

PROPOSED

# 777 PROPERTIES - PHASE 1

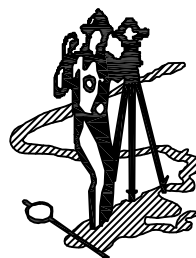
777 SOUTH STATE ROAD 7  
MARGATE, FLORIDA 33312

***DEVELOPMENT TEAM:***

*OWNER & DEVELOPER:*

777 Properties, Inc.  
Margate, Florida 33068  
(954) 390-7777

**CIVIL ENGINEER/SURVEYOR:**

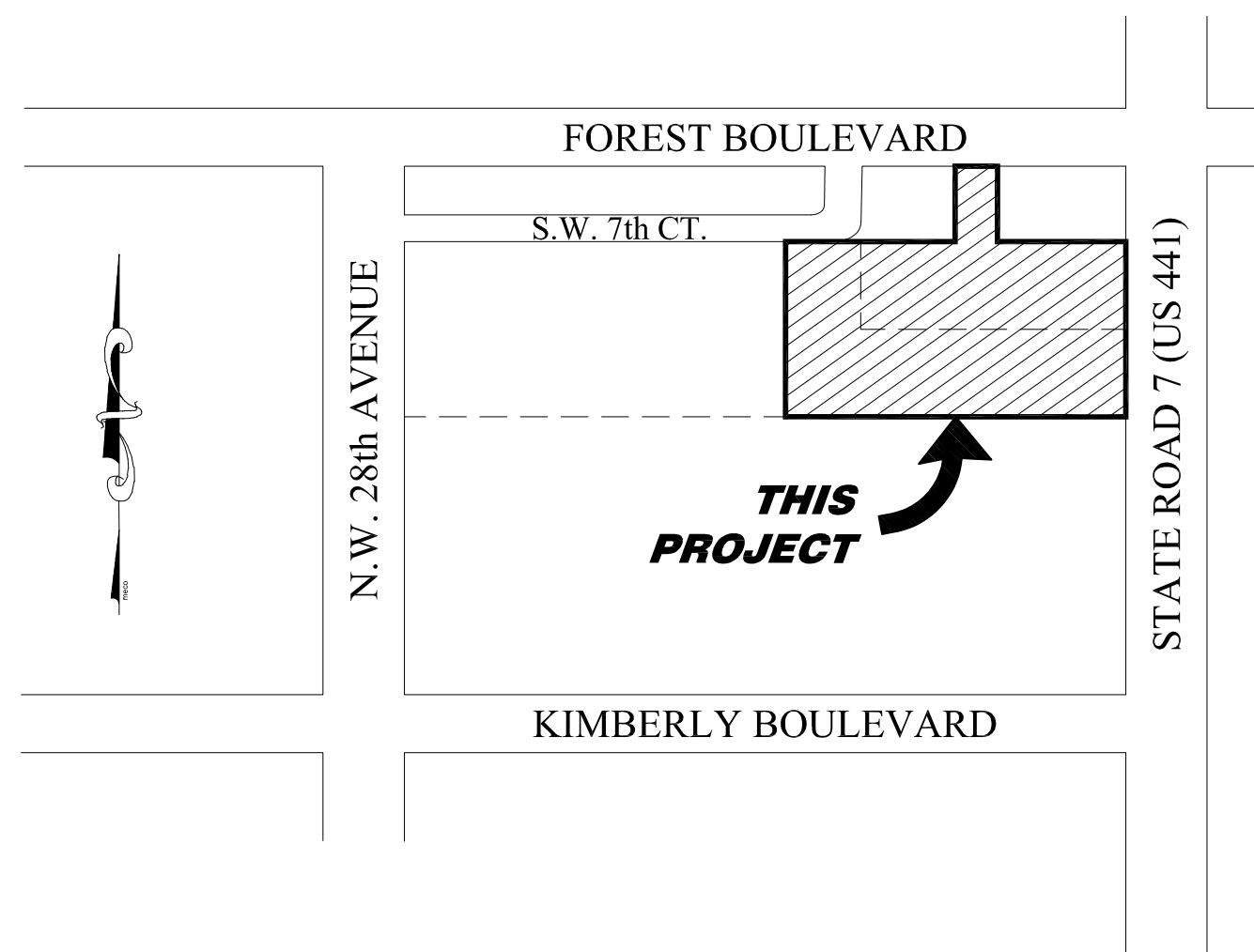


*McLaughlin Engineering Company  
1700 N.W. 64th Street, Suite 400  
Fort Lauderdale, Florida 33309-1801  
(954) 763-7611*



LANDSCAPE ARCHITECT:

*Landscape Architect Consultants, Inc.*  
5215 West Broward Boulevard  
Plantation, Florida 33317-2635  
(954) 581-1110



*Location Sketch*

*Not To Scale*

### Legal Description

Parcel "A", 441 SOUTH LTD. II, according to the Plat thereof, as recorded in Plat Book 124 at Page 41, of the Public Records of Broward County, Florida.


TOGETHER WITH the East 265 feet of Parcel "A", THE FOREST, according to the Plat thereof, as recorded in Plat Book 129, at Page 16, of the Public Records of Broward County Florida.

AND TOGETHER WITH Parcel "B", MINI MART DEVELOPMENT CORP. SUBDIVISION, according to the Plat thereof, as recorded in Plat Book 81, at Page 49, of the Public Records of Broward County, Florida.

Said lands situate lying and being in the City of Margate, Broward County, Florida, and containing 869,681 square feet or 19.9651 acres, more or less.

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TS-2	TREE SURVEY PLANS & LIST
IR-1	IRRIGATION PLAN
IR-2	IRRIGATION NOTES & DETAILS
SURVEY	ALTA/NSPS LAND TITLE SURVEY



**McLAUGHLIN ENGINEERING COMPANY**  
1700 N.W. 64th STREET, SUITE 400, FORT LAUDERDALE, FLORIDA 33309  
PHONE: (954) 763-7611  
FAX: (954) 763-7615  
EB & LB #285

Lou Campanile, Jr.  
Professional Engineer No. 36762  
Professional Surveyor and Mapper No. 4338  
State of Florida

777 PROPERTIES, INC.

77 PROPERTIES - PHASE 1  
CITY OF MARGATE,  
BROWARD COUNTY, FLORIDA  
SITE PLAN - PHASE 1

PROJECT NO. V3243

DATE	11/19/18
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REVISION	

12/11/18	





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DRAWING  
CD 1

SP-1

SHEET

1 OF 1



LEGEND

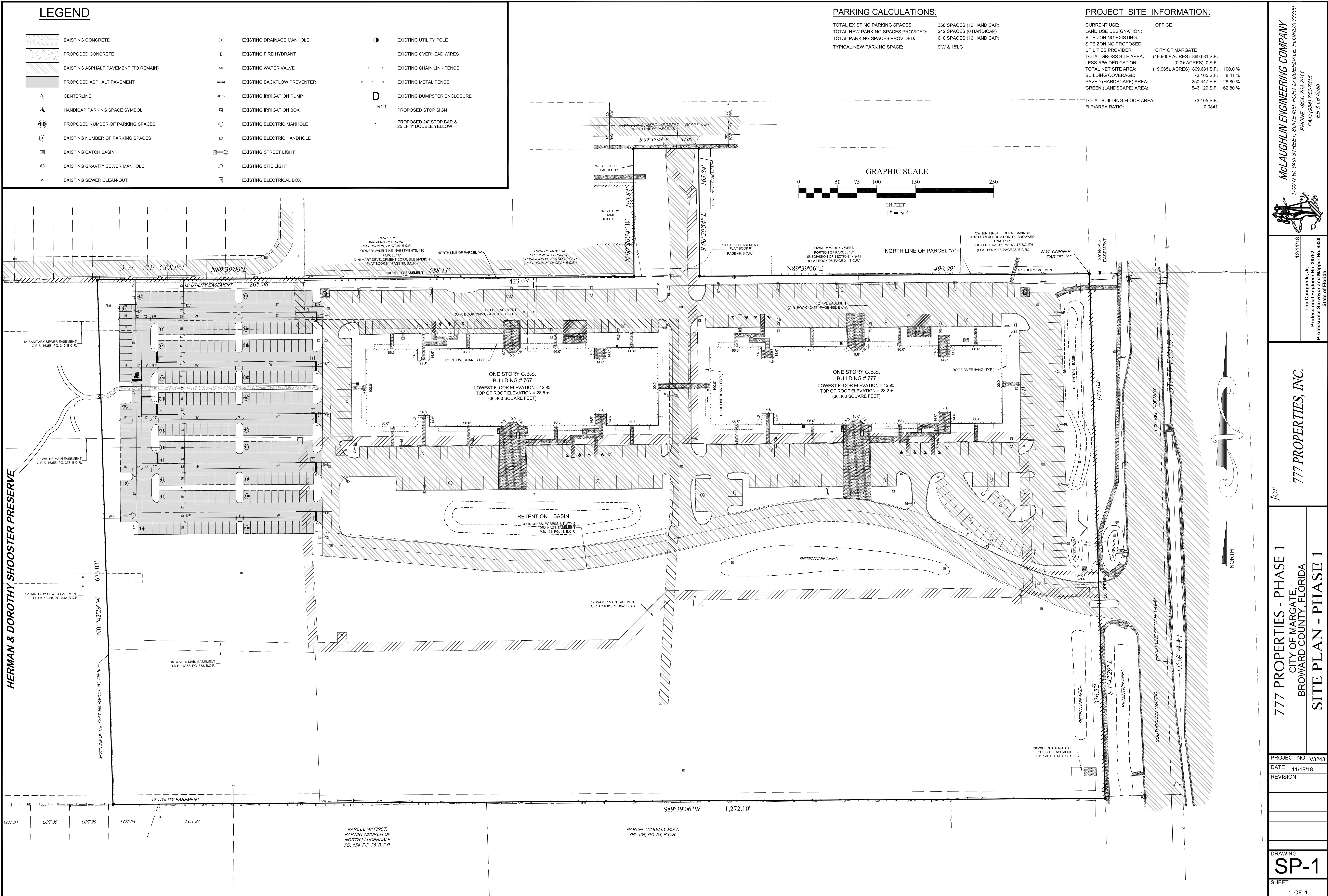
- |  |                                       |  |                             |  |  |
|--|---------------------------------------|--|-----------------------------|--|--|
|  | EXISTING CONCRETE                     |  | EXISTING DRAINAGE MANHOLE   |  | EXISTING UTILITY POLE                          |
|  | PROPOSED CONCRETE                     |  | EXISTING FIRE HYDRANT       |  | EXISTING OVERHEAD WIRES                        |
|  | EXISTING ASPHALT PAVEMENT (TO REMAIN) |  | EXISTING WATER VALVE        |  | EXISTING CHAIN LINK FENCE                      |
|  | PROPOSED ASPHALT PAVEMENT             |  | EXISTING BACKFLOW PREVENTER |  | EXISTING METAL FENCE                           |
|  | CENTERLINE                            |  | EXISTING IRRIGATION PUMP    |  | EXISTING DUMPSTER ENCLOSURE                    |
|  | HANDICAP PARKING SPACE SYMBOL         |  | EXISTING IRRIGATION BOX     |  | PROPOSED STOP SIGN                             |
|  | PROPOSED NUMBER OF PARKING SPACES     |  | EXISTING ELECTRIC MANHOLE   |  | PROPOSED 24" STOP BAR & 25 LF 4" DOUBLE YELLOW |
|  | EXISTING NUMBER OF PARKING SPACES     |  | EXISTING ELECTRIC HANDHOLE  |  |  |
|  | EXISTING CATCH BASIN                  |  | EXISTING STREET LIGHT       |  |  |
|  | EXISTING GRAVITY SEWER MANHOLE        |  | EXISTING SITE LIGHT         |  |  |
|  | EXISTING SEWER CLEAN-OUT              |  | EXISTING ELECTRICAL BOX     |  |  |

PARKING CALCULATIONS:

TOTAL EXISTING PARKING SPACES: 368 SPACES (16 HANDICAP)  
TOTAL NEW PARKING SPACES PROVIDED: 242 SPACES (0 HANDICAP)  
TOTAL PARKING SPACES PROVIDED: 610 SPACES (16 HANDICAP)  
TYPICAL NEW PARKING SPACE: 9'W & 18'LG

PROJECT SITE INFORMATION:

CURRENT USE: OFFICE  
LAND USE DESIGNATION: CITY OF MARGATE  
SITE ZONING EXISTING: (19.965± ACRES) 869,681 S.F.  
SITE ZONING PROPOSED: (0.0± ACRES) 0 S.F.  
UTILITIES PROVIDER: CITY OF MARGATE  
TOTAL GROSS SITE AREA: (19.965± ACRES) 869,681 S.F. 100.0 %  
LESS R/W DEDICATION: 73,105 S.F. 8.41 %  
TOTAL NET SITE AREA: (19.965± ACRES) 869,681 S.F. 100.0 %  
BUILDING COVERAGE: 250,447 S.F. 28.80 %  
PAVED (HARDSCAPE) AREA: 546,129 S.F. 62.80 %  
GREEN (LANDSCAPE) AREA:  
TOTAL BUILDING FLOOR AREA: 73,105 S.F.  
FLR/AREA RATIO: 0.0841

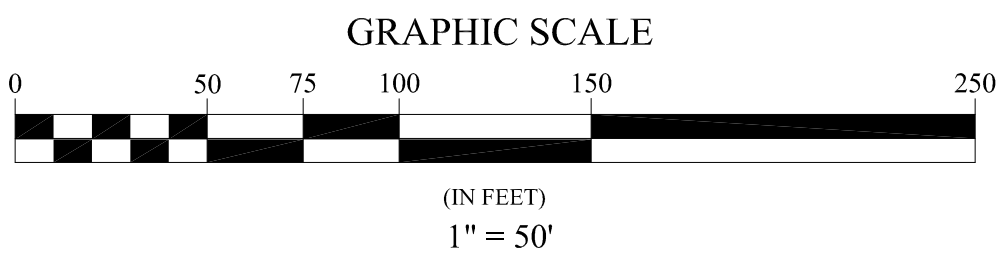


<b>McLAUGHLIN ENGINEERING COMPANY</b> 1700 N.W. 64th STREET, SUITE 400, FORT LAUDERDALE, FLORIDA 33309 PHONE: (954) 763-7611 FAX: (954) 763-7615 E & L #265	
12/11/18 Lou Campanile, Jr. Professional Engineer No. 38762 Professional Surveyor and Mapper No. 4338 State of Florida	
for <b>777 PROPERTIES, INC.</b>	
<b>777 PROPERTIES - PHASE 1</b> CITY OF MARGATE BROWARD COUNTY, FLORIDA	<b>SITE PLAN - PHASE 1</b>
PROJECT NO. V3243 DATE 11/19/18 REVISION	
DRAWING <b>SP-1</b> SHEET 1 OF 1	



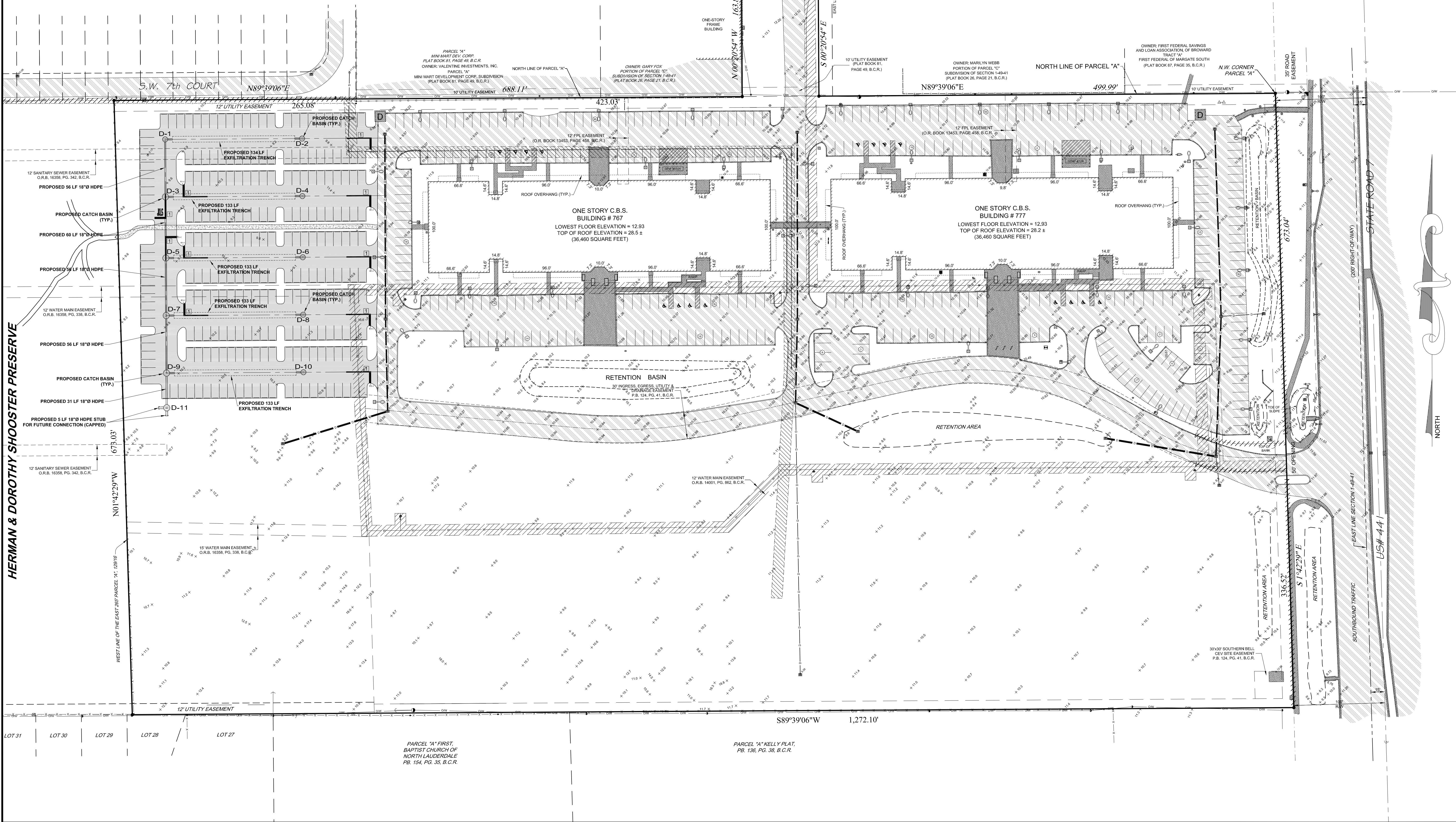
LEGEND

	EXISTING CONCRETE		EXISTING DRAINAGE MANHOLE		EXISTING UTILITY POLE
	PROPOSED CONCRETE		EXISTING FIRE HYDRANT		EXISTING OVERHEAD WIRES
	EXISTING ASPHALT PAVEMENT (TO REMAIN)		EXISTING WATER VALVE		EXISTING CHAIN LINK FENCE
	PROPOSED ASPHALT PAVEMENT		EXISTING BACKFLOW PREVENTER		EXISTING METAL FENCE
	CENTERLINE		EXISTING IRRIGATION PUMP		EXISTING DUMPSTER ENCLOSURE
	HANDICAP PARKING SPACE SYMBOL		EXISTING IRRIGATION BOX		PROPOSED STOP SIGN
	PROPOSED NUMBER OF PARKING SPACES		EXISTING ELECTRIC MANHOLE		PROPOSED 24" STOP BAR & 25 LF 4" DOUBLE YELLOW
	EXISTING NUMBER OF PARKING SPACES		EXISTING ELECTRIC HANDHOLE		EXISTING GRADE (NAVD)
	EXISTING CATCH BASIN		EXISTING STREET LIGHT		PROPOSED GRADE (NAVD)
	EXISTING GRAVITY SEWER MANHOLE		EXISTING SITE LIGHT		PROPOSED DRAINAGE FLOW ARROW
	EXISTING SEWER CLEAN-OUT		EXISTING ELECTRICAL BOX		PROPOSED DRAINAGE STRUCTURE NUMBER



NOTES:

- DESIGN WATER ELEVATION = 5.5 FEET, NAVD.
- ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD - 1988). TO CONVERT TO NATIONAL GEODETIC VERTICAL DATUM (NGVD - 1929) ADD 1.59'.
- ALL BAFFLES AND WEIRS INSTALLED IN DRAINAGE STRUCTURES ON THIS PROJECT SHALL BE REMOVABLE.
- ADJUST RIM GRADE OF ALL EXISTING AT GRADE UTILITIES WITHIN THE LIMITS OF CONSTRUCTION, AS NECESSARY.



