RESOLUTION No. 24-158

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, APPROVING THE SITE PLAN FOR DORAL MARKETPLACE, LLC, FOR THE PROPERTY LOCATED AT THE SOUTHWEST CORNER OF NW 107 AVENUE AND NW 41 STREET DORAL, FLORIDA, PURSUANT TO SECTION 53-184(F) OF THE CITY'S LAND DEVELOPMENT CODE; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, Chapter 53 "Administration", Article III. Development Procedures, Sec. 53-184(f) of the City of Doral's (the "City") Land Development Code, establishes the site plan review and approval procedures for the Mayor and City Council to review and approve the site plan; and

WHEREAS, Doral Marketplace, LLC (the "Applicant") is seeking site plan approval for the property located at the southwest corner of NW 107th Avenue and NW 41st Street, further identified by the Miami-Dade County Property Appraiser by Folio No. 35-3030-000-0020 (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 August 22, 2023, during which the public was afforded an opportunity to examine the Project and provide feedback; and

WHEREAS, the City Council reviewed the site plan application, 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.

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

<u>Section 1.</u> <u>Recitals.</u> 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 Doral Marketplace Retail Center, for the property located at the southwest corner of NW 107th Avenue and NW 41st Street, further identified by folio number 35-3030-000-0020, as legally described in "Exhibit A." The site plan proposes a retail center constructed of approximately 11 acres of the overall Property and 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 "Doral Marketplace Prepared for SJC Ventures," prepared by Kimley–Horn and Associates, Inc., dated stamped received May 13, 2024.
- 2. The Project shall be landscaped in accordance with the landscape plan, signed by Benjamin Van Johnson, PLA, dated stamped received May 13, 2024, as amended, and included with the site plan submittal.

- 3. The Applicant shall comply with the conditions set forth by Miami-Dade County Department of Transportation and Public Works (DTPW) Traffic Engineering Division.
- 4. The Applicant shall comply with Ordinance No. 2015-09 "Public Arts Program," as amended at the time of building permit.
- 5. Prior to building permit application, the Applicant shall provide a detail for the 4-foot-high decorative masonry wall for the row of parking facing Doral Boulevard next to the grocer building, noted as "Decorative Knee Wall" on the proposed Site Plan. Landscaping shall remain as provided for on plan, without reduction. Detail to be approved by the Planning Department.
- 6. The Applicant shall comply with the City's Floodplain Management regulations (Chapter 23, Article II, Floodplain Management) of the City's Code.
- 7. The Applicant shall provide the City a certified drainage inspection report prior to the issuance of a certificate of occupancy.
- 8. A Stormwater Pollution Prevention Plan (SWPPP) must be submitted by the Applicant 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, stormwater 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.
- 9. Construction shall be permitted only during the hours set forth in Ordinance No. 2011-01 "Noise Ordinance."
- 10. The Applicant shall comply with all applicable conditions and requirements of the Miami-Dade County Department of Regulatory and Economic Resources.
- 11. The Applicant shall comply with all applicable conditions and requirements of the Miami-Dade County Fire Rescue Department.
- 12. All applicable local, state, and federal permits must be obtained before commencement of the development.
- 13. 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

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- 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.
- 14. The Applicant shall 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.
- 15. 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.

<u>Section 4.</u> <u>Effective Date.</u> This Resolution shall become effective immediately upon its adoption.

The foregoing Resolution was offered by Vice Mayor Puig-Corve who moved its adoption.

The motion was seconded by Councilmember Cabral and upon being put to a vote, the vote was as follows:

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

PASSED AND ADOPTED this 12 day of June, 2024.

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:

GASTESI, LOPEZ & MESTRE, PLLC

CITY ATTORNEY

Louise Casiella

EXHIBIT "A"

LEGAL DESCRIPTION:

THAT PORTION OF THE NORTHEAST 1/4 OF SECTION 30, TOWNSHIP 53 SOUTH, RANGE 40 EAST, MIAMI-DADE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 30; THENCE SOUTH 01'44'50" EAST, ALONG THE EAST LINE OF SAID NORTHEAST 1/4 OF SECTION 30, FOR 174.40 FEET; THENCE SOUTH 88"15"10" WEST 51,83 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 08"39'38" WEST 42.41 FEET; THENCE SOUTH 03"44"49" EAST 166.36 FEET TO A POINT ON A CIRCULAR CURVE TO THE RIGHT FROM WHICH A RADIAL LINE BEARS NORTH 50"02"26" WEST; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 70.00 FEET AND A CENTRAL ANGLE OF 38"41"10", FOR AN ARC DISTANCE OF 47.26 FEET TO A POINT OF COMPOUND CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 500.00 FEET AND A CENTRAL ANGLE OF 11"41"37", FOR AN ARC DISTANCE OF 122.46 FEET TO A POINT OF TANGENCY; THENCE NORTH 89"39"39" WEST 1023.30 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTH WESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 60.00 FEET AND A CENTRAL ANGLE OF 75'29"15", FOR AN ARC DISTANCE OF 79.05 FEET TO A POINT OF COMPOUND CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 500.00 FEET AND A CENTRAL ANGLE OF 13"45"04", FOR AN ARC DISTANCE OF 120.00 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTHEAST 142.50 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTHEAST 142.50 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTHEAST 142.50 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTH B9"34"32" EAST ALONG SHE PARALLEL LINE 72.190 FEET; THENCE SOUTH 77"57"21" EAST 32.42 FEET SOUTH OF AND PARALLEL WITH THE NORTH LINE OF SAID CURVE, HAVING A RADIUS OF 56.00 FEET AND A CENTRAL ANGLE OF 07"47"18", FOR AN ARC DISTANCE OF 25.83 FEET TO A POINT OF COMPOUND CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTH AS 934"32" EAST ALONG SHE ARC OF SAID CURVE, HAVING A RADIUS OF 56.00 FEET AND A CENTRAL ANGLE OF 07"47"18", FOR AN ARC DISTANCE OF A CIRCULAR

SAID LANDS LYING AND BEING IN THE CITY OF DORAL, MIAMI-DADE COUNTY, FLORIDA, AND CONTAINING 437,973 SQUARE FEET (10.0545 ACRES), MORE OR LESS;

EXHIBIT "B"



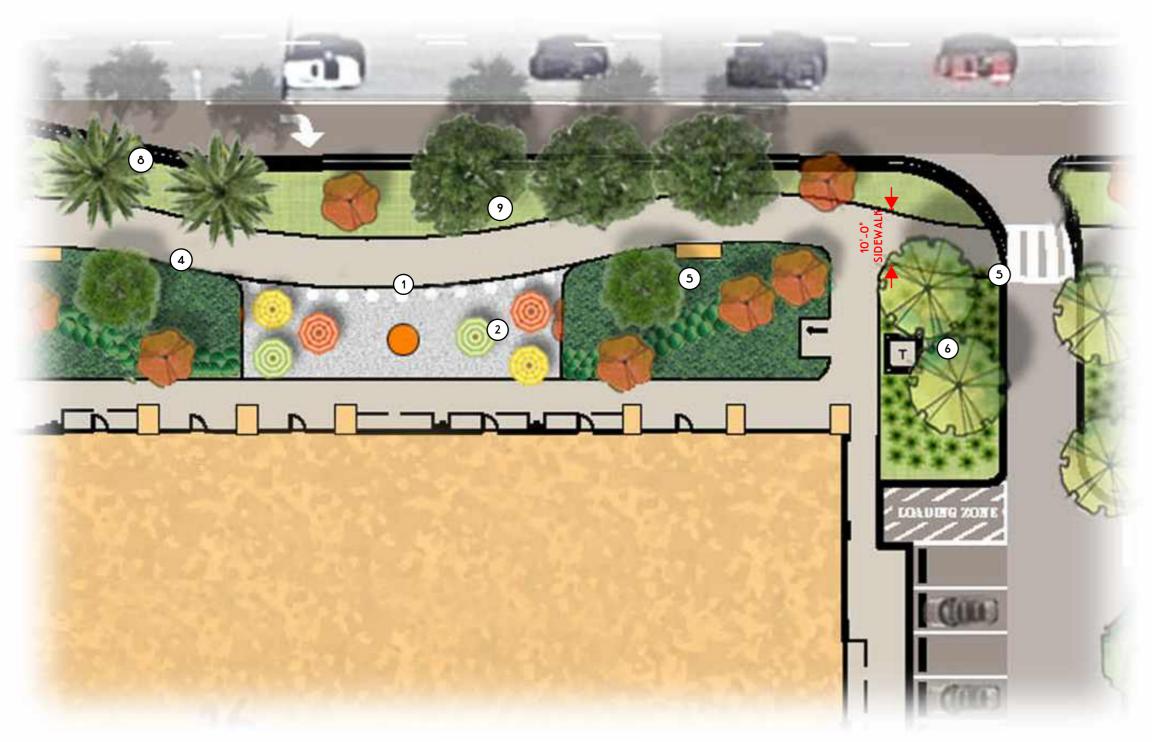


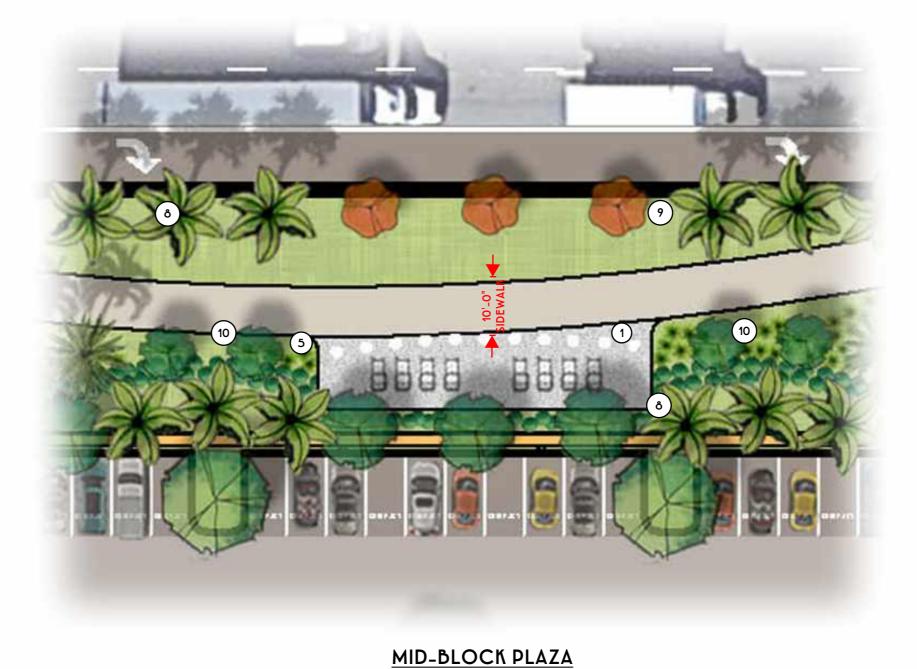


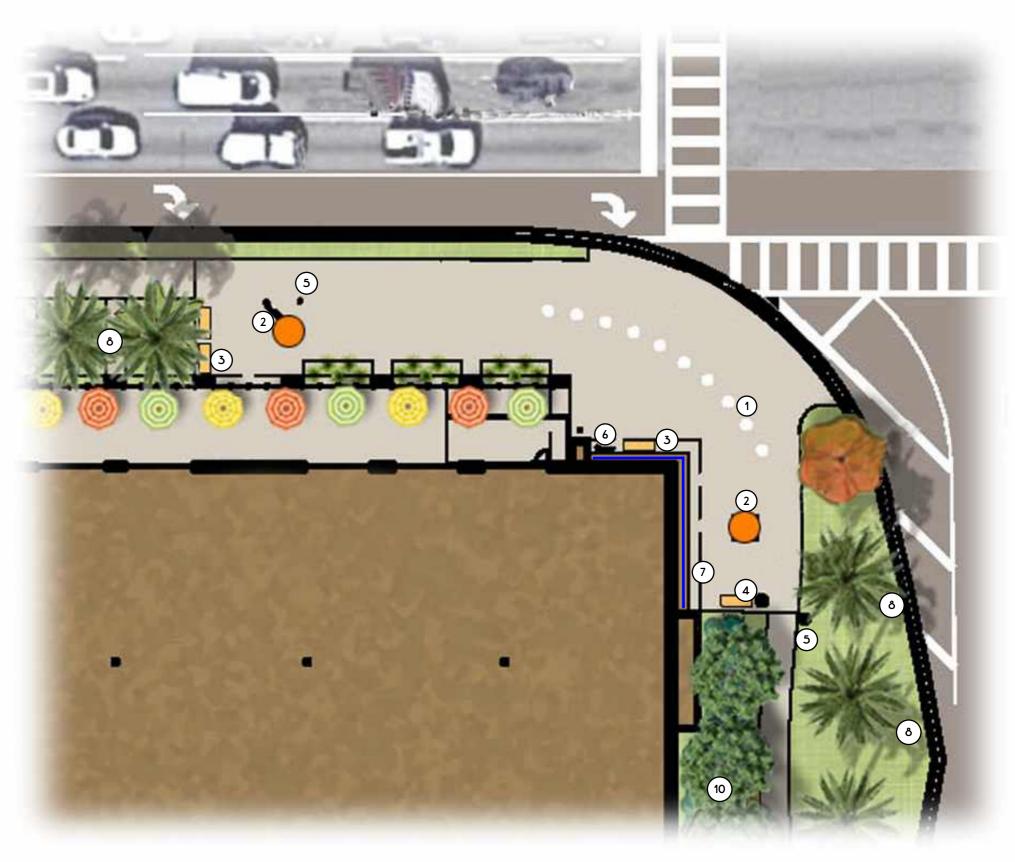










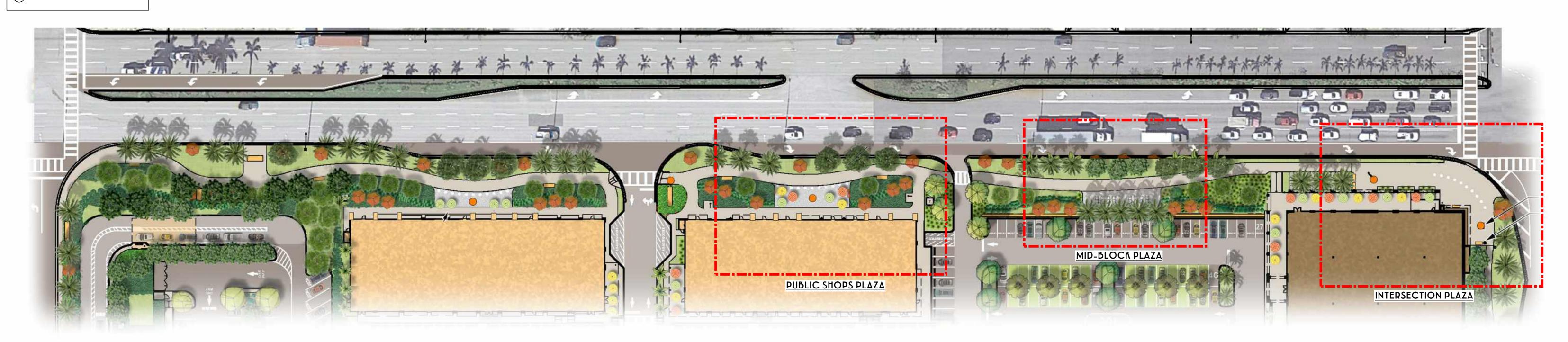


INTERSECTION PLAZA

PUBLIC SHOPS PLAZA

LEGEND

- 1 WHITE SPHERE BOLLARD
- 2 PUBLIC ART
 3 BENCH
- 4 BENCH WITH TRASH RECEPTACLE
- 5 PEDESTRIAN WALK LIGHT
- 6 BIKE RACK
- 7 WALL MURAL
- 8 KING ALEXANDER PALM
- 9 SOUTHERN LIVE OAK
- 10) SIMPSON'S STOPPER















1 FRONT ELEVATION (SOUTH)

SCALE: 1/8" = 1'-0"



2 REAR ELEVATION (NORTH)

SCALE: 1/8" = 1'-0"





SIDE ELEVATION (WEST)

SCALE: 1/8' = 1'-0'

SIDE ELEVATION (EAST)

SCALE: 1/8" = 1'-0"





1 FRONT ELEVATION (NORTH)

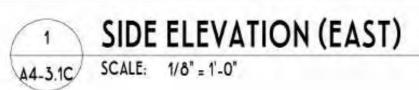
SCALE: 1/8' = 1'-0'



1 REAR ELEVATION (SOUTH)

SCALE: 1/8' = 1'-0'









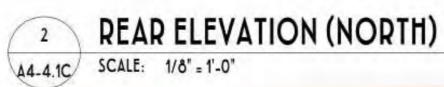




1 FRONT ELEVATION (SOUTH)

SCALE: 1/8" = 1'-0"





TENANT









FRONT ELEVATION (NORTH)



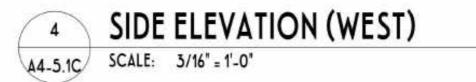
2 REAR ELEVATION (SOUTH)

SCALE: 3/16" = 1'-0"

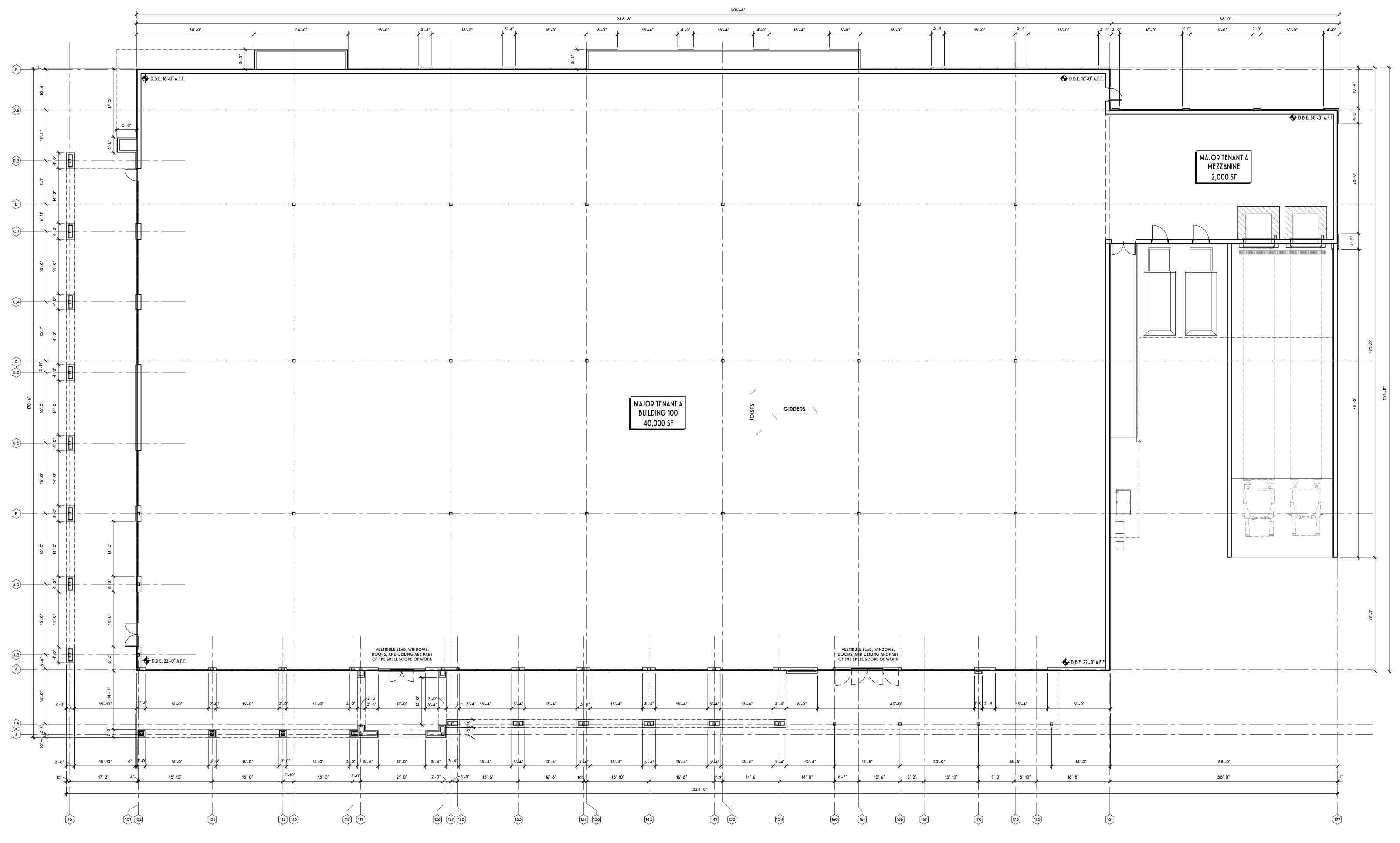








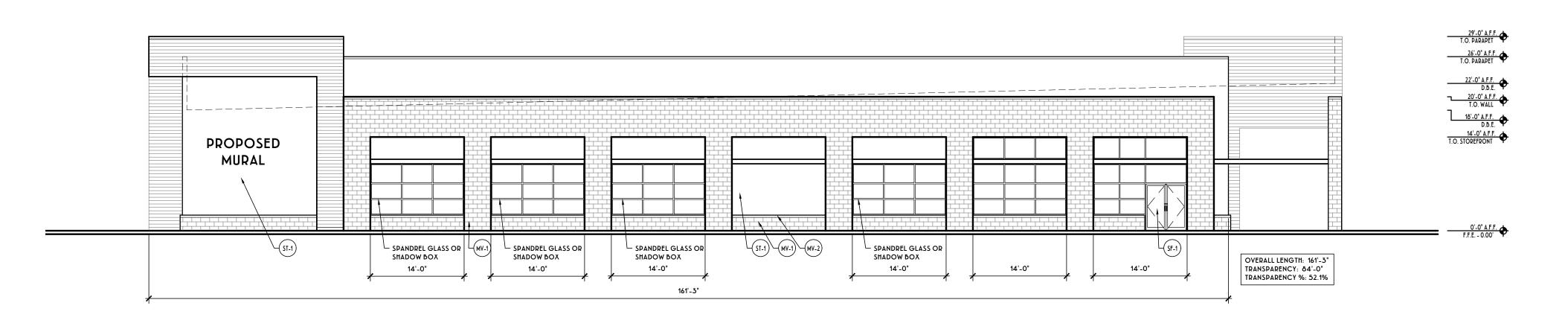


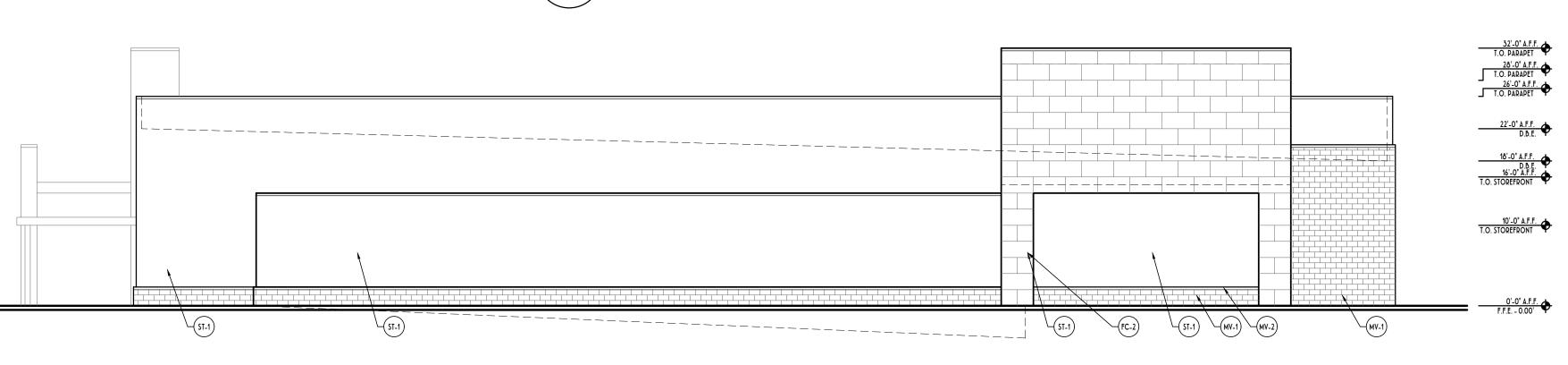












SIDE ELEVATION (NORTH)



DORAL MARKETPLACE

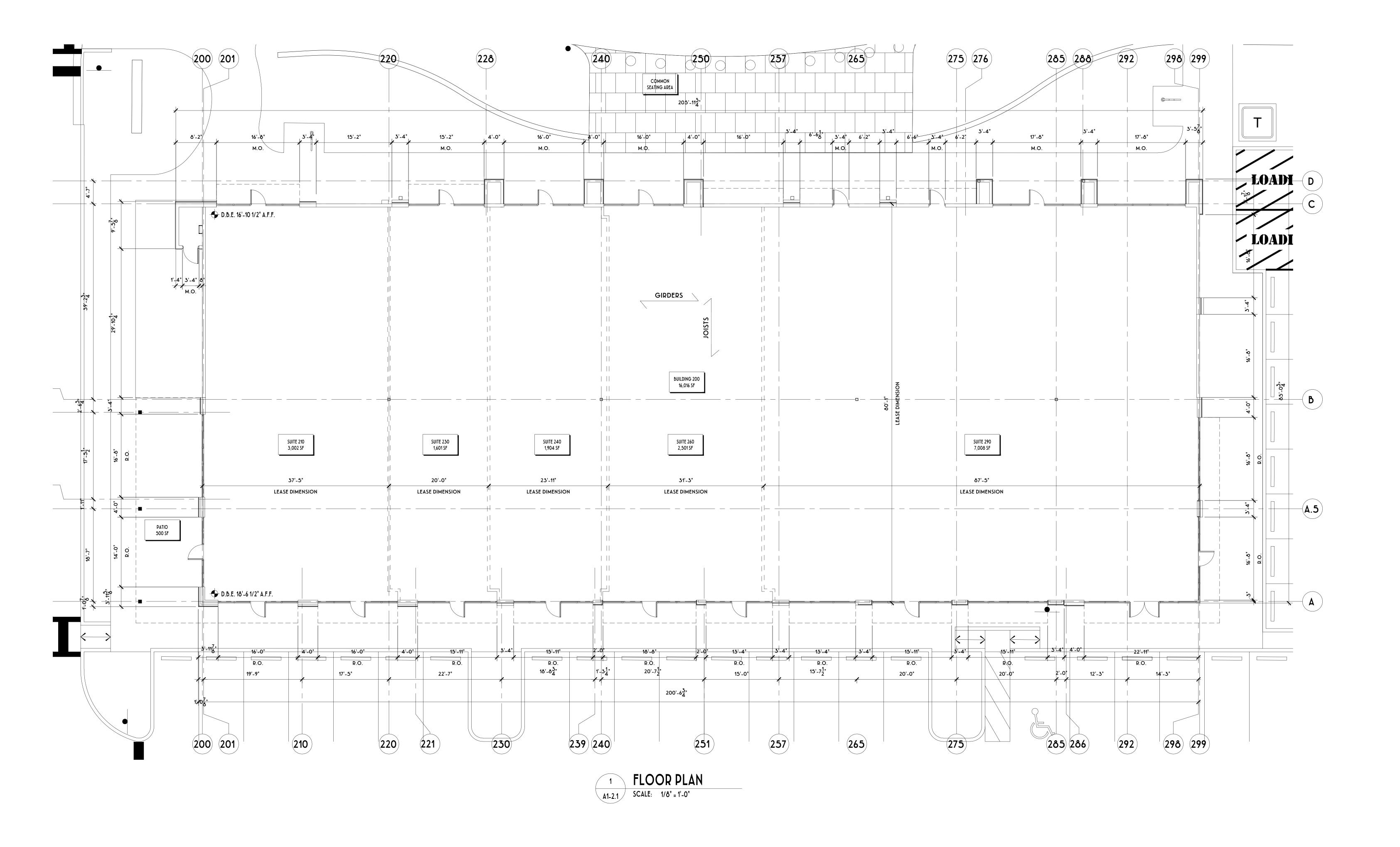
	FINISH SCHEDULE	
AW-1	METAL CANOPY - PREFINISHED ALUMINUM - COLOR TO MATCH PAC-CLAD "SLATE GRAY"	*
AW-2	ALUMINUM FRAMED FABRIC AWNING - COLOR CHARCOAL	*
FC-1	FIBER CEMENT SIDING - HARDI ARTISAN SHIPLAP SIDING - COLOR SW 9186 "CARMELIZED"	*
FC-2	FIBER CEMENT SIDING - HARDI PANEL SIDING - SMOOTH - COLOR SW 2739 "CHARCOAL BLUE"	*
GS-1	GREEN SCREEN FOR ACCENT LANDSCAPING - PRE-FINSISHED GRAY FINISH	*
L-1	OUTDOOR LIGHT FIXTURE - PHILIPS LUMEC CANDS1-RMS-M	*
L-2	OUTDOOR LIGHT FIXTURE - ELA HR2-18-SP-V5-120-CG-DB	*
MC-1	METAL COPING - COLOR TO MATCH SHERWIN WILLIAMS SW 7006 "EXTRA WHITE"	*
MV-1	MASONRY VENEER - READING ROCK - ROCKCAST SMOOTH - BUFFSTONE	*
MV-2	MASONRY VENEER SILL PIECE - READING ROCK - ROCKCAST SMOOTH - BUFFSTONE	*
SF-1	ALUMINUM STOREFRONT SYSTEM - KAWNEER TRIFAB 451 T W/ 1" INSULATED GLAZING SYSTEM. FINISH CLEAR ANODIZED.	*
SF-2	AUTOMATIC SLIDING DOOR - TORMAX TX9430 FULL BREAKOUT TELESCOPING SLIDER RH, SX-SO-SO CONF - COLOR PMS2188	*
ST-1	HARDCOAT STUCCO SYSTEM - COLOR SW 7028 "INCREDIBLE WHITE"	*

LEGEND

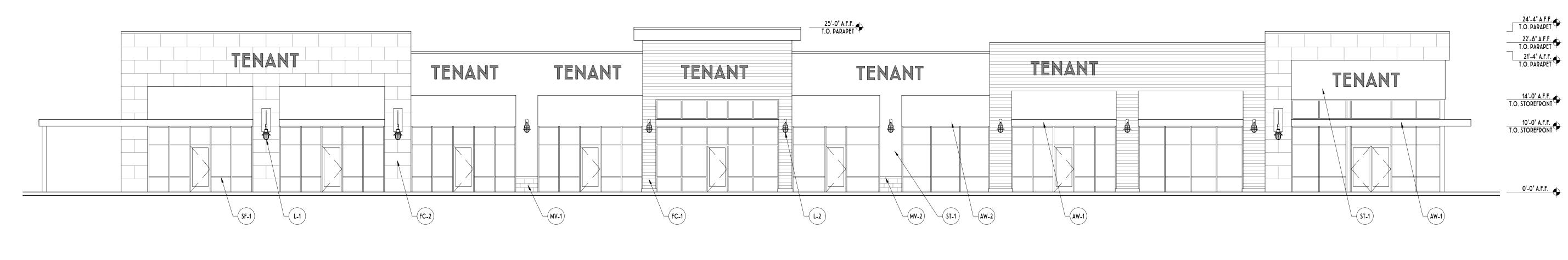
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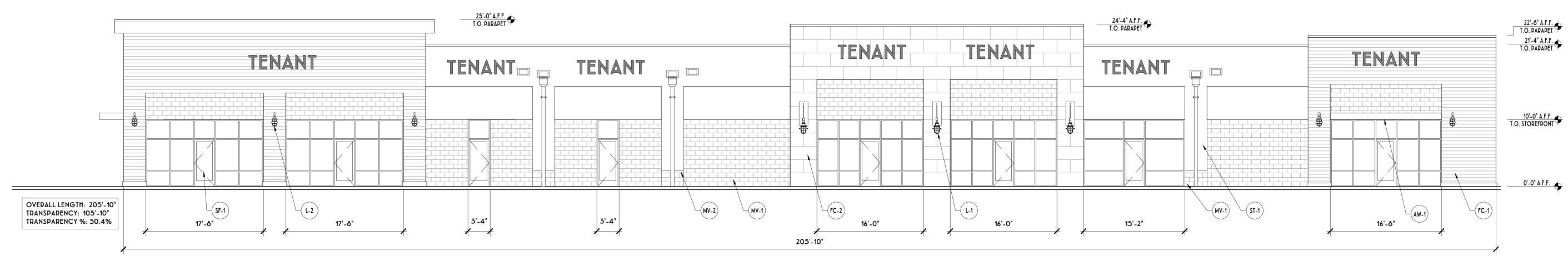




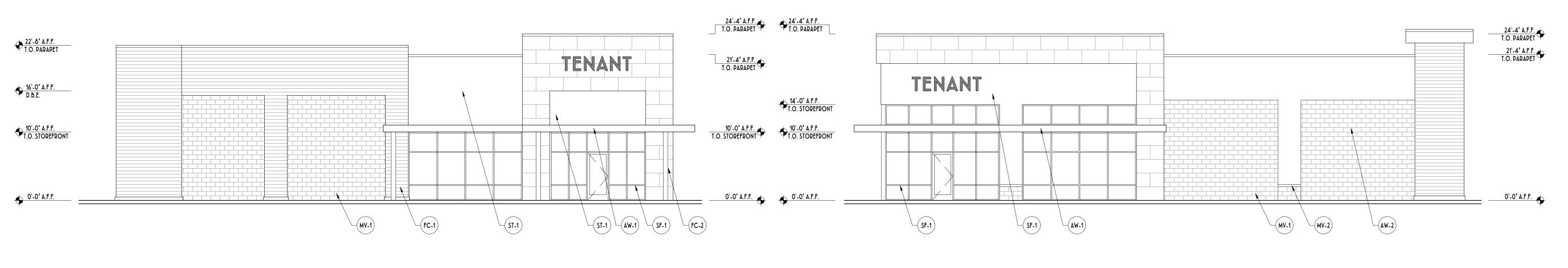




FRONT ELEVATION (SOUTH) A4-2.1 SCALE: 1/8" = 1'-0"



REAR ELEVATION (NORTH) SCALE: 1/8" = 1'-0"



SIDE ELEVATION (WEST) A4-2.1 SCALE: 1/8" = 1'-0"

SIDE ELEVATION (EAST) A4-2.1 SCALE: 1/8" = 1'-0"

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FC-1	FIBER CEMENT SIDING - HARDI ARTISAN SHIPLAP SIDING - COLOR SW 9186 "CARMELIZED"	*
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LEGEND

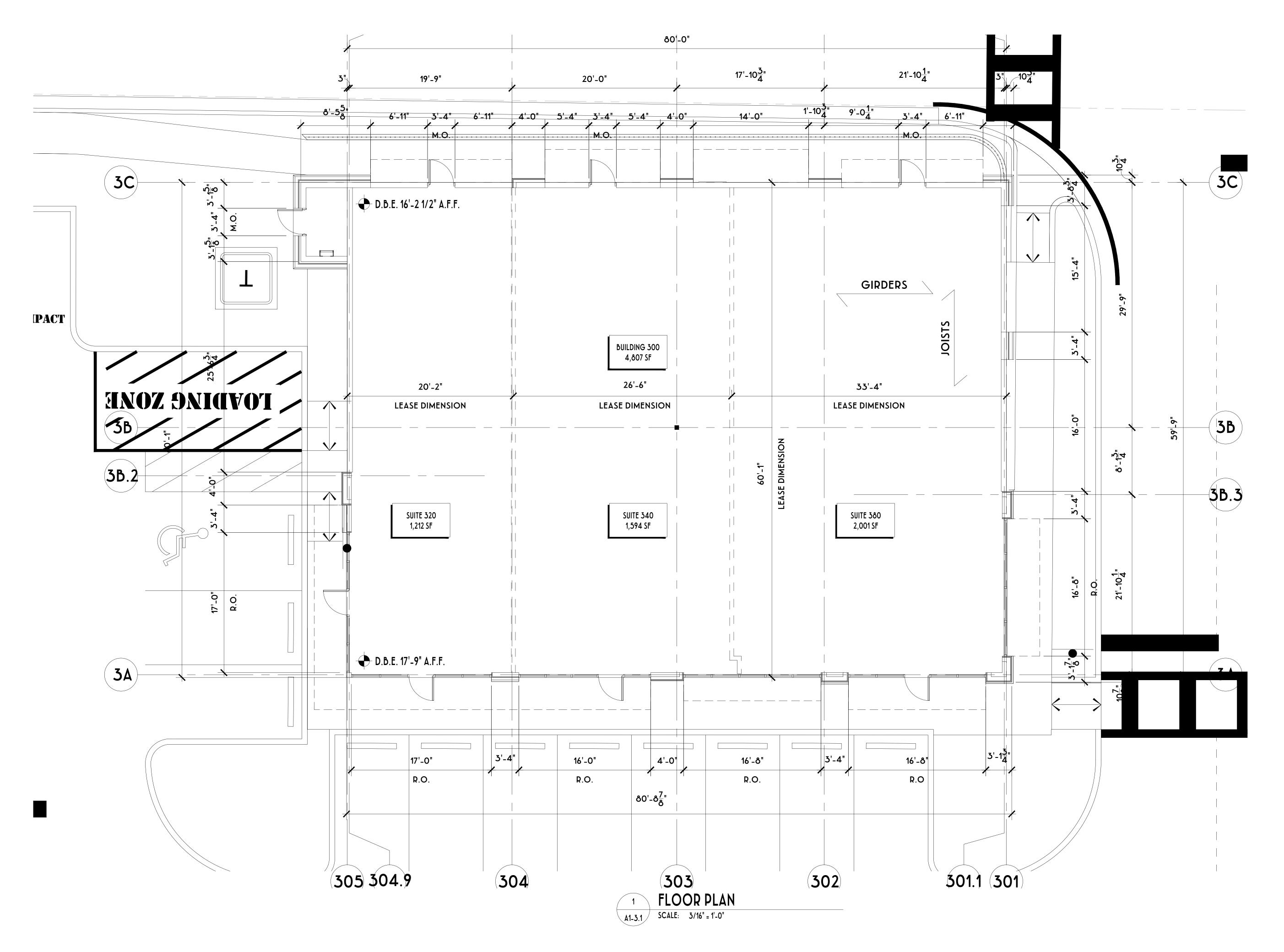
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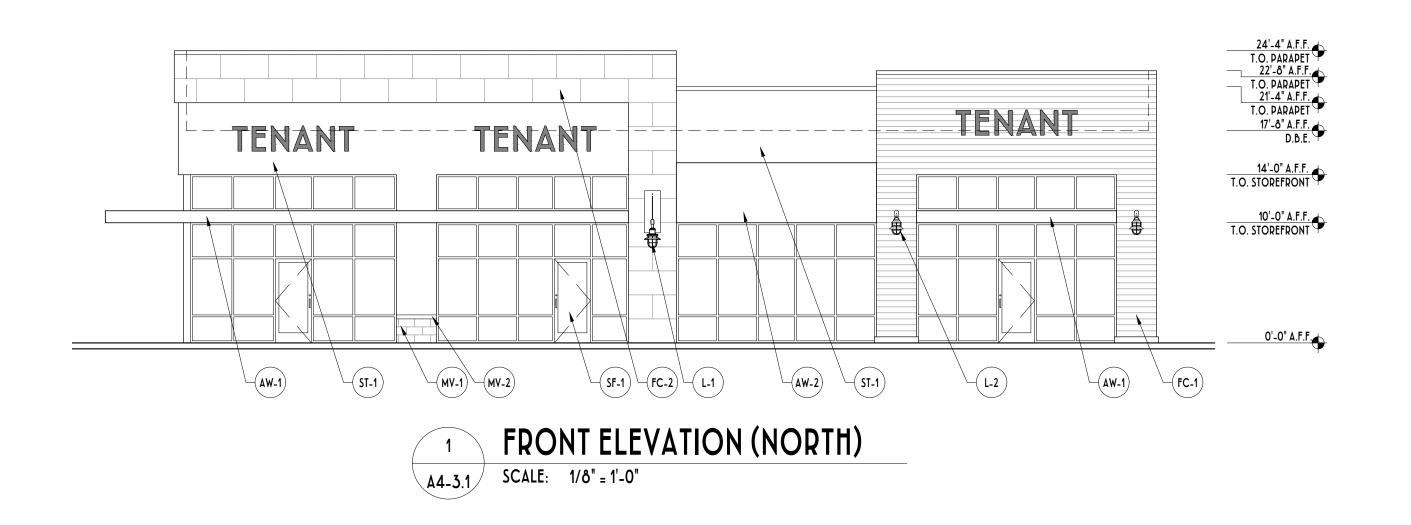


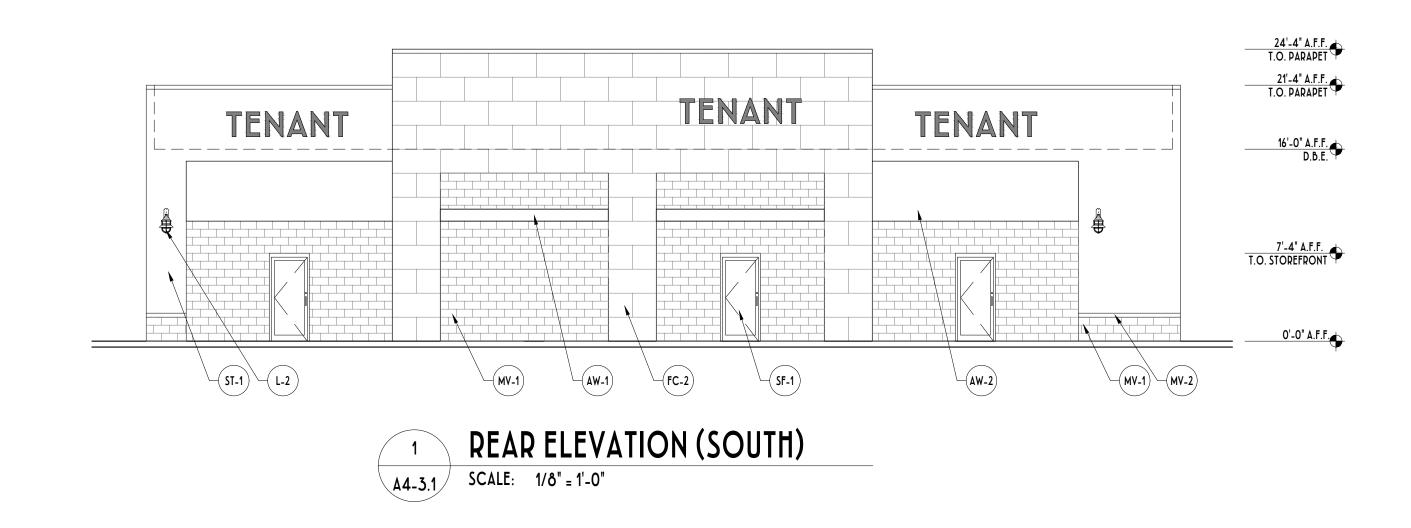
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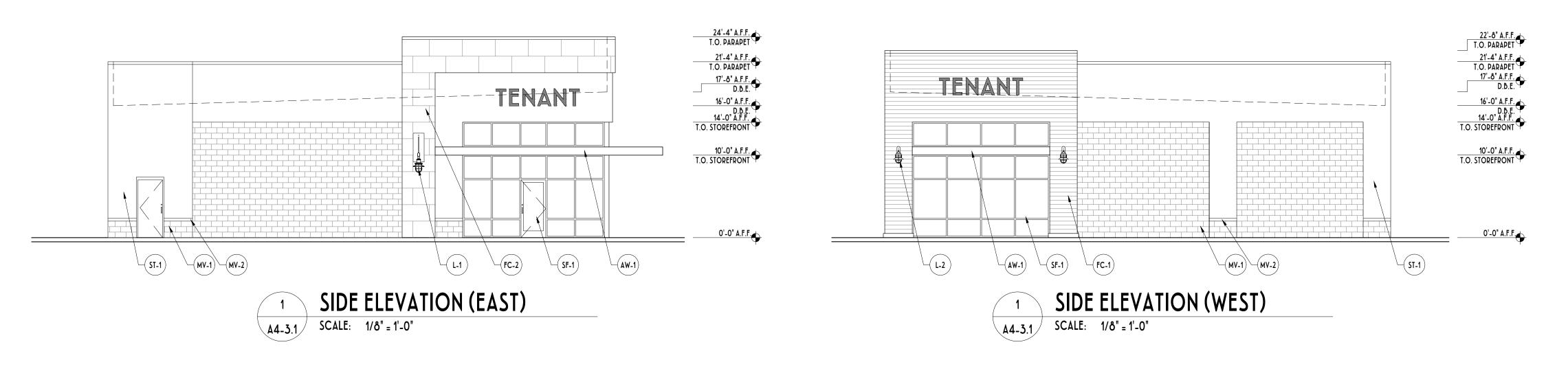




2023.09.27







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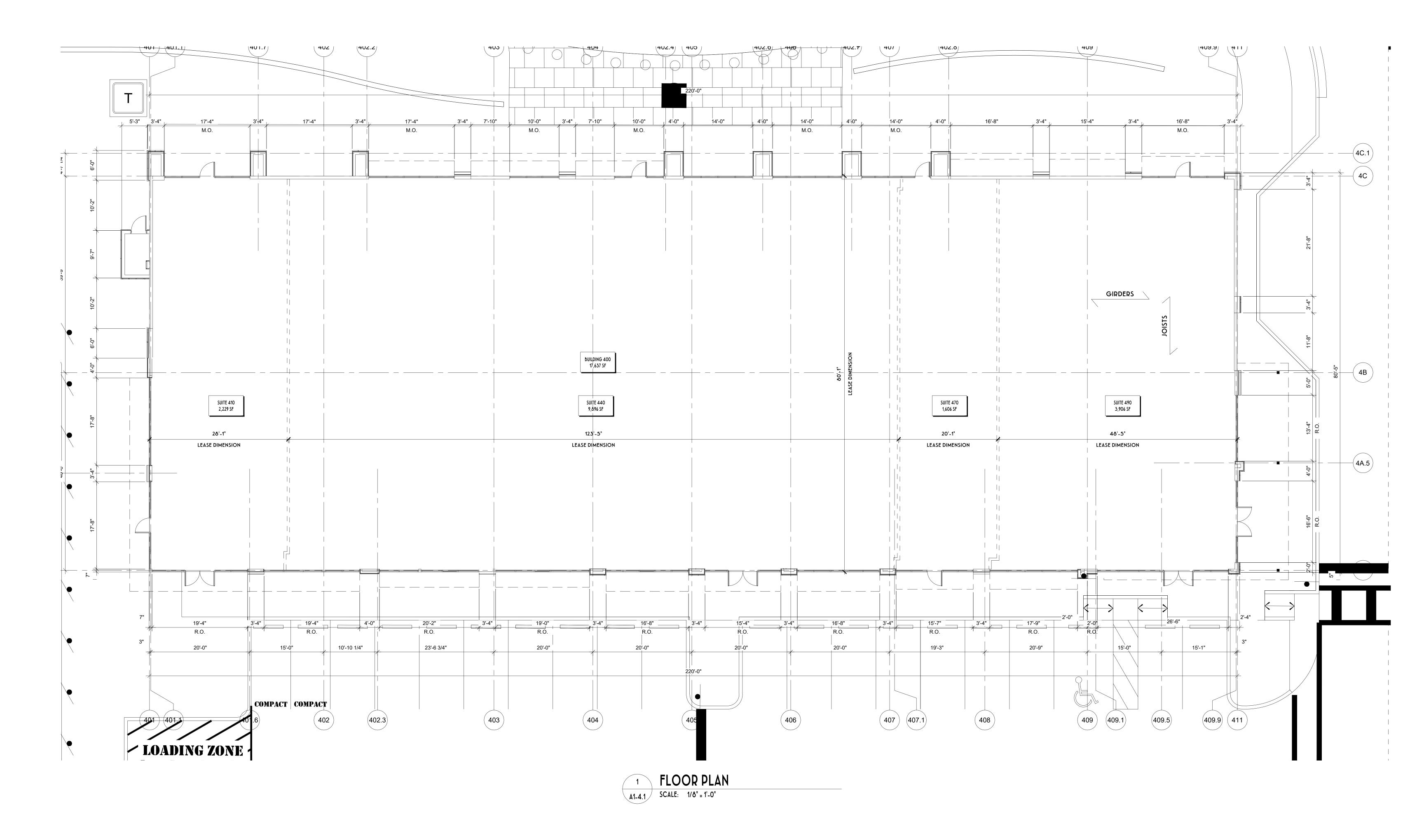
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NOTE:

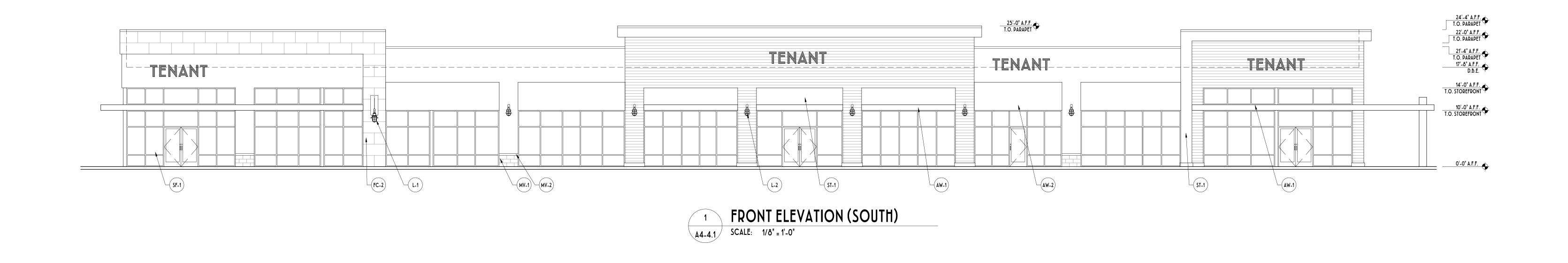
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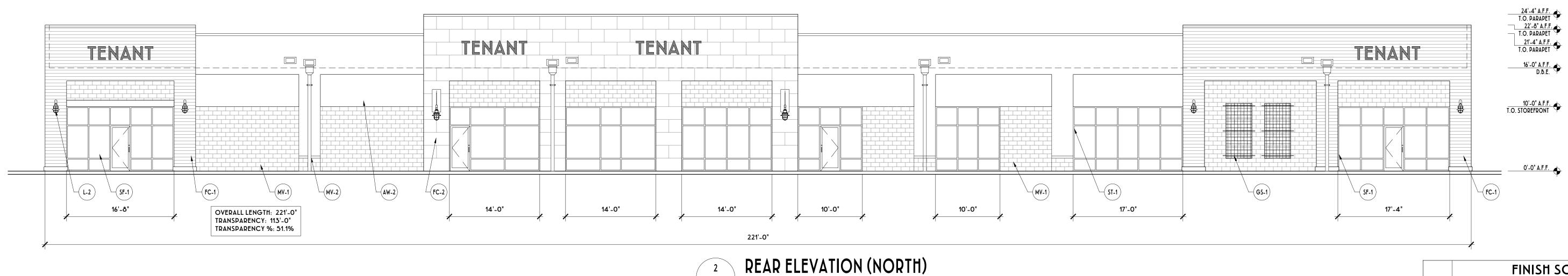




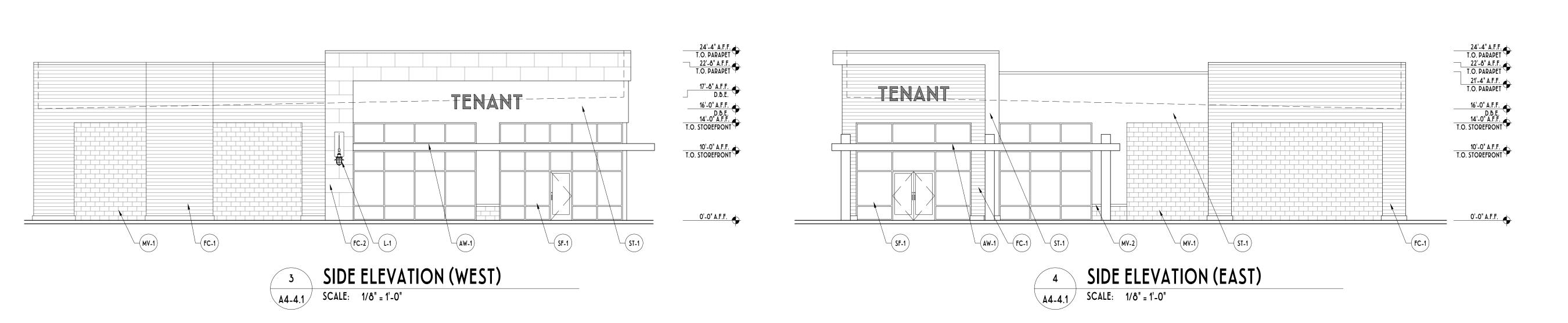








SCALE: 1/8" = 1'-0"



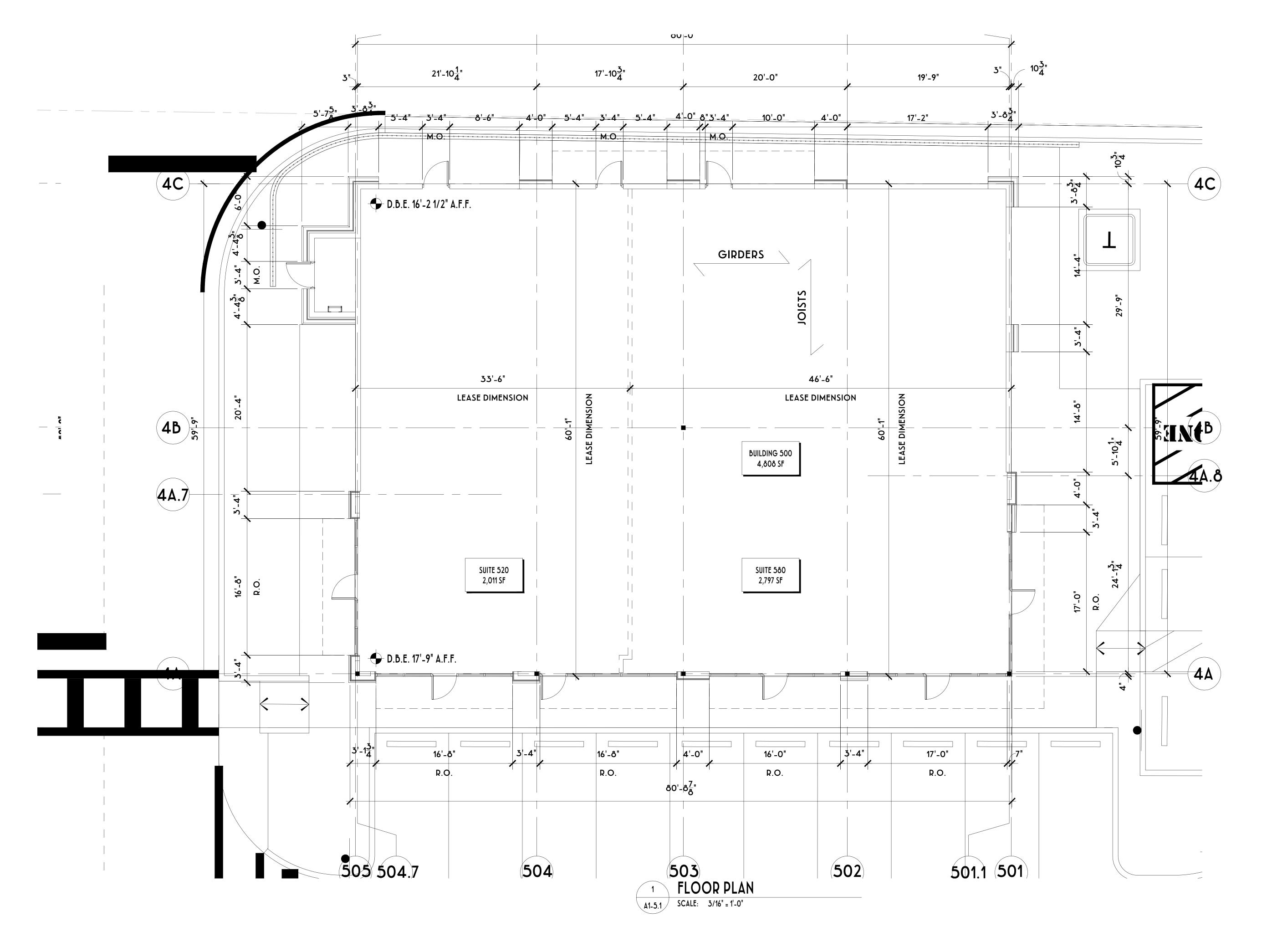
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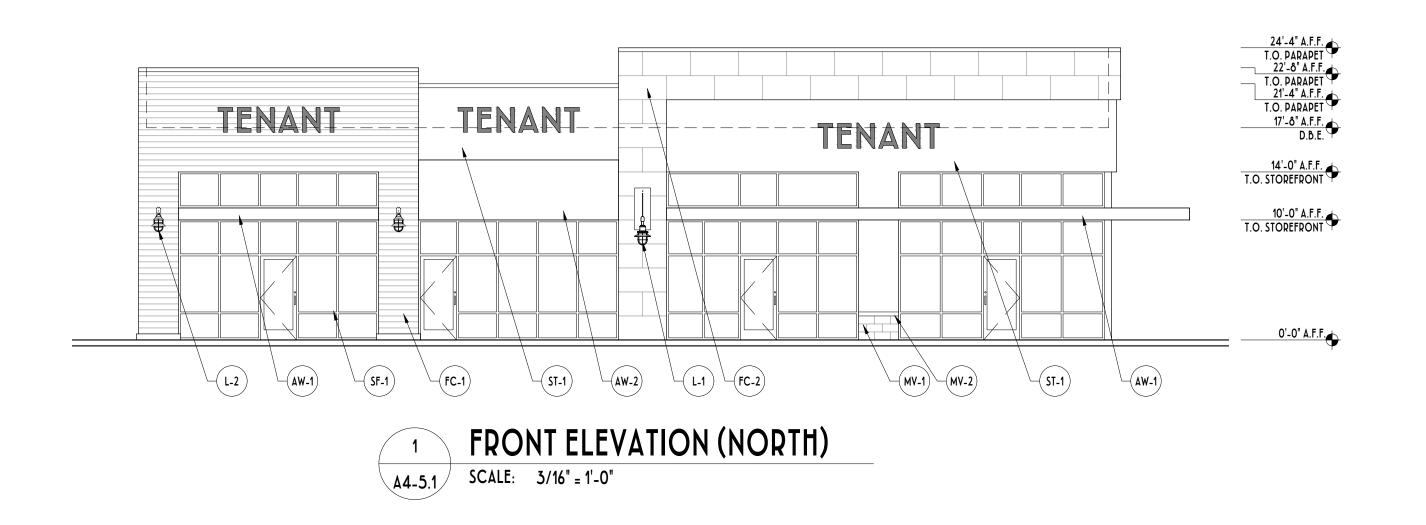
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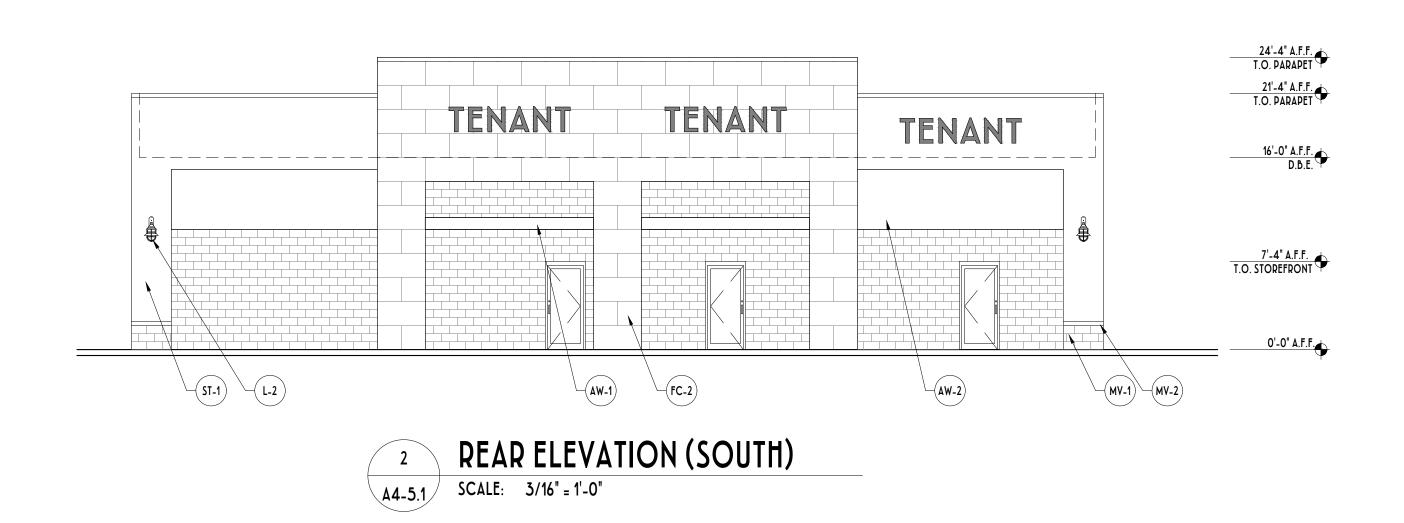
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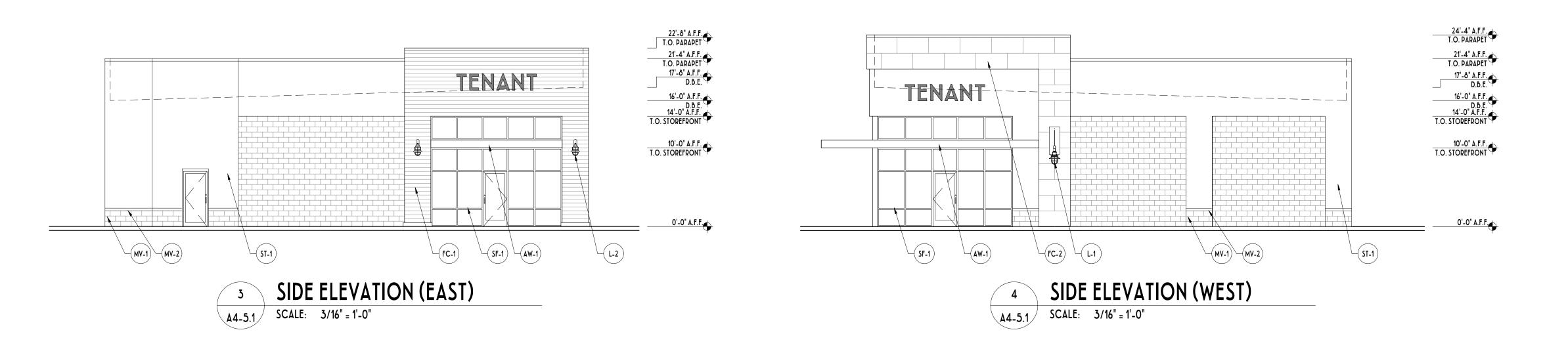












