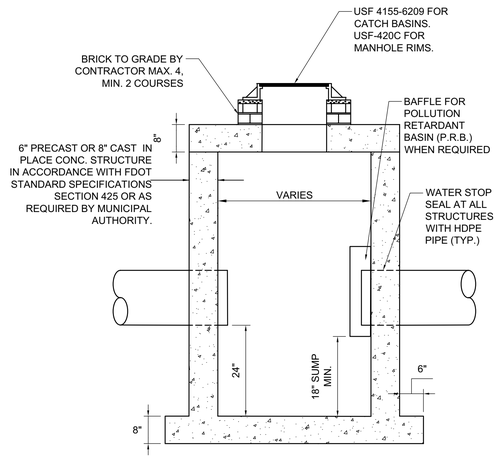
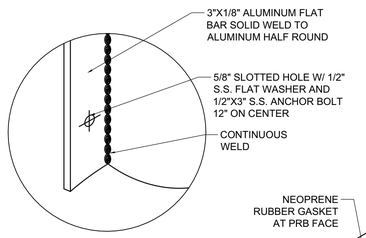


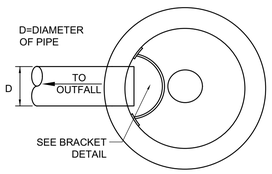
NOTES:
1. STRUCTURE MANUFACTURER AND/OR CONTRACTOR SHALL CONFIRM ALL STEEL REINFORCEMENT MEETS FDOT STANDARDS PER INDEX 425-010, SECTION 415 AND 425 PRIOR TO SUBMITTING ANY SHOP DRAWINGS FOR APPROVAL.
2. LOCKING GRATES TO BE PROVIDED.

11 CATCH BASIN / DRAINAGE MANHOLE DETAIL

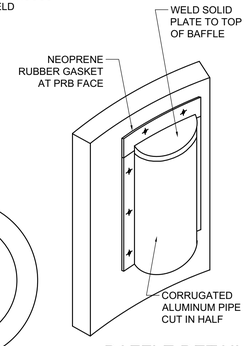
NOT TO SCALE



BRACKET DETAIL



PLAN VIEW

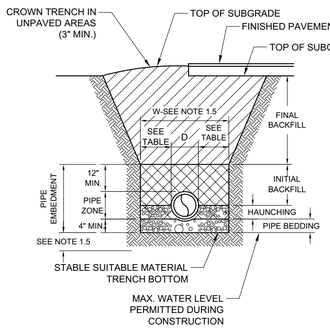


BAFFLE DETAIL

NOTE:
BAFFLE TO BE A SECTION OF CAP CUT IN HALF. CAP FOR BAFFLE SHALL BE THE NEXT STANDARD PIPE DIAMETER LARGER THAN THE INFLOW/ OUTFLOW PIPE.

14 POLLUTION RETARDANT BAFFLE DETAIL

NOT TO SCALE



NARROW TRENCH MINIMUM WIDTH	
PIPE "D"	WIDTH "D"
4" & 6"	18"
8"	24"
10"	26"
12" & 15"	30"
18"	32"
24"	36"
30"	42"
36"	48"
42"	54"
48"	60"
60" & LARGER	1.3 TIMES PIPE O.D.

"W" - TRENCH WIDTH AT TOP OF PIPE
"D" - OUTSIDE DIAMETER OF PIPE

1. NOTES - PRESSURE FLOW AND STORM SEWER PIPE.

1.1. GENERAL: TRENCH CONSTRUCTION SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 125. PVC PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE UNI-BELL PVC PIPE ASSOCIATION, HANDBOOK OF PVC PIPE, DESIGN AND CONSTRUCTION. CONCRETE PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH ANSI / ASCE 15-93.

1.2. PIPE BEDDING: PROVIDE BELL HOLES AT EACH JOINT, FOR PIPES LARGER THAN 4" IN DIAMETER, TO PERMIT PROPER ASSEMBLY AND PIPE SUPPORT.

1.3. HAUNCHING: USE MATERIAL MEETING THE CLASSIFICATION OF A-3 IN ACCORDANCE WITH ASTM D3282 (AASHTO M-145). MAXIMUM PARTICLE SIZE SHALL BE LESS THAN 1.5 INCHES.

