

COST SUMMARY

BASE BID /ALTERNATES/ALLOWANCES	TOTAL COSTS
Base bid	\$ 4,980,051

For Client's Use Only

CSI Summary for Base Bid					
Div. No.	CSI Division	Labor Cost	Material Cost	Total Cost	% of sub-total cost
DIV-01	General Requirements	\$ 311,013	\$ -	\$ 311,013	8.2%
DIV-02	Existing conditions	\$ 16,953	\$ -	\$ 16,953	0.4%
DIV-03	Concrete	\$ 41,046	\$ 47,261	\$ 88,307	2.3%
DIV-04	Masonry	\$ 48,977	\$ 31,619	\$ 80,596	2.1%
DIV-05	Metals	\$ 5,437	\$ 5,758	\$ 11,195	0.3%
DIV-06	Wood, Plastics & Composites	\$ 85,757	\$ 151,679	\$ 237,436	6.2%
DIV-07	Thermal & Moisture Protection	\$ 34,702	\$ 41,503	\$ 76,206	2.0%
DIV-08	Openings	\$ 38,053	\$ 165,043	\$ 203,096	5.3%
DIV-09	Finishes	\$ 220,178	\$ 160,793	\$ 380,971	10.0%
DIV-10	Specialties	\$ 5,741	\$ 24,062	\$ 29,803	0.8%
DIV-11	Equipment	\$ 1,256	\$ 21,952	\$ 23,208	0.6%
DIV-12	Furnishings	\$ 27,232	\$ 113,799	\$ 141,031	3.7%
DIV-13	Special Construction	\$ -	\$ -	\$ -	0.0%
DIV-14	Conveying Equipment	\$ -	\$ -	\$ -	0.0%
DIV-21	Fire Suppression	\$ 103,115	\$ 24,402	\$ 127,518	3.3%
DIV-22	Plumbing	\$ 278,001	\$ 110,852	\$ 388,853	10.2%
DIV-23	Heating, Ventilating, & Air conditioning	\$ 318,194	\$ 261,113	\$ 579,307	15.2%
DIV-26	Electrical	\$ 540,019	\$ 142,526	\$ 682,545	17.9%
DIV-27	Communications	\$ -	\$ -	\$ -	0.0%
DIV-28	Electronic Safety & Security	\$ 102,306	\$ 16,533	\$ 118,839	3.1%
DIV-31	Earthwork	\$ 88,062	\$ 14,890	\$ 102,952	2.7%
DIV-32	Exterior Improvements	\$ 46,214	\$ 84,097	\$ 130,311	3.4%
DIV-33	Utilities	\$ 57,940	\$ 27,253	\$ 85,194	2.2%
SUB TOTAL		\$ 2,370,197	\$ 1,445,136	\$ 3,815,333	
MATERIAL TAX			\$ 137,288	\$ 137,288	9.5%
OVERHEAD AND PROFIT		\$ 592,549.30	\$ 361,283.90	\$ 953,833	25.0%
Bond Fee				\$ 73,597	1.5%
TOTAL BASE BID				\$ 4,980,051	

Comparison with Sub-Quotes	
Enter Sub-Quotes here	Difference
	\$ 311,013
	\$ 16,953
	\$ 88,307
	\$ 80,596
	\$ 11,195
	\$ 237,436
	\$ 76,206
	\$ 203,096
	\$ 380,971
	\$ 29,803
	\$ 23,208
	\$ 141,031
	\$ -
	\$ -
	\$ 127,518
	\$ 388,853
	\$ 579,307
	\$ 682,545
	\$ -
	\$ 118,839
	\$ 102,952
	\$ 130,311
	\$ 85,194
	\$ 3,815,333
	\$ 137,288
	\$ 953,833
	\$ 73,597
	\$ 4,980,051

Sub-Contractor/Trade Summary for Base Bid				
Sub Contractor	Labor Cost	Material Cost	Total Cost	% of sub-total
General Requirements	\$ 311,013	\$ -	\$ 311,013	8.2%
Accessories	\$ 2,856	\$ 6,531	\$ 9,387	0.2%
Appliances	\$ 1,256	\$ 21,952	\$ 23,208	0.6%
Awnings / Canopies	\$ 1,013	\$ 4,790	\$ 5,803	0.2%
Cabinetry	\$ 19,472	\$ 52,165	\$ 71,637	1.9%
Concrete - Building	\$ 35,050	\$ 40,859	\$ 75,910	2.0%
Countertops	\$ 3,525	\$ 34,184	\$ 37,708	1.0%
Demo - Site	\$ 16,953	\$ -	\$ 16,953	0.4%
Dewatering	\$ 20,892	\$ -	\$ 20,892	0.5%
Doors & Hardware	\$ 26,452	\$ 137,084	\$ 163,537	4.3%
Dry Waller	\$ 50,853	\$ 25,820	\$ 76,673	2.0%
Earth worker	\$ 67,171	\$ 14,890	\$ 82,061	2.2%
Electrician	\$ 540,019	\$ 142,526	\$ 682,545	17.9%
Electronic Safety and Security (FA)	\$ 102,306	\$ 16,533	\$ 118,839	3.1%
Erosion Control	\$ 998	\$ 2,295	\$ 3,293	0.1%
Exterior improvements	\$ 749	\$ 14,000	\$ 14,749	0.4%
Exterior Painter	\$ 7,561	\$ 2,194	\$ 9,754	0.3%
Fencing and Gates - Wood	\$ 13,519	\$ 16,064	\$ 29,582	0.8%
Finish Carpenter	\$ 2,308	\$ 2,904	\$ 5,212	0.1%
Fire Suppression	\$ 103,115	\$ 24,402	\$ 127,518	3.3%
Flooring	\$ 15,340	\$ 25,840	\$ 41,179	1.1%
Framer Lumber	\$ 131,127	\$ 174,507	\$ 305,634	8.0%
Furniture	\$ 4,235	\$ 27,451	\$ 31,686	0.8%
Insulation	\$ 23,435	\$ 30,924	\$ 54,359	1.4%
Interior Painter	\$ 43,135	\$ 20,729	\$ 63,864	1.7%
Irrigation	\$ 3,778	\$ 4,154	\$ 7,931	0.2%
Joint Sealants	\$ 5,836	\$ 708	\$ 6,544	0.2%
Landscaper	\$ 8,182	\$ 17,640	\$ 25,822	0.7%
Mason - Cast Stone	\$ 48,977	\$ 31,619	\$ 80,596	2.1%
Mechanical	\$ 318,194	\$ 261,113	\$ 579,307	15.2%
Paving	\$ 11,153	\$ 20,458	\$ 31,611	0.8%
Plumber	\$ 278,001	\$ 110,852	\$ 388,853	10.2%
Roofer	\$ 5,846	\$ 12,060	\$ 17,906	0.5%
Sheathing	\$ 8,080	\$ 13,176	\$ 21,256	0.6%
Siding Contractor	\$ 9,978	\$ 13,889	\$ 23,866	0.6%
Site Concrete	\$ 4,333	\$ 9,159	\$ 13,492	0.4%
Site Paint	\$ 40	\$ 79	\$ 119	0.0%
Site Signage	\$ 118	\$ 136	\$ 255	0.0%
Staircases and Railings - Metal	\$ 5,387	\$ 4,678	\$ 10,065	0.3%
Staircases and Railings - Wood	\$ 15,926	\$ 8,358	\$ 24,284	0.6%
Structural Steel	\$ 1,077	\$ 2,423	\$ 3,500	0.1%
