

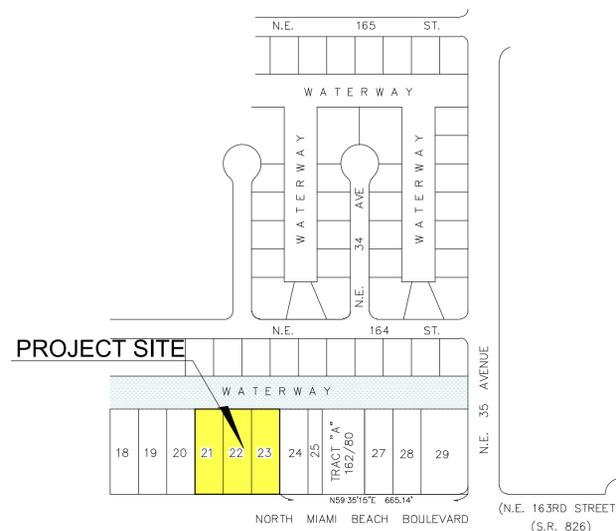
CANAL PARK 2

CIVIL SITE PLAN

City of North Miami Beach, Miami-Dade County, Florida

EXISTING LEGEND

- CONCRETE
- ASPHALT PAVEMENT
- PAVER BLOCKS
- OVERHEAD WIRES
- VPB VACUUM PRESSURE BREAKER
- FPL FLORIDA POWER & LIGHT COMPANY
- CENTERLINE
- O.R.B. OFFICIAL RECORDS BOOK
- TP TRAVERSE POINT (FOR FIELD INFORMATION ONLY)
- OAK TREE
- UNIDENTIFIED TREE
- PALM TREE
- ELEVATION
- N: 580463.73 STATE PLANE COORDINATE NORTHING
- E: 939869.68 STATE PLANE COORDINATE EASTING



LOCATION SKETCH

A PORTION OF SECTION 15, TOWNSHIP 52 SOUTH, RANGE 42 EAST
CITY OF NORTH MIAMI BEACH, MIAMI-DADE COUNTY, FLORIDA
SCALE: 1"=300'

LEGAL DESCRIPTION:

LOTS 21, 22, AND 23, BLOCK 4 OF "EASTERN SHORES", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 65, PAGE 28, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

NOTES

- ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. MIAMI-DADE COUNTY BENCHMARK: N-555; ELEVATION: 4.82 FEET.
- FLOOD ZONE: AE; BASE FLOOD ELEVATION: 8; COMMUNITY #1 20656; PANEL 1 2086C01 42L; MAP DATE: 09/11/09.

SHEET INDEX

SHEET No.	TITLE
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C3	NOTES
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C5	STORMWATER POLLUTION PREVENTION PLAN
C6	STORMWATER POLLUTION PREVENTION DETAILS
C7	DEMOLITION PLAN
C8	GEOMETRY, PAVING, SIGNAGE & MARKING PLAN
C9	GRADING & DRAINAGE PLAN
C10	WATER & SEWER PLAN
C11 thru C13	PAVING, DRAINAGE, Water & SEWER DETAILS
C14	VEHICLE LOADING SPACES EXHIBIT

FLOOD LEGEND

Commercial, Industrial

FLOOD: 07-2215-001-0880 ADDRESS: NE 163rd Street

LOT: 21, 22 & 23 BLOCK: 4 SUBDIVISION: EASTERN SHORES

PLAT BOOK: 65 PAGE: 28 MEETS & BOUND:

CROWN OF ROAD ELEV.: +5.85± FT. NGVD. CROWN OF ROAD ELEVATION WAS TAKEN FROM A CERTIFIED SURVEY PREPARED BY: JOHN F. PULICE SURVEYOR'S NAME PLS LIC. # LS2691

DRAINAGE PLANS SHALL BE ATTACHED (P&Z APPLICABLE PERVIOUS PLANS SHALL BE STAMPED WITH THE DERM/ WATER CONTROL SECTION APPROVAL)

DERM/WC - SURFACE WATER MANAGEMENT STORMWATER PERMIT (COPY ATTACHED)

SRMMD - ENVIRONMENTAL RESOURCES PERMIT (COPY ATTACHED)

TOTAL IMPERVIOUS AREA: UNDERGROUND PARKING: YES/NO (CIRCLE ONE) BASEMENT: YES/NO (CIRCLE ONE)

HAVE THIS SITE OR OTHER PORTIONS OF THIS PROPERTY BEEN GRANTED A CLOMR OR _____

FINAL LOWR# (CIRCLE ONE) YES/NO (CIRCLE ONE) LOWR# (CIRCLE ONE)

	Lowest Floor Elevation (Including basement/finish areas)	Adjacent Grade Elevation (next to the wall of the structure)	Crown Basin Elevation
PROPOSED	FT. NGVD	FT. NGVD	FT. NGVD
	+3.00 NGVD	+7.50 NGVD	+5.07 NGVD (Trench Drain)

0'-0" = NGVD

LEGEND:

EXISTING

- CATCH BASIN
- UTILITY MANHOLES
- FIRE HYDRANT
- UTILITY VALVES
- WATER METER
- TEL./ELEC. BOX
- WOOD POWER POLE
- POWER POLE w/LUMINAIRE
- CONC. POWER POLE
- TRAFFIC SIGN
- EXIST. IMPROVEMENTS

PROPOSED

- CONCRETE WALKWAYS
- TYPE "D" CONC. CURB
- TYPE "F" CURB & CUTTER

ABBREVIATIONS

- CL = CENTERLINE
- R/W = RIGHT OF WAY LINE
- F/L = PROPERTY LINE
- EXIST. = EXISTING
- PROP. = PROPOSED
- TYP. = TYPICAL
- EQ. = EQUAL
- ELEV. = ELEVATION
- INV. = INVERT
- F.C.O. = FLUSH CLEAN OUT
- F.D. = FRENCH DRAIN
- PERF. = PERFORATED
- WL = WATER LINE
- C.B. = CATCH BASIN
- M.H. = MANHOLE
- CONC. = CONCRETE
- CONT. = CONTRACTOR
- (T) = THERMOPLASTIC

- SANITARY SEWER MAIN
- WATER MAIN
- STORM SEWER LINES
- GAS MAINS
- OVERHEAD ELECTRIC (FPL)
- BURIED ELECTRIC (FPL)
- SANITARY FORCE MAIN
- TRAFFIC / STREET LIGHT
- UNKNOWN UTILITY
- COMMUNICATION: TELEPHONE, FIBER OPTIC, CABLE TV
- EXIST. GROUND ELEVATION
- ASPHALT PAVEMENT
- POROUS PAVEMENT
- DRAINAGE FLOW DIRECTION
- PROP. GRADE ELEVATION (PAVEMENT OR GROUND)

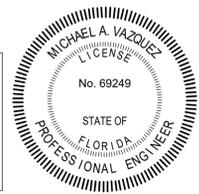
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No.	Date	Revision/Description

FORTIN, LEAVY, SKILES, INC.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 00003653
180 Northeast 168th Street / North Miami Beach, Florida, 33162
Phone: 305-653-4493 / Fax: 305-651-7152 / Email: fls@flsurvey.com

CANAL PARK 2
CIVIL SITE PLAN
COVER SHEET
City of North Miami Beach, Miami-Dade County, Florida

Date	05/24/2021
Scale	As Shown
Drawn By	REP
Cad. No.	201225SP
Date Plotted:	5/21/2021 3:23 PM
Ref. Dwg.	S.B.O.
Field Book	-
Job No.	207007
Dwg. No.	3020-039
Sheet	C1



This item has been digitally signed and sealed by Michael A. Vazquez, PE on the date adjacent to the seal.

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



PLANNING AND ZONING BOARD

I. APPLICABLE CODES:

A. GENERAL:

EXCEPT AS PARTICULARLY NOTED ON THE PLANS, ALL PROPOSED CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF AVENTURA, THE MIAMI-DADE COUNTY PUBLIC WORKS MANUAL, THE FLORIDA BUILDING CODE, AND THE AMERICANS WITH DISABILITIES ACT (ADA), 2010 STANDARDS. IF ANY ITEM OF WORK IS NOT COVERED IN EITHER OF THOSE SPECIFICATIONS, IT SHALL BE CONSTRUCTED PER THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

B. CONSTRUCTION SAFETY:

1. ALL CONSTRUCTION SHALL BE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) SHALL BE STRICTLY OBSERVED.

2. CONTRACTOR PERFORMING UNDERGROUND WORK SHALL COMPLY WITH ANY AND ALL REQUIREMENTS OF CHAPTER 556, FLORIDA STATUTES AND THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT".

C. TRENCH SAFETY ACT:

1. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE STATE OF FLORIDA "TRENCH SAFETY ACT", AND ALL REQUIREMENTS OF O.S.H.A.

2. WHERE EXCAVATIONS TO A DEPTH IN EXCESS OF FIVE FEET (5.0) ARE REQUIRED, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE BID.

- a. A REFERENCE TO THE SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
b. WRITTEN ASSURANCES BY THE CONTRACTOR PERFORMING THE TRENCH EXCAVATION THAT SUCH CONTRACTOR WILL COMPLY WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
c. A SEPARATE ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY STANDARDS.

3. WHERE A BID IS NOT SUBMITTED, THE CONTRACTOR SHALL SUBMIT THE INFORMATION LISTED IN ITEM 2, TO THE ENGINEER PRIOR TO STARTING WORK. D.

D. SURVEY DATA:

- 1. ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD).
2. ALL CONSTRUCTION STAKEOUT SHALL BE PERFORMED UNDER THE SUPERVISION OF A FLORIDA REGISTERED SURVEYOR.

3. THE APPROXIMATE LOCATION OF ALL EXISTING UTILITIES SHOWN HEREON WERE DETERMINED FROM AVAILABLE "AS-BUILT" PLANS AND/OR FIELD LOCATION OF VISIBLE IMPROVEMENTS, SOME EXISTING UTILITIES MIGHT NOT BE SHOWN DUE TO THE LACK OF RECORDS AND/OR INACCESSIBILITY AND IT IS CONTRACTORS RESPONSIBILITY TO VERIFY THEIR LOCATION PRIOR TO CONSTRUCTION.

4. THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER IF ANY ADDITIONAL DIMENSIONS OR SPECIFICATION ARE NEEDED TO LAYOUT OR CONSTRUCT THE PROJECT. UPON REQUEST, AN ELECTRONIC FILE OR GEOMETRIC CONTROL SHEET WILL BE PROVIDED TO THE CONTRACTOR BY THE ENGINEER OF RECORD.

III. PRE-CONSTRUCTION RESPONSIBILITY:

A. UPON RECEIPT OF NOTICE OF AWARD, THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION CONFERENCE TO INCLUDE THE APPROPRIATE PERMITTING AGENCIES, THE OWNER, AND THE ENGINEER OF RECORD, AFTER OBTAINING A CONSTRUCTION PERMIT FROM THE APPROPRIATE PERMITTING AGENCY.

B. THE CONTRACTOR SHALL OBTAIN A "SUNSHINE CERTIFICATION NUMBER" AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.

C. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, MATERIAL, AND CONDITION OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.

D. IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD.

E. CONTRACTOR SHALL UNCOVER ALL UNDERGROUND UTILITIES IN THE PATH OF THE WORK, WHETHER OR NOT THE UTILITIES ARE SHOWN ON THE PLANS, AND TAKE VERTICAL AND HORIZONTALS OF THE LOCATION OF THESE UTILITIES, AND IF ANY CONFLICTS ARE APPARENT REPORT THE MEASUREMENTS TO THE ENGINEER OF RECORD.

F. CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO RESOLVE CONFLICTS BETWEEN DESIGN AND EXISTING FEATURES.

G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITIES FOR WHICH HE FAILS TO REQUEST LOCATIONS SUNSHINE CERTIFICATION NUMBER. HE IS RESPONSIBLE AS WELL FOR DAMAGE TO ANY EXISTING UTILITIES WHICH ARE PROPERLY LOCATED.

H. ALL EXISTING IMPROVEMENTS THAT ARE TO BE DEMOLISHED MUST BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

I. CONTRACTOR SHALL COORDINATE SEQUENCE OF UTILITY CONSTRUCTION TO PREVENT UNDERMINING THE EXISTING AND PROPOSED BUILDING FOUNDATIONS.

IV. TEMPORARY FACILITIES:

A. TEMPORARY UTILITIES:

- 1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY TO HIS EMPLOYEE AND SUBCONTRACTORS FOR THEIR USE DURING CONSTRUCTION.
2. OBTAIN CONSTRUCTION METER FOR ALL WATER USED ON JOB. ALL WATER USED CLEANING, TESTING, ETC. WILL BE PAID FOR THE CONTRACTOR. IF WATER CAN NOT BE METERED THEN IT WILL BE CALCULATED.

B. TRAFFIC REGULATION:

- 1. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDING WITH THE M.U.T.C.D. AND F.D.O.T.
2. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.
3. NO TRENCHES OR HOLES NEAR WALKWAYS OR IN ROADWAYS OR THEIR SHOULDERS ARE TO BE LEFT OPEN DURING NIGHTIME HOURS WITHOUT EXPRESS PERMISSION OF THE PERMITTING AGENCIES.

III. SHOP DRAWING NOTES:

A. SHOP DRAWINGS SHALL BE CHECKED AND APPROVED FIRST BY THE CONTRACTOR AND THEN ONE COPY SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO THE PURCHASE OR INSTALLATION OF ANY SYSTEM COMPONENTS.

B. ANY SYSTEM COMPONENT THAT IS ADDED DURING CONSTRUCTION MUST BE APPROVED IN ADVANCE BY THE ENGINEER OF RECORD. SUCH APPROVAL REQUIRES THE SUBMISSION OF A SHOP DRAWING (ONE COPY ONLY) FOR EACH SYSTEM COMPONENT. SHOP DRAWINGS WILL ALSO BE REQUIRED FOR ALL NON-STANDARD ITEMS.

C. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST CONCRETE STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

V. PROJECT CLOSE OUT:

A. GENERAL:

1. CERTIFICATION OF COMPLETION OF PROJECT IN ACCORDANCE WITH PLANS AND SPECIFICATIONS WILL NOT BE ISSUED BY THE ENGINEER OF RECORD TO THE APPROPRIATE APPROVAL AND PERMITTING AGENCIES UNTIL ALL THE REQUIREMENTS DESCRIBED HEREIN HAVE BEEN MET.

B. CLEANING UP:

1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER. UPON FINAL CLEAN UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEEP BROOM CLEAN.

2. THE CONTRACTOR SHALL RESTORE OR REPLACE ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, EMPLOYEES OR THOSE OF HIS SUBCONTRACTORS TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THIS END, THE CONTRACTOR SHALL DO AS REQUIRED, ALL NECESSARY HIGHWAY OR DRIVEWAY SIDEWALK AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.

3. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR BEEN PLACED IN DRAINS, WATER COURSES, DITCHES, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.

4. WHEN WORKING IN AND AROUND EXISTING DRAINAGE CANALS, APPROPRIATE SILT BARRIERS SHALL BE INSTALLED AS REQUIRED BY THE APPROPRIATE PERMITTING AGENCIES.

C. PROJECT RECORD DOCUMENTS:

1. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD WITH A SET OF FINAL "AS-BUILT" DRAWINGS, SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED SURVEYOR, FOR ENGINEER'S REVIEW AND FILE.

2. THE CONTRACTOR SHALL MAINTAIN ACCURATE AND COMPLETE RECORDS OF ALL WORK ITEMS COMPLETED.

3. ALL "AS-BUILT" INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR AND LEGIBLE TO SATISFY THE ENGINEER OF RECORD THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.

4. PRIOR TO PLACEMENT OF ANY ASPHALT OR CONCRETE PAVEMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD "AS-BUILT" PLANS SHOWING LIMEROCK BASE GRADIES AND ALL DRAINAGE, WATER AND SEWER IMPROVEMENTS. PAVING OPERATIONS SHALL NOT COMMENCE UNTIL THE ENGINEER OF RECORD AND THE APPROPRIATE PERMITTING AGENCIES HAVE REVIEWED AND APPROVED THE "AS-BUILTS".

5. ALL REQUIRED DENSITY AND L.B.R. TEST RESULTS FOR SUBGRADE SHALL BE PROVIDED TO AND APPROVED BY THE ENGINEER OF RECORD AND THE PERMITTING AGENCIES PRIOR TO PLACING THE LIMEROCK BASE MATERIAL.

6. ALL REQUIRED DENSITY AND L.B.R. TEST RESULTS FOR LIMEROCK SHALL BE PROVIDED TO AND APPROVED BY THE ENGINEER OF RECORD AND THE PERMITTING AGENCIES PRIOR TO PLACING ASPHALT.

VII. EARTHWORK AND COMPACTION NOTES:

A. GENERAL:

1. QUALITY CONTROL TESTING FOR STABILIZATION, BASE, PAVEMENT, COMPACTION AND MATERIALS SHALL BE IN ACCORDANCE WITH FLORIDA D.O.T. REQUIREMENTS, AND SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR. COPIES OF ALL TEST REPORTS SHALL BE PROVIDED TO THE ENGINEER OF RECORD AS THEY ARE RECEIVED.

2. EXISTING ON-SITE BASE MATERIAL SHALL NOT BE REUSED FOR BASE CONSTRUCTION, BUT MAY BE USED FOR BACKFILL AROUND UTILITY AND DRAINAGE LINES, FOR SUBGRADE CONSTRUCTION AND FOR GENERAL FILL IF NECESSARY.

