

LEGEND

	PROPOSED TEE
	PROPOSED GATE VALVE
	PROPOSED HYDRANT
	PROPOSED SANITARY SEWER MANHOLE
	PROPOSED SANITARY CLEANOUT
	PROPOSED WATERMAIN
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED TELEPHONE
	PROPOSED GAS MAIN
	EXISTING OVERHEAD ELECTRIC
	EXISTING UNDERGROUND ELECTRIC
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	EXISTING WATERMAIN
	EXISTING COMMUNICATIONS CABLE
	EXISTING STORM MANHOLE / STORM CATCH-BASIN / SANITARY MANHOLE
	EXISTING STORM CATCH-BASIN (ON CURB)
	EXISTING GATE VALVE
	EXISTING HYDRANT
	EXISTING ELECTRICAL TRANSFORMER
	EXISTING COMMUNICATIONS BOX
	EXISTING LIGHT POLE
	PROPOSED LIGHT POLE, REFER TO ELECTRICAL LIGHTING PLAN

UTILITY PLAN NOTES

- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
10" PVC SDR35 SCHEDULE 40, OR EQUIVALENT PER ASTM D 3034
8" PVC SDR35 SCHEDULE 40, OR EQUIVALENT PER ASTM D 3034
6" PVC SCHEDULE 40
DUCTILE IRON PIPE PER AWWA C150
- WATER LINES SHALL BE AS FOLLOWS:
6" AND LARGER DUCTILE IRON PIPE PER AWWA C150
12" AND SMALLER USE CLASS 52 DIP
A MINIMUM OF 8 MIL POLYWRAP IS REQUIRED ON ALL DIP
WATER LINES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MOST CURRENT EDITION OF CREAM SPECIFICATIONS
ALL DUCTILE IRON PIPE SHALL BE COATED WITH A LAYER OF ARD-SPRAYED ZINC PER CITY OF BLOOMINGTON SPECIFICATIONS. DUCTILE IRON PIPE SHALL BE LINED WITH CEMENT MORTAR LINING PER AWWA C213.4C150.
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS.
- ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 6" COVER ON ALL WATER LINES.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE SCH. 40 OR C900 WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE, MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI A21.11 (AWWA C151) (CLASS 50).
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
- EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- REFER TO INTERIOR PUMPING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
- BACKFLOW DEVICES (DDV) AND PRZ ASSEMBLIES) AND METERS ARE LOCATED IN THE INTERIOR OF THE BUILDING, REF. ARCH. PLANS.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES BLOOMINGTON WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- ALL ON-SITE WATERMAINS AND SANITARY SEWERS SHALL BE PRIVATELY OWNED AND MAINTAINED.
- ALL WATERMAIN STUBOUTS SHALL BE MECHANICALLY RESTRAINED WITH REACTION BLOCKING.
- HOPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATER TIGHT MATERIALS UTILIZING AN A-LOCK OR WATERSTOP GASKET OR BOOT, CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUAL. WHERE THE ALIGNMENT PRECLUDES THE USE OF THE ABOVE APPROVED WATERSTOP METHOD, CONCRETE 231 WATERSTOP SEALANT, OR APPROVED EQUAL WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.
- TAPS OF LIVE WATER MAINS ARE DONE BY CITY FORKES AND PAID FOR AND COORDINATED WITH THE CONTRACTOR.
- UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER AND SEWER SERVICE PIPES INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
- ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT MUST UTILIZE PROTECTIVE INTERNAL COATINGS EXISTING CURRENT AWWA STANDARD FOR CEMENT MORTAR LINING OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED PIPE IS NOT ALLOWED.
- ALL UNUSED WATER SERVICES MUST BE PROPERLY ABANDONED AT THE MAIN. ALL UNUSED SANITARY SEWER SERVICES MUST BE PROPERLY ABANDONED AT THE PROPERTY LINE.
- UTILITY PERMITS ARE REQUIRED FOR CONNECTIONS TO THE PUBLIC STORM, SANITARY, AND WATER SYSTEM. CONTACT CITY OF BLOOMINGTON UTILITIES DIVISION (562-6644/77) FOR PERMIT INFORMATION.
- RESTORE UTILITY TRENCHES PER STANDARDS LISTED IN ARTICLE 5, CH. 17 OF THE BLOOMINGTON CITY CODE (SEE UTILITY DETAILS).
- INTERIOR CHIMNEY SEALS SHALL BE INSTALLED ON ALL SANITARY MANHOLES.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

