

LINE NO.	NOTE NO.	SCHEDULE LETTER	SPEC. NO.	ITEM DESCRIPTION	UNIT OF MEASURE	TOTAL QUANTITIES
1			2021.501	MOBILIZATION	LUMP SUM	1.00
2		A	2101.502	CLEARING	TREE	25.00
3		A	2101.507	GRUBBING	TREE	31.00
4		B	2101.511	CLEARING AND GRUBBING	LUMP SUM	1.00
5	1	C	2104.501	REMOVE CURB AND GUTTER	LIN FT	2,066.80
6		D	2104.501	REMOVE SEWER PIPE (STORM)	LIN FT	2,048.00
7		E	2104.501	REMOVE SEWER PIPE (SANITARY)	LIN FT	1,491.00
8		F	2104.501	REMOVE WATERMAIN	LIN FT	2,466.80
9		G	2104.501	REMOVE FENCE	LIN FT	70.00
10		H	2104.501	REMOVE CONCRETE STEPS	LIN FT	9.90
11		I	2104.503	REMOVE CONCRETE SIDEWALK	SQ FT	4,942.50
12		J	2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	8,003.00
13		J	2104.505	REMOVE CONCRETE PAVEMENT	SQ YD	251.00
14		K	2104.505	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	682.00
15		K	2104.505	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	318.00
16			2104.509	REMOVE HYDRANT	EACH	4.00
17		M	2104.509	REMOVE GATE VALVE & BOX	EACH	6.00
18		L	2104.509	REMOVE CATCH BASIN	EACH	18.00
19		L	2104.509	REMOVE MANHOLE	EACH	15.00
20		NN	2104.509	REMOVE CURB STOP & BOX	EACH	51.00
21		N	2104.509	REMOVE SIGN	EACH	6.00
22		L	2104.509	REMOVE CONCRETE APRON	EACH	1.00
23			2104.509	REMOVE MAIL BOX AND SUPPORT	EACH	26.00
24		O	2104.511	SAWING CONCRETE PAVEMENT (FULL DEPTH)	LIN FT	229.90
25		P	2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	616.60
26		PP	2104.521	SALVAGE WOODEN FENCE	LIN FT	67.00
27		L	2104.523	SALVAGE CASTING	EACH	29.00
28		Q	2104.618	SALVAGE CONCRETE BLOCK RETAINING WALL	SQ YD	40.00
29	2,4		2105.501	COMMON EXCAVATION (P)	CU YD	6,202.00
30	3		2105.521	GRANULAR BORROW (CV)	CU YD	780.00
31	4		2105.522	SELECT GRANULAR BORROW MOD 7% (CV)(P)	CU YD	2,700.00
32			2105.604	GEOTEXTILE FABRIC TYPE V	SQ YD	8,700.00
33	2		2105.607	EXCAVATION SPECIAL	CU YD	780.00
34	5	R	2211.502	AGGREGATE BASE (LV) CLASS 5	CU YD	110.50
35			2211.503	AGGREGATE BASE (CV) CLASS 5 (P)	CU YD	2,100.00
36		SS	2301.604	CONCRETE PAVEMENT 7"	SQ YD	251.00
37			2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	700.00
38			2360.502	TYPE SP 12.5 NON WEARING COURSE MIXTURE (3,C)	TON	900.00
39	6	R	2360.505	TYPE SP 9.5 BITUMINOUS MIXTURE FOR PATCHING	TON	176.50
40		Q	2411.618	INSTALL CONCRETE BLOCK RETAINING WALL	SQ YD	40.00
41	7		2451.501	STRUCTURE EXCAVATION CLASS R	CU YD	50.00
42	4,8		2451.503	GRANULAR BACKFILL (CV)	CU YD	50.00
43	9		2451.511	COARSE FILTER AGGREGATE (CV)	CU YD	50.00
44		V	2501.515	12" RC PIPE APRON	EACH	1.00
45	10,11	T	2502.521	4" PVC PIPE DRAIN	LIN FT	277.50
46		T	2502.521	10" PVC PIPE DRAIN	LIN FT	363.00
47	12		2502.541	4" PERFORATED PVC PIPE DRAIN	LIN FT	4,940.00
48	13		2502.601	DRAINAGE SYSTEM	LUMP SUM	1.00
49	14	T	2502.602	10" PVC PIPE DRAIN CLEANOUT	EACH	2.00
50		U	2502.511	10" PVC PIPE SEWER SDR 35	LIN FT	13.00
51		U	2503.511	8" PVC PIPE SEWER SDR 35	LIN FT	1,456.50
52	15	Y	2503.511	6" PVC PIPE SEWER SERVICE SDR 35	LIN FT	1,659.00
53		V	2503.541	12" RC SEWER PIPE DESIGN 3006, CLASS III	LIN FT	1,077.80
54		V	2503.541	15" RC SEWER PIPE DESIGN 3006, CLASS III	LIN FT	634.00
55		V	2503.541	18" RC SEWER PIPE DESIGN 3006, CLASS III	LIN FT	422.80
56		V	2503.541	24" RC SEWER PIPE DESIGN 3006, CLASS III	LIN FT	507.30
57		Y	2503.602	CONNECT TO EXISTING SANITARY SEWER SERVICE	EACH	51.00
58		U	2503.602	CONNECT TO EXISTING SANITARY SEWER	EACH	4.00
59		Y	2503.602	MAGNETIZED TRACER BOX	EACH	51.00
60	16	Y	2503.602	8" X 6" PVC WYE SDR 35	EACH	51.00
61		U	2503.603	CONSTRUCT 8" INSIDE DROP	LIN FT	11.10
62	17	U	2503.603	CIPP 8" MAIN LINING	LIN FT	836.00