Stucco - EIFS	\$ 12,634	\$ 12,102	\$ 24,736	0.6%
Tiler	\$ 4,178	\$ 5,882	\$ 10,061	0.3%
Toilet Partitions	\$ 1,872	\$ 12,741	\$ 14,613	0.4%
Utilities	\$ 57,940	\$ 27,253	\$ 85,194	2.2%
Water Proofing & Damp Proofing	\$ 12,715	\$ 10,055	\$ 22,769	0.6%
Window Installer	\$ 11,601	\$ 27,959	\$ 39,559	1.0%
SUB TOTAL	\$ 2,370,197	\$ 1,445,136	\$ 3,815,333	
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9.5%
25.0%
1.50%

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTA GE	QTY WITH WASTAG E	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
			DIV-01		General												\$ 105,406
					Plan Design and Permitting												
1			DIV-01	General Requirements	Architecture (Assumed By Owner)	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
2			DIV-01	General Requirements	Engineering (Assumed By Owner)	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
3			DIV-01	General Requirements	Surveying	11,870	5%	12,464	SF	-	\$ 50.0	\$ -	\$ -			\$ -	
4			DIV-01	General Requirements	Soils Report (Assumed By Owner)	3,860	0%	3,860	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
5			DIV-01	General Requirements	Geological Report (Assumed By Owner)	3,860	0%	3,860	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
6			DIV-01	General Requirements	Concrete Testing	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
7			DIV-01	General Requirements	Permit Running (Assumed By Owner)	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
8			DIV-01	General Requirements	Permits (Based on interior finish area)	12,506	5%	13,132	SF	-	\$ 50.0	\$ -	\$ -			\$ -	
9			DIV-01	General Requirements	Plan Coordination	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
10			DIV-01	General Requirements	Roof Inspection	3,860	5%	4,053	SF	-	\$ 50.0	\$ -	\$ -			\$ -	
11			DIV-01	General Requirements	Blueprints	3,860	5%	4,053	SF	0.0099	40.29	\$ 50.0	\$ 2,014.6			\$ 2,015	
					Utilities												
12			DIV-01	General Requirements	Utilities during construction (Based on interior finish area)	12,506	5%	13,132	SF	0.0365	478.66	\$ 50.0	\$ 23,933.1			\$ 23,933	
13			DIV-01	General Requirements	Port-o-Potty (Based on interior finish area)	12,506	5%	13,132	SF	0.0117	153.17	\$ 50.0	\$ 7,658.6			\$ 7,659	
14			DIV-01	General Requirements	Temporary Power (Based on interior finish area)	12,506	5%	13,132	SF	0.0182	239.33	\$ 50.0	\$ 11,966.6			\$ 11,967	
					Equipment and Tools												
15			DIV-01	General Requirements	Tool Rentals	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
16			DIV-01	General Requirements	Tool Shed	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
17			DIV-01	General Requirements	Dust Control	11,870	5%	12,464	SF	-	\$ 50.0	\$ -	\$ -			\$ -	
18			DIV-01	General Requirements	Ice, Water, Beverages	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
19			DIV-01	General Requirements	Garbage Dumpster / Trash Containers	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
20			DIV-01	General Requirements	Mobilization	12,506	5%	13,132	SF	0.0497	652.72	\$ 50.0	\$ 32,636.1			\$ 32,636	
					Signage and Promotion												
21			DIV-01	General Requirements	Job Signs	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
22			DIV-01	General Requirements	Job Photos	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
23			DIV-01	General Requirements	Signage	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
24			DIV-01	General Requirements	Promotion/entertainment	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
25			DIV-01	General Requirements	Misc.	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
					Cleaning and Final												
26			DIV-01	General Requirements	Trash	12,506	5%	13,132	SF	-	\$ 50.0	\$ -	\$ -			\$ -	
27			DIV-01	General Requirements	Final Cleaning	12,506	5%	13,132	SF	0.0414	543.94	\$ 50.0	\$ 27,196.8			\$ 27,197	
28			DIV-01	General Requirements	Window washing (rough # of windows)	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
29			DIV-01	General Requirements	Punch List Items	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
					Bonds, Insurance, Legal												
30			DIV-01	General Requirements	Casualty Insurance	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