WILLIAM D. MATZEK, P.E.
DATE: 04/09/2021 E.C. NO. 45790

phase
date
drawn by
checked by
project number
project name

BID SET
10/11/21
LEC
VDM
160687009

SICK - CAMPUS USA
PHASE 1

UTILITY PLAN

C600

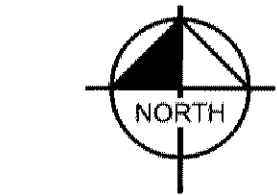
UTILITY CROSSING LEGEND					
C1	12" STRM (P' SWR) (EXIST.)	EX. GRADE: +14.90	EX. GRADE: +14.90	STRM COVER = +13.84	
C2	12" WATR (EXIST.)	EX. GRADE: +15.08	EX. GRADE: +15.08	STRM COVER = +14.12	
C3	12" STRM C900	EX. GRADE: +11.23	EX. GRADE: +11.23	STRM COVER = +8.16	
C4	12" WATR (EXIST.)	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C5	12" STRM	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.14	
C6	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C7	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C8	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C9	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C10	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C11	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C12	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C13	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C14	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C15	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C16	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C17	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C18	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C19	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C20	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C21	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C22	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C23	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C24	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C25	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C26	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C27	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C28	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C29	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C30	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C31	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C32	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C33	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C34	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C35	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C36	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C37	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C38	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C39	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C40	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C41	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C42	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C43	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C44	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C45	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C46	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C47	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C48	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C49	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C50	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C51	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C52	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C53	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C54	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C55	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C56	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C57	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C58	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C59	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C60	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C61	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C62	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C63	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C64	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C65	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C66	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C67	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C68	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C69	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C70	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C71	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C72	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C73	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C74	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C75	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C76	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C77	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C78	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C79	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C80	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C81	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C82	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C83	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C84	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C85	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C86	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C87	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C88	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C89	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C90	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C91	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C92	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C93	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C94	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C95	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C96	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C97	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C98	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C99	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	
C100	12" WATR	EX. GRADE: +11.15	EX. GRADE: +11.15	STRM COVER = +8.87	

NOTE: SEE DETAIL SHEET C501. CONTRACTOR TO VERIFY LOCATION, DEPTH, AND MATERIALS OF WATERMAIN, PROPOSED 30" PVC C900 TO BE CONSTRUCTED BELOW WATERMAIN. NOTIFY ENGINEER IF UNABLE TO MAINTAIN 0.45% SLOPE BETWEEN STRUCTURES.

NOTE: EXISTING SANITARY SEWER MAIN AND MANHOLES TO BE ABANDONED WITH CITY'S 2021 PROJECT. COORDINATE ALL WORK AND ACCESS OFF OF 28TH AVE. WITH THE CITY OF BLOOMINGTON.

As-Built Drawing

8-1-2022



GRAPHIC SCALE IN FEET
0 20 40 80
SCALE: 1" = 40'

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 04/09/2021 MN LIC NO. 45790

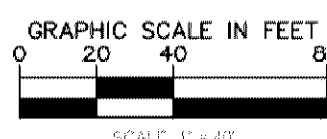
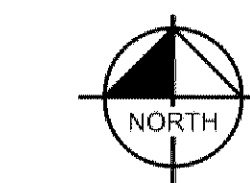
phase	BID SET
date	10/11/2
drawn by	LEC
checked by	WDM
project number	16068700
project name	

