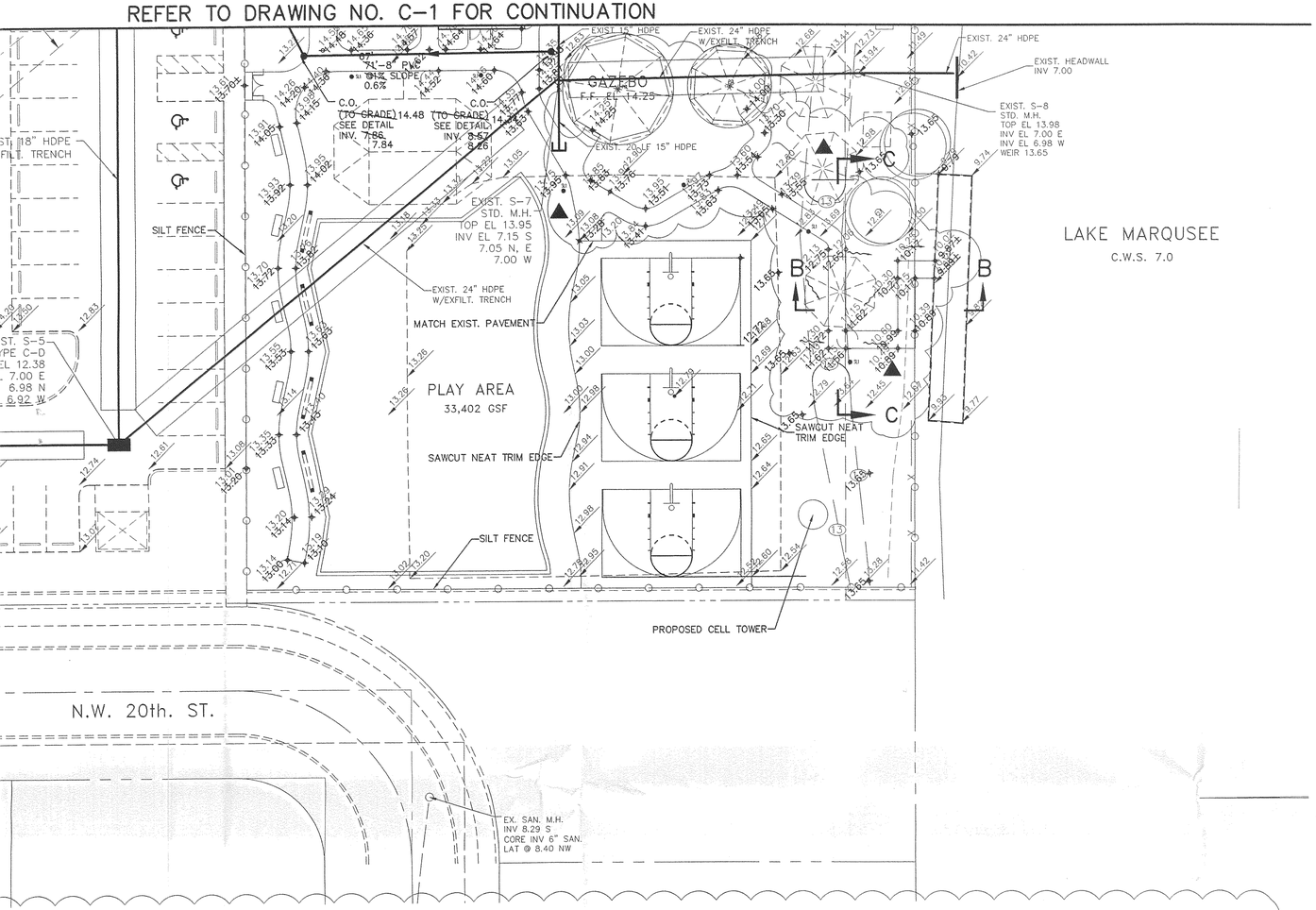
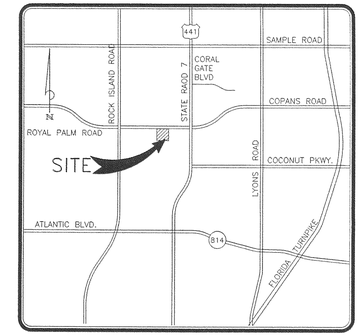
REFER TO DRAWING NO. C-1 FOR CONTINUATION