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ALL CONTROL JOINTS RUNNING HORIZONTALLY SHALL BE ALIGNED WITH ADJACENT TENANTS' HORIZONTAL CONTROL JOINTS - VERTICAL DEVIATIONS ARE NOT



GENERAL NOTES:

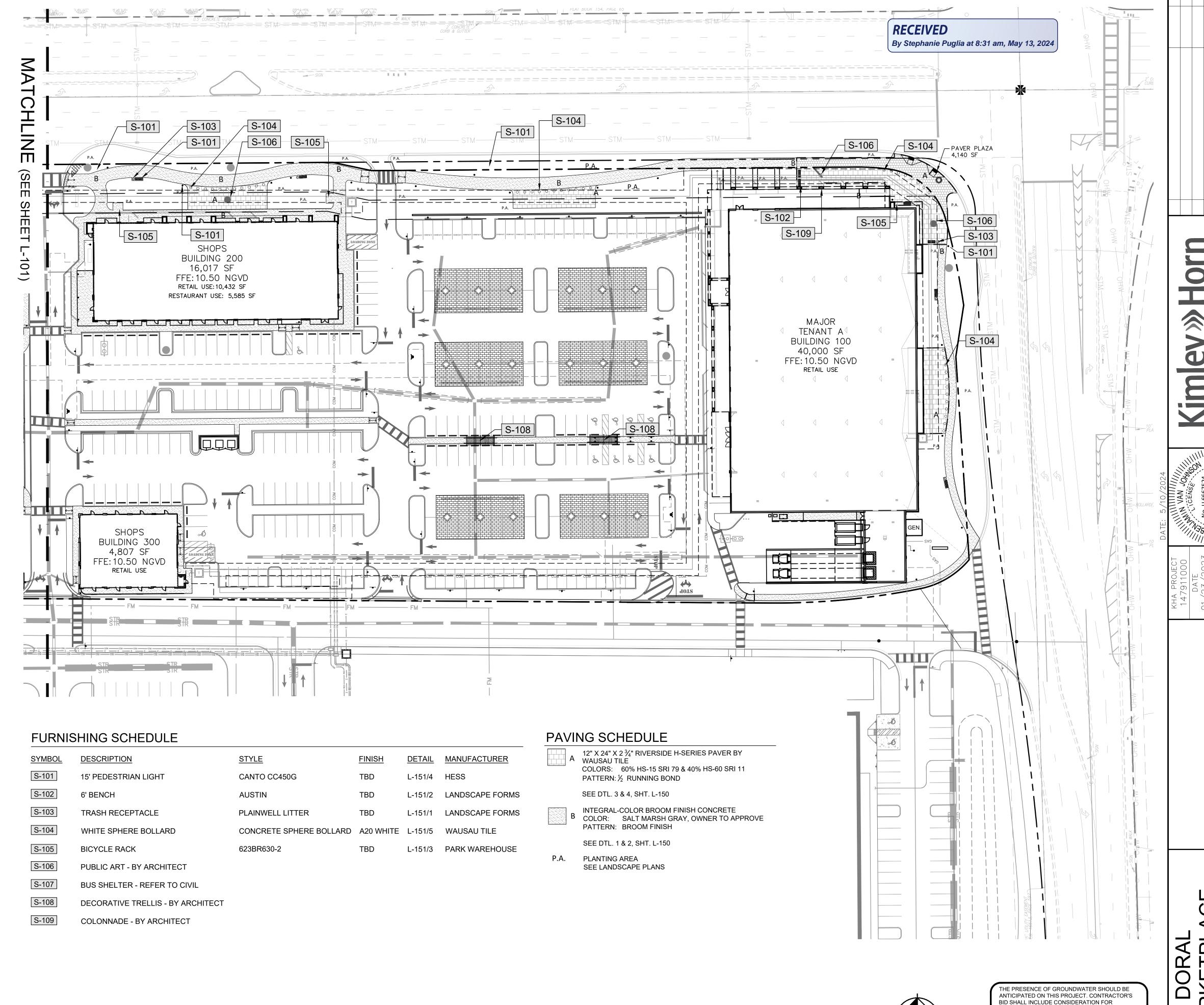
OF THE CONTRACT SHALL APPLY.

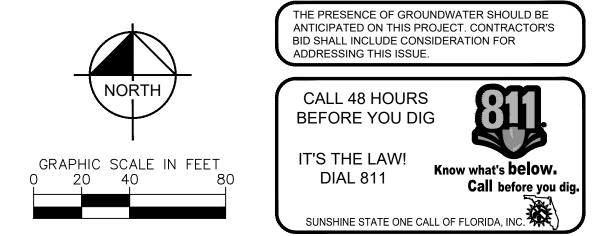
- 1. ALL WORK SHALL BE CONFINED TO LIMITS OF CONSTRUCTION AS SHOWN ON PLANS.
- 2. CONTRACTOR SHALL COORDINATE AND BE IN COMPLIANCE WITH ALL STATE AND LOCAL CODES AS WARRANTED.
- 3. ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS AND EXISTING SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT, IN WRITING, WHO SHALL PROMPTLY ADDRESS SUCH INCONSISTENCIES OR AMBIGUITIES. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE PERFORMED AT THE CONTRACTOR'S
- 4. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER, OR THE LANDSCAPE ARCHITECT MAY BE CAUSE FOR THE WORK TO BE DESIGNATED UNACCEPTABLE.
- 5. THE CONTRACTOR ACKNOWLEDGES & AGREES THAT THE WORK IS ENTIRELY AT HIS RISK UNTIL SITE IS ACCEPTED, AND HE WILL BE HELD RESPONSIBLE FOR ITS SAFETY BY THE OWNER.
- 6. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE DAMAGE OR LOSS OF ANY REFERENCE POINTS AND HUBS DURING THE CONSTRUCTION OF HIS WORK, AND SHALL BEAR THE COST OF REPLACING SAME.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING AND PROTECTING ALL PUBLIC AND PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE AT LEAST 48 HOURS PRIOR TO ANY DEMOLITION, GRADING, OR CONSTRUCTION ACTIVITY (CALL SUNSHINE DIG/CALL 811)
- 8. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC., DURING ALL CONSTRUCTION PHASES UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL REPAIR, AT HIS OWN EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
- 9. ANY FOREIGN ITEM FOUND DURING CONSTRUCTION IS THE PROPERTY OF THE OWNER. THIS INCLUDES, BUT IS NOT LIMITED TO, PRECIOUS METALS, COINS, PAPER CURRENCY, ARTIFACTS AND ANTIQUITIES.
- 10. ALL SURPLUS EXCAVATION SHALL BE TAKEN TO A SITE DESIGNATED BY OWNER, AT NO ADDITIONAL COST TO THE OWNER. IF OWNER CHOOSES, THE CONTRACTOR MAY TAKE POSSESSION OF SURPLUS EXCAVATION MATERIAL.
- 11. CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND/OR OBTAINING ALL REQUIRED PERMITS AND APPROVALS PRIOR TO COMMENCING CONSTRUCTION.
- 12. CONTRACTOR IS TO MAINTAIN CONTROLLED PEDESTRIAN AND ADA ACCESS THROUGH ALL AREAS OF THE SITE THROUGHOUT CONSTRUCTION PERIOD.
- 13. MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITION AT ALL TIMES. DAILY, AND MORE OFTEN IF NECESSARY, INSPECT & AND PICK UP ALL SCRAP, DEBRIS, & WASTE MATERIAL.
- 14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL MUD, DIRT, GRAVEL AND OTHER MATERIALS TRACKED ONTO ANY PRIVATE OR PUBLIC STREETS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN THESE DAILY, IF NECESSARY. THE CONTRACTOR MUST USE WATER OR OTHER ACCEPTABLE METHODS TO KEEP AIRBORNE DUST TO A REQUIRED MINIMUM.
- 15. PROVIDE PROTECTION TO ALL FINISHED WORK. MAINTAIN SURFACES CLEAN, UNMARRED, AND SUITABLY PROTECTED UNTIL ACCEPTANCE BY OWNER.
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE RESULTING FROM CONSTRUCTION ACTIVITY TO EXISTING ELEMENTS THAT ARE TO REMAIN.
- 17. EROSION CONTROL MEASURES (IE: SILT FENCING AND SEDIMENT CONTROL) SHALL BE MAINTAINED BY THE CONTRACTOR PER CIVIL SPECIFICATIONS. ANY EROSION CONTROL MEASURES DAMAGED BY THE CONTRACTOR SHALL BE REPLACED PER CIVIL SPECIFICATIONS.

18. CONTRACTOR SHALL VERIFY LOCATION, SIZE AND ELEVATION OF EXISTING UTILITIES, STRUCTURES,

- PIPES, PAVEMENTS, ETC. AS RELATED TO HIS WORK. NOTIFY LANDSCAPE ARCHITECT OF ANY CONFLICT AND/OR DISCREPANCIES IN THE CONSTRUCTION DOCUMENTS, PRIOR TO THE START OF CONSTRUCTION.

 19. ALL GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS AND TECHNICAL SPECIFICATIONS
- 20. ALL AREAS OUTSIDE THE LIMITS OF CONSTRUCTION LINE OR TREE PROTECTION FENCE SHALL NOT BE CROSSED BY HEAVY EQUIPMENT OR USED FOR STORING ANY EQUIPMENT OR MATERIALS.





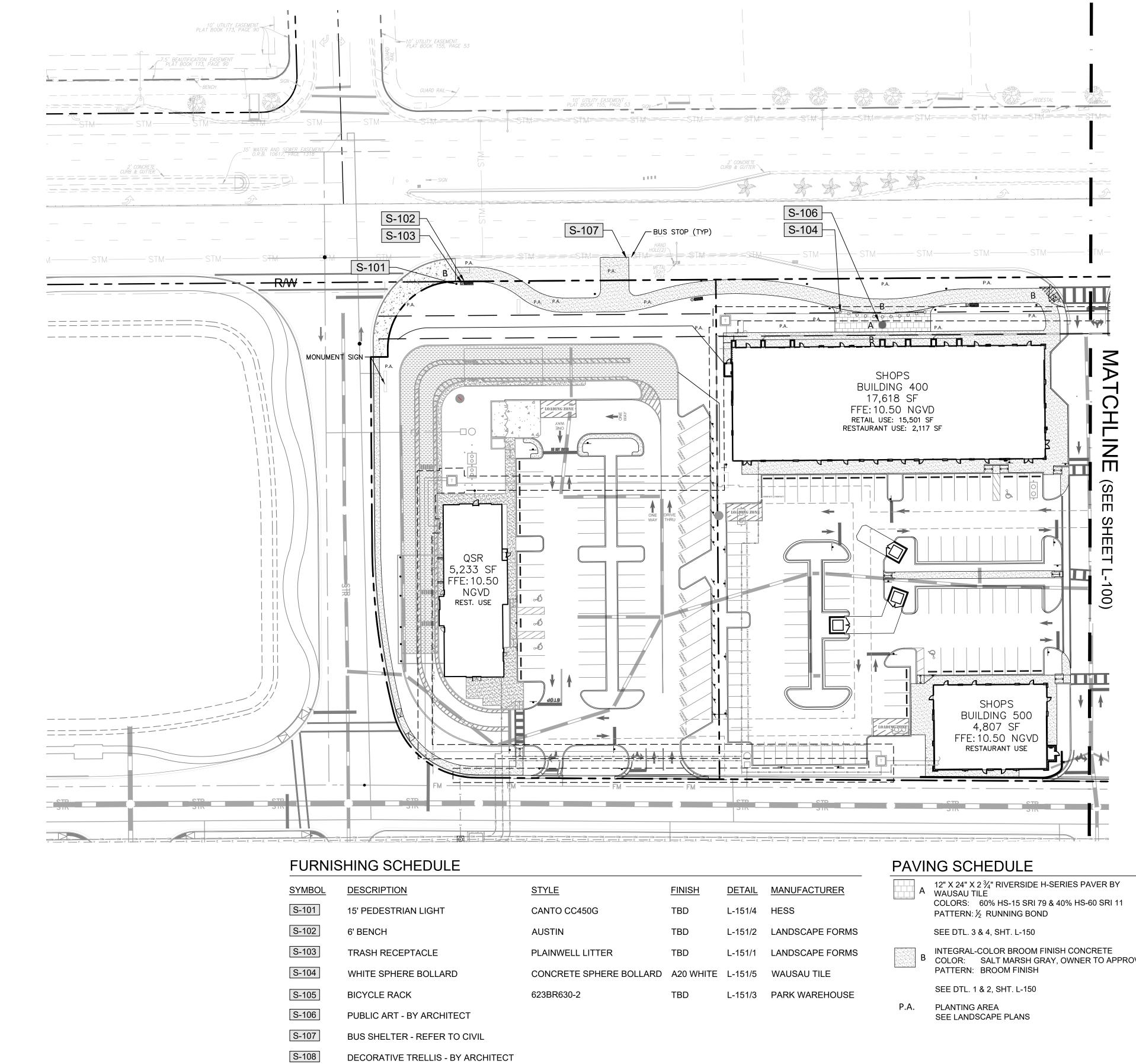
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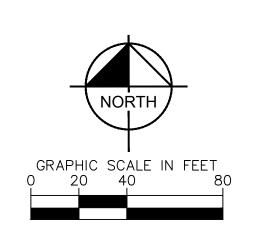
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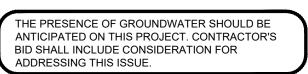


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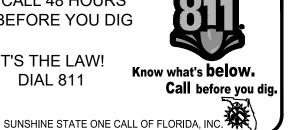
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DIAL 811

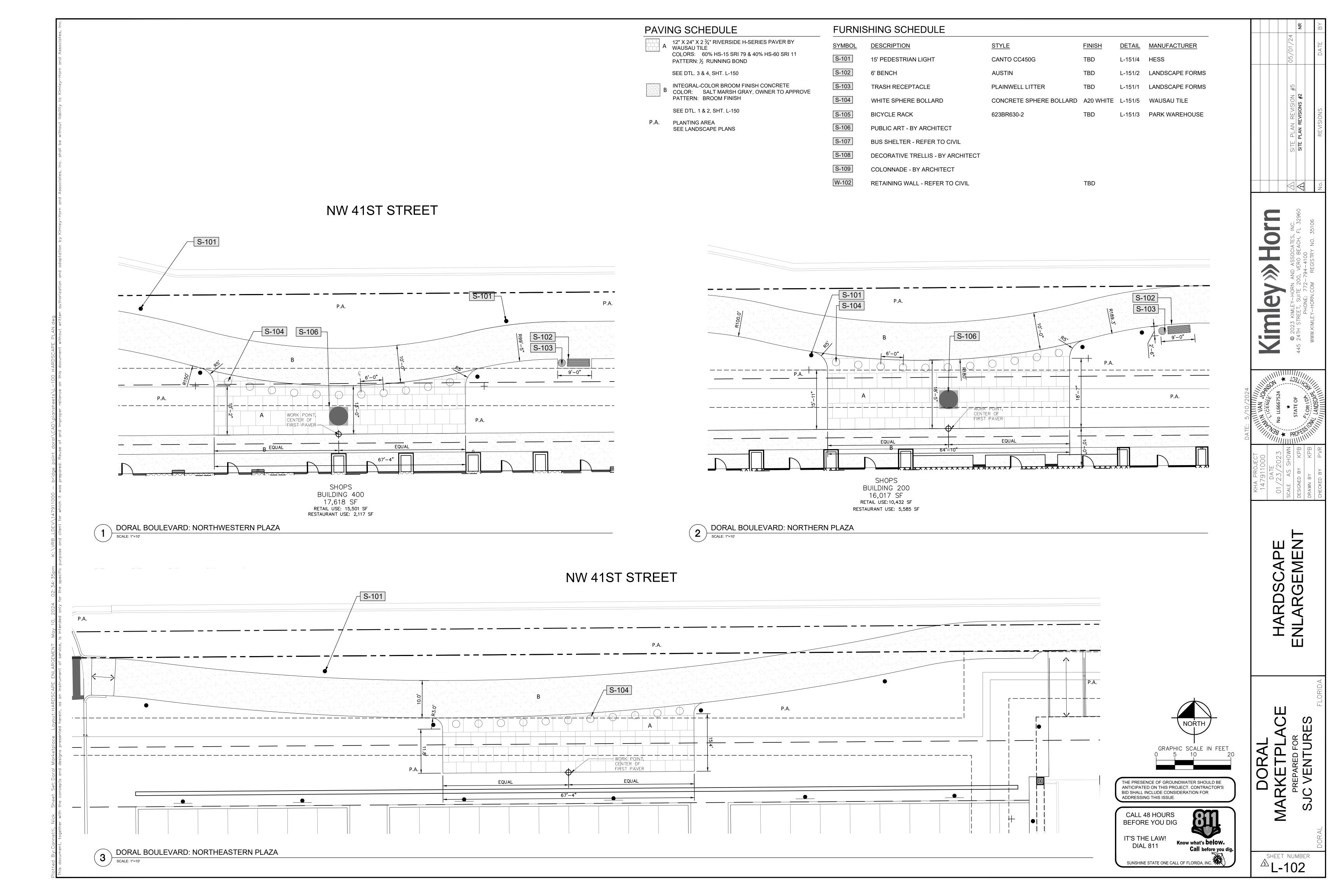


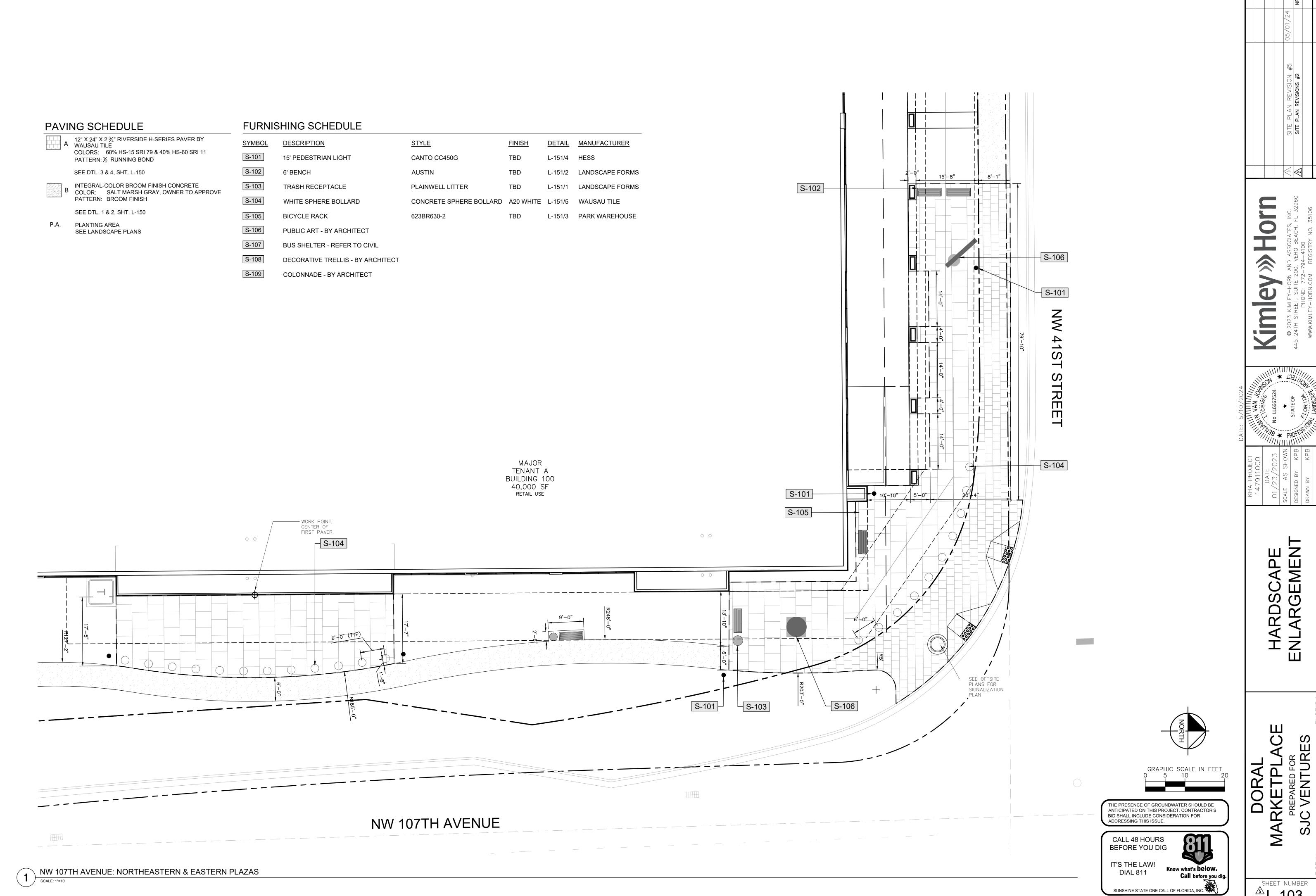
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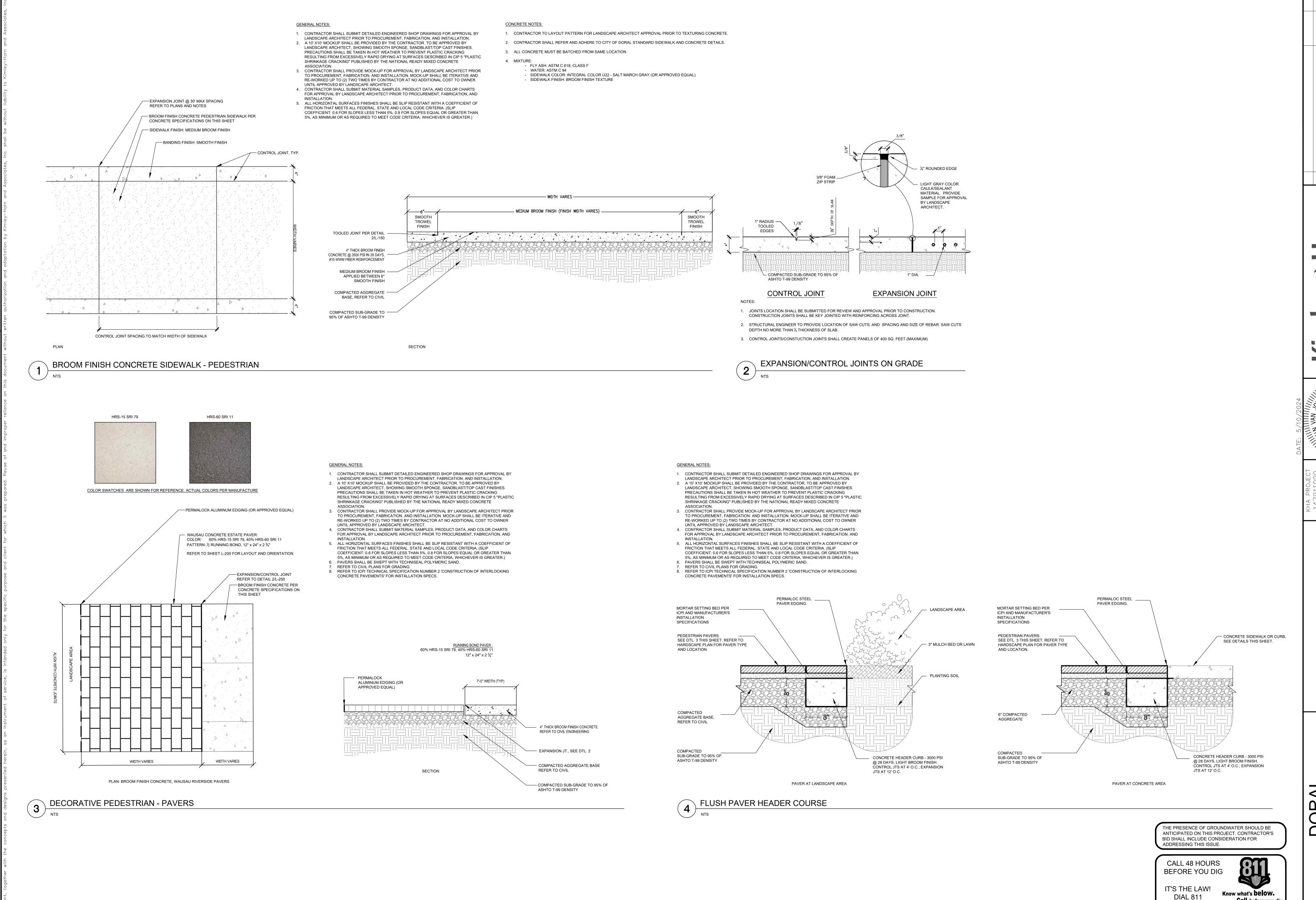
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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

2. CONTRACTOR SHALL PROVIDE MOCK-UP FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION. MOCK-UP SHALL BE ITERATIVE AND RE-WORKED UP TO (2) TWO TIMES BY CONTRACTOR AT NO ADDITIONAL COST TO OWNER UNTIL APPROVED BY LANDSCAPE ARCHITECT.

3. ALL HORIZONTAL SURFACES FINISHES SHALL BE SLIP RESISTANT WITH A COEFFICIENT OF FRICTION THAT MEETS ALL FEDERAL, STATE, AND LOCAL CODE CRITERIA. (SLIP COEFFICIENT: 0.6 FOR SLOPES LESS THAN 5%, 0.8 FOR SLOPES EQUAL TO OR GREATER THAN 5%, AS A MINIMUM OR AS REQUIRED TO MEET CODE CRITERIA, WHICHEVER IS GREATER).

4. MANUFACTURER PROVIDED SHEETS FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE DETAILS AND INSTALLATION WITH MANUFACTURER.

5. ALL PEDESTRIAN GATES AND FENCES SHALL COMPLY WITH ALL FBC AND ACCESSIBILITY REQUIREMENTS.

MANUFACTURER:

LANDSCAPE FORMS

MICHELLEM@LANDSCAPEFORMS.COM 305-975-4302

MODEL: PLAINWELL LITTER

WIDTH: 30" DIA SIZE: HEIGHT: 38"

COLOR: PER BOULEVARD MASTER PLAN

NOTES: INSTALL PER MANUFACTURER'S SPECIFICATIONS

> EMBEDDED MOUNT PER MANUFACTURER.

1. SURFACE MOUNTED, LOCATIONS SHALL BE COORDINATED AND APPROVED BY CITY OF DORAL PRIOR TO PROCUREMENT AND INSTALLATION. CONTRACTOR SHALL FURNISH ALL NECESSARY ANCHORING DEVICES FOR COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS FOR ANCHORING.

CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR APPROVAL BY CITY OF DORAL PRIOR TO PROCUREMENT, FABRICATION, AND

TRASH AND RECYCLE RECEPTACLE (PER BOULEVARD MASTER PLAN)







Austin blends modernist inspiration into a new interpretation that's as timely as today. The Austin Bench, designed by landscape architect Robert Chipman, is a study in beautiful balance. Inspired by architecture of the 20s and classic modern furniture of the 50s, it expresses familiar themes in thoroughly contemporary terms. Austin balances lightness and substance, is relaxed, yet refined, poised but never boring. The cantilever version is a natural for minimalist spaces, the four-legged version a fine fit within a range of architectural styles. Composed of minimal parts, (just two extrusions create the seat and back in all versions) Austin masters the details, from its tapered slats to the lovely winged shape of its end piece. In aluminum or wood Austin is a high-design solution — and a breath of fresh air — for corporate and healthcare courtyards, atria, small-scale public places, and private retail space.

 Austin benches are available in backed or backless, and in a selection of interior and exterior woods, as well as aluminum

• Unique cantilever style or freestanding/surface mount supports are cast iron.

Arm Options

• Optional arms may be added to both ends, as well as the

 Arms are available for either backed or backless benches. All arms are cast aluminum and attached to the seat boards.

Mounting Options Austin benches with freestanding/surface mount supports ship

with glides which may be removed for surface mounting. All cantilever supports must be surface mounted into concrete.

Standing Height (Rectangle)	Style	Depth	Length	Height	Weight
	cantilever backed	23"	72"	33"	Alum: 118 lb Wood: 150 lb
	cantilever backless	22"	72"	18"	Alum: 68 lb Wood: 120 lb
	Freestanding/ Surface Mount backed	24"	72"	33"	Alum: 100 lb Wood: 130 lb
	Freestanding/ Surface Mount backless	22"	72"	18"	Alum: 66 lb Wood: 90 lb
Arm Options					
end and center position end arms					
Mounting Options					

cantilever backed cantilever backless

Revised March 23, 2022 | Landscape Forms Inc. | 800.521.2546 | F 269.381.3455 | 7800 E. Michigan Ave., Kalamazoo, MI 49048

MANUFACTURER: LANDSCAPE FORMS

SIZE:

MICHELLEM@LANDSCAPEFORMS.COM

305-975-4302

24" DEPTH x 72" LENGTH x 33" HEIGHT

WEIGHT: 130 LBS

COLOR: PER BOULEVARD MASTER PLAN

1. SURFACE MOUNTED, LOCATIONS SHALL BE COORDINATED AND APPROVED BY CITY OF DORAL PRIOR TO PROCUREMENT AND INSTALLATION. CONTRACTOR SHALL FURNISH ALL NECESSARY ANCHORING DEVICES FOR COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS FOR ANCHORING.

2. CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR APPROVAL BY CITY OF DORAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.

N BENCH SEATING (PER BOULEVARD MASTER PLAN)

MANUFACTURER:



PARK WAREHOUSE PARKWAREHOUSE.COM/ 561-270-4444

MODEL: 623BR630-2 STAINLESS STEEL FINISH:

MANUFACTURER:

OR APPROVED EQUAL

BICYCLE RACK (PER BOULEVARD MASTER PLAN)

1. SURFACE MOUNTED, LOCATIONS SHALL BE COORDINATED AND APPROVED BY CITY OF DORAL PRIOR TO PROCUREMENT AND INSTALLATION. CONTRACTOR SHALL FURNISH ALL NECESSARY ANCHORING DEVICES FOR COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS FOR

ANCHORING. 2. CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR APPROVAL BY CITY OF DORAL PRIOR TO PROCUREMENT, FABRICATION, AND INSTALLATION.



WWW.HESSAMERICA.COM 305-866-421- ext 1-2 MODEL: CC450G FINISH: ALUMINUM W/ STAINLESS STEEL HARDWARE

1. SURFACE MOUNTED, LOCATIONS SHALL BE

DORAL PRIOR TO PROCUREMENT AND

COMPLIANCE WITH MANUFACTURER'S

SPECIFICATIONS FOR ANCHORING.

PROCUREMENT, FABRICATION, AND

INSTALLATION.

COORDINATED AND APPROVED BY CITY OF

ALL NECESSARY ANCHORING DEVICES FOR

2. CONTRACTOR SHALL SUBMIT PRODUCT DATA

FOR APPROVAL BY CITY OF DORAL PRIOR TO

INSTALLATION. CONTRACTOR SHALL FURNISH

HESS AMMERICA

OR APPROVED EQUAL

MANUFACTURER: WAUSAU TILE WAUSAUTILE.COM TROYD27@VERIZON.NET 813-334-0016 MODEL: 544BO125

OR APPROVED EQUAL

A20 WHITE

INSTALLATION.

FINISH:

1. SURFACE MOUNTED, LOCATIONS SHALL BE COORDINATED AND APPROVED BY CITY OF DORAL PRIOR TO PROCUREMENT AND INSTALLATION. CONTRACTOR SHALL FURNISH ALL NECESSARY ANCHORING DEVICES FOR COMPLIANCE WITH MANUFACTURER'S SPECIFICATIONS FOR ANCHORING. 2. CONTRACTOR SHALL SUBMIT PRODUCT DATA FOR APPROVAL BY CITY OF DORAL PRIOR TO PROCUREMENT, FABRICATION, AND

WHITE SPHERE BOLLARD (OR APPROVED EQUAL)

PEDESTRIAN LIGHTING (PER BOULEVARD MASTER PLAN)

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

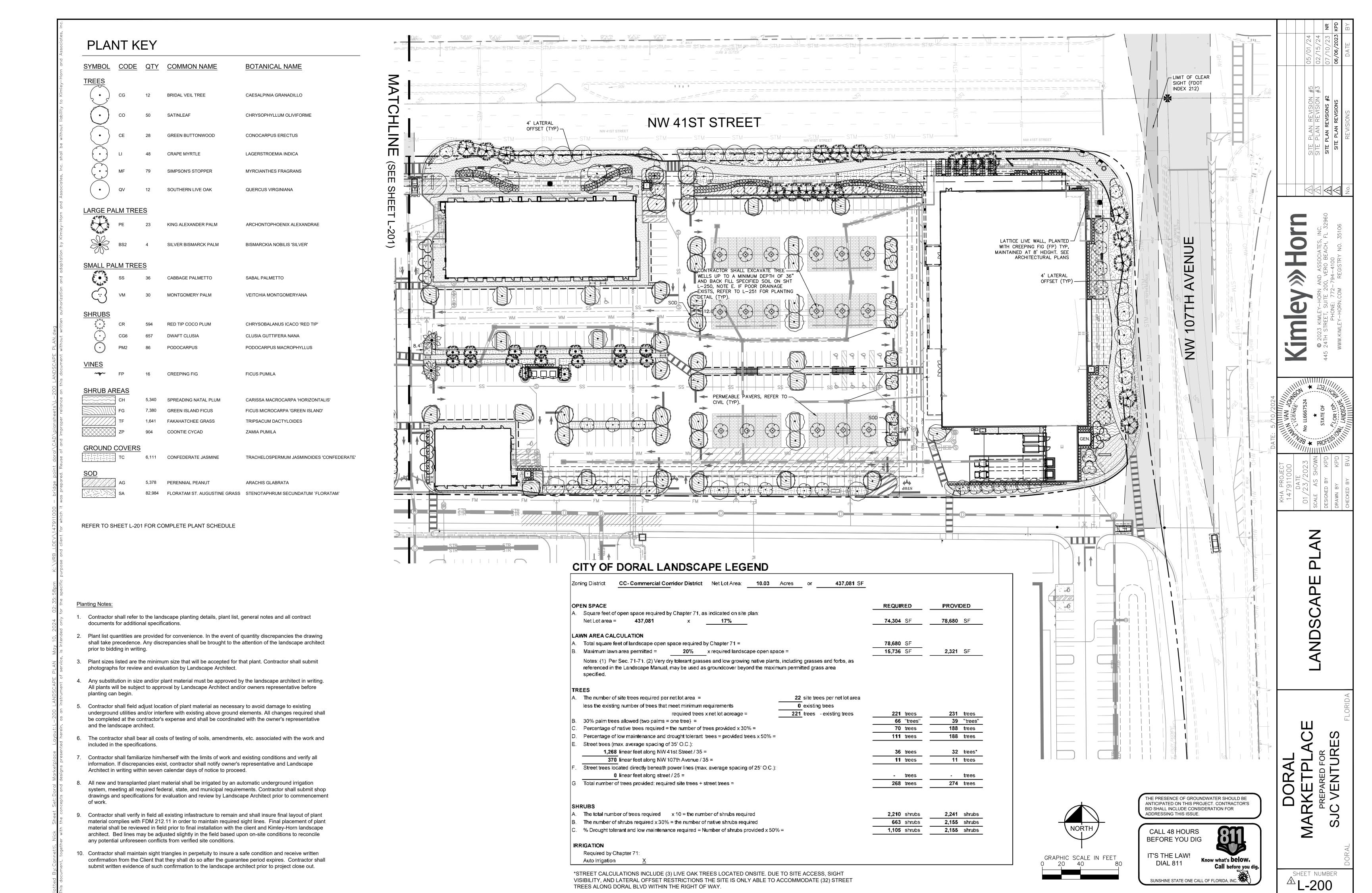
> CALL 48 HOURS BEFORE YOU DIG IT'S THE LAW! **DIAL 811**

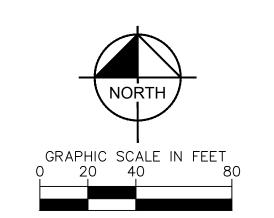
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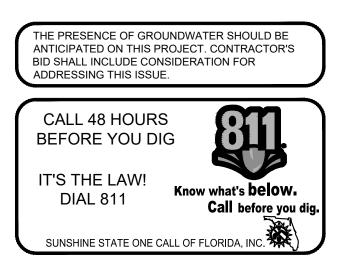
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A. SCOPE OF WORK

- 1. THE WORK CONSISTS OF: FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.
- 2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL CONTRACT PLANTING AREAS UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

- ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, OTHER SITE CONSTRUCTION ITEMS, AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER. AT NO COST TO THE OWNER.
- C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK
- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS EXISTING OR OTHERWISE, CAUSED BY CARELESS EQUIPMENT OPERATION, MATERIAL STOCKPILING, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP-LINE AND SPILLING OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP-LINE. NO MATERIALS SHALL BE BURNED WHERE HEAT WILL DAMAGE ANY PLANT. EXISTING TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/ OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS (\$100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY (20) PERCENT PER INCH OVER FOUR (4) INCHES CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES. CALIPER SHALL BE MEASURED SIX (6) INCHES ABOVE GROUND LEVEL FOR TREES UP TO AND INCLUDING FOUR (4) INCH CALIPER AND TWELVE (12) INCHES ABOVE GROUND LEVEL FOR TREES OVER FOUR (4) INCH CALIPER.

D. MATERIALS

GENERAL

a. MATERIALS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL. UPON SUBMITTALS' APPROVAL, DELIVERY OF MATERIALS MAY COMMENCE.

TOPSOIL MIX AMENDMENT MIX/ PRODUCT DATA/ TEST RESULTS PLANTS PHOTOGRAPHS OF ONE (1) OF EACH SPECIES (OR TAGGED IN NURSERY) INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC. CLIENT REQUESTED TAGGING MAY SUBSTITUTE PHOTOS. FERTILIZER PRODUCT DATA	MULCH	PRODUCT DATA
(OR TAGGED IN NURSERY) INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC. CLIENT REQUESTED TAGGING MAY SUBSTITUTE PHOTOS.	TOPSOIL MIX	AMENDMENT MIX/ PRODUCT DATA/ TEST RESULTS
FERTILIZER PRODUCT DATA	PLANTS	(OR TAGGED IN NURSERY) INDICATE SIZES (HEIGHT/WIDTH) AND QUALITY PER SPEC.
	FERTILIZER	PRODUCT DATA

PRODUCT DATA

PRODUCT DATA

SUBMITTAL

2. PLANT MATERIALS

HERBICIDE

INNOCULANT

- a. PLANT SPECIES AND SIZE SHALL CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH GRADES AND STANDARDS FOR NURSERY PLANTS, LATEST EDITION, PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA GRADE NO. 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE HEALTHY, VIGOROUS, SOUND, WELL-BRANCHED, AND FREE OF DISEASE AND INSECTS INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY WITH APPROVAL FROM OWNER OR OWNER'S REPRESENTATIVE. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE.
- b. MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE GROUND OR ACROSS THE NORMAL SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.
- c. INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH APPROVAL SHALL NOT IMPAIR THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF ROOT BALLS OR ROOTS, LATENT DEFECTS OR INJURIES. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

E. SOIL MIXTURE

- 1. SOIL MIXTURE (PLANTING MEDIUM FOR PLANT PITS) SHALL CONSIST OF 50% COARSE SAND AND 50% FLORIDA PEAT, AS DESCRIBED BELOW.
- 2. SOIL FOR USE IN PREPARING SOIL MIXTURE FOR BACKFILLING PLANT PITS SHALL BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER; REASONABLY FREE OF SUBSOIL, CLAY LUMPS, BRUSH WEEDS AND OTHER LITTER; FREE OF ROOTS, STUMPS, STONES LARGER THAN 2" IN ANY DIRECTION, AND OTHER EXTRANEOUS OR TOXIC MATTER HARMFUL TO PLANT GROWTH. IT SHALL HAVE A PH BETWEEN 5.5 AND 7.0 - SUBMIT SAMPLE AND PH TESTING RESULTS FOR APPROVAL.
- 3. SAND SHALL BE COARSE, CLEAN, WELL-DRAINING, NATIVE SAND. CONTRACTOR SHALL SUBMIT RESULTS OF SOIL TEST FOR THE SOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY THE OWNER.
- 4. CONTRACTOR TO SUBMIT SAMPLES OF SOIL MIXTURE FOR OWNER'S REPRESENTATIVE APPROVAL PRIOR TO PLANT INSTALLATION OPERATIONS COMMENCE.
- 5. CONTRACTOR SHALL PROVIDE PH TEST RESULT FOR ALL MIX COMPONENTS.
- 6. CONTRACTOR SHALL PROVIDE PENETROMETER ON-SITE AT ALL TIMES FOR COMPACTION INSPECTION AT THE DISCRETION OF THE LANDSCAPE ARCHITECT.
- 7. PENETROMETER CRITERIA / SPECIFICATION SHALL RANGE FROM APPROX. 75 PSI TO LESS THAN 300 PSI OR AS DETERMINE BY LANDSCAPE ARCHITECT.

- 8. SOIL SHALL BE SUPPLIED BY ATLAS PEAT & SOIL INC. 9621 STATE RD, BOYNTON BEACH, FLORIDA 33472. PHONE: 561-734-7300 OR APPROVED EQUAL.
- 9. FINAL MIX SHALL BE TESTED TO HAVE A SATURATED WEIGHT OF NO MORE THAN 110 POUNDER PER CUBIC FOOT WHEN COMPACTED TO 85% STANDARDS PROCTOR.

- WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE PLANT GROWTH AND SHALL NOT CONTAIN HARMFUL, NATURAL OR MAN-MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC.. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.
- 2. CONTRACTOR SHALL INSURE ALL PLANT MATERIAL RECEIVES APPROPRIATE WATER THROUGHOUT THE GUARANTEE PERIOD SO PLANT MATERIAL THRIVES AND ESTABLISHES READILY.
- 3. CONTRACTOR SHALL SUBMIT A WATERING SCHEDULE FOR WRITTEN APPROVAL BY
- *WATERING/IRRIGATION RESTRICTIONS MAY APPLY REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

G. FERTILIZER

 CONTRACTOR SHALL PROVIDE FERTILIZER APPLICATION SCHEDULE TO OWNER, AS APPLICABLE TO SOIL TYPE, PLANT INSTALLATION TYPE, AND SITE'S PROPOSED USE. SUGGESTED FERTILIZER TYPES SHALL BE ORGANIC OR OTHERWISE NATURALLY-DERIVED.

*FERTILIZER RESTRICTIONS MAY APPLY - REFER TO PROPERTY'S JURISDICTIONAL AUTHORITY.

1. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT, AND APPLIED AT A MINIMUM DEPTH OF 3 INCHES. CLEAR MULCH FROM EACH PLANT'S CROWN (BASE). TYPE OF MATERIAL: "FLORIMULCH" OR SHREDDED, STERILE EUCALYPTUS MULCH.

I. DIGGING AND HANDLING

- 1. PROTECT ROOTS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN, DRYING WINDS, WATER AND FREEZING, AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT DAMAGE DURING TRANSIT. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT ("WILTPRUF" OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.
- 2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL OF SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS. NO PLANTS MOVED WITH A ROOT BALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.
- 3. PLANTS MARKED "BR" IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS, COMPLYING WITH FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS, CURRENT EDITION. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT DURING TRANSPORTATION AND PRIOR TO PLANTING.
- 4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS SPECIFIED AFTER THE MINIMUM OF FRONDS HAVE BEEN REMOVED. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL.
- 5. EXCAVATION OF TREE PITS SHALL BE PERFORMED USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS AND PREPARED SUB-BASES.

J. CONTAINER GROWN STOCK

- 1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL-ROOTED PLANTS ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, FLORIDA #1 OR BETTER.
- 2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GROWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.
- 3. PLANT ROOTS BOUND IN CONTAINERS ARE NOT ACCEPTABLE.
- 4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL IS OBTAINED FROM THE OWNER OR OWNER'S REPRESENTATIVE.

K. COLLECTED STOCK

1. WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED BY THE OWNER OR OWNER'S REPRESENTATIVE, THE MINIMUM SIZES OF ROOTBALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

L. NATIVE STOCK

1. PLANTS COLLECTED FROM WILD OR NATIVE STANDS SHALL BE CONSIDERED NURSERY GROWN WHEN THEY HAVE BEEN SUCCESSFULLY RE-ESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

M. MATERIALS LIST

1. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED BY THE CONTRACTOR. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN THE PLANS AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO BIDDING OR INSTALLATION. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE.

N. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS OTHERWISE NOTED.

- 2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.
- 3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED FOR POSITIVE DRAINAGE TO SURFACE/SUBSURFACE STORM DRAIN SYSTEMS. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS. REFER TO CIVIL ENGINEER'S PLANS FOR FINAL GRADES.

O. PLANTING PROCEDURES

- 1. 1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE REMOVED FROM THE SURFACE OF ALL PLANT BEDS. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY ADVERSELY AFFECT THE PLANT GROWTH, HE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE. FAILURE TO DO SO BEFORE PLANTING SHALL MAKE THE CORRECTIVE MEASURES THE RESPONSIBILITY OF THE CONTRACTOR.
- VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES, INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORMWATER SYSTEMS, CABLE, AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES. CALL NATIONAL ONE CALL - 811 - TO LOCATE UTILITIES.
- 3. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO A MINIMUM DEPTH OF 36". CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ON-SITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK OR OTHER ADVERSE CONDITIONS OCCUR IN PLANTED AREAS AFTER 36" DEEP EXCAVATION BY THE CONTRACTOR, AND ADEQUATE PERCOLATION CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE.
- 4. FURNISH NURSERY'S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.
- 5. GENERAL COMPLY WITH APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. UPON ARRIVAL AT THE SITE, PLANTS SHALL BE THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS STORED ON-SITE SHALL NOT REMAIN UNPLANTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES, METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED
- THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE PLANTING WITH IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION APPURTENANCES AND PLANTS.
- 7. ALL PLANTING PITS SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD FOR NURSERY STOCK 260.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL MIXTURE AS SPECIFIED IN SECTION E. TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER PERCOLATION. IF POOR PERCOLATION EXISTS, UTILIZE "POOR DRAINAGE CONDITION" PLANTING DETAIL. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURES AND UNDER THE SUPERVISION OF A QUALIFIED LANDSCAPE FOREMAN. PROPER "JETTING IN" SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. "JET STICK" OR EQUAL IS RECOMMENDED.
- STRUCTURES WHILE INSTALLING TREES.

8. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS AND BUILDING

- 9. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION E OF THESE SPECIFICATIONS.
- 10. TREES AND SHRUBS SHALL BE SET STRAIGHT AT AN ELEVATION THAT, AFTER SETTLEMENT, THE PLANT CROWN WILL STAND ONE (1) TO TWO (2) INCHES ABOVE GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PIT. PLANTING SOIL MIXTURE SHALL BE BACKFILLED, THOROUGHLY TAMPED AROUND THE BALL, AND SETTLED BY WATER (AFTER TAMPING).
- 11. AMEND PINE AND OAK PLANT PITS WITH ECTOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. ALL OTHER PLANT PITS SHALL BE AMENDED WITH ENDOMYCORRHIZAL SOIL APPLICATION PER MANUFACTURER'S RECOMMENDATION. PROVIDE PRODUCT INFORMATION SUBMITTAL PRIOR TO INOCULATION.
- 12.FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, STIRRING IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE. ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, BASKETS, ETC..., SHALL BE REMOVED FROM THE SIDES AND TOPS OF BALLS, BUT NO BURLAP SHALL BE PULLED FROM UNDERNEATH.
- 13.PRUNING: TREES SHALL BE PRUNED, AT THE DIRECTION OF THE OWNER OR OWNER'S REPRESENTATIVE, TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL SOFT WOOD OR SUCKER GROWTH AND ALL BROKEN OR BADLY DAMAGED BRANCHES SHALL BE REMOVED WITH A CLEAN CUT. ALL PRUNING TO BE PERFORMED BY LICENSED ARBORIST, IN ACCORDANCE WITH ANSI A-300.
- 14. SHRUBS AND GROUND COVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED ON THE PLANT LIST. CULTIVATE ALL PLANTING AREAS TO A MINIMUM DEPTH OF 6", REMOVE AND DISPOSE ALL DEBRIS. MIX TOP 4" TO ACHEIVE SOIL MIXTURE AS SPECIFIED IN SECTION E. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.
- 15. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO INSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. IF THE CONTRACTOR AND OWNER DECIDE TO WAIVE THE TREE GUYING AND BRACING, THE OWNER SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING AND AGREE TO INDEMNIFY AND HOLD HARMLESS THE LANDSCAPE ARCHITECT IN THE EVENT UNSUPPORTED TREES PLANTED UNDER THIS CONTRACT FALL AND DAMAGE PERSON OR PROPERTY.
- 16.MULCHING: PROVIDE A THREE INCH (MINIMUM) LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUND COVER, VINE BED, AND TREE PIT PLANTED UNDER THIS CONTRACT.

17. HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER, "ROUND-UP" SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER'S PRECAUTIONS AND SPECIFICATIONS. PRIOR TO FINAL INSPECTION, TREAT ALL PLANTING BEDS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER. (AS ALLOWED BY JURISDICTIONAL AUTHORITY)

P. LAWN SODDING

- 1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING COMPLETE, IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A TURF GRASS LAWN ACCEPTABLE TO THE
- 2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND DEBRIS, AND THE GROUND BROUGHT TO AN EVEN GRADE. THE ENTIRE SURFACE SHALL BE ROLLED WITH A ROLLER WEIGHING NOT MORE THAN ONE-HUNDRED (100) POUNDS PER FOOT OF WIDTH. DURING THE ROLLING, ALL DEPRESSIONS CAUSED BY SETTLEMENT SHALL BE FILLED WITH ADDITIONAL SOIL, AND THE SURFACE SHALL BE REGRADED AND ROLLED UNTIL PRESENTING A SMOOTH AND EVEN FINISH TO THE REQUIRED GRADE.
- 3. SOIL PREPARATION: PREPARE LOOSE BED FOUR (4) INCHES DEEP. HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY.

a. THE CONTRACTOR SHALL SOD ALL AREAS THAT ARE NOT PAVED OR PLANTED AS

DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS, UNLESS SPECIFICALLY NOTED OTHERWISE. b. THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD

SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETAL TYPE, AND FREE FROM

WEEDS, FUNGUS, INSECTS AND DISEASE OF ANY KIND.

- c. SOD PANELS SHALL BE LAID TIGHTLY TOGETHER SO AS TO MAKE A SOLID SODDED LAWN AREA. SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A 24 INCH STONE MULCH STRIP SHALL BE PROVIDED. REFER TO DETAILS. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD CLEAN SAND, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY
- 5. DURING DELIVERY, PRIOR TO, AND DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE STACKED SO AS NOT TO BE DAMAGED BY SWEATING OR EXCESSIVE HEAT AND MOISTURE.

WATERED IN. FERTILIZE INSTALLED SOD AS ALLOWED BY PROPERTY'S

JURISDICTIONAL AUTHORITY.

- a. WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS (LARGER THAN 12"X12") UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. REPAIRED SODDING SHALL BE ACCOMPLISHED AS IN THE ORIGINAL WORK (INCLUDING REGRADING IF NECESSARY).
- b. CONTRACTOR RESPONSIBLE FOR ESTABLISHING AND MAINTAINING SOD/LAWN UNTIL ACCEPTANCE BY THE OWNER'S REPRESENTATIVE. PRIOR TO AND UPON ACCEPTANCE, CONTRACTOR TO PROVIDE WATERING/IRRIGATION SCHEDULE TO OWNER. OBSERVE ALL APPLICABLE WATERING RESTRICTIONS AS SET FORTH BY THE PROPERTY'S JURISDICTIONAL AUTHORITY

Q. CLEANUP

1. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL. EQUIPMENT. AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM-CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

R. PLANT MATERIAL MAINTENANCE

1. ALL PLANTS AND PLANTING INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY PLANT CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE. MAINTENANCE AFTER THE CERTIFICATION OF ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF 90 CALENDAR DAYS COMMENCING AFTER ACCEPTANCE.

S. MAINTENANCE (ALTERNATE BID ITEM)

1. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST-PER-MONTH BASIS.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

1. FINAL INSPECTION AT THE END OF THE WARRANTY PERIOD SHALL BE ON PLANTING. CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY REPLACEMENT AT THIS TIME SHALL BE SUBJECT TO THE SAME ONE (1) YEAR WARRANTY (OR AS SPECIFIED BY THE LANDSCAPE ARCHITECT OR OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

U. WARRANTY

- 1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED BY THE LANDSCAPE CONTRACTOR SHALL BE WARRANTED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER'S REPRESENTATIVE.
- 2. REPLACEMENT: ANY PLANT NOT FOUND IN A HEALTHY GROWING CONDITION AT THE END OF THE WARRANTY PERIOD SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED PLANTED AND MULCHED AS SPECIFIED UNDER "PLANTING", AT NO ADDITIONAL COST TO THE OWNER.
- 3. IN THE EVENT THE OWNER DOES NOT CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR BID SHALL INCLUDE CONSIDERATION FOR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH. IT IS ADDRESSING THIS ISSUE. SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S

CALL 48 HOURS BEFORE YOU DIG

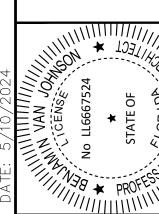
IT'S THE LAW!

