

1. ALL DIMENSIONS SHOWN ON THESE DRAWINGS ARE SCALED DISTANCES. THE CONTRACTOR SHALL CONFIRM ALL MEASUREMENTS IN THE FIELD AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCY PRIOR TO PERFORMING THE WORK. ALL QUANTITIES SHALL BE PAID ON THE BASIS OF FIELD MEASUREMENTS OF COMPLETED WORK.
2. REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS SPECIFICATIONS SEC. 941. CORRUGATED ALUMINUM PIPE (C.A.P.) SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS SPECIFICATIONS SEC. 945.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SUCH EXAMINATION OF THE SITE OF THE WORK, AND OF ANY MATERIAL SOURCES INDICATED IN THE PLANS, AS MAY BE NECESSARY TO INFORM HIMSELF OF THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED.
4. PROPOSED GRADES SHOWN IN PAVED AREAS REFER TO FINISH PAVEMENT GRADES.
5. PAVEMENT MARKING AND GEOMETRIC CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM PRACTICE CONVENTIONS FOR STREETS AND HIGHWAYS AND PALM BEACH COUNTY TYPICAL NO. T-P-17.
6. ALL LOTS, ROADWAYS AND BORROW AREAS SHALL BE STRIPPED OF ALL DELETERIOUS (UNDESIRABLE) MATERIALS AND MATERIALS SHALL BE DISPOSED WITHIN THE PROJECT AREA.
7. ALL GRADING OF STREETS, INCLUDING THE REMOVAL OF ALL MATERIALS AND THE FINISHING OF ALL SHOULDERS, SUBGRADE PREPARATION, SWALES AND BACKSLOPES, IN ACCORDANCE WITH THE TYPICAL SECTIONS SHOWN HEREON SHALL BE INCLUDED IN THE BID PRICE FOR PAVING.
8. ANY EXISTING ROADWAY AND/OR UTILITY THAT IS DAMAGED BY THE CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER, AND UTILITY.
9. THE FULL DEPTH OF ALL EXISTING ORGANIC AND DELETERIOUS MATERIALS WITHIN THE RIGHT-OF-WAY AND UTILITIES AND DRAINAGE EASEMENT SHALL BE COMPLETELY REMOVED TO MATERIALS OF F.D.O.T. CLASS A-5, A-7, OR A-8 SHALL BE ALLOWED.
10. ANY MUCK POCKETS OR GUMBO ENCOUNTERED SHALL BE REMOVED WITHIN THE ROADWAY TO 1'0" BELOW SUBGRADE AND TO OUTSIDE EDGE OF BOTH SHOULDERS.
11. ALL PAVING AND DRAINAGE WORK TO BE CONSTRUCTED IN FULL ACCORDANCE WITH PALM BEACH COUNTY STANDARDS AND SPECIFICATIONS.
12. THE SEQUENCE OF CONSTRUCTION SHALL BE SUCH THAT ALL UNDERGROUND INSTALLATIONS OF EVERY KIND THAT WILL BE BENEATH THE PAVEMENT CURRENTLY TO BE CONSTRUCTED SHALL BE INSTALLED PRIOR TO THE COMPLETION OF SUBGRADE CONSTRUCTION.
13. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER AND COUNTY ON ALL PIPE, PIPE BANDS, DRAINAGE STRUCTURES, GRATES, FRAMES AND COVERS.
14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF EXISTING UTILITIES WHETHER SHOWN OR NOT SHOWN ON THESE DRAWINGS AND SHALL VERIFY ALL ELEVATIONS BEFORE STARTING CONSTRUCTION. ANY EXISTING UTILITIES NOT SHOWN BY THE CONTRACTOR SHALL BE RESTORED TO EXISTING OR BETTER CONDITIONS BY CONTRACTOR AT NO EXPENSE TO OWNER.
15. WHERE CONNECTIONS TO AN EXISTING DRAINAGE SYSTEM ARE PROPOSED, SAID EXISTING DRAINAGE STRUCTURES AND LINES SHALL BE PURGED OF ALL SILT AND DEBRIS PRIOR TO SAID CONNECTION, AND WHERE EXISTING DRAINAGE SYSTEM INCLUDES DITCHES, SAID DITCHES SHALL BE CLEARED AND REWORKED, AS NECESSARY, TO RETURN THEM TO THE ORIGINAL APPROVED SECTION.
16. ALL PIPE JOINTS ARE TO BE INSPECTED BY A REPRESENTATIVE OF THE ENGINEER PRIOR TO BACKFILLING. ALL INSPECTIONS SHOULD BE MADE WITHIN TWO (2) HOURS OF THE INSPECTION DATE.
17. ALL CATCH BASIN GRATES MUST HAVE LOCKING CHAINS IN ACCORDANCE WITH FDOT INDEX 201.

