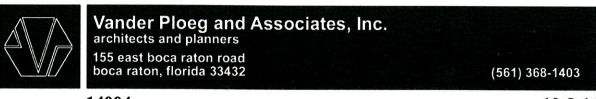
# Stirling Marina & Boat Sales Dania Beach, Florida







RENDERED VIEW FROM SOUTHWEST CORNER



# LIST OF DRAWINGS

NO.	DRAWING TITLE
	LOCATION SKETCH/TREE TABLE/PROFILE DETAILS/LEGEND
	LAND AND TOPOGRAPHIC SURVEY
	TREE SURVEY
DRA	WING LIST - ARCHITECTURAL
NO.	DRAWING TITLE
CS1	COVER SHEET - DRAWING LIST
SP1	PARTIAL SITE PLAN — SOUTH
SP2	PARTIAL SITE PLAN - NORTH/SITE DETAILS
SP3	SITE DETAILS
	FIRST AND SECOND FLOOR PLANS
A1 A2	ROOF PLAN
A2 A3	ROOF PLAN EXTERIOR ELEVATIONS
A2 A3 A4	ROOF PLAN EXTERIOR ELEVATIONS EXTERIOR ELEVATIONS
A2 A3 A4 A5	ROOF PLAN EXTERIOR ELEVATIONS EXTERIOR ELEVATIONS BUILDING SECTIONS
A2 A3 A4	ROOF PLAN EXTERIOR ELEVATIONS EXTERIOR ELEVATIONS

NO.	DRAWING TITLE				
0-1	LAYOUT PLAN				
0-2	PAVING-GRADING-DRAWING PLAN				
0-3	SITE DETAILS				
C-4 DRAINAGE DETAILS					
C-5	WATER & SEWER NOTES				
C-6	WATER & SEWER PLAN				

DRA	WING LIST - LANDSCAPE
NO.	DRAWING TITLE
TR-1	TREE REMOVAL PLAN
LP-1	LANDSCAPE PLAN SOUTH
LP-2	LANDSCAPE PLAN NORTH
LP-3	LANDSCAPE SPECIFICATIONS
LP-4	LANDSCAPE AREA REQUIREMENTS
IR-1	IRRIGATION PLAN
IR-2	IRRIGATION SPECIFICATIONS

# STIRLING MARINA AND BOAT SALES

COMM. NO. 14004

DEVELOPED BY: PROJECT USA, L.L.C. 3405 NORTH OCEAN DRIVE HOLLYWOOD, FLORIDA 33019-3805 (305) 510-1418; Fax (786) 351-5912

# ADDRESS: 150 SOUTH BRYAN ROAD DANIA BEACH, FLORIDA

Consulting Engineering & Science Civil/Coastal Engineers

10700 N. Kendall Drive, Suite 400 Miami, Florida 33176 (305) 378-5555; Fax (305) 279-4553 A. Grant Thornbrough and Associates Landscape Architects

132 N. Swinton Avenue Delray Beach, Florida 33444 (561) 276-5050; Fax (561) 276-8777 Vander Ploeg and Associates, Inc. Architects and Planners

155 East Boca Raton Road Boca Raton, Florida 33432 (561) 368-1403; Fax (561) 750-8051 JMD Engineering, Inc. Traffic Engineer

12773 Forest Hill Boulevard, Suite 204 Wellington, Florida 33424 (561) 383-5595; Fax (561) 383-5596 DRC SUBMISSION DATE: 7-2-14

FINAL DRC SUBMISSION DATE: 8-6-14

COUNCIL SUBMISSION DATE: 9-8-14

COUNCIL SUBMISSION REV: 10-8-14

Professional Surveyors, Inc. Land Surveyor

7744 Taft Street Pembroke Pines, Florida 33024 (954) 241-3000

L'33020 PHONE (954) 241-30 BEACH, FLORIDA. 33004

TRACT "A", OF "SYMONS PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 82, PAGE 49, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, LESS AND EXCEPT THE FOLLOWING DESCRIBED PARCEL:

BEGINNING AT THE SOUTHEAST CORNER OF SAID TRACT "A", THENCE SOUTH 87°55'33" WEST ON AN ASSUMED BEARING ALONG THE SOUTH LINE OF SAID TRACT "A", A DISTANCE OF 14.00 FEET; THENCE NORTH 21°13'59" EAST, A DISTANCE OF 35.39 FEET TO THE EAST LINE OF SAID TRACT "A"; THENCE SOUTH 02°04'22" EAST ALONG SAID EAST LINE, A DISTANCE OF 32.50 FEET TO THE POINT OF BEGINNING.

CONTAINING 83,163.7 SQUARE FEET, 1.91 ACRES, MORE OR LESS.

TABLE

TREE

CERTIFIED TO: \* PROJECT USA, L.L.C.

E. 05-1511B-D F. ALTA R. PROJECT USA, LLC. E. 06-24-2014 SHEET 1 OF 2 NOTALID WITHOUT MAP/PANEL NUMBER:

FLOOD ZONE: AE 7' --

# "ALTA/ACSM LAND TITLE SURVEY

- DE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES COMPLETED ON 06-24-2014.

- SIGNAL SURVEYORS, INC. OR THE SIGNING SURVEYOR WHEN COPIED BY OTHERS.

  HERWISE SHOWN HEREON, THE FOLLOWING NOTES APPLY:

  HERWISE SHOWN HEREON, THE SIGNING SURVEYOR WHEN COPIED BY OTHERS.

  HERWISE SHOWN HEREON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DEI WENTS FOR ALTAACSM LAND TITLE SURVEY'S, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCL.

  3.4.5.7.114.71 AND 22 OF TABLE A.THE FIELD WORK WAS COMPLETED ON 06-24-2014.

  WIND MEASURED CALLS ARE IN SUBSTANTIAL AGREEMENT AND POINTS ARE WITHIN 0.1' POSITIONAL TOLERANCE.

  SIS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS OR OTHER RECORDED ENCUMBRANCES NOT NOT THE PLAT AND THE SAME, IF ANY, MAY NOT BE SHOWN ON THIS SKETCH.

  OUND PORTIONS OF FOOTINGS, FOUNDATIONS OR OTHER IMPROVEMENTS WERE NOT LOCATED.

  NS ARE DATE FACE OF THE WALL. AND FENCE TIES ARE TO THE CENTERLINE OF THE FENCE OF THE WALL.

  SENSHIP OF FENCES, IF ANY, IS NOT DETERMINED BY THIS SKETCH.

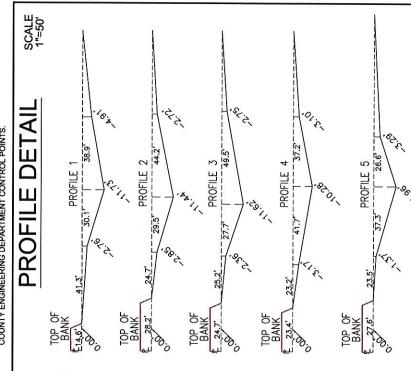
  E BROKEN AND DETERMORATED ASPHALT PATCHES IN VERY POOR CONDITION THROUGHOUT CERTAIN

  E BROKEN AND DETERMORATED ASPHALT PATCHES IN VERY POOR CONDITION THROUGHOUT CERTAIN

  FREE OF THIS PARCEL THAT ARE NOT SHOWN.

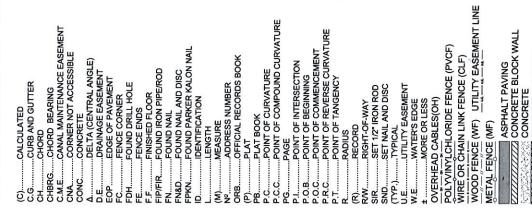
  E BROKEN AND DETERMINED BY THE EXCLUSIVE PURPOSE FOR USE AS AN ADI IN OBTAINING A PERMIT FREON DESCRIBED PROPERTY. NO ADDITIONAL WARRANTIES ARE HEREBY EXTENDED AND THIS SKETCH MAY END ON SCAULES.

  FER ON DESCRIBED PROPERTY. NO ADDITIONAL WARRANTIES ARE HEREBY EXTENDED AND THIS SKETCH MAY END ON BROWARD OFFICEN HAT ARE ADULISTMENT OF 1990 (NAD 83/90) AND ARE BASED ON BROWARD PROMINES.



# LOCATION SKETCH

# LEGEND & ABBREVIATIONS



NOT TO SCALE

NW 13th Ct NW 14th CI

CUTILITY POLE (UP)
CUTILITY POLE (UP)
CUTILITY POLE (UP)
CUTILITY ANCHOR
CUTILITY ANCHOR
CONCRETE PARKING (HCF
CONCRETE PARKING STC
CONCRETE PARKING STC
CONCRETE PARKING STC
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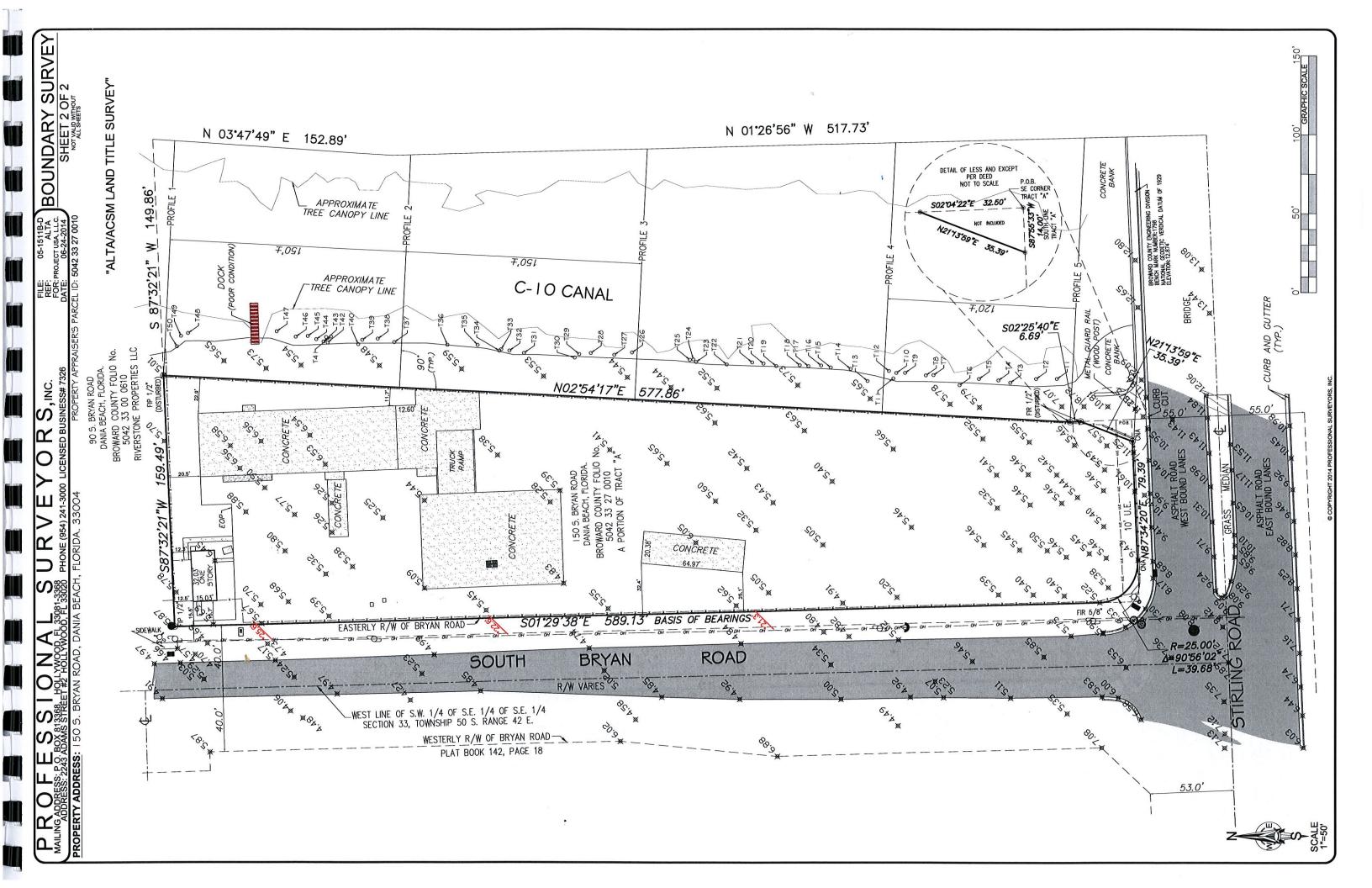
LINDICATES DIMENSION