- REMOVE ALL CURB & GUTTER WITHIN THE CONSTRUCTION LIMITS.
- EXCESS MATERIAL TO BE DISPOSED OF BY THE CONTRACTOR OFF PROJECT ROW(INCIDENTAL).
- TO BE USED TO FILL "EXCAVATION SPECIAL" TRENCH.
- SELECT GRANULAR BORROW AND GRANULAR BACKFILL (SPEC.3149) SHALL BE MODIFIED SO THAT A PORTION PASSING A 1" SIEVE, NOT MORE THAN 7% BY WEIGHT WILL PASS A # 200 SIEVE.
- TO BE USED AS TEMPORARY ACCESS TO DRIVEWAYS AND RESTORATION OF DRIVEWAYS.
- TO BE USED FOR BITUMINOUS DRIVEWAY RESTORATION. INCLUDES EXCAVATION, 12" OF CLASS 5 AND 3" OF BITUMINOUS. ALSO TO BE USED FOR AVENUE AND STREET TIE-INS.
- TO BE USED FOR THE REMOVAL OF LEDGE ROCK IN THE ROADWAY SECTION & UTILITY TRENCH.
- ITEM TO BE USED IN SANITARY AND WATER MAIN TRENCHES WHERE NATIVE SOIL IS NOT SUITABLE FOR BACKFILL. ITEM WILL BE DIRECTED BY THE ENGINEER AS TRENCH CONDITIONS WARRANT.

LINE NO.	NOTE NO.	SCHEDULE LETTER	SPEC. NO.	ITEM DESCRIPTION	UNIT OF MEASURE	TOTAL QUANTITIES
63			2504.601	TEMPORARY WATER SERVICE	LUMP SUM	1.00
64		Z	2504.602	0.75" TAPPING TEE WITH ELECTROFUSION SADDLE	EACH	41.00
65		Z	2504.602	1.0" TAPPING TEE WITH ELECTROFUSION SADDLE	EACH	10.00
66		Z	2504.602	0.75" CURB STOP & BOX	EACH	41.00
67		Z	2504.602	1.0" CURB STOP & BOX	EACH	10.00
68	18	AA	2504.602	HYDRANT	EACH	6.00
69		BB	2504.602	8" GATE VALVE AND BOX	EACH	6.00
70		BB	2504.602	CONNECT TO EXISTING WATERMAIN	EACH	4.00
71		Z	2504.602	CONNECT TO EXISTING WATER SERVICE	EACH	51.00
72		Z	2504.602	MAGNETIZED TRACER BOX	EACH	51.00
73		W	2504.602	ADJUST VALVE BOX	EACH	1.00
74		Z	2504.603	0.75" HDPE SDR 11 TAP SERVICE PIPE	LIN FT	1,320.00
75		Z	2504.603	1.0" HDPE SDR 11 TAP SERVICE PIPE	LIN FT	330.00
76		BB	2504.603	8" DIPS HDPE WATERMAIN SDR 11	LIN FT	2,338.00
77		X	2504.604	3" POLYSTYRENE INSULATION	SQ YD	131.70
78	19		2504.608	WATERMAIN FITTINGS	LBS	665.00
79	20	U	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN 4007C	LIN FT	81.80
80	20	V	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN 4020 - 72	LIN FT	7.51
81	20	V	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN F	LIN FT	112.35
82	20	V	2506.501	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	LIN FT	65.80
83		U	2506.516	CASTING ASSEMBLY	EACH	51.00
84		QQ	2506.602	ADJUST FRAME AND RING CASTING	EACH	1.00
85		U	2506.602	MANHOLE FRAME SEAL	EACH	10.00
86			2506.602	MANHOLE VACUUM TESTING	EACH	7.00
87		V	2506.602	CONNECT TO EXISTING STORM SEWER	EACH	6.00
88	21		2511.501	RANDOM RIP RAP CLASS II	CU YD	10.00
89		RR	2521.501	4" CONCRETE WALK	SQ FT	268.20
90		CC	2521.501	7" CONCRETE WALK	SQ FT	158.00
91		DD	2531.501	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	4,950.00
92		R	2531.507	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	690.00
93	22	S	2531.521	STRUCTURAL CONCRETE	CU YD	1.00
94		CC	2531.618	TRUNCATED DOMES	SQ FT	16.00
95			2540.602	FURNISH AND INSTALL MAILBOX AND SUPPORT	EACH	52.00
96		PP	2557.603	INSTALL WOODEN FENCE	LIN FT	67.00
97	23		2563.601	TRAFFIC CONTROL	LUMP SUM	1.00
98		EE	2564.533	FURNISH SIGN PANELS TYPE C	SQ FT	47.00
99		EE	2564.536	INSTALL SIGN PANELS TYPE C	EACH	10.00
100		LL	2571.502	DECIDUOUS TREE 2.5" CAL B&B	EACH	27.00
101		LL	2571.602	TREE PROTECTION TYPE 1	EACH	25.00
102		FF	2573.502	SILT FENCE, TYPE HEAVY DUTY	LIN FT	2,570.00
103		KK	2573.502	FILTER LOG TYPE ROCK LOG	LIN FT	100.00
104		II	2573.530	STORM DRAIN INLET PROTECTION	EACH	32.00
105		GG	2573.602	TEMPORARY ROCK CONSTRUCTION ENTRANCE	EACH	6.00
106		JJ	2573.602	TEMPORARY SEDIMENT TRAP	EACH	4.00
107		HH	2575.505	SODDING TYPE LAWN	SQ YD	9,217.00
108			2582.502	12" SOLID LINE WHITE EPOXY	LIN FT	61.00
109			2582.502	24" STOP LINE WHITE EPOXY	LIN FT	44.00