DIAL 811



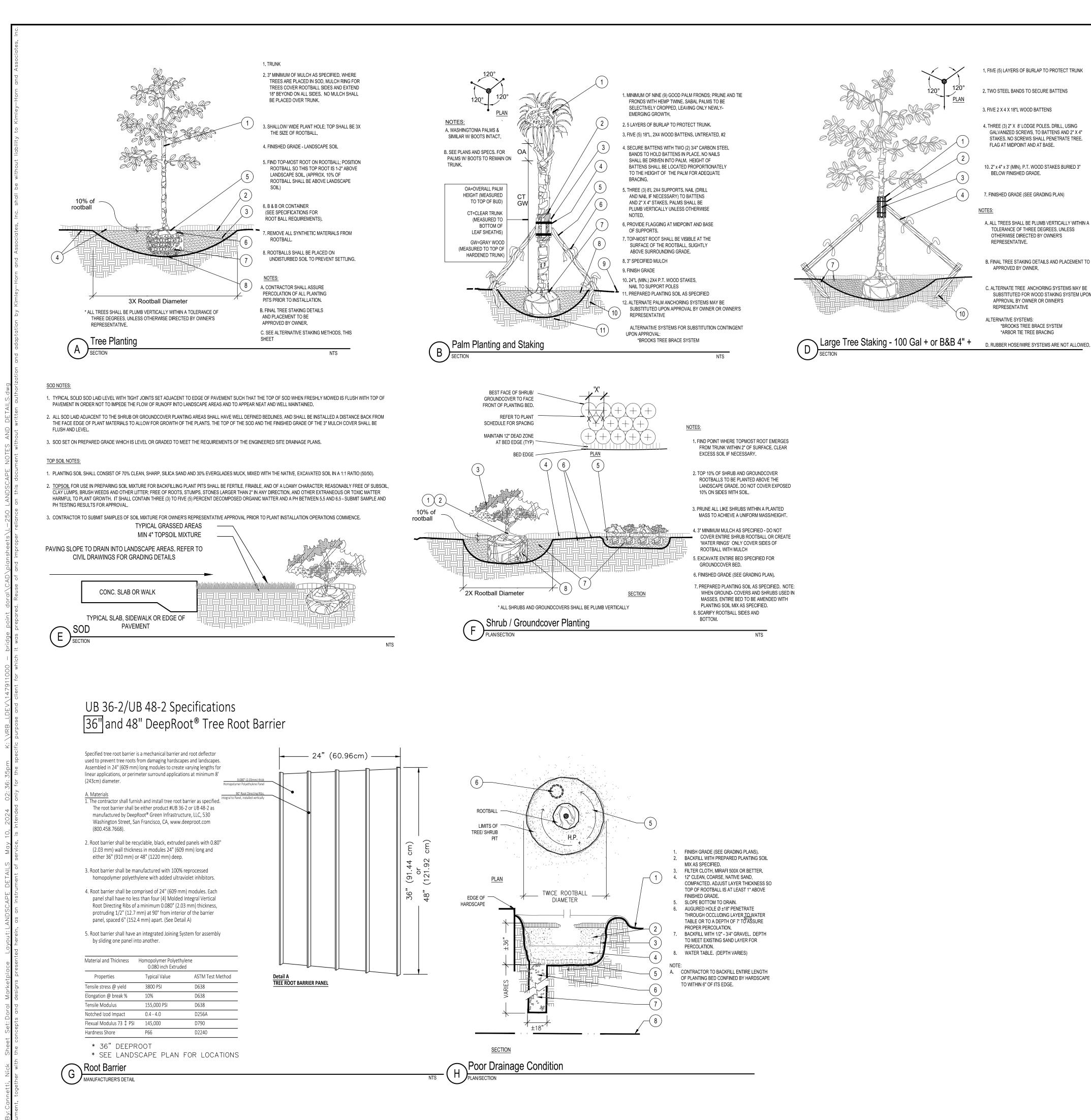
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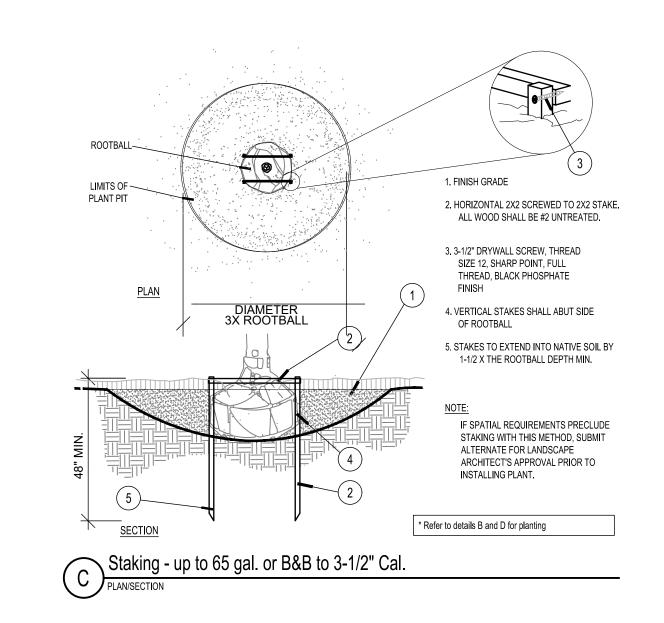
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1. FIVE (5) LAYERS OF BURLAP TO PROTECT TRUNK

2. TWO STEEL BANDS TO SECURE BATTENS

4. THREE (3) 2" X 8' LODGE POLES. DRILL, USING

FLAG AT MIDPOINT AND AT BASE.

7. FINISHED GRADE (SEE GRADING PLAN)

BELOW FINISHED GRADE.

GALVANIZED SCREWS, TO BATTENS AND 2" X 4"

STAKES. NO SCREWS SHALL PENETRATE TREE.

10. 2" x 4" x 3' (MIN), P.T. WOOD STAKES BURIED 3"

A. ALL TREES SHALL BE PLUMB VERTICALLY WITHIN A

B. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE

C. ALTERNATE TREE ANCHORING SYSTEMS MAY BE

APPROVAL BY OWNER OR OWNER'S

*BROOKS TREE BRACE SYSTEM

*ARBOR TIE TREE BRACING

SUBSTITUTED FOR WOOD STAKING SYSTEM UPON

TOLERANCE OF THREE DEGREES, UNLESS

OTHERWISE DIRECTED BY OWNER'S

APPROVED BY OWNER.

ALTERNATIVE SYSTEMS:

3. FIVE 2 X 4 X 18"L WOOD BATTENS

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.



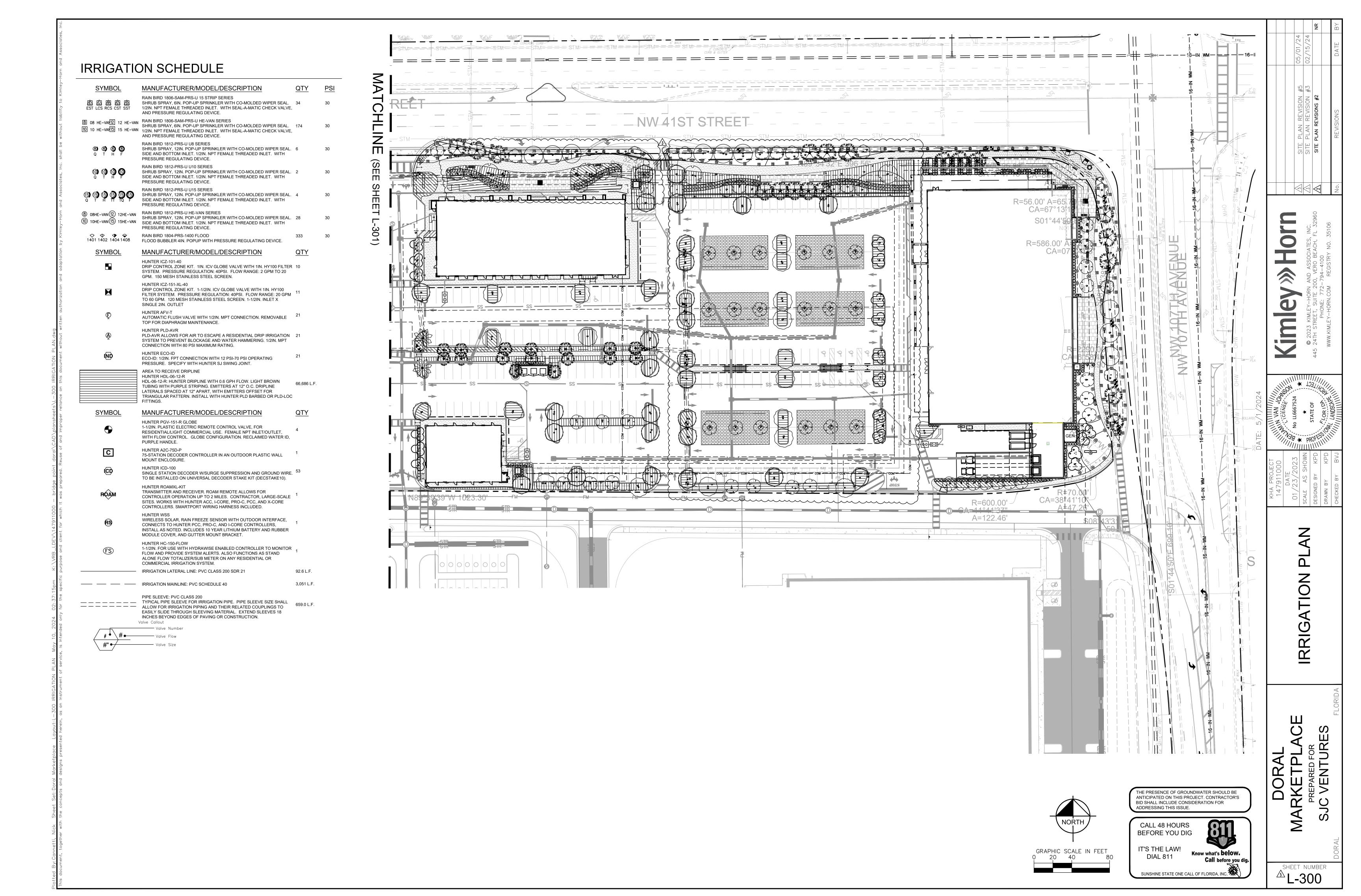
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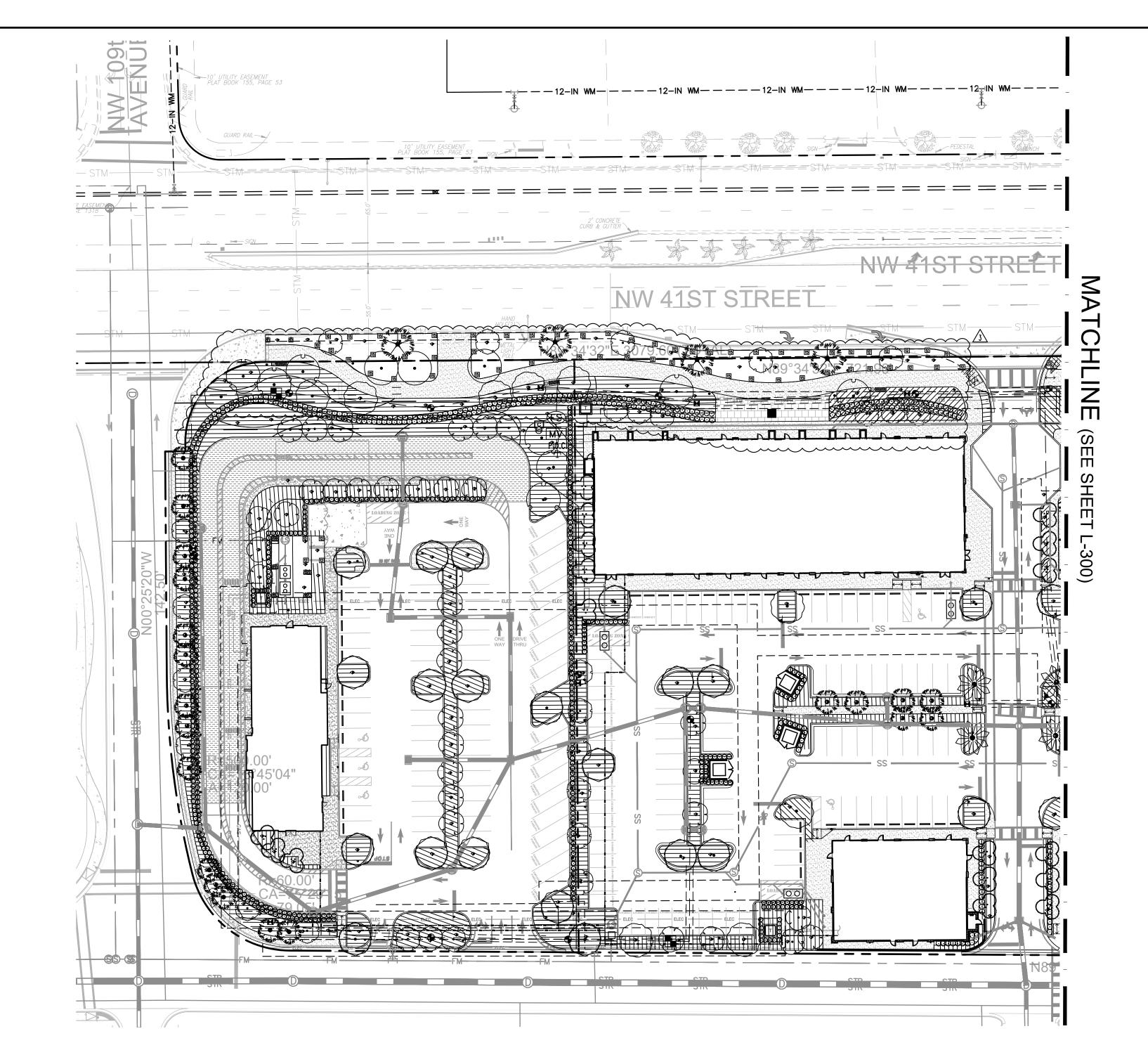
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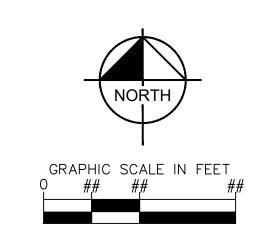
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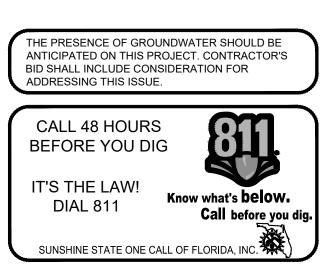


IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	<u>PSI</u>
മ മ മ മ മ EST LCS RCS CST SST	RAIN BIRD 1806-SAM-PRS-U 15 STRIP SERIES SHRUB SPRAY, 6IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. 1/2IN. NPT FEMALE THREADED INLET. WITH SEAL-A-MATIC CHECK VALVE, AND PRESSURE REGULATING DEVICE.	34	30
3 08 HE-VAN12 12 HE-VAN 3 10 HE-VAN15 15 HE-VAN	SHRUB SPRAY RINI DODJUD SPRINKUER WITH COLMOUNEN WIDER SEAL	174	30
(8) (8) (8) Q T H F	RAIN BIRD 1812-PRS-U U8 SERIES SHRUB SPRAY, 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2IN. NPT FEMALE THREADED INLET. WITH PRESSURE REGULATING DEVICE.	6	30
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	RAIN BIRD 1812-PRS-U U10 SERIES SHRUB SPRAY, 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2IN. NPT FEMALE THREADED INLET. WITH PRESSURE REGULATING DEVICE.	2	30
	RAIN BIRD 1812-PRS-U U15 SERIES SHRUB SPRAY, 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2IN. NPT FEMALE THREADED INLET. WITH PRESSURE REGULATING DEVICE.	4	30
0 08HE-VAN (12) 12HE-VAN 0 10HE-VAN (15) 15HE-VAN	RAIN BIRD 1812-PRS-U HE-VAN SERIES SHRUB SPRAY, 12IN. POP-UP SPRINKLER WITH CO-MOLDED WIPER SEAL. SIDE AND BOTTOM INLET. 1/2IN. NPT FEMALE THREADED INLET. WITH PRESSURE REGULATING DEVICE.	28	30
	RAIN BIRD 1804-PRS-1400 FLOOD FLOOD BUBBLER 4IN. POPUP WITH PRESSURE REGULATING DEVICE.	333	30
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	
	HUNTER ICZ-101-40 DRIP CONTROL ZONE KIT. 1IN. ICV GLOBE VALVE WITH 1IN. HY100 FILTER SYSTEM. PRESSURE REGULATION: 40PSI. FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN.	10	
	HUNTER ICZ-151-XL-40 DRIP CONTROL ZONE KIT. 1-1/2IN. ICV GLOBE VALVE WITH 1IN. HY100 FILTER SYSTEM. PRESSURE REGULATION: 40PSI. FLOW RANGE: 20 GPM TO 60 GPM. 120 MESH STAINLESS STEEL SCREEN. 1-1/2IN. INLET X SINGLE 2IN. OUTLET	11	
Ф	HUNTER AFV-T AUTOMATIC FLUSH VALVE WITH 1/2IN. MPT CONNECTION. REMOVABLE TOP FOR DIAPHRAGM MAINTENANCE.	21	
(HUNTER PLD-AVR PLD-AVR ALLOWS FOR AIR TO ESCAPE A RESIDENTIAL DRIP IRRIGATION SYSTEM TO PREVENT BLOCKAGE AND WATER HAMMERING. 1/2IN. MPT CONNECTION WITH 80 PSI MAXIMUM RATING.	21	
(ND	HUNTER ECO-ID ECO-ID: 1/2IN. FPT CONNECTION WITH 12 PSI-70 PSI OPERATING PRESSURE. SPECIFY WITH HUNTER SJ SWING JOINT.	21	
	AREA TO RECEIVE DRIPLINE HUNTER HDL-06-12-R HDL-06-12-R: HUNTER DRIPLINE WITH 0.6 GPH FLOW. LIGHT BROWN TUBING WITH PURPLE STRIPING. EMITTERS AT 12" O.C. DRIPLINE LATERALS SPACED AT 12" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. INSTALL WITH HUNTER PLD BARBED OR PLD-LOC FITTINGS.	66,686 L.F.	
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	<u>QTY</u>	
•	HUNTER PGV-151-R GLOBE 1-1/2IN. PLASTIC ELECTRIC REMOTE CONTROL VALVE, FOR RESIDENTIAL/LIGHT COMMERCIAL USE. FEMALE NPT INLET/OUTLET, WITH FLOW CONTROL. GLOBE CONFIGURATION. RECLAIMED WATER ID, PURPLE HANDLE.	4	
C	HUNTER A2C-75D-P 75-STATION DECODER CONTROLLER IN AN OUTDOOR PLASTIC WALL MOUNT ENCLOSURE.	1	
©	HUNTER ICD-100 SINGLE STATION DECODER W/SURGE SUPPRESSION AND GROUND WIRE. TO BE INSTALLED ON UNIVERSAL DECODER STAKE KIT (DECSTAKE10).	53	
ROAM	HUNTER ROAMXL-KIT TRANSMITTER AND RECEIVER. ROAM REMOTE ALLOWS FOR CONTROLLER OPERATION UP TO 2 MILES. CONTRACTOR, LARGE-SCALE SITES. WORKS WITH HUNTER ACC, I-CORE, PRO-C, PCC, AND X-CORE CONTROLLERS. SMARTPORT WIRING HARNESS INCLUDED.	1	
RS	HUNTER WSS WIRELESS SOLAR, RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER PCC, PRO-C, AND I-CORE CONTROLLERS, INSTALL AS NOTED. INCLUDES 10 YEAR LITHIUM BATTERY AND RUBBER MODULE COVER, AND GUTTER MOUNT BRACKET.	1	
FS	HUNTER HC-150-FLOW 1-1/2IN. FOR USE WITH HYDRAWISE ENABLED CONTROLLER TO MONITOR FLOW AND PROVIDE SYSTEM ALERTS. ALSO FUNCTIONS AS STAND ALONE FLOW TOTALIZER/SUB METER ON ANY RESIDENTIAL OR COMMERCIAL IRRIGATION SYSTEM.	1	
	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21	92.6 L.F.	
	IRRIGATION MAINLINE: PVC SCHEDULE 40	3,051 L.F.	
	PIPE SLEEVE: PVC CLASS 200 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.	659.0 L.F.	
<u></u>	Valve Number		







SHEET NUMBER

⁵ L-301

PART I: GENERAL 1.01 SCOPE

- A. The work covered by this specification shall include the furnishing of all labor, materials, tools and equipment necessary to perform and complete the installation of an automatic irrigation system as specified herein and as shown on the drawings and any incidental work not shown or specified which can reasonably be determined to be part of the work and necessary to provide a complete and functional system.
- B. The work covered by this specification also includes all permits, federal, state and local taxes and all other costs, both foreseeable and unforeseeable at the time of construction.
- C. No deviation from these specifications, the accompanying drawings, or agreement is authorized or shall be made without prior written authorization signed by the Owner or his duly appointed representative.
- 1.02 QUALITY ASSURANCE
- D. Installer Qualifications: A firm specializing in irrigation work with not less than five (5) years of experience in installing irrigation systems similar to those required for this project.
- E. Coordination: Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.
- F. Inspection of Site: The Contractor shall acquaint himself with all site conditions, including underground utilities before construction is to begin. Contractor shall coordinate placement of underground materials with contractors previously working underground in the vicinity or those scheduled to do underground work in the vicinity. Contractor is responsible for minor adjustments in the layout of the work to accommodate existing facilities.
- G. Protection of Existing Plants and Site Conditions: The Contractor shall take necessary precautions to protect site conditions to remain. Should damages be incurred, this Contractor shall repair the damage to its original condition at his own expense. Any disruption, destruction, or disturbance of any existing plant, tree, shrub, or turf, or any structure shall be completely restored to the satisfaction of the Owner and his representatives, solely at the Contractor's expense.
- H. Protection of Work and Property: The Contractor shall be liable for and shall take the following actions as required with regard to damage to any of the Owner's property.
 - 1. Any existing building, equipment, piping, pipe coverings, electrical systems, sewers, sidewalks, roads, grounds, landscaping or structure of any kind (including without limitation, damage from leaks in the piping system being installed or having been installed by Contractor) damaged by the Contractor, or by his agents, employees, or subcontractors, during the course of his work, whether through negligence or otherwise, shall be replaced or repaired by Contractor at his own expense in a manner satisfactory to Owner, which repair or replacement shall be a condition precedent to Owner's obligation to make final payment under the Contract.
 - 2. Contractor shall also be responsible for damage to any work covered by these specifications before final acceptance of the work. He shall securely cover all openings into the systems and cover all apparatus, equipment and appliances, both before and after being set in place to prevent obstructions on the pipes and the breakage, misuse or disfigurement of the apparatus, equipment or appliance.
 - 3. All trenching or other work under the leaf canopy of any and all trees shall be done by hand or by other methods so that no branches are damaged in any way.
 - Buildings, walks, walls, and other property shall be protected from damage. Open ditches left exposed shall be flagged and barricaded by the Contractor by approved means. The Contractor shall restore disturbed areas to their original condition.
 - 4. The Contractor shall be responsible for requesting the proper utility company to stake the exact location of any underground lines including but not limited to electric, gas, telephone service, water, and cable.
 - The Contractor shall take whatever precautions are necessary to protect these underground lines from damage. In the event damage does occur, all damage shall be completely repaired to its original condition, at no additional cost to the Owner.
 - 5. The Contractor shall request the Owner, in writing, to locate any private utilities (i.e., electrical service to outside lighting) before proceeding with any excavation. If, after such requests and necessary staking, private utilities which were not staked are encountered and damaged by the Contractor, they shall be repaired by the Owner at no cost to the Contractor. If the Contractor damages staked or located utilities, they shall be repaired at the Contractor's expense.
- J. Codes and Inspections: The entire installation shall comply fully with all local and state laws and ordinances and with all established codes arrange for all necessary inspections and shall pay all fees and expenses in connection with same, as part of the work under this Contract. Upon completion of the work, he shall furnish to the "Owner" all inspection certificates customarily issued in connection with the class of work
- K. The Contractor shall keep on his work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Owner, or Owner's representative.
- L. The superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor.
- M. The Owner's Landscape Architect or designated individual shall have full authority to approve or reject work performed by the Contractor. The Owner's Authorized Representative shall also have full authority to make field changes that are deemed necessary.
- N. Final Acceptance: Final acceptance of the work may be obtained from the Owner upon the satisfactory completion of all work. Acceptance by the Landscape Architect and/or Owner in no way removes the Contractor of his responsibility to make further repairs, corrections and adjustments to eliminate any deficiencies which may later be discovered.
- O. Guarantee: All work shall be guaranteed for one year from date of final acceptance against all defects in material, equipment and workmanship to the satisfaction of the Owner. Repairs, if required, shall be done promptly at no cost to the Owner.
 - 1. The guarantee shall also cover repair of damage to any part of the premises resulting from leaks or workmanship, to the satisfaction of the Owner. The Contractor shall not be responsible for work damaged by others. Repairs, if required, shall be done promptly. The guarantee shall state the name of the Owner, provide full guarantee terms, effective and termination date, name and license number of Contractor providing guarantee, address, and telephone number. It shall be signed by the chief executive of the Contractor of his liability under the guarantee. Such warranties shall only supplement the guarantee.
 - 2. If, within ten (10) days after mailing of written notice by the Owner to the Contractor requesting repairs or replacement resulting from a breach of warranty, the Contractor shall neglect to make or undertake with due diligence to make the same, the Owner may make such repairs at the Contractor's expense; provided, however, that in the case of emergency where, in the judgment of the Owner, delay would cause serious loss or damage, repairs or replacement may be made without notice being sent to the Contractor, and Contractor shall pay the cost thereof.

- P. The Contractor shall provide full, 100% irrigation coverage in all areas designed with proposed plantings, in accordance with the site's governing permitting requirements and as designed.
- Q. On—site Observation: At any time during the installation of the irrigation system by the Contractor, the Owner or Landscape Architect may visit the site to observe work underway. Upon request, the Contractor shall be required to uncover specified work as directed by the Owner or material, workmanship or method of installation not meet the standards specified herein, the Contractor shall replace the work at his own expense.
- R. Workmanship: All work shall be installed by qualified, skilled personnel, proficient in the trades required, in a neat, orderly, and responsible manner with recognized standards of workmanship. The Contractor shall have had considerable experience and demonstrated ability in the installation of sprinkler irrigation systems of this type.

1.04 SUBMITTALS

All materials shall be those specified and/or approved by the Landscape Architect.

- A. Product Data: After the award of the Contract and prior to beginning work, the Contractor shall submit for approval by the Owner and Landscape Architect, two copies of the complete list of materials, manufacturer's technical data, and installation instructions which he proposes to install.
- B. Commence no work before approval of material list and descriptive material by the Landscape Architect.
- C. Record Drawings: The Contractor shall record on reproducibles, all changes that may be made during actual installation of the system. Provide controller sequencing and control valve locations.
- 1. Immediately upon installation of any piping, valves, wiring, sprinklers, etc., in locations other than shown on the original drawings or of sizes other than indicated, the Contractor shall clearly indicate such changes on a set of blueline prints. Records shall be made on a daily basis. All records shall be neat and subject to the approval of the Owner.
- 2. The Contractor shall also indicate on the record prints the location of all wire splices, original or due to repair, that are installed underground in a location other than the controller pedestal, remote control valve box, power source or connection to a valve—in—head sprinkler.
- 3. These drawings shall also serve as work progress sheets. The Contractor shall make neat and legible notations thereon daily as the work proceeds, showing the work as actually installed. These drawings shall be available at all times for review and shall be kept in a location designated by the Owner's Representative.
- 4. Progress payment request and record drawing information must be approved by Landscape Architect before payment is made.
- 5. If in the opinion of the Owner or his representative, the record drawing information is not being properly or promptly recorded, construction payment may be stopped until the proper information has been recorded and submitted.
- 6. Before the date of the final site observation and approval, the Contractor shall deliver one set (copies) of reproducible record drawing plans and notes to the Landscape Architect. Record drawing information shall be approved by the Landscape Architect prior to submittal to Owner for final payments, including
- W. Operations and Maintenance Manuals: The Contractor shall prepare and deliver to the Owner, or his designated representative within ten (10) calendar days prior to completion of construction, a hard cover binder with three rings containing the following information:
- 1. Index sheet stating the Contractor's address and business telephone number, list of equipment with name(2) and address(es) of local manufacturer's representative(s).
- 2. Catalog and parts sheets on every material and equipment installed under this Contract.
- 3. Complete operating and maintenance instruction on all major equipment. Include initial controller schedule and recommended schedule after establishment period.
- 4. Demonstrate to and provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Owner, or his designated representative at the conclusion of the project that this service has been rendered.

1.05 EXPLANATION OF DRAWINGS

- A. Due to the scale of the drawings, it is not possible to indicate all offsets, fittings and sleeves which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the work and plan his work accordingly, furnishing such offsets, fittings and sleeves as may be required to meet such conditions.
- B. The drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting and architectural features. Deviations shall be brought to the Landscape Architects attention.
- C. All work called for a on the drawings by notes or details shall be furnished and installed whether or not specifically mentioned in the specifications.
- D. The Contractor shall not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been known in engineering. Such obstructions or differences should be brought to the attention of the Landscape Architect. In the event that notification is not performed, the Contractor shall assume full responsibility for any revision necessary.
- E. If, in the opinion of the Landscape Architect, the labor furnished by the Contractor is incompetent, unskilled, or unreliable, his equipment inadequate, improper or unsafe, or if the Contractor shall fail to continuously and diligently execute the construction, the Landscape Architect or Owner shall, in writing, instruct the Contractor to remove all such causes of noncompliance and the Contractor shall promptly comply.
- F. The Contractor shall be responsible for full and complete coverage of all irrigation areas. The Landscape Architect shall be notified of any necessary adjustments at no additional cost to the Owner. Any revisions to the irrigation system must be submitted and answered in written form, along with any change in Contract price. Layout may be modified, if necessary to obtain coverage. Spacing not to exceed 60% of the diameter.

PART II: PRODUCTS

2.01 MATERIALS

Material and equipment shall be supplied by the Contractor. No substitutions shall be allowed without the prior written approval of the Owner/Landscape Architect. The Contractor shall inspect all materials and equipment prior to installation, and defective materials shall be replaced with the proper materials and equipment. Those items used in the installation found to be defective, improperly installed or not as specified, shall be removed and the proper materials and equipment installed in the proper manner, as interpreted by the Owner/Landscape Architect. The Contractor shall remove all damaged and defective pipe and equipment from the site.

2.02 PIPING

- A. General Provisions: All materials throughout the system shall be new and in perfect condition unless otherwise directed by the Landscape Architect.
- B. Polyvinyl Chloride Pipe (PVC): (Where indicated on plan, use non-potable purple piping.)
 - 1. Laterals: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220. All lateral piping less than 3" in diameter shall be Class 200 SDR-21.
 - 2. Main Line Under Pressure: PVC shall conform to the requirements of ASTM Designation D 2241, Class 1120 or 1220, Schedule 40 with belled end for solvent weld connection.
 - 3. Pipe Markings: All PVC pipe shall bear the following markings:
 - o Manufacturer's Name o Nominal Pipe Size
 - o Schedule or Class
 - o Pressure Rating of PSI o NSF (National Sanitation Foundation) Approval
 - o Date of Extrusion

2.04 PVC JOINTS

Joints in PVC pipe smaller than 3" shall be solvent welded in accordance with the recommendations of the pipe manufacturer; the solvent cleaner and welding compound furnished with the pipe.

- 2.05 THREADED CONNECTIONS
- A. Threaded PVC connections shall be made up using Teflon tape only.
- B. Connection between mainline pipe fittings and automatic or manual control valves shall be made using Schedule 80 threaded fittings and nipples.

2.06 SOLVENT CEMENT

- A. General: Provide solvent cement and primer for PVC solvent weld pipe and fittings recommended by the manufacturer. Pipe joints for solvent weld pipe to be belled end. Pipe joints for gasketted pipe to be intrical ring type. Insert gaskets will not be accepted.
- B. Thrust Blocks: Main line piping 3" or greater in diameter shall have thrust blocks sized and placed in accordance with the pipe manufacturer's recommendations or, in the absence of specified recommendations by the pipe manufacturer. 3000 PSI concrete thrusts shall be properly installed at tees, elbows, 45's, crosses, reducers, plugs, caps and valves.
- 2.07 PIPE AND WIRE SLEEVES

A. Sleeves to be installed:

- 1. The Contractor shall install irrigation system pipe and wire sleeves conforming to the following:
 - a. All pipe sleeves shall extend a minimum of 36" beyond the edges of pavement.
 - b. All pipe sleeves to be installed beneath future/existing road surfaces shall be PVC pipe Schedule 40 or jack and bore steel pipe as per FDOT specifications, and as shown on plans.
 - c. All irrigation system wires shall be sleeved seperately from main or lateral lines.
 - d. All pipe sleeves shall be installed at the minimum depth specified for main lines, lateral lines, and electric wire.
 - e. Contractor shall coordinate all pipe sleeve locations and depths prior to initiating installation of the irrigation system.

2.08 DRIPLINE / SPRINKLER HEADS

A. Inline Emitter Tubing

1. Pressure—Compensating Landscape Dripline a. The inline emitter shall be welded to the inner circumference of the polyethylene tubing. The inline emitter shall have dual outlet ports, 180° apart, ensuring only one port has contact with the ground when the tubing is installed at grade and mulched over.

b. Emitter shall pressure compensate by lengthening the emitter's turbulent flow path. The emitter shall be cylindrical in shape and provide surface area for filtration throughout 360° of its outer circumference. This increased filtration surface area shall assure that the water that enters the inline emitter can always come from the cleanest part of the flow path in the polyethylene tubing regardless of how the inline tubing lays on the ground.

c. Landscape Dripline tubing shall be brown in color and conform to an outside diameter (O.D.) of 0.630 inches (16 mm) and an inside diameter (I.D.) of 0.540 inches (13,7 mm) and wall thickness of 0.045 inches (1,1 mm).

d. Landscape Dripline shall have factory installed, pressure—compensating, inline emitters with spacing as indicated on drawings.

e. The flow rate from each installed inline emitter shall be consistent when inlet pressure is between 8.5 and 60 psi (0,7 to 4,1 bars). GPH rating indicated by specified model f. Operating pressure range: 8.5 to 60 psi (0,7 to 4,1 bar).

g. Model: Pressure—Compensating Landscape Dripline as indicated on plans

B. Spray Sprinklers: The sprinkler shall be a fixed spray type designed for in-ground installation. The nozzle shall elevate 6" (or as designated on plan) when in operation. The body of the sprinkler shall be constructed of non-corrosive heavy duty Cycolac. A filter screen shall be in the nozzle piston. All sprinkler parts shall be removable through the tip of the unit by removal of a threaded cap.

Riser mounted spray shall be as indicated on the plans. The sprinkler shall consist of a nozzle and body. The body of the riser-mount sprinkler shall be constructed of non-corrosive materials. A cone strainer shall be a separate part with the nozzle assembly to allow for easy flushing of the sprinkler. Maximum working pressure at the base of the sprinkler shall be 40 PSI. C. Low Volume, Pressure—Compensating (PC) Emitter Modules:

a. Pressure—Compensating Modules shall be pressure compensating over the range of 10 to 50 psi (0.7 to 3,5 bar) and have a consistent flow rate over this pressure range, as specified.

2.09 SPRINKLER HEADS

A. Spray Sprinklers: The sprinkler shall be a fixed spray type designed for in-ground installation. The nozzle shall elevate 6" (or as designated on plan) when in operation. The body of the sprinkler shall be constructed of non-corrosive heavy duty Cycolac. A filter screen shall be in the nozzle piston. All sprinkler parts shall be removable through the tip of the unit by removal of a threaded cap.

Riser mounted spray shall be as indicated on the plans. The sprinkler shall consist of a nozzle and body. The body of the riser—mount sprinkler shall be constructed of non-corrosive materials. A cone strainer shall be a separate part with the nozzle assembly to allow for easy flushing of the sprinkler. Maximum working pressure at the base of the sprinkler shall be 40 PSI.

(continued...)

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

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2.10 GATE VALVES

- A. Gate valves for 3/4" through 2-1/2" shall be of brass or bronze construction, solid wedge, IPS threads, non-rising stem with wheel operating handle, for a continuous working pressure of 150 PSI.
- B. Gate valves for 3" and larger: Iron body, brass or bronze mounted AWWA gate valves, with a clear waterway equal to the full nominal diameter of the valve, rubber gasket for a continuous working pressure of 150p PSI. Valve shall be equipped with a square operating nut.

2.11 VALVE BOXES

- A. For gate valves, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the drawings.
- B. For control valves 3/4" through 2", the drip valve assemblies, use AMETEK #10-181-014 box with #10-181-015 locking lid, or sized as necessary to effectively house the equipment
- C. For control wiring splices, use AMETEK #10-181-014 box with #10-181-015 locking lid, or as per the

2.12 IRRIGATION WIRING

- A. Wiring used for connecting the electric control valves to the controllers shall be Type UF, 600 volt, single strand, solid copper with PVC insulation 4/64" thick. Size shall be 14 gauge, red for "hot" or lead wires, and common wire to be 14 gauge, white in color.
- B. Contractor shall perform an ohm test on ground to assure adequate protection against surges and indirect lightning strikes.
- 2.13 MISCELLANEOUS MATERIALS
- A. Drainage Backfill: Cleaned gravel or crushed stone, graded from 1" maximum to 3/4" minimum.
- B. Metalized Underground Tape: The detectable, underground utility marking tape shall consist of a minimum: 5 mil (0.005") overall thickness; five-ply composition; ultra-high molecular weight, 100% virgin polyethylene; acid. alkaline and corrosion resistant: with no less than 150 pounds of tensile break strenath per 6" width; color—code impregnated with color stable, lead—free, organic pigments suitable for direct burial. Tapes utilizing reprocessed plastics or resins shall not be acceptable. The detectable, underground utility marking tape shall have a 35 gauge (0.0035") solid aluminum foil, core encapsulated within a 2.55 mil (0.00255") polyethylene backing and a 0.6 mil (0.006") PET cover coating. The laminate on each side shall consist of a 0.75 mil (0.00075") layer of hot LPDE, poly—fusing the "sandwich" without use of adhesives.

2.14 AUTOMATIC CONTROL SYSTEM

An Independent Station Controller: Furnish a solid state controller, as specified on the plans. Each station shall be capable of timing from zero (0) minute to 99 minutes per station in one (1) minute increments.

Each station shall be capable of operating two (2) 7VA electric valve—in—head solenoids.

The stand—alone controller shall have two (2) possible programs.

The stand-alone controller shall provide global percentage increase/decrease (water budget) for all stations simultaneously, from ten (10) to two hundred (200) percent, in ten (10) percent increments.

All stations shall be able to be turned on/off manually buy operating timing mechanism or by manual switch at station output.

The stand—alone controller shall incorporate an integral MOV surge protection into the terminal block for each of its 24 VAC field wire outputs. Controller power input wires will also incorporate surge protection.

The control panel shall provide continuous display time. It shall have alphanumeric displays of descriptive English menus and legend identifiers with cursor selection of function and precision value adjustment by rotary dial input.

The stand—alone controller shall be UL listed and FCC approved.

The stand-alone controller shall have 117 VAC, 60 Hz input, 26.5 VAC, 60 Hz output for operating 24 VAC solenoids.

The stand—alone controller cabinet shall be a lockable and weather—resistant outdoor cabinet. Mount as noted on plans.

The controller shall be equipped with lightening protection, by the Contractor, on both the primary (120v) and each secondary (24v) circuit. The controller circuits shall be grounded to a copper clad grounding rod located at each controller.

The controller shall be equipped for a water conservation device. as specified.

PART III: EXECUTION

3.01 INSPECTION

The Contractor shall examine the areas and conditions under which landscape irrigation system is to be installed and notify the Landscape Architect in writing of conditions detrimental to the proper and timely completion of the work. The Contractor shall proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the Landscape Architect.

3.02 PREPARATION

The Contractor shall provide sleeves to accommodate piping under walks or paving. The Contractor shall coordinate with other trades and install to accurate levels prior to paving work. Cutting and patching of paving and concrete will not be permitted. The Contractor shall maintain all warning signs, shoring, barricades, flares and red lanterns, as required by any local codes, ordinances or permits.

3.03 TRENCHING AND BACKFILLING

A. Excavation: The Contractor shall stake out the location of each run of pipe, sprinkler heads, sprinkler valves and isolation valves prior to trenching. Excavation shall be open vertical construction sufficiently wide to provide free working space around the work installed and to provide ample space or backfilling and tamping. Trenches for pipe shall be cut to required grade lines, and compacted to provide accurate grade and uniform bearing for the full length of the line. The bottom of the trenches shall be free of rock or other sharp edged objects. Minimum cover shall be as follows:

Pipe and Wire Depth

Pressure Mainline 18" at top of pipe from Finish Grade Lateral Piping (rotor) 12" at top of pipe from Finish Grade Lateral Piping (pop-up) 12" at top of pipe from Finish Grade Control Wiring Side of main Line

B. Minimum Clearances: All pipelines shall have a minimum clearance of six inches from each other and from lines of other crafts. Parallel lines shall not be installed directly over one another. No lateral line shall be installed in the main-line trench.

3.04 INSTALLATION OF PIPING

- A. PVC Pipe and Joints: The Contractor shall not install solvent wild pipe when air temperature is below 40ø F. Installation shall be in accordance with the manufacturer's instructions.
- 1. Only the solvent recommended by the pipe manufacturer shall be used. All PVC pipe and fittings shall be installed as outlined and instructed by the pipe manufacturer, and it shall be the Contractor's full responsibility to make arrangements with the pipe manufacturer for any field assistance that may be necessary. The Contractor shall assume full responsibility for the correct installation.

3.05 BACKFILLING PROCEDURES

Initial backfill on PVC lines shall be pulverized native soil, free of foreign matter. Within radius of 4" of the pipe shall be clean soil or sand. Plant locations shall take precedence over sprinkler and pipe locations. The Contractor shall coordinate the location of trees and shrubs with the routing of lines and final head locations.

A. Backfill and Compaction: The Contractor shall leave trenches slightly mounded to allow for settlement after the backfilling is completed. The Contractor shall clean the site of the work continuously of excess waste materials as the backfilling progresses, and leave in a neat condition. No trenches shall be left open for a period of more than 48 hours. Protect open trenches as required.

The Contractor shall carefully backfill excavated materials approved for backfilling, consisting of earth, loam, sand, and other approved materials, free of rock and debris over 1" in size. Backfill shall be compacted to original density of surrounding soil without dips, sunken areas, or irregularities.

The Contractor shall conform to DOT requirements for methods and required compaction percentages, for roads and paving.

The Contractor shall hand place the first 6" of backfill (or to top of pipe) and have it walked on so as to secure the position of the pipe and wire.

No wheel rolling will be allowed. The Contractor shall remove rock or debris extracted from backfill materials and dispose of offsite. The Contractor shall fill any voids left in backfill with approved backfill materials.

- B. Existing Lawns: Where trenching is required across existing lawns, uniformly cut strips of sod 6" wider than trench. The Contractor shall remove sod in rolls of suitable size for handling and keep moistened until replanted. The Contractor shall replant sod within 48 hours after removal, roll and water generously. The Contractor shall resod any areas not in healthy condition equal to adjoining lawns 10 days after
- C. Seeded Area: Trenching will be required across existing seeded areas, primarily roadway edging. The Contractor shall conform to the requirements of seeding, Section 02930 for the reseeding of the disturbed trench area.
- D. Pavements: Jack and bore or directional bore piping under paving materials as per local regulatory codes. No cutting and patching of pavement will be permitted.

3.06 VALVES

- A. Isolation Valves: Shall be sized corresponding to adjacent pipe size. Specified valve boxes shall be installed flush with finish grade in such a manner that surface forces applied to their exposed area will not be transmitted to the piping in which the valve is installed nor any other piping, wiring or other lines in the vicinity of said valves.
- B. Gate Valves: Install where shown, in valve boxes.
- C. Electric Control Valves: Shall be installed in specified valve boxes. The valve shall have 6" of 3/4" pea gravel installed below the bottom of the valve. If the valve box does not extend to the base of the valve, a valve box extension shall be installed. Electric control valves shall be installed where shown and grouped together where practical. The Contractor shall place no closer than 24" to walk edges, bikeway edges, buildings and walls. The Contractor shall adjust the valve to provide flow rate or rated operating pressure required for each sprinkler circuit.

3.07 CONDUIT AND SLEEVES

A. Conduit and Sleeves for Control Wiring and Main/Lateral Pipe: The Contractor shall provide and install where necessary. Contractor shall coordinate locations of previously installed sleeving with the General Site

The Contractor shall coordinate installation of sleeves with work of other disciplines.

- A. The Contractor shall connect electric control valves to controllers in a clockwise sequence to correspond with station settings beginning with Stations 1, 2, 3, etc. Automatic controllers shall be provided and installed by the Contractor as noted on the drawings. All zones will be labeled on the controller.
- B. Controllers shall be equipped with lightning protection and grounded to a standard 5/8" copper clad steel ground rod driven a minimum of 8' into the ground and clamped.
- C. The electrical service to the controllers shall be performed by an electrical subcontractor in compliance with NEC requirements.

3.09 CONTROL WIRE

- A. Control wiring between the controller and electric valves shall be buried in main line trenches or in separate trenches. Electrical connection at valve will allow for pigtail so solenoid can be removed from valve with sufficient slack to allow ends to be pulled 12" above ground for examination and cleaning.
- B. An expansion loop shall be provided at every valve at 100' o.c. Expansion loop shall be formed by wrapping wire at least eight times around a 3/4" pipe and withdrawing pipe.
- C. The wire shall be bundled and taped every ten feet. The wire shall be laid in the trench prior to installing the pipe being careful to install wire beneath and 6" to the side of the main pipe line.
- D. Electrical connections to electric control valves shall be made with Rainbird Pen-Tite or Techdel GT-3-GEL -Tite connectors or equal.

Power Connections: Electrical connections to power and signal wires shall be made using 3M 82-A2 power cable splice kits.

3.10 SPRINKLER HEADS

A. General Provisions:

- 1. Sprinkler heads shall be installed as designated on the shop drawings. Heads shall be installed on flexible PVC. Top to be flush with finish grade or top of curb.
- 2. Spacing of heads shall not exceed the maximum indicated on the shop drawings (unless directed by the Landscape Architect). In no case shall the spacing exceed the maximum recommended by the manufacturer.

B. Head Types:

- 1. Pop-up- Rotary Sprinkler Heads: Shall be installed on flex joint and be set with top of head flush with finish grade. Heads installed at curb shall have 6" to 10" between perimeter of head and concrete. Heads placed at edge of pavement having no curb shall be installed 24" from edge of pavement.
- 2. Spray Pop-up Sprinkler Heads: Shall be installed on flexible PVC and be set with top of head flush with finished grade. Sprinkler heads placed adjacent to curbs will be installed 9" from concrete. Sprinkler heads placed adjacent to pavement having no curb shall be installed 24" from the edge of pavement.

3.11 COMPLETION

A. Flushing: Before sprinkler heads are set, the Contractor shall flush the lines thoroughly to make sure there is no foreign matter in the lines.

The Contractor shall flush the main lines from dead end fittings for a minimum of five minutes under a full head of pressure.

B. Testing: The Contractor shall notify Landscape Architect and Owner forty-eight (48) hours in advance of

Prior to backfilling of main line fittings, Contractor shall fill the main line piping with water, in the presence of the Owner/Landscape Architect, taking care to purge the air from it by operating all the sprinkler control valves one or more times and/or such other means as may be necessary. A small, high pressure pump or other means of maintaining a continuous water supply shall be connected to the main line and set so as to maintain 100 PSI in the main line system for two (2) hours without interruption. When this has been accomplished and while the pressure in the system is still 100 PSI, leakage testing shall be performed in accordance with AWWA Standard C-600. Pressure readings shall be noted and make up water usage shall be recorded. Should the rate of make up water usage indicate significant leakage, the source of such leakage shall be found and corrected and the system then retested until the Owner/Landscape Architect is satisfied that the system is reasonably sound. Lateral line testing shall be conducted during the operating testing of the system by checking visually the ground surface until no leaks in this portion of the system are evident. Leaks shall be repaired or paid for by the Contractor at any time they appear during the warranty period.

C. Adjustment and Coverage of System: Coordinate pressure testing with adjustments and coverage test of system so both may occur at the same time. The Contractor shall balance and adjust the various components of the system so that the overall operation of the system is most efficient. This includes a synchronization of the controllers, adjustments to pressure regulators, pressure relief valves, part circle sprinkler heads, and individual station adjustments on the controllers.

3.12 WARRANTY

- A. The Contractor shall fully warrant the landscape irrigation system for a period of one (1) year after the written final acceptance and will receive a written confirmation from the Landscape Architect that the warranty period is in effect.
- B. During the warranty period, the Contractor will enforce all manufacturer's and supplier's warranties as if made by the Contractor himself. Any malfunctions, deficiencies, breaks, damages, disrepair, or other disorder due to materials, workmanship, or installation by the Contractor and his suppliers shall be immediately and properly corrected to the proper order as directed by the Owner and/or Landscape
- C. Any damages caused by system malfunction shall be the responsibility of the Contractor who shall make full and immediate restoration for said damages.

3.13 WELL SPECIFICATION

WS-A. REFERENCE: General Provisions of the Contract, including General, Special and Supplementary Conditions and Division One General Requirements, apply to work specified in this section.

WS-B. DESCRIPTION OF WORK:

- A. Furnish all materials, equipment, labor, supervision and all related items necessary to complete this phase of the work as
- indicated on the drawings and/or specified herein. B. Capacity. Provide wells with minimum continuing producing capacity as follows: 70 GPM & 95 GPM
- C. Extent: Water well work is shown on drawings.
- D. Work: Includes furnishing all materials, equipment, labor, supervisors and all related items necessary to complete this phase of work, as indicated on drawings and specified herein. E. Water well: Work is based on following criteria:
- 1. Type and size of well will be such as to assure a constant flow of water as indicated on irrigation plans.
- 2. Water shall be sand free with the minimum amount of iron or tanning possible in a given geographic location. 3. Driven steel case wells shall be driven to a depth into best rock formation — water bearing stratus. 4. Rotary drilled well, PVC cased shall be drilled a minimum of 5 inches larger than the casing diameter. Depth as required to obtain the best water quality available in a given geographic location.
- 5. A minimum of 20 feet of slotted stainless steel mesh shall extend from bottom of easing and shall be gravel packed.
- 6. Casing shall be grouted to meet all state well drilling codes. 7. Applications and permits for drilling and developing wells.
 - Drilling for final water well depth Development of wells
 - Testing and disinfection
 - d. Setting of pumps and coordination to provide power for pumps
- F. Site Inspection: Contractor shall acquaint himself with all site conditions. Submission of his proposal shall be considered evidence that the examination has been conducted. Should utilities not shown on the plans be found during excavations, Contractor shall promptly notify the Owner's Represenative for instructions as to further action. Failure to do so will make Contractor liable for any and all damage thereto arising from his operations subsequent to discovery of such utilities not shown in plans.

WS-C QUALITY ASSURANCE:

- A. Protecting Water Quality: Take precautions to prevent contaminated water or water having undesirable physical or chemical characteristics from entering stratum from which well is to draw is supply. Prevent contaminated water, gasoline, etc., from entering well either through opening or by seepage through ground surface.
- B. Contamination: If well becomes contaminated or water having undesirable physical or chemical characteristics enters well due to neglect, provide casings, seals sterilizing agents or other materials to eliminate contamination or shut off undesirable water. Provide remedial work at no cost to the Owner. C. Exercise Care: In performance of work to prevent breakdown or caving in of strata overlying that from which water is to be
- drawn. Develop, pump or bail well until water pumped from well is substantially free from sand. D. Protect Work: To prevent either tampering with well or entrance of foreign matter. Upon completion, provide temporary well
- E. Driller's Requirements: Experienced foreman or driller to be constantly in control of well site and who has authority to take orders from Owner's Representative and, upon request, furnish well drilling information desired by Owner's Representative.
- F. Abandonment of Drilling: If it becomes necessary to abandon drillings operations before completion of water producing well, follow regulations for abandonment of well as required by local authorities having jurisdiction. Should abandonment of drilling be necessary due to poor workmanship or negligence on part of the Contractor, no compensations will be allowed. Should abandonment of drilling necessary due to inadequate supply of good quality water, or for such other reason that Owner's Representative deems to be no fault of the Contractor, compensation for work will be based o unit prices in contract.

WS-D SUBMITTALS:

- A. Shop Drawings: Submit in accordance with General Conditions of the Contract for construction. Shop drawings shall include manufacturer's product specifications and installation instructions. Include other data as may be required to show compliance with these specifications. Distribute an additional copy of each installation instruction to the Installer.
- B. Samples, Records and Reports: Take samples of sub-strata formation at ten-foot intervals and at changes in formation throughout entire depth of well. Furnish samples of water—bearing formation to qualified testing laboratory and well screen manufacturer for mechanical sleeve analysis. C. Provide Owner's Representative the following information for record purposes:
 - 8. Casings diameter, thickness, weight per foot of length, depth below grade 9. Screen — diameter, opening size
 - Pumping test static water level, maximum safe yield, drawn down at maximum yield 11.Log — formation log indication strata encountered
- Alignment certification that well is aligned and plumb within specified tolerances D. Salt Content: If well driller has knowledge that salt content may be present at 2" pilot well will be drilled not to exceed 700
- P.P.M. salt content. E. Submit Manufacturer's specifications: installation and start-up instructions, characteristics performance curves with selection points clearly indicated, shop

drawinas. wiring diagrams, and maintenance data including spare parts lists,

WS-E WARRANTY: Provide warranty covering all material, workmanship and performance of well for a period of one (1) year after Final Acceptance.

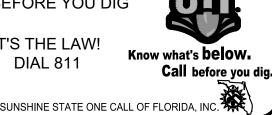
for each types in each of the following.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

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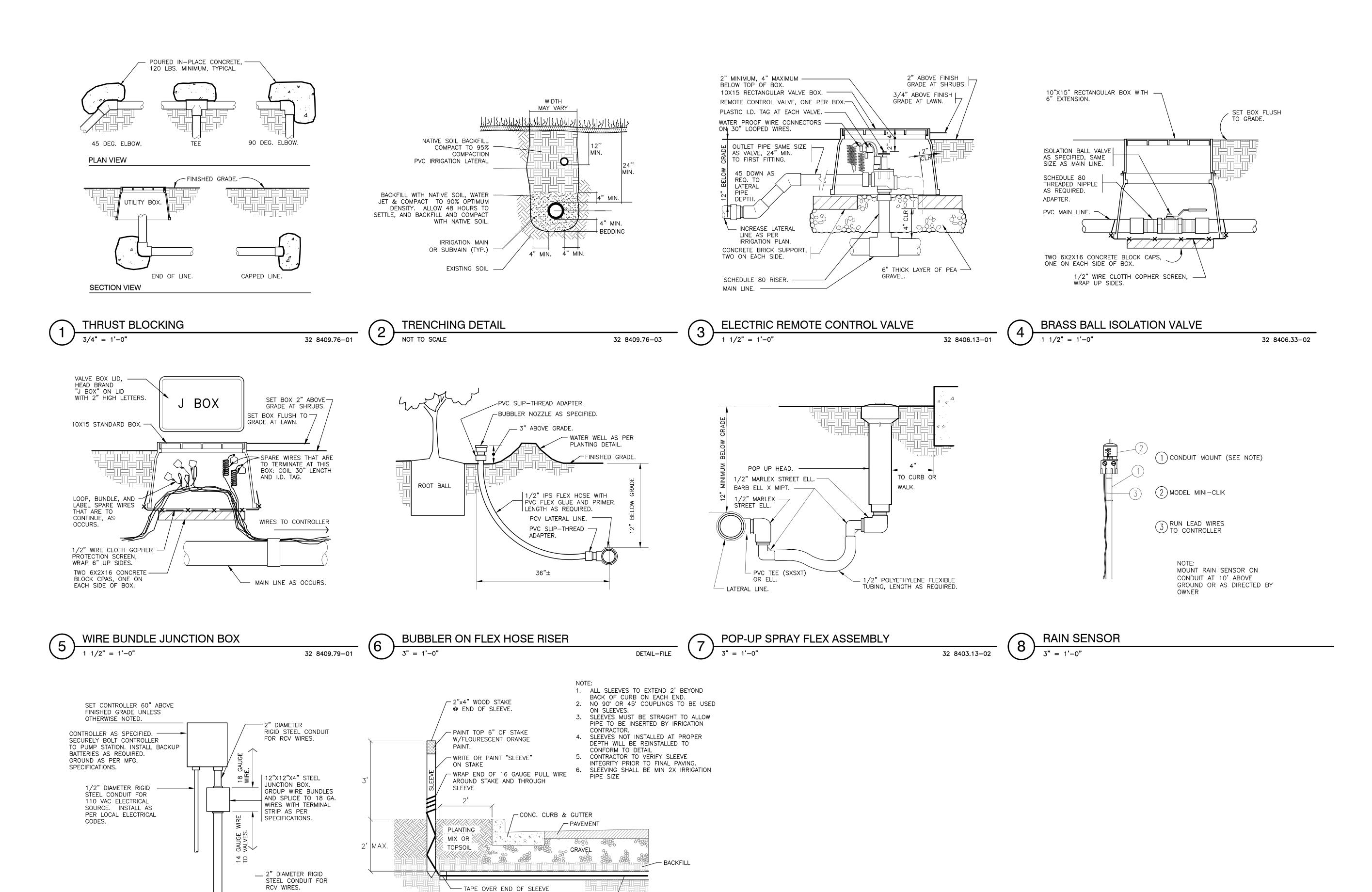
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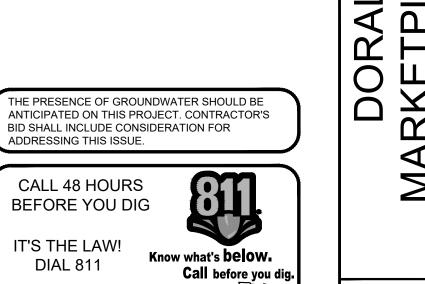
IRRIGATION SLEEVING

16 GAUGE PULL WIRE ----

__USE PVC SCH. 40 BELOW GRADE.

DETAIL-FILE

PUMP STATION MOUNTED CONTROLLER



ADDRESSING THIS ISSUE.

