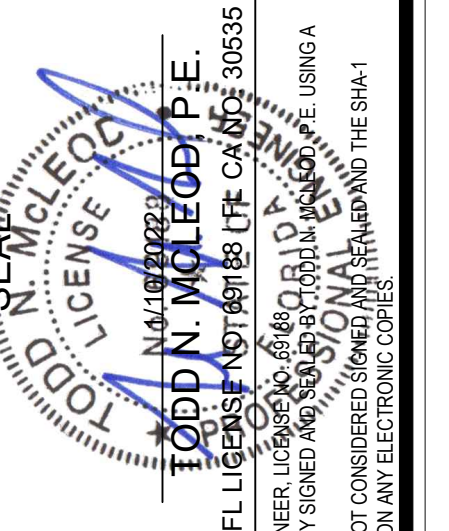




**McLeod • McCarthy
& Associates, P.A.**
Civil Engineers

The Forum III
1655 Palm Beach Lakes Blvd, Ste. 110
West Palm Beach, FL 33401
P: 561.689.9500
F: 561.689.8080
www.mcleodmccarthy.com



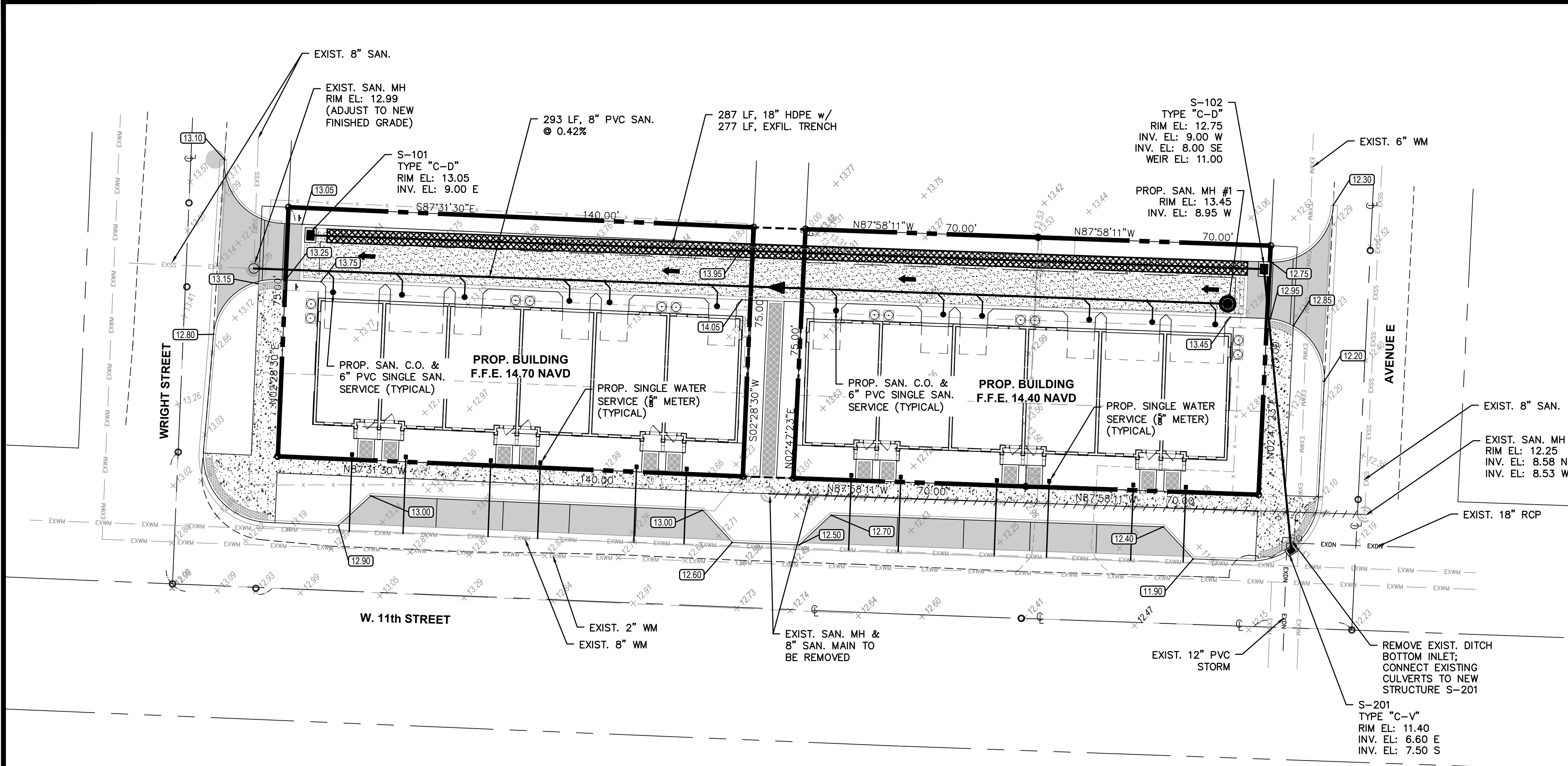
FIELD: P. Saffold
DRAWN: P. Saffold
DESIGNED: TMM
APPROVED: TMM
PROJECT #21-002
TODD N. McLEOD, P.E.
FL LICENSE #12000 (CIVIL ENGINEERING)
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND IS VALID AND LEGAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND VALID.
AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

NO.	DATE	REVISIONS

CONCEPTUAL ENGINEERING PLAN
VILLA L'ONZ: A TOWNHOUSE PROJECT
11th STREET & WRIGHT STREET
RIVIERA BEACH, FLORIDA

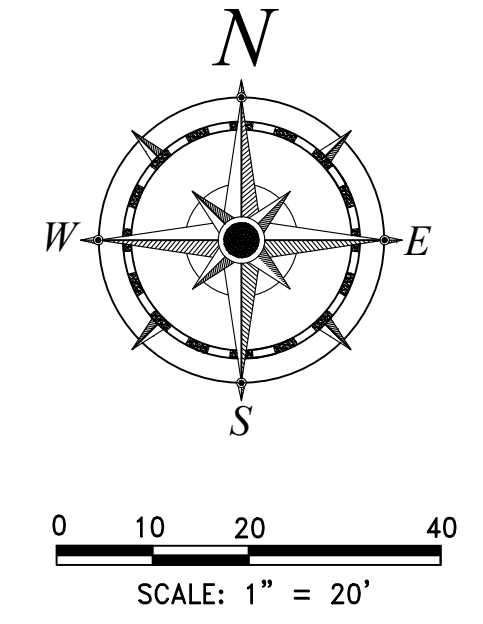
OWNER PROGRESS SET
DATE: 1/10/2022

SHEET
C1.1
OF 2



LEGEND

- PROP. SIGN
- SURFACE FLOW ARROW
- PROP. CONCRETE PAVEMENT
- PROP. ASPHALT PAVEMENT
- MILLING & RESURFACING
- PROP. PAVERS
- PROPOSED ELEVATION
- EXIST. ELEVATION
- POLLUTION RETARDANT BAFFLE PRB



