS.
 - CONTRACTOR SHALL USE 4" WIDE WHITE REFLECTIVE PAINT FOR STRIPING ON ASPHALT PARKING LOTS.
 - CONTRACTOR SHALL USE 4" WIDE YELLOW REFLECTIVE PAINT FOR STRIPING ON CONCRETE PARKING LOTS.
 - NO WHEEL STOPS TO BE INSTALLED WHEN PARKING IS ADJACENT TO SIDEWALK.
 - ADA SIGNS IN BOLLARDS AND BOLLARDS SHALL BE INSTALLED WHEN PARKING IS ADJACENT TO FLUSH CURB OR A RAMP.
 - ALL DIMENSIONS ARE TO CENTERLINE OF STRIPE UNLESS NOTED OTHERWISE.
 - STRIPING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR

4 60° ANGLED PARKING STRIPING
C4.0 NOT TO SCALE



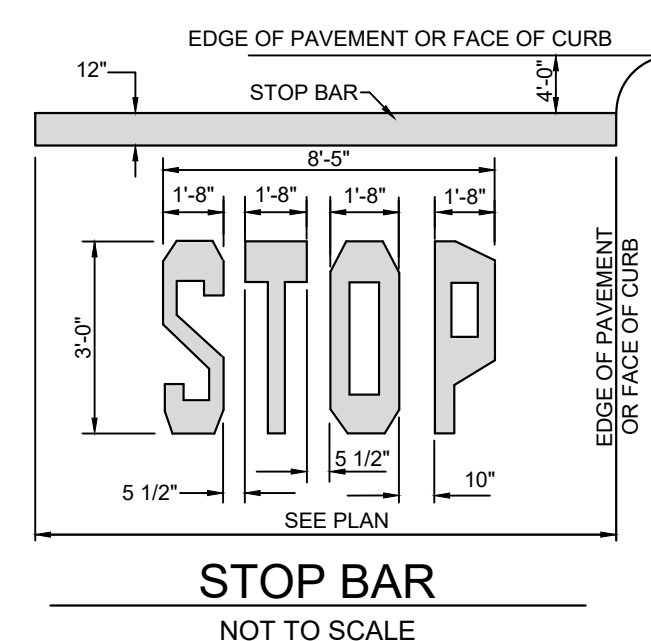
- NOTES:**
- ACCESSIBLE PARKING AND ACCESSIBLE AISLES SHALL NOT EXCEED 2% IN SLOPE IN ANY DIRECTION. IF ONLY ONE ACCESS ISLE IS INSTALLED, IT IS TO BE A VAN SIZE.
 - PARKING STALL DIMENSIONING SHALL BE IN ACCORDANCE WITH APPLICABLE GOVERNING AUTHORITIES & ADA STANDARDS. SEE SITE PLAN FOR COMPLETE STRIPING LAYOUT.
 - GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS.
 - CONTRACTOR SHALL USE 4" WIDE WHITE REFLECTIVE PAINT FOR STRIPING ON ASPHALT PARKING LOTS.
 - CONTRACTOR SHALL USE 4" WIDE YELLOW REFLECTIVE PAINT FOR STRIPING ON CONCRETE PARKING LOTS.
 - NO WHEEL STOPS TO BE INSTALLED WHEN PARKING IS ADJACENT TO SIDEWALK.
 - ADA SIGNS IN BOLLARDS AND BOLLARDS SHALL BE INSTALLED WHEN PARKING IS ADJACENT TO FLUSH CURB OR A RAMP.
 - ALL DIMENSIONS ARE TO CENTERLINE OF STRIPE UNLESS NOTED OTHERWISE.
 - STRIPING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR

3 90° PARKING STRIPING
C4.0 NOT TO SCALE

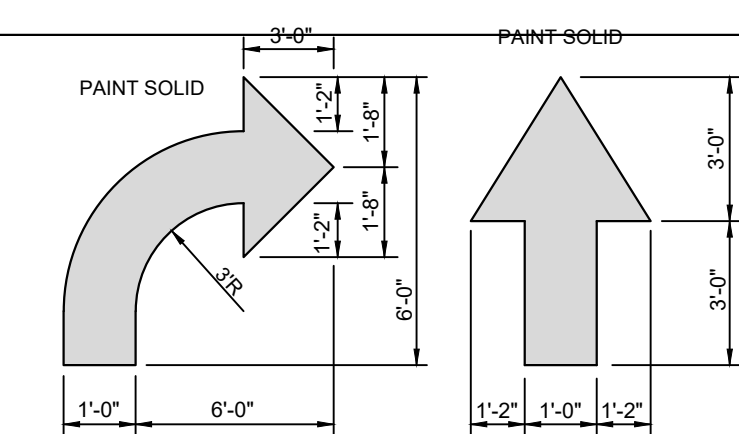


- NOTES:**
- GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS. SEE DETAIL.
 - PAVEMENT MARKINGS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE. UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.
 - IF STOP SIGNS ARE PROPOSED, "STOP" LETTERING ON STOP BAR DETAIL IS NOT REQUIRED.

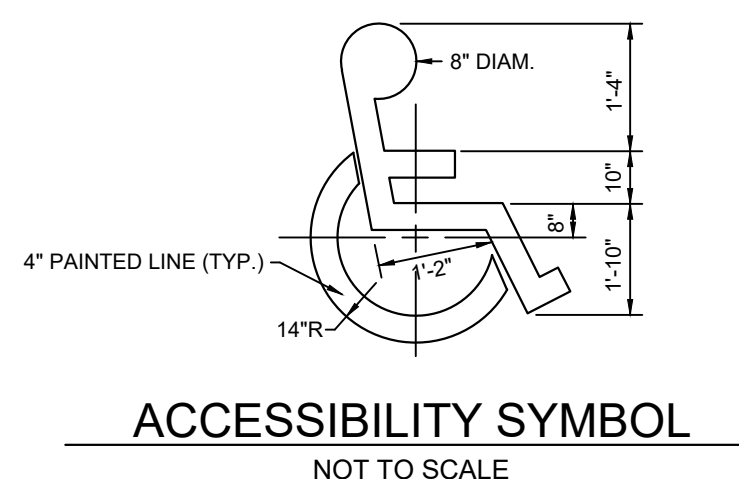
2 PAVEMENT MARKINGS - 2
C4.0 NOT TO SCALE



STOP BAR
NOT TO SCALE



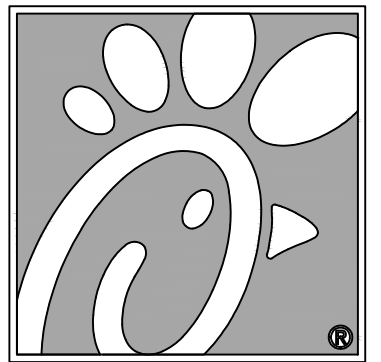
DIRECTIONAL ARROW
NOT TO SCALE



ACCESSIBILITY SYMBOL
NOT TO SCALE

- NOTES:**
- GENERAL CONTRACTOR SHALL REFER TO PARKING LOT STRIPING SPECIFICATIONS. SEE DETAIL.
 - PAVEMENT MARKINGS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 - CONTRACTOR SHALL USE WHITE REFLECTIVE PAINT ON ASPHALT & YELLOW REFLECTIVE PAINT ON CONCRETE. UNLESS UPON VERIFICATION BY THE GENERAL CONTRACTOR IT IS DETERMINED THAT LOCAL, STATE, OR ADA CODES DIFFER, IN WHICH CASE THESE CODES SHALL GOVERN.

1 PAVEMENT MARKINGS - 1
C4.0 NOT TO SCALE

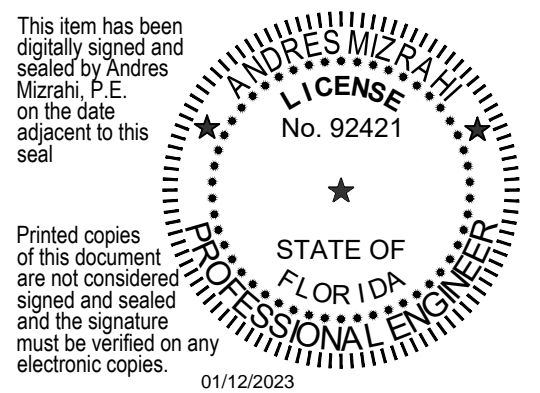


5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 2642
910 SE 17th St, Suite 302
Fort Lauderdale, FL 33316
Phone: (954) 344-6468
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



01/12/2023
ANDREW MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

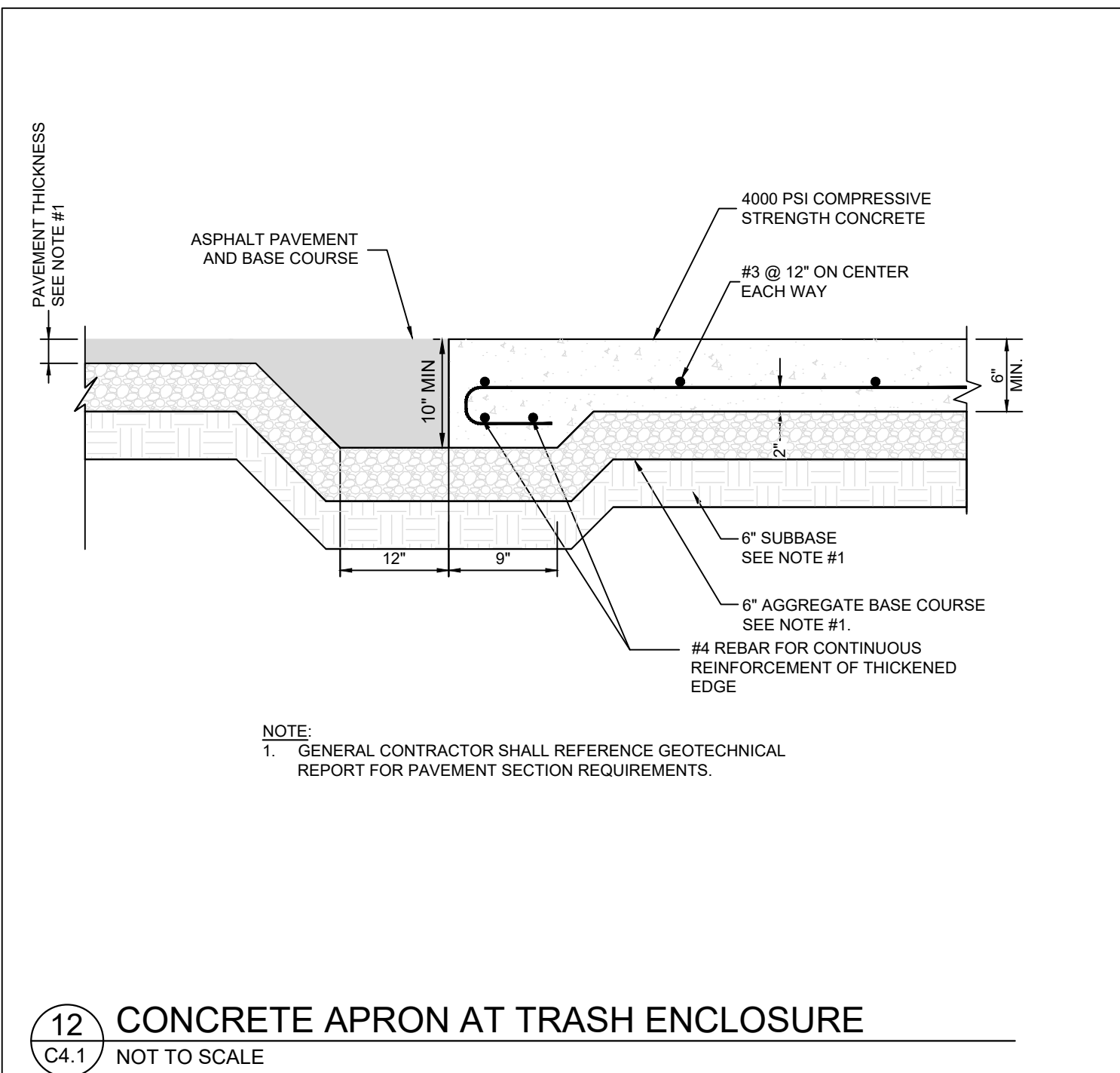
FSU# 5069

NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

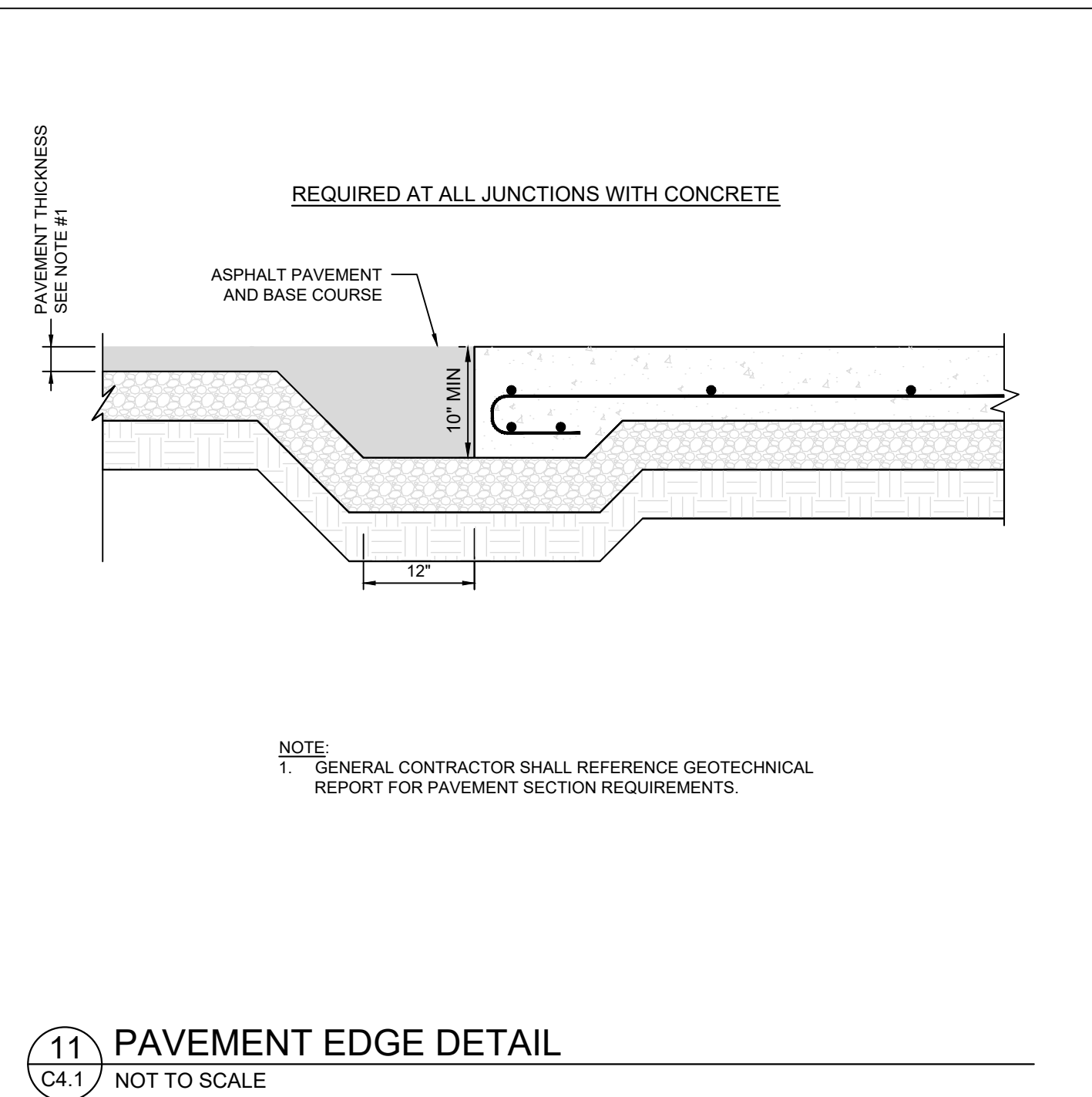
CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

CHICK-FIL-A STANDARD
DETAILS
SHEET NUMBER

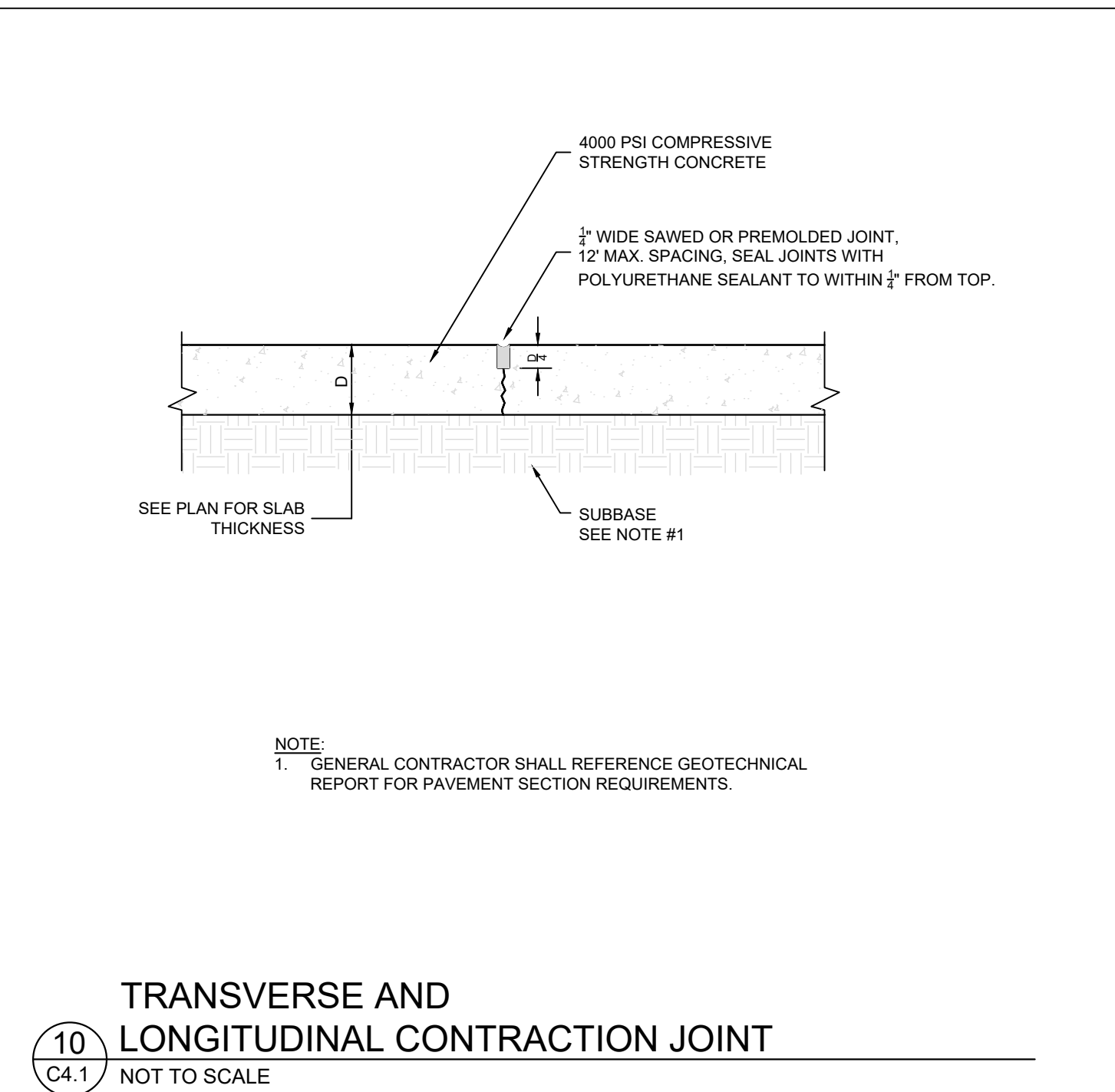
PERMIT **C-4.0**



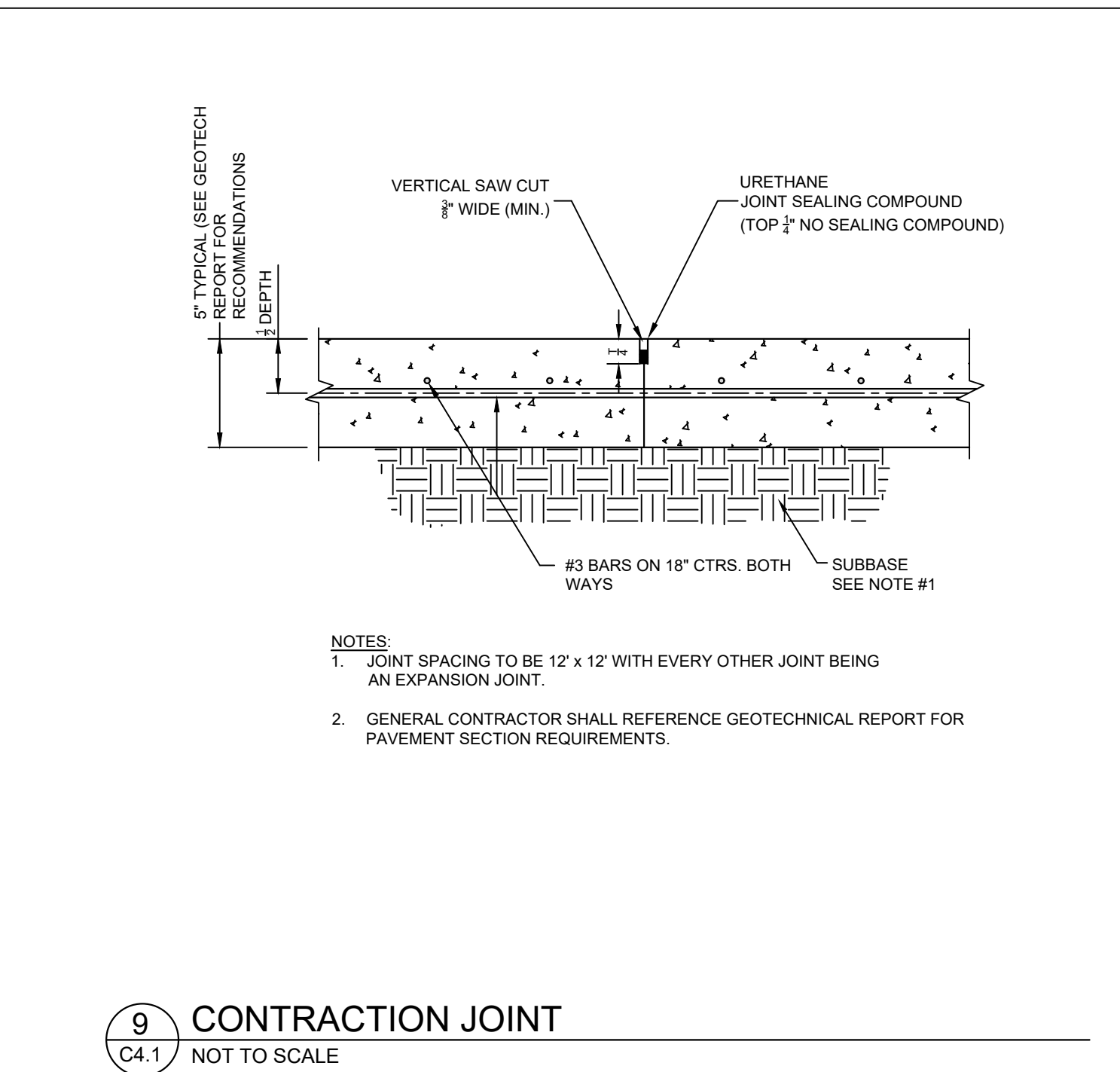
12 CONCRETE APRON AT TRASH ENCLOSURE
C4.1 NOT TO SCALE



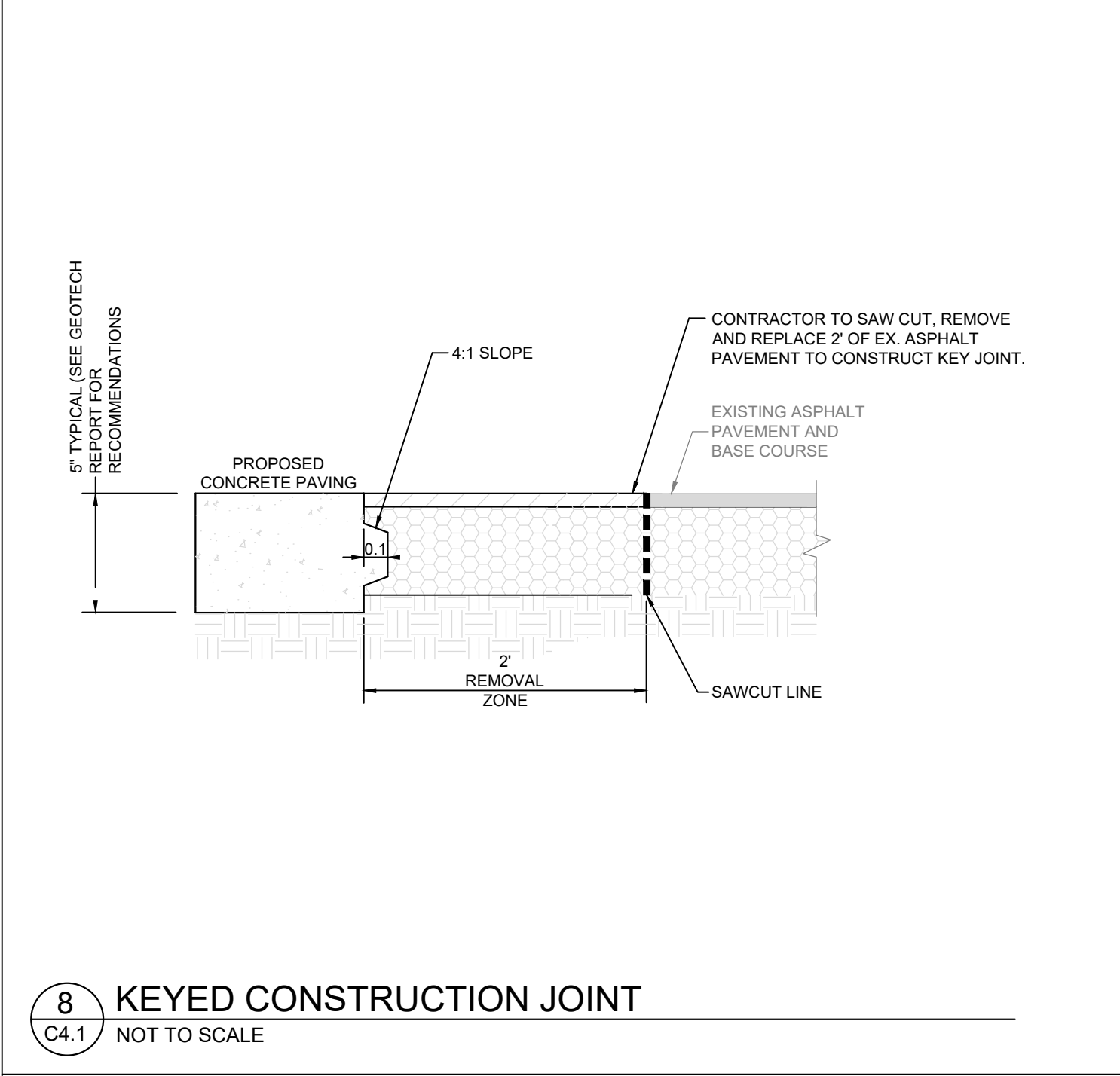
11 PAVEMENT EDGE DETAIL
C4.1 NOT TO SCALE



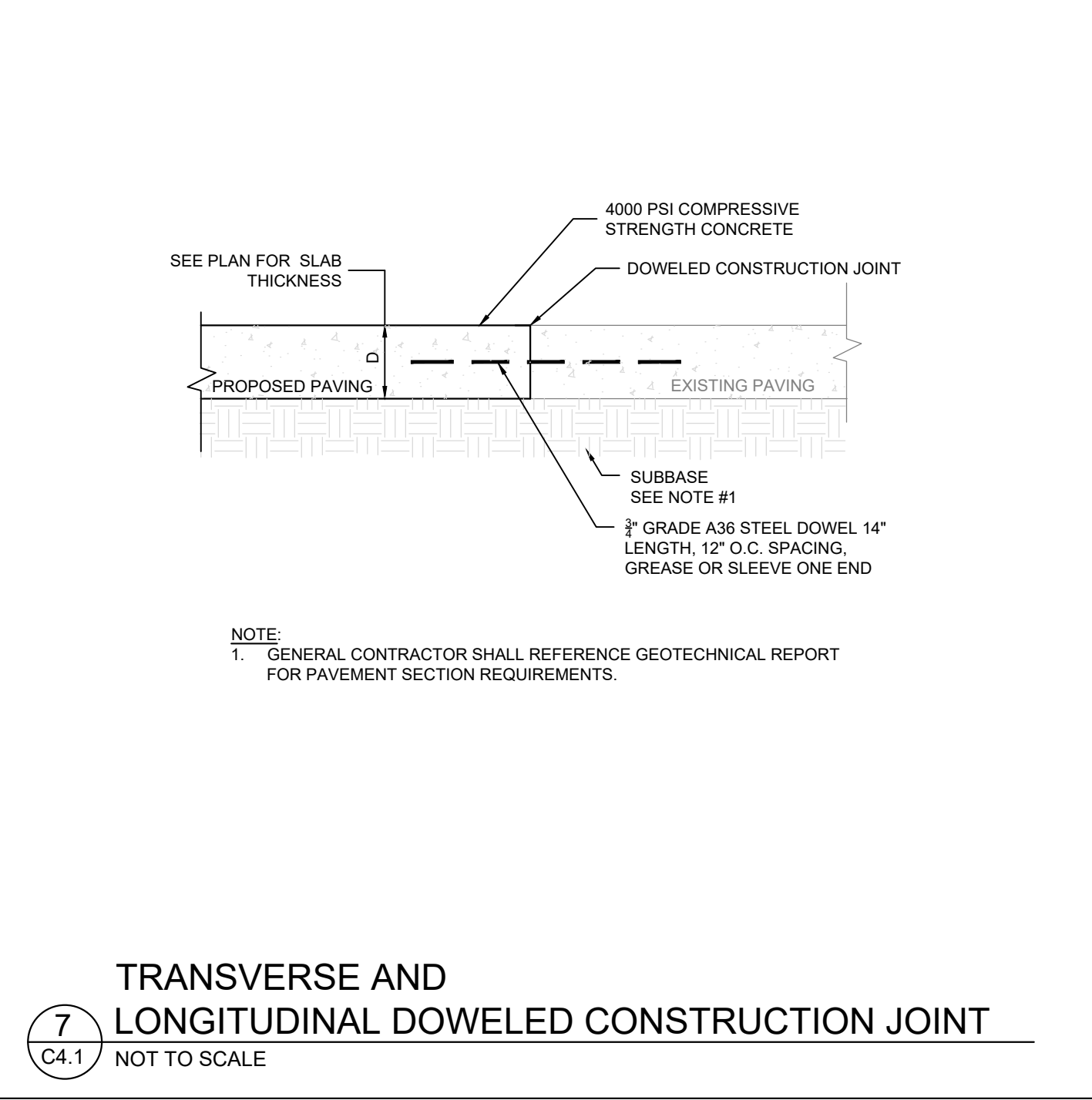
10 TRANSVERSE AND LONGITUDINAL CONTRACTION JOINT
C4.1 NOT TO SCALE



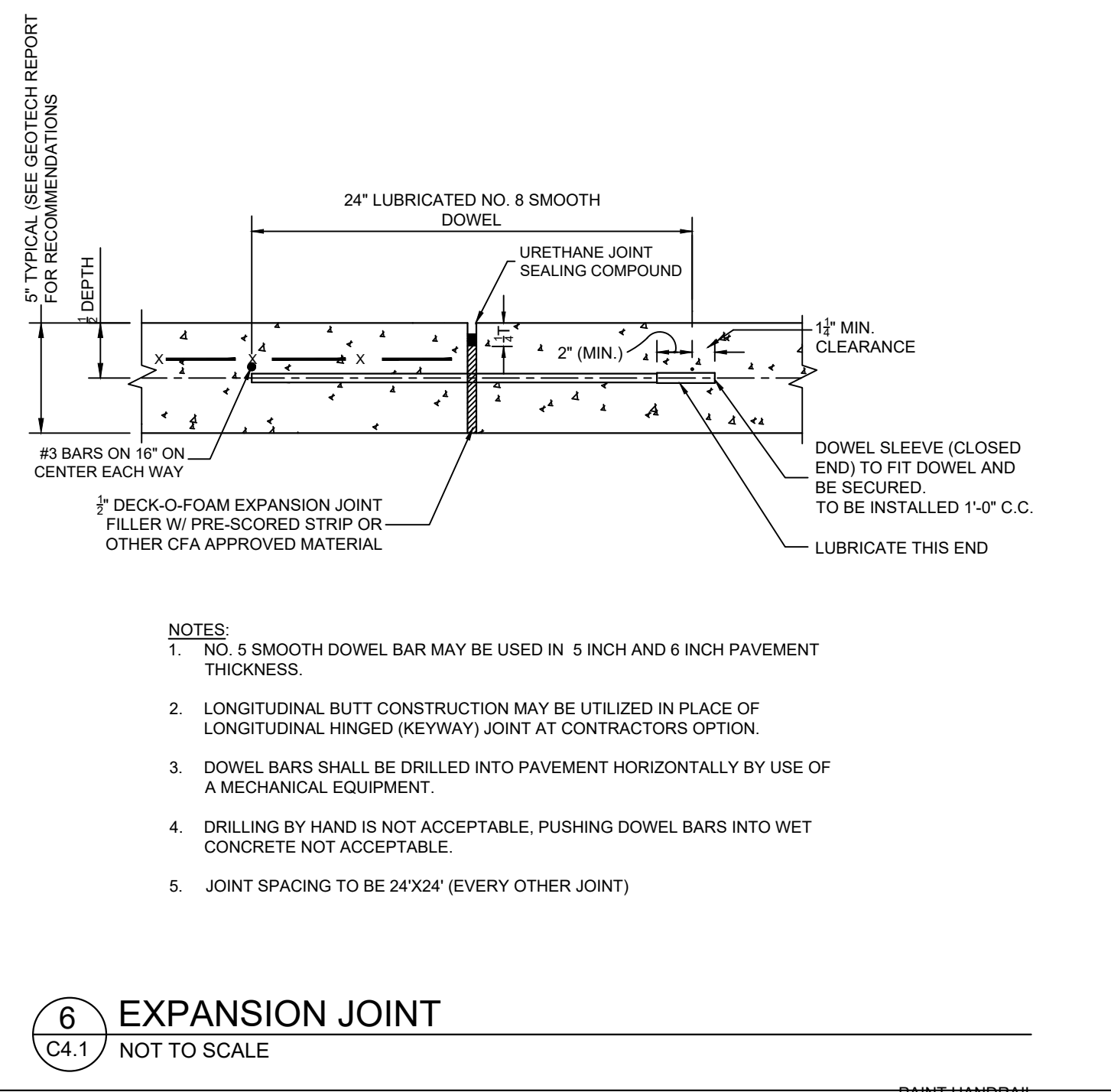
9 CONTRACTION JOINT
C4.1 NOT TO SCALE



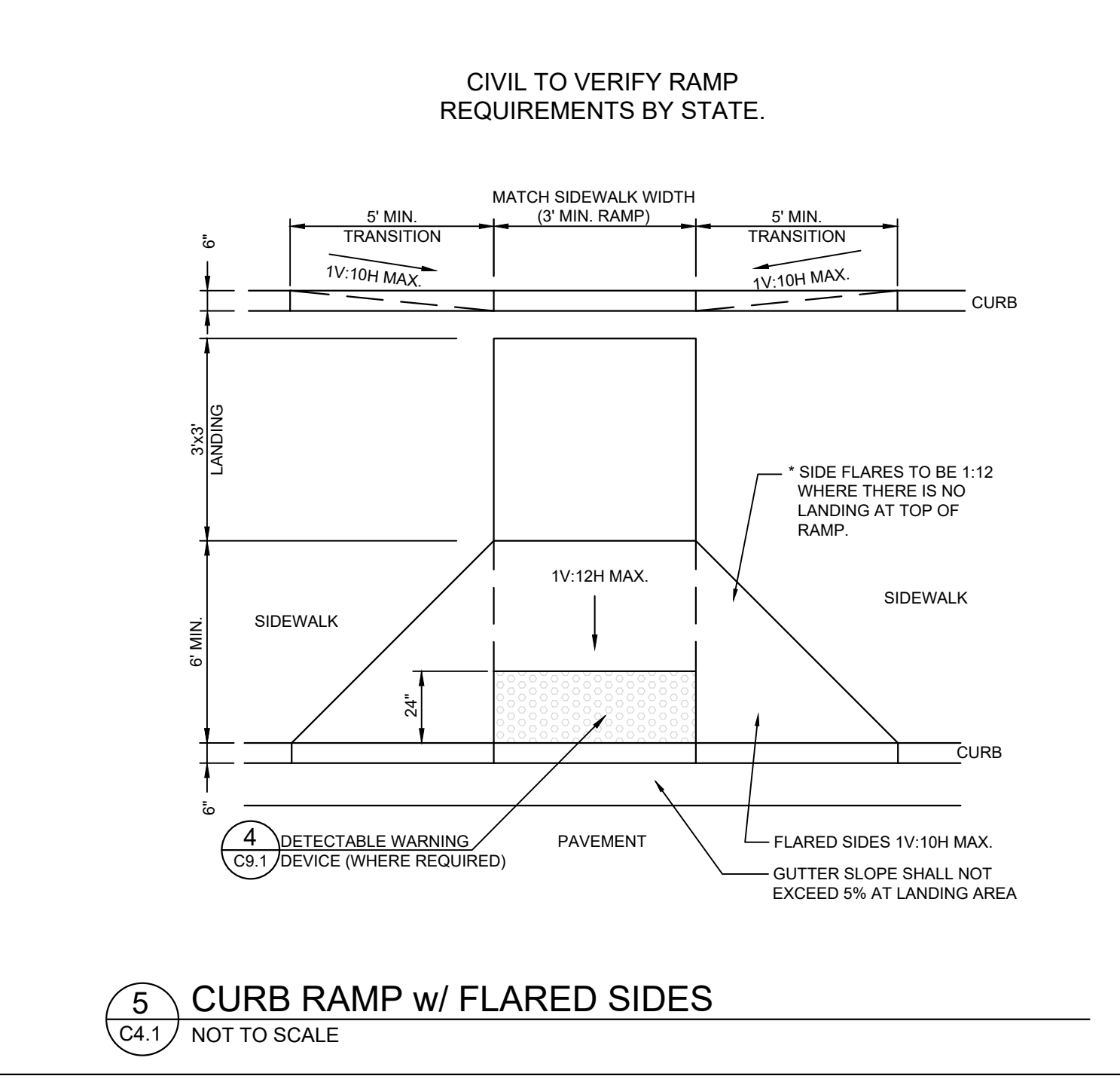
8 KEYED CONSTRUCTION JOINT
C4.1 NOT TO SCALE



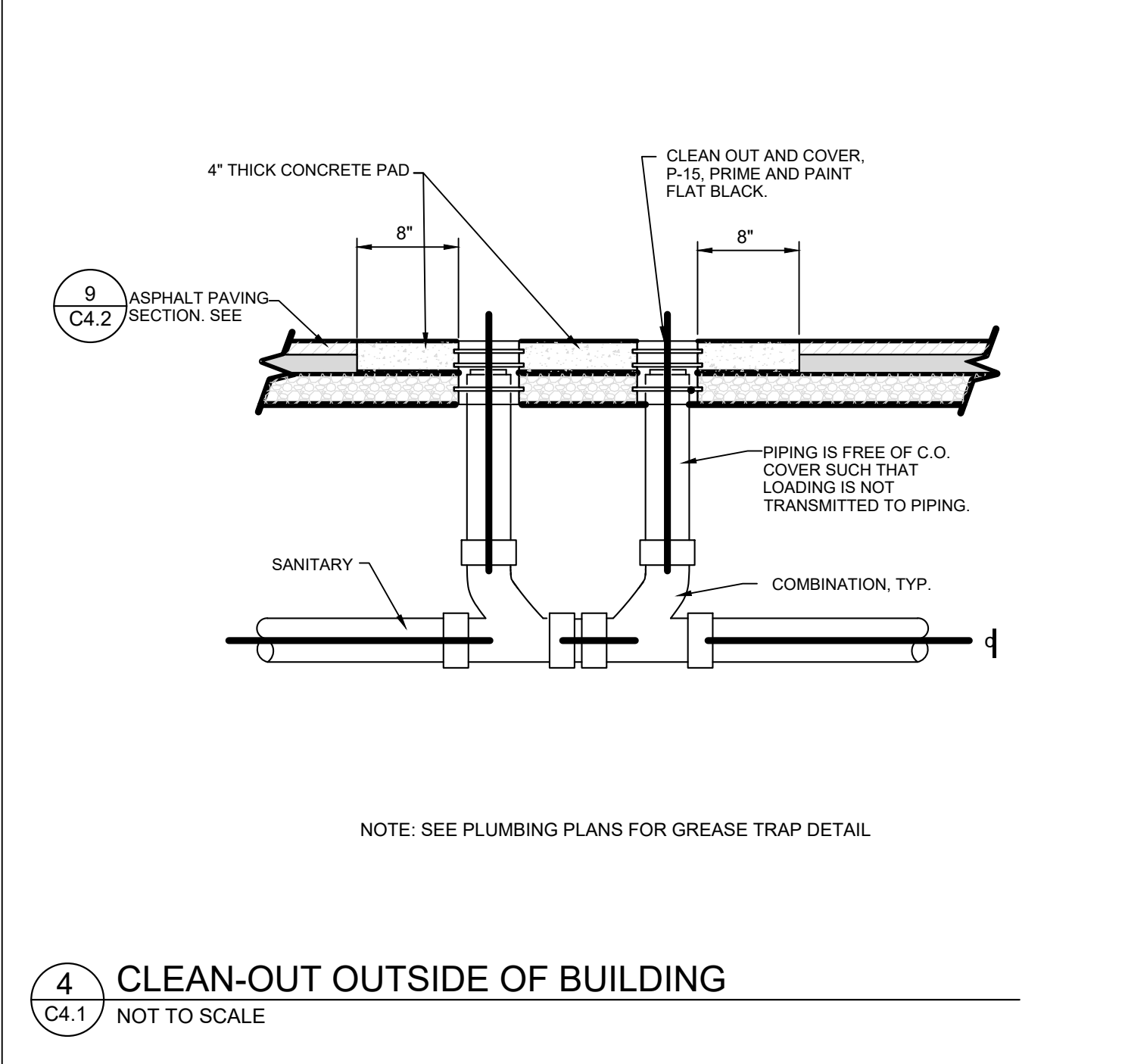
7 TRANSVERSE AND LONGITUDINAL DOWELED CONSTRUCTION JOINT
C4.1 NOT TO SCALE



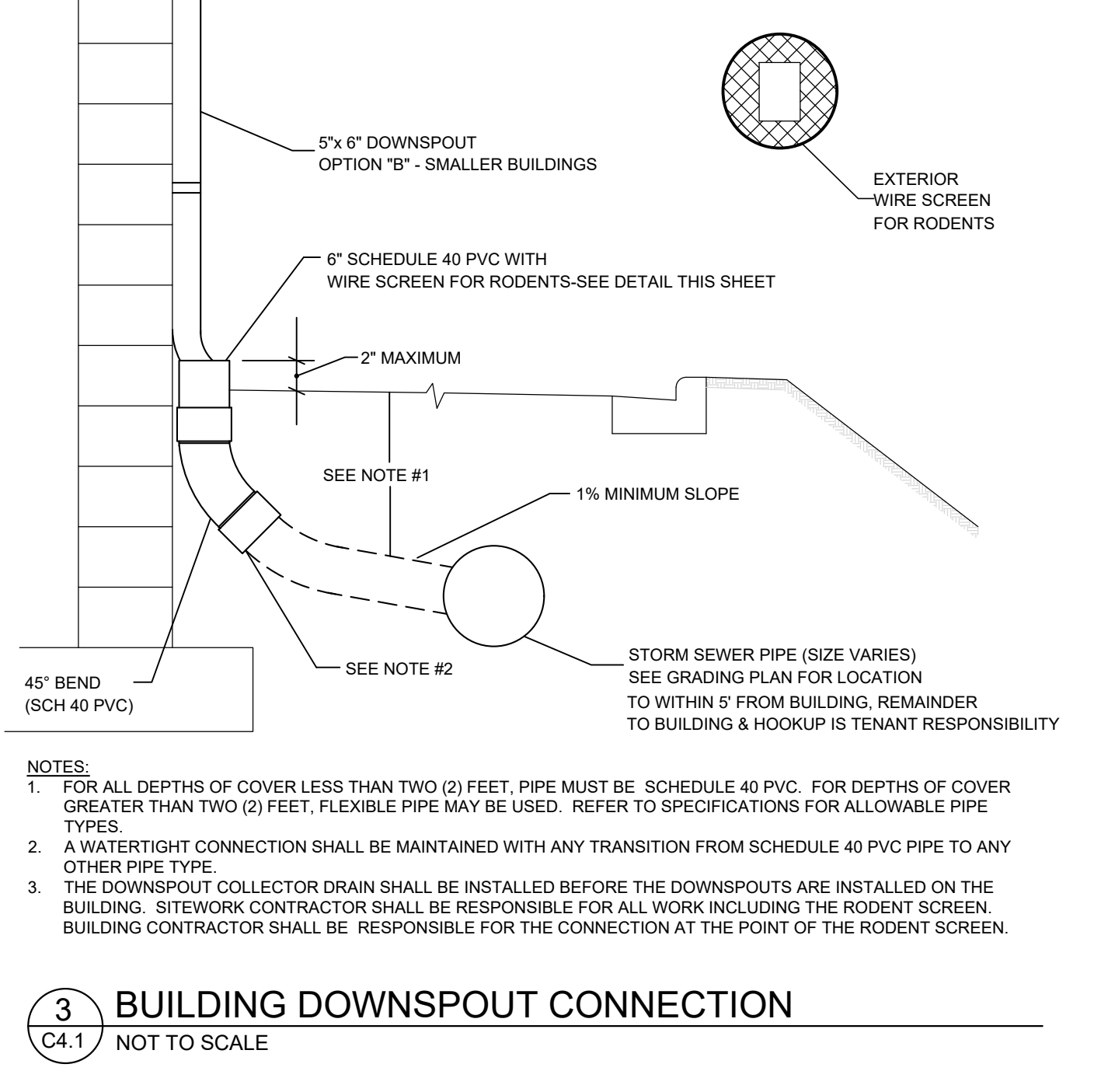
6 EXPANSION JOINT
C4.1 NOT TO SCALE



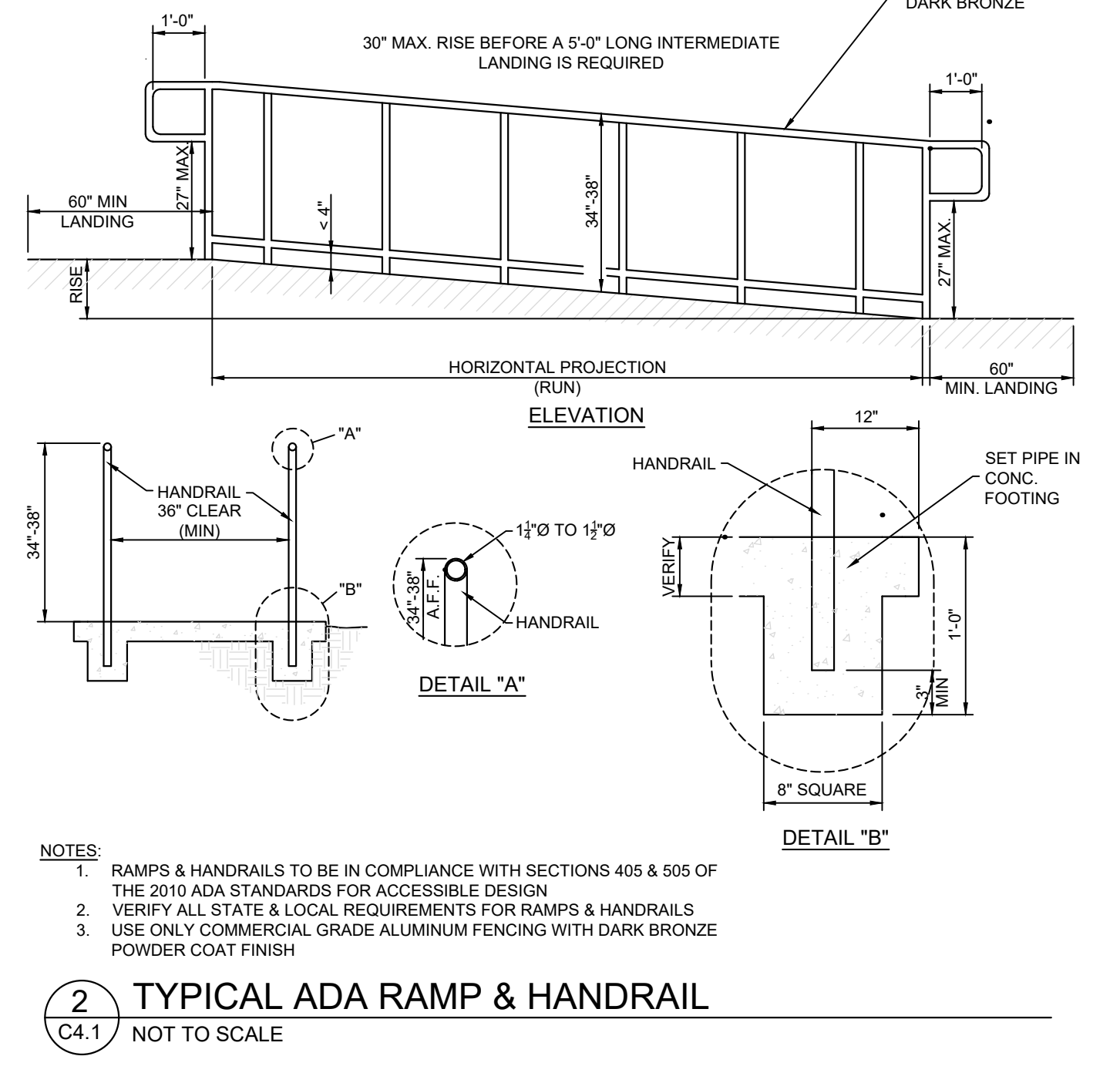
5 CURB RAMP w/ FLARED SIDES
C4.1 NOT TO SCALE



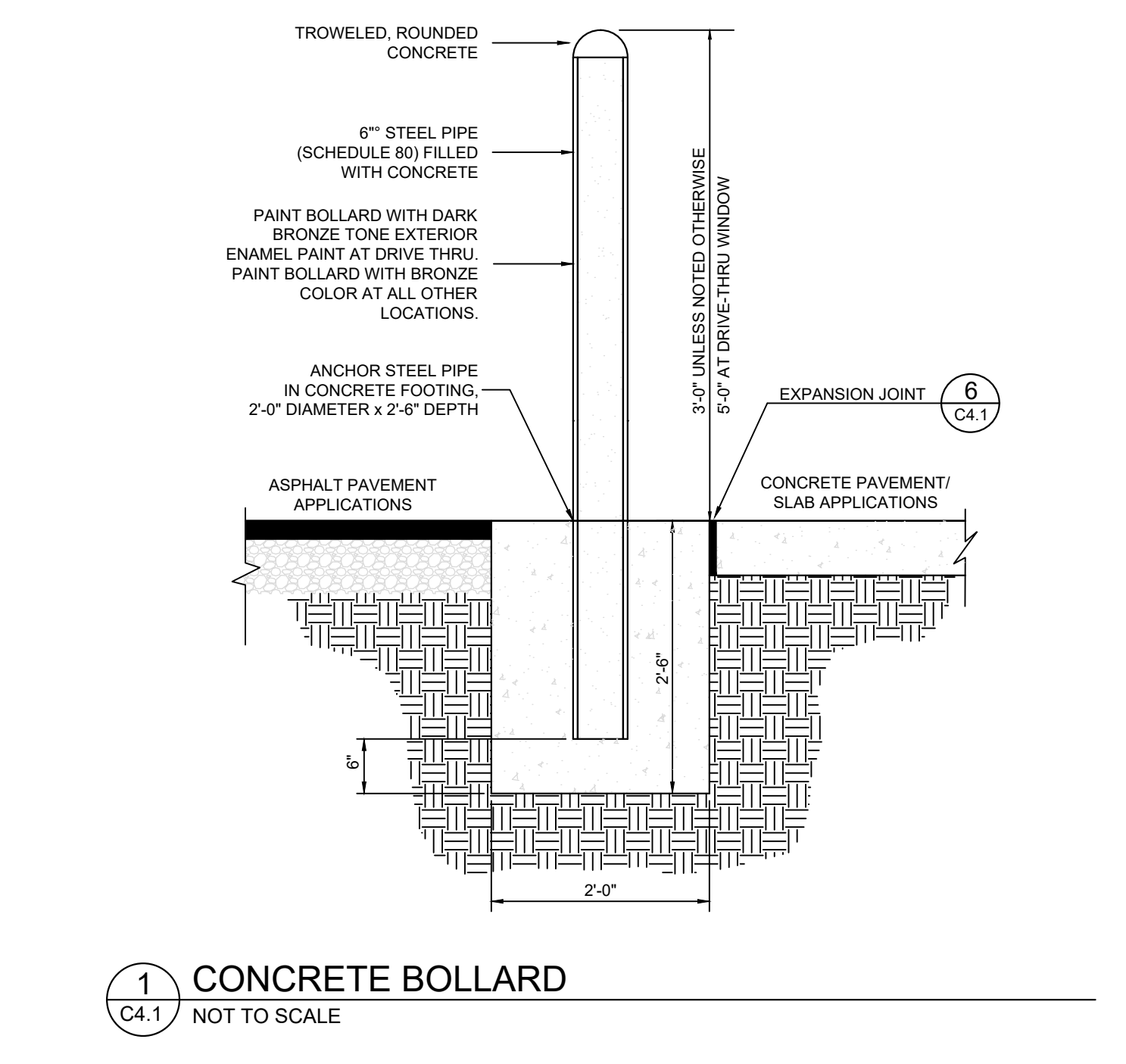
4 CLEAN-OUT OUTSIDE OF BUILDING
C4.1 NOT TO SCALE



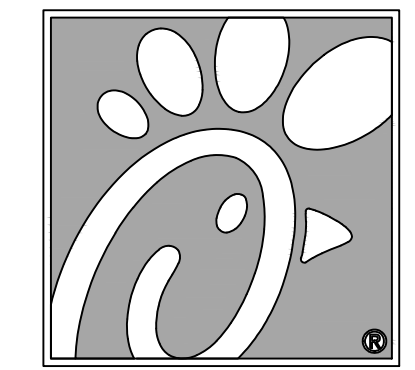
3 BUILDING DOWNSPOUT CONNECTION
C4.1 NOT TO SCALE



2 TYPICAL ADA RAMP & HANDRAIL
C4.1 NOT TO SCALE



1 CONCRETE BOLLARD
C4.1 NOT TO SCALE



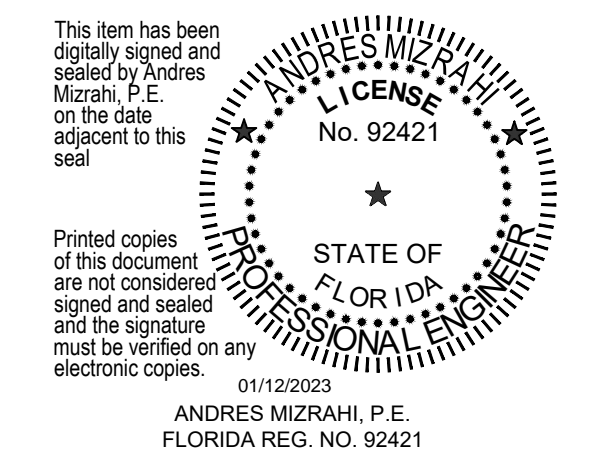
Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 2642
610 S.E. 17th St. Suite 302
Fort Lauderdale, FL 33316
Phone: (954) 344-8468
www.bowman.com
© 2021 Bowman Consulting Group LLC

Seal



Printed copies of this document are not considered signed and sealed until the date adjacent to this seal.