31			DIV-01	General Requirements	Medical Insurance	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
32			DIV-01	General Requirements	General Liability Insurance	1	0%	1	LS	-	\$ 50.0	\$ -	\$ -			\$ -	
					Supervision, Temporary Control & Facilities												
33			DIV-01	General Requirements	Project Management	12,506	5%	13,132	SF	0.0497	652.72	\$ 50.0	\$ 32,636.1			\$ 32,636	
34			DIV-01	General Requirements	Supervision	12,506	5%	13,132	SF	0.2386	3,133.07	\$ 50.0	\$ 156,653.3			\$ 156,653	
35			DIV-01	General Requirements	Temporary Control & Facilities	12,506	5%	13,132	SF	0.0249	326.36	\$ 50.0	\$ 16,318.1			\$ 16,318	
			DIV-02		Selective Removals And Demolition												\$ 16,953
					Demolition												
					Site Demolition												

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
36	C1.01	C1.01	DIV-02	Demo - Site	Remove existing building/structure/basement (including wall, footing, concrete slabs, lift, overhang, awning etc)	891	5%	936	SF	0.200	187.20	\$ 36.6	\$ 6,842.3		\$ -	\$ 6,842	
37	C1.01	C1.01	DIV-02	Demo - Site	Remove concrete driveway & drive approach	696	5%	731	SF	0.044	32.15	\$ 36.6	\$ 1,175.2		\$ -	\$ 1,175	
38	C1.01	C1.01	DIV-02	Demo - Site	Remove asphalt driveway	148	5%	155	SF	0.012	1.87	\$ 36.6	\$ 68.2		\$ -	\$ 68	
39	C1.01	C1.01	DIV-02	Demo - Site	Remove concrete	655	5%	687	SF	0.044	30.25	\$ 36.6	\$ 1,105.6		\$ -	\$ 1,106	
40	C1.01	C1.01	DIV-02	Demo - Site	Remove concrete stair	37	5%	39	SF	0.100	3.87	\$ 36.6	\$ 141.4		\$ -	\$ 141	
41	C1.01	C1.01	DIV-02	Demo - Site	Remove existing wall Note: Detail is not given, Assume 6'-0" Thickness	375	5%	394	SF	0.055	21.65	\$ 36.6	\$ 791.4		\$ -	\$ 791	
42			DIV-02	Demo - Site	Remove existing concrete footing	62	5%	66	LF	0.300	19.68	\$ 36.6	\$ 719.5		\$ -	\$ 719	
43	C1.01	C1.01	DIV-02	Demo - Site	Remove Railroad tie wall Note: Detail is not given, Assume 6'-0" Thickness	177	5%	186	SF	0.055	10.24	\$ 36.6	\$ 374.1		\$ -	\$ 374	
44	C1.01	C1.01	DIV-02	Demo - Site	Remove wire fence	219	5%	230	LF	0.100	22.98	\$ 36.6	\$ 839.8		\$ -	\$ 840	
45	C1.01	C1.01	DIV-02	Demo - Site	Remove iron fence	39	5%	41	LF	0.120	4.97	\$ 36.6	\$ 181.8		\$ -	\$ 182	
46	C1.01	C1.01	DIV-02	Demo - Site	Remove water line	50	5%	53	LF	0.135	7.14	\$ 36.6	\$ 260.9		\$ -	\$ 261	
47	C1.01	C1.01	DIV-02	Demo - Site	Remove tree	13	0%	13	EA	4.000	52.00	\$ 36.6	\$ 1,900.6		\$ -	\$ 1,901	
48	C1.01	C1.01	DIV-02	Demo - Site	Remove gas meter	1	0%	1	EA	0.680	0.68	\$ 36.6	\$ 24.9		\$ -	\$ 25	
49	C1.01	C1.01	DIV-02	Demo - Site	Remove water meter	1	0%	1	EA	1.230	1.23	\$ 36.6	\$ 45.0		\$ -	\$ 45	
50	C1.01	C1.01	DIV-02	Demo - Site	Remove sign	3	0%	3	EA	1.400	4.20	\$ 36.6	\$ 153.5		\$ -	\$ 154	
51			DIV-02	Demo - Site	Hauling of Demo Material offsite	2,427	5%	2,548	SF	0.025	63.71	\$ 36.6	\$ 2,328.6		\$ -	\$ 2,329	
			DIV-03		Concrete												\$ 88,307
					Concrete Cont. Footing												
52	C3.01	A8	DIV-03	Concrete - Building	(2'-0" Wide X 1'-0" Deep) Concrete Cont. Footing	54	5%	57	CY	2.000	114.17	\$ 42.0	\$ 4,795.1	\$ 130.0	\$ 7,421.2	\$ 12,216	
53	C3.01	A8	DIV-03	Concrete - Building	(3) #5 Cont. Bars.	2,290	5%	2,404	LBS	0.010	24.04	\$ 42.0	\$ 1,009.8	\$ 0.8	\$ 1,995.7	\$ 3,006	
54	C3.01	A8	DIV-03	Concrete - Building	#5 Transverse Bars @ 36" O.C.	382	5%	401	LBS	0.010	4.01	\$ 42.0	\$ 168.3	\$ 0.8	\$ 332.6	\$ 501	
55	C3.01	A8	DIV-03	Concrete - Building	(3'-6" Wide X 1'-0" Deep) Concrete Cont. Footing	10	5%	10	CY	2.000	20.00	\$ 42.0	\$ 840.0	\$ 130.0	\$ 1,300.0	\$ 2,140	
56	C3.01	A8	DIV-03	Concrete - Building	(4) #5 Cont. Bars.	306	5%	321	LBS	0.010	3.21	\$ 42.0	\$ 134.8	\$ 0.8	\$ 266.4	\$ 401	
57	C3.01	A8	DIV-03	Concrete - Building	#5 Transverse Bars @ 36" O.C.	76	5%	80	LBS	0.010	0.80	\$ 42.0	\$ 33.7	\$ 0.8	\$ 66.6	\$ 100	
					Concrete Foundation Wall												
58	C3.01	A8	DIV-03	Concrete - Building	(10" Thk X 3'-0" H) Concrete Foundation Wall	68	5%	71	CY	2.000	142.14	\$ 42.0	\$ 5,969.8	\$ 130.0	\$ 9,239.3	\$ 15,209	
59	C3.01	A8	DIV-03	Concrete - Building	#5 Horizontal bars @ 10" O.C	2,767	5%	2,905	LBS	0.010	29.05	\$ 42.0	\$ 1,220.2	\$ 0.8	\$ 2,411.4	\$ 3,632	
60	C3.01	A8	DIV-03	Concrete - Building	#5 Vertical bars @ 10" O.C	3,920	5%	4,116	LBS	0.010	41.16	\$ 42.0	\$ 1,728.6	\$ 0.8	\$ 3,416.1	\$ 5,145	