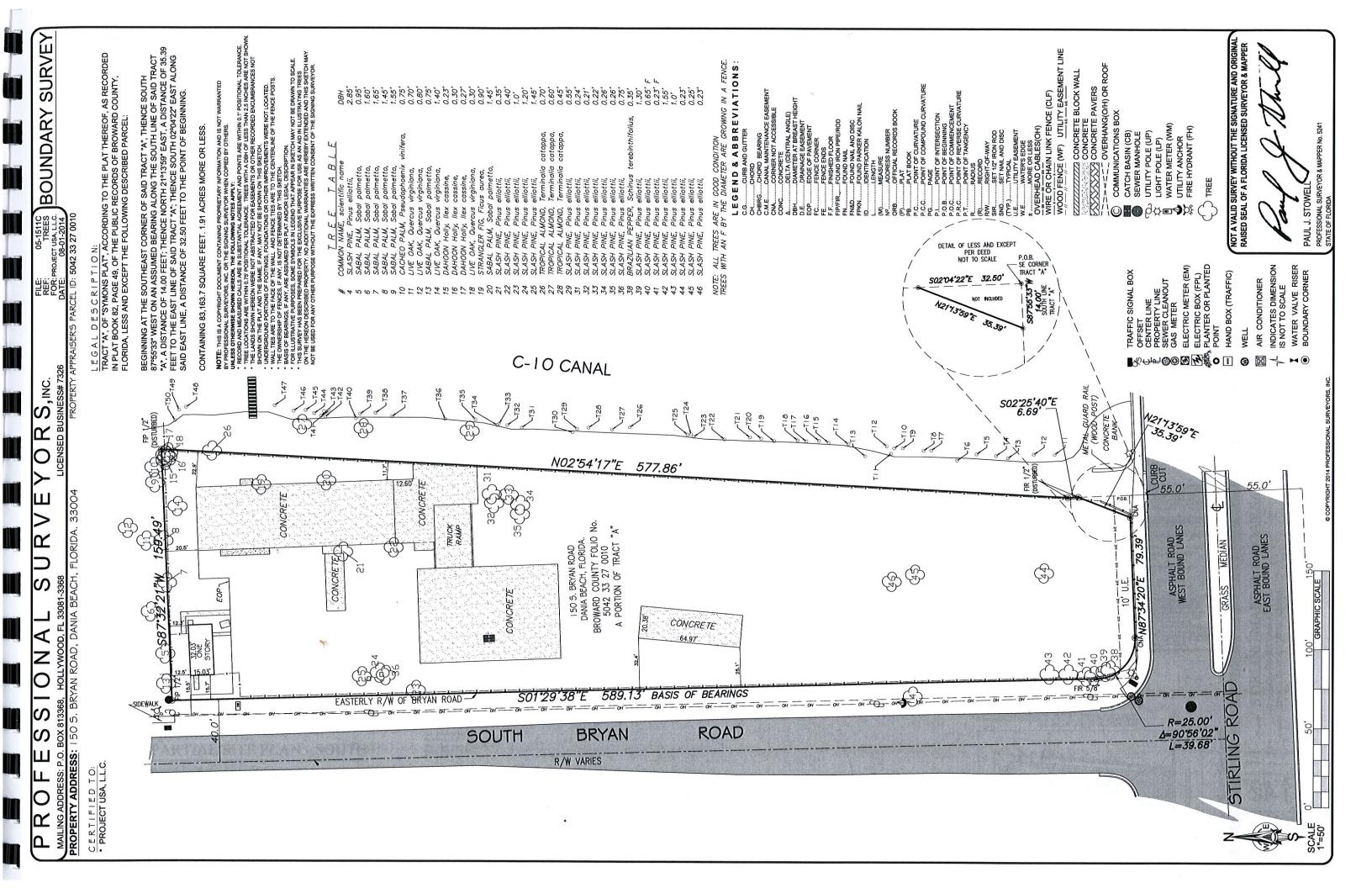
IS NOT TO SCALE

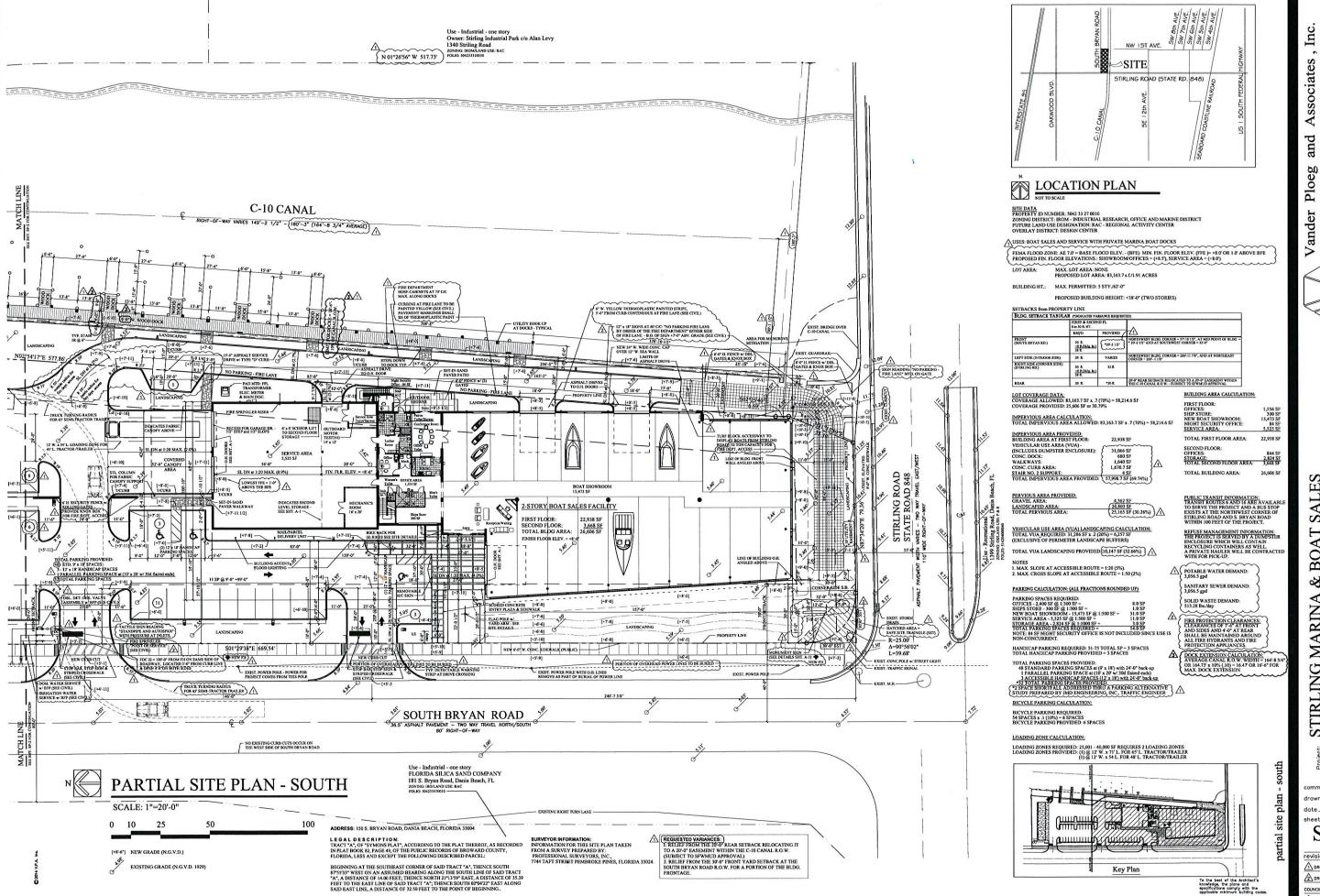
T WATER VALVE RISER

BOUNDARY CORNER

ELEVATION OVERHEAD C







SALES & BOAT

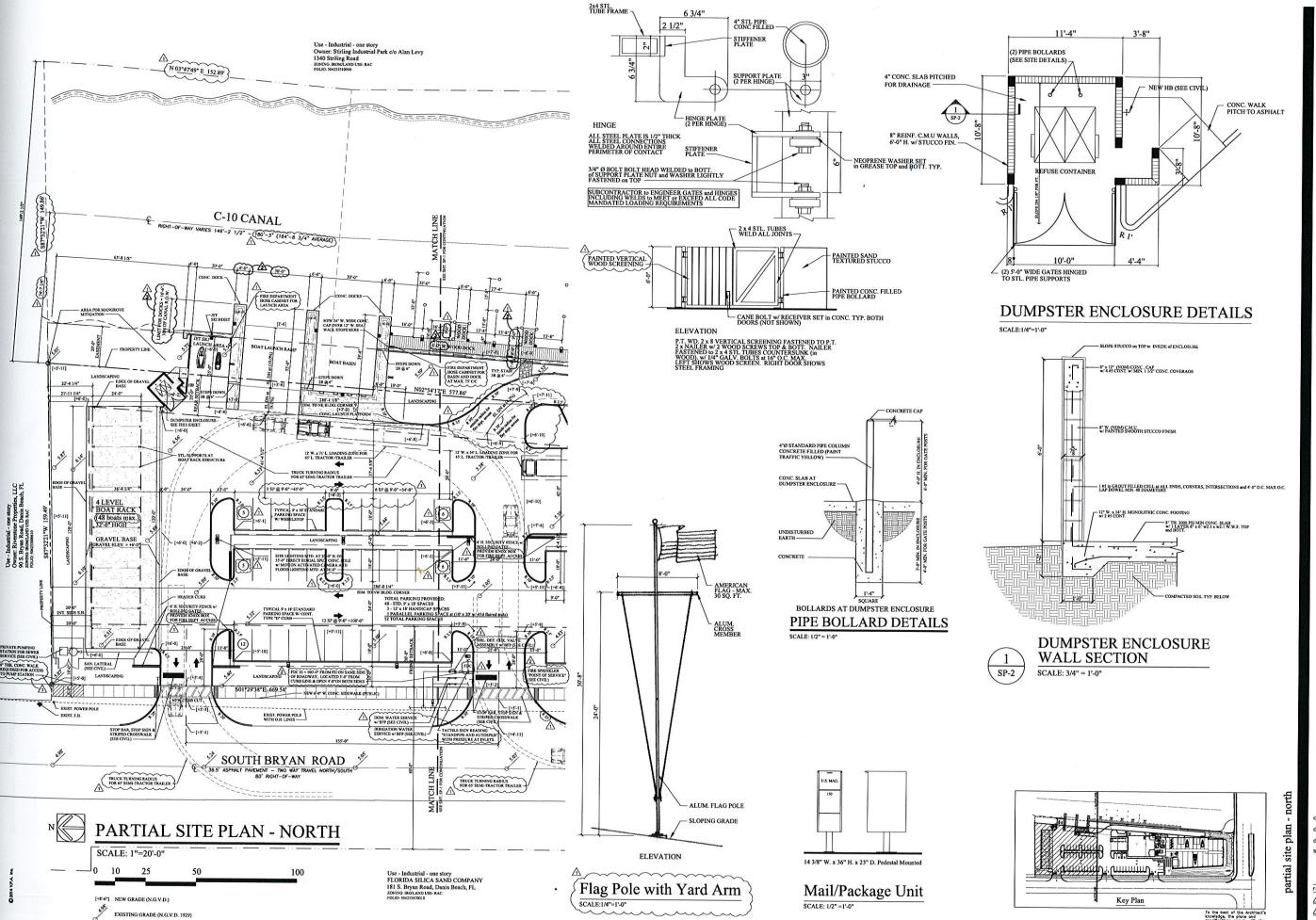
STIRLING MARINA
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004

architects and planners 155 east boca raton road boca raton, florida 33432

7/2/14 DRC ISSUE

SP. revision 1 DRC REV.: 8/6/14

2 DRC REV.: 8/28/14 COUNCIL SUBMISSION: 9/8/14



T SALES

(561) 368-1403 PH (561) 750-8051 FAX

ott. STIRLING MARINA & BC 150 SOUTH BRYAN ROAD 150 SANIA BEACH, FLORIDA 33004

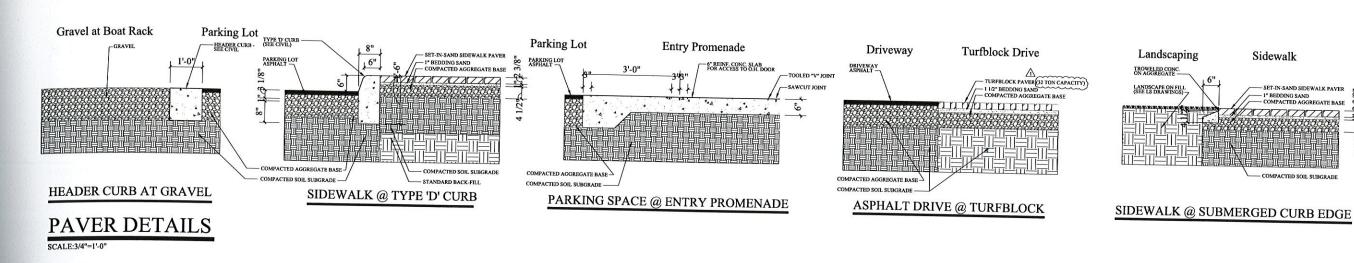
SP-2

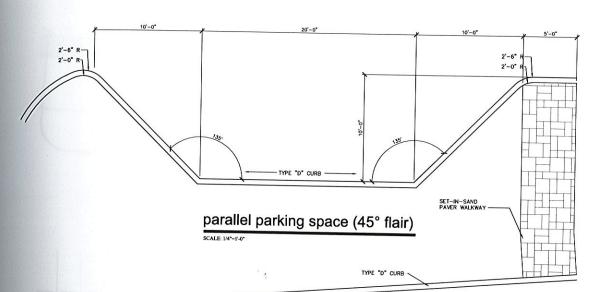
revision

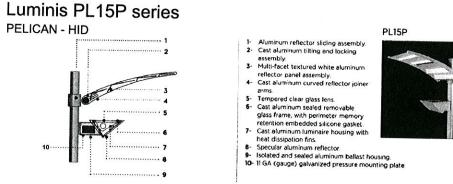
A DRC REV: 8/6/14

DRC REV: 8/28/14

COUNCIL SUBMISSION: 9/8/14

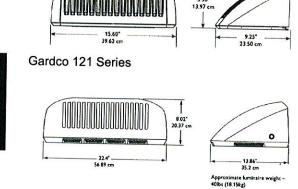








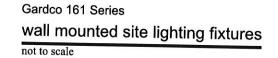


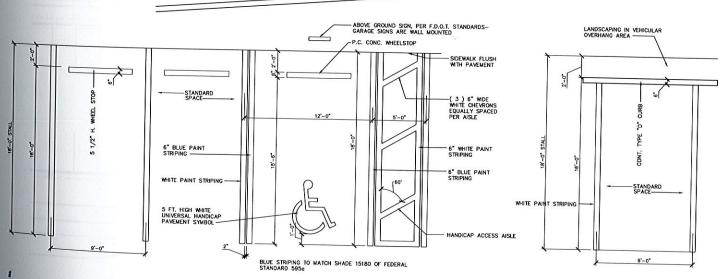


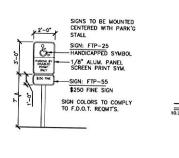
Sidewalk

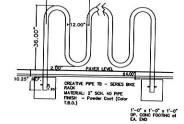
SET-IN-SAND SIDEWALK PAVER

COMPACTED SOIL SUBGRADE









bicycle parking detail

h/c park'g sign detail

typical parking space with wheelstop

typical h/c parking space

24" landscaped o.h.

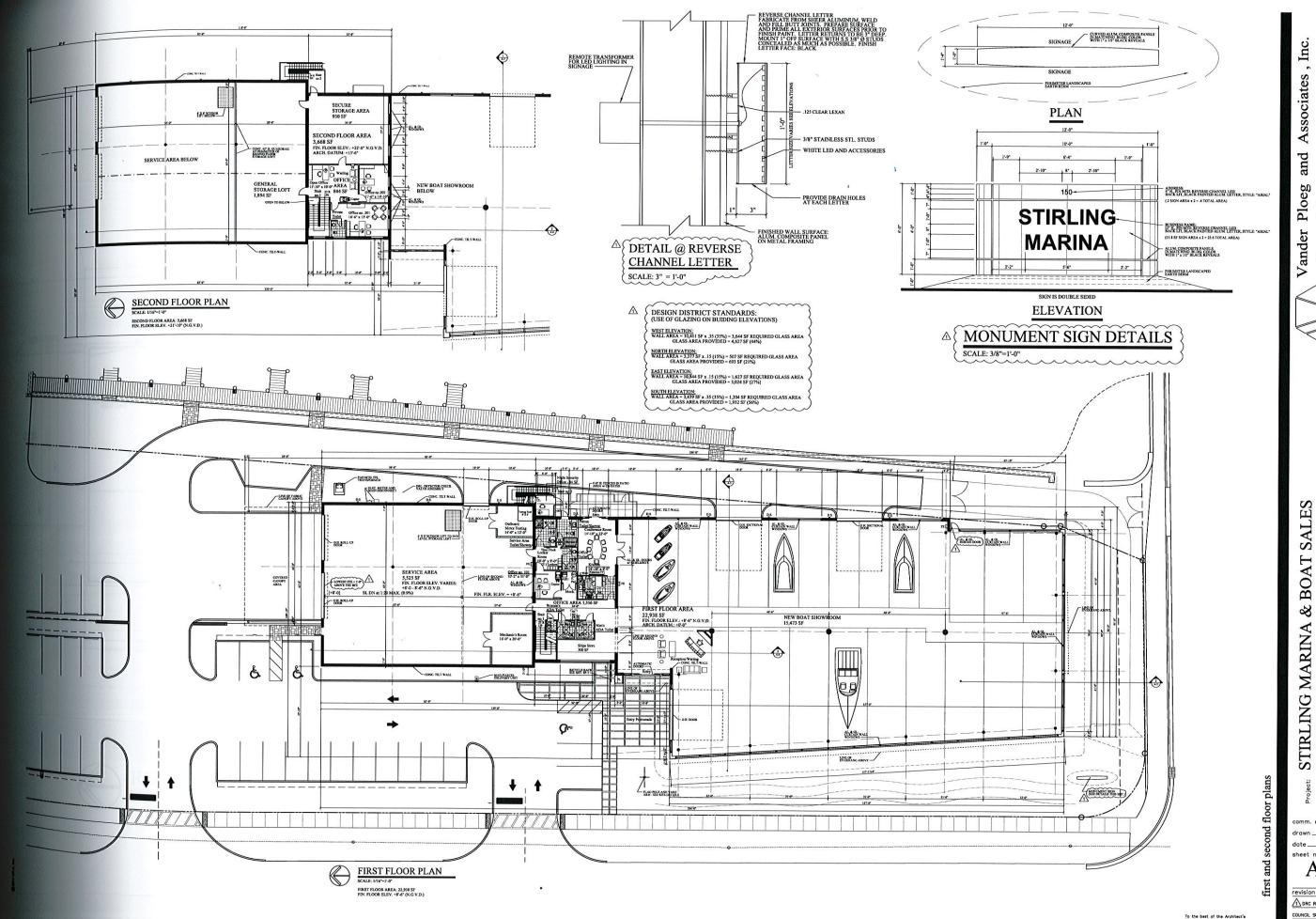
typical parking space w/

STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004 PROJECT USA, LLC 3405 NORTH OCEAN DRIVE HOLLYWOOD, FLORIDA 3301 7/2/14 DRC ISSUE

Associates, Inc.

Vander Ploeg

DRC REV.: 8/6/14

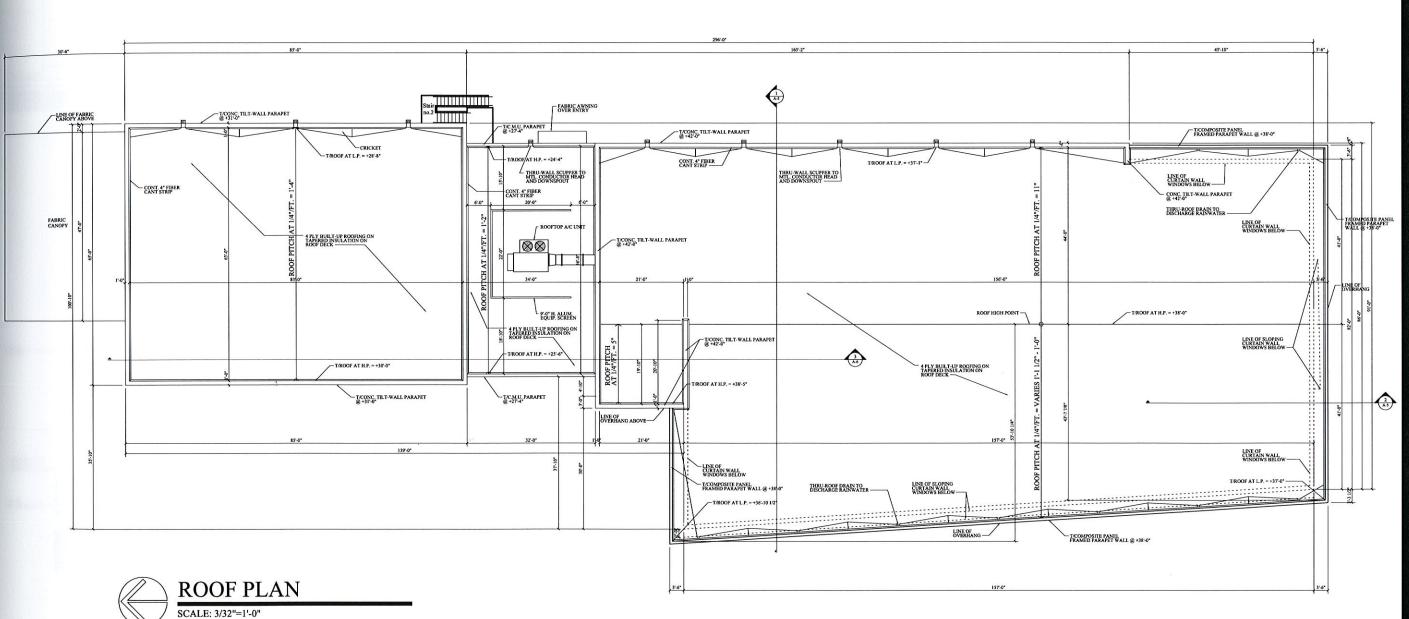


STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004

(561) 368-1403 PH (561) 750-8051 FAX

architects and planners 155 east boca raton road boca raton, florida 33432

PROJECT USA, LLC 3405 NORTH OCEAN DRIVE HOLLYWOOD, FLORIDA 33019 7/2/14 DRC ISSUE



Vander Ploeg and Associates, Inc. architects and planners
155 east boea raton road (561) 368-1403 PH boea raton, florida 33432 (561) 750-8031 FAX

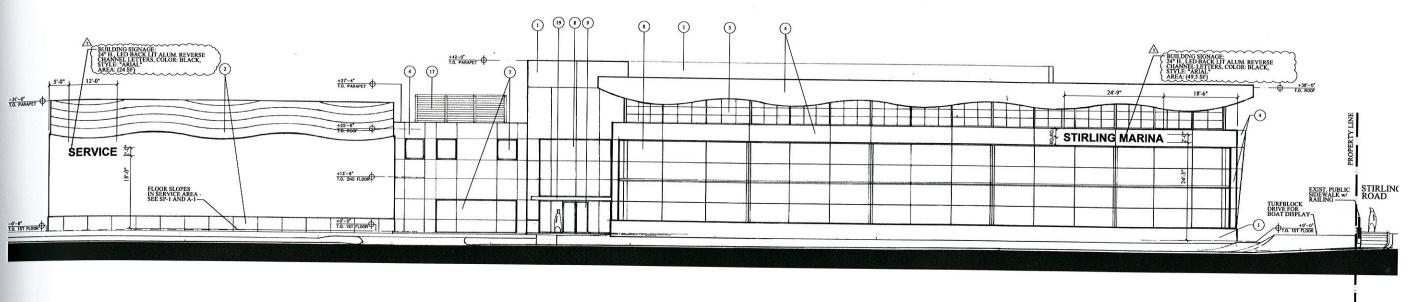
STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004

PROJECT USA, LLC 3405 NORTH OCEAN DRIVE HOLLYWOOD, FLORIDA 33019

7/2/14

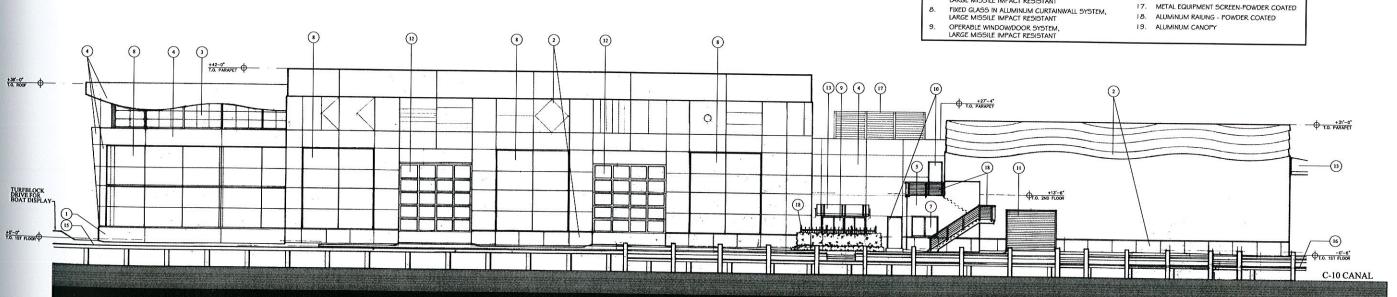
DRC ISSUE

To the best of the Architect's knowledge, the plans and specifications comply with the applicable minimum building coder



# **WEST ELEVATION**

SCALE = 3/32" =1'-0"



# **EAST ELEVATION**

SCALE = 3/32" =1'-0"

**FINISH LEGEND** 

CONCRETE TILT WALL - PAINTED PATTERNED TILT WALL - PAINTED KALWALL TRANSLUCENT PANELS

ALUMINUM COMPOSITE PANELS 5/8" STUCCO ON C.M.U.