01/12/2023

ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

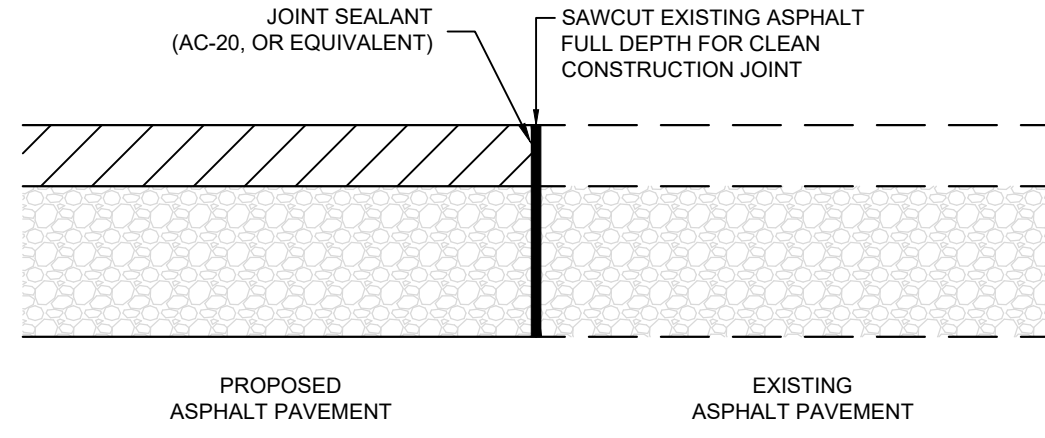
NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

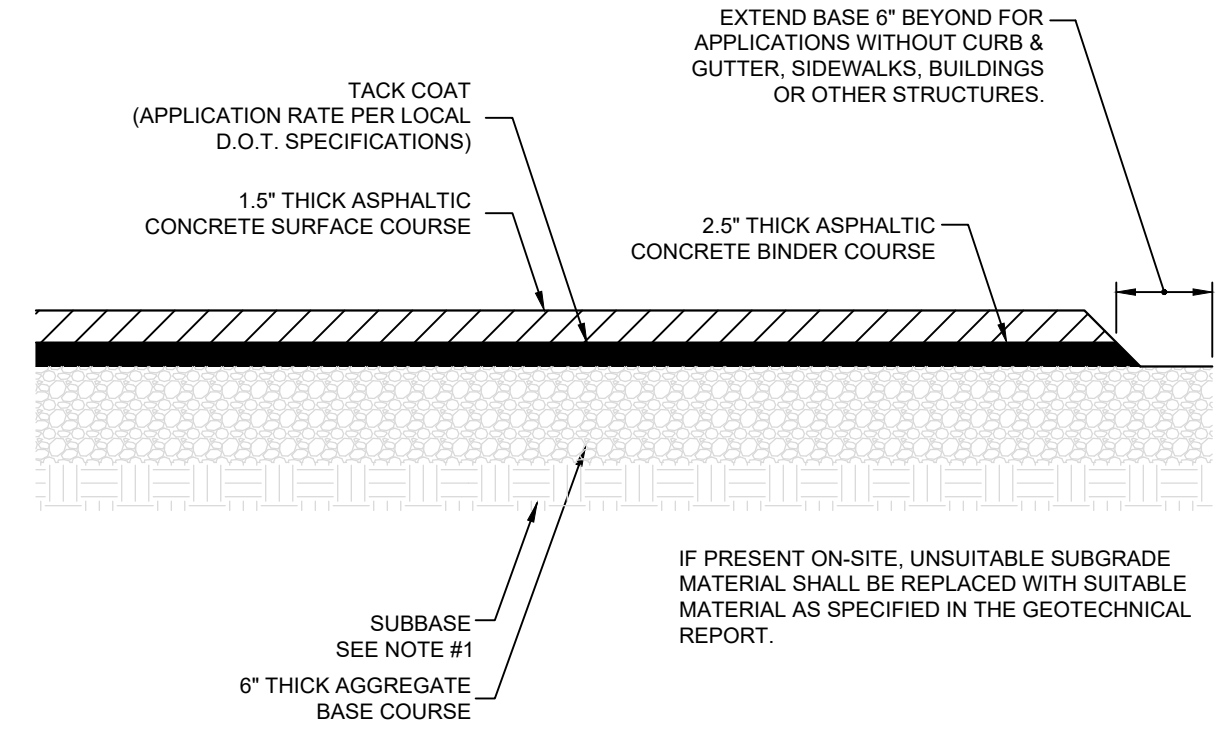
Information contained on this drawing and all digital files produced for drive content projects shall be reproduced in any manner without express written or verbal consent from the author and/or project representatives.

SHEET
CHICK-FIL-A STANDARD DETAILS
SHEET NUMBER
C-4.1

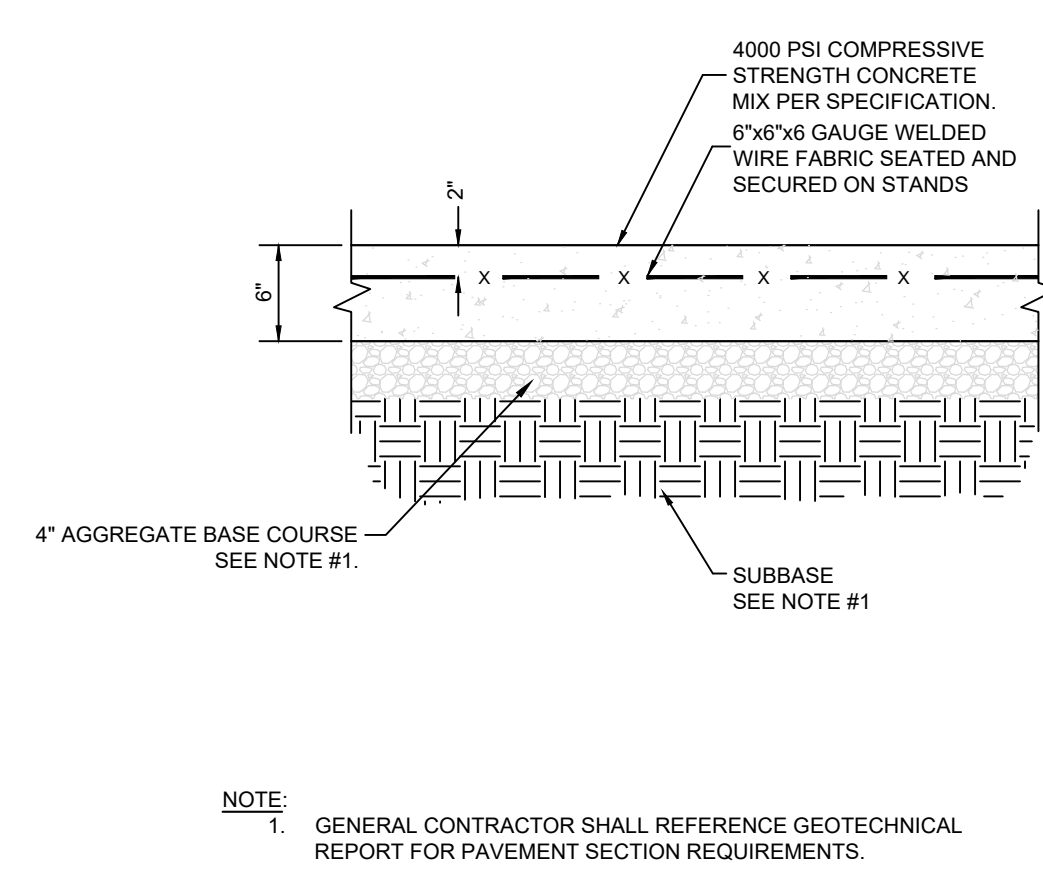
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGN REQUIREMENTS HEREIN, IS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY PORTIONS HEREIN FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION AND SIGNATURE OF BOWMAN CONSULTING GROUP, INC. IS STRICTLY PROHIBITED. BOWMAN CONSULTING GROUP, INC. IS NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DOCUMENT.



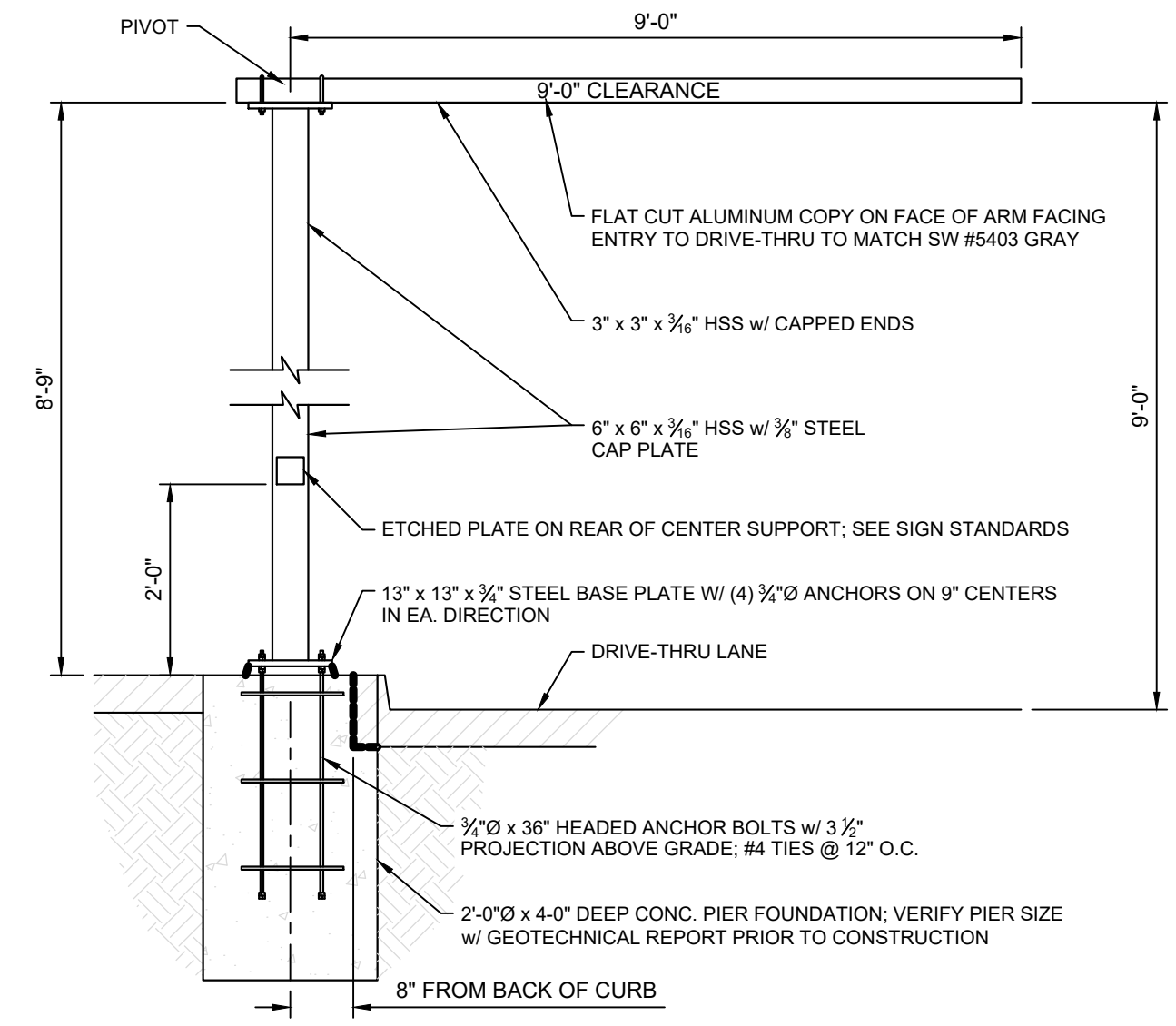
10 BUTT JOINT
C4.2 NOT TO SCALE



9 TYPICAL HMAC PAVEMENT SECTION
C4.2 NOT TO SCALE

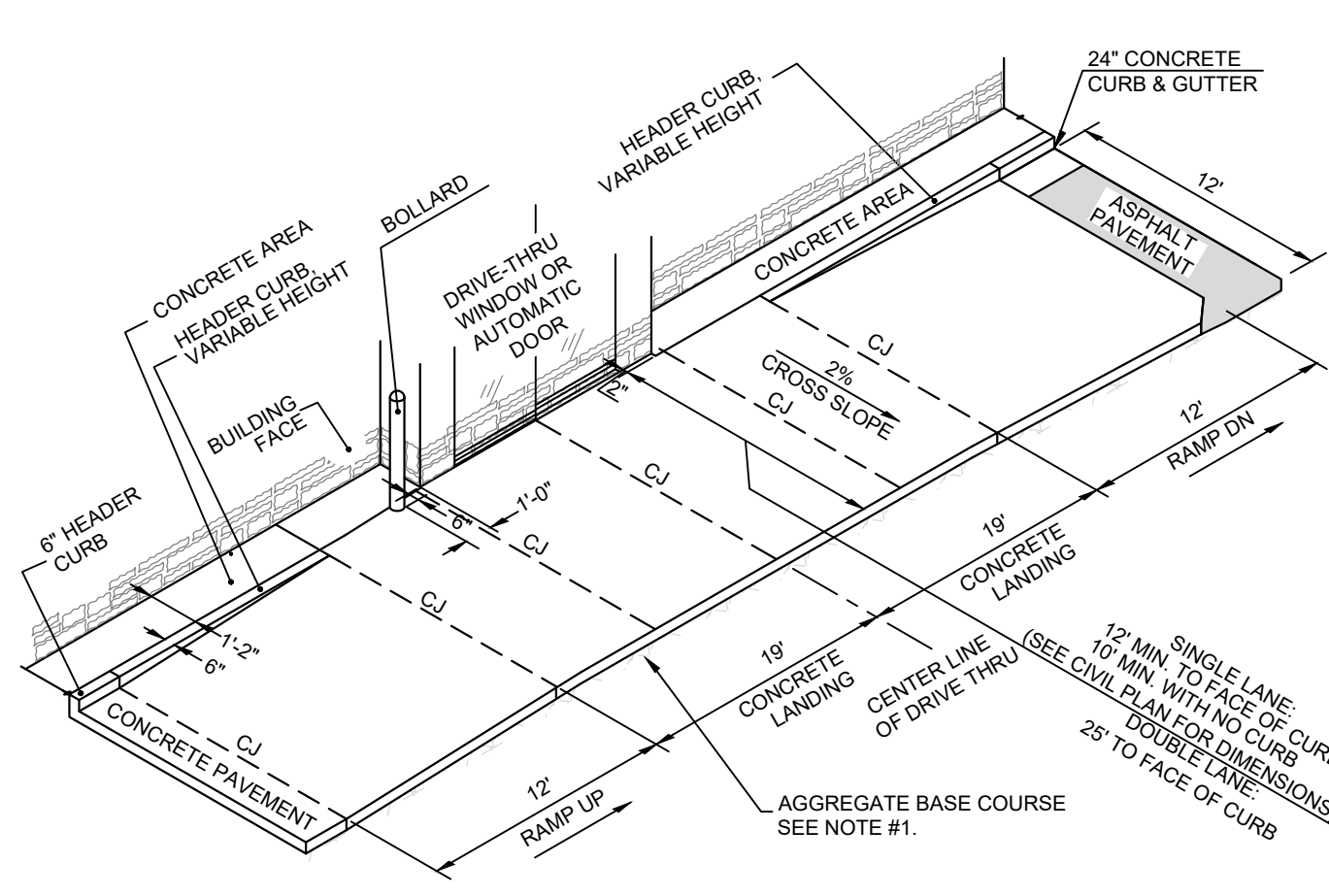


8 CONCRETE PAVEMENT DRIVE-THRU LANE
C4.2 NOT TO SCALE

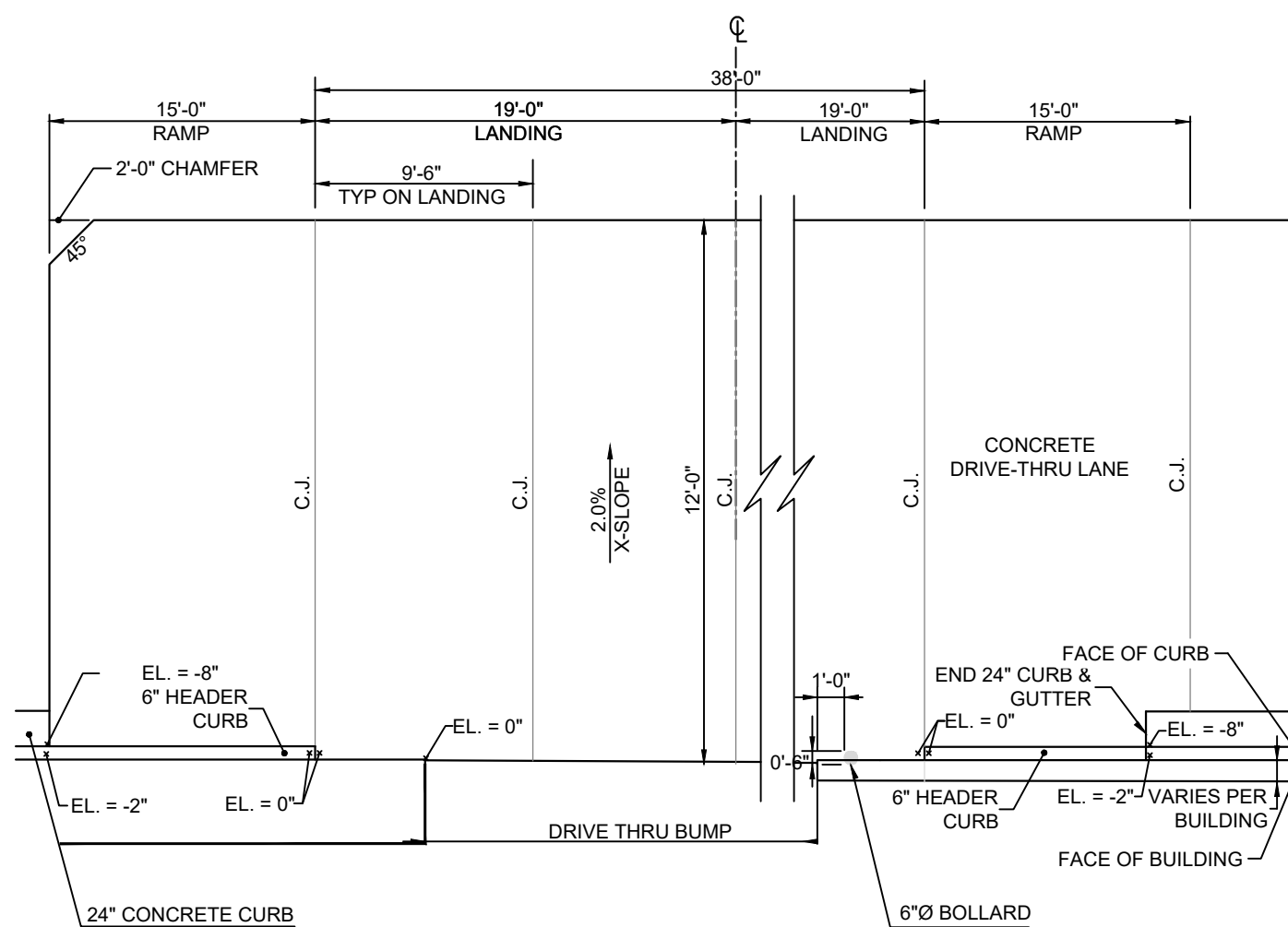


NOTES:
1. ENTIRE CLEARANCE BAR & HARDWARE TO BE POWDER COATED QPC P-820 MATTE BLACK FINISH
2. CLEARANCE BAR ARM TO ROTATE WHEN STRUCK & RETURN TO ORIGINAL POSITION
3. COORDINATE w/ THE ARCHITECT & STRUCTURAL ENGINEER

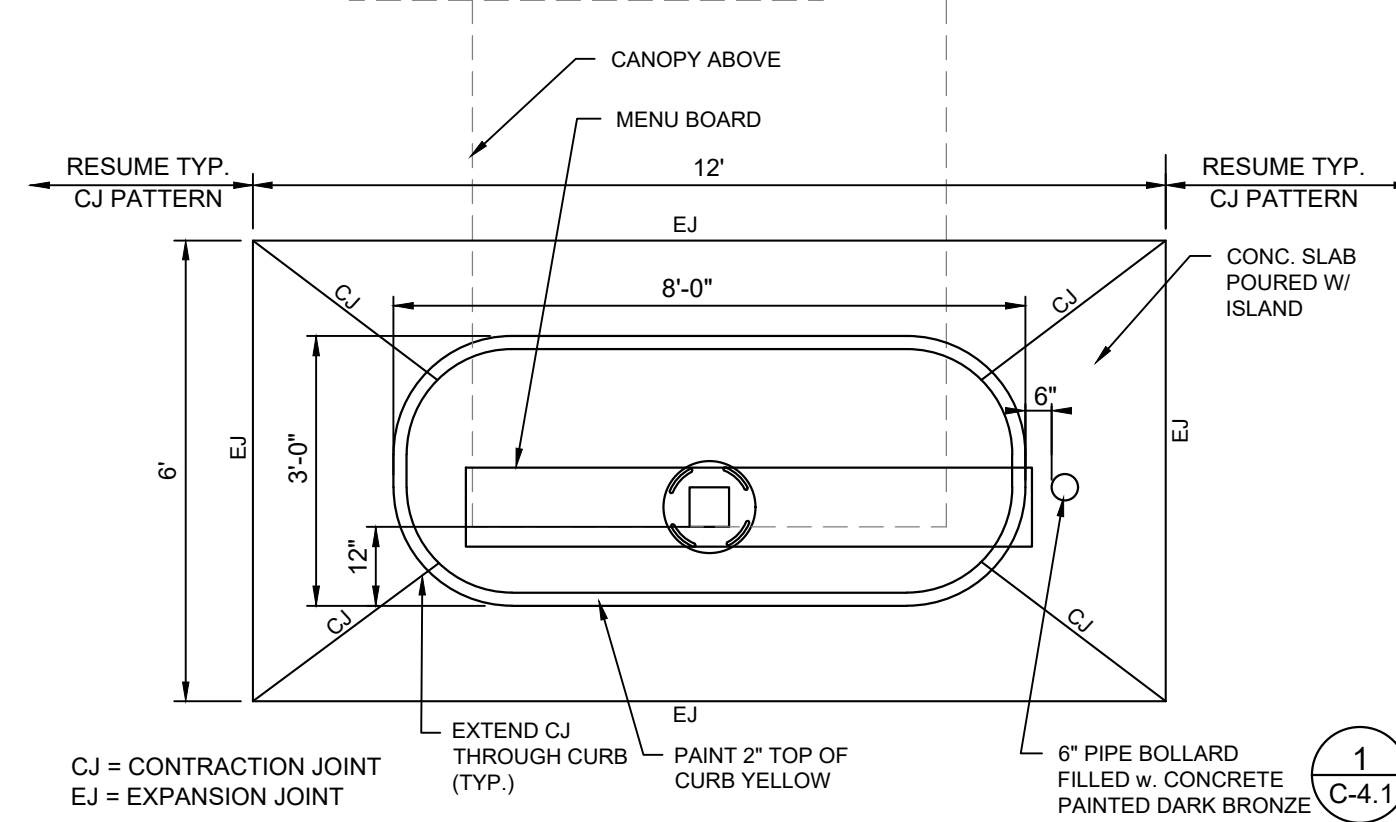
7 DRIVE-THRU CLEARANCE BAR
C4.2 NOT TO SCALE



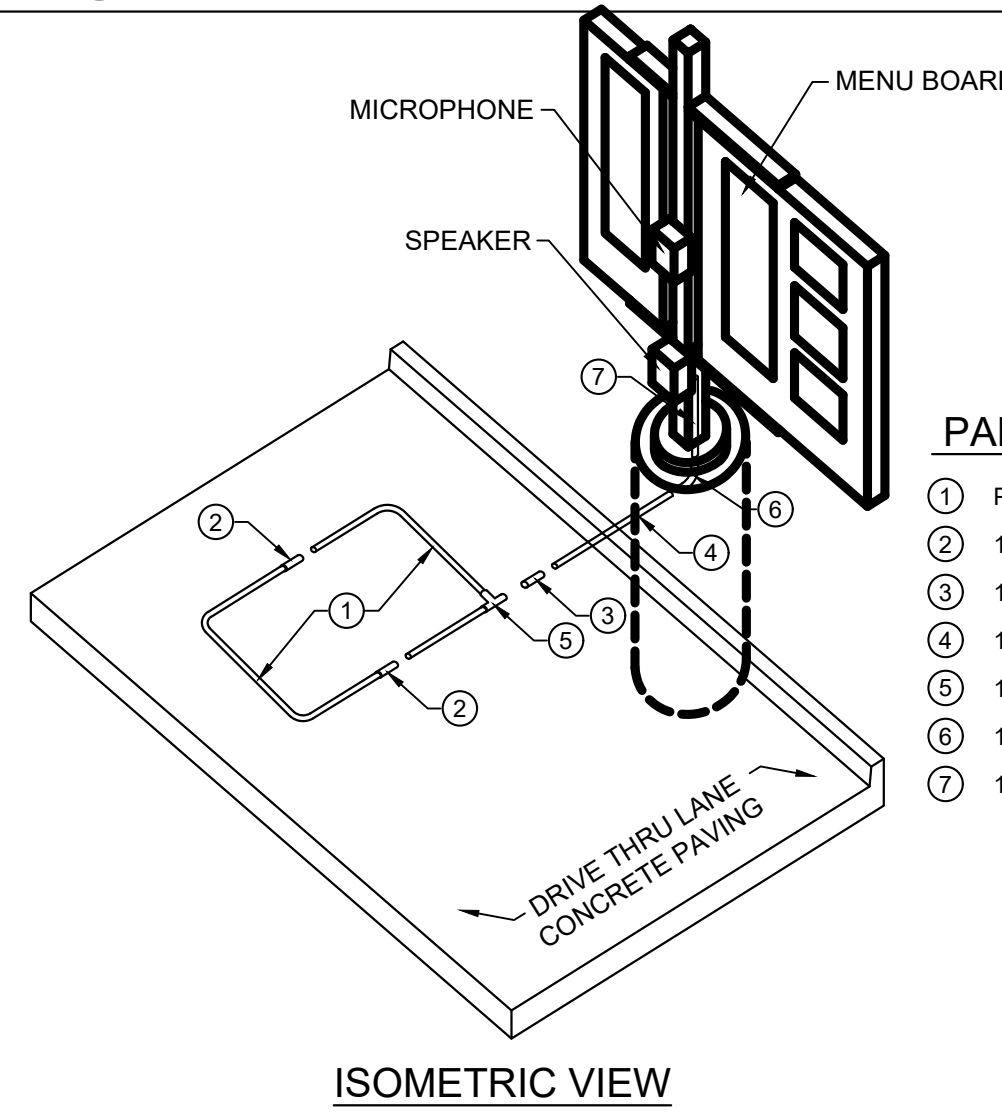
6 DRIVE-THRU ISOMETRIC
C4.2 NOT TO SCALE



5 DRIVE-THRU PLAN - FLUSH WITH FFE
C4.2 NOT TO SCALE

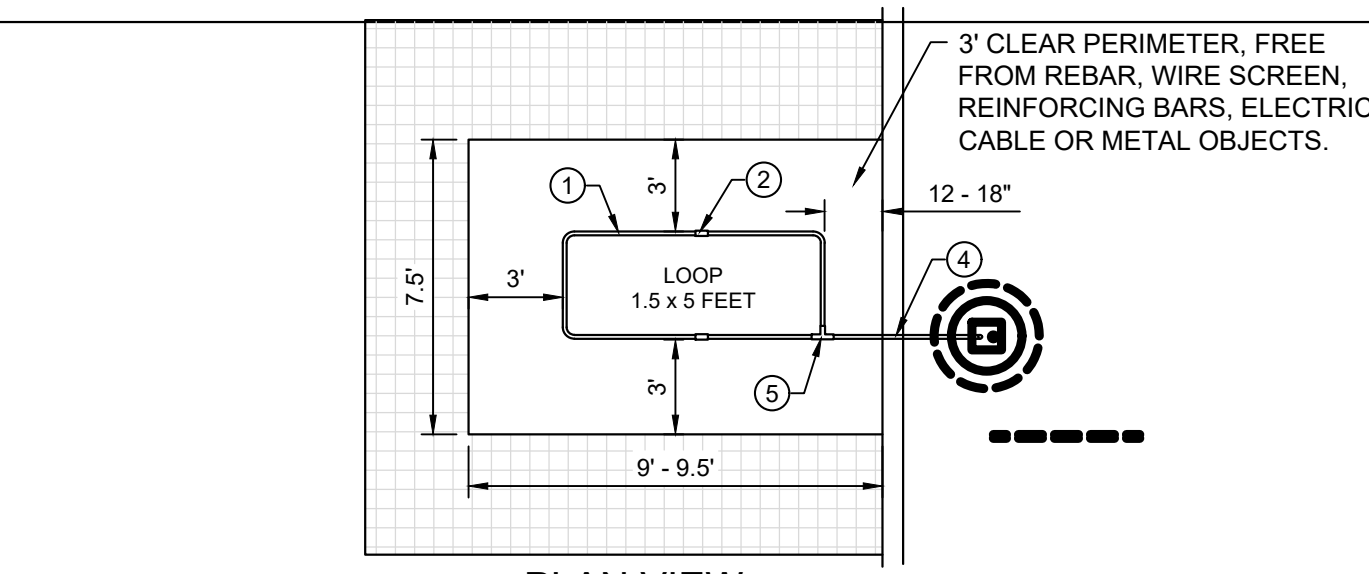


4 DRIVE-THRU ORDER POINT ISLAND
C4.2 NOT TO SCALE

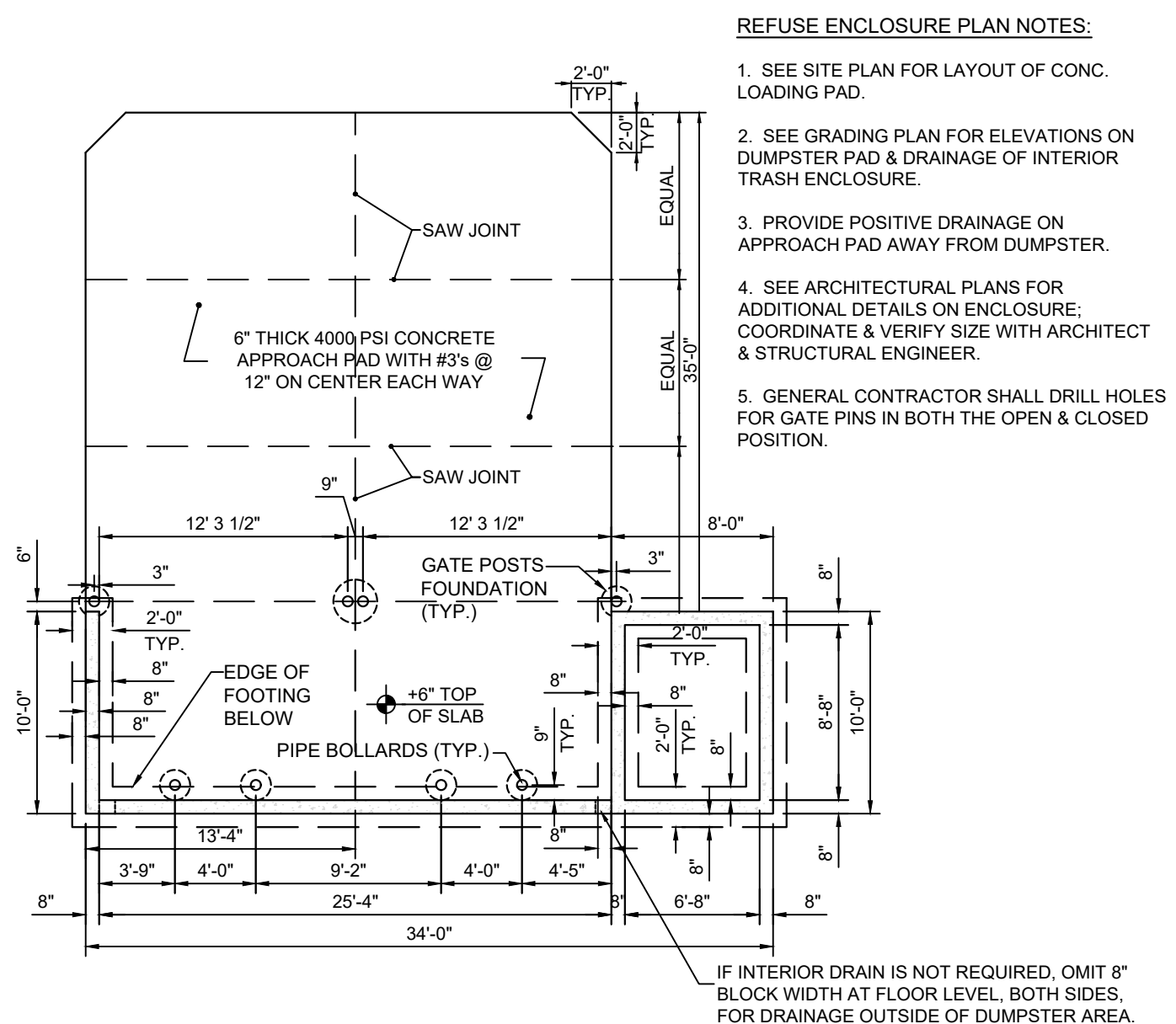


NOTES:
1. LOOP DETECTOR IS MODEL NO. VDL100 VEHICLE DETECTION LOOP MANUFACTURED BY MH ELECTRONICS, INC.
2. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.

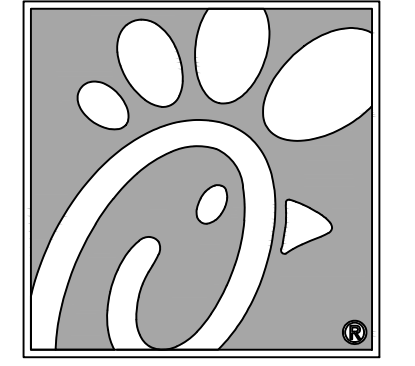
3 MENU BOARD LOOP DETECTION SYSTEM (ISO. VIEW)
C4.2 NOT TO SCALE



2 MENU BOARD LOOP DETECTION SYSTEM
C4.2 NOT TO SCALE



1 SCREENED REFUSE ENCLOSURE
C4.2 NOT TO SCALE



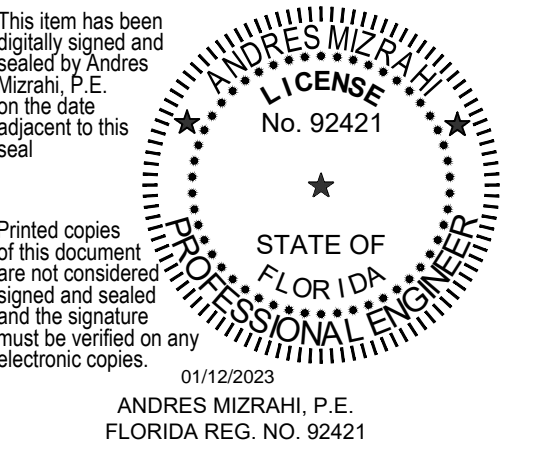
Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 5465
915 S. 17th St. Suite 102
Fort Lauderdale, FL 33316
Phone: (954) 344-6468
www.bowman.com
© 2021 Bowman Consulting Group LLC

Seal



This item has been digitally signed and sealed by Andres Mizrahi, P.E. on the date adjacent to this seal.
Printed copies of this document are not considered signed and sealed until the signature must be verified on any electronic copies.
01/12/2023
ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

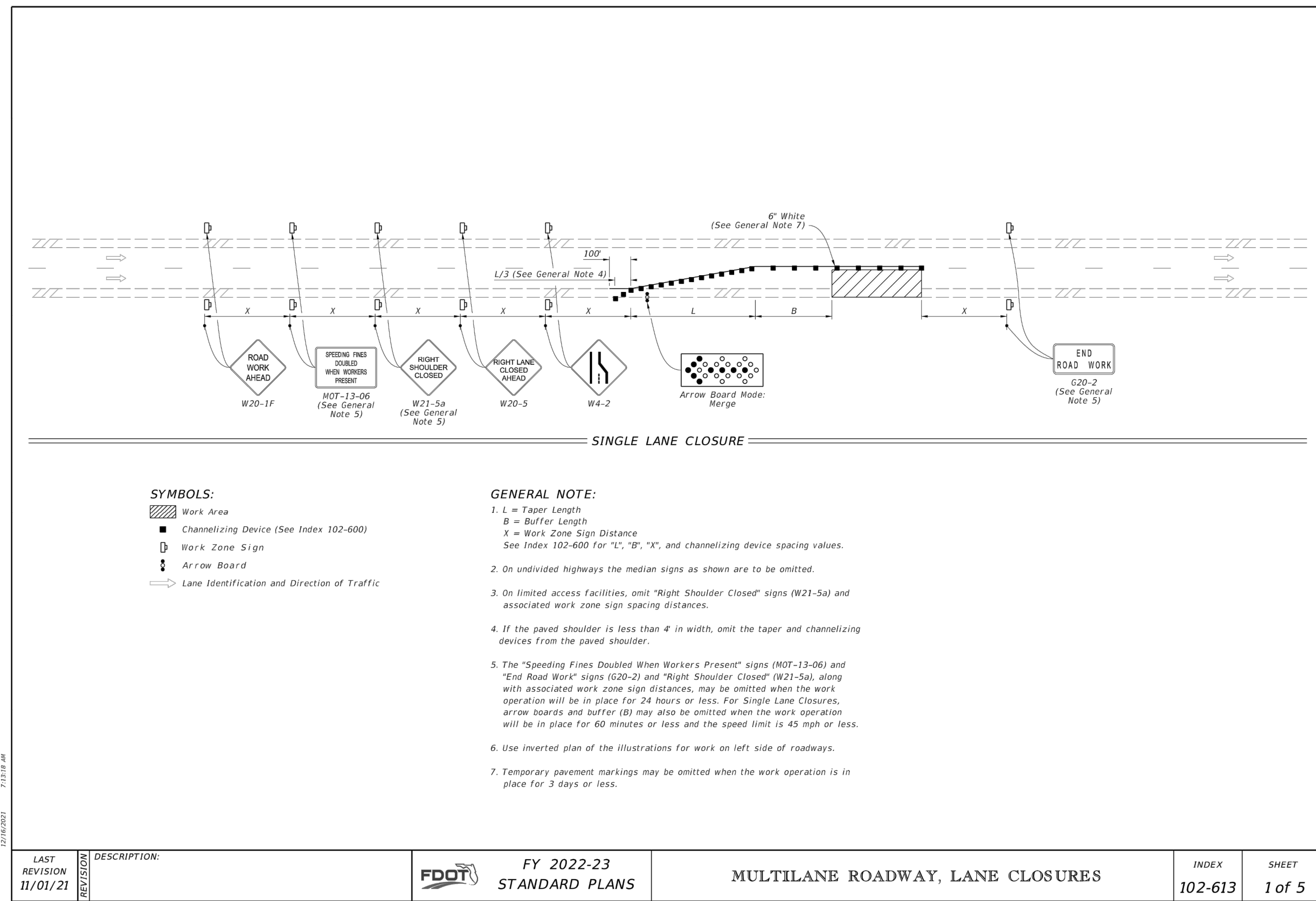
CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

Information contained on this drawing and in all digital files produced for drive permit process may not be reproduced, any manner without express written or verbal consent from authorized project representatives.