61	C3.01	A8	DIV-03	Water Proofing & Damp Proofing	Rigid insulation	2,202	5%	2,312	SF	0.020	46.24	\$ 77.7	\$ 3,592.7	\$ 1.2	\$ 2,774.4	\$ 6,367	
62	C3.01	A8	DIV-03	Water Proofing & Damp Proofing	Waterproofing membrane	2,202	5%	2,312	SF	0.008	18.50	\$ 77.7	\$ 1,437.1	\$ 1.1	\$ 2,543.2	\$ 3,980	
63	C3.01	A8	DIV-03	Concrete - Building	(12" Thk X 2'-0" H) Concrete Foundation Wall	5	5%	6	CY	2.000	11.43	\$ 42.0	\$ 480.0	\$ 130.0	\$ 742.9	\$ 1,223	
64	C3.01	A8	DIV-03	Concrete - Building	#5 Horizontal bars @ 10" O.C	185	5%	194	LBS	0.010	1.94	\$ 42.0	\$ 81.4	\$ 0.8	\$ 160.9	\$ 242	
65	C3.01	A8	DIV-03	Concrete - Building	#5 Vertical bars @ 10" O.C	300	5%	315	LBS	0.010	3.15	\$ 42.0	\$ 132.3	\$ 0.8	\$ 261.5	\$ 394	
66	C3.01	A8	DIV-03	Water Proofing & Damp Proofing	Rigid insulation	147	5%	154	SF	0.020	3.09	\$ 77.7	\$ 239.8	\$ 1.2	\$ 185.1	\$ 425	
67	C3.01	A8	DIV-03	Water Proofing & Damp Proofing	Waterproofing membrane	147	5%	154	SF	0.008	1.23	\$ 77.7	\$ 95.9	\$ 1.1	\$ 169.7	\$ 266	
					Concrete Slab												
68	C3.01	A8	DIV-03	Concrete - Building	(4" Thk) S.O.G - (3860 SF)	47	5%	50	CY	2.000	99.08	\$ 42.0	\$ 4,161.2	\$ 130.0	\$ 6,440.1	\$ 10,601	
69	C3.01	A8	DIV-03	Concrete - Building	(4" Thk) Gravel - (3860 SF)	47	5%	50	CY	1.500	74.31	\$ 42.0	\$ 3,120.9	\$ 32.5	\$ 1,610.0	\$ 4,731	
70	C3.01	A8	DIV-03	Concrete - Building	6x6-W1.4xW1.4	3,860	5%	4,053	SF	0.004	16.21	\$ 42.0	\$ 680.9	\$ 0.3	\$ 1,160.4	\$ 1,841	
					Compaction												
71			DIV-03	Concrete - Building	Slab	3,860	5%	4,053	SF	0.020	81.06	\$ 42.0	\$ 3,404.4		\$ -	\$ 3,404	
72			DIV-03	Concrete - Building	Footings	1,725	5%	1,811	SF	0.020	36.23	\$ 42.0	\$ 1,521.5		\$ -	\$ 1,521	

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73			DIV-03	Water Proofing & Damp Proofing	Moisture Barrier: 10Mil Vapor Barrier for concrete slab	3,860	5%	4,053	SF	0.002	8.11	\$ 77.7	\$ 629.8	\$ 0.2	\$ 729.5	\$ 1,359	
74			DIV-03	Concrete - Building	Formwork:	1,615	5%	1,696	SF	0.020	33.91	\$ 42.0	\$ 1,424.3	\$ -	\$ 1,424		
75			DIV-03	Concrete - Building	Formwork for foundation wall	4,698	5%	4,933	SF	0.020	98.65	\$ 42.0	\$ 4,143.2	\$ -	\$ 4,143		
					Mobilization												
76			DIV-03	Concrete - Building	Mobilization For Concrete	184	5%	193	CY	0.300	58.02	\$ 42.0		\$ 12.6	\$ 2,436.9	\$ 2,437	
77			DIV-03	Concrete - Building	Mobilization For Steel/Reinforcement	5	5%	5	TONS	4.500	24.16	\$ 42.0		\$ 189.0	\$ 1,014.6	\$ 1,015	
78			DIV-03	Concrete - Building	Mobilization For Aggregate	66	5%	69	TONS	0.200	13.87	\$ 42.0		\$ 8.4	\$ 582.6	\$ 583	
			DIV-04		Masonry												\$ 80,596
					Stone Veneer												
79	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	2" Stone Veneer	1,571	5%	1,649	SF	0.200	329.82	\$ 85.5	\$ 28,189.0	\$ 14.0	\$ 23,087.5	\$ 51,277	
80	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	(1) Layer 15# Felt Paper	1,571	5%	1,649	SF	0.005	8.25	\$ 85.5	\$ 704.7	\$ 0.2	\$ 329.8	\$ 1,035	
81	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	#9 Wire Mesh (Metal Lath)	1,571	5%	1,649	SF	0.010	16.49	\$ 85.5	\$ 1,409.5	\$ 0.5	\$ 742.1	\$ 2,152	
82	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	Precast Stone Veneer Cap	343	5%	360	LF	0.180	64.84	\$ 85.5	\$ 5,541.6	\$ 8.5	\$ 3,061.8	\$ 8,603	
83	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	Tyvek Home wrap Note Please Verify If Required	1,571	5%	1,649	SF	0.005	8.25	\$ 85.5	\$ 704.7	\$ 0.2	\$ 252.8	\$ 958	
84	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	Z-Flashing Note Please Verify If Required	132	5%	138	LF	0.040	5.52	\$ 85.5	\$ 472.1	\$ 1.7	\$ 234.8	\$ 707	
85	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	Mortar Setting Bed Note: Please verify if required.	5	5%	5	CY	1.100	5.37	\$ 85.5	\$ 459.4	\$ 65.5	\$ 320.0	\$ 779	
86	A5 & A6	A2 To A12	DIV-04	Mason - Cast Stone	22 Gauge Ties @16" O.C. E.W. Note: Please verify if required.	1,776	0%	1,776	EA	0.020	35.52	\$ 85.5	\$ 3,035.4	\$ 0.5	\$ 887.9	\$ 3,923	
87	A6	A7, A8, A9, A10	DIV-04	Mason - Cast Stone	Concrete Sill w/Drip Edge	286	5%	300	LF	0.100	30.03	\$ 85.5	\$ 2,566.6	\$ 9.0	\$ 2,702.7	\$ 5,269	
88			DIV-04	Mason - Cast Stone	Scaffolding/lift for Stone Veneer (Avg. Hot 29"-8")	10,946	5%	11,493	SF	0.006	68.96	\$ 85.5	\$ 5,893.7	\$ -	\$ 5,894		
			DIV-05		Metals												\$ 11,195
					Misc. Items.												