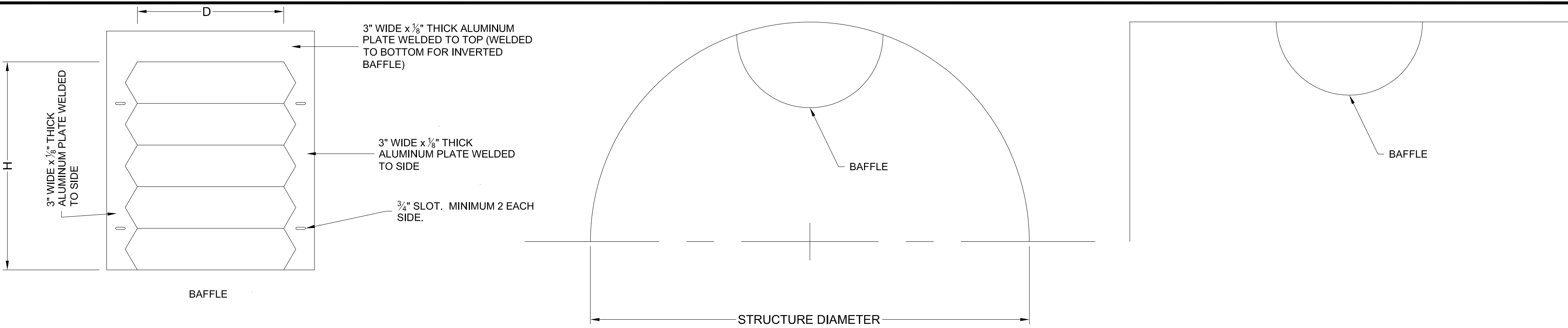
**McLAUGHLIN ENGINEERING COMPANY**  
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PHONE: (954) 763-7611  
FAX: (954) 763-7615  
E.O. 12117

**Lou Campanile, Jr.**  
Professional Engineer No. 38762  
Professional Surveyor and Mapper No. 4338  
State of Florida

for  
**777 PROPERTIES, INC.**  
CITY OF MARGATE  
BROWARD COUNTY, FLORIDA  
**MASTER CIVIL PLAN**

PROJECT NO. V3243  
DATE 11/19/18  
REVISION  
DRAWING  
**MCP**  
SHEET  
1 OF 1





STRUCTURE #	BAFFLE DIA. (D)	BAFFLE HT. (H)	# REQ.
D-1	24"	33"	1
D-2	24"	33"	1
D-3	24"	33"	1
D-4	24"	33"	1
D-5	24"	33"	1
D-6	24"	33"	1
D-7	24"	33"	1
D-8	24"	33"	1
D-9	24"	33"	1
D-10	24"	33"	2

ROUND WALL

FLAT WALL

BAFFLE DETAILS

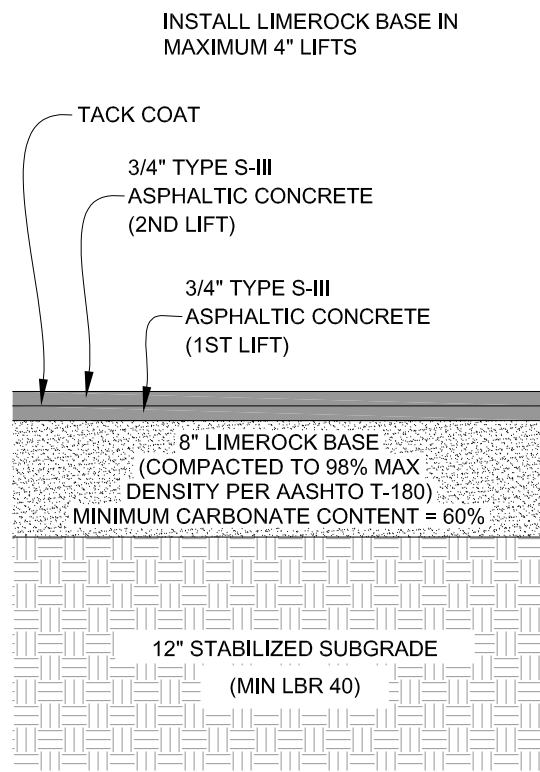
- NOTES:
1. ALL BAFFLES SHALL BE MADE FROM ONE HALF OF A CORRUGATED ALUMINUM PIPE.
  2. TOP OR BOTTOM PLATES SHALL BE CONTOURED TO FIT STRUCTURES.
  3. BAFFLES LARGER THAN 30" DIAMETER SHALL HAVE 3 SUPPORTS ON EACH SIDE.
  4. MID WELDS ARE ACCEPTABLE IF ANNULAR PIPE IS UTILIZED.
  5. BAFFLE TO BE SUPPLIED WITH 1/2"x3" NEOPRENE GASKETS UNLESS REQUESTED OTHERWISE.
  6. INVERTED BAFFLE (OVERFLOW WEIR) HAS PLATE WELDED TO BOTTOM WITH OPEN TOP.

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NO.	STRUCTURE SIZE	RIM ELEVATION	INVERT ELEVATIONS	SUMP ELEVATION	BAFFLES
D-1	5'Ø				E
D-2	5'Ø				W
D-3	6'Ø				E
D-4	5'Ø				W
D-5	6'Ø				E
D-6	5'Ø				W
D-7	6'Ø				E
D-8	5'Ø				W
D-9	6'Ø				E & S
D-10	5'Ø				W
D-11	6'Ø				

DRAINAGE STRUCTURE NOTES:

1. STRUCTURE SIZES ARE INSIDE DIMENSIONS (E.G. 5'Ø OR 6'x10').



TYPICAL ASPHALT PAVEMENT SECTION

N.T.S.



REFLECTIVE BLUE BACKGROUND W/ REFLECTIVE WHITE SYMBOL AND BORDER

PARKING BY DISABLED PERMIT ONLY

REFLECTIVE WHITE BACKGROUND W/ BLACK OPAQUE LEGEND & BORDER. 1" HIGH LETTERS

(NOTE: \$250.00 FINE)

7 FT FROM BOTTOM OF SIGN TO FINISHED GRADE BELOW

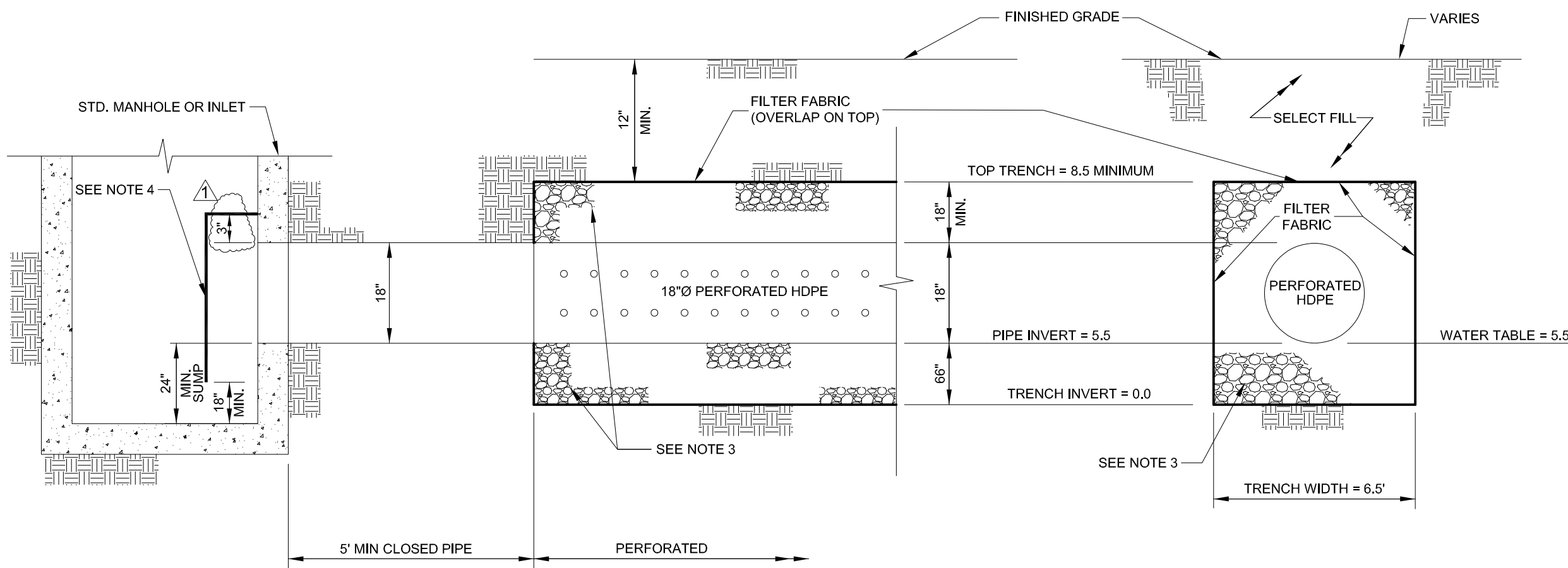
HANDICAP PARKING SIGN

S C A L E:

2" = 1'-0"

PAVING, GRADING & DRAINAGE NOTES:

1. ALL MUCK/ORGANIC MATERIALS ARE TO BE REMOVED FROM WITHIN 10' OF ANY BUILDING OR PAVEMENT (OR PER INSTRUCTIONS OF GEOTECHNICAL ENGINEER).
2. 12" COMPACTED SUBGRADE SHALL HAVE A LIMEROCK BEARING RATIO (LBR) OF 40 AND SHALL BE COMPACTED TO 100% OF MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99(c).
3. 4", 6", 8" & 12" LOCAL BASEROCK COURSE (MIN LBR 100) SHALL BE PRIMED AND COMPACTED TO 98% OF MAXIMUM DRY DENSITY AS PER AASHTO T-180 (MINIMUM CARBONATES=60%).
4. ALL CONCRETE SHALL BE CLASS 1 AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED. FIBER REINFORCEMENT SHALL BE USED IN ALL CAST-IN-PLACE CONCRETE.
5. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE CITY OF MARGATE STANDARDS AND SPECIFICATIONS.
6. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND THE CITY OF MARGATE 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROTECT ALL UTILITIES AND SHALL BE RESPONSIBLE FOR ALL DAMAGES CAUSED DURING CONSTRUCTION AND SHALL REPAIR SAID DAMAGES AT HIS EXPENSE.
7. THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY AND ARE BASED ON AS-BUILT INFORMATION. ADDITIONAL UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. ANY AND ALL CONFLICTS WITH EXISTING UTILITIES SHALL BE REPORTED TO THE ENGINEER. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
8. SHOP DRAWINGS OF ALL MATERIALS BEING USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ORDERING MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISED OR UNACCEPTABLE MATERIALS INSTALLED OR ORDERED WITHOUT AN APPROVED SHOP DRAWING.
9. THESE PLANS ARE NOT SUITABLE FOR MACHINE GUIDANCE USE OR PURPOSES.
10. IF THESE PLANS ARE USED TO PREPARE FILES FOR MACHINE GUIDANCE, A FLORIDA PROFESSIONAL SURVEYOR & MAPPER OR FLORIDA PROFESSIONAL ENGINEER SHALL BE IN RESPONSIBLE CHARGE OF DIGITAL TERRAIN MODEL (DTM) CREATION AND SITE CALIBRATION.
11. ALL DTM FILES USED FOR MACHINE GUIDANCE SHALL BE REVIEWED BY THE ENGINEER OF RECORD PRIOR TO USE.

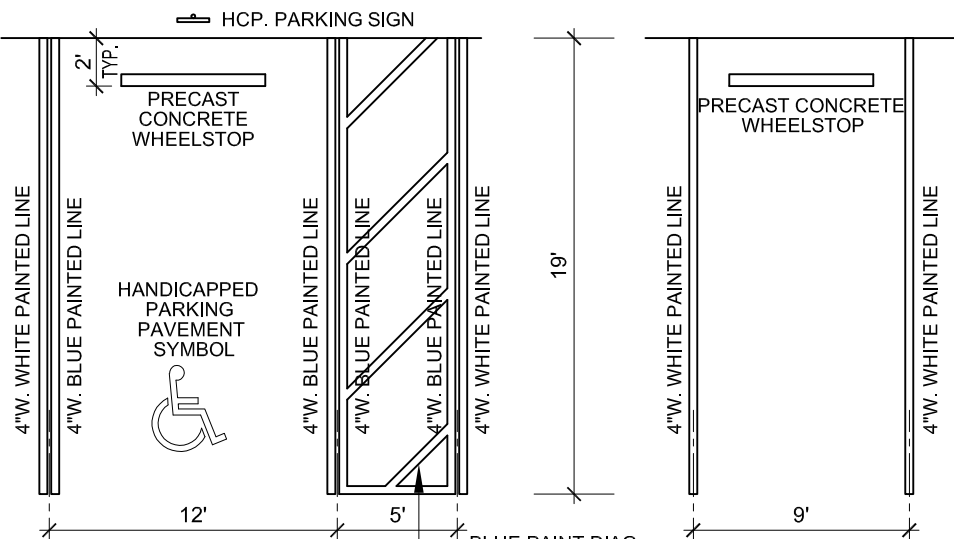


NOTES:

1. PIPES SHALL TERMINATE 2 FEET FROM END OF TRENCH (CAP ENDS OF PIPE) OR CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
2. SIDES, BOTTOM AND TOP OF TRENCH TO BE LINED WITH TRENCH LINER MATERIAL, MIRAFI OR EQUAL. OVERLAP LINER A MINIMUM OF 2 FEET AT TOP OF TRENCH.
3. BALLAST ROCK SHALL BE FDOT TYPE NO. 57 (3/4" BALLAST ROCK) CLEAN & WASHED.
4. PROVIDE POLLUTION RETARDANT BAFFLE AT EACH OUTFALL TO EXFILTRATION TRENCH.

EXFILTRATION TRENCH DETAIL

N.T.S.



HANDICAP PARKING

TYP. PARKING

PARKING STALL DETAILS

S C A L E:

1/8" = 1'-0"

McLAUGHLIN ENGINEERING COMPANY

1700 N.W. 64th STREET, SUITE 400, FORT LAUDERDALE, FLORIDA 33309

PHONE: (954) 763-7611

FAX: (954) 763-7615

EB & LB #265

12/11/18

Lou Campanile, Jr.