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SUNSHINE STATE ONE CALL OF FLORIDA, INC.

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L-351

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MOPS PRIVATE LIFT STATION DETAILS

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HARDSCAPE ENLARGEMENT

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PROJECT TEAM

OWNER/DEVELOPER PHONE: (561) 685-2648

ARCHITECT

LIST OF CONTACTS:

PLANNING AND ZONING DEPARTMENT

MIAMI DADE COUNTY PLANNING DEPARTMENT 11805 SW 26TH STREET MIAMI FL, 33175 CONTACT: DOUGLAS TROTTIN TEL: (786) 315-2650 FAX (305) 375-3968

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MIAMI FL, 33130 CONTACT: CAMILO IGNACIO TEL: (305) 372-6681 FAX: (305) 374-6481

NATURAL GAS FLORIDA CITY GAS 4045 NW 97TH AVE, DORAL, FL 33178 CONTACT: TEL: (888)248-9427

CIVIL ENGINEER

SURVEYOR JOHN PULICE

PULICE LAND SURVEYORS, INC

ELECTRIC FLORIDA POWER & LIGHT CO. 14250 SW 112TH STREET MIAMI. FLORIDA 33186

CONTACT: ULISES PEREZ TEL: (305) 387-7935 FAX: (305) 387-6651

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FAX: (305) 375-4974

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3575 SOUTH LEJEUNE ROAD MIAMI, FLORIDA 33133 CONTACT: LAZARO A. GUERRA, P.E. TEL: (786) 268-5220 FAX: (786) 268-5141

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TRAFFIC

FLORIDA DEPARTMENT OF TRANSPORTATION 1000 N.W. 111TH AVENUE MIAMI, FL 33172 CONTACT: ALI-AL-SAID, P.E. TEL: (305) 470-5367 FAX: (305) 470-6725

CABLE

AT&T BROADBAND 2601 SW 145TH AVENUE MIRAMAR, FLORIDA 33027 DAVID MCBRIDE



CONSTRUCTION PLANS

FOR

BRIDGE DORAL NORTH

NW 41ST STREET & NW 107TH AVE

LOCATED IN

DORAL, FLORIDA 33178

NE 1/4 OF SECTION 30, TOWNSHIP 53S, RANGE 40E

T-24918

LOCATION MAP 1" = 1,000'

PROJECT LOCATION

ELEVATIONS ARE BASED ON NATINAL GEODETIC VERTICAL DATUM OF 1929. MIAMI-DADE COUNTY BENCHMARK #N-3065; ELEVATION: 8.03 FEET.

PREPARED BY:
Kimley >>> Horn



Sheet Number	Sheet Title		H	
C-000	COVER SHEET	ON THE DATE ADJACENT TO THE	UST	
C-001	GENERAL NOTES) EN	ZE M	
C-002	LAND TITLE SURVEY	DJAC	ATU	
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C-101	PHASING PLAN	RE	AND	
C-104	SITE DETAILS	PETER J. VAN RENS, P.E.		
C-200	OVERALL PAVING GRADING AND DRAINAGE PLAN	ER J.	SIGI	_
C-201	PAVING AND DRAINAGE PLAN	PET	RED	
C-202	PAVING AND DRAINAGE PLAN	D BY	SIDE	l _
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SHEET NUMBER C-000

WATER/SEWER AGREEMENT # 32245

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE. **BEFORE YOU DIG**

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ENGINEERS CERTIFICATION:

THIS PLAN WAS PREPARED UNDER MY DIRECTION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF COMPLIES WITH THE INTENT OF THE MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, AS ADOPTED BY THE STATE OF FLORIDA LEGISLATURE, CHAPTER 72-328 F.S.

- ELEVATIONS SHOWN HEREON ARE BASED ON MIAMI-DADE COUNTY BENCHMARK #N-3065; ELEVATION:
- THE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND BECOMING FAMILIAR WITH THE SITE PRIOR TO CONSTRUCTION AND BIDDING.
- 4. THE CONTRACTOR SHALL ADHERE TO ALL NOTES PROVIDED IN THESE CONSTRUCTION DRAWINGS.
- 5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PERMITTED CONSTRUCTION DOCUMENTS. ANY DEVIATION FROM THE APPROVED CONSTRUCTION DOCUMENTS SHALL BE THE SOLE RESPONSIBILITY OF THE ORGANIZATION AND/OR ENTITY RESPONSIBLE FOR THE INSTALLATION TO UPDATE/REPLACE ANY DEFICIENT MATERIAL/EQUIPMENT NECESSARY TO BRING THE FINAL PRODUCT TO THE STANDARDS OF THE PERMITTED CONSTRUCTION DOCUMENTS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL/DISPOSAL OF ANY UNSUITABLE MATERIAL FROM HIS OPERATION, FURNISHING AND COMPACTING SUITABLE REPLACEMENT BACKFILL MATERIAL IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INCLUDING RIGHT-OF-WAY PERMITS, AND INSURANCE REQUIRED FOR THE PROJECT.
- 8. THE LOCATION OF ALL UTILITIES SHOWN ON THE DRAWINGS ARE FROM INFORMATION PROVIDED BY THE SURVEYOR, THE CITY OF DORAL AND FIELD OBSERVATIONS.
- 9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM, IN THE FIELD, THE LOCATIONS AND
- ELEVATIONS SHOWN PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 10. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND BUILDING PLACEMENT WITH ALL OTHER UTILITIES CONSTRUCTION. 11. CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE EROSION AND TURBIDITY CONTROLS DURING
- AND FOLLOWING CONSTRUCTION UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED TO AVOID ADVERSE ENVIRONMENTAL IMPACTS TO OFF-SITE PROPERTY AND DRAINAGE SYSTEMS.
- 12. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STORMWATER POLLUTION PREVENTION PLAN INCLUDED HEREIN.
- 13. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH THESE CONSTRUCTION PLANS AND PROJECT SPECIFICATIONS.
- 14. ALL AREAS OF DISTURBED EXISTING OR PROPOSED CITY, COUNTY, OR STATE RIGHT-OF-WAY SHALL
- 15. THE CONTRACTOR SHALL PROVIDE A TEMPORARY WATER SERVICE OR WATER TRUCK FOR WASH-DOWN OF VEHICLES LEAVING THE PROJECT SITE IF NECESSARY.
- 16. THE CONTRACTOR(S) SHALL NOTIFY ALL APPLICABLE UTILITIES COMPANIES, THE ENGINEER OF RECORD, AND THE PROPERTY OWNER 48 HOURS PRIOR TO INITIATING ANY EXCAVATION ACTIVITIES, OR AS SPECIFIED BY THE UTILITIES COMPANIES AND THE PERMITS OBTAINED FOR THE WORK.
- 17. THE ENGINEER OF RECORD SHALL BE GIVEN FORTY EIGHT HOURS (48-HR) NOTICE OF ALL MEETINGS AND OR TESTING MEASURES RELATED TO SAID PROJECT.
- 18. THERE ARE TO BE NO OPEN TRENCHES AT THE DAY'S END.
- 19. WHERE TRENCH EXCAVATION EXCEEDS FIVE (5) FEET IN DEPTH, THE CONTRACTOR SHALL SUBMIT A TRENCH SAFETY SYSTEM FOR APPROVAL. THE TRENCH SAFETY SYSTEM SHALL BE COMPLIANT WITH OSHA STANDARD 29 CFR SECTION 1926.650 SUBPART P. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION THAT THE TRENCH SAFETY SYSTEM IS IN COMPLIANCE WITH THE STATED OSHA
- 20. CONSTRUCTION WARNING SIGNS ARE TO BE MOUNTED AND ERECTED BEFORE CONSTRUCTION CAN COMMENCE. THESE AND ALL TRAFFIC CONTROL DEVICES SHALL FOLLOW THE STANDARDS SET FORTH BY THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS WELL AS FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX.
- 21. THE CONTRACTOR IS RESPONSIBLE FOR CLEARLY IDENTIFYING THE AREA OF CONSTRUCTION AND SAFELY ROUTING ALL VEHICULAR AND PEDESTRIAN TRAFFIC AROUND THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARLY MARKED AT ALL TIMES.
- 22. THE CONTRACTOR(S) SHALL LOCATE, VERIFY, AND IDENTIFY ALL EXISTING UNDERGROUND UTILITIES

SHOWN OR NOT SHOWN ON THE PLANS PRIOR TO ANY EXCAVATING ACTIVITIES.

- 23. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION AND TAKE ALL MEASURES NECESSARY TO PROTECT UTILITIES DURING CONSTRUCTION. SHOULD ANY UTILITY LINE OR COMPONENT BECOME DAMAGED OR REQUIRE RELOCATION THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPONSIBLE UTILITY COMPANY, THE ENGINEER OF RECORD, AND THE COUNTY.
- 24. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES, SURVEY MONUMENTS, MARKERS, CORNERS, AND EXISTING FEATURES IN THE AREA. ANY DAMAGE SHALL BE REPLACED/REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY HIS OPERATIONS.
- 26. A COPY OF THE CONTRACTORS GENERAL LICENSE AND /OR UNDER GROUND UTILITY LICENSE SHALL BE PROVIDED AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE.
- 27. USE OF ANY MATERIALS CLASSIFIED BY THE GEOTECHNICAL REPORT AS UNSUITABLE SHOULD NOT BE USED AS FILL SOIL UNLESS A METHOD OF MAKING THE MATERIAL SUITABLE IS APPROVED BY THE GEOTECHNICAL REPORT ENGINEER AND THE CLIENT.
- 28. TEMPORARY CONTROL OF GROUNDWATER SHOULD FOLLOW THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
- 29. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT FOR "SITE PREPARATION" FOR PROCEDURES IN PROPERLY PREPARING THE SITE FOR CONSTRUCTION OF FOUNDATIONS, PAVEMENT AND ALL ELEMENTS RELATED TO THIS PROJECT.
- 30. CITY OF DORAL DEVELOPMENT REVIEW INSPECTOR SHALL BE CONTACTED 24 HOURS PRIOR TO ALL NECESSARY SITE WORK INSPECTIONS AND 5 DAYS PRIOR TO THE FINAL INSPECTION.
- 31. IT IS THE RESPONSIBILITY OF THE APPLICANT TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH CITY OF DORAL STAFF AFTER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE CITY, AND PRIOR TO STARTING ANY SITE ACTIVITIES. THIS PRE-CONSTRUCTION MEETING WILL BE HELD IN CONJUNCTION WITH THE CITY OF DORAL UTILITY DEPARTMENT MANDATORY PRE-CONSTRUCTION
- 32. TO OFFSET POTENTIAL IMPACTS TO THE FLORIDA BONNETED BAT, THE APPLICANT WILL INCORPORATE BEST MANAGEMENT PRACTICES (BMPS) 1,5,6,7,11, AND 12 AS DESCRIBED ON APPENDIX D OF THE 2019 CONSULTATION KEY FOR THE FLORIDA BONNETED BAT (04EF2000-2014-i-0320-r001) PURSUANT TO THE TECHNICAL ASSISTANCE MEMORANDUM SUBMITTED TO USFWS AND THE USFWS APPROVAL RESPONSE (ECOSPHERE #2023-0031067), BOTH INCLUDED IN THE APPLICATION. 1 - ROOST SURVEYS WILL BE CONDUCTED WITHIN 30 DAYS OF CONSTRUCTION, DESPITE NOT YET OBSERVING EVIDENCE OF POTENTIAL ROOSTING/CAVITIES.
- 5 WETLAND HABITATS WILL BE CREATED/RESTORED WITHIN THE BIOSWALES TO REPLACE FUNCTION OF NATIVE HABITAT. THESE WILL BE ADJACENT TO THE OPEN WATER HABITAT OFF-SITE TO THE 6 - BIOSWALE EDGES WILL BE PLANTED WITH NATIVE VEGETATION.
- 7 INSECTICIDES WILL NOT BE SPRAYED WITHIN BIOSWALES 11 - THE ENTIRE SITE WILL HAVE DOWNWARD-FACING LIGHTS, AND LOW LUMEN LIGHTS WILL BE USED AROUND BIOSWALES. 12 - ENGINEERING DESIGNS WILL DISCOURAGE BATS FROM USING BUILDINGS/STRUCTURES.
- ADDITIONALLY, BRIDGE POINT DORAL 2700 LLC HAS DONATED TO THE FPL BAT LAB AT ZOO MIAMI THROUGH BAT CONSERVATION INTERNATIONAL TO BUILD AND INSTALL THREE ARTIFICIAL ROOSTS NEAR DORAL TO HELP PROTECT THIS RARE BAT FROM EXTINCTION. IF FLORIDA BONNETED BATS TAKE RESIDENCE WITHIN A STRUCTURE, THE PERMITTEE WILL CONTACT THE SERVICE AND FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION PRIOR TO ANY ATTEMPT OF REMOVAL OR WHEN CONDUCTING MAINTENANCE ACTIVITIES AROUND THE STRUCTURE.

SHOP DRAWING AND "AS-BUILT" REQUIREMENTS:

- THE CONTRACTOR SHALL SUBMIT AN ELECTRONIC SET OF SHOP DRAWINGS OF ALL STRUCTURES, EQUIPMENT, MATERIAL SPECIFICATIONS TO THE CONSTRUCTION MANAGER AND ENGINEER OF RECORD FOR APPROVAL PRIOR TO THE PURCHASE AND/OR INSTALLATION OF ANY STRUCTURES, EQUIPMENT,
- 2. THE CONTRACTOR SHALL OBTAIN SHOP DRAWING APPROVAL OF EQUIPMENT AND MATERIAL SPECIFICATIONS FROM THE ENGINEER OF RECORD AND SJCUD PRIOR TO THE PURCHASE OR INSTALLATION OF ANY EQUIPMENT OF MATERIAL.
- 3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRODUCE, SUBMIT AND OBTAIN APPROVAL OF REPRODUCIBLE "AS-BUILT" DRAWINGS FROM JURISDICTIONAL AGENCIES AS MAY BE REQUIRED.
- "AS-BUILT" INFORMATION SHALL BE MAINTAINED BY THE CONTRACTOR. CONTRACTOR SHALL EMPLOY THE SERVICES OF A SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO DETERMINE ALL "AS-BUILT" INFORMATION. UPON COMPLETION OF THE WORK THE CONTRACTOR SHALL PROVIDE UP TO SIX COPIES AND AN AUTOCAD FILE OF AS-BUILT DRAWINGS TO THE ENGINEER.
- THERE SHALL BE A MINIMUM THREE (3) DAYS NOTICE GIVEN FOR SCHEDULING THE FINAL INSPECTION.
- FIVE DAYS PRIOR TO THE FINAL INSPECTION TWO (2) SETS OF BLUELINE AS-BUILTS AND COPY ON DISK IN AUTOCAD FORMAT SHOWING THE REQUIRED INFORMATION, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD.

PAVING AND DRAINAGE NOTES:

- ALL GRADING, PLACEMENT OF FILL, AND COMPACTION SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- THE CONTRACTOR SHALL CONSTRUCT ALL DRAINAGE STRUCTURES TO THE DESIGN ELEVATIONS SHOWN AND IN COMPLIANCE WITH TYPICAL CONSTRUCTION DETAILS.
- 3. ALL PIPE LENGTHS SHOWN HEREIN ARE APPROXIMATE LENGTHS FROM CENTER TO CENTER OF THE RELATED
- 4. ALL PIPE LENGTHS ARE SCALED AND MAY REQUIRE SLIGHT FIELD ADJUSTMENTS TO FIT CONDITIONS. ALL PIPE CROSSINGS SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAX. DRY DENSITY (ASTM D1557) AT 1'
- THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE PAVING AND DRAINAGE FACILITIES WITH ALL OTHER CONSTRUCTION. WATER AND SANITARY SEWER ARE PROVIDED AS PART OF THESE CONSTRUCTION
- 6. ALL PIPE JOINTS SHALL BE PROPERLY FITTED AND SEALED PER PRODUCT MANUFACTURERS SPECIFICATIONS
- 7. THE CONTRACTOR SHALL COORDINATE ALL NOTIFICATIONS AND UTILITY LOCATION EFFORTS WITH THE UTILITY OWNERS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SEDIMENT AND EROSION CONTROL MEASURES DURING CONSTRUCTION. REFER TO THE CONSTRUCTION POLLUTION PREVENTION PLAN.
- 9. COMPACTION DENSITIES FOR ALL ROADWAY CROSSINGS ARE TO BE TAKEN IN ONE-FOOT (1') LIFTS.
- 10. LIMEROCK BEARING RATIOS FOR SUBGRADE AT FORTY (40) AND LIMEROCK OR ALTERNATIVE BASE COURSE AT ONE HUNDRED (100). THERE WILL BE NO UNDER TOLERANCE. CRUSHED CONCRETE IS AN ACCEPTABLE ALTERNATIVE TO LIMEROCK, ONLY IF IT MEETS THE SPECIFICATIONS DEFINED IN THE GEOTECHNICAL REPORT AS "BASE COURSE."
- 11. ALL MATERIAL USED FOR BACKFILL SHALL BE CLASS A3 FREE DRAINING SAND.
- THE CONTRACTOR SHALL ADHERE TO ALL NOTES PROVIDED IN THESE CONSTRUCTION DRAWINGS.
- 13. ALL CONSTRUCTION LINES & GRADES SHALL BE ESTABLISHED AND MAINTAINED BY THE CONTRACTOR.
- 14. CLEARING CONTRACTOR WILL CLEAR, GRUB AND DISPOSE OF ALL DEBRIS AND SURFACE ORGANICS TO FIRM MATERIAL IN ALL EASEMENTS, ROAD RIGHT-OF-WAYS AND DETENTION AREAS. DISPOSAL SHALL BE INCLUDED IN
- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF DOWNSTREAM TURBIDITY/ SILTATION THROUGH THE USE OF HAY BALES, SCREENS, SILTATION BASINS, CHEMICAL FLOCCULATION AND/OR ANY OTHER SUITABLE MEANS REQUIRED TO MEET FLORIDA STREAM STANDARDS. SEED AND MULCH ALL DISTURBED AREAS, SOD AS REQUIRED TO CONTROL EROSION THROUGH FINAL INSPECTION AND TO PRODUCE A UNIFORM STAND OF GRASS THROUGHOUT
- 16. STORM DRAIN CONTRACTOR SHALL BE RESPONSIBLE FOR BRICKING UP CURB INLETS TO FINISHED GRADE AND FURNISHING AND MAINTAINING ALL HARDWARE.
- 17. THE PAVING/CURB CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING CURB TRANSITIONS TO FINISH GRADE.
- 18. LUMP SUM PRICE FOR CLEARING AND GRUBBING SHALL INCLUDE THE CLEARING AND GRUBBING OF ALL
- 19. UNDERDRAINS SHALL BE INSTALLED IN ALL CASES WHERE THE SEASONAL HIGH WATER TABLE IS CLOSER THAN 12 INCHES BELOW THE PROPOSED SUBGRADE OF ANY ROAD, REGARDLESS OF PLANS. UNDERDRAINS SHALL BE STUBBED OUT 20' FROM ALL CURB INLETS FOR FUTURE POSSIBLE USE.
- 20. FILTER WRAP ALL DRAINAGE JOINTS TO FDOT SPECIFICATIONS.
- 21. A 2' STRIP OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS.
- 22. ALL POND SIDESLOPES SHALL BE STABILIZED WITH ESTABLISHED GRASS AT TIME OF FINAL INSPECTION.
- 23. ADA ACCESSIBLE RAMPS SHALL BE INSTALLED WHEREVER THE SIDEWALK MEETS THE CURB.
- 24. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTING ALL ADA PARKING SPACES AND ACCESSIBLE ROUTE. PURSUANT TO ADA GUIDELINES 4.6.3. IF THERE ARE DESCREPENCIES IN THE CONSTRUCTION DRAWINGS REGARDING GRADES ON SLOPES COMPARED TO ADA REQUIREMENTS. CONTRACTOR SHALL NOTIFY ENGINEER FOR CLARIFICATION, PRIOR TO IMPLEMENTATION. CONTRACTOR WILL BE RESPONSIBLE FOR ANY PAVEMENT, PARKING STALLS, SIDEWALKS, OR OTHER ADA ELEMENTS ASSOCIATED WITH THIS PROJECT THAT DOES NOT CONFORM TO ADA GUIDELINES AND THE INTENT OF THESE PLANS.
- 25. ALL ROADWAYS, DRIVEWAYS, AND BUILDING PAD LOCATIONS SHOULD BE PROOF ROLLED PRIOR TO IMPORTATION OF ADDITIONAL FILL OR SUBBASE MATERIAL (LIMEROCK OR CRUSH-CRETE). IN THE EVENT THAT PROPOSED COMPACTION AND DENSITIES CANNOT BE ACHIEVED, CONTRACTOR SHALL NOTIFY ENGINEER TO AID IN DETERMINING LIMITS OF UNSUITABLE MATERIALS.
- 26. ALL DRAINAGE PIPES INSTALLED WITHIN PUBLIC ROADWAY RIGHT-OF-WAYS/EASEMENTS SHALL BE TELEVISED BY A COMPANY OR INDIVIDUAL CERTIFIED TO PERFORM SUCH WORK PER LDC 6.04.07.L.5.G. THIS REQUIREMENT MAY ONLY BE WAIVED ON PRIVATE SITES IF THE ENGINEER OF RECORD CERTIFIES BY LETTER THAT THE SITE DOES NOT RECEIVE ANY RUNOFF FROM CITY OF DORAL RIGHT-OF-WAYS. IF THERE IS ANY CONNECTION OR RELATIONSHIP BETWEEN THE PROJECT SITE AND A CITY OWNED OR MAINTAINED DITCH, POND, OR STRUCTURE, IT SHALL BE REQUIRED. THIS TELEVISING OF THE DRAINAGE LINE SHALL BE DONE IN COLOR AND SHALL BE OF SUCH QUALITY AS TO VISUALLY IDENTIFY THE PROPER CONSTRUCTION OF ALL JOINTS AND PIPE ALIGNMENT. A VIDEO TAPE SHALL BE PROVIDED TO THE CITY UPON COMPLETION. THE TELEVISING OF THE DRAINAGE LINES SHALL BE PERFORMED AFTER THE PLACEMENT OF THE BASE MATERIAL AND PRIOR TO THE FINAL WEARING SURFACE OF THE ROADWAY. THE APPROVAL, BY THE COUNTY, OF THE TELEVISING SHALL BE REQUIRED PRIOR TO THE PLACEMENT OF THE FINAL WEARING SURFACE OF THE ROADWAY. TELEVISED RECORDS SHALL BE REVIEWED AND CERTIFIED BY THE ENGINEER OF RECORD (EOR).

SIGNAGE AND PAVEMENT MARKING NOTES:

- ALL SIGNS MUST MEET FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARDS FOR ENGINEERING GRADE SIGN FACES IN REFLECTIVITY.
- 2. ALL FINAL PAVEMENT MARKINGS WITHIN THE RIGHT-OF-WAYS SHALL BE THERMOPLASTIC.
- 3. ALL SIGNS SHALL BE ON A TEN-FOOT (10') POLE A MINIMUM SEVEN FEET (7') FROM THE GROUND.
- 4. STREET SIGNS SHALL BE MOUNTED WITH TEE CAPS.
- 5. STREET SIGNS SHALL BE SIX INCHES (6") WIDE WITH GREEN BACKINGS AND WHITE LETTERS AND
- 6. STOP SIGNS SHALL BE A MINIMUM TWENTY FOUR INCH BY TWENTY FOUR INCH (24" X 24").
- 7. STOP SIGNS ARE TO BE PLACED FOUR FEET (4') FROM BACK OF CURB, FOUR FEET (4') BEHIND CROSS WALKS AND ON RIGHT HAND SIDE OF THE ROAD.
- STOP BARS SHALL BE TWENTY-FOUR INCHES (24") WIDE AND LANE WIDTH. ALL STOP BARS SHALL
- 9. ALL SIGNS SHALL BE SIZED IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS. **DEMOLITION NOTES:**
- ALL CODES REGULATING DEMOLITION WORK SHALL BE COMPLIED WITH. THE CONTRACTOR SHALL PUT UP AND MAINTAIN SUCH BARRIERS AND WARNING LIGHTS, AS MAY BE NECESSARY OR REQUIRED BY CODE, TO PROTECT AND PREVENT UNAUTHORIZED PERSONNEL FROM ENTERING THE DEMOLITION WORK AREA. ALL DEMOLITION OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) INSOFAR AS THEY APPLY TO DEMOLITION WORK TO BE PERFORMED UNDER THIS CONTRACT.
- 2. PROTECTION OF BUILDINGS & EQUIPMENT TEMPORARY PROTECTIVE DEVICES, AS REQUIRED SHALL BE INSTALLED ADJACENT TO THE DEMOLITION WORK FOR PROTECTION OR PERSONNEL, EXISTING ADJACENT BUILDINGS, STRUCTURES AND EQUIPMENT AGAINST DUST, FALLING OR FLYING DEBRIS. ANY DAMAGE TO EXISTING STRUCTURES, FACILITIES AND/OR EQUIPMENT RESULTING FROM DEMOLITION WORK SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 3. DISPOSAL OF EXISTING EQUIPMENT & DEBRIS ALL DEBRIS AND EXISTING MATERIALS AND EQUIPMENT SHALL BE HAULED AWAY AND DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR OBTAINING DISPOSAL AREAS. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT SPILLAGE OF MATERIALS BEING HAULED IN PUBLIC STREETS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO IMMEDIATELY CLEAN UP ANY SPILLAGE WHICH MAY ACCIDENTALLY OCCUR.
- THE CONTRACTOR SHALL MAINTAIN AN ORDER OF NEATNESS AND GOOD HOUSEKEEPING. TOOLS, SCAFFOLDING AND OTHER DEMOLITION EQUIPMENT MUST AT ALL TIMES BE KEPT IN A NEAT AND ORDERLY ARRANGEMENT. AT THE CONCLUSION OF THE DEMOLITION OPERATIONS, THE ENTIRE WORK AREA SHALL BE LEFT IN A CLEAN CONDITION AS REQUIRED FOR SUBSEQUENT NEW WORK.

UTILITY NOTES:

- 1. ALL WATER, SEWER, AND REUSE WORK MUST BE PERFORMED IN ACCORDANCE WITH SJCUD WATER AND SEWER STANDARDS, DETAILS, AND SPECIFICATIONS AS WELL AS ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- 2. ALL EQUIPMENT AND MATERIALS SHALL COMPLY WITH THE SJCUD STANDARDS AND SPECIFICATIONS.
- 3. WHERE IT IS NOT POSSIBLE FOR WATER AND SEWER (INCLUDING STORM) LINES TO CROSS WITH A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE, A FULL-UNCUT LENGTH OF WATER QUALITY PIPE (i.e. DR 18 AWWA C-900 FOR NEWLY INSTALLED SEWER & DR 25 AWWA C-900 WATER) WHICH IS ÙSUALLY 20 FEET LONG WILL BE CENTERED ON THE POINT OF CROSSING. THE CONTRACTOR WILL FIELD VERIFY THE VERTICAL SEPARATION. THE MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER (INCLUDING STORM) PIPES WHEN 18 INCHES IS NOT POSSIBLE WILL BE 6 INCHES OUTSIDE DIAMETER TO OUTSIDE DIÁMETER. IT IS PREFERABLE TO HAVE THE WATER MAIN ABOVE THE SEWER LINES AND AT LEAST 18 INCHES VERTICAL SEPARATION.
- 4. A FULL UNCUT LENGTH OF WATER MAIN PIPE (USUALLY 20 FEET) SHALL BE CENTERED AT THE POINT OF CROSSING OF ALL WATER AND SEWER (INCLUDING STORM) LINES AT THE POINT OF CROSSINGS REGARDLESS OF THE VERTICAL SEPARATIONS.
- 5. IN THE CASE WHERE SOLVENT CONTAMINATION IS FOUND IN TRENCH, WORK WILL BE STOPPED AND THE PROPER AUTHORITIES NOTIFIED. WITH THE APPROVAL OF THE ST. JOHNS COUNTY HEALTH DEPARTMENT, DUCTILE IRON PIPE, FITTINGS AND APPROVED SOLVENT RESISTANT GASKET MATERIAL SHALL BE USED IN THE CONTAMINATE AREA. THE DUCTILE IRON PIPE WILL EXTEND AT LEAST 100 FEET BEYOND ANY DISCOVERED SOLVENT.
- 6. IN REGARD TO THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE, THE BACTERIOLOGICAL SAMPLE POINTS SHALL BE INDICATED IN RED OR PINK ON THE RECORD OR AS BUILT DRAWINGS. THE SAMPLE NUMBERS WILL CORRESPOND TO THOSE ON THE BACTERIOLOGICAL SAMPLE LAB SHEETS.
- 7. THE RECORD OR "AS BUILT" DRAWINGS TO BE PREPARED BY THE CONTRACTOR AND SUBMITTED AT THE TIME OF THE REQUEST FOR A LETTER OF RELEASE TO PLACE THE CONSTRUCTION INTO SERVICE WILL CLEARLY DEPICT THE VERTICAL CLEARANCES BETWEEN WATER AND SEWER (INCLUDING STORM) LINES AT ALL CROSSING AND PARALLEL RUNS WHERE THE HORIZONTAL SEPARATION IS LESS THAN 10 FEET. IN ADDITION, THE CENTERING OF UNCUT LENGTHS OF PIPE (USUALLY 20 FEET) AT POINTS OF CROSSINGS WILL BE DOCUMENTED ON THE DRAWINGS AND ALL MITIGATING CONSTRUCTION MEASURES CLEARLY DEPICTED IN CASES WHERE A MINIMUM OF 18 INCHES OF VERTICAL CLEARANCE BETWEEN THE WATER AND SEWER (INCLUDING STORM) LINES IS NOT POSSIBLE.
- 8. EXISTING UTILITIES SHOWN ON THESE PLANS HAVE BEEN LOCATED PER THE BEST MEANS AVAILABLE WITHOUT EXCAVATION. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- 9. VERTICAL LOCATIONS OF ALL UTILITIES (EXCLUDING EXISTING STORM SEWERS) SHOWN ON PLAN AND PROFILE SHEETS HAVE BEEN ASSUMED. CONTRACTOR SHALL EXERCISE CAUTION DURING EXCAVATION NEAR EXISTING UTILITIES SHOWN ON THE PLANS AND NOTIFY THE ENGINEER IF LOCATION DIFFERS FROM THAT SHOWN ON THE PLANS BEFORE CONTINUING WITH CONSTRUCTION.
- 10. SHOULD CONDITIONS VARY FROM THOSE SHOWN ON THESE PLANS THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO CONTINUING CONSTRUCTION.
- 11. ALL WATER AND SEWER CONSTRUCTION SHALL BE ACCOMPLISHED BY AN UNDERGROUND UTILITY CONTRACTOR LICENSED UNDER THE PROVISIONS OR CHAPTER 489, FLORIDA STATUTES.
- 12. ALL UNDERGROUND UTILITIES TO BE INSTALLED SHALL BE IN ACCORDANCE WITH THE SJCUD SPECIFICATIONS AND THE APPROVED SITE PLANS.
- 13. ALL WATERMAINS AND FORCEMAINS SHALL HAVE A MINIMUM OF 36" COVER FROM FINISHED GRADE. ALL UTILITY PIPELINES ARE DESIGNED TO FINISHED GRADE AND SHALL BE PROTECTED FROM DAMAGE
- 14. UNSUITABLE MATERIALS UNDER WATER AND SEWER MAINS SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL PROPERLY COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557).
- 15. ALL CURB STOPS ARE TO BE FORD BALL-TYPE WITH LOCKING CAPACITY. 1" MINIMUM.
- 16. NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSEI WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, CLEARED FOR SERVICE AND ACCEPTED FOR MAINTENANCE BY SJCUD AND FDEP.
- 17. CONTRACTOR IS RESPONSIBLE FOR PROPER NOTIFICATION OF INSPECTING AUTHORITIES BEFORE AND DURING CONSTRUCTION.
- 18. MECHANICAL RESTRAINTS ARE REQUIRED WHERE WATER MAINS AND FORCE MAINS ARE TERMINATED AND AT ALL BENDS. ANY VERTICAL CONFLICT CROSSING USING FITTING SHALL BE RODDED THROUGHOUT THE CROSSING. WHERE FORCE MAINS OR WATER MAINS ARE LAID WITHOUT FITTINGS, THE MAXIMUM DEFLECTION SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE PIPE USED.
- 19. FITTINGS SHALL BE USED AT LOCATIONS INDICATED ON THE PLANS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 20. ALL UNDERGROUND VALVES SHALL BE INSTALLED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH TOP SET TO FINAL GRADE IN ACCORDANCE WITH COUNTY DETAILS AND SPECIFICATIONS. 21. HYDRANTS CONNECTED TO A CENTRAL UTILITY AND ARE OWNED & MAINTAINED BY THAT UTILITY
- COMPANY SHALL BE COLORED CHROMIUM YELLOW WITH WHITE REFLECTIVE CAPS. 22. HYDRANTS SHALL BE INSTALLED SO LARGE DIAMETER (4.5 INCH) OUTLET IS FACING THE ROADWAY
- 23. HYDRANTS SHALL BE INSTALLED SO CENTER OR LOWEST OUTLET IS MINIMUM OF 18 INCHES ABOVE
- 24. HYDRANTS SHALL OPEN COUNTER CLOCKWISE.
- 25. BLUE ROAD REFLECTORS SHALL BE INSTALLED IN THE CENTER OF THE ROAD IN FRONT OF THE HYDRANT. (LDC 6.03.03)

- NOTICE OF PROCEDURE:
 26. ALL COMMERCIAL BUILDING PERMITS AND METERS TO BE PROCESSED THROUGH SJCUD WATER AND SEWER CUSTOMER SERVICE SHALL BE ACCOMPANIED BY A SET OF APPROVED CIVIL DESIGN PLANS.
- 27. ALL WATER AND SEWER TAPS TO BE PERFORMED BY UTILITY CONTRACTOR OR LICENSED MASTER PLUMBER MUST BE SCHEDULED AT LEAST 48 HOURS IN ADVANCE THROUGH YOUR SJCUD INSPECTOR. IN ADDITION. IT IS THE ENGINEER OF RECORD'S RESPONSIBILITY TO SECURE APPLICABLE D.E.P./SJCUD PERMITS IN ACCORDANCE WITH SJCUD PERMITTING PROCEDURES.
- 28. METERS TO BE INSTALLED BY SJCUD FORCES UPON APPLICATION AND PAYMENT BY LICENSED MASTER
- 29. WATER AND SEWER CAPACITY FEES SHALL BE REQUIRED AT TIME OF BUILDING PERMIT APPLICATION. FEES WILL BE BASED ON TOTAL NUMBER OF PLUMBING FIXTURE UNITS SHOWN OR LISTED ON BUILDING PLANS.
- 30. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED AND SHALL BE SCHEDULED 48 HOURS IN ADVANCE THROUGH YOUR SJCUD PLAN REVIEWER.

STANDARD WATER/SEWER SEPARATION STATEMENT:

- 1. SANITARY SEWERS (INCLUDING LATERALS), FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.
- WHERE SANITARY SEWERS, FORCE MAINS AND STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 18 INCHES VERTICAL DISTANCE, BOTH THE SEWER AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
- ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).
- WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 18 INCHES OF VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND THE NEW PIPE SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.
- 2. ALL UNDERGROUND WATERMAINS IN THE PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL SEPARATION OF AT LEAST 3 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND OUTSIDE OF ANY VACUUM SANITARY SEWER, STORM SEWER, STORMWATER FORCEMAIN, OR PIPELINE CONVEYING RECLAIMED WATER UNDER PART III OF CHAPTER 62-610 F.A.C. WATERMAIN SHALL BE LAID AT A MINIMUM DISTANCE OF 6 FEET BETWEEN THE OUTSIDE OF THE WATERMAIN AND THE OUTSIDE OF A GRAVITY SANITARY SEWER (3 FEET IF THE WATERMAIN BOTTOM IS LAID ATLEAST 6" ABOVE THE TOP OF THE SEWER) WATERMAIN SHALL BE LAID ATLEAST 6 FEET HORIZONTALLY (OUTSIDE TO OUTSIDE) FROM PRESSURE SANITARY SEWER, SANITARY FORCEMAINS, OR RECLAIMED WATER LINES NOT REGULATED UNDER PART III OF CHAPTER 62-610 F.A.C.
- WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
- 3. ALL DUCTILE IRON, HDPE, AND PVC PIPE SHALL MEET SJCUD STANDARDS AND SPECIFICATIONS.

HYDROSTATIC TESTING NOTES:

REGARDLESS OF THE LENGTH OF PIPE.

AFTER ALL PRESSURE PIPES (WATER MAINS, SERVICES, AND FORCE MAINS) ARE INSTALLED, THE JOINTS COMPLETED, AND THE TRENCH BACKFILLED, THE NEWLY LAID PIPE AND APPURTENANCES SHALL BE SUBJECTED TO A HYDROSTATIC TEST OF 150 PSI FOR A PERIOD OF AT LEAST TWO HOURS THE ENGINEER. AND SJCUD MUST BE NOTIFIED AT LEAST 48 HOURS BEFORE A TEST IS TO BE PERFORMED. TEST SHALL BE AS SET FORTH IN AWWA STANDARD C600. ANY LEAKS DETECTED SHALL BE CORRECTED AND THE SECTION OF PIPELINE RETESTED. THE TWO HOUR TEST PERIOD SHALL BEGIN WHEN ALL JOINTS HAVE BEEN DETERMINED TO BE WATER TIGHT. LEAKAGE SHALL BE LIMITED TO THAT ALLOWANCE SET FORTH IN SECTION 4 OF AWWA STANDARD C600 LATEST EDITION. HYDROSTATIC AND LEAKAGE TEST AND BLOW-DOWN (ZEROING OF GAGE) MUST OCCUR BEFORE SAMPLING FOR BACTERIOLOGICAL TEST. THE MAXIMUM ALLOWABLE PRESSURE LOSS IS 5 PSI

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SHEET NUMBER

CALL 48 HOURS BEFORE YOU DIG

SUNSHINE STATE ONE CALL OF FLORIDA. INC.

IT'S THE LAW!

DIAL 811

THE PRESENCE OF GROUNDWATER SHOULD BE

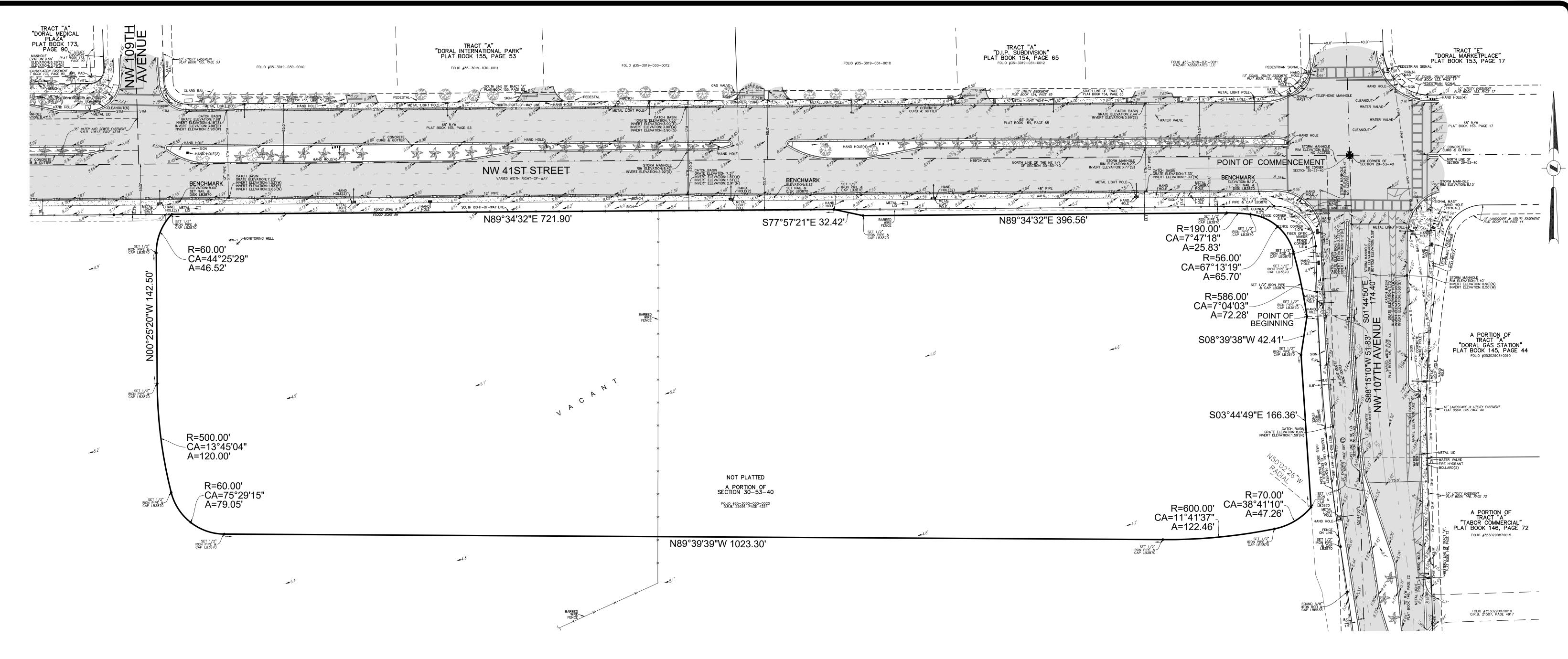
ANTICIPATED ON THIS PROJECT. CONTRACTOR'S

BID SHALL INCLUDE CONSIDERATION FOR

Know what's **below**.

Call before you di

ADDRESSING THIS ISSUE.

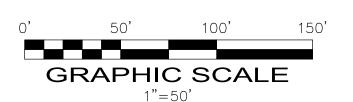


LEGAL DESCRIPTION:

THAT PORTION OF THE NORTHEAST 1/4 OF SECTION 30, TOWNSHIP 53 SOUTH, RANGE 40 EAST, MIAMI-DADE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 30; THENCE SOUTH 01°44'50" EAST, ALONG THE EAST LINE OF SAID NORTHEAST 1/4 OF SECTION 30, FOR 174.40 FEET; THENCE NORTH 88°15'10" EAST 51.83 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 08°39'38" WEST 42.41 FEET; THENCE SOUTH 03°44'49" EAST 166.36 FEET TO A POINT ON A CIRCULAR CURVE TO THE RIGHT FROM WHICH A RADIAL LINE BEARS NORTH 50°02'26" WEST; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 70.00 FEET AND A CENTRAL ANGLE OF 38°41'10", FOR AN ARC DISTANCE OF 47.26 FEET TO A POINT OF COMPOUND CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE WESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 600.00 FEET AND A CENTRAL ANGLE OF 11°41'37", FOR AN ARC DISTANCE OF 122.46 FEET TO A POINT OF TANGENCY; THENCE NORTH 89°39'39" WEST 1023.30 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 60.00 FEET AND A CENTRAL ANGLE OF 75°29'15", FOR AN ARC DISTANCE OF 79.05 FEET TO A POINT OF COMPOUND CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 500.00 FEET AND A CENTRAL ANGLE OF 13°45'04", FOR AN ARC DISTANCE OF 120.00 FEET TO A POINT OF TANGENCY; THENCE NORTH 00°25'20" WEST 142.50 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 60.00 FEET AND A CENTRAL ANGLE OF 44°25'29", FOR AN ARC DISTANCE OF 46.52 FEET TO A POINT ON A LINE 55 FEET SOUTH OF AND PARALLEL WITH THE NORTH LINE OF SAID NORTHEAST 1/4 OF SECTION 30; THENCE NORTH 89°34'32" EAST ALONG SAID PARALLEL LINE 721.90 FEET; THENCE SOUTH 77°57'21" EAST 32.42 FEET; THENCE NORTH 89°34'32" EAST ALONG A LINE 62 FEET SOUTH OF AND PARALLEL WITH SAID NORTH LINE OF THE NORTHEAST 1/4 OF SECTION 30 FOR 396.56 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE EASTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 190.00 FEET AND A CENTRAL ANGLE OF 07°47'18", FOR AN ARC DISTANCE OF 25.83 FEET TO A POINT OF COMPOUND CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE SOUTHEASTERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 56.00 FEET AND A CENTRAL ANGLE OF 67°13'19", FOR AN ARC DISTANCE OF 65.70 FEET TO A POINT OF COMPOUND CURVATURE OF A CIRCULAR CURVE TO THE RIGHT; THENCE SOUTHERLY ALONG THE ARC OF SAID CURVE, HAVING A RADIUS OF 586.00 FEET AND A CENTRAL ANGLE OF 07°04'03", FOR AN ARC DISTANCE OF 72.28 FEET TO THE POINT OF BEGINNING.

SAID LANDS LYING AND BEING IN THE CITY OF DORAL, MIAMI-DADE COUNTY, FLORIDA, AND CONTAINING 437,973 SQUARE FEET (10.0545 ACRES), MORE OR LESS.



TRACT "A" "DORAL MEDICAL PLAZA" P.B. 173, PG. 90 THIS SITE NOT PLATTED A PORTION OF SECTION 30-53-40 NOT PLATTED A PORTION OF SECTION 30-53-40 NOT PLATTED A PORTION OF SECTION 30-53-40 TRACT "A" "CANTEL WEST SUBDIVISION" P.B. 153, PG. 41 TRACT "A" "DORAL MARKETPLACE" P.B. 153, PG. 17 TRACT "A" "DORAL MARKETPLACE" P.B. 153, PG. 17 NW 41ST STREET NE CORNER NE 1/4 SECTION 30-53-40 TRACT "A" "DORAL MARKETPLACE" P.B. 153, PG. 17 NW CORNER OF SECTION 29-53-40 TRACT "A" "DORAL MARKETPLACE" P.B. 153, PG. 17 TRACT "A" "TABOR COMMERCIAL" P.B. 146, PG. 72 TRACT "A" "CANTEL WEST SUBDIVISION" P.B. 153, PG. 41

LOCATION SKETCH

SCALE: 1"=300'
PORTION OF NE 1/4 OF SECTION 30,
TOWNSHIP 53 SOUTH, RANGE 40 EAST

LEGEND			
10 A	CONCRETE	FPL	FLORIDA POWER & LIGHT COMPANY
	ASPHALT PAVEMENT	LB	LICENSED BUSINESS
10.00	ELEVATION	0.R.B.	OFFICIAL RECORDS BOOK
— онw —	OVERHEAD WIRES	×	SECTION CORNER
	UNDERGROUND STORM SEWER LINE	TP	TRAVERSE POINT (FOR FIELD
SAN	UNDERGROUND SANITARY SEWER LINE		INFORMATION ONLY)
—— G ——	UNDERGROUND GAS LINE		OAK TREE
<u>Ç</u>	CENTERLINE		PALM TREE
R=	RADIUS		UNIDENTIFIED TREE
CA=	CENTRAL ANGLE	P.B.	PLAT BOOK
A=	ARC LENGTH	PG.	PAGE

NOTE

1. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OR AN ELECTRONIC SIGNATURE AND ELECTRONIC SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

NO PART OF THIS SURVEY MAY BE REPRODUCED, IN ANY FORM OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM AN OFFICER OF PULICE LAND SURVEYORS, INC.
 ELEVATIONS ARE BASED ON NATINAL GEODETIC VERTICAL DATUM OF 1929. MIAMI-DADE COUNTY BENCHMARK #N-3065; ELEVATION: 8.03 FEET.

4. FLOOD ZONE: X/AH; BASE FLOOD ELEVATION: NONE/6 FEET; PANELS #12086C0267L AND 12086C0286L; COMMUNITY #120041; MAP DATE: 9/11/09.
5. THIS SITE LIES IN SECTION 30, TOWNSHIP 53 SOUTH, RANGE 40 EAST, MIAMI-DADE COUNTY,

6. BEARINGS ARE BASED ON AN ASSUMED MERIDIAN WITH THE NORTH LINE OF BLOCK 10 BEING N89°34'32"E AS SHOWN IN THE DEED RECORDED IN OFFICIAL RECORDS BOOK 29591, PAGE 4324.
7. REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND THE LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION OR CONSTRUCTION CONTACT THE APPROPRIATE UTILITY

COMPANIES FOR FIELD VERIFICATION.

8. THE HORIZONTAL POSITIONAL ACCURACY OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.07'. THE VERTICAL ACCURACY OF ELEVATIONS OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.07'.

9. THIS SURVEY WAS PREPARED WITH BENEFIT OF A COMMITMENT FOR TITLE INSURANCE. COMMITMENT ORDER NO. NCS-1149922-ATL, PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY. COMMITMENT DATE 09/30/22 AT 7:30 AM. THE FOLLOWING ITEMS ARE EXCEPTIONS IN SCHEDULE B SECTION II OF SAID COMMITMENT:

ITEMS 1, 2, 3, 4, 5, 6, 7, 8 & 9: STANDARD EXCEPTIONS, NOT ADDRESSED.

ITEM 10: OIL, GAS, MINERAL, CANAL AND DRAINAGE RESERVATIONS CONTAINED IN DEED FROM THE TRUSTEES OF THE INTERNAL IMPROVEMENT FUND OF FLORIDA RECORD IN DEED NO. 16571. NOTE: THE CANAL AND DRAINAGE RESERVATIONS WERE RELEASED IN QUITCLAIM DEED RECORDED IN BOOK 10028, PAGE 1948. APPLIES TO THIS SITE BUT CANNOT BE PLOTTED.

CANNOT BE PLOTTED.

ITEM 11: GRANT OF EASEMENT IN O.R.B. 16513, PAGE 597, DOES NOT APPLY TO THIS SITE AS DEPICTED HEREON.

ITEM 12: COVENANT IN O.R.B 33039, PAGE 4198 DOES NOT APPLY TO THIS SITE.
ITEM 13: TERMS AND CONDITIONS IN O.R.B 33140, PAGE 3543 APPLY TO THIS SITE BUT
CANNOT BE PLOTTED.

ITEM 14: NOT ADDRESSED

10. ALL RECORDED DOCUMENTS ARE PER MIAMI-DADE COUNTY PUBLIC RECORDS.

11. THE TREE SYMBOLS DEPICTED HEREON ARE NOT SCALED TO TREE CANOPY.

12. THE FLOOD ZONE DESIGNATION LINES DEPICTED HEREON ARE PLACED IN APPROXIMATE LOCATIONS, AS SCALED FROM THE IMAGE FROM THE FEMA.ORG WEBSITE.

13. MONITORING WELL LOCATIONS OBTAINED FROM SCS ENGINEERING.

14. DADE COUNTY FLOOD CRITERIA IS 7.2' PER AMENDED PLAT OF FLOOD CRITERIA MAP RECORDED

IN PLAT BOOK 120 PAGE 13 SHEET 2

IN PLAT BOOK 120, PAGE 13, SHEET 2.

15. THIS SITE IS PORTION OF FOLIO NO.: 35-3030-000-0020

16. CURRENT ZONING DISTRICT: GU (GENERAL USE)

17. NUMBER OF PROPOSED TRACTS: 1
18. THE LEGAL DESCRIPTION OF THE PROPERTY SHOWN IS LOCATED WHOLLY WITHIN THE BOUNDS OF THE VESTING DEED LEGAL DESCRIPTION OF THE PROPERTY.

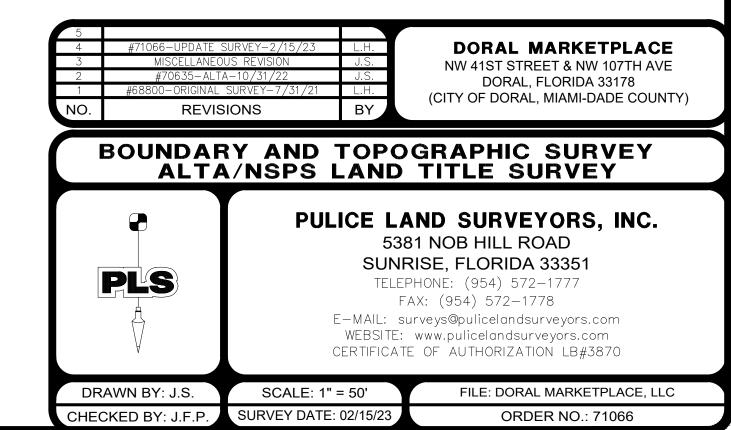
CERTIFICATION:

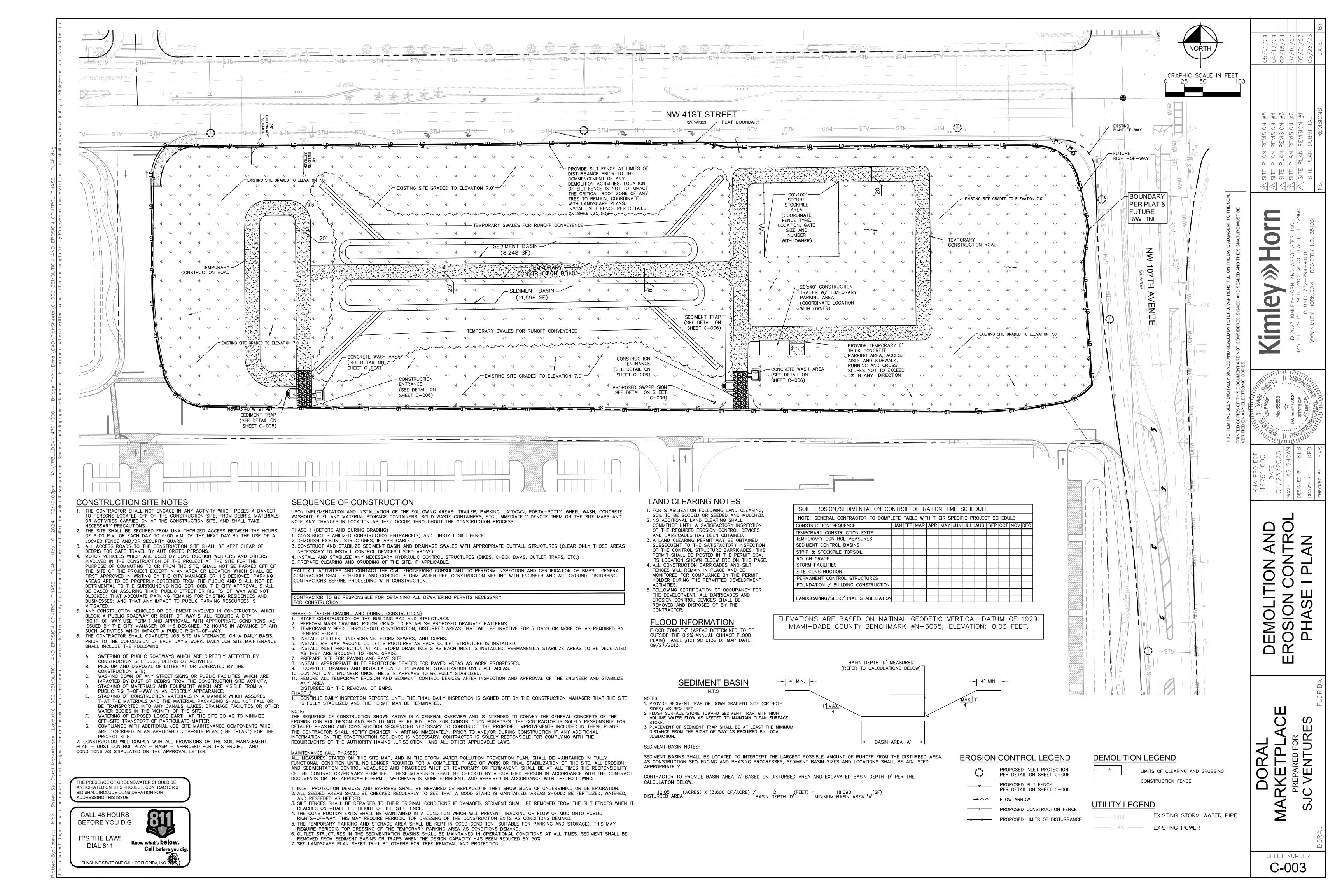
TO DORAL FARMS, LLC, A DELAWARE LIMITED LIABILITY COMPANY; DORAL MARKETPLACE, LLC, A DELAWARE LIMITED LIABILITY COMPANY; FIRST AMERICAN TITLE INSURANCE COMPANY:

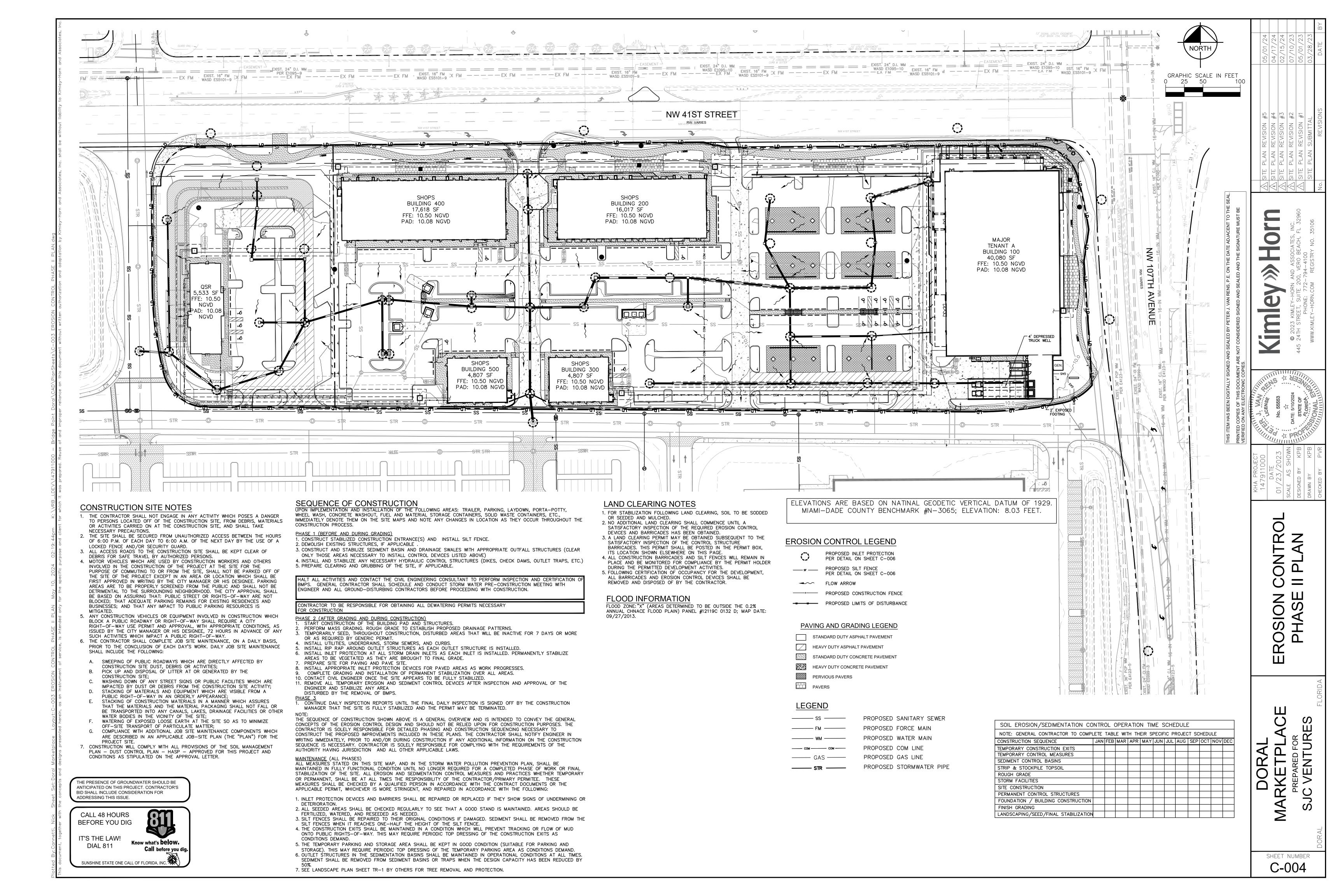
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 10, & 11(a), OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON 02/15/23.