89	A5 & A6	A9	DIV-05	Structural Steel	Metal lintel	286	5%	300	LF	0.120	36.04	\$ 29.9	\$ 1,077.5	\$ 8.1	\$ 2,422.8	\$ 3,500	
					Exterior Railing												
90	A5 & A6	A5 & A6	DIV-05	Staircases and Railings - Metal	36" Height Railing	174	5%	182	LF	1.000	182.25	\$ 23.9	\$ 4,359.4	\$ 18.3	\$ 3,335.1	\$ 7,695	
			DIV-06		Wood, Plastic & Composite												\$ 237,436
					Second Floor Framing												
					Joist												
91	S4	A8, A9, A10	DIV-06	Framer Lumber	TJI' s @ 16" O.C	2,862	5%	3,005	LF	0.050	150.24	\$ 51.7	\$ 7,764.3	\$ 6.6	\$ 19,831.4	\$ 27,596	
92	S4	A8, A9, A10	DIV-06	Framer Lumber	2x10 @ 16" O.C	252	5%	264	LF	0.038	10.05	\$ 51.7	\$ 519.4	\$ 2.1	\$ 555.4	\$ 1,075	
93	S4	A8, A9, A10	DIV-06	Framer Lumber	2x12 Rim joist	321	5%	337	LF	0.040	13.48	\$ 51.7	\$ 696.6	\$ 2.5	\$ 842.4	\$ 1,539	
					Columns												
94	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 2x6-C-1 (8'-6" H)	10	0%	10	EA	0.289	2.89	\$ 51.7	\$ 149.4	\$ 10.3	\$ 102.9	\$ 252	
95	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 2x6-C-1a (8'-6" H)	76	0%	76	EA	0.289	21.96	\$ 51.7	\$ 1,135.1	\$ 10.3	\$ 781.7	\$ 1,917	
96	S4	A8, A9, A10	DIV-06	Framer Lumber	(3) 2x6-C-2a (8'-6" H)	186	0%	186	EA	0.289	53.75	\$ 51.7	\$ 2,778.0	\$ 10.3	\$ 1,913.0	\$ 4,691	
97	S4	A8, A9, A10	DIV-06	Framer Lumber	(3) 2x6-C-2 (8'-6" H)	3	0%	3	EA	0.289	0.87	\$ 51.7	\$ 44.8	\$ 10.3	\$ 30.9	\$ 76	
98	S4	A8, A9, A10	DIV-06	Framer Lumber	6x6-C-3 (8'-6" H)	6	0%	6	EA	0.510	3.06	\$ 51.7	\$ 158.1	\$ 30.4	\$ 182.2	\$ 340	
					Header												

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
99	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 2x8 (HDR-1)	125	5%	131	LF	0.037	4.84	\$ 51.7	\$ 250.0	\$ 1.7	\$ 218.4	\$ 468	
100	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 2x8 (HDR-2)	59	5%	62	LF	0.037	2.29	\$ 51.7	\$ 118.2	\$ 1.7	\$ 103.2	\$ 221	
101	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x7-1/4" LVL (HDR-3)	236	5%	248	LF	0.042	10.42	\$ 51.7	\$ 538.6	\$ 3.4	\$ 843.7	\$ 1,382	
					Beam												
102	S4	A8, A9, A10	DIV-06	Framer Lumber	(3) 1-3/4"x18" LVL (FB-3)	36	5%	38	LF	0.110	4.16	\$ 51.7	\$ 215.2	\$ 7.7	\$ 291.5	\$ 507	
103	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x11-7/8" LVL (FB-6)	350	5%	367	LF	0.090	33.07	\$ 51.7	\$ 1,708.9	\$ 5.1	\$ 1,884.8	\$ 3,594	
104	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x11-7/8" LV (FB-7)	145	5%	153	LF	0.090	13.74	\$ 51.7	\$ 710.0	\$ 5.1	\$ 783.1	\$ 1,493	
105	S4	A8, A9, A10	DIV-06	Framer Lumber	(3) 1-3/4"x18" LVL (FB-8)	268	5%	281	LF	0.110	30.93	\$ 51.7	\$ 1,598.4	\$ 7.7	\$ 2,165.0	\$ 3,763	
106	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x11-7/8" LVL (FB-9)	51	5%	53	LF	0.090	4.77	\$ 51.7	\$ 246.7	\$ 5.1	\$ 272.1	\$ 519	
107	S4	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x11-7/8" LVL (FB-10)	56	5%	59	LF	0.090	5.28	\$ 51.7	\$ 272.7	\$ 5.1	\$ 300.8	\$ 573	
					Floor Sheathing												
108	S4	A8, A9, A10	DIV-06	Framer Lumber	3/4" T&G CDX plywood	4,141	5%	4,348	SF	0.012	52.18	\$ 51.7	\$ 2,696.5	\$ 2.3	\$ 10,184.0	\$ 12,880	
109	S4	A8, A9, A10	DIV-06	Insulation	R28 Bat insulation	4,141	5%	4,348	SF	0.015	65.22	\$ 51.7	\$ 3,370.6	\$ 0.9	\$ 3,913.3	\$ 7,284	
					Third Floor Framing												
					Joist												
110	S5	A8, A9, A10	DIV-06	Framer Lumber	TJI' s @ 16" O.C	2,840	5%	2,982	LF	0.050	149.10	\$ 51.7	\$ 7,705.3	\$ 6.6	\$ 19,680.9	\$ 27,386	
111	S5	A8, A9, A10	DIV-06	Framer Lumber	2x10 @ 16" O.C	230	5%	242	LF	0.038	9.18	\$ 51.7	\$ 474.6	\$ 2.1	\$ 507.5	\$ 982	
112	S5	A8, A9, A10	DIV-06	Framer Lumber	2x12 Rim joist	318	5%	334	LF	0.040	13.36	\$ 51.7	\$ 690.3	\$ 2.5	\$ 834.8	\$ 1,525	
					Header												
113	S5	A8, A9, A10	DIV-06	Framer Lumber	(2) 2x8 (HDR-1)	108	5%	113	LF	0.037	4.19	\$ 51.7	\$ 216.7	\$ 1.7	\$ 189.3	\$ 406	
114	S5	A8, A9, A10	DIV-06	Framer Lumber	(2) 2x8 (HDR-2)	97	5%	102	LF	0.037	3.77	\$ 51.7	\$ 194.7	\$ 1.7	\$ 170.1	\$ 365	
115	S5	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x7-1/4" LVL (HDR-3)	35	5%	37	LF	0.042	1.56	\$ 51.7	\$ 80.5	\$ 3.4	\$ 126.2	\$ 207	
116	S5	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x7-1/4" LVL (HDR-4)	24	5%	26	LF	0.042	1.07	\$ 51.7	\$ 55.4	\$ 3.4	\$ 86.8	\$ 142	