Professional Engineer No. 38762

Professional Surveyor and Mapper No. 4338

State of Florida

for

777 PROPERTIES, INC.

777 PROPERTIES - PHASE 1

CITY OF MARGATE

BROWARD COUNTY, FLORIDA

SITE DETAILS

PROJECT NO. V3243

DATE 11/19/18

REVISION

DRAWING

SD

SHEET

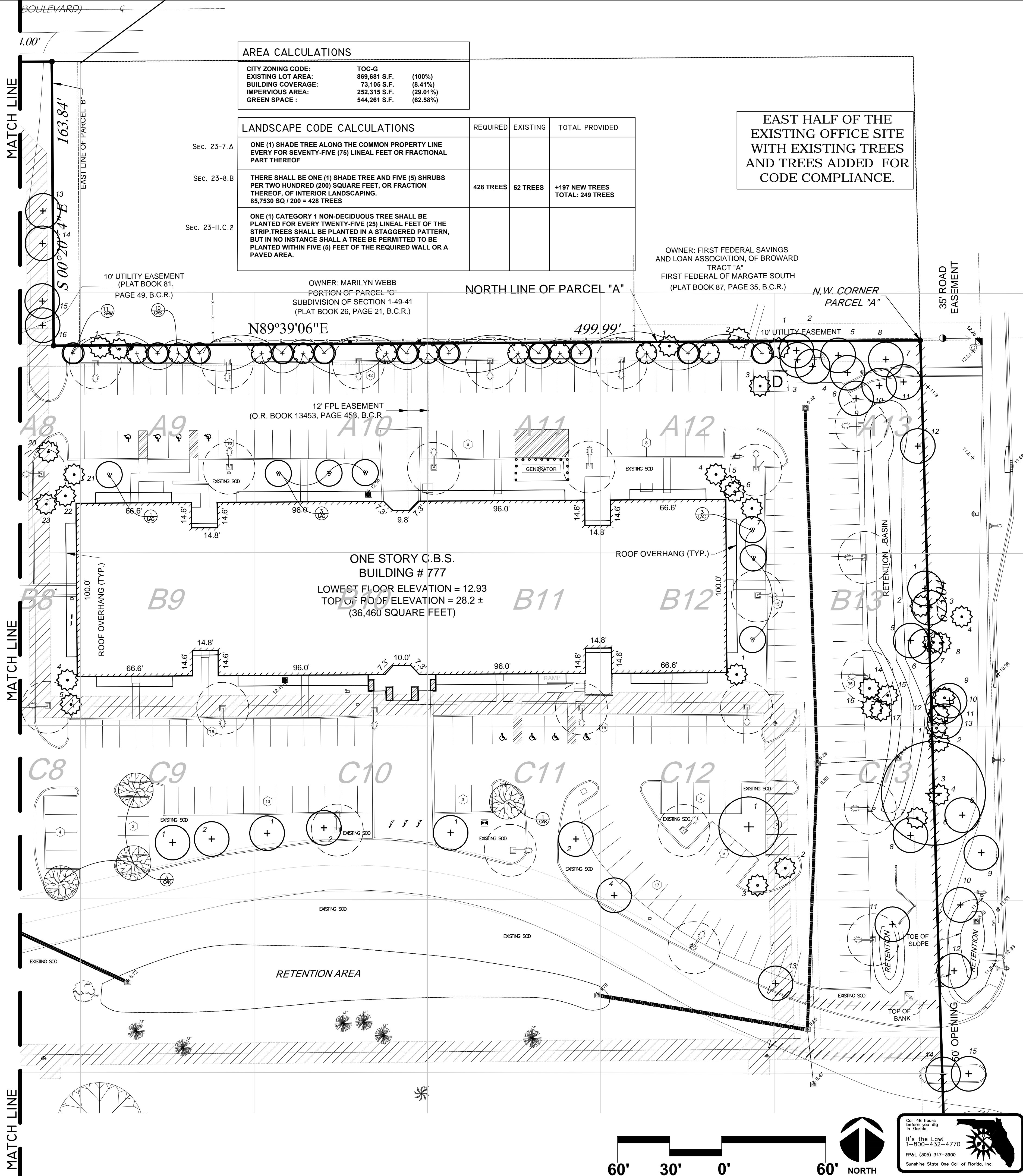
1 OF 1



+190 NEW TREES

PLANT MATERIALS LIST

KEY	PLANT DESCRIPTION	SPECIFICATIONS	QTY
BUL	Bulnesia arborea Verawood	12' ht.x 6' Spr. . 6" CT, 2" caliper	9
CAS	Cassia / Senna surattensis Glaucous Cassia	8' ht.x 4' Spr. 4" CT, 1.5" caliper	32
GEI	Cordia sebestena Orange Geiger Tree	10' ht.x 5' Spr. . 5" CT, 2" caliper	4
GUM	Bursera simaruba Gumbo Limbo	14' ht.x 6' Spr. . 6" CT, 4" caliper	25
ILX	Ilex cassine Dahoon Holly	12' ht.x 6' Spr. . 5" CT, 1.5" caliper	32
LAG	Lagerstroemia indica "Natchez" Natchez White Crape Myrtle	12' ht.x 6' Spr. . 6" CT, 5 trunks min. 1.5" cal. per trunk	13
OAK	Quercus virginiana Live Oak	14' ht.x 8' Spr. 6" CT, 3" caliper (ROOT GROWERS PLUS)	37
PIN	Pinus elliottii Slash Pine	12' ht.x 6' Spr. 6" CT, 3" caliper Well formed shape	8
SBW	Conocarpus erectus sericeus Silver Buttonwood	12' ht.x 6' Spr. . 5" CT, 2" caliper, Multi-5 trunks min.	30
DAC	Phoenix sylvestris Sylvester Date Palm	12' CW, full head., 16-18' OA matched.	2
FAK	Tripsacum dactyloides Dwarf Fakahatchee Grass	24" Ht X 24" Spr. 3-4" O.C. sp. as shown on plan	130
WRT	Microsorium scolopendrium Wart Fern	14" Ht X 14" Spr. 24" O.C. sp.	705
SOD	Stenotaphrum secundatum "Palmetto" St. Augustine Grass	Solid sod tight joints, weed free	as needed
SOIL	Planting Soil as required per Details and Specifications	70 / 30 Mix of Pulverized (70%)Sand (30%)Recycled/manufactured soil	as needed
MULCH	All areas not covered by Sod shall be Mulched in 3" continuous layer.	Eco-Cypress Mulch / available source 561-499-8148 www.mulchingsolutions.com	as needed



LANDSCAPE  
ARCHITECT  
CONSULTANTS  
5215 W. Broward Boulevard  
Plantation, Florida 33317  
P (954) 581-1110 F (9) 581-7118  
L-0000052  
Thomas J. Laubenthal, RLA  
TOM@LACFL.COM  
LA-000553

DATE	REVISIONS:
11-08-18	INITIAL SUBMITTAL

DATE: 12-4-18  
SCALE: 1" = 30'  
DRAWING BY: AD  
DESIGNED BY: TJL, AD

PROJECT: 777 PROPERTY  
BROWARD COUNTY  
MARGATE, FLORIDA  
LANDSCAPE PLAN:

PROJECT NO.  
18-025  
SHEET:  
LP-1 of 3

DATE:  
THOMAS J. LAUBENTHAL  
FLA-0000563 ILC-2600422

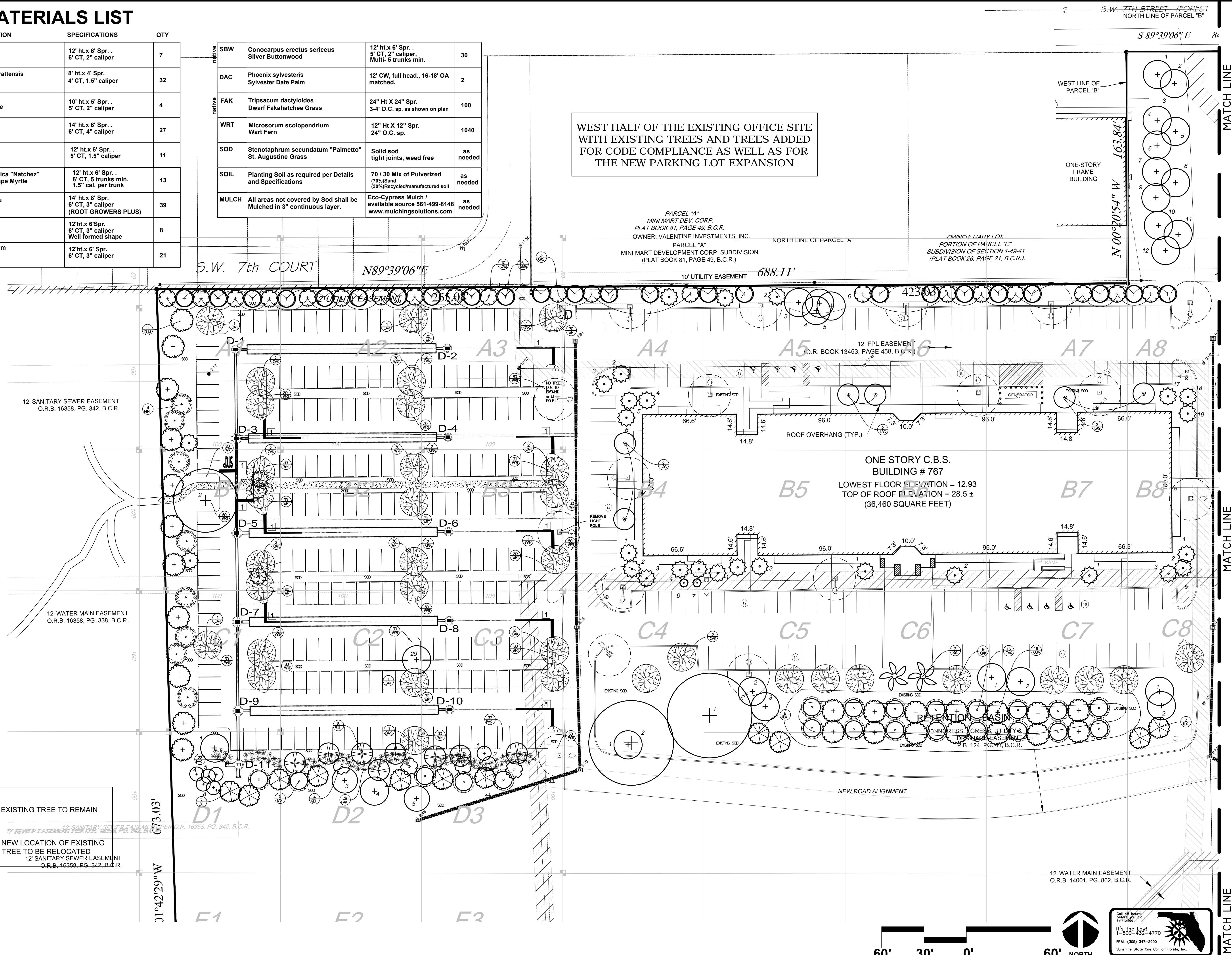


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TAX	Taxodium distichum Bald Cypress	12'ht.x 6' Spr. 6' CT, 3" caliper	21

native	SBW	Conocarpus erectus sericeus Silver Buttonwood	12" ht.x 6" Spr. . 5" C.T. caliper; Multi- 5 trunks min.	30
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PARCEL "A"  
MINI MART DEV. CORP.  
PLAT BOOK 81, PAGE 49, B.C.R.  
OWNER: VALENTINE INVESTMENTS, INC.  
PARCEL "A"  
MINI MART DEVELOPMENT CORP. SUBDIVISION  
(PLAT BOOK 81, PAGE 49, B.C.R.)

OWNER: GARY FOX  
PORTION OF PARCEL "C"  
SUBDIVISION OF SECTION 1-49-41  
(PLAT BOOK 26, PAGE 21, B.C.R.).



**LANDSCAPE  
ARCHITECT  
CONSULTANTS**  
5215 W. Broward Boulevard  
Plantation, Florida 33317  
P (954) 581-1110 F (9) 581-7118  
LC-26000422

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TOM@LACFL.COM  
LA-0000563

DATE	REVISIONS:
11-08-18	INITIAL SUBMITTAL

DATE:	12-4-18
SCALE:	1" = 30'
DRAWING BY:	AD
DESIGNED BY:	TJL, AD

777 PROPERTY

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MARGATE, FLORIDA

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LANDSCAPE PLAN:

PROJECT NO.  
**18-025**

SHEET:  
**LP-2 of 3**

DATE:  
THOMAS J. LAUBENTHAL  
#LA-0000563 #LC-26000422



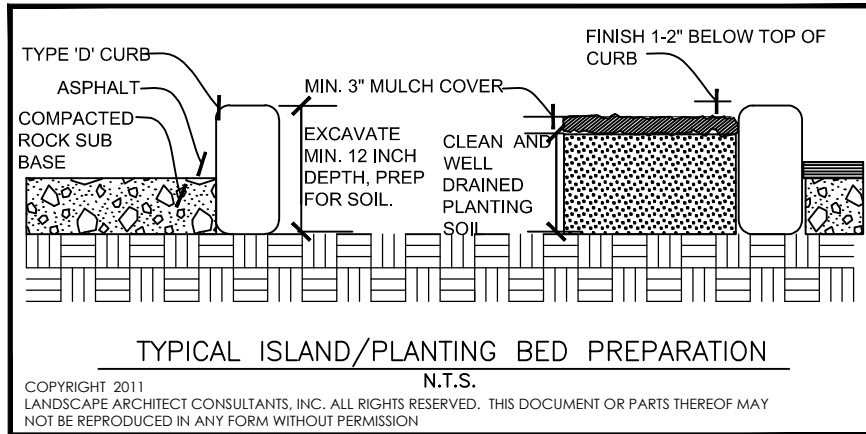
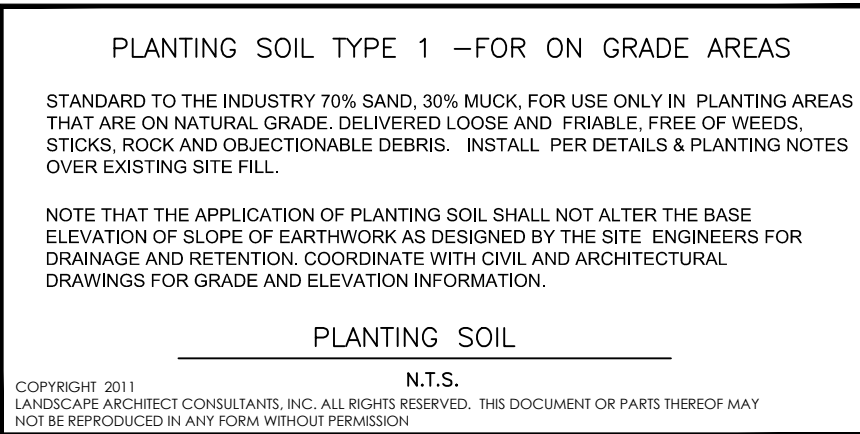
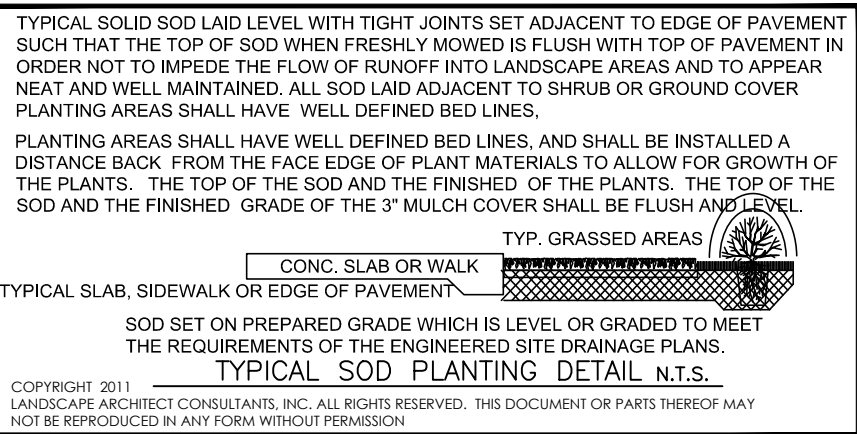
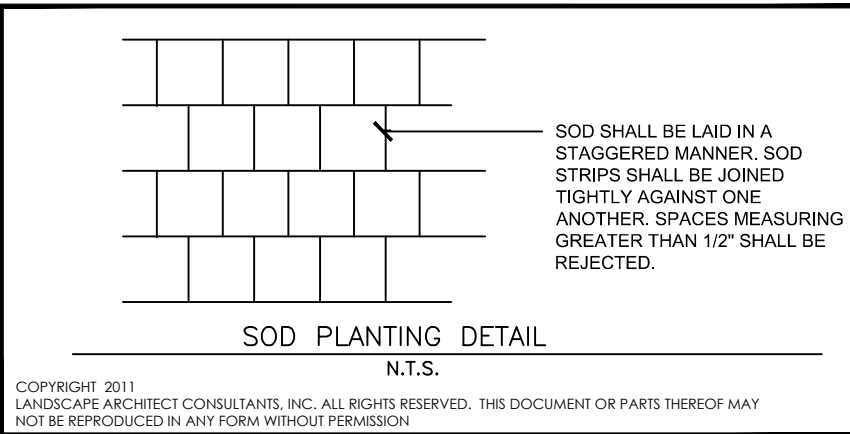
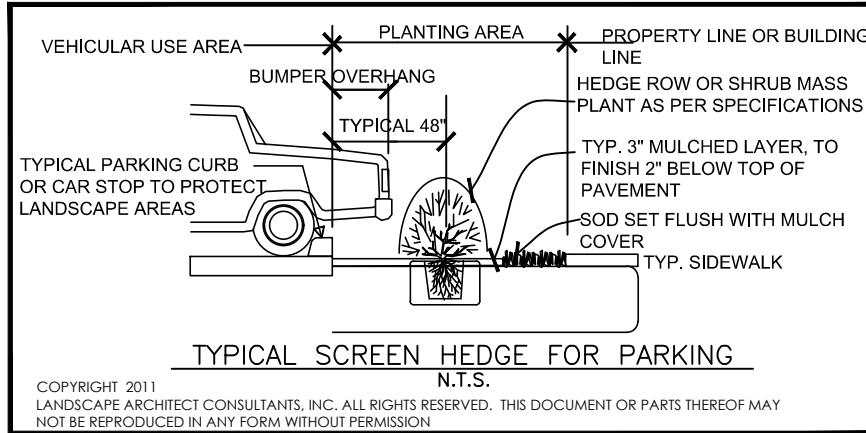
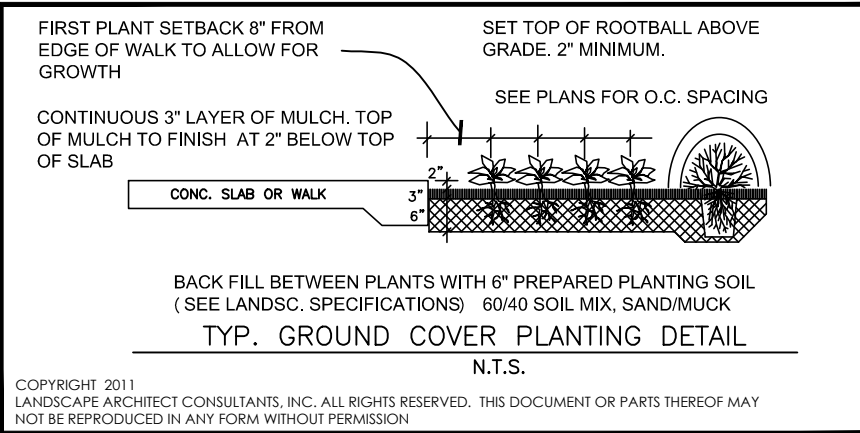
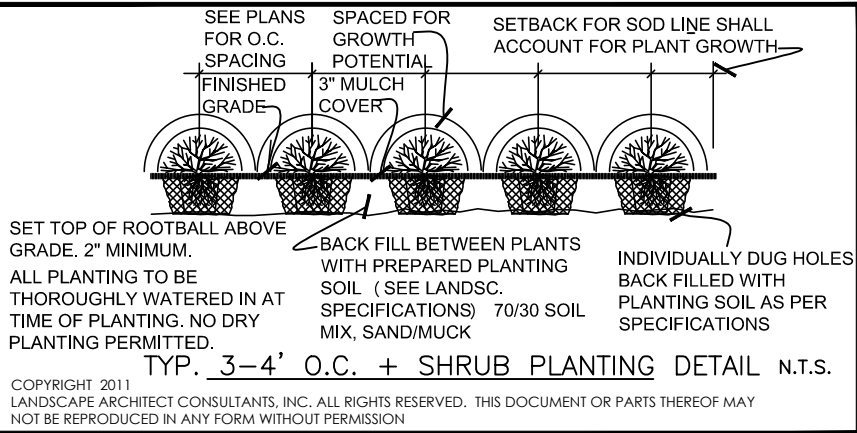
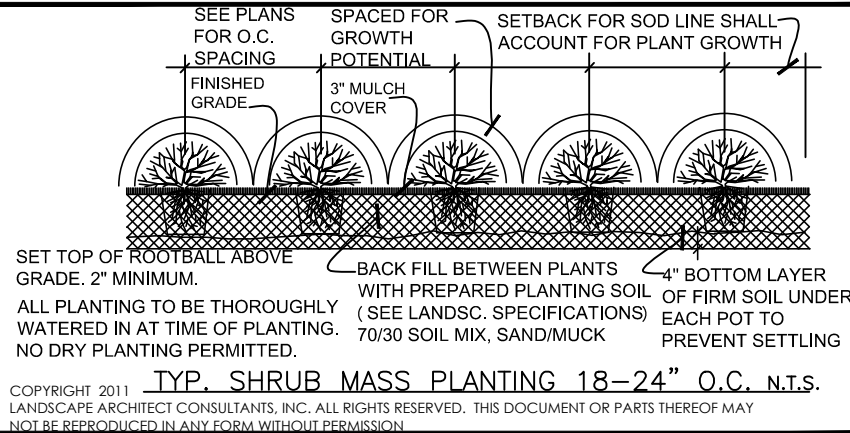
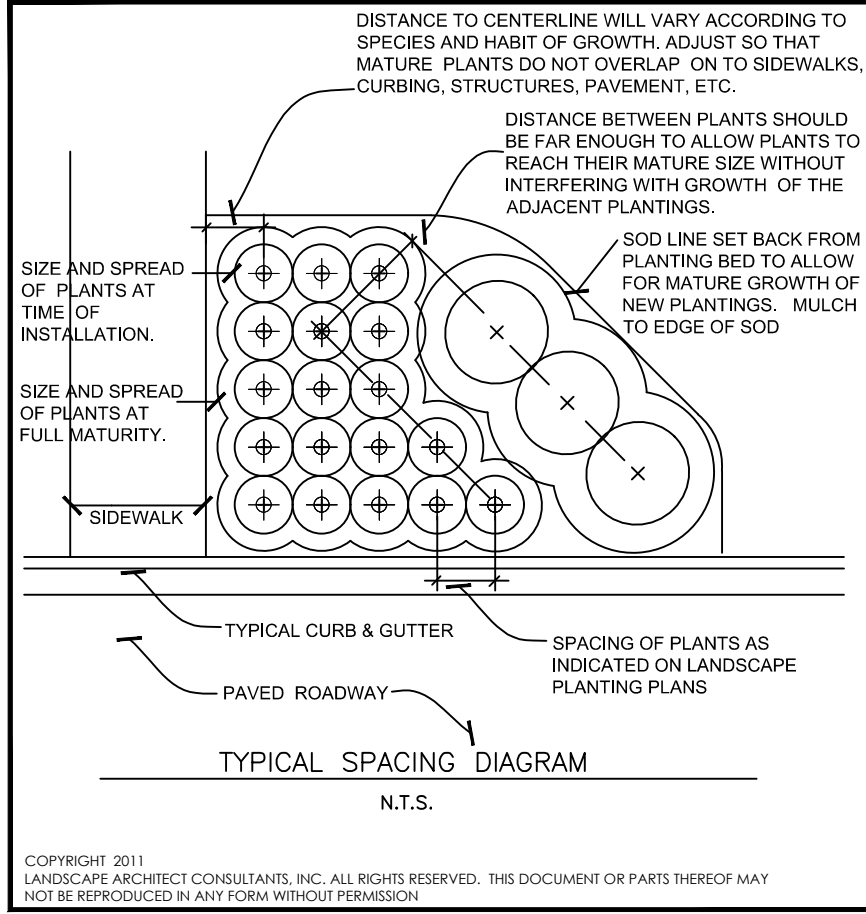
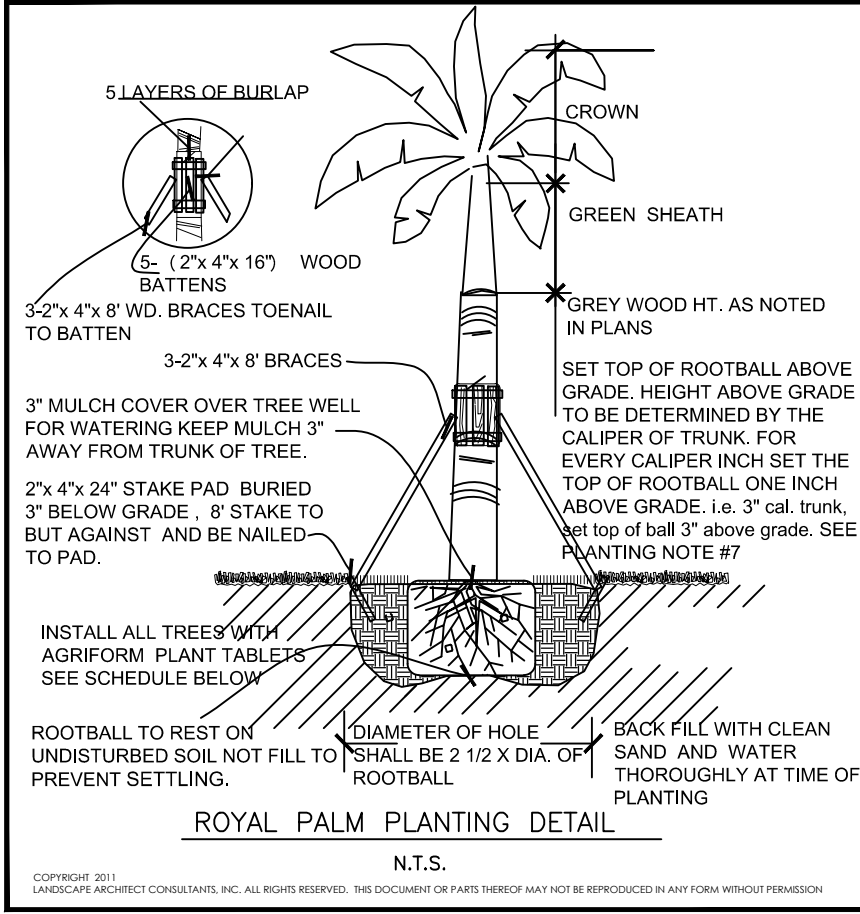
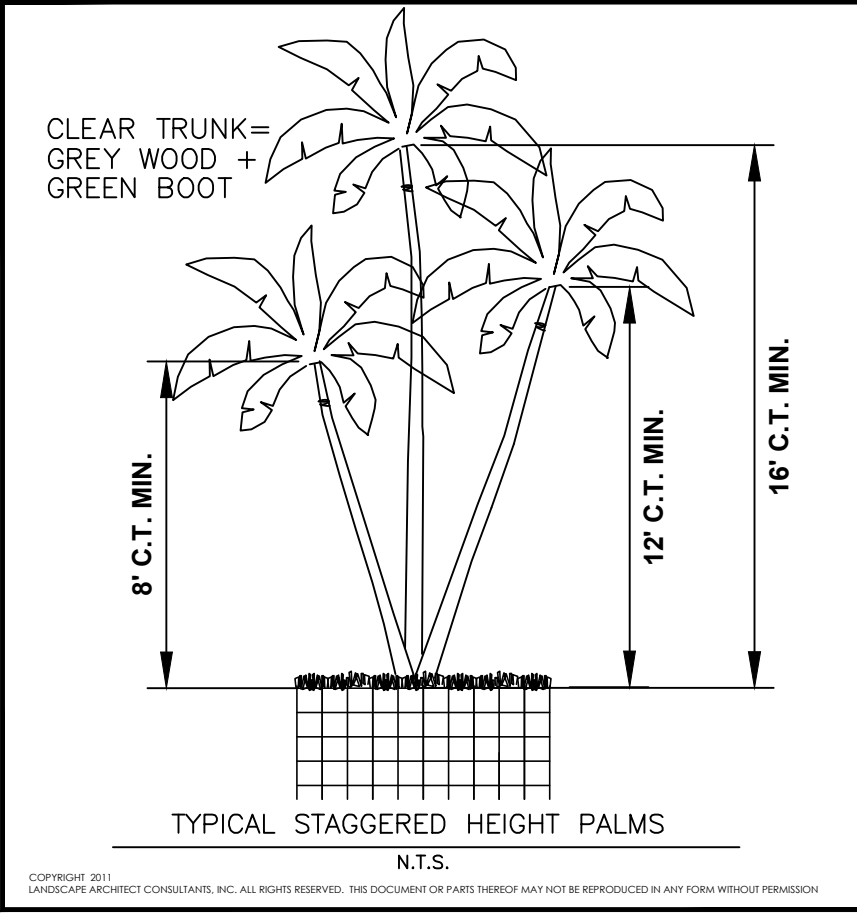
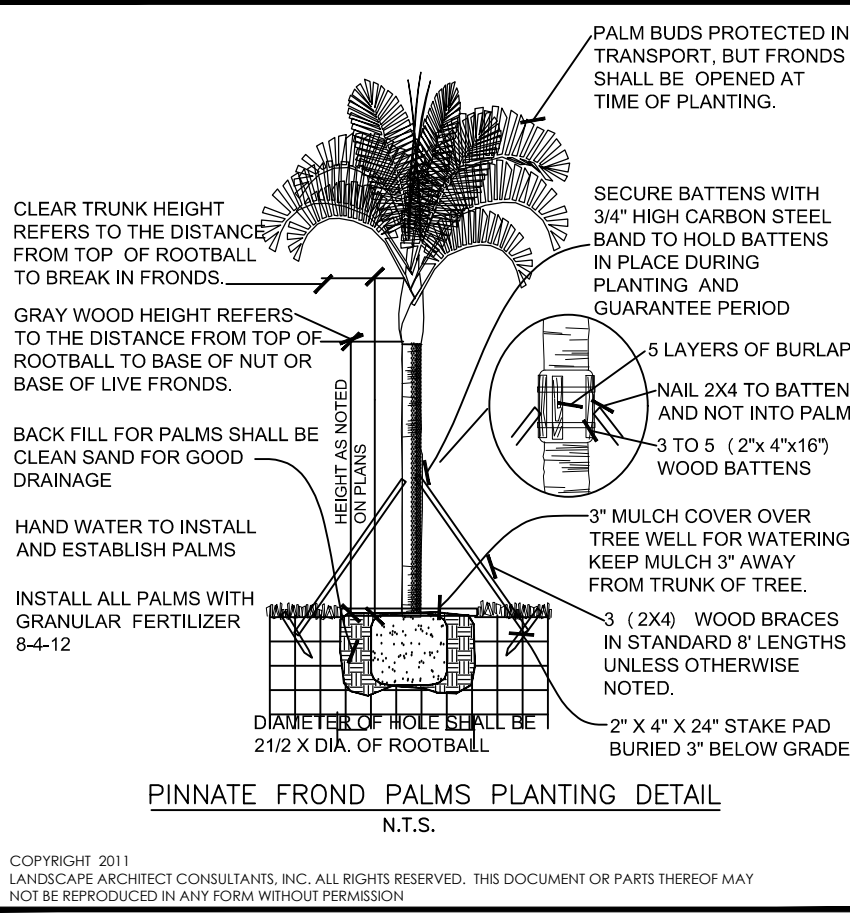
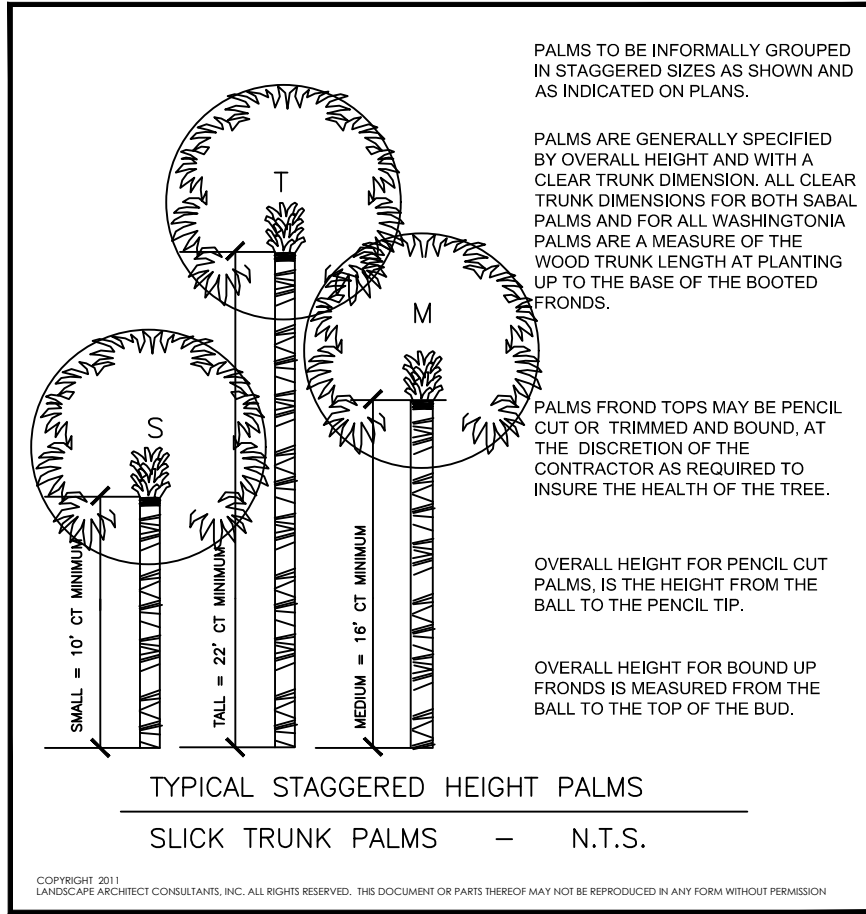
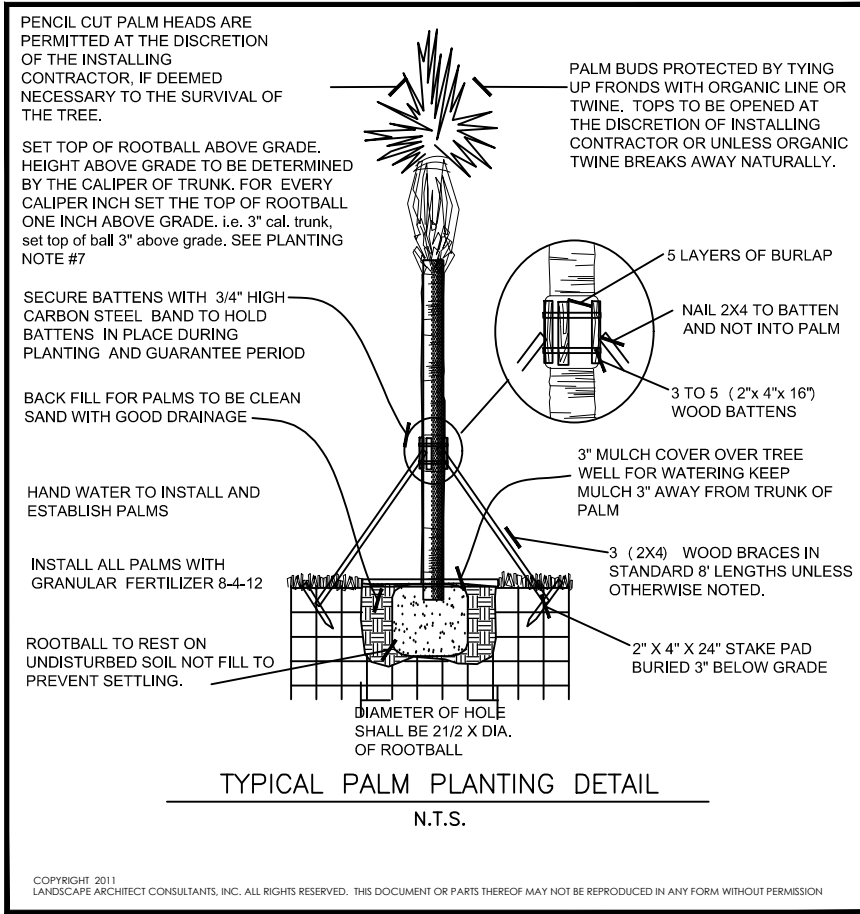
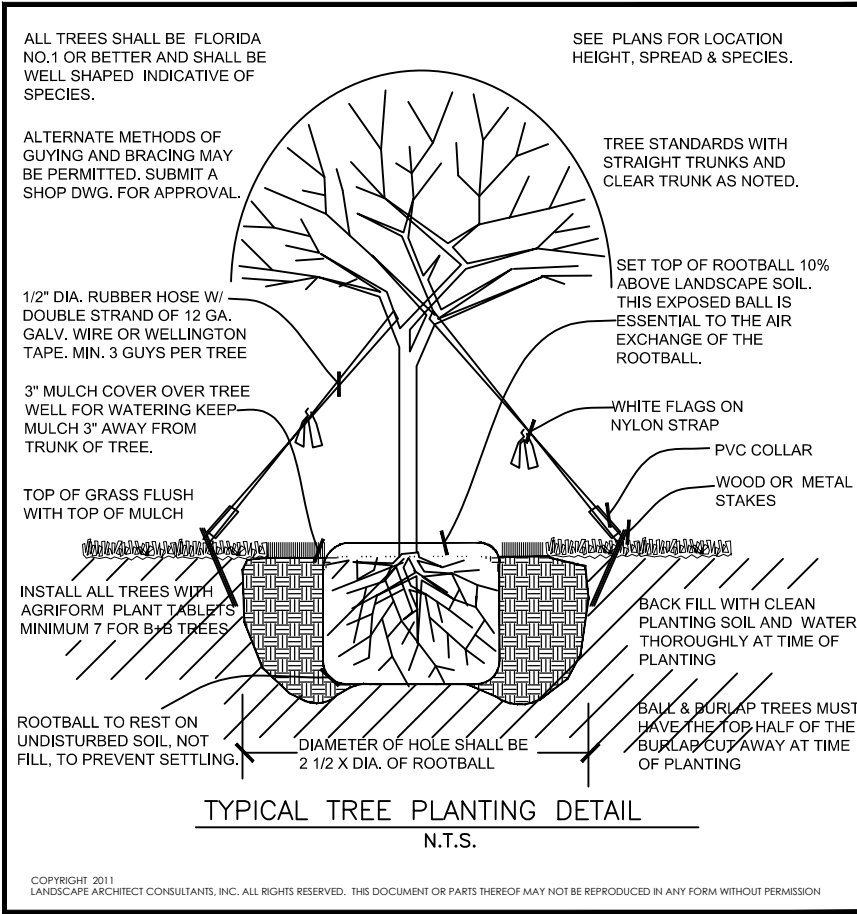
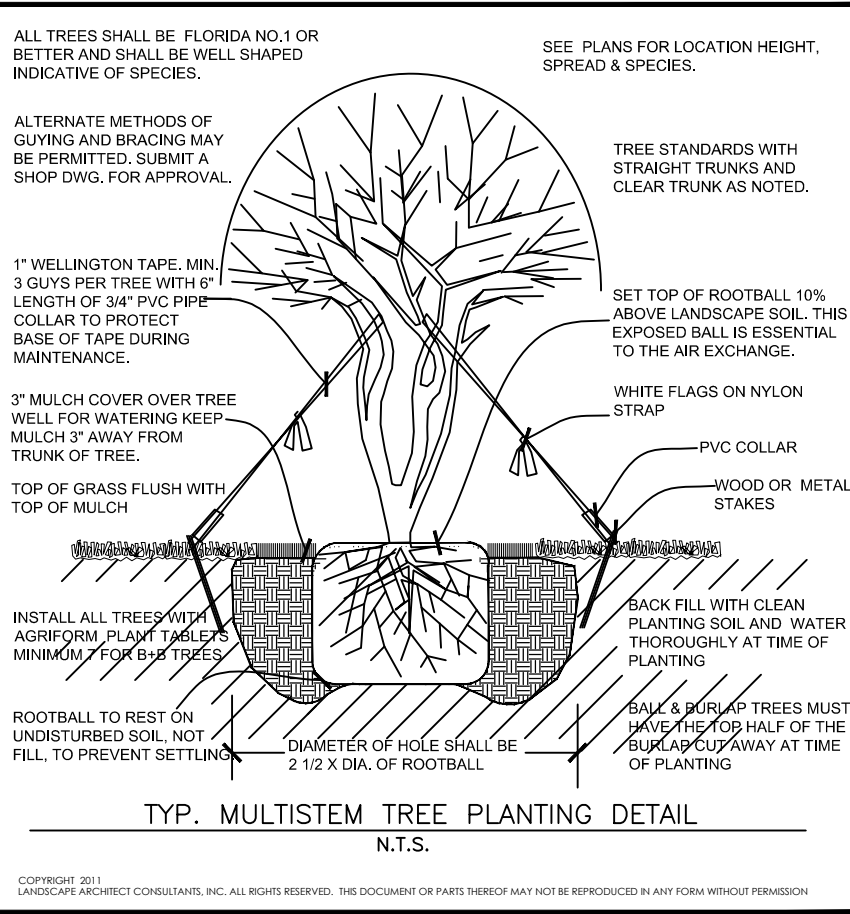
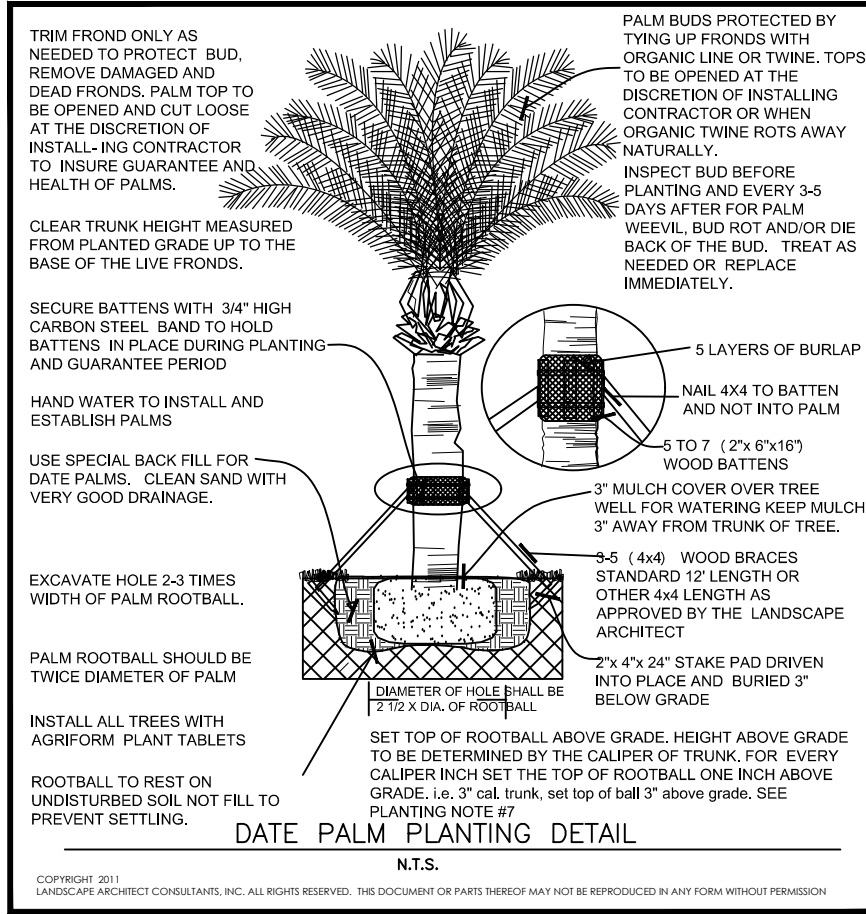
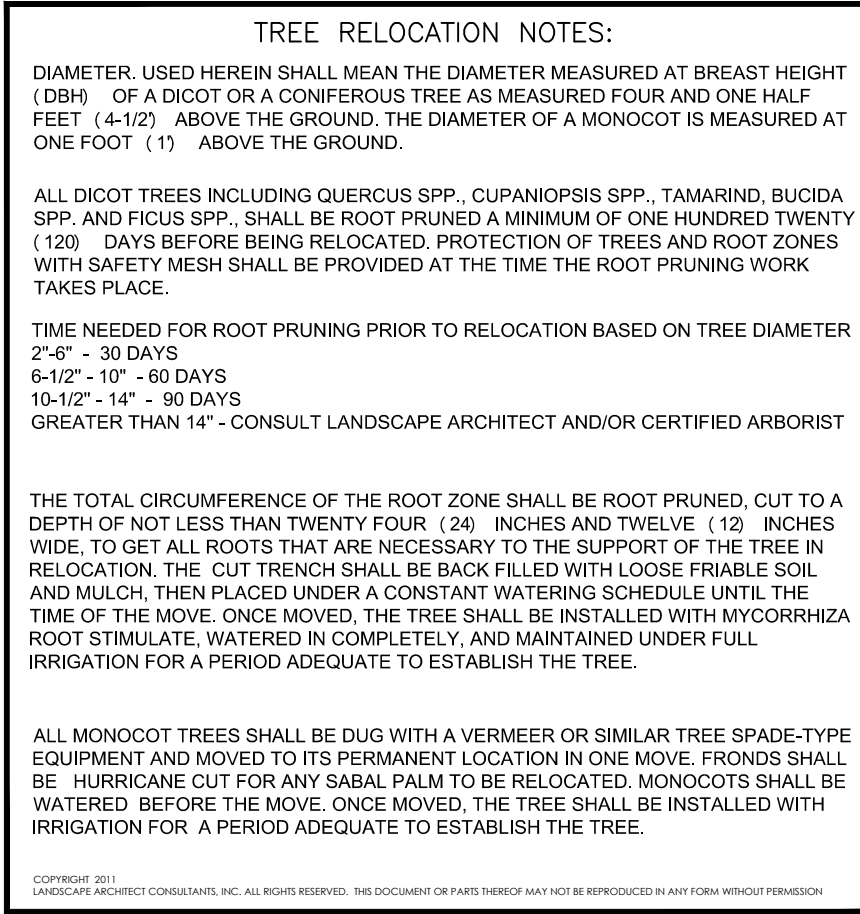
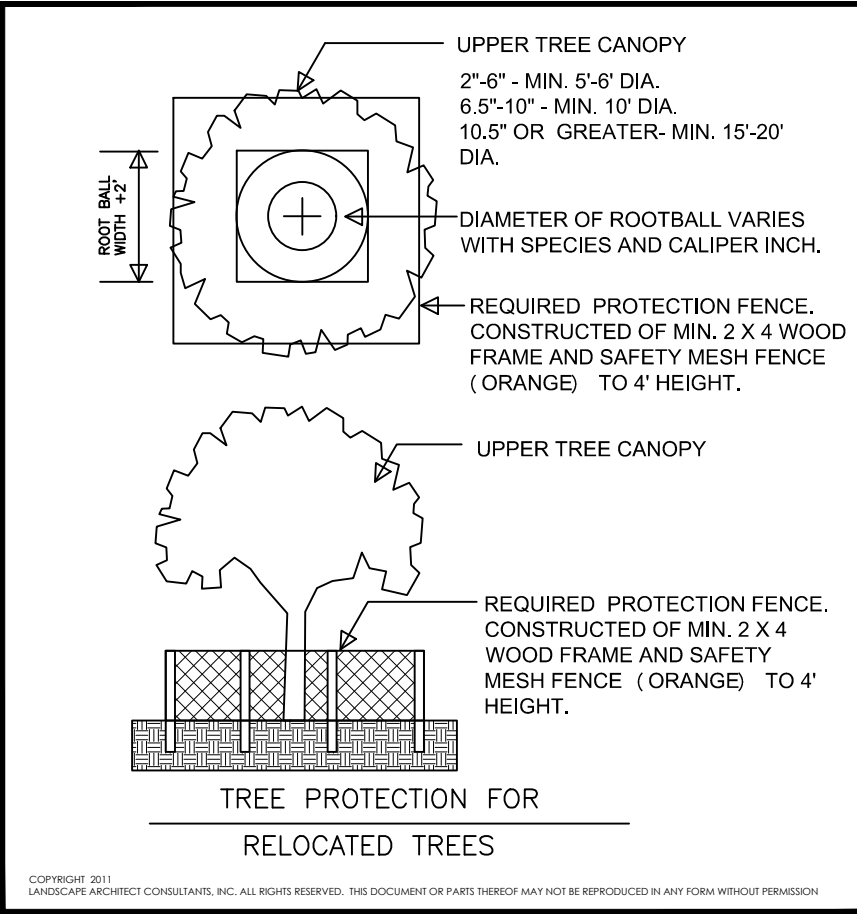
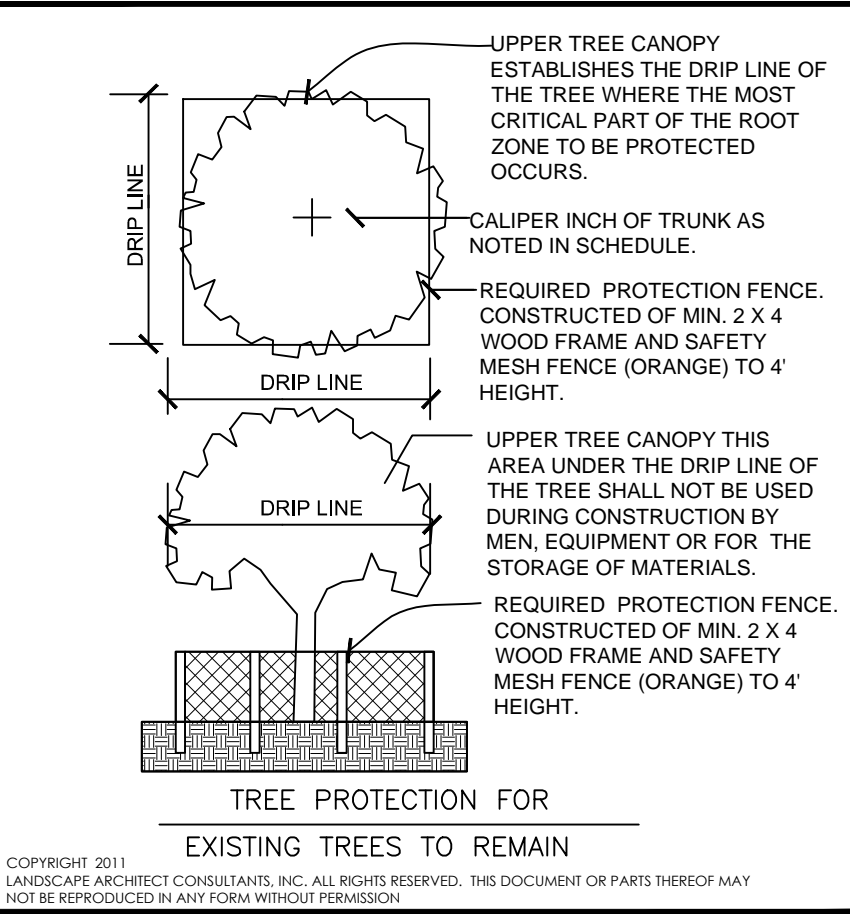
PLANTING NOTES