3. ALL SUBGRADE UNDER PAVED AREAS SHALL HAVE A MINIMUM L.B.R. VALUE OF 40 AND SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

4. ALL SUBGRADE UNDER SIDEWALK AREAS SHALL HAVE A MINIMUM OF 6" COMPACTED SUBGRADE TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

5. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

6. A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SOODED.

7. SOO SHALL BE INSTALLED AND SPECIFIED AS SHOWN IN THE LANDSCAPED PLANS.

8. WHEN WORKING IN AND AROUND EXISTING DRAINAGE CANALS OR LAKES, APPROPRIATE SILT BARRIERS SHALL BE INSTALLED.

9. NO MUCK BLANKET IS TO BE PLACED ON THE BOTTOM OF RETENTION AREAS OR SWALES.

10. MUCK BLANKET IS TO BE PLACED ON THE BOTTOM OF RETENTION AREAS OR SWALES.

11. ALL ORGANIC AND OTHER UNSUITABLE MATERIAL WITHIN THREE (3) FEET OF FINISHED GRADE AREAS TO BE PAVED SHALL BE REMOVED.

12. SUITABLE BACKFILL SHALL BE MINIMUM L.B.R. 40 MATERIAL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 FOR THREE (3) FEET BEYOND THE PERIMETER OF THE PAVING.

13. EROSION CONTROL TO BE PROVIDED BY THE CONTRACTOR PER DETAILS ON THE PLANS.

14. DISTING STORM DRAINAGE GRATES AND FRAMES AND MANHOLE COVERS AND RINGS THAT ARE TO BE REMOVED OR ADJUSTED, MAY BE REUSED ON THE SITE.

15. THE EXISTING DRAINAGE SYSTEM SHALL BE CLEANED AND/OR GRADED TO ENSURE PROPER FLOW AND FUNCTION.

16. THE CONTRACTOR SHALL INSTALL FILTER CLOTH AT ALL CATCH BASIN GRATES ADJACENT TO THE AREA OF CONSTRUCTION UNTIL FINAL ACCEPTANCE OF THE IMPROVEMENTS.

17. CONTRACTOR MAY UTILIZE ONE OF THE FOLLOWING MATERIALS, UNLESS OTHERWISE NOTED ON THE PLANS.

1. HIGH DENSITY POLYETHYLENE PIPE (H.D.P.E.)

a. PIPE SHALL BE CORRUGATED SMOOTH BORE POLYETHYLENE PIPE (M-12 PRO LINK ULTRA) OR APPROVED EQUAL, MANUFACTURED IN CONFORMANCE WITH ASTM M294.

b. PIPE SHALL HAVE BUILT-IN BELL JOINT WITH RUBBER GASKET IN CONFORMANCE WITH ASTM F477.

c. PIPE COUPLING BANDS IF NEEDED SHALL BE SPLIT/SPIT PREMIUM REQUIRING MAXIMUM PULL-APART RESISTANT.

2. CORRUGATED ALUMINIUM PIPE (CAP):

a. ALUMINIUM PIPE SHALL CONFORM TO AASHTO M196 FOR CIRCULAR CORRUGATED PIPE OF AASHTO M211 FOR HELICALLY CORRUGATED PIPE, AND SECTION 945, AS PER FDOT STANDARD SPECIFICATIONS.

b. MAKE FIELD JOINTS IN (CAP) WITH BANDS FABRICATED OF THE SAME ALLOYS THE CULVERT PIPE AND CONFORMING TO THE REQUIREMENTS OF AASHTO M196.

c. GASKET THE BANDED JOINTS WITH A NEOPRENE GASKET OF THE DESIGN INDICATED TO SECURE A SOIL-TIGHT OR WATER-TIGHT JOINT.

3. POLYVINYL CHLORIDE PIPE (PVC):

a. PLASTIC PIPE SHALL CONFORM WITH ASTM D 3034, TYPE PSM, POLYVINYL CHLORIDE (PVC) MATERIAL, BELL AND SPIGOT STYLE SOLVENT SEALED END JOINTS.

4. REINFORCED CONCRETE PIPE (RCP):

a. CONCRETE PIPE FOR STORM SEWERS SHALL CONFORM TO ASTM C 76, CLASS III WITH WALL TYPE A; BAR REINFORCEMENT.

b. ALL REINFORCED CONCRETE PIPES SHALL HAVE BELL AND SPIGOT END JOINTS, AS MODIFIED BY SECTION 94.1, FDOT STANDARD SPECIFICATIONS.

c. ALL REINFORCED CONCRETE PIPES SHALL HAVE RUBBER COMPRESSION GASKET JOINTS AS PER ASTM C443, UNLESS OTHERWISE SPECIFIED.

C. MISCELLANEOUS:

1. TRENCH RESTORATION ON PAVED AREAS SHALL BE IN ACCORDANCE TO FDOT FY 2019-20 INDEX I 25-001.

2. BACKFILL MATERIAL UNDER AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 IN 12" LAYERS MAX.

3. CATCH BASINS SHALL BE PRECAST MINIMUM 3000 PSI CONCRETE WITH REINFORCED STEEL PER ASTM A615.

D. INSTALLATION:

1. PIPE SHALL BE PLACED ON STABLE GRANULAR MATERIAL FREE OF ROCK, FORMATION OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO UNIFORM GRADE AND LINE.

2. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL WELL TAMPED IN LAYERS NOT TO EXCEED SIX INCHES (6").

3. PROVIDE A MINIMUM PROTECTIVE COVER OF 24 INCHES OVER STORM SEWER. CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION SHALL NOT BE ALLOWED WITH LESS THAN 24 INCHES OF COVER.

1. THE CONTRACTOR SHALL NOTIFY THE LOCAL WATER MANAGEMENT DISTRICT AT LEAST 24 HOURS PRIOR TO THE START OF THE CONSTRUCTION AND INSPECTION.

VIII. STORM DRAINAGE PRE-TREATMENT/EXFILTRATION SYSTEMS:

A. ANY CONFLICT WITH EXISTING OR PROPOSED UTILITIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD. ANY IMPERMEABLE MATERIAL ENCOUNTERED IN THE EXCAVATION FOR THE DRAIN FIELD SHALL BE REMOVED AS DIRECTED BY THE ENGINEER OF RECORD.

B. THE FILTER FABRIC SHALL BE WOVEN MONOFILAMENT TYPE D-3 PER F.D.O.T. SECTION 985 FY 2019-2020 EDITION, AND SECTION 985 OF THE F.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, JANUARY 2017 EDITION, OR APPROVED EQUAL. IT SHALL BE USED ON THE BOTTOM, SIDES AND TOP OF DRAIN FIELD DITCH. THE TOP SECTION OF THE MATERIAL SHALL BE LAPPED A MINIMUM OF 24 INCHES AND THE CONTRACTOR SHALL TAKE EXTREME CARE IN BACKFILLING TO AVOID BUNCHING OF THE FABRIC.

C. PERFORATED PIPE WITHIN THE DRAIN FIELDS AND EXFILTRATION TRENCHES SHALL COMPLY WITH AASHTO CLASS II PERFORATIONS.

D. PERFORATED PIPE SHALL TERMINATE FIVE FEET (5.0) FROM THE DRAINAGE STRUCTURE. THE REMAINING FIVE FEET (5.0) SHALL BE NON-PERFORATED PIPE.

E. PIPES SHALL TERMINATE TWO FEET (2.0) FROM THE END OF THE TRENCH OR CONNECT TO ADDITIONAL CATCH BASINS.

IX. PAVING NOTES:

A. GENERAL:

1. ALL UNDERGROUND FACILITIES, INCLUDING WATER, SEWER, STORM DRAINAGE, SLEEVES FOR PUBLIC UTILITIES, AND IRRIGATION LINES SHALL BE INSTALLED PRIOR TO COMPACTION OR ROAD SUBGRADE AND INSTALLATION OF BASE MATERIAL.

2. ALL EXISTING PAVEMENT CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.

3. WHERE PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT.

4. EXISTING ASPHALT PAVEMENT THAT IS TO BE REMOVED SHALL BE TRUCKED OFF SITE BY THE CONTRACTOR FOR DISPOSAL AT AN APPROVED LOCATION.

5. ALL ACCESSIBLE ROUTES CANNOT EXCEED A RUNNING SLOPE OF 1:20 (5%) AND CURB CUT RAMP AND RAMPS CANNOT EXCEED A RUNNING SLOPE OF 1:12 (8.33%). RAMPS THAT EXCEED 6" IN RISE REQUIRE HANDRAILS. ALL CROSS SLOPES CANNOT EXCEED A SLOPE 1:50 (2%).

B. MATERIALS:

1. BASE COURSE SHALL BE CRUSHED LIMEROCK MIAMI ODOLITE WITH A MINIMUM OF 70% CARBONATES OF CALCIUM AND MAGNESIUM (60% FOR LOCAL STREETS AND PARKING AREAS) AND A MINIMUM LIMEROCK BEARING RATIO 100.

2. ALL LIMEROCK BASE UNDER PAVED AREAS SHALL HAVE A MINIMUM L.B.R. VALUE OF 100, AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

3. PRIME COAT AND TACK COAT SHALL MEET F.D.O.T. STANDARDS.

4. PAVEMENT SECTION IS TO CONSIST OF A 2" ASPHALTIC CONCRETE PAVEMENT F.D.O.T. TYPE SP-12.5, IN TWO 1" LIFTS.

5. REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" X 6" No. 10 GAUGE MESH, OR AS SHOWN ON THE PLANS.

C. INSTALLATION:

1. LIMEROCK BASE MATERIAL SHALL BE IN THE COMPACTION THICKNESS SHOWN ON THE PLANS AND SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

2. LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO OR MORE EQUAL LIFTS.

3. ASPHALTIC CONCRETE PAVEMENT SHALL BE IN THE THICKNESS SHOWN ON THE PLANS.

4. PRIME COAT SHALL BE PLACED ON ALL LIMEROCK BASES IN ACCORDANCE WITH F.D.O.T. STANDARDS.

5. TACK COAT SHALL BE PLACED AS REQUIRED IN ACCORDANCE WITH F.D.O.T. STANDARDS.

D. TESTING:

1. ALL SUBGRADE, LIMEROCK AND ASPHALT TEST REQUIRED SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OF RECORD AND/OR THE PERMITTING AGENCY.

2. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.

3. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY, CERTIFIED BY THE STATE OF FLORIDA, AND TAKEN AS DIRECTED BY THE ENGINEER OF RECORD AND THE PERMITTING AGENCY. ALL TESTING COSTS SHALL BE PAID FOR THE CONTRACTOR.

X. CONCRETE PAVERS INSTALLATION:

A. SPREAD THE BEDDING MATERIAL EVENLY OVER THE BASE COURSE AND SCREED TO PLAN THICKNESS, NOT TO EXCEED A THICKNESS OF 1 1/2 INCH. DO NOT DISTURB THE SCREEDD BEDDING MATERIAL. ENSURE PLACEMENT OF SUFFICIENT BEDDING MATERIAL TO STAY AHEAD OF THE LAID CONCRETE PAVERS. DO NOT USE THE BEDDING MATERIAL TO FILL DEPRESSIONS IN THE BASE COURSE.

B. LAY CONCRETE PAVERS IN THE PATTERNS SHOWN IN THE HARDSCAPE PLANS (BY OTHERS, NOT PART OF THE CIVIL PLANS) AND MAINTAIN STRAIGHT PATTERN LINES.

C. JOINTS BETWEEN THE CONCRETE PAVERS, ON AVERAGE, WILL BE BETWEEN 1/16 TO 3/16 INCH WIDE.

D. FILL GAPS AT THE EDGES OF THE PAVED AREA WITH CUT OR EDGE CONCRETE PAVERS.

E. WHEN UTILIZING BEDDING AND JOINT SAND:

1. USE A LOW AMPLITUDE VIBRATOR CAPABLE OF 5,000 FOOT-POUNDS WITH 7-100 HZ FREQUENCIES TO VIBRATE AND COMPACT CONCRETE PAVERS INTO BEDDING SAND.

2. VIBRATE THE CONCRETE PAVERS, SWEEPING DRY JOINT SAND INTO THE JOINTS AND VIBRATING, UNTIL THE JOINTS ARE FULL. DO NOT VIBRATE WITHIN 3 FEET OF THE UNRESTRAINED EDGES OF THE CONCRETE PAVERS.

3. AT THE END OF EACH DAY, ALL WORK WITHIN 3 FEET OF LAYING FACE MUST BE LEFT FULLY COMPACTED, WITH SAND-FILLED JOINTS.

4. SWEEP OFF THE EXCESS SAND.

5. LEAVE A FINAL SURFACE ELEVATION OF CONCRETE PAVERS OF 1/8 TO 1/4 INCH ABOVE ADJACENT DRAINAGE INLETS, CONCRETE COLLARS OR CHANNELS.

6. DO NOT PERMIT THE FINAL SURFACE ELEVATIONS OF THE PAVERS TO DEVIATE MORE THAN 3/8 INCH UNDER A 10 FOOT LONG STRAIGHTEDGE, OR MORE THAN 1/8 INCH BETWEEN ADJACENT PAVERS.

H. WHEN SETTING CONCRETE PAVERS ON A CONCRETE SLAB, USE MORTAR SET BEDDING 3/4" MINIMUM THICKNESS.

XII. INSPECTION NOTES:

A. THE ENGINEER OF RECORD SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE BEFORE INSTALLATION, TESTING AND BACKFILLING OF ANY STORM DRAINAGE COMPONENTS.

B. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD, AT LEAST 24 HOURS PRIOR TO THE INSPECTION OF THE FOLLOWING ITEMS:

- 1. STORM DRAINAGE.
2. EXFILTRATION TESTS (WATERTIGHT SYSTEMS).
3. DENSITY TESTS (WATER & SEWER).
4. LAMPING REPORT (STORM DRAINAGE).
5. TELEVISED INSPECTION OF ALL STORM DRAINAGE.
6. SANITARY SEWER.
7. WATER SYSTEM.
8. SUBGRADE; SUBMIT AND HAVE APPROVED DENSITIES PRIOR TOPLACEMENT OF ROCK.
9. LIMEROCK BASE; SUBMIT AND HAVE APPROVED DENSITIES AND AS-BUILTS PRIOR TO THE PLACEMENT OF ANY ASPHALT.
10. ASPHALTIC CONCRETE.
11. FINAL.

XIII. SIGNING AND MARKING NOTES:

A. ALL PAVEMENT MARKINGS AND SIGNS SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION, AND THE DADE COUNTY PUBLIC WORKS MANUAL.

B. ASPHALT CONCRETE SURFACE: ALL PAVING MARKINGS TO BE THERMOPLASTIC PER FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

C. PAVEMENT SURFACES: MARKINGS TO BE COLOR PAVERS. COLOR OF PAVERS TO BE AS SPECIFIED ON PLANS. PAVERS MATERIAL TO BE AS SPECIFIED IN THE LANDSCAPE ARCHITECT PLANS.

D. INSTALL REFLECTIVE PAVEMENT MARKERS PER F.D.O.T. STANDARDS, OR AS SHOWN ON THE PLANS.

E. ALL SIGNS SHALL BE HIGH-INTENSITY GRADE REFLECTIVE SHEETING, MOUNTED ON A BREAK AWAY POST ASSEMBLY PER F.D.O.T. SPECIFICATIONS.

F. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL PAVEMENT MARKINGS AND SIGNS CONFLICTING WITH THE PROPOSED ROADWAY CONSTRUCTION.

G. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL PAVEMENT MARKINGS AND SIGNS AS SHOWN IN THE PLANS AND APPLICABLE TRAFFIC DESIGN STANDARDS.

H. CONTRACTOR SHALL BE RESPONSIBLE FOR MATCHING EXISTING PAVEMENT MARKINGS AT THE BEGINNING AND AT THE END OF THE PROJECT.

I. SIGN ASSEMBLY LOCATIONS SHOWN IN THE PLANS WHICH ARE IN CONFLICT WITH STREET LIGHTING UTILITIES, DRIVEWAYS, PEDESTRIAN RAMPS ETC. MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER OF RECORD AND/OR APPROVAL AGENCIES' INSPECTOR.

XIII. UNDERGROUND STRUCTURE INSTALLATION NOTE:

A. EXCAVATE 12 INCHES BELOW TO DESIGN BEARING LEVEL AND BACKFILL TO THE REQUIRED GRADE USING FREE DRAINING GRAVEL (PEA ROCK OR ROCK #57). THE SURFACE OF THE GRAVEL SHALL BE TAMPED TO ENSURE A FIRM BEARING SURFACE. A GEOTECHNICAL ENGINEER IS TO OBSERVE THE GRAVEL PLACEMENT AT THE END OF THE EXCAVATION PROCESS.