					Beam												
117	S5	A8, A9, A10	DIV-06	Framer Lumber	(3) 1-3/4"x18" LVL (FB-1)	266	5%	280	LF	0.110	30.75	\$ 51.7	\$ 1,589.3	\$ 7.7	\$ 2,152.6	\$ 3,742	
118	S5	A8, A9, A10	DIV-06	Framer Lumber	(3) 1-3/4"x11-7/8" LVL (FB-2)	205	5%	215	LF	0.090	19.36	\$ 51.7	\$ 1,000.4	\$ 5.1	\$ 1,103.4	\$ 2,104	
119	S5	A8, A9, A10	DIV-06	Framer Lumber	(3) 1-3/4"x18" LVL (FB-3)	474	5%	498	LF	0.110	54.75	\$ 51.7	\$ 2,829.5	\$ 7.7	\$ 3,832.5	\$ 6,662	
120	S5	A8, A9, A10	DIV-06	Framer Lumber	(3) 1-3/4"x9-1/2" LVL (FB-4)	121	5%	127	LF	0.086	10.90	\$ 51.7	\$ 563.1	\$ 4.1	\$ 519.4	\$ 1,083	
121	S5	A8, A9, A10	DIV-06	Framer Lumber	(3) 1-3/4"x11-7/8" LVL (FB-5)	165	5%	174	LF	0.090	15.62	\$ 51.7	\$ 807.1	\$ 5.1	\$ 890.2	\$ 1,697	
122	S5	A8, A9, A10	DIV-06	Framer Lumber	(2) 1-3/4"x11-7/8" LVL (FB-6)	89	5%	94	LF	0.090	8.44	\$ 51.7	\$ 436.3	\$ 5.1	\$ 481.2	\$ 918	
					Floor Sheathing												
123	S5	A8, A9, A10	DIV-06	Framer Lumber	3/4" T&G CDX plywood	4,083	5%	4,287	SF	0.012	51.45	\$ 51.7	\$ 2,658.9	\$ 2.3	\$ 10,041.9	\$ 12,701	
124	S5	A8, A9, A10	DIV-06	Insulation	R28 Bat insulation	4,083	5%	4,287	SF	0.015	64.31	\$ 51.7	\$ 3,323.6	\$ 0.9	\$ 3,858.7	\$ 7,182	
					Roof Framing												
					Trusses												
125	S3	A8, A9	DIV-06	Framer Lumber	Engineered trusses @ 24" O.C	2,463	5%	2,587	LF	0.060	155.19	\$ 51.7	\$ 8,020.4	\$ 12.8	\$ 33,108.2	\$ 41,129	
					Columns												
126	S3	A8, A9	DIV-06	Framer Lumber	(2) 2x6-C-1 (8'-6" H)	128	0%	128	EA	0.289	36.99	\$ 51.7	\$ 1,911.7	\$ 10.3	\$ 1,316.5	\$ 3,228	
127	S3	A8, A9	DIV-06	Framer Lumber	(3) 2x6-C-2 (8'-6" H)	108	0%	108	EA	0.289	31.21	\$ 51.7	\$ 1,613.0	\$ 10.3	\$ 1,110.8	\$ 2,724	
					Header												
128	S3	A8, A9	DIV-06	Framer Lumber	(2) 2x8 (HDR-1)	235	5%	247	LF	0.037	9.15	\$ 51.7	\$ 472.7	\$ 1.7	\$ 412.8	\$ 886	
129	S3	A8, A9	DIV-06	Framer Lumber	(2) 2x8 (HDR-2)	226	5%	238	LF	0.037	8.79	\$ 51.7	\$ 454.2	\$ 1.7	\$ 396.7	\$ 851	
					Floor Sheathing												
130	S3	A8, A9	DIV-06	Framer Lumber	1/2" CDX or OSB plywood sheathing	4,930	5%	5,177	SF	0.012	62.12	\$ 51.7	\$ 3,210.4	\$ 1.3	\$ 6,762.1	\$ 9,972	
131	S3	A8, A9	DIV-06	Insulation	R-49 Bat insulation	4,274	5%	4,488	SF	0.015	67.32	\$ 51.7	\$ 3,479.0	\$ 1.7	\$ 7,539.7	\$ 11,019	
132	S3	A8, A9	DIV-06	Insulation	Insulation baffles	395	5%	415	SF	0.020	8.30	\$ 51.7	\$ 428.7	\$ 1.5	\$ 622.1	\$ 1,051	
					Stair Framing												
133	A3, A4	A8	DIV-06	Staircases and Railings - Wood	5/8" Type X gyp board @ soffits of stair	426	5%	447	SF	0.009	3.91	\$ 59.4	\$ 232.5	\$ 0.4	\$ 157.6	\$ 390	
134	A3, A4	A8	DIV-06	Staircases and Railings - Wood	(3) 2x12 Stringer	350	5%	367	LF	0.040	14.70	\$ 59.4	\$ 873.5	\$ 2.5	\$ 918.6	\$ 1,792	
135	A3, A4	A8	DIV-06	Staircases and Railings - Wood	Wood guardrail (3'-0" H)	46	5%	48	LF	1.100	53.21	\$ 59.4	\$ 3,162.4	\$ 22.8	\$ 1,102.9	\$ 4,265	

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
136	A3, A4	A8	DIV-06	Staircases and Railings - Metal	Steel Handrail (3'-6" Long x 0'-10" Wide) Wood tread (15 EA)	102	5%	107	LF	0.400	42.97	\$ 23.9	\$ 1,027.9	\$ 12.5	\$ 1,342.8	\$ 2,371	
137	A3, A4	A8	DIV-06	Staircases and Railings - Wood	(3'-6" Long x 0'-7" High) Wood Riser (16 EA)	120	0%	120	EA	0.898	107.76	\$ 59.4	\$ 6,404.4	\$ 24.3	\$ 2,916.8	\$ 9,321	
138	A3, A4	A8	DIV-06	Staircases and Railings - Wood	(3'-6" x 3'-6") Wood landing	128	0%	128	EA	0.614	78.59	\$ 59.4	\$ 4,670.9	\$ 17.0	\$ 2,177.8	\$ 6,849	
139	A3, A4	A8	DIV-06	Staircases and Railings - Wood	Blocking	8	0%	8	EA	1.225	9.80	\$ 59.4	\$ 582.4	\$ 135.5	\$ 1,083.9	\$ 1,666	
140	S3	S3	DIV-06	Framer Lumber	2x4 Blocking	902	5%	947	LF	0.033	31.26	\$ 51.7	\$ 1,615.5	\$ 1.1	\$ 1,034.4	\$ 2,650	
			DIV-07		Thermal And Moisture Protection												\$ 76,206
					Roofing												
141	S3	A8,A9	DIV-07	Roofer	Asphalt Shingle/Tile	4,791	5%	5,030	SF	0.028	140.84	\$ 23.1	\$ 3,246.5	\$ 1.1	\$ 5,352.1	\$ 8,599	
142	S3	A8,A9	DIV-07	Roofer	Layer of #15 Felt Paper	9,581	5%	10,060	SF	0.005	50.30	\$ 23.1	\$ 1,159.5	\$ 0.2	\$ 2,012.1	\$ 3,172	
143	S3	A8,A9	DIV-07	Water Proofing & Damp Proofing	2' Wide Ice and Water Shield	810	5%	850	SF	0.020	17.01	\$ 77.7	\$ 1,321.6	\$ 0.9	\$ 765.4	\$ 2,087	