STUCCO REVEAL - I WIDE x 5/8" DEEP FIXED GLASS IN ALUMINUM WINDOW SYSTEM, LARGE MISSILE IMPACT RESISTANT

16. WOOD DOCK WITH PILING SUPPORTS

10. HOLLOW METAL DOOR ROLL-UP GARAGE DOOR

15. CONC. SEAWALL

12. SECTIONAL GARAGE DOOR
13. FABRIC AWNING ON ALUM. PIPE FRAMING

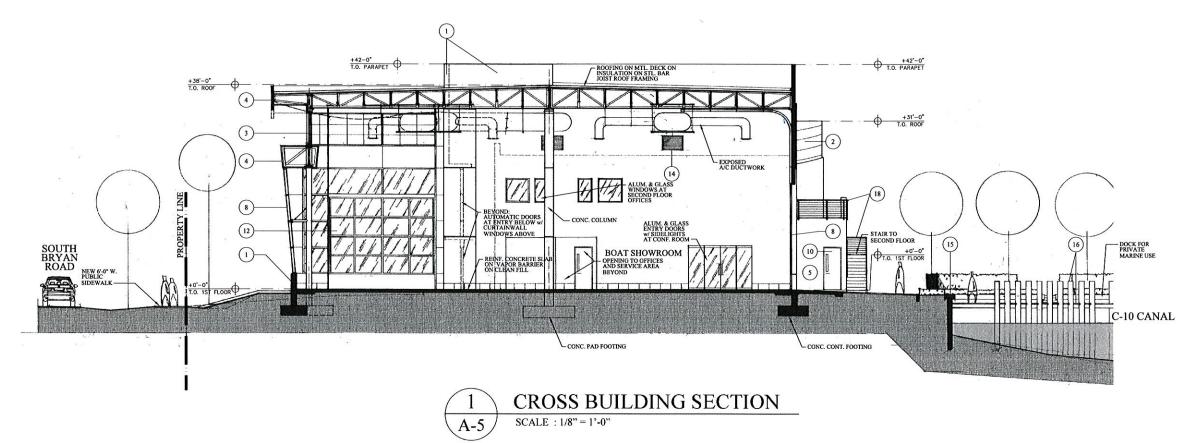
14. ALUMINUM LOUVER W/ POWDER COAT FINISH

Vander Ploeg and Associates, Inc.

STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004

7/2/14

1 DRC REV.: 8/6/14





- CONCRETE TILT WALL PAINTED

  PATTENED TILT WALL PAINTED

  KAWALL TRANSLUCENT PANELS

  ALUMINUM COMPOSITE PANELS

  5/8' STUCCO ON C.M.U.

  STUCCO REVEAL I' WIDE x 5/8' DEEP

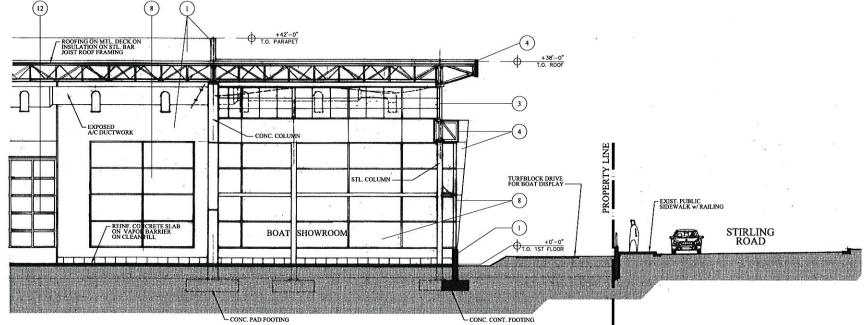
  FRED GLASS IN ALUMINUM WINDOW SYSTEM,

  LAGE MISSILE IMPACT RESISTANT

  DED GLASS IN ALUMINUM CURTAINWALL SYSTEM,

  LAGE MISSILE IMPACT RESISTANT

  OPERALE WINDOWDOOR SYSTEM. OPERABLE WINDOW/DOOR SYSTEM, LARGE MISSILE IMPACT RESISTANT
- 10. HOLLOW METAL DOOR
- ROLL-UP GARAGE DOOR SECTIONAL GARAGE DOOR
- FABRIC AWNING ON ALUM. PIPE FRAMING
- ALUMINUM LOUVER W/ POWDER COAT FINISH
- 15. CONC. SEAWALL 16. WOOD DOCK WITH PILING SUPPORTS
- 17. METAL EQUIPMENT SCREEN-POWDER COATED 18. ALUMINUM RAILING - POWDER COATED
- 19. ALUMINUM CANOPY



PARTIAL SECTION- SHOWROOM SOUTH WALL

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

7/2/14

STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004

(561) 368-1403 PH (561) 750-8051 FAX

Vander Ploeg

# **FINISH LEGEND**

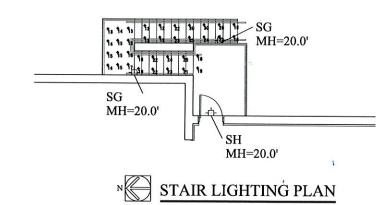
- CONCRETE TILT WALL PAINTED PATTERNED TILT WALL PAINTED
- KALWALL TRANSLUCENT PANELS
- ALUMINUM COMPOSITE PANELS
- 5/8" STUCCO ON C.M.U.
- STUCCO REVEAL I' WIDE x 5/8" DEEP FIXED GLASS IN ALUMINUM WINDOW SYSTEM LARGE MISSILE IMPACT RESISTANT
- FIXED GLASS IN ALUMINUM CURTAINWALL SYSTEM, LARGE MISSILE IMPACT RESISTANT
- OPERABLE WINDOW/DOOR SYSTEM, LARGE MISSILE IMPACT RESISTANT
- HOLLOW METAL DOOR
   ROLL-UP GARAGE DOOR
- SECTIONAL GARAGE DOOR
- FABRIC AWNING ON ALUM. PIPE FRAMING
- 14. ALUMINUM LOUVER W/ POWDER COAT FINISH
- 15. CONC. SEAWALL
- 16. WOOD DOCK WITH PILING SUPPORTS
- 17. METAL EQUIPMENT SCREEN-POWDER COATED 18. ALUMINUM RAILING - POWDER COATED
- 19. ALUMINUM CANOPY

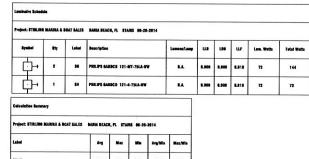
# PARTIAL LONGITUDINAL BUILDING SECTION

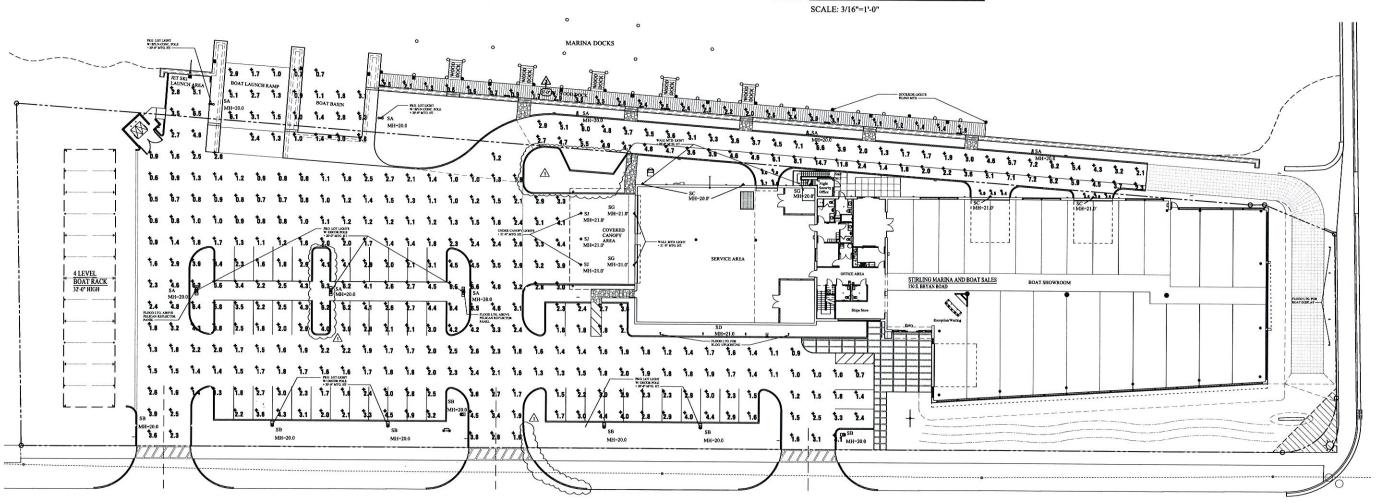
SCALE : 1/8" = 1'-0

Vander Ploeg

STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004









# SITE LIGHTING PLAN

SCALE: 1"=20'-0"

missirs Educate										
Project: STIRLING	MARINA &	BOAT BALES	BANIA BEACH, FL 80-20-2014						-2727	
Symbol	Qty	Label	Description		Lumens/Lump	ш	LDO	w	Lon. Watts	Total Wat
<del>-000-</del>		su.	LUMINIS PL10-P150NT	POLE MOUNT: 20 - 0" AFG	22000	0.850	8.900	0.768	185	1888
<b>₹</b>	10	н	LUMINIS PLIS-PISORT	POLE MOUNT: 20 - 6" AFG	22900	0.850	B.900	8.765	185	1850
ф+	4	sc	PHILIPS EARSCO 161-CWL-4-178(A-8653-EW	WALL MODET		0.900	E.904	6.810	154	632
ф	1		PHILIPS BARDCO 121-3-75LA-WW	WALL MOUNT	ш	0.900	0.900	LIII	n	72
ф+	4	14	PHILIPS BARBOO 121-EF2-MT-50LA-2-3253-MW	WALL MODET	ш	0.900	6.900	6.810	n	255
ф	1	\$H	PHILIPS GARDOO 121-EP2-4-50LA-2-3253-EW	WALL MODET	ш	8.900	8.500	6.810	n	72
ιф,		n n	PHILIPS GARDED 83-18-2-106LA-221A-WW	STEM MOUNT: 21'- P' AFG	BA.	0.900	8.900	0.810	106	318

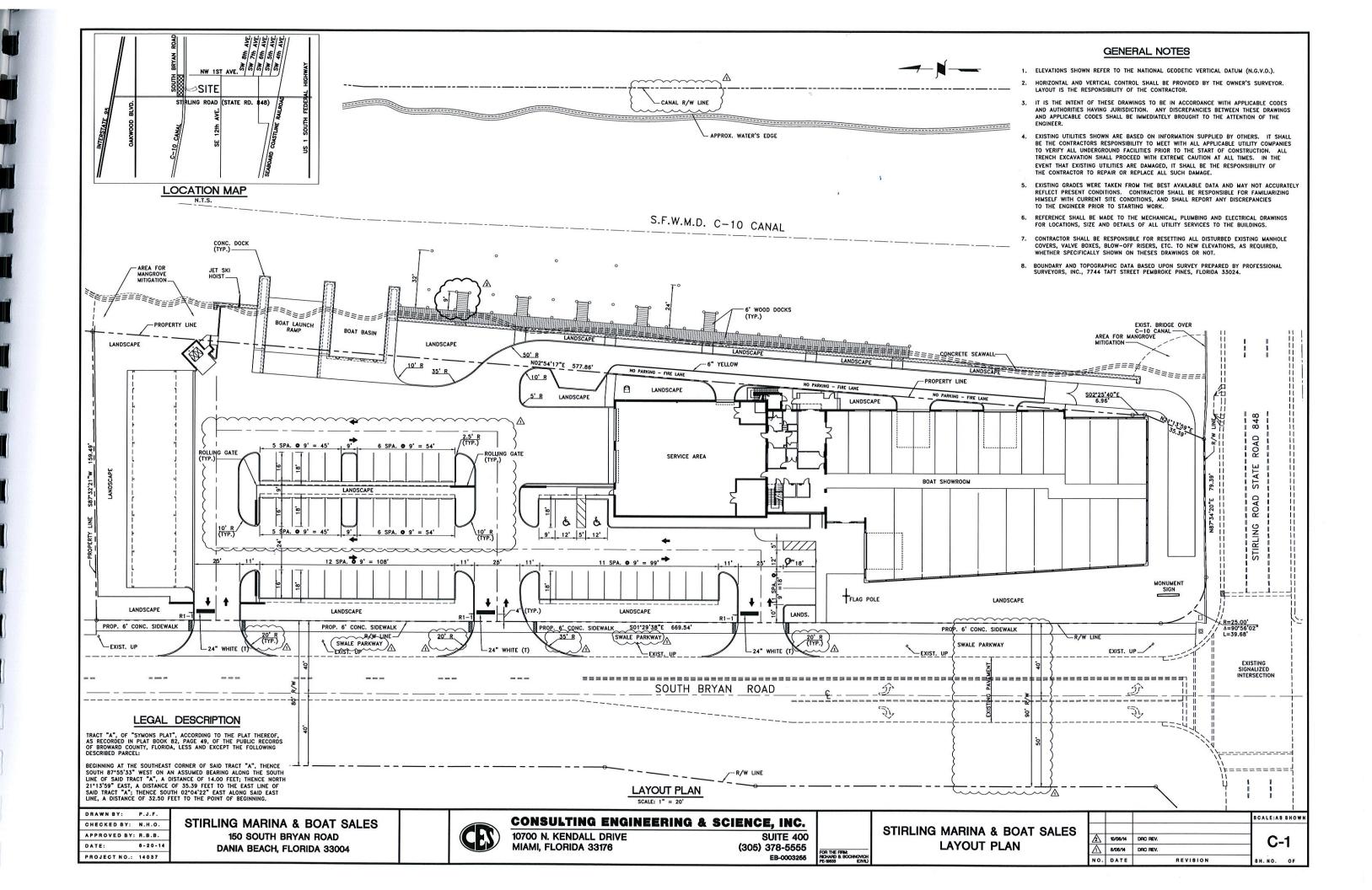
Calculation Summary					
Project STIRLING MARINA & BOAT SALI	ES BANKA BEA	CH, FL B	I-20-2014		
Label	Arg	Max.	Me	Avy/Min	Max/Min
BOAT TAMP AND JET SEI_Placer	2.36	6.1	0.7	3.37	8.71
BOCE	2.10	1.9	0.6	1.50	E.50
PARIONG LOT	2.41	8.4	0.5	4.82	13.20
EAST BRIVE	4.41	14.7	1.3	1.45	11.31