LAKE MARQUSEE
C.W.S. 7.0

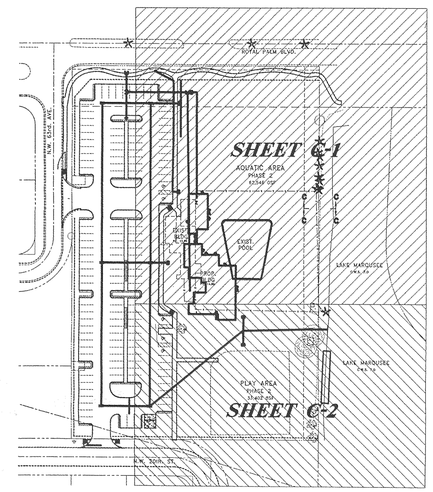
GRAPHIC SCALE
0 10 20 40
(IN FEET)
1 INCH = 20 FEET



SECTION 25, TOWNSHIP 48 S, RANGE 41E

LOCATION MAP

N.T.S.



KEY MAP

N.T.S.

LEGEND

- PROPOSED CHANNEL DECK DRAIN W/PVC PIPE (SIZE INDICATED ON PLAN)
- PROPOSED WATER PIPE
- PROPOSED SANITARY SEWER PIPE
- PROPOSED PIPE FLOW DIRECTION
- PROPOSED YARD DRAIN
- PROPOSED DECK DRAIN
- PROPOSED HOSE BIBB EVERY 50 FEET ALONG WATER SERVICE – PROVIDE J.R. SMITH 5730–NB BOX W/12"x12"x4" CONCRETE THRUST BLOCK.
- 14.34 — PROPOSED GRADE
- 13.09 — EXISTING ELEVATION
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- TACTILE SURFACE
- PROPOSED SHOWER – SEE ARCHITECTURAL PLANS FOR DETAILS
- PROPOSED SAMPLE POINT

NOTE:

1. CONTRACTOR SHALL UTILIZE 45°, 22-1/2°, 11-1/4° BENDS AS REQUIRED.
2. CONTRACTOR TO MAINTAIN MINIMUM 2% TO MAXIMUM 4% SLOPE BETWEEN DECK DRAIN AND POOL EDGE.

EXISTING UTILITY NOTES:

1. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING UTILITIES.
2. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO TAKE THE NECESSARY PRECAUTIONS TO ENSURE PROPER SAFETY AND WORKMANSHIP WHEN WORKING IN THE VICINITY OF EXISTING UTILITY LINES.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH FPL ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
4. CONTRACTOR SHALL VERIFY PROPER CLEARANCE BELOW EXISTING OVERHEAD POWER LINES PRIOR TO WORKING WITHIN THE VICINITY THE POWER LINES.

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF MARGATE, WATER AND WASTE WATER SPECIFICATIONS.
2. P.V.C. WATER MAIN TO BE 1120 S.D.R. 18 CONFORMING TO A.N.S.I. / A.W.W.A. C-900-89 WITH A MINIMUM COVER OF 36". D.I.P. WATER MAIN SHOULD BE MINIMUM CLASS 50

TESTING / WATER MAIN

WATER MAINS SHALL BE TESTED IN ACCORDANCE WITH A.N.S.I. / A.W.W.A. STANDARDS C-600-93

1. HYDROSTATIC TESTS SHALL BE CONDUCTED AS FOLLOWS: AFTER A NEW PRESSURE MAIN HAS BEEN laID AND BACKFILLED, IT SHALL BE PUMPED TO A PRESSURE OF 150 P.S.I. AND SHALL NOT VARY BY MORE THAN 5 P.S.I. DURING THE DURATION OF THE TEST. ALL VISIBLE LEAKS SHALL BE STOPPED BY APPROVED METHODS.

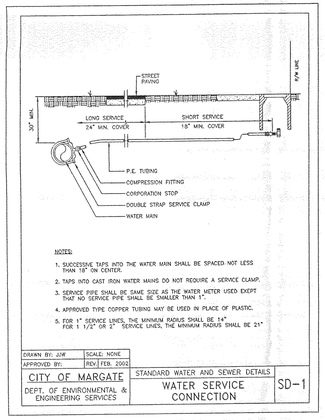
   A LEAKAGE TEST SHALL THEN BE CONDUCTED AT THE ABOVE MENTIONED PRESSURE AND NO INSTALLATION WILL BE ACCEPTABLE BY THE ENGINEER UNTIL THE LEAKAGE IS LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FOLLOWING FORMULA.

