

GENERAL DRAINAGE NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO DRAINAGE SYSTEM AND SHALL RESTORE ANY DAMAGED STRUCTURES.
2. ALL PIPE FROM THE BUILDING DRAINS SHALL BE SMOOTH INTERIOR CORRUGATED EXTERIOR (SICE) HDPE OR PVC SCH 40.
3. ALL STORM PIPE SHALL BE CONSTRUCTED OF REINFORCED CONCRETE CLASS III WITH BUTYL MASTIC SEALANT WITH CERTIFIED WATERTIGHT JOINTS BY THE MANUFACTURER OR HDPE PIPE WITH CERTIFIED WATERTIGHT JOINTS BY THE MANUFACTURER. RCP JOINTS SHALL BE WRAPPED WHERE APPLICABLE PER FDOT SPECIFICATIONS. ACCEPTABLE HDPE PIPE SHALL BE HANCOR SUR-LOK WT. ADS SERIES 35, ADS N-12 WITH WT JOINT OR EQUAL.
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL MATERIAL AND STRUCTURES TO THE ENGINEER (NEWKIRK ENGINEERING, INC.) FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING.
5. CONTRACTOR TO PLACE FILTER FABRIC BETWEEN DRAINAGE STRUCTURES AND TOPS TO PREVENT SOIL INTRUSION. THE FABRIC SHALL BE PERIODICALLY CLEANED OF SAND AND DEBRIS. FABRIC SHALL REMAIN IN PLACE UNTIL DRAINAGE IS COMPLETE.
6. ALL EXISTING STRUCTURES UNLESS OTHERWISE NOTED TO REMAIN, FENCING TREES, & ETC. WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED AND DISPOSED OF OFFSITE.
7. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST PER FDOT SPECIFICATIONS.
8. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H-20) LOADING AND BE INSTALLED ACCORDINGLY PER FDOT STANDARD SPECIFICATIONS AND MANUFACTURERS SPECIFICATIONS RESPECTIVELY.
9. ALL DRAINAGE STRUCTURES AND PIPES SHALL BE CLEANED OF SAND AT THE LAST STAGE OF CONSTRUCTION PRIOR TO THE FINAL INSPECTION.
10. ALL STORM INLET GRATES SHALL BE STEEL (TRAFFIC RATED).
11. ALL CLEANOUTS SHALL BE TRAFFIC BEARING (H-20 LOAD RATED) WITH BRASS TOPS. DO NOT THREAD BRASS TOPS INTO PVC HUBS. ADJUST TOP TO BE FLUSH WITH FINISH GRADE.

STORM STRUCTURE SCHEDULE

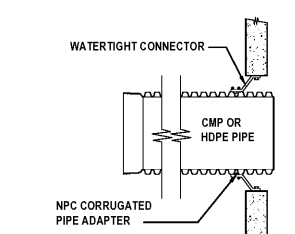
I.D.	SIZE	TYPE BOT	TYPE TOP	TOP ELEV	BOT ELEV	N INV	S INV	E INV	W INV
I-01	4.0' DIA	P	9	122.67	117.67	118.67	---	---	---
I-02	4.0' DIA	P	9	122.67	117.31	118.31	---	---	118.31
I-03	4.0' DIA	P	9	122.67	117.10	---	118.10	---	118.10
I-04	4.0' DIA	P	9	123.28	109.91	18"	8"	15"	15"
I-05	4.0' DIA	P	5	121.19	117.19	---	---	118.19	---

STORM STRUCTURE NOTES:

1. ROUND STRUCTURE BOTTOMS ARE FDOT ALTERNATE 'A'.
2. SQUARE / RECTANGULAR STRUCTURE BOTTOMS ARE FDOT ALTERNATE 'B'.
3. 4'-0" DIAMETER AND SMALLER AND 3'-6" SQUARE STANDARD STRUCTURE BOTTOMS ARE FDOT TYPE DESIGNATED 'P'. LARGER STANDARD STRUCTURE BOTTOMS ARE DESIGNATED TYPE 'J'.
4. BOTTOM OF STRUCTURE SHALL HAVE "NO" WEEP HOLES.
5. INSTALL 12"x12" WEEP HOLE AT BOTTOM OF STRUCTURE WITH 24"x4"x12" THICK AGGREGATE BED WRAPPED WITH FILTER FABRIC.

DRAINAGE PIPE MINIMUM SLOPE REQUIREMENTS

PIPE SIZE (IN)	SELF-CLEANSING VELOCITY (FPS)	MANNINGS (N)	RADIUS (FT)	CROSS-SECTIONAL AREA (FT ²)	WETTED PERIMETER	MINIMUM SLOPE (FT / 100 FT)
15	3.0	0.012	0.625	1.227	FULL & 1/2 FULL	0.0028
18	3.0	0.012	0.75	1.767	FULL & 1/2 FULL	0.0022



WATER-TIGHT PIPE TO MANHOLE CONNECTION DETAIL PRECAST HOLES REQUIRED
NOT TO SCALE

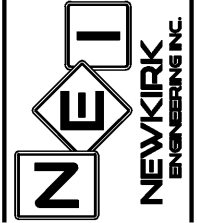


WARNING !!
CONTRACTOR SHALL TAKE ALL PRECAUTIONS DURING CONSTRUCTION TO AVOID CONTACT WITH EXISTING UNDERGROUND UTILITIES, GAS MAINS AND OVERHEAD ELECTRIC IN THE RIGHT-OF-WAY.

REVISIONS

DATE	DESCRIPTION

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Transportation, CEI &
Landscape Architecture



DRAINAGE PLAN
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PROJECT No: 2020-307
DATE: DECEMBER 2020
DESIGN BY: HHN
DRAWN BY: DAB
CHECKED BY: HHN
SCALE: 1" = 20'

DRAWING NUMBER
7

U.S. HIGHWAY 90 (STATE ROAD 10)
(VARIABLE RW)(SPEED LIMIT 45 MPH)

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