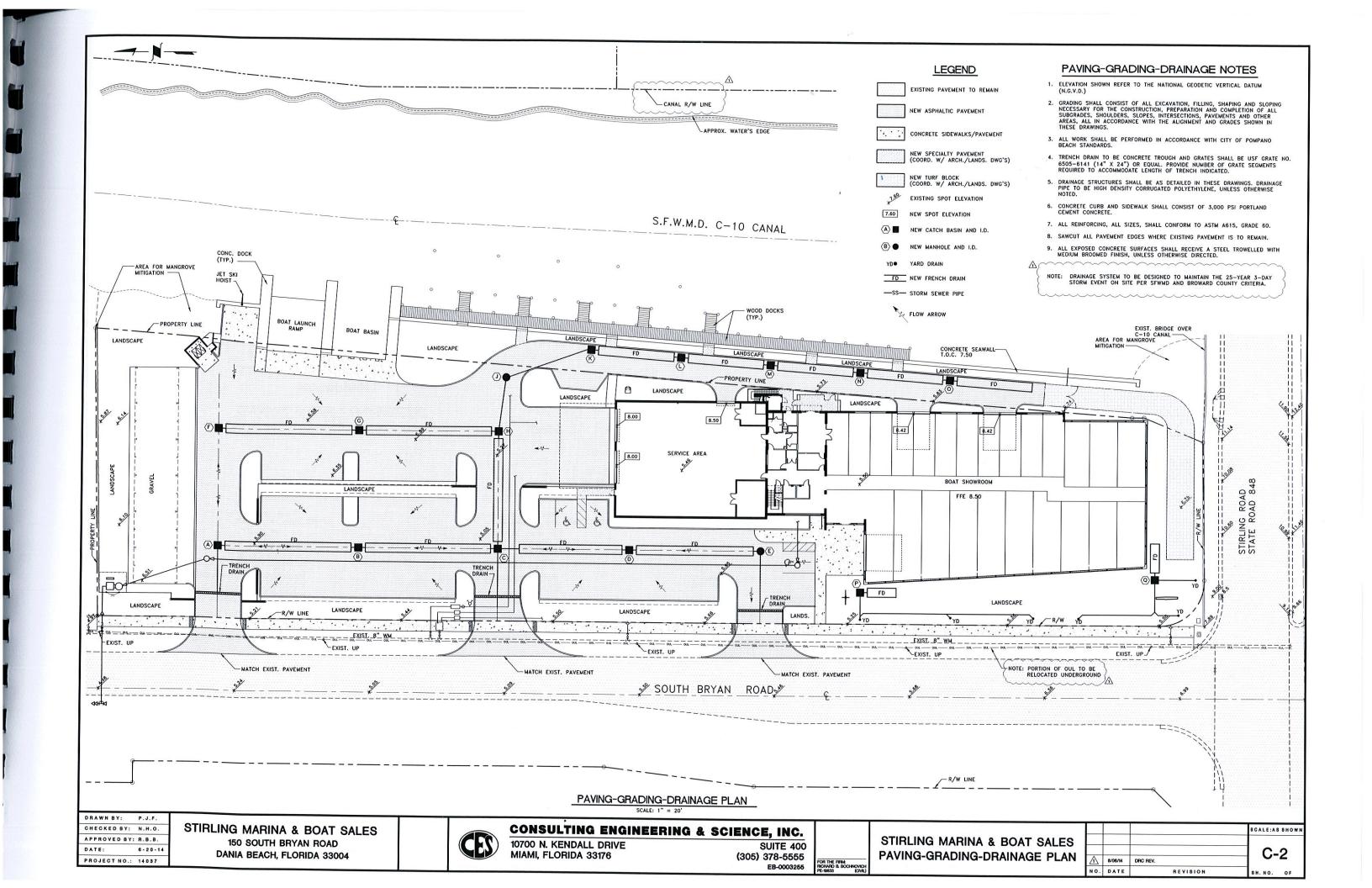
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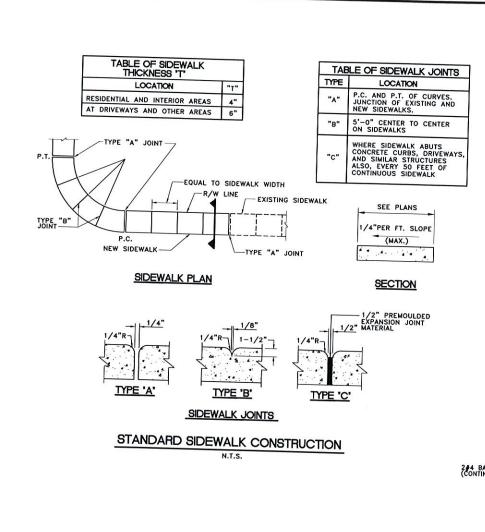
STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004

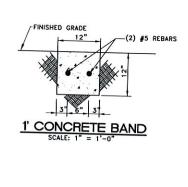
Vander Ploeg and Associates, Inc.

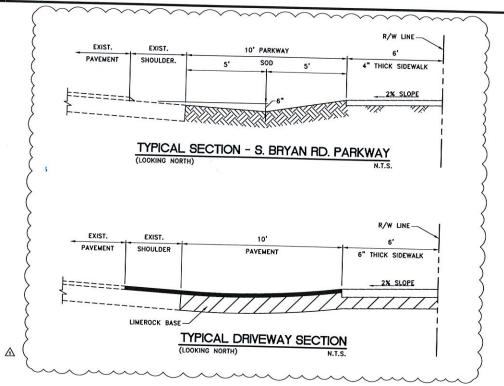
SLP1

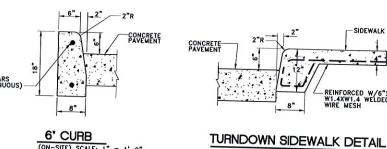




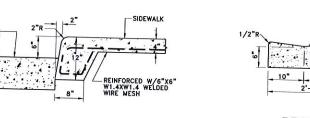


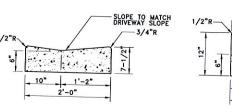


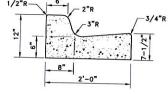




(ON-SITE) SCALE: 1" = 1'-0"

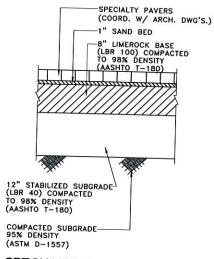


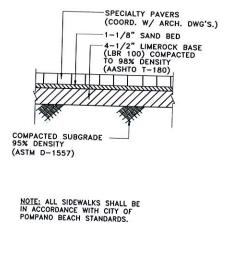


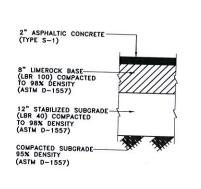


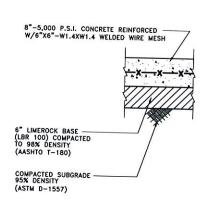
DROP CURB IN PUBLIC R/W

TYPE 'F' CURB AND GUTTER IN PUBLIC R/W









CONCRETE PAVEMENT

SPECIALTY PA	۷E	M	IENT	SECTION	
SCALE:	1"	=	1'-0"		

PAVER SIDEWALK SECTION

ASPHALTIC PAVEMENT SCALE: 1" = 1'-0"

DRAWN BY: P.J.F. CHECKED BY: N.H.O. APPROVED BY: R.B.B. DATE: 8-20-14

PROJECT NO.: 14087

STIRLING MARINA & BOAT SALES 150 SOUTH BRYAN ROAD DANIA BEACH, FLORIDA 33004



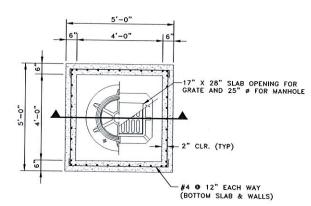
# CONSULTING ENGINEERING & SCIENCE, INC.

10700 N. KENDALL DRIVE MIAMI, FLORIDA 33176

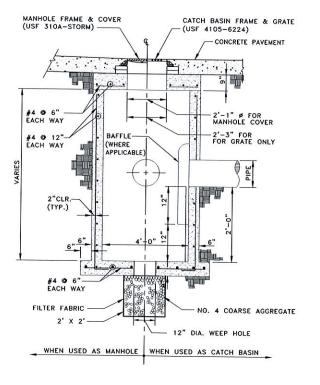
SUITE 400 (305) 378-5555 EB-0003255

STIRLING MARINA & BOAT SALES SITE DETAILS

			SCALE: AS SHOWN
			C-3
1	8/06/14	DRC REV.	0-0
NO.	DATE	REVISION	8 H. NO. OF

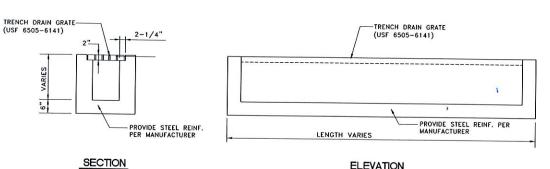


### <u>PLAN</u>



SECTION

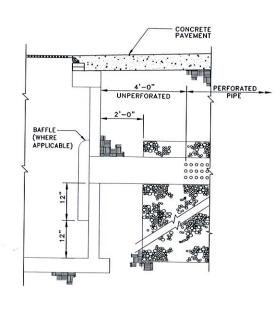
CATCH BASIN/MANHOLE DETAIL

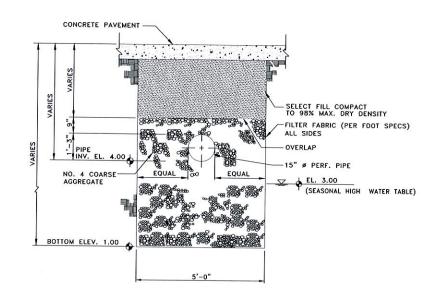


**ELEVATION** 

TRENCH DRAIN DETAIL SCALE: 3/4" = 1'-0"

NOTE: CONTRACTOR SHALL SUBMIT TRENCH DRAIN SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO ORDERING TRENCH DRAIN.





- 1. PROVIDE BAFFLE WHEREVER PIPE ENTERS FRENCH DRAIN.
- BAFFLE SHALL BE TYPE S-15 HYDRO-BAFFLE AS MANUFACTURED BY GEOTECHNICAL MARINE CORP. OR APPROVED EQUAL.

FRENCH DRAIN CONNECTION DETAIL

SCALE: 1/2" = 1'-0"

FRENCH DRAIN SECTION
SCALE: 1/2" = 1'-0"

LAYOUT PLAN SCALE: 1" = 20'

DRAWN BY:	P.J.F.
CHECKED BY:	N.H.O.
APPROVED BY:	R.B.B.
DATE:	6 - 2 0 - 14
PROJECT NO :	14037

STIRLING MARINA & BOAT SALES 150 SOUTH BRYAN ROAD DANIA BEACH, FLORIDA 33004



# CONSULTING ENGINEERING & SCIENCE, INC.

10700 N. KENDALL DRIVE MIAMI, FLORIDA 33176

SUITE 400 (305) 378-5555 EB-0003255

STIRLING MARINA & BOAT SALES **DRAINAGE DETAILS** 

				SCALE: AS SHOWN
;				C-4
	NO.	DATE	REVISION	8 H. NO. OF

### WATER AND SEWER NOTES

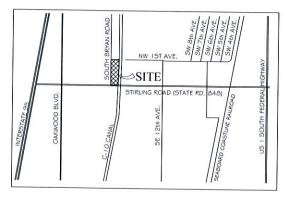
- ALL WORK TO BE PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (F.B.C.) LATEST EDITION. WORK SHALL ALSO BE IN COMPLIANCE WITH THE REQUIREMENTS OF, AND ACCEPTABLE TO, CITY OF DANIA BEACH ENGINEERING DEPARTMENT, BROWARD COUNTY HEALTH DEPARTMENT, APPLICABLE ZONING ORDINANCES AND ANY AGENCY HAVING JURISDICTION ON THIS PROJECT.
- 2. CONTRACTOR SHALL EXERCISE ALL CARE AND CAUTION IN PROTECTING ALL UTILITIES DURING COMPLETION OF HIS WORK. IN THE EVENT OF DAMAGE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE APPROPRIATE UTILITY CO. ANY AND ALL COST INCURRED DUE TO DAMAGE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL PROVIDE HIS OWN LINE AND GRADE FROM HORIZONTAL AND VERTICAL CONTRACTOR SHALL FACILITY. PROVIDE "AS-BUILT" GRADES CERTIFIED BY A REGISTERED LAND SURVEYOR AS REQUIRED BY BROWARD COUNTY HEALTH DEPARTMENT
- CONTRACTOR'S ATTENTION IS DIRECTED TO GENERAL AND SPECIFIC CONDITIONS AND PERMIT PROVISIONS OF WATER AND SEWER PERMITS.
- POLYVINYL CHLORIDE PIPE (PVC) 4" THROUGH 12" SHALL BE MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C900 (LATEST EDITION) AND SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 PSI AND HAVE A DR (DIMENSION RATIO) OF 18. THE ON-SITE FIRE LINE SYSTEM SHALL HAVE A WORKING PRESSURE OF 200 PSI AND HAVE A DR OF 14. ALL PVC PIPE SHALL BEAR THE NSF LOGO FOR POTABLE WATER JOINTS SHALL BE OF THE PUSH—ON TYPE AND COUPLINGS CONFORMING TO ASTM D3139 CONFORMING TO DR18 OR DR14 PIPE.
- WATER LINES, 3" OR SMALLER, SHALL BE PVC, SCHEDULE 80, AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-1785. ALL PVC PIPE SHALL BEAR THE APPROVAL SEAL OF THE NATIONAL SANITATION FOUNDATION (NSF) FOR POTABLE WATER PIPE.
- FITTINGS FOR ALL DUCTILE IRON PIPE AND PVC C900 PIPE SHALL BE DUCTILE IRON AND SHALL CONFORM TO ANSI/AWWA C153/ A21.53 (LATEST EDITION) 250 PSI MINIMUM PRESSURE RATING AND SHALL BE CEMENT LINED IN CONFORMANCE WITH ANSI/AWWA
- 7. ALL SANITARY SEWER PIPE SHALL BE PVC SDR-35. PVC NON-PRESSURE PIPE SHALL BE TYPE PSM POLYVINYL CHLORIDE (PVC) HAVING A CELL CLASSIFICATION OF 12454-B OR 12454-C OR 13364-B (WITH A MINIMUM TENSILE MODULES OF 500,000 PSI) AS DEFINED IN ASTM D1784, ALL PVC PIPE AND FITTINGS SHALL MEET OR EXCEED ALL OF THE MATERIAL REQUIREMENTS OF ASTM D3034 AND THICKNESS REQUIREMENTS OF SDR 35. UV DEGRADED PIPE SHALL BE REJECTED.
- 8. PROVISIONS MUST BE MADE FOR CONTRACTION AND EXPANSION AT EACH JOINT WITH A RUBBER RING AND INTEGRAL THICKENED BELL AS PART OF EACH JOINT. GASKETS SHALL CONFORM TO ASTM F477. PIPE SHALL BE SUPPLIED IN LAYING LENGTHS OF 19-1/2 TO 20 FEET. ALL PIPE AND FITTINGS SHALL BE ASSEMBLED WITH A NON-TOXIC LUBRICANT.
- ALL FITTINGS AND PLUGS TO BE USED WITH THE PVC PIPE SHALL BE THOSE MANUFACTURED BY THE MANUFACTURER OF THE PIPE. EACH SPECIAL FITTING SHALL BE A COMPLETELY MANUFACTURED UNIT WITH EITHER BELLS OR SPIGOTS ON EACH CONNECTION THAT ARE AN EXACT DUPLICATION OF THE BELLS AND SPIGOTS ON THE PIPELINE. FITTINGS WITH ANY OTHER TYPE OF CONNECTIONS SHALL NOT BE ACCEPTED.
- 10. TAPPING VALVES SHALL BE MUELLER H667 OR APPROVED EQUAL.
- 11. TAPPING SLEEVES SHALL BE MUELLER H615 OR APPROVED EQUAL.
- GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH MALLEABLE HAND WHEELS, OR APPROVED EQUAL.
- GATE VALVES 4" OR LARGER SHALL MEET A.W.W.A. C-500-02 SPECIFICATION (LATEST REVISION). VALVES SHALL BE MUELLER CO. OR APPROVED EQUAL.
- 14. FIRE HYDRANTS SHALL BE BREAKAWAY MUELLER, CLOW OR APPROVED EQUAL.
- 15. ALLOWABLE LEAKAGE FOR PVC PRESSURE MAINS WILL BE IN ACCORDANCE WITH AWWA C605.
- 16. CONSTRUCTION INSPECTION WILL BE PROVIDED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE, AT HIS OWN EXPENSE, ALL NECESSARY TEST PUMPING EQUIPMENT, WATER, METERS, WATER METERS, PRESSURE GAUGE, AND OTH EQUIPMENT, MATERIALS, AND FACILITIES REQUIRED FOR ALL HYDROSTATIC AND LEAKAGE TESTING.
- 17. CONTRACTOR SHALL OBTAIN A COPY OF THE FDEP WATER SYSTEM PERMIT AND PULL BACTERIOLOGICAL TESTING SAMPLES FROM THE SAMPLE POINTS SPECIFIED IN THE PERMIT. BE AWARE THAT THE BACTERIOLOGICAL TEST RESULTS MUST INCLUDE THE CHLORINE RESIDUAL OF CALLS SAUDIE
- 18. PRIOR TO THE CONNECTION TO ANY EXISTING MAIN, THE PROPOSED WATER MAIN SHALL BE DISINFECTED, HAVE ENGINEER WITNESSED AND APPROVED PRESSURE TESTING, AND HAVE FDEP CLEARANCE. REFER TO FDEP PERMIT FOR ANY ADDITIONAL REQUIREMENTS.
- THE WATER SYSTEM SHALL BE TESTED FOR LEAKAGE AT NO LESS THAN 150 PSI FOR TWO
   HOURS, WITH ALLOWABLE LEAKAGE IN ACCORDANCE WITH ABOVE STANDARDS.
- 20. LEAKAGE TESTING OF THE SANITARY SEWER SYSTEM IS REQUIRED IN ACCORDANCE WITH RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (1997 EDITION) 33.93, 33.94 AND 33.95. THE TEST SHALL BE PERFORMED BY THE CONTRACTOR AND WITNESSED BY THE ENGINEER OF RECORD. FOR WATER (HYDROSTATIC) TESTING, THE LEAKAGE EXFLITATION OR INFILTRATION SHALL NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM. AN EXFLITATION OR INFILTRATION TEST SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.
- 21. CONTRACTOR SHALL PERFORM LINE LAMPING AND DEFLECTION TEST, WHICH SHALL BE WITNESSED BY THE ENGINEER AND OWNER/OPERATOR. THE TEST SHALL BE IN ACCORDANCE WITH THE RECOMMENDED STANDARDS FOR WASTEWARER FACILITIES (2004 EDITION) 33.85. THE DEFLECTION TEST SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER FINAL BACKFILL HAS BEEN PLACED AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL—PIPE SYSTEM. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF DEFECTION EXCEEDS 5%, REPLACEMENT OR CORRECTION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH REQUIREMENTS IN THE APPROVED SPECIFICATIONS. THE RIGID BALL OR MANDREL USED FOR THE DEFLECTION TEST SHALL HAVE A DIAMETER NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER OF A VAPERAGE INSIDE DIAMETER OF THE PIPE DEFENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATION, INCLUDING THE APPENDIX, TO WHICH THE PIPE IS MANUFACTURED. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
- 22. STANDARD PIPE MARKINGS:

ALL PIPE AND PIPE FITTINGS SHALL BE COLOR CODED OR MARKED AS FOLLOWS:

- A. POTABLE WATER PIPE: BLUE
- B. RECLAIMED WATER PIPE: VIOLET
- C. SANITARY PIPE: GREEN

### **GENERAL NOTES**

- 1. ELEVATIONS SHOWN REFER TO THE NATIONAL GEODETIC VERTICAL DATUM (N.G.V.D.).
- 2. HORIZONTAL AND VERTICAL CONTROL SHALL BE PROVIDED BY THE OWNER'S SURVEYOR. LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR
- 3. IT IS THE INTENT OF THESE DRAWINGS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE
- 4. EXISTING UTILITIES SHOWN ARE BASED ON INFORMATION SUPPLIED BY OTHERS. IT SHALL EXISTING OTHERIES SHOWN ARE BASED ON INFORMATION SUPPLIED BY OTHERS. IT SHALLS BE THE CONTRACTORS RESPONSIBILITY TO MEET WITH ALL APPLICABLE UTILITY COMPANIES TO VERIFY ALL UNDERGROUND FACILITIES PRIOR TO THE START OF CONSTRUCTION. ALL TRENCH EXCAVATION SHALL PROCEED WITH EXTREME CAUTION AT ALL TIMES. IN THE EVENT THAT EXISTING UTILITIES ARE DAMAGED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE ALL SUCH DAMAGE.
- 5. EXISTING GRADES WERE TAKEN FROM THE BEST AVAILABLE DATA AND MAY NOT ACCURATELY REFLECT PRESENT CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH CURRENT SITE CONDITIONS, AND SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO STARTING WORK.
- REFERENCE SHALL BE MADE TO THE MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS, SIZE AND DETAILS OF ALL UTILITY SERVICES TO THE BUILDINGS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESETTING ALL DISTURBED EXISTING MANHOLE COVERS, VALVE BOXES, BLOW-OFF RISERS, ETC. TO NEW ELEVATIONS, AS REQUIRED, WHETHER SPECIFICALLY SHOWN ON THESES DRAWINGS OR NOT.
- BOUNDARY AND TOPOGRAPHIC DATA BASED UPON SURVEY PREPARED BY PROFESSIONAL SURVEYORS, INC., 7744 TAFT STREET PEMBROKE PINES, FLORIDA 33024.



# LOCATION MAP

### LEGAL DESCRIPTION

TRACT "A", OF "SYMONS PLAT", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 82, PAGE 49, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, LESS AND EXCEPT THE FOLLOWING PROPERTY PAGE 1.

BEGINNING AT THE SOUTHEAST CORNER OF SAID TRACT "A", THENCE SOUTH 87\*55'33" WEST ON AN ASSUMED BEARING ALONG THE SOUTH LINE OF SAID TRACT "A", A DISTANCE OF 14.00 FEET; THENCE NORTH 21\*13'59" EAST, A DISTANCE OF 35.39 FEET TO THE EAST LINE OF SAID TRACT "A"; THENCE SOUTH 02'04'22" EAST ALONG SAID EAST LINE, A DISTANCE OF 32.50 FEET TO THE POINT OF BEGINNING.

### FLORIDA DEP NOTES ON WATER-SEWER INSTALLATION

- A HORIZONTAL DISTANCE OF 10 FT. SHALL BE MAINTAINED BETWEEN WATER AND SEWER MAINS. WHEN THE 10 FEET HORIZONTAL DISTANCE CRITERIA CANNOT BE MET DUE TO AN EXISTING UNDERGROUND FACILITY CONFLICT, THE SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH MECHANICAL JOINTS.
- A VERTICAL DISTANCE OF AT LEAST 18 INCHES SHALL BE MAINTAINED BETWEEN ANY WATER AND SEWER MAINS.
  THE SEWER SHALL BE A DUCTILE IRON SINGLE 20 FEET LENGTH CENTERED ON THE CROSSING IF THE MINIMUM
  VERTICAL DISTANCE IS LESS THAN 18 INCHES OR THE SEWER IS INSTALLED ABOVE THE WATER MAIN
  REGARDLESS OF SEPARATION).
- 3. IN HIGHLY CONGESTED AREAS, WHERE EITHER WATER OR SEWER FACILITIES ARE EXISTING AND THE SEPARATION REQUIREMENTS CANNOT BE MET, SPECIAL CONSIDERATION MAY BE GIVEN SUBJECT TO A COMPLETE EVALUATION OF EXISTING AND PROPOSED CONDITIONS.
- 47 THE CONTRACTOR SHALL VERIFY NATURE, DEPTH, CHARACTER OF EXISTING UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- ALL OTHER PUBLIC OR PRIVATE UTILITY FACILITIES SHALL BE CONSTRUCTED AT LEAST 3 FEET FROM ANY WATER AND SEWER MAIN AS MEASURED FROM THE OUTSIDE BELL OF THE WATER AND SEWER PIPE TO THE OUTSIDE OF THE UTILITY PIPE.
- WHEN THE 3 FEET SEPARATION BETWEEN PROPOSED AND EXISTING LINE IS NOT POSSIBLE, THE CONTRACTOR SHALL HAND DIG OR EXPOSE THE WATER AND SEWER PIPES BEFORE PROCEEDING WITH POWER EQUIPMENT EXCAVATION.
- IN NO CASE SHALL A CONTRACTOR INSTALL UTILITY PIPES, CONDUITS, CABLES, ETC. IN THE SAME TRENCH
  PARALLEL TO AND ABOVE EXISTING WATER AND SEWER PIPES EXCEPT WHERE THEY CROSS. ANY DEVIATION
  FROM NOTES 4 AND 5 SHALL BE APPROVED IN WRITING BY THE RESPONSIBLE WATER AND SEWER UTILITY.

### HEALTH DEPARTMENT NOTES

### 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 10 FT. AND AT LEAST 3 FT. MINIMUM.

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 MAINS IS AT LEAST

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

### 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

### UTILITY DEMOLITION NOTES

- THE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITY SERVICE LINES
  PRIOR TO START OF CONSTRUCTION AND DETERMINE THE REQUIREMENTS
  FOR THEIR PROTECTION.
- THE CONTRACTOR SHALL ARRANGE FOR THE PROPER DISCONNECTION AND CAPPING OF ALL UTILITIES BY THE APPROPRIATE CERTIFIED TECHNICIAN.
- 3. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND OWNER PRIOR TO DEMOLISHING ANY EXISTING UTILITIES.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT ALL UTILITIES DESIGNATED TO REMAIN AND TO REPAIR ANY DAMAGED UTILITIES.

DRAWN BY: P.J.F. CHECKED BY: N.H.O APPROVED BY: R.B.B. DATE: 6 - 2 0 - 1 PROJECT NO .: 14037

STIRLING MARINA & BOAT SALES 150 SOUTH BRYAN ROAD DANIA BEACH, FLORIDA 33004



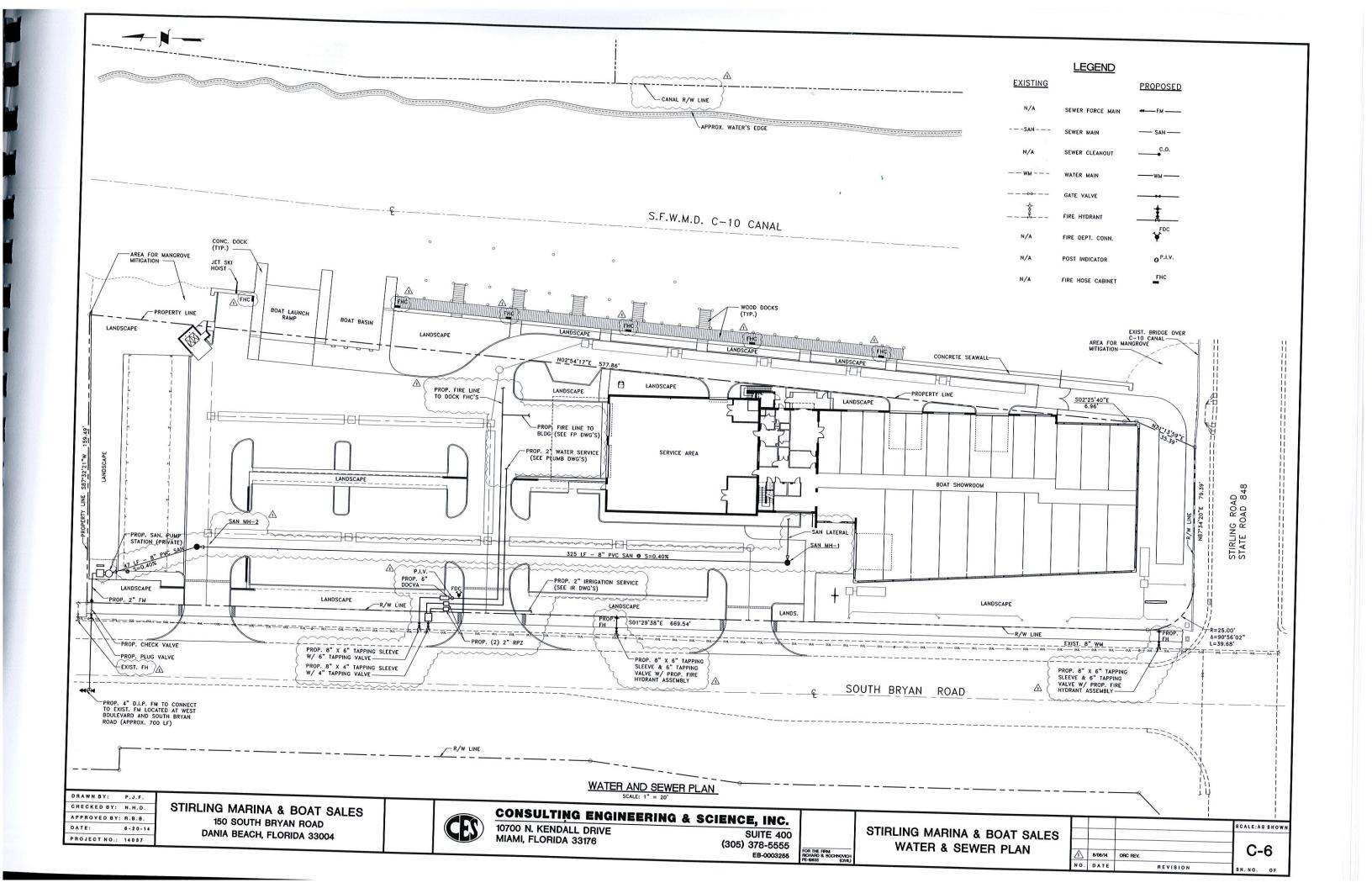
# CONSULTING ENGINEERING & SCIENCE, INC.

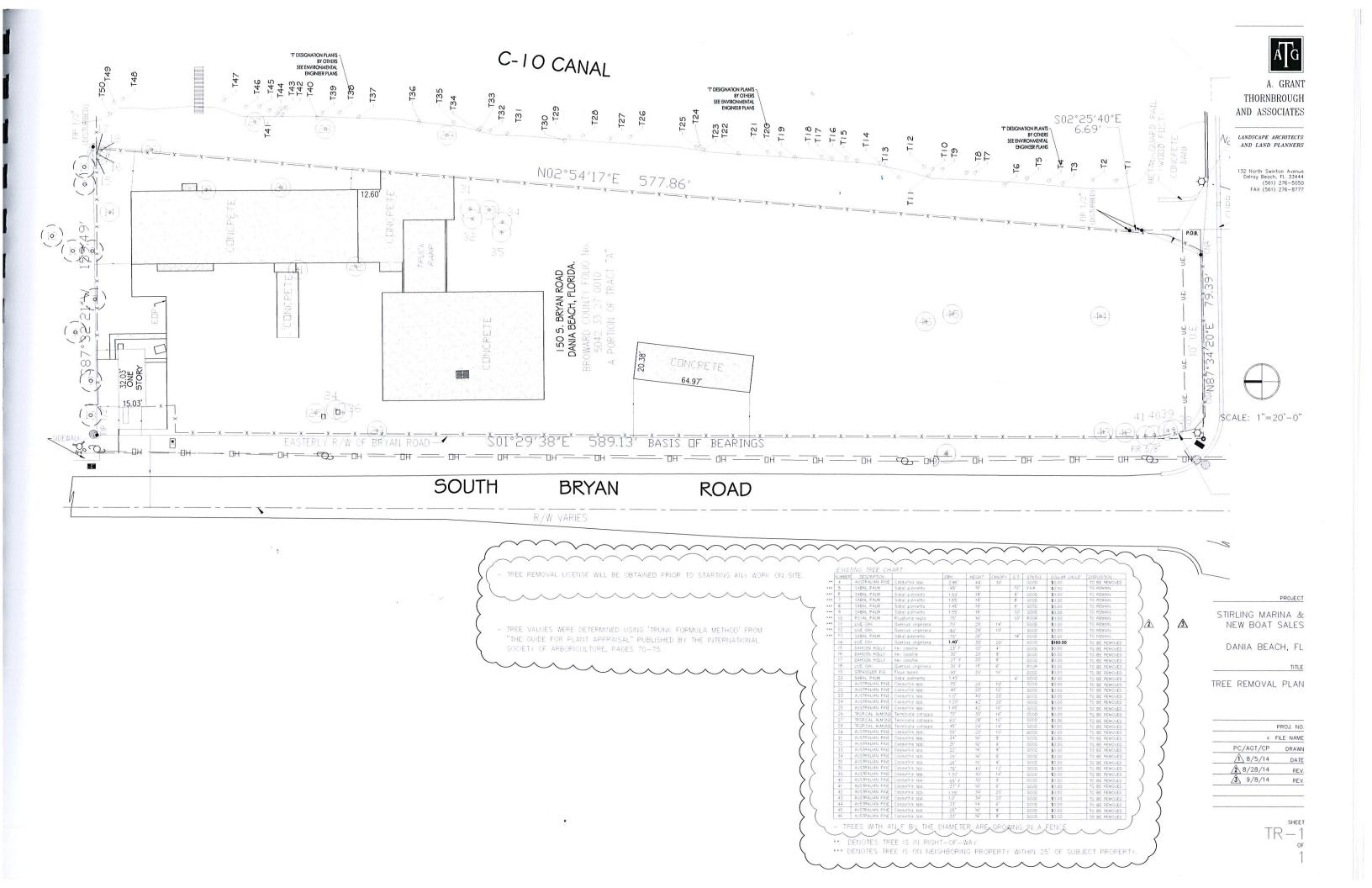
10700 N. KENDALL DRIVE MIAMI, FLORIDA 33176

SUITE 400 (305) 378-5555 EB-0003255

STIRLING MARINA & BOAT SALES **WATER & SEWER NOTES** 

SCALE:AS SHOW C-5 REVISION SH. NO. OF









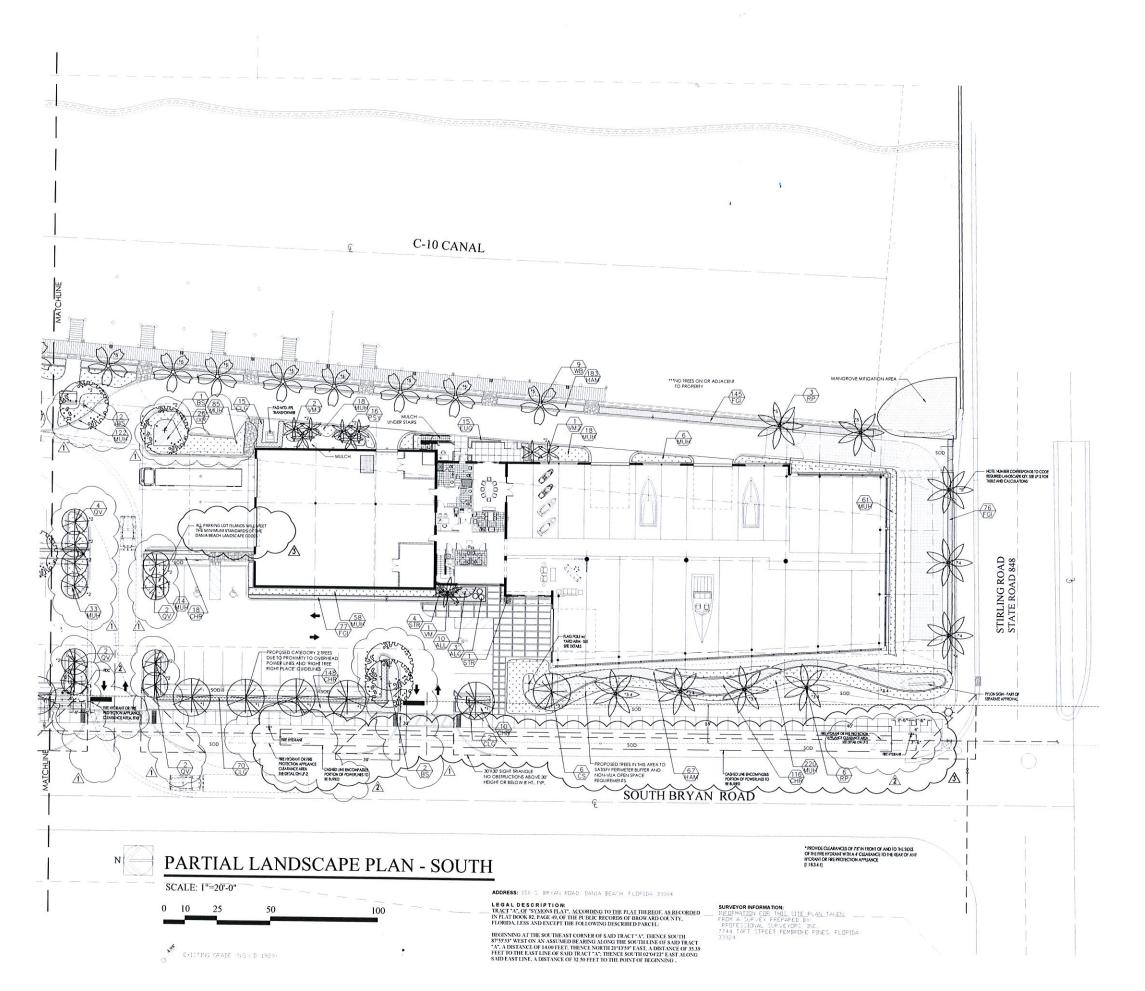
DANIA BEACH, FL

TITLE

LANDSCAPE PLAN

PROJ. NO.	
FILE NAME	×
DRAWN	PC/AGT/CP
DATE	7/2/14
REV.	1 8/5/14
REV.	2 8/28/14
REV.	3 9/8/14

SHEET OF



EXISTING GRADE (NG V D. 1929)