CITY OF NORTH MIAMI BEACH PUBLIC SERVICES "AS-BUILT STANDARDS" FOR WATER AND SEWER PROJECTS

PIPELINE:

- 1. SHOW STATION NUMBER EVERY 100 FEET ON PLAN AND PROFILE INDICATING WHERE PIPE BEGINS AND ENDS. ON PLAN, SHOW DIMENSION OF STREET FROM RW TO RW WITH CENTER-LINE. SHOW OFFSET DIMENSION FROM ONE OF THE ABOVE TO PIPELINE AT EACH STATION, VALVE AND FITTING.
2. ON PROFILE, SHOW ELEVATION OF WATER MAIN AND SEWER FORCE MAIN AT EACH 100-FOOT STATION. AT EACH VALVE AND FITTING SHOW STATION NUMBER AND ELEVATION. INCLUDE SEWER MANHOLE RIM AND INVERT ELEVATIONS, LATERAL INVERT ELEVATION AT CLEAN-OUT, FINISHED GRADE ELEVATIONS TO BE MARKED AT EVERY 100-FOOT STATION.
3. INDICATE IF PIPE IS IN PRIVATE PROPERTY LOCATING BASE-LINE SURVEY LINE AND LENGTH AND WIDTH OF EASEMENT FROM RW LINE. ALSO INDICATE EASEMENT FOR SERVICE LINES, LATERALS AND FIRE HYDRANTS.
4. INDICATE MANUFACTURER, SIZE, MATERIAL, TYPE OF JOINT, PRESSURE CLASS OF ALL PIPE INSTALLED. ALSO INDICATE MATERIAL OF ANY EXISTING PIPE CONNECTING TO.
5. SHOW TYPE OF JOINT RESTRAINT INSTALLED ON PIPE, VALVES OR FITTINGS WHERE APPROPRIATE (THRUST-BLOCKS, RETAINER GLANDS, RESTRAINED JOINT PIPE, ETC.). ALSO INDICATE LENGTH OF RESTRAINT OF PIPE FROM THESE VALVES OR FITTINGS.
6. INDICATE SIZE, LOCATION AND MATERIAL OF ALL SERVICE LINES INCLUDING STATION NUMBERS AND ELEVATIONS. INCLUDE METER LOCATIONS BY DIMENSIONS FROM CENTER-LINE OF PIPE, VALVES, ETC., TO CENTER-LINE OF METER.

VALVES:

- 1. INDICATE SIZE, TYPE (GATE, BUTTERFLY, CHECK, PLUG, ETC.) OF VALVES. ALL VALVES ARE TO BE LOCATED WITH DIMENSIONS FROM AT LEAST TWO PERMANENT REFERENCE POINTS. INDICATE WHICH SIDE OF BUTTERFLY VALVE THE OPERATING NUT IS LOCATED.
2. INCLUDE ENLARGEMENT DETAIL AT SCALE 1"= 10' FOR ALL VALVE CLUSTERS AND METER/BACKFLOW ASSEMBLIES.

OTHER:

- 1. PLANS SHOULD BE OF THE SAME FORMAT AS ORIGINAL APPROVED PLANS, IN 24" X 36" SHEETS ONLY AND DONE IN AUTOCAD. INCLUDE ADDRESS, NAME OF PROJECT AND SHEET NUMBER IN TITLE BLOCK OF EACH SHEET.
2. WHEN CORRECTING A SET OF DESIGN DRAWINGS TO REFLECT AS-BUILT INFORMATION, DESIGN INFORMATION IS TO BE ERASED AND REPLACED WITH AS-BUILT INFORMATION.
3. SHOW LOCATION OF ALL UNDERGROUND AND ABOVE GROUND FACILITIES WITHIN 10 FEET OF CENTER-LINE OF PIPE ON PLAN AND PROFILE, I.E. GAS, FPL, WATER, SEWER, TELEPHONE, ETC. AND CATCH BASINS, SIDEWALKS, MANHOLES, UTILITY POLES, ETC., INCLUDING STATION NUMBERS AND ELEVATIONS.
4. WHEN NEW WATER OR SEWER LINE CROSSES ANY UTILITY LINE, INDICATE ON PLAN (INCLUDING STATION NUMBER) AND ON PROFILE (INCLUDING STATION NUMBERS AND ELEVATIONS OF EACH).
5. WHEN BOTH WATER AND SEWER LINES ARE INSTALLED, A SEPARATE SET OF MYLAR "AS-BUILT" DRAWINGS IS REQUIRED FOR EACH.
6. WHEN WATER AND/OR SEWER LINE ARE INSTALLED IN PRIVATE PROPERTY, OVERALL SITE PLAN OF PROPERTY IS REQUIRED SHOWING CONFIGURATION OF ALL PIPELINES WITHIN EASEMENTS, INDICATING PROPERTY LINE SURVEY AND MATCH LINES WITH CORRESPONDING PAGE NUMBERS, ETC.
7. PROVIDE AREA LOCATION SKETCH (MAP), LEGAL DESCRIPTION OF THE PROPERTY TO BE SERVED, AND SCOPE OF PROJECT TABULATION I.E.

RER-DERM WATER-SEWER GENERAL NOTES

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.
 - 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 SEWERS.
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, FIFTY (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.
5. 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 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 FORCEMAIN 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 (AWWA) 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:
 - A) ALL WORK IN THE AREA SHALL FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS (E.G., OSHA, ETC.) AND NOTIFICATION MUST BE PROVIDED TO THE APPROPRIATE AGENCIES.
 - B) IMMEDIATELY NOTIFY THE ENVIRONMENTAL MONITORING AND RESTORATION DIVISION (EMRD), THE EMRD CAN BE CONTACTED AT (305) 372-6700.
 - C) 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.
 - D) 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 (305) 372-6700.

1. 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: TRFS@MIAMI-DADE.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-G1 SUBPART M, THEREFORE, PURSUANT TO THE PROVISIONS OF 40 CFR-G1-145, 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-G1, 154, AND 40 CFR-G1, 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@MIAMI-DADE.GOV OR 305-372-6925. REV. 4/30/2018

BACKFLOW PREVENTER NOTES:

1. PRIOR TO THE INSTALLATION OF THE BACK FLOW PREVENTER DEVICE, APPROVAL FROM THE APPLICABLE BUILDING AND ZONING DEPARTMENT AND FIRE DEPARTMENT SHALL BE REQUIRED.
2. PRIOR TO THE INSTALLATION OF ANY WATER METER THE BACK FLOW PREVENTER DEVICE MUST BE INSPECTED AND RELEASED BY THE APPLICABLE BUILDING AND ZONING DEPARTMENT.
3. INSTALLATION OF THE BACK FLOW PREVENTER DEVICE SHALL BE PERFORMED BY A CERTIFIED PLUMBING CONTRACTOR.

ENGINEER'S NOTES:

1. THE WATER AND/OR SEWER SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE PUBLISHED AND CURRENT STANDARDS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND UNDER THE INSPECTION OF THEIR PERSONNEL.
 2. THE APPROXIMATE LOCATION OF ALL UTILITIES SHOWN HEREON WERE DETERMINED FROM "AS-BUILT" PLANS AND/OR FIELD LOCATION AND MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION.
 3. CONTRACTOR TO VERIFY LOCATION, ELEVATION, MATERIAL AND CONDITION OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. AFTER OBTAINING LOCATION FROM SUNSHINE AND OTHER UTILITY COMPANIES, AND PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL UNCOVER ALL KNOWN UNDER-GROUND UTILITIES IN THE PATH OF THE WORK, WHETHER OR NOT THE UTILITIES ARE SHOWN ON THE PLANS AND SHALL TAKE VERTICAL AND HORIZONTAL MEASUREMENTS OF THE LOCATIONS OF THESE UTILITIES, AND IF ANY CONFLICTS ARE APPARENT, REPORT THE MEASUREMENTS TO THE ENGINEER-OF-RECORD.
 4. CONTRACTOR TO CONTACT ENGINEER-OF-RECORD IF EXISTING UTILITIES ARE NOT SHOWN ON THE PLANS.
 5. ALL LANDSCAPING AND IRRIGATION DISTURBED SHALL BE REPLACED WITH LIKE KIND.
 6. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE "TRENCH SAFETY ACT", AND ALL REQUIREMENTS OF O.S.H.A.
 7. ALL BRANCH VALVES ARE TO BE TIED TO TEES.
 8. ALL REQUIRED BACTERIOLOGICAL SAMPLING POINTS SHALL BE INSTALLED BY THE CONTRACTOR AND ALL BACTERIOLOGICAL TESTS PERFORMED BY HIM PER THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF H.R.S.
 9. ALL REQUIRED FLUSHING, CLEANING PRESSURE TESTING AND BACTERIOLOGICAL TESTING SHALL BE PERFORMED BY THE CONTRACTOR AND THE COST OF SAME SHALL BE INCLUDED IN THE CONTRACTORS BID FOR THE WORK.
 10. SHOP DRAWINGS SHALL BE CHECKED AND APPROVED BY THE CONTRACTOR AND THEN ONE COPY SUBMITTED TO THE ENGINEER-OF-RECORD FOR REVIEW PRIOR TO THE PURCHASE OR INSTALLATION OF ANY SYSTEM COMPONENTS. SHOP DRAWINGS MUST BE REVIEWED AND APPROVED BY M-DWASD PLANS REV. UNIT BEFORE PRE-CONSTRUCTION MEETING CAN BE SCHEDULED (TYPICAL).
 11. THE CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER IF ANY ADDITIONAL DIMENSIONS OR SPECIFICATION ARE NEEDED TO LAYOUT OR CONSTRUCT THE PROJECT. AN ELECTRONIC FILE OR GEOMETRIC CONTROL SHEET WILL BE PROVIDED TO THE CONTRACTOR BY THE ENGINEER.
 12. ALL PAVEMENT RESTORATION SHALL COMPLY WITH THE REQUIREMENTS OF MIAMI-DADE COUNTY PUBLIC WORKS MANUAL, F.D.O.T. FLORIDA BUILDING CODE, AND/OR THE SPECIFIC MUNICIPALITY STANDARDS.
 13. LOCATION OF THE PUBLIC WATER SYSTEM MAINS SHALL COMPLY WITH THE LATEST FLORIDA ADMINSTRATIVE CODE (F.A.C.) RULE G2-555.314.
- ### ENGINEER'S CERTIFICATION REQUIREMENTS:
1. SURFACE RESTORATION, PAVEMENT REPLACEMENT, SIDEWALK REPLACE, TRENCH BACKFILL AND COMPACTION SHALL COMPLY WITH MIAMI-DADE STANDARD DETAILS GS1.9, SS1.9, A1.0, A1.1, AND A4.0, M-DCPWD STANDARD DETAIL R2.1.1 AND THE APPLICABLE CURRENT FDOT STANDARDS, M-DCPWD AND CITY OF AVENTURA PUBLIC WORKS.
 2. THE WATER AND/OR SEWER STAKEOUTS, PIPE COVER AND/OR INVERT ELEVATIONS AND DETERMINATION DETERMINATION OF EASEMENT GEOMETRY SHALL BE PERFORMED BY A STATE OF FLORIDA LICENSED LAND SURVEYOR AT THE TIME OF INSTALLATION.
 3. THE ENGINEER-OF-RECORD SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE BEFORE INSTALLATION, TESTING AND BACKFILLING OF ANY LINES.
 4. IMMEDIATELY UPON COMPLETION OF THE TESTS, THE ENGINEER-OF-RECORD SHALL BE PROVIDED WITH COPIES OF THE REPORTS SHOWING SATISFACTORY RESULTS OF THE FOLLOWING:
 1. BACTERIOLOGICAL TESTING (WATER).
 2. PRESSURE TESTING (WATER & FORCE MAINS).
 3. BACKFLOW PREVENTER TESTS (WATER).
 4. EXFILTRATION TESTS (SEWER).
 5. DENSITY TESTS (WATER & SEWER).
 6. LAMPING REPORT (SEWER).
 7. TELEVISED INSPECTION OF ALL GRAVITY SANITARY SEWER MAINS AND LATERALS.
 5. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER-OF-RECORD FOR REVIEW PRIOR TO THE PURCHASE OR INSTALLATION OF ANY SYSTEM COMPONENTS.
 6. CONTRACTOR SHALL PROVIDE THE ENGINEER-OF-RECORD WITH A SET OF FINAL "AS-BUILT" DRAWINGS, SIGNED AND SEALED BY A STATE OF FLORIDA LICENSED LAND SURVEYOR, FOR ENGINEERS REVIEW AND FILE.
 7. CERTIFICATION OF COMPLETION IN ACCORDANCE WITH PLANS & SPECIFICATIONS WILL "NOT" BE ISSUED BY THE ENGINEER-OF-RECORD TO THE APPROPRIATE PERMITTING AGENCIES UNTIL ALL THE REQUIREMENTS DESCRIBED HEREIN HAVE BEEN MET.

HEALTH DEPARTMENT NOTES:

(NOT A PART OF MD-DWASD NOTES OR APPROVAL)

WATER MAIN HORIZONTAL SEPARATIONS:

SEPARATIONS SHALL BE MEASURED OUTSIDE EDGE TO OUTSIDE EDGE BETWEEN WATER MAINS AND STORM SEWERS, STORMWATER FORCE MAINS, OR RECLAIMED WATER LINES, SHALL BE 3 FT. MINIMUM.

BETWEEN WATER MAINS AND VACUUM TYPE SEWER PREFERABLY 1.0 FT. AND AT LEAST 3 FT. MINIMUM.

GRAVITY OR PRESSURE SANITARY SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER PREFERABLY 1.0 FT. AND AT LEAST 6 FT. MAY BE REDUCED TO 3 FT. WHERE BOTTOM OF WATER MAINS IS AT LEAST 6 INCHES ABOVE TOP OF SEWER.

1.0 FT. TO ANY PART OF ON-SITE SEWER TREATMENT OR DISPOSAL SYSTEM.

WATER MAIN VERTICAL SEPARATIONS:

SEPARATIONS BETWEEN WATER MAINS AND GRAVITY SEWER, VACUUM TYPE SEWER, OR STORM SEWERS, TO BE PREFERABLY 12 INCHES, OR AT LEAST 6 INCHES ABOVE, OR AT LEAST 12 INCHES IF BELOW.

PRESSURE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR RECLAIMED WATER, AT LEAST 12 INCHES ABOVE OR BELOW.

*NOTE: CENTER 1-FULL LENGTH OF WATER MAIN PIPE AT CROSSINGS; ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS IN VACUUM, STORM OR STORM FORCE MAINS, AT LEAST 6 FEET FROM JOINTS IN GRAVITY OR PRESSURE SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER.

1. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. **SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.**
2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4"-0" MIN.
3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 5.3 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.
4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND CHECK VALVE AT THE POINT OF ENTRY.
5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.
6. ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT PROVIDING THE APPROPRIATE CHARGES HAVE BEEN PREPAID.
7. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY THE MIAMI-DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.
8. CONTRACTOR MUST CALL M-DWASD INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.
9. CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THIS DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.
10. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT.
 - a. EASEMENTS, IF REQUIRED.
 - b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN.
 - c. ABSOLUTE BILL OF SALE.
 - d. CONTRACTOR'S LETTER OF WARRANTY (I.E., LETTER AGREEMENT).
 - e. DEVELOPER'S CONTRACT (I.E., CONTRACT AGREEMENT).
 - f. "RECORD DRAWINGS" PRINTS (24"x36") SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED FLORIDA SURVEYOR & MAPPER, ALONG WITH PRINTS OF "RECORD DRAWINGS" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR & MAPPER. (No. OF PRINTS: 3-FOR WATER, 4-FOR GRAVITY SEWER AND 5-FOR FORCE MAIN OR PUMP STATION PROJECTS). Submit all of final CAD files required in accordance with SEC. 0775 "MAGNETIC MEDIA SUBMITTAL".
 - g. H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS.
 - h. BILL OF SALE SKETCH (8 1/2"x11") FOR WATER AND SEWER, SEPARATELY.
11. ALL NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.
12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MIDWASD FOR ALL NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.
13. UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE DONE BY DEPARTMENT FORCES, UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.

ISSUE DATE	APPROVED BY	STANDARD DETAIL	CROSS REF.	SPEC. REF.
03/01/2010	V.F.C.	STANDARD DETAILS WATER AND SEWER CONSTRUCTION		
07/20/2016	D.V.			

GS
0.5
SHEET 1 OF 2

1. AT THE COMPLETION OF ANY WATER AND SEWER JOB, EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT:
 - a. RECORD DRAWING PRINTS WHICH HAVE BEEN SIGNED AND SEAL BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER. (Qty. OF PRINTS, AS REQUIRED BY THE DEPARTMENT).
 2. "RECORD DRAWING" FORMAT:
 - a. 24"x36" PRINTS
 - b. PDF FILE
 - c. CAD FILE (DWG OR DXF) ROTATED AND TRANSLATED TO STATE PLAN COORDINATES NAD 83 FLORIDA EAST ZONE.
 - d. THE WORD "RECORD DRAWING" IN LARGE LETTERS.
 - e. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION.
 - f. PREFERRED SCALE TO BE 1" = 40' HORIZONTALLY AND 1" = 4' VERTICALLY.*
 - g. STREET NOMENCLATURE.
 - h. SEPARATE RECORD DRAWING FOR WATER AND SEWER.
 - i. SEPARATE WATER AND SEWER PROFILE.
 - j. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E., Q, S, ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN.
 - k. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT.
 - l. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC.)
 - m. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY "AS-BUILT" INFORMATION REFLECTED IN DRAWINGS.
 3. WATER "RECORD DRAWINGS" MUST INCLUDE:
 - a. PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (F' ANY), STATION OF SERVICES, HYDRANTS, VALVES, FITTINGS, IF ANY, ALL IN STATE PLANE COORDINATES. UTILITY CROSSINGS SHALL BE CLEARLY IDENTIFIED AND LOCATED.
 - b. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.
 4. SEWER "RECORD DRAWINGS" MUST INCLUDE:
 - a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, SLOPE OF GRAVITY SEWER, LOCATION OF LATERALS WITH REFERENCE TO MANHOLE AND CLEANOUTS.
 - b. THE NORTHERLY AND EASTERLY COORDINATES ON ALL FIELD OBTAINED MEASUREMENTS AND PROVIDED ON ALL RECORD DRAWINGS SUBMITTALS.
 - c. PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH ETC.) AND STATION STARTING AT 0+00 AT DOWNSTREAM MANHOLE.
 5. FORCE MAIN "AS-BUILTS" SAME AS WATER MAIN.
 6. EACH RECORD DRAWING SHALL SHOW THE FLORIDA STATE PLAN COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.
- * OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPARTMENT PRIOR TO PREPARATION OF DRAWINGS.