SICK - CAMPUS USA
PHASE 1

STORMWATER MANAGEMENT PLAN

should require

C501



PROPOSED PH1 INDUSTRIAL/OFFICE BUILDING
140,400± S.F.
FFE=813.0

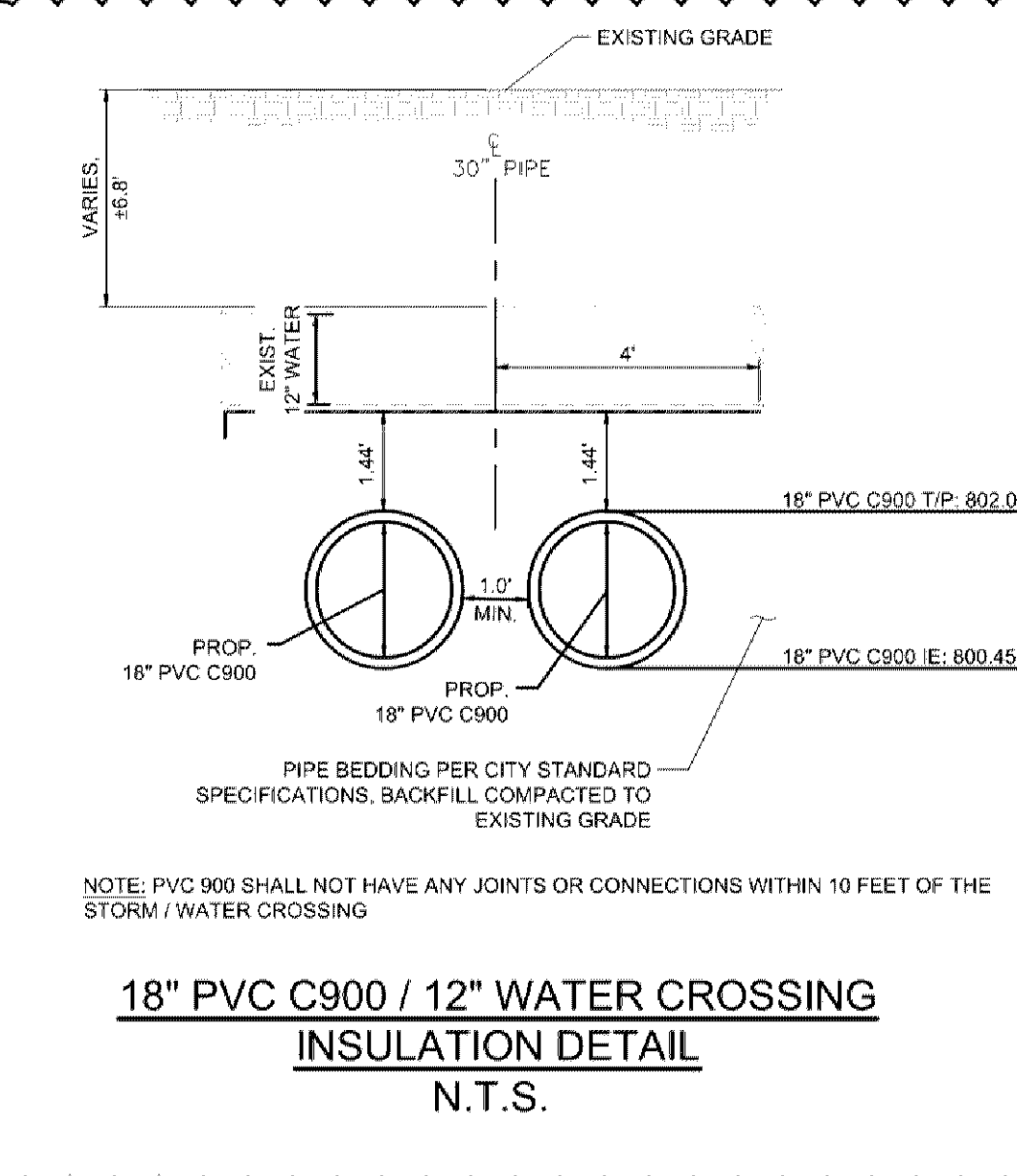
STRUCTURE NO.	STRUCTURE/CASTING TYPE	RIM/GRADE ELEVATION	INVERT ELEVATION IN	PIPE SIZE IN	PIPE SLOPE IN	INVERT ELEVATION OUT	PIPE SIZE OUT	PIPE SLOPE OUT	PIPE MATERIAL
STR-99	N/A Structure		S 801.16	18"	0.45%	N 801.50	18"	0.66%	HDPE
STRM 108	STMH 96" DIA.	811.38	S 806.35	18"	0.45%	N 807.50	18"	0.66%	PVC C590
STRM 101	STMH 72" DIA.	812.08	S 803.80	18"	0.56%	N 806.70	18"	0.45%	PVC
STRM 102	30" DIAM RISER NEENAH R-1642		S 803.80	15"	1.32%	N 803.80	36"	0.00%	HDPE
STRM 103	CONNECT TO BMP #1	1.75	S 803.80	15"	1.32%	N 803.80	36"	0.00%	HDPE
STRM 104	CONNECT TO BMP #1	805.17	S 803.80	15"	1.32%	N 803.80	36"	0.00%	HDPE
STRM 105	CBMH 3" SUMP NEENAH R-2501		S 803.87	12"	1.33%	N 803.87	15"	1.32%	HDPE
STRM 106	STRM CO COORD W/ MEP		S 803.80	12"	1.33%	N 804.80	12"	1.33%	HDPE
STRM 107	CONNECT TO BMP #1	805.17	S 803.80	15"	1.25%	N 803.86	15"	1.25%	HDPE
STRM 108	CBMH 48" DIA. (CIR.) 3" SUMP NEENAH R-2501		S 803.87	12"	1.33%	N 803.87	15"	1.32%	HDPE
STRM 109	STRM CO COORD W/ MEP	812.83	S 803.80	12"	1.33%	N 804.80	12"	1.33%	HDPE
STRM 110	CONNECT TO BMP #1	806.98	S 803.80	15"	0.75%	W 804.27	15"	0.75%	HDPE