1.4. INITIAL BACKFILL: USE SAME MATERIAL AS SPECIFIED FOR FINAL BACKFILL.

2. GENERAL NOTES:

2.1. TRENCH WALLS - EXCAVATE TRENCH TO ENSURE SIDES WILL BE STABLE UNDER WORKING CONDITIONS. TRENCH WALLS TO BE SLOPED OR SUPPORTED IN ACCORDANCE WITH THE CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT) AND FEDERAL OSHA STANDARD CFR SECTION 1926.650 SUBPART - P.

2.2. DEWATERING: WHEN RUNNING OR STANDING WATER OCCURS IN THE TRENCH BOTTOM, OR THE TRENCH BOTTOM DISPLAYS A "QUICK" CONDITION, WATER SHALL BE REMOVED TO BELOW THE PIPE INVERT BY A SUITABLE MEANS, UNTIL THE PIPE IS BACKFILLED TO A SUFFICIENT HEIGHT TO PREVENT PIPE FLOATATION.

2.3. MINIMUM TRENCH WIDTH: PROVIDE A TRENCH WIDTH SUFFICIENT, BUT NO WIDER THAN NECESSARY, TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING BACKFILL MATERIAL. SEE TABLE FOR MINIMUM TRENCH WIDTHS. WHERE SOIL CONDITIONS REQUIRE TRENCH WALLS TO BE SUPPORTED, MINIMUM WIDTH SHALL BE BETWEEN INNER FACE OF TRENCH SUPPORTS.

2.4. MOVABLE SHEETING, TRENCH BOXES OR SHIELDS: WHEN MOVABLE TRENCH SUPPORT IS USED, THE MINIMUM DISTANCE BETWEEN INNER FACE OF TRENCH SUPPORT, AND THE OUTER PIPE WALL, SHALL BE AT LEAST ONE PIPE DIAMETER OR 2 FEET WHICH EVER IS GREATER.

2.5. PREPARATION OF TRENCH BOTTOM: TRENCH BOTTOM SHALL BE PREPARED TO PROVIDE A FIRM STABLE UNIFORM FOUNDATION THE FULL LENGTH OF THE PIPE. IF UNSUITABLE MATERIAL IS ENCOUNTERED AT BOTTOM OF TRENCH, CONTINUE TO EXCAVATE TILL SUITABLE MATERIAL IS ENCOUNTERED. IF DEPTH TO SUITABLE MATERIAL IS GREATER THAN 2 FEET BELOW BOTTOM OF TRENCH, NOTIFY ENGINEER OF SUCH CONDITION BEFORE CONTINUING FURTHER TRENCH EXCAVATION.

2.6. PIPE BEDDING: BEDDING MATERIAL SHALL CONFORM TO ASTM D-2321, AND MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. FOR PVC AND OTHER "FLEXIBLE" PIPES, EXCAVATE 4" BELOW PROPOSED OUTSIDE BOTTOM OF PIPE, BACKFILL AND COMPACT WITH SPECIFIED BEDDING MATERIAL TO PROPER GRADE.

2.7. HAUNCHING: MATERIAL SHALL MEET AND BE INSTALLED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. PLACE AND CONSOLIDATE MATERIAL UNDER THE PIPE HAUNCH, UP TO THE PIPE SPRINGLINE, FOR THE FULL WIDTH OF THE TRENCH, BEFORE PLACING AND COMPACTING THE REMAINDER OF THE EMBEDMENT IN THE PIPE ZONE. HAUNCHING MATERIAL SHALL BE PLACED AND CONSOLIDATED BY HAND SHOVEL SLICING ALONG HAUNCH OF PIPE AND BY WATERING (JETTING OR PUDDLING) OR HAND TAMPING. MECHANICAL COMPACTION IS NOT TO BE USED WITHIN 1 PIPE DIAMETER OR 2 FEET, WHICH EVER IS GREATER, EITHER SIDE OF THE OUTSIDE WALL OF THE PIPE.