ISSUE DATE	APPROVED BY	STANDARD DETAIL	CROSS REF.	SPEC. REF.
03/11/2009	V.F.C.	"AS-BUILT" REQUIREMENTS		
07/20/2016	D.V.			

GS
0.5
SHEET 2 OF 2

NOTE:
ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND PROP. WATER & FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0

NOTE:
ALL WATER & SEWER CROSSINGS PER GS 1.5

NOTE:
ALL PROPOSED SEWER LATERALS TO COMPLY WITH STANDARD DETAILS GS 1.5, SS 1.0, & SS 3.1 AS APPLICABLE.

GENERAL NOTES & SPECIFICATIONS FOR WATER MAIN INSTALLATIONS

1. All materials and construction under this project shall be in strict accordance with the requirements of the City of North Miami Beach Engineering Department (NMB) and/or Dade County Public Works Department (DOPWD) and/or the Florida Department of Transportation (FDOT) and shall conform to the standards and specifications available and on file with the department. As a minimum requirement, the standards of the AWWA shall apply.
2. Minimum cover over water mains shall be 3'-0" unless specific written exception is issued or required by an authorized representative of NMB.
3. Detector tape shall be installed 18" above the centerline of water mains and services.
4. All water main line valves shall be installed complete with 10" riser pipes and No. 3 valve boxes. Fire hydrants and service valves shall be installed complete with 6" riser pipes and No. 2 valve boxes.
5. All water meters up to 2" will be installed by department personnel providing the appropriate charges for backflow preventers, valves and meter or pits will be in accordance with construction plans and specifications approved by NMB.
6. Fire hydrant requirements (number and location) shall be as required by the Dade County Fire Department or the appropriate fire agency with installations in accordance with NMB standards.
7. Contractor MUST call the NMB Inspection Division and all other applicable permitting agencies to arrange for a Pre-Construction Meeting at least 72 hours prior to proposed start of construction.
8. NMB personnel will inspect all facilities approved by the Engineering Department. All other requirements of the permitting agency shall be in accordance with their standards and requirements.
9. Work performed under this project will not be considered as complete until final acceptance of the system by the department and until the following documents are received and approved by NMB:
 - Easements, if required (whether by deed or plat suitably recorded)
 - Contractor's Waiver and Release of Lien
 - Absolute Bill of Sale
 - Contractor's Letter of Warranty (I.e. Letter Agreement)
 - Contractor's Maintenance Bond (for 1 year)
 - As-Built 3 mi mylar 24" x 36" showing specific locations, depths, etc. of all water facilities as located by a licensed surveyor, along with two (2) prints of the "As-Built" which have been signed and sealed by a registered surveyor or Engineer of record and endorsed by the Contractor in accordance with NMB standards.
10. All new connections from existing NMB mains to be inspected by NMB forces prior to install.
11. The Contractor shall be responsible for verifying all locations, dimensions, elevations and the locations of all underground structures and utilities prior to the start of construction. The locations shown on the plans are not guaranteed accurate or correct by the known utility companies.
12. Thrust blocks shall be provided at all bends, tees, and plugs in accordance with NMB standard details.
13. All new fittings at reaction points shall be fitted with megagul retainer glands or approved equal, meeting NMB requirements. All valves are to be restrained with retainer glands.
14. Pipe installation, cleaning, flushing, testing, and disinfecting as per NMB and State of Florida Department of Health and Rehabilitative Services Standards for the installation of water mains by customer donation projects.
15. Preliminary cleaning of all water mains 12" and larger to be accomplished by use of a poly-pig per NMB standards.
16. The Contractor is responsible for the cost of inspections for any construction activities occurring outside normal working hours (8:00 a.m. to 5:00 p.m.) Saturdays and Sundays and holidays excluded and arrangements for inspections outside normal working hours must be made a minimum of 48 hours in advance of the construction activity.
17. All trenches to be over-excavated a minimum of 6" to provide for installation of rock bedding in accordance with NMB standards.
18. Surface restoration, pavement replacement, sidewalk replacement, trench backfilling and compaction shall comply with the applicable current NMB, DOPWD and FDOT Standards.
19. All gate valves to be resilient seat per AWWA-C509.
20. Where field conditions require, as determined by NMB, stop water main shall be polyethylene encased in accordance with AWWA-C105.
21. The Contractor shall be responsible for providing NMB with HRS Letter of Clearance to Place a Public Utility Water Facility on Service. The Engineer of record shall provide NMB with a signed and sealed pressure test report certifying pressure test results.

Date	Revisions	Appr. by	Date	Scale	N.T.S.	Dwg	FIG. 101b	Fig	300

REQUIREMENTS PER DEPARTMENT OF HEALTH

WATER MAIN HORIZONTAL SEPARATIONS

1. Separations shall be measured outside edge to outside edge.
 - a. Between water mains and, storm sewers, storm water force mains, or reclaimed water lines, SHALL BE 3 ft. minimum.
 - b. Between water mains and vacuum type sewer preferably 10 ft. and at least 3 ft. minimum.
4. Gravity or pressure sanitary sewers, wastewater force mains or reclaimed water preferably 10 ft. and at least 6 ft. MAY be reduced to 3 ft. Where bottom of water main is at least 6 inches above top of sewer.
5. 10ft. of any part of on-site sewer treatment or disposal system.

WATER MAIN VERTICAL SEPARATIONS

1. Separations between water mains and gravity sewer, vacuum type sewer, or storm sewers, to be preferably 12 inches, or at least 6 inches above, or at least 12 inches if below.
 2. Pressure sanitary sewer, wastewater or storm water force main, or reclaimed water, at least 12 inches above or below.
- * Note: Center 1 - full length of water main pipe at crossings, alternatively arrange pipes so joints are at least 3 feet from joints in vacuum, storm or storm force mains. At least 6 feet from joints in gravity of pressure sewers, wastewater force mains or reclaimed water.

TRENCH PROTECTION

Trench excavation protection shall be accomplished as required by the provisions of Part 1925, Subpart P Excavations, Trenching and Shoring of the Occupational Safety and Health Administrations Standards and Interpretations.

09/04	DATE	SCALE	N.T.S.	DWG	FIG. 101c	Fig	300A

The following activities on existing water services and/or existing water mains such as:

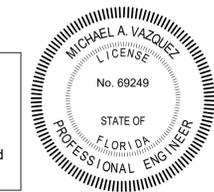
- Cut and plugs
- Water main offsets
- Interconnections
- Service installations/retirements/service transfers
- Hydrant installations/retirements/relocations
- Any work that may affect the quality and/or quantity of WASD's water, transmission and distribution system.

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.

All elevations on the plans or referenced in the specifications are based on National Geodetic Vertical Datum of 1929 (NGVD).

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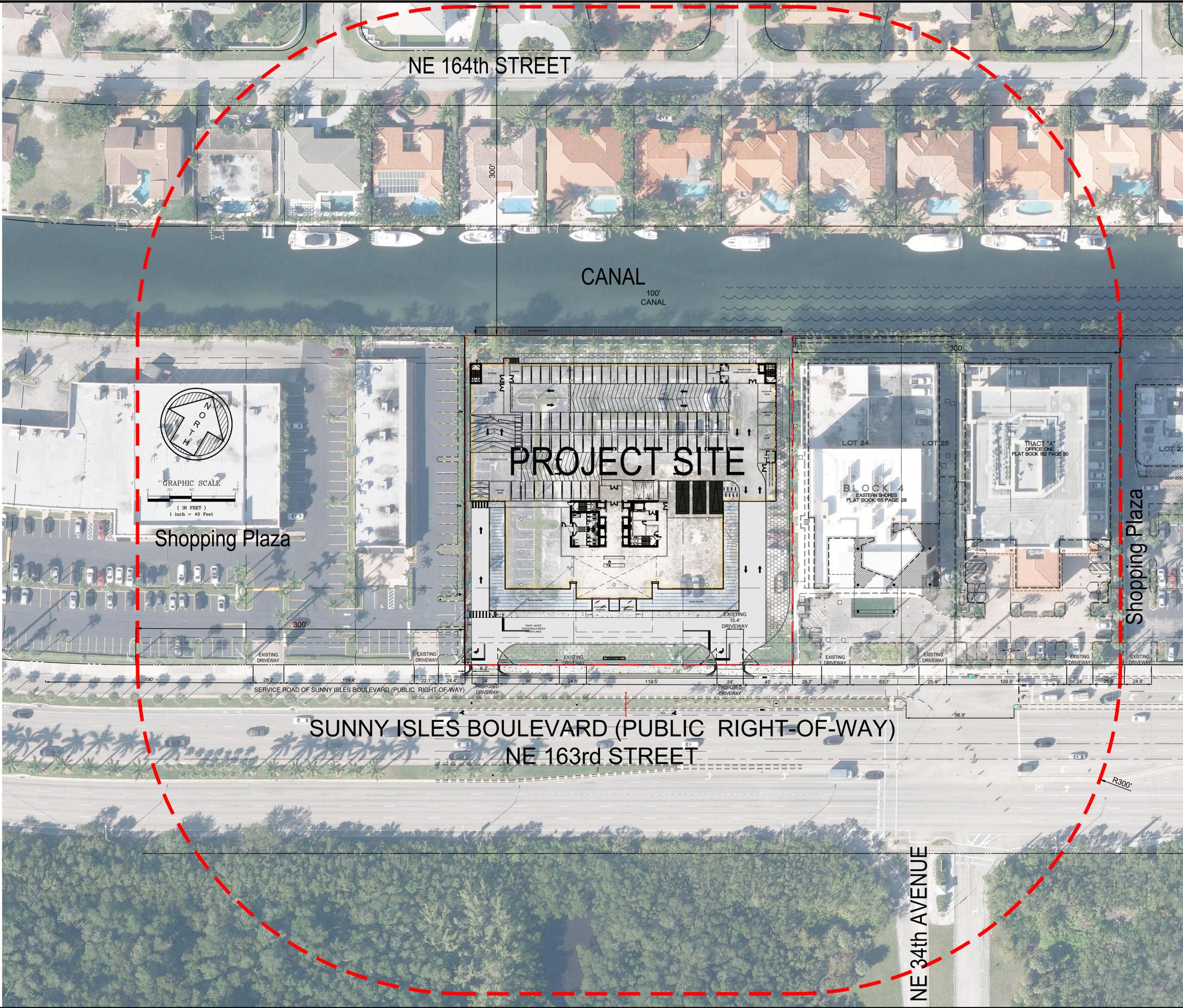
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No.	Revision Description	Date

FORTIN, LEAVY, SKILES, INC.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 00003653
180 Northeast 168th Street / North Miami Beach, Florida, 33162
Phone: 305-653-4493 / Fax: 305-651-7152 / Email: fls@flsurvey.com

CANAL PARK 2
CIVIL SITE PLAN
NOTES
City of North Miami Beach, Miami-Dade County, Florida

Date	05/24/2021
Scale	None
Drawn By	REP
Cad. No.	201225SP
Date Plotted:	5/21/2021 3:23 PM
Ref. Dwg.	S.B.O.
Field Book	-
Job No.	207007
Dwg. No.	3020-039
Sheet	C3



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CANAL PARK 2
CIVIL SITE PLAN
ADJACENT DRIVEWAY PLAN
 City of North Miami Beach, Miami-Dade County, Florida

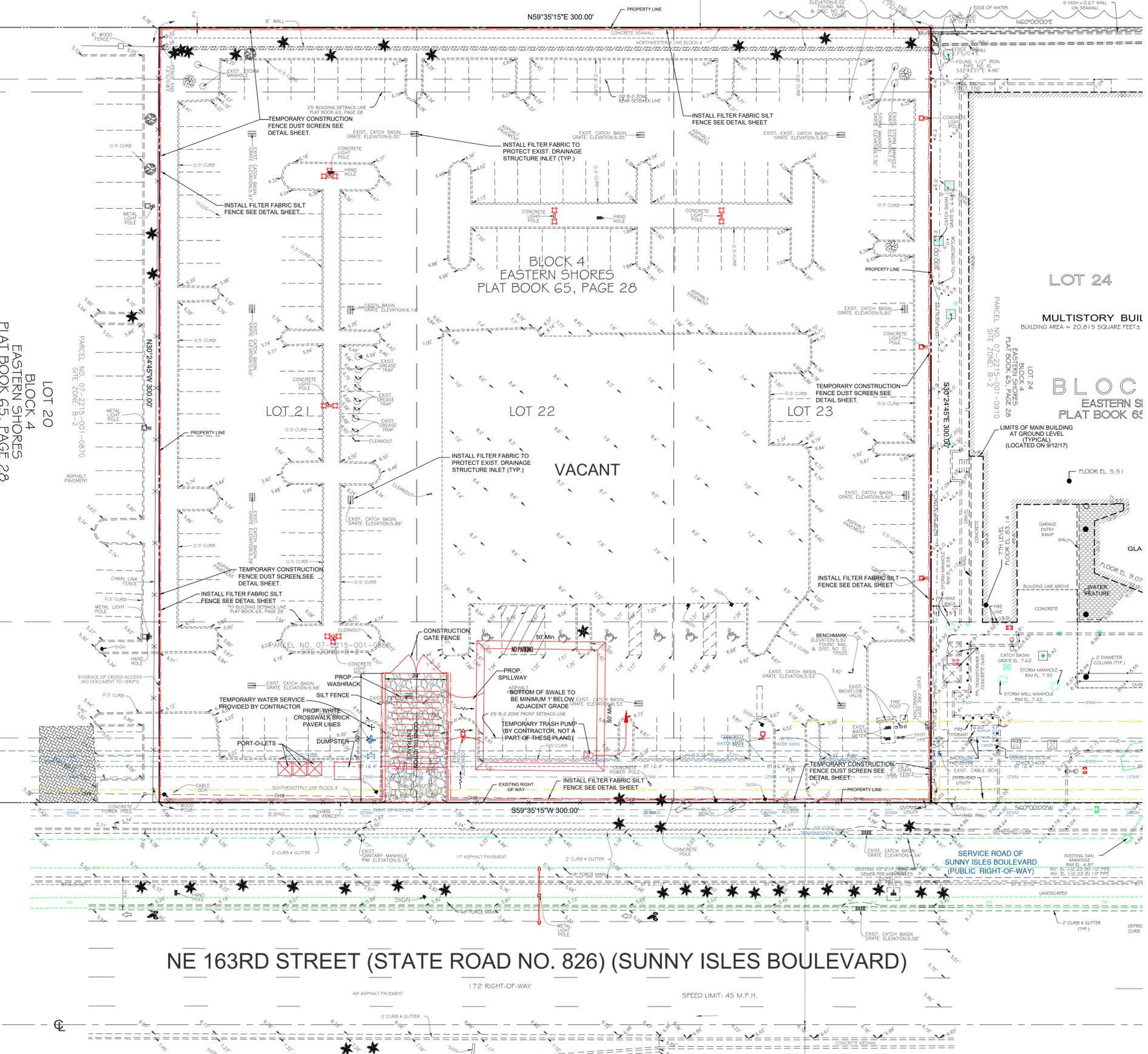
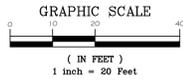
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Field Book	-
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Dwg. No.	3020-039
Sheet	C4

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100' WATERWAY



NOTE:
EROSION CONTROL METHODS
SHALL BE MAINTAINED
THROUGHOUT THE DURATION OF
THE PROJECT.