NOTES:

1. EXIST. UTILITIES, DRAINAGE, & ELEVATIONS BASED ON SURVEY PREPARED BY PM SURVEYING. CONTRACTOR SHALL VERIFY INVERTS, PIPE SIZES, AND STRUCTURE LOCATIONS PRIOR TO SUBMITTING SHOP DRAWINGS.
2. ALL LANDSCAPE AREAS ADJACENT TO BUILDING SHALL BE GRADED TO DRAIN AWAY FROM BUILDING.
3. CONTRACTOR SHALL CONFIRM DETECTABLE WARNING REQUIREMENTS WITH BUILDING OFFICIAL PRIOR TO INSTALLATION.
4. WHERE LANDSCAPE/SOD ABUTS BUILDING SLAB, A MINIMUM 3" SLAB REVEAL SHALL BE PROVIDED.
5. MAXIMUM SLOPE FROM TOP OF CURB AND BACK OF WALK TO FINISHED GRADE SHALL BE 4(H):1(V), UNLESS OTHERWISE NOTED.
6. ALL BUFFER, DETENTION, SWALE, AND UN-LANDSCAPED/UNPAVED AREAS SHALL BE SODDED UNLESS OTHERWISE NOTED.
7. REFER TO SITE PLAN PREPARED BY REG ARCHITECTS AND 2GHO FOR ADDITIONAL SITE REQUIREMENTS.
8. ALL CULVERTS LEADING TO EXFILTRATION TRENCH SHALL BE FITTED WITH A POLLUTION RETARDANT BAFFLE (PRB) PER THE ENCLOSED DETAIL.
9. ALL BUFFER & UNPAVED/UNLANDSCAPED AREAS SHALL BE SODDED BY CONTRACTOR.
10. ALL OFFSITE DISTURBED AREAS SHALL BE SODDED BY CONTRACTOR. ALL DAMAGED CURBING, PAVEMENT, STRIPING, SIGNAGE, LANDSCAPING, ETC. SHALL BE RESTORED BY CONTRACTOR.
11. CONTRACTOR IS SOLELY RESPONSIBLE FOR PREPARING MAINTENANCE OF TRAFFIC (MOT) PLANS AND OBTAINING ALL REGULATORY APPROVALS FOR MOT PLANS. COPIES OF APPROVED MOT PLANS SHALL BE PROVIDED TO ENGINEER PRIOR TO COMMENCING WORK.
12. ALL PIPE JOINTS SHALL BE WRAPPED PER FDOT INDEX NO. 430-001.

ACCESSIBILITY NOTES:

1. ACCESSIBLE ROUTES SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE - ACCESSIBILITY.
2. ALL WALKS CROSSING A VEHICULAR AREA SHALL HAVE DETECTABLE WARNING SURFACE (TRUNCATED DOME) IN ACCORDANCE WITH THE FLORIDA BUILDING CODE - ACCESSIBILITY.
3. CURB RAMP SLOPES AND DIMENSIONS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX NO. 522-02. CURB RAMP DETECTABLE WARNING SURFACES SHALL BE TRUNCATED DOME AND SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.
4. DETECTABLE WARNING SHALL BE THE WIDTH OF THE WALKING SURFACE AND 3' IN LONGITUDINAL LENGTH (DIRECTION OF TRAVEL). DETECTABLE WARNING MATS SHALL PER THE FDOT APPROVED PRODUCTS LIST (APL), LATEST EDITION.

RECORD DRAWING NOTES:

1. RECORD DRAWINGS SHALL BE PREPARED IN THE STATE PLANE COORDINATE SYSTEM.
2. ALL UTILITY FEATURES SHALL BE SHOWN IN THEIR AS-BUILT LOCATION.
3. STATE PLANE COORDINATES SHALL BE DISPLAYED ON RECORD DRAWINGS FOR ALL FEATURES SPECIFIED IN THE CITY OF RIVIERA BEACH STANDARDS.
4. STATE PLANE COORDINATES SHALL BE SHOWN ON PROPERTY CORNERS.

GENERAL WATER NOTES:

1. ALL WATER MAIN DUCTILE IRON PIPE (DIP) AND PIPE FITTINGS SHALL BE PAINTED WITH A 4" WIDE CONTINUOUS BLUE LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND IS LOCATED ALONG THE TOP OF THE PIPE.
2. ALL WATER MAINS SHALL BE MARKED WITH ONE CONTINUOUS STRIP OF 6" WIDE MAGNETIC BLUE CODED TAPE IMPRINTED WITH TWO (2) INCH HIGH LETTERING READING "CAUTION - POTABLE WATER LINE BURIED BELOW" AND LOCATED APPROXIMATELY TWELVE (12) INCHES ABOVE THE CROWN OF THE PIPE. THE WORDING SHALL OCCUR EVERY THREE (3) FEET.
3. ALL WATER SERVICE BRASS ARE REQUIRED TO BE LEAD FREE.
4. CONTRACTOR SHALL ALLOW A MINIMUM OF 60 DAYS FROM SUBMITTAL OF WATER/SEWER ASBUILT RECORD DRAWINGS UNTIL REQUEST FOR FIRST WATER METER IN ORDER TO ALLOW FOR EOR AND CITY REVIEW OF ASBUILT DRAWINGS. ASBUILTS WHICH DO NOT COMPLY WITH THESE PLANS AND CWPB/HEALTH DEPT. CRITERIA, MAY REQUIRE SIGNIFICANT CORRECTIVE WORK AND MAY RESULT IN SIGNIFICANT DELAYS WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL SEWER NOTES:

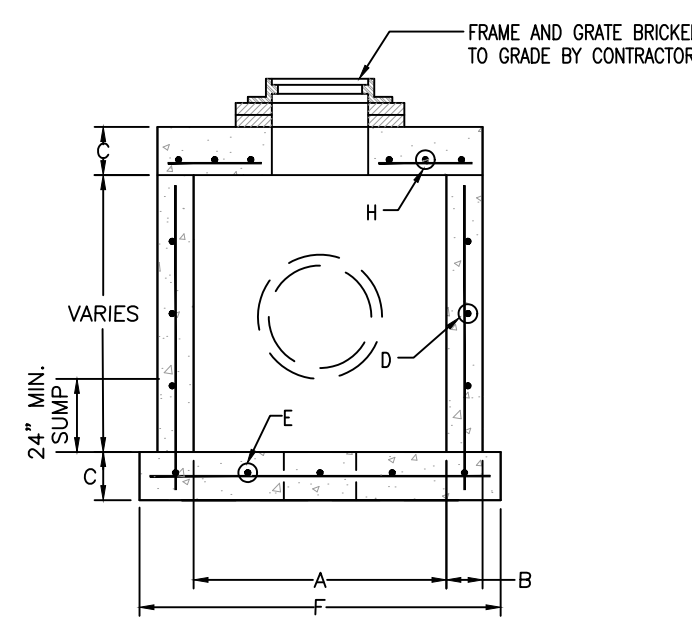
1. ON-SITE SEWER LATERALS & WATER SERVICE ARE PRIVATELY OWNED AND MAINTAINED.

