

LOCATION MAP  
NOT TO SCALE

### DEDICATION:

KNOW ALL MEN BY THESE PRESENTS THAT M.J.H. VILLA, LLC, A FLORIDA LIMITED LIABILITY COMPANY, OWNER OF THE LAND SHOWN HEREON, BEING IN SECTION 9, TOWNSHIP 46 SOUTH, RANGE 43 EAST, CITY OF DELRAY BEACH, PALM BEACH COUNTY, FLORIDA, SHOWN HEREON AS "BOND PLAT", BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THAT PORTION OF TRACT FIVE OF CORRECTION MAP SHOWING SUBDIVISION OF PROPERTY OF HARRY SEEMILLER, SITUATED IN LOTS 36, 1, 2, AND 3 IN SECTION 9, TOWNSHIP 46 SOUTH, RANGE 43 EAST, AS RECORDED IN PLAT BOOK 9, PAGE 72 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, LYING EAST OF BUT NOT ADJACENT TO STATE HIGHWAY NO. 5 (US HIGHWAY #1) AND LYING WEST OF THE CENTERLINE OF N. E. 8TH AVENUE IF EXTENDED NORTHWARD (N.E. 8TH AVENUE BEING AS SHOWN ON THE PLAT OF KENMONT, RECORDED IN PLAT BOOK 20, PAGE 65 OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA) MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE CENTERLINE OF SAID N. E. 8TH AVENUE AND THE SOUTH LINE OF SAID TRACT FIVE; THENCE N 90°00'00" W ALONG THE SOUTH LINE OF SAID TRACT FIVE A DISTANCE OF 25.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUING N 90°00'00" W ALONG THE SOUTH LINE OF SAID TRACT 5, A DISTANCE OF 167.27 FEET; THENCE N 00°00'00" E A DISTANCE OF 100.00 FEET; THENCE N 90°00'00" E A DISTANCE OF 42.27 FEET; THENCE N 00°00'00" E A DISTANCE OF 70.27 FEET TO A POINT BEING 70.00 FEET SOUTH OF THE NORTH LINE OF SAID TRACT 5; THENCE N 89°56'30" E ALONG A LINE 70.00 FEET SOUTH OF AND MEASURED AT A RIGHT ANGLE TO THE NORTH LINE OF SAID TRACT 5, A DISTANCE OF 125.00 FEET; THENCE S 00° 00'00" W ALONG A LINE 25.00 FEET WEST OF THE PROJECTION OF THE CENTERLINE EXTENSION N.E. 8TH AVE; A DISTANCE OF 170.39 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION.

CONTAINING 25,518.31 SQUARE FEET OR 0.5858 ACRES MORE OR LESS.

HAVE CAUSED SAID LANDS TO BE SURVEYED AND PLATTED AS SHOWN HEREON AS THE BOND PLAT AND FURTHER DEDICATE AS FOLLOWS:

LOTS 1 AND 2 ARE HEREBY PLATTED FOR PRIVATE PURPOSES AS PURSUANT TO THE PLANNING AND ZONING REGULATIONS OF THE CITY OF DELRAY BEACH.

GENERAL UTILITY (G.U.) EASEMENTS ARE MADE TO ANY PUBLIC OR PRIVATE UTILITY, SUCH AS BUT NOT LIMITED TO, STORM DRAINAGE, ELECTRIC POWER, GAS SERVICE, TELEPHONE LINES AND CABLE TELEVISION; PROVIDED HOWEVER, NO SUCH CONSTRUCTION, INSTALLATION, MAINTENANCE AND OPERATION OF CABLE TELEVISION SHALL INTERFERE WITH THE FACILITY AND SERVICES OF ELECTRIC, TELEPHONE, GAS OR OTHER PUBLIC FACILITY.

IN WITNESS WHEREOF, THE ABOVE-NAMED LIMITED LIABILITY COMPANY HAS CAUSED THESE PRESENTS TO BE SIGNED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2015.

M.J.H. VILLA, LLC,  
A FLORIDA LIMITED LIABILITY COMPANY

WITNESS: \_\_\_\_\_ BY: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_ PRINT NAME: \_\_\_\_\_

WITNESS: \_\_\_\_\_

PRINT NAME: \_\_\_\_\_

## BOND PLAT

A REPLAT OF A PORTION OF TRACT 5, HARRY SEEMILLER,  
AS RECORDED IN PLAT BOOK 9, PAGE 72 OF THE PUBLIC  
RECORDS OF PALM BEACH COUNTY, FLORIDA LYING IN  
SECTION 9, TOWNSHIP 46 SOUTH, RANGE 43 EAST,  
CITY OF DELRAY BEACH, PALM BEACH COUNTY, FLORIDA  
SHEET NO. 1 OF 2  
AUGUST, 2015

### ACKNOWLEDGEMENT:

STATE OF FLORIDA  
COUNTY OF PALM BEACH

BEFORE ME PERSONALLY APPEARED \_\_\_\_\_ WHO IS PERSONALLY KNOWN TO ME, OR HAS PRODUCED \_\_\_\_\_ AS IDENTIFICATION, AND WHO EXECUTED THE FOREGOING INSTRUMENT AS \_\_\_\_\_ OF M.J.H. VILLA, LLC, A FLORIDA LIMITED LIABILITY COMPANY, AND SEVERALLY ACKNOWLEDGED TO AND BEFORE ME THAT HE EXECUTED SUCH INSTRUMENT AS SUCH OFFICER OF SAID COMPANY, AND THAT THE SEAL AFFIXED TO THE FOREGOING INSTRUMENT IS THE COMPANY SEAL OF SAID COMPANY AND THAT IT WAS AFFIXED TO SAID INSTRUMENT BY DUE AND REGULAR COMPANY AUTHORITY, AND THAT SAID INSTRUMENT IS THE FREE ACT AND DEED OF SAID COMPANY.

WITNESS MY HAND AND SIGNATURE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2015.

MY COMMISSION EXPIRES: \_\_\_\_\_

NOTARY PUBLIC  
NAME: \_\_\_\_\_  
COMMISSION NO. \_\_\_\_\_

### CITY APPROVAL:

THIS PLAT OF "BOND PLAT" AS APPROVED ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_ A.D. 2015 BY THE CITY COMMISSION OF THE CITY OF DELRAY BEACH, FLORIDA

\_\_\_\_\_  
MAYOR ATTEST: \_\_\_\_\_  
CITY CLERK

AND REVIEWED, ACCEPTED, AND CERTIFIED BY:

\_\_\_\_\_  
DIRECTOR OF PLANNING AND ZONING \_\_\_\_\_  
FIRE MARSHALL

\_\_\_\_\_  
CITY ENGINEER

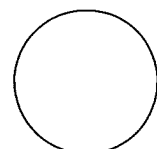
### TITLE CERTIFICATION:

STATE OF FLORIDA  
COUNTY OF PALM BEACH

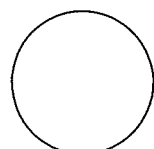
I \_\_\_\_\_, A DULY LICENSED ATTORNEY IN THE STATE OF FLORIDA, DO HEREBY CERTIFY THAT I HAVE EXAMINED THE TITLE TO THE HEREON DESCRIBED PROPERTY; THAT I FIND THE TITLE TO THE PROPERTY IS VESTED TO M.J.H. VILLA, LLC; THAT THE CURRENT TAXES HAVE BEEN PAID; THAT THERE ARE NO MORTGAGES OF RECORD; AND THAT THERE ARE ENCUMBRANCES OF RECORD, BUT THOSE ENCUMBRANCES DO NOT PROHIBIT THE CREATION OF THE SUBDIVISION DEPICTED BY THIS PLAT.

DATE \_\_\_\_\_

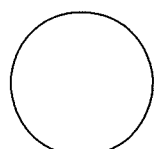
BY: \_\_\_\_\_  
NAME  
ATTORNEY-AT-LAW  
MEMBER OF FLORIDA BAR



SEAL  
CITY OF  
DELRAY BEACH



SEAL  
LAND SURVEYOR



SEAL  
REVIEWING SURVEYOR

STATE OF FLORIDA  
COUNTY OF PALM BEACH  
THIS PLAT WAS FILED FOR  
RECORD AT \_\_\_\_\_ M. THIS \_\_\_\_\_ DAY  
OF \_\_\_\_\_, 2015, AND DULY  
RECORDED IN PLAT BOOK  
NO. \_\_\_\_\_  
ON PAGES \_\_\_\_\_ THRU \_\_\_\_\_

SHARON R. BOCK  
CLERK AND COMPTROLLER  
BY \_\_\_\_\_ D.C.

### SURVEYOR'S CERTIFICATION:

THIS IS TO CERTIFY THAT THE PLAT SHOWN HEREON IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY MADE UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION; THAT SAID SURVEY IS ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF; THAT PERMANENT REFERENCE MONUMENTS (P.R.M.'S) AND MONUMENTS ACCORDING TO SEC. 177.091 (9), F.S. HAVE BEEN PLACED AS REQUIRED BY LAW; AND, FURTHER, THAT THE SURVEY DATA COMPLIES WITH ALL THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES, AS AMENDED, AND THE ORDINANCES OF THE CITY OF DELRAY BEACH, FLORIDA.

DATE: \_\_\_\_\_

PAUL A. DAVIS  
SURVEYOR AND MAPPER NO. 4531

PAUL A. DAVIS, INC.  
4710 N.E. 17TH AVENUE  
POMPAHO BEACH, FLORIDA 33064  
L.B. NO. 0007219

### REVIEWING SURVEYOR'S STATEMENT:

THIS PLAT HAS BEEN REVIEWED IN ACCORDANCE WITH CHAPTER 177.081, FLORIDA STATUTES.

DATE: \_\_\_\_\_

DAVID P. LINDLEY, P.L.S.  
FLORIDA REGISTRATION NO. 5005  
CAULFIELD WHEELER, INC.  
LICENSE BUSINESS NO. L.B. 3591

### NOTES:

THE CITY OF DELRAY BEACH IS HEREBY GRANTED THE RIGHT OF ACCESS FOR EMERGENCY AND MAINTENANCE PURPOSES

BEARINGS SHOWN HEREON, ARE BASED ON GRID NORTH, (NORTH AMERICAN DATUM 83 (90) ADJUSTMENT) WITH THE EAST LINE OF SECTION 9, TOWNSHIP 46 SOUTH, RANGE 43 EAST, ALSO BEING THE CENTERLINE OF NORTH 8TH AVENUE, HAVING A BEARING OF N00°00'00"E.

NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLANTED IN AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF THE PLAT. THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT RECORDED ON THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.

THIS INSTRUMENT WAS PREPARED BY PAUL A. DAVIS, IN THE OFFICE OF PAUL A. DAVIS, INC., 4710 NE 17TH AVE POMPAHO BEACH, FL. (954) 698-9101

PERMANENT REFERENCE MONUMENTS ARE SHOWN THUS: ☒

BENCH MARK REFERENCE PALM BEACH COUNTY VERTICAL CONTROL BENCH MARK (RIBBIT) N.G.V.D. (1929) ELEVATION = 15.272 FEET

CONSTRUCTION OR LANDSCAPING MUST BE IN CONFORMANCE WITH ALL BUILDING AND ZONING CODES AND/OR ORDINANCES OF THE CITY OF DELRAY BEACH.

THERE SHALL BE NO BUILDINGS OR ANY KIND OF CONSTRUCTION PLACED ON WATER, SEWER OR DRAINAGE EASEMENTS. NO STRUCTURES SHALL BE PLACED WITHIN A HORIZONTAL DISTANCE OF 10 FEET FROM ANY EXISTING OR PROPOSED CITY OF DELRAY BEACH MAINTAINED WATER, SEWER OR DRAINAGE FACILITIES. CONSTRUCTION OF LANDSCAPING UPON MAINTENANCE OR MAINTENANCE ACCESS EASEMENTS MUST BE IN CONFORMANCE WITH ALL BUILDING AND ZONING CODES AND/OR ORDINANCES OF THE CITY OF DELRAY BEACH.



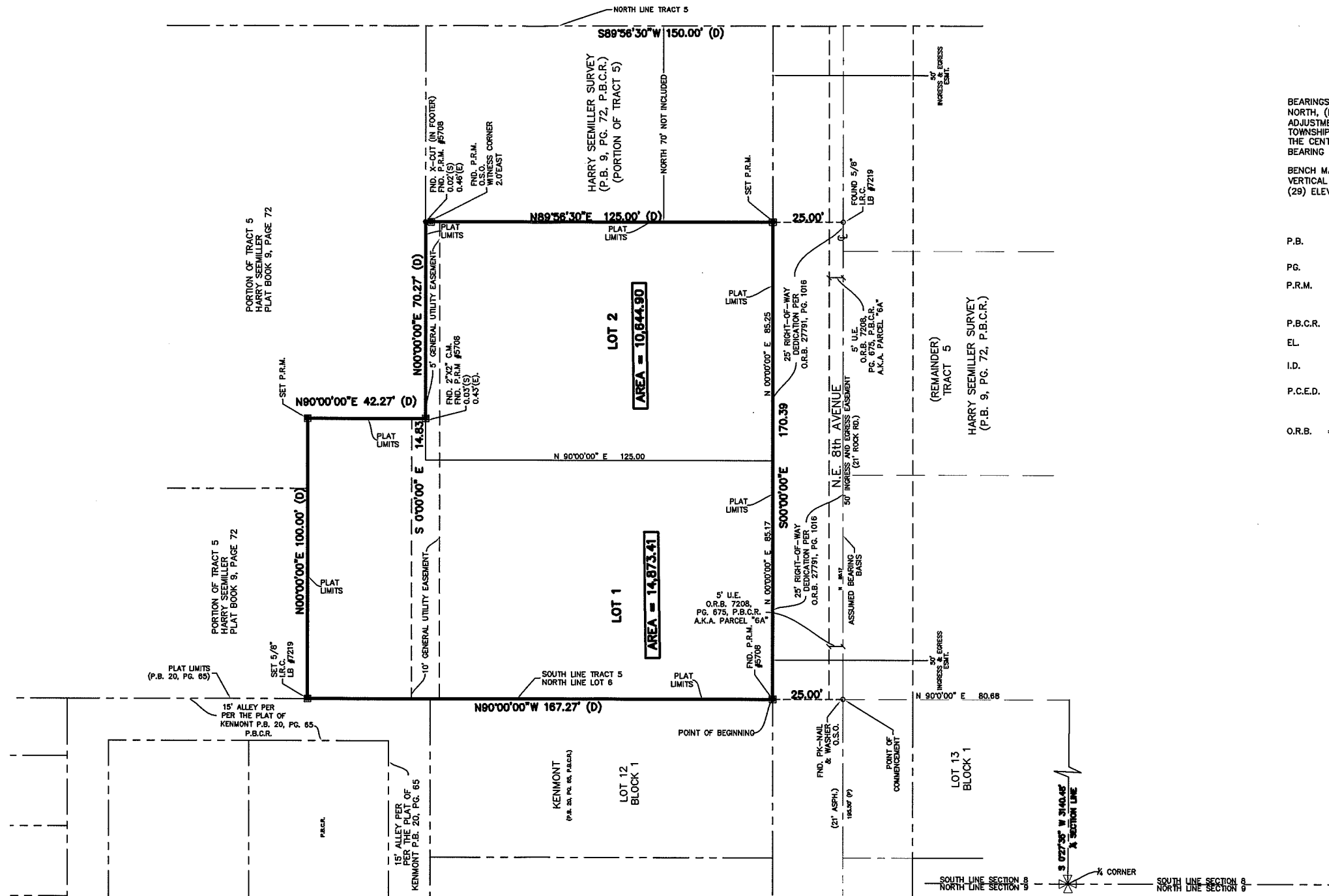
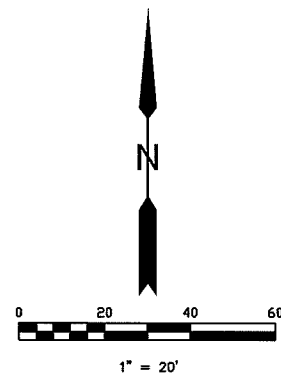
THIS INSTRUMENT PREPARED BY:  
**PAUL A. DAVIS, INC.**

Land Surveyors • Land Development • Consultants • Planners  
2097 N.E. 36TH STREET # 50234 LIGHTHOUSE POINT, FL. 33074  
Phone: (954) 421-9101 & (954) 698-9101 Fax: (954) 421-5201  
Subdivisions & Condominiums • Land & Site Planning • Sanitary Sewer Systems • Water Systems • Drainage Design • Parking Design  
Lot Surveys • Mortgage Surveys • Acreage Surveys • Topographic Surveys • Record Plots • Condominium Plots • Construction Layout

# BOND PLAT

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AS RECORDED IN PLAT BOOK 9, PAGE 72 OF THE PUBLIC  
RECORDS OF PALM BEACH COUNTY, FLORIDA LYING IN  
SECTION 9, TOWNSHIP 46 SOUTH, RANGE 43 EAST,  
CITY OF DERAY BEACH, PALM BEACH COUNTY, FLORIDA  
SHEET NO. 2 OF 2  
AUGUST, 2015

STATE OF FLORIDA  
COUNTY OF PALM BEACH  
THIS PLAT WAS FILED FOR  
RECORD AT \_\_\_\_\_ M. THIS \_\_\_\_\_ DAY  
OF \_\_\_\_\_ 2015, AND DULY  
RECORDED IN PLAT BOOK  
NO. \_\_\_\_\_  
ON PAGES \_\_\_\_\_ THRU \_\_\_\_\_  
BY SHARON R. BOCK  
CLERK AND COMPTROLLER  
D.C.