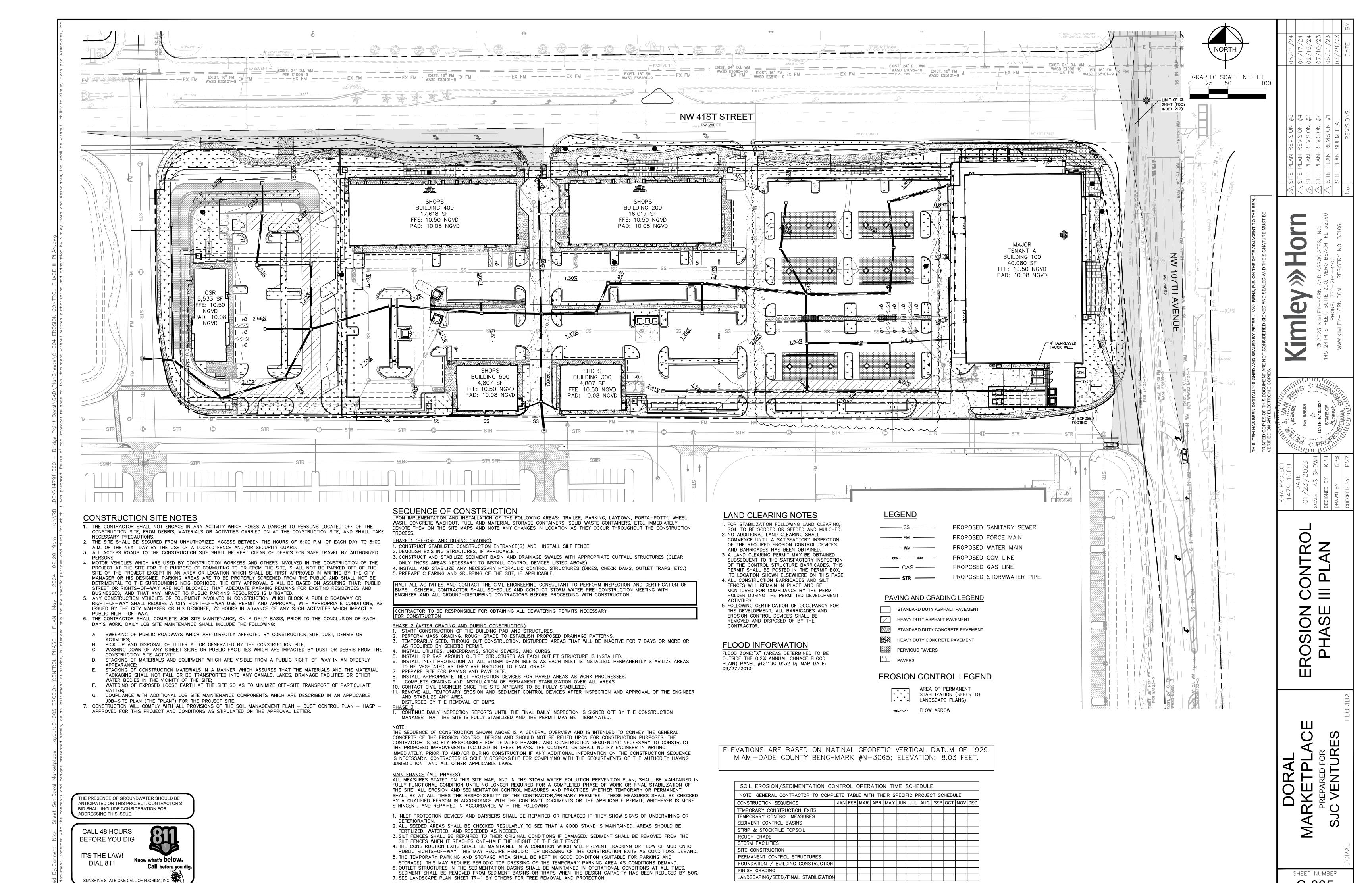
DATE OF PLAT OR MAP: 02/15/23

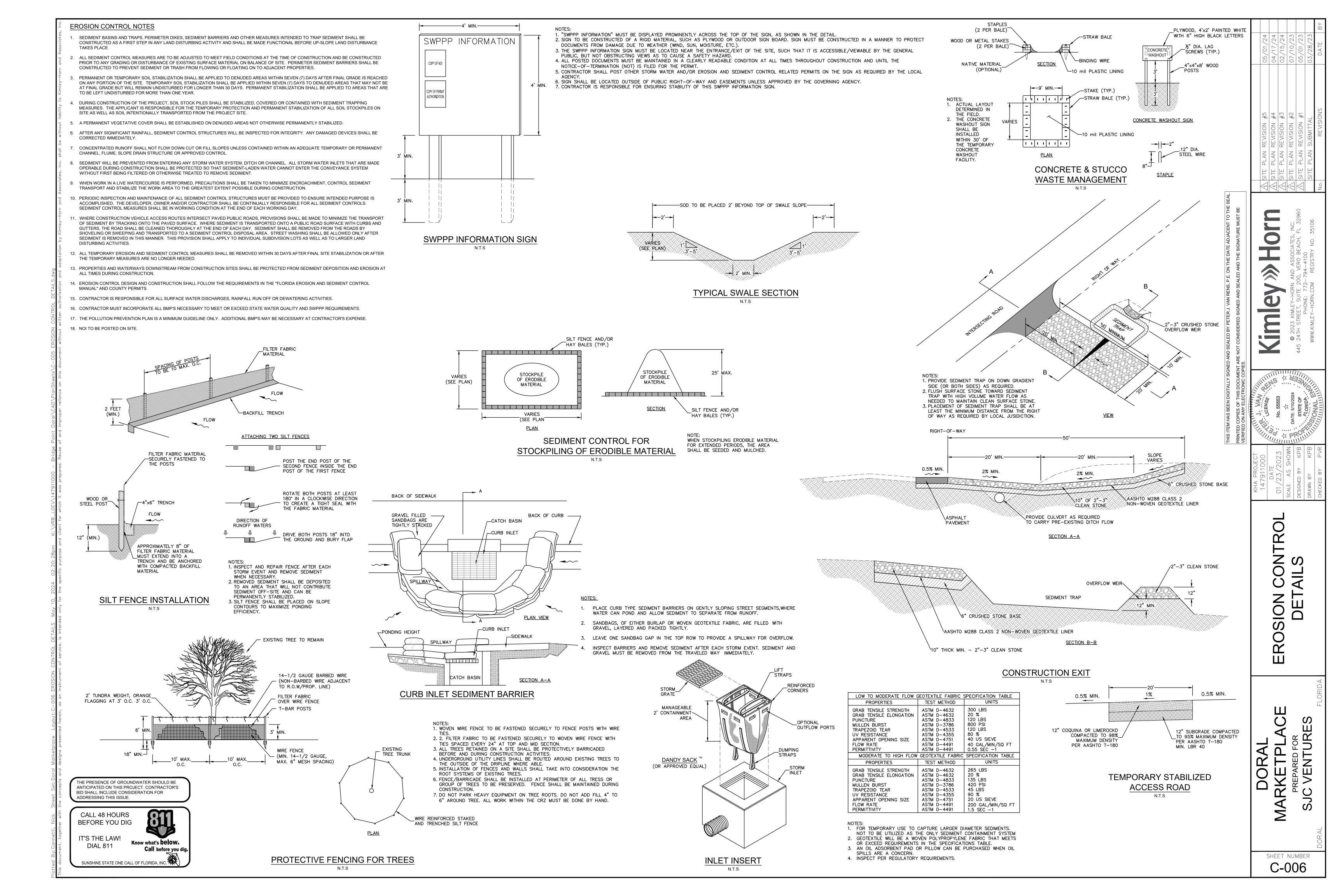
□ JOHN F. PULICE, PROFESSIONAL SURVEYOR AND MAPPER LS2691
□ VICTOR R. GILBERT, PROFESSIONAL SURVEYOR AND MAPPER LS6274
□ DONNA C. WEST, PROFESSIONAL SURVEYOR AND MAPPER LS4290
STATE OF FLORIDA

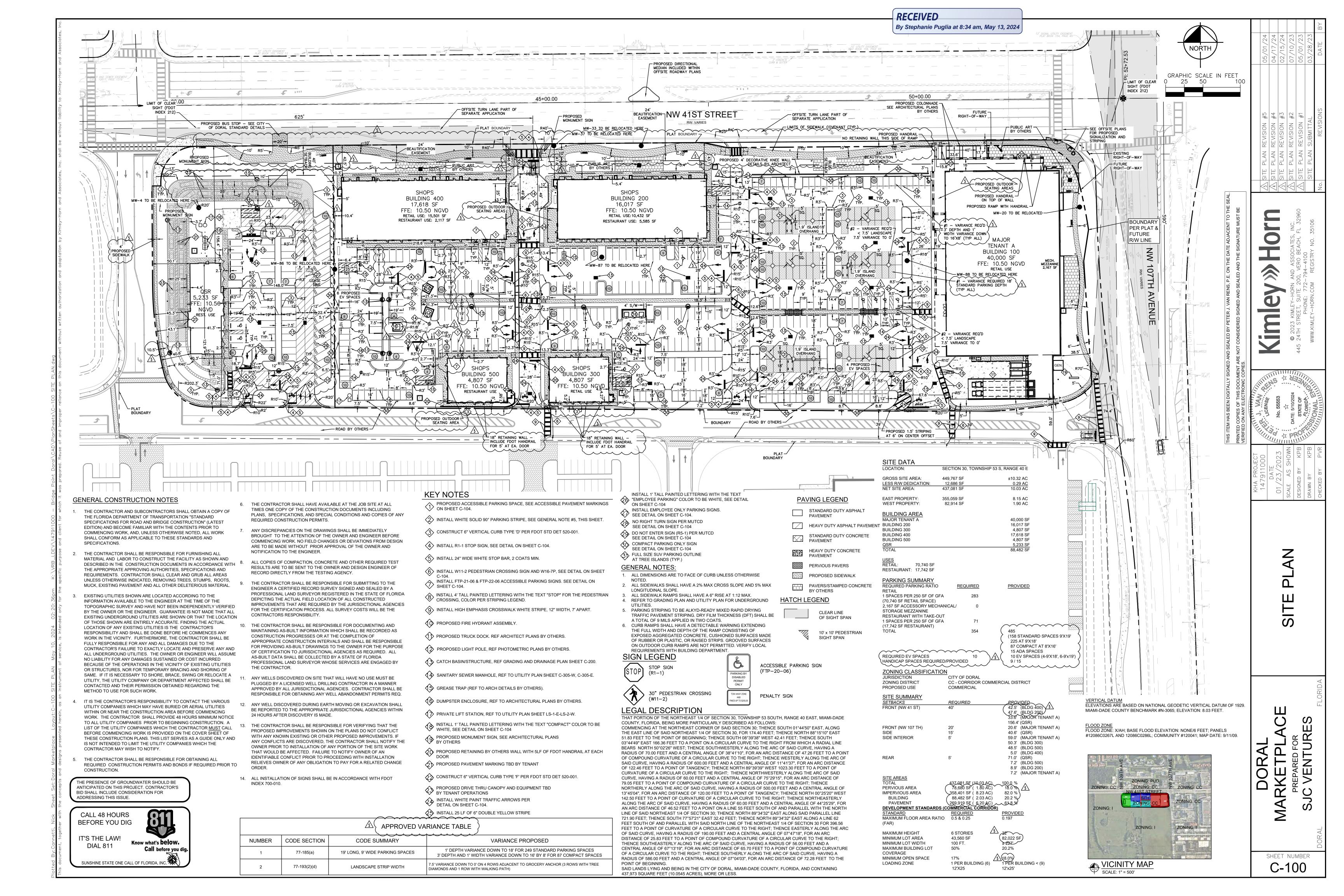


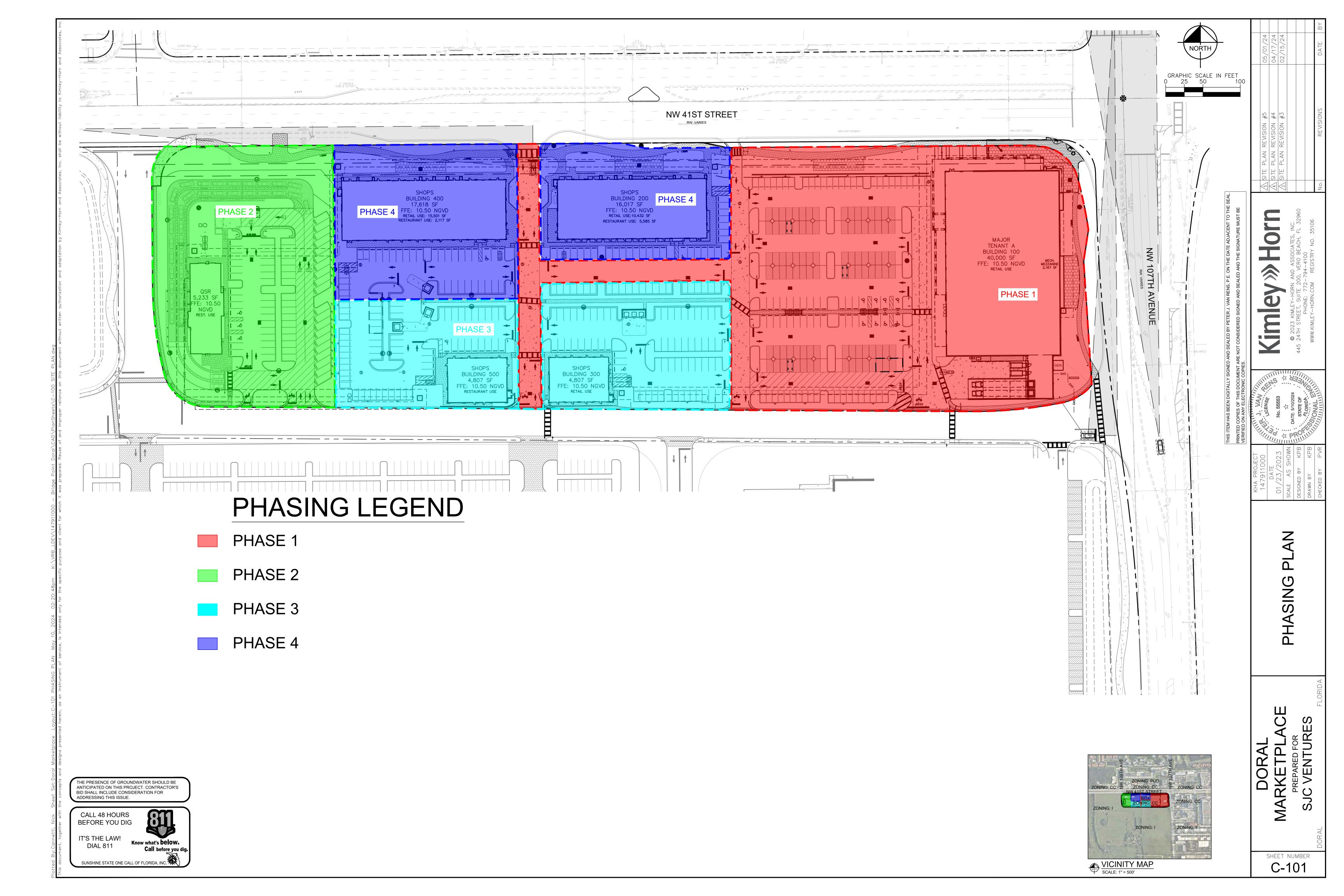


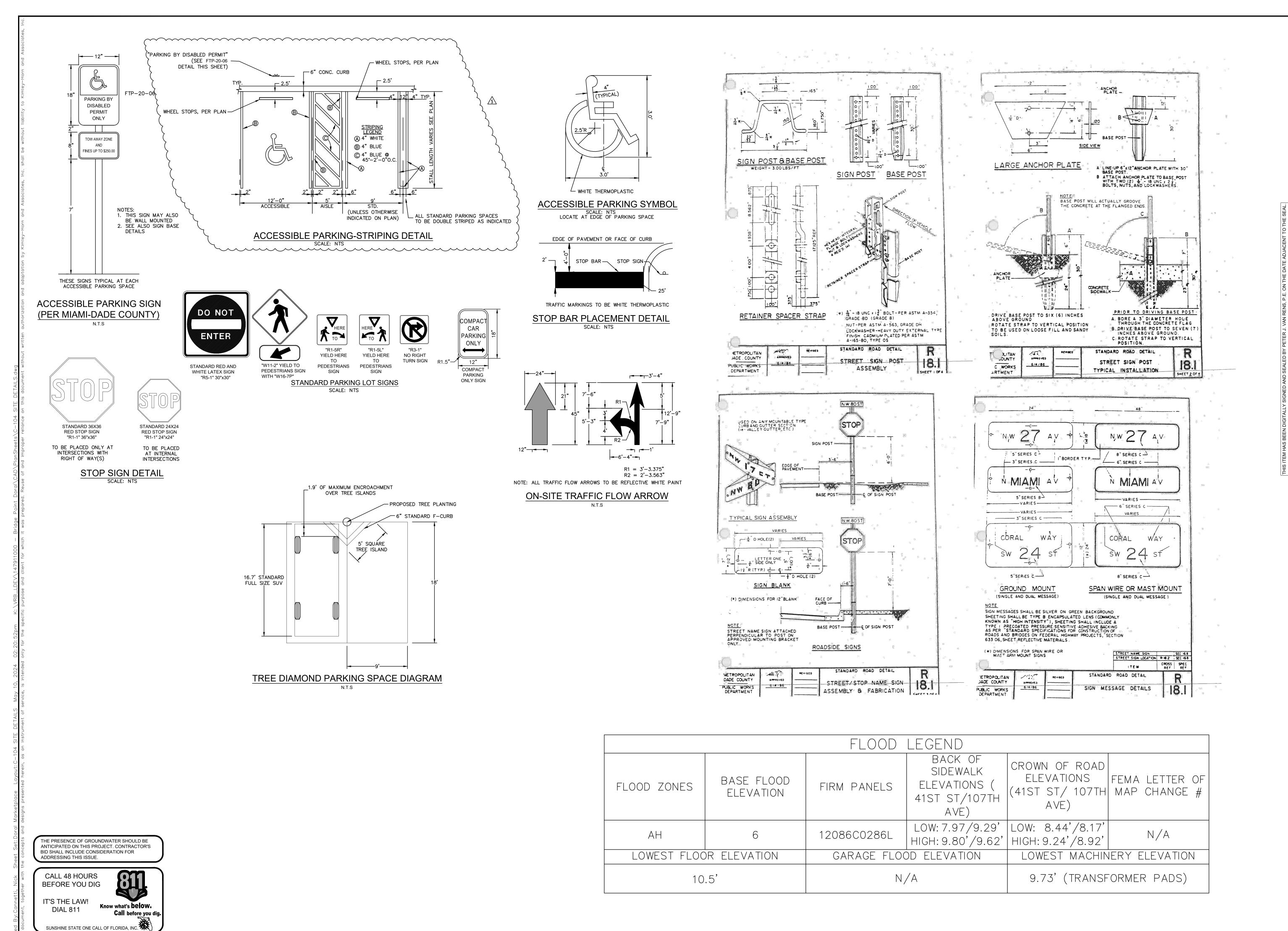












ES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE NOT ECTRONIC COPIES.

WANTITY

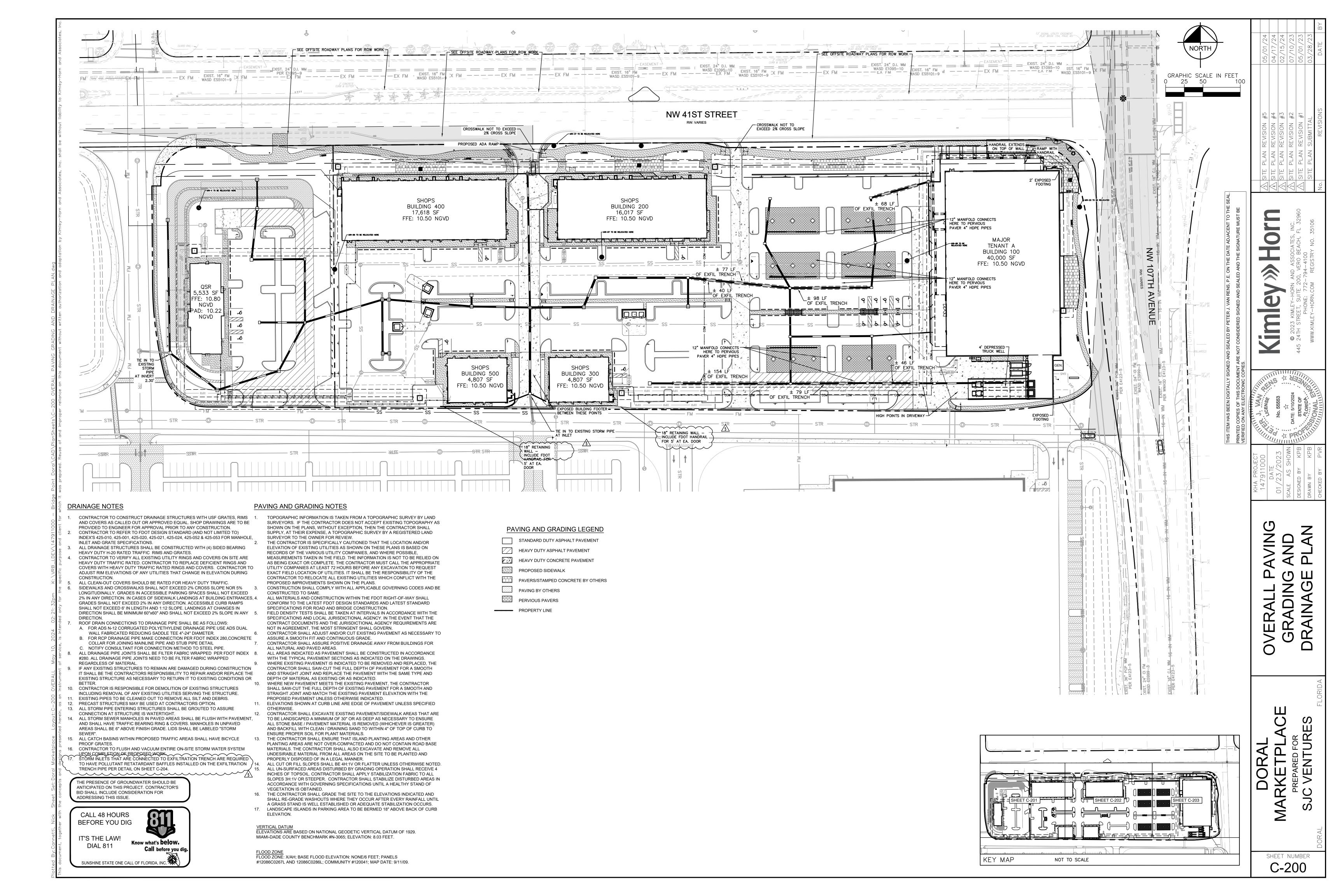
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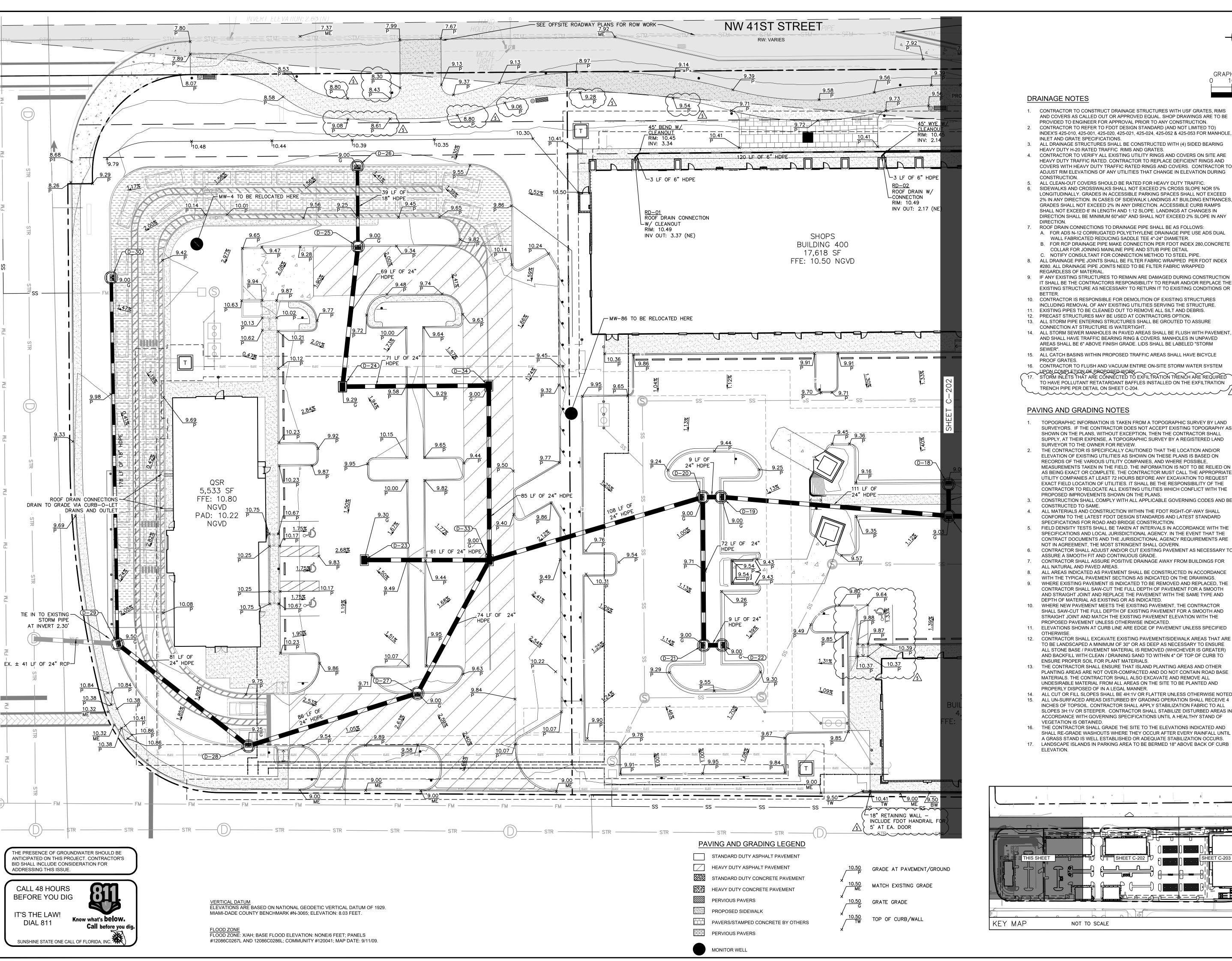
SENSE.

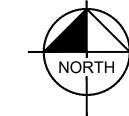
DETAILS SCALE

SITE DETA

DORAL
MARKETPLACE
PREPARED FOR
SJC VENTURES







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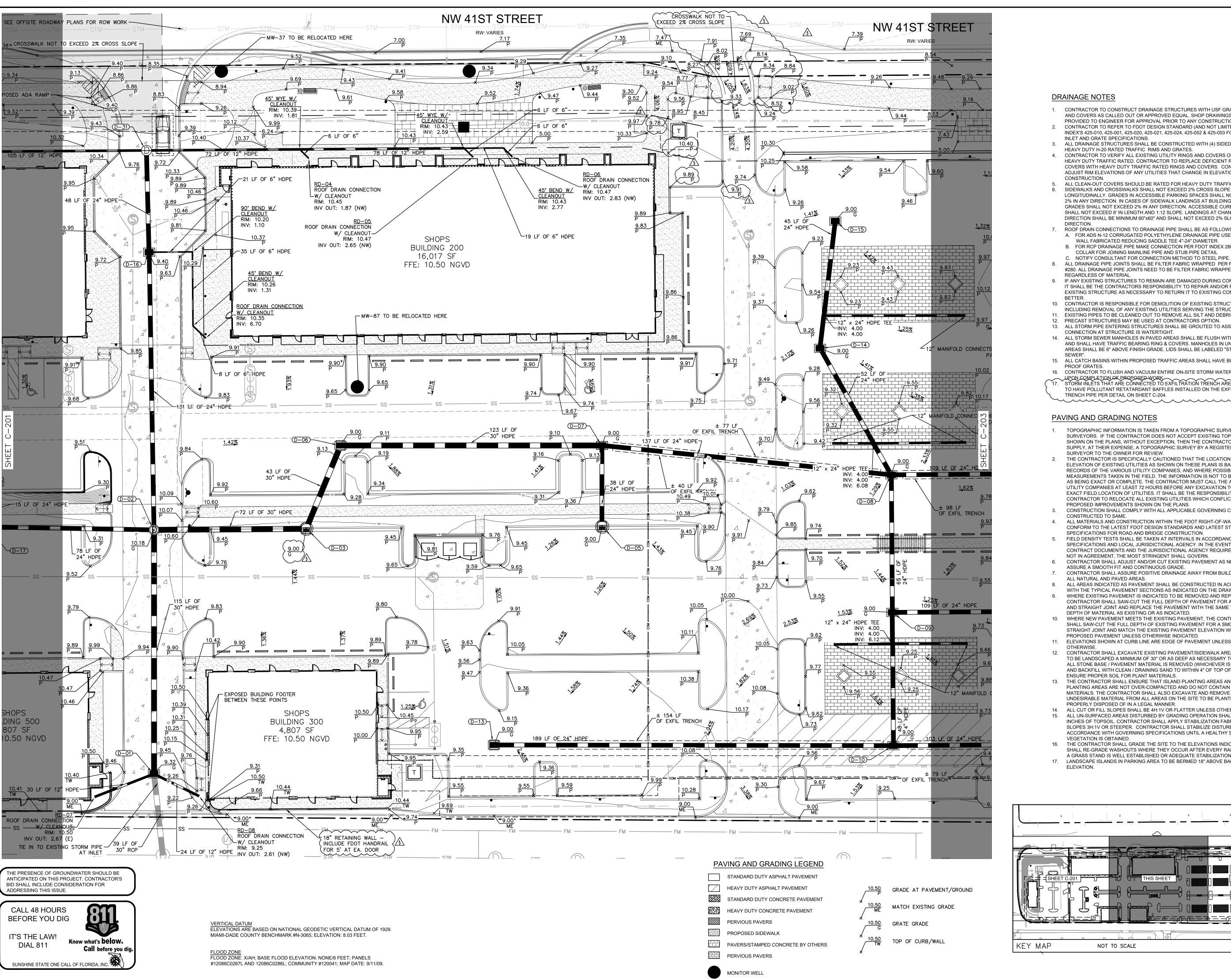
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NOT TO SCALE





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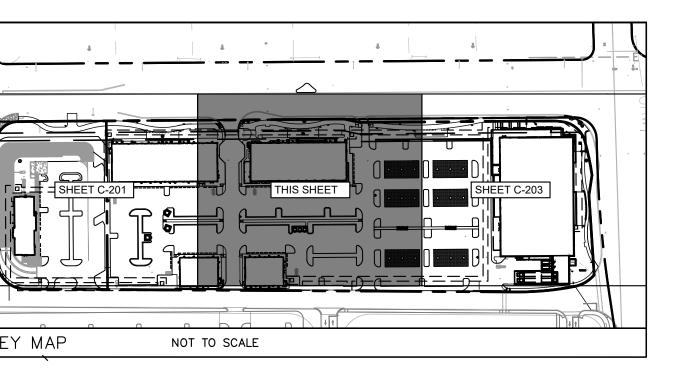
WALL FABRICATED REDUCING SADDLE TEE 4"-24" DIAMETER.

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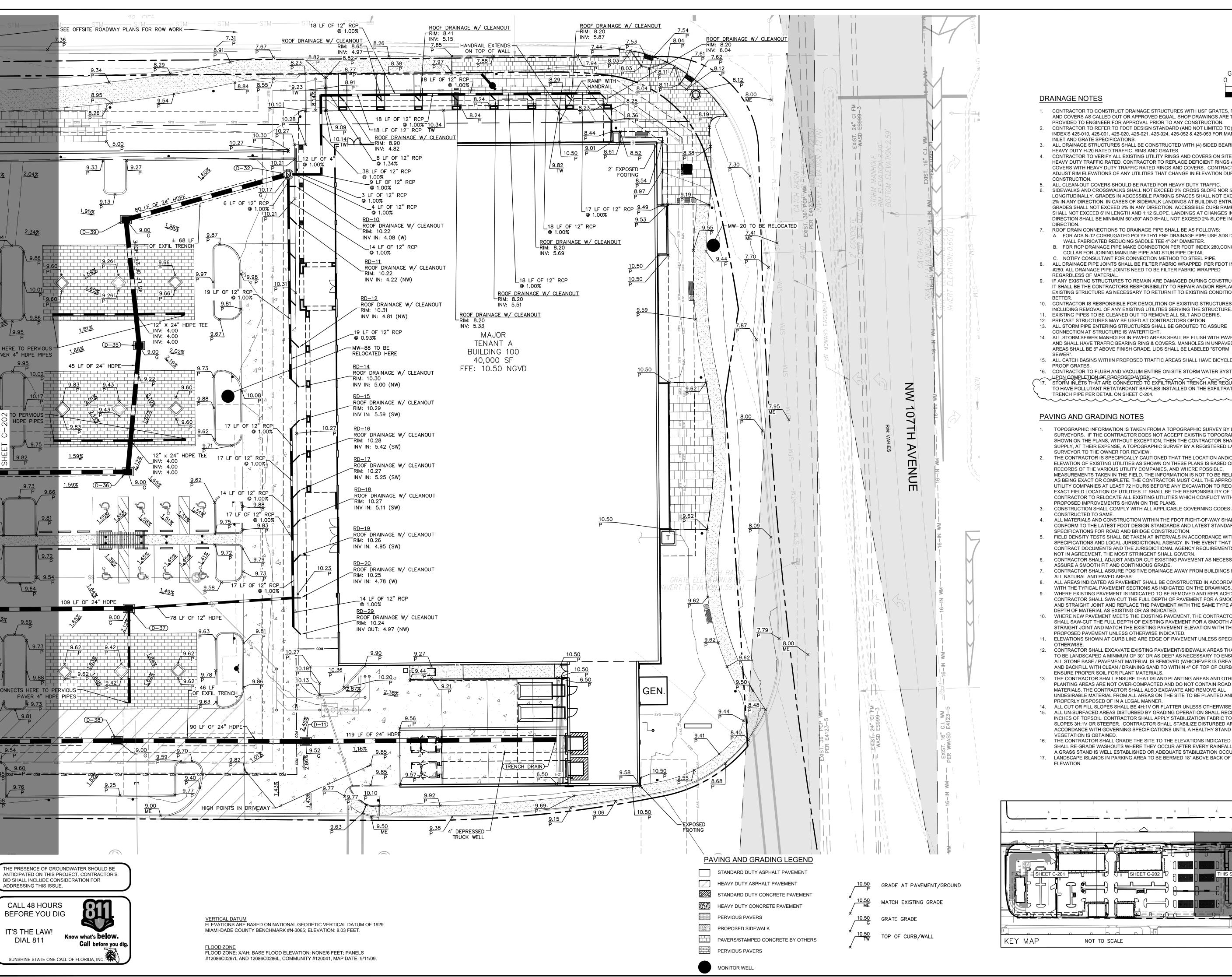
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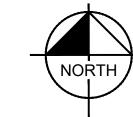
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LANDSCAPE ISLANDS IN PARKING AREA TO BE BERMED 18" ABOVE BACK OF CURB ELEVATION.



DORA



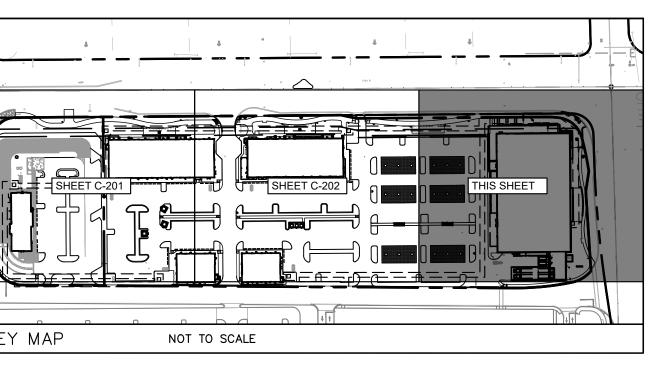


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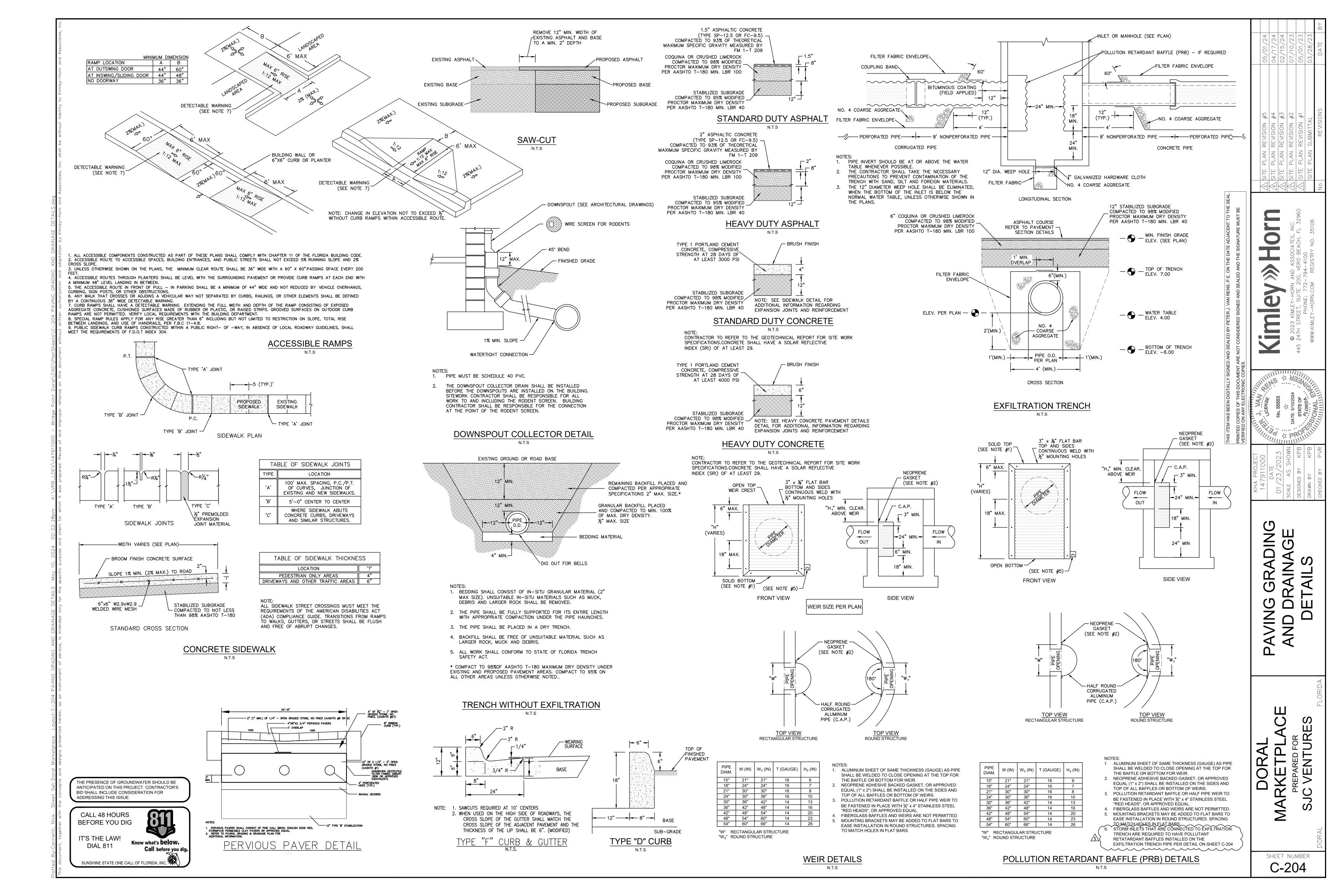
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- THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT OVER-COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
- 14. ALL CUT OR FILL SLOPES SHALL BE 4H:1V OR FLATTER UNLESS OTHERWISE NOTED. 15. ALL UN-SURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF
- 16. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL RE-GRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.

17. LANDSCAPE ISLANDS IN PARKING AREA TO BE BERMED 18" ABOVE BACK OF CURB



C-203



1. STORM INLETS THAT ARE CONNECTED TO EXFILTRATION TRENCH ARE REQUIRED TO HAVE POLLUTANT RETATARDANT BAFFLES INSTALLED ON THE EXFILTRATION TRENCH PIPE PER DETAIL ON SHEET C-204

STRUCTURE TABLE				
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT	
D-22	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV OUT: 3.15		TO D-21, 24" HDPE INV OUT: 3.15 @ 0.18%	
D-23	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.30 INV OUT: 4.20		TO D-33, 24" HDPE INV OUT: 4.20 @ 0.18%	
D-24	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.29 INV IN: 3.09 INV OUT: 3.09	FROM D-25, 24" HDPE INV IN: 3.09 @ 0.18%	TO D-34, 24" HDPE INV OUT: 3.09 @ 0.18%	
D-25	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 3.21 INV OUT: 3.21	FROM D-26, 18" HDPE INV IN: 3.21 @ 0.18%	TO D-24, 24" HDPE INV OUT: 3.21 @ 0.18%	
D-26	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV OUT: 3.28		TO D-25, 18" HDPE INV OUT: 3.28 @ 0.18%	
D-27	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 2.68 INV OUT: 2.68	FROM D-33, 24" HDPE INV IN: 2.68 @ 0.18%	TO D-28, 24" HDPE INV OUT: 2.68 @ 0.18%	
D-28	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.26 INV IN: 2.52 INV OUT: 2.52	FROM D-27, 24" HDPE INV IN: 2.52 @ 0.18%	TO D-29, 24" HDPE INV OUT: 2.52 @ 0.18%	
D-29	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.50 INV IN: 2.37 INV IN: 2.37 INV OUT: 2.30	FROM D-28, 24" HDPE INV IN: 2.37 @ 0.18% FROM D-30, 18" HDPE INV IN: 2.37 @ 0.18%	TO 40, 24" RCP INV OUT: 2.30 @ 0.00%	
D-30	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV OUT: 2.68		TO D-29, 18" HDPE INV OUT: 2.68 @ 0.18%	
D-31	TYPE J-BOTTOM MANHOLE PER FDOT STD. PLAN RIM: 9.75 INV IN: 1.09 INV IN: 1.09 INV OUT: 1.09	FROM 76, 12" HDPE INV IN: 1.09 @ 1.00% FROM 72, 12" HDPE INV IN: 1.09 @ 1.00%	TO D-16, 24" HDPE INV OUT: 1.09 @ 0.18%	
D-32	TYPE J-BOTTOM MANHOLE PER FDOT STD. PLAN RIM: 10.16 INV IN: 4.14 INV IN: 4.03 INV OUT: 4.00	FROM 313, 12" RCP INV IN: 4.14 @ 1.00% FROM 301, 12" RCP INV IN: 4.03 @ 1.00%	TO D-39, 24" HDPE INV OUT: 4.00 @ 0.009	
D-33	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 2.81 INV IN: 4.09 INV IN: 2.81 INV OUT: 2.81	FROM D-20, 24" HDPE INV IN: 2.81 @ 0.18% FROM D-23, 24" HDPE INV IN: 4.09 @ 0.18% FROM D-34, 24" HDPE INV IN: 2.81 @ 0.18%	TO D-27, 24" HDPE INV OUT: 2.81 @ 0.18%	
D-34	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 2.96 INV OUT: 2.96	FROM D-24, 24" HDPE INV IN: 2.96 @ 0.18%	TO D-33, 24" HDPE INV OUT: 2.96 @ 0.185	
D-35	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV OUT: 4.00	FROM 340, 24" HDPE INV IN: 4.00 @ 0.00%	TO 348, 24" HDPE INV OUT: 4.00 @ 0.00%	
D-36	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV OUT: 4.00	FROM 348, 24" HDPE INV IN: 4.00 @ 0.00%	TO D-08, 24" HDPE INV OUT: 4.00 @ 0.00	
D-37	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV IN: 4.00 INV IN: 4.00	FROM D-09, 24" HDPE INV IN: 4.00 @ 0.00% FROM 210, 12" HDPE INV IN: 4.00 @ 0.00% FROM 350, 12" HDPE INV IN: 4.00 @ 0.00%		
D-38	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV OUT: 4.00	FROM D-11, 24" HDPE INV IN: 4.00 @ 0.00%	TO D-10, 24" HDPE INV OUT: 4.00 @ 0.009	
D-39	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV OUT: 4.00	FROM D-32, 24" HDPE INV IN: 4.00 @ 0.00%	TO 340, 24" HDPE INV OUT: 4.00 @ 0.00%	
TRENCH DRAIN	TRENCH DRAIN RIM: 6.38 INV OUT: 4.00		TO D-11, 24" HDPE INV OUT: 4.00 @ 0.00%	

STRUCTURE NAME:		PIPES IN:	PIPES OUT
D-01	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.32 INV IN: -2.50 INV IN: 2.37 INV IN: 2.37 INV OUT: 2.37	FROM D-02, 30" HDPE INV IN: -2.50 @ 0.00% FROM RD-08, 12" HDPE INV IN: 2.37 @ 1.00% FROM RD-07, 12" HDPE INV IN: 2.37 @ 1.00%	TO 10, 30" RCP INV OUT: 2.37 @ 0.18%
D-02	TYPE J-BOTTOM MANHOLE PER FDOT STD. PLAN RIM: 10.18 INV IN: 3.36 INV IN: 1.00 INV OUT: -2.50 INV OUT: 3.36	FROM D-03, 30" HDPE INV IN: 3.36 @ 0.18% FROM D-16, 24" HDPE INV IN: 1.00 @ 0.00%	TO D-01, 30" HDPE INV OUT: -2.50 @ 0.00 TO D-17, 24" HDPE INV OUT: 3.36 @ 0.18%
D-03	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 3.49 INV OUT: 3.49	FROM D-06, 30" HDPE INV IN: 3.49 @ 0.18%	TO D-02, 30" HDPE INV OUT: 3.49 @ 0.18%
D-05	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV OUT: 3.86		TO D-07, 24" HDPE INV OUT: 3.86 @ 0.18%
D-06	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 3.57 INV OUT: 3.57	FROM D-07, 30" HDPE INV IN: 3.57 @ 0.18%	TO D-03, 30" HDPE INV OUT: 3.57 @ 0.18%
D-07	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV IN: 3.79 INV OUT: 3.79	FROM D-08, 24" HDPE INV IN: 4.00 @ 0.00% FROM D-05, 24" HDPE INV IN: 3.79 @ 0.18%	TO D-06, 30" HDPE INV OUT: 3.79 @ 0.18%
D-08	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV IN: -0.50 INV IN: 4.00 INV OUT: 4.00	FROM 345, 24" HDPE INV IN: 4.00 @ 0.00% FROM D-09, 24" HDPE INV IN: -0.50 @ 0.00% FROM D-36, 24" HDPE INV IN: 4.00 @ 0.00%	TO D-07, 24" HDPE INV OUT: 4.00 @ 0.00%
D-09	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV OUT: -0.50 INV OUT: 4.00	FROM 352, 24" HDPE INV IN: 4.00 @ 0.00%	TO D-08, 24" HDPE INV OUT: -0.50 @ 0.00 TO D-37, 24" HDPE INV OUT: 4.00 @ 0.00%
D-10	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV IN: 4.00 INV OUT: 4.00	FROM D-38, 24" HDPE INV IN: 4.00 @ 0.00% FROM D-13, 24" HDPE INV IN: 4.00 @ 0.00%	TO 352, 24" HDPE INV OUT: 4.00 @ 0.00%
D-11	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.52 INV IN: 4.00 INV OUT: 4.00	FROM TRENCH DRAIN, 24" HDPE INV IN: 4.00 @ 0.00%	TO D-38, 24" HDPE INV OUT: 4.00 @ 0.00%
D-13	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV OUT: 4.00		TO D-10, 24" HDPE INV OUT: 4.00 @ 0.00%
D-14	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 4.00 INV OUT: 4.00	FROM 343, 24" HDPE INV IN: 4.00 @ 0.00%	TO 345, 24" HDPE INV OUT: 4.00 @ 0.00%
D-15	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV OUT: 4.00		TO 343, 24" HDPE INV OUT: 4.00 @ 0.00%
D-16	TYPE E INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.40 INV IN: 1.00 INV IN: 1.00 INV OUT: 1.00	FROM D-31, 24" HDPE INV IN: 1.00 @ 0.18% FROM 79, 6" HDPE INV IN: 1.00 @ 0.50%	TO D-02, 24" HDPE INV OUT: 1.00 @ 0.00%
D-17	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 3.22 INV IN: 3.22 INV OUT: 3.22	FROM D-02, 24" HDPE INV IN: 3.22 @ 0.18% FROM D-18, 24" HDPE INV IN: 3.22 @ 0.18%	TO D-19, 24" HDPE INV OUT: 3.22 @ 0.18%
D-18	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.52 INV OUT: 3.25		TO D-17, 24" HDPE INV OUT: 3.25 @ 0.18%
D-19	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 3.02 INV OUT: 3.02	FROM D-17, 24" HDPE INV IN: 3.02 @ 0.18%	TO D-20, 24" HDPE INV OUT: 3.02 @ 0.18%
D-20	TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 3.00 INV IN: 3.00 INV OUT: 3.00	FROM D-19, 24" HDPE INV IN: 3.00 @ 0.18% FROM D-21, 24" HDPE INV IN: 3.00 @ 0.18%	TO D-33, 24" HDPE INV OUT: 3.00 @ 0.18%
	TYPE 9 INLET W/		

TYPE 9 INLET W/ J-BOTTOM PER FDOT STD. PLAN RIM: 9.00 INV IN: 3.13 INV OUT: 3.13

STRUCTURE TABLE

PIPES IN:

PIPES OUT

TO D-20, 24" HDPE INV OUT: 3.13 @ 0.18%

STRUCTURE NAME: DETAILS:

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

D-21

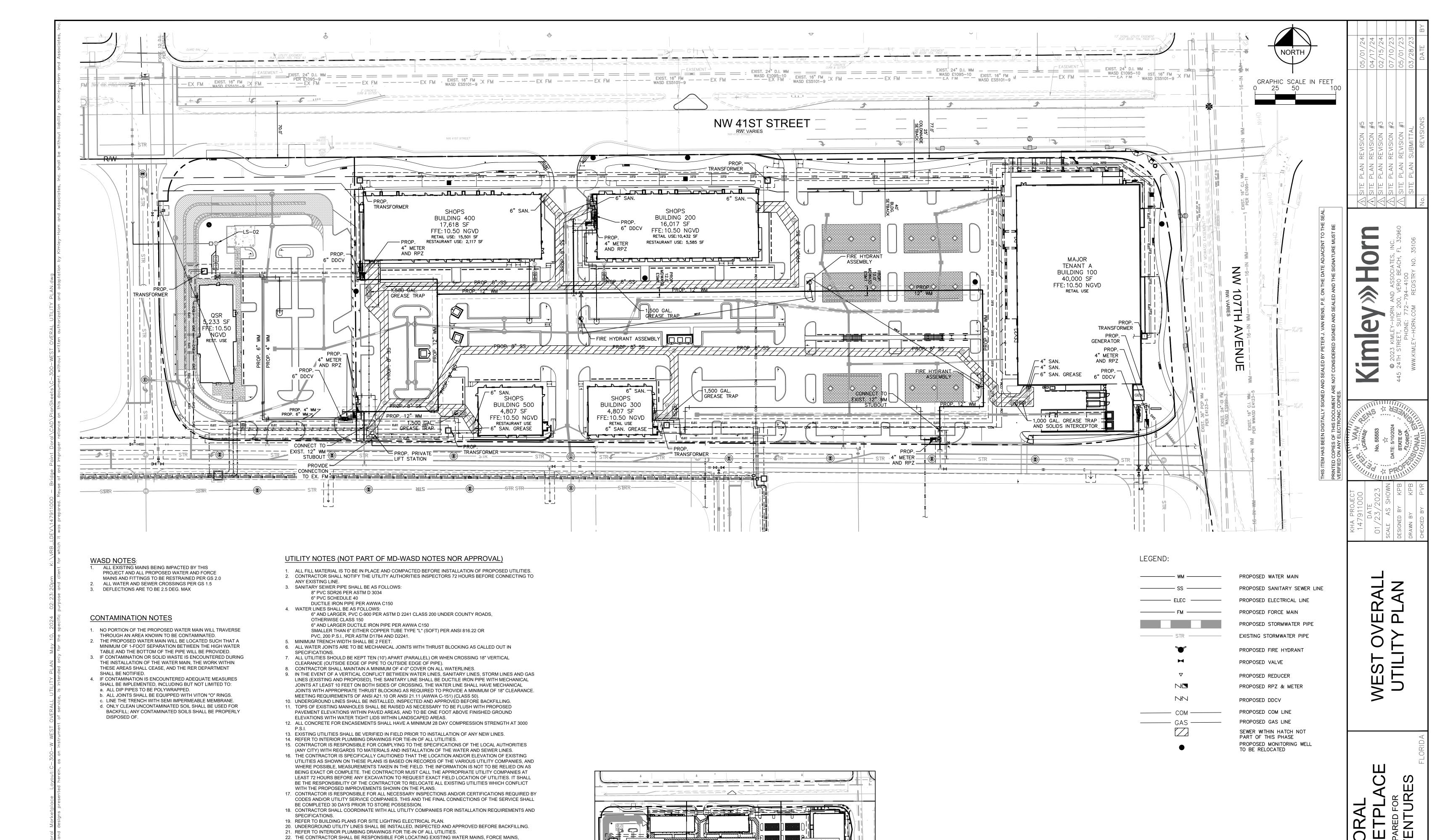
IT'S THE LAW! Know what's below.

Call before you dig. **DIAL 811**

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

PAVING GRADING AND DRAINAGE DETAILS

PAVING



NOT TO SCALE

SHEET NUMBER

C-300-W

WATER/SEWER AGREEMENT # 32245

KEY MAP

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

BEFORE YOU DIG

IT'S THE LAW! **DIAL 811**

Know what's **below.** SUNSHINE STATE ONE CALL OF FLORIDA, INC.

SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND

CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL

23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY

OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND

24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE

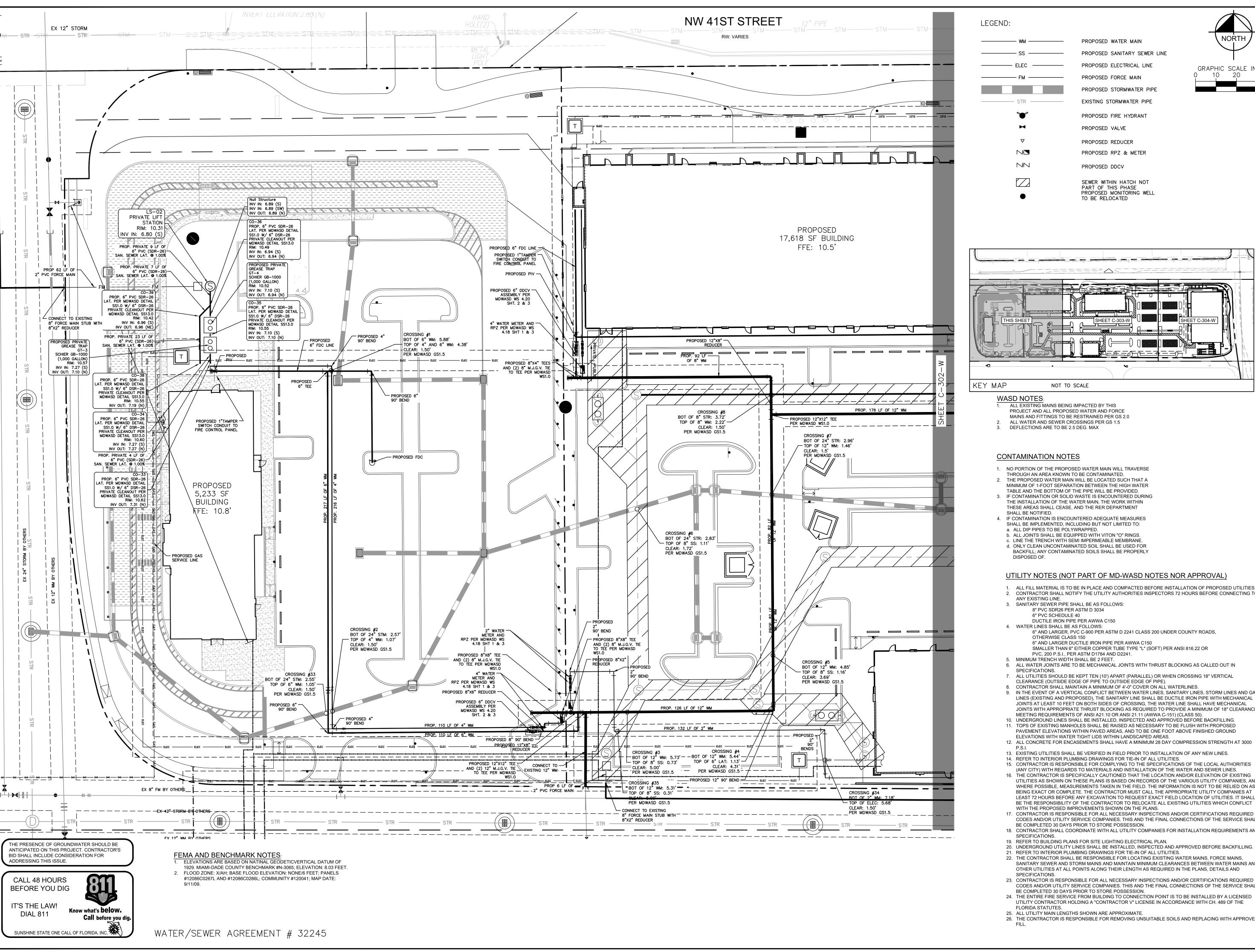
26. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNSUITABLE SOILS AND REPLACING WITH APPROVED

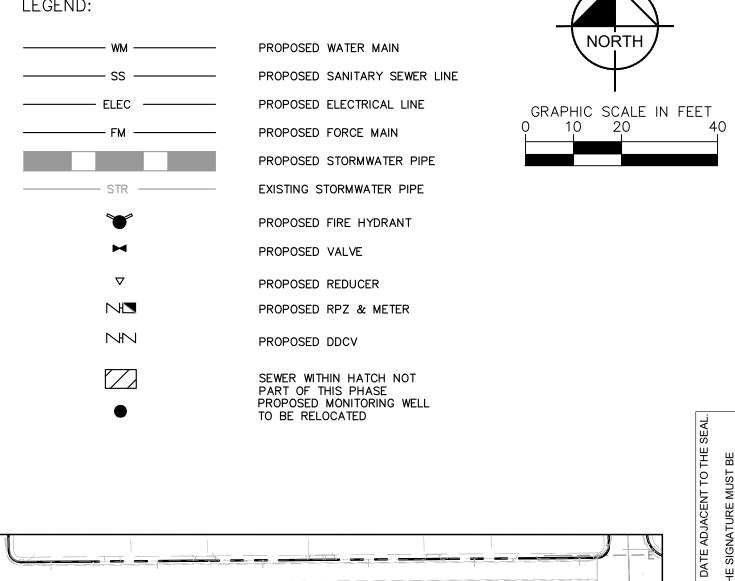
SPECIFICATIONS.

FLORIDA STATUTES.

BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.

25. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.





ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED WATER AND FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0

- 1. NO PORTION OF THE PROPOSED WATER MAIN WILL TRAVERSE
- 2. THE PROPOSED WATER MAIN WILL BE LOCATED SUCH THAT A MINIMUM OF 1-FOOT SEPARATION BETWEEN THE HIGH WATER TABLE AND THE BOTTOM OF THE PIPE WILL BE PROVIDED.
- IF CONTAMINATION OR SOLID WASTE IS ENCOUNTERED DURING THE INSTALLATION OF THE WATER MAIN, THE WORK WITHIN THESE AREAS SHALL CEASE, AND THE RER DEPARTMENT
- 4. IF CONTAMINATION IS ENCOUNTERED ADEQUATE MEASURES SHALL BE IMPLEMENTED, INCLUDING BUT NOT LIMITED TO: a. ALL DIP PIPES TO BE POLYWRAPPED b. ALL JOINTS SHALL BE EQUIPPED WITH VITON "O" RINGS.
- c. LINE THE TRENCH WITH SEMI IMPERMEABLE MEMBRANE. d. ONLY CLEAN UNCONTAMINATED SOIL SHALL BE USED FOR BACKFILL; ANY CONTAMINATED SOILS SHALL BE PROPERLY

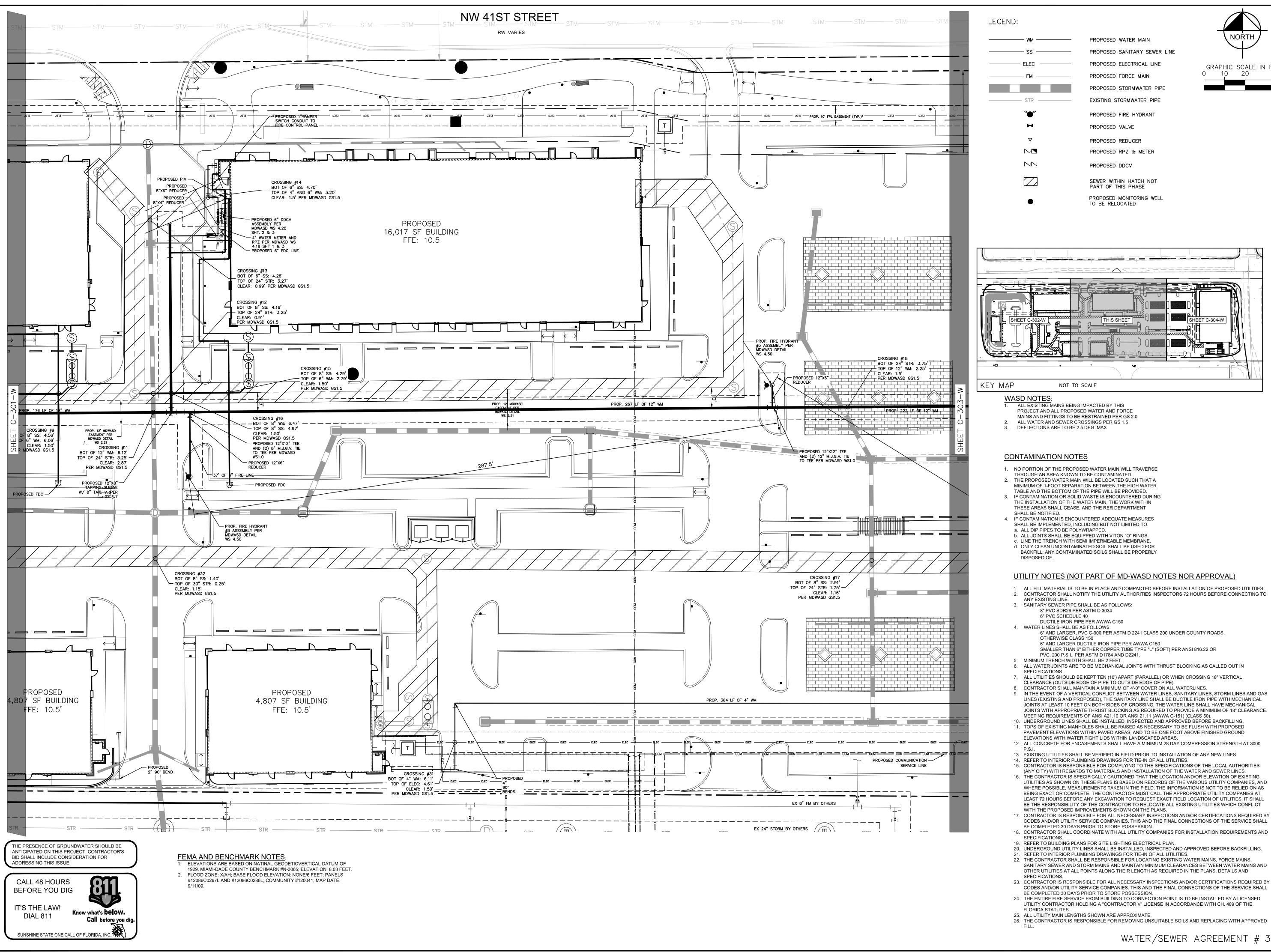
UTILITY NOTES (NOT PART OF MD-WASD NOTES NOR APPROVAL)

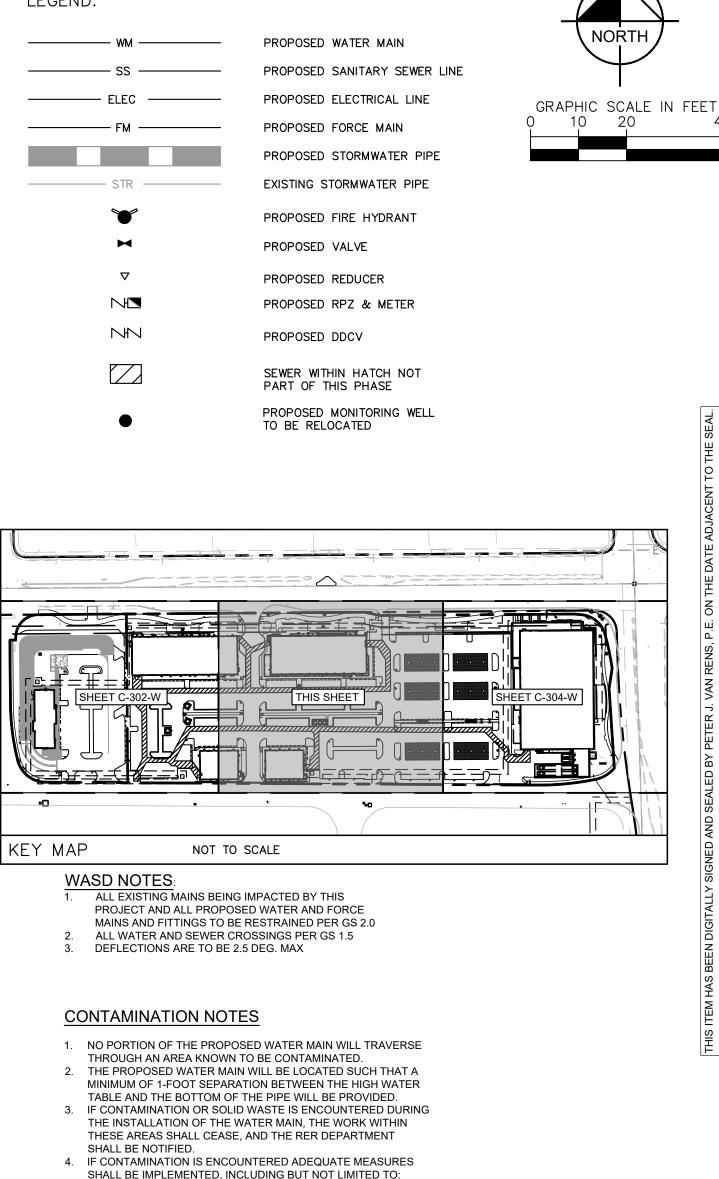
- 1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES. 2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO
- 3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
- DUCTILE IRON PIPE PER AWWA C150
- 6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS,
- 6" AND LARGER DUCTILE IRON PIPE PER AWWA C150 SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR
- PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
- 6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN
- 7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL
- 8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES. 9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL
- JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50). 10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- 11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND
- ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS. 12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000
- 13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- (ANY CITY) WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES. 16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL
- WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. 17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL
- BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION. 18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND
- 19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN. 20. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- 21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES. 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND
- 23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
- 24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE
- 26. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNSUITABLE SOILS AND REPLACING WITH APPROVED

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SHEET NUMBER C-302-W





UTILITY NOTES (NOT PART OF MD-WASD NOTES NOR APPROVAL)

- 1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES. 2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO
- 3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:

DUCTILE IRON PIPE PER AWWA C150

6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS,

OTHERWISE CLASS 150 6" AND LARGER DUCTILE IRON PIPE PER AWWA C150

SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.

5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET. 6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN

7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL

8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES. 9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL

MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50). 10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING. 11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED

PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS.

12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000

13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES. 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.

(ANY CITY) WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES. 16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL

WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. 17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL

BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION. 18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND

19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN. 20. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING. 21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND

23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.

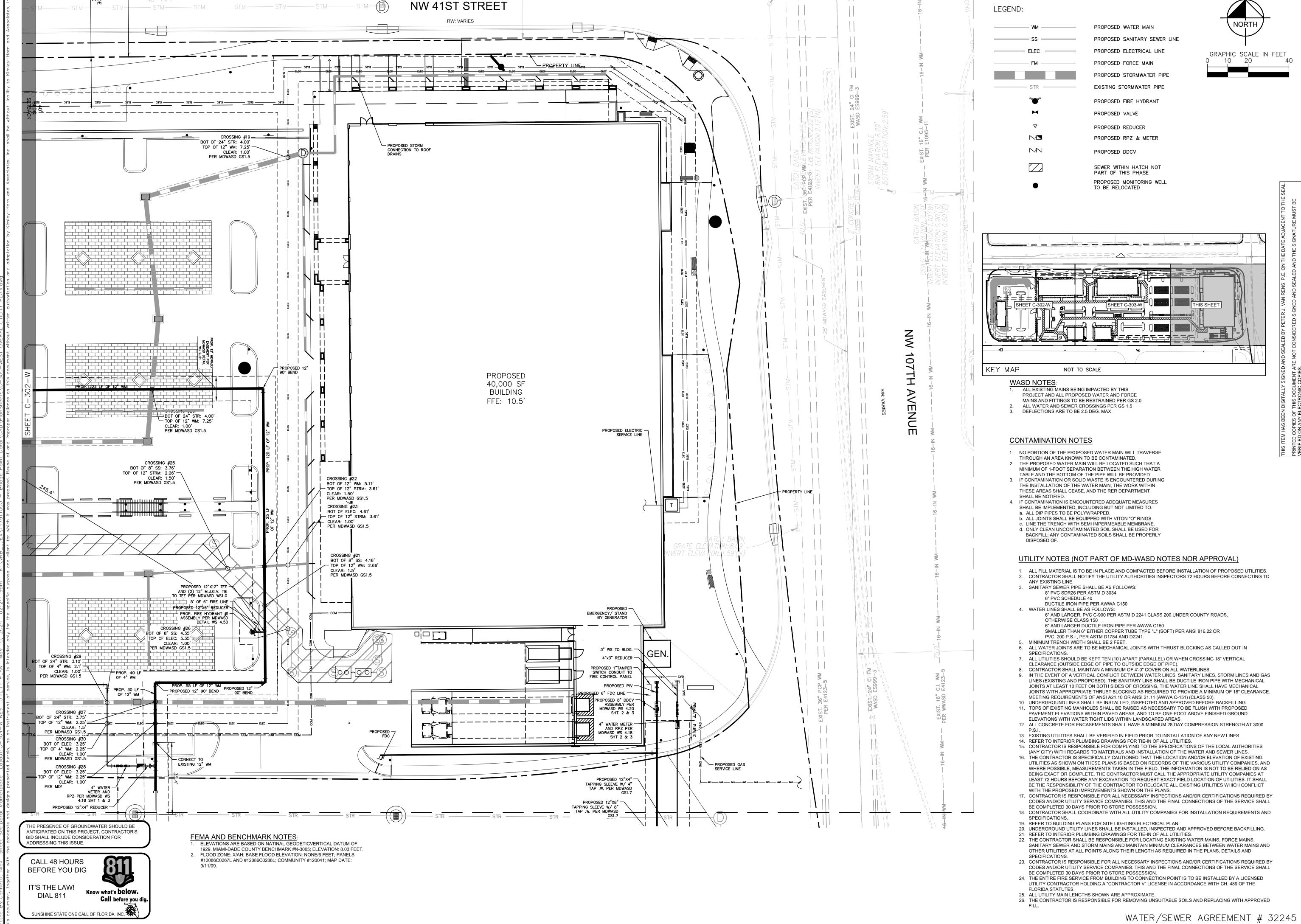
24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE

WATER/SEWER AGREEMENT # 32245

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SHEET NUMBER C-303-W



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SHEET NUMBER C-304-W

(NOT PART OF M-DWASD NOTES OR APPROVAL)

- A. ALL ELEVATIONS REFER TO SEA LEVEL DATUM 1929 (NGVD).
- THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITY INFORMATION. CONTRACTOR SHALL VERIFY THE SIZE, LOCATION AND CHARACTER OF ALL UTILITIES IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION.
 - I. INFORMATION ON EXISTING UTILITIES WAS REQUESTED AND OR OBTAINED FROM THE FOLLOWING SOURCES: a. MIAMI-DADE WATER & SEWER DEPARTMENT
- b. SURVEY BY PULICE LAND SURVEYORS, INC. DATED 02-23-2023 2. INFORMATION ON EXISTING RIGHT-OF-WAYS AND EASEMENT WAS TAKEN
- a. SURVEY BY PULICE LAND SURVEYORS, INC. DATED 02-23-2023.
- NOTIFY ALL UTILITY COMPANIES IN THE AREA BEFORE BEGINNING CONSTRUCTION.
- 2. IF YOU DAMAGE EXISTING IMPROVEMENTS, RESTORE THEM TO THEIR CONDITION AT THE BEGINNING OF YOUR WORK.
- 3. YOU ARE SOLELY RESPONSIBLE FOR COORDINATION AND GIVING NOTICE OF REQUIRED INSPECTIONS. IN DOING THIS, HONOR THE LEAD TIME NEEDS OF THE RESPECTIVE AGENCIES. 4. PRESERVE EXISTING SURVEY MARKERS. REFERENCE THOSE THAT ARE
- LIABLE TO DISTURBANCE AND RESET THOSE THAT BECOME DISPLACED. 5. NOTE: THE ENGINEER'S CERTIFICATION OF CONSTRUCTION OBSERVATION IS REQUIRED FOR UTILITY CONVEYANCE. YOU ARE RESPONSIBLE FOR NOTIFYING THE ENGINEER 72 HOURS IN ADVANCE OF MANHOLE INSTALLATIONS, MAIN & SERVICE INSTALLATIONS, TESTING, FLUSHING AND DISINFECTING SO THAT ENGINEER MAY MAKE THE
- OBSERVATIONS NECESSARY FOR THE CERTIFICATION. 5. SUBMITTALS (SHOP DRAWINGS AND PRODUCT LITERATURE): NUMBER REQUIRED: TWO TO BE RETAINED BY ENGINEER PLUS WHÁTEVER ADDITIONAL MAY BE NEEDED BY CONTRACTOR. SCOPE: ALL PRODUCTS AND MATERIALS. 7. COORDINATE MAINTENANCE OF TRAFFIC WITH AFFECTED PARTIES.

D. RECORD DRAWINGS

- HONOR UTILITY COMPANY REQUIREMENTS. ENGINEER WILL FURNISH ELECTRONIC FILES TO THE CONTRACTOR TO BE
- USED AS A "BASE" FILE FOR RECORD DRAWING PREPARATION. 3. CONTRACTOR SHALL SUBMIT TO ENGINEER A CERTIFIED COPY OF RECORD DRAWINGS FOR ENGINEER'S REVIEW.
- 4. RECORD DRAWING SHALL SHOW BUILT LOCATION AND GRADES FOR PIPE, FITTINGS, VALVES AND HYDRANTS. 5. SUBMIT TO ENGINEER FOR UTILITY DEPARTMENT: RECORD MYLAR AND TWO PRINTS SIGNED AND SEALED BY A LICENSED SURVEYOR AND

ADDITIONAL NOTES FOR CONTRACTOR (NOT PART OF M-DWASD NOTES OR APPROVAL

ENDORSED BY THE CONTRACTOR.

- ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE
- INSTALLATION OF PROPOSED UTILITIES.
 CONTRACTOR SHALL NOTIFY THE UTILITIES AUTHORITY INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED
- BEFORE BACKFILLING. DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL
- SPECIFICATIONS. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING JTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON

POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND

- THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARD TO MATERIALS AND INSTALLATION OF WATER AND SEWER LINES.
- 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 SERVICE. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR
- INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE FLORIDA
- BACTERIOLOGICAL SAMPLE POINTS SHALL BE PLACED IN THE LOCATIONS SHOWN AND AS REQUIRED BY THE FLORIDA DEPT. OF ENVIRONMENTAL
- PROTECTION. ALL BACKFLOW PREVENTION DEVICES SHALL CONFORM TO AWWA M-14.
- ALL WATER MAIN PIPING SHALL CONFORM TO AWWA C-900 IF PVC AND AWWA C-151 IF DUCTILE IRON, UNLESS OTHERWISE NOTED. REFER TO WATER AND SEWER SEPARATION NOTES, THIS SHEET.
- 15. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
- TREES SHALL BE PLACED SO AS TO AVOID BURIED UTILITIES. NO LANDSCAPE PLANTS, OTHER THAN SOD, SHALL BE PLACED WITHIN
- A 3' RADIUS AROUND FIRE HYDRANTS. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE. ALL MANHOLE TOP ELEVATIONS ARE APPROXIMATE AND SHOWN ON THE SANITARY PROFILES SHEETS. CONTRACTOR SHALL SET MANHOLE TOPS
- LEVEL WITH FINISH PAVEMENT GRADES OR, IN UNPAVED AREAS, 6" ABOVE SURROUNDING GRADES. 20. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS, BUILDING UTILITY ENTRANCE LOCATIONS/INVERTS, EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, EXIT PORCHES, RAMPS TRUCK DOCKS, DOWNSPOUTS, BOLLARDS IN BUILDING SIDEWALKS AND AT
- TRUCK WELL RETAINING WALLS. ALSO REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND MOUNTING INSTRUCTIONS FOR WALL MOUNTED SIGNS. MONUMENT OR PYLON SIGNS SHALL BE CONSTRUCTED BY OTHERS. THE CONTRACTOR SHALL STUB CONDUIT AND WIRING TO SIGN LOCATIONS AS

DEPARTMENT OF HEALTH WATER NOTES (REQUIRED)

THE PRESENCE OF GROUNDWATER SHOULD BE

BID SHALL INCLUDE CONSIDERATION FOR

ADDRESSING THIS ISSUE.

BEFORE YOU DIG

IT'S THE LAW!

DIAL 811

ANTICIPATED ON THIS PROJECT. CONTRACTOR'S

SUNSHINE STATE ONE CALL OF FLORIDA. INC.

Know what's **below.**

Call before you di

NOT PART OF M-DWASD NOTES OR APPROVAL)

- STORM DRAINAGE LINES ARE TREATED THE SAME AS SANITARY SEWER LINES. EXFILTRATION DRAINAGE TRENCHES ARE EXEMPTED.
- MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATERMAINS AND SEWER LINES IS REQUIRED. IF UNABLE TO MAINTAIN MINIMUM SEPARATION HORIZONTALLY, EACH PIPE SHALL BE SHELVED WITH MINIMUM 18 INCHES VERTICAL SEPARATION.
- FORCE MAIN MUST HAVE AN 18-INCH VERTICAL SEPARATION FROM WATER
- SEWER LINES, INCLUDING LATERALS, MUST HAVE 18" VERTICAL CLEARANCE BETWEEN WATER MAINS AND/OR 6 INCHES MINIMUM CLEARANCE IF SEWER LINE IS DIP. STORM DRAINAGE LÍNES ARE EXEMPT IF DIP WATER MAIN SEPARATION IS MAINTAINED AND BOTH PIPES HAVE NO JOINTS WITHIN 10 FEET OF

NOTES ON WATER AND SEWER INSTALLATION

DERM REQUIREMENTS--

- (NOT PART OF M-DWASD NOTES OR APPROVAL) 1. A HORIZONTAL DISTANCE OF AT LEAST 6 FEET, AND PREFERABLY 10 FEET (OUTSIDE TO
- OUTSIDE), SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE SEWER PIPES AND WATER PIPES. THE MINIMUM HORIZONTAL SEPARATION CAN BE REDUCED TO 3 FEET FOR VACUUM-TYPE SEWERS OR FOR GRAVITY SEWERS WHERE THE TOP OF THE SEWER PIPE IS AT LEAST 6 INCHES BELOW THE BOTTOM OF THE WATER PIPE. WHEN THE ABOVE SPECIFIED HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF ONE OF THE FOLLOWING IS MET:
- A. THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.

C. THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER PIPE.

- B. THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
- 2. A VERTICAL DISTANCE OF AT LEAST 12 INCHES (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS WITH SEWER PIPES PREFERABLY CROSSING UNDER WATER MAINS. THE MINIMUM VERTICAL SEPARATION CAN BE REDUCED TO 6 INCHES FOR VACUUM-TYPE SEWERS OR FOR GRAVITY SEWERS WHERE THE SEWER PIPE IS BELOW THE WATER MAIN. THE CROSSING SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 6 FEET FROM ALL JOINTS IN GRAVITY AND PRESSURE SEWER PIPES. THIS DISTANCE CAN BE REDUCED TO 3 FEET FOR VACUUM-TYPE SEWERS. WHEN THE ABOVE SPECIFIED VERTICAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT,
- SMALLER SEPARATIONS ARE ALLOWED IF ONE OF THE FOLLOWING IS MET: A. THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.
- B. THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
- 3. AIR RELEASE VALVES SHALL BE PROVIDED AT HIGH POINTS OF NEW FORCE MAIN SANITARY
- 4. GRAVITY SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE C-900 PVC OR DUCTILE IRON PIPE. THE MAXIMUM ALLOWABLE EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE: A. RESIDENTIAL LAND USES. F IFTY (50) GALLONS PER INCH PIPE DIAMETER PER MILE PER
- DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE. B. NON-RESIDENTIAL LAND USES. TWENTY (20) GALLONS PER INCH PIPE DIAMETER PER MILE
- PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE.

C. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED

- EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED. THE MAXIMUM ALLOWABLE EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED OUTSIDE A PUBLIC WELLFIELD PROTECTION AREA SHALL BE ONE HUNDRED (100) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN THE
- 6. FORCEMAIN SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE DUCTILE IRON, C-900 PVC, HDPE OR REINFORCED CONCRETE PRESSURE SEWER PIPES.
- 7. THE MAXIMUM ALLOWABLE EXFILTRATION/LEAKAGE RATE OF FORCE MAIN SANITARY SEWERS A. DUCTILE IRON, C-900 PVC, HDPE AND PVC PIPE. THE ALLOWABLE LEAKAGE RATE SPECIFIED IN
- AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWAS) C600-82 AT A TEST PRESSURE OF 100 PSI FOR A DURATION OF NOT LESS THAN TWO (2) HOURS.
- B. REINFORCED CONCRETE PRESSURE PIPE. HALF (1/2) THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600-82 AT A TEST PRESSURE OF 100 PSI FOR A DURATION OF NOT LESS THAN TWO (2) HOURS.
- C. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED. 8. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, AND CHARACTER OF EXISTING UNDERGROUND
- UTILITIES PRIOR TO START OF CONSTRUCTION. 9. IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC. IN THE
- SAME TRENCH ABOVE AN EXISTING WATER OR SEWER PIPE EXCEPT WHERE THEY CROSS. 10. IF ANY AREA OF THE WORK SITE IS FOUND TO CONTAIN BURIED SOLID WASTE AND/OR GROUND OR GROUND WATER CONTAMINATION, THE FOLLOWING SHALL APPLY:
- D. ALL WORK IN THE AREA SHALL FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS (E.G., OSHA, ETC.) AND NOTIFICATION MUST BE PROVIDED TO THE APPROPRIATE AGENCIES.
- E. IMMEDIATELY NOTIFY THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION (EMRD). THE EMRD CAN BE CONTACTED AT (305) 372-6700.
- F. IF CONTAMINATED SOILS AND/OR BURIED SOLID WASTE MATERIAL IS EXCAVATED DURING CONSTRUCTION, THEN THEY REQUIRE PROPER HANDLING AND DISPOSAL IN ACCORDANCE WITH THE LOCAL, STATE AND FEDERAL REGULATIONS. BE ADVISED THAT THE LANDFILL OWNER/OPERATOR IS THE FINAL AUTHORITY ON DISPOSAL AND MAY HAVE REQUIREMENTS BEYOND THOSE PROVIDED BY HEREIN. IF DISPOSAL WITHIN A MIAMI-DADE COUNTY OWNED LANDFILL (CLASS I LANDFILL) IS APPROPRIATE AND SELECTED, PLEASE CONTACT THE MIAMI-DADE COUNTY DEPARTMENT OF SOLID WASTE MANAGEMENT AT (305) 594-6666 FOR INFORMATION.
- G. THE REUSE OF CONTAMINATED SOILS THAT ARE NOT RETURNED TO THE ORIGINAL EXCAVATION REQUIRES PRIOR APPROVAL OF A SOIL MANAGEMENT PLAN FROM THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION. THE EMRD CAN BE CONTACTED AT
- 11. PUMPS MUST COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) REQUIREMENTS FOR CLASS I, GROUP D, DIVISION 1 LOCATIONS (EXPLOSION PROOF).
- 12. THE CONTRACTOR IS ADVISED THAT A TREE REMOVAL/RELOCATION PERMIT MAY BE REQUIRED PRIOR TO THE REMOVAL AND/OR RELOCATION OF TREE RESOURCES. PRIOR TO REMOVING OR RELOCATING ANY TREES, THE CONTRACTOR SHALL NOTIFY THE TREE AND FOREST RESOURCES SECTION OF DERM AT (305) 372-6574 OR VIA E-MAIL AT: TFRS@MIAMIDADE.GOV, OR CONTACT THE MUNICIPALITY WITH TREE ORDINANCE JURISDICTION TO OBTAIN ANY REQUIRED PERMITS. THOSE TREES NOT INTERFERING WITH THE CONSTRUCTION SHALL BE PROTECTED IN PLACE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 24-49.5 OF THE MIAMI-DADE CODE.
- 13. PLEASE NOTE THAT THE DEMOLITION, REMOVAL, AND/OR DISTURBANCE OF EXISTING UNDERGROUND UTILITIES THAT CONTAIN ASBESTOS- CEMENT PIPES (ACP) ARE SUBJECT TO THE PROVISIONS OF 40 CFR-61 SUBPART M. THEREFORE, PURSUANT TO THE PROVISIONS OF 40 CER-61-145 A NOTICE OF DEMOLITION OR ASBESTOS RENOVATION FORM MUST BE FILED WITH THE AIR QUALITY MANAGEMENT DIVISION (AQMD) OF DERM, AT LEAST TEN (10) WORKING DAYS PRIOR TO STARTING OF ANY WORK. NOTE THAT THE BACKFILLING AND BURIAL OF CRUSHED ACP WOULD CAUSE THESE LOCATIONS TO BE CONSIDERED ACTIVE DISPOSAL SITES AND SUBJECT TO 40 CFR-61.154, AND 40 CFR-61.151 A YEAR AFTER PROJECT COMPLETION. EXISTING STANDARD OPERATING PROCEDURES, AS WELL AS APPLICABLE FEDERAL, STATE AND LOCAL REGULATORY CRITERIA, MUST BE FOLLOWED AND IMPLEMENTED TO MINIMIZE ANY POTENTIAL RELEASE OF FUGITIVE EMISSIONS, ESPECIALLY DURING PROJECT CONSTRUCTION ACTIVITIES. THE AQMD CAN BE CONTACTED VIA EMAIL AT ASBESTOS@MIAMIDADE.GOV OR 305-372-6925.

ENGINEER PRIOR TO STARTING WORK.

- 1. ELEVATIONS SHOWN REFER TO THE NATIONAL GEODETIC VERTICAL DATUM (N.G.V.D.)
- HORIZONTAL AND VERTICAL CONTROL POINTS SHALL BE PROVIDED BY THE OWNER. ALL CONSTRUCTION LAYOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IN THE EVENT THAT CONTROL POINTS ARE DISTURBED BY CONTRACTOR, CONTRACTOR SHALL PAY FOR ALL RESETTING OF CONTROL POINTS.
- 3. EXISTING CONDITIONS WERE TAKEN FROM THE BEST AVAILABLE DATA, CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING AND PROPOSED WORK AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER AND
- 4. EXISTING UTILITIES ARE SHOWN BASED UPON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES AND HAVING THEIR FACILITIES FIELD LOCATED. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE TO EXISTING UTILITIES CAUSED AS A RESULT OF HIS WORK.

FLORIDA DEP/DADE COUNTY DERM NOTES

- ON WATER-SEWER INSTALLATION
- 1. A HORIZONTAL DISTANCE OF 10 FT. SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. WHEN THE 10 FEE HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, THE SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH MECHANICAL JOINTS.
- 2. A VERTICAL DISTANCE OF AT LEAST 18 INCHES SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS. THE SEWER SHALL BE A DUCTILE IRON SINGLE 20 FEET LENGTH CENTERED ON THE CROSSING IF THE MINIMUM VERTICAL DISTANCE IS LESS THAN 18 INCHES OR THE SEWER IS INSTALLED ABOVE THE WATER MAIN (REGARDLESS OF
- 3. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING AND THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO A COMPLETE EVALUATION OF EXISTING AND PROPOSED CONDITIONS.
- 4. THE MAXIMUM ALLOWABLE EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE FIFTY (50) GALLONS PER INCH PIPE DIAMETER PER MILE DAY FOR RESIDENTIAL LAND USE AND TWENTY (20) GALLONS PER INCH PIPE PER MILE PER DAY FOR NONRESIDENTIAL LAND USE.
- 5. FORCE MAIN SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE EITHER DUCTILE IRON OR REINFORCED CONCRETE PRESSURE SEWER PIPE. THE DUCTILE IRON PIPE EXFILTRATION RATE SHALL NOT BE GREATER THAN THE ALLOWED LEAKAGE RATE SPECIFIED IN AN AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWAS) C600-82 AT A TEST PRESSURE OF 100 POUNDS PER SQUARE INCH.
- 6. THE REINFORCED CONCRETE PRESSURE SANITARY SEWER FORCE MAIN EXFILTRATION RATE SHALL NOT BE GREATER THAN ONE-HALF (1/2) THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600-82 AT A TEST PRESSURE OF 100 POUNDS PRE SQUARE INCH.
- 7. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF
- 8. ALL OTHER PUBLIC OR PRIVATE UTILITY FACILITIES SHALL BE CONSTRUCTED AT LEAST 3 FEET FROM ANY WATER AND SEWER MAIN AS MEASURED FROM THE OUTSIDE BELL OF THE WATER AND SEWER PIPE TO THE OUTSIDE OF THE UTILITY
- 9. WHEN THE 3 FEET SEPARATION BETWEEN PROPOSED AND EXISTING LINE IS NOT POSSIBLE, THE CONTRACTOR SHALL HAND DIG OR EXPOSE THE WATER AND SEWER PIPES BEFORE PROCEEDING WITH POWER EQUIPMENT EXCAVATION. 10.IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC., IN THE SAME TRENCH PARALLEL TO AND ABOVE EXISTING WATER AND SEWER PIPES EXCEPT WHERE THEY CROSS. ANY DEVIATION FROM NOTES 6, 7 AND
- 11.A NON-RESETTABLE ELAPSE TIME METER SHALL BE INSTALLED AT EACH PUMP TO RECORD THE TOTAL OPERATING HOURS OF THE STATION.

NOT PART OF M-DWASD APPROVAL)

- IT IS REQUIRED THAT NEW AND RELOCATED SEWER MAINS AND APPURTENANCES BE INSTALLED AND TESTED IN ACCORDANCE WITH THE CRITERIA FOR WATER AND SANITARY SEWER SYSTEMS WITHIN MIAMI DADE COUNTY AND SANITARY SPECIFICATIONS AND WASD LATEST EDITION AND ANY APPLICABLE AWWA STANDARDS AND/OR THE MANUFACTURER'S RECOMMENDED PROCEDURES. IF ANY CONFLICTS BETWEEN THESE REQUIREMENTS EXISTS THE MOST STRINGENT SHALL GOVERN. THE TESTING SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTORS RESPONSIBILITY.
- 2. ALL SANITARY SEWER CLEANOUTS SHALL BE TRAFFIC BEARING TYPE.

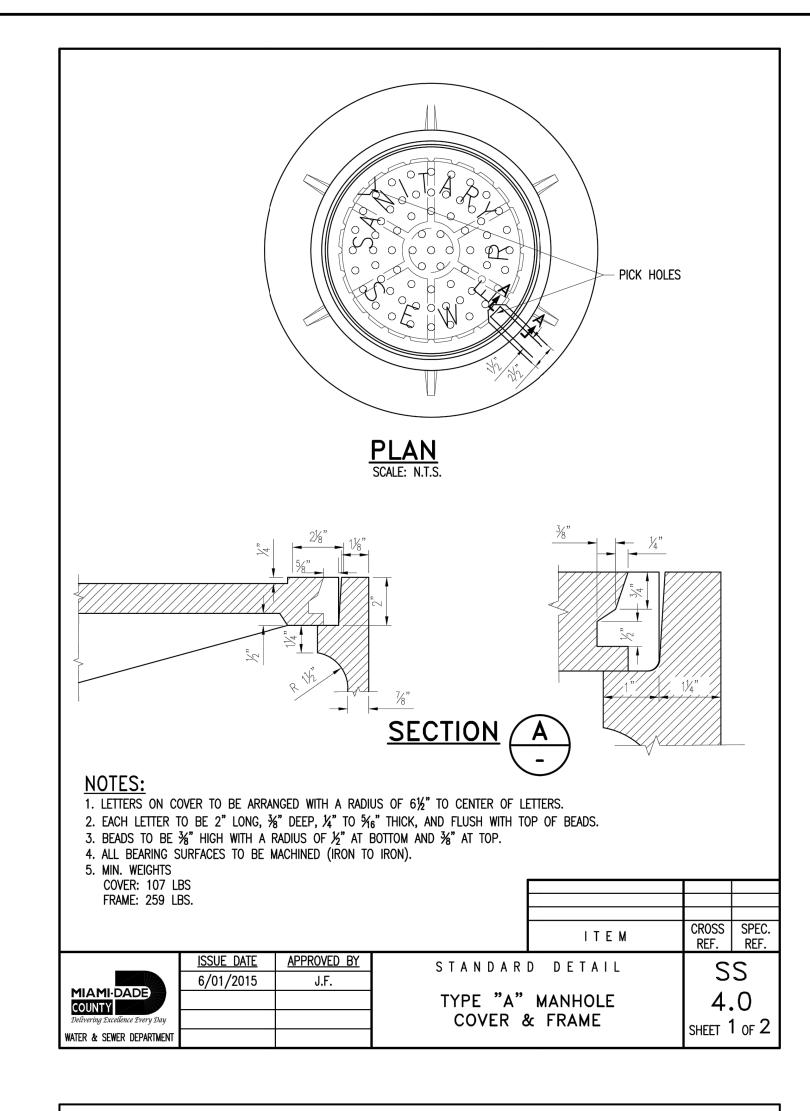
8 SHALL BE APPROVED IN WRITING BY THE RESPONSIBLE WATER AND SEWER UTILITY.

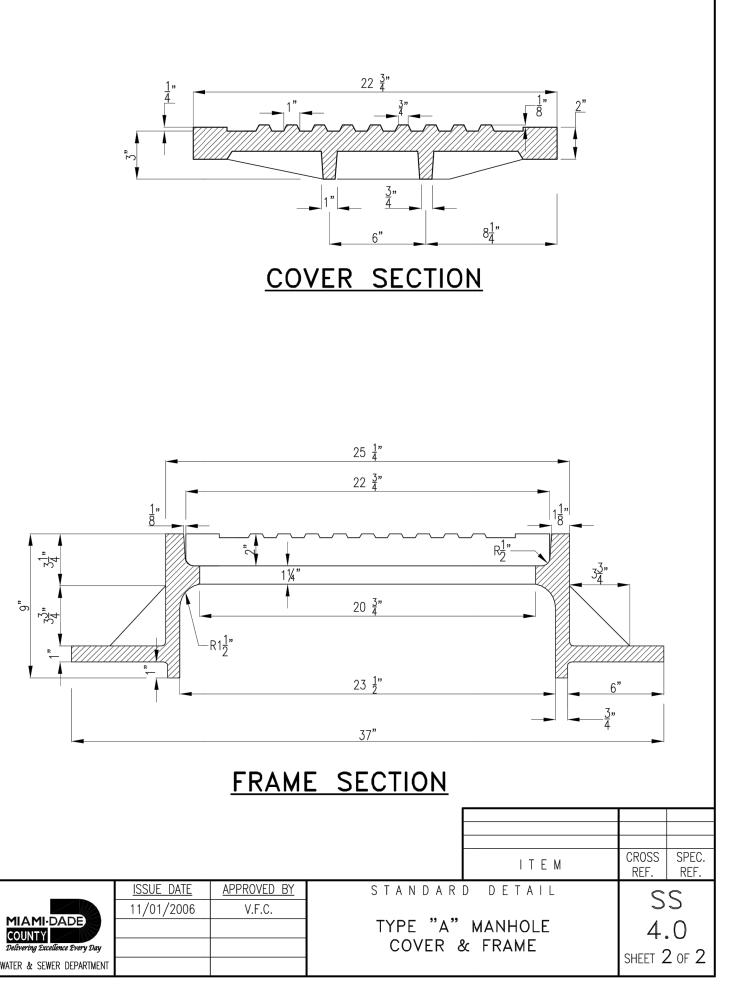
- 3. RIM ELEVATIONS SHOWN ARE APPROXIMATE. ALL SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING LIDS. STRUCTURES IN NON-PAVED AREAS SHALL BE 2" ABOVE FINISH GRADE.
- ALL SANITARY SEWER SLOPES ARE APPROXIMATE.
- 5. ALL SEWER CONSTRUCTION MUST COMPLY WITH MIAMI DADE COUNTY WATER AND SEWER (WASD)
- GARDENS WASTEWATER COLLECTION DEPARTMENT PRIOR TO TELEVISING. A MIAMI-DADE WASD COUNTY INSPECTOR MUST BE PRESENT.

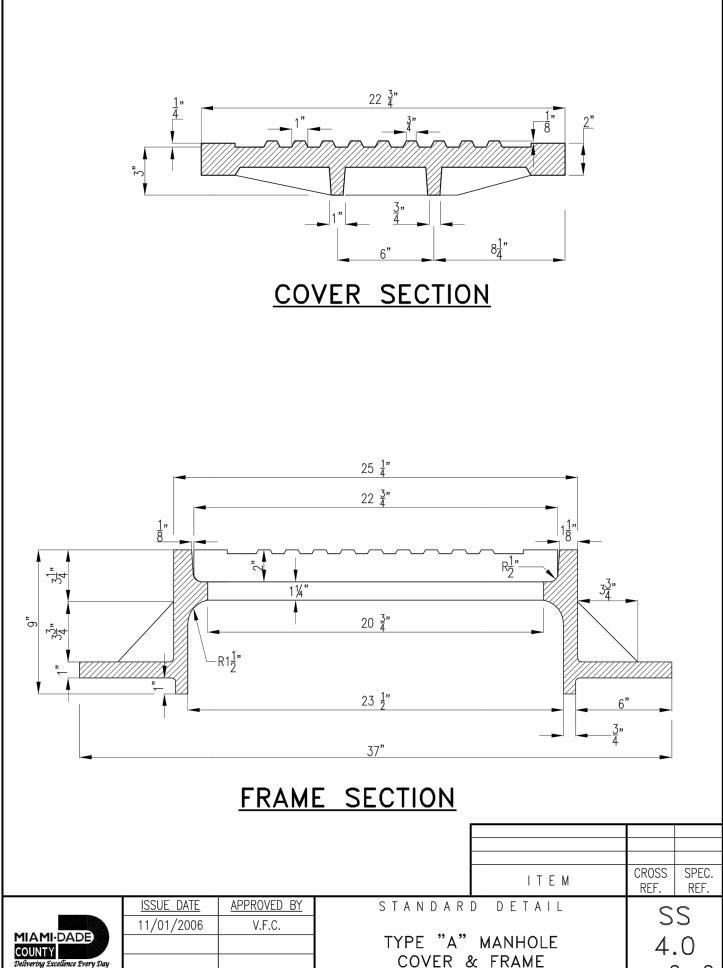
6. GRAVITY MAINS MUST HAVE A TELEVISED INSPECTION. A 48 HOUR NOTICE MUST BE GIVEN TO THE CITY OF MIAMI

(NOT PART OF M-DWASD APPROVAL)

- IT IS REQUIRED THAT NEW AND RELOCATED WATER MAINS AND APPURTENANCES BE INSTALLED AND TESTED IN ACCORDANCE WITH MIAMI DADE COUNTY AND WASD REQUIREMENTS AND ANY APPLICABLE AWWA STANDARDS AND/OR THE MANUFACTURER'S RECOMMENDED PROCEDURES. IF ANY CONFLICTS BETWEEN THESE REQUIREMENTS EXISTS, THE MOST STRINGENT SHALL GOVERN. THE TESTING SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTORS RESPONSIBILITY.
- 2. ALL WATER MAIN PIPING SHALL CONFORM TO AWWA C-900, IF PVC, AND AWWA C-151, IF DUCTILE IRON, UNLESS OTHERWISE
- 3. NEW FIRE HYDRANTS SHALL BE POSITIONED NOT MORE THAN 7 NOR LESS THAN 4 FEET OFF OF THE EDGE OF THE PAVEMENT WITH THE CENTERLINE OF THE STEAMER CONNECTION (4 1/2"), AND NOT OUTSIDE THE RANGE OF 18-22" ABOVE THE FINISH GRADE. ALSO. ALL HYDRANTS SHALL BE READILY ACCESSIBLE WITHOUT THE NEED TO TRANSVERSE SWALES, DITCHES, ETC. REFER TO MDWASD STANDARD
- 4. WATER FOR FIRE FIGHTING PURPOSES SHALL BE AVAILABLE AT THE TIME COMBUSTIBLES ARE ON SITE.
- LANDSCAPING SHALL NOT BE LOCATED WITHIN 7.5 FEET TO SIDES AND FRONT OR 4 FEET TO REAR OF ANY FIRE HYDRANT OR ANY FIRE DEPARTMENT CONNECTION.
- WATER FOR FIRE FIGHTING PURPOSES SHALL BE INDICATED WITH A BLUE ROADWAY REFLECTOR, PLACE ONE FOOT OFF OF THE CENTERLINE OF THE ROAD FACING THE FIRE HYDRANT. THIS INCLUDES NEW AND EXISTING SOURCES. 7. ALL WATER DISTRIBUTION CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH WASD TECHNICAL SPECIFICATIONS FOR CONSTRUCTION OF WATER DISTRIBUTION
- 8. ALL FIRE HYDRANTS DOWNSTREAM OF THE DDC WILL BE PRIVATE. THE PRIVATE FIRE HYDRANTS MUST BE PAINTED THE SAME COLOR AS THE DDC.
- 9. THE ENTIRE FIRE SERVICE FROM BUILDING ENVELOPE TO AND BETWEEN DDCV'S SHALL BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V "LICENSE IN ACCORDANCE WITH CHAPTER
- 10. BACTERIOLOGICAL SAMPLE POINTS SHALL BE PLACED AS SHOWN OR AS OTHERWISE REQUIRED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 11. ALL BACKFLOW PREVENTION DEVICES SHALL CONFORM TO AWWA M-14.

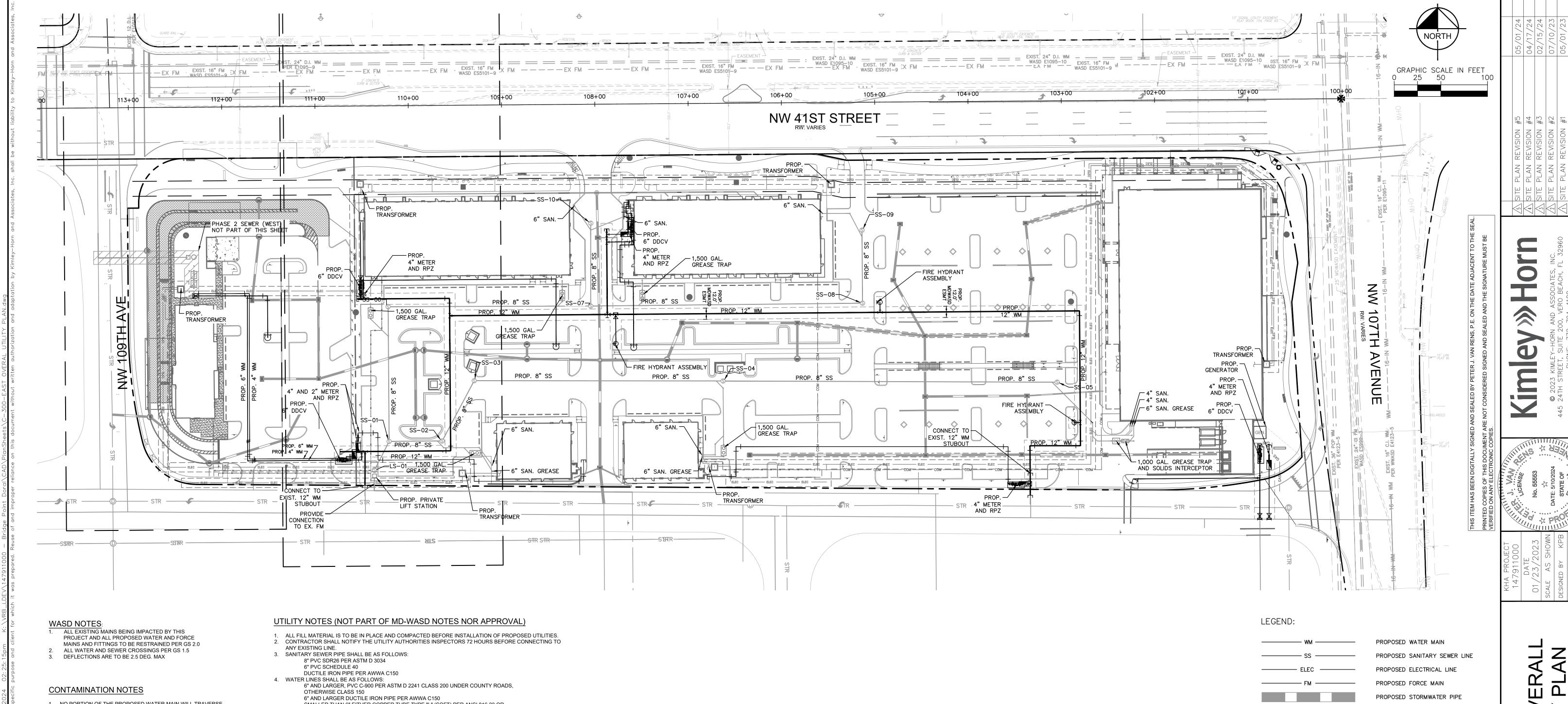






SHEET NUMBER C-305-W

WATER/SEWER AGREEMENT # 32245



- 1. NO PORTION OF THE PROPOSED WATER MAIN WILL TRAVERSE THROUGH AN AREA KNOWN TO BE CONTAMINATED.
- 2. THE PROPOSED WATER MAIN WILL BE LOCATED SUCH THAT A MINIMUM OF 1-FOOT SEPARATION BETWEEN THE HIGH WATER TABLE AND THE BOTTOM OF THE PIPE WILL BE PROVIDED. 3. IF CONTAMINATION OR SOLID WASTE IS ENCOUNTERED DURING
- THE INSTALLATION OF THE WATER MAIN, THE WORK WITHIN THESE AREAS SHALL CEASE, AND THE RER DEPARTMENT SHALL BE NOTIFIED. 4. IF CONTAMINATION IS ENCOUNTERED ADEQUATE MEASURES
- SHALL BE IMPLEMENTED, INCLUDING BUT NOT LIMITED TO: a. ALL DIP PIPES TO BE POLYWRAPPED. b. ALL JOINTS SHALL BE EQUIPPED WITH VITON "O" RINGS. c. LINE THE TRENCH WITH SEMI IMPERMEABLE MEMBRANE. d. ONLY CLEAN UNCONTAMINATED SOIL SHALL BE USED FOR

DISPOSED OF.

THE PRESENCE OF GROUNDWATER SHOULD BE

ANTICIPATED ON THIS PROJECT. CONTRACTOR'S

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

Know what's **below.**

BID SHALL INCLUDE CONSIDERATION FOR

ADDRESSING THIS ISSUE.

BEFORE YOU DIG

IT'S THE LAW!

DIAL 811

BACKFILL; ANY CONTAMINATED SOILS SHALL BE PROPERLY

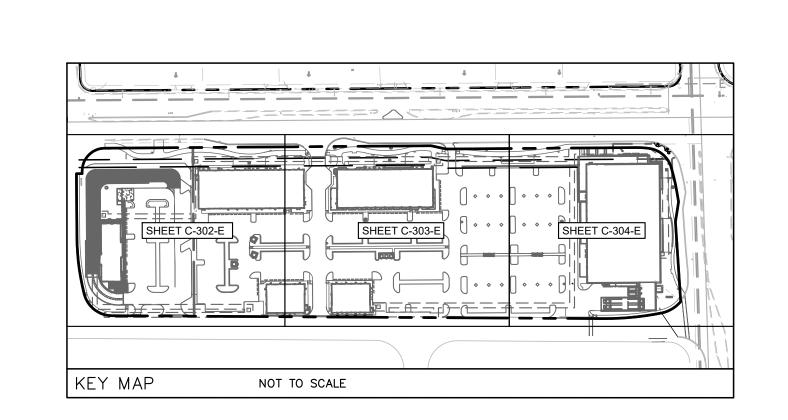
- SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241. 5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- 6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS. 7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL
- CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE). 8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES. 9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE.
- MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50). 10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING. 11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND
- ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS. 12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000
- 13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES. 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- 15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES (ANY CITY) WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES. 16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT
- BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. 17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY

LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL

- CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION. 18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND
- 19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN. 20. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING. 21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.

SPECIFICATIONS.