1. All sizes for plant material shown on plan are to be considered as minimums. All plant material must meet or exceed all minimum requirements for both height and spread. Any other requirements for specific shape or effect as noted on the plan will also be required for final acceptance.
2. All plant material furnished by the Landscape Contractor shall be Florida No.1 or better, unless otherwise specified, and shall be installed as specified in the most current edition of Grades and Standards for Nursery Plants, Part I by the Florida Department of Agriculture, Consumer Services Division, State Plant Board of Florida.
3. Landscape Design and installation shall conform to xeriscape landscape principles as included in the South Florida Water Management District's xeriscape Principle Guide II, updated version. Xeriscape requirements apply to all materials required by code. Additional plantings over and above code are provided to develop a higher aesthetic than code requires, and are not bound by these minimum standards.
4. In addition to these requirements all local landscape codes and requirements shall be met as a part of this base bid and contract in order to satisfy the review and approval of the governing municipality.
5. Quantities for landscape materials as noted on plans supersede any quantities listed in summary tables or lists.
6. All landscaping scheduled to occur in vehicular use areas shall be protected from vehicular encroachment by curbing or other durable barriers.
7. All planting holes shall have a minimum diameter of 2 1/2 times the diameter of the plant ball and have a minimum of 12" of soil on all sides of the plant ball. All planting holes shall be excavated to remove all objectionable materials, such as asphalt, sub-base, concrete, rock, caustic materials with an excessive soil Ph, or similar materials not suited for landscape planting. Planting hole(s) shall be dug to a depth that is 90% the height of the root ball, with the installed root ball resting on undisturbed soil. Top of root ball to be 10% above final grade. For small caliper trees of 4" or less, plant the root ball above grade 1" for every 1" caliper. (i.e. if you have a 3" caliper tree plant the rootball 3" above grade. For all shrubs and ground cover plant the rootball minimum 2" above grade.
8. All plant material shall be installed in planting soil that is delivered to the site in a clean, loose and friable condition. All soil shall have well draining characteristics. Soil must be free of all rocks, sticks, objectionable debris including weeds and weed seed. Minimum soil depth requirements may vary with each municipality. See details and local codes for clarification.
9. All plant materials shall be thoroughly watered in at the time of planting. No dry planting shall be permitted.
10. Local codes require specific formulas for the use of native plants, as well as calculations for required number of code size trees by type and caliper inch. See code calculation tables provided with plan drawings.
11. Plants and new plantings shall be required to provide for safe sight lines at all access and egress points from the site, as well as intersections. All emergency equipment such as fire hydrants shall be maintained as visible and accessible, free of obstruction by new plantings. Trees require setbacks from lighting poles and fixtures. The contractor is required to field adjust the location of plant materials to meet these standards as work in contract.

12. Fertilizer shall be applied directly to the surface of the plant bed immediately after installation and prior to mulching.
- Turf Areas - Sunniland Fertilizer 16-4-8, applied per mfg. recommendation noted on the bag.
- Shrub Areas - Atlantic Fertilizer 12-6-8 plus Minors, applied per mfg. recommendation noted on the bag.
- Canopy Trees- Atlantic Fertilizer 12-6-8 plus Minors, applied per mfg. recommendation noted on the bag.
- Palm Trees - Atlantic Fertilizer Palm Mix 8-4-12 plus Minors, applied per mfg. recommendation noted on the bag.
13. All landscape areas not covered by shrubs or ground cover shall be planted with sod, and conversely all areas not covered by sod shall be covered with mulch to a minimum depth of (3) three inches of cover when settled. Mulch shall be kept 3" away from the face of the trunk (tree or palm). Eco-Cypress mulch or Eco-Melaleuca mulch shall be used; see natural mulch products at www.mulchingsolutions.com for product information or call 561-499-8148.
14. Sod shall be (as noted) solid sod, and shall be laid on a smooth planting base which has been graded to meet the drainage characteristics of the site. All sod shall be laid with closely fitted joints, and shall be in a green and healthy growing condition at planting. Sod shall be free of disease, debris, sticks, rocks and weeds. Variety as specified in plans. Where sod is abutting shrub and/or ground cover beds, the sod line shall be cut in a clean smooth line (radial or straight) free of any jagged or crooked edges.

15. All landscape areas shall be finished graded such that they are flush and level with the surrounding paved surfaces as not to impede the flow of drainage into landscape areas and to prevent the back wash of mulch and debris onto paved areas.
16. All new landscaped areas shall be excavated of all road rock, existing site fill down to a depth of 12" minimum from top of curb. SEE DETAIL THIS SHEET FOR SPECIFICS.
17. All landscape areas shall be irrigated by a fully automatic system adjusted to provide 100% coverage. All heads shall be adjusted to minimum 100% overlap.
18. The irrigation system shall be equipped with a rain sensor shutoff device, hard wired to over ride the time clock, controller or pump station in the event of rain or equally wet conditions. This requirement conforms to the County and SFVMD ordinance.
19. Any existing trees and their root zones on site shall be protected from damage during construction. All trees/palms to be removed or relocated shall require proper permitting and documentation of size, species, condition and proposed action. Established values for mitigation is required in the case of removals. Trees to be relocated shall be free of any hazardous defects and/or characteristics including but not limited to: Girdling roots, codominant leaders with bark inclusions, active trunk decay, stub cuts, open trunk wounds and broken leader(s). All permitting and review processes must be completed prior to any work being done. Any relocation's shall be root pruned in advance except for palm species. Palm fronds shall be hurricane cut in advance for any Sabal Palms to be relocated.
20. All selective trimming of existing and/or relocated trees on site, shall be done applying the standards of the American National Standards Institute, ANSI 300, 2001.

21. All new trees and relocated trees shall be guyed and braced applying the Standards of the National Arborist Association Guide Lines 1988 edition or most current.
22. All trees and palms shall be setback from roadways, walks and utility clear zones as required to conform to safety standards of the local municipality, FDOT and/or the utility companies, whether the plans show dimensions or not. These standards shall supersede all plan documents and are included in the work required by the contractor to complete the project.
23. Any substitutions to plant materials for areas addressed on the plans shall be approved by the governing municipality prior to work performed.
24. Landscape materials shall be maintained during construction as part of this base contract and any materials that die or decline below grades and standards shall be replaced immediately for final acceptance.
25. All landscape materials are guaranteed for full replacement including the material and labor for a period of one year from the time of final acceptance. This applies to any materials which are dead or have declined below grades and standards. The guarantee is void only in cases of 75 mph hurricane force winds at the site and/or a freeze below 35 degrees when established by the weather bureau as effecting the project location.
26. Medium and large maturing palms shall be planted at least 3' (feet) from all hardscapes and at least their typical frond length from a building or light pole.
27. Medium and large maturing trees shall be planted at least 5' (feet) from all hardscapes (e.g. sidewalks, driveways, pavers, curbs, etc.) They shall be planted a minimum of 10' (feet) from a building or light pole.



LAC

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L-0000563

Thomas J. Laubenthal, RLA  
TOM@LACFL.COM  
L-0000563

DATE	REVISIONS:
11-08-18	INITIAL SUBMITTAL

DATE:	12-4-18
SCALE:	N. T. S.
DRAWING BY:	AD
DESIGNED BY:	TJL, AD

777 PROPERTY

MARGATE, FLORIDA

BROWARD COUNTY

LANDSCAPE NOTES & DETAILS:

PROJECT NO.