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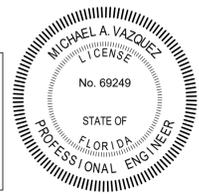
No.	Date	Revision Description

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180 Northeast 168th Street / North Miami Beach, Florida, 33162
Phone: 305-653-4493 / Fax: 305-651-7152 / Email: fls@flsurvey.com

CANAL PARK 2 CIVIL SITE PLAN STORMWATER POLLUTION PREVENTION PLAN

City of North Miami Beach, Miami-Dade County, Florida

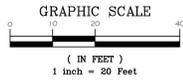
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Cad. No.	201225SP
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Field Book	-
Job No.	207007
Dwg. No.	3020-039
Sheet	C5



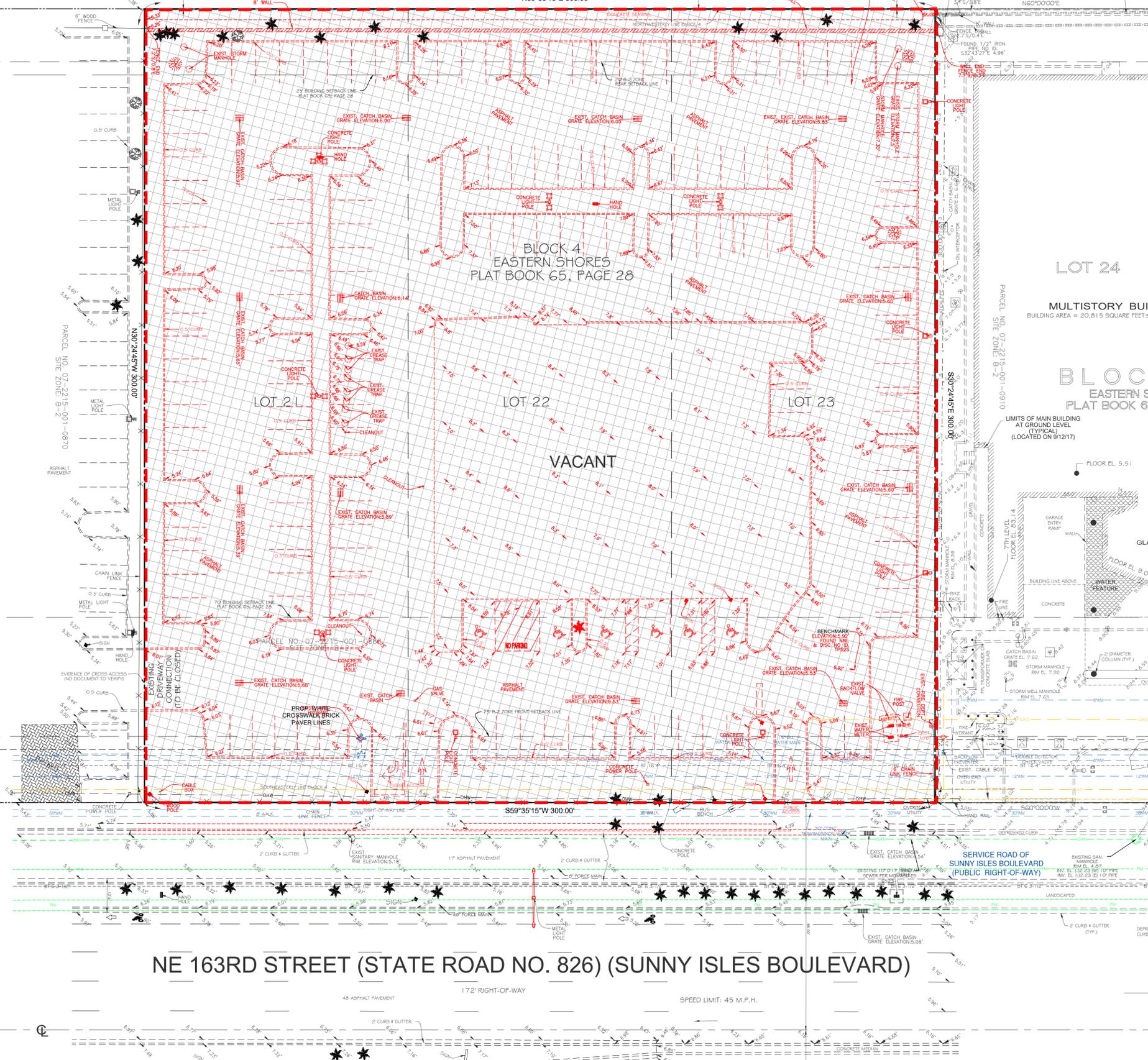
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100' WATERWAY



N59°35'15"E 300.00'



- ON-SITE DEMOLITION NOTES:**
- All Demolition shall Comply with the City of North Miami Beach, Miami-Dade County, Florida Department of Transportation & State of Florida Requirements Specifications.
 - Existing Trees that are to be removed shall be per the Landscape Architect's Plan and is shown in these drawings for reference only.
 - Existing Detector Check Valves and Fire Service Lines to be disconnected and removed per North Miami Beach Department's requirements if applicable.
 - Existing Water Valves, Meters, Backflow Preventers and Vacuum Breakers to be disconnected and removed per North Miami Beach Department's requirements.
 - Existing FPL Duct and Transformers to be de-energized and removed if applicable. Coordinate with Florida Power & Light.
 - Existing Sanitary Sewer Laterals to be disconnected and removed to within 5' of property line. Sanitary Sewer Laterals to be capped in Place within 5' of property line and/or Right of Way Line.
 - Existing Storm Sewer Catch Basin, Manholes & Pipes to be disconnected and removed.
 - Existing Gas Meters & feed lines cut and capped at Right of Way Line by Gas Company if applicable.
 - Existing Site Light Poles to be disconnected and removed.
 - Contractor to determine type of Existing Utility Handholes and coordinate with owner of utility for removal unless otherwise shown to remain.
- OFF-SITE DEMOLITION NOTES:**
- Existing Sidewalk, Curb & Gutter along the Service Road for Sunny Isles Boulevard to be replaced per the Paving and Drainage Plan.
 - Existing Utilities that are to remain shall be adjusted to New Paver or New Concrete Sidewalk as required.
 - Existing Handholes in sidewalk are to be relocated as noted.

ITEMS SHOWN IN RED ARE TO BE REMOVED UNLESS OTHERWISE NOTED

= PROJECT LIMITS

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No.	Date	Revision Description

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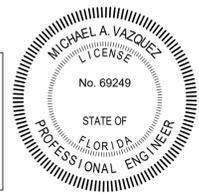
CANAL PARK 2 CIVIL SITE PLAN DEMOLITION PLAN

City of North Miami Beach, Miami-Dade County, Florida

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Scale	1" = 20'
Drawn By	REP
Cad. No.	201225SP
Date Plotted:	5/21/2021 3:24 PM
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Field Book	-
Job No.	207007
Dwg. No.	3020-039
Sheet	C7

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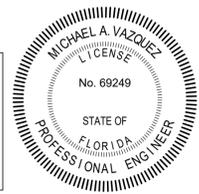
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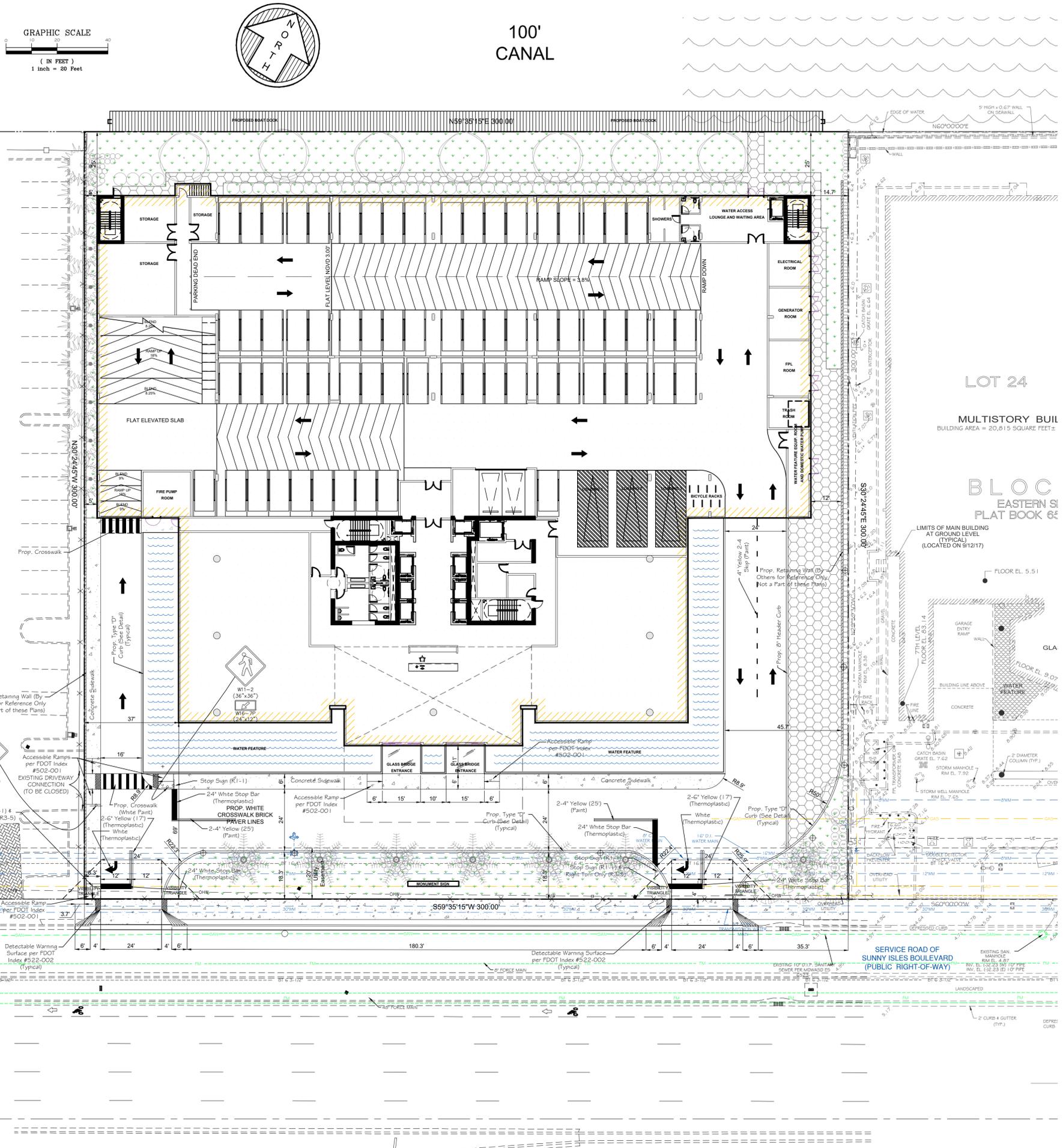
FORTIN, LEAVY, SKILES, INC.
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CANAL PARK 2
CIVIL SITE PLAN
 GEOMETRY, PAVING, SIGNAGE & MARKING PLAN
 City of North Miami Beach, Miami-Dade County, Florida

Date	05/24/2021
Scale	1" = 20'
Drawn By	REP
Cad. No.	201225SP
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Field Book	-
Job No.	207007
Dwg. No.	3020-039
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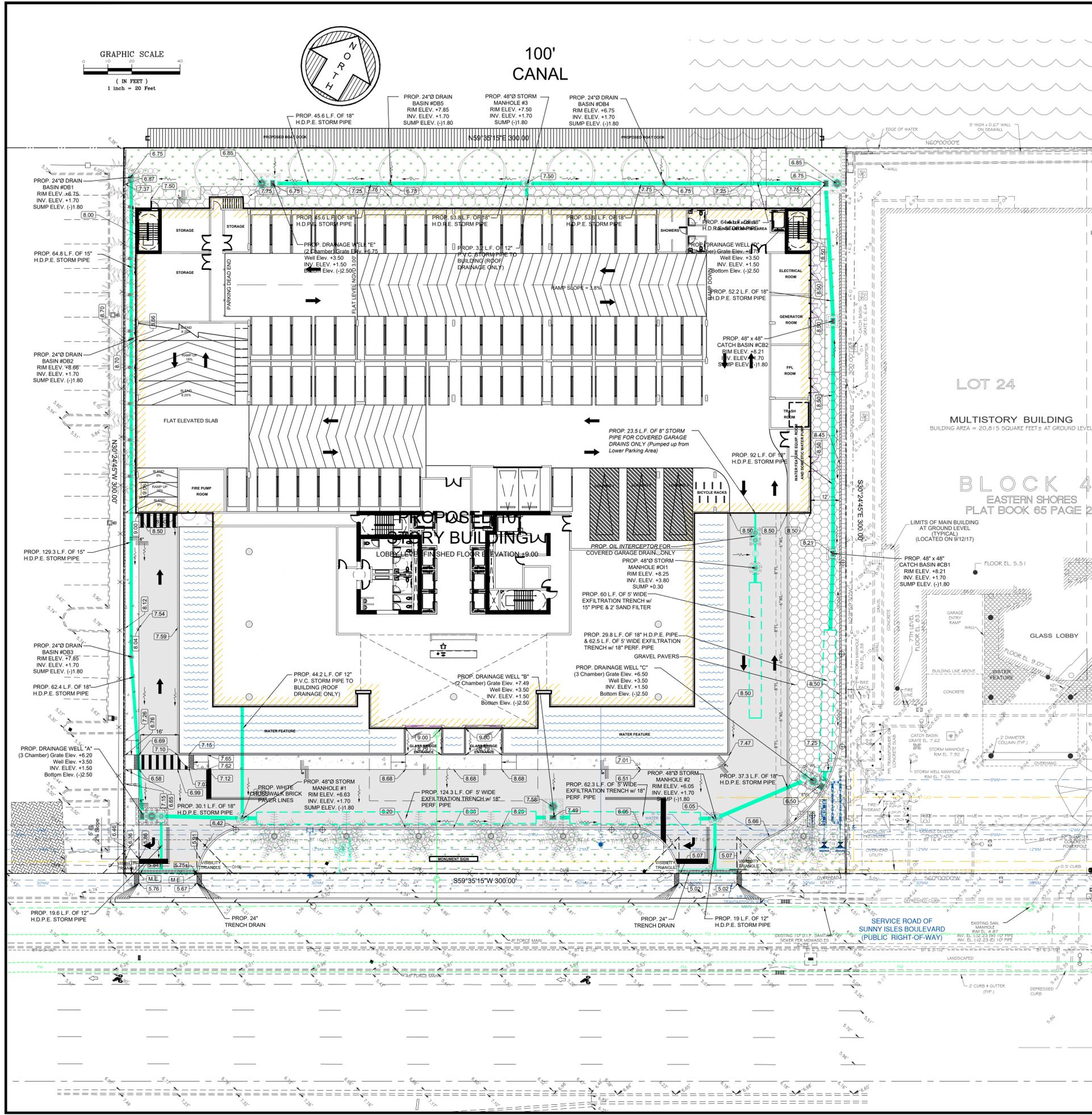
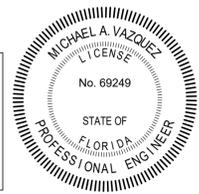
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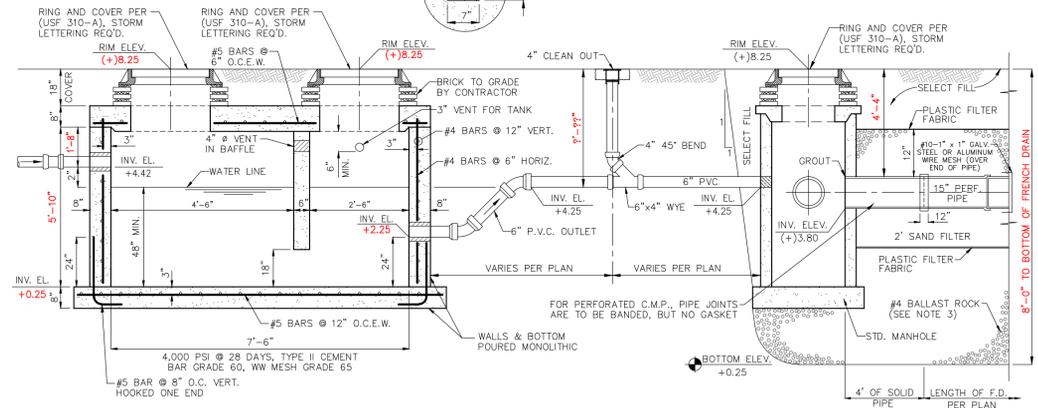
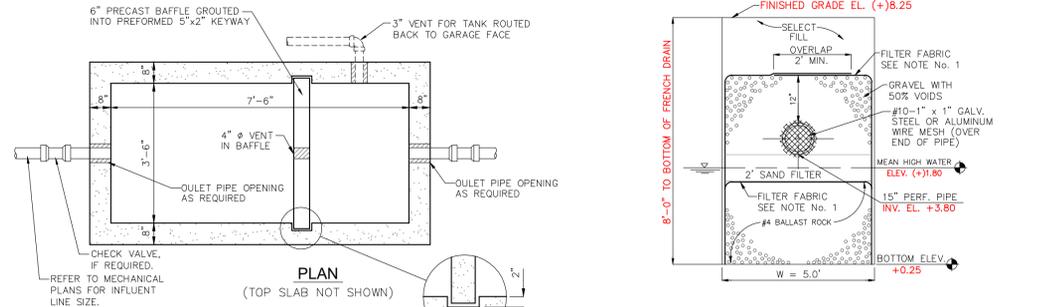
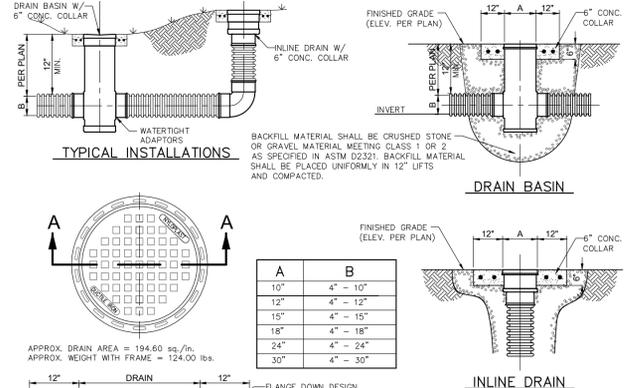
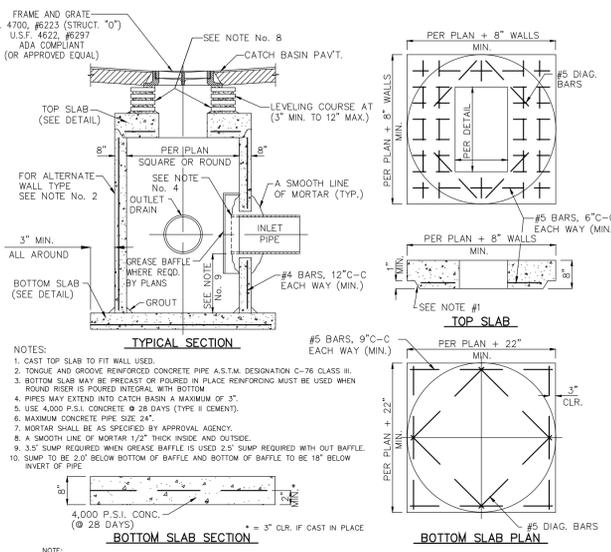
CANAL PARK 2
CIVIL SITE PLAN
GRADING AND DRAINAGE PLANS
 City of North Miami Beach, Miami-Dade County, Florida