NOTES:

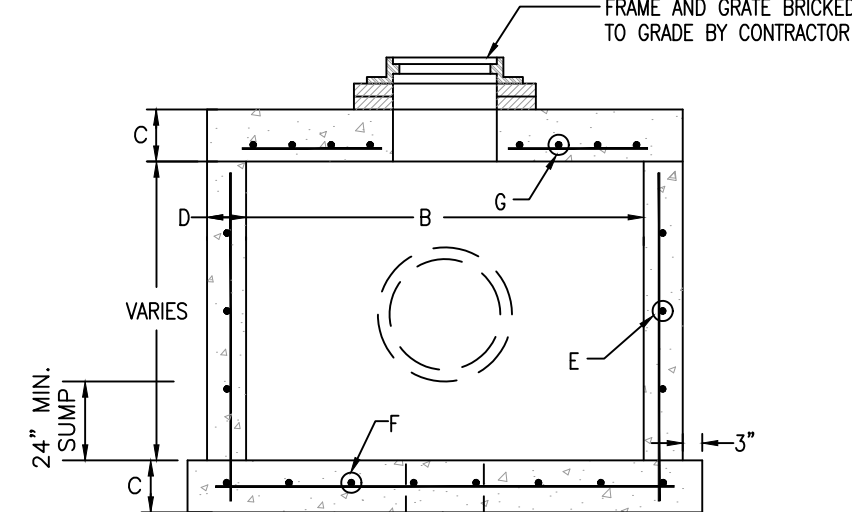
1. PRIOR TO CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY (ELEVATION & LOCATION) ALL EXISTING UTILITIES. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONTINUATION OF WORK.
2. ALL SANITARY SEWER SHALL BE P.V.C. SDR 26 (UNLESS OTHERWISE NOTED).
3. ALL WATER MAINS & FORCE MAINS SHALL BE DIP UNLESS OTHERWISE NOTED.
4. FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 7' AND A MAXIMUM OF 12' FROM EDGE OF PAVEMENT.
5. VALVES SHALL NOT BE PLACED IN CURVES.
6. ALL WATER AND SANITARY SERVICES SHALL BE CONSTRUCTED A MINIMUM OF 5' FROM DRAINAGE STRUCTURES.
7. MAGNETIC TAPE IS REQUIRED FOR ALL WATER & FORCE MAINS AND SHALL BE 6" WIDE, IMPRINTED WITH 2" HIGH LETTERING READING "CAUTION - WATER MAIN BURIED BELOW" OR "CAUTION - FORCE MAIN BURIED BELOW", AS REQUIRED.
8. RECORD DRAWINGS MUST HAVE DATA FOR TAP AND METER LOCATIONS FOR ALL NON-PERPENDICULAR WATER MAIN SERVICES.
9. PRESSURE TESTING AND CERTIFICATION SHALL FOLLOW CITY OF RIVIERA BEACH CONSTRUCTION STANDARDS, LATEST EDITION.
10. ALL WATERMANS TO CROSS OVER SANITARY SEWER SERVICES. WHERE 18" MINIMUM CLEARANCE CANNOT BE MAINTAINED, 20 LINEAR FEET OF DUCTILE IRON WATERMAIN SHALL BE CENTERED ON THE CROSSING AND THE SEWER SERVICE SHALL BE C-900, SDR-18. IN NO CASE SHALL THERE BE LESS THAN 6" CLEARANCE.
13. WATER/SEWER SYMBOLS ARE REPRESENTATIVE OF THE CORRESPONDING FITTINGS ONLY. CONTRACTOR SHALL NOT ATTEMPT TO ATTEMPT TO CONSTRUCT WATER/SEWER SYSTEM BY SCALING THE SYMBOLS FROM THESE PLANS. ALL FITTINGS SHALL INSTEAD BE BUILT PER THE ENCLOSED DETAILS.
14. CONTRACTOR SHALL PROVIDE COMPLETE ELECTRICAL SERVICE TO DCDA TAMPER SWITCHES.
15. CONNECTIONS TO CITY UTILITY SYSTEM SHALL BE SCHEDULED WITH CITY OF RIVIERA BEACH PERSONNEL A MINIMUM OF 72 HOURS IN ADVANCE.
16. CONTRACTOR SHALL PRESSURE TEST FIREMAIN WITH CITY OF RIVIERA BEACH FIRE DEPT. PERSONNEL IN ACCORDANCE WITH NFPA CRITERIA AND WITH OPEN JOINTS.

NOTE: THESE PLANS ARE UNDER REGULATORY REVIEW & SHALL NOT BE USED FOR CONTRACTUAL OR CONSTRUCTION PURPOSES UNTIL ALL PERMITS ARE ISSUED.

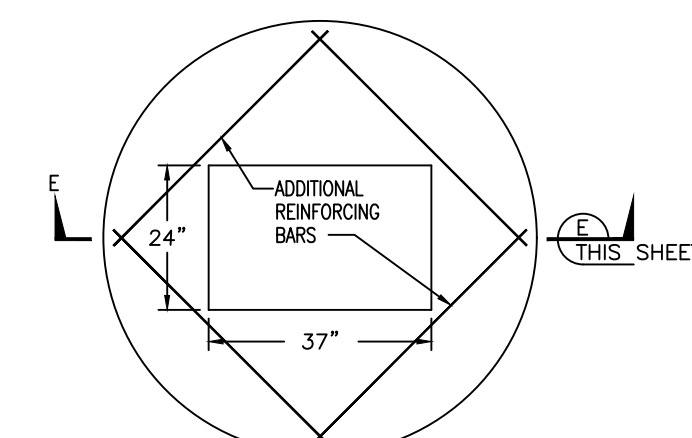
DATUM NOTE: ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TO CONVERT TO NGVD 1929, ADD 1.50' TO NAVD ELEVATIONS.