144	S3	A8,A9	DIV-07	Roofer	Metal Gutter	178	5%	187	LF	0.060	11.22	\$ 23.1	\$ 258.7	\$ 4.4	\$ 823.1	\$ 1,082	
145	S3	A8,A9	DIV-07	Roofer	Roof Flashing	227	5%	238	LF	0.046	10.95	\$ 23.1	\$ 252.5	\$ 2.8	\$ 666.8	\$ 919	
146	S3	A8,A9	DIV-07	Roofer	Note: Verify if required.	178	5%	187	LF	0.042	7.86	\$ 23.1	\$ 181.1	\$ 3.6	\$ 673.5	\$ 855	
147	A5 & A6	A2 To A12	DIV-07	Roofer	Drip Edge	290	5%	305	LF	0.055	16.76	\$ 23.1	\$ 386.3	\$ 5.9	\$ 1,797.8	\$ 2,184	
					Low Roof												
148	S3	A8,A9	DIV-07	Roofer	Asphalt Shingle /Tile	172	5%	181	SF	0.028	5.07	\$ 23.1	\$ 116.8	\$ 1.1	\$ 192.6	\$ 309	
149	S3	A8,A9	DIV-07	Roofer	2 Layer of #15 Felt Paper	345	5%	362	SF	0.005	1.81	\$ 23.1	\$ 41.7	\$ 0.2	\$ 72.4	\$ 114	
150	S3	A8,A9	DIV-07	Roofer	Metal Drip Edge	69	5%	72	LF	0.020	1.44	\$ 23.1	\$ 33.3	\$ 0.9	\$ 65.0	\$ 98	
151	S3	A8,A9	DIV-07	Roofer	Metal Gutter	69	5%	72	LF	0.060	4.33	\$ 23.1	\$ 99.8	\$ 4.4	\$ 317.6	\$ 417	
152	S3	A8,A9	DIV-07	Roofer	Wall To Roof Flashing	69	5%	72	LF	0.042	3.03	\$ 23.1	\$ 69.9	\$ 1.2	\$ 86.6	\$ 157	
153	S3	A8,A9	DIV-07	Siding Contractor	Note: we assume this detail please verify if required.	277	5%	291	SF	0.005	1.45	\$ 35.9	\$ 52.1	\$ 0.2	\$ 44.6	\$ 97	
					Exterior Finishes												
					Stucco												
154	A5 & A6	A2 To A12	DIV-07	Stucco - EIFS	Stucco coat	3,091	5%	3,246	SF	0.100	324.56	\$ 36.5	\$ 11,859.0	\$ 3.5	\$ 11,359.5	\$ 23,218	
155	A5 & A6	A2 To A12	DIV-07	Stucco - EIFS	9'-5" Height Stucco coat	152	5%	159	SF	0.100	15.94	\$ 36.5	\$ 582.4	\$ 3.5	\$ 557.9	\$ 1,140	
156	A5 & A6	A2 To A12	DIV-07	Stucco - EIFS	8'-1" Height Stucco coat	50	5%	53	SF	0.100	5.28	\$ 36.5	\$ 192.7	\$ 3.5	\$ 184.6	\$ 377	
157	A5 & A6	A2 To A12	DIV-07	Water Proofing & Damp Proofing	(2) Layer 15# Felt Paper	6,586	5%	6,915	SF	0.005	34.58	\$ 77.7	\$ 2,686.5	\$ 0.2	\$ 1,383.1	\$ 4,070	
					Siding												
158	A5 & A6	A2 To A12	DIV-07	Siding Contractor	Wood Siding	3,643	5%	3,825	SF	0.045	172.15	\$ 35.9	\$ 6,172.5	\$ 3.1	\$ 11,859.0	\$ 18,031	
159	A5 & A6	A2 To A12	DIV-07	Siding Contractor	8'-6" Height Wood Siding	68	5%	71	SF	0.045	3.21	\$ 35.9	\$ 115.1	\$ 3.1	\$ 221.1	\$ 336	
160	A5 & A6	A2 To A12	DIV-07	Water Proofing & Damp Proofing	(1) Layer 15# Felt Paper	3,711	5%	3,897	SF	0.005	19.48	\$ 77.7	\$ 1,513.8	\$ 0.2	\$ 779.3	\$ 2,293	
161	A3 & A4	A2 To A12	DIV-07	Water Proofing & Damp Proofing	Lap TYVEK Metal Flashing	138	5%	145	LF	0.046	6.69	\$ 77.7	\$ 519.5	\$ 2.8	\$ 407.0	\$ 926	
162	A3 & A4	A2 To A12	DIV-07	Water Proofing & Damp Proofing	Lap 6" Tape/Caulk Tyvek Over Through-Wall Flashing	138	5%	145	LF	0.018	2.62	\$ 77.7	\$ 203.3	\$ 0.8	\$ 118.2	\$ 321	
163	S3	A8,A9	DIV-07	Siding Contractor	1'-6" Wide Vented Metal Soffit	607	5%	638	SF	0.035	22.32	\$ 35.9	\$ 800.5	\$ 1.9	\$ 1,211.9	\$ 2,012	
164	S3	A8,A9	DIV-07	Siding Contractor	2' Wide Vented Metal Soffit	277	5%	291	SF	0.035	10.17	\$ 35.9	\$ 364.8	\$ 1.9	\$ 552.3	\$ 917	
165			DIV-07	Siding Contractor	Scaffolding/Lifts Exterior (H= 29'-8" avg.)	10,946	5%	11,493	SF	0.006	68.96	\$ 35.9	\$ 2,472.6		\$ -	\$ 2,473	
			DIV-08		Openings												\$ 203,096
					Doors												
166	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	16'-0" x 7'-0" Sect. Overhead Door Type-1	4	0%	4	EA	9.447	37.79	\$ 33.8	\$ 1,276.8	\$ 5,129.6	\$ 20,518.4	\$ 21,795	
167	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	9'-0" x 7'-0" Sect. Overhead Door Type-2	4	0%	4	EA	8.338	33.35	\$ 33.8	\$ 1,126.8	\$ 2,885.4	\$ 11,541.6	\$ 12,668	
168	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	3'-0" x 6'-8" Glass Tempered Door Type-3	12	0%	12	EA	4.738	56.86	\$ 33.8	\$ 1,921.0	\$ 690.3	\$ 8,284.1	\$ 10,205	

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
169	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	3'-0" x 6'-8" Solid. 20 Min. Fire rated Door Type-4	12	0%	12	EA	4.255	51.06	\$ 33.8	\$ 1,725.1	\$ 510.3	\$ 6,123.1	\$ 7,848	
170	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	3'-0" x 4'-6" Solid Custom Door Type-5	4	0%	4	EA	3.680	14.72	\$ 33.8	\$ 497.3	\$ 344.3	\$ 1,377.0	\$ 1,874	
171	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	6'-0" x 6'-8" Glass Double Tempered Door Type-6	12	0%	12	EA	7.613	91.36	\$ 33.8	\$ 3,086.6	\$ 1,380.7	\$ 16,568.3	\$ 19,655	