STRM 111	24" AREA DRAIN W/DOME GRATE	809.94	E 804.37	12"	0.56%	W 804.55	15"	0.75%	HDPE
STRM 112	18" AREA DRAIN W/DOME GRATE	810.98	E 804.37	12"	0.56%	W 804.55	15"	0.75%	HDPE
STRM 113	15" NYLOPLAST AREA DRAIN AT ROOF DRAIN OVERFLOW COORD. W/ MEP AND ARCH PLANS	812.83	NW 807.83	12"	1.83%	NW 807.83	12"	1.83%	PVC
STRM 114	STRM MH NEENAH R-1642	811.90	S 804.23	24"	1.00%	N 804.23	24"	1.00%	HDPE
STRM 115	30" DIAM RISER NEENAH R-1642		S 804.23	12"	1.83%	N 804.23	12"	1.83%	HDPE
STRM 116	CORE DRILL CONNECT TO EX. CATCH BASIN		S 805.70	15"	0.56%	N 805.85	15"	0.56%	HDPE
STRM 208	CBMH 96" DIA. (CIR.)	814.89	S 800.00	18"	0.66%	N 800.51	18"	0.66%	RCP
STRM 201	STMH 48" DIA.	815.07	S 800.51	18"	0.66%	N 801.50	18"	0.66%	HDPE
STRM 202	OCS STMH 48" DIA.	811.36	S 800.51	18"	0.66%	N 801.50	18"	0.66%	HDPE
STRM 203	STMH 48" DIA.	809.97	E 804.25	15"	2.71%	W 805.00	15"	2.71%	HDPE
STRM 204	CBMH 48" DIA.	808.75	E 804.25	15"	2.70%	W 805.00	15"	2.70%	HDPE
STRM 205	STMH 48" DIA.	809.97	E 804.25	15"	2.70%	W 805.00	15"	2.70%	HDPE
STRM 206	CBMH		E 804.25	15"	2.70%	W 805.00	15"	2.70%	HDPE
STRM 300S	STRM MH NEENAH SOLID CASTING PER CITY STANDARD PLATE 506	811.97	N 802.30	27"	0.50%	S 802.50	27"	0.50%	RCP
STRM 301	OCS STMH	811.22	W 802.50	42"	0.00%	S 802.50	27"	0.50%	RCP