Date	05/24/2021
Scale	1" = 20'
Drawn By	REP
Cad. No.	201225SP
Date Plotted	5/21/2021 3:24 PM
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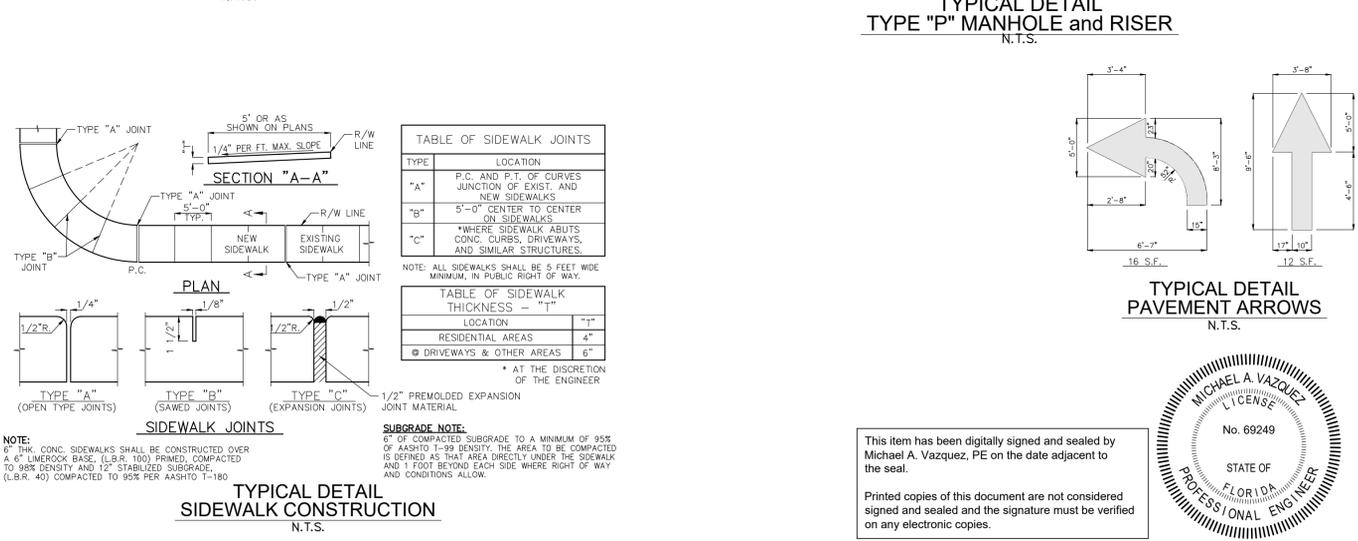
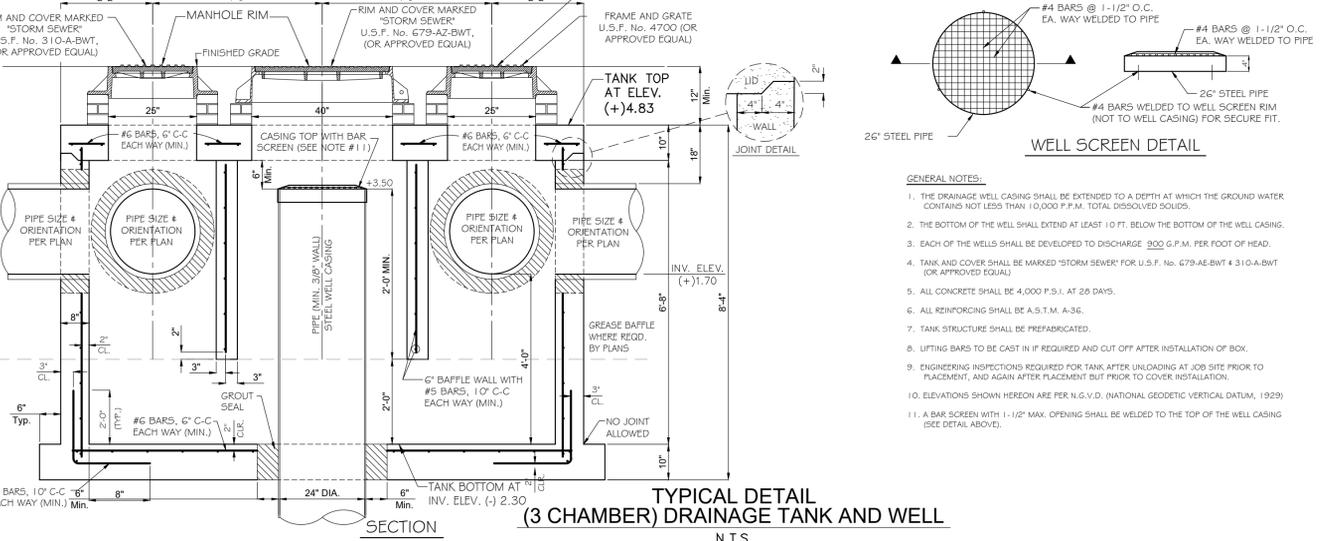
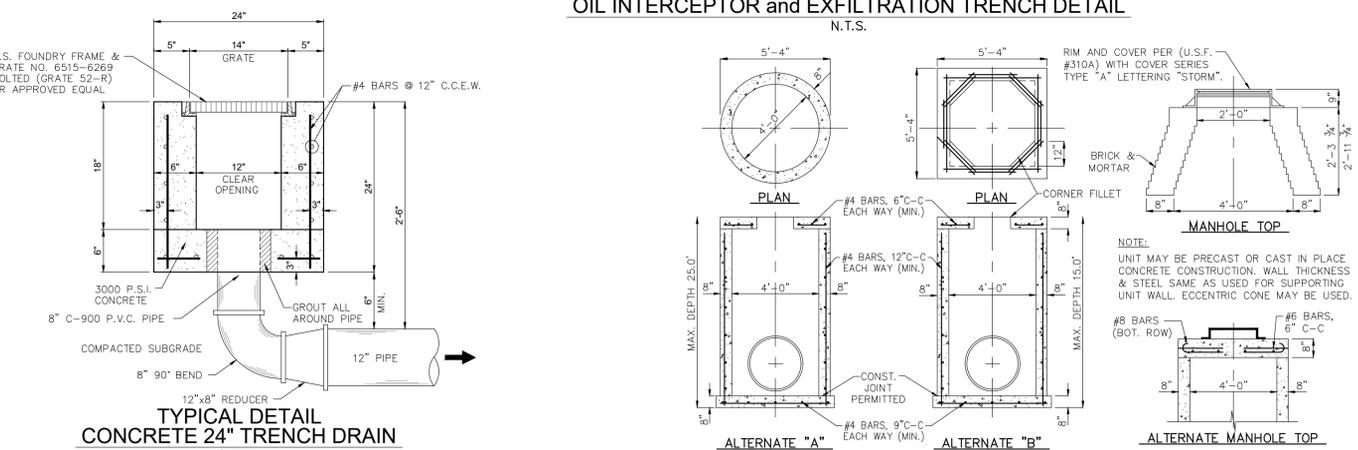
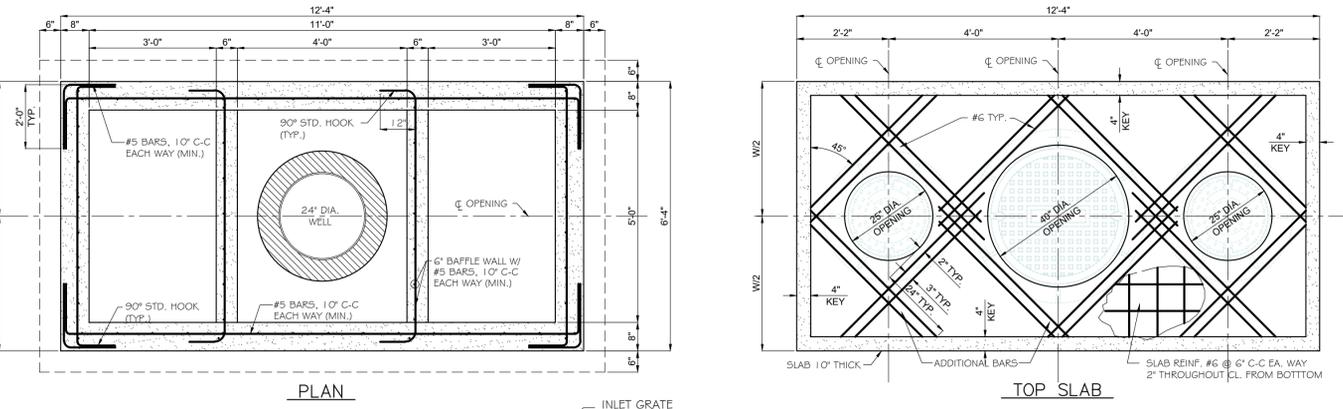


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NOTES:

- NON-WOVEN PLASTIC FILTER FABRIC PER F.D.O.T. STANDARD INDEX #199 (TYPE D-3 FOR FRENCH DRAIN) SHALL BE USED AT EACH SIDE AND ON TOP, AND AT EACH END OF FRENCH DRAIN TRENCH, SHOP SPECS. AND A SAMPLE OF THE MATERIAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING AND INSTALLING THE FABRIC.
- THE BOTTOM OF THE EXFILTRATION TRENCH SHALL BE AT ELEV. $+0.25$ N.G.V.D. UNLESS OTHERWISE SHOWN.
- AFTER THE BALLAST ROCK HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY VIBRATED OR COMPACTED IN ORDER TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF IT DOES TAKE PLACE, ADDITIONAL BALLAST ROCK WILL BE ADDED TO RESTORE THE BALLAST ROCK TO THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH CAN BE COMPLETED IN ACCORDANCE WITH THE DETAIL.



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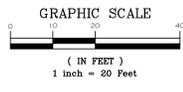
FORTIN, LEAVY, SKILES, INC.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 00003653
180 Northeast 168th Street / North Miami Beach, Florida, 33162
Phone: 305-653-4493 / Fax: 305-651-7152 / Email: fls@flsurvey.com

CANAL PARK 2 CIVIL SITE PLAN
SECTION AND DETAILS
City of North Miami Beach, Miami-Dade County, Florida

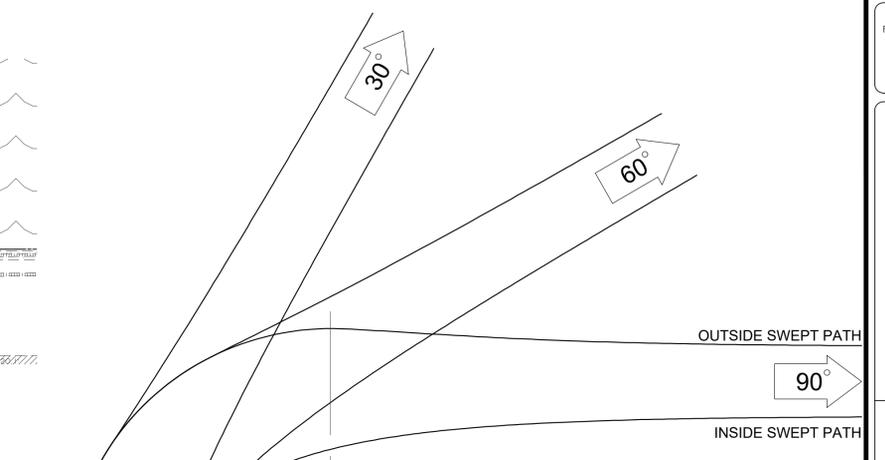
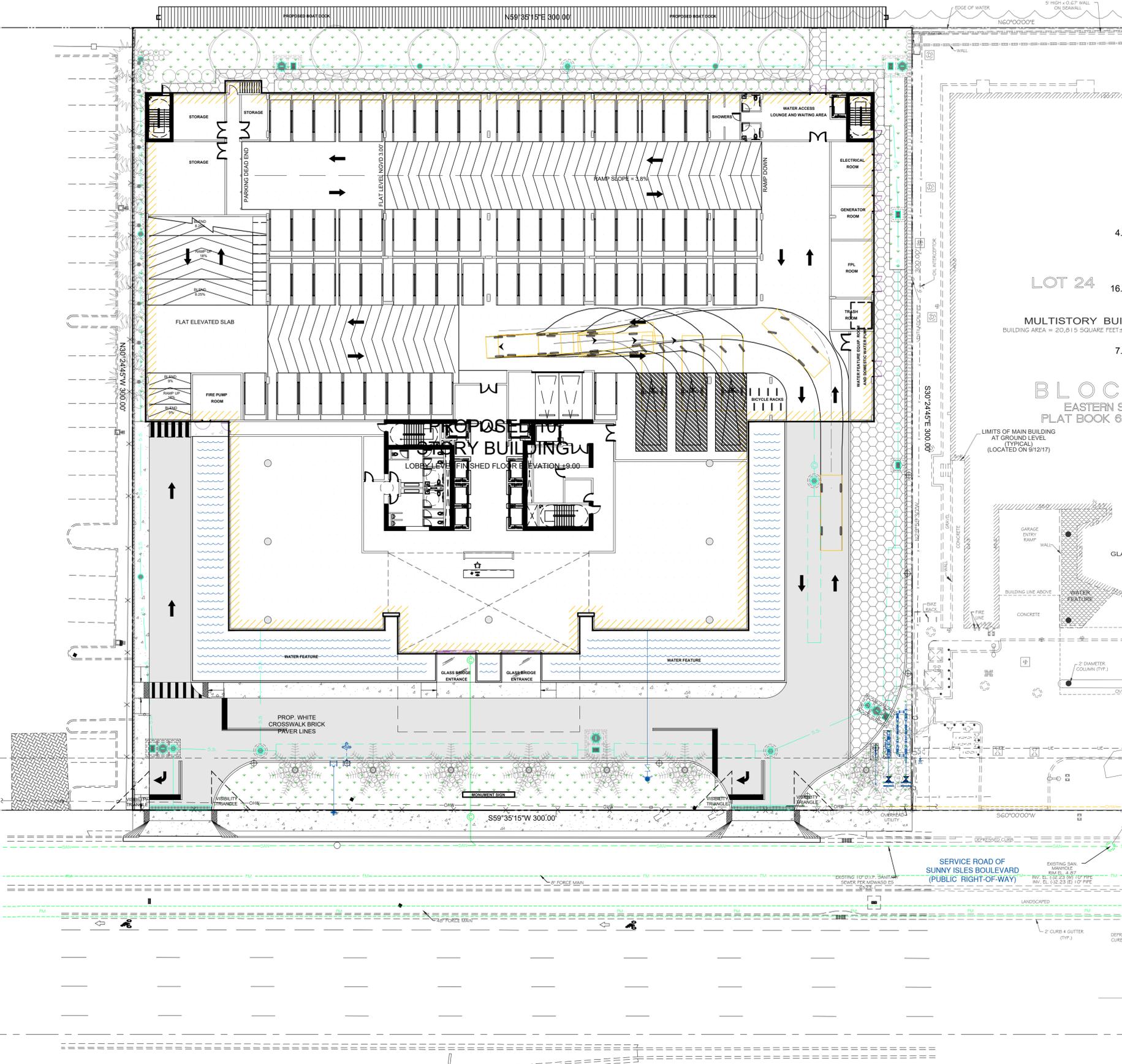
Date: 05/24/2021
Scale: As Shown
Drawn By: REP
Cad. No: 201225SP
Date Plotted: 5/21/2021 3:24 PM
Ref. Dwg.: S.B.O.
Field Book: -
Job No.: 207007
Dwg. No.: 3020-039
Sheet: C11

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

MICHAEL A. VAZQUEZ
L.I.CENS.
No. 69249
STATE OF FLORIDA
PROFESSIONAL ENGINEER

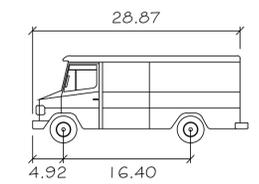


100'
CANAL



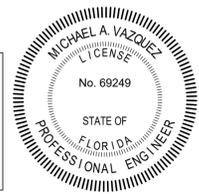
STEERING LOCK ANGLE = 38.7 deg.
ACHIEVED STEERING ANGLE:
30 deg. SWEEP ANGLE: 20.4 deg.
60 deg. SWEEP ANGLE: 29.7 deg.
90 deg. SWEEP ANGLE: 34.2 deg.

SERVICE VEHICLE
2006 (AU)
[ft]
Copyright (c) 2013, Transoft Solutions



SERVICE VEHICLE
Width : 8.20
Track : 8.20
Lock to Lock Time : 6.0
Steering Angle : 38.7

This item has been digitally signed and sealed by Michael A. Vazquez, PE on the date adjacent to the seal.
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No.	Date	Revision Description

FORTIN, LEAVY, SKILES, INC.
CONSULTING ENGINEERS, SURVEYORS & MAPPERS
FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 00003653
180 Northeast 168th Street / North Miami Beach, Florida, 33162
Phone: 305-653-4493 / Fax: 305-651-7152 / Email: fls@flsurvey.com

CANAL PARK 2
CIVIL SITE PLAN
VEHICLE LOADING SPACES EXHIBIT
City of North Miami Beach, Miami-Dade County, Florida

Date	05/24/2021
Scale	1" = 20'
Drawn By	RDP
Cad. No.	201225SP
Date Plotted	5/21/2021 3:24 PM
Ref. Dwg.	S.B.O.
Field Book	-
Job No.	207007
Dwg. No.	3020-039
Sheet	C14

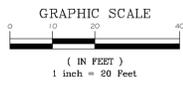
THIS DRAWING IS THE PROPERTY OF FORTIN, LEAVY, SKILES, INC. AND IS AN INSTRUMENT OF SERVICE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF SAME.