- ITEM TO BE USED FOR BEDDING PIPE OR STRUCTURES IN A WET TRENCH BELOW THE 6" BEDDING MATERIAL. ITEM WILL BE DIRECTED BY THE ENGINEER AS TRENCH CONDITIONS WARRANT.
- ITEM INCLUDES ALL LABOR AND MATERIALS TO CONSTRUCT I & I SERVICES TYPES C AND D PER CITY OF DULUTH'S 2011 DETAILS INCLUDING 4" PVC CAPS AND GREEN TREATED 2X4 TO MARK PIPE ENDS.
- ITEM TO BE INSTALLED ON THE 10" PVC PIPE DRAIN TO THE ROW TO CONNECT I & I SERVICES. INCLUDES (7) 10"X4" WYES (7) 4"PVC CAPS. PIPE END TO BE MARKED FOR FUTURE HOOK UP FROM HOMEOWNER.
- FILTER FABRIC AND COARSE FILTER AGGREGATE IS INCIDENTAL TO THIS ITEM.
- ITEM TO BE USED TO INSTALL THE HYDRODYNAMIC STORM SEPARATOR TREATMENT STRUCTURE (CONTECH CDS 3020 MODEL OR APPROVED EQUAL). ITEM INCLUDES ALL ITEMS NECESSARY FOR THE COMPLETE INSTALLATION OF THE SYSTEM.
- EACH 10"CLEANOUT INCLUDES 10"X10" TEE, 4' OF 10" PVC RISER PIPE AND 10" PVC CAP.
- ITEM INCLUDES REMOVAL OF EXISTING SERVICE PIPE FROM MAIN TO ROW.
- INCLUDES 19 SERVICES THAT NEED TO BE CUT INTO CIPP LINED 8" CLAY PIPE.
- ITEM TO BE USED TO INSTALL A CURED IN PLACE (CIPP) LINING ACCORDING TO THE CITY OF DULUTH'S 2011 STANDARD CONSTRUCTION SPECIFICATIONS.
- HYDRANT ITEM INCLUDES "HYDRANT ASSEMBLY" AS DEFINED IN DULUTH'S 2011 STANDARD CONSTRUCTION SPECIFICATIONS. ITEM INCLUDES 15 LF OF 6" DIP FOR HYDRANT LEAD.
- FITTING WEIGHT IS BASED ON (1) 12"X8" AND (1) 12"X6" TEE.
- NO STEPS SHALL BE INSTALLED ON ANY MANHOLE.
- ITEM INCLUDES GEOTEXTILE FABRIC AND FILTER MATERIALS AS INCIDENTAL TO APRON.
- ITEM TO BE USED TO CONSTRUCT CONCRETE STEPS.
- CONTRACTOR SHALL PROVIDE (2) TEMPORARY GANG MAIL BOX LOCATIONS AS SHOWN ON SHEET NO.42. THE POSTMASTER SHALL BE CONTACTED AND HE WILL HAVE THE FINAL DECISION ON THE EXACT PLACEMENT OF EACH GANG BOX LOCATION. THIS WORK WILL BE COMPENSATED FOR UNDER THE TRAFFIC CONTROL ITEM.

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

DATE 5/4/11
 40926
 David G. Bolif
 PRINTED NAME

NO	DATE	REVISION	BY
2			
3			

STATEMENT OF ESTIMATED QUANTITIES
 IVANHOE STREET

SHEET NO. 2 OF 92

NO	DATE	REVISION	BY	JOB NO.	E-1893	DATE	APRIL 2011
4							
5							
8							

City of Duluth Proj. No. 0851TR

ENGINEERS • SURVEYORS • PLANNERS
 SALO ENGINEERING, INC.
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