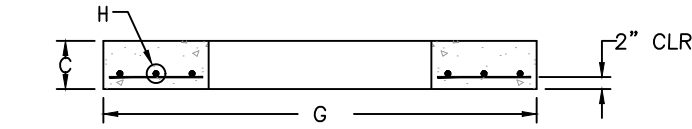
CATCH BASIN
(SEE TABLE FOR DIMENSIONS)



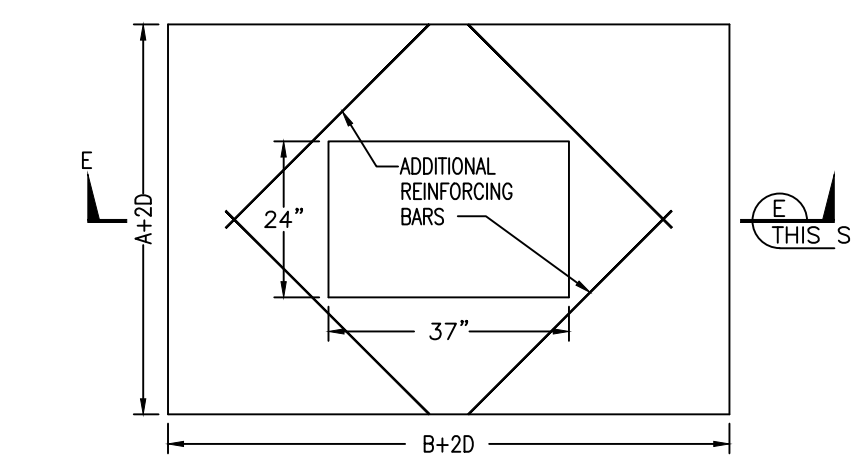
CATCH BASIN
(SEE TABLE FOR DIMENSIONS)



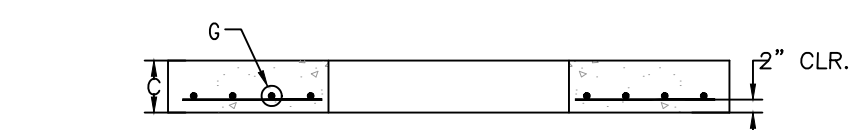
TOP SLAB FOR CATCH BASIN



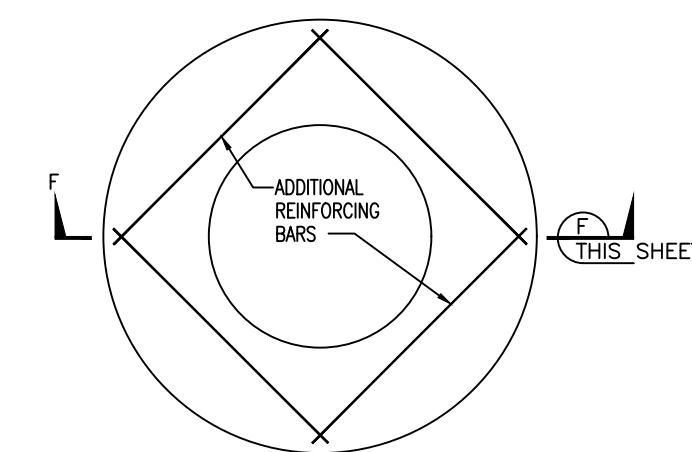
SECTION F
(SEE TABLE FOR DIMENSIONS)



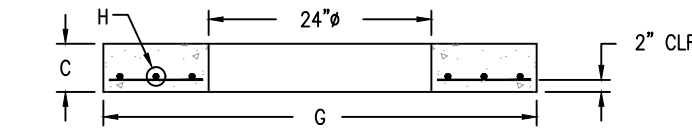
TOP SLAB FOR CATCH BASIN



SECTION F
(SEE TABLE FOR DIMENSIONS)



TOP SLAB FOR MANHOLE



SECTION F
(SEE TABLE FOR DIMENSIONS)

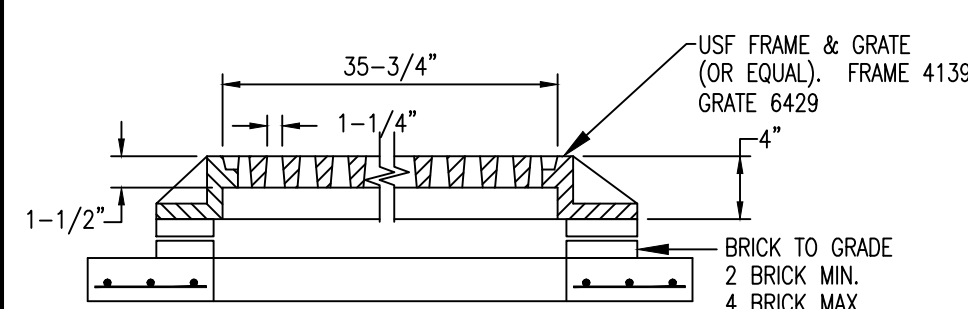
A	B	C	D	E*	F	G	H*
3'-6"	4'	8"	ASTM C-478	#4 @ 12"	4'-6"	4'-2"	#4 @ 6"
3'-6"	6"	8"	ASTM C-478	#4 @ 12"	5'-0"	4'-6"	#4 @ 6"
4'	6"	8"	ASTM C-478	#4 @ 12"	6'-0"	5'-0"	#4 @ 6"
4'	8"	8"	ASTM C-478	#4 @ 12"	6'-4"	5'-4"	#4 @ 6"
5'-0"	8"	8"	ASTM C-478	#5 @ 12"	7'-4"	6'-4"	#5 @ 6"
6'-0"	6"	8"	ASTM C-478	#5 @ 6"	8'-0"	7'-0"	#5 @ 6"
6'-0"	8"	8"	ASTM C-478	#5 @ 6"	8'-4"	7'-4"	#5 @ 6"
7'-0"	8"	8"	ASTM C-478	#5 @ 6"	9'-4"	8'-4"	#5 @ 6"
8'-0"	10"	10"	ASTM C-478	#5 @ 6"	10'-8"	9'-8"	#5 @ 6"
10'-0"	12"	12"	ASTM C-478	#5 @ 6"	12'-0"	12'-0"	#5 @ 6"