CLEARING AND GRUBBING:

18. WORK SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF EXISTING TREES, LIMBS, STUMPS, ROOTS, RUBBISH, AND DEBRIS AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND AND THE SURFACE OF EXISTING AREAS, AND ALL DRAINAGE OBSTRUCTIONS. OBSTRUCTIONS NECESSARY TO BE REMOVED, INCLUDING SEPTIC TANKS, BUILDING FOUNDATIONS, AND PIPES.
19. ROOTS AND OTHER DEBRIS SHALL BE REMOVED TO A DEPTH OF AT LEAST ONE FOOT BELOW THE GROUND SURFACE. ALL STUMPS WITHIN THE CONSTRUCTION AREA SHALL BE COMPLETELY REMOVED AND DISPOSED OF BY THE CONTRACTOR.
20. EXISTING TREES TO REMAIN SHALL BE SO DIRECTED BY THE ENGINEER, SHALL BE TRIMMED, PROTECTED AND LEFT STANDING.
21. PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS BUILDINGS, SEWERS, DRAINS, WATER OR GAS PIPES, CONDUITS, FENCES, WALLS, POSTS, AND SIGNAGE, ETC. SHALL BE PROTECTED FROM INJURY AND ARE NOT TO BE DISPLACED.
22. CLEARING AND GRUBBING MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR IN LOCATIONS AND BY METHODS APPROVED BY THE ENGINEER.

SUBGRADE:

23. UTILIZATION OF MATERIAL IN SUBGRADE CONSTRUCTION SHALL BE IN ACCORDANCE WITH PLAN DETAILS OR AS DIRECTED BY THE ENGINEER.
24. A PROCTOR TEST SHALL BE PERFORMED ON THE PROPOSED SUBGRADE MATERIAL TO DETERMINE THE OPTIMUM MOISTURE CONTENT AND MAXIMUM DENSITY OF THE MATERIAL. IN-PLACE DENSITY TESTS OF THE FINISH SUBGRADE SHALL BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST FOR EACH 1000 SQ. YD. OF FINISH SUBGRADE. THE AREA TO DETERMINE COMPLIANCE WITH THE DESIGN SPECIFICATIONS OF 100% OF MAX. DENSITY PER AASHTO T-99 TESTING METHODS.
25. STABILIZED SUBGRADE SHALL HAVE A MINIMUM LIMEOR CEMENT BEARING RATIO (LBR) OF 10% AND SHALL BE CONSTRUCTED TO MEET THE FINISH GRADES, AND CROSS-SECTIONS SHOWN ON THE PLANS. ALL ROOTS, STUMPS, OR OBJECTIONABLE MATERIAL PRESENT ON, UNDER, OR PROTRUDING THROUGH THE SURFACE OF THE SUBGRADE SHALL BE REMOVED. THE FINISHED SURFACE OF THE SUBGRADE SHALL BE STRONG-LINED PRIOR TO PLACEMENT OF ROCK BASE TO VERIFY THAT THE SUBGRADE HAS BEEN CONSTRUCTED TO THE PROPER LINES, CROSS-SECTIONS, AND ELEVATIONS. AN ALLOWABLE TOLERANCE OF 1/2" OF THE PROPOSED FINISH SUBGRADE ELEVATIONS.