No.	Date	Revision Description
A	03/22/2021	REVISED PER FIRE DEPARTMENT COMMENTS

FORTIN, LEAVY, SKILES, INC.
 CONSULTING ENGINEERS, SURVEYORS & MAPPERS
 FLORIDA CERTIFICATE OF AUTHORIZATION NUMBER: 00003653
 180 Northeast 168th Street / North Miami Beach, Florida, 33162
 Phone: 305-653-4493 / Fax: 305-651-7152 / Email: fls@flsurvey.com

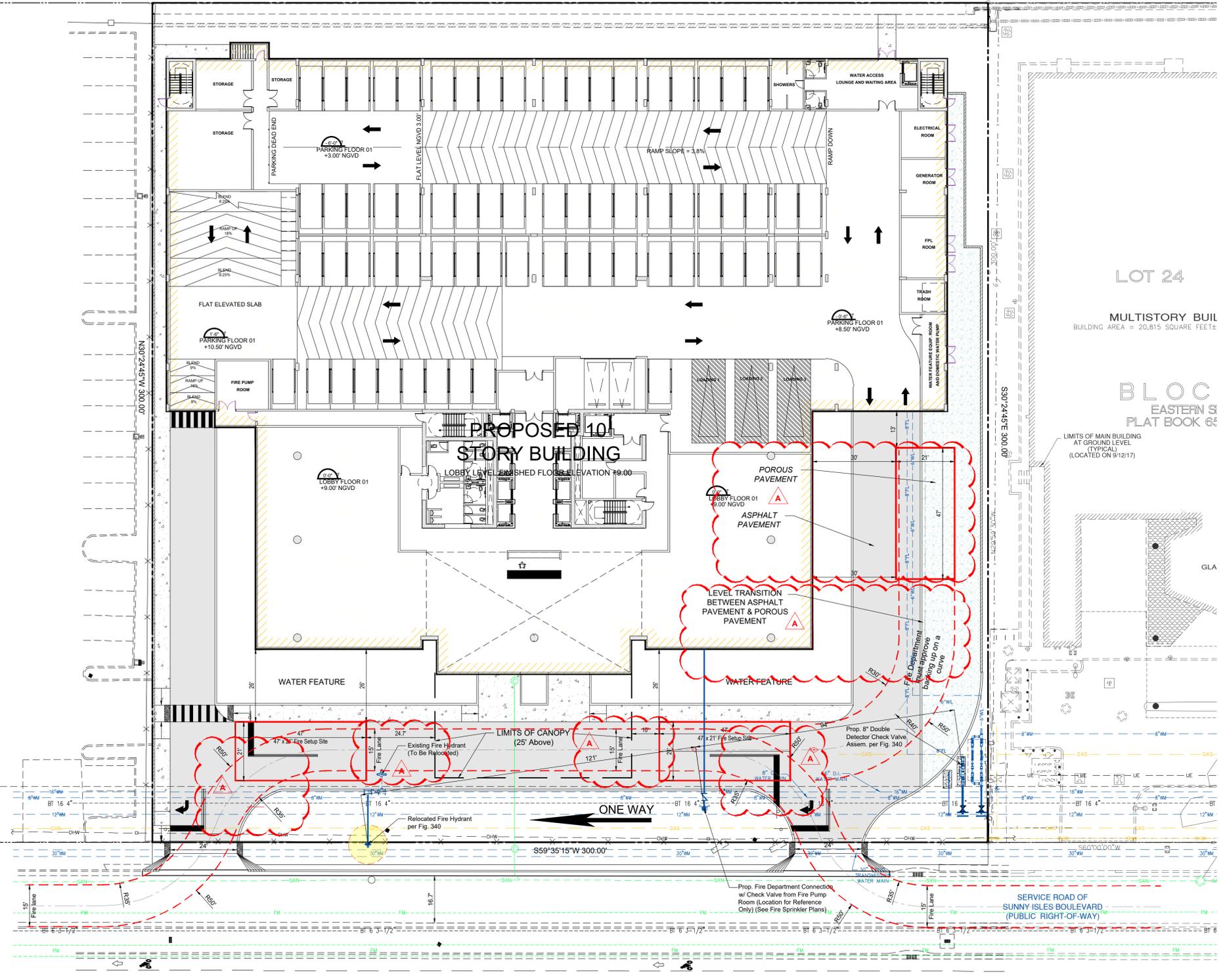
CANAL PARK 2
CIVIL SITE PLAN
FIRE ACCESS PLAN
 City of North Miami Beach, Miami-Dade County, Florida

Date	01/21/2021
Scale	1" = 20'
Drawn By	REP
Cad. No.	201225SP
Date Plotted:	3/22/2021 4:02 PM
Ref. Dwg.	S.B.O.
Field Book	
Job No.	207007
Dwg. No.	3020-039-FA1
Sheet	FA1



N59°35'15"E 300.00'

N6°00'00"E



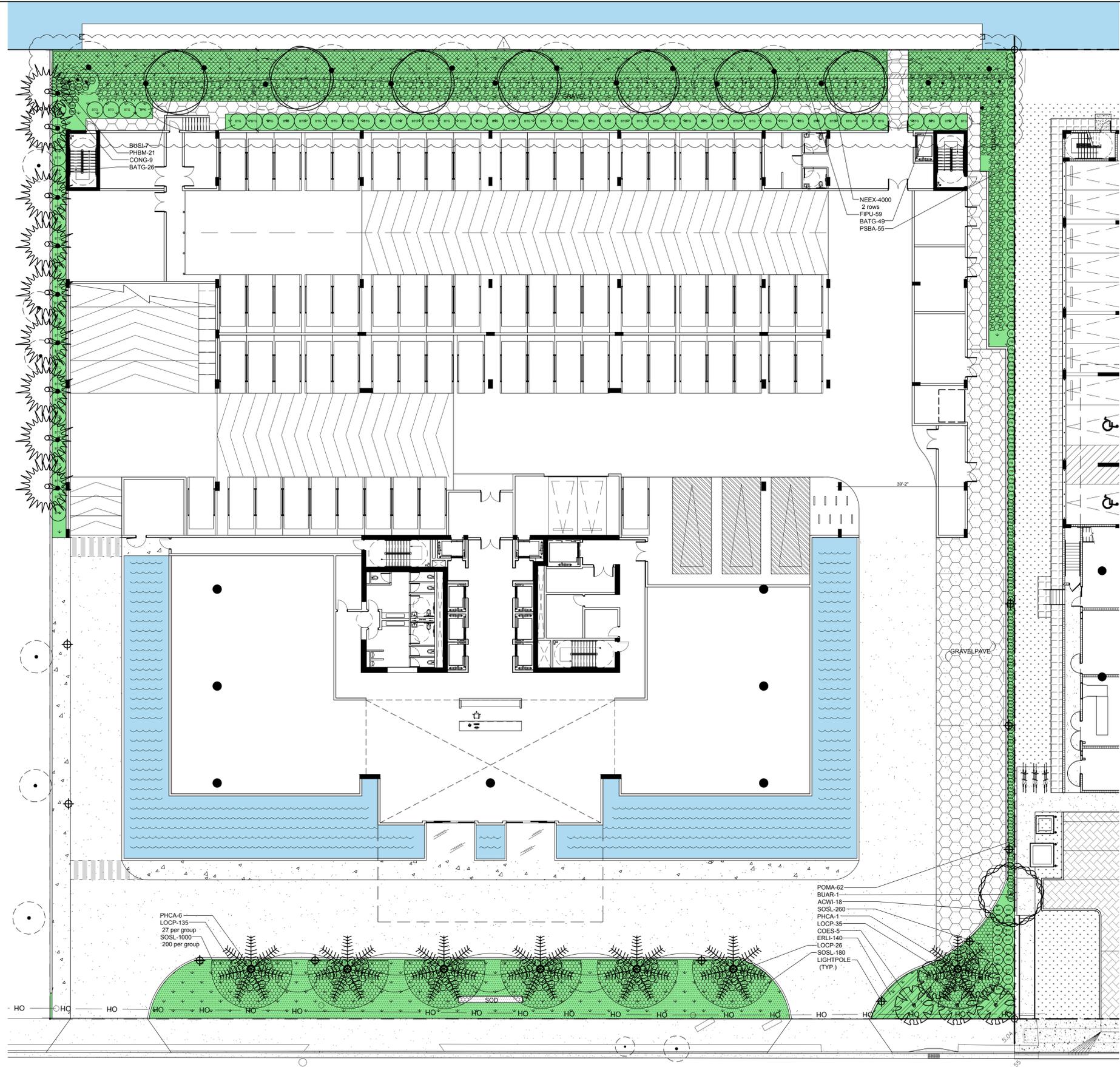
LOT 24
MULTISTORY BUILD
 BUILDING AREA = 20,815 SQUARE FEET
BLOC
 EASTERN S
 PLAT BOOK 66

Michael Vazquez
 Digitally signed by Michael Vazquez
 Date: 2021.03.22 16:24:37 -04'00'

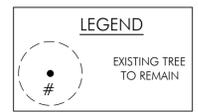


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PLANT LIST				
TREES				
KEY	PLANT NAME	QTY.	UT.	SIZE
BUAR	Bulnesia arborea ...Verawood	1	ea.	18' tall x 8' spread, 5" DBH
BUSI	Bursera simaruba ...Gumbo Limbo	7	ea.	18' tall x 8' spread, 5" DBH
COES	Conocarpus erectus "Sericeus" ...Silver Buttonwood	5	ea.	12' tall x 6' spread min. multi-trunk, lifted to tree form
PALMS				
KEY	PLANT NAME	QTY.	UT.	SIZE
CONG	Cocos nucifera "Green Malayan" ...Coconut Palm	9	ea.	28' tall OA, 10' CW
PHCA	Phoenix canariensis ...Canary Island Date Palm	7	ea.	10' CW, classic cut, matching, to be selected by owner
PHRO(d)	Phoenix roebellini ...Pygmy Date Palm	6	ea.	6' tall OA, double trunk
BAMBOO				
KEY	PLANT NAME	QTY.	UT.	SIZE
BATG	Bambusa textilis gracilis ...Graceful Bamboo	71	ea.	14' tall OA, 7 culms min per pot
SHRUBS				
KEY	PLANT NAME	QTY.	UT.	SIZE
ACWI	Acalypha wilkesiana ...Copperleaf	18	ea.	3 gallon cans, 24" o.c.
ERLI	Emodea littoralis ...Golden Creeper	140	ea.	1 gal cans, install 18" o.c.
NEEX	Nephrolepis exaltata ...Boston Fern	1900	ea.	1 gal cans, install 12" o.c.
LOCP	Loropetalum chinense "Purple Diamond" ...Purple Loropetalum	196	ea.	7 gal cans, 30"x24" min.
PHBM	Philodendron 'Burlie Marx' ...Burlie Marx Philodendron	21	ea.	1 gallon cans, 24" o.c.
POMA	Podocarpus macrophyllus ...Maki Yew	62	ea.	4' tall x 2' spread
PSBA	Psychotria bahamensis ...Bahamas Wild Coffee	55	ea.	18"x18"
SOSL	Solenostemon scutellaroides "Lime" ...Coleus	1260	ea.	1 gal cans, install 12" o.c.
MISC				
KEY	PLANT NAME	QTY.	UT.	SIZE
gravel	Grey Gravel	25	c.y.	#57 stone
sod	Empire Zoysia	as req	s.f.	solid sod
	Planting Soil		c.y.	excavate 24" depth and backfill with planting soil in all planters adjacent to the front driveway
	70% Silica Sand			
	30% Florida Peat			
	Shredded Pinebark Mulch		c.y.	2" layer, Dark brown color



NOTE: AN AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED IN THE PERMIT SET OF DOCUMENTS



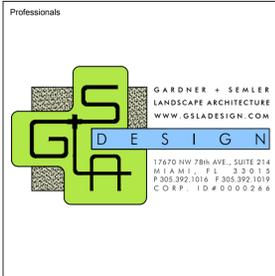
PLANTING PLAN - GROUND FLOOR



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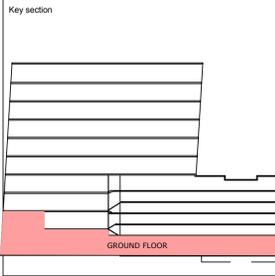
CANAL PARK
3323 NE 163rd Street, Suite 200 North Miami Beach, FL 33160
305.792.0015 305.931.0279 info@absolute-idea.com

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THIS SECTION AND 633 FLORIDA STATUTES.
TAYLOR KIEHL SEMLER
FLA 6687205



REV.	DATE	DESCRIPTION
1	5.10.2021	TRAD

ALL MEASUREMENTS MUST BE VERIFIED BEFORE BEGINNING THE WORKS. NO MEASUREMENTS ARE TO BE SCALED DIRECTLY FROM THIS DRAWING.



Client
CANAL PARK OFFICE 2

Project
CANAL PARK WEST TOWER
3227 North Miami Beach, FL 33160

Title
PLANTING PLAN GROUND FLOOR

Drawn
TKS
Verified
TKS
Approved
KEG

Field
LANDSCAPE ARCHITECTURE
Scale
as shown
Date
05-24-2021
Project Manager
LA-201
Project
16-839US

SUBMITTAL FOR B&Z BOARD 05.24.2021

TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THIS SECTION AND 633 FLORIDA STATUTES.
TAYLOR KIEHL SEMLER
FLA 668705

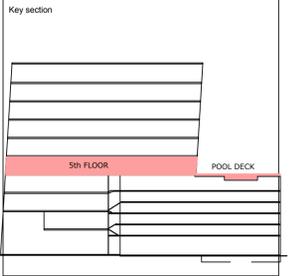
Professionals



GARDNER + SEMLER
LANDSCAPE ARCHITECTURE
WWW.GSLDESIGN.COM
17470 NW 78th AVE., SUITE 214
MIA MI, FL 33157
P 305.992.1016 F 305.392.1019
C O R P I D # 0000266

REV.	DATE	DESCRIPTION
△	5.10.2021	TRAD

ALL MEASUREMENTS MUST BE VERIFIED BEFORE BEGINNING THE WORKS. NO MEASUREMENTS ARE TO BE SCALED DIRECTLY FROM THIS DRAWING.