INLET NOTES

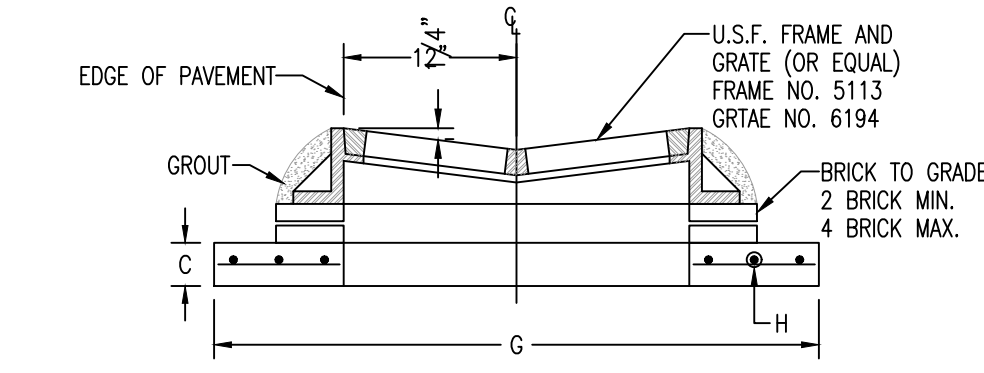
BEVELED EDGES: ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
 FOUNDATION MATERIAL: WHERE MATERIAL UNSATISFACTORY FOR FOUNDATION IS ENCOUNTERED, ALL SUCH MATERIAL MUST BE REMOVED DOWN TO SATISFACTORY MATERIAL AND BACKFILLED TO SUBGRADE WITH CLEAN SAND.
 INLET TYPES: INLETS ARE TO BE CONSTRUCTED TO THE DIMENSIONS SHOWN HEREON. INLETS RECEIVING PIPE LARGER THAN 42" DIAMETER SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS

MATERIAL: INLET WALLS AND BASES MAY EITHER BE CAST-IN-PLACE CLASS I, 2500 P.S.I. CONCRETE OR PRECAST CLASS II, 4000 (MIN.) P.S.I. CONCRETE.

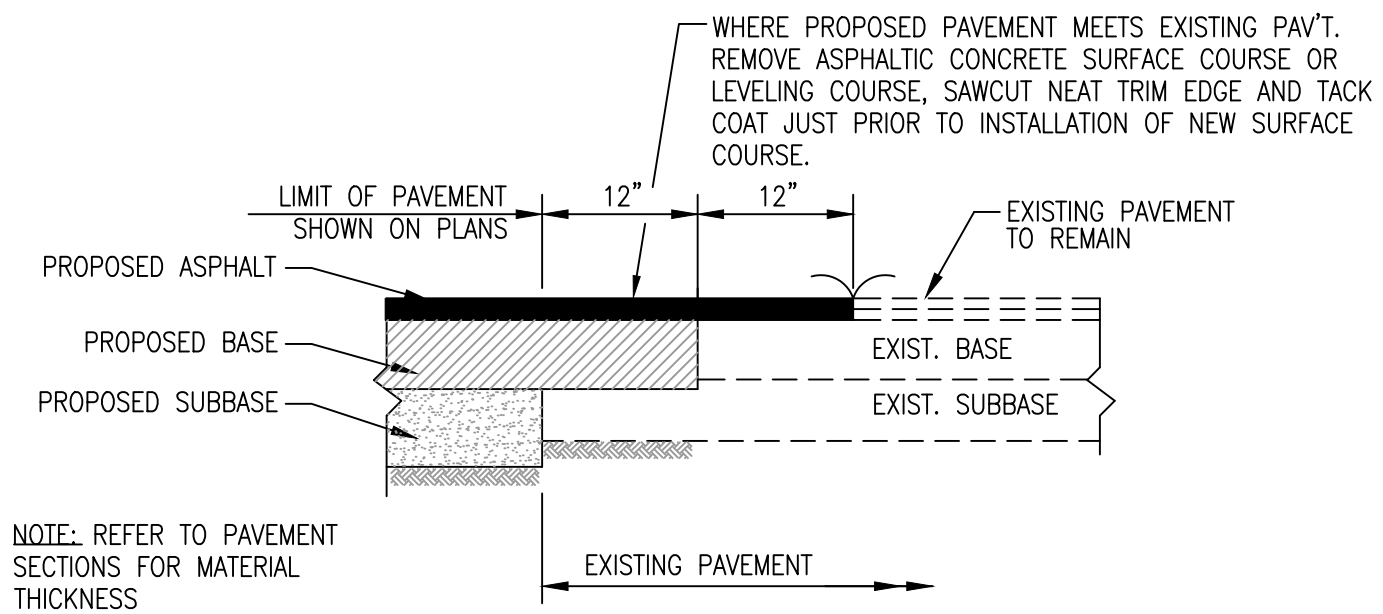
CIRCULAR CATCH BASIN (ON-SITE)



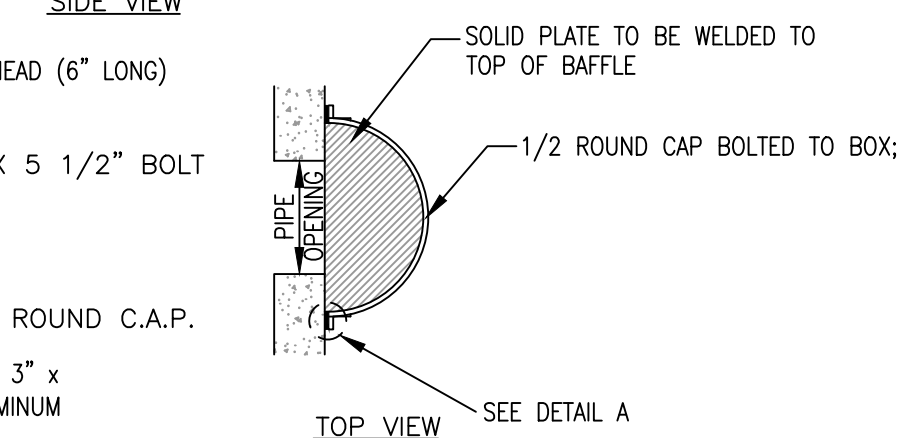
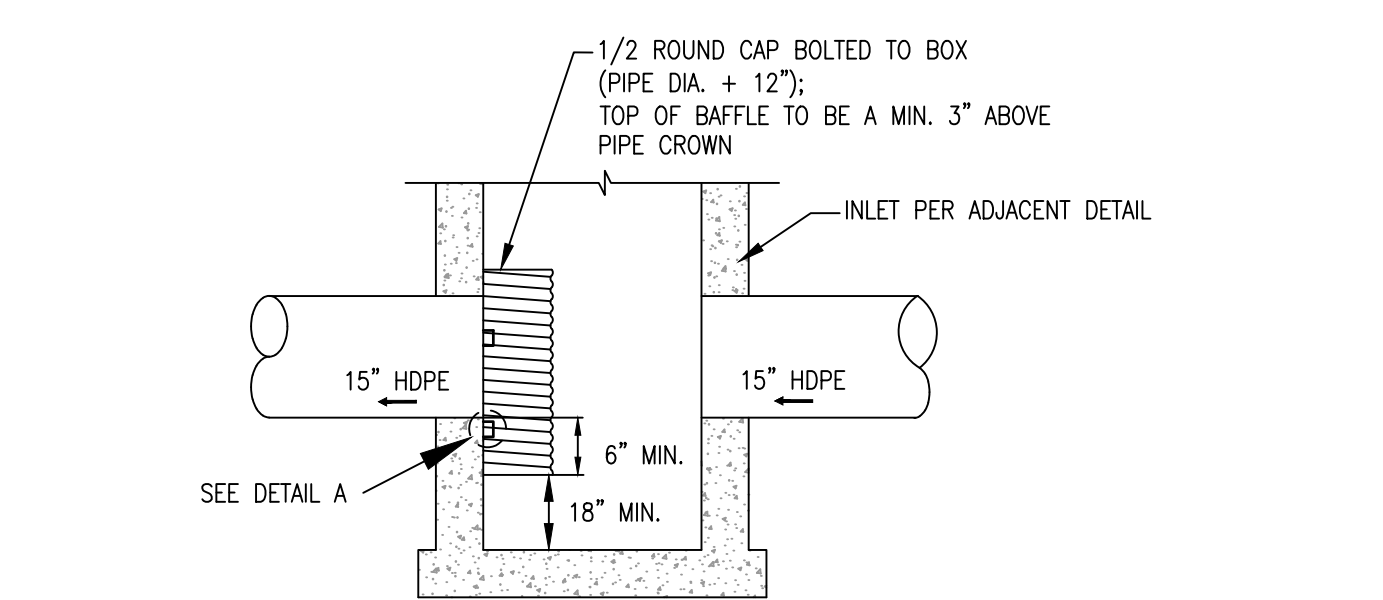
ON-SITE INLET FRAME & GRATE
(TYPE "C-D" INLET)