1. IF DURING THE PROPOSED CONSTRUCTION/CROSSING ANY EXISTING PB COUNTY STORM DRAIN PIPE/STRUCTURES ARE AFFECTED IN ANY WAY PB COUNTY RASB REQUIRES FULL RESTORATION OF THE EXISTING PIPE/STRUCTURE TO ORIGINAL DESIGN AND CONSTRUCTION STANDARDS.
2. IF ANY AFFECTED ROADWAYS ARE TO BE RESTORED FROM EOP TO EOP (NONE, WIDTH, MIN. ANV. 50' IN EITHER DIRECTION, THOROUGHFARE) AND 25' MIN. RESTORATION (NON-THOROUGHFARE),
3. IF ANY ADDITIONAL LANS ARE AFFECTED FOR ANY REASON DURING CONSTRUCTION, PB COUNTY RASB WILL REQUIRE THAT THE AFFECTED LANS BE RESTORED TO BE LIKE OR BETTER THAN THE ORIGINAL LANS AND TO EQUAL DIMENSIONS AS THE ADJACENT LANS.
4. IF PB COUNTY SIDEWALK / PATHWAY / C&G / AND ADA FACILITIES ARE AFFECTED PB COUNTY RASB WILL REQUIRE THAT THE AFFECTED FACILITIES BE RESTORED TO BE LIKE OR BETTER THEN LANS CONDITION PER / FDOT / PB COUNTY STANDARDS.
5. SIDEWALKS WILL BE RESTORED BY REPLACING TWO FLIPS IF THE PORT OF CONSTRUCTION IS BETWEEN CONTROL JOINTS. NO PARTIAL JOINTS ACCEPTED. (PER SITUATION).

1. CONTACT HAROLD REED AT 561 681-4326 BEFORE STARTING CONSTRUCTION PBC-TRAFFIC ITS WILL REMOVE FIBER OPTIC CABLES FROM UNDERGROUND AND OVERHEAD FACILITIES PRIOR CONSTRUCTION. PLEASE PROVIDE 2 WEEKS ADVANCE NOTICE TO REMOVE FIBER OPTIC CABLE.
2. CONTRACTOR SHALL CONTACT PALM BEACH COUNTY TRAFFIC OPERATIONS AT 561-233-3900 DURING (EIGHTH) HOURS PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF BEACH COUNTY.
3. DAMAGES TO LOOPS OR ANY SIGNAL EQUIPMENT CAUSED BY CONSTRUCTION OF THIS PROJECT MUST BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.
4. NO EXCAVATION AROUND PBC SIGNALS WITHIN 6 FT. RADIUS FROM CENTER OF POLE. PLEASE SEE PBC SIGNAL TYPICAL PAGE 1-5.3 (SHEET 8 OF 23).

1. DESCRIPTION:

I. GENERAL:

A. Scope of Work:

1. Furnish and place sand bedding course.
2. Furnish and install concrete interlocking paving stones in the quality, shape, thickness and a color as specified.
3. Furnish and install all accessory items as required by the contract.

B. Related Work:

1. Furnish and install subgrade per Table 100.6 of the Palm Beach County Land Development Design Standards Manual.
2. Furnish and install base per Table 100.6 of the Palm Beach County Land Development Design Standards Manual.

C. Product Handling:

1. Paving stones shall be delivered and unloaded at jobsite in such a manner that no damage occurs during shipping, handling and storage.

D. References:

1. Solid concrete interlocking paving stones must meet or exceed the requirements in ASTM C-936 Standard Specifications for Solid Concrete Interlocking Paving Units.

II. MATERIALS:

2.1 SOLID CONCRETE INTERLOCKING PAVING STONES

A. Thickness, Color and Pattern:

1. Paving stone thickness shall be between 3-1/8" min - 4" max.
2. All paving stones shall be colored through the full depth of cover and not just the surface.
3. A multi-colored paving stone pattern shall be used.

B. Cementitious Materials:

1. Portland cements shall conform to ASTM C-150.

C. Aggregates:

1. Aggregates shall conform to ASTM C-33 for normal weight concrete except that grading requirements shall not necessarily apply.

D. Other Materials:

1. Coloring pigments, air entraining agents, integral water repellents, finely ground silica, etc., shall conform to ASTM standards where applicable or shall be previously established as suitable for use in concrete.

E. Compressive Strength:

1. The time of delivery to the work site, the average compressive strength shall not be less than 8,000 psi with no individual unit strength less than 7,200 psi, with testing procedures in accordance with ASTM C-140.

F. Absorption:

1. The average absorption shall not be greater than 5% with no individual unit absorption greater than 7%.

G. Proven Field Performance:

1. Satisfying field performance is indicated when paving stones similar in composition, and made with the same manufacturing equipment as those supplied to the purchaser, do not exhibit deterioration after one year.

H. Visual Inspection:

1. All paving stones shall be sound and free of defects that would interfere with the proper placement of the paving stone or impair its strength or permanence of the construction.
2. Minor cracks incidental to the usual methods of manufacture, or chipping resulting from customary methods of handling in shipping and delivery, shall not be deemed grounds for rejection.