### PLANT LIST

	TREES A	AND PALMS	
** N	BS	12	Bursera simaruba (Gumbo Limbo) 12–14' ht., 6' spr., full canapy
•• N	CE	3	Conocarpus erectus (Buttonwood) 12' ht., 6' spr., full canopy
** N	CS	18	Conocarpus erectus var. sericeus (Silver Buttonwood) 14' ht., 8' spr., full canopy
N	CU	1	Coccoloba uvifera (Seagrape) 14' ht., 8' spr., full canopy
√( N	QV	16	Quercus virginiana 'QVTIA' PP11219 Highrise (Live Oak 'Highrise 14' ht., 8' spr., full canopy
N	RP	6	Roystonea regia (Royal Palm) 8—10' g.w., 25' o.a. ht. min., heavy, matched
	VM	1	Veitchia montgomeryana (Montgomery Palm) 6' c.t. hts., 12' o.a. ht., heavy
	VM2	1	Veitchia montgomeryana (Montgomery Palm) 6' c.t. hts., 12' o.a. ht., double, heavy
	VM3	2	Veitchia montgomeryana (Montgomery Palm) 6' c.t. hts., 12' o.a. ht., triple, heavy

PLANT AND SPECIFICATION

### KEY QTY PLANT AND SPECIFICATION SHRUBS, GROUNDCOVERS AND ACCENTS

1		(	ALC	3	Alcanterea imperialis (Imperial Bromeliad) 17" pot, 32" spr.
		/	ALL	10	Allamanda cathartica 'Compacta' (Dwarf Allamanda)
	••	N	CHR	716	18" ht., 18" spr., 24" o.c. Chrysobudonus taco (Cocoplum) 24" ht., 24" spr., full, 24" o.c.
			CHL	18	Chrisalidocarpus lutescens (Areca Palm) 12' ht., 8' spr., 8' o.c., full to base, used as screening hedge, not for tree requirements
	••	N	CLG	196	Clusia guttifera (Small Leaf Clusia) 4' ht., 24" spr., full, 2' o.c.
	••	N	EUG	15	Eugenia foetida (Spanish Stopper) 4" ht., 18" spr., full, 24" o.c.
,	**	~	FGI	140	Ficus microcarpa var 'Green Island Ficus' (Green Island Ficus) 12" ht., 12" spr., full, 18" o.c.
	••	N	НАМ	119	Hamelia patens 'Calusa' (Firebush 'Calusa') 24" ht., 18" spr., full, 18" o.c.
>			IXR	43	Ixora coccinea 'Nora Grant' (Ixora 'Nora Grant') 24" ht., 18" spr., full, 24" o.c.
1		N _	MUH	622	Muhlenbergia cappilaris (Muhly Grass) 12" ht., 12" spr., full, 30" o.c., 4" pots
		N	PSY	16	Psychotria nervosa (Wild Coffee) 24" ht., 18" spr., full, 18" o.c.

Schefflera arboricola (Dwarf Schefflera) 24" ht., 24" spr., full, 24" o.c.

### PLANTS IN SFWMD EASEMENT

	KEY TREES	QTY AND PALMS	PLANT AND SPECIFICATION
N	RP	3	Roystonea regia (Royal Palm) 8—10° g.w., 25° o.a. ht. min., heavy, matched
	WB	9	Wodyetia bifurcata (Foxtail Palm) 8' c.t. hts., 15' o.a. ht., heavy

### SHRUBS, GROUNDCOVERS AND ACCENTS

••	FGI	158	Ficus microcarpa var 'Green Island Ficus' (Green Islant 12" ht., 12" spr., full, 18" o.c.	d Ficus
** N	НАМ	183	Hamelia patens 'Calusa' (Firebush 'Calusa') 24" ht., 18" spr., full, 18" o.c.	
** N	MUH	52	Muhlenbergia cappilaris (Muhly Grass) 12" ht., 12" spr., full, 30" o.c., 4" pots	

N DENOTES NATIVE SPECIES

\*\* DENOTES DROUGHT TOLERANT

EXISTING TREES ON ADJACENT PROPERTY TO REMAIN

### NATIVE CALCULATIONS

TREES: THERE ARE 59 NEW TREES ON PLAN. 56 ARE NATIVE = 95% OF TREES ARE NATIVE SHRUBS: THERE ARE 1,934 SHRUBS ON PLAN. 1,694 ARE NATIVE = 88% ARE NATIVE

### VUA LANDSCAPE AREA CALCULATION

VUA=31,286 SF x 20% = 6,257.2 SF OF REQUIRED LANDSCAPE AREA THIS REQUIRED LANDSCAPE AREA IS ACHIEVED BY PARKING LOT ISLANDS AND SPACE SURROUNDING THE PARKING LOT

### City of Dania Beach Standard Landscape Notes

1. A pre-construction meeting with the Dania Beach City Arborist is required prior to landscaping activities including removal of trees and/or installation of plant material. Call 954-924-0423 a minimum of 5 days prior to desired start date to schedule pre-construction meeting of disturbance of the construction area by tree protection for and signage. The tree protection fencing shall be located at the edge of the tree protection area is not designated. No material storage or construction access is permitted within the tree protection zone is not designated. No material storage or construction access is permitted within the tree protection zone is not designated. No material storage or construction access is permitted within the tree protection zone.

3. All existing trees shall be pruned to ANSI A -300 standards to correct potential hazards.

4. A tree removal permit is required prior to removal or relocation of any tree or palm. Contact the Dania Beach City Arborist at 954-924-6805 to obtain permit information.

5. Landscape contractor shall notify Sunshine One Call of Florida, Inc. at 1-800-432-4770 a minimum of 2 full business days prior to digging. Landscape contractor is responsible for avoiding damage to utilities from plant installation.

6. Tree relocations:

6. Existing trees to be relocated shall be root pruned a minimum of 120 days prior to relocation.

b. Iree relocations: a. Existing trees to be relocated shall be root pruned a minimum of 120 days prior to relocation b. Minimum root ball sizes shall be in accordance with ANSI standards as

Minimum Root Ball Diameter

8 80
28 12 inches per inch of trunk diameter
Transplanted trees with undersized root balls may be rejected by the City
Arborst and replacement trees may be required.
C. A temporary irrigation system shall be provided during and for the first 40 days after root pruning.
7. All planting must foliow planting specifications and details shown on the plan.
8. Substitutions of plant species or specifications must be approved in writing by the Dania Beach City
Arborst prior to use.
9. All plant material planted per this landscape plan shall be Florida Grade #I or better, as specified in
the current edition of the Florida Department of

Agriculture's Grades and Standards for Nursery Plants. Damaged plant material shall be rejected and replaced prior to installation.

All sizes shown for plant material are to be considered minimums

11. Where quantities and/or species differ between the planting plans and plant lists, the plans shall take

precedence.

12. All new plant material shall be warranted by the landscape contractor for a minimum period of one year. The warrantee period shall begin after acceptance of the plants by the City Arborist.

13. All plant beds to be treated with pre-emergent herbicide prior to planting.

14. All tree and palm staking and support shall be removed one year after installation.

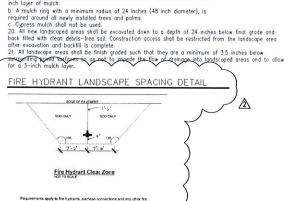
15. No fertilizer shall be opplied to newly planted trees and palms.

16. All landscape material shall be thoroughly watered at the time of planting, no dry planting permitted.

17. Landscape contractor shall be responsible for providing temporary water provisions until such time as the irrigation system is operational.

All wire guys and/or fabric straps shall be flagged with florescent colored tape.

Mulching:
 All landscape areas not covered by sod shall be covered by a minimum 3—



LANDSCAPE TABULAR DATA

CATEGORY	REQUIREMENT	VEGETATION REQUIRED	VEGETATION PROVIDED
PERIMETER VEGETATION			
NORTH PROPERTY LINE 159 L.F. BUFFER	1 SHADE TREE / 40 L.F. CONTINUOUS 3' HT. HEDGE	4 SHADE TREES 159 L.F. CONTINUOUS HEDGE	4 SHADE TREES- (GUMBO LIMBO) 159 L.F. CONTINUOUS HEDGE (ARECA PALM)
WEST PROPERTY LINE 513 L.F. BUFFER	1 SHADE TREE / 40 L.F. CONTINUOUS 3' HT. HEDGE	15 SHADE TREES 532 L.F. CONTINUOUS HEDGE	16 TREES* (SILVER BUTTONWOOD, ROYAL PALM * SEE NOTE ON LP-2 532 CONTINUOUS HEDGE (MIXED)
SOUTH PROPERTY LINE 76 L.F. BUFFER	1 SHADE TREE / 40 L.F. CONTINUOUS 3' HT. HEDGE	3 SHADE TREES 76 L.F CONTINUOUS HEDGE	3 PALM TREES (ROYAL PALM) 76 L.F. CONTINUOUS HEDGE
EAST PROPERTY LINE 520 L.F.	N/A	N/A	10 TREES (MIXED)

By the authority of the South Florida Fire Prevention Code Section 5211.2.

The clear zone shall be free of landscape (except sod), mailboxes, parting, tamp-posts and all other objects.

STIRLING MARINA &

SCALE: 1"=20'-0"

A. GRANT THORNBROUGH AND ASSOCIATES

LANDSCAPE ARCHITECTS AND LAND PLANNERS

132 North Swinton Avenue Delray Beach, Fl. 33444 (561) 276-5050

FAX (561) 276-8777

NEW BOAT SALES

DANIA BEACH, FL

LANDSCAPE PLAN

TITLE

ODE	CATEGORY	REQUIREMENT	VEGETATION REQUIRED	VEGETATION PROVIDED
•1	VEHICULAR USE AREA - PERIMETER BUFFER	1 SHADE TREE/40 LF, HEDGE 24"O.C.	558 L.F. = 14 TREES, 242 SHRUBS	15 TREES, 294 SHRUBS HEDGE
•2	VEHICULAR USE AREA - INTERIOR	LANDSCAPE AREA = 20% OF VUA	6,257.2 SF LANDSCAPED AREA	9,932 SF LANDSCAPED AREA, 37 TREES, 924 SHRUB
3	NON-VEHICULAR USE AREA < 30% (10%)	1 TREE & 10 SHRUBS PER 2000SF	8,201 SF = 5 TREES, 100 SHRUBS	7 TREES, 259 SHRUBS
4	GENERAL - PERIMETER BUFFER	1 TREE PER 40 LF, HEDGE 24" O.C.	297 LF = 8 TREES, 149 SHRUBS	TREES SHARED WITH ABOVE, 245 SHRUBS HEDGE
5	OTHER - SFWMD EASEMENT	N/A	N/A	12 PALM TREE, SHRUBS
		TOTALS	27 TREES REQUIRED	59 TREES PROVIDED

CATEGORY	REQUIREMENT	PROVIDED	PERCENTAGE
1-SHADE	40% MIN.	36	61%
2-INTERMEDIATE	30% MAX.	20	34%
3-SMALL	10% MAX.	0	0%
4-PALM	20% MAX.	3	5%

	PROJ. NO.
×	FILE NAME
PC/AGT/CP	DRAWN
7/2/14	DATE
<u> 1</u> 8/5/14	REV.
<u>2</u> 8/28/14	REV.
<u>3</u> 9/8/14	REV.

SHEET

### 1. GENERAL CONDITIONS

### A. SCOPE

- 1. Contractor shall furnish labor, equipment, and materials required to perform all work necessary for the construction of the project as indicated in the drawings.

  Such work includes but is not limited to the following:

  a. Finish grading of planting areas.

  b. Planting,

  c. Sodding (if required).

  C. Contractor shall have a competent representative at the site who shall be capable of reading and understanding plans, specifications, and other contract documents. The representative shall be knowledgeable in all areas of landscape construction in Florida.

  3. Contractor shall be responsible for knowledge of the contents of these specifications and other requirements of any accompanying drawings.

### B DRAWINGS

The drawings and plant lists together with these written specifications shall be considered as one contract document and shall be accordingly read together. The drawings and specifications remain the property of the Landscape Architect and, if required, shall be returned to him upon completion of the work. The contractor shall keep one copy of the darwings and the specifications at the construction site for the use of the Landscape Architect, Owner, and their representatives.

### C. REQUIREMENTS OF REGULATORY AGENCIES

- Perform work in accordance with all applicable codes, laws, and regulations required by authorities having prisal control of the propertions of the properties of

### D. PROTECTION OF WORK AND PROPERTY

- Contractor is responsible for maintaining adequate protection of his work from, injury and loss resulting from the execution of this contract. He must make good all repairs and replacements to the satisfaction of the Landscape Architect or the Owner except where caused by the Owner or his agents. He must provide all safety or protective measures required by public authorities or local conditions.

  2. Existing plant material to remain must be protected by barriers or fences at the drip line surrounding the material. No burning, storage, or parking shall be permitted within these protected areas. Contractor shall notify the Landscape Architect or Owner of any situation he feels may damage the existing plants to remain in the normal execution of this contract. Do not proceed with such work until directed by the Landscape Architect or Owner. Contractor damaged plants shall be replaced with plants of the same species, size, and quality as those damaged at no cost to the Owner. The Landscape Architect shall determine the extent and value of the damaged plants.

### E. CHANGES IN THE WORK

- The Owner reserves the right to make changes in the work and thereby changes in the cost of the work within the condi-tions of the original contract. All changes shall be in written form and once accepted, shall become a part of the contract
- form and once accepted, shall become a part of the contract occurrents.

  The Contractor shall not begin any work on extras or changes from the contract document before written approval has been given by the Owner or Owner's representative. Any work done prior to such written approval may or may not be paid for, at the discretion of the Owner.

### F. OWNER'S RIGHT TO DO WORK

The Owner reserves the right, upon two (2) days written notice to the Contractor to remedy any neglected provisions of the contract and to deduct the cost of the work or deficiencies from the contract payments.

### G. SURFACE AND SUBSURFACE OBSTRUCTIONS

It is the Contractor's responsibility to acquaint himself with the existence and location of all surface and subsurface structures and installations, existing or proposed, before commencing work. Any damage by the Contractor during the execution of this contract shall be made good at the Contractor's own time and expense. If subsurface construction or a structions are encountered during planting, alternate locations may be selected by the Landscape Architect or Owner.

### H. OWNER'S RIGHT TO TERMINATE

Should the Contractor at any time fail, refuse, or neglect to comply with the provisions of this contract, the Owner or his representative shall without prejudice to any other rights or remedy and after having given seven (7) days written notice to the Contractor, terminate the contract and take posession of the premises. The cost of completion will be deducted from the amount of the contract.

Coordinate and cooperate with other contractors to enable the work to proceed as rapidly and efficiently as possible.

### J. INSPECTION OF SITE

- Contractor shall visit the site and inspect site conditions as they exist prior to submitting bid.
   No additional compensation nor relief from any obligation of the contract will be granted because of lack of knowledge of the site or of the conditions under which the work will be accomplished.

### II. PLANTING SPECIFICATIONS

### A. PLANT MATERIALS

- Plants shall be nursery grown in accordance with good horticultural practices under climatic conditions similar to those of the project, unless otherwise noted.
   Ouantities, sizes, and spacing will be determined by the drawings and specifications. Where discrepancies exist, the Landscape Architect or Owner is to be notified for clarification. Contractor shall be responsible for completing installation as called for in the plans, plant lists, and specifications.

### B. ABBREVIATIONS ON PLANT LIST

B&B – Balled and burlapped. Plants shall be dug with a firm natural ball of earth of sufficient size to encompass the fibrous root system necessary for recovery of the plant. Broken or loose balls will not be accepted One (1) gallon container.

R.C. – Rooted cutting. A cutting which has calloused and produced roots. Applies equally to cuttings rooted in a propogation bed or in individual containers.

Cal. - Caliper of trunk measured four (4) feet above the ground C.T. - Clear trunk. Measurement from top of root ball to first branching.

G.W. – Grey wood area on palms between ground level and base of fronds.

O.A. HT. — Overall height from ground level to midpoint of current season's growth.

SPR. - Spread measured across the average diameter of plant. O.C. - On center. Horizontal spacing of plants center to center. P.P.P. - Plants per pot.

Container sizes are only a guide. Contractor is responsible for size and quantity of plant material as specified. No container material shall be rootbound. Where B&B material is specified, container material will not be accepted without written consent of Landscape Architect or Owner.

### C. QUALITY AND SIZE

Plants shall have a habit of growth which is normal for the species and shall be fee from physical damage, insects or pests, and adverse conditions that would prevent thriving growth. Measurements specified in the plant list are the minimum acceptable sizes. All plant materials used shall be true to name and size in conformance with the Grades and Standards for Nursery Plants, State Plant Board of Florida, and shall be graded Florida No. 1 or greater, except where noted in the contract documents. Plants shall be graded before pruning. Any necessary pruning shall be done after planting, and with the consent of the Landscape Architect or Owner. Plants which do not meet the requirements will not be accepted.