BEARINGS SHOWN HEREON, ARE BASED ON GRID  
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ADJUSTMENT) WITH THE EAST LINE OF SECTION 9,  
TOWNSHIP 46 SOUTH, RANGE 43 EAST, ALSO BEING  
THE CENTERLINE OF NORTH 8TH AVENUE, HAVING A  
BEARING OF N00°00'00"E.

BENCH MARK REFERENCE PALM BEACH COUNTY  
VERTICAL CONTROL BENCH MARK (RIBBIT) N.G.V.D.  
(29) ELEVATION = 15.272 FEET

#### LEGEND:

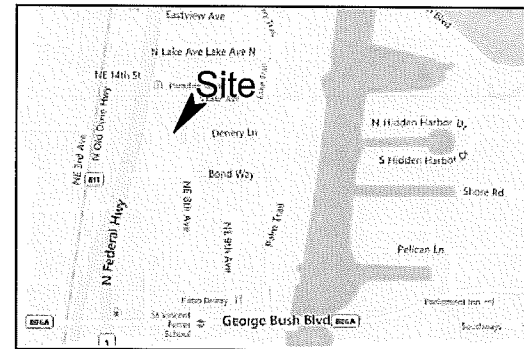
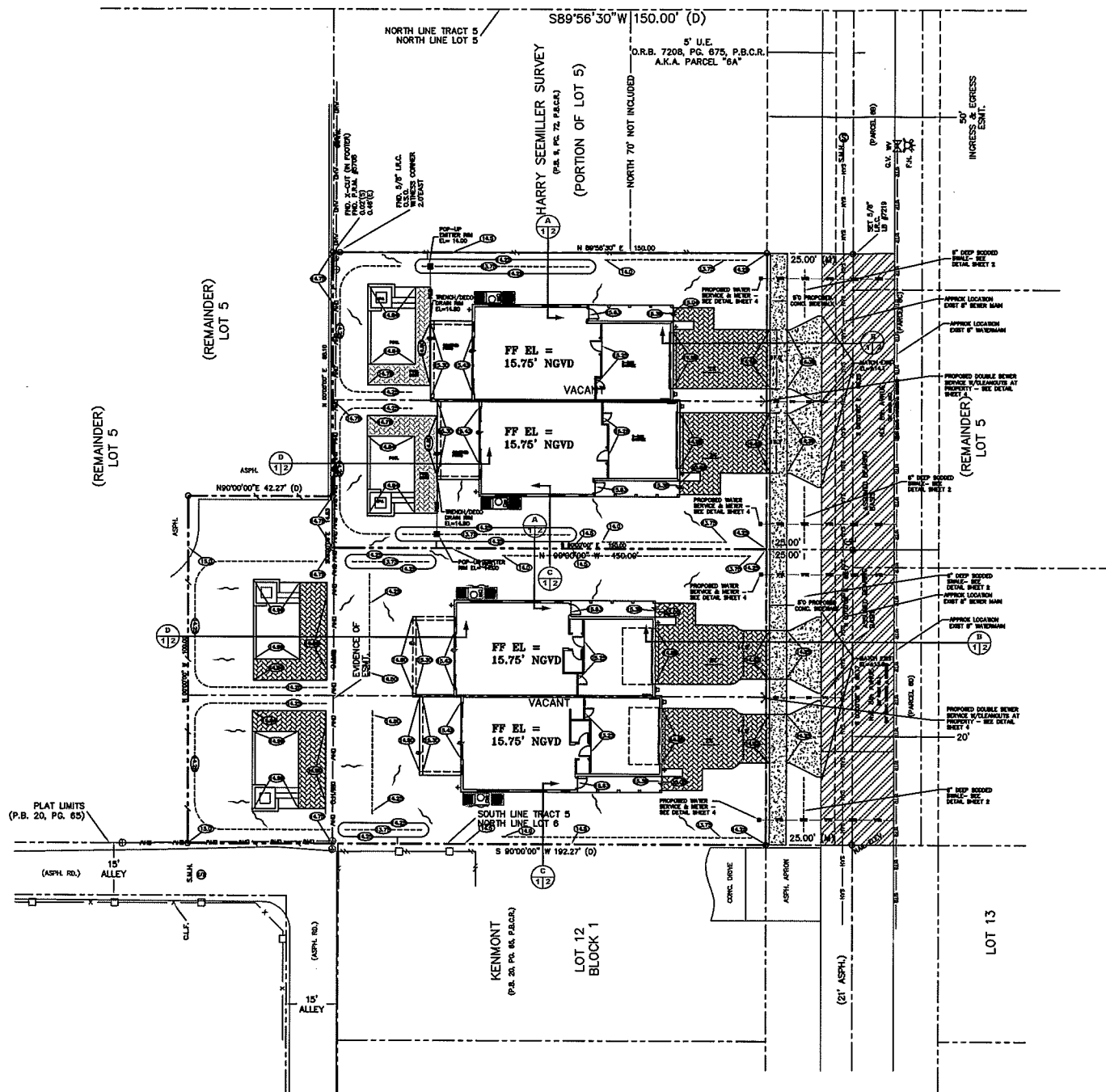
- P.B. = PLAT BOOK (PALM BEACH COUNTY,  
RECORDS) UNLESS STATED OTHERWISE
- PG. = PAGE
- P.R.M. = PERMANENT REFERENCE MONUMENT  
(4"x4" CONCRETE MONUMENT 1 1/4"  
STEEL DISC STAMPED P.R.M. LB7219)
- P.B.C.R. = PALM BEACH COUNTY RECORDS
- EL. = ELEVATION (NATIONAL GEODETIC VERTICAL  
DATUM) 1929
- I.D. = IDENTIFICATION
- P.C.E.D. = PALM BEACH COUNTY ENGINEERING  
DEPARTMENT
- O.R.B. = OFFICIAL RECORD BOOK



THIS INSTRUMENT PREPARED BY:  
**PAUL A. DAVIS, INC.**  
LB #0007219

Land Surveyors Land Development-Consultants Planners  
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LOCATION MAP  
N.T.S.

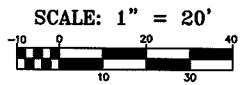
LEGEND:

- PROPERTY LINE
- (A/11) SECTION IDENTIFIER  
PLAN PAGE DETAIL PAGE
- (16.5) PROPOSED ELEVATION
- ~ DIRECTION OF FLOW
- +4.7 EXISTING ELEVATION
- [Hatched Box] DENOTES AREA OF PROPOSED ASPHALT PAVING
- [Cross-hatched Box] DENOTES AREA OF PROPOSED BRICK PAVEMENT DRIVEWAY
- [Circle with cross] PROPOSED WATER METER
- [Circle] EXISTING MANHOLE
- C.O. SANITARY SEWER CLEANOUT
- [Line with cross] SINGLE SANITARY SERVICE WITH CLEANOUT



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ENGINEER REPRESENTING ENVIRODESIGN ASSOCIATES, INC.

COMPOSITE UTILITY PLAN FOR:  
8TH AVE VILLAS  
NE 8TH AVENUE  
DELRAY BEACH, FLORIDA

EnviroDesign Associates, Inc.  
ENGINEERS - ENVIRONMENTAL CONSULTANTS  
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 85063444  
298 PLYMOUTH WAY, DELRAY BEACH, FL 33444  
Phone: (561) 274-8500 Fax: (561) 274-8558

DRAWN:  
M.T.J.  
CHECKED:  
J.A.P.  
DATE:  
10/21/15  
JOB NO.  
15035-COMP  
SHEET NO.  
1 OF 1

NO.	DATE	REVISION	BY:
1	10/21/15	1	M.T.J.
2	10/21/15	2	M.T.J.
3	10/21/15	3	M.T.J.
4	10/21/15	4	M.T.J.
5	10/21/15	5	M.T.J.
6	10/21/15	6	M.T.J.
7	10/21/15	7	M.T.J.
8	10/21/15	8	M.T.J.
9	10/21/15	9	M.T.J.
10	10/21/15	10	M.T.J.

# DRAINAGE CALCULATIONS:

GIVEN: TOTAL SITE AREA 14873 sf  
IMPERVIOUS AREA 6175 sf 41.5 %  
PERVIOUS AREA 8698 sf 58.5 %

REQUIRED STORAGE: 1" OVER TOTAL SITE AREA OR 2.5" OVER IMPERVIOUS AREA (IF SITE IS OVER 40% IMPERVIOUS, USE 2.5" OVER IMPERVIOUS)

USDA SCS RUNOFF EQUATION:

A = 14873 sf

Q = RUNOFF = (P-0.2S)<sup>2</sup> / (P+0.8S)

P = ACCUMULATED RAINFALL

= 1.04

S = SOIL STORAGE \* %PERVIOUS

AVERAGE PERVIOUS ELEVATION = 14.5 ft

WATER TABLE ELEVATION = 10 ft

DEPTH TO WATER TABLE = 4 ft

CUMULATIVE WATER STORAGE WITHIN SOIL = 10.9 in

STORAGE PER SF WMD BASIS OF REVIEW = 8.175 in

25% REDUCTION = 4.78 in

NOTE: IF 0.2S IS > OR = P, THEN Q = 0

0.2S = 0.95 < 1.04

Q = 0.00 in

VOLUME REQUIRED:

V = A\*Q/12 = 1.7 cf

VOLUME PROVIDED:

V = 200sf IN SWALES \* 6/12" DEEP \* 1/2 = 50 cf

## LEGEND:

--- PROPERTY LINE



SECTION IDENTIFIER

PLAN PAGE DETAIL PAGE



PROPOSED ELEVATION



DIRECTION OF FLOW



EXISTING ELEVATION



DENOTES AREA OF PROPOSED ASPHALT PAVING



DENOTES AREA OF PROPOSED BRICK PAVEMENT DRIVEWAY



PROPOSED WATER METER



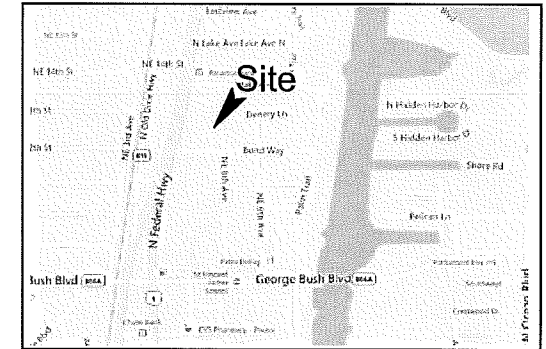
EXISTING MANHOLE



SANITARY SEWER CLEANOUT



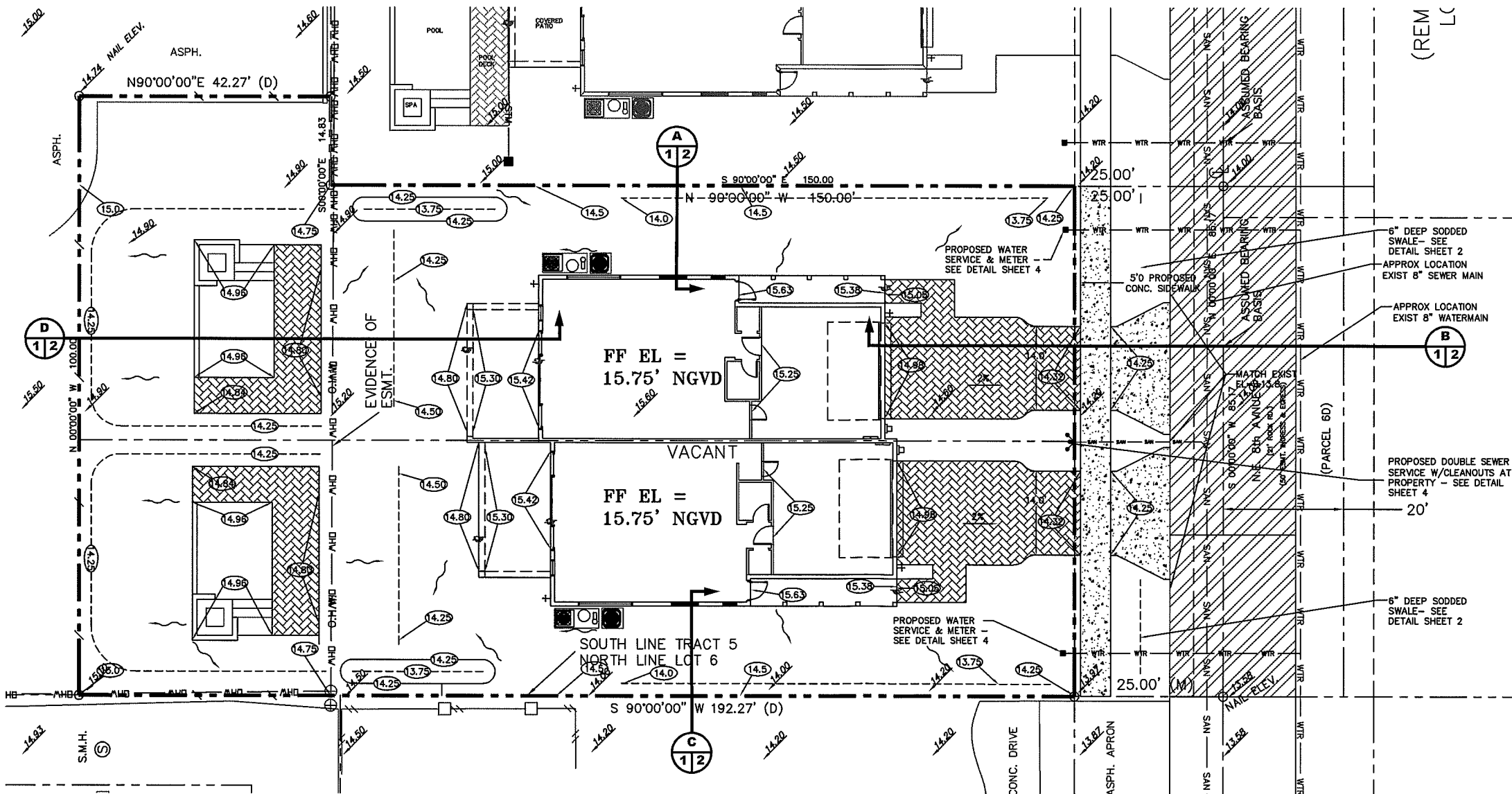
SINGLE SANITARY SERVICE WITH CLEANOUT



LOCATION MAP  
N.T.S.



BY:	RC
DATE:	06/19/15
NO.:	1
REVISIONS:	
NOT VALID WITHOUT ENGINEER'S SEAL	
JOSEPH A. PIKE, P.E. FL REG # 42896	
PAVING & DRAINAGE PLAN FOR: 8TH AVE VILLAS - SOUTH (LOT 1)	
NE 8TH AVENUE DELRAY BEACH, FLORIDA	
EnviroDesign Associates, Inc. www.envirodesign.com ENGINEERS • ENVIRONMENTAL CONSULTANTS FLORIDA CERTIFICATE OF AUTHORIZATION No. 6506 298 Pineapple Grove Way Delray Beach, Florida 33444 Phone: (561) 274-6500 Fax: (561) 274-8558	
DRAWN:	M.T.J.
CHECKED:	J.A.P.
DATE:	10/21/15
JOB NO.	15035-ENG
SHEET NO.	1 OF 5

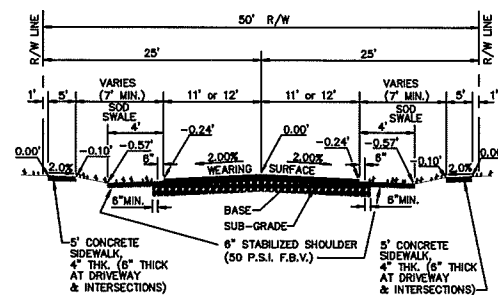


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SCALE: 1" = 10'

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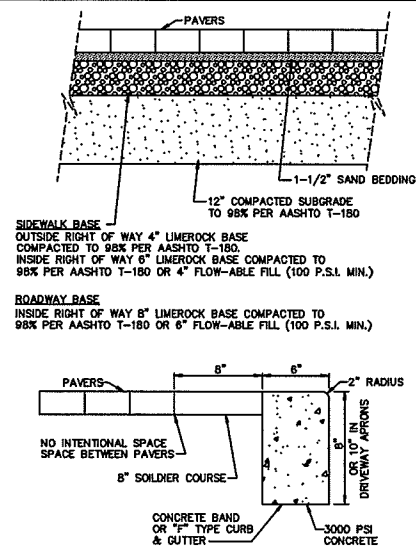


PAVEMENT SPECIFICATIONS	
WEARING SURFACE	1 1/2" TYPE S-III (2 LIFTS) OR 1-1/2" TYPE S-I
BASE	8" LIMEROCK OR 10" CRUSHED CONCRETE COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180 PRIME & TACK COAT PER FDOT SECTION 300.
SUBGRADE	12" STABILIZED (75 P.S.I. FBV) AND COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.