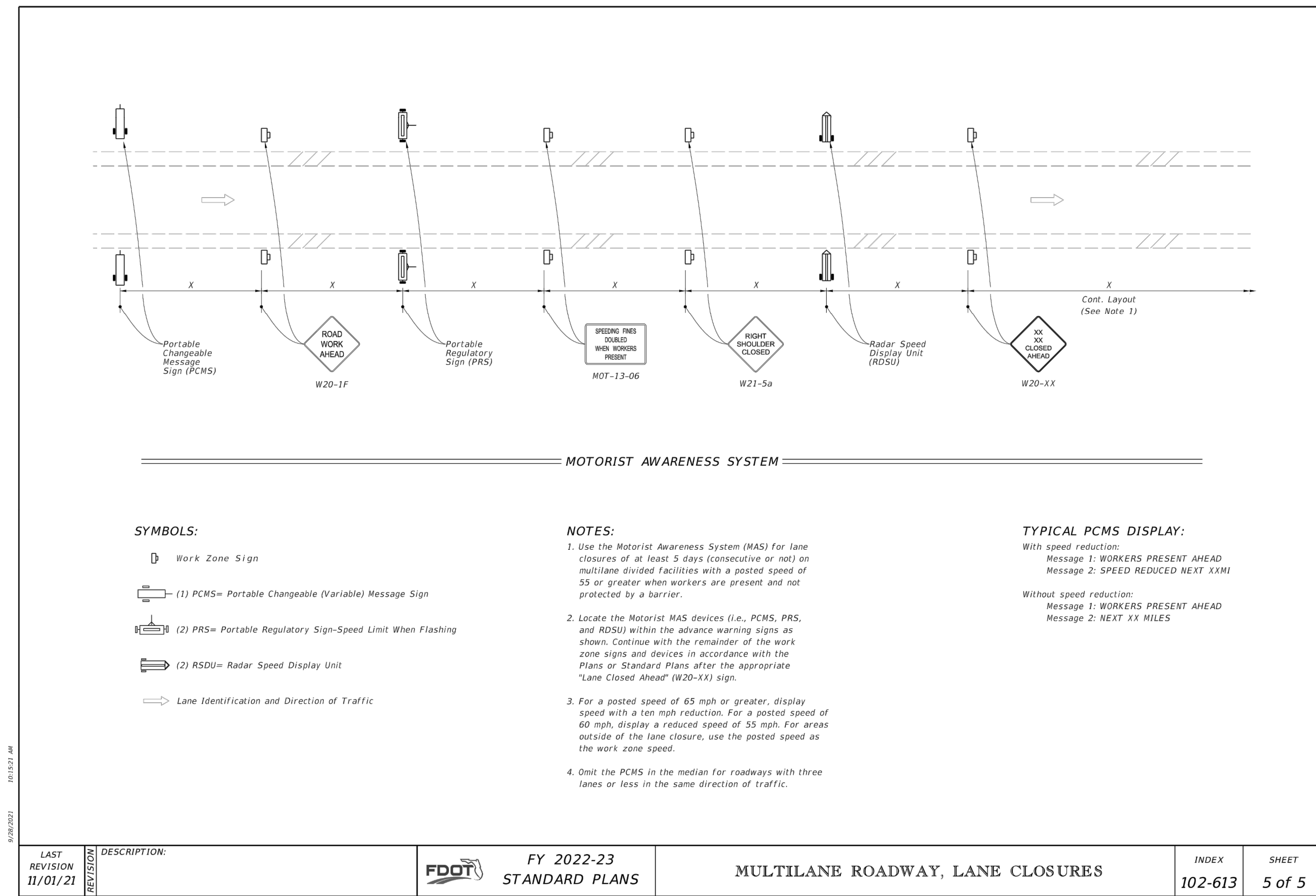
CHICK-FIL-A STANDARD DETAILS
SHEET NUMBER

PERMIT

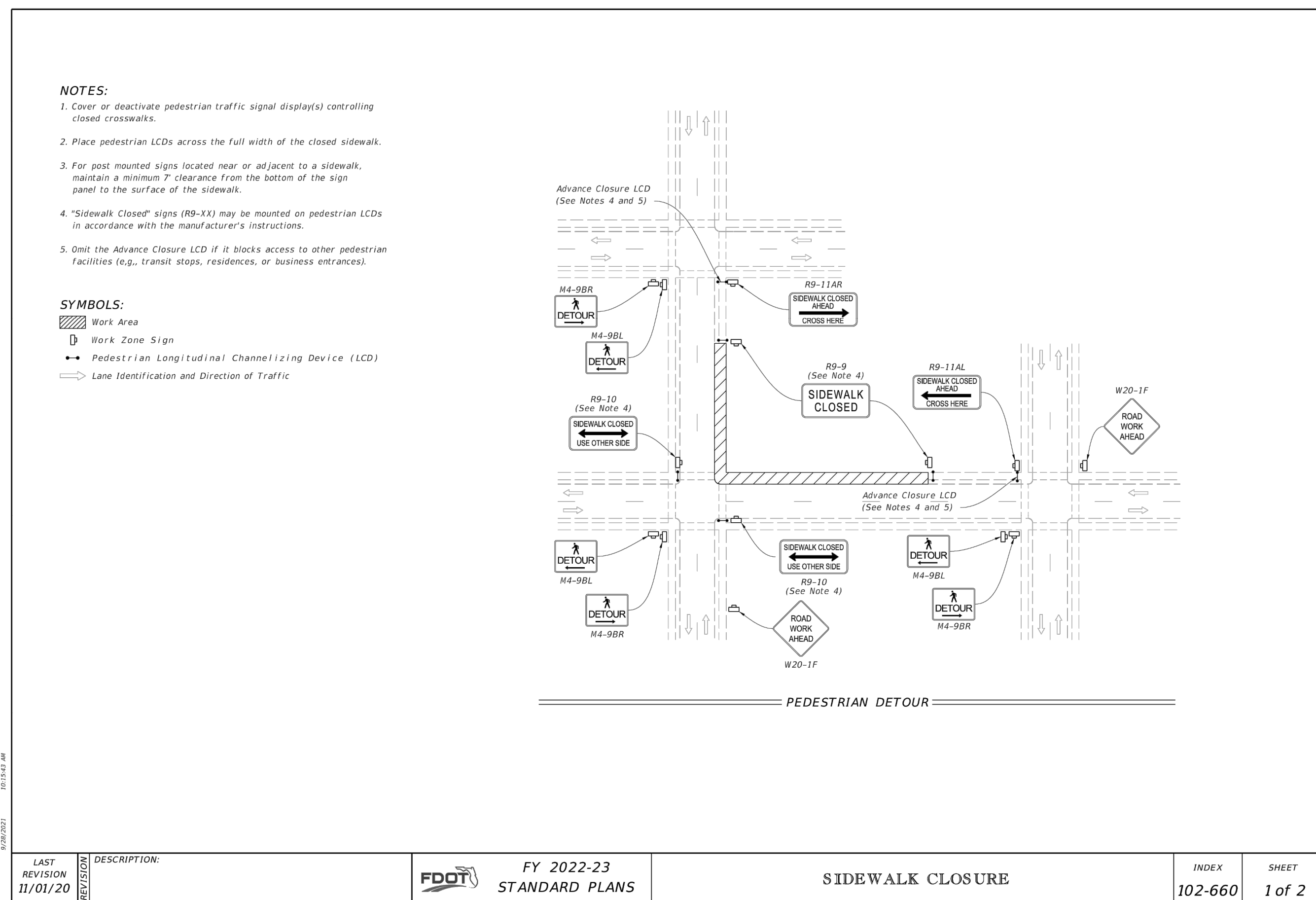
C-4.2



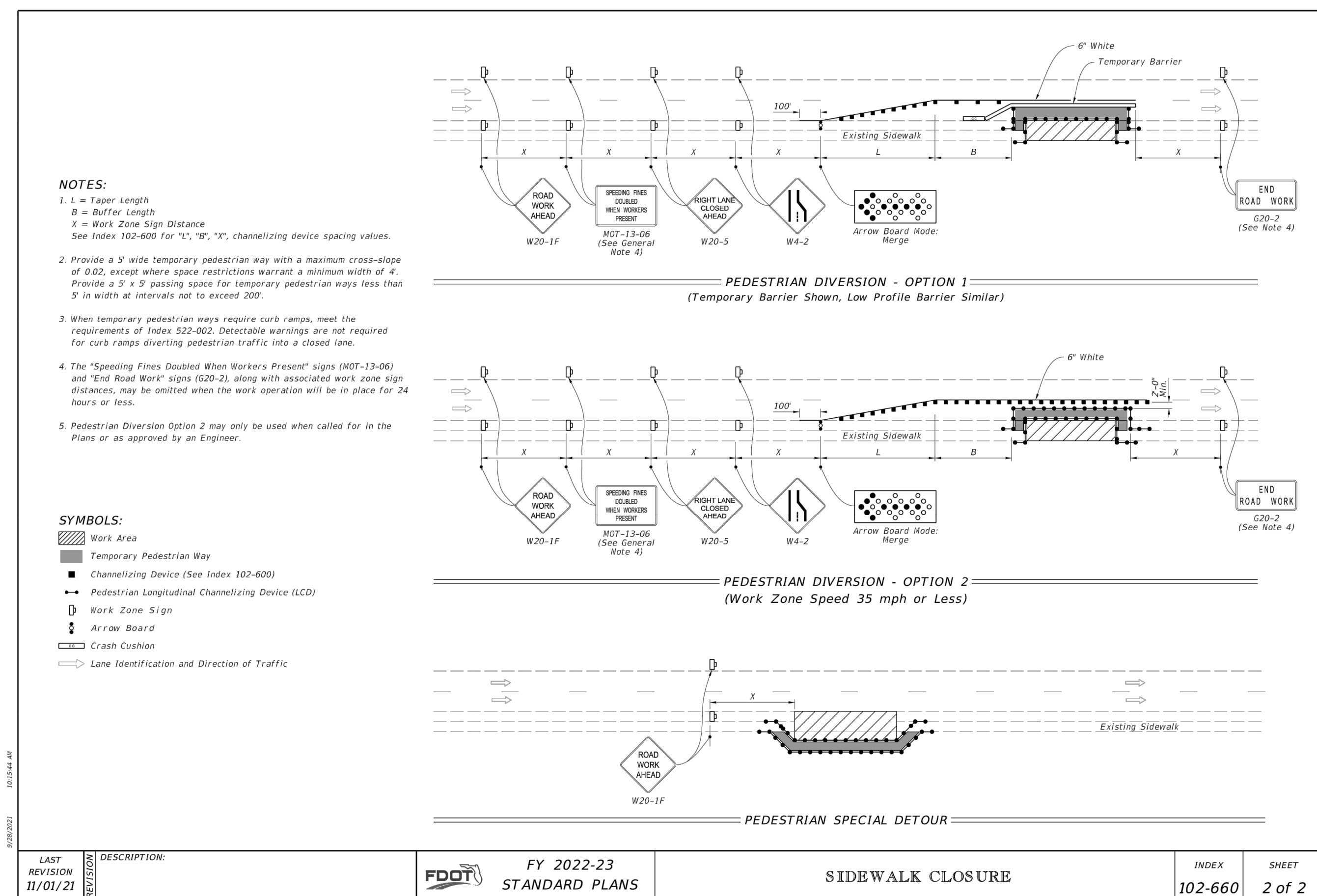
1 MULTILANE ROADWAY, LANE CLOSURE
C5.0 NOT TO SCALE



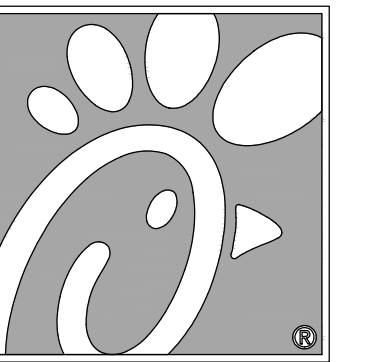
2 MULTILANE ROADWAY, LANE CLOSURE
C5.0 NOT TO SCALE



3 SIDEWALK CLOSURE
C5.0 NOT TO SCALE



4 SIDEWALK CLOSURE
C5.0 NOT TO SCALE



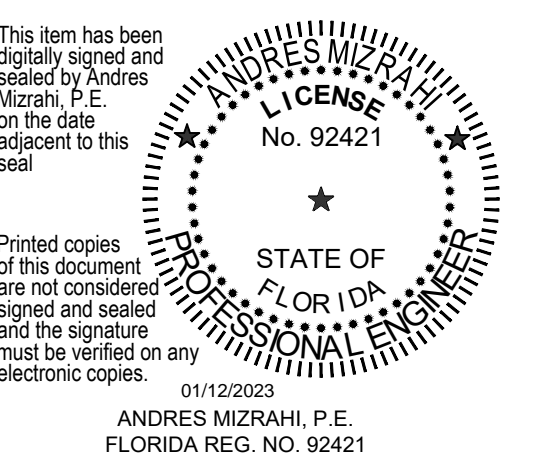
Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 2642
610 SE 17th St. Suite 300
Fort Lauderdale, FL 33316
Phone: (954) 344-6468
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



Printed copies of this document are not considered signed and sealed until the signature must be verified on any electronic copies.

01/12/2023
ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

REVISION SCHEDULE	NO.	DATE	DESCRIPTION
	1	05/09/2022	ADD GAS AND CO

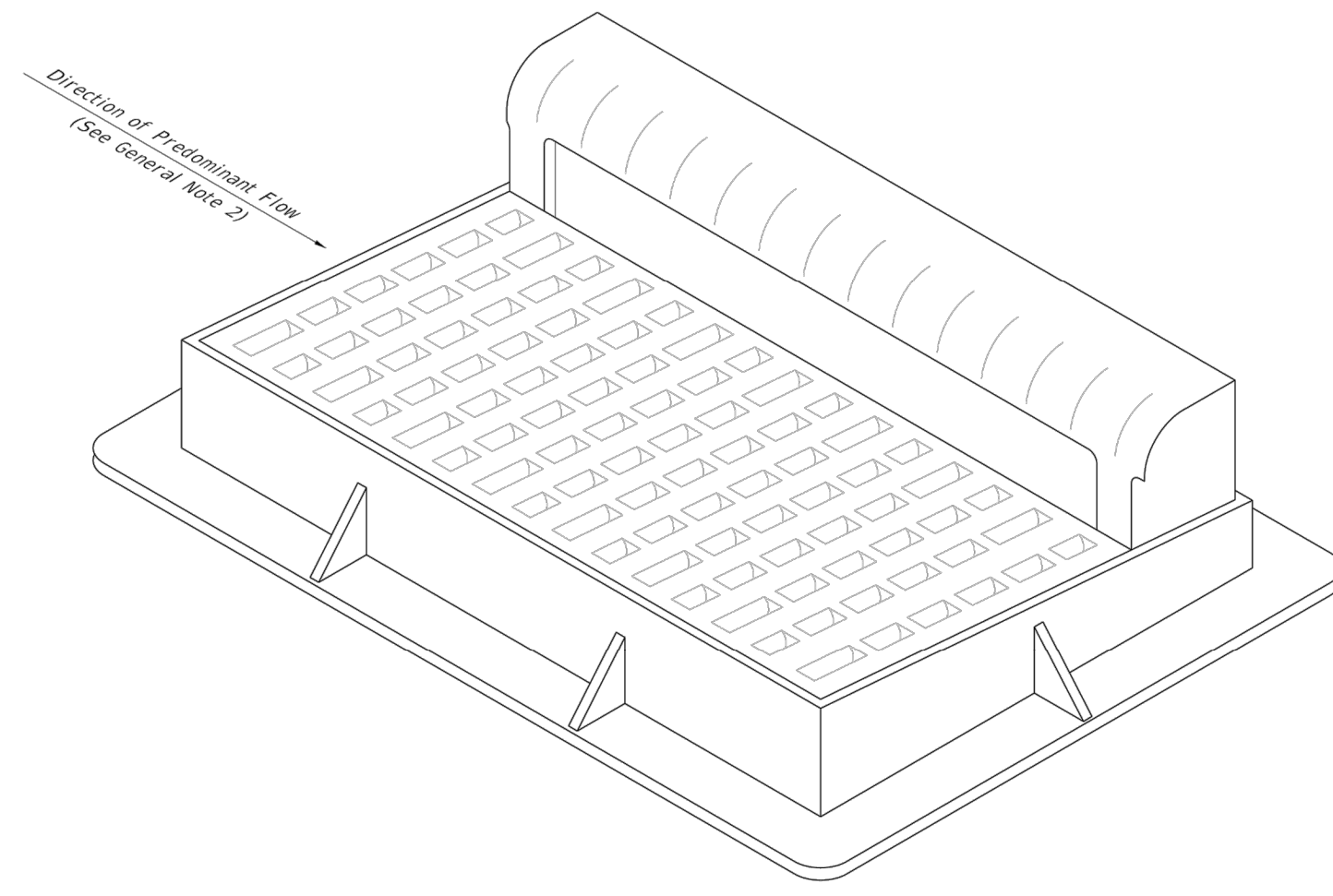
CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

SHEET
SITE AND DRAINAGE
DETAILS
SHEET NUMBER

C-5.0

PERMIT

- GENERAL NOTES:**
1. Work this Index with Index 425-001 and Index 425-010.
 2. Orient grate with vanes directed toward predominant flow.
 3. Provide 1 1/2" minimum cover for steel in slab tops unless otherwise shown. Tops may be either cast-in-place or precast concrete.
 4. Place top slab openings such that 2 edges of inlet frame will be located directly above bottom wall or riser wall for Alternate B applications.
 5. When used on a structure with dimensions larger than those detailed on Sheet 3 and risers are not applied, construct the top slab using Index 425-010 with the slab opening adjusted to 24"x36". The "Special Top Slab" on Index 425-010 is not permitted.
 6. Frame may be adjusted with one to six courses of brick.
 7. Vaned grates with approximately equal openings that satisfy AASHTO HL-93 loading are permitted. Provide reversible (right or left) grates.

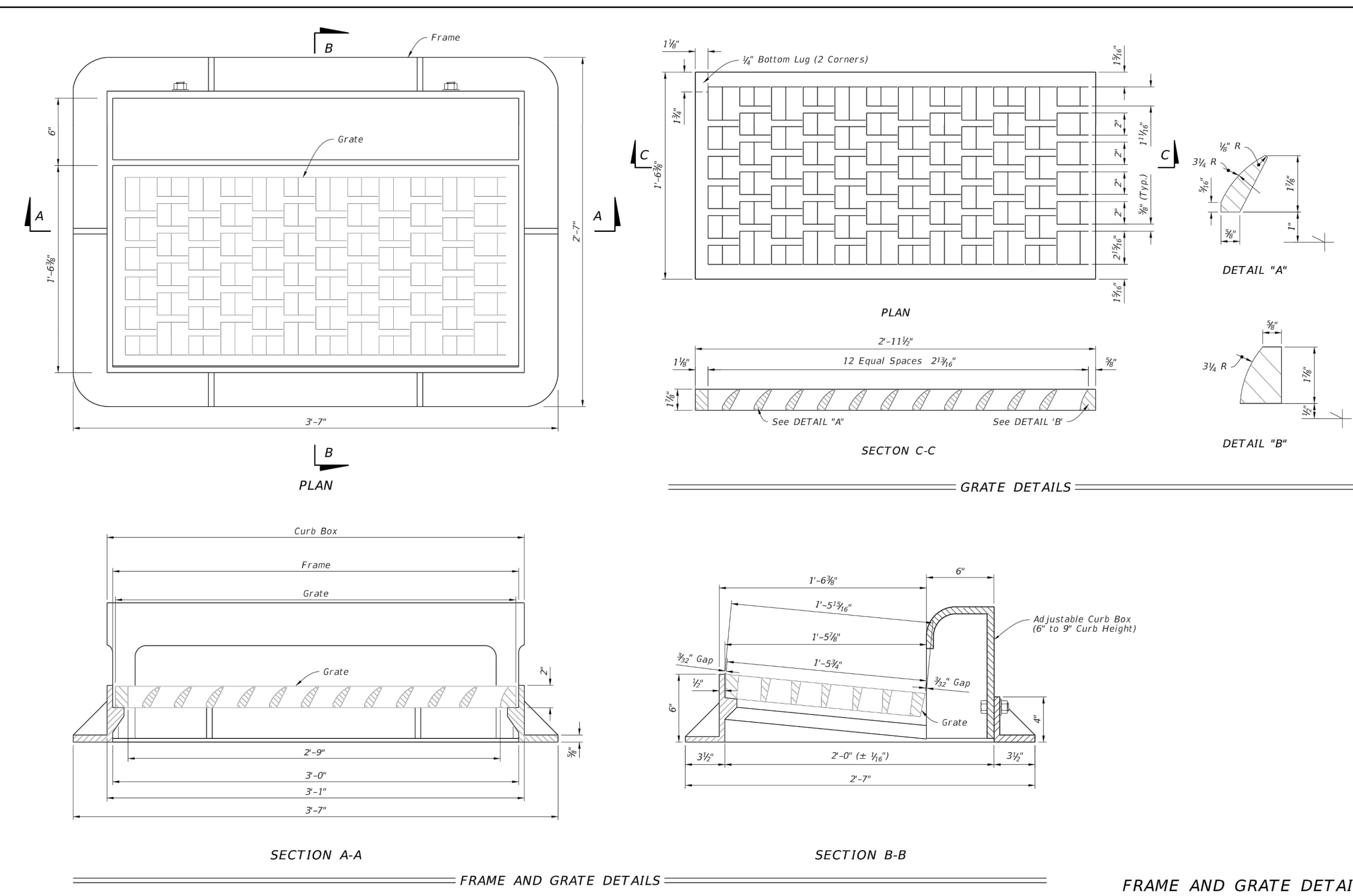


CURB INLET TOP TYPE 9

TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Frame and Grate Details
3	Top Slab Details

LAST REVISION 11/01/20	DESCRIPTION:	FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPE 9	INDEX 425-024	SHEET 1 of 3
------------------------	--------------	---------------------------	-----------------------	---------------	--------------

1 CURB INLET TOP TYPE 9
CS.1 NOT TO SCALE

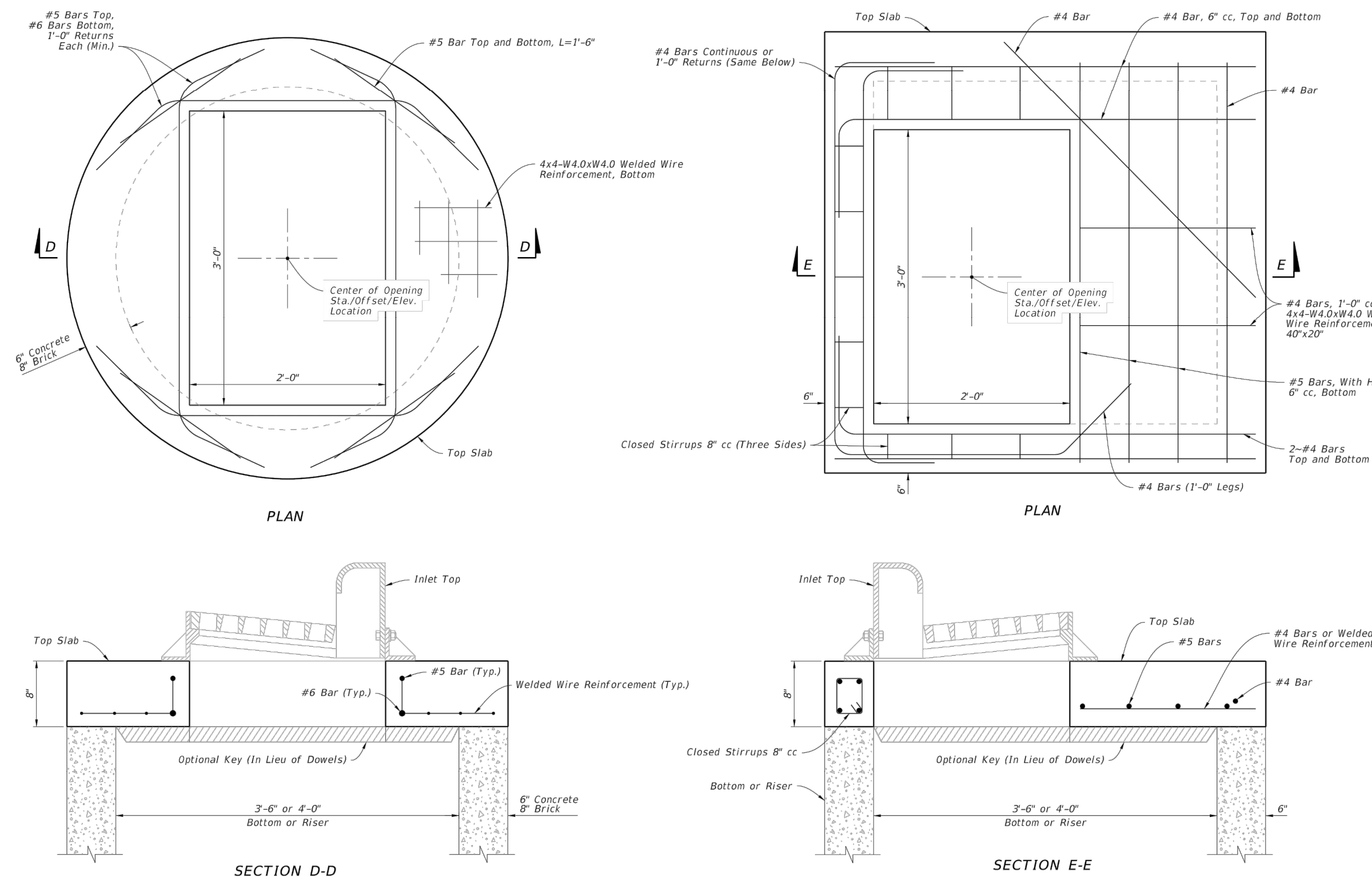


FRAME AND GRATE DETAILS

FRAME AND GRATE DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPE 9	INDEX 425-024	SHEET 2 of 3
------------------------	--------------	---------------------------	-----------------------	---------------	--------------

2 CURB INLET TOP TYPE 9
CS.1 NOT TO SCALE

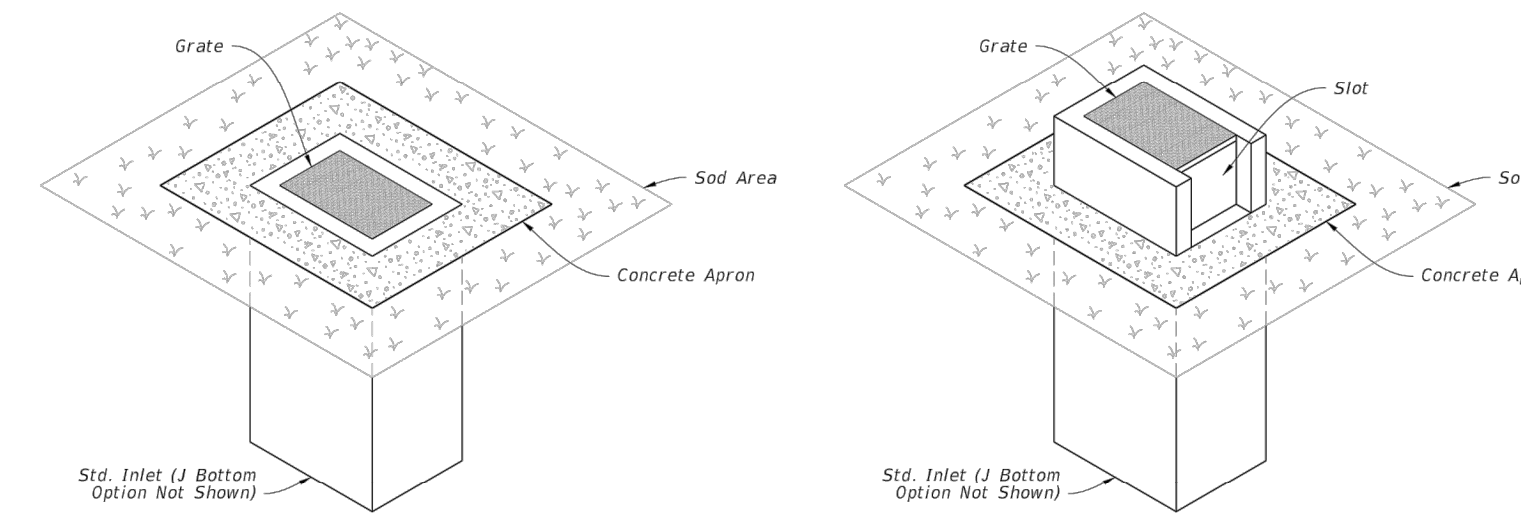


TOP SLAB DETAILS

LAST REVISION 11/01/20	DESCRIPTION:	FY 2022-23 STANDARD PLANS	CURB INLET TOP TYPE 9	INDEX 425-024	SHEET 3 of 3
------------------------	--------------	---------------------------	-----------------------	---------------	--------------

3 CURB INLET TOP TYPE 9
CS.1 NOT TO SCALE

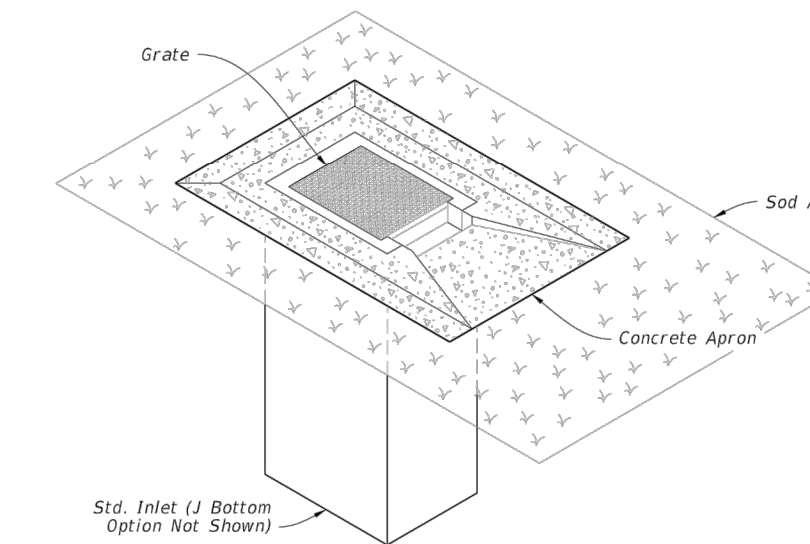
- GENERAL NOTES:**
1. Work this Index with Index 425-001 and Index 425-010.
 2. Chamfer all exposed edges and corners 1/4" chamfer or tool to 1/8" radius.
 3. All reinforcing is Grade 60 bars with 2" minimum cover unless otherwise noted. Cut or bend bars for 1 1/2" clearance around pipe opening. Provide one additional #4 bar above and at each side of pipe opening.
 4. Use Concrete Apron on inlets without slots and inlets with non-traversable slots only when called for in the Plans.
 5. Quantities are for informational and estimating purposes only.



DITCH BOTTOM INLET TYPE C
TRAVERSABLE
(Without Slot - Type D, E, and H Similar, Pipe Connection Not Shown)

DITCH BOTTOM INLET TYPE C
NON-TRAVERSABLE
(Slot > 7" Shown - Type D, E, and H Similar, Pipe Connection Not Shown)

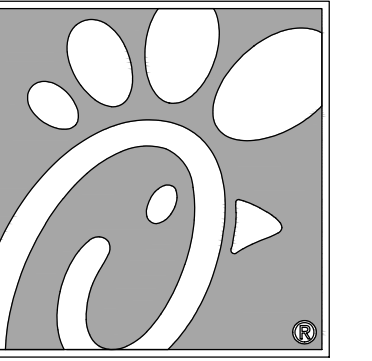
TABLE OF CONTENTS:	
Sheet	Description
1	General Notes and Contents
2	Type C - Dimensional, Reinforcing, and Grate Details
3	Type D - Dimensional, Reinforcing, and Grate Details
4	Type E - Dimensional, Reinforcing, and Grate Details
5	Type H (2 & 3 Grate) - Dimensional, Reinforcing, and Steel Grate Details
6	Type H (4 Grate) - Dimensional, Reinforcing, and Steel Grate Details
7	Cast Iron Grate Details
8	Non-Traversable Inlet Details
9	Traversable Inlet Without Slot Details
10	Traversable Inlet With Slot Details
11	Case 1 - Add Traversable Slots to Existing Inlets
12	Case 2 - Add Traversable Slots (Partial) to Existing Inlets
13	Case 3 - Add Traversable Slots (Partial) to Existing Inlets and Ditch Block
14	Alternate A Structure Bottom - Top Slab Details



DITCH BOTTOM INLET TYPE C
TRAVERSABLE
(Single Slot < 7" Shown, Double Slot, Type D, and E Similar, Pipe Connection Not Shown)

LAST REVISION 11/01/20	DESCRIPTION:	FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX 425-052	SHEET 1 of 14
------------------------	--------------	---------------------------	--	---------------	---------------

4 DITCH BOTTOM INLET
CS.1 NOT TO SCALE

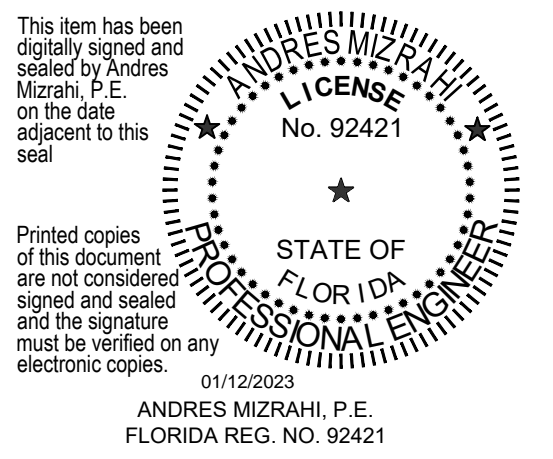


5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 5945
815 S. 17th St. Suite 302
Fort Lauderdale, FL 33316
Phone: (954) 344-8468
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



01/12/2023
ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

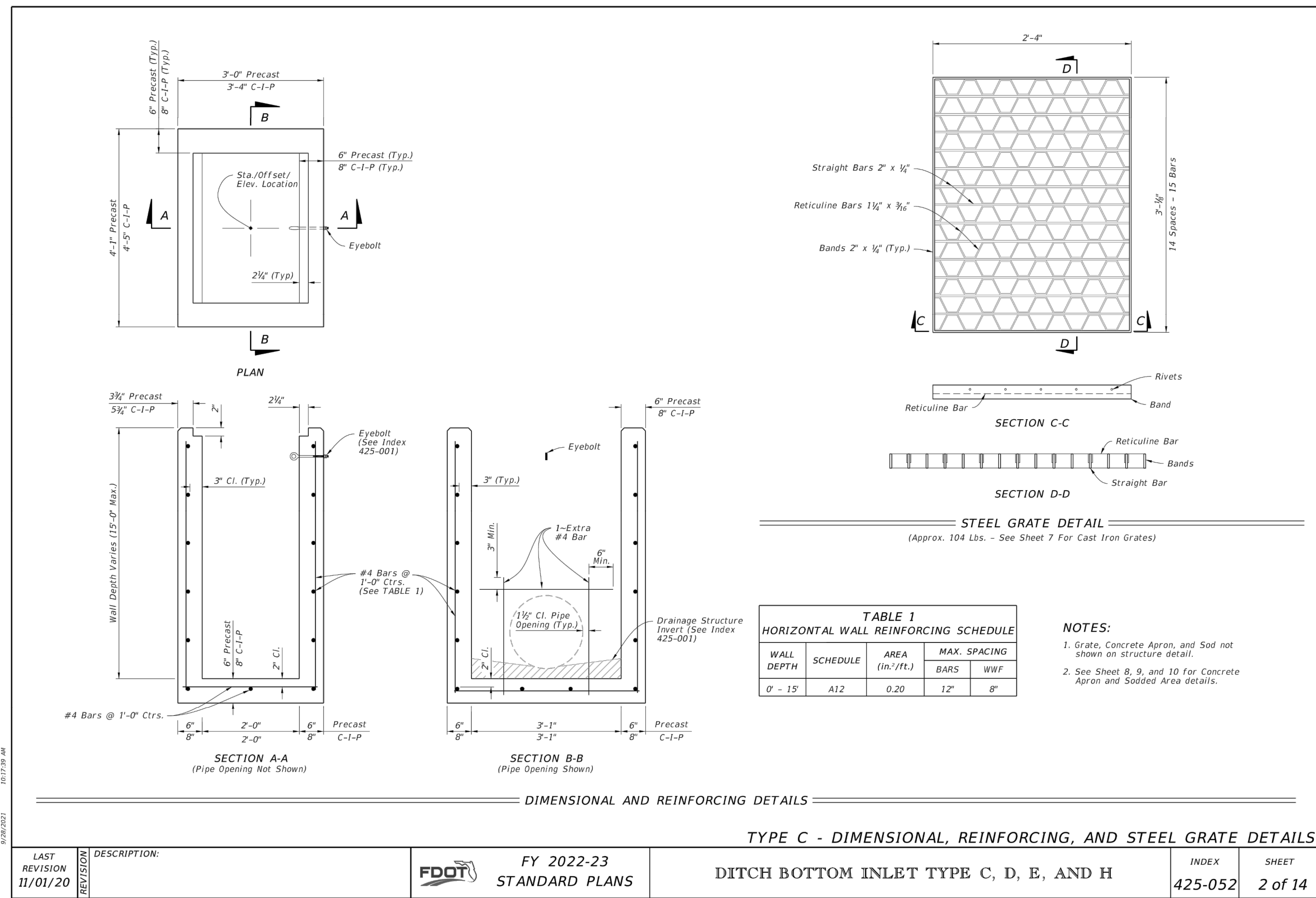
FSU# 5069

REVISION SCHEDULE		
NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

SITE AND DRAINAGE
DETAILS
SHEET NUMBER

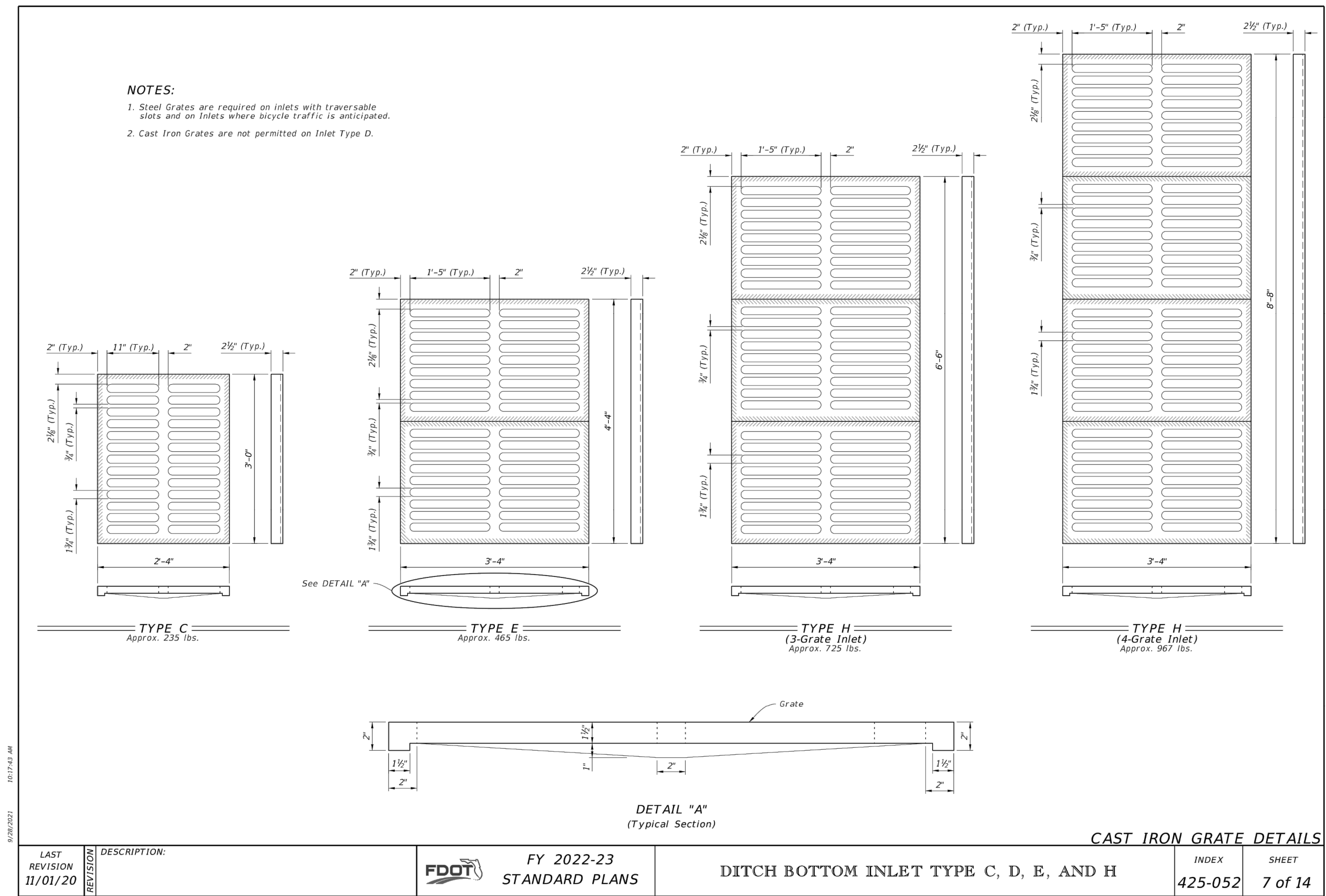
C-5.1



TYPE C - DIMENSIONAL, REINFORCING, AND STEEL GRATE DETAILS

LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX	SHEET
11/01/20					425-052	2 of 14

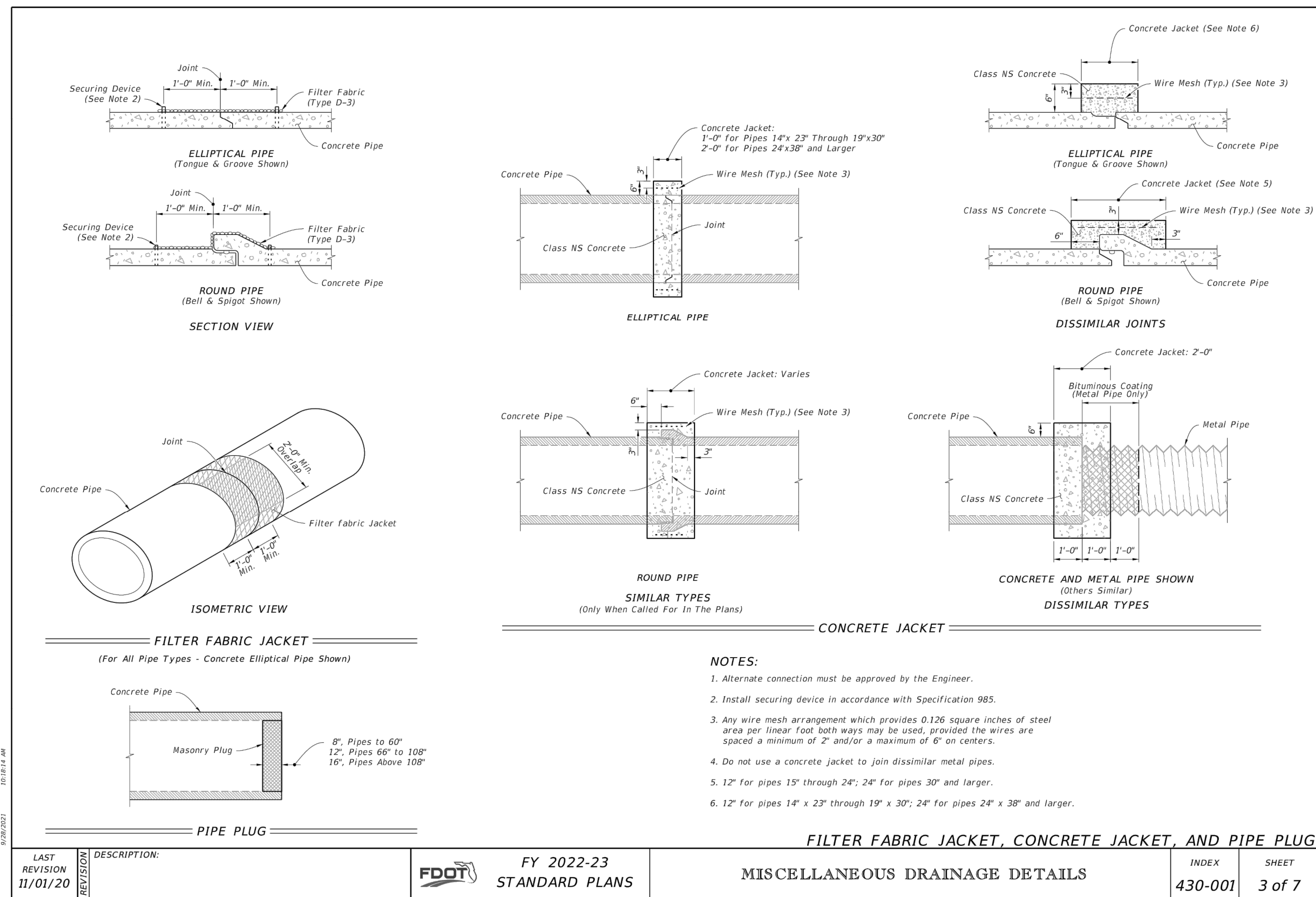
1 DITCH BOTTOM INLET
CS.2 NOT TO SCALE



CAST IRON GRATE DETAILS

LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	DITCH BOTTOM INLET TYPE C, D, E, AND H	INDEX	SHEET
11/01/20					425-052	7 of 14

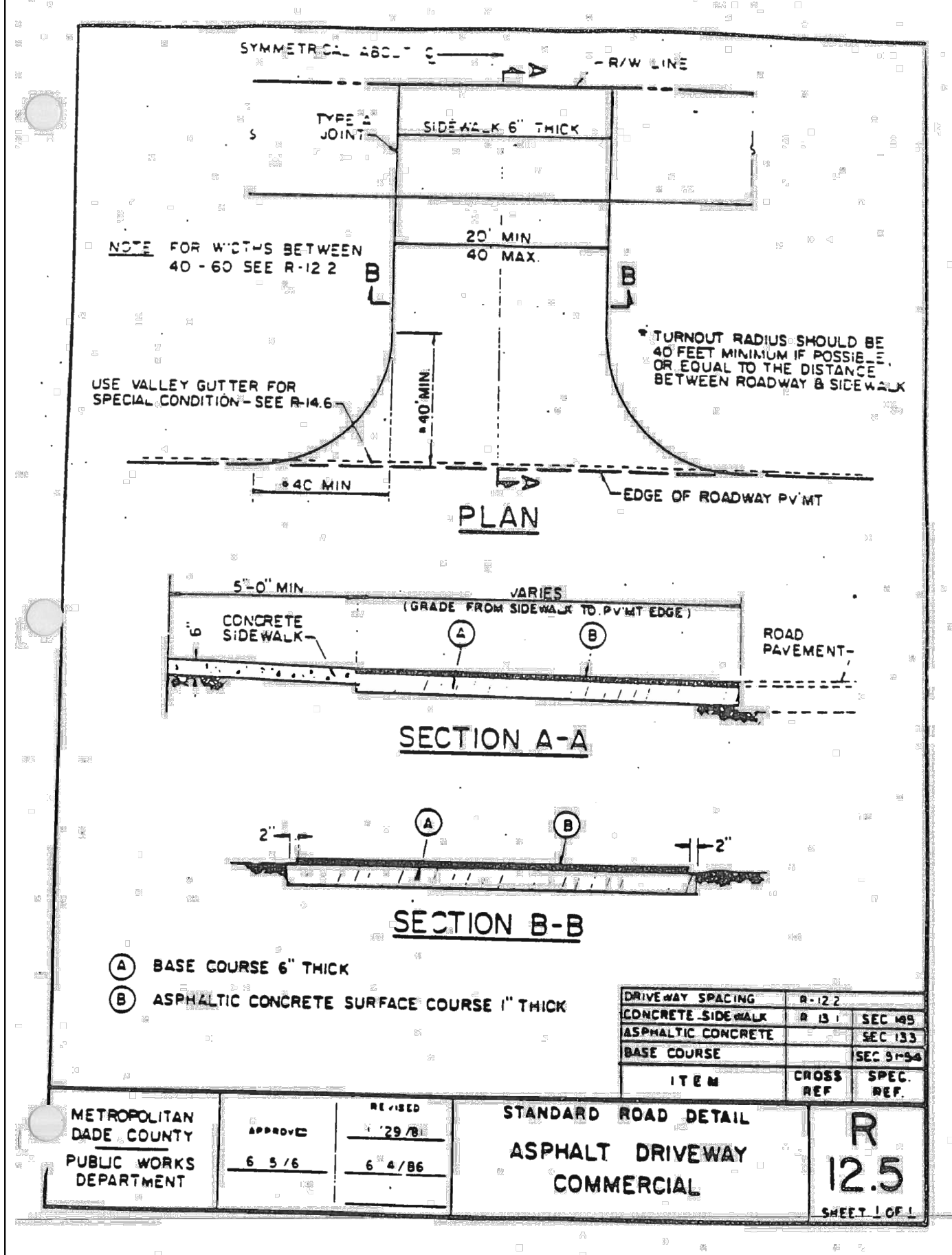
2 DITCH BOTTOM INLET
CS.2 NOT TO SCALE



FILTER FABRIC JACKET, CONCRETE JACKET, AND PIPE PLUG

LAST REVISION	DESCRIPTION:	FDOT	FY 2022-23 STANDARD PLANS	MISCELLANEOUS DRAINAGE DETAILS	INDEX	SHEET
11/01/20					430-001	3 of 7

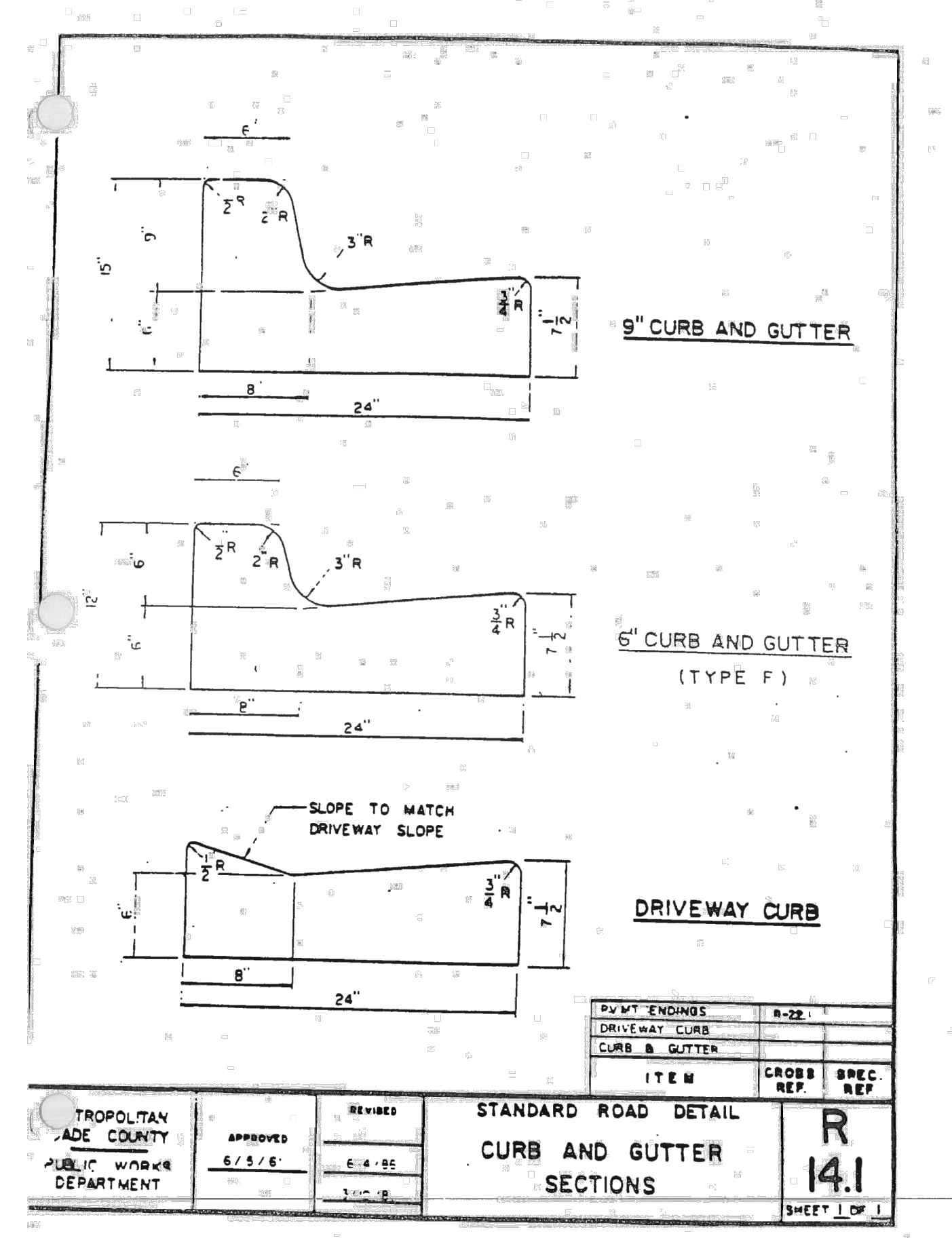
3 MISCELLANEOUS DRAINAGE DETAILS
CS.2 NOT TO SCALE