   $$L = \frac{ND\sqrt{P}}{133,200}$$ A.N.S.I./ A.W.W.A. C600 – 93 STANDARDS

   IN WHICH L EQUAL THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR; S = LENGTH OF LINES IN FEET; D = DIAMETER OF LINES IN INCHES AND P = THE AVERAGE TEST PRESSURE DURING THE LEAKAGE TEST, IN POUNDS PER SQUARE INCH. THE TEST SHALL BE MAINTAINED FOR ONE (1) HOUR. IF IT BECOMES APPARENT THAT THE LEAKAGE IS EQUAL TO OR GREATER THAN THE AMOUNT ALLOWABLE, WATER SUPPLIED TO THE MAIN DURING THE TEST TO MAINTAIN THE REQUIRED PRESSURE SHALL BE MEASURED BY A 5/8 INCH METER CONNECTED ON THE PUMP SIDE OF THE TEST PUMP, OR BY PUMPING FROM CALIBRATED CONTAINERS. A HOSE BIBB CONNECTED TO THE MAIN BEING TESTED SHALL BE USED TO PUMP WATER SUPPLIED BY THE CITY OF MARGATE. THE SECTION OF THE MAIN BEING TESTED SHALL BE LIMITED TO A MAXIMUM LENGTH OF 2000 FEET, OR THE DISTANCE BETWEEN THE TWO (2) CLOSEST VALVES, WHICHEVER IS GREATER. WHEN TESTING AGAINST CLOSED METAL-SEATED VALVES, AND ADDITIONAL LEAKAGE PER DISCLOSED VALVE OF 0.00078 GAL/HR/IN OF NOMINAL VALVE SIZE SHALL BE ALLOWED. ANY EXCEPTIONS PERTAINING TO PROCEDURES USED DURING THE TEST SHALL BE DIRECTED BY THE ENGINEER.
2. STERILIZATION SHALL BE PERFORMED AFTER THE WATER MAINS HAVE SATISFIED THE LEAKAGE REQUIREMENTS. THE WATER MAINS SHALL BE FLUSHED THROUGH OUTLETS AT THE DEADEND OF MAIN SIZE AS DETAILED IN A.N.S.I. / A.W.W.A. STANDARD C-651-92. THE WATER MAIN SHALL THEN BE FILLED WITH WATER MIXED WITH CHLORINE. THE APPLICABLE SECTIONS OF THE ABOVE NAMED SPECIFICATIONS, ON MAIN BREAKS, CUT-INS, ETC. A LIBERAL APPLICATION OF CALCIUM HYPROCHLORITE SHALL BE MADE.

   MAINS SHALL NOT BE PUT INTO DOMESTIC SERVICE UNTIL AFTER THE NECESSARY BACTERIOLOGICAL SAMPLES HAVE BEEN APPROVED BY THE APPLICABLE REGULATORY AGENCIES.

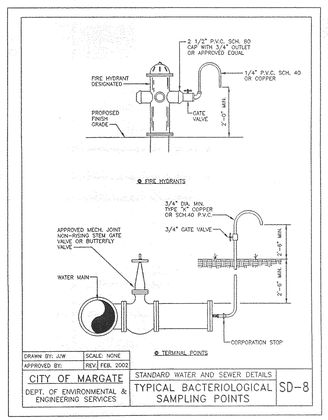
DRAWN BY: JJW	SCALE: NONE
APPROVED BY:	REV. FEB. 2002
CITY OF MARGATE	STANDARD WATER AND SEWER DETAILS
DEPT. OF ENVIRONMENTAL & ENGINEERING SERVICES	NOTES — GN-1A



NOTES:

1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED NOT LESS THAN 18" ON CENTER.
2. TAPS INTO CAST IRON WATER MAINS DO NOT REQUIRE A SERVICE CLAMP.
3. SERVICE PIPE SHALL BE SAME SIZE AS THE WATER METER USED EXCEPT THAT NO SERVICE PIPE SHALL BE SMALLER THAN 1".
4. APPROVED TYPE COPPER TUBING MAY BE USED IN PLACE OF PLASTIC.
5. FOR 1" SERVICE LINES, THE MINIMUM RADIUS SHALL BE 14". FOR 1 1/2" OR 2" SERVICE LINES, THE MINIMUM RADIUS SHALL BE 21'

DRAWN BY: JJW	SCALE: NONE
APPROVED BY:	REV. FEB. 2002
CITY OF MARGATE	STANDARD WATER AND SEWER DETAILS
DEPT. OF ENVIRONMENTAL & ENGINEERING SERVICES	WATER SERVICE CONNECTION — SD-1