18-025

SHEET:

LP-3 of 3

DATE:

THOMAS J. LAUBENTHAL  
FLA-0000563 ILC-2600422

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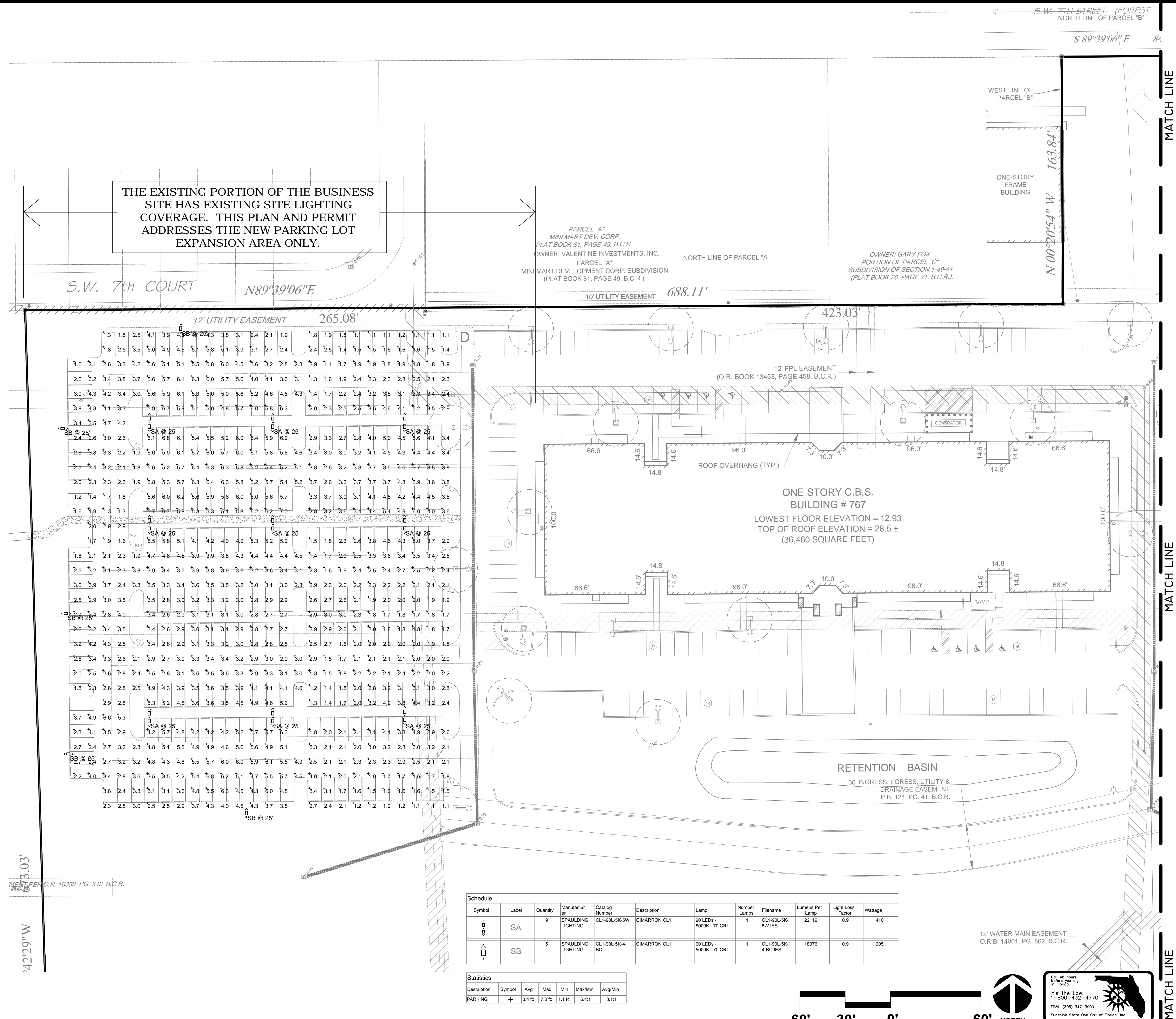
DATE	REVISIONS:
11-08-18	INITIAL SUBMITTAL

DATE: 12-4-18  
SCALE: 1" = 30'  
DRAWING BY: AD  
DESIGNED BY: TJL, AD

PROJECT: 777 PROPERTY  
BROWARD COUNTY  
MARGATE, FLORIDA  
SITE LIGHTING PLAN:

PROJECT NO.  
18-025  
SHEET:  
LT-1 of 2

DATE:  
THOMAS J. LAUBENTHAL  
#LA-000563 #LC-2600422



Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
SA	SA	9	SPALDING LIGHTING	CL1-90L-5K-5W	CIMARRON CL1	90 LEDs - 5000K - 70 CRI	1	CL1-90L-5K-5W.IES	22119	0.9	410
SB	SB	5	SPALDING LIGHTING	CL1-90L-5K-4-BC	CIMARRON CL1	90 LEDs - 5000K - 70 CRI	1	CL1-90L-5K-4-BC.IES	18376	0.9	205

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING	+	3.4 fc	7.0 fc	1.1 fc	6.4:1	3.1:1

CONTRACT NO. 18-025  
LANDSCAPE ARCHITECT CONSULTANTS, INC.  
OR PART THEREOF MAY NOT BE REPRODUCED  
WITHOUT WRITTEN PERMISSION





DATE:	12-4-18
SCALE:	N.T.S.
DRAWING BY:	AD
DESIGNED BY:	TJL, AD

PROJECT NO.  
**18-025**

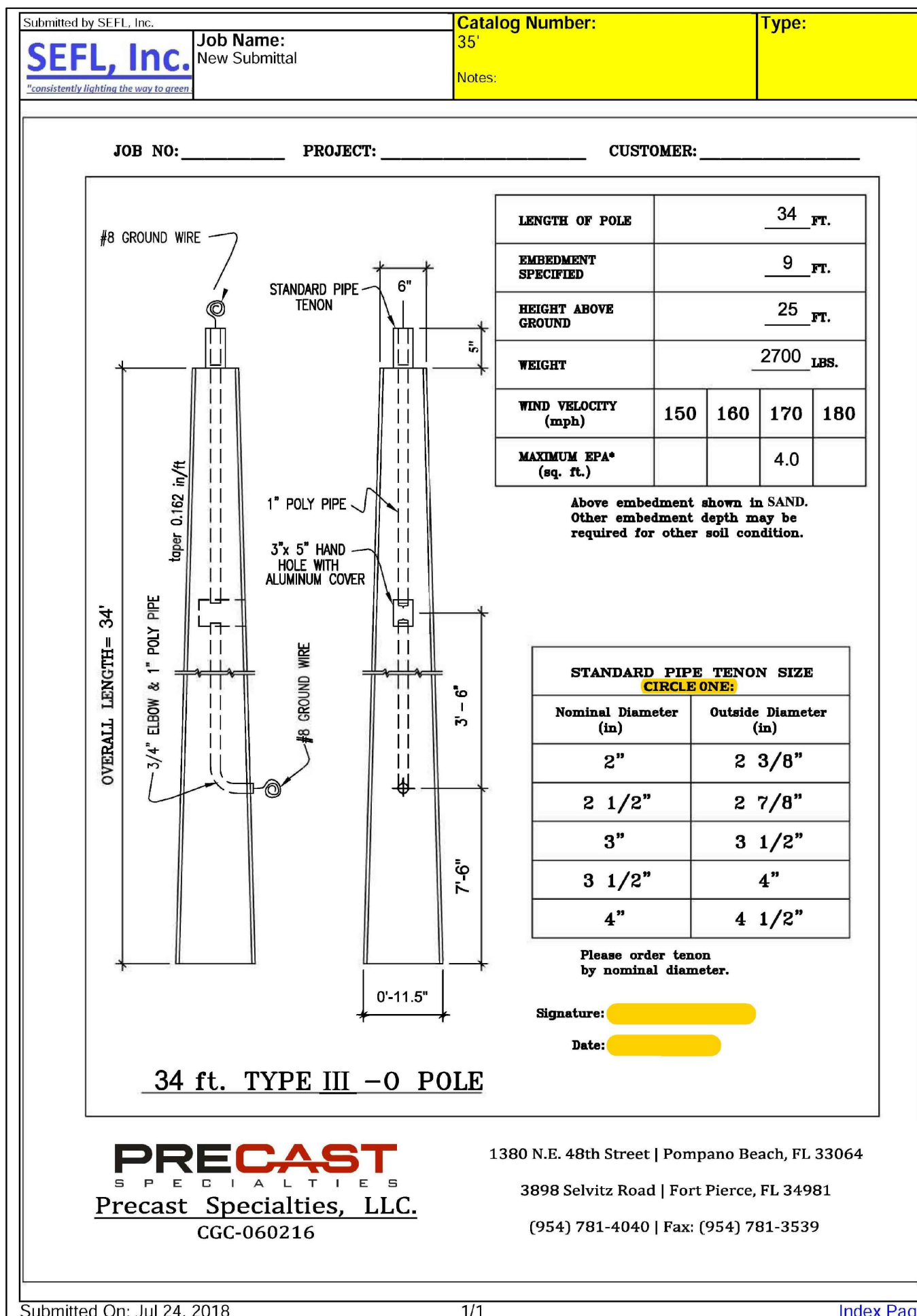
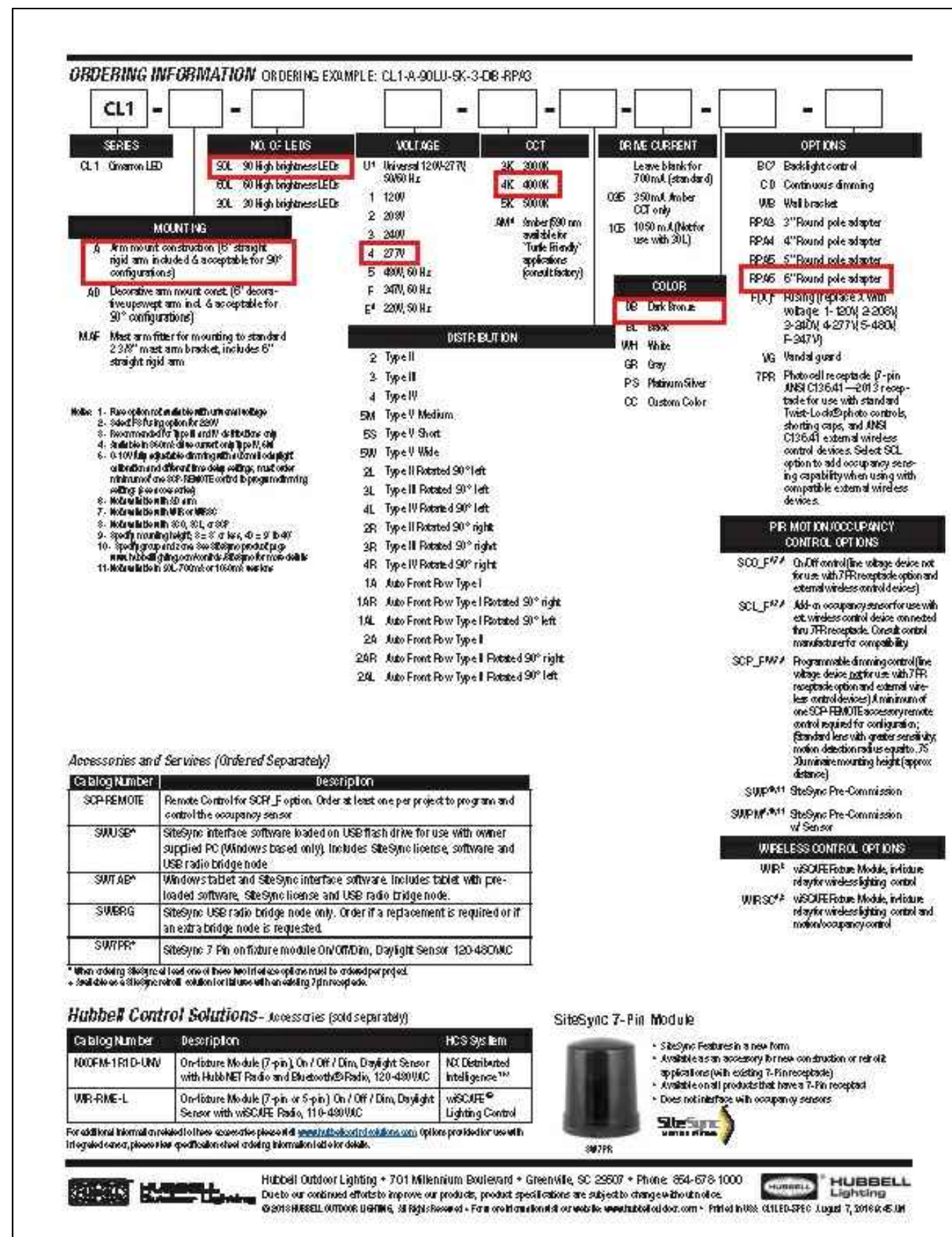
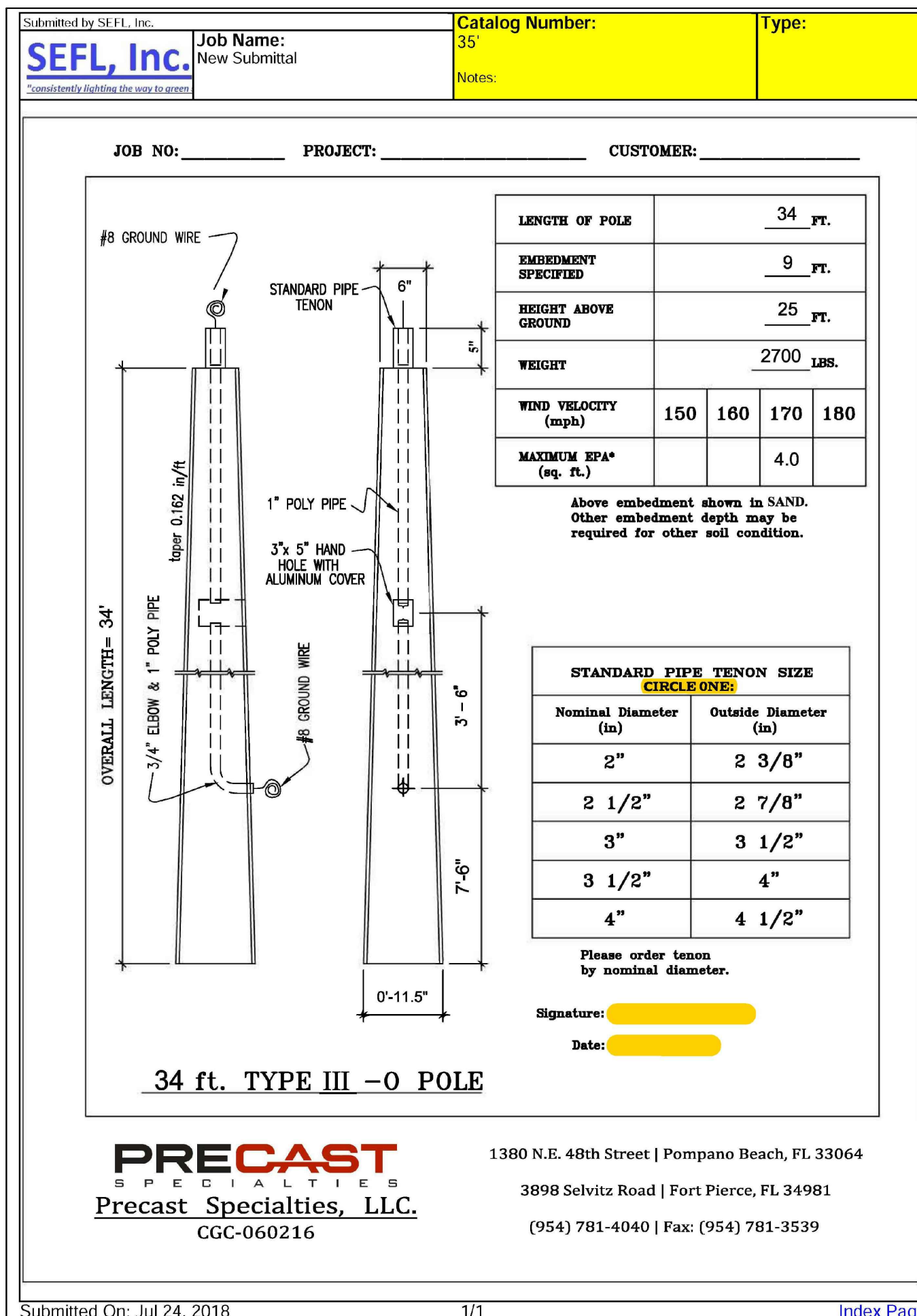
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***LT-2 of 2***

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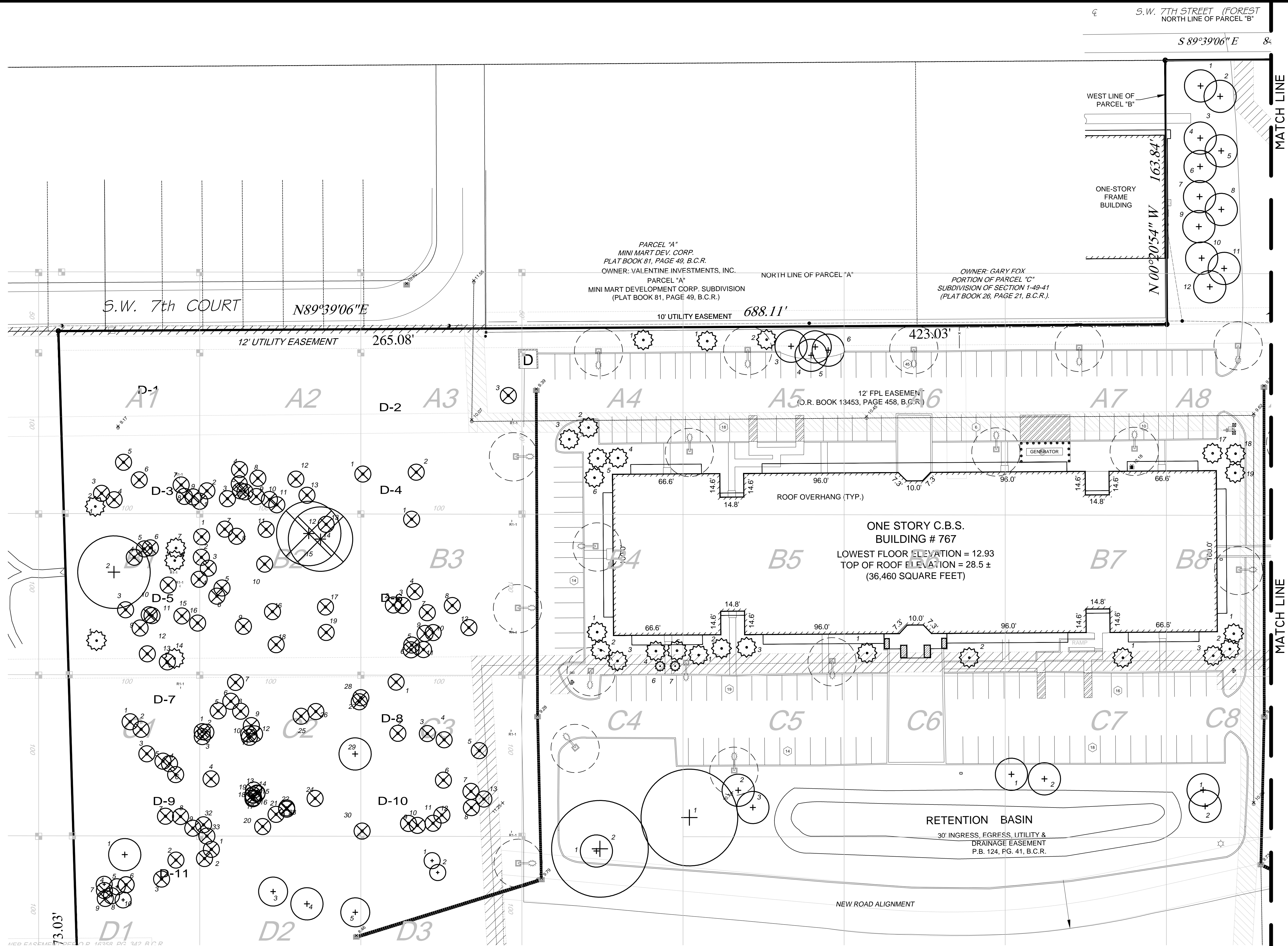
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GRAPHIC KEY