STANDARD ROAD DETAIL
ASPHALT DRIVEWAY
COMMERCIAL

METROPOLITAN DADE COUNTY PUBLIC WORKS DEPARTMENT	APPROVED	REVISED	DATE	6/3/16	6/4/86	6/4/86

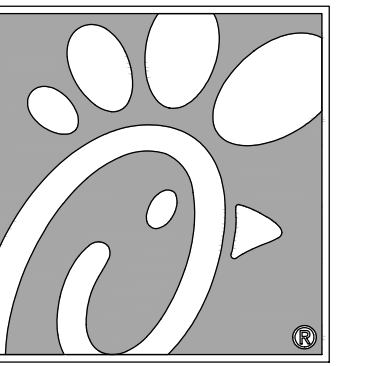
4 ASPHALT DRIVEWAY
CS.2 NOT TO SCALE



STANDARD ROAD DETAIL
CURB AND GUTTER
SECTIONS

METROPOLITAN DADE COUNTY PUBLIC WORKS DEPARTMENT	APPROVED	REVISED	DATE	6/5/16	6/4/86	7/1/16

5 CURB AND GUTTER SECTION
CS.2 NOT TO SCALE



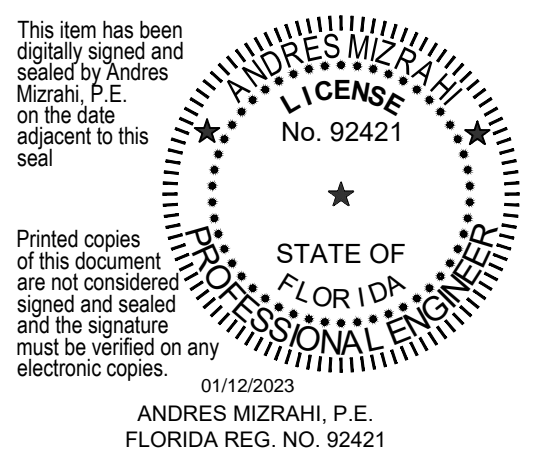
Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 2648
Professional Engineer
Fort Lauderdale, FL 33316
Phone: (954) 344-8468
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

01/12/2023
ANDRES MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

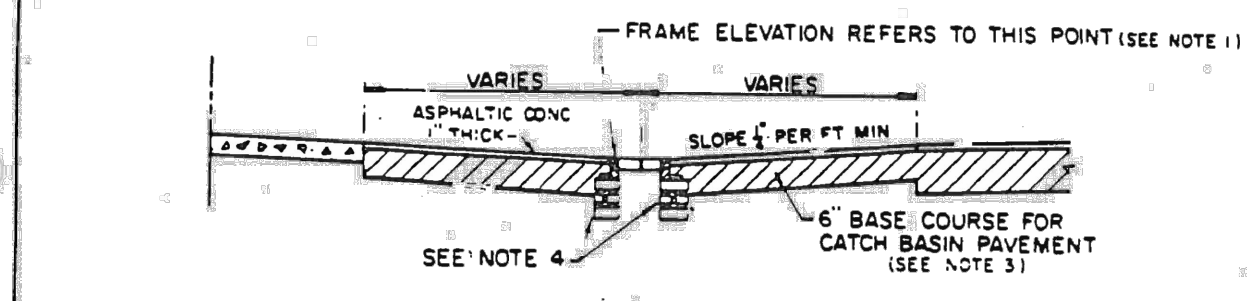
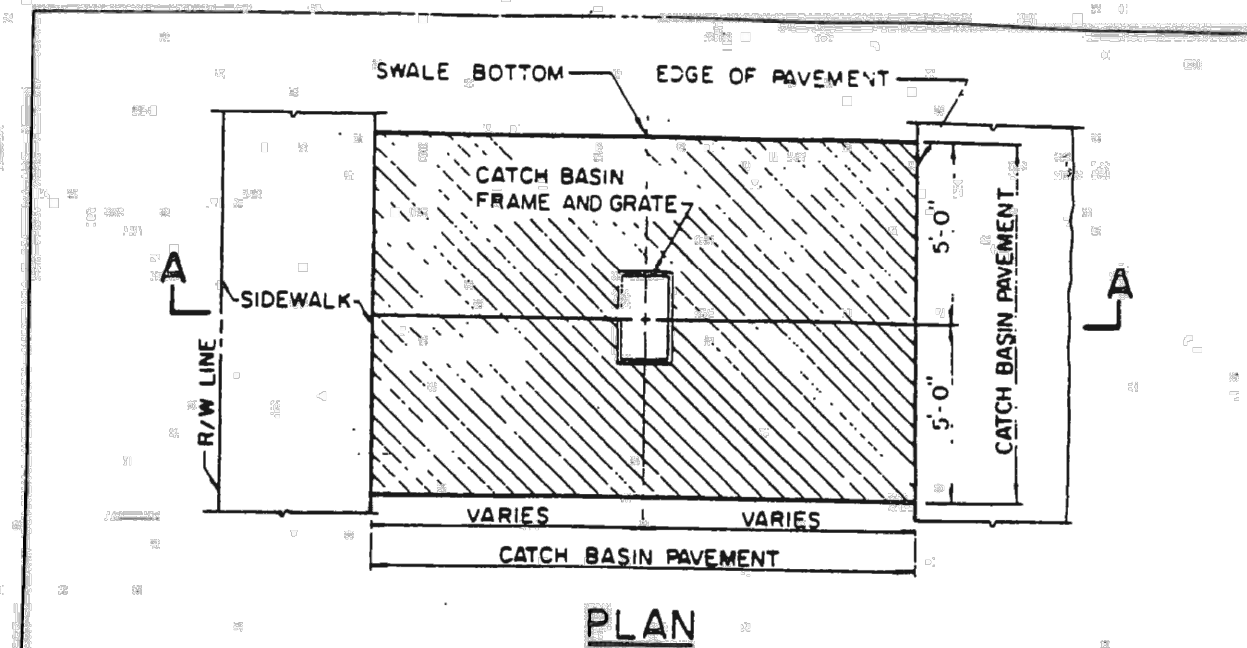
REVISION SCHEDULE	DATE	DESCRIPTION
NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

INFORMATION CONTAINED ON THIS DRAWING AND ALL DIGITAL FILES PRODUCED BY THESE FILES ARE THE PROPERTY OF BOWMAN CONSULTING GROUP LTD. ANY REUSE OR MODIFICATION WITHOUT WRITTEN CONSENT FROM BOWMAN CONSULTING GROUP LTD. IS PROHIBITED.

SHEET
SITE AND DRAINAGE
DETAILS
SHEET NUMBER

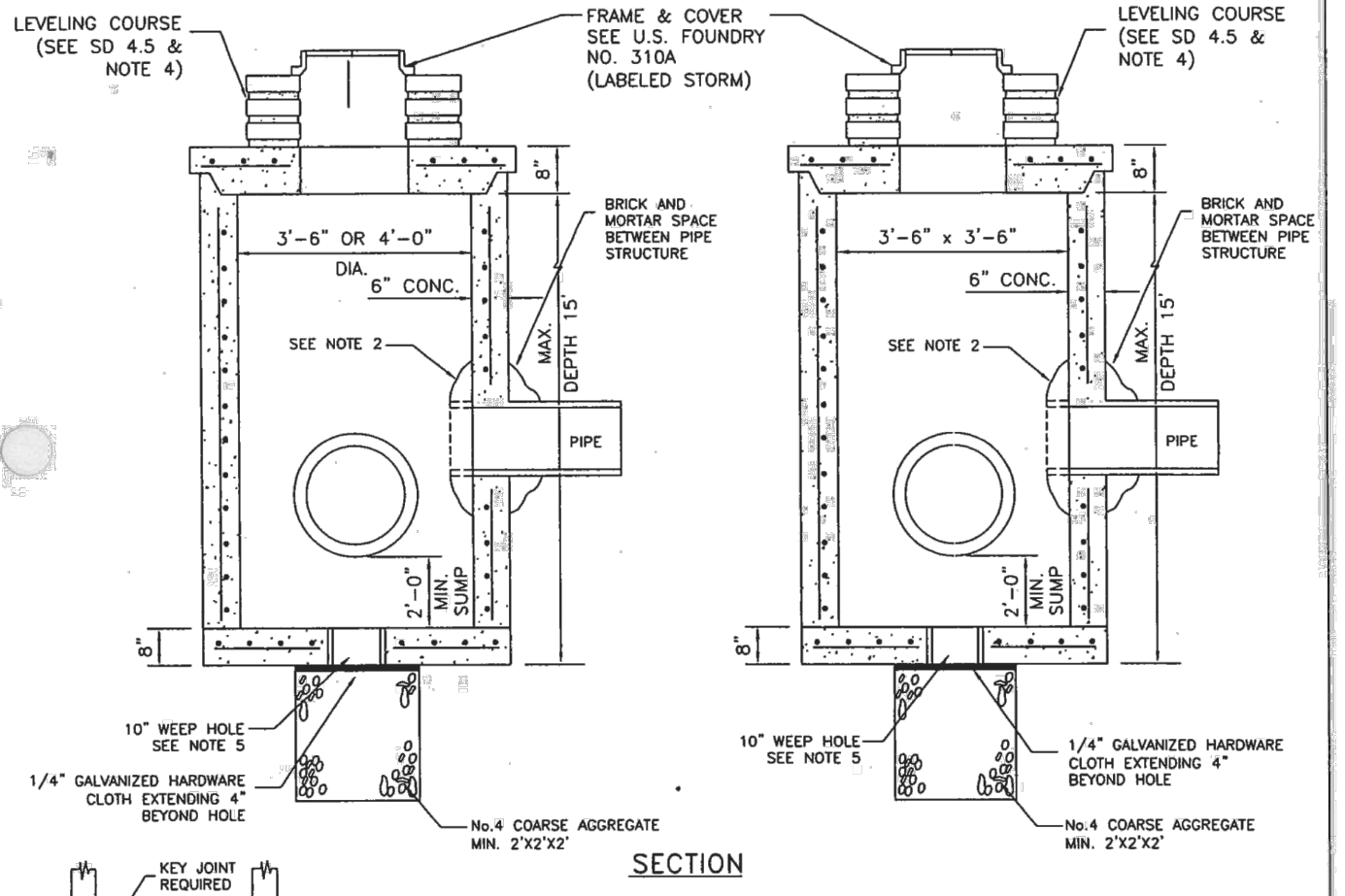
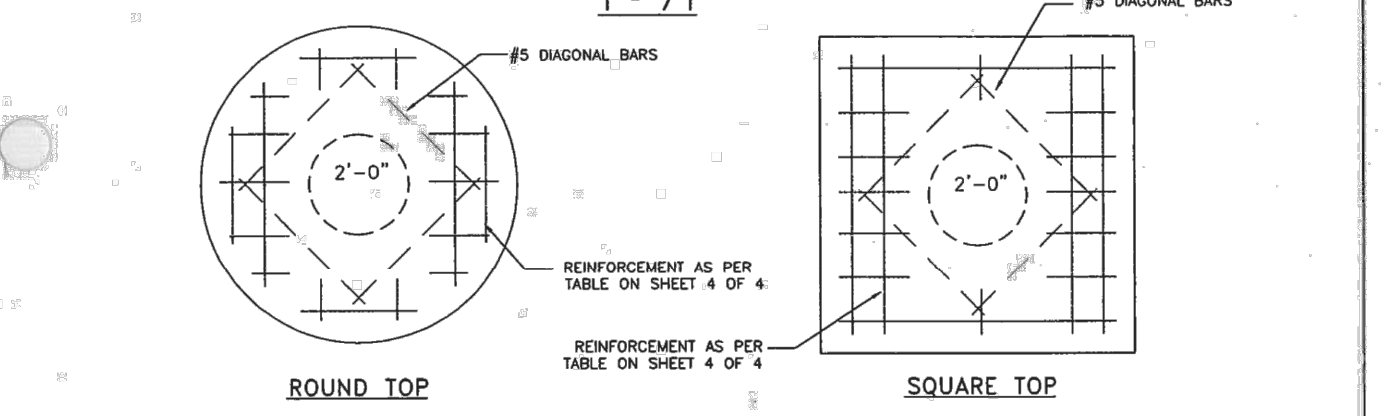
C-5.2



- NOTES:**
- FRAME ELEVATION SHALL BE AT LEAST 3" BELOW SWALE GRADE ELEVATIONS AS SHOWN ON DETAILS R-11 THRU R-81.
 - FRAME ELEVATION SHALL BE AT LOW POINT OF CATCH BASIN PAVEMENT.
 - CONCRETE SLAB MAY BE SUBSTITUTED FOR 6" BASE COURSE REINFORCING STEEL TO BE APPROVED BY PUBLIC WORKS DEPARTMENT.
 - A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.

METROPOLITAN DADE COUNTY PUBLIC WORKS DEPARTMENT	REVISED 8/1/86	APPROVED 5/17/72	STANDARD STORM DRAINAGE DETAIL CATCH BASIN PAVEMENT (OTHER THAN DRIVEWAY LOCATIONS)	SD 2.5
--	----------------	------------------	---	--------

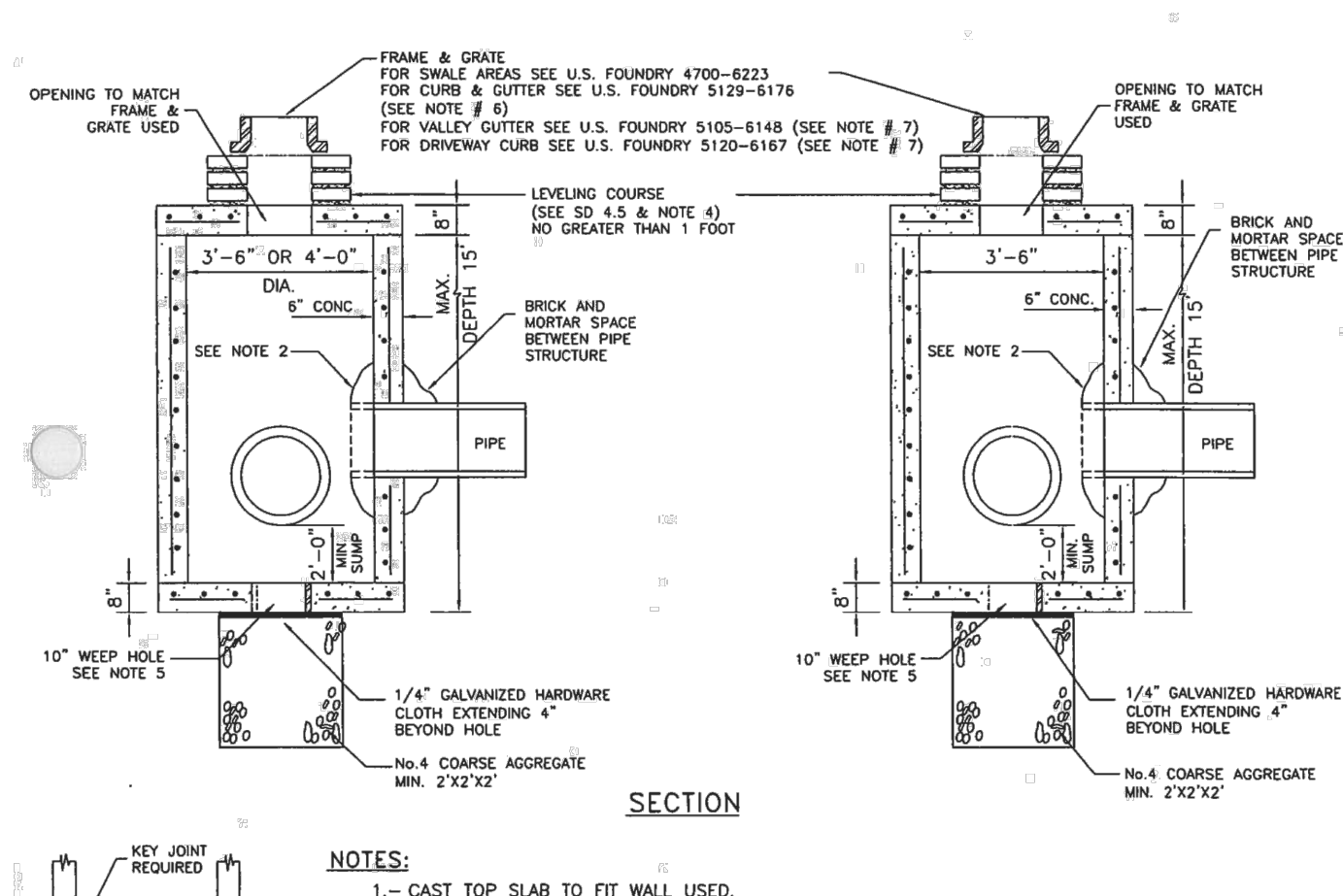
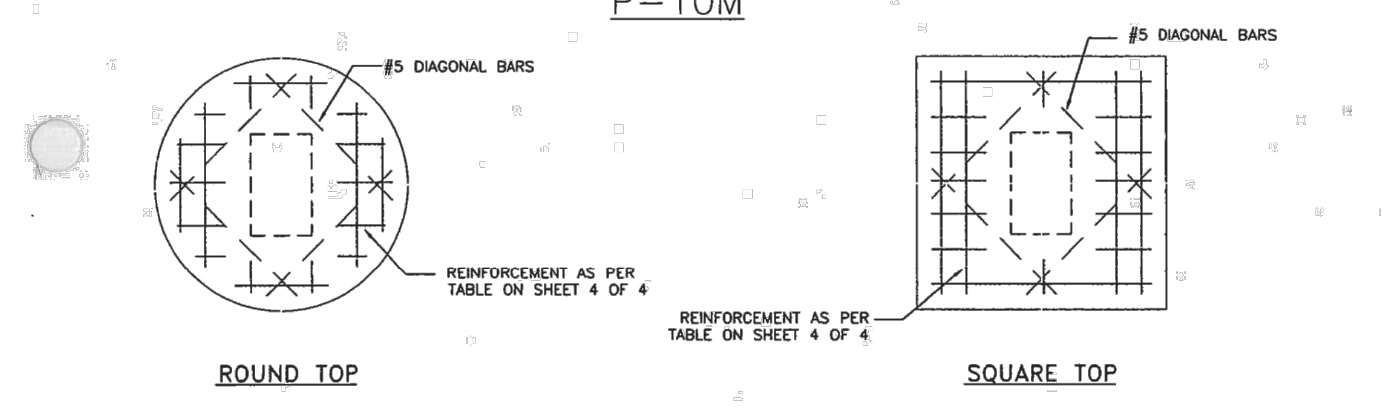
1 CATCH BASIN PAVEMENT
C5.3 NOT TO SCALE



- NOTES:**
- CAST TOP SLAB TO FIT WALL USED.
 - PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
 - USE 4,000 PSI CONCRETE, (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
 - A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
 - WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE TOP OF THE BOTTOM SLAB OF THE STRUCTURE.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	REVISED 5/8/2018	APPROVED 5/8/2018	STANDARD STORM DRAINAGE DETAIL MANHOLE AND INLET (TYPE P)	SD 2.7
---	------------------	-------------------	---	--------

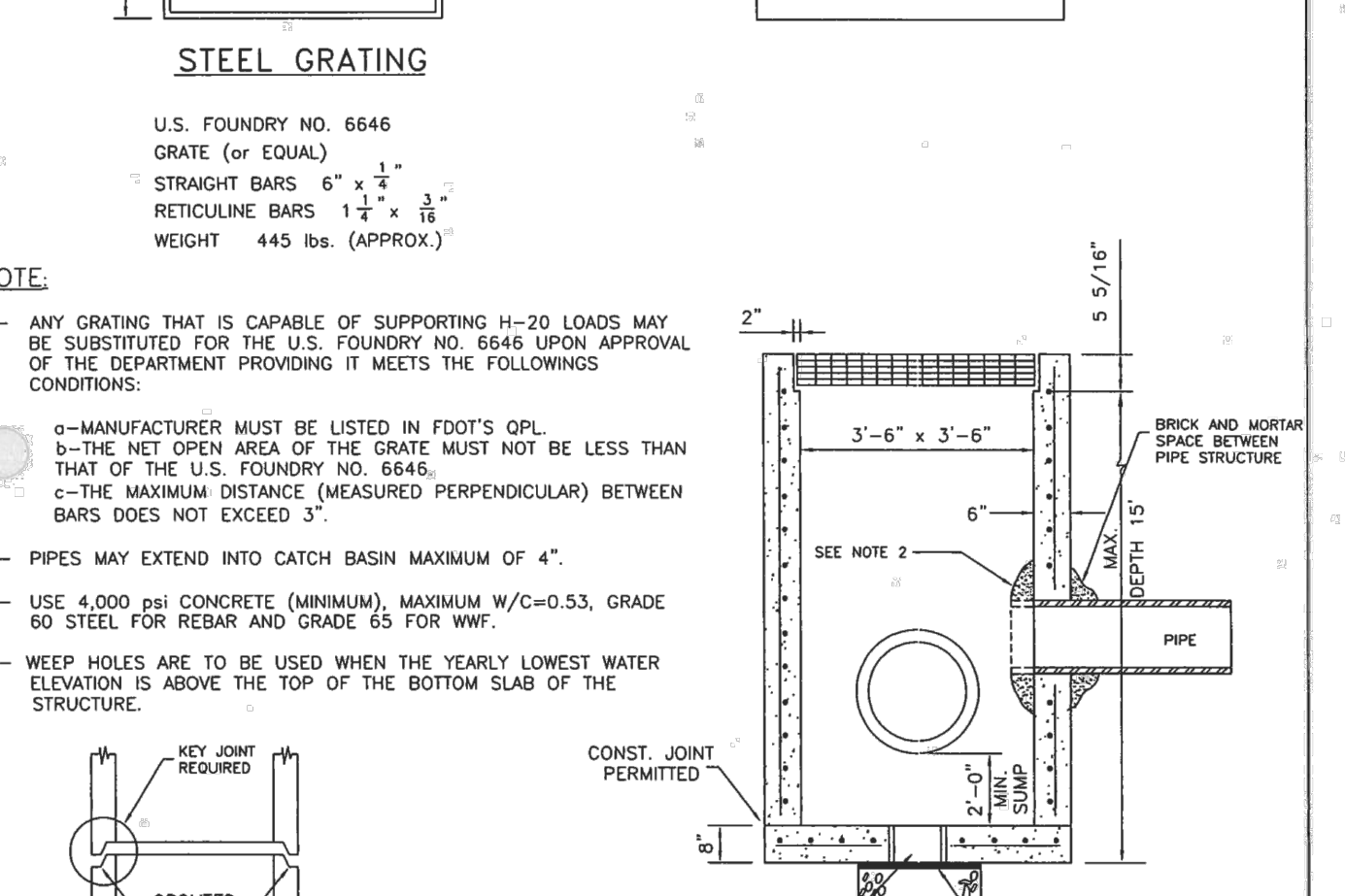
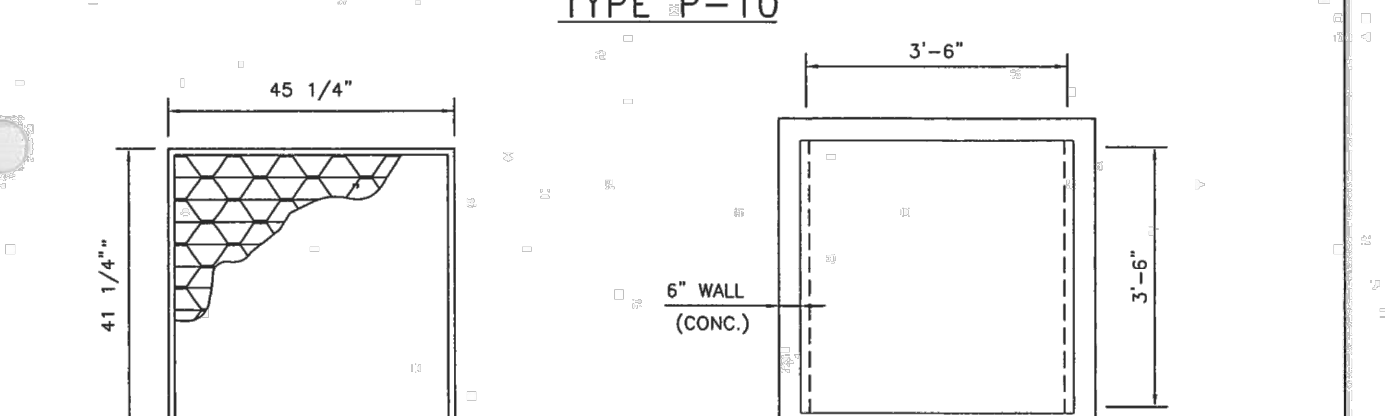
2 MANHOLE AND INLET
C5.3 NOT TO SCALE



- NOTES:**
- CAST TOP SLAB TO FIT WALL USED.
 - PIPES MAY EXTEND INTO CATCH BASIN A MAXIMUM OF 4".
 - USE 4,000 PSI CONCRETE, (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
 - A SMOOTH LINE OF MORTAR 1/2" THICK INSIDE AND OUTSIDE.
 - WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE TOP OF THE BOTTOM SLAB OF THE STRUCTURE.
 - USF 5129-5178 MAY ONLY BE USED WHEN STRUCTURES ARE TO BE PLACED WITHIN THE RADIUS OF A CORNER AND ITS USE MUST BE APPROVED BY THE DEPARTMENT. THE USE OF THIS FRAME AND GRATE IS NOT INTENDED TO REPLACE STANDARD CURB INLET TOPS. FOR CURB INLETS PLEASE REFER TO FOOT DESIGN STANDARDS INDEX 210 AND 211. INSTALLATION IN OTHER LOCATIONS IS NOT PERMITTED UNLESS APPROVED BY THE DEPARTMENT AS A RESULT OF MITIGATING CIRCUMSTANCES.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	REVISED 5/8/2018	APPROVED 5/8/2018	STANDARD STORM DRAINAGE DETAIL MANHOLE AND INLET (TYPE P)	SD 2.7
---	------------------	-------------------	---	--------

3 MANHOLE AND INLET
C5.3 NOT TO SCALE



- NOTES:**
- ANY GRATING THAT IS CAPABLE OF SUPPORTING H-20 LOADS MAY BE SUBSTITUTED FOR THE U.S. FOUNDRY NO. 6646 UPON APPROVAL OF THE DEPARTMENT PROVIDING IT MEETS THE FOLLOWING CONDITIONS:
 - a-MANUFACTURER MUST BE LISTED IN FOOT'S OPL.
 - b-THE NET OPEN AREA OF THE GRATE MUST NOT BE LESS THAN THAT OF THE U.S. FOUNDRY NO. 6646.
 - c-THE MAXIMUM DISTANCE (MEASURED PERPENDICULAR) BETWEEN BARS DOES NOT EXCEED 3".
 - PIPES MAY EXTEND INTO CATCH BASIN MAXIMUM OF 4".
 - USE 4,000 PSI CONCRETE, (MINIMUM), MAXIMUM W/C=0.53, GRADE 60 STEEL FOR REBAR AND GRADE 65 FOR WWF.
 - WEEP HOLES ARE TO BE USED WHEN THE YEARLY LOWEST WATER ELEVATION IS ABOVE THE TOP OF THE BOTTOM SLAB OF THE STRUCTURE.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	REVISED 5/8/2018	APPROVED 5/8/2018	STANDARD STORM DRAINAGE DETAIL MANHOLE AND INLET (TYPE P)	SD 2.7
---	------------------	-------------------	---	--------

4 MANHOLE AND INLET
C5.3 NOT TO SCALE

SQUARE STRUCTURE

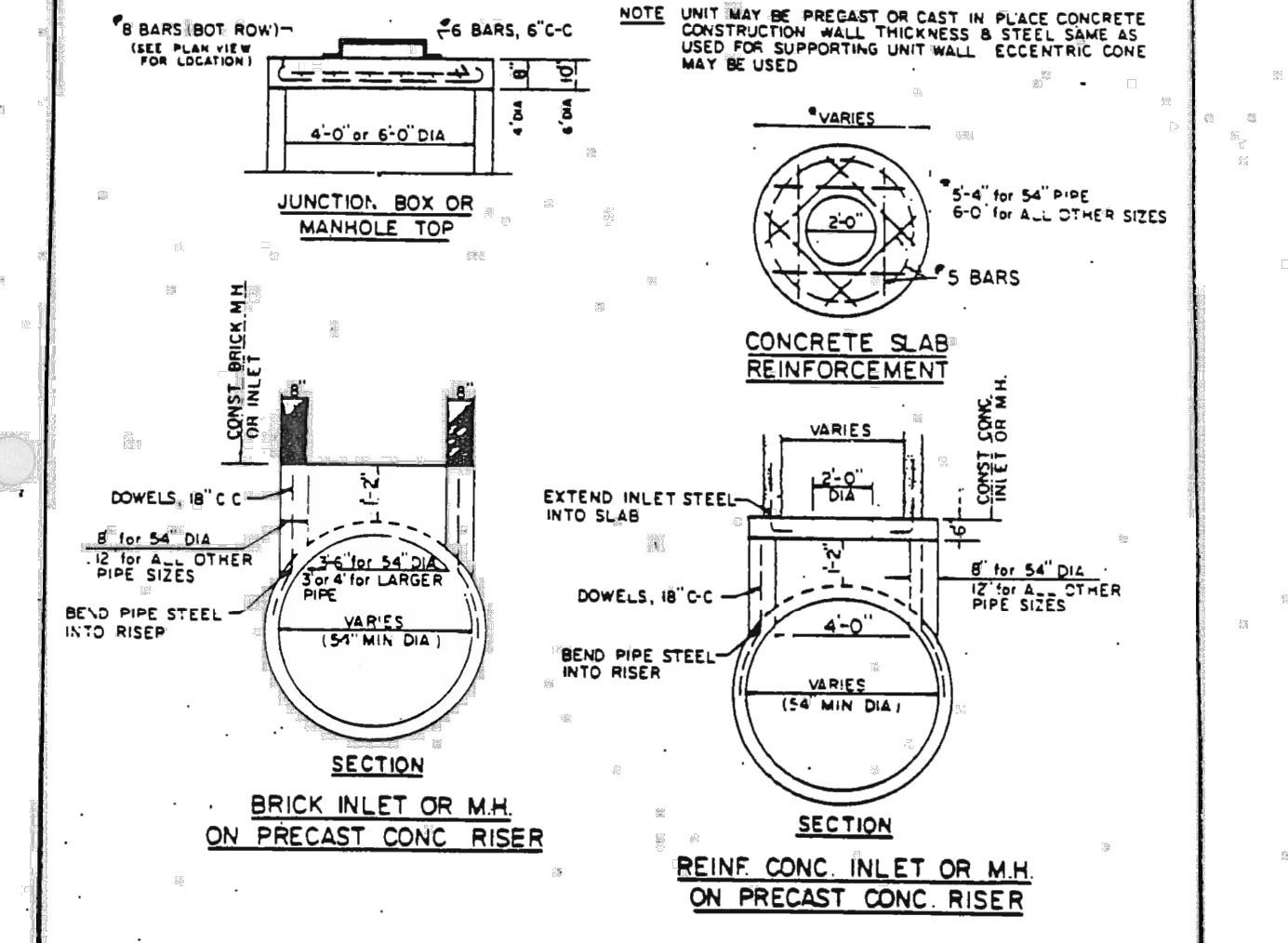
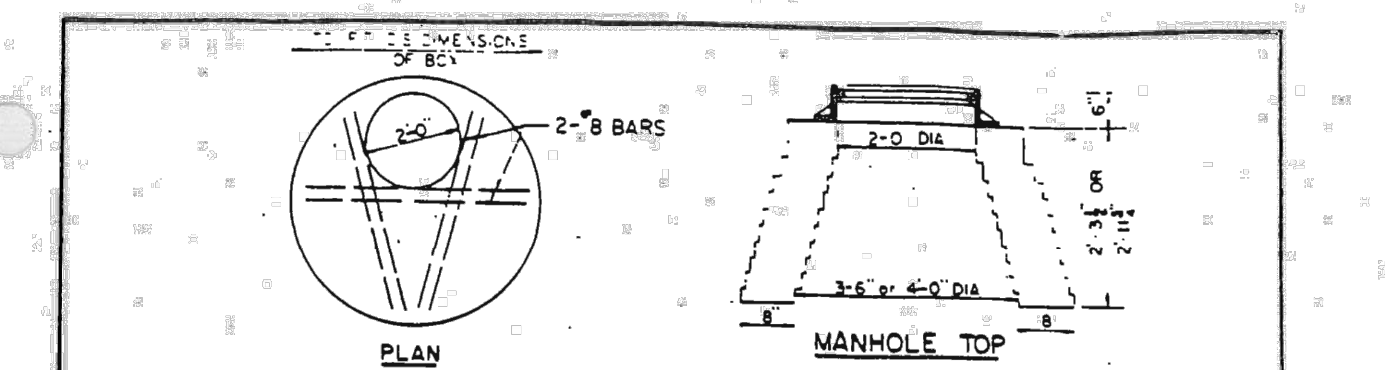
Standard Detail	Width (ft)	Length (ft)	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel
2.7	3.5	3.5	0.0 - 5.0	6.0	#4@10"H #4@10"V E.W.	8.0	#4@7" E.W.	8.0	#4@10" E.W.
2.7	3.5	3.5	5.1 - 10.0	6.0	#4@9"H #4@10"V E.W.	8.0	#4@6" E.W.	8.0	#4@10" E.W.
2.7	3.5	3.5	10.1 - 15.0	6.0	#5@6"H #4@10"V E.W.	8.0	#4@6.5" E.W.	8.0	#4@10" E.W.

ROUND STRUCTURE

Standard Detail	Dia. (ft) Min.	Dia. (ft) Max.	Height (ft)	Wall Thickness (in)	Wall Steel	Top Slab Thickness (in)	Top Slab Steel	Bottom Slab Thickness (in)	Bottom Slab Steel
2.7	3.5	4.0	0.0 - 5.0	6.0	8 x 8 W20 or #4@10"E.W.	8.0	#4@7" E.W.	8.0	#4@10" E.W.
2.7	3.5	4.0	5.1 - 10.0	6.0	8 x 8 W20 or #4@10"E.W.	8.0	#4@6" E.W.	8.0	#4@10" E.W.
2.7	3.5	4.0	10.1 - 15.0	6.0	8 x 8 W20 or #4@10"E.W.	8.0	#4@6.5" E.W.	8.0	#4@10" E.W.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	REVISED 5/8/2018	APPROVED 5/8/2018	STANDARD STORM DRAINAGE DETAIL MANHOLE AND INLET (TYPE P)	SD 2.7
---	------------------	-------------------	---	--------

5 MANHOLE AND INLET
C5.3 NOT TO SCALE



NOTES:

- THE INSIDE AND OUTSIDE OF BRICK WALLS SHALL BE PLASTERED WITH 1/2" CEMENT MORTAR THICK.

METROPOLITAN DADE COUNTY PUBLIC WORKS DEPARTMENT	REVISED 8/1/86	APPROVED 5/17/72	STANDARD STORM DRAINAGE DETAIL JUNCTION BOX, MANHOLE TOP & PRECAST CONCRETE RISER DETAILS	SD 3.6
--	----------------	------------------	---	--------

6 JUNCTION BOX, MANHOLE TOP & CONCRETE RISER
C5.3 NOT TO SCALE

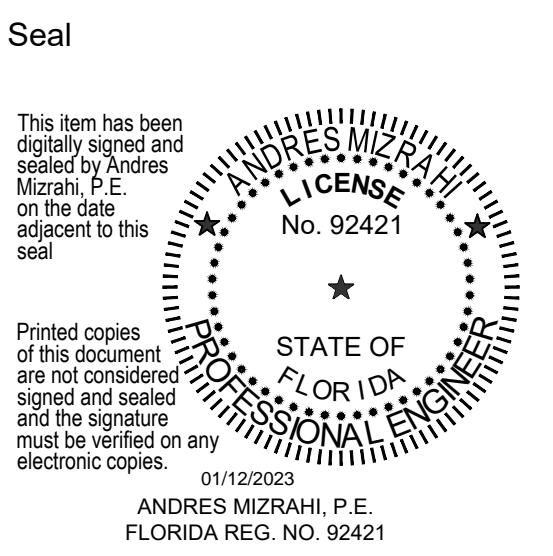


Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 92421
915 SW 17th St, Suite 302
Fort Lauderdale, FL 33316
Phone: (954) 348-6668
www.bowman.com
© 2021 Bowman Consulting Group Ltd



01/12/2023
ANDREW MIZRAHI, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

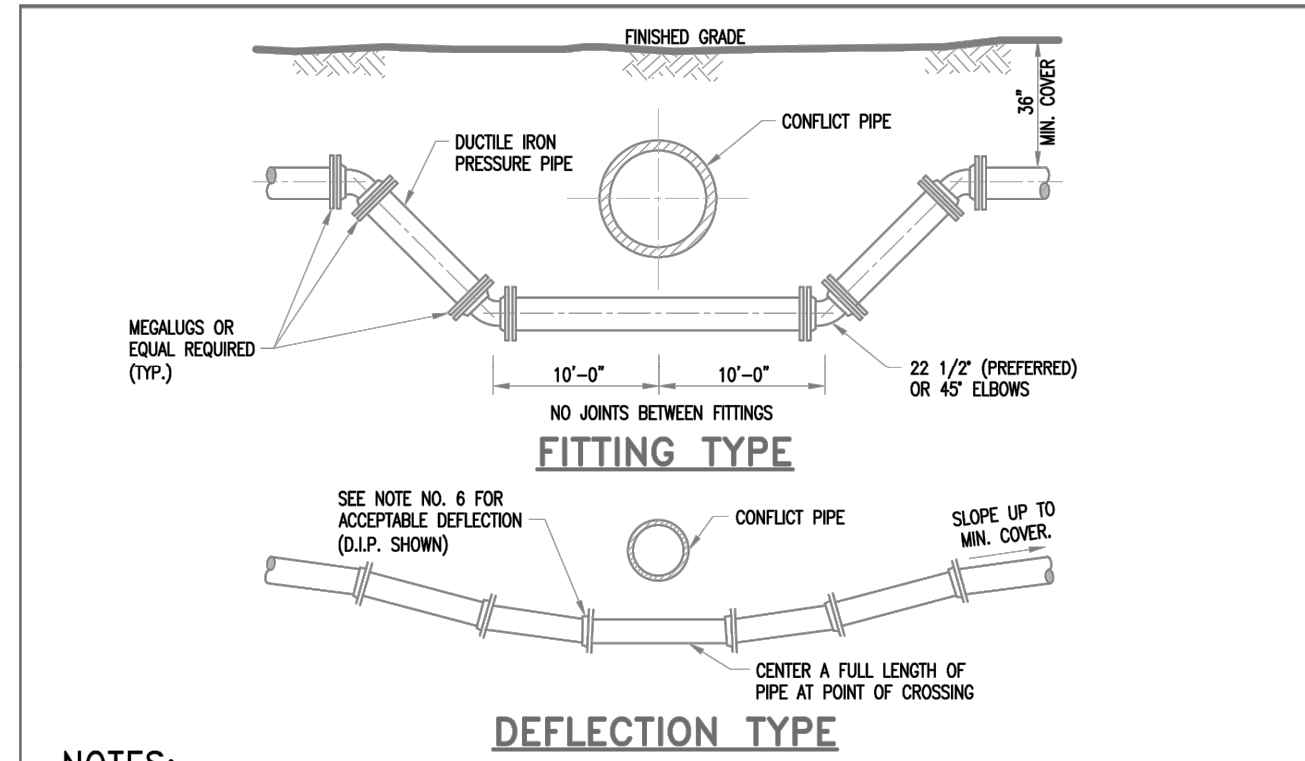
NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

CURRENT DESIGN	2021-005
NOTE APPLIED	
PROJECT #	010014-01-149
PRINTED FOR	PERMIT
DATE	12/15/2022
DRAWN BY	JP

Information contained on this drawing and in all digital files produced for drive control system files and not reproduced in any manner without express written or verbal consent from authorized project representatives.

PERMIT SITE AND DRAINAGE DETAILS SHEET NUMBER

C-5.3



NOTES:

- STORM SEWER, GRAVITY WASTEWATER AND RECLAIMED WATER MAIN CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE STORM/WASTEWATER/RECLAIMED WATER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS. BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6 INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/RECLAIMED WATER PIPES CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM 12" VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED, AND BOTH PIPES SHALL BE D.I.P. IRRESPECTIVE OF SEPARATION. D.I.P. IS NOT REQUIRED FOR STORM SEWERS.
- WHENEVER POSSIBLE MAINTAIN MIN. TEN (10) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN POTABLE WATER MAIN AND STORM SEWER, WASTEWATER MAIN, OR FORCE MAIN (A MIN. 6' SEPARATION MAY BE APPROVED ON A CASE BY CASE BASIS). MAINTAIN MIN. THREE (3) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN RECLAIMED WATER MAIN AND POTABLE WATER MAIN, STORM SEWER, WASTEWATER GRAVITY MAIN OR FORCE MAIN.
- FORCE MAIN CROSSING POTABLE WATER MAIN OR RECLAIMED WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN WITH THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN CROSSING OVER THE FORCE MAIN.
- FITTINGS SHALL BE RESTRAINED.
- THE DEFLECTION TYPE CROSSING IS PREFERRED.
- DO NOT EXCEED SIZE OF MANUFACTURERS RECOMMENDED JOINT DEFLECTION FOR DUCTILE IRON PIPE, PVC PIPE CURVATURE MAY ONLY BE ACCOMPLISHED BY INSTALLING APPROPRIATE BENDS.
- POTABLE WATER SERVICE LINES SHALL CROSS OVER WASTEWATER MAINS WITH MIN. 12" VERTICAL SEPARATION. WHERE THIS MIN. SEPARATION CANNOT BE MAINTAINED, THE WATER SERVICE SHALL BE ENCASED IN A MIN. 10" LONG CASING CENTERED OVER THE CROSSING WITH MIN. 6" VERTICAL SEPARATION.
- WASTEWATER MAINS, WATER MAINS, STORM PIPES AND OTHER UTILITY PIPES SHALL CROSS PERPENDICULAR WHENEVER POSSIBLE.

ITEM	CROSS REF.	SPEC. REF.
1	1.1	GS

STANDARD DETAIL
POTABLE WATER MAIN/FORCE MAIN PRESSURE PIPE CONFLICT DETAIL
MIAMI-DADE COUNTY
07/20/2016
D.V.
SHEET 1 OF 1

1 WATER MAIN CONFLICT DETAIL
PS1.1 NOT TO SCALE

LOCATION OF PUBLIC WATER SYSTEM MAINS ACCORDANCE WITH F.A.C. RULE 62-565.314

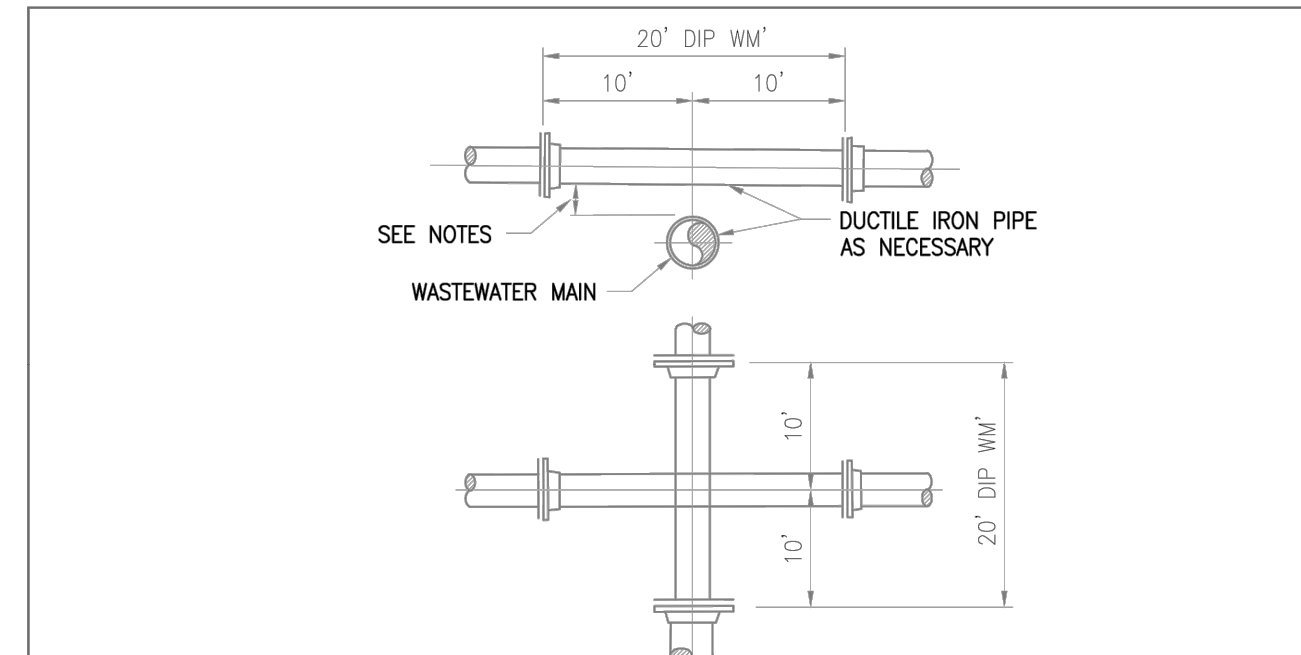
JOINT ENGINES & CROSSINGS (FULL LENGTH OF PIPE CENTERED)	CROSSINGS (1)	HORIZONTAL SEPARATION	OTHER PIPE
Alternate: 3 ft. minimum	Water Main 12 inches to the minimum	Water Main 3 ft. minimum	Storm Sewer, Sanitary Sewer, Reclaimed Water (2)
Alternate: 3 ft. minimum	Water Main 12 inches preferred 6 inches minimum	Water Main 3 ft. minimum	Vacuum Sanitary Sewer
Alternate: 6 ft. minimum	Water Main 12 inches to the minimum	Water Main 10 ft. preferred 6 ft. minimum (3)	Gravity or Pressure, Sanitary Sewer, Force Main, Reclaimed Water (1)
			On-Cell, Sump, Treatment & Disposal System

NOTES:
(1) WATER MAIN SHOULD BE ABOVE OTHER PIPE. WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
(2) RECLAIMED WATER REQUIRING UNDER PIPE III OF CHAPTER 62-610, F.A.C. TO BE MAINTAINED AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
(3) RECLAIMED WATER NOT REQUIRING UNDER PART III OF CHAPTER 62-610, F.A.C.

ITEM	CROSS REF.	SPEC. REF.
1	1.5	GS

STANDARD DETAIL
POTABLE WATER MAIN, WASTEWATER & STORM SEWER CONFLICT
MIAMI-DADE COUNTY
10/1/2017
D.V.
SHEET 1 OF 2

2 WATER MAIN & STORM SEWER CONFLICT
PS1.1 NOT TO SCALE



NOTES:

- STORM SEWER, GRAVITY WASTEWATER AND RECLAIMED WATER MAIN CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE STORM/WASTEWATER/RECLAIMED WATER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN TEN (10) FEET BETWEEN ANY TWO JOINTS. BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6 INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/RECLAIMED WATER PIPES CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM 12" VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED, AND BOTH PIPES SHALL BE D.I.P. D.I.P. IS NOT REQUIRED FOR STORM SEWERS.
- WHENEVER POSSIBLE MAINTAIN MIN. TEN (10) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN POTABLE WATER MAIN AND STORM SEWER, WASTEWATER MAIN, OR FORCE MAIN (A MIN. 6' SEPARATION MAY BE APPROVED ON A CASE BY CASE BASIS). MAINTAIN MIN. THREE (3) FEET HORIZONTAL DISTANCE (WALL TO WALL) BETWEEN RECLAIMED WATER MAIN AND POTABLE WATER MAIN, STORM SEWER, WASTEWATER GRAVITY MAIN OR FORCE MAIN.
- FORCE MAIN CROSSING POTABLE WATER MAIN OR RECLAIMED WATER MAIN SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND OUTSIDE OF THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN WITH THE POTABLE WATER MAIN OR RECLAIMED WATER MAIN CROSSING OVER THE FORCE MAIN.
- WASTEWATER LATERALS SHALL CROSS UNDER POTABLE WATER MAINS WITH A MIN. 12" VERTICAL SEPARATION. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, A 20" SECTION OF DUCTILE IRON PIPE POTABLE WATER MAIN CENTERED ON THE CROSSING IS REQUIRED AND THE MINIMUM VERTICAL SEPARATION SHALL BE 6". WHERE THERE IS NO ALTERNATIVE TO A WASTEWATER LATERAL PIPE CROSSING OVER A POTABLE WATER MAIN, A MINIMUM 12" VERTICAL SEPARATION IS REQUIRED. THE LATERAL SHALL BE P.V.C. C-900 SDR18 OR BETTER. THE POTABLE WATER MAIN SHALL BE D.I.P. AND THE PIPE JOINTS SHALL BE EQUIDISTANT FROM THE POINT OF CROSSING.
- POTABLE WATER SERVICE LINES SHALL CROSS OVER WASTEWATER MAINS WITH A MIN. 12" VERTICAL SEPARATION. WHERE THIS MIN. SEPARATION CANNOT BE MAINTAINED, THE WATER SERVICE SHALL BE ENCASED IN A MIN. 10" LONG PVC CASING CENTERED OVER THE CROSSING WITH MIN. 6" VERTICAL SEPARATION.
- WASTEWATER MAINS, WATER MAINS, STORM PIPES AND OTHER UTILITY PIPES SHALL CROSS PERPENDICULAR WHENEVER POSSIBLE.