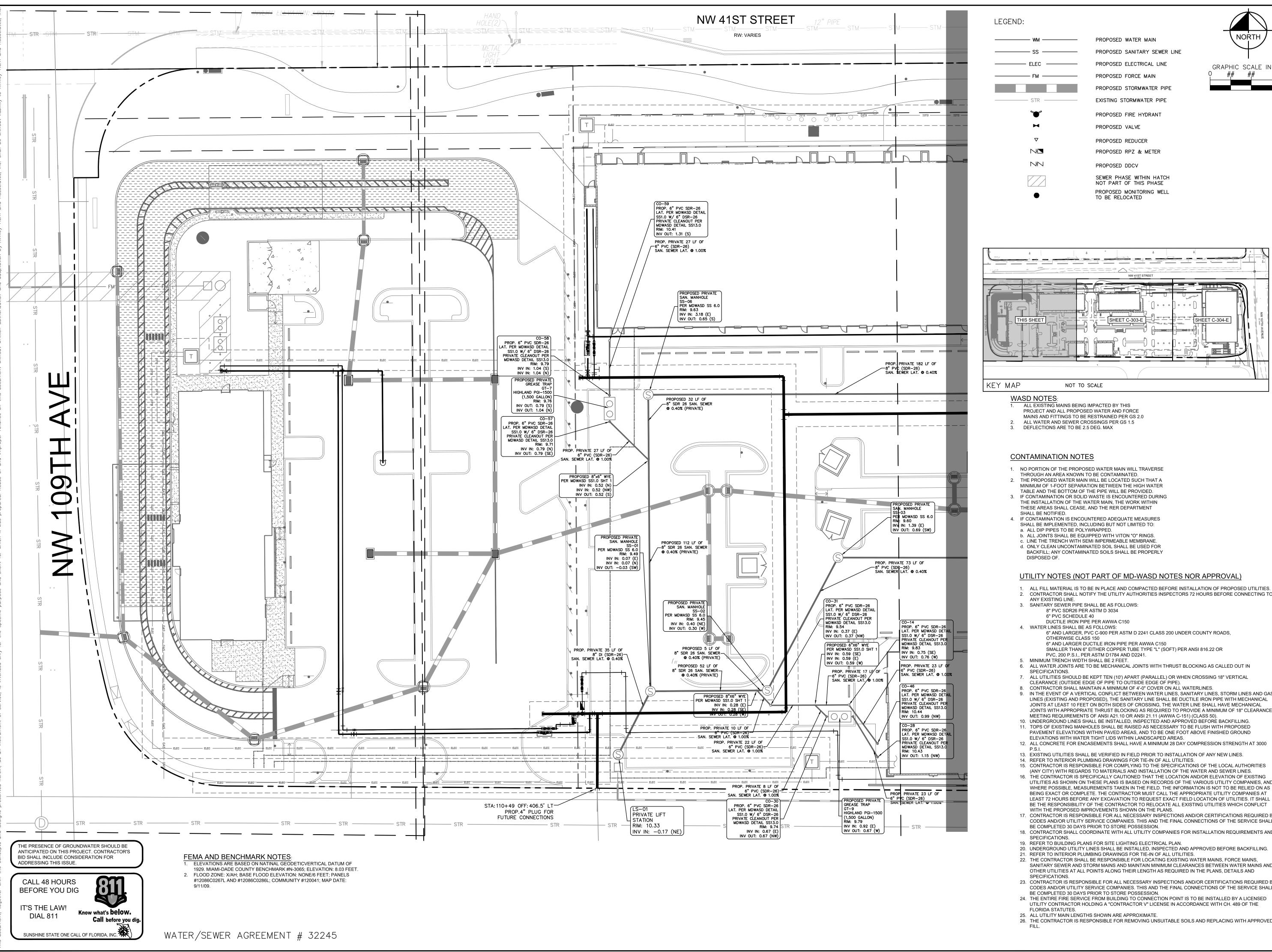
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND SPECIFICATIONS.
- 23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
- 24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE FLORIDA STATUTES. 25. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.
- 26. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNSUITABLE SOILS AND REPLACING WITH APPROVED

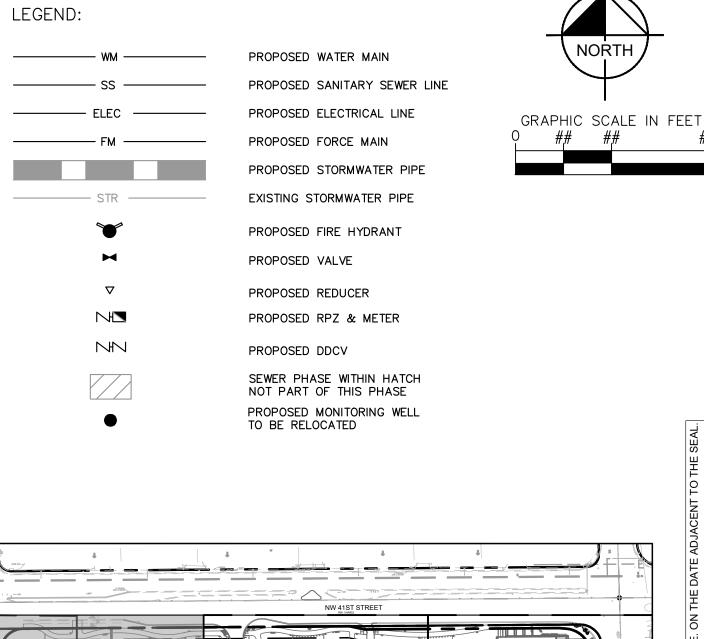


EXISTING STORMWATER PIPE PROPOSED FIRE HYDRANT PROPOSED VALVE PROPOSED REDUCER PROPOSED RPZ & METER PROPOSED DDCV PROPOSED COM LINE _____ COM _____ ——— GAS ——— PROPOSED GAS LINE SEWER PHASE WITHIN HATCH NOT PART OF THIS PHASE PROPOSED MONITORING WELL TO BE RELOCATED

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SHEET NUMBER C-300-E





ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED WATER AND FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0 ALL WATER AND SEWER CROSSINGS PER GS 1.5

DEFLECTIONS ARE TO BE 2.5 DEG. MAX

CONTAMINATION NOTES

- 1. NO PORTION OF THE PROPOSED WATER MAIN WILL TRAVERSE THROUGH AN AREA KNOWN TO BE CONTAMINATED.
- 2. THE PROPOSED WATER MAIN WILL BE LOCATED SUCH THAT A MINIMUM OF 1-FOOT SEPARATION BETWEEN THE HIGH WATER TABLE AND THE BOTTOM OF THE PIPE WILL BE PROVIDED.
- IF CONTAMINATION OR SOLID WASTE IS ENCOUNTERED DURING THE INSTALLATION OF THE WATER MAIN, THE WORK WITHIN THESE AREAS SHALL CEASE, AND THE RER DEPARTMENT
- 4. IF CONTAMINATION IS ENCOUNTERED ADEQUATE MEASURES SHALL BE IMPLEMENTED, INCLUDING BUT NOT LIMITED TO: a. ALL DIP PIPES TO BE POLYWRAPPED.
- b. ALL JOINTS SHALL BE EQUIPPED WITH VITON "O" RINGS. c. LINE THE TRENCH WITH SEMI IMPERMEABLE MEMBRANE. d. ONLY CLEAN UNCONTAMINATED SOIL SHALL BE USED FOR BACKFILL; ANY CONTAMINATED SOILS SHALL BE PROPERLY

UTILITY NOTES (NOT PART OF MD-WASD NOTES NOR APPROVAL)

1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES. 2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO

SHEET C-304-E

3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS: 8" PVC SDR26 PER ASTM D 3034

6" PVC SCHEDULE 40

DUCTILE IRON PIPE PER AWWA C150

4. WATER LINES SHALL BE AS FOLLOWS:

6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS, OTHERWISE CLASS 150

SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR

PVC, 200 P.S.I., PER ASTM D1784 AND D2241.

5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET. 6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN

7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL

CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE). 8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES. 9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL

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PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS.

12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000

13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES. 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.

15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES (ANY CITY) WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES. 16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT

WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS. 17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL

BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION. 18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND

19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN. 20. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.

21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES. 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND

23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL

BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION. 24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE

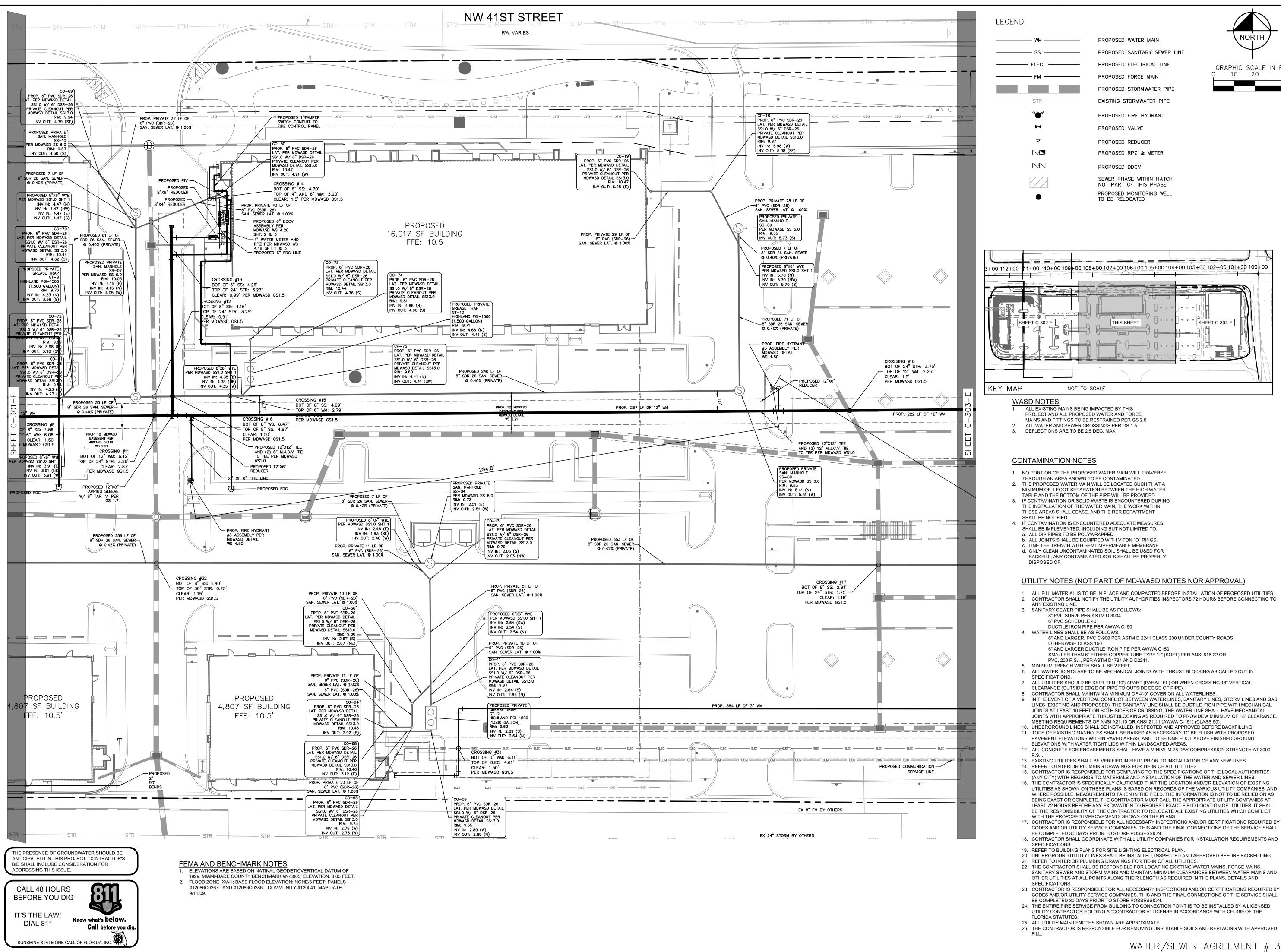
26. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNSUITABLE SOILS AND REPLACING WITH APPROVED

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SHEET NUMBER C-302-E



PROPOSED WATER MAIN PROPOSED SANITARY SEWER LINE PROPOSED ELECTRICAL LINE GRAPHIC SCALE IN FEET 10 20 PROPOSED FORCE MAIN PROPOSED STORMWATER PIPE EXISTING STORMWATER PIPE PROPOSED FIRE HYDRANT PROPOSED VALVE PROPOSED REDUCER PROPOSED RPZ & METER PROPOSED DDCV SEWER PHASE WITHIN HATCH NOT PART OF THIS PHASE PROPOSED MONITORING WELL TO BE RELOCATED

1+00 110+00 109+00 108+00 107+00 106+00 105+00 104+00 103+00 102+00 101+00 100+00 SHEET C-304-E THIS SHEET NOT TO SCALE

> ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED WATER AND FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0 ALL WATER AND SEWER CROSSINGS PER GS 1.5

- 1. NO PORTION OF THE PROPOSED WATER MAIN WILL TRAVERSE
- THE PROPOSED WATER MAIN WILL BE LOCATED SUCH THAT A MINIMUM OF 1-FOOT SEPARATION BETWEEN THE HIGH WATER TABLE AND THE BOTTOM OF THE PIPE WILL BE PROVIDED. IF CONTAMINATION OR SOLID WASTE IS ENCOUNTERED DURIN
- THE INSTALLATION OF THE WATER MAIN, THE WORK WITHIN THESE AREAS SHALL CEASE, AND THE RER DEPARTMENT 4. IF CONTAMINATION IS ENCOUNTERED ADEQUATE MEASURES
- SHALL BE IMPLEMENTED, INCLUDING BUT NOT LIMITED TO: a. ALL DIP PIPES TO BE POLYWRAPPED. b. ALL JOINTS SHALL BE EQUIPPED WITH VITON "O" RINGS. c. LINE THE TRENCH WITH SEMI IMPERMEABLE MEMBRANE. d. ONLY CLEAN UNCONTAMINATED SOIL SHALL BE USED FOR

UTILITY NOTES (NOT PART OF MD-WASD NOTES NOR APPROVAL)

- 1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES. 2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO
- 3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:

6" PVC SCHEDULE 40

DUCTILE IRON PIPE PER AWWA C150 4. WATER LINES SHALL BE AS FOLLOWS:

6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS,

6" AND LARGER DUCTILE IRON PIPE PER AWWA C150 SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR

PVC, 200 P.S.I., PER ASTM D1784 AND D2241. 5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.

6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN

7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE). 8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES.

9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE

MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50). 10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING. 11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND

ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS. 12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000

13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES. 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.

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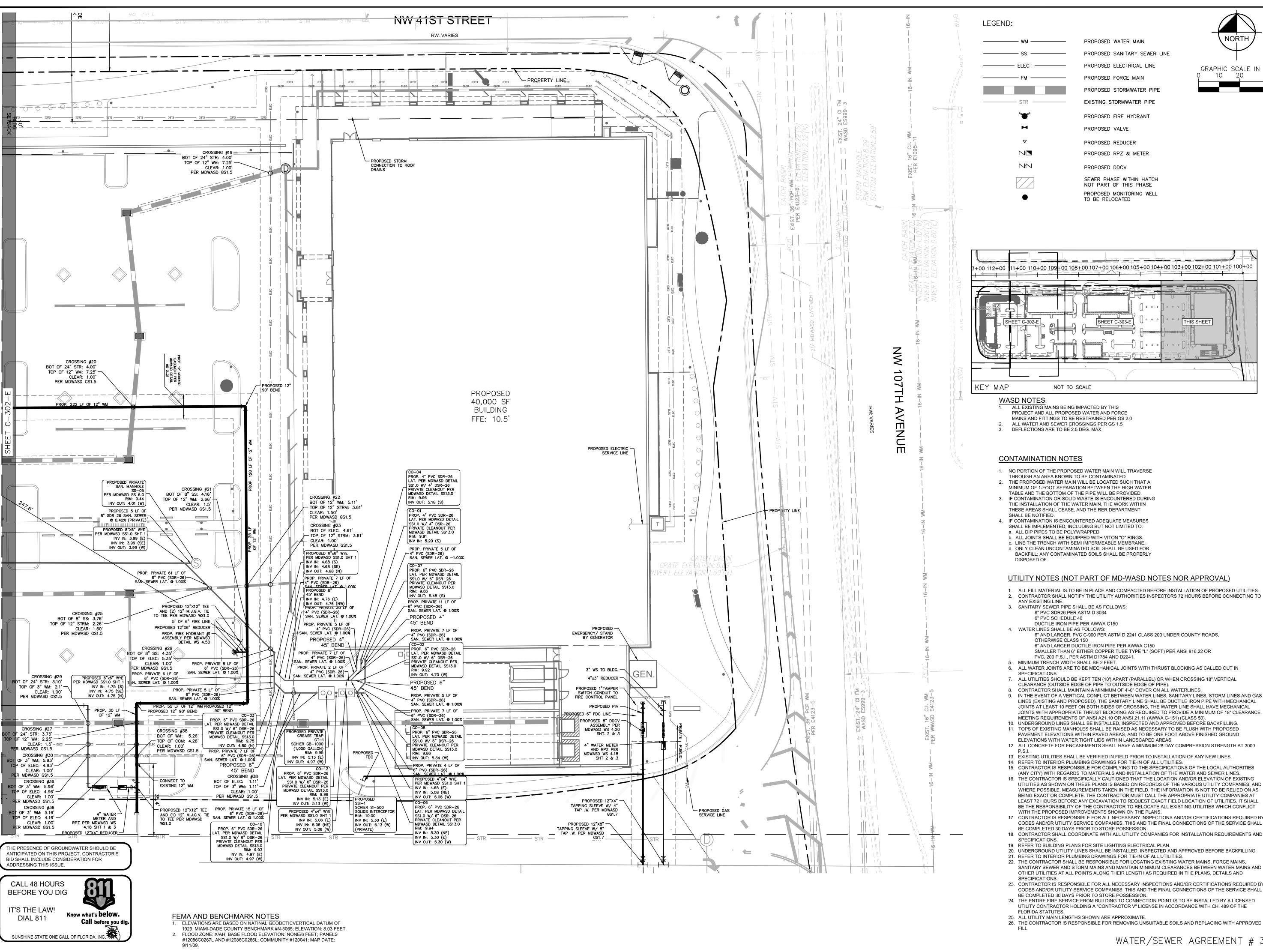
WATER/SEWER AGREEMENT # 32245

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SHEET NUMBER C-303-E



PROPOSED WATER MAIN PROPOSED SANITARY SEWER LINE PROPOSED ELECTRICAL LINE GRAPHIC SCALE IN FEET 10 20 PROPOSED FORCE MAIN PROPOSED STORMWATER PIPE EXISTING STORMWATER PIPE PROPOSED FIRE HYDRANT PROPOSED VALVE PROPOSED REDUCER PROPOSED RPZ & METER PROPOSED DDCV SEWER PHASE WITHIN HATCH NOT PART OF THIS PHASE PROPOSED MONITORING WELL

1+00 110+00 109+00 108+00 107+00 106+00 105+00 104+00 103+00 102+00 101+00 100+00 THIS SHEET

- PROJECT AND ALL PROPOSED WATER AND FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0 ALL WATER AND SEWER CROSSINGS PER GS 1.5
- 1. NO PORTION OF THE PROPOSED WATER MAIN WILL TRAVERSE THROUGH AN AREA KNOWN TO BE CONTAMINATED.
- 2. THE PROPOSED WATER MAIN WILL BE LOCATED SUCH THAT A MINIMUM OF 1-FOOT SEPARATION BETWEEN THE HIGH WATER TABLE AND THE BOTTOM OF THE PIPE WILL BE PROVIDED. IF CONTAMINATION OR SOLID WASTE IS ENCOUNTERED DURING
- 4. IF CONTAMINATION IS ENCOUNTERED ADEQUATE MEASURES SHALL BE IMPLEMENTED, INCLUDING BUT NOT LIMITED TO:
- b. ALL JOINTS SHALL BE EQUIPPED WITH VITON "O" RINGS. c. LINE THE TRENCH WITH SEMI IMPERMEABLE MEMBRANE. d. ONLY CLEAN UNCONTAMINATED SOIL SHALL BE USED FOR BACKFILL; ANY CONTAMINATED SOILS SHALL BE PROPERLY

UTILITY NOTES (NOT PART OF MD-WASD NOTES NOR APPROVAL

- 1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES. 2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO
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DUCTILE IRON PIPE PER AWWA C150

6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS,

6" AND LARGER DUCTILE IRON PIPE PER AWWA C150 SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR

PVC, 200 P.S.I., PER ASTM D1784 AND D2241.

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7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL

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12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000

13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES. 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.

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18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND

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SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND 23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY

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25. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE. 26. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNSUITABLE SOILS AND REPLACING WITH APPROVED

WATER/SEWER AGREEMENT # 32245

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SHEET NUMBER

C-304-E

OBTAINED FROM THE FOLLOWING SOURCES:

- A. ALL ELEVATIONS REFER TO SEA LEVEL DATUM 1929 (NGVD).
- B. THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITY INFORMATION. CONTRACTOR SHALL VERIFY THE SIZE, LOCATION AND CHARACTER OF ALL UTILITIES IN THE FIELD PRIOR TO BEGINNING
- CONSTRUCTION. INFORMATION ON EXISTING UTILITIES WAS REQUESTED AND OR
- a. MIAMI-DADE WATER & SEWER DEPARTMENT . SURVEY BY PULICE LAND SURVEYORS, INC. DATED 02-23-2023. 2. INFORMATION ON EXISTING RIGHT-OF-WAYS AND EASEMENT WAS TAKEN
- a. SURVEY BY PULICE LAND SURVEYORS, INC. DATED 02-23-2023. 1. NOTIFY ALL UTILITY COMPANIES IN THE AREA BEFORE BEGINNING
- CONSTRUCTION 2. IF YOU DAMAGE EXISTING IMPROVEMENTS, RESTORE THEM TO THEIR CONDITION AT THE BEGINNING OF YOUR WORK.
- 3. YOU ARE SOLELY RESPONSIBLE FOR COORDINATION AND GIVING NOTICE OF REQUIRED INSPECTIONS. IN DOING THIS, HONOR THE LEAD TIME NEEDS OF THE RESPECTIVE AGENCIES. 4. PRESERVE EXISTING SURVEY MARKERS. REFERENCE THOSE THAT ARE
- LIABLE TO DISTURBANCE AND RESET THOSE THAT BECOME DISPLACED. 5. NOTE: THE ENGINEER'S CERTIFICATION OF CONSTRUCTION OBSERVATION IS REQUIRED FOR UTILITY CONVEYANCE. YOU ARE RESPONSIBLE FOR NOTIFYING THE ENGINEER 72 HOURS IN ADVANCE OF MANHOLE INSTALLATIONS, MAIN & SERVICE INSTALLATIONS, TESTING, FLUSHING AND DISINFECTING SO THAT ENGINEER MAY MAKE THE
- OBSERVATIONS NECESSARY FOR THE CERTIFICATION. 6. SUBMITTALS (SHOP DRAWINGS AND PRODUCT LITERATURE): NUMBER REQUIRED: TWO TO BE RETAINED BY ENGINEER PLUS WHÂTEVER ADDITIONAL MAY BE NEEDED BY CONTRACTOR. SCOPE: ALL PRODUCTS AND MATERIALS. 7. COORDINATE MAINTENANCE OF TRAFFIC WITH AFFECTED PARTIES.
- HONOR UTILITY COMPANY REQUIREMENTS. ENGINEER WILL FURNISH ELECTRONIC FILES TO THE CONTRACTOR TO BE
- CONTRACTOR SHALL SUBMIT TO ENGINEER A CERTIFIED COPY OF RECORD DRAWINGS FOR ENGINEER'S REVIEW. 4. RECORD DRAWING SHALL SHOW BUILT LOCATION AND GRADES FOR PIPE,
- TTINGS, VALVES AND HYDRANTS. 5. SUBMIT TO ENGINEER FOR UTILITY DEPARTMENT: RECORD MYLAR AND TWO PRINTS SIGNED AND SEALED BY A LICENSED SURVEYOR AND ENDORSED BY THE CONTRACTOR.

LISED AS A "RASE" FILE FOR RECORD DRAWING PREPARATION

NOT PART OF M-DWASD NOTES OR APPROVAL)

SPECIFICATIONS

- 1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE
- INSTALLATION OF PROPOSED UTILITIES. 2. CONTRACTOR SHALL NOTIFY THE UTILITIES AUTHORITY INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED
- BEFORE BACKFILLING DRAWINGS DO NOT PURPORT TO SHOW ALL EXISTING UTILITIES.
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND
- 6. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND /OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES. AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE SPECIFICATIONS THE LOCAL AUTHORITIES WITH REGARD TO MATERIALS AND INSTALLATION OF WATER AND SEWER LINES. 8. 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 SERVICE. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- 10. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE FLORIDA
- 11. BACTERIOLOGICAL SAMPLE POINTS SHALL BE PLACED IN THE LOCATIONS SHOWN AND AS REQUIRED BY THE FLORIDA DEPT. OF ENVIRONMENTAL
- PROTECTION. 12. ALL BACKFLOW PREVENTION DEVICES SHALL CONFORM TO AWWA M-14. 13. ALL WATER MAIN PIPING SHALL CONFORM TO AWWA C-900 IF PVC AND
- AWWA C-151 IF DUCTILE IRON, UNLESS OTHERWISE NOTED. REFER TO WATER AND SEWER SEPARATION NOTES, THIS SHEET
- 15. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE. TREES SHALL BE PLACED SO AS TO AVOID BURIED UTILITIES
- NO LANDSCAPE PLANTS, OTHER THAN SOD, SHALL BE PLACED WITHIN A 3' RADIUS AROUND FIRE HYDRANTS. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE ALL MANHOLE TOP ELEVATIONS ARE APPROXIMATE AND SHOWN ON THE SANITARY PROFILES SHEETS. CONTRACTOR SHALL SET MANHOLE TOPS
- LEVEL WITH FINISH PAVEMENT GRADES OR, IN UNPAVED AREAS, 6" ABOVE SURROUNDING GRADES. 20. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS, BUILDING UTILITY ENTRANCE LOCATIONS/INVERTS, EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, EXIT PORCHES, RAMPS, TRUCK DOCKS, DOWNSPOUTS, BOLLARDS IN BUILDING SIDEWALKS AND AT
- TRUCK WELL RETAINING WALLS. ALSO REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND MOUNTING INSTRUCTIONS FOR WALL MOUNTED SIGNS. MONUMENT OR PYLON SIGNS SHALL BE CONSTRUCTED BY OTHERS. THE CONTRACTOR SHALL STUB CONDUIT AND WIRING TO SIGN LOCATIONS AS PART OF THIS CONTRACT.

DEPARTMENT OF HEALTH

WATER NOTES (REQUIRED) (NOT PART OF M-DWASD NOTES OR APPROVAL)

- STORM DRAINAGE LINES ARE TREATED THE SAME AS SANITARY SEWER LINES. EXFILTRATION DRAINAGE TRENCHES ARE EXEMPTED.
- MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATERMAINS AND SEWER LINES IS REQUIRED. IF UNABLE TO MAINTAIN MINIMUM SEPARATION HORIZONTALLY, EACH PIPE SHALL BE SHELVED WITH MINIMUM 18 INCHES VERTICAL SEPARATION.
- 3. FORCE MAIN MUST HAVE AN 18-INCH VERTICAL SEPARATION FROM WATER
- 4. SEWER LINES, INCLUDING LATERALS, MUST HAVE 18" VERTICAL CLEARANCE BETWEEN WATER MAINS AND/OR 6 INCHES MINIMUM CLEARANCE IF SEWER LINE IS DIP. STORM DRAINAGE LÍNES ARE EXEMPT IF DIP WATER MAIN SEPARATION IS MAINTAINED AND BOTH PIPES HAVE NO JOINTS WITHIN 10 FEET OF

NOTES ON WATER AND SEWER INSTALLATION

DERM REQUIREMENTS-(NOT PART OF M-DWASD NOTES OR APPROVAL

- 1. A HORIZONTAL DISTANCE OF AT LEAST 6 FEET, AND PREFERABLY 10 FEET (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE SEWER PIPES AND WATER PIPES. THE MINIMUM HORIZONTAL SEPARATION CAN BE REDUCED TO 3 FEET FOR VACUUM-TYPE SEWERS OR FOR GRAVITY SEWERS WHERE THE TOP OF THE SEWER PIPE IS AT LEAST 6 INCHES BELOW THE BOTTOM OF THE WATER PIPE. WHEN THE ABOVE SPECIFIED HORIZONTAL DISTANCE
- SEPARATIONS ARE ALLOWED IF ONE OF THE FOLLOWING IS MET: A. THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI.

CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER

- B. THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
- C. THE TOP OF THE SEWER IS AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER PIPE. 2. A VERTICAL DISTANCE OF AT LEAST 12 INCHES (OUTSIDE TO OUTSIDE) SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS WITH SEWER PIPES PREFERABLY CROSSING UNDER WATER MAINS. THE MINIMUM VERTICAL SEPARATION CAN BE REDUCED TO 6 INCHES FOR VACUUM-TYPE SEWERS OR FOR GRAVITY SEWERS WHERE THE SEWER PIPE IS BELOW THE WATER MAIN. THE CROSSING SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST 6 FEET FROM ALL JOINTS IN GRAVITY AND PRESSURE SEWER PIPES. THIS DISTANCE CAN BE REDUCED TO 3 FEET FOR VACUUM-TYPE SEWERS. WHEN THE ABOVE SPECIFIED VERTICAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, SMALLER SEPARATIONS ARE ALLOWED IF ONE OF THE FOLLOWING IS MET:
- A. THE SEWER PIPES ARE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER PIPE AND PRESSURE TESTED AT 150 PSI. B. THE SEWER IS ENCASED IN A WATERTIGHT CARRIER PIPE OR CONCRETE.
- 3. AIR RELEASE VALVES SHALL BE PROVIDED AT HIGH POINTS OF NEW FORCE MAIN SANITARY
- BE C-900 PVC OR DUCTILE IRON PIPE. THE MAXIMUM ALLOWABLE EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE A. RESIDENTIAL LAND USES. F IFTY (50) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE.

4. GRAVITY SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL

- B. NON-RESIDENTIAL LAND USES. TWENTY (20) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE.
- C. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED. THE MAXIMUM ALLOWARI F EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED
- OUTSIDE A PUBLIC WELLFIELD PROTECTION AREA SHALL BE ONE HUNDRED (100) GALLONS PER INCH PIPE DIAMETER PER MILE PER DAY, BASED ON A MINIMUM TWO (2) HOUR TEST HAVING A MINIMUM OF TWO (2) FEET OF POSITIVE HEAD ABOVE THE CROWN OF THE PIPE. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED.
- 6. FORCEMAIN SANITARY SEWERS CONSTRUCTED WITHIN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE DUCTILE IRON, C-900 PVC, HDPE OR REINFORCED CONCRETE PRESSURE SEWER PIPES.
- 7. THE MAXIMUM ALLOWABLE EXFILTRATION/LEAKAGE RATE OF FORCE MAIN SANITARY SEWERS SHALL BE: A. DUCTILE IRON, C-900 PVC, HDPE AND PVC PIPE. THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWAS) C600-82 AT A TEST PRESSURE
- OF 100 PSI FOR A DURATION OF NOT LESS THAN TWO (2) HOURS. B. REINFORCED CONCRETE PRESSURE PIPE. HALF (1/2) THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600-82 AT A TEST PRESSURE OF 100 PSI FOR A DURATION OF NOT LESS THAN TWO (2) HOURS.
- C. ANY OBSERVED LEAKS OR ANY OBVIOUSLY DEFECTIVE JOINTS OR PIPES SHALL BE REPLACED EVEN WHEN THE TOTAL LEAKAGE IS BELOW THAT ALLOWED.
- 8. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, AND CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- 9. IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC. IN THE SAME TRENCH ABOVE AN EXISTING WATER OR SEWER PIPE EXCEPT WHERE THEY CROSS.
- 10. IF ANY AREA OF THE WORK SITE IS FOUND TO CONTAIN BURIED SOLID WASTE AND/OR GROUND OR GROUND WATER CONTAMINATION, THE FOLLOWING SHALL APPLY:
- D. ALL WORK IN THE AREA SHALL FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS (E.G., OSHA, ETC.) AND NOTIFICATION MUST BE PROVIDED TO THE APPROPRIATE AGENCIES.
- E. IMMEDIATELY NOTIFY THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION (EMRD). THE EMRD CAN BE CONTACTED AT (305) 372-6700. F. IF CONTAMINATED SOILS AND/OR BURIED SOLID WASTE MATERIAL IS EXCAVATED DURING
- CONSTRUCTION, THEN THEY REQUIRE PROPER HANDLING AND DISPOSAL IN ACCORDANCE WITH THE LOCAL, STATE AND FEDERAL REGULATIONS. BE ADVISED THAT THE LANDFILL OWNER/OPERATOR IS THE FINAL AUTHORITY ON DISPOSAL AND MAY HAVE REQUIREMENTS BEYOND THOSE PROVIDED BY HEREIN. IF DISPOSAL WITHIN A MIAMI-DADE COUNTY OWNED LANDFILL (CLASS I LANDFILL) IS APPROPRIATE AND SELECTED, PLEASE CONTACT THE MIAMI-DADE COUNTY DEPARTMENT OF SOLID WASTE MANAGEMENT AT (305) 594-6666 FOR INFORMATION.
- G. THE REUSE OF CONTAMINATED SOILS THAT ARE NOT RETURNED TO THE ORIGINAL VATION REQUIRES PRIOR APPROVAL OF A SOIL MANAGEMENT PLAN FROM ENVIRONMENTAL MONITORING AND RESTORATION DIVISION. THE EMRD CAN BE CONTACTED AT (305) 372-6700.
- 11. PUMPS MUST COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC) REQUIREMENTS FOR CLASS I, GROUP D, DIVISION 1 LOCATIONS (EXPLOSION PROOF).
- 12. THE CONTRACTOR IS ADVISED THAT A TREE REMOVAL/RELOCATION PERMIT MAY BE REQUIRED PRIOR TO THE REMOVAL AND/OR RELOCATION OF TREE RESOURCES. PRIOR TO REMOVING OR RELOCATING ANY TREES, THE CONTRACTOR SHALL NOTIFY THE TREE AND FOREST RESOURCES SECTION OF DERM AT (305) 372-6574 OR VIA E-MAIL AT: TFRS@MIAMIDADE.GOV, OR CONTACT THE MUNICIPALITY WITH TREE ORDINANCE JURISDICTION TO OBTAIN ANY REQUIRED PERMITS. THOSE TREES NOT INTERFERING WITH THE CONSTRUCTION SHALL BE PROTECTED IN PLACE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 24-49.5 OF THE MIAMI-DADE CODE.
- 13. PLEASE NOTE THAT THE DEMOLITION, REMOVAL, AND/OR DISTURBANCE OF EXISTING UNDERGROUND UTILITIES THAT CONTAIN ASBESTOS- CEMENT PIPES (ACP) ARE SUBJECT TO THE PROVISIONS OF 40 CFR-61 SUBPART M. THEREFORE, PURSUANT TO THE PROVISIONS OF 40 CFR-61-145, A NOTICE OF DEMOLITION OR ASBESTOS RENOVATION FORM MUST BE FILED WITH THE AIR QUALITY MANAGEMENT DIVISION (AQMD) OF DERM, AT LEAST TEN (10) WORKING DAYS PRIOR TO STARTING OF ANY WORK. NOTE THAT THE BACKFILLING AND BURIAL OF CRUSHED ACP WOULD CAUSE THESE LOCATIONS TO BE CONSIDERED ACTIVE DISPOSAL SITES AND SUBJECT TO 40 CFR-61.154, AND 40 CFR-61.151 A YEAR AFTER PROJECT COMPLETION. EXISTING STANDARD OPERATING PROCEDURES, AS WELL AS APPLICABLE FEDERAL, STATE AND LOCAL REGULATORY CRITERIA, MUST BE FOLLOWED AND IMPLEMENTED TO MINIMIZE ANY POTENTIAL RELEASE OF FUGITIVE EMISSIONS, ESPECIALLY DURING PROJECT CONSTRUCTION ACTIVITIES. THE AQMD CAN BE CONTACTED VIA EMAIL AT ASBESTOS@MIAMIDADE.GOV OR 305-372-6925.

M-DWASD NOTES

THE FOLLOWING ACTIVITIES ON EXISTING WATER SERVICES AND/OR EXISTING WATER MAINS

CUT AND PLUGS WATER MAIN OFFSET INTERCONNECTIONS

SERVICE INSTALLATIONS / RETIREMENTS / SERVICE TRANSFERS HYDRANT INSTALLATIONS / RETIREMENTS / RELOCATIONS ANY WORK THAT MAY AFFECT THE QUALITY AND/OR QUANTITY OF WASD'S WATER, TRANSMISSION AND DISTRIBUTION SYSTEM.

SHALL BE PERFORMED BY A LICENSED CONTRACTOR UNDER THE SUPERVISION OF WASD LICENSED OPERATOR AND WASD DONATIONS INSPECTOR UNDER THE SCOPE AND JURISDICTION OF THE CONTRACTOR'S RIGHT-OF-WAY PERMIT. PRIOR TO ANY WORK BEING DONE, THE LICENSED CONTRACTOR SHALL COORDINATE WITH WASD DONATION INSPECTOR FOR THE SCHEDULING OF LICENSED OPERATOR TO BE PRESENT FOR PROPOSED ACTIVITY.

- . FOR ALL PROJECTS WHERE REMOVAL OF UTILITY LINES IS PROPOSED
- 2.1. ALL EXISTING UTILITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN ACTIVE AND IN SERVICE, UNTIL SUCH TIME WHEN NEW REPLACING UTILITIES HAVE BEEN INSTALLED, IN SERVICE, ACCEPTED BY THE DEPARTMENT AND ALL RELATED SERVICES FROM THE EXISTING MANS HAVE BEEN TRANSFERRED TO THE NEW ONES, BY A LICENSED CONTRACTOR UNDER THE SUPERVISION OF WASD LICENSED OPERATOR AND WASD DONATIONS INSPECTOR UNDER THE SCOPE AND JURISDICTION OF THE CONTRACTOR'S RIGHT-OF-WAY PERMIT AS APPLICABLE.
- 2.2. ALL WATER AND/OR SEWER FACILITIES LOCATED IN PRIVATE PROPERTY SHALL BE REMOVED AFTER ALL INSTALLED SERVICES FROM THEM HAVE BEEN TRANSFERRED TO THE ALREADY INSTALLED AND IN SERVICE NEW MAINS. ANY ASSOCIATED EXCLUSIVE EASEMENTS SHALL BE CLOSED AND RELEASED AFTER THE REMOVAL OF THE EXISTING WATER AND/OR SEWER FACILITIES.

GENERAL NOTES

- NOT A PART OF M-DWASD NOTES OR APPROVAL)
- 1. ELEVATIONS SHOWN REFER TO THE NATIONAL GEODETIC VERTICAL DATUM 1929 (N.G.V.D.)
- 2. HORIZONTAL AND VERTICAL CONTROL POINTS SHALL BE PROVIDED BY THE OWNER. ALL CONSTRUCTION LAYOUT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IN THE EVENT THAT CONTROL POINTS ARE DISTURBED BY CONTRACTOR, CONTRACTOR SHALL PAY FOR ALL RESETTING OF CONTROL POINTS.
- 3. EXISTING CONDITIONS WERE TAKEN FROM THE BEST AVAILABLE DATA, CONTRACTOR SHALL VERIFY LOCATIONS ALL EXISTING AND PROPOSED WORK AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER AND ENGINEER PRIOR TO STARTING WORK.
- 4. EXISTING UTILITIES ARE SHOWN BASED UPON THE BEST INFORMATION AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES AND HAVING THEIR FACILITIES FIELD LOCATED. CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES AND REPAIRING ANY DAMAGE TO EXISTING UTILITIES CAUSED AS A RESULT OF HIS WORK

FLORIDA DEP/DADE COUNTY DERM NOTES

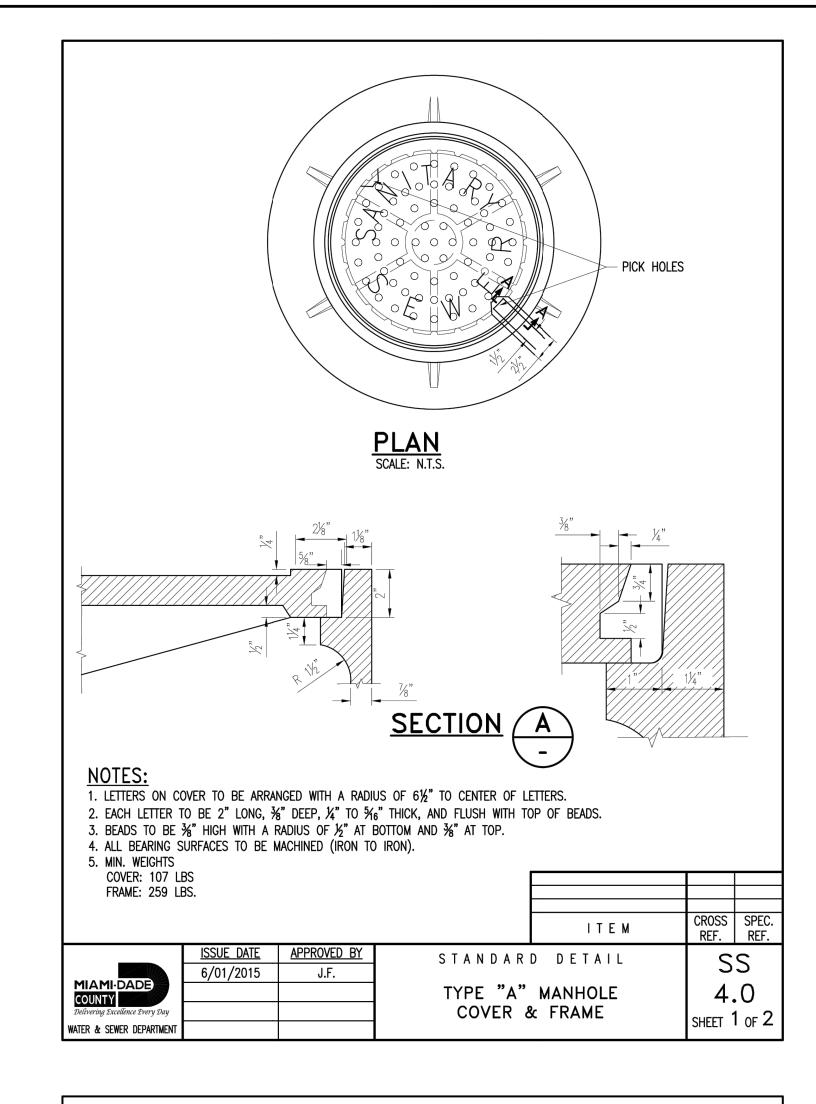
- ON WATER-SEWER INSTALLATION
- 1. A HORIZONTAL DISTANCE OF 10 FT. SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. WHEN THE 10 FEET HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, THE SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH MECHANICAL JOINTS.
- 2. A VERTICAL DISTANCE OF AT LEAST 18 INCHES SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS. THE SEWER SHALL BE A DUCTILE IRON SINGLE 20 FEET LENGTH CENTERED ON THE CROSSING IF THE MINIMUM VERTICAL DISTANCE IS LESS THAN 18 INCHES OR THE SEWER IS INSTALLED ABOVE THE WATER MAIN (REGARDLESS OF
- 3. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING AND THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO A COMPLETE EVALUATION OF EXISTING AND PROPOSED CONDITIONS.
- 4. THE MAXIMUM ALLOWABLE EXFILTRATION RATE OF GRAVITY SANITARY SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE FIFTY (50) GALLONS PER INCH PIPE DIAMETER PER MILE DAY FOR RESIDENTIAL LAND USE AND TWENTY (20) GALLONS PER INCH PIPE PER MILE PER DAY FOR NONRESIDENTIAL LAND USE
- 5. FORCE MAIN SEWERS CONSTRUCTED IN A PUBLIC WELLFIELD PROTECTION AREA SHALL BE EITHER DUCTILE IRON OR REINFORCED CONCRETE PRESSURE SEWER PIPE. THE DUCTILE IRON PIPE EXFILTRATION RATE SHALL NOT BE GREATER THAN THE ALLOWED LEAKAGE RATE SPECIFIED IN AN AMERICAN WATER WORKS ASSOCIATION STANDARD (AWWAS) C600-82 AT A TEST PRESSURE OF 100 POUNDS PER SQUARE INCH.
- 6. THE REINFORCED CONCRETE PRESSURE SANITARY SEWER FORCE MAIN EXFILTRATION RATE SHALL NOT BE GREATER THAN ONE-HALF (1/2) THE ALLOWABLE LEAKAGE RATE SPECIFIED IN AWWA C600-82 AT A TEST PRESSURE OF 100 POUNDS PRE SQUARE INCH.
- 7. THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF 8. ALL OTHER PUBLIC OR PRIVATE UTILITY FACILITIES SHALL BE CONSTRUCTED AT LEAST 3 FEET FROM ANY WATER AND
- SEWER MAIN AS MEASURED FROM THE OUTSIDE BELL OF THE WATER AND SEWER PIPE TO THE OUTSIDE OF THE UTILITY 9. WHEN THE 3 FEET SEPARATION BETWEEN PROPOSED AND EXISTING LINE IS NOT POSSIBLE, THE CONTRACTOR SHALL
- HAND DIG OR EXPOSE THE WATER AND SEWER PIPES BEFORE PROCEEDING WITH POWER EQUIPMENT EXCAVATION. 10.IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC., IN THE SAME TRENCH PARALLEL TO AND ABOVE EXISTING WATER AND SEWER PIPES EXCEPT WHERE THEY CROSS. ANY DEVIATION FROM NOTES 6, 7 AND 8 SHALL BE APPROVED IN WRITING BY THE RESPONSIBLE WATER AND SEWER UTILITY.
- 11.A NON-RESETTABLE ELAPSE TIME METER SHALL BE INSTALLED AT EACH PUMP TO RECORD THE TOTAL OPERATING HOURS OF THE STATION.

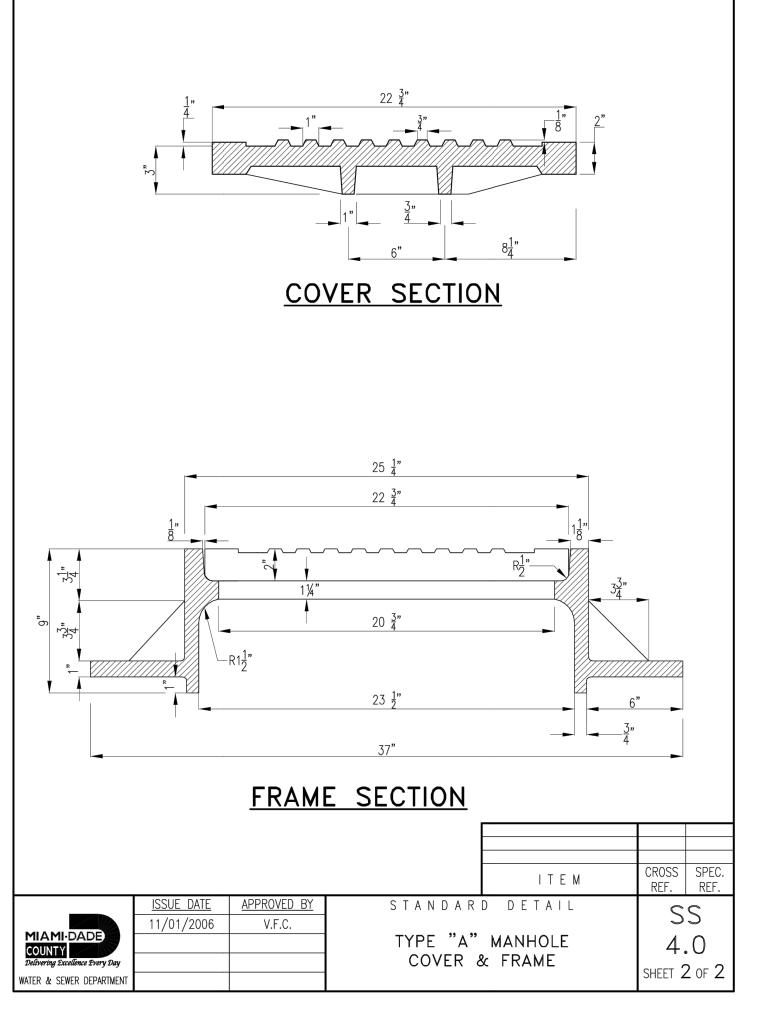
(NOT PART OF M-DWASD APPROVAL)

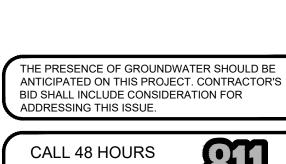
- IT IS REQUIRED THAT NEW AND RELOCATED SEWER MAINS AND APPURTENANCES BE INSTALLED AND TESTED IN ACCORDANCE WITH THE CRITERIA FOR WATER AND SANITARY SEWER SYSTEMS WITHIN MIAMI DADE COUNTY AND SANITARY SPECIFICATIONS AND WASD LATEST EDITION AND ANY APPLICABLE AWWA STANDARDS AND/OR THE MANUFACTURER'S RECOMMENDED PROCEDURES. IF ANY CONFLICTS BETWEEN THESE REQUIREMENTS EXISTS, THE MOST STRINGENT SHALL GOVERN. THE TESTING SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTORS RESPONSIBILITY.
- 2. ALL SANITARY SEWER CLEANOUTS SHALL BE TRAFFIC BEARING TYPE.
- 3. RIM ELEVATIONS SHOWN ARE APPROXIMATE. ALL SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL HAVE TRAFFIC BEARING LIDS. STRUCTURES IN NON-PAVED AREAS SHALL BE 2" ABOVE FINISH GRADE.
- 4. ALL SANITARY SEWER SLOPES ARE APPROXIMATE.
- 5. ALL SEWER CONSTRUCTION MUST COMPLY WITH MIAMI DADE COUNTY WATER AND SEWER (WASD)
- GRAVITY MAINS MUST HAVE A TELEVISED INSPECTION. A 48 HOUR NOTICE MUST BE GIVEN TO THE CITY OF MIAMI GARDENS WASTEWATER COLLECTION DEPARTMENT PRIOR TO TELEVISING, A MIAMI-DADE WASD COUNTY INSPECTOR MUST BE PRESENT

(NOT PART OF M-DWASD APPROVAL)

- IT IS REQUIRED THAT NEW AND RELOCATED WATER MAINS AND APPURTENANCES BE INSTALLED AND TESTED IN ACCORDANCE WITH MIAMI DADE COUNTY AND WASD REQUIREMENTS AND ANY APPLICABLE AWWA STANDARDS AND/OR THE MANUFACTURER'S RECOMMENDED PROCEDURES. IF ANY CONFLICTS BETWEEN THESE REQUIREMENTS EXISTS, THE MOST STRINGENT SHALL GOVERN. THE TESTING SCHEDULING, COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTORS RESPONSIBILITY.
- ALL WATER MAIN PIPING SHALL CONFORM TO AWWA C-900, IF PVC, AND AWWA C-151, IF DUCTILE IRON, UNLESS OTHERWISE . NEW FIRE HYDRANTS SHALL BE POSITIONED NOT MORE THAN 7 NOR LESS THAN 4 FEET OFF OF THE EDGE OF THE PAVEMENT WITH THE CENTERLINE OF THE
- STEAMER CONNECTION (4 1/2"), AND NOT OUTSIDE THE RANGE OF 18–22" ABOVE THE FINISH GRADE. ALSO, ALL HYDRANTS SHALL BE READILY ACCESSIBLE WITHOUT THE NEED TO TRANSVERSE SWALES, DITCHES, ETC. REFER TO MDWASD STANDARD 4. WATER FOR FIRE FIGHTING PURPOSES SHALL BE AVAILABLE AT THE TIME COMBUSTIBLES ARE ON SITE. LANDSCAPING SHALL NOT BE LOCATED WITHIN 7.5 FEET TO SIDES AND FRONT OR 4 FEET TO REAR OF ANY FIRE HYDRANT
- WATER FOR FIRE FIGHTING PURPOSES SHALL BE INDICATED WITH A BLUE ROADWAY REFLECTOR, PLACE ONE FOOT OFF OF THE CENTERLINE OF THE ROAD FACING THE $\,$ FIRE HYDRANT. THIS INCLUDES NEW AND EXISTING SOURCES. ALL WATER DISTRIBUTION CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH WASD TECHNICAL SPECIFICATIONS FOR
- 8. ALL FIRE HYDRANTS DOWNSTREAM OF THE DDC WILL BE PRIVATE. THE PRIVATE FIRE HYDRANTS MUST BE PAINTED THE SAME
- 9. THE ENTIRE FIRE SERVICE FROM BUILDING ENVELOPE TO AND BETWEEN DDCV'S SHALL BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V "LICENSE IN ACCORDANCE WITH CHAPTER
- 10. BACTERIOLOGICAL SAMPLE POINTS SHALL BE PLACED AS SHOWN OR AS OTHERWISE REQUIRED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION. 11. ALL BACKFLOW PREVENTION DEVICES SHALL CONFORM TO AWWA M-14.







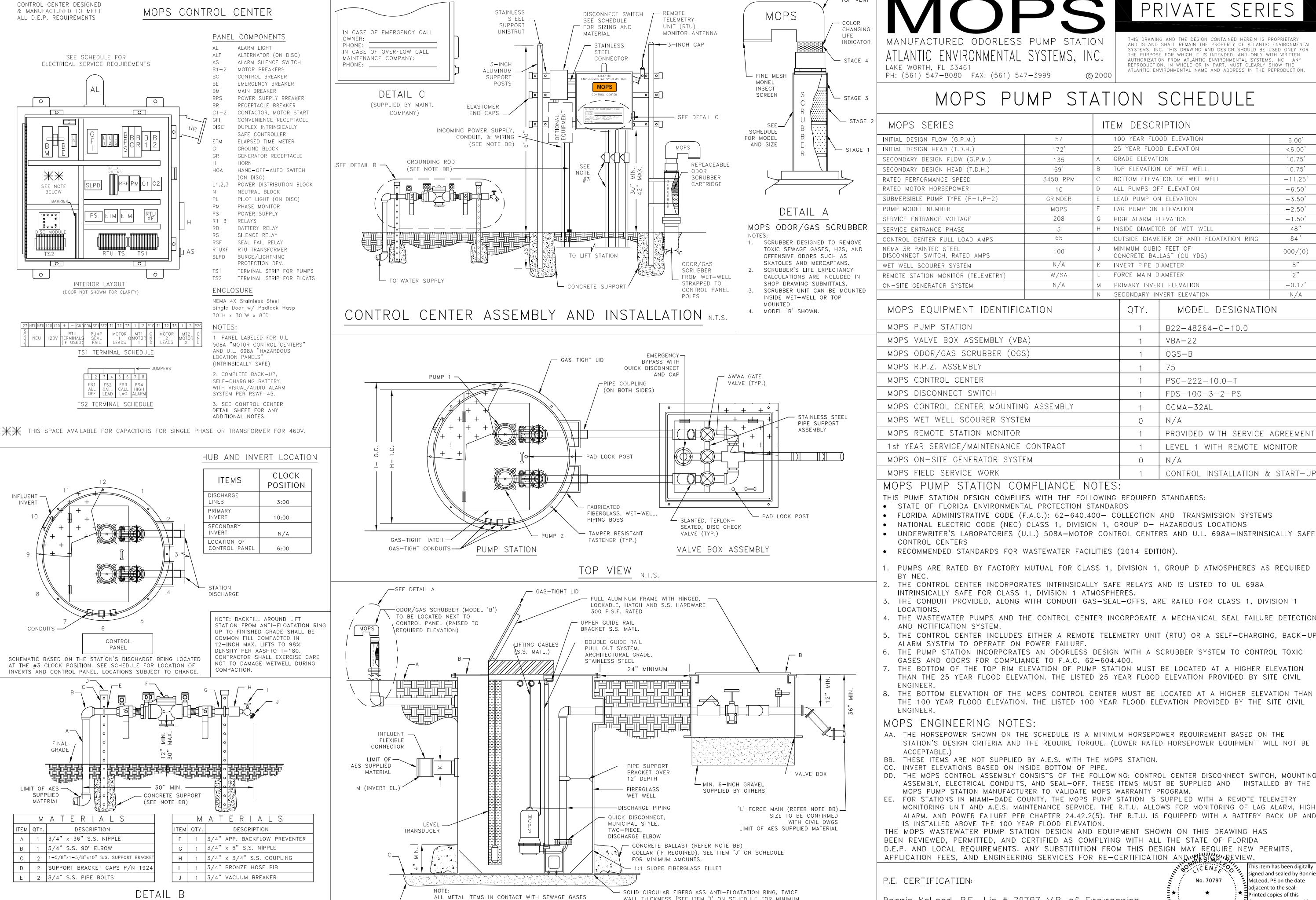
BEFORE YOU DIG IT'S THE LAW! Know what's **below. DIAL 811** Call before you di SUNSHINE STATE ONE CALL OF FLORIDA. INC.

WATER/SEWER AGREEMENT # 32245

SHEET NUMBER C-305-E

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ARE ALUMINUM AND STAINLESS STEEL EXCEPT

EPOXY COATED PUMPS AND DISCHARGE ELBOW.

 $\frac{7}{2}$ MIN. 6-INCH GRAVEL

SUPPLIED BY OTHERS

R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL

U.S.C. AND A.S.S.E. APPROVED

WALL THICKNESS [SEE ITEM 'I' ON SCHEDULE FOR MINIMUM

FLANGE O.D. SIZE (DETERMINES BALLAST CALCULATIONS)]

PRIVATE SERIES

THIS DRAWING AND THE DESIGN CONTAINED HEREIN IS PROPRIETARY

AND IS AND SHALL REMAIN THE PROPERTY OF ATLANTIC ENVIRONMENTAL SYSTEMS, INC. THIS DRAWING AND DESIGN SHOULD BE USED ONLY FOR THE PURPOSE FOR WHICH IT IS INTENDED, AND ONLY WITH WRITTEN AUTHORIZATION FROM ATLANTIC ENVIRONMENTAL SYSTEMS, INC. ANY REPRODUCTION, IN WHOLE OR IN PART, MUST CLEARLY SHOW THE ATLANTIC ENVIRONMENTAL NAME AND ADDRESS IN THE REPRODUCTION.