### D. SUBSTITUTIONS

No substitutions shall be accepted without the written consent of the Landscape Architect, Owner or their representatives. Proof must be submitted that the plant in question is not available in the type or size specified. The Landscape Architect or Owner shall determine the nearest equivalent replacement.

### E. TRANSPORTATION AND STORAGE

All plant material shall be protected from possible injury or breekage of branches. All plants shall be delivered adequately covered to prevent windburn, drying, or damage. Plants which can not be planted immediately shall be adequately healed in and protected from the drying of sun and wind. All plants shall be watered as necessary until planting. Storage period shall not exceed 72 hours. All palms shall have their buds tied with burlap strips to remain in place until the tree is well established in its new location (this may be waived with the consent of the Landscape Architect or Owner). Trees moved by crane or winch shall be adequately protected from chain marks and girdling by approved methods.

### F INSPECTION

No plant material shall be planted until it is inspected and approved by the Landscape Architect, Owner, or their representatives. Contractor shall give the Landscape Architect or Owner two (2) days notice for inspection of plant material. Inspection may be waived at the discretion of the Landscape Architect or Owner, in which case, the Contractor will still be responsible for complying with all specifications. Contractor shall be responsible for all inspections of plant material that may be required by State or Federal authorities and inspection certificates shall be submitted to the Landscape Architect or Owner. Rejected material shall be replaced at no additional cost. Landscape Architect, at his discretion, may tag any or all plant material in the nursery.

### G. PLANTING SOIL

Planting soil shall consist of fertile friable soil of a sandy loam nature and shall be derived from 50% minimum amount of decomposed organic matter (muck or peat) and 50% clean sand with no trace of solinity. There must be a slight actio reaction to the soil. Planting soil shall be free from stones, plants, roots, clods, sticks and other foreign materials which might be a hinderance to planting operations or be detrimental to good plant growth. Planting soil shall be applied in accordance with the Methods of Installation and details.

### H. MULCH

Mulch shall be approved (as per Municipality) non-cypress mulch, unless otherwise specified, and shall be free of weeds, weed seeds, sticks and other foreign materials. It shall be applied to a minimum three (3) inch depth, unless otherwise specified, and moistened at the time of application to prevent wind displacement.

### I. COMMERCIAL FERTILIZER

Commercial fertilizer shall be an organic fertilizer containing Commercial terturer snat be an organic terturer consuming equal percentages of nitrogen, phosphoric acid and potash as available plant food by weight. 50% of the nitrogen shall be derived from natural organic sources. The trace elements of iron and magnesium must also be present. The minimum analysis acceptable shall be 63%—63%—63%—feetilizer shall be 64%—67%—63%—feetilizer shall be 64%—free flowing, and delivered to the site in unopened original containers, each bearing the manufacturers gaudranted analysis. If Milorganite with trace elements is to be used, application rates are as follows:

Trees:
7gal + :
3gal :
f Gal. Can:
Pot:
Punde Trees: 12 ibs./2"-3" coliper tree 7gal + : 4 ibs./container 3gal : 1 ib./container 1 Gal. Can: 5. ibs/container 4" Pot: ... 25 ibs./container Groundcover Beds 10 bs./100 sq. ft.

Fertilizer shall be spread before laying mulch and at the above recommended rates, unless otherwise specified If plant tablets are called for, they shall be Agriform 20–10–5 formula, 21 gram tablets. Tablets shall be placed mid—way to the plant ball in the back fill material and at manufacturer's rates, unless otherwise specified.

Water is to be furnished by the Owner. The Contractor shall transport as required.

### K SOD (WHEN APPLICABLE)

K SOD (WHEN APPLICABLE)

Sod shall be one year old and of the variety indicated in the plant list. Sod shall be dense, vigorous, and green, with the grass having been mowed at least three times at a 2"-2" 1/2" height before lifting from the field. Sod shall have a good root development and compact growth and contain no weeds, vermin, lungus, or other diseases. No sod shall be used which is not certified as being free of the imported fire ant. All sticks, strain, tangus, or other diseases. No sod shall be used which is not certified as being free of the imported fire ant. All sticks, strain the property of the prope

### L. SEED (WHERE APPLICABLE)

L. SEED (WHERE APPLICABLE)
Gross seed shall be of the mixture called for in the plant list, it shall be a standard grade seed of the current or last year's crop. Seed which has become wet, moldy, or otherwise damaged will not be accepted. Seed must come in unopened packages with the procurer's guaranteed analysis attached. Weed seed content shall not exceed 0.25%. Before any planting, the ground shall be plowed or scarified to a depth of at least 4" and shall be raked and smoothed evenly to establish a final grade. All sticks, and other foreign material over one inch in diameter shall be removed. Contractor shall use the Hydromulch seeding method and supported with the seed of the

### III. METHODS OF INSTALLATION

Location of plants and layout of all beds are indicated on the plans. Plant locations are to be staked in the field by the Contractor. Landscape Architect or Owner will check staking of plants in the field and shall adjust to his satisfaction before planting begins. Where surface or subsurface obstructions are encountered or where changes have been made in construction, necessary adjustments will be approved by the Landscape Architect or Owner.

### B. EXCAVATION FOR PLANTING

Planting holes shall be excavated to a minimum depth of four (4) inches deeper than the depth of the root ball except for trees over 10 feet in height (see section III, C). Holes shall be a minimum of six (6) inches greater in diameter than the root ball for shrubs and eighteen (18) inches greater in diameter for trees. All existing vegetation, including sod, shall be completly removed from all planting beds before planting. Four (4) inches of planting soil shall be incorporated into all planting beds for rooted cuttings. Where applicable, planting holes for all trees, shrubs, and gorundcovers shall be exavated through any compacted building subgrade or road rock to undisturbed subsoil or clean sand fill. All excess exavation material shall be removed from the site by the Contractor. Holes shall be back-filled with planting soil so defined in Section II, 6 and as shown in details. The following is a guide for planting soil quantities:

Quantities of planting soil needed may be greater if excavation of building subgrade or roadrock is necessary.

### C. SETTING TREES AND SHRUBS

All trees and shrubs are to be planted plumb on four (4) inches of planting soil and centered in the planting hole as as to give the best appearance in relation to adjacent plants and structures. I rees over ten (10) feet in height sholl be planted directly on the plant of the plant of the plant of the plant of the settlement sholl be the finished grade level of the plant of the settlement sholl be the finished grade level of the plant of the settlement of the plant of the planting soil, water thoroughly, saturating rootball, before installing remainder of planting soil to top of hole, eliminating all air pockets. After settlement, add planting soil to the level of the finished grade, allowing three (3) inches for mulch. Form a shallow soucer around each plant by forming a ridge of soil along the edge of the planting hole. All Sobla plantetic are to be planted in sand. Water all plants immediately after planting.

### D. PRUNING

Remove dead and broken branches from all plant material.
Prune with shorp instrument flush with trunk or branch,
so as to leave no stubs. Prune to retain typical growth habit
of the particular species. Paint cuts over 1 1/2" in diameter
with a waterproof antiseptic tree paint.

### E. STAKING AND GUYING

Staking and guying of trees, where specified, is an option to be used by the Contractor, who will be responsible for material remaining plumb and striaght for all given conditions throug the guarantee period. The Landscape Architect, Owner or Owner's representative may require that a tree or trees be staked or guyed if the tree(s) are obviously unstable or pose a threat to person or property if they should fall. Tree support, if required by Landscape Architect or Owner, shall be done according to staking details provided. Staking and guying shall be done at no extra cost to the Owner. No method of support shall be permitted which causes physical damage to the plant. Ar method of staking or guying not shown must be approved by the Landscape Architect.

### F MULCHING

All tree and shrub beds shall be mulched immediately after planting to a three (3) inch depth and thoroughly wetted down. Unless otherwise specified, the following configurations will apply:

Trees and Palms: Hedges: Shrub masses

3' wide beds continuous bed extending 2' outside of plants, in configurations shown on

plans Plans Ground cover beds:entire surface (mulching of certain ground cover plants may be waived by Landscape Architect)

### G. FINISH GRADES

- Finish grades for all sod areas after settlement shall be 1/2 below top of adjacent curbs, walks, walls, and abutments.
   Finish grade of all ground cover beds after mulching and settling shall be 1/2 below finish grade of sod, adjacent curbs, walks and walls.
   Finish grading shall include the removal of all surface rock and other debris that prevents a smooth level surface.

### H CLEANUP

All areas shall be kept clean and orderly as the work progresses. Upon completion of planting, all excess deleterious materials and debris shall be removed from the site or disposed of as directed by the Landscape Architect or Owner. All tags and ribbons shall be removed from trees and shrubs

### I. MAINTENANCE

A maintenance period shall begin immediately after each plant is planted and shall continue until all planting has passed final inspection and acceptance. Maintenance of new planting shall consist of watering, cultivating, weeding, mulching, restoking, repairing and tightening auys, resetting plants to proper grades and positions, removal of dead materials, restoration of planting saucers, maintaining any barriers or fences, and any other necessary operations. Any damage created by the planting operation shall be repaired promptly. All trees and other 828 material shall be deep watered for a period of least twenty one (21) days after installation and at least once every other day during the (21) day period.

### IV. FINAL INSPECTION AND ACCEPTANCE

- A. Inspection of work to determine completion of contract, but exclusive of the replacement of plant materials under the Warranty Period, will be made by the Landscape Architect or Owner at the conclusion of all planting and at the written request of the Contractor.
- B. The Contractor will be notified by the Landscape Architect or Owner of the acceptance of all plant material and work,manship, exclusive of the possible replacement of plants subject to Warranty.

### V. WARRANTY PERIOD AND REPLACEMENT

- WARRANTY PERIOD AND REPLACEMENT

  A. The Contractor, as part of this contract, shall guarantee all moterials, workmanship, and plant materials for a period of twelve (12) months from the time of final acceptance. Exception: sod shall be guaranteed for thirty (30) days. Guarantee shall apply to the position, health, shape, condition, and specified size and quality of all plant material.

  B. The guarantee shall be null and void for plant material that is damaged or dies as a result of freeze, hall or hurriconeforce winds, provided the material was properly planted and in a healthy growing condition prior to such acts of Nature.

  C. The Contractor shall not be held responsible for failures due to neglect by Owner or acts of vandalism during the Warranty Period.

  D. During, or at the end of the Warranty Period, any plant that is dead or not in satisfactory condition, as determined by the Landscape Architect or Owner, shall be replaced by the Contractors shall be shared equally by the Owner and the Contractor, should the replacement not survive, unless the plant(s) have not been planted in accordance with previous specifications as a planter shall be furnished and formitted to work of the planter shall be furnished and formitted themson. The Warranty Period for replaced plant material shall commence on the date of acceptance of the replaced item(s) of plant material.

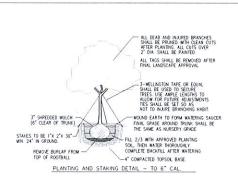
All addenda apply to section(s) specified in the contract documents and therefore are to be considered a part of the contract.

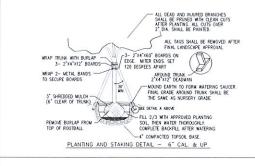
### SITE RESTORATION

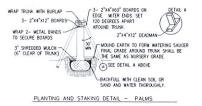
The contractor shall remove all excess material and shall clean up and restore the site to lits original condition or better. All damage, as a result of work under this Contract, done to existing structure, powement, driveways, poved areas, curbs and gutters, sidewalks, shrubbery, grass, trees, utility poles, utility pipe lines, conduits, drains, catch basins, flagstones, rocked, graveled or stabilized areas or driveways and including all obstructions not specifically named herein, shall be repaired and restored to a condition acceptable to the Landscape Architect or owner.

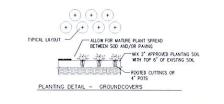
### CONTRACTOR TO CHECK DRAWINGS AND DATA

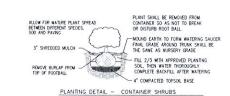
The Contractor shall verify all dimensions, quantities, locations, materials and details shown on the Drawings, supplementary drawings, schedules or other data received from the Landscape Architect, and shall notify him of all errors, omissions, conflicts and discrepancies found therein. Failure to discover or correct errors, conflictions or descrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction, or improper operation resulting therefrom nor from rectifying such condition at his own expense. He will not be allowed to take advantage of any error or omissions, as full instructions will be furnished by the Landscape Architect or Owner, should any error or omissions be discovered. All schedules are given for the convenience of the Client, Landscape Architect and Contractor and are not guaranteed to be complete.

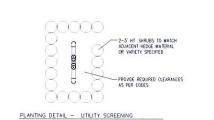














### A. GRANT THORNBROUGH AND ASSOCIATES

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PROJECT

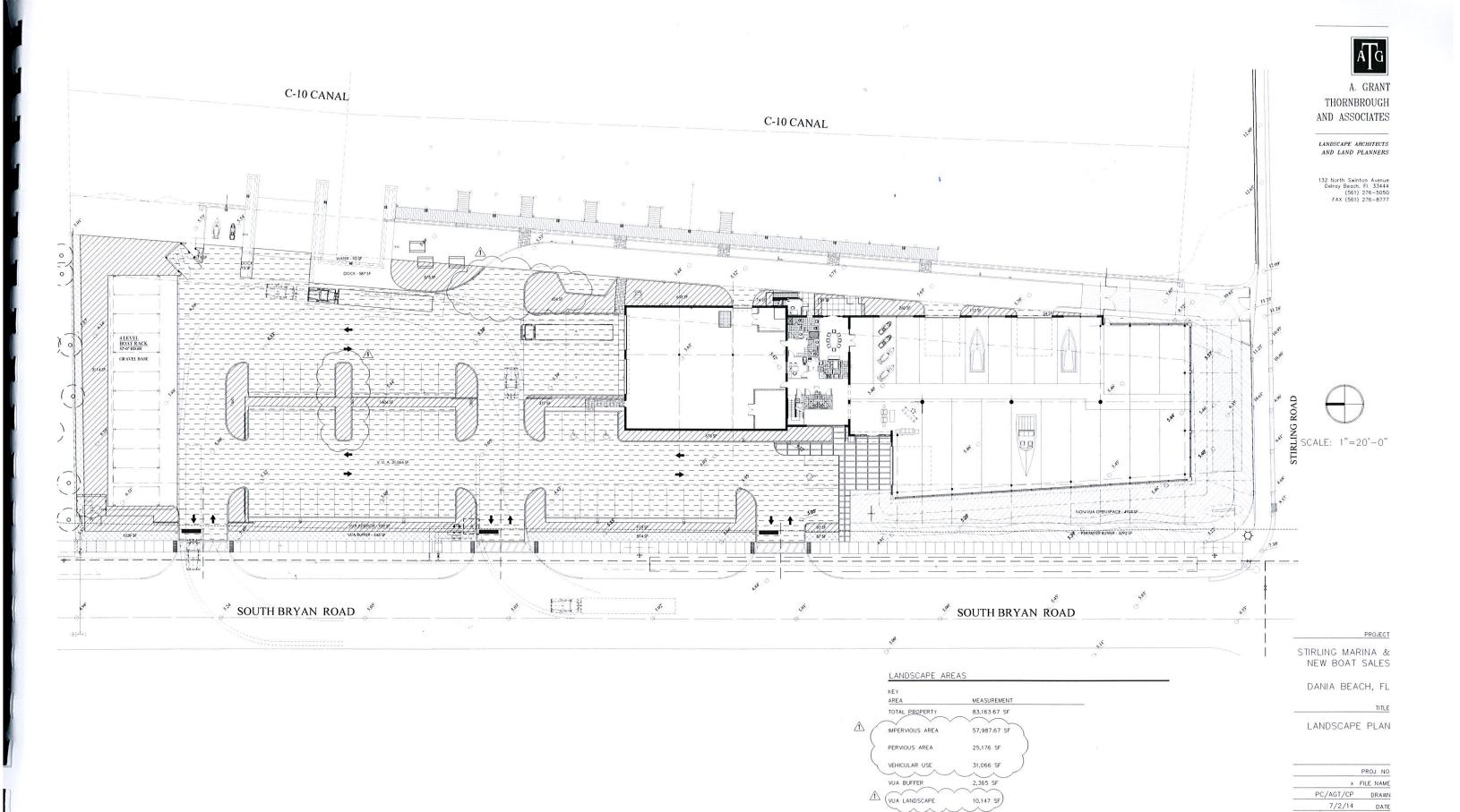
STIRLING MARINA & NEW BOAT SALES

DANIA BEACH, FL

LANDSCAPE PLAN

PROJ. NO × FILE NAME PC/AGT/CP DRAWN 7/2/14 DATE 1 8/5/14 REV. 2 8/28/14 REV. <u>/3</u>\ 9/8/14 REV.