I. Sampling and Testing:

1. The purchaser shall be accorded proper facilities to inspect and sample the paving stones at the place of manufacture from lots to be delivered.
2. Paving stones will be sampled and tested in accordance with ASTM C-140.

J. Rejection:

1. If the shipment fails to conform to the specified requirements, the manufacturer may sort it, and new test paving stones shall be selected at random by the purchaser from the retained lot and at the expense of the manufacturer. If the second set of test stones fail to conform to the specified requirements, the entire lot shall be rejected.

- A. The bedding course shall be a well graded, clean, washed sand with 100% passing a 3/8" sieve size and a maximum of 3% passing a No. 200 sieve size. The use of mason sand shall not be approved.
- B. The bedding course shall be the responsibility of the paving stone installer.

2.3 EDGE RESTRAINT:

- A. All edges of the installed paving stones shall be restrained. The type of edge restraint, shall be approved at locations and to details noted on plans.

- 3.1 PREPARATION OF THE BASE COURSE:
 - A. A suitable base shall be prepared as specified in Section B.2. of this specification.
 - B. The base course shall be shaped to grade and cross section with allowable tolerance of 1/4".
- 3.2 CONSTRUCTION OF THE BEDDING COURSE:
 - A. The finished base course shall be approved before the placement of the bedding course.
 - B. The sand bedding course shall be spread evenly over the area to receive the paving stones and the screeded level to produce a 1" thickness when the paving stones have been placed and vibrated.
 - C. The final elevation of the bedding course shall be nominally 1/4" to 3/8" higher than the adjacent curb, gutter, etc., to allow for free drainage from chamfers on paving stone edges.
 - D. The bedding course shall not be disturbed, once screeded and leveled to the desired elevation.
- 3.3 INSTALLATION OF PAVING STONES:
 - A. The paving stones shall be placed as shown on the drawings.
 - B. The paving stones shall be placed in such a manner that the desired pattern is maintained and that no intentional space is left between the stones for maximum interlock.
 - C. String lines should be used to hold all patterns true.
 - D. The tops at the edge of the stone should be square and shall be filled with standard edge stone or with stones cut to fit. Cutting of concrete paving stone shall be accomplished to leave a clean edge to the traffic surface using a double-headed breaker or a mason's edge tool. Whenever possible, no cut should result with a paving stone less than 1/3 of original dimension.
 - E. Paving stones shall be vibrated into the bedding course using a plate vibrator compacting 300 to 500 psi vacuum compaction force with the surface clean and the joints open.
 - F. After vibration, clean, sharp sand containing at least 30% of 1/8" particles shall be spread over the paving stone surface, allowed to dry and vibrated into the joints with additional plate vibrator passes and brushing so as to completely fill the joints.
 - G. Surplus material shall then be swept from the surface or left on the surface during construction to insure complete filling of joints during initial use.
 - H. Upon completion of work covered in this section, the Contractor shall clean up all work areas by removing all debris, surplus material and equipment from the job site.
4. Paver brick shall conform with Palm Beach County Land Development Design Standards Manual with the following exceptions:
 - A) Under II Material 2.1 # A.1, Paving stone thickness shall be 3 1/8" (min.) to 4" (max).
 - B) Under II Material 2.1 # A.3, coloring shall be throughout the entire brick with the white and yellow conforming with F.D.O.T. Standard Specifications for Road and Bridge Construction (latest edition) section 710-4.7
5. Glass spheres to meet the requirements of sections 971-1 and 971-14 with retroreflectivity to be not less than 500 minicandies.
6. When header curb is used to outline a crosswalk the curb shall be white concrete with glass beads in the white concrete.
7. The brick shall be pre-approved per project before installation by the Palm Beach County Traffic Engineering Division.

SITE

ATLANTIC BLVD

INTRACOASTAL WATERWAY

SE 2ND STREET

SOUTH RIVERSIDE DRIVE

HIBISCUS AVENUE

[illegible]

CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434

POMPADOUR BEACH, FLORIDA

MATTHEW V. KAHN
PROFESSIONAL ENGINEER
LICENSE NO. 82227
STATE OF FLORIDA
- FOR THE FIRM -
DATE

JOB # 11181
SHT.NO. PD-1
OF 12 SHEETS