ITEM	CROSS REF.	SPEC. REF.
1	1.5	GS

STANDARD DETAIL
WATER AND SEWER MAINS CROSSING
MIAMI-DADE COUNTY
10/1/2017
D.V.
SHEET 2 OF 2

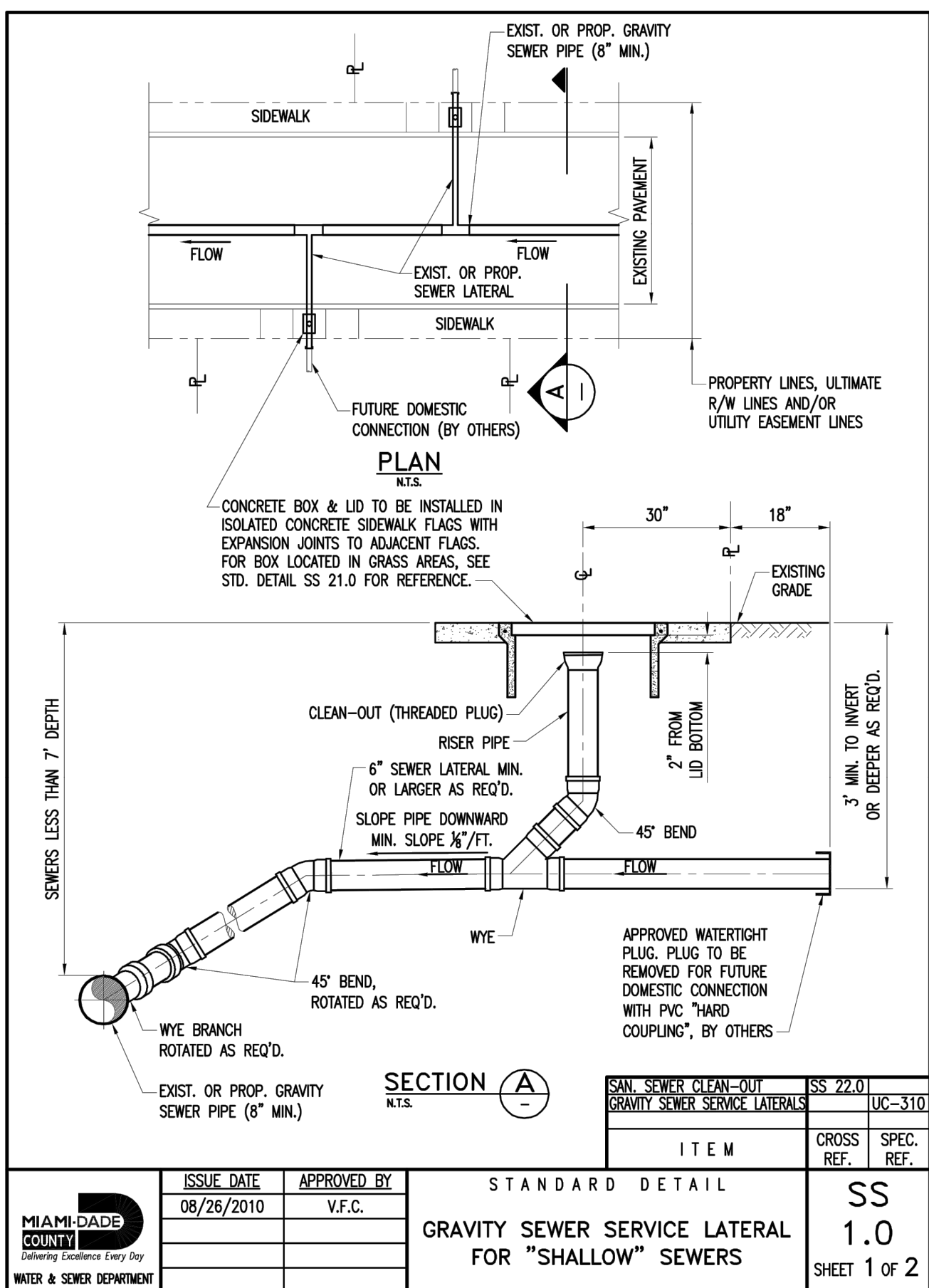
3 WATER AND SEWER MAINS CROSSING
PS1.1 NOT TO SCALE

- ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.
- COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4'-0" MIN.
- ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 53 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.
- ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND CHECK VALVE AT THE POINT OF ENTRY.
- ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.
- ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT, PROVIDING THE APPROPRIATE CHARGES HAVE BEEN PREPAID.
- FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY MIAMI-DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.
- CONTRACTOR MUST CALL MIAMI-DADE INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.
- CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THE DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.
- WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT:
 - EASEMENTS, IF REQUIRED
 - CONTRACTOR'S WAIVER AND RELEASE OF LIEN
 - ABSOLUTE BILL OF SALE
 - CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT)
 - DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT)
 - "RECORD DRAWING" PRINTS (24" x 36" SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED SURVEYOR & MAPPER, ALONG WITH PRINTS OF "RECORD DRAWINGS" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR & MAPPER. (NO. OF PRINTS: 3-FOR WATER, 4-FOR GRAVITY SEWER AND 5-FOR FORCE MAIN OR PUMP STATION PROJECTS). Submit of final CAD files required.
 - H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS
 - BILL OF SALE SKETCH (8 1/2" x 11") FOR WATER AND SEWER, SEPARATELY
- ALL NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.
- AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MIAMI-DADE FOR ALL NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.
- UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.

ITEM	CROSS REF.	SPEC. REF.
1	0.5	GS

STANDARD DETAIL
STANDARD REQUIREMENTS WATER AND SEWER CONSTRUCTION
MIAMI-DADE COUNTY
03/01/2010
07/20/2016
V.F.C.
D.V.
SHEET 1 OF 2

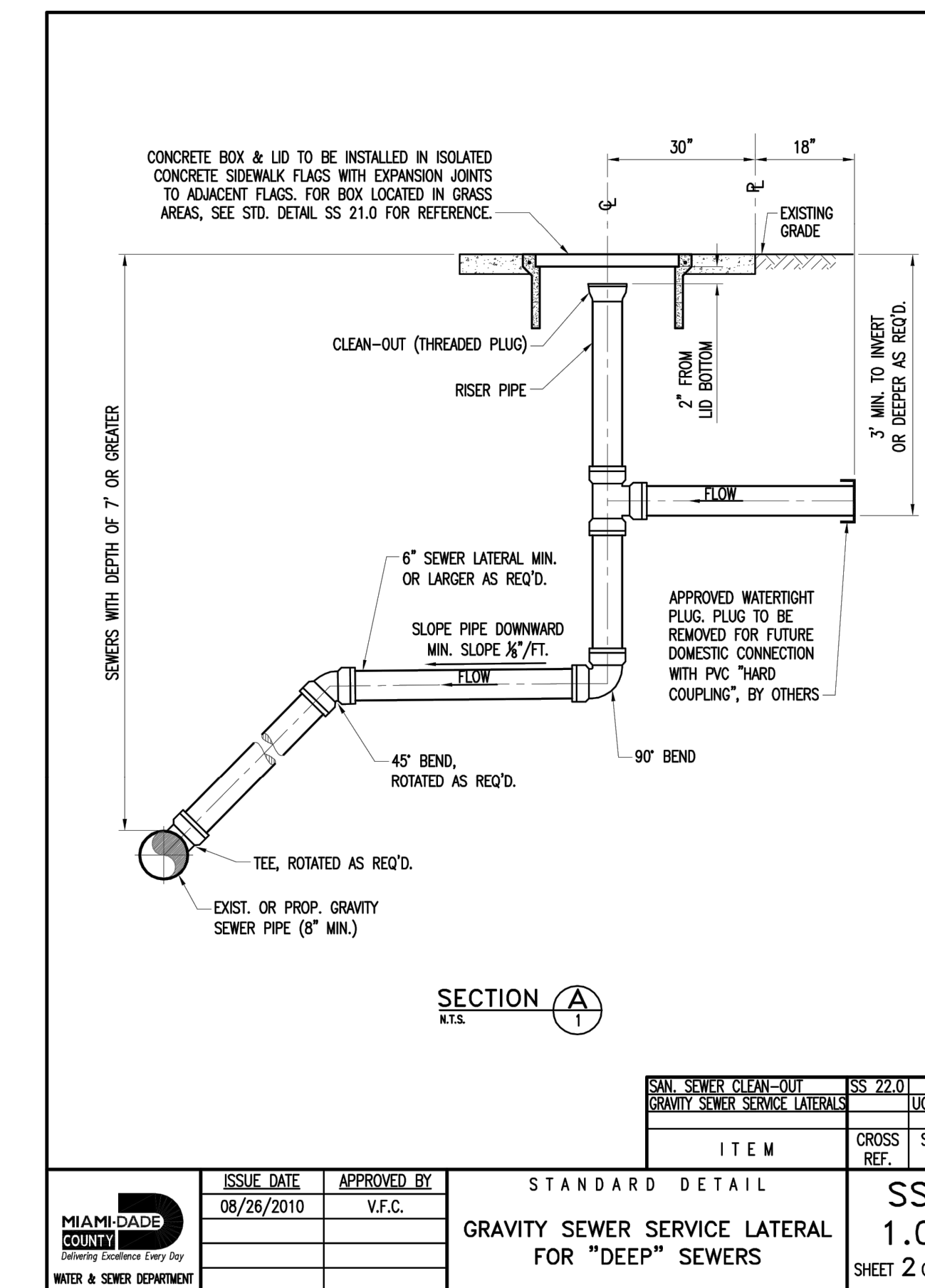
4 STANDARD REQUIREMENTS FOR WATER & SEWER
PS1.1 NOT TO SCALE



ITEM	CROSS REF.	SPEC. REF.
1	1.0	SS

STANDARD DETAIL
GRAVITY SEWER SERVICE LATERAL FOR "SHALLOW" SEWERS
MIAMI-DADE COUNTY
08/26/2010
V.F.C.
SHEET 1 OF 2

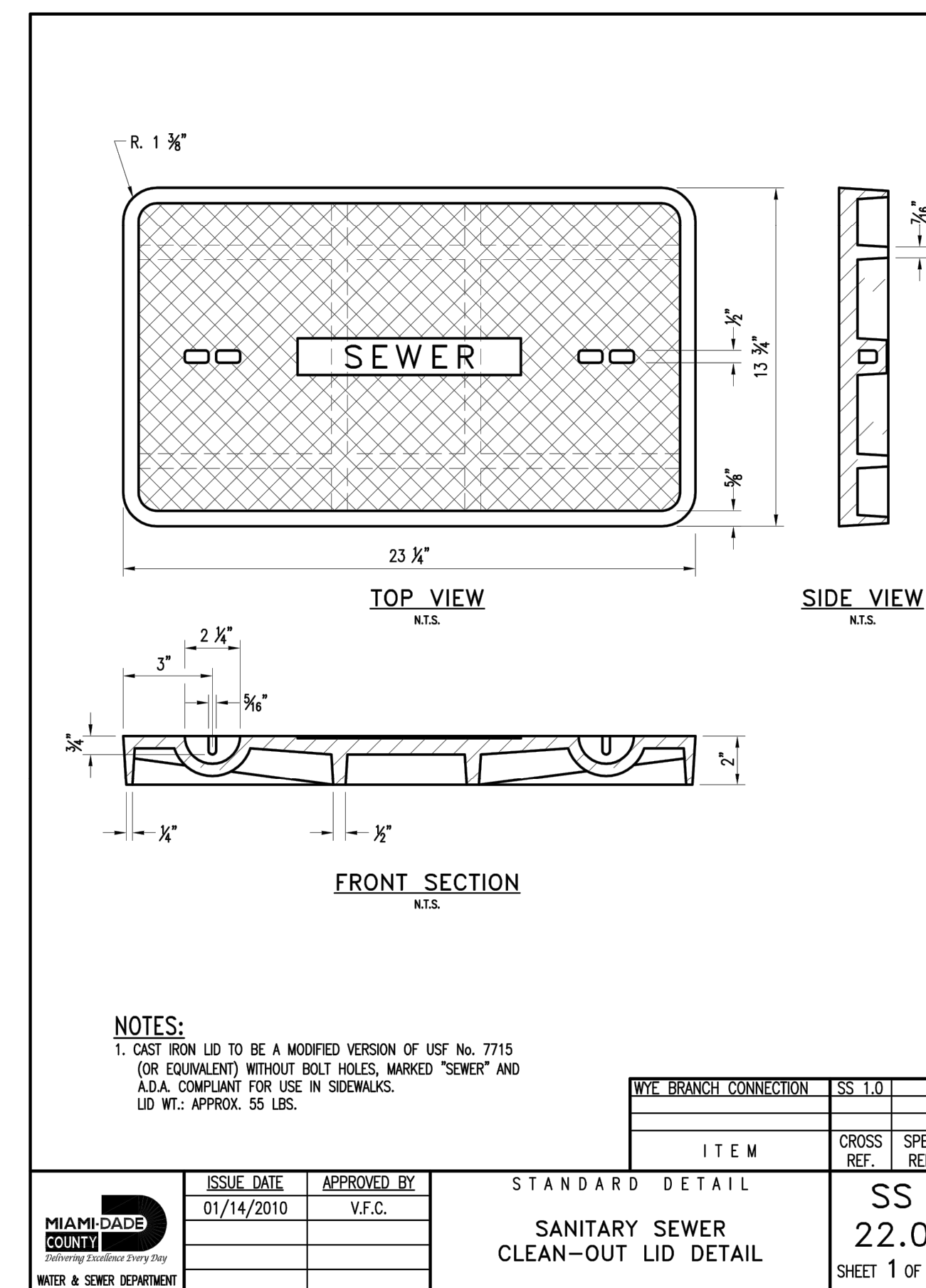
5 SHALLOW SEWER LATERAL SERVICE
PS1.1 NOT TO SCALE



ITEM	CROSS REF.	SPEC. REF.
1	1.0	SS

STANDARD DETAIL
GRAVITY SEWER SERVICE LATERAL FOR "DEEP" SEWERS
MIAMI-DADE COUNTY
08/26/2010
V.F.C.
SHEET 2 OF 2

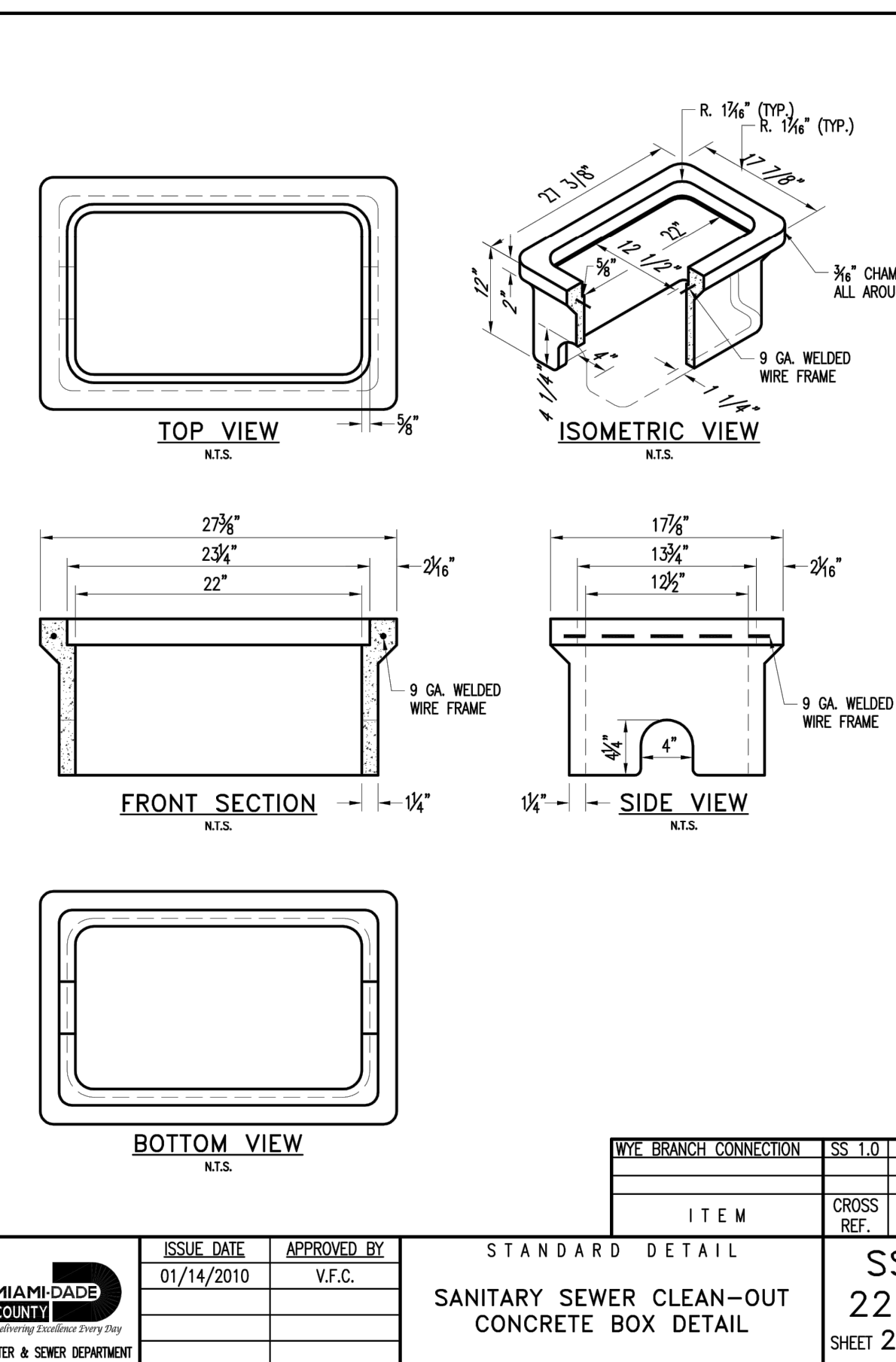
6 DEEP SEWER LATERAL SERVICE
PS1.1 NOT TO SCALE



ITEM	CROSS REF.	SPEC. REF.
1	22.0	SS

STANDARD DETAIL
SANITARY SEWER CLEAN-OUT LID DETAIL
MIAMI-DADE COUNTY
01/14/2010
V.F.C.
SHEET 1 OF 2

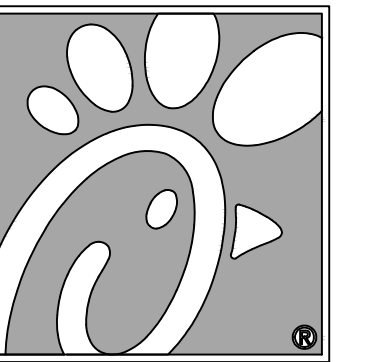
7 SANITARY SEWER CLEAN-OUT LID
PS1.1 NOT TO SCALE



ITEM	CROSS REF.	SPEC. REF.
1	22.0	SS

STANDARD DETAIL
SANITARY SEWER CLEAN-OUT CONCRETE BOX DETAIL
MIAMI-DADE COUNTY
01/14/2010
V.F.C.
SHEET 2 OF 2

8 SANITARY SEWER CLEAN-OUT BOX
PS1.1 NOT TO SCALE



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 92421
Professional Engineer
No. 92421
STATE OF FLORIDA
Professional Engineer

Seal

This item has been digitally signed and sealed by Andres Mirah, P.E. on the date adjacent to this seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
01/12/2023
ANDRES MIRAH, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

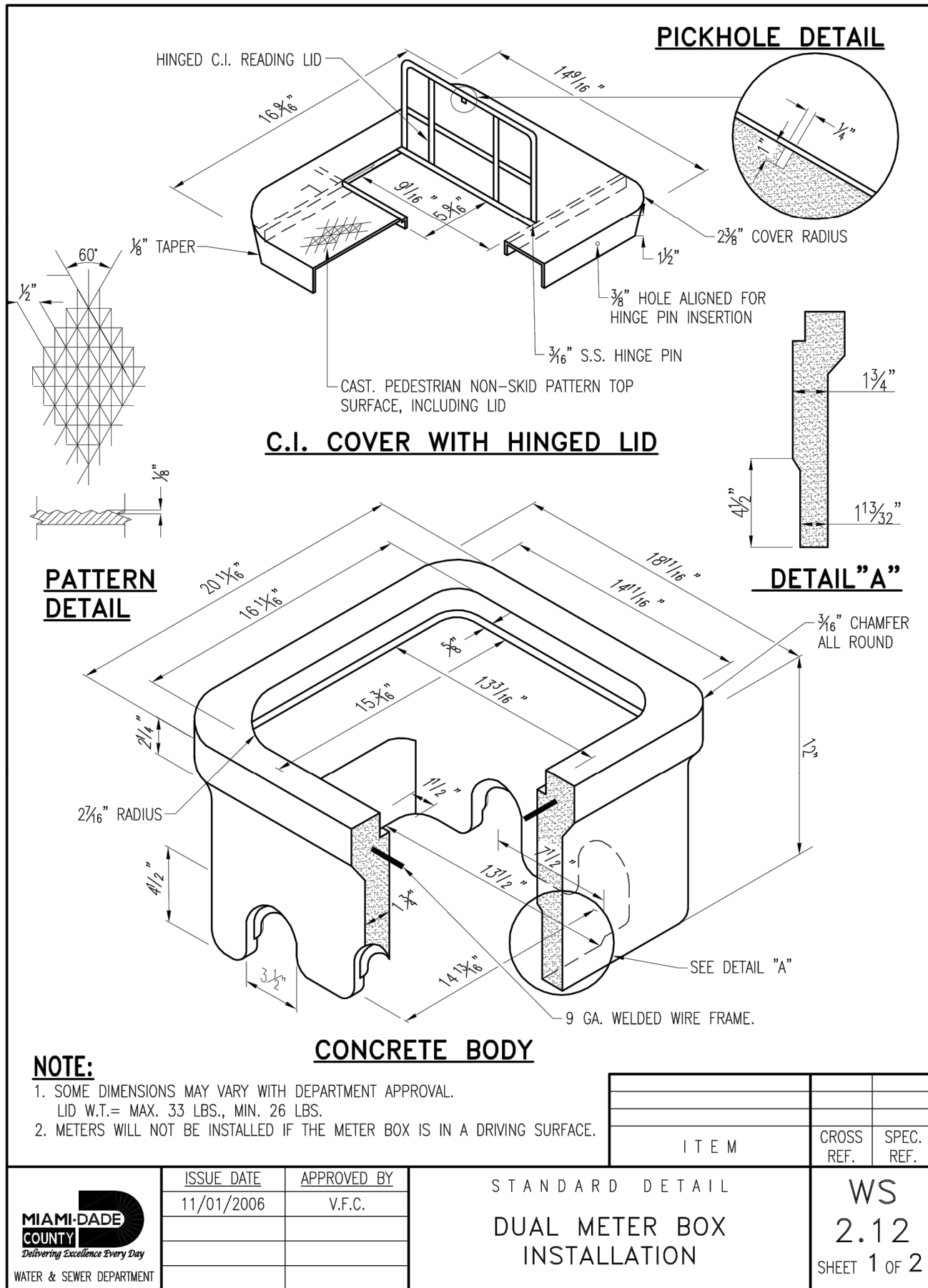
FSU# 5069

NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

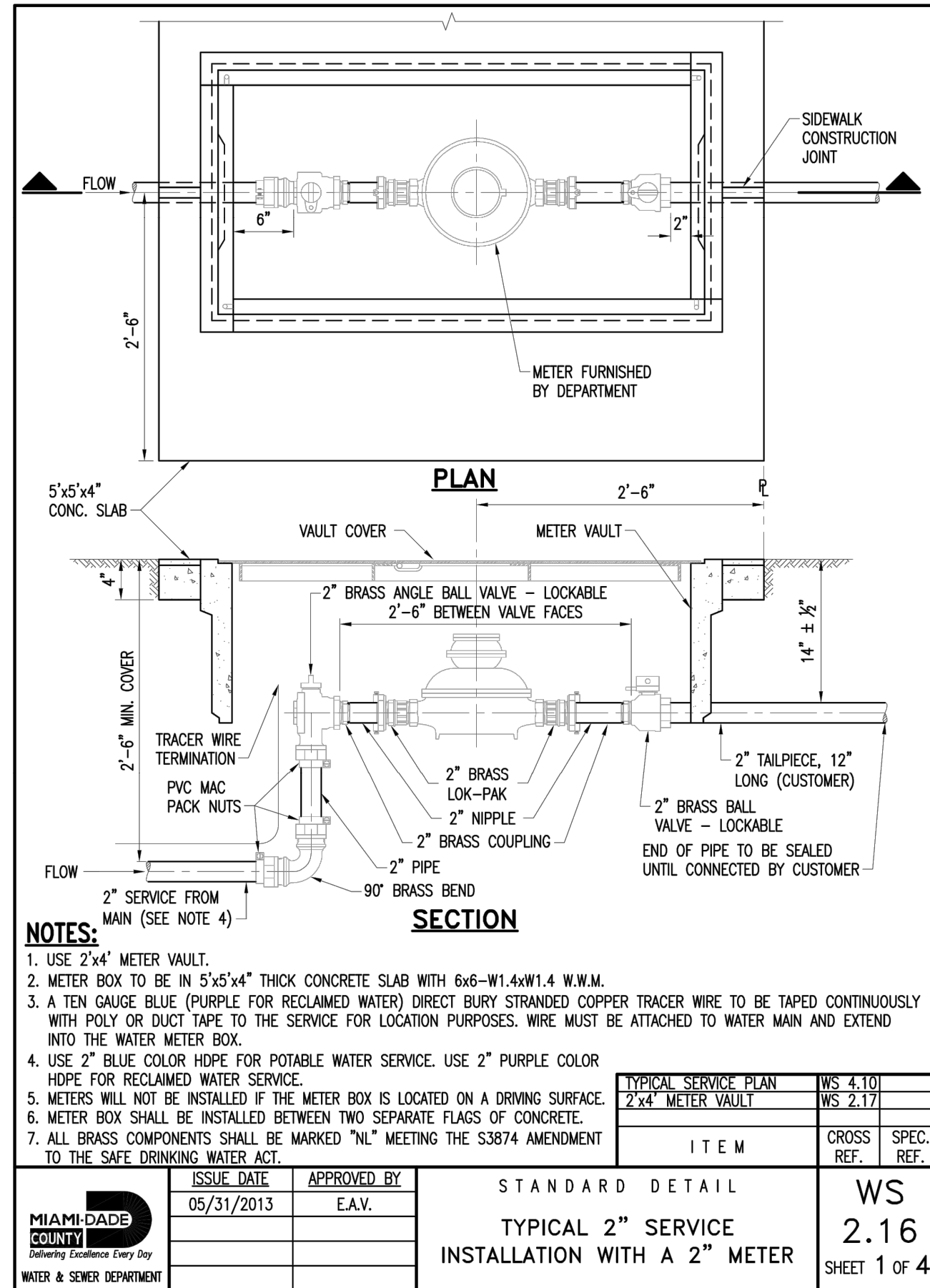
REVISION SCHEDULE	NO.	DATE	DESCRIPTION
NO. DATE DESCRIPTION			
1	05/09/2022	ADD GAS AND CO	

CURRENT DESIGN NOTE APPLIED PROJECT # 010014-01-149 PRINTED FOR PERMIT DATE 12/15/2022 DRAWN BY JP SHEET UTILITY DETAILS SHEET NUMBER

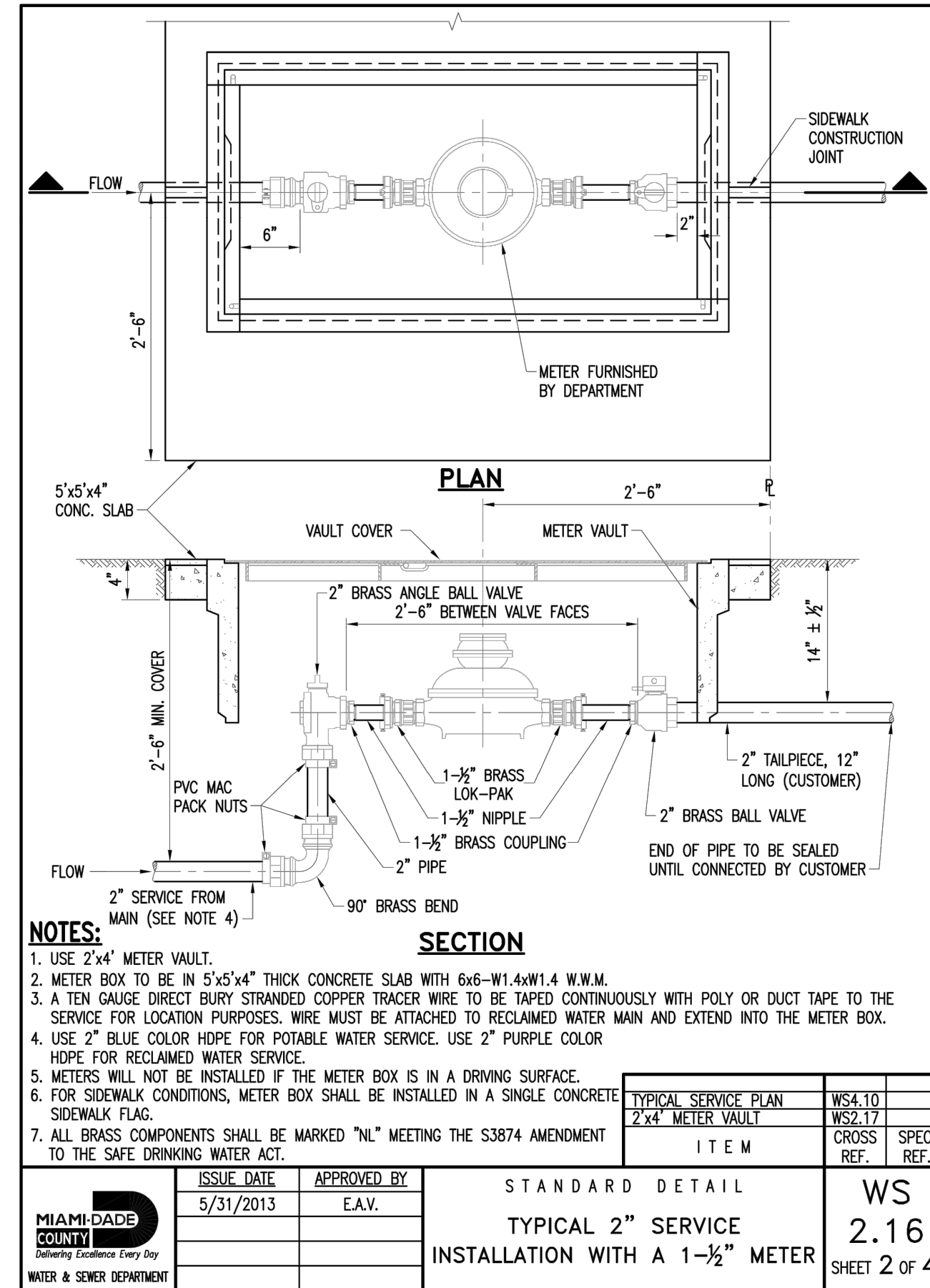
PS-1.1



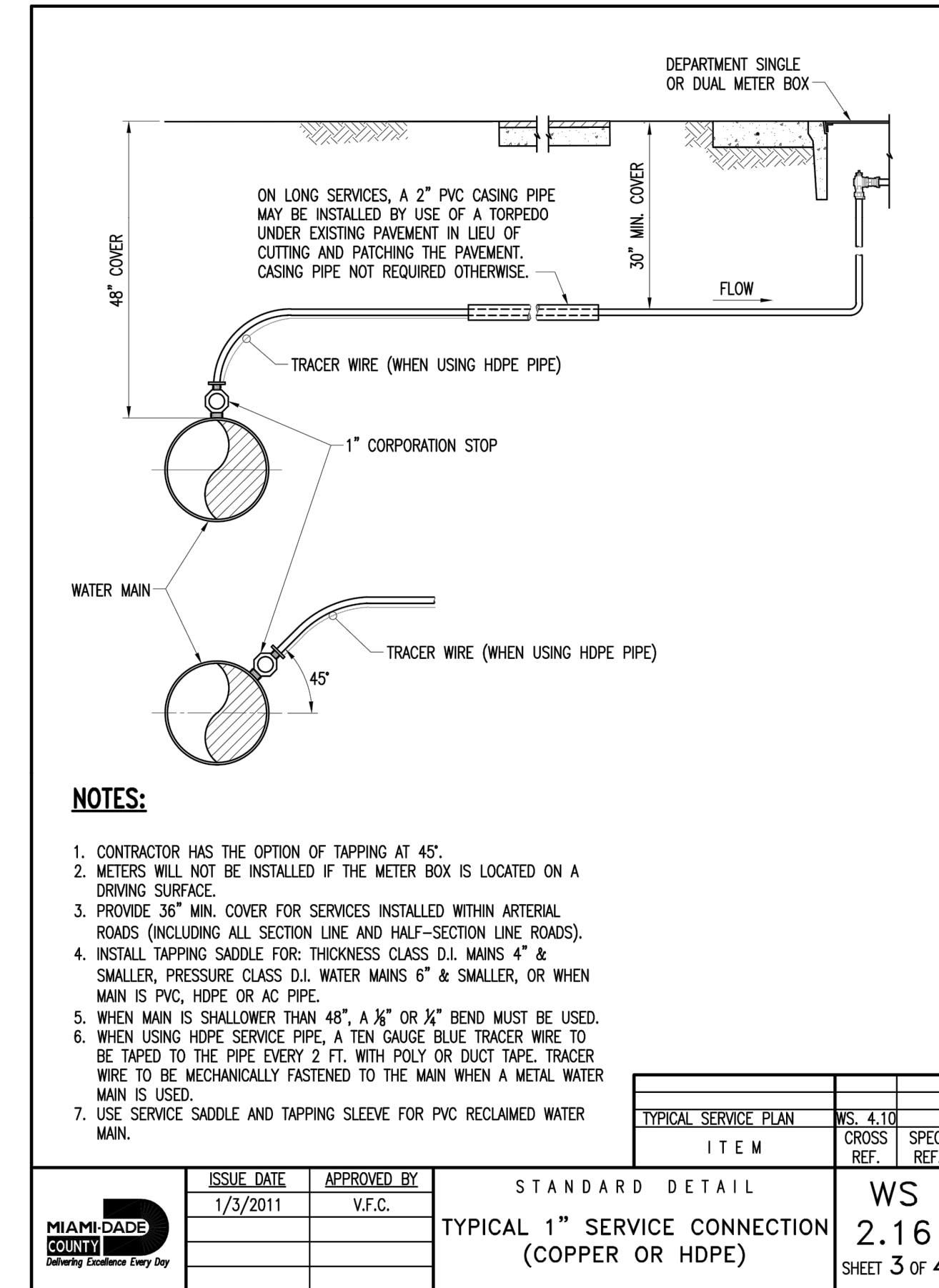
1 DUAL METER BOX
PS1.2 NOT TO SCALE



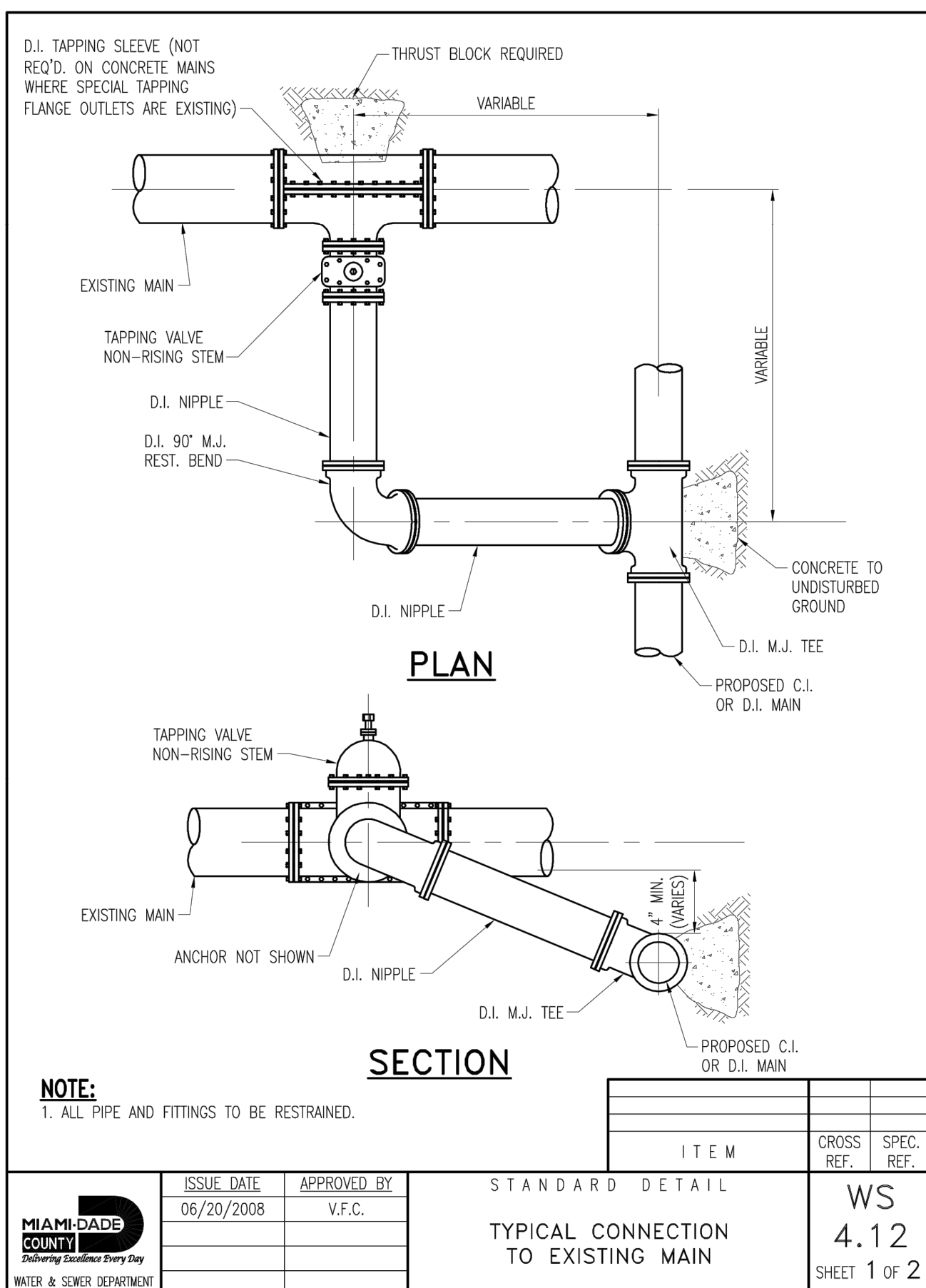
2 TYPICAL 2" SERVICE WITH 2" METER
PS1.2 NOT TO SCALE



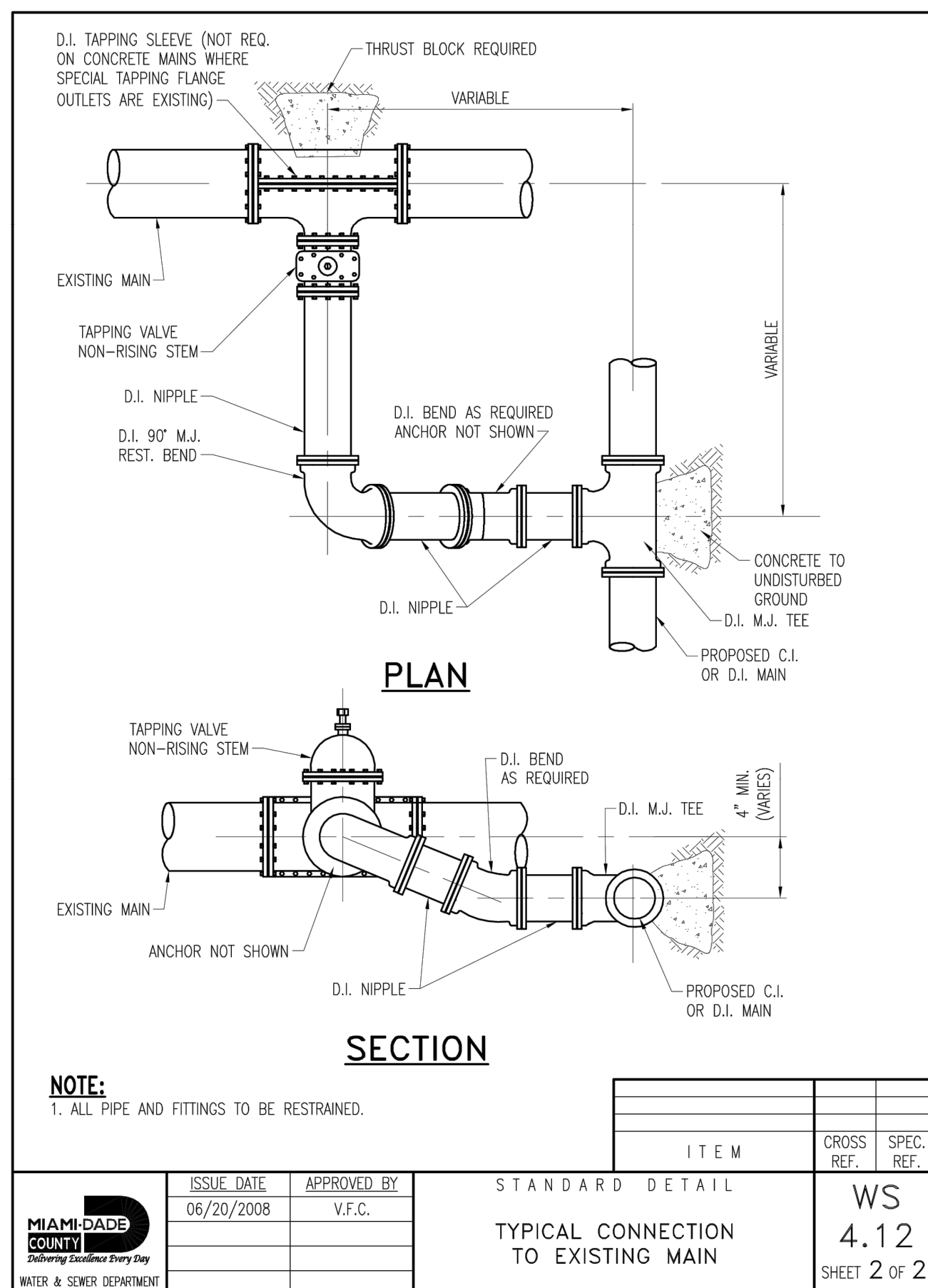
3 TYPICAL 2" SERVICE WITH 1-1/2" METER
PS1.2 NOT TO SCALE



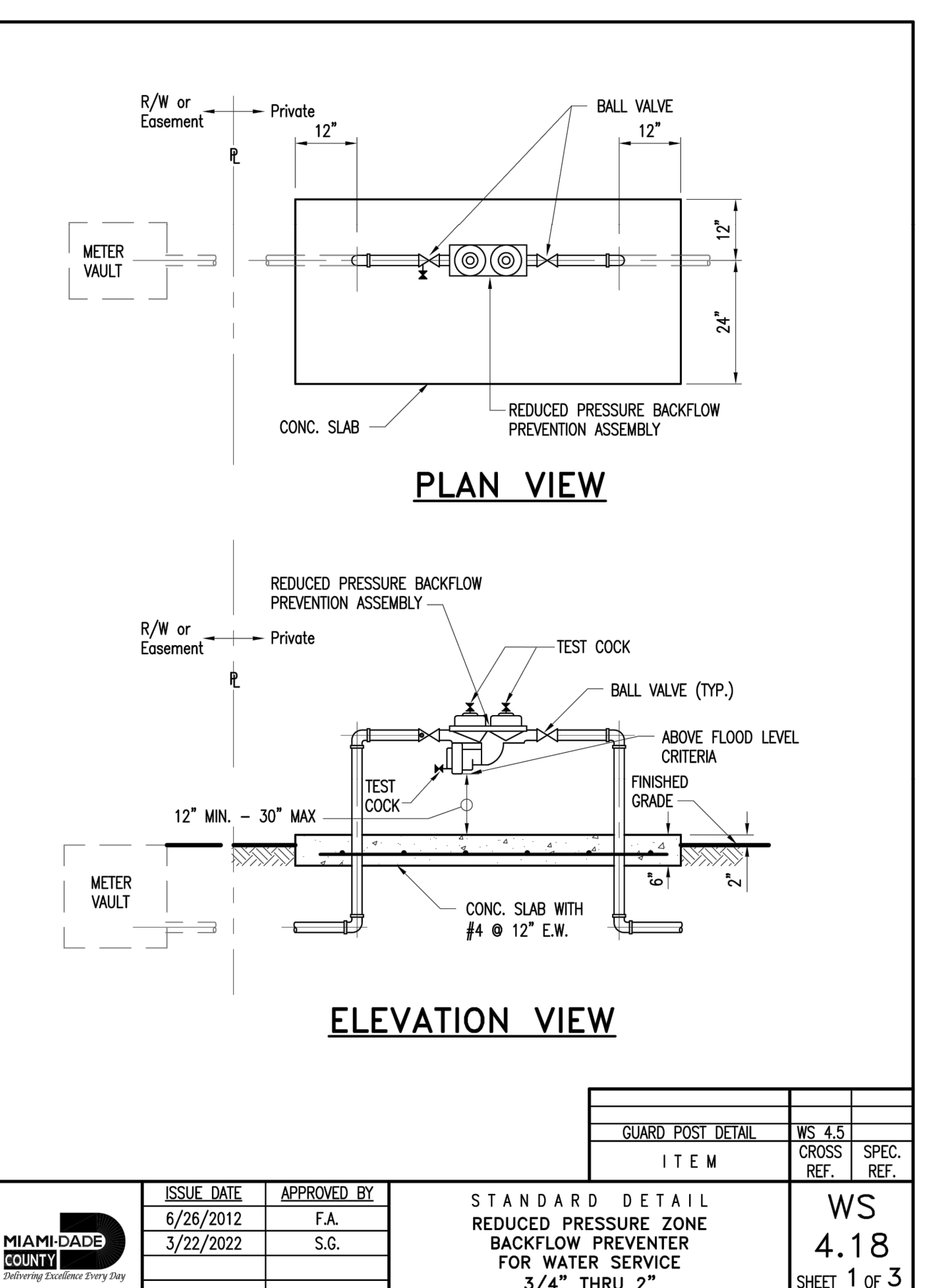
4 TYPICAL 1" SERVICE CONNECTION
PS1.2 NOT TO SCALE