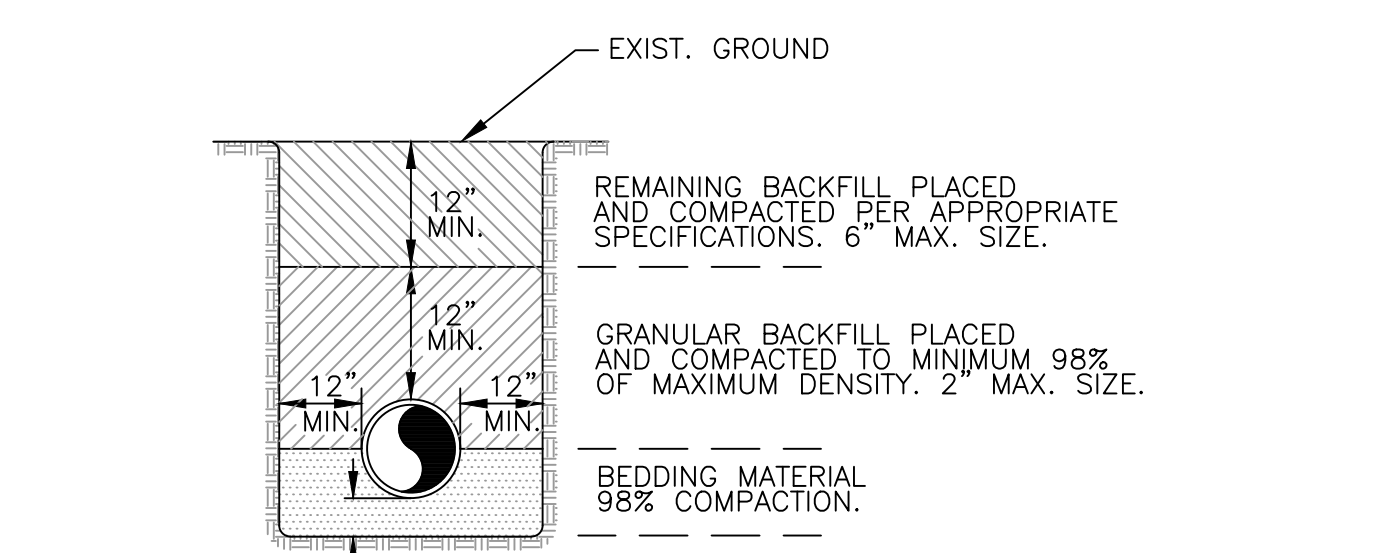
VALLEY GUTTER TOP (TYPE "C-V" INLET)
GRATE ELEVATION AS SHOWN ON PLANS = EDGE OF PAVEMENT ELEVATION



PAVEMENT MATCHING DETAIL
N.T.S.