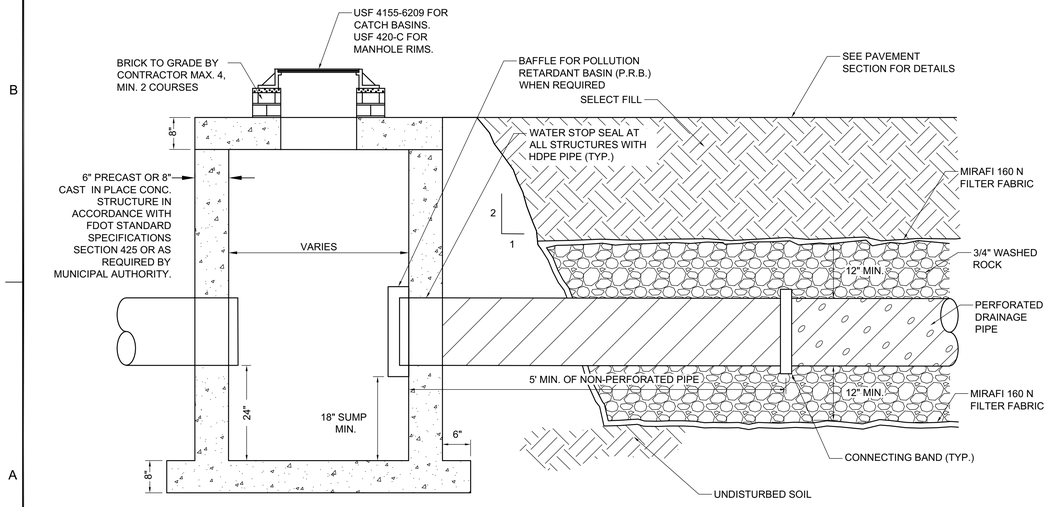
2.8. INITIAL BACKFILL: SHALL EXTEND FROM THE SPRINGLINE OF THE PIPE TO 1 FOOT ABOVE THE TOP OF PIPE. MATERIAL SHALL BE PLACED AND CONSOLIDATED AS SPECIFIED FOR THE HAUNCHING MATERIAL.

2.9. FINAL BACKFILL: MATERIAL SHALL MEET AND BE INSTALLED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. SELECT BACKFILL MEETING THE CLASSIFICATION OF A-1, A-3, OR A-2-4 IN ACCORDANCE WITH ASTM D3282 (AASHTO M-145). THE MATERIAL MUST NOT CONTAIN MUCK, STUMPS, ROOTS, BRUSH, VEGETABLE MATTER, RUBBISH, CONSTRUCTION DEBRIS OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE EMBANKMENT. MATERIAL MUST HAVE MAXIMUM PARTICLE SIZE AS FOLLOWS: WITHIN 12" OF TOP OF SUBGRADE - 31/2"; 12" TO 24" BELOW TOP OF SUBGRADE - 6"; GREATER THAN 24" BELOW TOP OF SUBGRADE - 12" OR COMPACTED THICKNESS OF LAYER BEING PLACED, WHICH EVER IS LESS. FINAL BACKFILL MAY BE NATIVE MATERIAL MEETING THE SPECIFIED REQUIREMENTS. UNLESS OTHERWISE NOTED.

2.10. COMPACTION TEST: COMPACTION PERCENTAGES SHOWN FOR TRENCH SECTION BACKFILL MATERIAL REFER TO ASTM - D698 (AASHTO - T-99, STANDARD PROCTOR). COMPACTION PERCENTAGES FOR LIMEROCK BASE COURSE MATERIAL REFER TO ASTM - D1557 (AASHTO -T-180, MODIFIED PROCTOR).

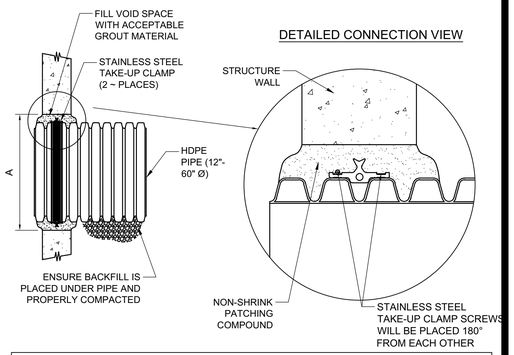
30 TRENCH SECTION FOR BURIED PIPES AND CULVERTS

NOT TO SCALE



15 CATCH BASIN W/ PRB AND EXFILTRATION TRENCH

NOT TO SCALE



NOTES:
PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

SEE ADS STANDARD DETAIL STD-201 AND ADS INSTALLATION GUIDE 1.05: WATERSTOP INSTALLATION FOR INSTALLATION RECOMMENDATIONS.