SHEET



NON-VUA LANDSCAPE

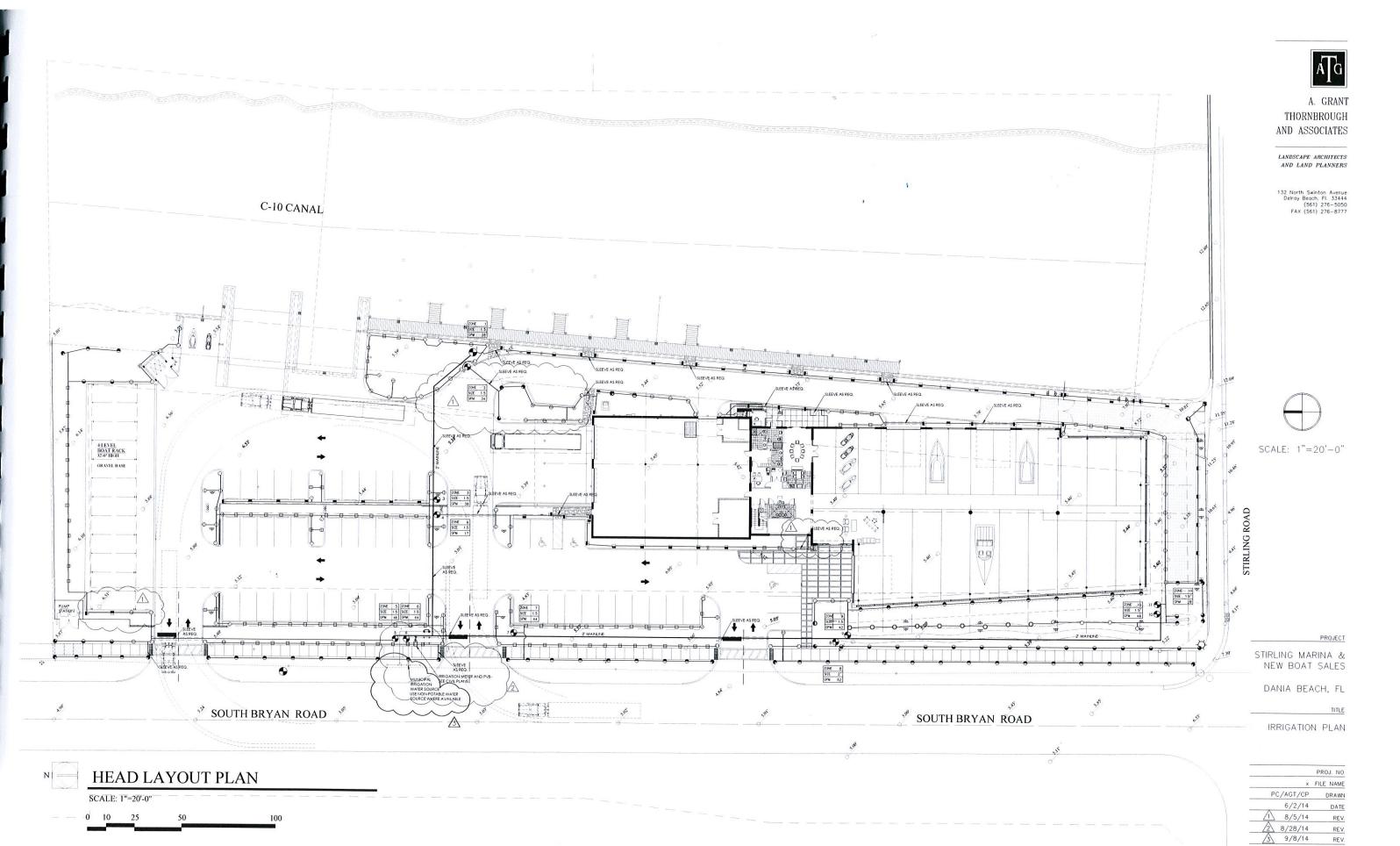
PERIMETER BUFFER

4.903 SF

SHEET OF 4

⚠ 8/5/14

2 8/28/14 3 9/8/14



SHEET IR — 1

2) MATER PROOF CONNECTION (1 OF 2) BUBBLER NOZZLE AS SPECIFED ON PLAN (3) 0 140
(4) PEMOTE CONTROL VALVE:
PAN BIPD PEB
(5) VALVE BOX WITH COVER:
12-410H 50ZE
(6) PENSH CPAZE/TOP (F MUCCH
(7) PVC 50H 80 NPPLE (CLOSE)
(8) PVC 90H 40 ELL ) PLANT MATERIAL ) FINISH CRACE/TOP OF MILLON PLANT WATERIAL / SOD
 POWSH ORADE/TOP OF MULCH
 POP-LP SPRAY SPRANLER
 SANIC FRE, 12-INCH LENGTH UV PACIATION RESISTANT 1/2 MOH PVC SCH BO NEPL (LENGTH AS REQUIRED) (3) 1/2-INCH FEMALE NPT . 0.490-RVCH BAPB ELBON 3) 1/2-NCH MALE NPT + 490 BARB ELBOW (3) 1/2-NOH WALE NPT . 490 FM BARB ELBOW (6) PW. LATERAL PIPE (7) PWS SCH 40 TEE CR ELL (6) SMNO PPE, 12-INCH LEWS (3) PUC LATERAL PIPE (2) PUC SON 40 TEE OR ELL 7 PVC LATERAL PIPE 8 1/2-mich MALE NPT 492-mich BARB ELBON 1417 (9) PVC SON 40 TEE OP ELL PPP PPP (6) 3.0-NCH MEDIMUM DEPTH OF 3/4-NCH MASHED CRAVEL (CRICHAL) BUBBLER 6" POP-UP SPRAY SPRINKLER 12" POP-UP SPRAY SPRINKLER



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### IRRIGATION NOTES

2

- 1. THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL REQUIRED TO MAKE THE SYSTEM FUNCTION PROPERLY. ALL IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ALSO STATE AND/OR LOCAL CODES.

  2. IRRIGATION PLANS ARE SCHEMATIC AND DRAWN FOR GRAPHIC CLARITY. ALL PIPING BELOW PAVEMENT SHALL BE SLEEVED LAYOUT OF IRRIGATION SYSTEM SHALL BE COORDINATED WITH CORRESPONDING LANDSCAPE PLAN.

  3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOCAL UNDERGROUND UTILITIES TO VERIFY LOCATIONS. THE CONTRACTOR SHOULD VISIT THE SITE PRIOR TO INSTALLATION AND BECOME FAMILIAR WITH EXISTING CONDITIONS.

  4. VALVE LOCATIONS ARE SCHEMATIC ONLY AND WILL BE ADJUSTED FOR SITE CONDITIONS. EACH VALVE SHALL BE INSTALLED IN A AMERICA OR CARSON VALVE BOX. THE FLOW ADJUSTMENT FEATURE WILL BE USED TO BALANCE PRESSURE THROUGHOUT THE SYSTEM.
- THE IRRIGATION CONTROLLER SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL COORS AND MANUFACTURER'S RECOMMENDATIONS, PROPER GROUNDING EQUIPMENT AND SURGE PROTECTION SHALL BE PROVIDED A RAIN SENSOR SHALL BE INSTALLED TO OVER-RIDE THE CONTROLLER.

  ALL HEADS ON RISERS SHALL BE SET AT THE HEIGHT OF ADJACENT PLANT MATERIAL.

- 7 ALL HEADS ON RISERS SHALL BE SET AT THE HEIGHT OF ADJACENT PLANT MATERIAL.

  SPRINKERE LOCATIONS ADJACENT TO PAVEMENT, STRUCTURES, FENCES, ETC. SHALL BE GFFSET AS FOLLOWS, 122 MIN FOR FOR-UP MIST HEADS, 18" FOR SHAUD RISERS, 18" FOR ROTOR HEADS, AND TYPICALLY 5 FEET FOR ROTORS ALONG UNCURRED RODADAYS.

  9. ALL SLEEVING SHALL BE SCH 40 PVC TO SIZE INDICATED ON PLAN, OR IF NOT INDICATED, A MIN. OF 2" PIPE SIZES LARGER THAN SUPPLY LINE CONTAINED. ALL SLEEVES SHALL BE INSTALLED A MIN. OF 2" PIPE SIZES LARGER THAN SUPPLY LINE CONTAINED. ALL SLEEVES SHALL BE INSTALLED A MIN. OF 2" PIPE SIZES LARGER THAN SUPPLY LINE CONTAINED. ALL SLEEVES SHALL BE MISTALLED A MIN. OF 2" PIPE SIZES SHALL BE LUB FINSTALLED TO THE MAIN LINE IN TRENCH OR THROUGH MIRE SLEEVES AT PAWEVENT CROSSINGS 24" BELOW FIN. GRADE ALL SPLICES SHALL BE MADE MINH MATERROOF DIRECT—BURIAL SPLICE KITS AND CONTINUED IN VALVE BOXES. TWO EXTRA CONTROL WHE SHALL BE MISTALLED TO THE FURTHEST VALVES IN EACH DIRECTION FROM THE CONTROLLER.

  11. PIPING IN NARROW PLANTING AREAS, PARKING ISLANDS AND PLANTERS SHALL BE STILL ONE SIDE
- PIPING IN NARROW PLANTING AREAS, PARKING ISLANDS AND PLANTERS SHALL BE SET TO ONE SIDE TO ALLOW ROOM FOR ROOT BALLS PIPE AS INDICATED ON PLAN IS SCHEMATIC AND SHOULD BE ADJUSTED FOR FIELD CONDITIONS.
- 12. ALL GLUE JOINTS SHALL BE CLEANED, SANDED, AND TREATED WITH A COLORED HIGH ETCH PRIMER AND JOINED USING A SOLVENT CONFORMING WITH ASTIN D2564.

  3. SYSTEM PIEC 322, 3/4, SHALL BE CLEAS 200 PMC, SYSTEM PIPE, SIZE 1, OR GREATER SHALL BE CLASS 160 PMC. SYSTEM MAIN WILL BE SCH. 40 PMC TO SIZE INDICATED ON PLAN. ALL FITTINGS WILL BE SOLVENT WELD, SOLVENT PIPOL OF 40 PMC. MAIN LINES HALL BE UNINDIMINATION, AND FIRE OF POREIGN DEBRIS AND SHAPE DESCRIPTION OF AND SHAPE AND SHAPE OF THE COLOR SHAPE AND SHAPE OF THE COLOR SHAPE
- 14 AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND GIVEN TO THE OWNER PRIOR TO FINAL ACCEPTANCE.
- 15. WATERING TIME PER STATION WILL BE DETERMINED IN THE FIELD AND PER LOCAL REQUIREMENTS. REFER TO MANUFACTURER'S INSTRUCTIONS FOR PRECIPITATION RATES OF SPRINKLERS SPECIFIED. 16. IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE WITH 50% OVERLAP MIN.

SOD AND SHRUB IRRIGATION ZONES TO BE SEPARATE TO PROVIDE APPROPRIATE WATER AMOUNTS DISTRIBUTED BASED ON VEGETATION NEEDS IN ORDER TO CONSERVE WATER.

18. IRRIGATION SYSTEM TO MAKE USE OF ANY NON-POTABLE WATER SOURCE IF AVAILABLE. 3

IRRIGATION PIPE INSTALLATION to follow specifications called for in Florida Plumbing Code Appendix F:

PIPE SIZE (inches)	DEPTH of COVER (inches
1/2 - 2 1/2	18 - 24
3 - 5	24 - 36
6 and larger	30 - 36

PIPE SIZE (inches)	DEPTH of COVER (inches)
1/2 - 1 1/4	6 - 12
1 1/2 - 2	12 - 18
2 1/2 - 3	18 - 24
4 and larger	24 - 36

(\*) ALL TESTING AND INSPECTIONS OF INSTALLED IRRIGATION SYSTEM SHALL BE AS PER FBC APPENDIX 'F', PART VI

Irrigation installation shall observe all other standards established by FPC.

IRRIGATION PIPE SIZES TO FOLLOW FOLLOWING SCHEDULE:

PIPE SIZE (inches)	max. GPM
3/4	10
1"	15
1 1/4"	25
1 1/2"	35
2"	55
2 1/2"	85
3"	over 85

IRR	IGAT	ION	LEG	END
	EE-0TR.	EE-UIK.	DUARTER	MIST HEADS
e) FULL	H djusted	t to o		RAINBIRD 1806 (OR EQUAL TO MATCH EXISTING) 6° POP-UP SPRAY HEAD w/ THE FOLLOWING NOZZLES:
0	0	•	•	15' SERIES NOZZLE.
0	Đ	9		12' SERIES NOZZLE.
$\oplus$	$\oplus$	$\Theta$	0	10' SERIES NOZZLE.
H		B	凹	8' SERIES NOZZLE.
				CS / SS-530 CENTER / SIDE SPRAY

. ADJUST POP-UP TYPE (HEIGHT) FOR SHRUB BEDS

BUBBLER NOZZLES

ES. RCS. LCS-515 END/ CORNER SPRAY

BUBBLERS AT TREES TO BE CAPPED ONCE TREES ARE ESTABLISHED BUBBLER NOZZLE ON FIXED RISER 3" ABOVE FINISH GRADE AS FOLLOWS:



CONTRACTOR TO SUPPLY A RAINBIRD RSD SERIES RAIN SENSOR CONTRACTOR TO COORDINATE BEST LOCATION SCH 40 PVC sleeves under payemer SLEEVES: SCH 40 PVC OR RATED EQUAL CLASS SLEEVES TO BE MIN. 24" - MAX. 36" DEEP - See FPC Chart

DANIA BEACH, FL TITLE IRRIGATION SPECIFICATIONS

STIRLING MARINA & NEW BOAT SALES

PROJECT

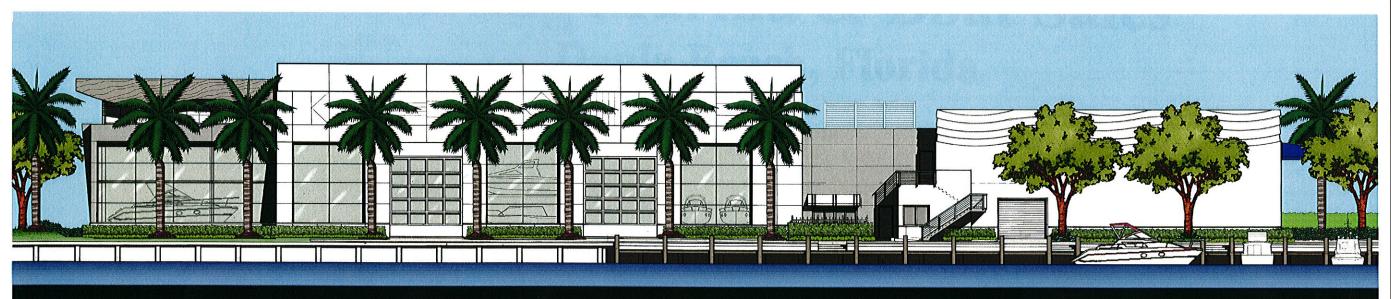
PROJ. NO. × FILE NAME 1 8/5/14 2 8/28/14 3 9/8/14 REV.

SHEET

IRRITROL VALVE 700 SERIES, SIZE AS NOTED ON PLAN, IN AMETEK OR CARSON 12"x18" VALVE BOX PC/AGT/CP DRAWN 6/2/14 DATE FIELD CONTROLLERS LOCATION—CONTRACTOR TO COORDINATE BEST LOCATION WITH OWNER REV. REV.



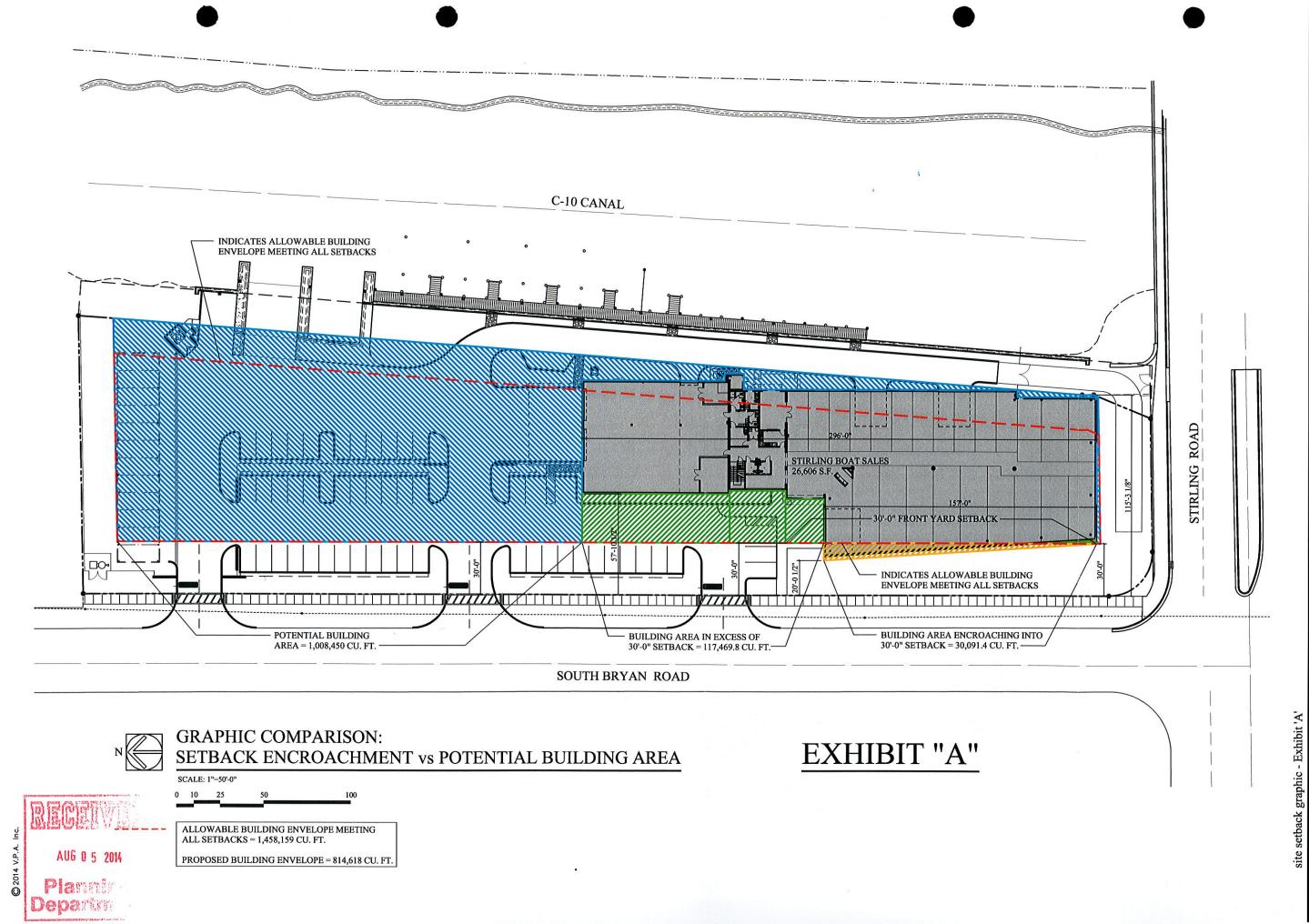
# WEST ELEVATION SCALE = 3/32" =1'-0"



# **EAST ELEVATION**

SCALE = 3/32" =1'-0"

# STIRLING MARINA & BOAT SALES



STIRLING MARINA & BOAT SALES
150 SOUTH BRYAN ROAD
DANIA BEACH, FLORIDA 33004

Vander Ploeg and Associates, Inc.

EXHIBIT "A"