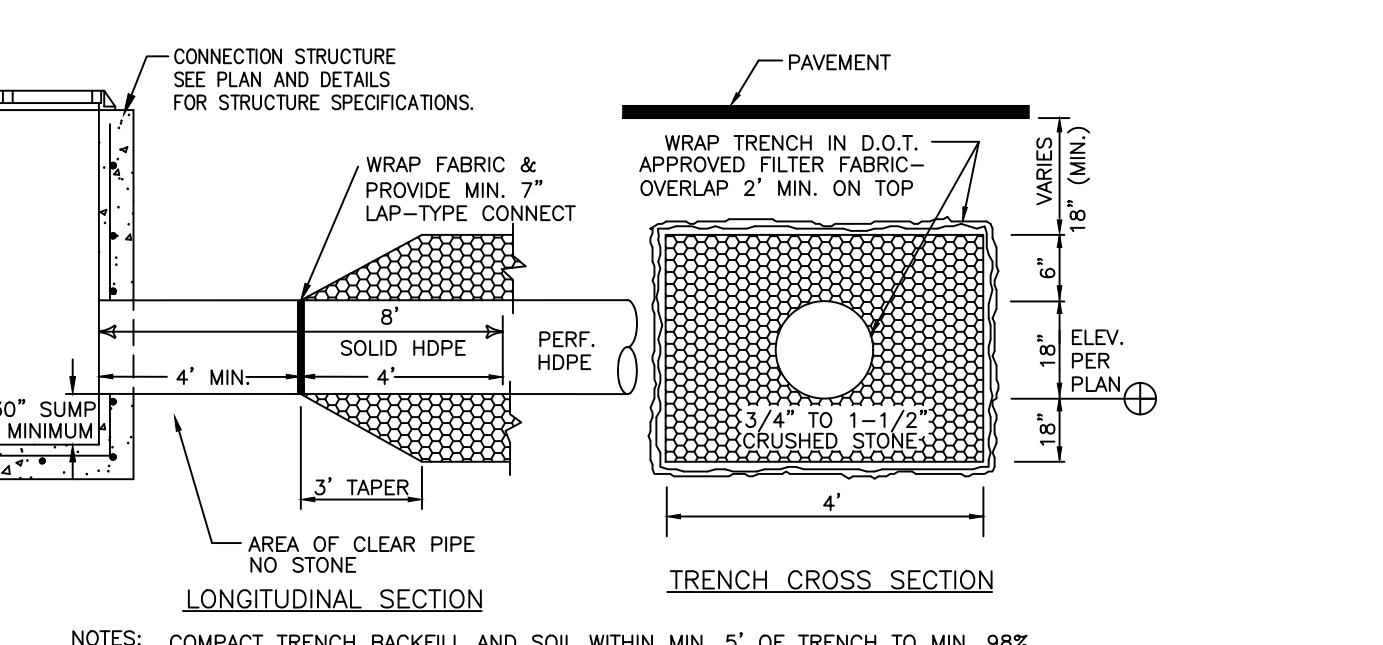


POLLUTION RETARDANT BAFFLE (PRB) DETAIL
N.T.S.

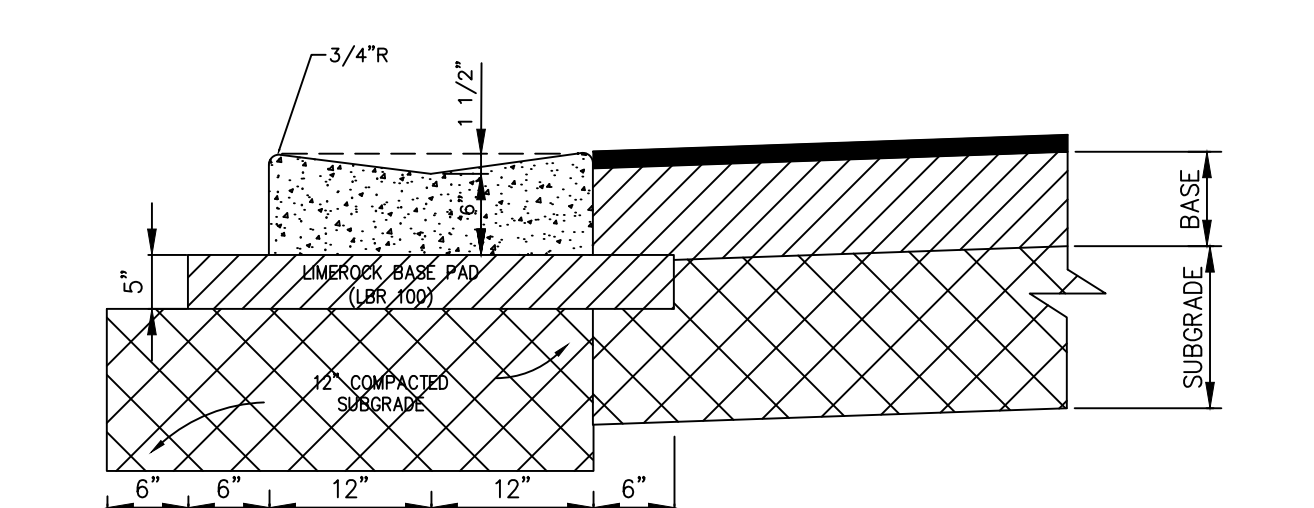


TRENCH DETAIL
N.T.S.

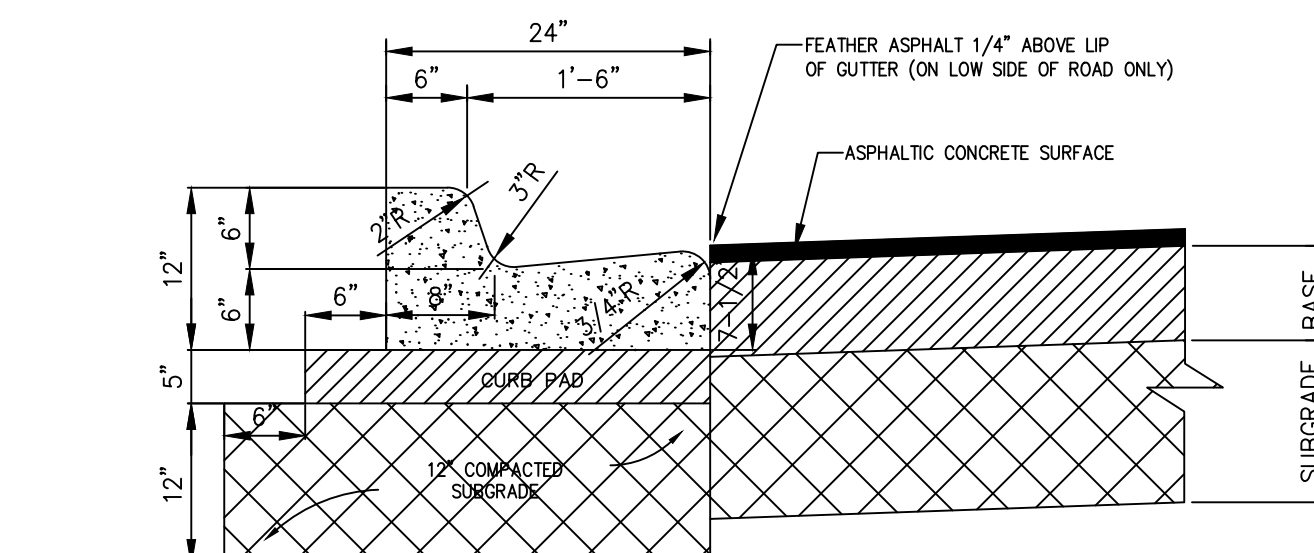
- NOTES:
1. BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8" - 7/8" SIZING UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
 2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
 3. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
 4. BACKFILL SHALL BE FREE OF UNSUITABLE MATERIALS SUCH AS LARGER ROCK, MUCK AND DEBRIS.
 5. SEE GENERAL NOTES FOR PIPE BACKFILL BENEATH PROPOSED PAVEMENT.