VARIATION FROM MATERIAL SPECIFICATIONS WILL BE CONSIDERED  
ON A CASE BY CASE BASIS BY THE CITY ENGINEER.

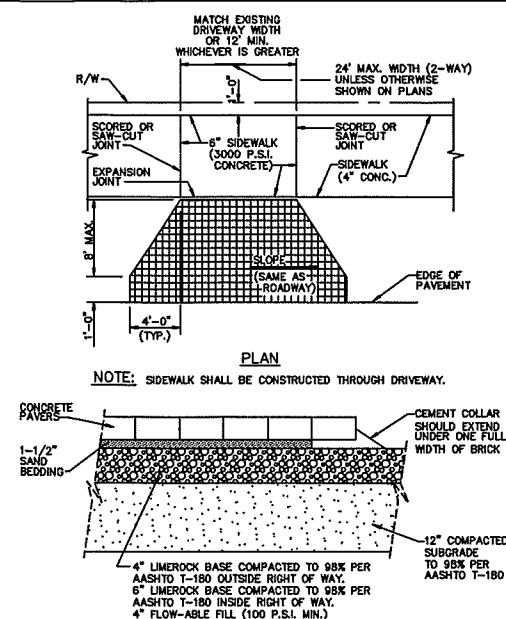
STABILIZE SHOULDER TO 50 P.S.I. F.B.V.

TYPICAL 50' R/W SECTION WITH SWALE  
DETAIL RT 1.1b



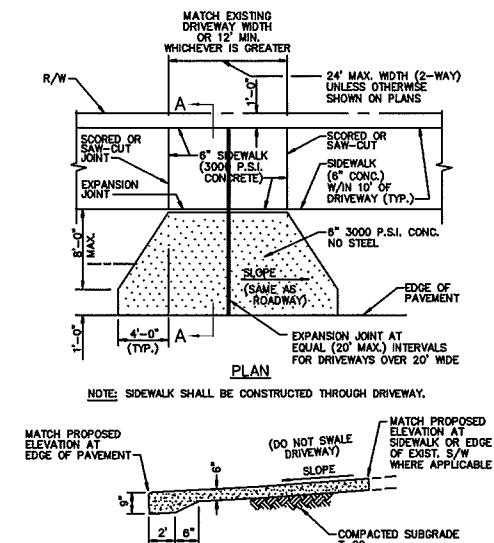
**NOTE:**

IF CITY APPROVES PAVERS TO BE USED IN LIEU OF CONC.  
SIDEWALK PAVES SHALL BE HOLLAND-STONE, 45' HERRING  
BONE, RED/CHARCOAL, COLOR MIX #2

PAVER BRICK SECTION  
DETAIL RT 10.1

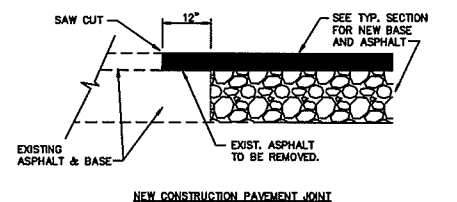
## SECTION

PAVER DRIVEWAY APRON TYPICAL DETAIL RT10.2



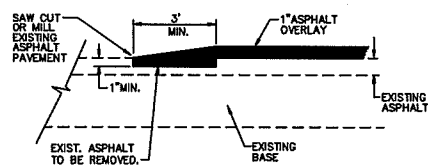
NOTE: ALL SIDEWALKS WITH CENTRAL BUSSINESS DISTRICT SHALL BE A MINIMUM WIDTH OF 8'

CONCRETE DRIVEWAY APRON RT 91



NOTE:

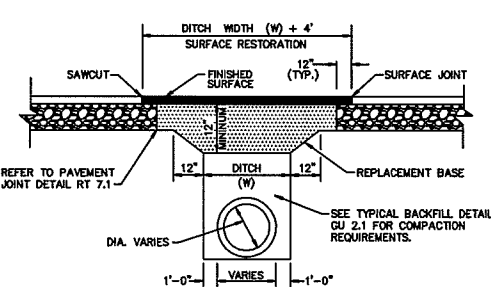
THIS METHOD OF PAYEMENT JOINT SHALL BE USED FOR ANY APPLICATION OR CONSTRUCTION WHERE PROPOSED PAVEMENT AND BASE WILL BE CONNECTED TO EXISTING PAVEMENT AND BASE.



NOTE:

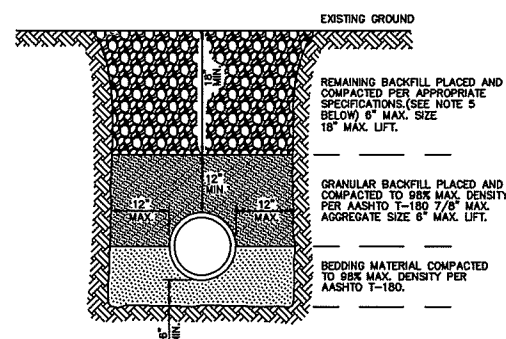
THIS METHOD OF PAVEMENT JOINT SHALL BE USED FOR ANY APPLICATION OR CONSTRUCTION WHERE PROPOSED PAVEMENT WILL BE CONNECTED TO EXISTING PAVEMENT.

PAVEMENT JOINT DETAIL RT 7.1



1. REPLACEMENT BASE TO BE AT MIN. 12" THICK.
- 2a. BASE MATERIAL SHALL BE PLACED IN TWO LIFTS AND EACH LIFT COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-180 (MAX. LIFT THICKNESS = 6").
3. 12" EXCAVATABLE FLOWABLE FILL, MAX. S.S. MAY BE USED IN LIEU OF 12" BASE.
4. ALL DISTURBED PAVEMENT MARKINGS SHALL BE RESTORED IN ACCORDANCE WITH CITY STANDARDS.
5. SURFACE MATERIAL SHALL BE F.O.D.T. TYPE S-1 OR S-III ASPHALTIC CONC. (MIN. THICKNESS 1 1/2").
6. ANY PAVT. CUTS SHALL BE COLD PATCHED AT END OF EACH WORKING DAY TO FACILITATE UNHINDERED TRAFFIC FLOW.
7. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.

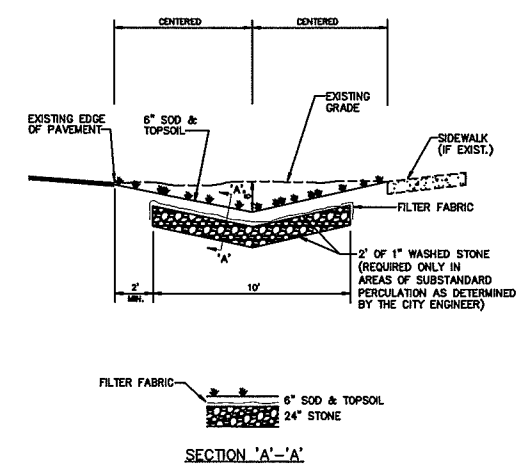
PAVEMENT REPAIR DETAIL GU 1.1



NOTES:

1. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGE ROCKS SHALL BE REMOVED; BEDDING MATERIAL AND BACKFILL CONSISTING OF WASHED AND GRADED LIMEROCK 3/8" - 7/8" SIZES.
2. THE PIPE AND/OR STRUCTURE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE AND/OR STRUCTURE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
5. COMPACT BACKFILL TO 98% DENSITY UNDER PAVEMENT AND TO 95% DENSITY ELSEWHERE (AASHTO T-160)
6. COMPACTION AND DENSITY TESTS SHALL BE COMPLETED DURING BACKFILL OPERATION. CONTRACTORS NOT FOLLOWING THIS PROCEDURE, FOR WHATEVER REASONS, SHALL BE REQUIRED TO RE-EVACUATE THE AREA IN QUESTION, DOWN TO THE BEDDING, THEN RE-BEDDING AND THEN BACKFILLING.

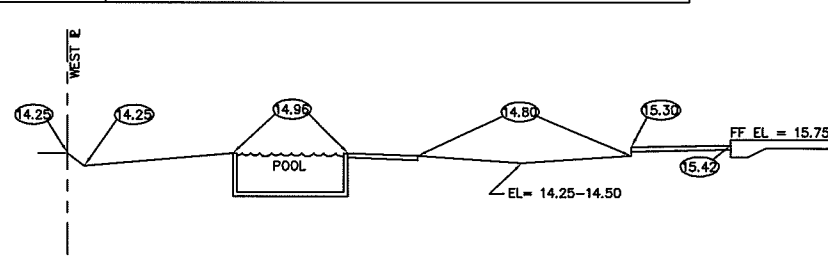
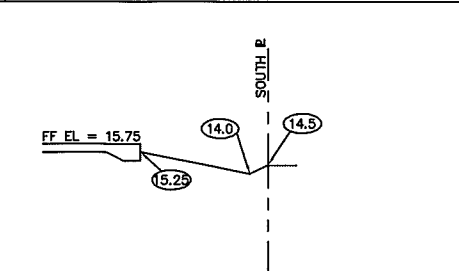
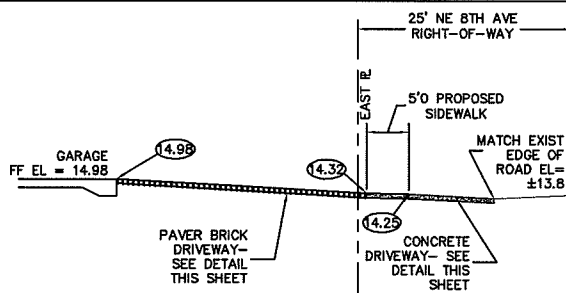
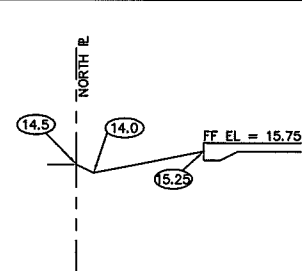
TYPICAL BACKFILL DETAIL GU 2.1



**NOTE:**


1. CONTRACTOR TO REPLACE ALL IRRIGATION, TREES & SHRUBBERY IN SWALES DAMAGED DURING CONSTRUCTION.

SWALE REPLACEMENT DETAIL D10.1



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**PAVING & DRAINAGE DETAILS FOR:**  
**8TH AVE VILLAS - SOUTH (LOT 1)**  
**NE 8TH AVENUE**  
**DELRAY BEACH, FLORIDA**

 **EnviroDesign  
Associates Inc.**  
[www.envirodesign.com](http://www.envirodesign.com)

**ENGINEERS • ENVIRONMENTAL CONSULTANTS**

FLORIDA CERTIFICATE OF AUTHORIZATION No. 5506  
298 Pineapple Grove Way Delray Beach, Florida 33444  
Phone: (561) 274-6500 Fax: (561) 274-6558  
E-mail: [info@envirodesign.com](mailto:info@envirodesign.com)

**DRAWN:**  
**M.T.J.**

**CHECKED:**  
**J.A.P.**

DATE:  
10/21/15

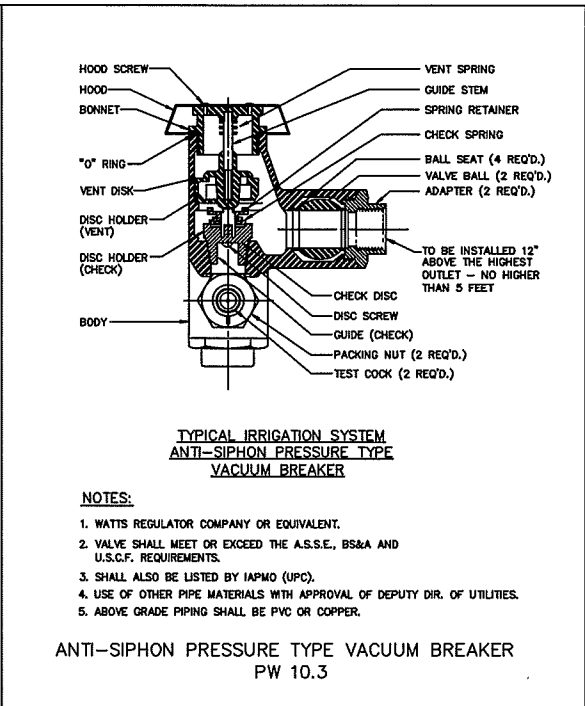
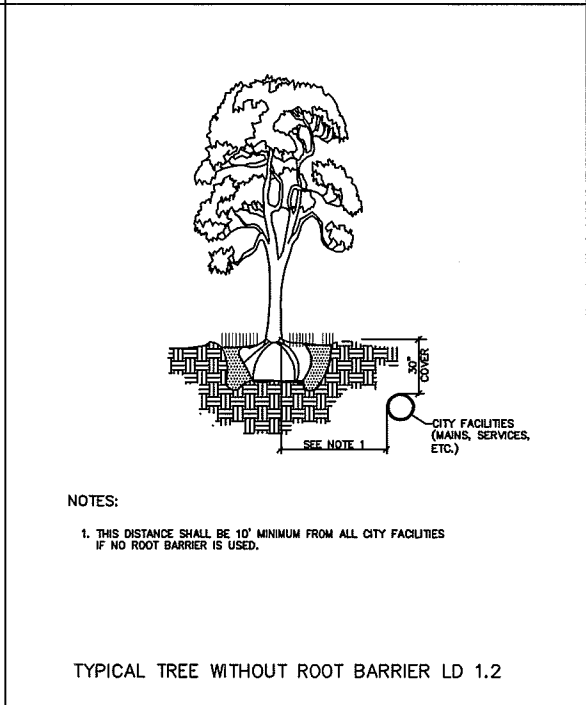
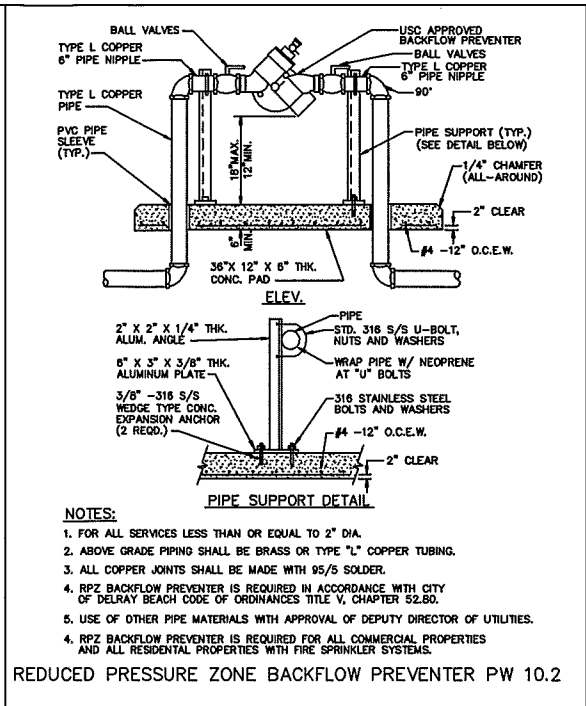
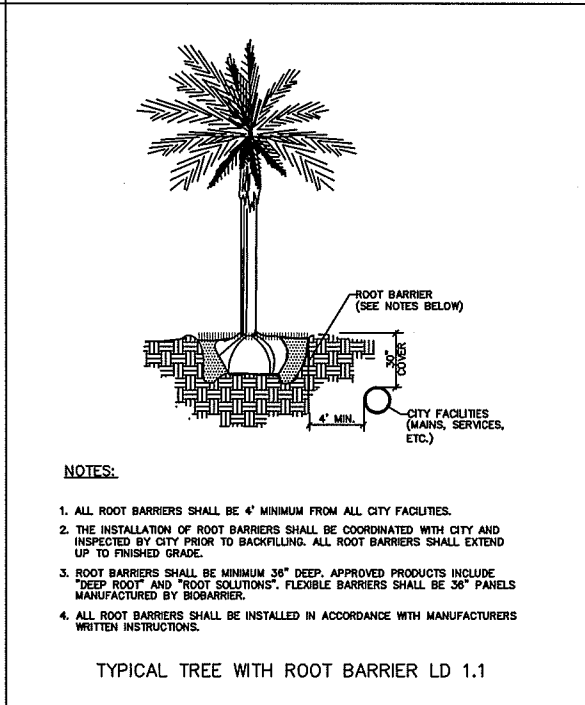
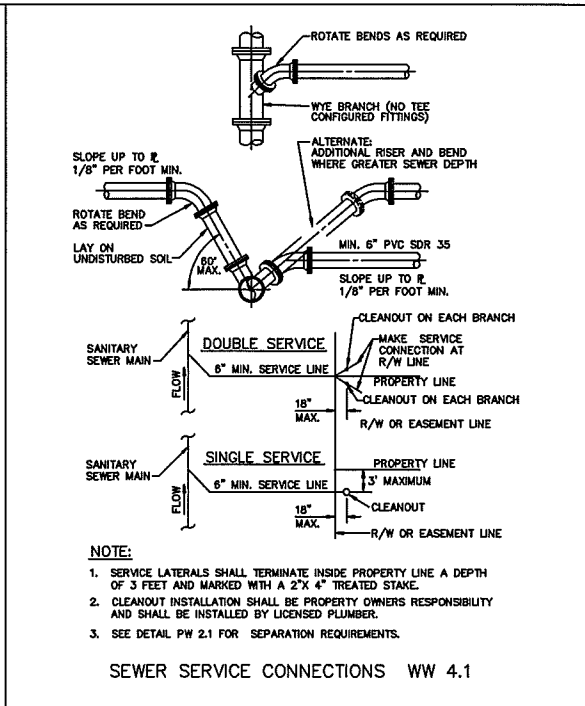
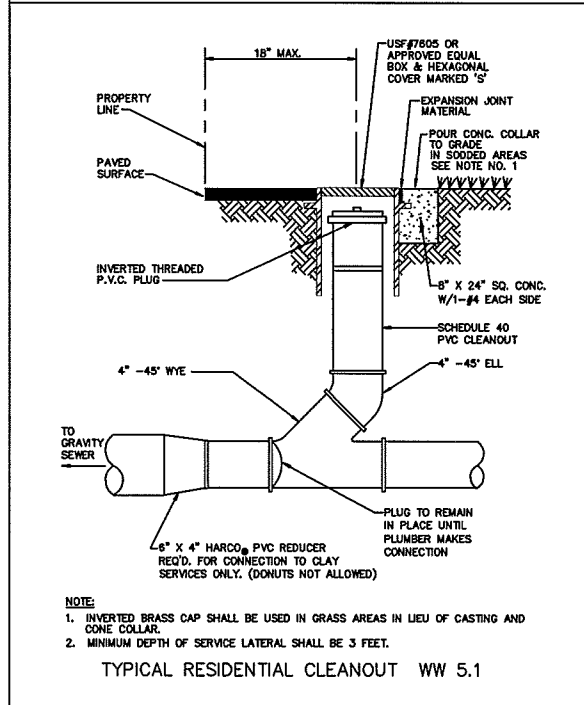
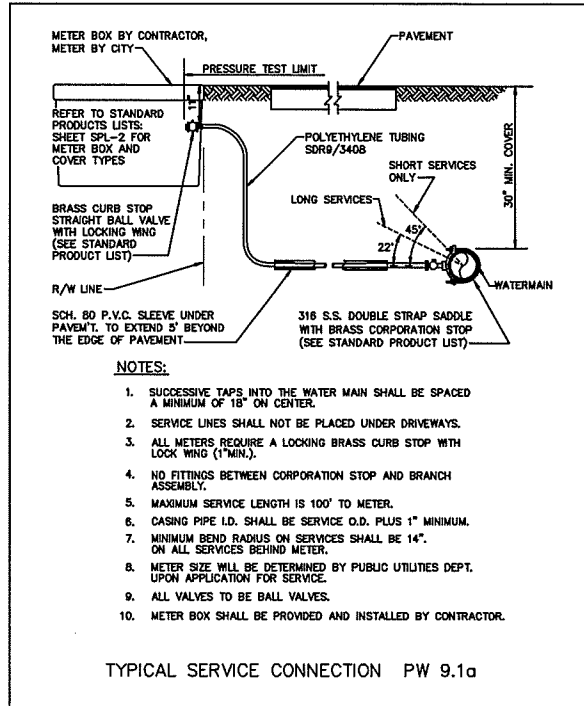
**JOB NO.**  
**15035-DTL**

