## DRAINAGE AND UTILITIES BILL OF MATERIALS:

	PAY ITEM	UNIT	QUANTITY
Ī	TRENCH BACKFILL	CU.YD.	65
	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	119
	STORM SEWER REMOVAL 12"	FOOT	119
	CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID	EACH	2
	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	9
• [	INLETS TO BE ADJUSTED	EACH	3
	REMOVING CATCH BASINS TO MAINTAIN FLOW	EACH	2
	REMOVING INLETS TO MAINTAIN FLOW	EACH	9
	STORM SEWERS TO BE CLEANED	FOOT	320

NOMINAL QUANTITY

## **DRAINAGE AND UTILITIES GENERAL NOTES:**

- 1. ALL STORM SEWERS AND PIPE CULVERTS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE IDOT STANDARD AND SUPPLEMENTAL SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE A.A.S.H.T.O. DESIGNATION M170 (A.S.T.M. DESIGNATION C76), WITH A MINIMUM OF CLASS III.
- 2. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE THE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT, IF NECESSARY, AND A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THE TEMPORARY CONNECTIONS UNTIL SUCH TIME AS THE PERMANENT CONNECTION WITH SEWERS ARE BUILT AND IN SERVICE. THIS WORK WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- ALL BACKFILLING OPERATIONS SHALL CONFORM TO ARTICLE 550.07 OF THE IDOT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.
- . TRENCH BACKFILL SHALL BE USED ON THE ENTIRE LENGTH OF THE MAIN DRAIN.
- 5. ALL BENDS SHOWN WILL NOT BE PAID FOR DIRECTLY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT OF THE RESPECTIVE SIZE STORM SEWER.
- 6. PREFORMED FLEXIBLE GASKETS ARE TO BE USED ON ALL CIRCULAR STORM SEWERS AND CULVERTS AND SHALL CONFORM TO ARTICLE 1056.01 OF THE STANDARD AND SUPPLEMENTAL SPECIFICATIONS. THIS WORK WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID PER FOOT FOR STORM SEWER OF SPECIFIED SIZE.
- 7. THE LOCATION AND ELEVATION OF EXISTING UTILITIES ARE APPROXIMATE AND ARE PROVIDED BY OWNERS. THE EXACT LOCATIONS AND ELEVATIONS ARE TO BE VERIFIED BY THE CONTRACTOR THROUGH THE OWNER OF THE UTILITY.
- B. EMBANKMENTS SHALL BE COMPLETED TO THE SATISFACTION OF THE ENGINEER PRIOR TO EXCAVATION FOR STORM SEWER.
- THE COST OF MAKING STORM SEWER CONNECTIONS TO EXISTING OR PROPOSED SEWER SHALL BE INCIDENTAL TO THE COST OF STORM SEWER BEING CONNECTED.
- 10. INVERT ELEVATIONS FOR PROPOSED DRAINAGE STRUCTURES TO BE CONNECTED TO EXISTING STRUCTURES ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR IS TO VERIFY AND ADJUST PROPOSED INVERTS AS NECESSARY IN ORDER TO ACHIEVE POSITIVE DRAINAGE.
- 11. ALL ADJUSTMENTS OR RECONSTRUCTIONS REQUIRED FOR STRUCTURES SHALL INCLUDE THE REMOVAL AND REPLACEMENT, AT THE CONTRACTOR'S EXPENSE, OF ALL UNSUITABLE 24 INCH INSIDE DIAMETER ADJUSTING RINGS.
- 12. IT IS UNDERSTOOD THAT THE PAY ITEM FOR STORM SEWER REMOVAL DOES NOT INCLUDE THE PROVISION OF FINE AGGREGATE TRENCH BACKFILL MATERIAL AS DESCRIBED IN ARTICLE 208,01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. AN ESTIMATED QUANTITY OF TRENCH BACKFILL HAS BEEN ADDED TO THE PLANS FOR THE PURPOSES OF BACKFILLING THE TRENCH REMAINING FROM THE STORM SEWER REMOVAL TO BE USED AT THE DIRECTION OF THE ENGINEER.
- 13. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT NOT ALL THE EXISTING UNDERGROUND UTILITIES HAVE BEEN DELINEATED ON THE PLANS AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. NO EXTRA COMPENSATION WILL BE ALLOWED FOR DELAYS ARISING FROM ANY WORK PERFORMED BY THE UTILITY COMPANY.
- 14. THE CONTRACTOR SHOULD CONTACT J.U.L.I.E. AT LEAST 48 HOURS BEFORE START OF CONSTRUCTION AT 1-800-892-0123.
- 5. FOR STORM SEWER CONNECTIONS MADE TO STORM SEWERS 24 INCH DIAMETER OR LESS PRECAST WYE CONNECTIONS SHALL BE USED. THE COST OF WYE CONNECTIONS SHALL BE INCLUDED IN THE COST OF STORM SEWER BEING CONNECTED.

	USER NAME = mmiller	DESIGNED	-	BA	REVISED -	
		DRAWN	-	BA	REVISED -	
	PLOT SCALE = 60.0000 '/ in.	CHECKED	-	WPK	REVISED -	
	PLOT DATE = 3/21/2013	DATE	-	3/19/13	REVISED -	