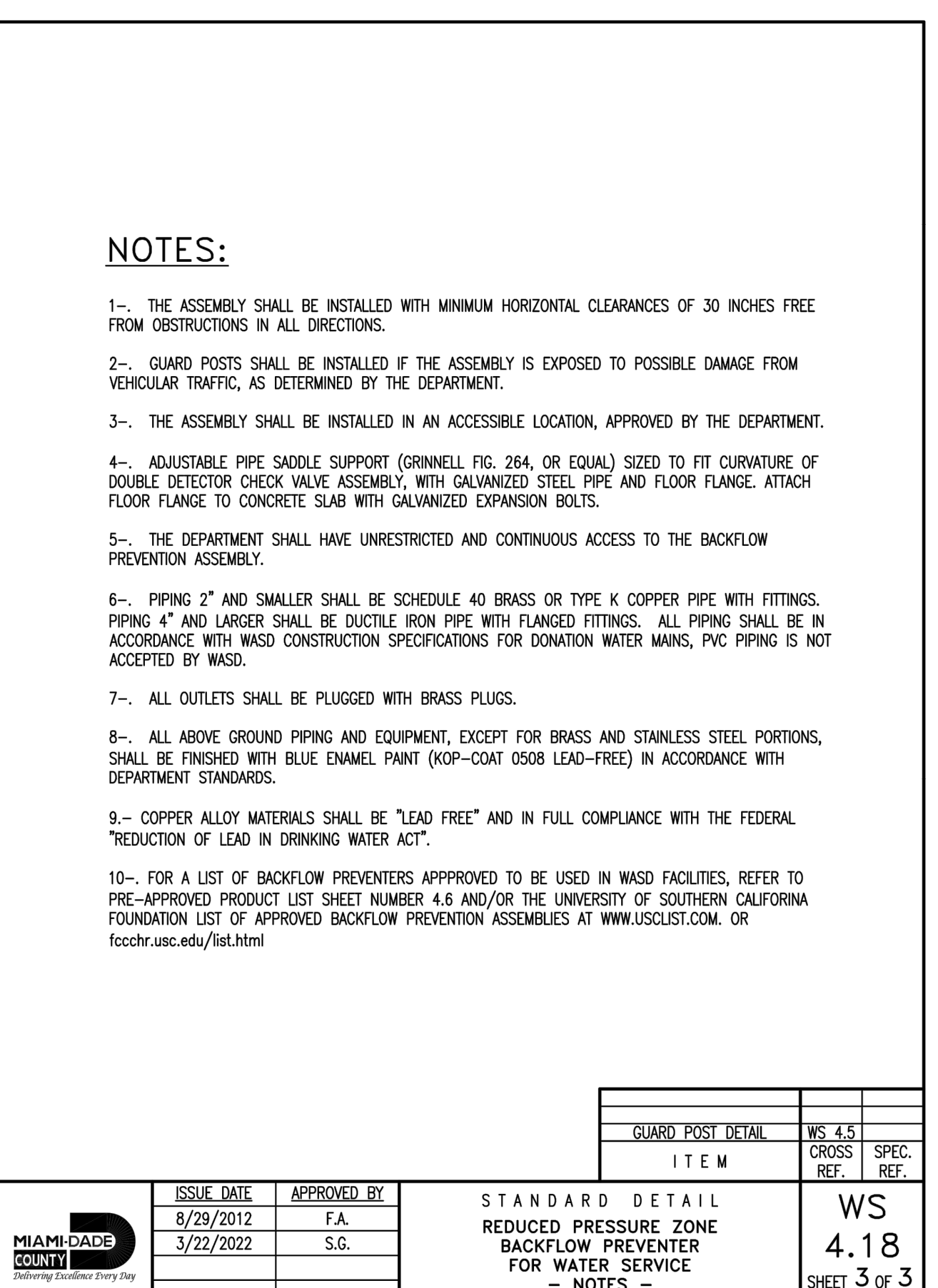
5 TYPICAL CONNECTION TO EXISTING MAIN
PS1.2 NOT TO SCALE



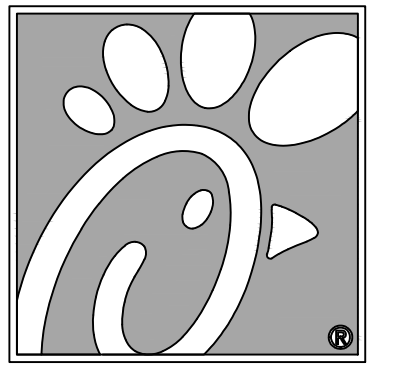
6 TYPICAL CONNECTION TO EXISTING MAIN
PS1.2 NOT TO SCALE



7 BACKFLOW PREVENTER 3/4" THRU 2"
PS1.2 NOT TO SCALE



8 BACKFLOW PREVENTER NOTES
PS1.2 NOT TO SCALE



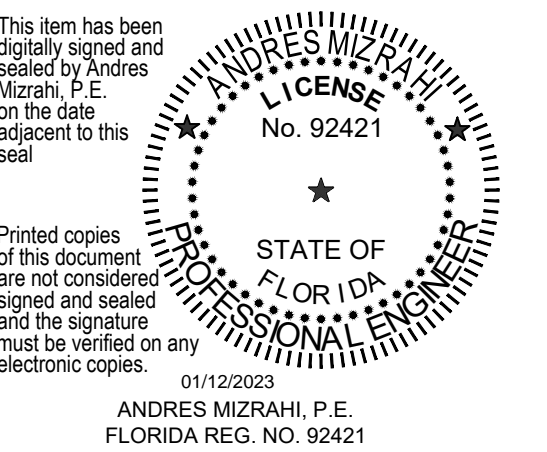
Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Bowman

Certificate of Authorization License No. 2042
810 S.E. 17th St. Suite 302
Fort Lauderdale, FL 33316
Phone: (954) 314-8488
www.bowman.com
© 2021 Bowman Consulting Group Ltd

Seal



01/12/2023
ANDRES MIRZAH, P.E.
FLORIDA REG. NO. 92421

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

FSU# 5069

NO.	DATE	DESCRIPTION
1	05/09/2022	ADD GAS AND CO

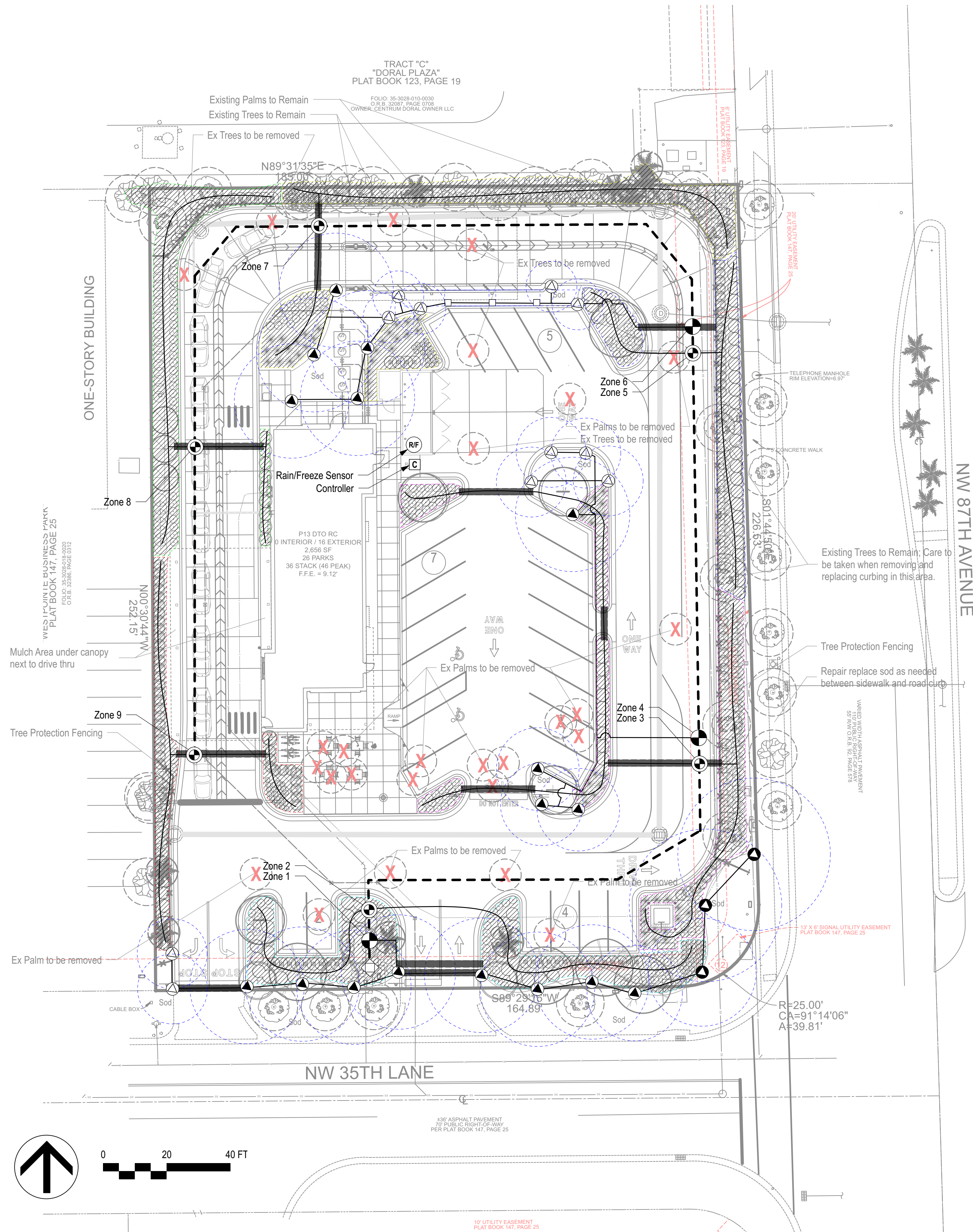
ISSUE DATE	APPROVED BY	STANDARD DETAIL	WS
06/20/2008	V.F.C.	TYPICAL CONNECTION TO EXISTING MAIN	4.12

UTILITY DETAILS

PS-1.2

IRRIGATION CONTROLLER ZONES *zones are calculated based on output of products utilized in the design and as specified in the legend.

ZONE	GPM	ZONE	GPM
1.	11.70	6.	7.80
2.	DRIP	7.	DRIP
3.	DRIP	8.	DRIP
4.	4.41	9.	DRIP
5.	DRIP		



IRRIGATION LEGEND & PRODUCT SPEC - MUST USE RAINBIRD PRODUCTS

SYMBOL	PRODUCT	SPECIFICATION
M	IRRIGATION METER	SEE CIVIL PLANS; PROVIDED BY THE GENERAL CONTRACTOR
S	1" MANUAL SHUTOFF VALVE	1 REQUIRED
BF	BACKFLOW PREVENTER	AS REQUIRED BY CITY; SEE CIVIL PLANS
PR	1" PRESSURE REGULATOR	AS REQUIRED
EV	1" ELECTRICAL MASTER VALVE	1 REQUIRED
LANDSCAPE DRIPLINE	LANDSCAPE DRIPLINE	RAINBIRD XFD-06-18
SPRAY: RVAN SIDE STRIP NOZZLE	SPRAY: RVAN SIDE STRIP NOZZLE	RAINBIRD RD1800-S-P45-RVANLCS or (RCS)
SPRAY: RVAN14 NOZZLE - 45°-270° SPRAY - 8'-14" RADIUS	SPRAY: RVAN14 NOZZLE - 45°-270° SPRAY - 8'-14" RADIUS	RAINBIRD RD1800-S-P45-R-VAN14
SPRAY: RVAN18 NOZZLE - 45°-270° SPRAY - 13'-18" RADIUS	SPRAY: RVAN18 NOZZLE - 45°-270° SPRAY - 13'-18" RADIUS	RAINBIRD RD1800-S-P45-R-VAN18
SPRAY: RVAN24 NOZZLE - 45°-270° SPRAY - 17'-24" RADIUS	SPRAY: RVAN24 NOZZLE - 45°-270° SPRAY - 17'-24" RADIUS	RAINBIRD RD1800-S-P45-R-VAN24
1" ELECTRIC VALVE	1" ELECTRIC VALVE	RAINBIRD 100-PGA
1" DRIP CONTROL ZONE VALVE	1" DRIP CONTROL ZONE VALVE	RAINBIRD XGZ-100-PRB-COM
C	AUTOMATIC CONTROLLER	RAINBIRD ESP-ME3 (120V required); expansion modules as needed
R/F	RAIN/FREEZE SENSOR	RAINBIRD WR2-RFC
1" LATERAL LINE	1" LATERAL LINE	CLASS 200 PVC IRRIGATION PIPE AND FITTINGS - 1" LATERAL LINES
1.5" MAINLINE	1.5" MAINLINE	CLASS 200 PVC IRRIGATION PIPE AND FITTINGS - 1.5" MAINLINE
IRRIGATION SLEEVE - 4" SCH 40 PVC	IRRIGATION SLEEVE - 4" SCH 40 PVC	4" SCH 40 PVC SLEEVE UNDER PAVEMENT Installation of sleeves by contractor in location as shown on plan.

IRRIGATION NOTES

1. Irrigation contractor is responsible for locating and protecting all underground utilities prior to trenching.
2. Pressure regulator required by local code if static water pressure at point of connection for site is greater than 80 psi.
3. Irrigation meter and backflow preventor to be provided by the General Contractor.
4. All valves to be located in valve box with cover, at grade. When possible, locate box in grassed area. Valve box shall be lined with a min. 3" depth, 3/4" washed stone.
5. Automatic controller to be located in the storage room; 120VAC required. Rain/Freeze sensor shall be located on the trash enclosure respectively. Rain/Freeze Sensor to be located free from obstructions and exposed to the elements.
6. All pipes, automatic valves, backflow preventor, manual valve and meter to be located within property lines. Shown outside on drawing for clarity only.
7. 45 psi required per rotor station, 30 psi required per spray station, 40 psi required per drip station. All spray and rotor bodies to have PRS (in-stem pressure regulation) as indicated in the legend.
8. Pop-up height as follows: 4" or 6" in Turf Zones, 12" in Shrub Zones, and 12" in Seasonal/color beds.
9. RainBird MPR 5000 Rotor Nozzle size is indicated on each individual symbol used on the drawing; Contractor must install nozzle types as indicated.
10. Sleeves to be located and exposed by the General Contractor prior to start of irrigation installation. 4" SCH 40 PVC sleeves; locations as shown on drawing. Extend sleeve 18" beyond back of curb or pavement.
11. 1.5" mainlines (class 200 PVC pipe) shall have a minimum 18" of cover.
12. Lateral and sub-main pipe, (class 200 PVC pipe) shall have a minimum 12" and maximum of 18" cover.
13. No rocks, boulders, or other extraneous materials shall be used in backfilling trenches.
14. Threaded joints to be coated with Teflon Tape or Liquid Teflon.
15. All lines to be thoroughly flushed before installation of irrigation heads.
16. Contractor must use products specified on this drawing, unless otherwise approved by the Landscape Architect. Refer to the drawing and the Irrigation Legend for product specs.
17. The Irrigation System is to be installed as designed; unless otherwise approved by the Landscape Architect.
18. All pipe, valves, drip, spray heads, rotors, controllers, and sensors are to be installed as per manufacturers specifications. For any RainBird products or installation questions call Donn Mann (520)-904-1146.
19. Irrigation Contractor shall provide an Irrigation As-Built drawing to the Landscape Architect. This drawing shall be sent overnight within 24 hours of installation completion.
20. Prior to opening, but no later than one week after opening, the Irrigation Contractor shall perform an irrigation walk-thru inspection with the Store Operator. System shall be fully functional prior to walk-thru inspection.



Chick-fil-A
Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998



Manley Land Design, Inc.
51 Old Canton Street
Alpharetta, Georgia 30009
770.442.8171 tel

CHICK-FIL-A
EAST DORAL
8705 NW 35th Lane
Doral, FL 33172

FSU# 5069

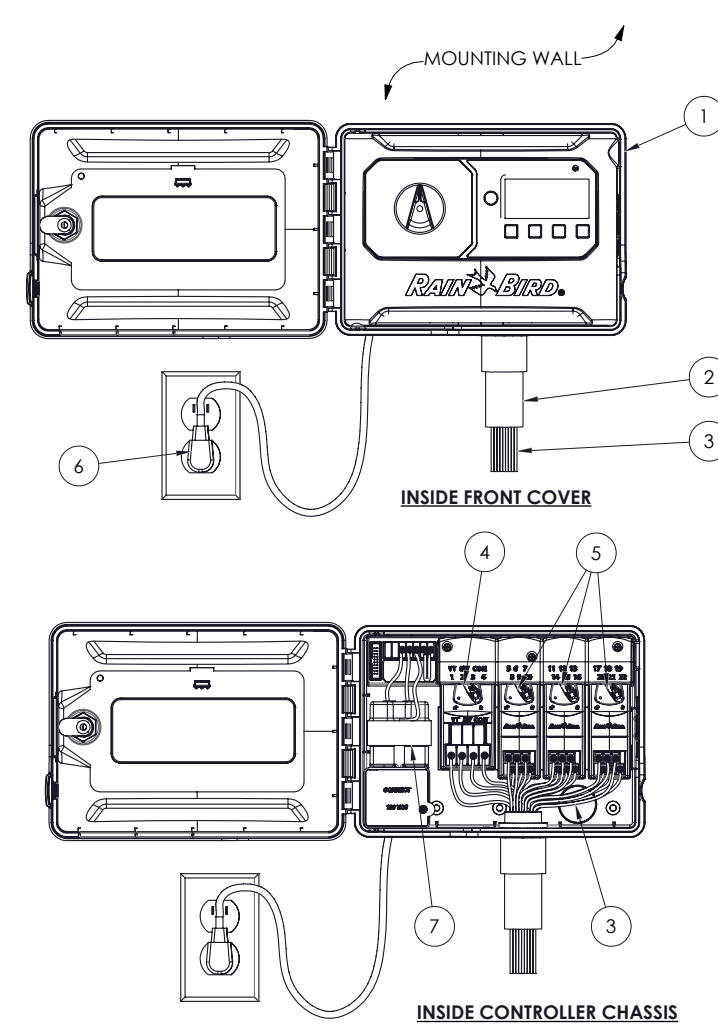
REVISION SCHEDULE
NO. DATE BY DESCRIPTION

MLD PROJECT # 2022110
PRINTED FOR
DATE 8.4.22
DRAWN BY MB

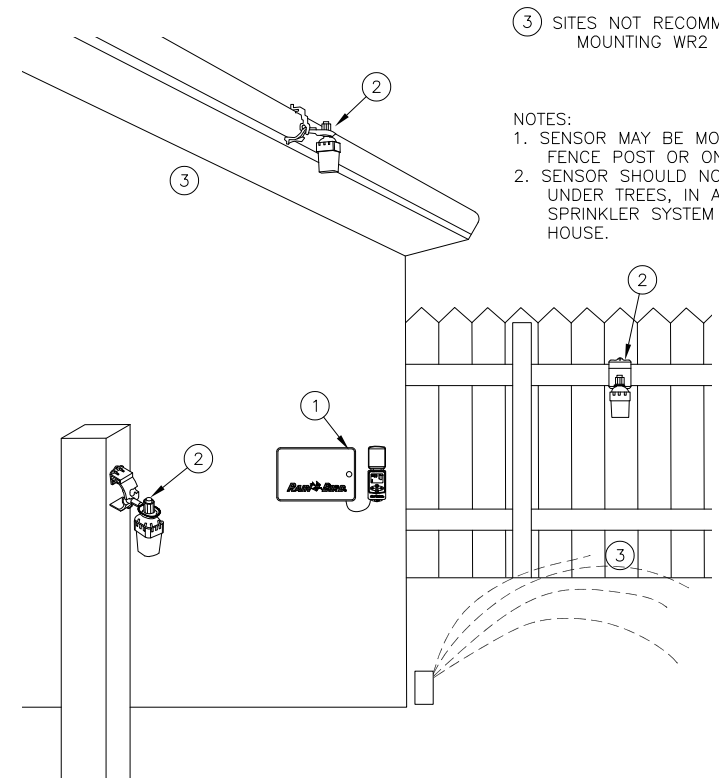
Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

PERMIT Irrigation Plan

SHEET NUMBER
L-200

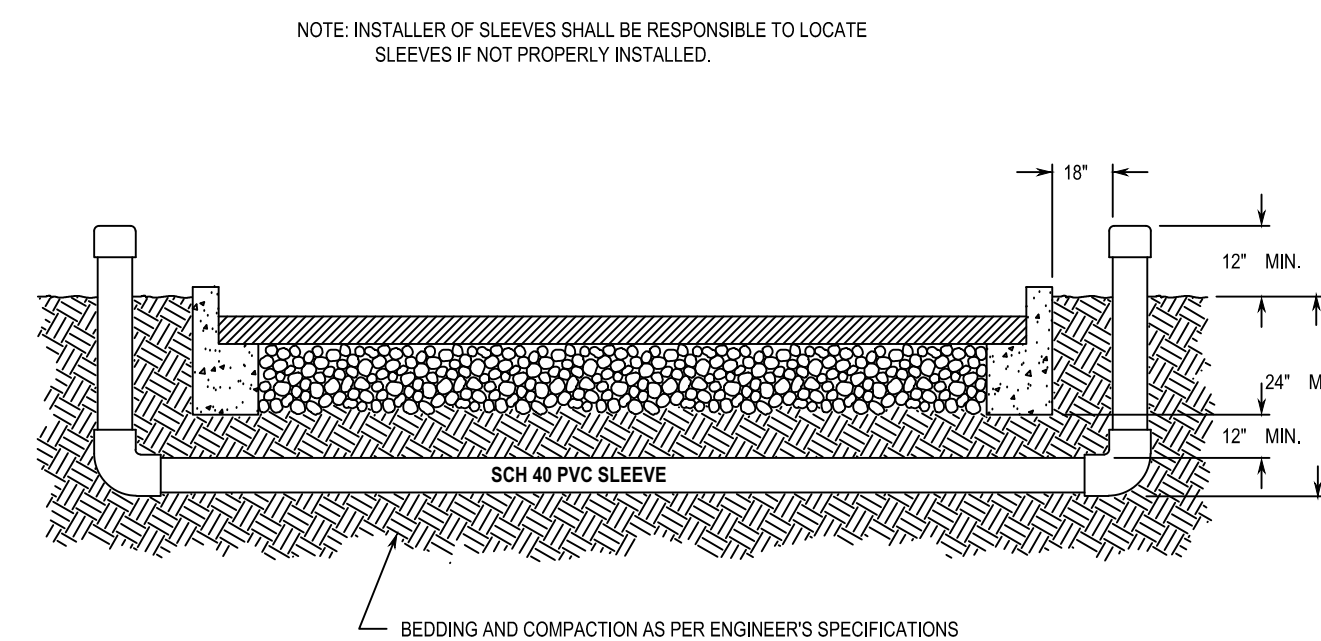
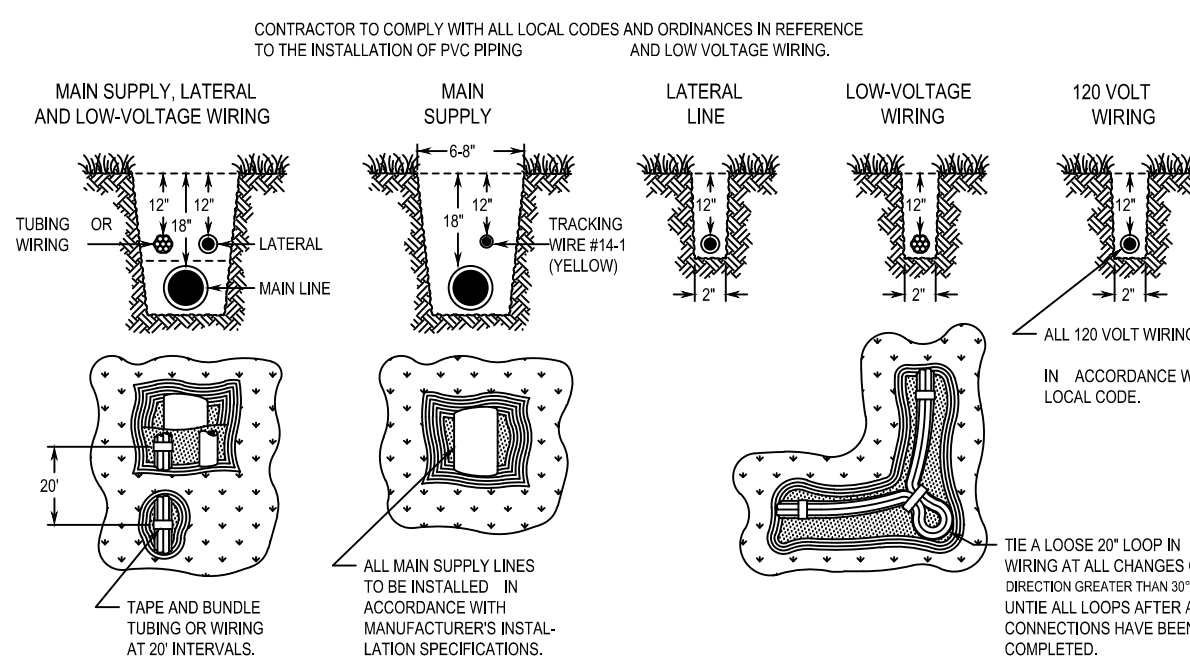


- GENERAL NOTES:
- 1 MODULAR HYBRID CONTROLLER: RAIN BIRD ESP-ME3 INSIDE WALL MOUNT
 - 2 1-INCH PVC SCH 40 CONDUIT AND FITTINGS
 - 3 WIRES TO REMOTE CONTROL VALVES
 - 4 STANDARD MODULE FOR 4-STATION CONTROLLERS
 - 5 OPTIONAL MODULES FOR 22-STATION CONTROLLER
 - 6 STANDARD 120 V PLUG
 - 7 120 VAC, 60 HZ INTERNAL TRANSFORMER



- NOTES:
1. SENSOR MAY BE MOUNTED ON FENCE, FENCE POST OR ON OUTER OF HOUSE.
 2. SENSOR SHOULD NOT BE MOUNTED UNDER TREES, IN AREAS AFFECTED BY SPRINKLER SYSTEM OR UNDER EAVE OF HOUSE.

- 1 RAIN BIRD CONTROLLER WITH WR2 CONTROLLER INTERFACE
- 2 RAIN BIRD WR2 SENSOR RECOMMENDED MOUNTING SITE
- 3 SITES NOT RECOMMENDED FOR MOUNTING WR2 SENSOR

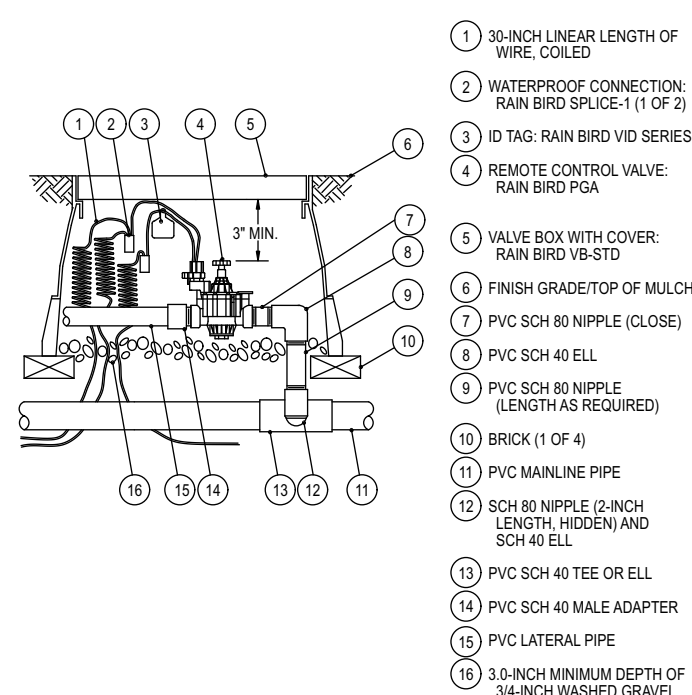


1 IRRIGATION CONTROLLER: ESP-ME3
SCALE: NTS (LOCATE IN STORAGE ROOM)

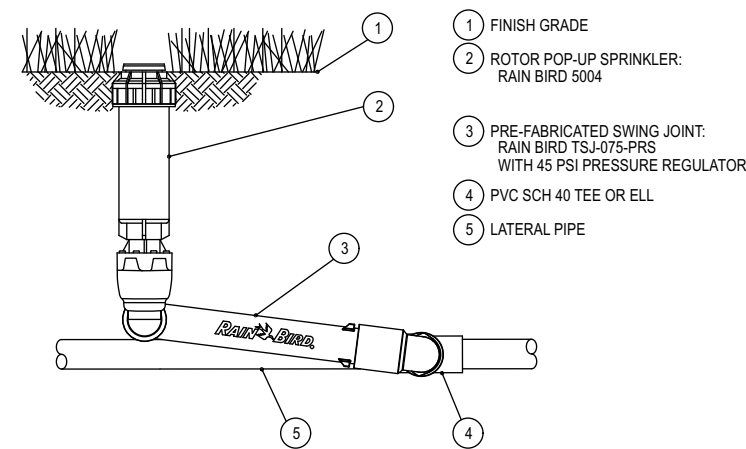
2 WR2 WIRELESS RAIN/FREEZE SENSOR
SCALE: NTS (LOCATE ON TRASH ENCLOSURE WALL)

3 IRRIGATION TRENCHING AND PIPE DEPTH
SCALE: NTS

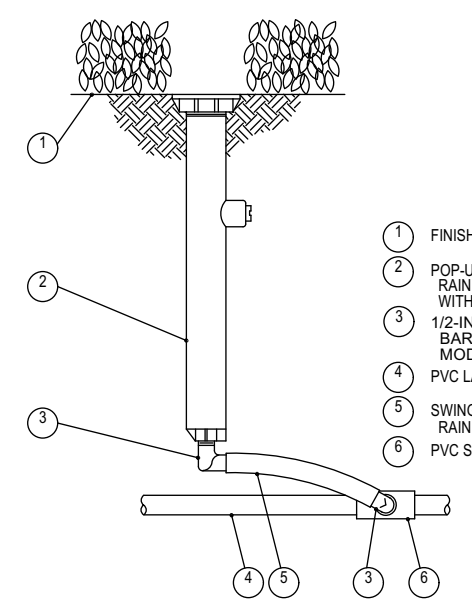
4 IRRIGATION SLEEVING
SCALE: NTS



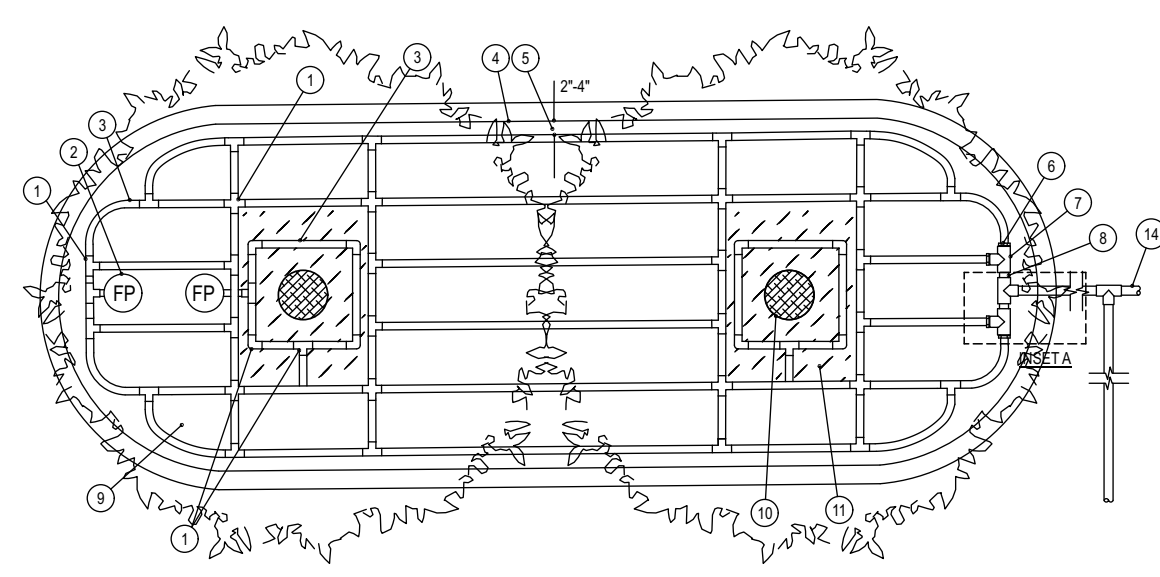
- 1 30-INCH LINEAR LENGTH OF WIRE COILED
- 2 WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
- 3 ID TAG: RAIN BIRD VID SERIES: RAIN BIRD PVA
- 4 REMOTE CONTROL VALVE: RAIN BIRD PVA
- 5 VALVE BOX WITH COVER: RAIN BIRD VB-STD
- 6 FINISH GRADE/TOP OF MULCH
- 7 PVC SCH 80 NIPPLE (CLOSE)
- 8 PVC SCH 40 ELL
- 9 PVC SCH 80 NIPPLE (LENGTHS AS REQUIRED)
- 10 BRICK (1 OF 4)
- 11 PVC MAINLINE PIPE
- 12 SCH 80 NIPPLE (2-INCH LENGTH HIDDEN AND SCH 40 ELL)
- 13 PVC SCH 40 TEE OR ELL
- 14 PVC SCH 40 MALE ADAPTER
- 15 PVC LATERAL PIPE
- 16 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL



- 1 FINISH GRADE
- 2 ROTOR POP-UP SPRINKLER: RAIN BIRD 5004
- 3 PRE-FABRICATED SWING JOINT: RAIN BIRD TS-50-PSB WITH 45 PSI PRESSURE REGULATOR
- 4 PVC SCH 40 TEE OR ELL
- 5 LATERAL PIPE



- 1 FINISH GRADE/TOP OF MULCH
- 2 POP-UP SPRAY SPRINKLER: RAIN BIRD 1817-PRS WITH 45 PSI NOZZLE
- 3 1/2-INCH MALE NPT x .490 INCH BARB ELBOW: RAIN BIRD MODEL SSE-500 PVC LATERAL PIPE
- 4 SWING PIPE, 1/2-INCH LENGTH: RAIN BIRD MODEL SP-100 PVC SCH 40 TEE OR ELL



Inlet Pressure psi	12' Spacing		18' Spacing	
	Normal Flow (GPH)	Normal Flow (GPI)	Normal Flow (GPH)	Normal Flow (GPI)
20	162	138	294	235
30	288	252	462	337
40	360	306	567	416
50	450	381	707	517
60	540	459	857	629

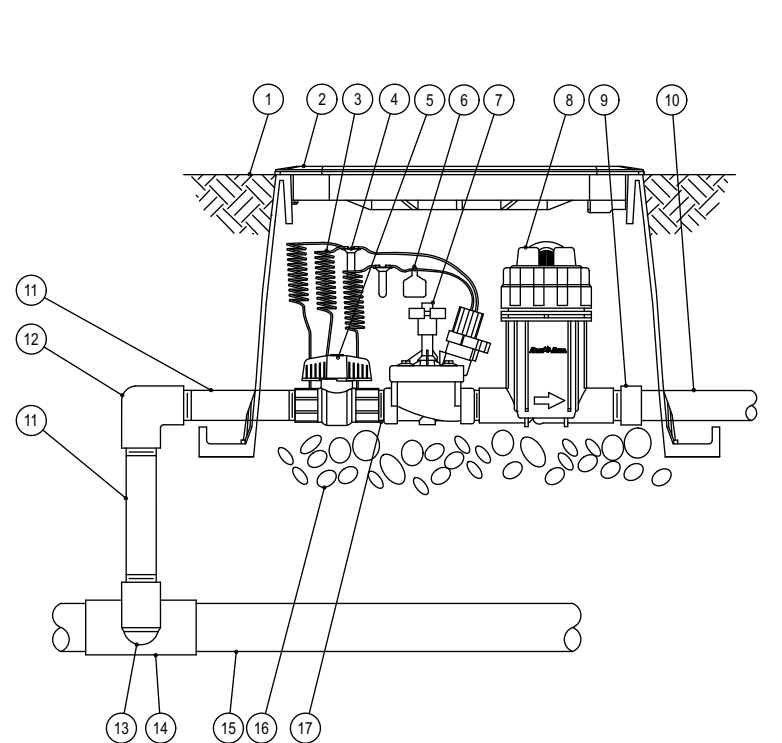
- 1 BARB X BARB INSERT EL, TEE OR CROSS: RAIN BIRD XFF-ELBOW (TYPICAL), RAIN BIRD XFF-TEE (TYPICAL), RAIN BIRD XFF-CROSS (TYPICAL)
- 2 FLUSH POINT (TYPICAL): SEE RAIN BIRD DETAIL "XFD FLUSH POINT"
- 3 ON-SURFACE DRIPLINE PIPE: RAIN BIRD XFD SERIES DRIPLINE: POTABLE: XFCV DRIPLINE
- 4 PARKING ISLAND CURB
- 5 PERMETER DRIPLINE PIPE TO BE INSTALLED 2'-4" FROM PARKING ISLAND CURB
- 6 BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- 7 PVC SCH 40 TEE OR EL (TYPICAL)
- 8 PVC SUPPLY MANFOLD
- 9 SHRUB OR GROUND COVER BED (TREE (TYPICAL))
- 10 MULCH BED FOR TREE
- 11 2-3 INCHES DEPTH OF MULCH
- 12 FINISH GRADE
- 13 PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
- 14 PVC RISER PIPE

5 IRRIGATION VALVE: 100-PGA
SCALE: NTS

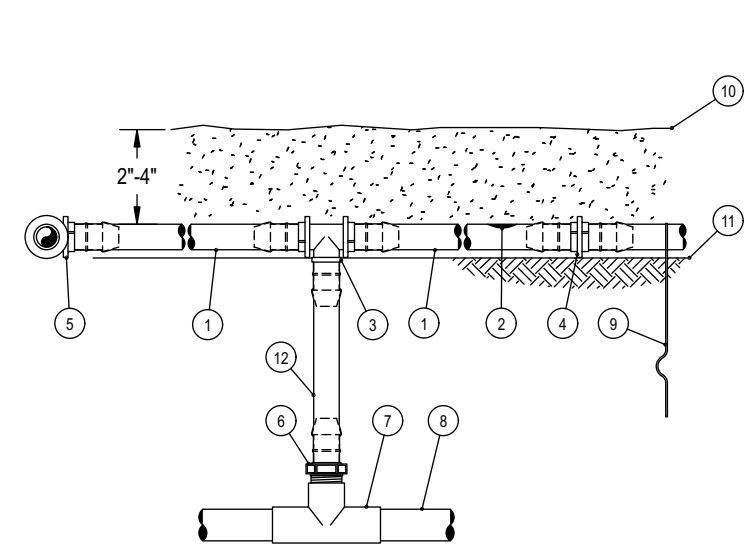
6 POP-UP ROTOR: 5000 SERIES W/T MPR NOZZLE
SCALE: NTS

7 POP-UP SPRAY: 1800 SERIES
SCALE: NTS

8 DRIP: SYSTEM LAYOUT AND INSTALLATION OVERVIEW
SCALE: NTS

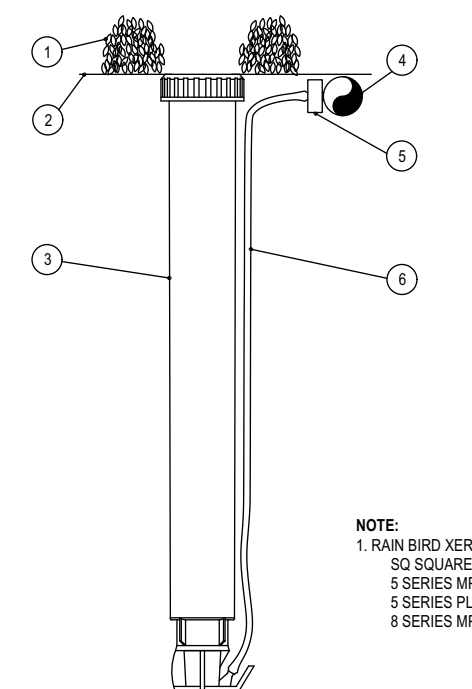


- 1 FINISH GRADE/TOP OF MULCH
- 2 VALVE BOX WITH COVER: RAIN BIRD VB-STD
- 3 30-INCH LINEAR LENGTH OF WIRE COILED
- 4 WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
- 5 1-INCH BALL VALVE, INCLUDED IN XZZ-PRB-100-COM KIT
- 6 ID TAG
- 7 REMOTE CONTROL VALVE: RAIN BIRD PVB (INCLUDED IN XZZ-PRB-100-COM KIT)
- 8 PRESSURE REGULATING QUICK CHECK®: BASKET FILTER: RAIN BIRD PRB-QCHK-100 (INCLUDED IN XZZ-PRB-100-COM KIT)
- 9 PVC SCH 40 FEMALE ADAPTOR
- 10 LATERAL PIPE
- 11 PVC SCH 80 NIPPLE (LENGTHS AS REQUIRED)
- 12 PVC SCH 40 ELL
- 13 PVC SCH 80 NIPPLE (2-INCH LENGTH: HIDDEN) AND PVC SCH 40 ELL
- 14 PVC SCH 40 TEE OR ELL
- 15 MAINLINE PIPE
- 16 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 17 PVC SCH 80 NIPPLE, CLOSE (INCLUDED IN XZZ-PRB-100-COM KIT)

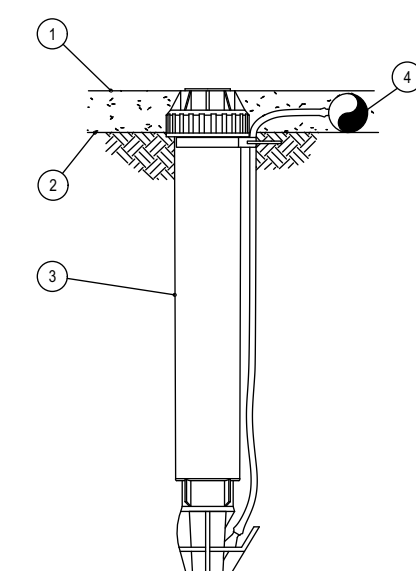


- NOTES:
1. PLACE THE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM AND FIVE FEET IN CLAY.
 2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE THE DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
 3. SAVE YOUR HANDS. USE THE RAIN BIRD FITTING TOOL, XFD INSERTION TOOL FOR FITTING ASSEMBLY.

- 1 ON-SURFACE DRIPLINE: RAIN BIRD XFD SERIES DRIPLINE: POTABLE: XFCV DRIPLINE
- 2 INLINE DRIP EMITTER OUTLET, SEE PLANS FOR DRIPLINE OUTLET SPACING
- 3 BARB TEE 1/2"x1/2"mm: RAIN BIRD XFF-TEE
- 4 BARB COUPLING 1/2"x1/2"mm: RAIN BIRD XFF-COUP
- 5 BARB ELBOW 1/2"x1/2"mm: RAIN BIRD XFF-ELBOW
- 6 BARB MALE ADAPTER 1/2"m x 1/2" MPT: RAIN BIRD XFF-MA-050 1/2"m x 3/4" MPT: RAIN BIRD XFF-MA-075
- 7 PVC TEE 5/8x1/2
- 8 PVC LATERAL SUPPLY HEADER
- 9 TIE DOWN STAKE: RAIN BIRD TDS-050 WITH BEND (TYPICAL)
- 10 MULCH
- 11 FINISH GRADE
- 12 RAIN BIRD XFD SERIES BLANK TUBING LENGTHS AS REQUIRED

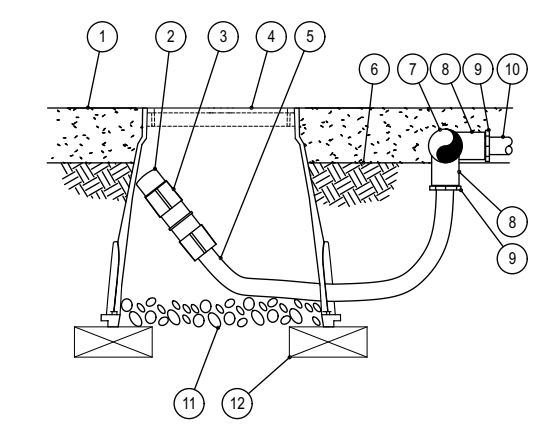


- NOTE:
1. RAIN BIRD XERI-POP CAN UTILIZE THE FOLLOWING NOZZLES: 82 SQUARE NOZZLES (FORMERLY XPCN)
 - 5 SERIES MPR NOZZLES (ALL CONFIGURATIONS)
 - 5 SERIES PLASTIC BUBBLERS
 - 8 SERIES MPR NOZZLES (R, FT AND RD)



- 1 MULCH
- 2 FINISH GRADE
- 3 OPERATION INDICATOR: RAIN BIRD MODEL OPERND
- 4 ON-SURFACE DRIPLINE: RAIN BIRD XFD SERIES DRIPLINE: POTABLE: XFCV DRIPLINE

- NOTE:
1. USE XERMAN TOOL XM-TOOL TO INSERT BARB TRANSFER FITTING DIRECTLY INTO DRIPLINE TUBING.
 2. VAN NOZZLE MAY BE SET TO CLOSED, OR IF IT IS DESIRED TO SEE SPRAY FROM THE NOZZLE, SET THE ARC TO 1/4 PATTERN. THE FLOW FROM THE NOZZLE @ 0.3 GPM SHOULD BE ACCOUNTED FOR IN THE SYSTEM DESIGN.



- 1 MULCH
- 2 FLUSH CAP FOR EASY FIT: COMPRESSION FITTINGS: POTABLE: RAIN BIRD MDCFCAP
- 3 EASY FIT COUPLING: RAIN BIRD MDCFCOUP
- 4 SUBTERRANEAN EMITTER BOX: RAIN BIRD SEB-780
- 5 1/2" POLYETHYLENE TUBING: RAIN BIRD XFD BLANK TUBING
- 6 FINISH GRADE
- 7 PVC EXHAUST HEADER
- 8 PVC SCH 40 TEE OR EL
- 9 BARB X MALE FITTING: RAIN BIRD XFF-MA FITTING (TYPICAL)
- 10 ON-SURFACE DRIPLINE: RAIN BIRD XFD SERIES DRIPLINE: POTABLE: XFCV DRIPLINE
- 11 3-INCH MINIMUM DEPTH OF 3/4" WASHED GRAVEL
- 12 BRICK (1 OF 2)

- NOTE:
1. ALLOW A MINIMUM OF 6-INCHES OF DRIPLINE TUBING IN VALVE BOX IN ORDER TO DIRECT FLUSHED WATER OUTSIDE VALVE BOX.

9 DRIP VALVE: XZZ-PRB-100-COM
SCALE: NTS

10 DRIP: ON-SURFACE RISER ASSEMBLY
SCALE: NTS

11 DRIP: XERI-POP MICRO SPRAY
SCALE: NTS

12 DRIP: OPERATION INDICATOR
SCALE: NTS

13 DRIP: DRIPLINE FLUSH POINT
SCALE: NTS



Chick-fil-A
Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998



Manley Land Design, Inc.
51 Old Canton Street
Alpharetta, Georgia 30009
770.442.8171 tel

CHICK-FIL-A
EAST DORAL
8705 NW 35th Lane
Doral, FL 33172

FSU# 5069

REVISION SCHEDULE
NO. DATE BY DESCRIPTION

MLD PROJECT # 2022110

PRINTED FOR

DATE 8.4.22

DRAWN BY MB

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET

Permit Irrigation Details

SHEET NUMBER

L-201

IRRIGATION COMPONENTS AND/OR SYSTEMS

PART 1 – GENERAL

SECTION INCLUDES

Work to be performed under this Section shall consist of furnishing all labor and materials necessary to construct a complete working and tested sprinkler irrigation system as per all drawings and specifications.

REFERENCES

- ANSI – American National Standards Institute
- ASIC – American Society of Irrigation Consultants: ASIC Grounding Guideline.
- ASSE – American Society of Sanitary Engineering: ASSE 1013, 1015: Backflow Preventers, Pressure Reducers.
- ASTM – American Society of Testing and Materials
- IA – The Irrigation Association: Main BMP Document.
- NFPA – National Fire Protection Association: NFPA 70 National Electrical Code.
- UL – Underwriters Laboratories: UL Wires and Cables.

PERFORMANCE REQUIREMENTS

- All work to be performed to current standards of SEI and of the local governing municipality.
- PVC Pipe: Must be stamped with certified NFS.
- Contractor shall be responsible to obtain all necessary permits and to comply with electrical company requirements.
- No substitutions of materials are allowed unless approved by Landscape Architect.

QUALITY ASSURANCE

- Contractor shall have considerable experience and demonstrate ability in the installation of irrigation system(s) of specified type(s) in a neat, orderly, and responsible manner in accordance with recognized standards of workmanship.
- All work shall be performed in accordance with the best standards of practice relating to the trade.
- Contractor shall provide an irrigation as-built drawing to the designer responsible for the irrigation plan. **This drawing shall be overnighted to the respective party within 24 hours of installation completion.**

WARRANTY

- Contractor shall provide a one year warranty that covers all workmanship and labor.
- Contractor shall provide a five year warranty that covers all materials.

PART 2 - PRODUCTS

PIPE AND FITTINGS

- Material: PVC
- Pressure Pipe: Class 200.
- Lateral Pipe: Class 200, Polyethylene for Northeastern Climate.
- Fittings: Schedule 40, solvent welded or threaded.
- Risers: Schedule 80, threaded.
- Sleeves: Schedule 40, minimum 4".

AUTOMATIC CONTROLLER

- Irrigation controller specifications include but are not limited to:
 - The controller shall be of a hybrid type that is microelectronic circuitry capable of fully automatic or manual operation.
 - All stations shall have the capability of independently obeying or ignoring the weather sensor as well as using or not using the master valve.
 - The controller shall have the capability of shutting off the system on rainy days.
- Control zone kit for drip zones with flows from 3 to 15 gpm (11.4 to 56.8 l/m), including control valve (CV) and pressure-regulating filter (PRF).
 - Control Valve (CV) component specifications include:
 - Valve body and bonnet constructed of high impact, weather-resistant plastic, stainless steel and other chemical/ultra-violet resistant materials.
 - One unit diaphragm constructed of durable Buna-N rubber with a clog resistant metering orifice.
 - Inlet pressure rating of 15 to 150 psi (1.0 to 10.3 bar).
 - Pressure Regulating Filter (PRF) component specifications include:
 - Compact "Y" filter body and cap configuration constructed of glass-filled, ultra-violet resistant polypropylene, with 150 psi (10.3 bar) operating pressure rating.
 - 200 mesh (75 micron) filter screen constructed of stainless steel.
 - Normally-open pressure regulating device with preset outlet pressure of 40 psi (2.8 bar).
 - Regulated pressure of 40 psi (2.8 bar).
- Low flow control zone kit for drip zones with flows from 0.2 to 5.0 gpm (0.8 to 18.9 l/m), including Low Flow Valve (LFV) and Pressure-Regulating Filter (PRF).
 - Low flow valve (LFV) component specifications include:
 - Valve body and bonnet constructed of high impact, weather-resistant plastic, stainless steel and other chemical/ultra-violet resistant materials.
 - One unit diaphragm constructed of durable Buna-N rubber material with a clog resistant metering orifice.
 - Inlet pressure rating of 15 to 150 psi (1.0 to 10.3 bar).
 - Pressure regulating filter (PRF) component specifications include:
 - Compact "Y" filter body and cap configuration constructed of glass-filled, ultra-violet resistant polypropylene, with 150 psi (10.3 bar) operating pressure rating.
 - 200 mesh (75 micron) filter screen constructed of stainless steel.
 - Normally-open pressure regulating device with preset outlet pressure of 30 psi (2.1 bar).
 - Regulated pressure of 30 psi (2.1 bar).