**SHEET NO.**  
**2** OF **4**

PAVING, GRADING AND DRAINAGE NOTES		GENERAL NOTES	
1. ALL PAVING AND DRAINAGE WORK IN THE PALM BEACH COUNTY (PBC) RIGHT-OF-WAY SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH THE PBC LATEST STANDARDS. ALL PAVING AND DRAINAGE WORK IN THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) RIGHT-OF-WAY SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH THE FDOT LATEST STANDARDS.	11. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE IN ACCORDANCE WITH SECTION 334 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE SURFACE COURSE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS.	1. CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID SURVEY MARKERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF PERMANENT REFERENCE MONUMENTS DISTURBED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.	12. ENVIRODESIGN ASSOC. INC. SHALL NOT BE RESPONSIBLE FOR THE SAFETY OF THE WORKERS OR THE GENERAL PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFETY TO THE WORKERS IN ACCORDANCE WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATIONS (OSHA) REQUIREMENTS AND THE SAFETY OF THE GENERAL PUBLIC.
2. COMPACTED SUBGRADE SHALL BE COMPACTED AND MEET THE DENSITY REQUIREMENTS AS DETERMINED BY THE AASHTO T-180 SPECIFICATIONS. SUBGRADE SHALL EXTEND 12 INCHES BEYOND THE PROPOSED EDGE OF PAVEMENT AND/OR 8" BEYOND VALLEY GUTTER, TYPE "F" CURB & GUTTER, OR TYPE "D" CURB. SUBGRADE SHALL BE 12 INCHES THICK COMPACTED TO 98% ACCORDING TO AASHTO T-180. ALL MUCK, STUMPS, ROOTS OR OTHER DELETERIOUS MATTER ENCOUNTERED IN THE PREPARATION OF THE SUBGRADE SHALL BE REMOVED COMPLETELY FROM THE CENTERLINE OF THE ROADWAY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT. IF SUBGRADE IS REQUIRED TO BE STABILIZED, THE REQUIRED BEARING VALUE DETERMINATIONS SHALL BE MADE BY THE FLORIDA BEARING TEST, TEST METHOD "C" OF AASHTO T-180 SPECIFICATIONS.	12. ALL CONCRETE SHALL DEVELOP 2500 p.s.i. (MINIMUM) 28 DAY COMPRESSIVE STRENGTH OR GREATER WHERE NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH THE FDOT SPECIFICATIONS, LATEST EDITION. CLASS I CONCRETE USED AS PAVING SHALL DEVELOP 3000 p.s.i. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH.	2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE PLANS. UTILITIES SHOWN ON THE PLANS ARE FOR REFERENCE ONLY AND MAY NOT DEPICT ACTUAL LOCATIONS. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR LOCATION AND DEPTH OF THEIR LINES PRIOR TO CONSTRUCTION.	13. ALL MATERIALS AND WORKMANSHIP MUST BE IN ACCORDANCE WITH THE LOCAL UTILITY STANDARDS AND SPECIFICATIONS.
3. SHELLROCK BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 250 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE SHELLROCK BASE SHALL BE AS SHOWN ON THE DETAIL DRAWINGS AND SHALL BE COMPACTED TO A DENSITY OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. THE SHELLROCK SHALL HAVE A MINIMUM OF 40% CARBONATES OF CALCIUM AND MAGNESIUM IN THE MATERIAL.	13. PAVEMENT TRAFFIC STRIPES AND MARKINGS SHALL BE IN ACCORDANCE WITH CITY OF DELRAY BEACH CURRENT STANDARDS AND/OR MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND/OR PALM BEACH COUNTY TRAFFIC DEPARTMENT TYPICAL T-P-10-001, WHERE APPLICABLE.	3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE DEENERGIZING OF POWER LINES AND/OR HOLDING POWER POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.	14. THE CONTRACTOR SHALL CALL SUNSHINE 1-800-432-4770 48 HOURS BEFORE DIGGING FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES.
4. LIMEROCK BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 200 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE LIMEROCK BASE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS AND SHALL BE COMPACTED TO A DENSITY OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.	14. SEQUENCE OF CONSTRUCTION - THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND THAT ARE BENEATH THE PAVEMENT, SHALL BE IN PLACE AND HAVE PROPER DRAINAGE PRIOR TO THE CONSTRUCTION AND COMPACTION OF THE SUBGRADE.	4. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE REPLACEMENT OF TRAFFIC LOOPS IF DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.	15. CORRUGATED ALUMINUM PIPE USED BENEATH PAVEMENT SHALL BE IN CONFORMANCE WITH SEC. 8.24.E.5.I
5. MUCK AND PEAT - IF MUCK AND/OR PEAT ARE ENCOUNTERED IN THE ROAD OR PARKING AREA, THEY WILL BE REMOVED COMPLETELY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT AND SHALL BE BACKFILLED WITH GRANULAR MATERIAL. IF HARDPAN IS ENCOUNTERED IN THE SWALE AREA, IT WILL BE REMOVED TO A WIDTH OF TWO FEET AT THE SWALE INVERT AND REPLACED WITH GRANULAR MATERIAL.	15. INLETS AND MANHOLES - ALL INLETS AND MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FDOT SPECIFICATIONS, LATEST EDITION, AND ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION, AND PBC STANDARDS LATEST EDITION, WHERE APPLICABLE.	5. ALL ELEVATIONS REFER TO N.G.V.D. 1929. MINIMUM FINISHED FLOOR ELEVATION FOR ANY RESIDENTIAL STRUCTURE SHALL BE SET AT OR ABOVE ELEVATION 15.75' (WHICH IS ABOVE THE 100-YEAR FREQUENCY STORM).	16. ALL CONSTRUCTION ACTIVITY, INCLUDING TRENCHING, IS TO BE A MINIMUM OF SIX FEET FROM THE BASE OF ANY TREE THAT IS DESIGNATED TO REMAIN.
6. WHERE SOD IS DESIRED, LOWER THE GRADE 2 INCHES BELOW THE FINISHED GRADE TO ALLOW FOR THE THICKNESS OF THE SOD.	16. GRATE ELEVATIONS REFER TO THE FLOWLINE OF THE GRATE.	6. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OR INSTALLATION AS REQUIRED BY THE ENGINEER OR BY THE APPROPRIATE GOVERNING AGENCIES.	17. ALL LIMEROCK AND BASE MATERIALS SHALL BE REMOVED FROM THE PLANTER AREAS/ISLANDS AND REPLACED WITH APPROPRIATE PLANTING SOIL PRIOR TOT THE LANDSCAPING OF THE SITE.
7. CLEARING AND GRUBBING - WITHIN THE LIMITS OF CONSTRUCTION ALL VEGETATION AND ROOT MATERIAL SHALL BE REMOVED.	17. GRADES SHOWN ARE FINISHED GRADES.	7. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND PAY FOR, AT NO ADDITIONAL COST TO THE OWNER, ALL NECESSARY PERMITS, FEES AND LICENSES.	18. THE REMOVAL OF ANY TREE ON THE SITE IS PROHIBITED WITHOUT THE REQUIRED PERMITS.
8. GUMBO - WHERE GUMBO OR OTHER PLASTIC CLAYS ARE ENCOUNTERED, THEY SHALL BE REMOVED WITHIN THE ROADWAY AND PARKING AREAS ONE FOOT BELOW THE SUBGRADE EXTENDING HORIZONTALLY TO THE OUTSIDE EDGE OF THE SHOULDER AREA.	18. MINIMUM ROAD CROWN ELEVATION SHALL BE EL. N/A N.G.V.D.	8. CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING THE REQUIRED NOTICES AND COMPLYING WITH ALL PERMIT(S) CONDITIONS.	19. ALL MATERIALS AND CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO THE FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM (LATEST ED.).
9. PRIME COAT SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. PRIME COAT SHALL BE RC-70 OR ASPHALT EMULSION PRIME (AEP). PRIME COAT SHALL BE APPLIED AT A RATE OF APPLICATION NOT LESS THAN 0.10 GALLONS PER SQUARE YARD FOR LIMEROCK BASES AND NOT LESS THAN 0.15 GALLONS PER SQUARE YARD FOR SHELL ROCK OR COQUINA SHELL BASES.	19. REINFORCED CONCRETE PIPE - THE PIPE SHALL CONFORM WITH THE REQUIREMENTS OF CLASS III OF ASTM C-76 AND WITH THE FDOT SPECIFICATIONS, LATEST EDITION. THE FIRST JOINT OF PIPE ENTERING OR LEAVING A MANHOLE OR INLET SHALL BE WRAPPED WITH FILTER FABRIC PER FDOT SPECIFICATIONS.	9. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE HOLDING OF OTHER UTILITY POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.	20. LANE CLOSURES WITHIN THE FDOT RIGHT-OF-WAY SHALL BE LIMITED TO THE HOURS OF 9AM-3PM, MONDAY-FRIDAY EXCLUDING GOVERNMENTAL HOLIDAYS. MAINTENANCE OF TRAFFIC SHALL BE PROVIDED IN ACCORDANCE WITH INDEX 613 OF THE FDOT DESIGN STANDARDS (LATEST ED.)
10. TACK COAT - BITUMINOUS TACK COAT SHALL CONFORM WITH THE REQUIREMENTS OF THE FDOT SPECIFICATIONS, LATEST EDITION AND SHALL BE APPLIED AT THE RATE OF 0.08 GALLONS PER SQUARE YARD, UNLESS A VARIATION IS APPROVED BY THE ENGINEER.	20. CORRUGATED ALUMINUM PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M196 AND SECTIONS 125, 430 AND 943 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.	10. ALL CONCRETE SHALL DEVELOP 2500 p.s.i. (MINIMUM) 28 DAY COMPRESSIVE STRENGTH OR GREATER WHERE NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH THE FDOT SPECIFICATIONS, LATEST EDITION. CLASS I CONCRETE USED AS PAVING SHALL DEVELOP 3000 p.s.i. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH.	
	21. MEASUREMENT OF THE LENGTH OF PIPE SHALL BE FROM THE CENTER OF THE STRUCTURE TO THE CENTER OF THE STRUCTURE.	11. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL UTILITY.	
	22. PIPE BACKFILL - REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE DEFINED IN THE FDOT SPECIFICATIONS, LATEST EDITION. PIPELINE BACKFILL SHALL BE PLACED IN SIX INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (AASHTO) T-99 SPECIFICATIONS.		
	23. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THREE (3) CERTIFIED COPIES OF A CHEMICAL AND SIEVE ANALYSIS OF THE SHELL ROCK BY A STATE OF FLORIDA CERTIFIED LAB WHEN CONSTRUCTING A SHELL ROCK BASE FOR ROADWAY.		
	24. PRIOR TO CERTIFICATION OF THE DRAINAGE SYSTEM, THE CONTRACTOR MUST PUMP DOWN AND LAMP THE DRAINAGE SYSTEM FOR INSPECTION BY THE ENGINEER AFTER FINISHED ROCK FOR THE ROADWAYS HAS BEEN INSTALLED.		