MOPS PUMP STATION SCHEDULE

MOPS SERIES		ITEM DESCRIPTION	
INITIAL DESIGN FLOW (G.P.M.)	57	100 YEAR FLOOD ELEVATION	6.00'
INITIAL DESIGN HEAD (T.D.H.)	172'	25 YEAR FLOOD ELEVATION	<6.00'
SECONDARY DESIGN FLOW (G.P.M.)	135	A GRADE ELEVATION	10.75
SECONDARY DESIGN HEAD (T.D.H.)	69'	B TOP ELEVATION OF WET WELL	10.75
RATED PERFORMANCE SPEED	3450 RPM	C BOTTOM ELEVATION OF WET WELL	-11.25
RATED MOTOR HORSEPOWER	10	D ALL PUMPS OFF ELEVATION	-6.50
SUBMERSIBLE PUMP TYPE (P-1,P-2)	GRINDER	E LEAD PUMP ON ELEVATION	-3.50'
PUMP MODEL NUMBER	MOPS	F LAG PUMP ON ELEVATION	-2.50'
SERVICE ENTRANCE VOLTAGE	208	G HIGH ALARM ELEVATION	-1.50'
SERVICE ENTRANCE PHASE	3	H INSIDE DIAMETER OF WET-WELL	48"
CONTROL CENTER FULL LOAD AMPS	65	I OUTSIDE DIAMETER OF ANTI-FLOATATION RING	84"
NEMA 3R PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	100	J MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)	000/(0)
WET WELL SCOURER SYSTEM	N/A	K INVERT PIPE DIAMETER	8"
REMOTE STATION MONITOR (TELEMETRY)	W/SA	L FORCE MAIN DIAMETER	2"
ON-SITE GENERATOR SYSTEM	N/A	M PRIMARY INVERT ELEVATION	-0.17
		N SECONDARY INVERT FLEVATION	Ν/Δ

l N	SECONDART IN	IVERT ELEVATION N/A
MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	B22-48264-C-10.0
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-22
MOPS ODOR/GAS SCRUBBER (OGS)	1	OGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-222-10.0-T
MOPS DISCONNECT SWITCH	1	FDS-100-3-2-PS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32AL
MOPS WET WELL SCOURER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	1	PROVIDED WITH SERVICE AGREEMENT
1st YEAR SERVICE/MAINTENANCE CONTRACT	1	LEVEL 1 WITH REMOTE MONITOR
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

1. PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED

2. THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A

3. THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS—SEAL—OFFS, ARE RATED FOR CLASS 1, DIVISION 1

4. THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION

5. THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP

7. THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION

THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL

THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL

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DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE

MONITORING UNIT AND A.E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND

BEEN REVIEWED, PERMITTED, AND CERTIFIED AS COMPLYING WITH ALL THE STATE OF FLORIDA D.E.P. AND LOCAL REQUIREMENTS. ANY SUBSTITUTION FROM THIS DESIGN MAY REQUIRE NEW PERMITS,

Bonnie McLeod, P.E., Lic # 70797 V.P. of Engineering Atlantic Environmental Systems, Inc., Certificate # 26398 2244 4th Ave. North, Lake Worth, Florida 33461 Ph: 561-547-8080 Fax: 561-547-3999

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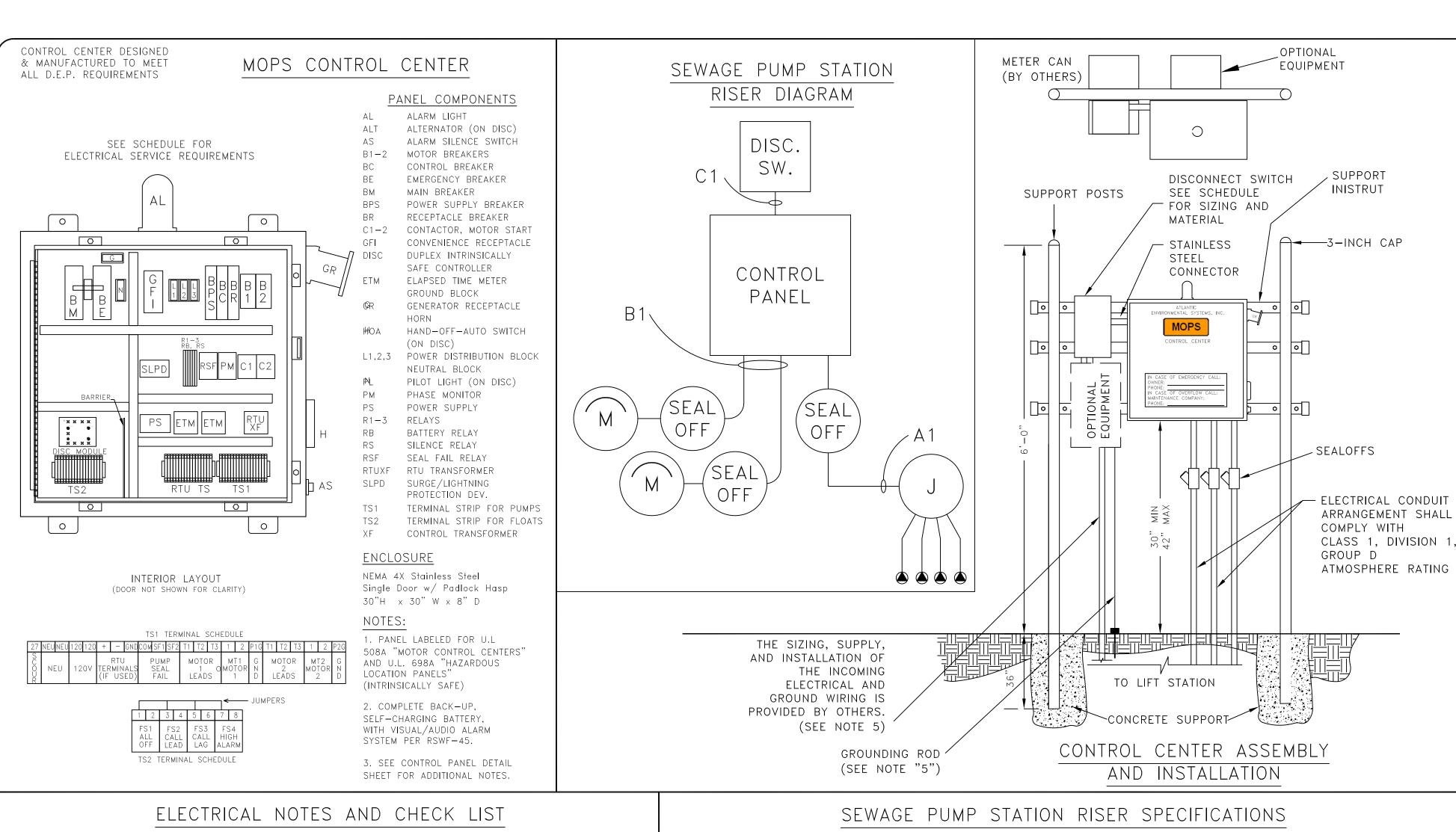
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1. RISER DIAGRAM

- 1.A. SEE DIAGRAM (POWER METER ON REAR SIDE OF CONTROL CENTER MOUNTING ASSEMBLY, WHEN APPLICABLE.)
- 1.B. ALL PRE-WIRED CONTROL PANELS SHALL BE U.L. LISTED AND LABELED, PRIOR TO INSTALLATION.
- 1.C. AMPS INTERRUPTING CAPACITY NOTED ON RISER DIAGRAM.
- 1.D. SEAL OFFS SHALL BE USED AND CONFORM TO N.E.C. CH. 500 ON EACH WETWELL CONDUIT.
- 1.E. ALL SERVICE EQUIPMENT SHALL HAVE A FUSIBLE DISCONNECT AND SHALL BE SERVICE RATED (WHERE APPLICABLE.)
- 1.F. SUPPORT RACK DETAIL AND MATERIALS OF CONSTRUCTION ARE SHOWN ON PUMP STATION DRAWING.
- 1.G. ALL EQUIPMENT SHALL COMPLY WITH N.E.C. 430-120 (ALL BREAKERS SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION WHEN REQUIRED.)

2. PANEL SCHEDULE

- 2.A. SERVICE AND METER ATTACHED TO BACK SIDE OF MOPS PUMP STATION CONTROL CENTER (WHEN APPLICABLE.)
- 3. LOAD CALCULATIONS
- 3.A. NOTE LOAD CALCULATIONS IN DETAIL; NEUTRAL SHALL NOT BE DERATED. 4. MISCELLANEOUS
- 4.A. ALL ELECTRICAL EQUIPMENT AND APPURTENANCES ARE IN COMPLIANCE WITH N.E.C. 110-16.
- 4.B. CIRCUIT NUMBERS NOT APPLICABLE TO THIS PUMP STATION.
- 4.C. CONDUIT SEAL-OFFS SHALL BE USED IN ACCORDANCE WITH N.E.C. SECTION 500-5-1 AND 500-5-A.
- 4.D. PUMP STATION IS RATED CLASS 1, DIVISION 1, GROUP D, FOR HAZARDOUS LOCATION.
- 4.E. ALL CABLES SHALL BE LISTED WITH A N.R.T.L. FOR USE AND APPLICATION. SUBMERSIBLE PUMP MOTOR CABLES WILL BE SUPPLIED INTEGRAL WITH THE MOTOR BY MANUFACTURER.
- 4.F. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE—TELEMETRY MONITORING UNIT THROUGH THE A.E.S. MAINTENANCE SERVICE PROGRAM, THE R.T.U. ALLOWS FOR MONITORING OF THE LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.
- 5. INCOMING POWER SUPPLY AND GROUNDING
- 5.A. THE DESIGN, SUBMITTAL, SUPPLY, SIZING, AND INSTALLATION OF ALL INCOMING POWER FEEDS, GROUNDING, AND GROUNDING CONDUCTORS ARE TO BE PROVIDED BY OTHERS; AND ARE REQUIRED TO COMPLY WITH THE NATIONAL ELECTRIC CODE AND ALL OTHER LOCAL BUILDING CODES.

POWER = 3 PHASE / 60 HERTZ / 208 VAC / 3 WIRE + GROUND

(NEUTRAL/ COMMON SUPPLIED BY PANEL TRANSFORMER.)

(2) 10.0 HP (7.5 KW) PUMP MOTORS WITH FULL LOAD AMPS OF 26.0 EACH

65 AMP MAX. RATING FOR CONTROL PANEL

100 AMP FUSIBLE DISCONNECT SWITCH AS SERVICE ENTRANCE WITH

100 AMP TIME DELAY (INDUCTION MOTOR DUTY) FUSES (QUANTITY 3)

100 AMP DISCONNECT SWITCH

PUMP STATION DUPLEX CONTROL PANEL

PANEL MAIN & EMERGENCY CIRCUIT BREAKERS = 3 POLE

100 AMP, MIN 18 KAIC RATED

MOTOR OCPD RATED FOR 20-50 AMPS ADJUSTABLE

WIRE & CONDUIT SCHEDULE PER DRAWING:

A1 = MIN 1-1/4" RIGID GALVANIZED CONDUIT FOR (4) FLOAT LEVEL SWITCH CORDS

B1 = MIN 1-1/4" RIGID GALVANIZED CONDUIT FOR MOTOR POWER CABLES C1 = MIN 1" (30A), MIN 1-1/4" (60A) MIN 2/0 (100A) MIN 3/0 (200A)

GALVANIZED STEEL CONDUIT NIPPLE BETWEEN DISCONNECT

SWITCH AND CONTROL PANEL, WITH (4) 208-230V, OR (3) 460V

MIN. SIZE AWG # 6 CONDUCTORS,

GROUND = AWG # 6 COPPER (GREEN)

SEWAGE PUMP STATION POWER

LOAD CALCULATIONS

ALL CALCULATIONS ARE PER NATIONAL ELECTRIC CODE SECTION 230-91, 230-42 AND 220. POWER = 3 PHASE / 60 HERTZ / 208 VAC / 3 WIRE + GROUND

(NEUTRAL/ COMMON FROM PANEL 120VAC TRANSFORMER.)

MOTOR = 10.0 HP (7.5 KW) WITH FULL LOAD AMPS = 26.0 EACH

PUMP MOTOR 1 = 26.0 AMPS

PUMP MOTOR 2 = 26.0 AMPS

MAX. CONTROL POWER = 1.0 AMP

MAX. DUPLEX CONVENIENCE RECEPTACLE POWER = 5.0 AMPS

25% OF LARGEST MOTOR LOAD = 6.5 AMPS

TOTAL AMPS = 64.5 MAXIMUM

USE 65 AMP MAX. RATING FOR CONTROL PANEL USE 100 AMP FUSIBLE DISCONNECT SWITCH AS SERVICE ENTRANCE (IF APPLICABLE)

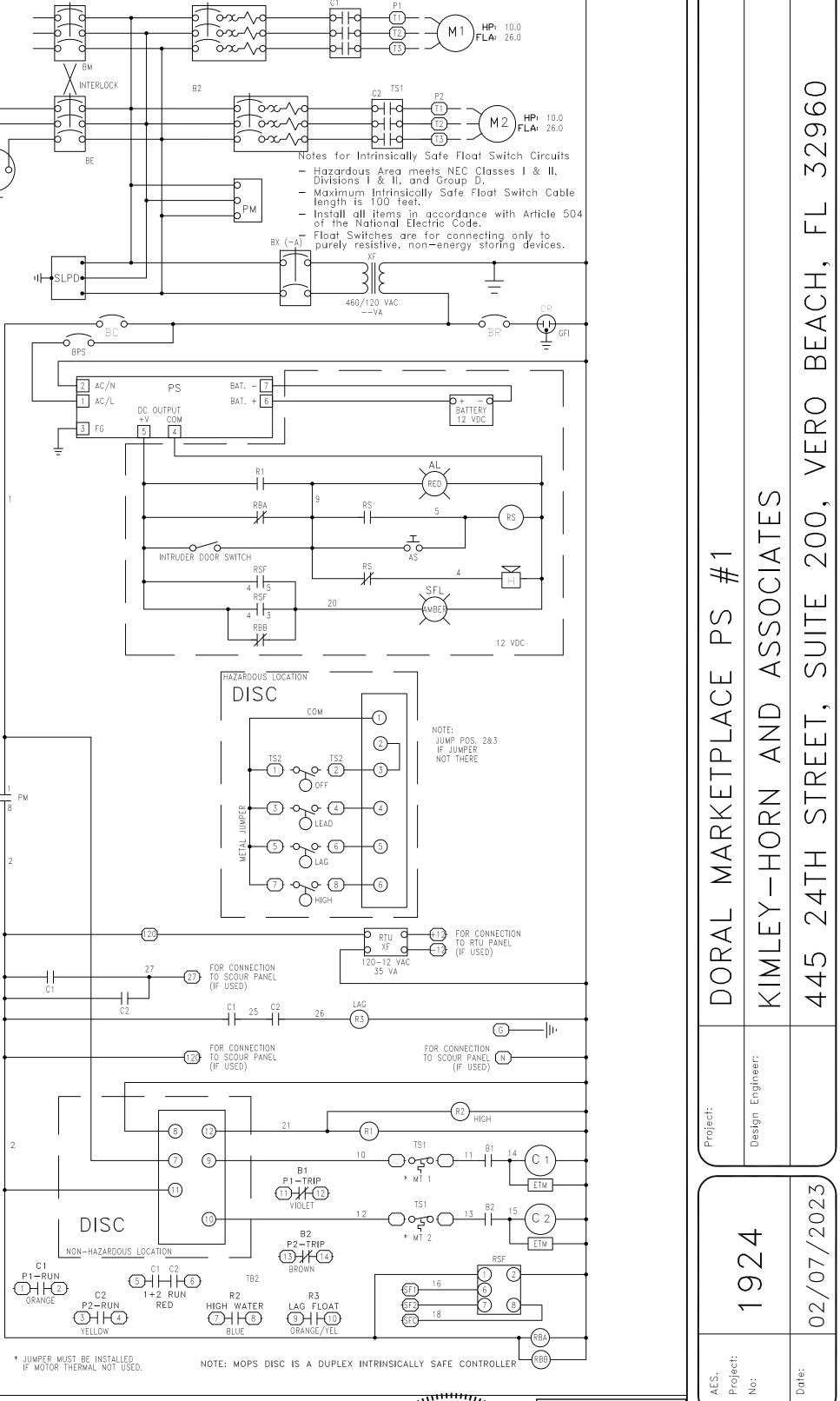
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P.E. CERTIFICATION:

Bonnie McLeod, P.E., Lic # 70797 V.P. of Engine ing * Atlantic Environmental Systems, Inc., Certificate # 26398 2244 4th Ave. North, Lake Worth, Florida 3346 Ph: 561-547-8080 Fax: 561-547-3999

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DPS MANUFACTURED PUMP STATIONS ARE DESIGNED TO MEET THE MINIMU QUIREMENTS OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S ANDARDS FOR SEWAGE LIFT STATIONS, INCLUDING THOSE STANDARDS AS SCRIBED IN THE FLORIDA ADMINISTRATIVE CODE. THE PRIMARY PURPOSE THIS DRAWING IS TO RELAY ELECTRICAL REQUIREMENTS AND TO SHOW IIS DRAWING AND THE DESIGN CONTAINED HEREIN IS PROPRIETARY ND IS AND SHALL REMAIN THE PROPERTY OF ATLANTIC ENVIRONMENTAL STEMS, INC. THIS DRAWING AND DESIGN SHOULD BE USED ONLY FOR E PURPOSE FOR WHICH IT IS INTENDED, AND ONLY WITH WRITTEN ITHORIZATION FROM ATLANTIC ENVIRONMENTAL SYSTEMS, INC. ANY PRODUCTION, IN WHOLE OR IN PART, MUST CLEARLY SHOW THE ATLANTIC ENVIRONMENTAL NAME AND ADDRESS IN THE REPRODUCTION



NTROL SYSTEMS FOR THE LIFT STATION BY A.E.S.

ATLANTIC ENVIRONMENTAL SYSTEMS, INC.

PH: (561) 547-8080 FAX: (561) 547-3999

LAKE WORTH, FL 33461

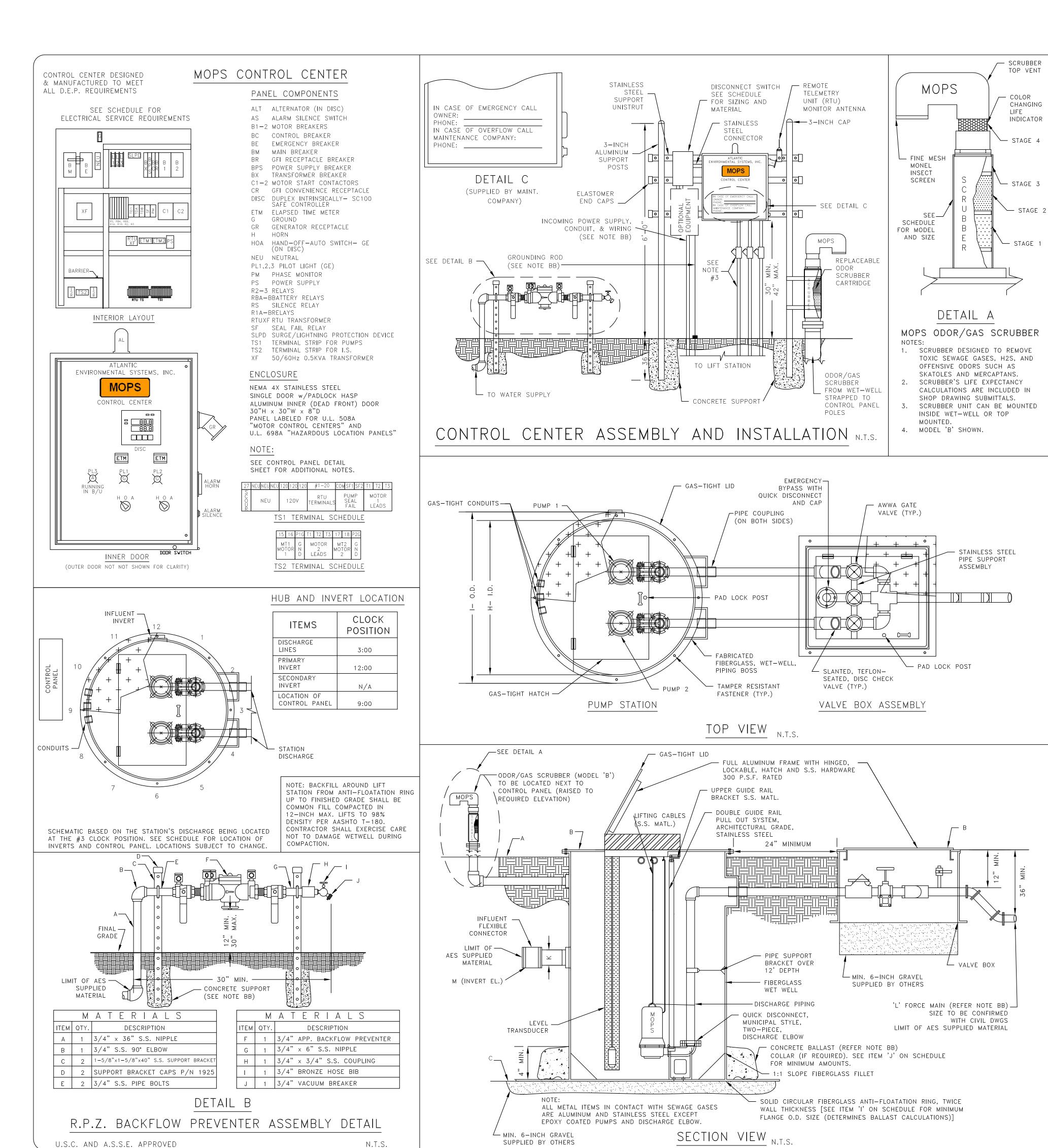
208 VAC

3 PHASE

3 POWER

1 GROUND

Drawing No. LS-2



ATLANTIC ENVIRONMENTAL SYSTEMS, INC. LAKE WORTH, FL 33461

PH: (561) 547-8080 FAX: (561) 547-3999

PRIVATE SERIES

THIS DRAWING AND THE DESIGN CONTAINED HEREIN IS PROPRIETARY AND IS AND SHALL REMAIN THE PROPERTY OF ATLANTIC ENVIRONMENTAL SYSTEMS, INC. THIS DRAWING AND DESIGN SHOULD BE USED ONLY FOR THE PURPOSE FOR WHICH IT IS INTENDED, AND ONLY WITH WRITTEN AUTHORIZATION FROM ATLANTIC ENVIRONMENTAL SYSTEMS, INC. ANY REPRODUCTION, IN WHOLE OR IN PART, MUST CLEARLY SHOW THE ATLANTIC ENVIRONMENTAL NAME AND ADDRESS IN THE REPRODUCTION.

MOPS PUMP STATION SCHEDULE

MOPS SERIES		ITEM DESCRIPTION	
INITIAL DESIGN FLOW (G.P.M.)	69'	100 YEAR FLOOD ELEVATION	6.00'
INITIAL DESIGN HEAD (T.D.H.)	171'	25 YEAR FLOOD ELEVATION	<6.00'
SECONDARY DESIGN FLOW (G.P.M.)	133	A GRADE ELEVATION	10.37
SECONDARY DESIGN HEAD (T.D.H.)	95'	B TOP ELEVATION OF WET WELL	10.37
RATED PERFORMANCE SPEED	3450 RPM	C BOTTOM ELEVATION OF WET WELL	-1.63'
RATED MOTOR HORSEPOWER	10	D ALL PUMPS OFF ELEVATION	2.00'
SUBMERSIBLE PUMP TYPE (P-1,P-2)	GRINDER	E LEAD PUMP ON ELEVATION	5.00'
PUMP MODEL NUMBER	MOPS	F LAG PUMP ON ELEVATION	5.50'
SERVICE ENTRANCE VOLTAGE	208	G HIGH ALARM ELEVATION	6.00'
SERVICE ENTRANCE PHASE	3	H INSIDE DIAMETER OF WET-WELL	48"
CONTROL CENTER FULL LOAD AMPS	65	I OUTSIDE DIAMETER OF ANTI-FLOATATION RING	84"
NEMA 3R PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	100	J MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)	000/(0)
WET WELL SCOURER SYSTEM	N/A	K INVERT PIPE DIAMETER	6"
REMOTE STATION MONITOR (TELEMETRY)	W/SA	L FORCE MAIN DIAMETER	2"
ON-SITE GENERATOR SYSTEM	N/A	M PRIMARY INVERT ELEVATION	6.80'
		N SECONDARY INVERT ELEVATION	N/A

Į		N SE	CONDARY IN	VERT ELEVATION	N/A
	MOPS EQUIPMENT IDENTIFICATION		QTY.	MODEL DESIGNATIO	N
•	MOPS PUMP STATION		1	B22-48144-C-10.0	
	MOPS VALVE BOX ASSEMBLY (VBA)		1	VBA-22	
	MOPS ODOR/GAS SCRUBBER (OGS)		1	OGS-B	
	MOPS R.P.Z. ASSEMBLY		1	75	
	MOPS CONTROL CENTER		1	PSC-222-10.0-T	
	MOPS DISCONNECT SWITCH		1	FDS-100-3-2-PS	
	MOPS CONTROL CENTER MOUNTING ASSEM	MBLY	1	CCMA-32AL	
	MOPS WET WELL SCOURER SYSTEM		0	N/A	
	MOPS REMOTE STATION MONITOR		1	PROVIDED WITH SERVICE	AGREEMENT
	1st YEAR SERVICE/MAINTENANCE CONTRA	СТ	1	LEVEL 1 WITH REMOTE M	ONITOR
	MOPS ON-SITE GENERATOR SYSTEM		0	N/A	
	MOPS FIELD SERVICE WORK		1	CONTROL INSTALLATION &	START-UP
Γ		105 110750			

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS

• FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS • NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS

 UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INSTRINSICALLY SAFE CONTROL CENTERS

RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (2014 EDITION).

1. PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.

2. THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.

3. THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS—SEAL—OFFS, ARE RATED FOR CLASS 1, DIVISION 1

4. THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION

AND NOTIFICATION SYSTEM.

5. THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE

6. THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC

GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400. 7. THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION

THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.

THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

MOPS ENGINEERING NOTES:

AA. THE HORSEPOWER SHOWN ON THE SCHEDULE IS A MINIMUM HORSEPOWER REQUIREMENT BASED ON THE STATION'S DESIGN CRITERIA AND THE REQUIRE TORQUE. (LOWER RATED HORSEPOWER EQUIPMENT WILL NOT BE ACCEPTABLE.)

BB. THESE ITEMS ARE NOT SUPPLIED BY A.E.S. WITH THE MOPS STATION. CC. INVERT ELEVATIONS BASED ON INSIDE BOTTOM OF PIPE.

DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE MOPS PUMP STATION MANUFACTURER TO VALIDATE MOPS WARRANTY PROGRAM.

EE. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE TELEMETRY MONITORING UNIT AND A.E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.

THE MOPS WASTEWATER PUMP STATION DESIGN AND EQUIPMENT SHOWN ON THIS DRAWING HAS BEEN REVIEWED, PERMITTED, AND CERTIFIED AS COMPLYING WITH ALL THE STATE OF FLORIDA D.E.P. AND LOCAL REQUIREMENTS. ANY SUBSTITUTION FROM THIS DESIGN MAY REQUIRE NEW PERMITS, APPLICATION FEES, AND ENGINEERING SERVICES FOR RE-CERTIFICATION AND TESIMORE THE

P.E. CERTIFICATION:

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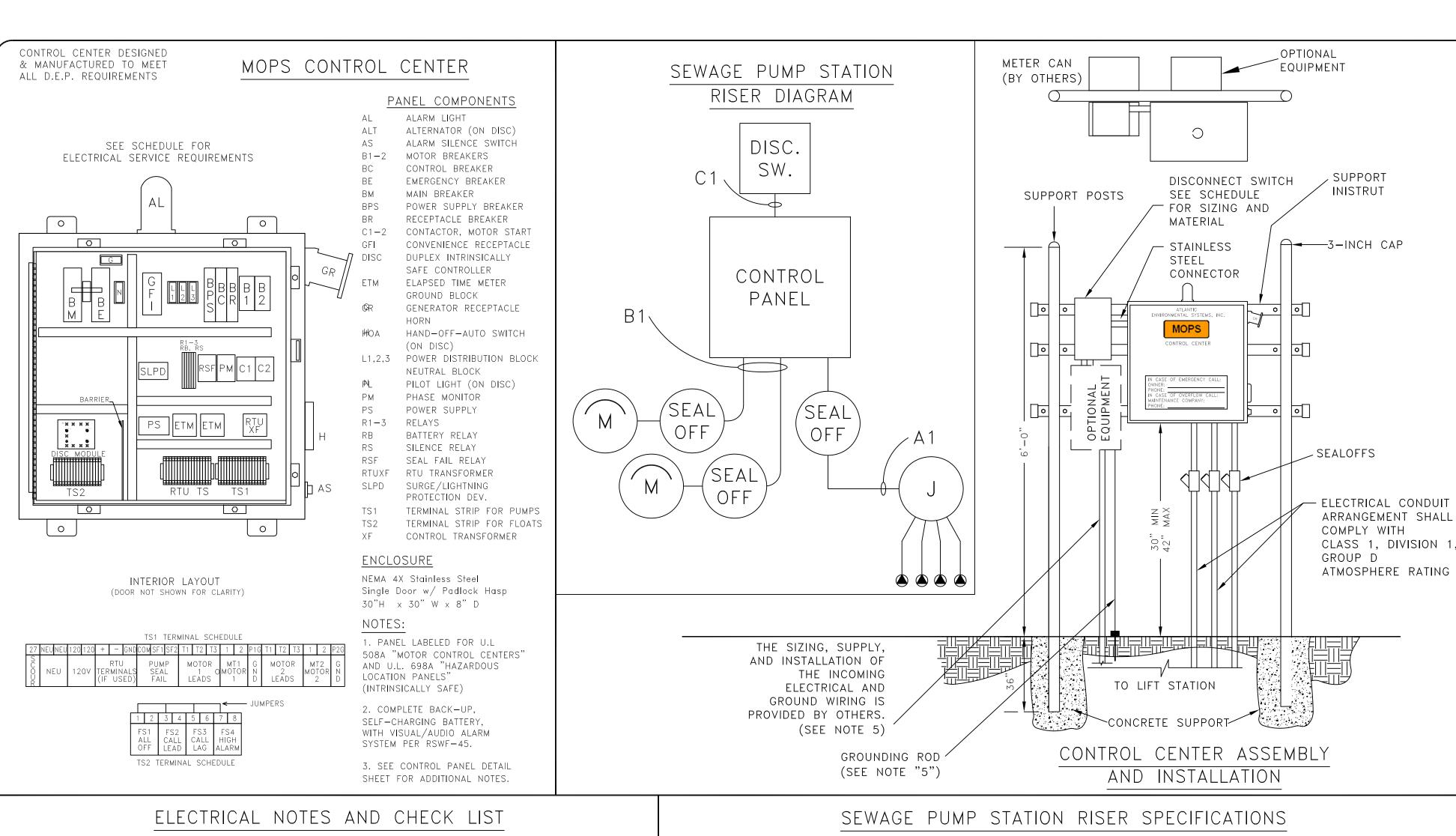
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1. RISER DIAGRAM

- 1.A. SEE DIAGRAM (POWER METER ON REAR SIDE OF CONTROL CENTER MOUNTING ASSEMBLY, WHEN APPLICABLE.)
- 1.B. ALL PRE-WIRED CONTROL PANELS SHALL BE U.L. LISTED AND LABELED, PRIOR TO INSTALLATION.
- 1.C. AMPS INTERRUPTING CAPACITY NOTED ON RISER DIAGRAM.
- 1.D. SEAL OFFS SHALL BE USED AND CONFORM TO N.E.C. CH. 500 ON EACH WETWELL CONDUIT.
- 1.E. ALL SERVICE EQUIPMENT SHALL HAVE A FUSIBLE DISCONNECT AND SHALL BE SERVICE RATED (WHERE APPLICABLE.)
- 1.F. SUPPORT RACK DETAIL AND MATERIALS OF CONSTRUCTION ARE SHOWN ON PUMP STATION DRAWING.
- 1.G. ALL EQUIPMENT SHALL COMPLY WITH N.E.C. 430-120 (ALL BREAKERS SHALL BE CAPABLE OF BEING LOCKED IN THE OPEN POSITION WHEN REQUIRED.)

2. PANEL SCHEDULE

- 2.A. SERVICE AND METER ATTACHED TO BACK SIDE OF MOPS PUMP STATION CONTROL CENTER (WHEN APPLICABLE.)
- 3. LOAD CALCULATIONS
- 3.A. NOTE LOAD CALCULATIONS IN DETAIL; NEUTRAL SHALL NOT BE DERATED. 4. MISCELLANEOUS
- 4.A. ALL ELECTRICAL EQUIPMENT AND APPURTENANCES ARE IN COMPLIANCE WITH N.E.C. 110-16.
- 4.B. CIRCUIT NUMBERS NOT APPLICABLE TO THIS PUMP STATION.
- 4.C. CONDUIT SEAL-OFFS SHALL BE USED IN ACCORDANCE WITH N.E.C. SECTION 500-5-1 AND 500-5-A.
- 4.D. PUMP STATION IS RATED CLASS 1, DIVISION 1, GROUP D, FOR HAZARDOUS LOCATION.
- 4.E. ALL CABLES SHALL BE LISTED WITH A N.R.T.L. FOR USE AND APPLICATION. SUBMERSIBLE PUMP MOTOR CABLES WILL BE SUPPLIED INTEGRAL WITH THE MOTOR BY MANUFACTURER.
- 4.F. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE—TELEMETRY MONITORING UNIT THROUGH THE A.E.S. MAINTENANCE SERVICE PROGRAM, THE R.T.U. ALLOWS FOR MONITORING OF THE LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.
- 5. INCOMING POWER SUPPLY AND GROUNDING
- 5.A. THE DESIGN, SUBMITTAL, SUPPLY, SIZING, AND INSTALLATION OF ALL INCOMING POWER FEEDS, GROUNDING, AND GROUNDING CONDUCTORS ARE TO BE PROVIDED BY OTHERS; AND ARE REQUIRED TO COMPLY WITH THE NATIONAL ELECTRIC CODE AND ALL OTHER LOCAL BUILDING CODES.

POWER = 3 PHASE / 60 HERTZ / 208 VAC / 3 WIRE + GROUND

(NEUTRAL/ COMMON SUPPLIED BY PANEL TRANSFORMER.)

(2) 10.0 HP (7.5 KW) PUMP MOTORS WITH FULL LOAD AMPS OF 26.0 EACH

65 AMP MAX. RATING FOR CONTROL PANEL

100 AMP FUSIBLE DISCONNECT SWITCH AS SERVICE ENTRANCE WITH

100 AMP TIME DELAY (INDUCTION MOTOR DUTY) FUSES (QUANTITY 3)

100 AMP DISCONNECT SWITCH

PUMP STATION DUPLEX CONTROL PANEL

PANEL MAIN & EMERGENCY CIRCUIT BREAKERS = 3 POLE

100 AMP. MIN 18 KAIC RATED

MOTOR OCPD RATED FOR 20-50 AMPS ADJUSTABLE

WIRE & CONDUIT SCHEDULE PER DRAWING:

A1 = MIN 1-1/4" RIGID GALVANIZED CONDUIT FOR (4) FLOAT LEVEL SWITCH CORDS

B1 = MIN 1-1/4" RIGID GALVANIZED CONDUIT FOR MOTOR POWER CABLES C1 = MIN 1" (30A), MIN 1-1/4" (60A) MIN 2/0 (100A) MIN 3/0 (200A)

GALVANIZED STEEL CONDUIT NIPPLE BETWEEN DISCONNECT

SWITCH AND CONTROL PANEL, WITH (4) 208-230V, OR (3) 460V

MIN. SIZE AWG # 6 CONDUCTORS,

GROUND = AWG # 6 COPPER (GREEN)

SEWAGE PUMP STATION POWER

LOAD CALCULATIONS

ALL CALCULATIONS ARE PER NATIONAL ELECTRIC CODE SECTION 230-91, 230-42 AND 220. POWER = 3 PHASE / 60 HERTZ / 208 VAC / 3 WIRE + GROUND

(NEUTRAL/ COMMON FROM PANEL 120VAC TRANSFORMER.)

MOTOR = 10.0 HP (7.5 KW) WITH FULL LOAD AMPS = 26.0 EACH

PUMP MOTOR 1 = 26.0 AMPS

PUMP MOTOR 2 = 26.0 AMPS

MAX. CONTROL POWER = 1.0 AMP

MAX. DUPLEX CONVENIENCE RECEPTACLE POWER = 5.0 AMPS

25% OF LARGEST MOTOR LOAD = 6.5 AMPS

TOTAL AMPS = 64.5 MAXIMUM

USE 65 AMP MAX. RATING FOR CONTROL PANEL

USE 100 AMP FUSIBLE DISCONNECT SWITCH AS SERVICE ENTRANCE (IF APPLICABLE)

USE 100 AMP TIME DELAY (INDUCTION MOTOR DUTY) FUSES (QUANTITY 3)

ATLANTIC ENVIRONMENTAL SYSTEMS, INC. LAKE WORTH, FL 33461

PH: (561) 547-8080 FAX: (561) 547-3999

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IIS DRAWING AND THE DESIGN CONTAINED HEREIN IS PROPRIETARY ND IS AND SHALL REMAIN THE PROPERTY OF ATLANTIC ENVIRONMENTAL STEMS, INC. THIS DRAWING AND DESIGN SHOULD BE USED ONLY FOR E PURPOSE FOR WHICH IT IS INTENDED, AND ONLY WITH WRITTEN ITHORIZATION FROM ATLANTIC ENVIRONMENTAL SYSTEMS, INC. ANY PRODUCTION, IN WHOLE OR IN PART, MUST CLEARLY SHOW THE ATLANTIC ENVIRONMENTAL NAME AND ADDRESS IN THE REPRODUCTION

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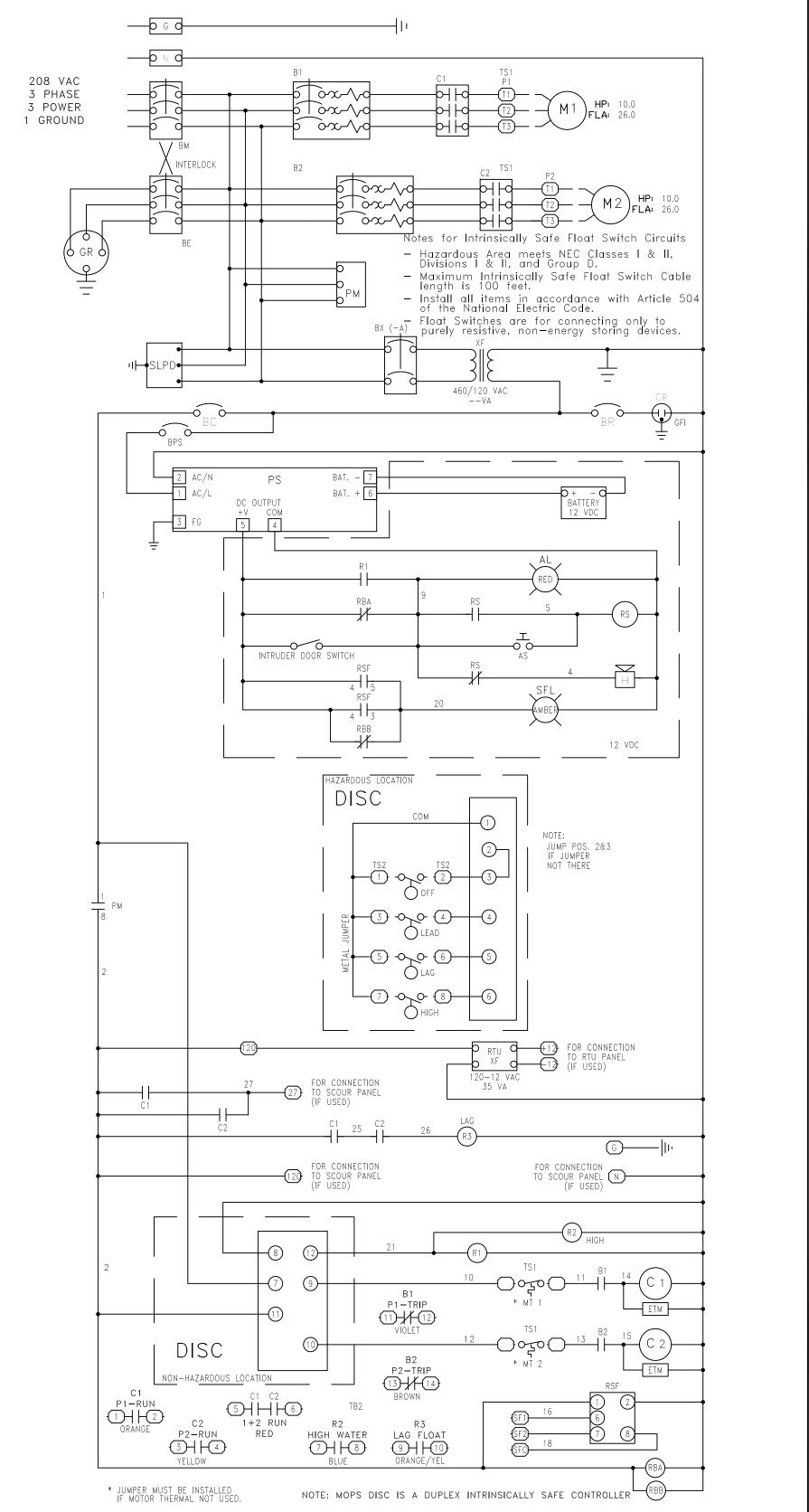
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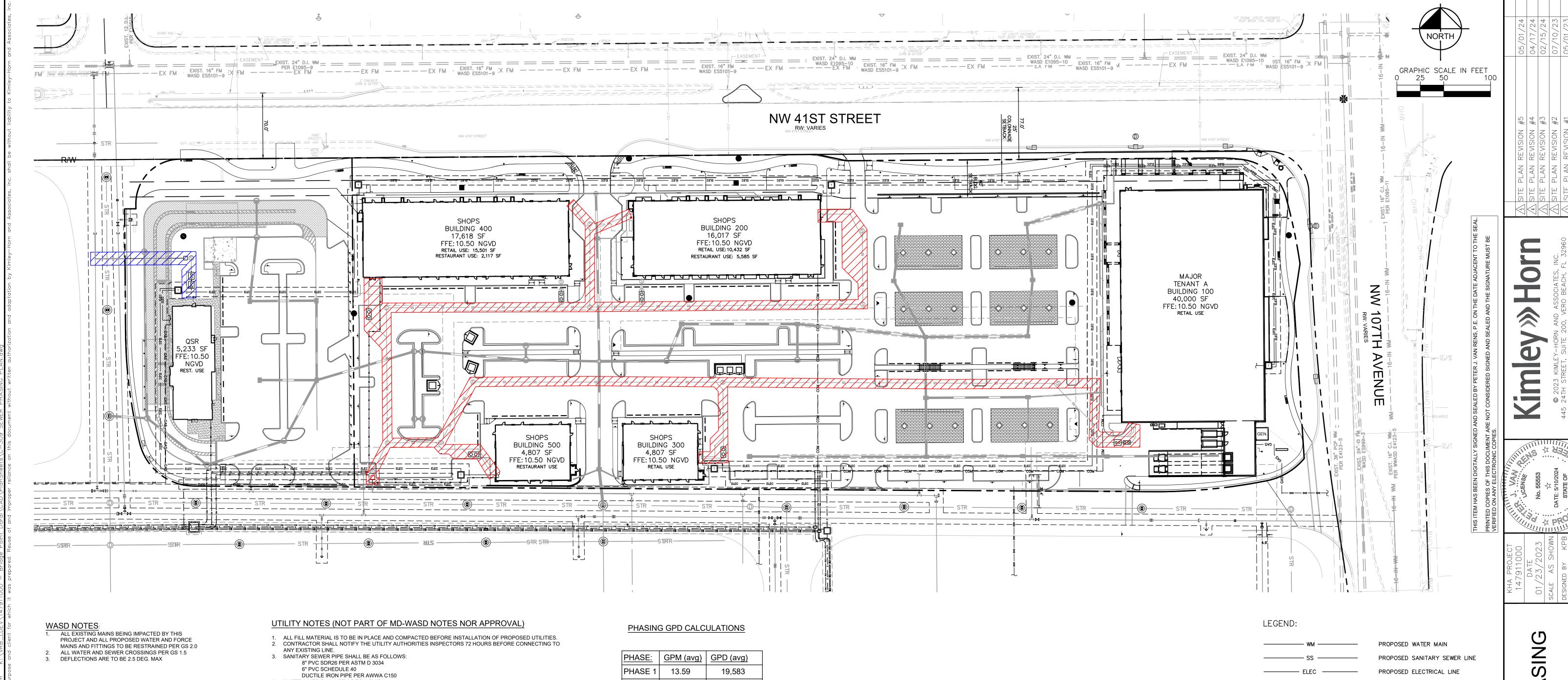
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Bonnie McLeod, P.E., Lic # 70797 V.P. of Engine ing * Atlantic Environmental Systems, Inc., Certificate # 26398. 2244 4th Ave. North, Lake Worth, Florida 334610. Ph: 561-547-8080 Fax: 561-547-3999

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Drawing No. LS-2

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CONTAMINATION NOTES

DISPOSED OF.

- 1. NO PORTION OF THE PROPOSED WATER MAIN WILL TRAVERSE THROUGH AN AREA KNOWN TO BE CONTAMINATED.
- 2. THE PROPOSED WATER MAIN WILL BE LOCATED SUCH THAT A MINIMUM OF 1-FOOT SEPARATION BETWEEN THE HIGH WATER
- TABLE AND THE BOTTOM OF THE PIPE WILL BE PROVIDED. 3. IF CONTAMINATION OR SOLID WASTE IS ENCOUNTERED DURING THE INSTALLATION OF THE WATER MAIN, THE WORK WITHIN THESE AREAS SHALL CEASE, AND THE RER DEPARTMENT SHALL BE NOTIFIED.

d. ONLY CLEAN UNCONTAMINATED SOIL SHALL BE USED FOR

BACKFILL; ANY CONTAMINATED SOILS SHALL BE PROPERLY

- 4. IF CONTAMINATION IS ENCOUNTERED ADEQUATE MEASURES SHALL BE IMPLEMENTED, INCLUDING BUT NOT LIMITED TO: a. ALL DIP PIPES TO BE POLYWRAPPED. b. ALL JOINTS SHALL BE EQUIPPED WITH VITON "O" RINGS. c. LINE THE TRENCH WITH SEMI IMPERMEABLE MEMBRANE.
- 4. WATER LINES SHALL BE AS FOLLOWS: 6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS,

5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.

- OTHERWISE CLASS 150 6" AND LARGER DUCTILE IRON PIPE PER AWWA C150 SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
- 6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS. 7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL
- CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE). 8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES. 9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING, THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE.
- MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50). 10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING. 11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND
- ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS. 12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000
- 13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- 14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES. 15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES (ANY CITY) WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- 16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- 17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION. 18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND
- SPECIFICATIONS. 19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN. 20. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- 21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES. 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND
- SPECIFICATIONS. 23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
- 24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE FLORIDA STATUTES.
- 25. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE. 26. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNSUITABLE SOILS AND REPLACING WITH APPROVED

PHASE:	GPM (avg)	GPD (avg)
PHASE 1	13.59	19,583
PHASE 2	3.63	5,233

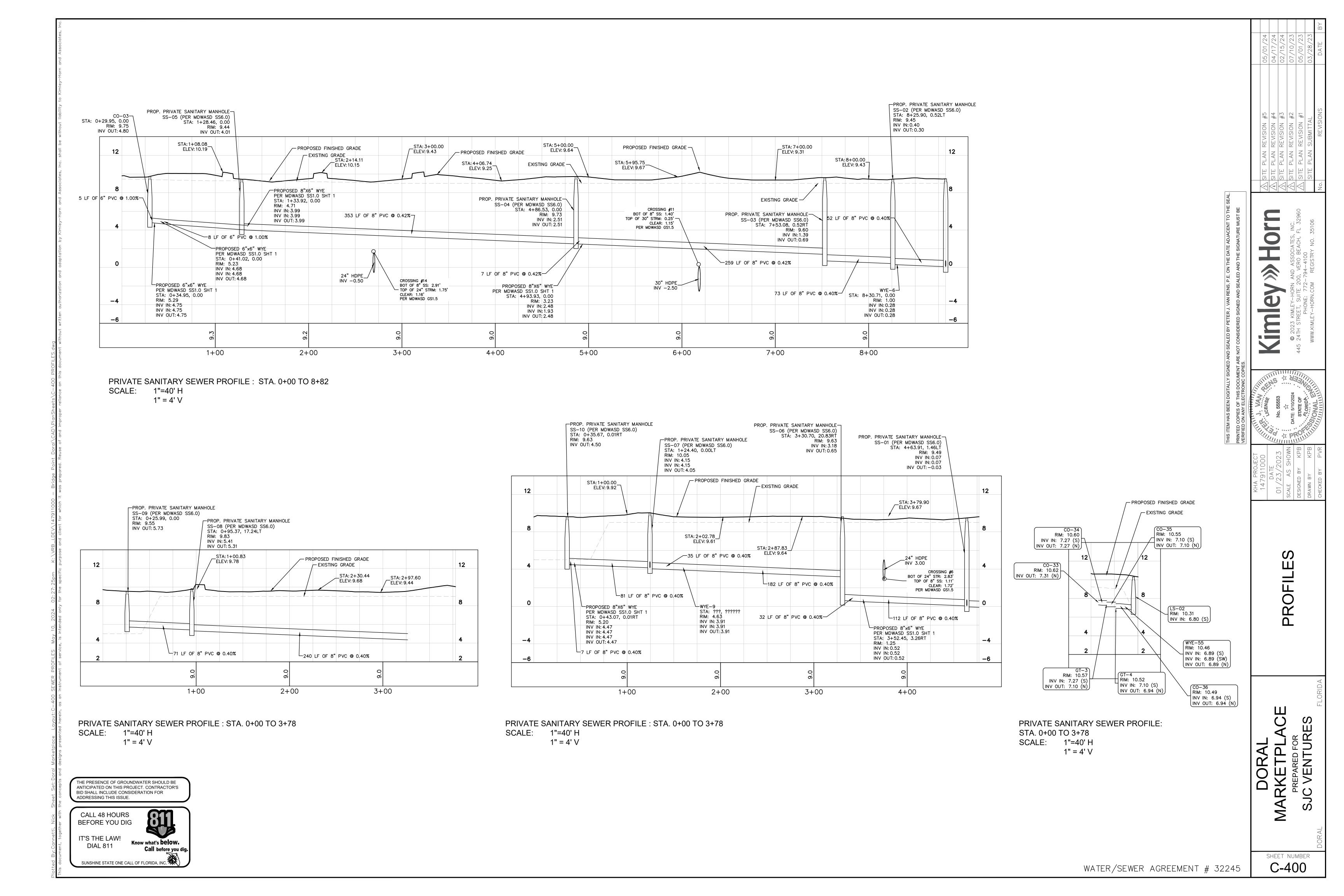
PROPOSED FORCE MAIN PROPOSED STORMWATER PIPE EXISTING STORMWATER PIPE PROPOSED FIRE HYDRANT PROPOSED VALVE PROPOSED REDUCER PROPOSED RPZ & METER PROPOSED DDCV PROPOSED COM LINE _____ COM _____ PROPOSED GAS LINE ——— GAS ——— PHASE 1 SEWER PHASE 2 SEWER

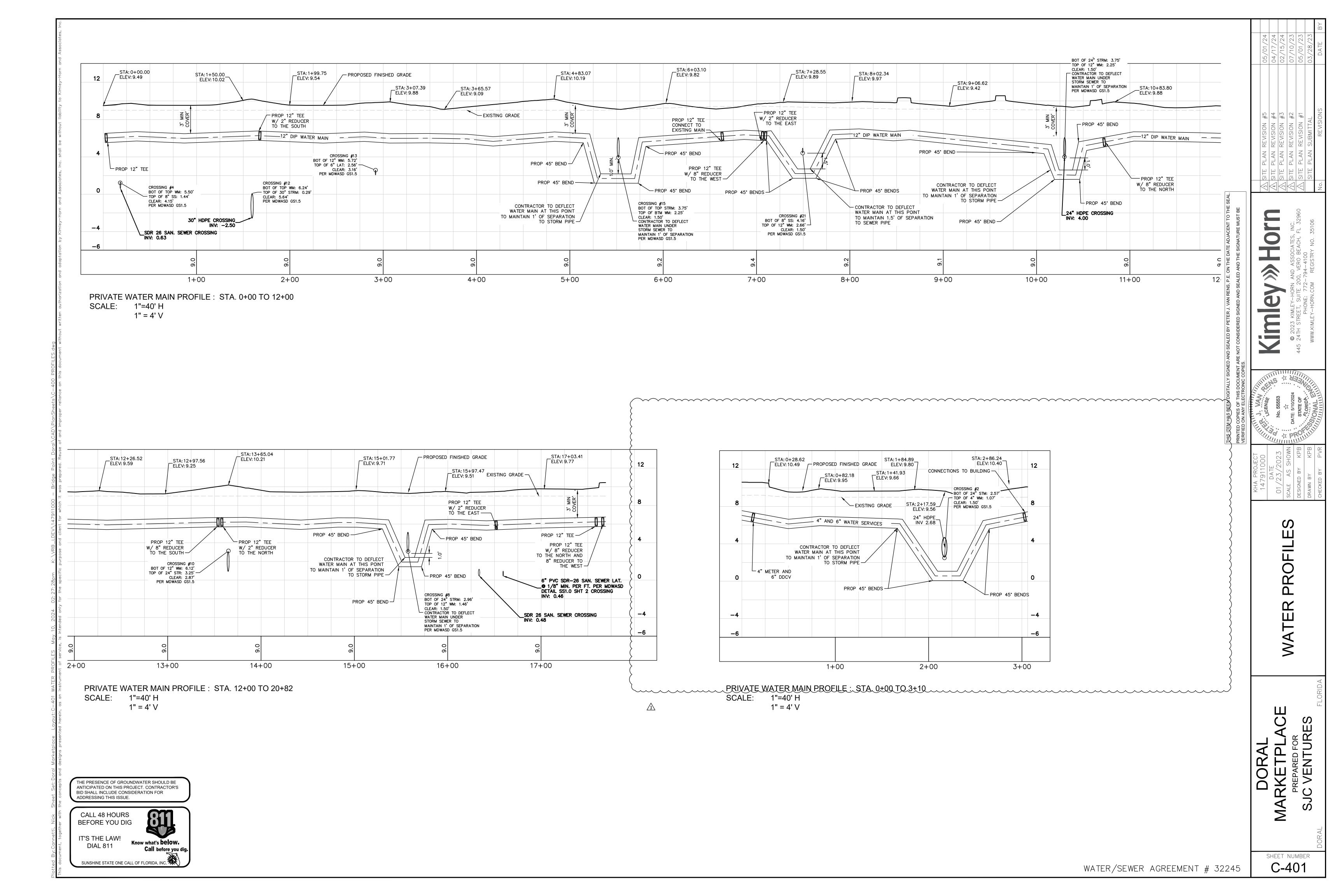
SHEET NUMBER C-301

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

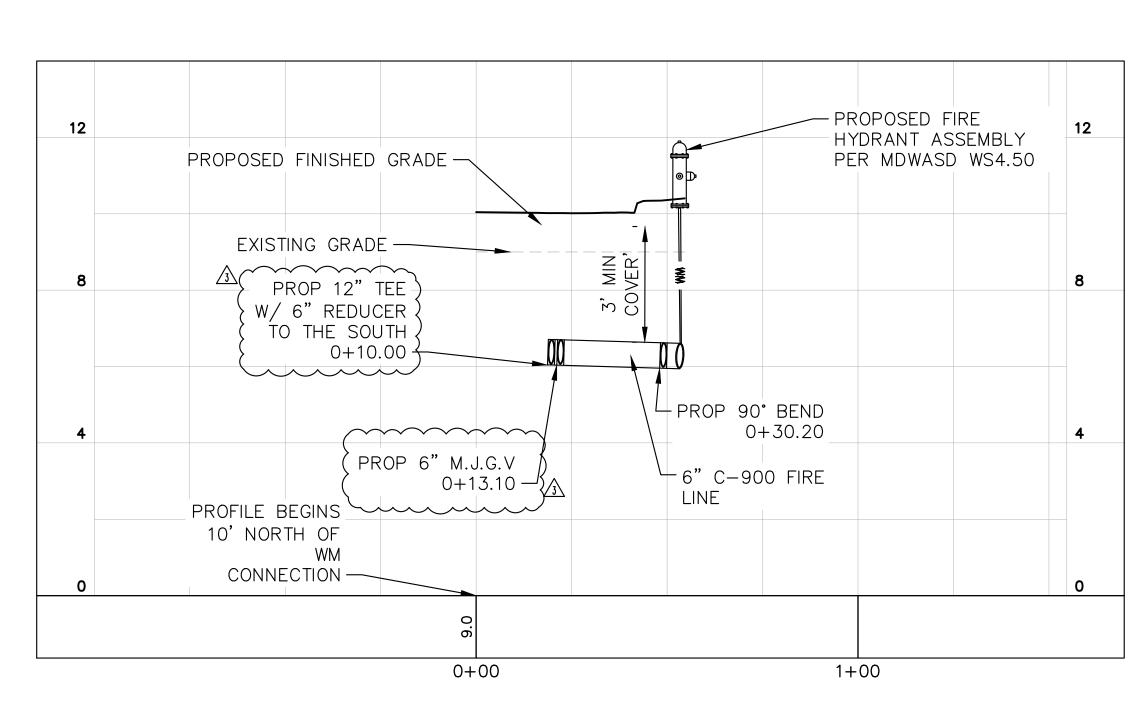
BEFORE YOU DIG IT'S THE LAW! **DIAL 811**



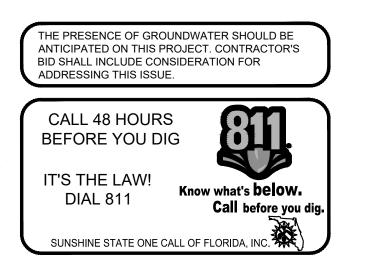


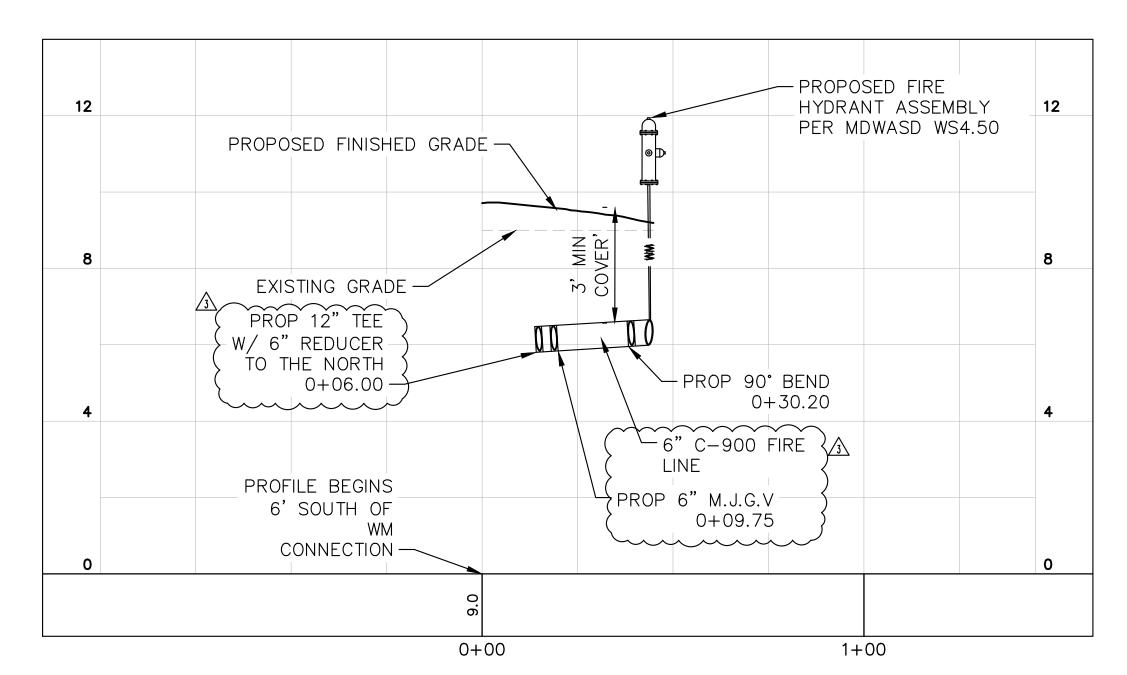


PRIVATE FIRE LINE PROFILE: STA. 0+00 TO 1+25 SCALE: 1"=40' H 1" = 4' V



PRIVATE FIRE LINE PROFILE: STA. 0+00 TO 1+55 SCALE: 1"=40' H 1" = 4' V





PRIVATE FIRE LINE PROFILE: STA. 0+00 TO 1+45 SCALE: 1"=40' H 1" = 4' V

Kim

PROFILE FIRE