LEGEND

- | | |
|--|---|
| | PROPERTY LINE |
| | EXISTING CONTOUR |
| | PROPOSED CONTOUR |
| | PROPOSED STORM MANHOLE (SOLID CASTING) |
| | PROPOSED STORM MANHOLE (ROUND INLET CASTING) |
| | PROPOSED STORM MANHOLE / CATCH BASIN (CURB INLET CASTING) |
| | PROPOSED STORM SEWER CLEWOUT |
| | PROPOSED FLARED END SECTION |
| | PROPOSED RIBRAP |
| | PROPOSED STORM SEWER |
| | PROPOSED STORM SEWER |
| | EXISTING STORM SEWER |
| | EXISTING STORM MANHOLE / STORM CATCH-BASIN / SANITARY MANHOLE |
| | EXISTING STORM CATCH-BASIN (ON CURB) |
| | PROPOSED DRAINAGE DIRECTION |
| | PROPOSED ADA SLOPE |
| | RETAINING WALL |
| | PROPOSED CURB AND GUTTER |
| | PROPOSED LANDSCAPE SWALE |

STORMWATER MANAGEMENT PLAN NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF BLOOMINGTON SPECIFICATIONS AND BUILDING PERMIT REQUIREMENTS.
2. CONTRACTOR TO CALL BLOOMINGTON STATE CALL CENTER @ 1-800-292-1166 AT LEAST TWO WORKDAYS PRIOR TO EXCAVATION START DATE TO ADVISE UTILITY LOCATIONS
3. STORM SEWER PIPE SHALL BE AS FOLLOWS:
RIP ROCK 24" X 36"
HIDE: 0'7" PER A.D.M. 3012
HIDE: 12" OR 24" PER A.D.M. 3012 PER A.D.M. 2305
PVC 36" 40 PER A.D.M. 1304
PVC 36" PER A.D.M. 1304
STORM SEWER CROSSINGS ABOVE WATERMAIN: STORM SEWER 18" (AND SMALLER) SHALL BE PVC 36" 40 PER A.D.M. 0-1785; STORM SEWER 18" MINIMUM VERTICAL CLEARANCE OUTER EDGE TO OUTER EDGE
STORM SEWER FITTINGS SHALL BE AS FOLLOWS:
HIDE: 0'7" PER A.D.M. 3012 PER A.D.M. 3012 PER A.D.M. 2305, C-292, AND C-443
HIDE: 12" PER A.D.M. 3012
HIDE: 12" PER A.D.M. 3012 PER A.D.M. 3012 PER A.D.M. 2305
STORM SEWER CROSSINGS ABOVE WATERMAIN: STORM SEWER 18" (AND SMALLER) SHALL BE PVC 36" 40 PER A.D.M. 0-1785; STORM SEWER 18" MINIMUM VERTICAL CLEARANCE OUTER EDGE TO OUTER EDGE
4. CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OR EXISTING UTILITY HYDROGRAPHIC FEATURES PRIOR TO THE START OF SITE GRADING. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES OR VARIATIONS.
5. SUBGRADE EXCAVATION SHALL BE BACKFILLED IMMEDIATELY AFTER SEWER OR STORM PIPES ARE LIFTED OFF OF STABILIZED SUBGRADE DUE TO WATER SEEP OR STEEP SLOPES. WHEN PLACING NEW SURFACE MATERIAL ADJACENT TO EXISTING PAVEMENT, THE EXCAVATION SHALL BE BACKFILLED PROMPTLY TO AVOID UNDERSIDES OF EXISTING PAVEMENT.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HORIZONTAL AND VERTICAL CONTROL POINTS AND ELEVATIONS.
7. CONTRACTOR SHALL EXCAVATE DRAINAGE TRENCHES TO FOLLOW PROPOSED STORM SEWER ALIGNMENTS.
8. ALL EXCESS MATERIAL, BUT NOT SURPLUS SUPPLY, CONCRETE ITEMS, ANY ABANDONED MATERIALS, AND DEBRIS OF ANY TYPE OR MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF THE CONSTRUCTION SITE.
9. REFER TO THE UTILITY PLAN FOR SANITARY SEWER MAIN, WATER MAIN SERVICE LAYOUT AND ELEVATIONS AND CASTINGS / STRUCTURE SCHEDULE.
10. UPON COMPLETION OF EXCAVATION AND FILLING, CONTRACTOR SHALL RESTORE ALL EXISTING OR DISTURBED AREAS TO ORIGINAL OR BETTER CONDITION. EXPOSED AREAS SHALL BE RE-VEGETATED WITH A MINIMUM OF 4" OF TOPSOIL.
11. CONTRACTOR TO PROVIDE 5% SETTLEMENT BY 18" GAGES CENTERED ON STORM/PIPE IF LESS THAN 4' OF COVER/PAVEMENT AREAS AND LESS THAN 5' OF COVER IN LANDSCAPE AREAS.
12. ROOF DRAIN INVERT CONNECTIONS AT THE BUILDING SHALL BE AS SHOWN ON PLAN UNLESS OTHERWISE NOTED. REFERENCE ME PLANS FOR ROOF DRAIN CONNECTIONS.
13. ALL STORM SEWER CONNECTIONS SHALL BE GASKETED AND WATER TIGHT INCLUDING MANHOLE CONNECTIONS.
14. ALL STORM SEWER PIPE SHALL BE AIR TESTED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
15. HOPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH TIGHT MANHOLE MANHOLES. UTILIZE A LOCK OR WATERSTOP GASKETS OR HOPE CAST-IN-PLACE RUBBER GROMMET. IN ALL AREAS, WHERE THE A.D.M. SPECIFICATION PRECLUDES THE USE OF THE ABOVE APPROVED WATERSTOP METHODS, CONSULT A WATERPROOFING CONTRACTOR OR APPROVED EQUAL. WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.
16. ALL STORM/WATER MANAGEMENT AREAS SHALL BE KEPT OFF-LIMITS UNTIL DISTURBED AREAS ARE PROTECTED BY PERMANENT EROSION CONTROL MEASURES. CONTRACTOR TO PROVIDE CERTIFICATES OF OCCUPANCY.
17. SEE SHEET 2222 FOR UNDERGROUND STORM/WATER MANAGEMENT NOTES AND



As-Built Drawing

ARL MAKI

8-1-2022