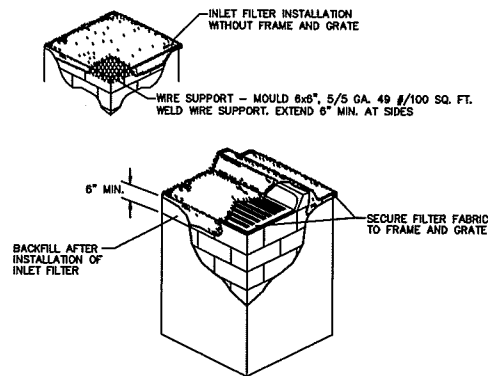
PAVING & DRAINAGE DETAILS FOR: 8TH AVE VILLAS - SOUTH (LOT 1)		NO. 1 DATE: 08/19/15 REVISED PER CITY COMMENTS		REVISED PER CITY COMMENTS	
NE 8TH AVENUE DELRAY BEACH, FLORIDA		NOT MAJOR WITHOUT ENGINEER'S SEAL		JOSEPH A. PINE, P.E. FL REG # 42856	
EnviroDesign Associates Inc. www.envirodesign.com ENGINEERS • ENVIRONMENTAL CONSULTANTS FLORIDA CERTIFICATE OF AUTHORIZATION No. 14506 208 S. W. 10th Ave., Suite 100 Phone: (561) 274-6500 Fax: (561) 274-5558		DRAWN: M.T.J.		CHECKED: J.A.P.	
		DATE: 10/21/15		JOB NO. 15035-DTL	
		SHEET NO. 3 OF 5			





 <b>EnviroDesign Associates Inc.</b> www.envirodesign.com		<b>ENGINEERS • ENVIRONMENTAL CONSULTANTS</b> FLORIDA CERTIFICATE OF AUTHORIZATION No. 8506 288 Pineapple Grove Way Delray Beach, Florida 33444 Phone: (561) 274-6500 Fax (561) 274-8558		<b>WATER &amp; WASTEWATER DETAILS FOR: 8TH AVE VILLAS - SOUTH (LOT 1)</b>		BY: RC	
<b>DRAWN: M.T.J.</b>		<b>CHECKED: J.A.P.</b>		<b>DATE: 10/21/15</b>		NO. DATE REVISIONS: Δ 09/19/13 REVISED PER CITY COMMENTS	
<b>JOB NO. 15035-DTL</b>		<b>SHEET NO. 4 OF 5</b>		<b>NE 8TH AVENUE DELRAY BEACH, FLORIDA</b>		NOT VALID WITHOUT ENGINEER'S SEAL	
						JOSEPH A. PIKE, P.E. FL REG # 42396	





**NOTES:**

1. CONTRACTOR IS TO CLEAN INLET FILTER AFTER EVERY STORM.
2. CONTRACTOR TO REMOVE FABRIC JUST PRIOR TO PAVING.

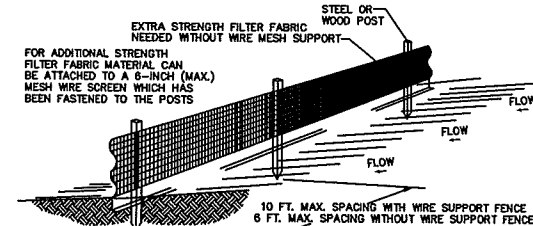
A SEDIMENT TRAP WILL BE EXCAVATED BEHIND THE CURB AT THE INLET. THE BASIN SHALL BE AT LEAST 12 TO 14 INCHES IN DEPTH, APPROXIMATELY 36 INCHES IN WIDTH, AND APPROXIMATELY 7 TO 10 FEET IN LENGTH PARALLEL TO THE CURB.

STORM WATER WILL REACH THE SEDIMENT TRAP VIA CURB CUTS ADJACENT TO EACH SIDE OF THE INLET STRUCTURE. THESE OPENINGS SHALL BE AT LEAST 12 INCHES IN LENGTH. STORM WATER MAY ALSO REACH THE BASIN VIA OVERLAND FLOW LAND AREA BEHIND THE CURB. THE CURB CUTS SHALL BE REPAIRED WHEN THE SEDIMENT TRAP IS REMOVED.

INLET FILTER DETAIL D 8.1

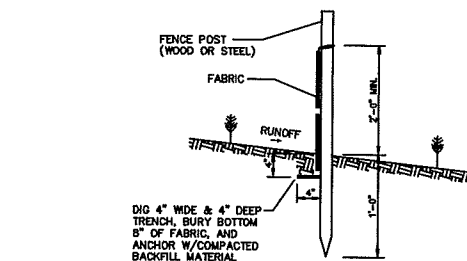
- EROSION CONTROL NOTES DETAIL D9.1**
1. THE INTENT OF EROSION CONTROL MEASURES INDICATED GRAPHICALLY ON PLANS IS TO PROVIDE A BARRIER TO CONTAIN SILT AND SEDIMENT ON THE PROJECT SITE. THIS REPRESENTATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE TEST OF EROSION CONTROL EFFECTIVENESS IS NOT TO BE DETERMINED BY ADHERENCE TO THE REPRESENTATION SET FORTH ON THE DRAWINGS AND SPECIFICATIONS, BUT BY MEETING THE REGULATIONS SET FORTH BY THE AUTHORITY HAVING JURISDICTION OVER WATER QUALITY CONTROL AND OTHER SEDIMENTATION RESTRICTION REQUIREMENTS IN THE REGION.
  2. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING, OR OTHER LAND DISTURBANCE ACTIVITIES, EXCEPT THOSE OPERATIONS NEEDED TO INSTALL SUCH MEASURES.
  3. INSPECTION OF ALL EROSION CONTROL MEASURES SHALL BE CONDUCTED WEEKLY, OR AFTER EACH RAINFALL EVENT, REPAIR, AND/OR REPLACEMENT OF SUCH MEASURES SHALL BE MADE PROMPTLY, AS NEEDED.
  4. KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS.
  5. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED IF DEEMED NECESSARY BY ONSITE INSPECTION.
  6. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES SHALL RESULT IN CONSTRUCTION BEING HALTED.
  7. DRAINAGE INLETS SHALL BE PROTECTED BY FILTER AND GRADED ROCK AS PER INLET PROTECTION DETAIL.
  8. ANY ACCESS ROUTES TO SITE SHALL BE BASED WITH CRUSHED STONE, WHERE PRACTICAL.
  9. EROSION CONTROL MEASURES ARE TO BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
  10. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED.
  11. ALL WORK IS TO BE IN COMPLIANCE WITH THE RULES AND REGULATIONS SET FORTH BY THE STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE CITY OF DELRAY BEACH.
  12. DISCHARGE FROM DEMATERING OPERATIONS SHALL BE RETAINED ONSITE IN A CONTAINMENT AREA.

EROSION CONTROL NOTES DETAIL D9.1



- NOTES:**
1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (90 CM).
  2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS.
  3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET (3 M) APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES (30 CM). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 8 FEET (2.4 M).
  4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES (10 CM) WIDE AND 4 INCHES (10 CM) DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
  5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH (25 MM) LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES (5 CM) AND SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
  6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES (20 CM) OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
  7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
  8. ALL PROJECTS REQUIRE SUBMITTAL OF POLLUTION PREVENTION PLAN (PPP).
  9. ALL PROJECTS 1 AC. OR MORE MUST SUBMIT NOTICE OF INTENT (NOI) TO FDEP.

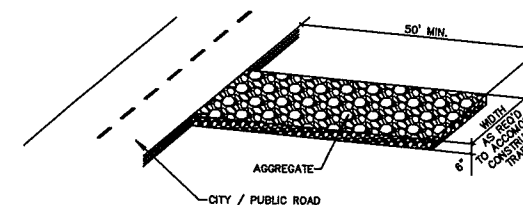
SILT FENCE INSTALLATION DETAIL D 9.1a  
Sheet 1 of 2



- NOTES:**
1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
  2. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
  3. DRIVE BOTH POSTS ABOUT 18 INCHES INTO THE GROUND AND BURY FLAP.

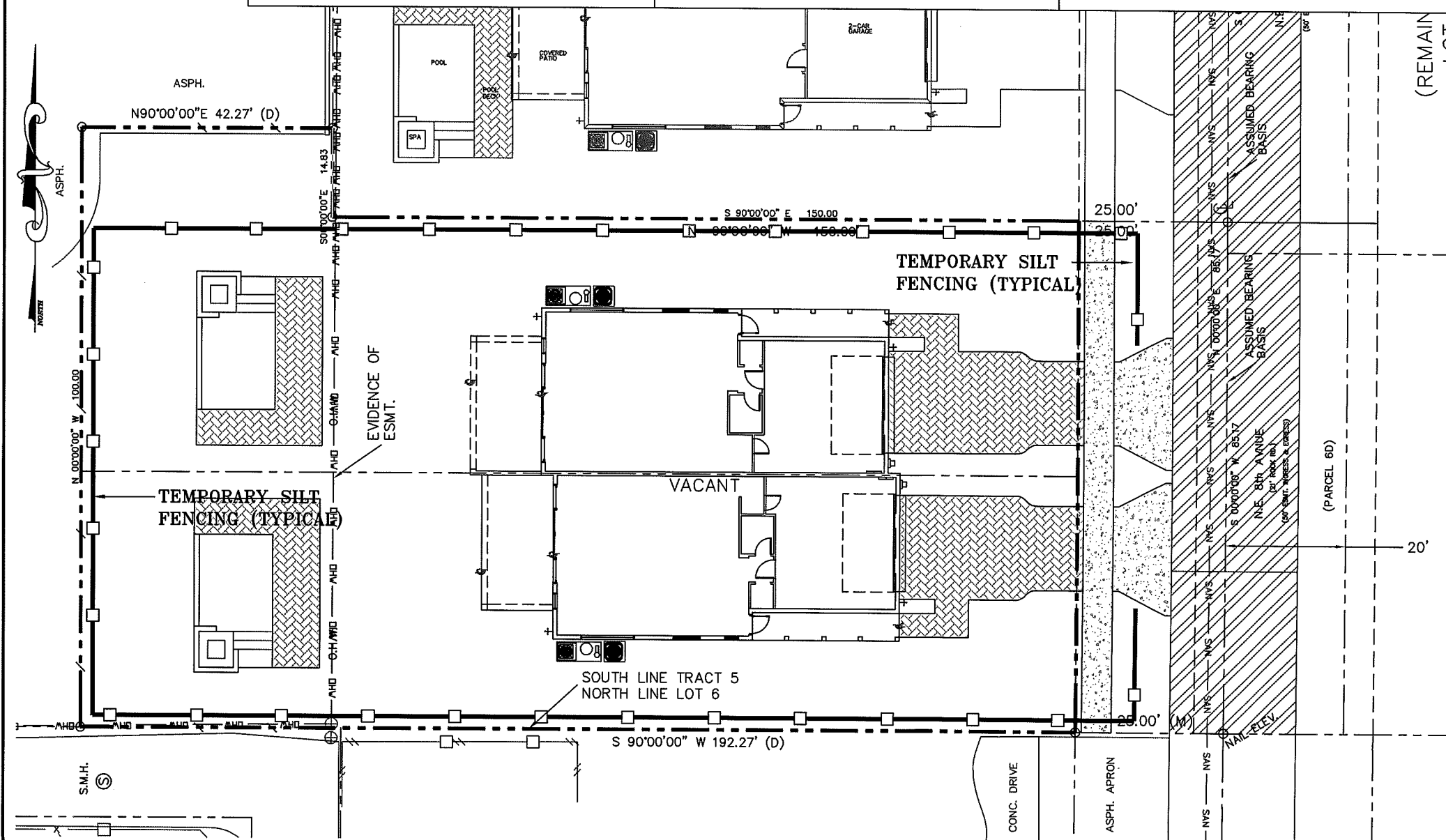
ATTACHING TWO SILT FENCES  
NOT TO SCALE

SILT FENCE INSTALLATION DETAIL D 9.1b  
Sheet 2 of 2



**NOTE:**  
A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AND CONTAIN AN AGGREGATE LAYER (FOOT AGGREGATE NO.1), AT LEAST 6-INCHES THICK. IT MUST EXTEND TO THE WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA.

STABILIZED CONSTRUCTION ENTRANCE DETAIL D9.1C



CALL 48 HOURS BEFORE YOU DIG.  
IT'S THE LAW  
1-800-432-4770  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

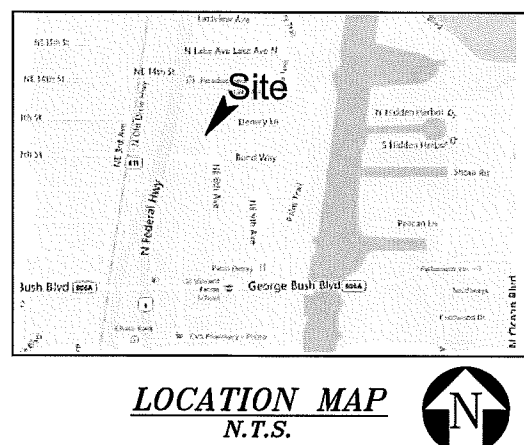
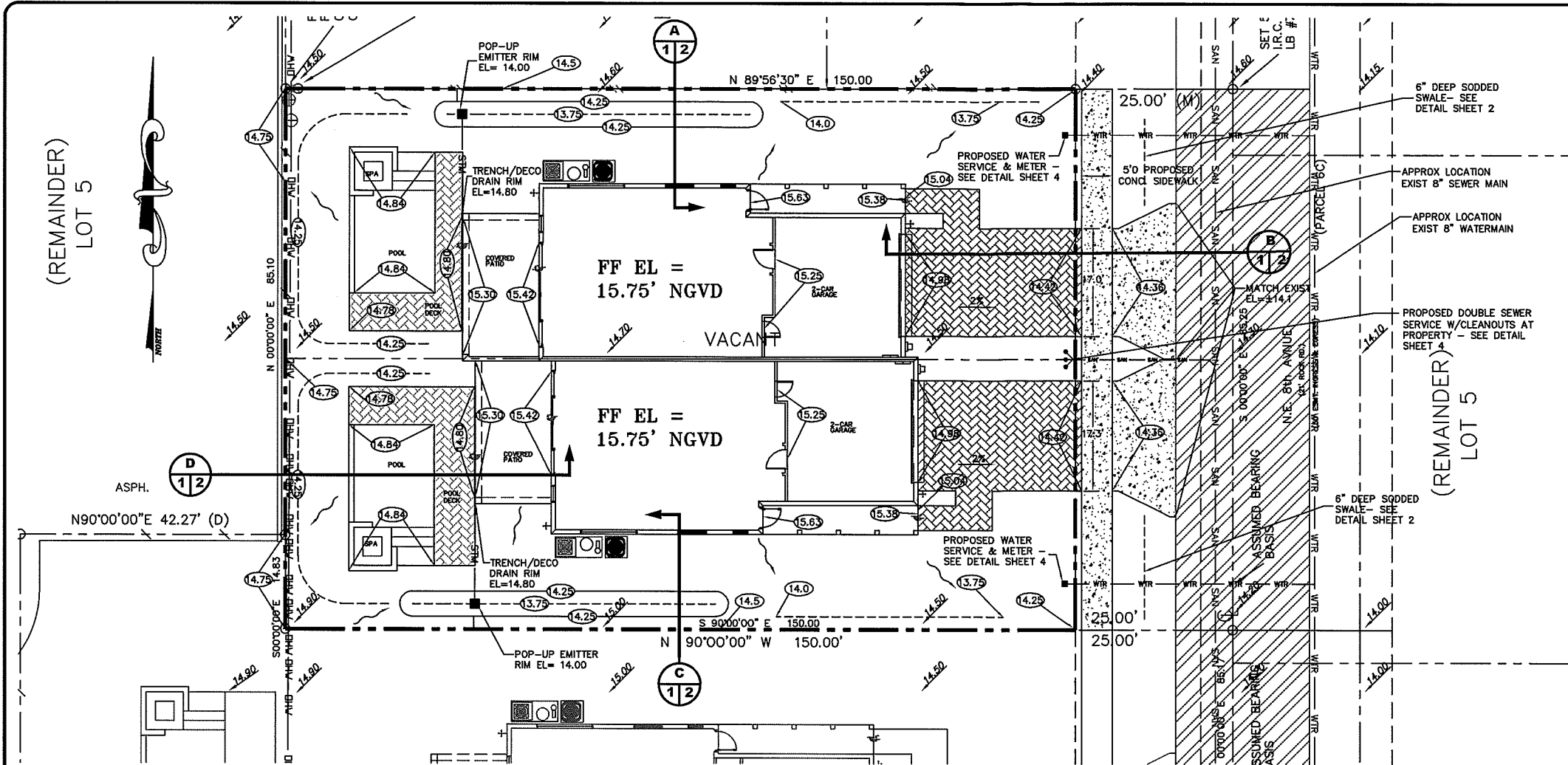


Know what's below.  
Call before you dig.