Client
**CANAL PARK
OFFICE 2**

Project
**CANAL PARK
WEST TOWER**
3227 North Miami Beach, FL 33160

Title
**PLANTING PLAN
5TH FLOOR**

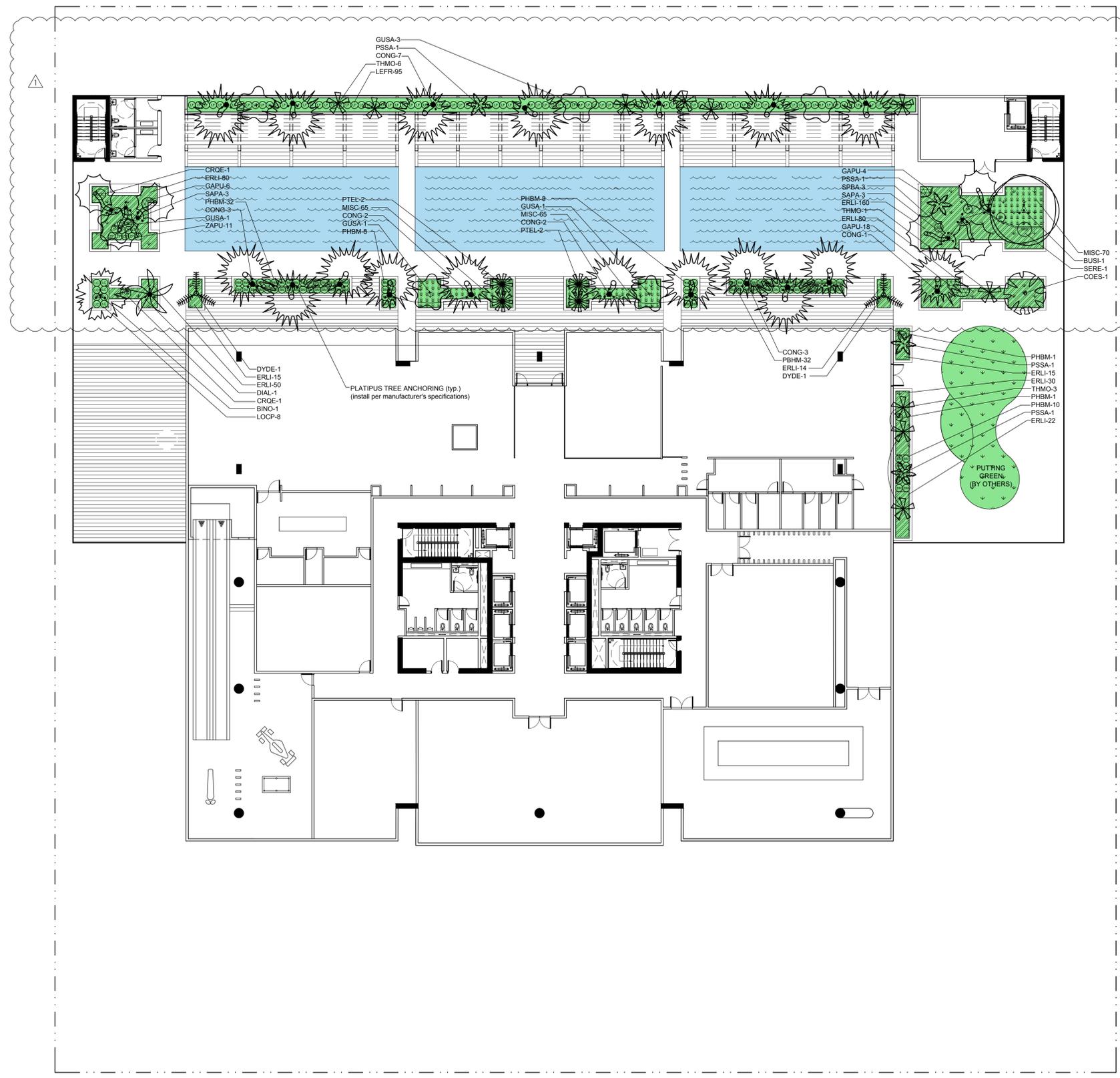
Drawn
TKS
Verified
TKS
Approved
KEG

Field
**LANDSCAPE
ARCHITECTURE**
Scale
as shown
Date
05-24-2021

Project Manager
LA-202
Dwg. no.
16-839US

SUBMITTAL FOR B&Z BOARD 05.24.2021

PLANT LIST - POOL DECK				
KEY	PLANT NAME	QTY.	UT.	SIZE
TREES				
BUSI	Bursera simaruba ...Gumbo Limbo	1	ea.	12' tall x 5' spread, 3" DBH
COES	Conocarpus erectus "Sericeus" ...Silver Buttonwood	1	ea.	10' tall x 6' spread min. multi-trunk, lifted to tree form
GUSA	Guaiacum sanctum ...Lignum Vitae	6	ea.	6' tall x 5' spread, 1.5" DBH
PALMS				
BINO	Bismarckia nobilis ...Bismarck Palm	1	ea.	5' CW
CONG	Cocos nucifera "Green Malayan" ...Coconut Palm	18	ea.	5' CT, curved trunks
DIAL	Dictyosperma album ...Princess Palm	1	ea.	7' tall OA
DYDE	Dypsis decaryi ...Triangle Palm	2	ea.	5' CT
PSSA	Pseudophoenix sargentii ...Buccaneer Palm	4	ea.	5' tall OA
PTEL	Ptychosperma elegans ...Solitare Palm	4	ea.	18' tall OA, matching heights
SAPA	Sabal palmetto ...Sabal Palm	6	ea.	20' tall OA, curved trunks, leaning as shown on plan.
THMO	Thrinax morissii ...Silver Keys Palm	10	ea.	5' tall OA
SHRUBS				
CRQE	Crinum asiaticum "Queen Emma" ...Queen Emma Crinum Lily	2	ea.	48"x48"
ERLI	Emodea littoralis ...Golden Creeper	466	ea.	1 gal cans, install 18" o.c.
GAPU	Gaillardia pulchella ...Blanket Flower	28	ea.	1 gallon cans, install 24" o.c. against wall
LOCP	Loropetalum chinense "Purple Diamond" ...Purple Loropetalum	8	ea.	18"x18"
MISC	Microsorium scolopendria ...Wart Fern	200	ea.	1 gal cans, install 12" o.c.
LEFR	Leucophyllum frutescens ...Texas Sage	95	ea.	24"x24"
PHBM	Philodendron 'Burle Marx' ...Burle Marx Philodendron	92	ea.	3 gallon cans
SERE(s)	Serenoa repens "Silver Form" ...Silver Saw Palmetto	1	ea.	24"x24"
SPBA	Spartina bakerii ...Sand Cordgrass	3	ea.	
ZAPU	Zamia pumila ...Coontie	11	ea.	18"x18"
MISC				
KEY	PLANT NAME	QTY.	UT.	SIZE
	Planting Soil		c.y.	install in roofdeck planters
	60% Silica Sand			
	30% Florida Peat			
	10% Rice Rock			
	Shredded Pinebark Mulch		c.y.	2" layer, Dark brown color



NOTE: AN AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED IN THE PERMIT SET OF DOCUMENTS

PLANT LIST - ROOF				
SHRUBS				
KEY	PLANT NAME	QTY.	UT.	SIZE
CHIC	Chrysobalanus icaco	138	ea.	24"x24"
	...Cocoplum			
LEFR	Leucophyllum frutescens	184	ea.	24"x24"
	...Texas Sage			
MISC				
KEY	PLANT NAME	QTY.	UT.	SIZE
	Planting Soil	as req	c.y.	install in roofdeck planters
	60% Silica Sand			
	30% Florida Peat			
	10% Rice Rock			
	Shredded Pinebark Mulch	as req	c.y.	2" layer, Dark brown color



NOTE: AN AUTOMATIC IRRIGATION SYSTEM WILL BE PROVIDED IN THE PERMIT SET OF DOCUMENTS



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 3323 NE 163rd Street, Suite 200 North Miami Beach, FL 33160
 T 305.792.0015 F 305.931.0279 @info@absolute-idea.com

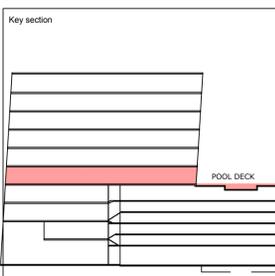
SEAL
 TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH THIS SECTION AND 633 FLORIDA STATUTES.
 TAYLOR KIEHL SEMLER
 FLA 6687205

Professionals

GARDNER + SEMLER
 LANDSCAPE ARCHITECTURE
 WWW.GSLADESIGN.COM
 17470 NW 78th AVE., SUITE 214
 MIAMI, FL 33153
 P 305.392.1014 F 305.392.1019
 C O R P . I D # 0000266

REV.	DATE	DESCRIPTION

ALL MEASUREMENTS MUST BE VERIFIED BEFORE BEGINNING THE WORKS. NO MEASUREMENTS ARE TO BE SCALED DIRECTLY FROM THIS DRAWING.



Client
CANAL PARK
OFFICE 2

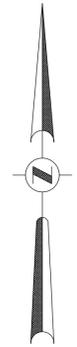
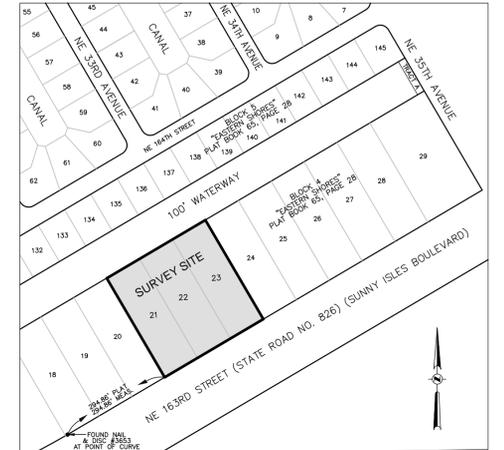
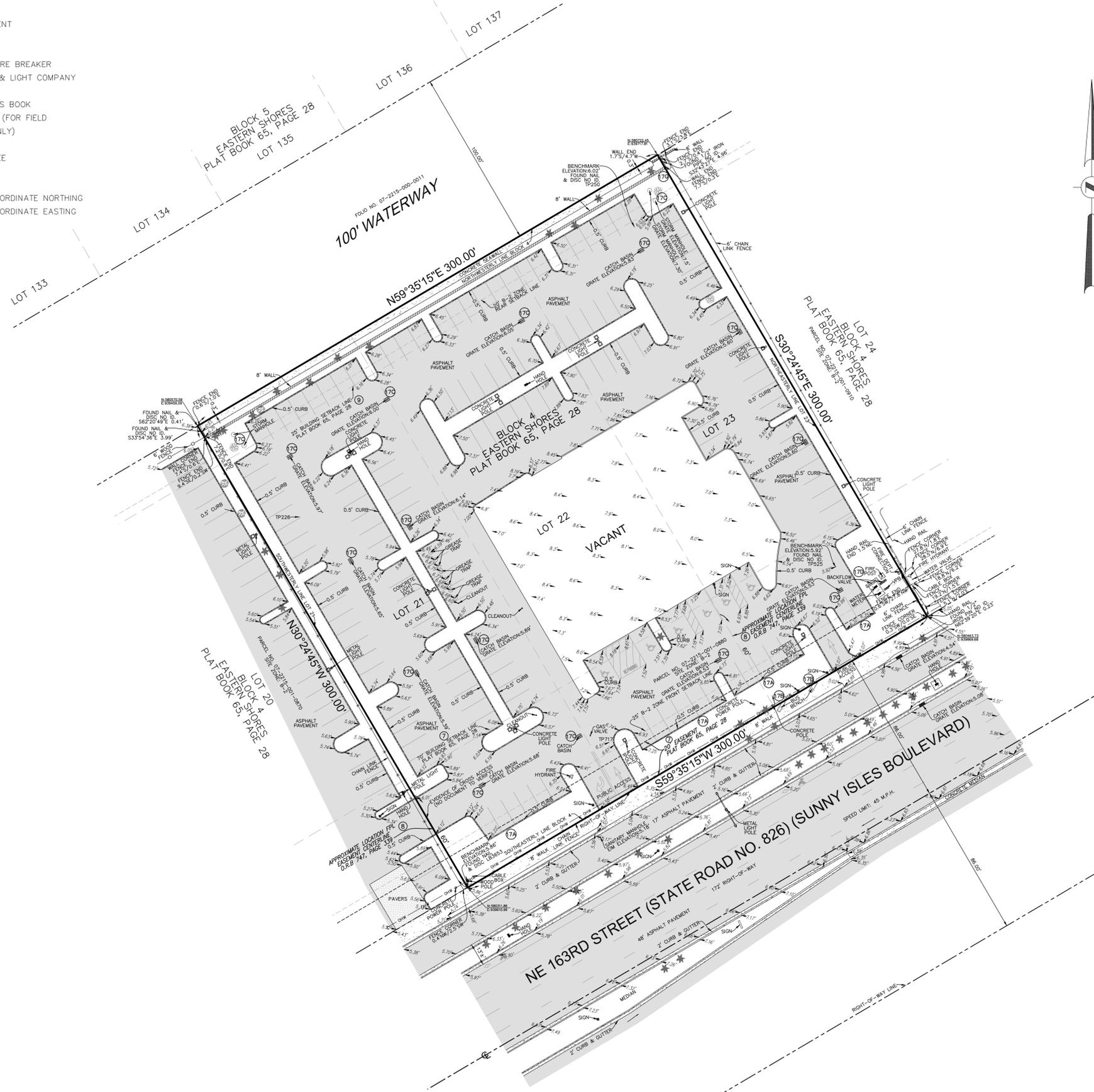
Project
CANAL PARK
WEST TOWER
 3227 North Miami Beach, FL 33160

Title
PLANTING PLAN
ROOF

Drawn TKS	Field LANDSCAPE ARCHITECTURE
Verified TKS	Scale as shown
Approved KEG	Date 05-24-2021
Project Manager	Dwg. no. LA-203
Project 16-839US	

SUBMITTAL FOR BOARD 05.24.2021

- LEGEND**
- CONCRETE
 - ASPHALT PAVEMENT
 - PAVER BLOCKS
 - OVERHEAD WIRES
 - VPB VACUUM PRESSURE BREAKER
 - FPL FLORIDA POWER & LIGHT COMPANY
 - CENTERLINE
 - O.R.B. OFFICIAL RECORDS BOOK
 - TP TRAVERSE POINT (FOR FIELD INFORMATION ONLY)
 - OAK TREE
 - UNIDENTIFIED TREE
 - PALM TREE
 - ELEVATION
 - N:580463.73 STATE PLANE COORDINATE NORTHING
 - E:939869.68 STATE PLANE COORDINATE EASTING



LEGAL DESCRIPTION:

LOTS 21, 22, AND 23, BLOCK 4 OF "EASTERN SHORES", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 65, PAGE 28, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

NOTES:

- 1) THIS SITE CONTAINS 90,000 SQUARE FEET (2.0661 ACRES).
- 2) ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929. MIAMI-DADE COUNTY BENCHMARK: N-555; ELEVATION: 4.82 FEET.
- 3) FLOOD ZONE: AE; BASE FLOOD ELEVATION: 8'; COMMUNITY #120656; PANEL 12086C0142L; MAP DATE: 09/11/09.
- 4) THIS SITE LIES IN SECTION 15, TOWNSHIP 52 SOUTH, RANGE 42 EAST, MIAMI-DADE COUNTY, FLORIDA.
- 5) GRID BEARINGS AND STATE PLANE COORDINATES ARE BASED ON FIELD OBSERVATION AND ARE TO NORTH AMERICAN DATUM OF 1983 WITH THE 1990 ADJUSTMENT. PL-E ZONE, WITH THE SOUTHEASTERLY LINE OF BLOCK 4 BEING S59°35'15"W.
- 6) 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.
- 7) 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'.
- 8) THIS SITE CONTAINS 157 TOTAL PARKING SPACES (151 REGULAR & 6 DISABLED).
- 9) THIS SURVEY WAS PREPARED WITH BENEFIT OF COMMITMENT FOR TITLE INSURANCE, FILE NO. 16049381 (REVISION C) PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, EFFECTIVE DATE: SEPTEMBER 16, 2016 AT 8:00 AM. REVISED DATE: SEPTEMBER 27, 2016 AT 3:31 PM. THE FOLLOWING ITEMS ARE SCHEDULE B-SECTION II EXCEPTIONS TO SAID COMMITMENT: ITEMS 1, 3, 4 & 6- STANDARD EXCEPTIONS NOT ADDRESSED. ITEMS 2 & 5-INTENTIONALLY DELETED. ITEM 7-EASEMENT(S), BUILDING SETBACK(S), AND DEDICATIONS IN PLAT BOOK 65, PAGE 28, AFFECT THIS SITE AS DEPICTED HEREON. ITEM 8-EASEMENT IN FAVOR OF FLORIDA POWER & LIGHT COMPANY IN O.R.B. 747, PAGE 339, AFFECTS THIS SITE, APPROXIMATE LOCATION DEPICTED HEREON. ITEM 9-BILL OF SALE IN O.R.B. 18606, PAGE 4227, AFFECTS THIS SITE BUT CANNOT BE PLOTTED. ITEM 10-TERMS AND CONDITIONS IN LEASE AGREEMENT AS EVIDENCED IN MEMORANDUM OF LEASE IN O.R.B. 28377, PAGE 4937, AS AMENDED BY UNRECORDED AMENDMENT TO LEASE AGREEMENT, FURTHER AMENDED BY UNRECORDED AMENDMENT TO LEASE AGREEMENT, FURTHER AMENDED BY UNRECORDED AMENDMENT TO LEASE AGREEMENT, AND FURTHER AMENDED BY AMENDMENT TO LEASE AGREEMENT AFFECT THIS SITE BUT CANNOT BE PLOTTED. ITEM 11-NOTICE OF COMMENCEMENT IN O.R.B. 29767, PAGE 1491, AFFECTS THIS SITE BUT CANNOT BE PLOTTED. ITEM 12, 13, 14 & 15-NOT ADDRESSED. ITEM 16-INTENTIONALLY DELETED. ITEM 17-ENCROACHMENTS A, B, C, D & G ARE DEPICTED HEREON. E, F & H ARE OFFSITE. ITEM 18-TERMS AND CONDITIONS OF MEMORANDUM OF PURCHASE AND SALE AGREEMENT IN O.R.B. 30206, PAGE 2773, AFFECT THIS SITE BUT CANNOT BE PLOTTED. 10) SITE ZONE: B-2 (GENERAL BUSINESS)
- 11) REQUIREMENTS FOR ZONE B-2: FRONT SETBACK-25'; REAR SETBACK-20' SIDE SETBACK (INTERIOR)-0' SIDE SETBACK (CORNER)-20'; MAXIMUM BUILDING HEIGHT-15 STORIES/150', WHICHEVER IS LESS; MINIMUM PERVIOUS AREA: 20% OF TOTAL LOT AREA; MINIMUM FLOOR AREA-1,000 SQUARE FEET PER STRUCTURE.

CERTIFICATION:

TO CANAL PARK OFFICE 2, LLC, A FLORIDA LIMITED LIABILITY COMPANY; SABADELL UNITED BANK, N.A., A NATIONAL BANKING ASSOCIATION, ITS SUCCESSORS AND/OR ASSIGNS AS THEIR INTERESTS MAY APPEAR; SIEGFRIED, RIVERA, HYMAN, LERNER, DE LA TORRE, MARS & SOBEL, P.A.; OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY; SHUTTS & BOWEN LLP.

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 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, 6(a), 7(a), 8, 9, 11 OF TABLE A THEREOF.

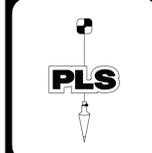
NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

- JOHN F. PULICE, PROFESSIONAL SURVEYOR AND MAPPER LS2691
 - BETH BURNS, PROFESSIONAL SURVEYOR AND MAPPER LS6136
 - VICTOR R. GILBERT, PROFESSIONAL SURVEYOR AND MAPPER LS6274
 - DONNA C. WEST, PROFESSIONAL SURVEYOR AND MAPPER LS4
- STATE OF FLORIDA

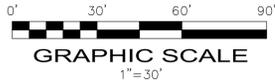
NO.	REVISIONS	BY
6	#67804-UPDATE SURVEY WITH ELEVATIONS-11/28/20	B.B.
5	#61992-REVISE NEW TITLE COMMITMENT-10/17/16	B.F.
4	#61344-UPDATE SURVEY-6/23/16	M.D.
3	MISC. REVISIONS	J.F.P.
2	#57093-UPDATE SURVEY-12/3/13	L.S.
1	#26361-ORIGINAL SURVEY-6/7/13	B.E.

CANAL PARK 2 SITE
3227 NE 163RD STREET
NORTH MIAMI BEACH, MIAMI-DADE COUNTY
FLORIDA 33160

BOUNDARY SURVEY AND TOPOGRAPHIC ALTA/NSPS LAND TITLE SURVEY



PULICE LAND SURVEYORS, INC.
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CERTIFICATE OF AUTHORIZATION LB#3870



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DRAWN BY: B.E. SCALE: 1" = 30' FILE: IDEA ARCHITECTURE AND ENGINEERING
CHECKED BY: J.F.P. SURVEY DATE: 11/20/20 ORDER NO.: 67804