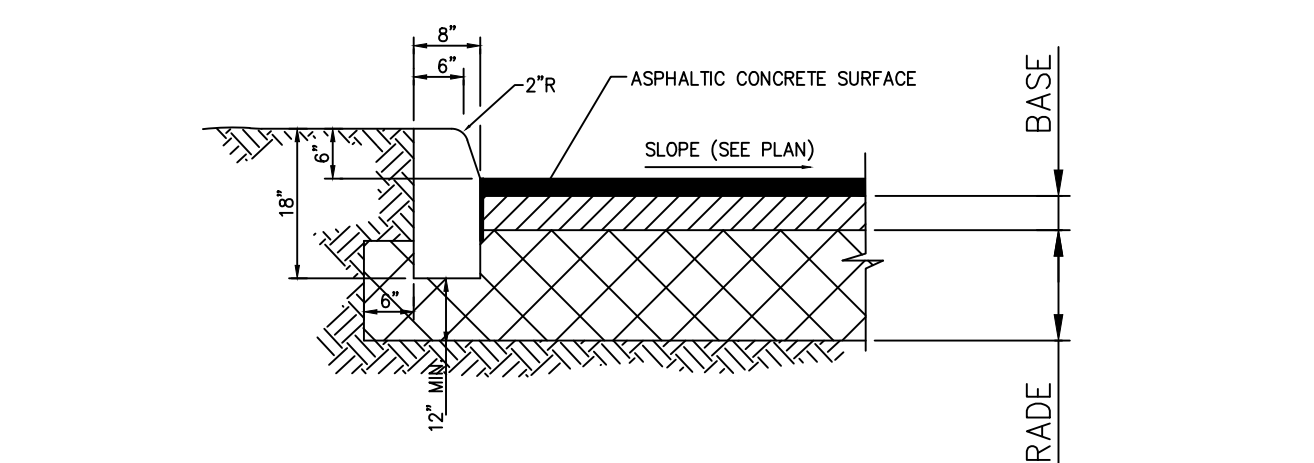
ON-SITE EXFILTRATION TRENCH DETAIL
N.T.S.



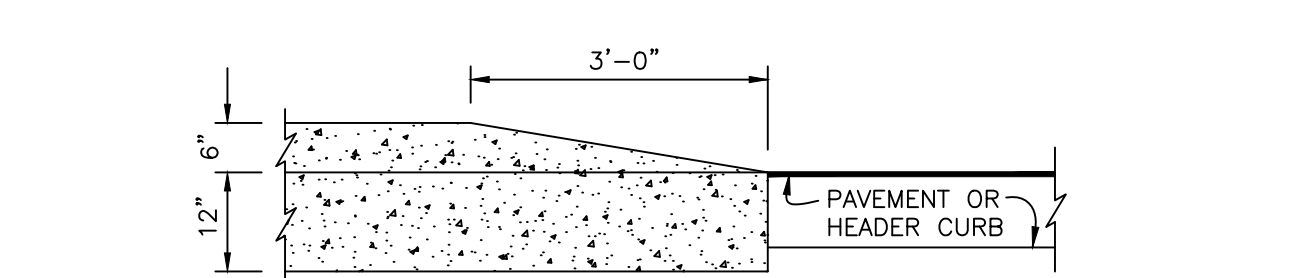
VALLEY GUTTER REFER TO FDOT INDEX 300 FOR NOTES AND DETAILS
SCALE: NONE



TYPE "F" CURB & GUTTER
SCALE: NONE



CONCRETE CURB (TYPE "D")
SCALE: NONE



TRANSITION CURB TAPER DETAIL
N.T.S.

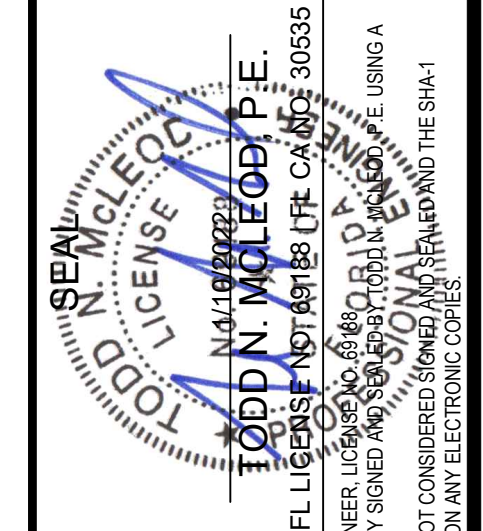
PAVEMENT SECTION REQUIREMENTS			
TYPE	WEARING SURFACE	BASE	SUB-GRADE
CONCRETE PAVEMENT (ON-SITE & CITY R/W)	8" THICK (4,000 PSI) WITH JOINTING PER ACI 330. SUBMITTING PLAN TO BE SUBMITTED PRIOR TO POURING CONCRETE	N/A	12" THICK, COMPACTED TO 98% MAXIMUM DRY DENSITY A.A.S.H.T.O. T-180 (LBR 30)
LIGHT-DUTY ASPHALT PAVEMENT (ON-SITE)	2" THICK SP-9.5 A.C.S.C. (2-LIFTS)	8" THICK LIMEROCK BASE (LBR 100) COMPACTED TO 98% AASHTO T-180 DENSITY & PLACED IN 4" MAX. LIFTS.	12" THICK, COMPACTED TO 98% MAXIMUM DRY DENSITY A.A.S.H.T.O. T-180
SIDEWALKS	SIDEWALK: 4" THICK CONCRETE (3,000 PSI). CONCRETE TO BE BROOM FINISHED WITH EVEN, DUSTLESS SURFACE. CONTROL JOINTS TO BE SPACED 5' ON CENTER. ISOLATION JOINTS REQUIRED WHERE SIDEWALK ABUTS BUILDING, EXISTING PAVEMENT, OR OTHER STRUCTURES.		

NOTE: THESE PLANS ARE UNDER REGULATORY REVIEW & SHALL NOT BE USED FOR CONTRACTUAL OR CONSTRUCTION PURPOSES UNTIL ALL PERMITS ARE ISSUED.
 DATUM NOTE: ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TO CONVERT TO NGVD 1929, ADD 1.50' TO NAVD ELEVATIONS.



McLeod & McCarthy & Associates, P.A.
Civil Engineers

The Forum III
1655 Palm Beach Lakes Blvd, Ste. 810
West Palm Beach, FL 33401
P: 561.689.9500
F: 561.689.8080
www.mcleodmccarthy.com



FIELD: DRAWN: P. Saffold
DESIGNED: TMM
APPROVED: TMM
PROJECT #21-002
TODD N. McLEOD, P.E.
FL LICENSE NUMBER: 30355

NO.	DATE	REVISIONS

PRELIMINARY ENGINEERING DETAILS
VILLA L'ONZ: A TOWNHOUSE PROJECT
 11th STREET & WRIGHT STREET
 RIVIERA BEACH, FLORIDA

OWNER PROGRESS SET
DATE: 1/10/2022

SHEET
C2.1
OF 2