SCALE: 1" = 10'  
0 5 10 15 20

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BY:		REVISIONS:		NO. DATE		NOT VALID WITHOUT ENGINEER'S SEAL		JOSEPH A. KING P.E. FL REG # 42656
POLLUTION PREVENTION PLAN FOR:	8TH AVE VILLAS - SOUTH (LOT 1)							
ENGINEERS:	ENVIRONMENTAL CONSULTANTS							
298 Pineapple Grove Way Delray Beach, FL 33444								
Phone: (561) 274-6500								
DRAWN:	M.T.J.							
CHECKED:	J.A.P.							
DATE:	10/21/15							
JOB NO.	15035-ENG							
SHEET NO.	5 OF 5							



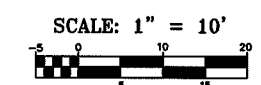
DRAINAGE CALCULATIONS:			
GIVEN:	TOTAL SITE AREA	10644 sf	
	IMPERVIOUS AREA	5915 sf	55.6 %
	PERVIOUS AREA	4729 sf	44.4 %
REQUIRED STORAGE: 1" OVER TOTAL SITE AREA OR 2.5" OVER IMPERVIOUS AREA (IF SITE IS OVER 40% IMPERVIOUS. USE 2.5" OVER IMPERVIOUS)			
USDA SCS RUNOFF EQUATION			
A =	10644 sf		
Q = RUNOFF =	(P+0.2S)/2 / (P+0.8S)		
P = ACCUMULATED RAINFALL	= 1.39		
S = SOIL STORAGE * %PERVIOUS			
AVERAGE PERVIOUS ELEVATION	= 14.5 ft		
WATER TABLE ELEVATION	= 16 ft		
DEPTH TO WATER TABLE	= 4 ft		
CUMULATIVE WATER STORAGE WITHIN SOIL	= 10.9 in		
STORAGE PER SFVWD BASIS OF REVIEW			
25% REDUCTION	= 8.175 in		
3.63 in			
NOTE: IF 0.2S IS > OR = P, THEN Q = 0			
0.2S =	0.73	<	1.39
Q =	0.10 in		
VOLUME REQUIRED:			
V = A*Q/12	=	90.7 cf	
VOLUME PROVIDED:			
V = 200sf IN SWALES * 6/12" DEEP * 1/2 =	50 cf		

- LEGEND:**
- PROPERTY LINE
  - (A/1/1) SECTION IDENTIFIER  
PLAN PAGE DETAIL PAGE
  - (16.5) PROPOSED ELEVATION
  - ~ DIRECTION OF FLOW
  - +4.7 EXISTING ELEVATION
  - [Hatched Box] DENOTES AREA OF PROPOSED ASPHALT PAVING
  - [Cross-hatched Box] DENOTES AREA OF PROPOSED BRICK PAVEMENT DRIVEWAY
  - [Symbol] PROPOSED WATER METER
  - [Circle] EXISTING MANHOLE
  - C.O. SANITARY SEWER CLEANOUT
  - [Symbol] SINGLE SANITARY SERVICE WITH CLEANOUT



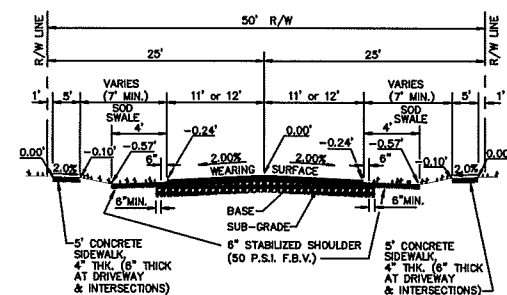
NOTE: CONTRACTOR TO FIELD VERIFY EXACT LOCATION, SIZE, AND DEPTH OF ALL EXISTING UTILITIES AT TIME OF CONSTRUCTION AND REPORT ANY DISCREPANCIES TO ENVIRODESIGN ASSOCIATES, INC.

CALL 48 HOURS BEFORE YOU DIG.  
IT'S THE LAW  
1-800-432-4770  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.



811  
Know what's below.  
Call before you dig.

BY: RC	REVISIONS:	DATE: 08/19/15	REVISED PER CITY COMMENTS:
NO. 1	NOT VALID WITHOUT ENGINEER'S SEAL		
PAVING & DRAINAGE PLAN FOR: 8TH AVE VILLAS - NORTH (LOT 2) NE 8TH AVENUE DELRAY BEACH, FLORIDA			
EnviroDesign Associates, Inc. ENGINEERS - ENVIRONMENTAL CONSULTANTS FLORIDA CERTIFICATE OF AUTHORIZATION No. 65093444 298 Florida Avenue, Suite 200, Delray Beach, FL 33444 Phone: (561) 274-6500 Fax: (561) 274-6558			
DRAWN: M.T.J.			
CHECKED: J.A.P.			
DATE: 10/21/15			
JOB NO. 15035-ENG			
SHEET NO. 1 OF 5			

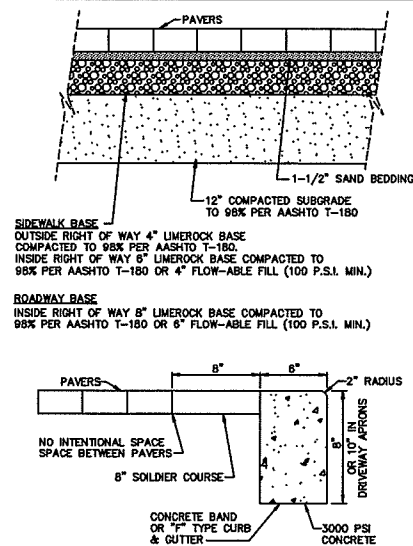


PAVEMENT SPECIFICATIONS	
WEARING SURFACE	1 1/2" TYPE S-III (2 LIFTS) OR 1-1/2" TYPE S-1
BASE	8" LUMBEROCK OR 10" CRUSHED CONCRETE COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180 PRIME & TACK COAT PER FOOT SECTION 300.
SUBGRADE	12" STABILIZED (75 P.S.I. FBV) AND COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.

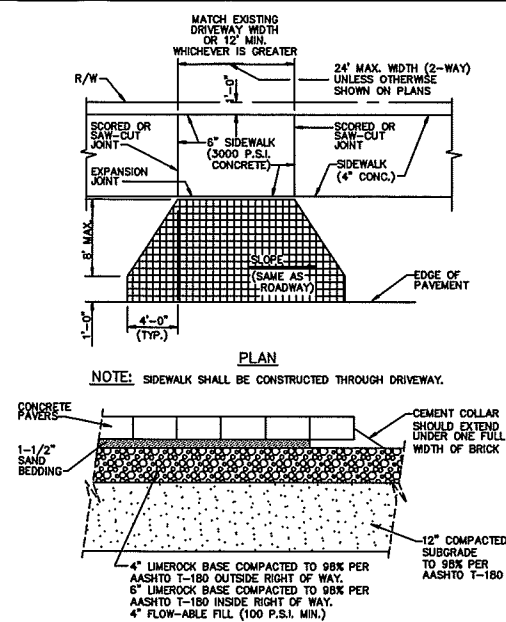
VARIATION FROM MATERIAL SPECIFICATIONS WILL BE CONSIDERED  
ON A CASE BY CASE BASIS BY THE CITY ENGINEER.

STABILIZE SHOULDER TO 50 P.S.I. F.B.V.

TYPICAL 50' R/W SECTION WITH SWALE  
DETAIL RT 1.1b

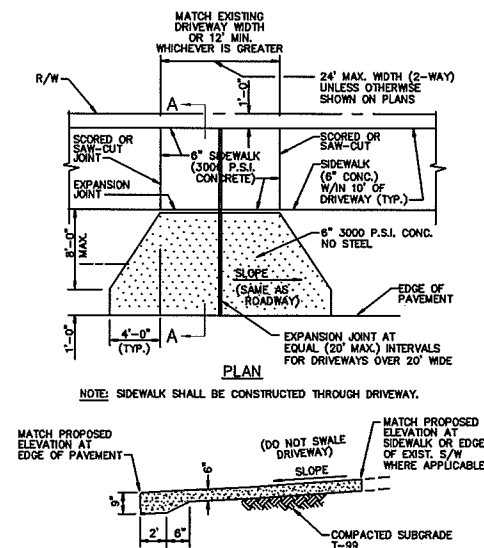


**NOTE:**  
IF CITY APPROVES PAVERS TO BE USED IN LIEU OF CONC.  
SIDEWALK PAVES SHALL BE HOLLAND-STONE, 45" HERRING  
BONE, RED/CHARCOAL, COLOR MIX #2

PAVER BRICK SECTION  
DETAIL RT 10.1

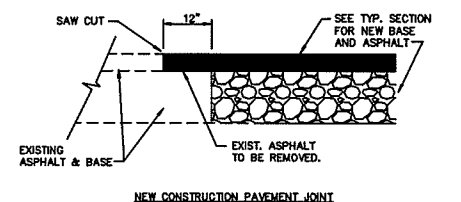
## SECTION

PAVER DRIVEWAY APRON TYPICAL DETAIL RT10.2



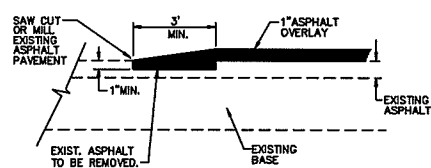
NOTE: ALL SIDEWALKS WITH CENTRAL BUSSINESS DISTRICT  
SHALL BE A MINIMUM WIDTH OF 8'

CONCRETE DRIVEWAY APRON RT 9.1



NOTE:

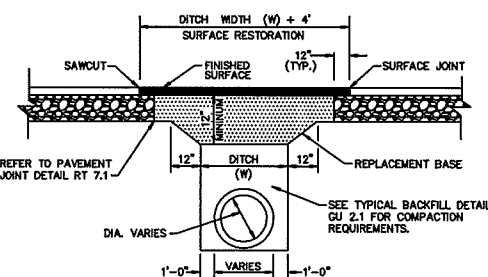
THIS METHOD OF PAVEMENT JOINT SHALL BE USED FOR ANY APPLICATION OR CONSTRUCTION WHERE PROPOSED PAVEMENT AND BASE WILL BE CONNECTED TO EXISTING PAVEMENT AND BASE.



NOTE:

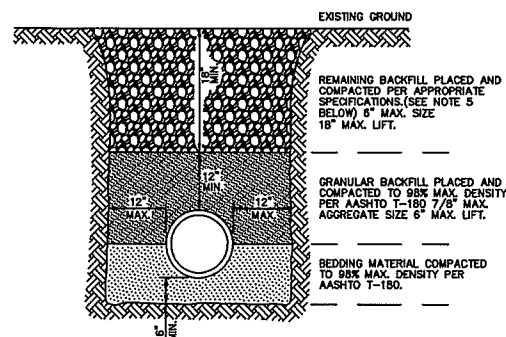
THIS METHOD OF PAYEMENT JOINT SHALL BE USED FOR ANY APPLICATION OR CONSTRUCTION WHERE PROPOSED PAYEMENT WILL BE CONNECTED TO EXISTING PAYEMENT.

PAVEMENT JOINT DETAIL RT 7.1



1. REPLACEMENT BASE TO BE AT MIN. 12" THICK.
- 2a. BASE MATERIAL SHALL BE PLACED IN TWO LIFTS AND EACH LIFT COMPACTED TO 98% MAXIMUM DENSITY PER AASHTO T-100 (MAX. LIFT THICKNESS = 6").
- 2b. 12" EXCAVATABLE FLOWABLE FILL MAY BE USED IN LIEU OF 12" BASE.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. ALL DISTURBED PAVEMENT MARKINGS SHALL BE RESTORED IN ACCORDANCE WITH CITY STANDARDS.
5. SURFACE MATERIAL SHALL BE F.O.D.T. TYPE S-1 OR S-III ASPHALTIC CONC. (MIN. THICKNESS 1 1/2").
6. ANY PAVT. CUTS SHALL BE COLD PATCHED AT END OF EACH WORKING DAY TO FACILITATE UNHINDERED TRAFFIC FLOW.

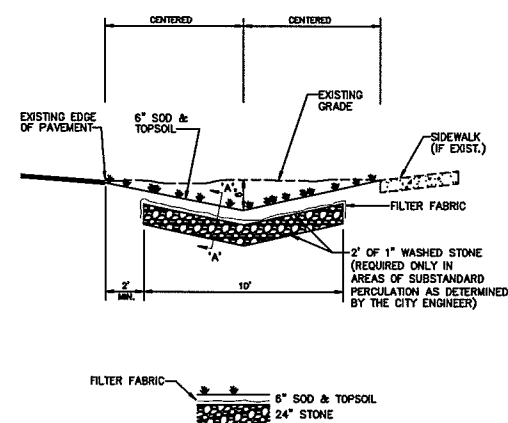
PAVEMENT REPAIR DETAIL GU 1.1



NOTES:

1. UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGE ROCKS SHALL BE REMOVED; BEDDING MATERIAL AND BACKFILL CONSISTING OF WASHED AND GRADED UMMEROCK 3/8" - 1/2" SIZING.
2. THE PIPE AND/OR STRUCTURE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
3. THE PIPE AND/OR STRUCTURE SHALL BE PLACED IN A DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIAL SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
5. COMPACT BACKFILL TO 95% DENSITY UNDER PAVEMENT AND TO 95% DENSITY ELSEWHERE. (AASHTO T-150)
6. COMPACTION AND DENSITY TESTS SHALL BE COMPLETED DURING BACKFILL OPERATIONS. CONTRACTORS NOT FOLLOWING THIS PROCEDURE, FOR WHATEVER REASONS, SHALL BE REQUIRED TO RE-EXCAVATE THE AREA IN QUESTION, DOWN TO THE BEDDING MATERIAL, THEN BACKFILL AND FOLLOW THE ABOVE PROCEDURE.

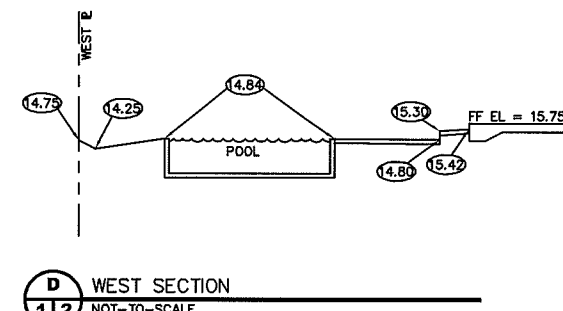
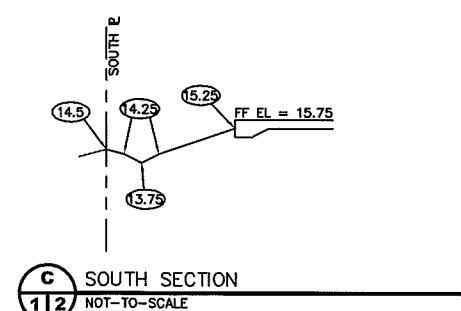
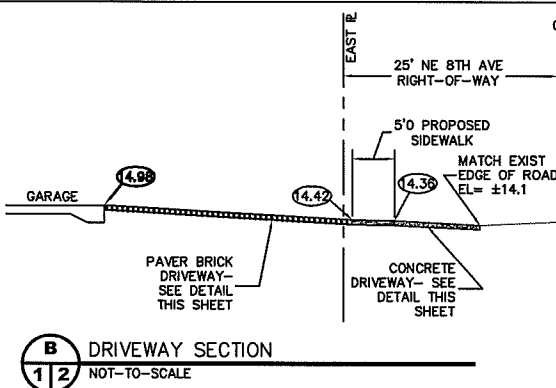
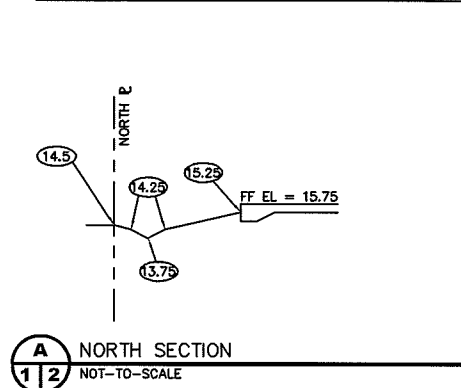
TYPICAL BACKFILL DETAIL GU 2.1