DRAWN BY: JJW	SCALE: NONE
APPROVED BY:	REV. FEB. 2002
CITY OF MARGATE	STANDARD WATER AND SEWER DETAILS
DEPT. OF ENVIRONMENTAL & ENGINEERING SERVICES	TYPICAL BACTERIOLOGICAL SAMPLING POINTS — SD-8

TESTING / WATER SERVICE

1. HYDROSTATIC TESTING: HYDROSTATIC TESTING OF WATER SERVICE LINES SHALL BE DONE IN CONJUNCTION WITH THE TESTING OF THE LATERAL OR MAIN LINE. NO ADDITIONAL LEAKAGE ALLOWANCE WILL BE MADE FOR SERVICE LINES.
2. STERILIZATION: STERILIZATION OF SERVICE LINES SHALL BE DONE IN CONJUNCTION WITH THE STERILIZATION OF THE MAIN LINE. SEPARATE BACTERIOLOGICAL SAMPLING POINTS SHALL BE TAKEN FROM SERVICE LINE CONNECTIONS TO ASSURE UNIFORM RESULTS THROUGHOUT THE SYSTEM BEING TESTED.

ALL FIRE LINES TO BE INSTALLED AND TESTED PER N.F.P.A. 24 CODE. CONTRACTOR TO TAKE NOTE THAT PRESSURE TEST ON THIS LINE WILL BE AT 200 P.S.I. AND PIPE AND VALVES SHOULD MEET THIS REQUIREMENT.

DRAWN BY: JJW	SCALE: NONE
APPROVED BY:	REV. FEB. 2002
CITY OF MARGATE	STANDARD WATER AND SEWER DETAILS
DEPT. OF ENVIRONMENTAL & ENGINEERING SERVICES	NOTES — GN-1B

STANDARD WATER AND SEWER SEPARATION STATEMENT

) NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO ROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER AIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM TYPE SANITARY SEWER , STORM EWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER ART III OF CHAPTER 62-610, F.A.C.

) NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND HAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM- TYPE SANITARY SEWER OR TORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE HE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; AND NEW OR RELOCATED, NDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY XISTING OR PROPOSED PRESSURE- TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE AIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE.

) AT THE UTILITY CROSSING DESCRIBED IN PART A ABOVE, ONE FULL LENGTH OF WATER MAIN PE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE S FAR AS POSSIBLE FROM THE OTHER PIPELINE OR THE PIPES WILL BE ARRANGED SO THAT ALL ATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM- TYPE SANITARY EWERS, STORM SEWERS, STORMWATER FORCE MAINS; OR PIPELINES CONVEYING RECLAIMED WATER EGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS E GRAVITY- OR PRESSURE- TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES ONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

Prepared by:

MILLER LEGG & ASSOCIATES, INC.
Engineers • Surveyors & Mappers
GIS • Planners • Landscape Architects
Environmental Professionals
www.millerlegg.com

Main Office:
1800 N. Douglas Road, Suite 200
Pembroke Pines, Florida 33024-3200
(954)436-7000 Fax: (954)436-8664

Palm Beach Regional Office:
1300 Corporate Center Way, Suite 201
Wellington, Florida 33414-8593
(561)798-9981 Fax: (561)795-9808

Orlando Office:
37 North Orange Avenue, Suite 505
Orlando, Florida 32801
(407)926-4122 Fax: (407)926-4123

MPA
MPA ARCHITECTS, INC.
ARCHITECTS
PLANNERS
INTERIOR DESIGNERS

1801 CENTREPARK DR.
SUITE 175
WEST PALM BEACH
FL 33401

TEL (561) 683-7000
FAX (561) 478-3922

FL LIC AA-C000630

SEAL

Michael F. Schwartz, P.E.
Fla. Registration No. 56200

FLORIDA

CALYPSO COVE AT ROYAL PALM PARK
ROYAL PALM ROAD

MARGATE, BROWARD COUNTY

Scale:	1" = 20'
Date:	12/12/03
Design By:	MFS
Drawn By:	SHB
Check By:	MFS

FILE NUMBER
03-00013

UTILITY, PAVING, GRADING AND DRAINAGE PLAN

REVISIONS
- 5/7/04 PERMIT REVISIONS
- 5/7/04 RESPONSE TO RFI'S 1-9

SHEET
C-3
OF ___ OF ___