PIPE SIZE	PIPE OD		"A" MIN. HOLE DIA	MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT
	A-PROFILE	H-PROFILE		
12"	14.5"	N/A	19.5"	3.7"
15"	17.6"	N/A	23.00"	4.0"
18"	21.2"	N/A	26.50"	4.2"
24"	27.8"	N/A	33.25"	4.5
30"	35.1"	N/A	40.50"	5.2"
36"	41.1"	41.1"	47.00"	5.5"
42"	47.7"	48.0"	53.00"	5.7"
48"	53.6"	54.0"	59.00"	5.7"
60"	66.3"	67.3"	72.00"	6.4"

17 GROUTED MANHOLE CONNECTION (HDPE PIPE) DETAIL

NOT TO SCALE

SPACING OF REQUIRED ROADWAY, PARKING AREA, AND UTILITY TRENCH TESTS								
	Proctor Maximum Density		L.B.R.		DENSITY / Per Lift		THICKNESS	
	MAX. SPACING		MAX. SPACING		MAX. SPACING		MAX. SPACING	
	LIN. FEET	SQ. FEET	LIN. FEET	SQ. FEET	LIN. FEET	SQ. FEET	LIN. FEET	SQ. FEET
COMPACTED OR STABILIZED SUBGRADE	1000	12,000	1000	12,000	500	6,000	200	2,400
LIMEROCK BASE	4000	24,000	--	--	500	6,000	200	2,400
ASPHALT	--	--	--	--	1500	18000	Every 200 Tons	
UTILITY TRENCH	One per Soil Type		--	--	500	6,000	--	--
Embankment / Backfill	One per Soil Type		--	--	500	6,000	--	--

ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 12" INSIDE THE LEFT EDGE OF THE ITEM TESTED TO THE CENTER, TO A POINT 12" INSIDE THE RIGHT EDGE. A MINIMUM OF 2 TESTS SHALL BE TAKEN INCLUDING UTILITY TRENCHES AND ROADWAY RESTORATION. SEE FDOT STANDARD SPECIFICATIONS FOR FURTHER DETAILS AND REQUIREMENTS.

33 COMPACTION TEST SCHEDULE

NOT TO SCALE

KEITH
301 East Atlantic Blvd. Pompano Beach, FL 33060
PH: (954) 788-3400
Florida Certificate of Authorization: 7928
Licensed Business Number: 6860

Plotted by: mpinzon On 11/21/2023 3:43 PM

REVISIONS

NO.	DESCRIPTION	DATE

PRELIMINARY PLAN NOT FOR CONSTRUCTION

THESE PLANS ARE NOT FULLY PERMITTED AND ARE SUBJECT TO REVISIONS MADE DURING THE PERMITTING PROCESS.

RESPONSIBILITY FOR THE USE OF THESE PLANS PRIOR TO OBTAINING PERMITS FROM ALL AGENCIES HAVING JURISDICTION OVER THE PROJECT WILL FALL SOLELY UPON THE USER.

ISSUE DATE:	11/28/23
DESIGNED BY:	MA, MP
DRAWN BY:	MA, MP, JP
CHECKED BY:	MV, MP
BID-CONTRACT:	

This item has been digitally signed and sealed by MICHAEL PINZON, P.E. on the date adjacent to the seal.

MICHAEL PINZON LICENSE No. 95668 STATE OF FLORIDA PROFESSIONAL ENGINEER

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

2023.11.27 11:52:43-05'00'

MICHAEL PINZON, P.E.
FLORIDA REG. NO. 95668
(FOR THE FIRM)

CLIENT

ATLANTIC RESIDENTIAL

PROJECT

Live!

INDIGO POMPANO BEACH RESIDENTIAL

SHEET TITLE

PAVING, GRADING, AND DRAINAGE DETAILS

SHEET NUMBER	CP-502
PROJECT NUMBER	10230.19

STATUS: DRC SUBMITTAL

Drawing name: Q:\10230.19 - Atlantic Realty Residential - Isla Casino\Engineering\Cadd\10230.19-CP-5XX.dwg

AAC
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02/06/2024