**NOTE:**

1. CONTRACTOR TO REPLACE ALL IRRIGATION, TREES & SHRUBBERY IN SWALES DAMAGED DURING CONSTRUCTION.

SWALE REPLACEMENT DETAIL D10.1



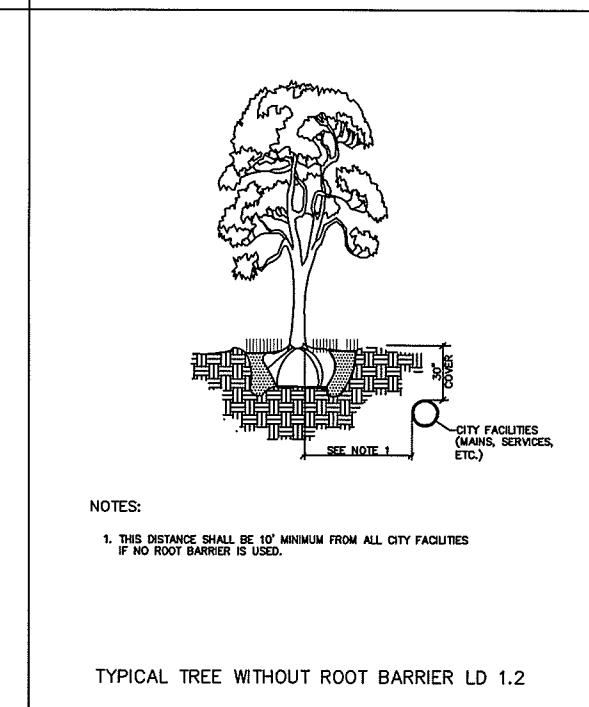
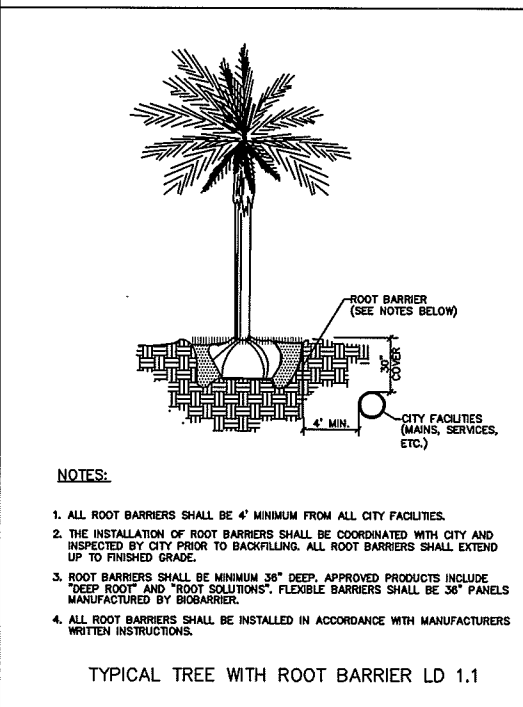
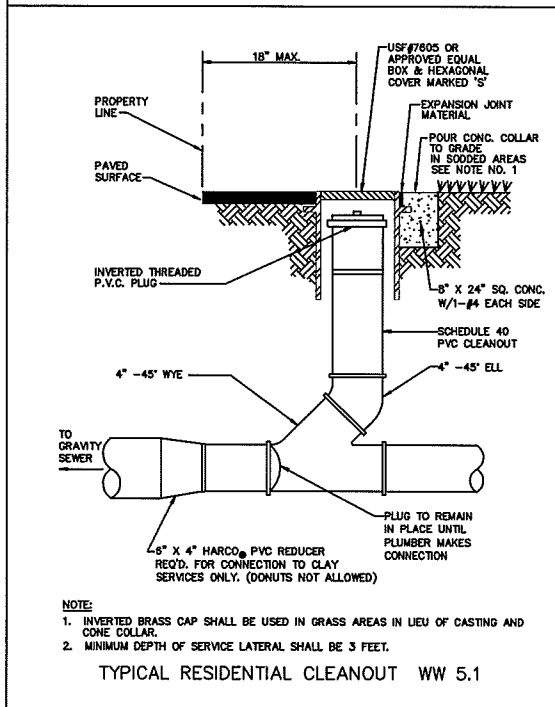
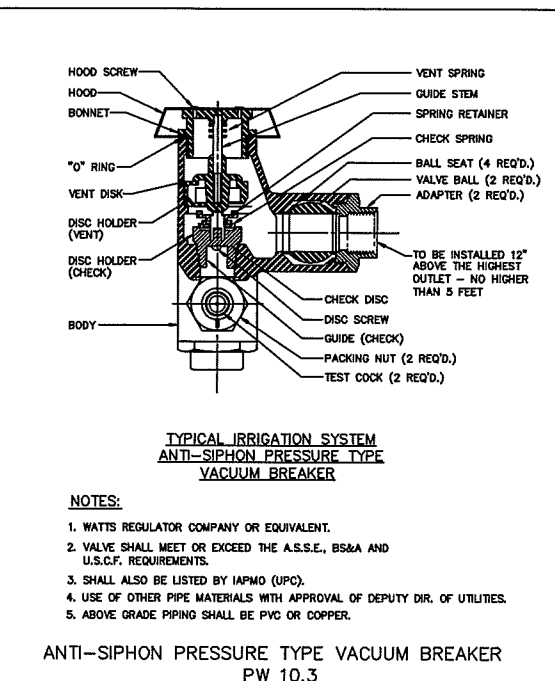
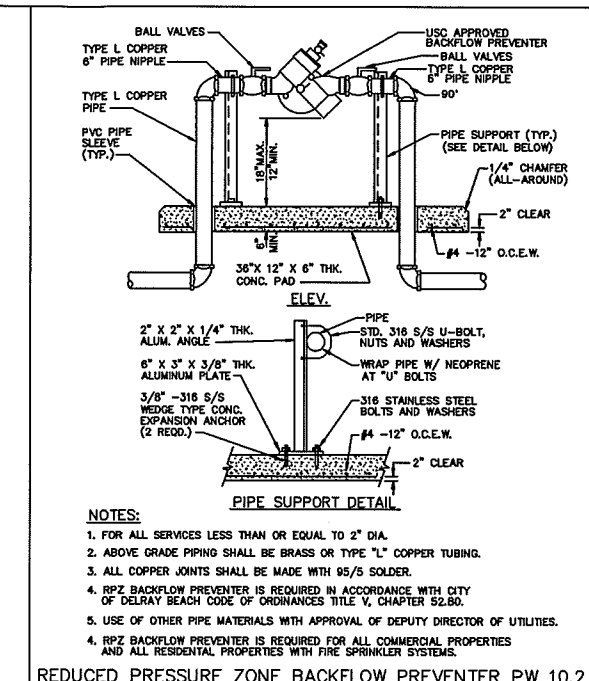
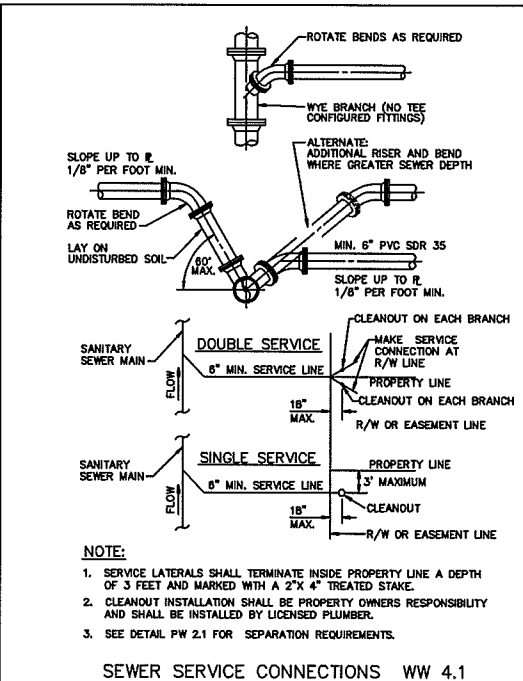
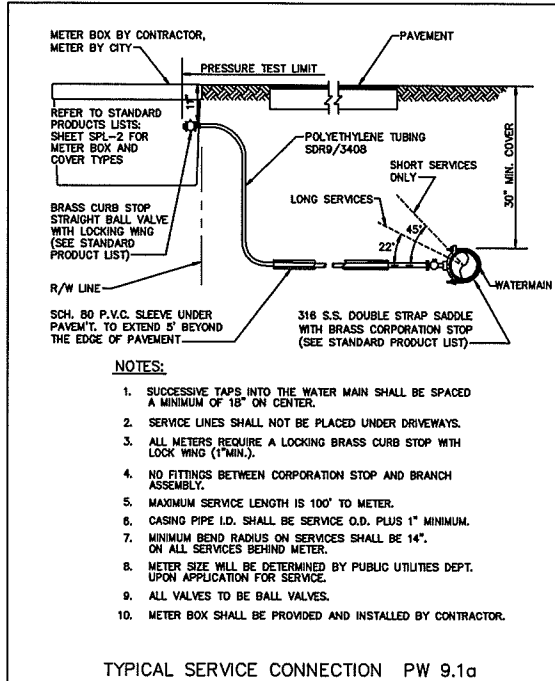
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UNLESS SIGNED AND SEALED BY A REGISTERED PROFESSIONAL  
ENGINEER REPRESENTING ENVIRODESIGN ASSOCIATES, INC.

 <p> <b>EnviroDesign Associates Inc.</b>  <a href="http://www.envirodesign.com">www.envirodesign.com</a>  <b>ENGINEERS • ENVIRONMENTAL CONSULTANTS</b> </p>	<p> <b>FLORIDA CERTIFICATE OF AUTHORIZATION No. 6506</b>  <b>15444</b>  <b>298 Centrepine Grove Way Delray Beach, Florida 33444-8654</b>  <b>Ph: 561-321-8654</b>  <b>Florida Reg. # 42898</b> </p>			<p> <b>PAVING &amp; DRAINAGE DETAILS FOR:</b>  <b>8TH AVE VILLAS - NORTH (LOT 2)</b>  <b>NE 8TH AVENUE</b>  <b>DELRAY BEACH, FLORIDA</b> </p>			NOT VALID WITHOUT ENGINEER'S SEAL	NO.	DATE:	REVISIONS:	BY:
<p> <b>DRAWN:</b>  <b>M.T.J.</b>  <b>CHECKED:</b>  <b>J.A.P.</b>  <b>DATE:</b>  <b>10/21/15</b>  <b>JOB NO.</b>  <b>15035- DTL</b>  <b>SHEET NO.</b>  <b>2 OF 5</b> </p>											

PAVING, GRADING AND DRAINAGE NOTES	
1. ALL PAVING AND DRAINAGE WORK IN THE PALM BEACH COUNTY (PBC) RIGHT-OF-WAY SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH THE PBC LATEST STANDARDS. ALL PAVING AND DRAINAGE WORK IN THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) RIGHT-OF-WAY SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH THE FDOT LATEST STANDARDS.	11. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE IN ACCORDANCE WITH SECTION 334 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE SURFACE COURSE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS.
2. COMPACTED SUBGRADE SHALL BE COMPACTED AND MEET THE DENSITY REQUIREMENTS AS DETERMINED BY THE AASHTO T-180 SPECIFICATIONS. SUBGRADE SHALL EXTEND 12 INCHES BEYOND THE PROPOSED EDGE OF PAVEMENT AND/OR 6" BEYOND VALLEY CUTTER, TYPE "T" CURB & GUTTER, OR TYPE "OT" CURB. SUBGRADE SHALL BE 12 INCHES THICK COMPACTED TO 98% ACCORDING TO AASHTO T-180. ALL MUCK, STUMPS, ROOTS OR OTHER DELETERIOUS MATTER ENCOUNTERED IN THE PREPARATION OF THE SUBGRADE SHALL BE REMOVED COMPLETELY FROM THE CENTERLINE OF THE ROADWAY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT. IF SUBGRADE IS REQUIRED TO BE STABILIZED, THE REQUIRED BEARING VALUE DETERMINATIONS SHALL BE MADE BY THE FLORIDA BEARING TEST, TEST METHOD "C" OF AASHTO T-180 SPECIFICATIONS.	12. ALL CONCRETE SHALL DEVELOP 2500 p.s.i. (MINIMUM) 28 DAY COMPRESSIVE STRENGTH OR GREATER WHERE NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH THE FDOT SPECIFICATIONS, LATEST EDITION. CLASS I CONCRETE USED AS PAVING SHALL DEVELOP 3000 p.s.i. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH.
3. SHELLROCK BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 250 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE SHELLROCK BASE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS AND SHALL BE COMPACTED TO A DENSITY OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. THE SHELLROCK SHALL HAVE A MINIMUM OF 40% CARBONATES OF CALCIUM AND MAGNESIUM IN THE MATERIAL.	13. PAVEMENT TRAFFIC STRIPES AND MARKINGS SHALL BE IN ACCORDANCE WITH CITY OF DELRAY BEACH CURRENT STANDARDS AND/OR MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, AND/OR PALM BEACH COUNTY TRAFFIC DEPARTMENT TYPICAL T-P-10-001, WHERE APPLICABLE.
4. LIMEROCK BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 207 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE THICKNESS OF THE LIMEROCK BASE SHALL BE AS SHOWN ON THE DETAILED DRAWINGS AND SHALL BE COMPACTED TO A DENSITY OF 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.	14. SEQUENCE OF CONSTRUCTION - THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND THAT ARE BENEATH THE PAVEMENT, SHALL BE IN PLACE AND HAVE PROPER DENSITY PRIOR TO THE CONSTRUCTION AND COMPACTION OF THE SUBGRADE.
5. MUCK AND PEAT - IF MUCK AND/OR PEAT ARE ENCOUNTERED IN THE ROAD OR PARKING AREA, THEY WILL BE REMOVED COMPLETELY TO A WIDTH OF TEN FEET BEYOND THE EDGE OF PAVEMENT AND SHALL BE BACKFILLED WITH GRANULAR MATERIAL. IF HARDPAN IS ENCOUNTERED IN THE SWALE AREA, IT WILL BE REMOVED TO A WIDTH OF TWO FEET AT THE SWALE INVERT AND REPLACED WITH GRANULAR MATERIAL.	15. INLETS AND MANHOLES - ALL INLETS AND MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FDOT SPECIFICATIONS, LATEST EDITION, AND ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION, AND PBC STANDARDS LATEST EDITION, WHERE APPLICABLE.
6. WHERE SOD IS DESIRED, LOWER THE GRADE 2 INCHES BELOW THE FINISHED GRADE TO ALLOW FOR THE THICKNESS OF THE SOD.	16. GRATE ELEVATIONS REFER TO THE FLOWLINE OF THE GRATE.
7. CLEARING AND GRUBBING - WITHIN THE LIMITS OF CONSTRUCTION ALL VEGETATION AND ROOT MATERIAL SHALL BE REMOVED.	17. GRADES SHOWN ARE FINISHED GRADES.
8. GUMBO - WHERE GUMBO OR OTHER PLASTIC CLAYS ARE ENCOUNTERED, THEY SHALL BE REMOVED WITHIN THE ROADWAY AND PARKING AREAS ONE FOOT BELOW THE SUBGRADE EXTENDING HORIZONTALLY TO THE OUTSIDE EDGE OF THE SHOULDER AREA.	18. MINIMUM ROAD CROWN ELEVATION SHALL BE EL. N/A N.G.V.D.
9. PRIME COAT SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. PRIME COAT SHALL BE RC-70 OR ASPHALT EMULSION PRIME (AEP). PRIME COAT SHALL BE APPLIED AT A RATE OF APPLICATION NOT LESS THAN 0.10 GALLONS PER SQUARE YARD FOR LIMEROCK BASES AND NOT LESS THAN 0.15 GALLONS PER SQUARE YARD FOR SHELL ROCK OR COQUINA SHELL BASES.	19. REINFORCED CONCRETE PIPE - THE PIPE SHALL CONFORM WITH THE REQUIREMENTS OF CLASS III OF ASTM C-76 AND WITH THE FDOT SPECIFICATIONS, LATEST EDITION. THE FIRST JOINT OF PIPE ENTERING OR LEAVING A MANHOLE OR INLET SHALL BE WRAPPED WITH FILTER FABRIC PER FDOT SPECIFICATIONS.
10. TACK COAT - BITUMINOUS TACK COAT SHALL CONFORM WITH THE REQUIREMENTS OF THE FDOT SPECIFICATIONS, LATEST EDITION AND SHALL BE APPLIED AT THE RATE OF 0.08 GALLONS PER SQUARE YARD, UNLESS A VARIATION IS APPROVED BY THE ENGINEER.	20. CORRUGATED ALUMINUM PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M196 AND SECTIONS 125, 430 AND 943 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
	21. MEASUREMENT OF THE LENGTH OF PIPE SHALL BE FROM THE CENTER OF THE STRUCTURE TO THE CENTER OF THE STRUCTURE.
	22. PIPE BACKFILL - REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE DEFINED IN THE FDOT SPECIFICATIONS, LATEST EDITION. PIPELINE BACKFILL SHALL BE PLACED IN SIX INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (AASHTO) T-99 SPECIFICATIONS.
	23. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER THREE (3) CERTIFIED COPIES OF A CHEMICAL AND SIEVE ANALYSIS OF THE SHELL ROCK BY A STATE OF FLORIDA CERTIFIED LAB WHEN CONSTRUCTING A SHELL ROCK BASE FOR ROADWAY.
	24. PRIOR TO CERTIFICATION OF THE DRAINAGE SYSTEM, THE CONTRACTOR MUST PUMP DOWN AND LAMP THE DRAINAGE SYSTEM FOR INSPECTION BY THE ENGINEER AFTER FINISHED ROCK FOR THE ROADWAYS HAS BEEN INSTALLED.