POP-UP SPRINKLERS

- Irrigation spray body for small turf areas (2.5-24 feet (0.8-7.3m) with a 30 psi (2.0 bar) pressure regulating device specifications include but are not limited to:
 - Parts and components to withstand harsh operating conditions using chemically treated recycled water (reclaimed/non-potable), dirty water containing grit, debris, and other particulates, high operating pressures common in commercial irrigation and resistant to ultra-violet light.
 - Pressure-activated, co-molded soft elastomer wiper seal composed of three wipers and a base seal to ensure a positive seal without excess "flow-by" which enables more heads to be installed on the same valve.
 - Recessed debris pockets located in the base of the spray body to prevent recirculation of harmful debris during operation.
 - Shall include a check valve to prevent low head drainage of up to 14 feet (4.3 m); 6 psi (0.4 bar).
 - Shall include technology built into the stem to prevent water loss and alert maintenance when a spray nozzle is removed.
 - Flow by rating of 0 at 15 psi (1.0 bar) or greater, 0.5 gpm (0.1 m3/h; 0.03 l/s) otherwise.
 - Shall include ½" (15/21) NPT female threaded bottom inlet.
 - The spray body, stem, nozzle, and screen shall be constructed of heavy-duty and ultra-violet resistant plastic.
- Irrigation spray body for small turf areas (2.5-24 feet (0.8-7.3m) with a 45 psi (3.1 bar) pressure regulating device specifications include but are not limited to:
 - Parts and components to withstand harsh operating conditions using chemically treated recycled water (reclaimed/non-potable), dirty water containing grit, debris, and other particulates, high operating pressures common in commercial irrigation and resistant to ultra-violet light.
 - Pressure-activated, co-molded soft elastomer wiper seal composed of three wipers and a base seal to ensure a positive seal without excess "flow-by" which enables more heads to be installed on the same valve.
 - Recessed debris pockets located in the base of the spray body to prevent recirculation of harmful debris during operation.
 - Shall include a check valve to prevent low head drainage of up to 14 feet (4.3 m); 6 psi (0.4 bar).
 - Shall include technology built into the stem to prevent water loss and alert maintenance when a spray nozzle is removed.
 - Flow by rating of 0 at 15 psi (1.0 bar) or greater, 0.5 gpm (0.1 m3/h; 0.03 l/s) otherwise.
 - Shall include ½" (15/21) NPT female threaded bottom inlet.
 - The spray body, stem, nozzle, and screen shall be constructed of heavy-duty and ultra-violet resistant plastic.

SPRAY NOZZLES

- Fixed or variable arc matched precipitation rate spray nozzle for small turf areas (3-15 feet (.91-4.6 m), maximum 30 psi (2.1 bar) specifications include but are not limited to:
 - Shall be constructed of ultra-violet resistant plastic.
 - Shall contain a stainless steel flow and radius adjustment screw allowing up to 25% radius reduction.
 - Nozzle shall have a precipitation rate that is matched across sets and patterns of spray nozzles up to 15 feet (4.6 m).
 - Shall include color coding marking on top of nozzle for easy identification of spray radius.
- Dual orifice fixed arc nozzle for small turf areas (5-15 feet (1.7-4.6 m), maximum 30 psi (2.1 bar) specifications include but are not limited to:
 - Shall be constructed of ultra-violet resistant plastic.
 - Shall contain a stainless steel flow and radius adjustment screw allowing up to 25% radius reduction.
 - The nozzle shall have dual orifices for both in-close watering and standard pattern watering with a matched precipitation rate between sets and matched flow and with other matched precipitation rate fixed spray nozzles up to 15 feet (4.6 m).
 - Shall include color coding marking on top of nozzle for easy identification of spray radius.
- Multi stream rotating nozzle for small turf areas (8-24 feet (2.4-7.4m), maximum 55 psi (3.8 bar) specifications include but are not limited to:
 - Shall be constructed of ultra-violet resistant plastic.
 - Shall contain a stainless steel radius adjustment screw allowing reduction to 13 feet (4.0 m).
 - Shall have a matched precipitation rate of 0.60 in/hr (15.2 mm/hr).
 - Shall have a color coded radius reduction plug to allow for easy identification of fixed arc pattern.

ROTOR HEADS

- Pop-up rotor sprinkler for medium turf areas (25-47 feet (7.6-14.3 m), maximum 75 psi (5.2 bar) specifications include but are not limited to:
 - Shall have adjustable arc rotation of 40 to 360 degrees (0.7 to 6.3 rad) and reversing full circle rotation.
 - Shall have a flow shut-off device that is integrated into the flow path of the sprinkler.
 - Shall have a pressure-activated, multi-function wiper seal that protects internals from debris and assures positive pop-up and retraction.
 - Shall contain additional o-rings and seals for extra protection in "gritty" water.
 - Operating precipitation rate of 0.20 to 1.01 inches per hour (5 to 26 mm/h).
 - Operating flow rate of 0.73 to 8.31 gpm (0.17 to 1.85 m3/h).
 - The body, stem, nozzle, and screen shall be constructed of heavy-duty and ultra-violet resistant plastic.
 - Shall include a 45 psi (3.1 bar) pressure regulating device to prevent high pressure misting to the nozzle stream.
 - Shall include an internal check valve to prevent low head drainage of up to 7 feet (2.1 m) to prevent puddling, run-off and erosion.
 - Shall include a set of twelve interchangeable nozzles, 8 nozzles with 25 degree (0.4 rad) trajectory and 4 low angle nozzles with 10 degree (0.2 rad) trajectory.

FLEXIBLE SWING PIPE

- Swing pipe specifications include but are not limited to:
 - Swing pipe shall be flexible black tubing constructed of linear low density polyethylene material with a wall thickness of 0.098" (0.3 cm) with a nominal inside diameter of 0.49" (1.2 cm).
 - Pipe shall be capable of a flow up to 8 gpm (0.5 l/s).

DRIPLINE

- Distribution tubing specifications include but are not limited to:
 - The blank tubing shall be manufactured from flexible polyethylene material with a wall thickness of 0.049" (1.2 mm), outside diameter of 0.634" (16.1 mm), and inside diameter of 0.536" (13.6 mm).
 - The tubing shall be dual-layered (brown over black).

INLINE EMITTER DRIPLINE

- Sub-surface inline emitter tubing specifications include but are not limited to:
 - The tubing shall be manufactured from flexible polyethylene material with wall thickness of 0.049" (1.2 mm), outside diameter of 0.634" (16 mm), and inside diameter of 0.536" (13.6 mm).
 - The tubing shall have factory installed pressure-compensating, inline emitters with a copper shield device installed every 12, 18, or 24 inches (30.5, 45.7, 61 cm) as indicated on construction drawings.
 - Operating pressure range of 8.5 to 60 psi (0.6 to 4.1 bar).
 - Operating emitter flow rates of 0.6 and 0.9 gph (2.3 l/hr and 3.5 l/hr).

DISTRIBUTION TUBING

- ¾" distribution tubing for emitters and other devices specifications include but are not limited to:
 - The blank tubing shall be extruded from ultra-violet resistant polyethylene resin materials with a wall thickness of 0.04" (1 mm), outside diameter of 0.250" (6.3 mm), and inside diameter of 0.170" (4.3 mm).
 - Operating pressure range from 0 to 60 psi (0 to 4.1 bar).

EMITTERS

- Point source emission device specifications include but are not limited to:
 - The emitter shall be constructed of ultra-violet resistant acetyl materials.
 - Shall have a pressure-compensating design to deliver a uniform flow throughout a pressure range of 15 to 50 psi (1.0 to 3.4 bar).
 - Flow rates that range from 0.5 to 2 gph (1.89 to 7.57 l/h) at a pressure range of 15 to 50 psi (1.0 to 3.4 bar).

VALVE BOX

- Valve boxes specifications include but are not limited to:
 - Shall be made of structural foam HPDE resin that is resistant to ultra-violet light, weather, moisture and chemical action of soils.
 - Lids shall be clearly marked with the words "IRRIGATION CONTROL VALVE" molded onto the top.
 - Lid colors are available in black, green and purple designating non-potable water use.

PART 3 - EXECUTION

EXCAVATION

- Stake pipe and equipment layout for Owner's review and approval. Review does not relieve installer from coverage problems due to improper placement after staking.
- Excavate trenches for irrigation system pipe to provide minimum cover per plans and details.
- Barricade trenches that are left open overnight.

INSTALLATION

- General: Plans are diagrammatic. Proceed with installation in accordance with the following:
 - Install stop and waste valves, backflow preventers, and other equipment required by local authorities according to laws and regulations in order to make system complete.
 - Coordinate with the General Contractor the responsible for installing the backflow preventer and other irrigation items at the connection point.
 - Coordinate with the General Contractor the for exact location of the irrigation connection point.
 - Thoroughly flush main lines before installing automatic control valves, and laterals before installing sprinklers. Flush supply lines thoroughly before installing backflow preventers or other regulating devices.
- Piping: Assemble all mainline and lateral lines in accordance with manufacturer's recommendations with no cul-de-sacs. Assure positive drainage.
- Sleeves: General Contractor shall install sleeves before concrete/paving work.
 - Sleeves should be a minimum two times the diameter of the pipe passing through them.
 - General Contractor shall stub-up and flag sleeve locations for the Irrigation Contractors ease of locating.
 - Sleeve locations shall be approximate to that shown on the Irrigation Plan.
- Control Valves:
 - Install one valve per valve box and provide 12 inches of expansion loop slack wire at all connections inside valve box.
- Manual Drains:
 - Install per manufacturer's recommendations on upstream and downstream side of backflow preventers and at lowest point along main pressure pipe.
- Quick-Coupling Valves:
 - Install using 1 inch PVC nipples and schedule 40 ells as detailed. Location as indicated on plans.
- Backflow Preventer:
 - Install assembly complete for irrigation system with 2 drain valves and 2 shut off valves per detail, local laws and regulations, and per manufacturer's specifications.
 - Install assemblies with drain valves in below grade installations. Provide open box floor with gravel drain sump.
- Valve Boxes
 - Install over all remote control valves, manual control valves, zone shutoff valves, gate valves, or globe valves. Size to provide adequate room for maintenance.
 - Install boxes on level subgrade with proper drainage so that top of boxes are flush with finish grade material (sod, mulch, rock, etc.). Place parallel or perpendicular to adjacent curbs, sidewalks, or driveways.
 - Place washed gravel aggregate in sump as shown on details.
- Automatic Controller
 - Properly ground controller per local laws and regulations. Make all control wire connections to automatic controller. Coordinate controller installation with other electrical work.
 - Connect remote control valves to controller in numerical sequence as shown on Plans.
- Wire and Electrical Work
 - Use electrical control and ground wire suitable for sprinkler control cable.
 - Provide 120-volt power connection (by others) to automatic controller to conform to local codes, ordinances and authorities having jurisdiction.
 - Low Voltage Wiring:
 - Bury control wiring between controller and electric valves in pressure supply line trenches, strung as close as possible to main pipe lines with such wires to be consistently located below and to one side of the pipe, or in separate trenches.
 - Bundle all 24-volt wires at 10-foot intervals and lay with pressure supply line pipe to one side of trench.
 - Install control wire for each control valve.
 - Run 2 spare #14-1 wires from controller pedestal or electric control valve on each and every leg of mainline.
- Sprinkler Heads, Emitters, Rotators, and Rotors
 - Flush circuit piping with full head of water and install sprinklers after hydrostatic test is completed.
 - Adjust nozzles to allow for adequate coverage and to minimize overspray onto walks, roads, driveways, and buildings.
 - Stake emitter tubing with 1/4" Rainbird® TS-025 tubing stakes.
 - Adjust heads to be plumb and flush with finish grades, even with top of soil level or top of material level after completion of grading, seeding, sodding, and rolling of grass.
- Drip Tubing
 - Install all drip tubing in locations shown on the Irrigation Plan. To be laid out and installed per the irrigation drip details (sheet L-2.1).
 - Install flush caps as indicated on details.
 - Install drip indicator on all drip zones.
- Thrust Blocks and/or Joint Restraints
 - Install on pipe sized 2" or larger wherever the main pipe line:
 - Changes any direction at tees, angles, and crosses vertical and horizontal.
 - Changes at reducers.
 - Stops at a dead-end.
 - Valves at which thrust develops when closed.

BACKFILLING

- Do not begin backfilling operations until system tests and approvals have been completed.
- Bed all pipe a minimum of 2 inches. Backfill to 6 inches above pipe with soil free of rocks over 1-inch diameter, debris, or organic matter. Backfill remainder of trench with soil of like quality to adjacent areas. Haul away all material not suitable for backfill.
- Compact backfill in 6-inch lifts thoroughly to prevent settling damage to grades or plant material. Leave trenches slightly mounded to allow for settlement after backfilling is completed. Low areas and damage caused by settling will be repaired by Contractor at no additional cost to the Project or Owner.
- Prevent soil, rocks, or debris from entering pipes or sleeves.

FLUSHING AND TESTING

- Flushing: After piping, risers, and valves are in place and connected, but prior to installation of sprinkler heads, thoroughly flush piping system under full head of water pressure from dead end fittings. Maintain flushing for 5 minutes through furthest valves. Cap risers after flushing.

INSPECTION

- Arrange for Owner's presence 48 hours in advance of inspection walk-through.
- Examine areas and conditions under which work of this section is to be performed and ensure a complete and operating installation prior to scheduling a walk-through.
- Operate each zone in its entirety for Owner at time of walk-through and open all valve boxes as directed.
- Expose all drip emitters under operations for observation by Owner to demonstrate they are performing and installed as designed prior to placing of mulch material. Schedule separate walk-through as necessary.
- As necessary Owner will generate a list of items to be corrected prior to Final Acceptance.

RESTORATION AND CLEANING

- Flush dirt and debris from piping before installing sprinklers and other devices.
- Adjust automatic control valves to provide flow rate of rated operating pressure required for each sprinkler circuit.
- Restore all damaged areas to original condition unless otherwise shown on plans at no additional cost to the Project or Owner.



Chick-fil-A
Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998



Manley Land Design, Inc.
51 Old Canton Street
Alpharetta, Georgia 30009

770.442.8171 tel

CHICK-FIL-A
EAST DORAL
8705 NW 35th Lane
Doral, FL 33172

FSU# 5069

REVISION SCHEDULE
NO. DATE BY DESCRIPTION

MLD PROJECT # 2022110

PRINTED FOR

DATE 8.4.22

DRAWN BY MB

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET

PERMIT Irrigation Specifications

SHEET NUMBER

L-202



Chick-fil-A

Chick-fil-A
5200 Buffington Road
Atlanta, Georgia
30349-2998



ENERGY DESIGN

CONSULTING ENGINEERS
145 S State College Blvd, Suite 200
Brea, CA 92621
+1 (800) 751-8655 NJ office
+1 (210) 510-2300 SA office
+1 (210) 510-2319 SA fax
www.coolsysenergydesign.com
Firm Lic. # 32861

CHICK-FIL-A
EAST DORAL
8705 NW 35TH LANE
DORAL, FL 33172

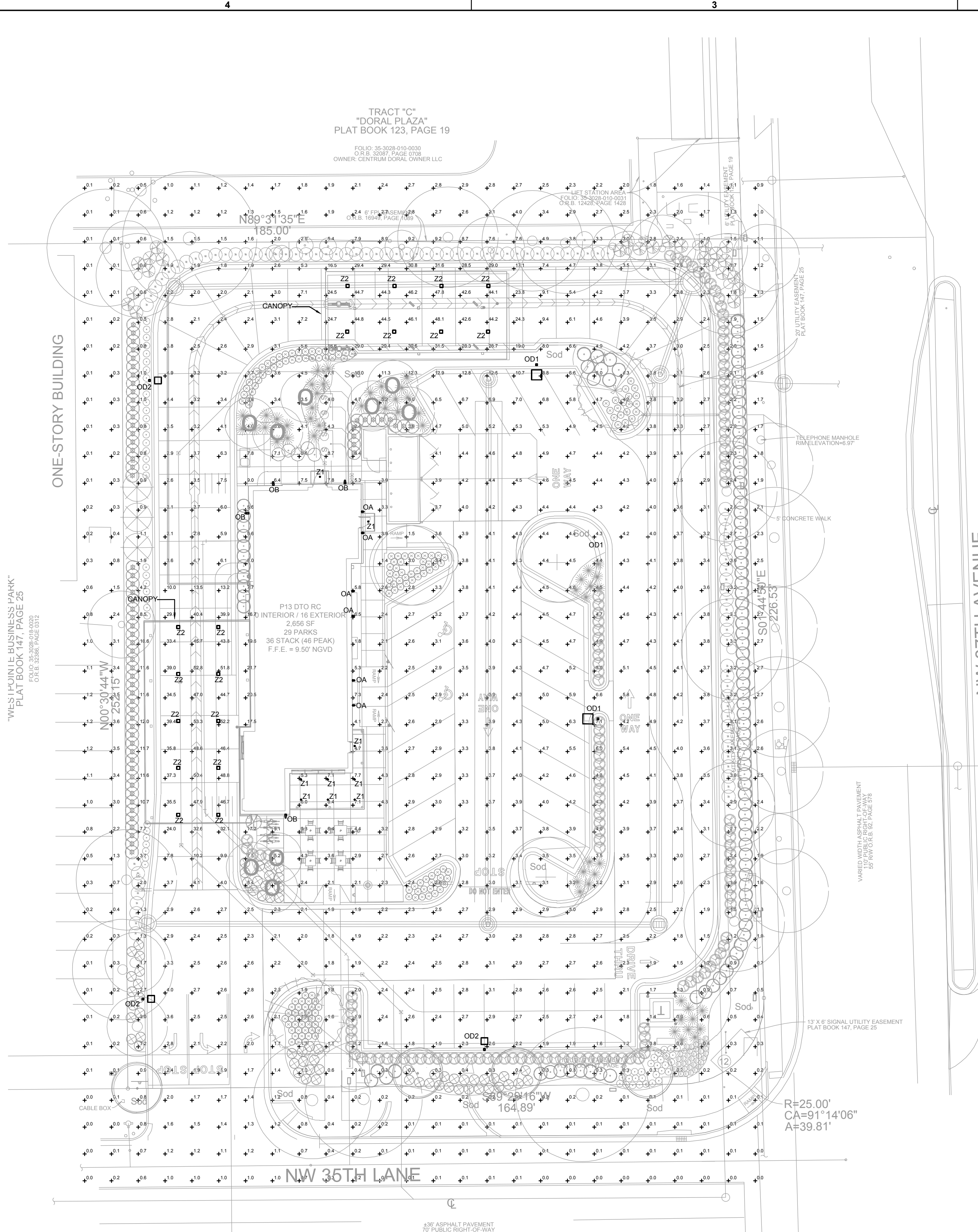
FSR#05069
BUILDING TYPE / SIZE: FSR
RELEASE:

REVISION SCHEDULE
NO. DATE DESCRIPTION

CONSULTANT PROJECT # 22-TX130-01
PRINTED FOR SD Set
DATE 10/26/2022
DRAWN BY TW

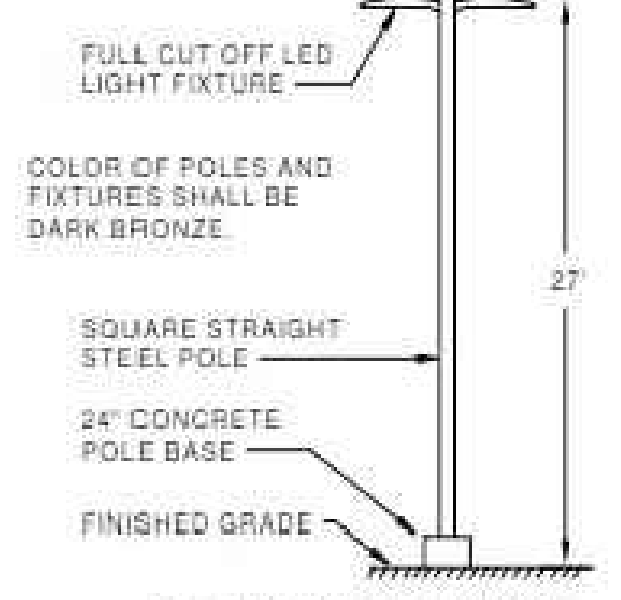
Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.
SHEET SITE PHOTOMETRICS PLAN
SHEET NUMBER

E-100

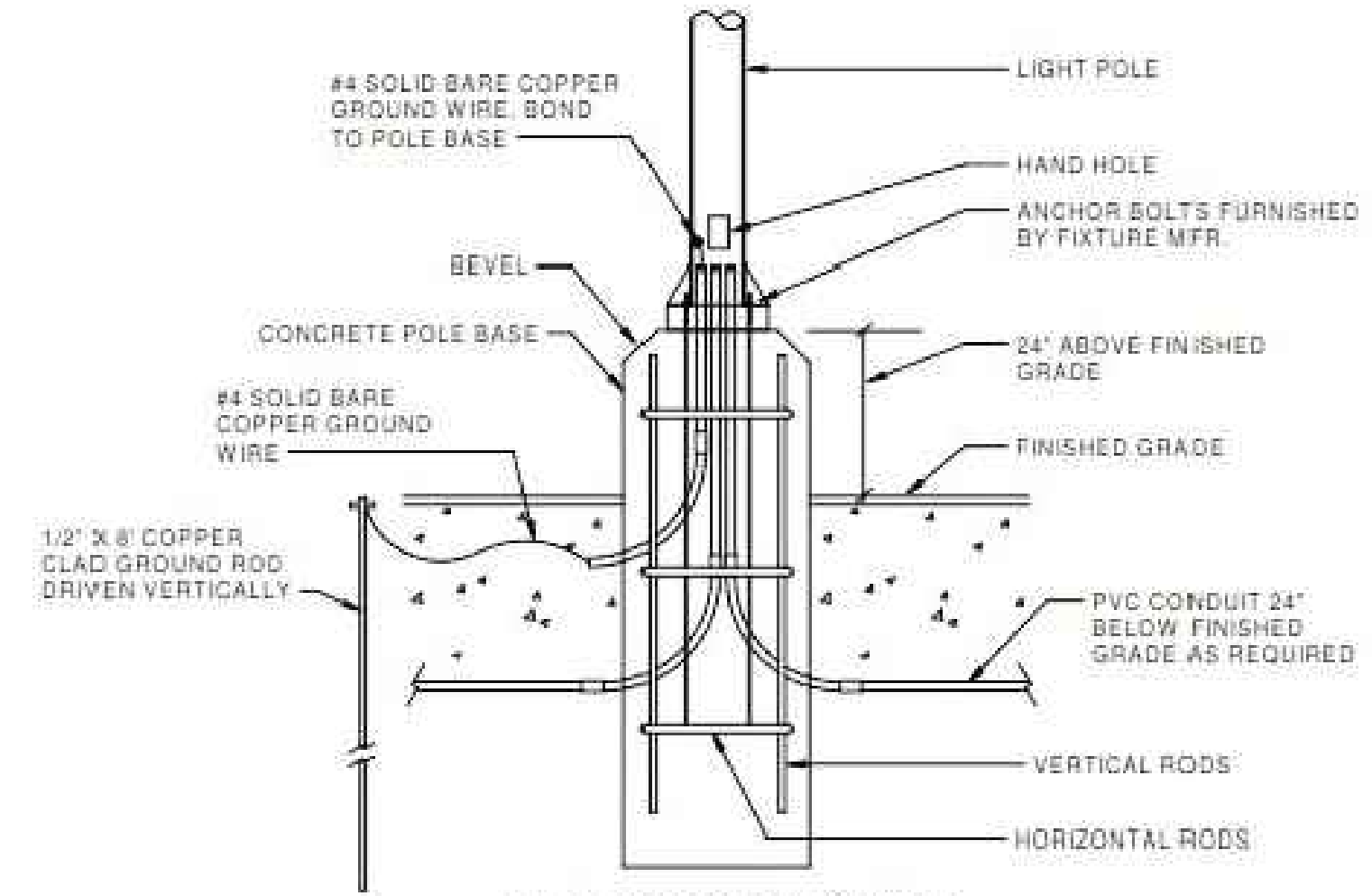


EXTERIOR LIGHTING FIXTURE SCHEDULE - CFA EAST DORAL								
TYPE	DESCRIPTION	MANUFACTURER / MODEL#	VOLTAGE	LAMPS		WATTAGE	MOUNTING	REMARKS
				NO.	TYPE			
OD1	AREA LIGHT ON 25' POLE, SINGLE HEAD, TYPE 5WQ DISTRIBUTION	COOPER #GALN-SA8C-740-2-5WQ-BZ	208 VOLT	-	LED	429	POLE	
OD2	AREA LIGHT ON 25' POLE, SINGLE HEAD, TYPE 4W DISTRIBUTION WITH HOUSE SIDE SHIELD	COOPER #GALN-AF03-740-2-SL3-HSS-BZ	208 VOLT	-	LED	166	POLE	
POLE	25' SQUARE NON-TAPERED STEEL POLE		-	-	-	-	-	
OA	4" WALL MOUNTED CYLINDER WITH TOP COVER	PROGRESS #P5675-3130K	120 VOLT	-	LED	33.9	WALL	
OB	ROADWAY ASYMMETRICAL FLAT BEAM DISTRIBUTION FIXTURE	BEGA #66 456 K4 BRZ	UNIVERSAL	-	LED	29	WALL	
Z1	4" SURFACE DOWNLIGHT	HALO #SLD405930WH 8 40 WH	120 VOLT	-	LED	12	SURFACE	
Z2	16" RECESSED CANOPY LIGHT	LSI #CRUS SC LED LW 40 UE WHT	UNIVERSAL	-	LED	73	RECESSED	

1 PHOTOMETRICS SITE PLAN
SCALE: 1" = 20'-0"








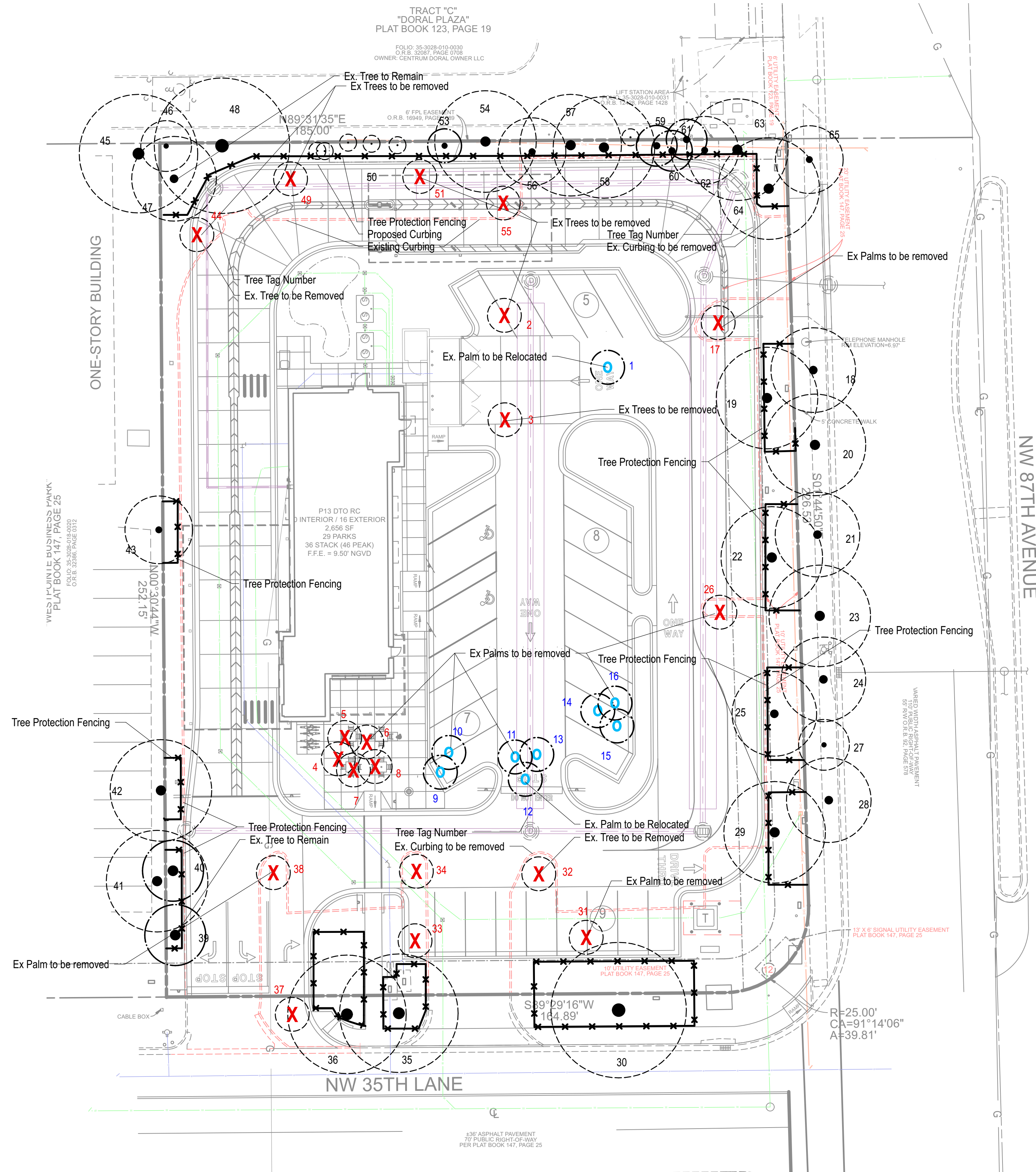
A3 SITE LIGHTING POLE DETAIL
N.T.S.



A1 TYPICAL LIGHT POLE BASE DETAIL
N.T.S.

LEGEND

-  EXISTING TREE TO BE REMOVED
-  EXISTING PALMS TO BE RELOCATED
-  EXISTING TREE TO REMAIN
-  EXISTING PALM TO REMAIN
-  TREE PROTECTION FENCING



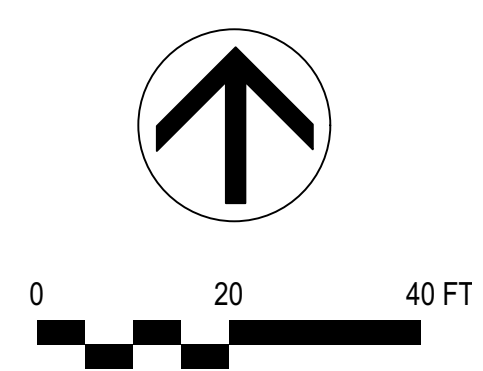
Tree #	Common Name	Genus Species	DBH (inches)	Height (feet)	Spread (feet)	Condition (%)	Status
1	Washingtonia palm	Washingtonia robusta		40	15	65	Relocated
2	Mahogany	Sweetenia mahogoni	18.5	30	30	25	Remove
3	Mahogany	Sweetenia mahogoni	17.5	35	35	55	Remove
4	Washingtonia palm	Washingtonia robusta		35	15	60	Remove
5	Washingtonia palm	Washingtonia robusta		35	15	55	Remove
6	Washingtonia palm	Washingtonia robusta		35	15	65	Remove
7	Washingtonia palm	Washingtonia robusta		35	15	65	Remove
8	Washingtonia palm	Washingtonia robusta		35	15	65	Remove
9	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
10	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
11	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
12	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
13	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
14	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
15	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
16	Washingtonia palm	Washingtonia robusta		35	15	65	Relocated
17	Pygmy date palm	Phoenix roebelenii		8	10	50	Remove
18	Live oak	Quercus virginiana	10.5	25	25	55	
19	Live oak	Quercus virginiana	13	30	30	50	
20	Live oak	Quercus virginiana	10	25	30	50	
21	Live oak	Quercus virginiana	8.5	20	25	45	
22	Live oak	Quercus virginiana	16	35	30	55	
23	Live oak	Quercus virginiana	12.5	30	30	50	
24	Live oak	Quercus virginiana	12.5	25	25	55	
25	Live oak	Quercus virginiana	13	25	25	55	
26	Pygmy date palm	Phoenix roebelenii		8	10	50	Remove
27	Live oak	Quercus virginiana	5	15	15	15	
28	Live oak	Quercus virginiana	13	20	25	50	
29	Live oak	Quercus virginiana	15.5	30	30	55	
30	Live oak	Quercus virginiana	17	35	40	65	
31	Live oak	Quercus virginiana	23	35	55	60	Remove
32	Queen palm	Syagrus romanzoffiana		20	18	65	Remove
33	Queen palm	Syagrus romanzoffiana		22	18	60	Remove
34	Queen palm	Syagrus romanzoffiana		22	18	65	Remove
35	Live oak	Quercus virginiana	15	30	35	60	
36	Live oak	Quercus virginiana	15.5	30	35	65	
37	Live oak	Quercus virginiana	18.5	25	30	55	Remove
38	Queen palm	Syagrus romanzoffiana		16	18	65	Remove
39	Queen palm	Syagrus romanzoffiana		20	18	45	
40	Queen palm	Syagrus romanzoffiana		22	18	55	
41	Mahogany	Sweetenia mahogoni	16	45	30	40	
42	Mahogany	Sweetenia mahogoni	16	40	30	55	
43	Mahogany	Sweetenia mahogoni	14	20	20	35	
44	Mahogany	Sweetenia mahogoni	10	30	20	55	Remove
45	Mahogany	Sweetenia mahogoni	17.5	45	35	50	
46	Podocarpus	Podocarpus macrophyllus	6	20	15	60	
47	Live oak	Quercus virginiana	9	30	25	50	
48	Mahogany	Sweetenia mahogoni	20.5	50	40	60	
49	Live oak	Quercus virginiana	19	45	35	65	Remove
50	Mahogany	Sweetenia mahogoni	18	45	30	60	
51	Live oak	Quercus virginiana	13	35	30	60	Remove
52	SKIP NUMBER	TAG LOST	NUMBER	NOT	USED		
53	Montgomery palm	Veitchia arvensis		9	10	20	
54	Mahogany	Sweetenia mahogoni	20	45	30	50	
55	Mahogany	Sweetenia mahogoni	9	20	30	45	Remove
56	Mahogany	Sweetenia mahogoni	5	20	20	50	
57	Mahogany	Sweetenia mahogoni	23	40	30	50	
58	Mahogany	Sweetenia mahogoni	22	45	30	40	
59	Cabbage palm	Sabal palmetto		12	12	50	
60	Cabbage palm	Sabal palmetto		18	12	55	
61	Cabbage palm	Sabal palmetto		14	12	45	
62	Mahogany	Sweetenia mahogoni	12	30	20	45	
63	Mahogany	Sweetenia mahogoni	17	40	30	35	
64	Mahogany	Sweetenia mahogoni	18	25	30	55	
65	Mahogany	Sweetenia mahogoni	5	25	20	60	
Prepared by:	Justin Rogers	ISA Certified Arborist	FLS547A			Condition ratings assigned in accordance with 10th edition Guide for Trees	Palms Height Measured in Feet of Clear Trunk (CT)

TREE REMOVAL SUMMARY

- 19 TREES REMOVED (11 PALM, 8 HARDWOOD)
- 2 PYGMY DATE PALM
- 4 QUEEN PALM
- 5 WASHINGTONIA PALM
- 4 MAHOGANY (73.5" removed)
- 4 LIVE OAK (55" removed)

TREE RELOCATE SUMMARY

- 9 PALMS RELOCATED
- 9 WASHINGTONIA PALM TO BE RELOCATED



CHICK-FIL-A
EAST DORAL
 8705 NW 35th Lane
 Doral, FL 33172
FSU# 5069

REVISION SCHEDULE
 NO. DATE BY DESCRIPTION

M/D PROJECT # 2022110
 PRINTED FOR PERMIT
 DATE 10/20/22
 DRAWN BY AN

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET
Tree Disposition Plan

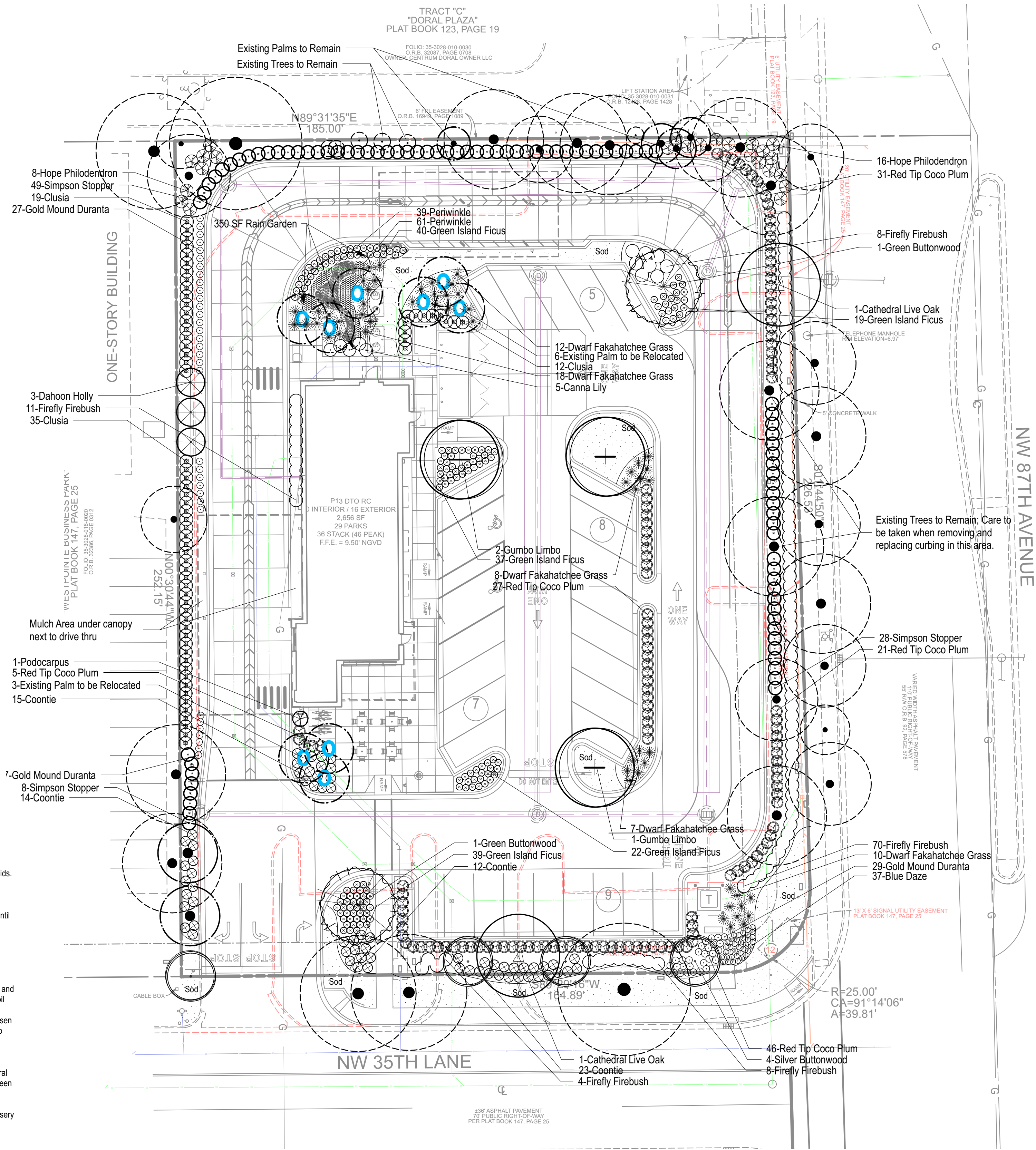
PERMIT
 SHEET NUMBER
L-001

LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING PALMS TO BE RELOCATED
- EXISTING TREE TO REMAIN
- EXISTING PALM TO REMAIN
- TREE PROTECTION FENCING

SOUTHEAST LANDSCAPE NOTES

1. Landscape Contractor to read and understand the Landscape Specifications prior to finalizing bids. The Landscape Specifications shall be adhered to throughout the construction process.
2. Contractor is responsible for locating and protecting all underground utilities prior to digging.
3. Contractor is responsible for protecting existing trees from damage during construction.
4. All tree protection devices to be installed prior to the start of land disturbance, and maintained until final landscaping.
5. All tree protection areas to be protected from sedimentation.
6. All tree protection fencing to be inspected daily, and repaired or replaced as needed.
7. No parking, storage or other construction activities are to occur within tree protection areas.
8. All planting areas shall be cleaned of construction debris (i.e. concrete, rock, rubble, building materials, etc) prior to adding and spreading of the topsoil.
9. General Contractor is responsible for adding a min of 4" clean friable topsoil in all planting beds and all grassed areas. Graded areas to be held down the appropriate elevation to account for topsoil depth. See Landscape Specifications for required topsoil characteristics.
10. In all parking lot islands, the General Contractor is responsible to remove all debris, fracture/loosen subgrade to a min. 24" depth. Add topsoil to a 6"-8" bermed height above island curbing; refer to landscape specifications and landscape island detail.
11. Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve topsoil provided by the General Contractor and observe the site conditions under which the work is to be done. Notify the General Contractor of any unsatisfactory conditions, work shall not proceed until such conditions have been corrected and are acceptable to the Landscape Contractor.
12. Any deviations from the approved set of plans are to be approved by the Landscape Architect.
13. Landscaping shall be installed in conformance with ANSI Z60.1 the "American Standard for Nursery Stock" and the accepted standards of the American Association of Nurserymen.
14. Existing grass in proposed planting areas shall be killed and removed. Hand rake to remove all rocks and debris larger than 1 inch in diameter, prior to adding topsoil and planting shrubs.
15. Soil to be tested to determine fertilizer and lime requirements prior to laying sod.
16. Annual and perennial beds: add min. 4 inch layer of organic material and till to a min. depth of 12 inches. Mulch annual and perennial beds with 2-3 inch depth of mini nuggets.
17. All shrubs beds (existing and new) to be mulched with a min. 3 inch layer of mulch (double shredded hardwood mulch).
18. Planting holes to be dug a minimum of twice the width of the root ball, for both shrub and tree. Set plant material 2-3" above finish grade. Backfill planting pit with topsoil and native excavated soil.
19. Sod to be delivered fresh (Cut less than 24 hours prior to arriving on site), laid immediately, rolled, and watered thoroughly immediately after planting. Edge of sod at planting beds are to be "V" trenched; see Landscape Details.
20. Any existing grass disturbed during construction to be fully removed, regraded and replaced. All tire marks and indentions to be repaired.
21. Water thoroughly twice in first 24 hours and apply mulch immediately.
22. The Landscape Contractor shall guarantee all plants installed for one full year from date of acceptance by the owner. All plants shall be alive and at a vigorous rate of growth at the end of the guarantee period. The Landscape Contractor shall not be responsible for acts of God or vandalism. See Landscape Specifications for Warranty requirements/expectations.
23. Any plant that is determined dead, in an unhealthy, unsightly condition, lost its shape due to dead branches, or other symptoms of poor, non-vigorous growth, shall be replaced by the Landscape Contractor. See Landscape Specifications for warranty requirements/expectations.
24. Site to be 100% irrigated in all planting beds and grass area by an automatic underground Irrigation System. Irrigation as-built shall be provided to the Landscape Architect within 24 hours of irrigation install completion.
25. Stake all evergreen and deciduous trees as shown in the planting detail and as per the Landscape Specifications.
26. Remove stakes and guying from all trees after one year from planting.