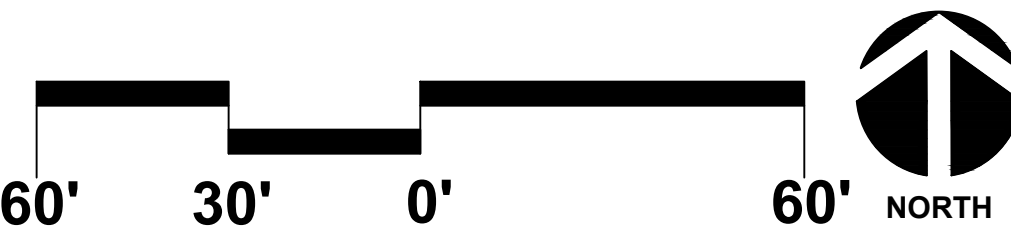
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EXISTING TREE  
TO BE REMOVED

#

EXISTING TREE TO REMAIN

See Sheet TS-2 for Summary List



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Thomas J. Laubenthal, R.L.A.  
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LA-000593

DATE	REVISIONS:
11-08-18	INITIAL SUBMITTAL

DATE: 12-4-18  
SCALE: 1" = 30'  
DRAWING BY: AD  
DESIGNED BY: T.J.L, AD

PROJECT:

777 PROPERTY

BROWARD COUNTY

MARGATE, FLORIDA

TREE SURVEY PLAN

PROJECT NO.  
**18-025**  
SHEET:  
**TS-1 of 2**

DATE:  
THOMAS J. LAUBENTHAL  
ILA-000593 ILA-26000422

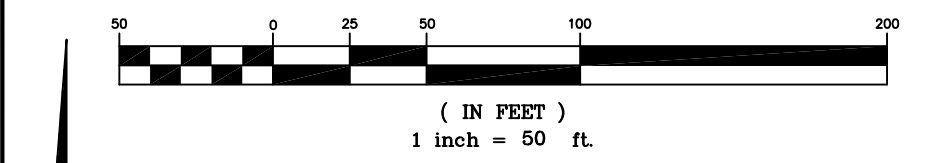




MAS J. LAUBENTHAL  
0000563 #LC-26000422



McLAUGHLIN ENGINEERING COMPANY (LB#285)  
1700 N.W. 64th STREET, SUITE 400  
FORT LAUDERDALE, FLORIDA, 33309  
PHONE: (954) 763-7611 FAX: (954) 763-7615  
GRAPHIC SCALE

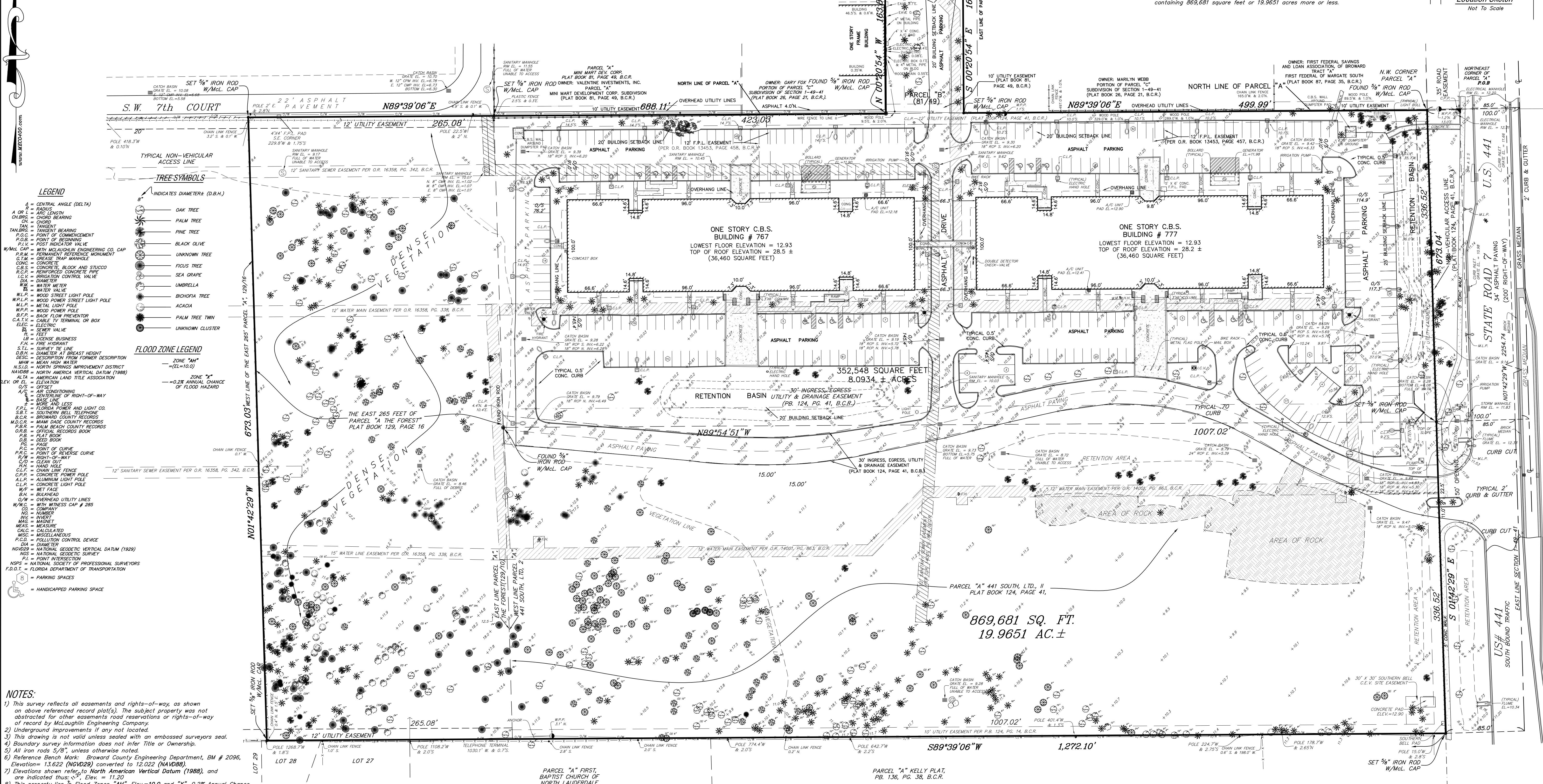


# ALTA/NSPS LAND TITLE SURVEY

## PARCEL "A" THE FOREST, P.B. 129, PG. 16, B.C.R., AND PARCEL "A" 441 SOUTH, LTD., P.B. 124, PG. 41, B.C.R., AND PARCEL "B", MINI MART DEVELOPMENT CORP. SUBDIVISION, P.B. 81, P.G. 49, B.C.R.

**Legal Description**  
Parcel "A" 441 SOUTH LTD., II, according to the plat thereof as recorded in Plat Book 124, Page 41, of the public records of Broward County, Florida.  
TOGETHER WITH the East 265 feet of Parcel "A" THE FOREST, according to the plat thereof as recorded in Plat Book 129, Page 16, of the public records of Broward County, Florida.  
AND TOGETHER WITH Parcel "B", MINI MART DEVELOPMENT CORP. SUBDIVISION according to the plat thereof as recorded in Plat Book 81, Page 49, of the public records of Broward County, Florida.  
Said lands situate lying and being in the City of Margate, Broward County, Florida, and containing 869,681 square feet or 19.9651 acres more or less.

**Location Sketch**  
Not To Scale



- LEGEND**
- A = CENTRAL ANGLE (DELTA)
  - A OR L = ARC LENGTH
  - CH = CHORD BEARING
  - CH = CHORD
  - TAN BEG = TANGENT BEARING
  - P.O.C. = POINT OF COMMENCEMENT
  - P.O.B. = POINT OF BEGINNING
  - P.I. = POINT OF INTERSECTION
  - W/MCL CAP = WITH McLAUGHLIN ENGINEERING CO. CAP
  - P.F.M. = PERMANENT REFERENCE MONUMENT
  - C.T.M. = CREASE TIE MANHOLE
  - CONC. = CONCRETE
  - C.B.S. = CONCRETE BLOCK AND STUCCO
  - R.C.P. = REINFORCED CONCRETE PIPE
  - L.C.V. = IRRIGATION CONTROL VALVE
  - DIA. = DIAMETER
  - W.M. = WATER METER
  - W.L.P. = WOOD STREET LIGHT POLE
  - M.L.P. = METAL LIGHT POLE
  - W.P.P. = WOOD POWER POLE
  - B.F.P. = BACK FLOW PREVENTOR
  - C.A.T.V. = CABLE TV TERMINAL OR BOX
  - ELEC. = ELECTRIC
  - BL. = LICENSE BUSINESS
  - FL. = FIRE HYDRANT
  - D.B.H. = DIAMETER AT BREAST HEIGHT
  - DESC. = DESCRIPTION FROM FORMER DESCRIPTION
  - M.H. = MANHOLE
  - N.S.D. = NORTH SPRINGS IMPROVEMENT DISTRICT
  - M.H.S.D. = NORTH SPRINGS IMPROVEMENT DISTRICT
  - ALTA = ALTA/NSPS LAND TITLE ASSOCIATION
  - LEV. = ELEVATION
  - O/S = OFFSET
  - A.P. = AIR CONDITIONING
  - ENTR. = CENTERLINE OF RIGHT-OF-WAY
  - Z. = MORE AND LESS
  - F.F.L. = FLOOD FLOOR AND LIGHT CO.
  - S.B.T. = SOUTHERN BELL TELEPHONE
  - B.C.R. = BROWARD COUNTY RECORDS
  - M.D.C.R. = MIAMI DADE COUNTY RECORDS
  - P.M.B. = PALM BEACH COUNTY RECORDS
  - O.R.B. = OFFICIAL RECORDS BOOK
  - D.B. = DEED BOOK
  - P.C. = POINT OF CURVE
  - P.L. = POINT OF LONGEST CURVE
  - R/W = RIGHT-OF-WAY
  - R/L = RIGHT-OF-LEASE CURVE
  - C.L. = CENTERLINE
  - H.M. = HAND HOLE
  - C.P.P. = CONCRETE POWER POLE
  - A.L.P. = ALUMINUM LIGHT POLE
  - C.L.P. = CONCRETE LIGHT POLE
  - W/F = WET FACE
  - O.V. = OVERHEAD UTILITY LINES
  - W/W. = WITH WITNESS CAP # 285
  - CO. = COMPANY
  - INV. = INVERT
  - MEAS. = MEASURE
  - CAL. = CALCULATED
  - MISC. = MISCELLANEOUS
  - POLL. = POLLUTION CONTROL DEVICE
  - DIA. = DIAMETER
  - NGVD29 = NATIONAL GEODETIC VERTICAL DATUM (1929)
  - NAD83 = NATIONAL GEODETIC SURVEY
  - P.I. = POINT OF INTERSECTION
  - NSPS = NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS
  - F.D.O.T. = FLORIDA DEPARTMENT OF TRANSPORTATION
  - P. = PARKING SPACES
  - H. = HANDICAPPED PARKING SPACE
- TREE SYMBOLS**
- INDICATES DIAMETER (D.B.H.)
  - OAK TREE
  - PALM TREE
  - BLACK OLIVE
  - UNKNOWN TREE
  - FIGUS TREE
  - SEA GRAPE
  - UMBRELLA
  - BICHOFIA TREE
  - ACACIA
  - PALM TREE THIN
  - UNKNOWN CLUSTER
- FLOOD ZONE LEGEND**
- ZONE "AH" (ELEV=10.0)
  - ZONE "X" (ELEV=10.0)
  - 0.2% ANNUAL CHANCE OF FLOOD HAZARD

- NOTES:**
- This survey reflects all easements and rights-of-way, as shown on above referenced record plat(s). The subject property was not abstracted for other easements road reservations or rights-of-way of record by McLaughlin Engineering Company.
  - Underground improvements if any not located.
  - This drawing is not valid unless sealed with an embossed surveyors seal.
  - Boundary survey information does not infer Title or Ownership.
  - All iron rods 5/8", unless otherwise noted.
  - Reference Bench Mark: Broward County Engineering Department, BM # 2096, Elevation: 13.622 (NGVD29) converted to 12.022 (NAVD83), Dated: August 18, 2014, Community Panel No. 120047.
  - Elevations shown refer to North American Vertical Datum (1988), and are indicated thus:  $\text{Elev.} = 11.20$ .
  - This property lies in Flood Zones "AH", Elev=10.0 and "X", 0.2% Annual Chance of Flood Hazard Per Flood Insurance Rate Map No. 1201100355 H, Dated: August 18, 2014, Community Panel No. 120047.
  - Underground Utility locations shown hereon, if any, are based upon point marks on the ground provided by others. McLaughlin Engineering Company did not confirm the accuracy of this data. The exact location of all utilities should be confirmed prior to design or construction.
  - Bearings shown shown refer to assumed datum and assumes the East line of section 1-49-41 as North 01°42'29" West.
  - Elevations per North American Vertical Datum (1988) derived from National Geodetic Vertical Datum (1929) data and converted using U.S. Army Corps of Engineers software (Corpscon 6.0.1) obtained from <http://www.tech.army.mil/>

**OFFICE NOTES**

FIELD BOOK NO. LB #204/43, LB #89/26 & 44, LB #83/12 & 13, 724/88, 705, LB# 287/72, PRINT

JOB ORDER NO. T-5108, T-3973, REF. DMC. AA-99, 93-03-90, Z-45, AA-1084, U-4638, V-3254

CHECKED BY: JST, S.W., KT, RDR

DRAWN BY:

01 - 3 - 070 (18)

**ALTA/NSPS CERTIFICATION**

To:  
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(b), 7(a), 7(b)(1), 7(c), 8, 9, 11 (as to visible utilities only), 16 (none apparent), 17 (none apparent), 18 (none apparent) of Table A thereof.  
The fieldwork was completed on April 12th, 2018.

**CERTIFICATION**

We hereby certify that this survey meets the "Standards of Practice" as set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17.05 Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

Dated at Fort Lauderdale, Florida, this 29th day of August, 2008.  
Resurveyed this 9th day of May, 2018.

**McLAUGHLIN ENGINEERING COMPANY**

JERALD A. McLAUGHLIN  
Registered Land Surveyor No. 5269  
State of Florida.







1. IRRIGATION CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ALL OTHER DRAWINGS OF THE PROJECT TO RESOLVE COORDINATION AND POTENTIAL CONFLICTS WITH EXISTING UNDERGROUND PIPES AND UTILITIES OR WORK BY OTHERS, PRIOR TO ANY WORK BEING DONE. MOST MAIN LINES SHARE ALIGNMENT WITH PERIMETER UTILITY EASEMENTS & SIGNIFICANT LANDSCAPE BUFFER PLANTINGS. AVOID CONFLICTS WITH ROOTBALL AREA OF TREES.
2. THE IRRIGATION CONTRACTOR IS RESPONSIBLE TO CALL FOR LOCATIONS AND TO COORDINATE WITH LOCAL AGENCIES TO IDENTIFY LINES, PIPES, CABLES OF EASEMENTS WITHIN THE EFFECTED AREAS, PRIOR TO WORK. ALL WORK SHALL CONFORM TO THE FLORIDA BUILDING CODE PLUMBING SECTION, APPENDIX F FOR IRRIGATION.

- PIPES ARE SIZED SPECIFICALLY TO THE ANTICIPATE THE USE OF THE APPROPRIATE NOZZLE REQUIRED FOR ADEQUATE COVERAGE WITHOUT OVERSPRAY. THE PIPE SIZE IS DESIGNED WITH A REASONABLE MINIMUM CUSHION IN THE LINE SIZE THAT WILL ALLOW THE OWNER THE LATITUDE TO EFFECT NORMAL REPAIRS AND CHANGES OVER COMING YEARS. DO NOT REDUCE THE LINE SIZES FROM THE SCHEDULE SHOWN.

NO PVC PIPE AND FITTINGS, SMALLER THAN 3/4" PIPE SHALL BE PERMITTED, EXCEPT FOR SWNG JOINT ADAPTERS TO FLEX PIPE FITTINGS. ALL SECTION LINE PIPE SHALL BE STANDARD INDUSTRY PIPE SIZES 3/4", 1" 1 1/4", 1 1/2", 2" 2 1/2", 3", AND 4" PIPE, WITH APPROPRIATE NEW SCH. 40 PVC FITTINGS FOR SOLVENT WELDED ASSEMBLY USING CLEANERS/PRIMERS.

IT IS THE INTENT OF THE LANDSCAPE ARCHITECT / DESIGNER TO PROVIDE A SCHEMATIC DRAWING DEMONSTRATING THE RECOMMENDED PIPING LAYOUT. THE CONTRACTOR SHALL CONFORM TO THAT PLAN DIAGRAM WHEREVER POSSIBLE. WHEN A CHANGE IN THE LAYOUT IS DEEMED NECESSARY DUE TO A CONFLICTS, ADJUST PIPE AS NEEDED AND PROVIDE AS-BUILT DATA.