GENERAL NOTES	
1. CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID SURVEY MARKERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF PERMANENT REFERENCE MONUMENTS DISTURBED DURING CONSTRUCTION, AT NO ADDITIONAL COST TO THE OWNER.	12. ENVIRODESIGN ASSOC. INC. SHALL NOT BE RESPONSIBLE FOR THE SAFETY OF THE WORKERS OR THE GENERAL PUBLIC. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFETY TO THE WORKERS IN ACCORDANCE WITH OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) REQUIREMENTS AND THE SAFETY OF THE GENERAL PUBLIC.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES WHETHER OR NOT SHOWN ON THE PLANS. UTILITIES SHOWN ON THE PLANS ARE FOR REFERENCE ONLY AND MAY NOT DEPICT ACTUAL LOCATIONS. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES FOR LOCATION AND DEPTH OF THEIR LINES PRIOR TO CONSTRUCTION.	13. ALL MATERIALS AND WORKMANSHIP MUST BE IN ACCORDANCE WITH THE LOCAL UTILITY STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE DEENERGIZING OF POWER LINES AND/OR HOLDING POWER POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.	14. THE CONTRACTOR SHALL CALL SUNSHINE 1-800-432-4770 48 HOURS BEFORE DIGGING FOR FIELD LOCATIONS OF UNDERGROUND UTILITIES.
4. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE REPLACEMENT OF TRAFFIC LOOPS IF DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COAST TO THE OWNER.	15. CORRUGATED ALUMINUM PIPE USED BENEATH PAVEMENT SHALL BE IN CONFORMANCE WITH SEC. 8.24.E.5.I
5. ALL ELEVATIONS REFER TO N.G.V.D. 1929. MINIMUM FINISHED FLOOR ELEVATION FOR ANY RESIDENTIAL STRUCTURE SHALL BE SET AT OR ABOVE ELEVATION 15.75' (WHICH IS ABOVE THE 100-YEAR FREQUENCY STORM).	16. ALL CONSTRUCTION ACTIVITY, INCLUDING TRENCHING, IS TO BE A MINIMUM OF SIX FEET FROM THE BASE OF ANY TREE THAT IS DESIGNATED TO REMAIN.
6. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION OR INSTALLATION AS REQUIRED BY THE ENGINEER OR BY THE APPROPRIATE GOVERNING AGENCIES.	17. ALL LIMEROCK AND BASE MATERIALS SHALL BE REMOVED FROM THE PLANTER AREAS/ISLANDS AND REPLACED WITH APPROPRIATE PLANTING SOIL PRIOR TOT THE LANDSCAPING OF THE SITE.
7. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND PAY FOR, AT NO ADDITIONAL COST TO THE OWNER, ALL NECESSARY PERMITS, FEES AND LICENSES.	18. THE REMOVAL OF ANY TREE ON THE SITE IS PROHIBITED WITHOUT THE REQUIRED PERMITS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR GIVING THE REQUIRED NOTICES AND COMPLYING WITH ALL PERMIT(S) CONDITIONS.	19. ALL MATERIALS AND CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY SHALL CONFORM TO THE FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM (LATEST ED.).
9. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE AND PAY FOR THE HOLDING OF OTHER UTILITY POLES DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.	20. LANE CLOSURES WITHIN THE FDOT RIGHT-OF-WAY SHALL BE LIMITED TO THE HOURS OF 9AM-3PM, MONDAY-FRIDAY EXCLUDING GOVERNMENTAL HOLIDAYS. MAINTENANCE OF TRAFFIC SHALL BE PROVIDED IN ACCORDANCE WITH INDEX 613 OF THE FDOT DESIGN STANDARDS (LATEST ED.).
10. ALL CONCRETE SHALL DEVELOP 2500 p.s.i. (MINIMUM) 28 DAY COMPRESSIVE STRENGTH OR GREATER WHERE NOTED ON PLANS. CLASS I CONCRETE SHALL CONFORM WITH THE FDOT SPECIFICATIONS, LATEST EDITION. CLASS I CONCRETE USED AS PAVING SHALL DEVELOP 3000 p.s.i. (MINIMUM) 28 DAYS COMPRESSIVE STRENGTH.	
11. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL UTILITY.	

DRAWN: M.T.J.	CHECKED: J.A.P.	DATE: 10/21/15	JOB NO. 15035-DTL	SHEET NO. 3 OF 5	PAVING & DRAINAGE DETAILS FOR: 8TH AVE VILLAS - NORTH (LOT 2) NE 8TH AVENUE DELRAY BEACH, FLORIDA	NOT VALID WITHOUT ENGINEER'S SEAL	NO.	DATE:	REVISIONS:	BY:
							Δ	6/19/15	REVISED PER CITY COMMENTS	RC
EnviroDesign Associates Inc. www.envirodesign.com ENGINEERS - ENVIRONMENTAL CONSULTANTS FLORIDA CERTIFICATE OF AUTHORIZATION No. 6505 208 E. Palm Beach Blvd., Suite 444 Palm Beach, FL 33480 Phone: (561) 274-6500 Fax: (561) 274-8558						JOSEPH A. PIKE, P.E. FL REG # 42866				

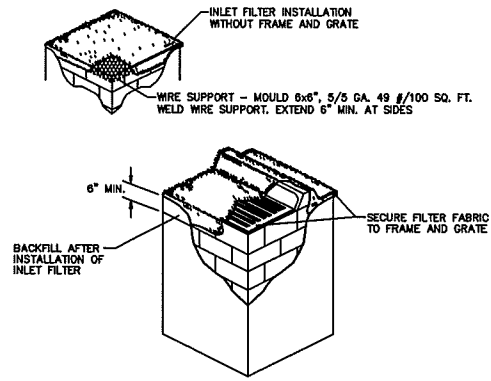
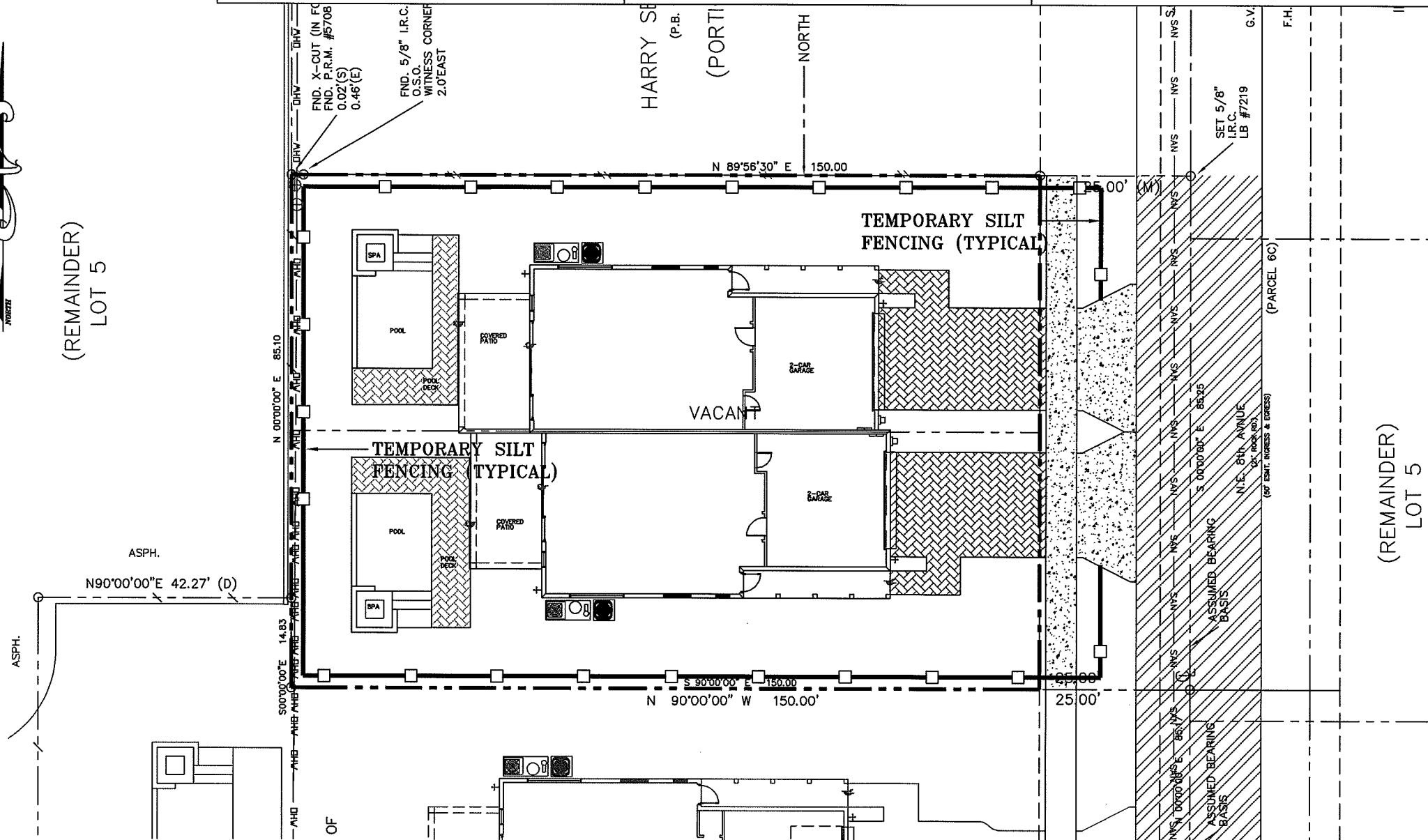


<b>WATER &amp; WASTEWATER DETAILS FOR:</b> <b>8TH AVE VILLAS - NORTH (LOT 2)</b> <b>NE 8TH AVENUE</b> <b>DELRAY BEACH, FLORIDA</b>	<b>ENGINEERS - ENVIRONMENTAL CONSULTANTS</b> <b>EnviroDesign Associates, Inc.</b> 298 DELRAY BEACH BLVD., SUITE 204 DELRAY BEACH, FLORIDA 33444 Phone: (561) 274-6500 Fax: (561) 274-6558	DATE: 6/19/15 NO. 2	REVISIONS: REVISED PER CITY COMMENTS	BY: RC
		DRAWN: M.T.J. CHECKED: J.A.P. DATE: 10/21/15 JOB NO. 15035-DTL SHEET NO. 4 OF 5		





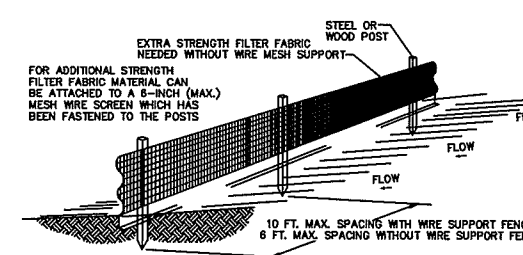
(REMAINDER)  
LOT 5



NOTES:  
1. CONTRACTOR IS TO CLEAN INLET FILTER AFTER EVERY STORM.  
2. CONTRACTOR TO REMOVE FABRIC JUST PRIOR TO PAVING.  
A SEDIMENT TRAP WILL BE EXCAVATED BEHIND THE CURB AT THE INLET. THE BASIN SHALL BE AT LEAST 12 TO 14 INCHES IN DEPTH, APPROXIMATELY 36 INCHES IN WIDTH, AND APPROXIMATELY 7 TO 10 FEET IN LENGTH PARALLEL TO THE CURB.  
STORM WATER WILL REACH THE SEDIMENT TRAP VIA CURB CUTS ADJACENT TO EACH SIDE OF THE INLET STRUCTURE. THESE OPENINGS SHALL BE AT LEAST 12 INCHES IN LENGTH. STORM WATER MAY ALSO REACH THE BASIN VIA OVERLAND FLOW LAND AREA BEHIND THE CURB. THE CURB CUTS SHALL BE REPAIRED WHEN THE SEDIMENT TRAP IS REMOVED.

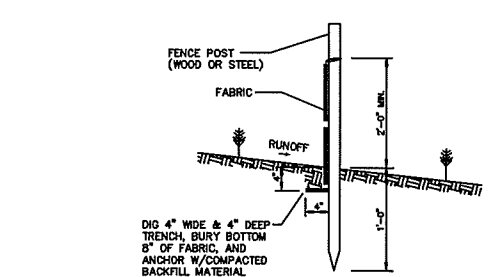
INLET FILTER DETAIL D 8.1

- EROSION CONTROL NOTES DETAIL D9.1
1. THE INTENT OF EROSION CONTROL MEASURES INDICATED GRAPHICALLY ON PLANS IS TO PROVIDE A BARRIER TO CONTAIN DIRT AND SEDIMENT ON THE PROJECT SITE. THIS REPRESENTATION IS PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE TEST OF EROSION CONTROL EFFECTIVENESS IS NOT TO BE DETERMINED BY ADHERENCE TO THE REPRESENT SET FORTH ON THE DRAWINGS AND SPECIFICATIONS, BUT BY MEETING THE REGULATIONS SET FORTH BY THE AUTHORITY HAVING JURISDICTION OVER WATER QUALITY CONTROL AND OTHER SEDIMENTATION RESTRICTION REQUIREMENTS IN THE REGION.
  2. APPROVED EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, EXCAVATION, FILLING, OR OTHER LAND DISTURBANCE ACTIVITIES EXCEPT THOSE OPERATIONS NEEDED TO INSTALL SUCH MEASURES.
  3. INSPECTION OF ALL EROSION CONTROL MEASURES SHALL BE CONDUCTED WEEKLY, OR AFTER EACH RAINFALL EVENT, REPAIR, AND/OR REPLACEMENT OF SUCH MEASURES SHALL BE MADE PROMPTLY, AS NEEDED.
  4. KEEP DUST WITHIN TOLERABLE LIMITS BY SPRINKLING OR OTHER ACCEPTABLE MEANS.
  5. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED IF DEEMED NECESSARY BY ONSITE INSPECTION.
  6. FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL PRACTICES SHALL RESULT IN CONSTRUCTION BEING HALTED.
  7. DRAINAGE INLETS SHALL BE PROTECTED BY FILTER AND GRADED ROCK AS PER INLET PROTECTION DETAIL.
  8. ANY ACCESS ROUTES TO SITE SHALL BE BASED WITH CRUSHED STONE, WHERE PRACTICAL.
  9. EROSION CONTROL MEASURES ARE TO BE MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
  10. WHENEVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED.
  11. ALL WORK IS TO BE IN COMPLIANCE WITH THE RULES AND REGULATIONS SET FORTH BY THE STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE CITY OF DELRAY BEACH.
  12. DISCHARGE FROM Dewatering OPERATIONS SHALL BE RETAINED ONSITE IN A CONTAINMENT AREA.



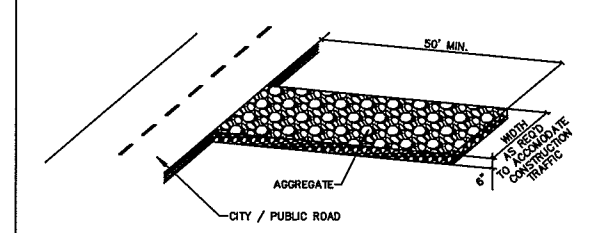
- NOTES:
1. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (90 CM).
  2. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS.
  3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET (3 M) APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 12 INCHES (30 CM). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 6 FEET (1.8 M).
  4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES (10 CM) WIDE AND 4 INCHES (10 CM) DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
  5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH (25 MM) LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES (5 CM) AND SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
  6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES (20 CM) OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES (90 CM) ABOVE THE ORIGINAL GROUND SURFACE.
  7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
  8. ALL PROJECTS REQUIRE SUBMITTAL OF POLLUTION PREVENTION PLAN (PPP).
  9. ALL PROJECTS 1 AC. OR MORE MUST SUBMIT NOTICE OF INTENT (NOI) TO FDEP.

SILT FENCE INSTALLATION DETAIL D 9.1a  
Sheet 1 of 2



- NOTES:
1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
  2. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
  3. DRIVE BOTH POSTS ABOUT 18 INCHES INTO THE GROUND AND BURY FLAP.
- ATTACHING TWO SILT FENCES  
NOT TO SCALE

SILT FENCE INSTALLATION DETAIL D 9.1b  
Sheet 2 of 2



NOTE:  
A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AND CONTAIN AN AGGREGATE LAYER (FDOT AGGREGATE NO.1), AT LEAST 6-INCHES THICK. IT MUST EXTEND TO THE WIDTH OF THE VEHICULAR INGRESS AND EGRESS AREA.

STABILIZED CONSTRUCTION ENTRANCE DETAIL D9.1C

CALL 48 HOURS BEFORE YOU DIG.

IT'S THE LAW  
1-800-432-4770  
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

811  
Know what's below.  
Call before you dig.

SCALE: 1" = 10'

0 5 10 15 20

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BY:	
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JOSEPH A. PIKE, P.E. FL REG # 42896	

POLLUTION PREVENTION PLAN FOR:  
8TH AVE VILLAS - NORTH (LOT 2)  
NE 8TH AVENUE  
DELRAY BEACH, FLORIDA

EnviroDesign Associates Inc.  
www.envirodesign.com

ENGINEERS • ENVIRONMENTAL CONSULTANTS  
FLORIDA CERTIFICATE OF AUTHORIZATION No. 6506  
298 Pineapple Grove Way Delray Beach, Florida 33444  
Phone: (561) 274-6500 Fax: (561) 274-6558

DRAWN:  
M.T.J.

CHECKED:  
J.A.P.

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SHEET NO.  
5 OF 5