LANDSCAPE REQUIREMENTS

A. TREES		CITY OF DORAL, FL
REQUIRED	1. Industrial Commercial (IC) Land Use requires 15 Trees/Ac 1.08 Acre x 15 = 16 Trees	
	2. 20% open space required; 1.08 Ac = 47,045 SF x 20% = 9409 SF	
	3. No more than 30 percent of the min tree requirements shall be met by palm trees (16 x 30% = 5)	
	4. 50% of required trees and/or palms shall be native (16 x 50% = 8)	
	5. 80% of required trees shall be listed in the Miami-Dade Landscape Manual	
	6. Street trees shall be on average 35 LF O.C.	
	35th Lane 133 LF / 35 LF = 4 Street Trees	
	87th Ave 226 LF / 35 LF = 7 Street Trees	
PROVIDED	1. 11 Ex Hardwood Trees, 6 Ex Palms, 14 Proposed Trees, 9 Relocated Palm = 40 Trees	
	2. 25% open space = 11,761 SF	
	3. Palms are not being used to meet requirements	
	4. 100% of proposed trees are native	
	5. 100% of required trees are listed in the Miami-Dade Landscape Manual	
	6. 35th Lane 4 Existing Live Oak = 4 Trees	
	87th Ave 8 Existing Live Oak = 8 Trees	
B. SHRUBS		
REQUIRED	1. 10 Shrubs for every required tree 16 x 10 = 160 Shrubs	
	2. 50% of the shrubs shall be native species = 80 Native Shrubs	
	3. Hedges shall be planted at 18" Hgt @ 30" O.C. OR 36" hgt @ 48" O.C.	
PROVIDED	1. 531 Shrubs proposed = 531 Shrubs	
	2. 82% of proposed shrubs are native = 435 Native Shrubs	
	3. Hedges are a maximum average of 30" O.C. and 18" Hgt	
C. BUFFERYARD		
REQUIRED	1. Industrial commercial: Intensity Factor: 9	
	Commercial Corridor to southern property line Intensity Factor: 7	
	9 - 7 = Bufferyard Design Type on southern property line = Buffer Yard Type 2	
	Type 2 = 10' Buffer width, 3 Shade Trees, 3 Understory, 30 Shrubs per 100 LF	
	133 LF / 100 = 1.33 x 3 = 4 Shade Trees	
	133 LF / 100 = 1.33 x 3 = 4 Understory Trees	
	133 LF / 100 = 1.33 x 3 = 40 Shrubs	
PROVIDED	1. Shade Trees: 3 Ex. Oak, 1 Live Oak = 4 Shade Trees	
	Understory Trees: 4 Silver Buttonwood = 4 Understory Trees	
	Shrubs: 25 Cocoplum, 11 Coontie, 12 Firebush = 70 Shrubs	
D. PARKING LOT		
REQUIRED	1. All parking lots adjacent to a ROW shall be buffered by a continuous planting	
	2. Plantings shall be either a minimum hgt. of 18" with 30" spacing OR 36" hgt. with 48" Spacing	
	3. 10 Sq. Ft. of landscaped area per parking space = 290 SF Landscape Area	
	29 parking spaces x 10 SF = 290 SF Landscape Area	
	4. 1 Tree per 80 Sq. Ft. of landscaped area = 4 Trees	
	290 / 80 SF = 4 Trees	
	5. Parking lot islands to be min 10' wide	
	6. Each island shall have a min of one tree; min 14' hgt and 4" cal	
PROVIDED	1. Parking lot is buffered with continuous planting	
	2. Plantings are a minimum of 18" hgt. with a minimum of 30" spacing	
	3. 3753 SF Landscape Area provided	
	4. 3 Gumbo Limbos, 2 Green Buttonwood = 5 Trees	
	5. Parking lot islands are min 10' in width	
	6. Each island has one tree proposed 4" Cal; 14' hgt	

PLANT LIST

Qty	Botanical Name	Common Name	Scheduled Size	Remarks
Trees				
3	Bursera simaruba	Gumbo Limbo	4" Cal; Min 14' Hgt; 4' Spr	FL #1; Single Leader
2	Conocarpus erectus	Green Buttonwood	4" Cal; Min 14' Hgt; 4' Spr	FL #1; Standard
4	Conocarpus erectus "sericeus"	Silver Buttonwood	2.5" Cal.; 10' Hgt x 4' Spr	FL #1; Single Leader
3	Ilex cassine	Dahoon Holly	7-8" Hgt x 3-4' Spr	Full to base
2	Quercus virginiana "SDLN"	Cathedral Live Oak	4" Cal.; 14' Hgt x 5' Spr	FL #1; Single Leader
Shrubs				
5	Canna indica 'Phasion'	Canna Lily	3 Gal; 30" Hgt x 18" Spr	Plant 48" O.C.
130	Chrysobalanus icaco 'Red Tip'	Red Tip Coco Plum	3 Gal; 24" Hgt x 18" Spr	Plant max 30" O.C.
66	Clusia guttifera	Small-Leaf Clusia	3 Gal; 24" Hgt x 18" Spr	Full; Plant 36" OC
101	Hamelia patens 'Firefly'	Firefly Firebush	3 Gal; 18" Hgt x 12" Spr	Plant 36" OC.
85	Myrcianthes fragrans	Simpson Stopper	3 Gal; 24" Hgt x 24" Spr	Full; plant 30" OC.
24	Philodendron bipinnatifidum 'Hope'	Hope Philodendron	3 Gal; 30" Hgt x 30" Spr.	10 Gal.
1	Podocarpus macrophyllus 'Maki'	Shrubby Yew Podocarpus	10 Gal.	FL #1; Full, low branched
55	Tripsacum floridanum	Dwarf Fakahatchee Grass	3 Gal; 24" Hgt x 18" Spr	
64	Zamia pumila	Coontie	3 Gal; 15" Hgt x 15" Spr.	Plant 36" OC
Groundcovers				
63	Duranta erecta 'Gold Mound'	Gold Mound Duranta	3 Gal; 12" Hgt x 12" Spr	Plant 24" OC
37	Evolvulus glomeratus	Blue Daze	3 Gal; 6" Hgt x 12" Spr	Plant 18" O.C.
157	Ficus microcarpa 'Green Island'	Green Island Ficus	3 Gal; 12" Hgt x 12" Spr	Plant 24" OC
100	Vinca major	Periwinkle	1 Gal.	Plant 12" O.C.
3199	Cynodon dactylon	Hybrid Bermuda Grass	SF; Sod	
Other				
#	Rock Mulch	Rock Mulch	SF.	See Specifications



Chick-fil-A
 Chick-fil-A
 5200 Buffington Road
 Atlanta, Georgia 30349-2998



Manley Land Design, Inc.
 51 Old Canton Street
 Alpharetta, Georgia 30009
 770.442.8171 tel

CHICK-FIL-A
EAST DORAL
 8705 NW 35th Lane
 Doral, FL 33172

FSU# 5069

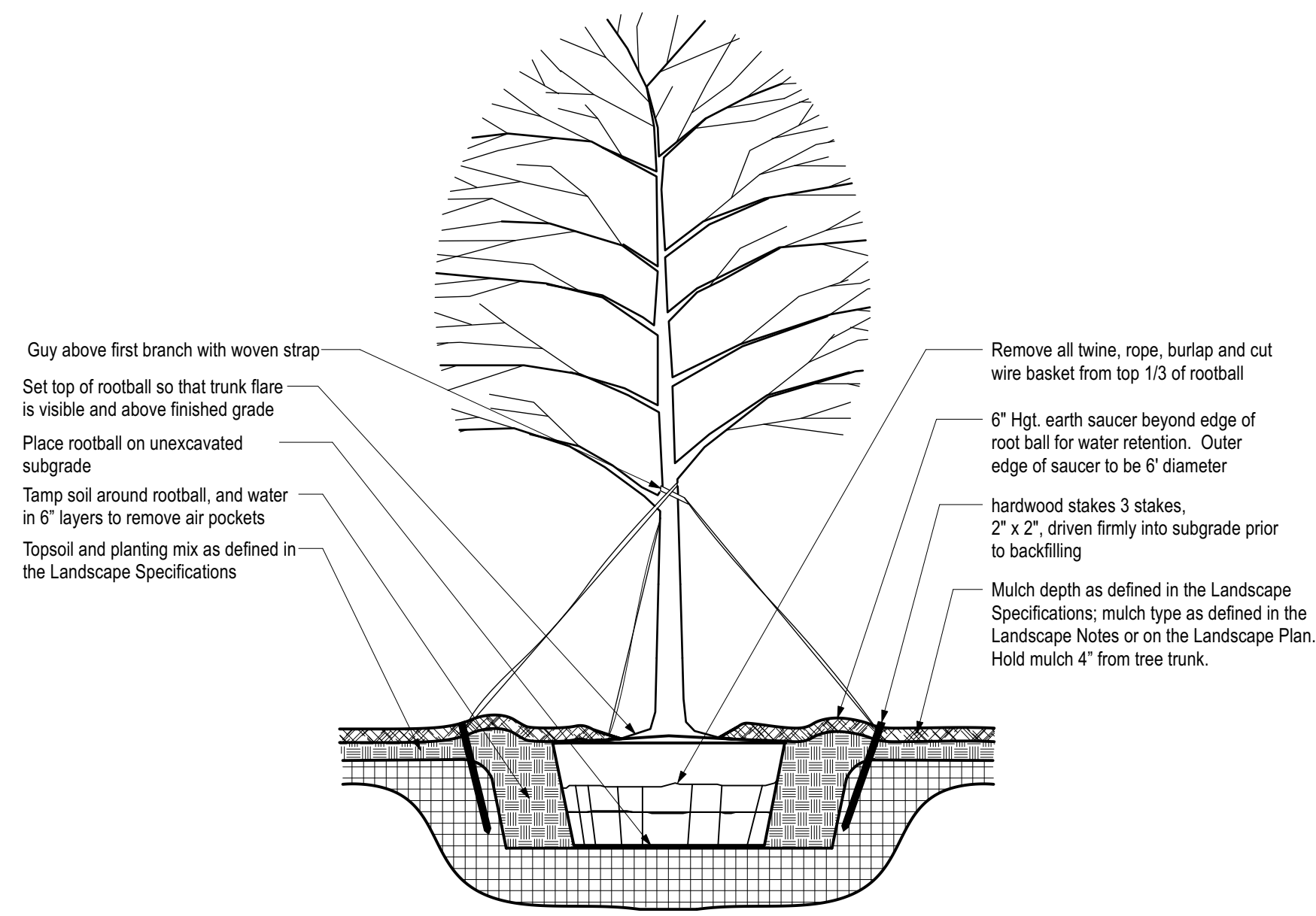
REVISION SCHEDULE
 NO. DATE BY DESCRIPTION

M/D PROJECT # 2022110
 PRINTED FOR PERMIT
 DATE 10/20/22
 DRAWN BY AN

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

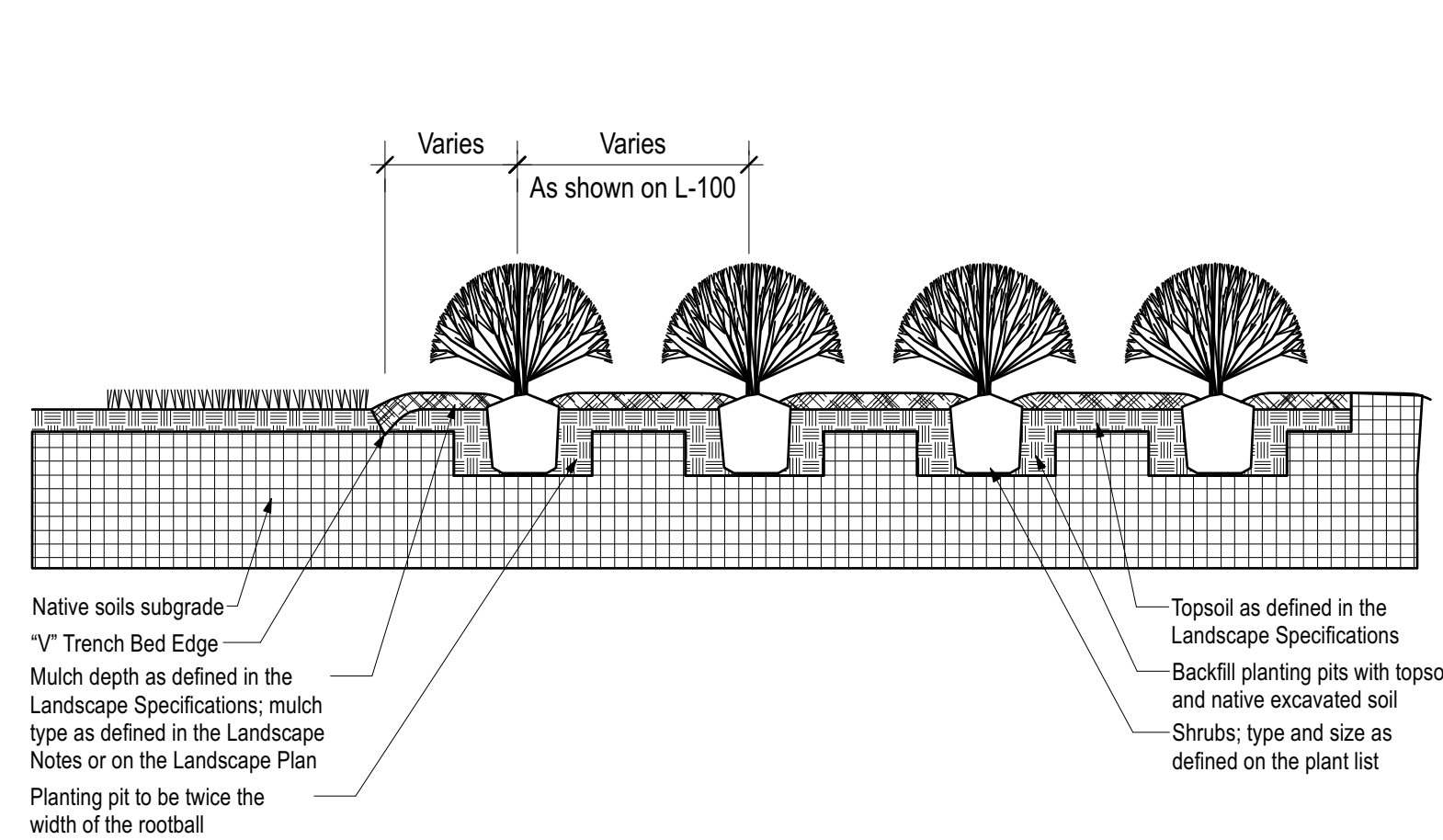
PERMIT Landscape Plan

SHEET NUMBER
L-100

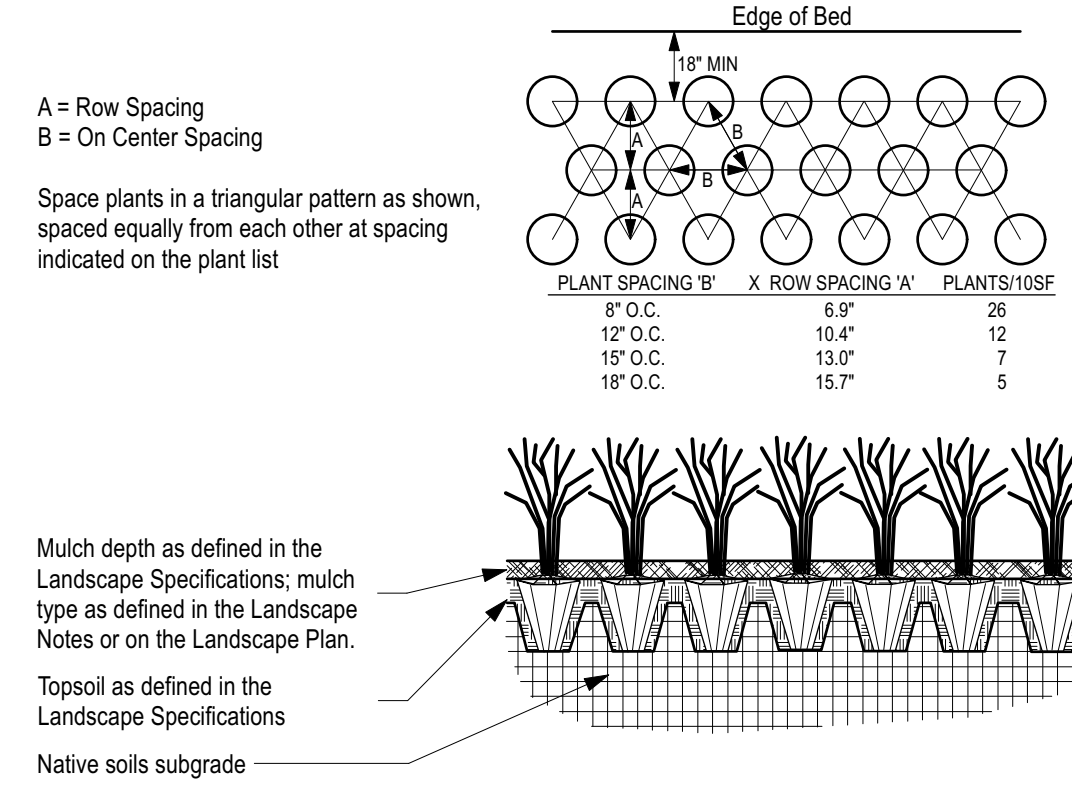


- NOTE**
- Hole to be twice the width of the rootball.
 - Do not heavily prune tree at planting. Prune only crossover limbs, broken or dead branches. Do not remove the terminal buds of branches that extend to the edge of the crown.
 - Each tree must be planted such that the trunk flare is visible at the top of the rootball. Trees where the trunk flare is not visible shall be rejected. Do not cover the top of the rootball with soil. Mulch to be held back 4' away from trunk.
 - Remove Guy Wires and Staking when warranty period has expired (after one year).

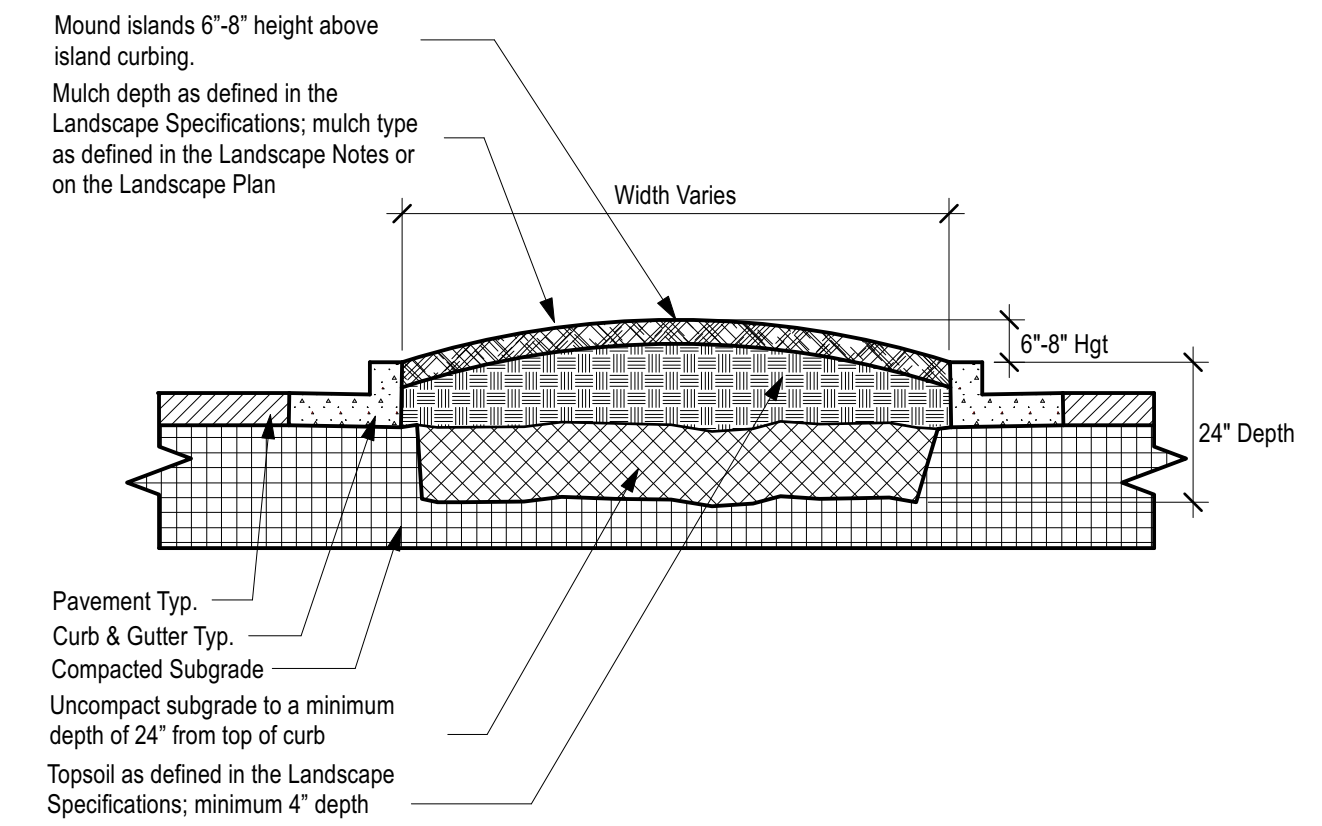
1 TREE PLANTING & STAKING
SCALE: NTS



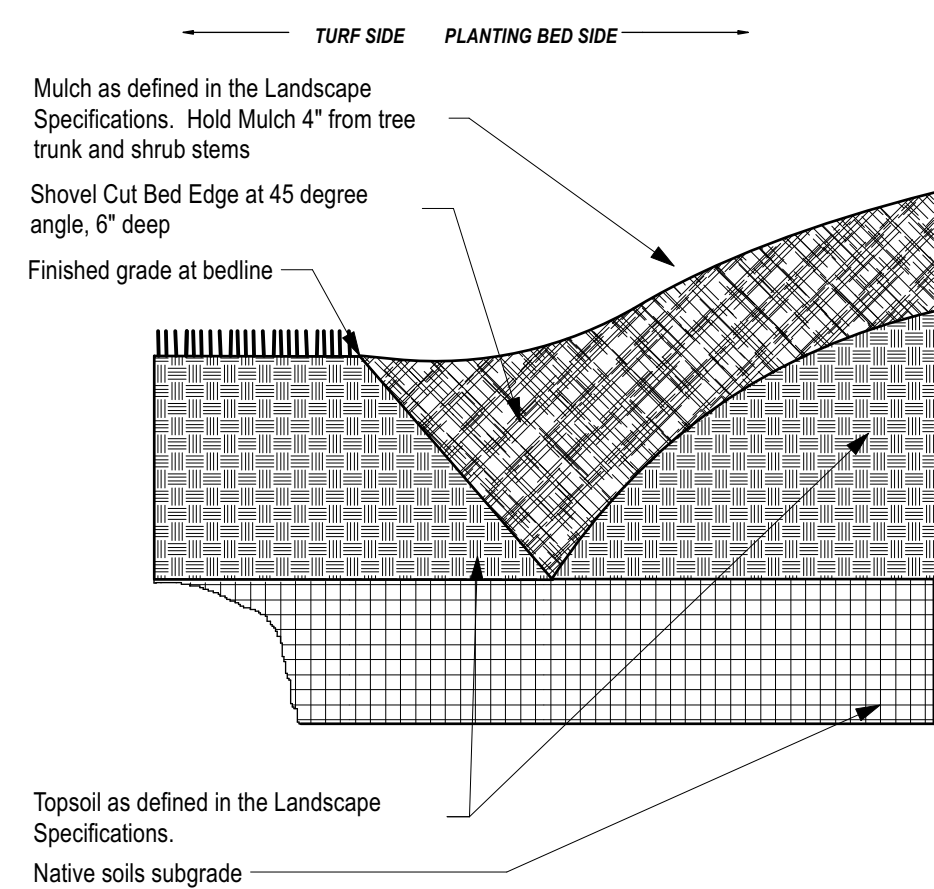
2 SHRUB BED PLANTING DETAIL
SCALE: NTS



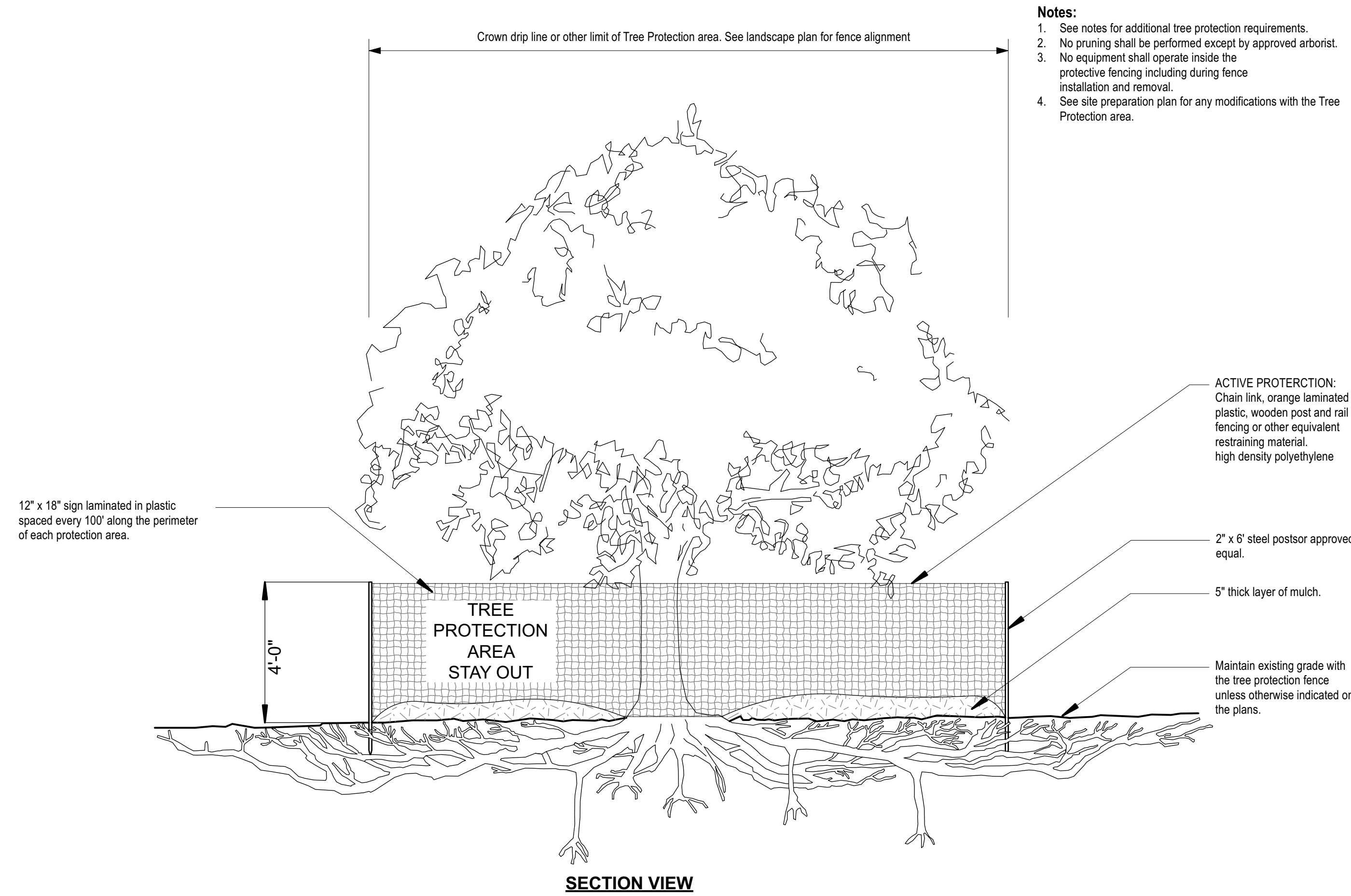
3 GROUNDCOVER PLANTING DETAIL
SCALE: NTS



4 PARKING ISLAND DETAIL
SCALE: NTS



5 "V" TRENCH BED EDGING
SCALE: NTS



6 TREE PROTECTION FENCING DETAIL
SCALE: NTS

URBAN TREE FOUNDATION © 2014
OPEN SOURCE FREE TO USE



Chick-fil-A
5200 Buffington Road
Atlanta, Georgia 30349-2998



Manley Land Design, Inc.
51 Old Canton Street
Alpharetta, Georgia 30009
770.442.8171 tel

CHICK-FIL-A
EAST DORAL
8705 NW 35th Lane
Doral, FL 33172

FSU# 5069

REVISION SCHEDULE
NO. DATE BY DESCRIPTION

MLD PROJECT # 2022110
PRINTED FOR PERMIT
DATE 10/20/22
DRAWN BY AN

Information contained on this drawing and in all digital files produced for above named project may not be reproduced in any manner without express written or verbal consent from authorized project representatives.

SHEET
PERMIT Landscape Details

SHEET NUMBER
L-101

LANDSCAPE SPECIFICATIONS

PART 1 - GENERAL

DESCRIPTION

Provide trees, shrubs, ground covers, sod, and annuals/perennials as shown and specified on the landscape plan. The work includes:

1. Soil preparation.
2. Trees, shrubs, ground covers, and annuals/perennials.
3. Planting mixes.
4. Top Soil, Mulch and Planting accessories.
5. Maintenance.
6. Decorative stone.

Related Work:

1. Irrigation System; if provided, see irrigation specifications (sheet L-2.2)

QUALITY ASSURANCE

Plant names indicated, comply with "Standardized Plant Names" as adopted by the latest edition of the American Joint Committee of Horticultural Nomenclature. Names of varieties not listed conform generally with names accepted by the nursery trade. Provide stock true to botanical name and legibly tagged.

Comply with sizing and grading standards of the latest edition of "American Standard for Nursery Stock". A plant shall be dimensioned as it stands in its natural position.

All plants shall be nursery grown under climatic conditions similar to those in the locality of the project for a minimum of 2 years.

Nursery Stock furnished shall be at least the minimum size indicated. Larger stock is acceptable, at no additional cost, and providing that the larger plants will not be cut back to size indicated. Provide plants indicated by two measurements so that only a maximum of 25% are of the minimum size indicated and 75% are of the maximum size indicated.

Before submitting a bid, the Contractor shall have investigated the sources of supply and be satisfied that they can supply the listed plants in the size, variety and quality as specified. Failure to take this precaution will not relieve the Contractor from their responsibility for furnishing and installing all plant materials in strict accordance with the Contract Documents without additional cost to the Owner. The Landscape Architect shall approve any substitutes of plant material, or changes in plant material size, prior to the Landscape Contractor submitting a bid.

DELIVER, STORAGE AND HANDLING

Take all precautions customary in good trade practice in preparing plants for moving. Workmanship that fails to meet the highest standards will be rejected. Spray deciduous plants in foliage with an approved "Anti-Desiccant" immediately after digging to prevent dehydration. Dig, pack, transport, and handle plants with care to ensure protection against injury. Inspection certificates required by law shall accompany each shipment invoice or order to stock. Protect all plants from drying out. If plants cannot be planted immediately upon delivery, properly protect them with soil, wet peat moss, or in a manner acceptable to the Landscape Architect. Water heeled-in plantings daily. No plant shall be bound with rope or wire in a manner that could damage or break the branches. Cover plants transported on open vehicles with a protective covering to prevent wind burn.

PROJECT CONDITIONS

Protect existing utilities, paving, and other facilities from damage caused by landscape operations.

A complete list of plants, including a schedule of sizes, quantities, and other requirements are shown on the drawings. In the event that quantity discrepancies or material omissions occur in the plant materials list, the planting plans shall govern.

The irrigation system will be installed prior to planting. Locate, protect and maintain the irrigation system during planting operations. Repair irrigation system components damaged during planting operations; at the Contractor's expense. Refer to the irrigation specifications, irrigation plan and irrigation details.

Do not begin landscape accessory work before completion of final grading or surfacing.

WARRANTY

Warrant plant material to remain alive, be healthy and in a vigorous condition for a period of 1 year after completion and final acceptance of entire project.

Replace, in accordance with the drawings and specifications, all plants that are dead or, are in an unhealthy, or unsightly condition, and have lost their natural shape due to dead branches, or other causes due to the Contractor's negligence. The cost of such replacement(s) is at the Contractor's expense. Warrant all replacement plants for 1 year after installation.

Warranty shall not include damage, loss of trees, plants, or ground covers caused by fires, floods, freezing rains, lightning storms, winds over 75 miles per hour, winter kill caused by extreme cold, severe winter conditions not typical of planting area, and/or acts of vandalism or negligence on a part of the Owner.

Remove and immediately replace all plants, found to be unsatisfactory during the initial planting installation.

Maintain and protect plant material, lawns, and irrigation until final acceptance is made.

ACCEPTANCE

Inspection of planted areas will be made by the Owner's representative.

1. Planted areas will be accepted provided all requirements, including maintenance, have been complied with and plant materials are alive and in a healthy, vigorous condition.

Upon acceptance, the Contractor shall commence the specified plant maintenance.

CODES, PERMITS AND FEES

Obtain any necessary permits for this Section of Work and pay any fees required for permits.

The entire installation shall fully comply with all local and state laws and ordinances, and with all established codes applicable thereto; also as depicted on the landscape and irrigation construction set.

PART 2 - PRODUCTS

MATERIALS

Plants: Provide typical of their species or variety; with normal, densely developed branches and vigorous, fibrous root systems. Provide only sound, healthy, vigorous plants free from defects, disfiguring knots, sun scald injuries, frost cracks, abrasions of the bark, plant diseases, insect eggs, borers, and all forms of infestation. All plants shall have a fully developed form without voids and open spaces. Plants held on storage will be rejected if they show signs of growth during the storage period.

1. Balled and plants wrapped with burlap, to have firm, natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Provide ball sizes complying with the latest edition of the "American Standard for Nursery Stock". Cracked or mushroomed balls, or signs of circling roots are not acceptable.
2. Container- grown stock: Grown in a container for sufficient length of time for the root system to have developed to hold its soil together, firm and whole.
 - a. No plants shall be loose in the container.
 - b. Container stock shall not be pot bound.
 - c. Plants planted in rows shall be matched in form.
4. Plants larger than those specified in the plant list may be used when acceptable to the Landscape Architect.
 - a. If the use of larger plants is acceptable, increase the spread of roots or root ball in proportion to the size of the plant.
5. The height of the trees, measured from the crown of the roots to the top of the top branch, shall not be less than the minimum size designated in the plant list.
6. No pruning wounds shall be present with a diameter of more than 1" and such wounds must show vigorous bark on all edges.
7. Evergreen trees shall be branched to the ground or as specified in plant list.
8. Shrubs and small plants shall meet the requirements for spread and height indicated in the plant list.
 - a. The measurements for height shall be taken from the ground level to the height of the top of the plant and not the longest branch.
 - b. Single stemmed or thin plants will not be accepted.
 - c. Side branches shall be generous, well-twigged, and the plant as a whole well-bushed to the ground.
 - d. Plants shall be in a moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries.

ACCESSORIES

Topsoil: Shall be Fertile, friable, natural topsoil of loamy character, without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, roots, sticks, and other foreign materials, with acidity range of between pH 6.0 and 6.8.

Note: All planting areas shall be cleaned of construction debris (ie. Concrete, rubble, stones, building material, etc.) prior to adding and spreading of the top soil.

1. **Sod Areas:** Spread a minimum 4" layer of top soil and rake smooth.
2. **Planting bed areas:** Spread a minimum 4" layer of top soil and rake smooth.

3. **Landscape Islands/Medians:** Fracture/loosen existing subgrade to a minimum 24" depth. Remove and replace any subgrade unsuitable for planting. Once subgrade is clean of debris and loosened, add topsoil to a minimum berm 6"-8" height above island curbing.
4. **Annual/Perennial bed areas:** Add a minimum of 4" organic matter and till to a minimum 12" depth.

Mulch: Type selected dependent on region and availability; see landscape plans for type of mulch to be used. Hold mulch 4" from tree trunks and shrub stems.

1. Hardwood: (color) dark brown, 6 month old well rotted double shredded native hardwood bark mulch not larger than 4" in length and ½" in width, free of wood chips and sawdust. Install minimum depth of 3".
2. Pine Straw: Pine straw to be fresh harvest, free of debris, bright in color. Bales to be wired and tightly bound. Needles to be dry. Install minimum depth of 3".
3. River Rock: (color) light gray to buff to dark brown, washed river rock, 1" – 3" in size. Install in shrub beds to an even depth of 3". Weed control barrier to be installed under all rock mulch areas. Use caution during installation not to damage plant material.
4. Mini Nuggets: Install to a minimum depth of 2"-3" at all locations of annual and perennial beds. Lift the stems and leaves of the annuals and carefully spread the mulch to avoid injuring the plants. Gently brush the mulch off the plants.

Guying/Staking:

1. Arbotie: Green (or white) staking and guying material to be flat, woven, polypropylene material, ¾" wide 900 lb. break strength. Arbotie shall be fastened to stakes in a manner which permits free movement and supports the tree.
2. Remove Guying/Staking after one year from planting.

Tree Wrap: Tree wraps should be used on young, newly planted thin-barked trees (Cherry, Crabapple, Honey Locust, Linden, Maple, Mountain Ash, Plum) that are most susceptible to sun scald/Sunburn. Standard waterproofed tree wrapping paper, 2-1/2" wide, made of 2 layers of crepe Draft paper weighing not less than 30 lbs. per ream, cemented together with asphalt. Wrap the tree in the fall and leave the wrap in place throughout the winter and early spring. Tree wraps are temporary and no longer needed once trees develop corky bark.

PART 3 – EXECUTION

INSPECTION

Prior to beginning work, the Landscape Contractor shall inspect the subgrade, general site conditions, verify elevations, utility locations, irrigation, approve top soil provided by the General Contractor and observe the site conditions under which the work is to be done. Notify the General Contractor of any unsatisfactory conditions, and work shall not proceed until such conditions have been corrected and are acceptable to the Landscape Contractor.

PREPARATION

Planting shall be performed only by experienced workmen familiar with planting procedures under the supervision of a qualified supervisor.

Locate plants as indicated on the plans or as approved in the field after staking by the Landscape Contractor. If obstructions are encountered that are not shown on the drawings, do not proceed with planting operations until alternate plant locations have been selected and approved by the Landscape Architect; spacing of plant material shall be as shown on the landscape plan.

Excavate circular plant pits with vertical sides, except for plants specifically indicated to be planted in beds. Provide shrub pits at least 12" greater than the diameter of the root system and 24" greater for trees. Depth of pit shall accommodate the root system. Provide undisturbed sub grade to hold root ball at nursery grade as shown on the drawings.

INSTALLATION

Set plant material in the planting pit to proper grade and alignment. Set plants upright, plumb, and faced to give the best appearance or relationship to each other or adjacent structure. Set plant material 2" – 3" above the finish grade. No filling will be permitted around trunks or stems. Backfill the pit with topsoil mix and excavated material. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water.

After balled and wrapped in burlap plants are set, muddle planting soil mixture around bases of balls and fill all voids.

1. Remove all burlap, ropes, and wires from the top 1/3 of the root ball

Space ground cover plants in accordance with indicated dimensions. Adjust spacing as necessary to evenly fill planting bed with indicated quantity of plants. Plant to within 24" of the trunks of trees and shrubs within planting bed and to within 18" of edge of bed.

Mulching:

1. Mulch tree and shrub planting pits and shrub beds with required mulching material (see landscape plan for mulch type); depth of mulch as noted above. **Hold mulch back 4" away from tree trunks and shrub stems.** Thoroughly water mulched areas. After watering, rake mulch to provide a uniform finished surface.

Decorative Stone: (where indicated on landscape plan)

1. Install weed control barrier over sub-grade prior to installing stone. Lap 6" on all sides.
2. Place stone without damaging weed barrier.
3. Arrange stones for best appearance and to cover all weed barrier fabric.

Wrapping, guying, staking:

1. Inspect trees for injury to trunks, evidence of insect infestation, and improper pruning before wrapping.
2. Wrapping:
 - a. Wrap trunks of all young newly planted trees known to have thin bark. Wrap spirally from bottom to top with specified tree wrap and secure in place.
 - b. Overlap ½ the width of the tree wrap strip and cover the trunk from the ground to the height of the second branch.
 - c. Secure tree wrap in place with twine wound spirally downward in the opposite direction, tied around the tree in at least 3 places in addition to the top and bottom.
 - d. Wrap the trees in the fall and leave the wrap in place throughout the winter and early spring.
 - e. Tree wraps are temporary and no longer needed once the trees develop corky bark.
3. Staking/Guying:
 - a. Stake/guy all trees immediately after lawn sodding operations and prior to acceptance.
 - b. Stake deciduous trees 2" caliper and less. Stake evergreen trees under 7"-0" tall.
 1. Stakes are placed in line with prevailing wind direction and driven into undisturbed soil.
 2. Ties are attached to the tree, usually at the lowest branch.
 - c. Guy deciduous trees over 2" caliper. Guy evergreen trees 7"-0" tall and over.
 1. Guy wires to be attached to three slakes driven into undisturbed soil, with one stake placed in the direction of the prevailing wind.
 2. Ties are attached to the tree as high as practical.
 3. The axis of the stake should be at 90 degree angle to the axis on the pull of the guy wire.
4. **Remove all guying and staking after one year from planting.**

Pruning:

1. Prune deciduous trees and evergreens only to remove broken or damaged branches.

WORKMANSHIP

During landscape/irrigation installation operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of installation operations, all excess materials, equipment, debris and waste material shall be cleaned up and removed from the site; unless provisions have been granted by the owner to use on-site trash receptacles. Sweep parking and walks clean of dirt and debris. Remove all plant tags and other debris from lawns and planting areas.

Any damage to the landscape, the structure, or the irrigation system caused by the landscape contractor shall be repaired by the landscape contractor without charge to the owner.

MAINTENANCE

Contractor shall provide maintenance until work has been accepted by the Owner's Representative.

Maintenance shall include mowing, fertilizing, mulching, pruning, cultivation, weeding, watering, and application of appropriate insecticides and fungicides necessary to maintain plants and lawns free of insects and disease.

1. Re-set settled plants to proper grade and position. Restore planting saucer and adjacent material and remove dead material.
2. repair guy wires and stakes as required. Remove all stakes and guy wires after 1 year.
3. Correct defective work as soon as possible after deficiencies become apparent and weather and season permit.
4. Water trees, plants and ground cover beds within the first 24 hours of initial planting, and not less than twice per week until final acceptance.

LANDSCAPE MAINTENANCE SPECIFICATIONS

The Contractor shall provide as a separate bid, maintenance for a period of **1 year** after final acceptance of the project landscaping. The Contractor must be able to provide continued maintenance if requested by the Owner or provide the name of a reputable landscape contractor who can provide maintenance.

STANDARDS

All landscape maintenance services shall be performed by trained personnel using current, acceptable horticultural practices.

All work shall be performed in a manner that maintains the original intent of the landscape design.

All chemical applications shall be performed in accordance with current county, state and federal laws, using EPA registered materials and methods of application. These applications shall be performed under the supervision of a Licensed Certified applicator.

APPROVALS

Any work performed in addition to that which is outlined in the contract shall only be done upon written approval by the Owner's Representative (General Manager of the restaurant).

All seasonal color selections shall be approved by the General Manager prior to ordering and installation.

SOIL TESTING

The maintenance contractor shall perform soil tests as needed to identify imbalances or deficiencies causing plant material decline. The owner shall be notified of the recommendation for approval, and the necessary corrections made at an additional cost to the owner.

Acceptable Soil Test Results

	Landscape Trees and Shrubs	Turf
pH Range	5.0-7.0	6.0-7.0
Organic Matter	>1.5%	>2.5%
Magnesium (Mg)	100-lbs./acre	100-lbs./acre
Phosphorus (P2O5)	150-lbs./acre	150-lbs./acre
Potassium (K2O)	120-lbs./acre	120-lbs./acre
Soluble salts	Not to exceed 900ppm/1.9 mmhos/cm	Not to exceed 750ppm/0.75 mmhos/cm
Conductivity	in soil; not to exceed 1400 ppm/2.5 mmhos/cm in high organic mix	in soil; not to exceed 2000 ppm/2.0 mmhos/cm in high organic mix

For unusual soil conditions, the following optional tests are recommended with levels not to exceed:

Boron	3 pounds per acre
Manganese	50 pounds per acre
Potassium (K2O)	450 pounds per acre
Sodium	20 pounds per acre

WORKMANSHIP

During landscape maintenance operations, all areas shall be kept neat and clean. Precautions shall be taken to avoid damage to existing structures. All work shall be performed in a safe manner to the operators, the occupants and any pedestrians.

Upon completion of maintenance operations, all debris and waste material shall be cleaned up and removed from the site, unless provisions have been granted by the owner to use on-site trash receptacles.

Any damage to the landscape, the structure, or the irrigation system caused by the maintenance contractor, shall be repaired by the maintenance contractor without charge to the owner.

TURF

GENERAL CLEAN UP

Prior to mowing, all trash, sticks, and other unwanted debris shall be removed from lawns, plant beds, and paved areas.

MOWING

Warm season grasses (i.e. Bermuda grass) shall be maintained at a height of 1" to 2" during the growing season.

Cool season grasses, including blue grass, tall fescue, perennial ryegrass, etc., shall be maintained at a height of 2" to 3" in spring and fall. From June through September, mowing height shall be maintained at no less than 3".

The mowing operation includes trimming around all obstacles, raking excessive grass clippings and removing debris from walks, curbs, and parking areas. Caution: Weed eaters should NOT be used around trees because of potential damage to the bark.

EDGING

Edging of all sidewalks, curbs and other paved areas shall be performed once every other mowing. Debris from the edging operations shall be removed and the areas swept clean. Caution shall be used to avoid flying debris.

LIMING & FERTILIZING

A soil test shall be taken to determine whether an application of limestone in late fall is necessary. If limestone is required, the landscape contractor shall specify the rate, obtain approval from the owner and apply it at an additional cost. A unit price for liming of turf shall accompany the bid based on a rate of 50 pounds per 1000 square feet.

Fertilizer shall be applied in areas based on the existing turf species.

LAWN WEED CONTROL: HERBICIDES

Selection and proper use of herbicides shall be the landscape contractor's responsibility. All chemical applications shall be performed under the supervision of a Licensed Certified Applicator. **Read the label prior to applying any chemical.**

INSECT & DISEASE CONTROL FOR TURF

The contractor shall be responsible for monitoring the site conditions on each visit to determine if any insect pest or disease problems exist. The contractor shall identify the insect pest or disease, as well as the host plant, and then consult the most current edition of the Cooperative Extension Service's "Commercial Insecticide Recommendation for Turf" for control. The licensed applicator shall be familiar with the label provided for the selected product prior to application.

Inspection and treatment to control insect pests shall be included in the contract price.

TREES, SHRUBS, & GROUND COVER

PRUNING

All ornamental trees, shrubs and ground cover shall be pruned when appropriate to remove dead or damaged branches, develop the natural shapes. **Do not shear trees or shrubs.** If previous maintenance practice has been to shear and ball, then a natural shape will be restored gradually.

Pruning Guidelines:

1. Prune those that flower before the end of June immediately after flowering. Flower buds develop during the previous growing season. Fall, winter or spring pruning would reduce the spring flowering display.
2. Prune those that flower in summer or autumn in winter or spring before new growth begins, since these plants develop flowers on new growth.
3. Delay pruning plants grown for ornamental fruits, such as cotoneasters, pyracanthas and viburnums.
4. Hollies and other evergreens may be pruned during winter in order to use their branches for seasonal decoration. However, severe pruning of evergreens should be done in early spring only.
5. Broadleaf evergreen shrubs shall be hand-pruned to maintain their natural appearance after the new growth hardens off.
6. Hedges or shrubs that require shearing to maintain a formal appearance shall be pruned as required. Dead wood shall be removed from sheared plants before the first shearing of the season.
7. Conifers shall be pruned, if required, according to their genus.
 - A. Yews, junipers, hemlocks, arbutoviae, and false-cypress may be pruned after new growth has hardened off in late summer. If severe pruning is necessary, it must be done in early spring.
 - B. Firs and spruces may be lightly pruned in late summer, fall, or winter after completing growth. Leave side buds. Never cut central leader.
 - C. Pines may be lightly pruned in early June by reducing candles.
8. Groundcover shall be edged and pruned as needed to contain it within its borders.

9. Thinning: Remove branches and water sprouts by cutting them back to their point of origin on parent stems. This method results in a more open plant, without stimulating excessive growth. Thinning is used on crepe myrtle, lilacs, viburnums, smoke bush,etc.
10. Renewal pruning: Remove oldest branches of shrub at ground, leaving the younger, more vigorous branches. Also remove weak stems. On overgrown plants, this method may be best done over a three-year period. Renewal pruning may be used on abelia, forsythia, deutzia, spireaee, etc.

Plants overhanging passageways and parking areas and damaged plants shall be pruned as needed.

Shade trees that cannot be adequately pruned from the ground shall not be included in the Maintenance Contract. A certified arborist under a separate contract shall perform this type of work.

SPRING CLEANUP

Plant beds shall receive a general cleanup before fertilizing and mulching. Cleanup includes removing debris and trash from beds and cutting back herbaceous perennials left standing through winter, e.g. ornamental grasses, Sedum Autumn Joy.

FERTILIZING

For trees, the rate of fertilization depends on the tree species, tree vigor, area available for fertilization, and growth stage of the tree. Mature specimens benefit from fertilization every 3 to 4 years; younger trees shall be fertilized more often during rapid growth stages.

The current recommendation is based on the rate of 1000 square feet of area under the tree to be fertilized. For deciduous trees, 2 to 6 pounds of Nitrogen per 1000 square feet, for narrow-leaf evergreens, 1 to 4 pounds of Nitrogen per 1000 square feet; for broadleaf evergreens, 1 to 3 pounds of Nitrogen per 1000 square feet.

Shrubs and groundcover shall be top-dressed with compost 1" deep, or fertilized once in March with 10-6-4 analysis fertilizer at the rate of 3 pounds per 100 square feet of bed area. Eriaceous material shall be fertilized with an ericaceous fertilizer at the manufacturer's recommendation rate. If plants are growing poorly, a soil sample should be taken.

MULCHING

Annually, all tree and shrub beds will be prepared and mulched, to a minimum depth of 3" with quality mulch to match existing. Bed preparation shall include removing all weeds, cleaning up said bed, edging and cultivating decayed mulch into the soil. Debris from edging is to be removed from beds where applicable. If deemed necessary, a pre-emergent herbicide may be applied to the soil to inhibit the growth of future weeds.

Organically maintained gardens shall not receive any pre-emergent herbicides. Mulch in excess of 4" will be removed from the bed areas. SPECIAL CARE shall be taken in the mulching operation not to over-mulch or cover the base of trees and shrubs. This can be detrimental to the health of the plants.

WEEDING

All beds shall be weeded on a continuous basis throughout the growing season to maintain a neat appearance at all times.

Pre-emergent (soil-applied) and post-emergent (foliar-applied) herbicides shall be used where and when applicable and in accordance with the product's label.

INSECT & DISEASE CONTROL: TREES, SHRUBS & GROUNDCOVER

The maintenance contractor shall be responsible for monitoring the landscape site on a regular basis. The monitoring frequency shall be monthly except for growing season, which will be every other week. Trained personnel shall monitor for plant damaging insect activity, plant pathogenic diseases and potential cultural problems in the landscape. The pest or cultural problem will be identified under the supervision of the contractor.

For plant damaging insects and mites identified in the landscape, the contractor shall consult and follow the recommendations of the most current edition of the state Cooperative Service publication on insect control on landscape plant material.

Plant pathogenic disease problems identified by the contractor that can be resolved by pruning or physical removal of damaged plant parts will be performed as part of the contract. For an additional charge, plant pathogenic diseases that can be resolved through properly timed applications of fungicides shall be made when the owner authorizes it.

If the contractor notes an especially insect-or disease-prone plant species in the landscape, he/she will suggest replacement with a more pest-resistant cultivar or species that is consistent with the intent of the landscape design.

NOTE: For identification of plant-damaging insects and mites, a reference textbook that can be used is *Insects that Feed on Trees and Shrubs* by Johnson and Lyon, Comstock Publishing Associates. For plant pathogenic diseases, two references are suggested: *Scouting and Controlling Woody Ornamental Diseases in Landscapes and Nurseries*, authored by Gary Moorman, published by Penn State College of Agricultural Sciences, and *Diseases of Trees and Shrubs* by Sinclair and Lyon, published by Comstock Publishing Press.

TRASH REMOVAL

The maintenance contractor shall remove trash from all shrub and groundcover beds with each visit.

LEAF REMOVAL

All fallen leaves shall be removed from the site in November and once in December. If requested by the owner, the maintenance contractor, at an additional cost to the owner shall perform supplemental leaf removals.

WINTER CLEAN-UP

The project shall receive a general clean-up once during each of the winter months, i.e., January, February, and March.

Clean-up includes:

- Cleaning curbs and parking areas
- Removing all trash and unwanted debris
- Turning mulch where necessary
- Inspection of grounds

SEASONAL COLOR: PERENNIALS, ANNUALS, AND BULBS

The installation of perennials, annuals, and bulbs, unless specified herein, shall be reviewed with the owner, and, if accepted, installed and billed to the owner.

SEASONAL COLOR MAINTENANCE

Perennialization of Bulbs:

1. After flowering, cut off spent flower heads.
2. Allow leaves of daffodils and hyacinths to remain for six weeks after flowers have faded. Cut off at base.
3. Allow leaves of other bulbs to yellow naturally and then cut off at base.
4. Apply fertilizer after flowering in spring, possibly again in fall. Apply 10-10-10 at the rate of 2 pounds per 1000 square feet, or top-dress with compost 1" deep. Fall fertilization with a bulb fertilizer or mulching with 1" of compost is optional.

Flower Rotation:

1. Bulbs: Remove the entire plant and bulb after flowers have faded or at the direction of the owner, and install new plants if included in contract.
2. Summer Annuals or Fall Plants:
 - a. Dead heading: Pinch and remove dead flowers on annuals as necessary.
 - b. Fertilizing Summer Annuals: Fertilize using one or two methods: Apply a slow-release fertilizer in May following manufacturer's recommendations. A booster such as 10-10-10 may be necessary in late summer. Or, apply liquid fertilizations of 20-20-20 water-soluble fertilizers, not to exceed 2 pounds of 20-20-20 per 100 gallons of water, monthly; or mulch with compost 1" deep.
 - c. Removal: If fall plants are to be installed, summer annuals shall be left in the ground until the first killing frost and then removed, unless otherwise directed by the owner.

<