IRRIGATION DETAIL - PIPE SIZING &amp; NOZZLE NOTES

CONTRACTORS SHALL EMPLOY THE FULL SPECTRUM OF NOZZLE PATTERNS AVAILABLE FROM THE MANUFACTURER TO PROVIDE THE CORRECT NOZZLES TO COVER THE LANDSCAPE AREAS AND AVOID OVERSPRAY ON PAVED AREAS. THIS WOULD INCLUDE BUT NOT BE LIMITED TO, ADJUSTABLE ARC NOZZLES, CENTER STRIP, END STRIP & SIDE STRIP NOZZLES, AND OTHER BASIC NOZZLES DESIGNED TO CONTROL OVERSPRAY ON AREAS NOT INTENDED TO GET WET OR REQUIRED COVERAGE. THE USE OF THESE NOZZLE TYPES IS IMPLIED AS PART OF THE BASE BID PRICE AND REPRESENTS A SYSTEM INSTALLATION THAT IS STANDARD TO THE INDUSTRY AND REQUIRED BY LOCAL CODES FOR WATER CONSERVATION AND SAFETY PROTECTION AGAINST WET SURFACES, SLIP & FALL SITUATIONS OR SKID ACCIDENT.

PIPES ARE SIZED SPECIFICALLY TO THE ANTICIPATE THE USE OF THE APPROPRIATE NOZZLE REQUIRED FOR ADEQUATE COVERAGE WITHOUT OVERSPRAY. THE PIPE SIZE IS DESIGNED WITH A REASONABLE MINIMUM CUSHION IN THE LINE SIZE THAT WILL ALLOW THE OWNER THE LATITUDE TO EFFECT NORMAL REPAIRS AND CHANGES OVER COMING YEARS. DO NOT REDUCE THE LINE SIZES FROM THE SCHEDULE SHOWN.

- RAINBIRD FLOCK. = MODEL ESP-LX-24
- A. 24 STATION CLOG W/ MULTIPLE PROGRAMMABLE FEATURES FOR A, B, C AND D (DRIP CYCLES)
- B. INDIVIDUAL ZONE SETTINGS IN 1-120 MINUTE INCREMENTS, WITH TIME OF DAY, MULTIPLE START TIMES, 365 DAY CALENDAR. PLUS ODD-EVEN DAY WATERING OPTIONS.
- C. WATER BUDGET AND SEASONAL PROGRAM ADJUSTMENTS WITHIN 1% TO 300% ADJUSTMENT RANGE
- D. DEFAULT PROGRAM SETTING TO RETAIN MEMORY IN CASE OF POWER LOSS.
- E. BATTERY BACK UP RESERVE POWER FOR MINIMUM 3 DAYS.
- F. RAIN AND MOISTURE SENSOR BYPASS TO OVER RIDE SYSTEM
- G. EASY PROGRAMMING GUIDE IN FACE PANEL OF UNIT.
- H. DIAGNOSTIC SELF TEST CIRCUIT BREAKER FOR WIRE FAULTS
- J. 120VAC +10%, 60 HZ WITH 26.5 VAC, 1.9 AMP OUTPUT

BE WALL MOUNTED (RSD-BEX) OR PVC PIPE MOUNTED (RSD-CBX) INCLUDES TWO 3 VOLT (CR2032) BATTERIES WITH 5 YEAR LIFE AND 300 FOOT RANGE (LINE OF SIGHT)

RAINBIRD MODEL WSRC WIRELESS TRANSMITTER UNIT POWERED BY CONTROLLER

SPRINKLER CLOCK HAVE A CIRCUIT DEDICATED TO THE RAIN SENSOR OVER RIDE. CONNECT BATTERY OPERATE WIRELESS TRANSMITTER TO SIDE OF CLOCK AND WIRED DIRECTLY TO CIRCUIT INSIDE.

ORDER SET AS A RAINBIRD – WSRC WIRELESS RAIN SENSOR COMBO INCLUDES 1 RECEIVER AND 1 TRANSMITTER AS A FULL SET.

CONTROL WIRES IN CONDUIT TO REMOTE VALVES

CODE #	REQUIREMENT	STATUS	METHOD
A-1	IRRIGATION PLANS SHOWN AS FULL SCHEMATICS	PROVIDED	SEE PLANS
A-2a	SOURCE CONNECTION AND DESIGN CAPACITY	PROVIDED	SEE PLANS
A-2b	WATER PRESSURE AT POINT OF CONNECTION (POC)	PROVIDED	PUMP SPECS
A-2c	WATER METER SIZE	N.A.	N.A.
A-2d	BACK FLOW PREVENTOR TYPE	N.A.	N.A.
A-2e	FULL PUMP STATION SPECIFICATION AND DETAILS	PROVIDED	PUMP SPECS
A-2f	PRECIPITATION RATE EXPRESSED IN INCHES PER HOUR	PROVIDED	DETAILS+SPCS
A-2g	FLOW RATE SCHEDULE WITH PIPE SIZING CHART	PROVIDED	DETAILS+SPCS
A-2h	COMPLETE IRRIGATION LEGEND FOR HEADS & VALVES	PROVIDED	DETAILS+SPCS
B-1	IRRIGATION SYSTEM MATCHED TO PLANT MATERIAL TYPE	--	--
B-2	SEPARATION OF TURF AND SHRUB WHEN PRACTICAL	PROVIDED	SEE PLANS
B-3	PRODUCTS LIST AND SPECIFICATION FOR ALL EQUIPMENT	PROVIDED	PLAN KEY
B-4	HEAD SPACING DIAGRAM WITH REQUIRED OVERLAP	PROVIDED	DETAILS+SPCS
B-5	FREE FLOW CONDITION PROTECTION FROM MAIN BREAKS	PROVIDED	DETAILS+SPCS
B-6	RAN SENSOR SWITCH OR SOIL PROBE (sect. 373.62.63)	PROVIDED	DETAILS+SPCS
B-7	PROGRAMMABLE CONTROLLER SPECIFIED W/ REQ. OPTIONS	PROVIDED	DETAILS+SPCS
B-8	NO LIFT LIMIT IN CODED PROGRAM	PROVIDED	DETAILS+SPCS
B-9	AUTOMATIC CONTROLLER W/ SEASONAL SETTING ADJUST.	PROVIDED	DETAILS+SPCS
B-10	TOTAL LIST OF CONTROLLER REQUIREMENTS	--	DETAILS+SPCS
B-10a	PROGRAMMABLE FOR MINUTES, DAYS OR WK. & T. OF DAY	PROVIDED	DETAILS+SPCS
B-10b	PROGRAMMABLE FOR MULTIPLE START TIMES	PROVIDED	DETAILS+SPCS
B-10c	AUTOMATIC SHUT-OFF AFTER ADEQUATE RAIN FALL	PROVIDED	DETAILS+SPCS
B-10d	MAINTAIN BACK-UP POWER & PROGRAM FOR MIN. 3 DAYS	PROVIDED	DETAILS+SPCS
B-10e	PROGRAMS ADJUSTABLE TO WATER RESTRICTION REQ.	PROVIDED	DETAILS+SPCS
B-11	RECOMMENDED MAINTENANCE SCHEDULE FOR IRR. EQUIPT.	PROVIDED	DETAILS+SPCS
B-12	HEADS ON SAME ZONES W/ MATCHED PRECIPITATION RATE	PROVIDED	SEE PLANS
B-13	DESIGN UNIFORMITY FOR EMITTER TYPE,SPACING,PRESSURE	PROVIDED	DETAILS+SPCS
B-14	MEASURABLE IRR. WATER USE FOR SYSTEM OVER 70 GPM	PROVIDED	DETAILS+SPCS
B-15	PLANS TO INCLUDE FINAL SYSTEM TESTING REQUIREMENTS	PROVIDED	DETAILS+SPCS
B-16	SCHEMATIC DESIGN TO DEFINE ZONES & PLANT TYPES	PROVIDED	SEE PLANS
B-17	RAN SENSOR SWITCH OR SOIL PROBE (sect. 373.62.63)	PROVIDED	DETAILS+SPCS
B-18	WELL BESSER SYSTEMS WITH MAIN LINES OVER 2" DIA.	PROVIDED	DETAILS+SPCS
B-19	WELL BESSER WIRING WITH PUMP CYCLE CONTROL	N.A.	N.A.
B-20	HEADS ON HIGH SLOPES WILL MATCHED CHECK VALVES	N.A.	N.A.
B-21	NOZZLE PRECIPITATION RATES MATCHED WITHIN ZONES	PROVIDED	DETAILS+SPCS
B-22	NO SMALL SPRAY UNDER POOL OVERHANGS.	N.A.	N.A.
B-23	APPLY SMALL AREA EMITTERS FOR AREAS UNDER 4 FT.	PROVIDED	SEE PLANS
B-24	PRESSURE REGULATING VALVES REQUIRED OVER 50 PSI	PROVIDED	SEE PLANS
C	REQUIREMENTS PROVIDED FOR END USER	--	--
C-1	IRRIGATION SCH. INFO, PROVIDED + INSTRUCTION	AT C.O.	AT C.O.
C-2	AS-BUILT PLANS TO BE PROVIDED TO END USER	AT C.O.	AT C.O.
C-3	OPERATION PROCEDURES FOR ESTABLISHMENT + REG. USE	AT C.O.	AT C.O.
C-4	EQUIPMENT MAINTENANCE GUIDE TO BE PROVIDED	AT C.O.	AT C.O.
C-5	WHERE POSSIBLE WANT. INFO TRANSFER TO NEXT OWNER	N.A.	N.A.
D	BACK FLOW PREVENTOR TO BE RECERTIFIED ANNUALLY	N.A.	N.A.

COORD. W/ LANDSCAPE CONTRACTOR AND ADJUST HEADS TO 1/2" BELOW MOWING HEIGHT.

POP-UP, GEAR DRIVEN ROTOR W/ NOZZLES SCHEDULED AS PER PLANS.

3/4" SPIRAL BARB FITTINGS W/ MALE NPL ENDS

24" MIN.

12" MIN. DEPTH

PVC SECTION LINE

SLIP X SLIP X 3/4" THREADED TEES

RAINBIRD SWING OR TORO FLEX MIN. 24" LENGTH

ALL HEADS LOCATED IN GRASSED AREAS OR ADJ. TO WALK

Diagram illustrating a drip irrigation system for pots and urns. The system consists of a vertical riser pipe (3/4" SCH. 80 PVC THREADED RISER) connected to a horizontal lateral pipe (PVC LATERAL). The riser pipe has a drip tube adapter fitted to its top, which connects to a drip tube. The lateral pipe has a section line dedicated to the drip irrigation system for pots and urns fed from drip tubes. The riser pipe is connected to the lateral pipe via a 3/4" TEE. The lateral pipe is shown below the finished grade.

Diagram illustrating a trenchless pipe replacement method. The diagram shows a cross-section of a roadway surface and the underlying ground. A typical existing pipe is shown, which is to remain undisturbed. Below it, a new pipe is installed using a jack & bore or directional boring method. The new pipe is labeled as SCH. 40 PVC PIPE SLEEVE. The diagram also shows the subgrade under the roadway and the existing pipe. A note indicates that the locations for any excavations or boring should be called for prior to any excavation or boring.

ROADWAY SURFACE

TYPICAL EXISTING PIPE TO REMAIN UNDISTURBED

SUBGRADE UNDER ROADWAY

JACK & BORED OR DIRECTIONAL BORING FOR IRRIGATION MAIN UNDER EXISTING ROADWAY

SCH. 40 PVC PIPE SLEEVE

SCH. 40 PVC PIPE SLEEVE

NOTE:  
CALL FOR LOCATIONS  
PRIOR TO ANY EXCAVATION  
OR BORING IN RIGHT-OF-WAY

Diagram illustrating the assembly of a locking valve for a PVC lateral line. The diagram shows a cross-section of the ground with a lateral line (PVC LATERAL) and a main line (PVC MAIN). The lateral line has threaded nipples on both ends. A locking valve assembly is installed on the lateral line, connected to the main line via PVC fittings. The assembly includes a locking valve box (locking valve box as per specifications, flush with final grade) and a control wire (control wire) connected to a common wire (COMMON WIRE) and a controller. The final grade is indicated, and the depth of the assembly is noted as 12" DEPTH. The lateral line is labeled as 1/2" DEPTH. The main line is labeled as 1/2" DEPTH. The assembly is labeled as NO MALE ADAPTERS USED WITH VALVE ASSEMBLY. The assembly is labeled as WIRE CONNECTORS. The assembly is labeled as WIRE TRACING FOIL TAPE ON TOP OF MAIN LARGER THAN 2". The assembly is labeled as PVC FITTINGS. The assembly is labeled as PVC MAIN. The assembly is labeled as PVC LATERAL. The assembly is labeled as LOCKING VALVE BOX AS PER SPECIFICATIONS, FLUSH WITH FINAL GRADE. The assembly is labeled as CONTROL WIRE. The assembly is labeled as COMMON WIRE BACK TO CONTROLLER.

SEE PLANS AND SPECS FOR NOZZLE SCHEDULES

COORD. W/ LANDSCAPE CONTRACTOR AND ADJUST HEADS TO MEET FINAL GRADE.

6" POP-UP BODIES IN TURF AREAS.

12" POP-UP BODIES IN SHRUB AREAS.

NO 4" BODIES ACCEPTED ON JOB

SST COUPLER

SPIRAL BARB FITTINGS

SWING PIPE

PVC SECTION LINE

12" MIN. DEPTH

ALL HEADS LOCATED IN GRASSED AREAS OR ADJACENT TO WALKS OR DRIVES SHALL BE MOUNTED WITH FLEXIBLE PIPE CONNECTIONS.

The diagram illustrates a trench cross-section. The trench has a width of 12 inches and a depth of 24 inches. The trench is filled with clean sand. A SCH. 40 PVC pipe sleeve is shown passing through the sand. An electrical conduit or direct burial wire is shown being installed under the main line for protection. The ground surface is labeled GRADE.

12"

24"

GRADE

CLEAN SAND FILL

SCH. 40 PVC PIPE SLEEVE

ELECT. CONDUIT OR DIRECT BURIAL WIRES TO BE INSTALLED UNDER THE MAIN LINE FOR PROTECTION.

NOTE:  
FLOOD SAND FILL INTO PLACE AND VIBRATE WITH CONCRETE VIBRATOR.

NOTE: SEE PIPE SLEEVING SCHEDULE FOR SLEEVE SIZES, FOR PIPE SIZES 2 1/2" AND OVER THERE SHOULD BE A 2" MINIMUM BETWEEN THE INSIDE WALL OF THE SLEEVE AND THE OUTSIDE WALL OF THE PIPE.

**PIPE SLEEVING SCHEDULE**

PIPE SIZE	SLEEVE SIZE
1"	2"
1 1/4"	2 1/2"
1 1/2"	3"
2"	4"
2 1/2"+	6"

SLEEVES THAT PROTECT TWO OR MORE LATERALS AND/OR MAINS IN THE SAME SLEEVE SHALL BE SIZED BY THE CONTRACTOR WITH THE SAME MINIMUM 2" CLEARANCE STANDARD FOR ALL PIPES.

MAIN LINE PIPE SHALL BE INSTALLED WITH A MINIMUM OF 18" OF COVER. NO ROCK SHALL BE IN CONTACT WITH PIPE.

MAIN LINE PIPE SHALL BE SCHEDULE 40 PVC PIPE ONLY, WITH SOLVENT WELDED FITTINGS, INSTALLED AS PER THE MANUFACTURERS RECOMMENDATIONS INCLUDING PIPE CLEANER AND SOLVENT WELDING.

ALL NEW CONSTRUCTED MAIN LINES MUST BE PRESSURE CHECKED PRIOR TO BACK FILLING. PRESSURE CHECKS SHALL INCLUDE INSTALLED VALVE ASSEMBLIES, WITH TEMPORARY CAPS TO CLOSE THE SYSTEM. PRESSURE SHALL BE BROUGHT UP TO 100 PSI WITH A PRESSURE GAUGE IN PLACE, AND LEFT AT THAT PRESSURE FOR 24 HOURS. ANY PRESSURE LOSS OF GREATER THAN 5 PSI IN 24 HOURS IS A FAILURE OF THE MAIN.

ANY LEAKS OR BREAKS IN THE MAIN SHALL BE LOCATED AND REPAIRED, THEN THE MAIN LINE SHALL BE RETESTED BY THE SAME PROCEDURE, FOR FINAL APPROVAL AND ACCEPTANCE.

PIPES ARE SIZED SPECIFICALLY TO ANTICIPATE THE USE OF THE APPROPRIATE NOZZLE REQUIRED FOR ADEQUATE COVERAGE WITHOUT OVSERSPRAY. THE PIPE SIZE IS DESIGNED WITH A REASONABLE MINIMUM CUSHION IN THE LINE SIZE THAT WILL ALLOW THE OWNER THE LATITUDE TO EFFECT NORMAL REPAIRS AND CHANGES OVER COMING YEARS. DO NOT REDUCE THE LINE SIZES FROM THE SCHEDULE SHOWN.

NO PVC PIPE AND FITTINGS, SMALLER THAN 3/4" PIPE SHALL BE REMOVED, EXCEPT FOR SWING JOINTS. FITTERS TO FLEX PIPE, REMOVED SECTION OF PIPE SHALL BE STANDARD INDUSTRY PIPE SIZES 3/4", 1", 1 1/2", 2", 2 1/2", 3", AND 4" PIPE, WITH APPROPRIATE NEW SCH. 40 PVC/FITTINGS FOR SOLVENT WELDED ASSEMBLY USING CLEANERS/PRIMERS.

IT IS THE INTENT OF THE LANDSCAPE ARCHITECT / DESIGNER TO PROVIDE A SCHEMATIC DRAWING DEMONSTRATING THE RECOMMENDED PIPING LAYOUT. THE CONTRACTOR SHALL CONFORM TO THAT PLAN DIAGRAM WHEREVER POSSIBLE, WHEN A CHANGE IN THE LAYOUT IS DEEMED NECESSARY DUE TO A CONFLICTS, ADJUST PIPE AS NEEDED AND PROVIDE AS-BUILT DATA.

CONTRACTORS SHALL EMPLOY THE FULL SPECTRUM OF NOZZLE PATTERNS AVAILABLE FROM THE MANUFACTURER TO PROVIDE THE CORRECT NOZZLES TO COVER THE LANDSCAPE AREAS AND AVOID OVSERPAY ONTO PAVED AREAS, THIS WOULD INCLUDE BUT NOT BE LIMITED TO, ADJUSTABLE ARC NOZZLES, CENTER STRIP, END STRIP & SIDE STRIP NOZZLES, AND OTHER BASIC NOZZLES DESIGNED TO CONTROL OVSERPAY ONTO AREAS NOT INTENDED TO GET WET OR REQUIRED COVERAGE. THE USE OF THESE NOZZLE TYPES IS IMPLIED AS PART OF THE BASE BID PRICE AND REPRESENTS A SYSTEM INSTALLATION THAT IS STANDARD TO THE INDUSTRY AND REQUIRED BY LOCAL CODES FOR WATER CONSERVATION AND SAFETY PROTECTION AGAINST WET SURFACES, SLIP & FALL SITUATIONS OR SKID ACCIDENT.

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