172	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	2'-6" x 6'-8" Solid Door Type-7	44	0%	44	EA	4.186	184.18	\$ 33.8	\$ 6,222.9	\$ 425.2	\$ 18,709.4	\$ 24,932	
173	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	1'-0" x 6'-8" Solid Door Type-8	4	0%	4	EA	3.427	13.71	\$ 33.8	\$ 463.1	\$ 170.1	\$ 680.3	\$ 1,143	
174	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	5'-0" x 6'-8" Glass Double Tempered Door Type-9	4	0%	4	EA	6.728	26.91	\$ 33.8	\$ 909.2	\$ 1,150.6	\$ 4,602.3	\$ 5,511	
175	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	3'-0" x 6'-8" Glass Tempered Door Type-10	4	0%	4	EA	4.738	18.95	\$ 33.8	\$ 640.3	\$ 690.3	\$ 2,761.4	\$ 3,402	
176	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	2'-8" x 6'-8" Solid Door Type-11	4	0%	4	EA	4.192	16.77	\$ 33.8	\$ 566.5	\$ 454.1	\$ 1,816.5	\$ 2,383	
177	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	3'-0" x 6'-8" Solid Double Door Type-12	4	0%	4	EA	4.255	17.02	\$ 33.8	\$ 575.0	\$ 765.4	\$ 3,061.5	\$ 3,637	
178	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	1'-8" x 6'-8" Solid Door Type-13	4	0%	4	EA	3.588	14.35	\$ 33.8	\$ 484.9	\$ 284.0	\$ 1,136.2	\$ 1,621	
179	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	4'-6" x 6'-8" Solid Double Door Type-14	4	0%	4	EA	4.888	19.55	\$ 33.8	\$ 660.5	\$ 1,148.1	\$ 4,592.3	\$ 5,253	
180	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	2'-0" x 6'-0" Shower, Glass Tempered Door Type-15	8	0%	8	EA	4.094	32.75	\$ 33.8	\$ 1,106.6	\$ 414.0	\$ 3,312.0	\$ 4,419	
					Door Hardware												
181	A3 & A4	A2 To A12	DIV-08	Doors & Hardware	Allowance For Door Hardware (128 EA)	1	0%	1	LS	153.600	153.60	\$ 33.8	\$ 5,189.6	\$ 32,000.0	\$ 32,000.0	\$ 37,190	
					Windows												
182	A3 & A4	A2 To A12	DIV-08	Window Installer	5'-0" x 1'-6" Fixed Window Type-A	2	0%	2	EA	2.625	5.25	\$ 33.8	\$ 177.4	\$ 213.8	\$ 427.5	\$ 605	
183	A3 & A4	A2 To A12	DIV-08	Window Installer	5'-0" x 1'-6" (1) Casement Window Type-B	8	0%	8	EA	2.625	21.00	\$ 33.8	\$ 709.5	\$ 213.8	\$ 1,710.0	\$ 2,420	
184	A3 & A4	A2 To A12	DIV-08	Window Installer	9'-0" x 7'-0" (1) Casement Window Type-C	4	0%	4	EA	22.050	88.20	\$ 33.8	\$ 2,980.0	\$ 1,795.5	\$ 7,182.0	\$ 10,162	
185	A3 & A4	A2 To A12	DIV-08	Window Installer	2'-0" x 2'-0" Fixed Window Type-D	20	0%	20	EA	1.400	28.00	\$ 33.8	\$ 946.0	\$ 114.0	\$ 2,280.0	\$ 3,226	
186	A3 & A4	A2 To A12	DIV-08	Window Installer	3'-0" x 2'-0" Casement Window Type-E	8	0%	8	EA	2.100	16.80	\$ 33.8	\$ 567.6	\$ 171.0	\$ 1,368.0	\$ 1,936	
187	A3 & A4	A2 To A12	DIV-08	Window Installer	1'-6" x 2'-0" Fixed Window Type-F	8	0%	8	EA	1.050	8.40	\$ 33.8	\$ 283.8	\$ 85.5	\$ 684.0	\$ 968	
188	A3 & A4	A2 To A12	DIV-08	Window Installer	5'-0" x 7'-0" (2) Casement Window Type-G	2	0%	2	EA	12.250	24.50	\$ 33.8	\$ 827.8	\$ 997.5	\$ 1,995.0	\$ 2,823	
189	A3 & A4	A2 To A12	DIV-08	Window Installer	2'-0" x 3'-0" Casement Window Type-H	12	0%	12	EA	2.100	25.20	\$ 33.8	\$ 851.4	\$ 171.0	\$ 2,052.0	\$ 2,903	
190	A3 & A4	A2 To A12	DIV-08	Window Installer	2'-6" x 4'-0" Casement Window Type-J	4	0%	4	EA	3.500	14.00	\$ 33.8	\$ 473.0	\$ 285.0	\$ 1,140.0	\$ 1,613	
191	A3 & A4	A2 To A12	DIV-08	Window Installer	2'-6" x 1'-0" Fixed Window Type-K	4	0%	4	EA	0.875	3.50	\$ 33.8	\$ 118.3	\$ 71.3	\$ 285.0	\$ 403	
192	A3 & A4	A2 To A12	DIV-08	Window Installer	5'-0" x 5'-0" (2) Casement Window Type-L	4	0%	4	EA	8.750	35.00	\$ 33.8	\$ 1,182.5	\$ 712.5	\$ 2,850.0	\$ 4,033	
193	A3 & A4	A2 To A12	DIV-08	Window Installer	7'-6" x 5'-0" (2) Casement Window Type-M	4	0%	4	EA	13.125	52.50	\$ 33.8	\$ 1,773.8	\$ 1,068.8	\$ 4,275.0	\$ 6,049	
194	A3 & A4	A2 To A12	DIV-08	Window Installer	5'-0" x 3'-0" (2) Casement Window Type-N	2	0%	2	EA	5.250	10.50	\$ 33.8	\$ 354.8	\$ 427.5	\$ 855.0	\$ 1,210	
195	A3 & A4	A2 To A12	DIV-08	Window Installer	2'-6" x 3'-0" Casement Window Type-O	4	0%	4	EA	2.625	10.50	\$ 33.8	\$ 354.8	\$ 213.8	\$ 855.0	\$ 1,210	
			DIV-09		Finishes												\$ 380,971
					Stud Walls												
					First Floor												
196					2x6 Exterior wall (8'-1" High)	373	5%	392	LF								
197	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on interior side (4'x8' Ea.)	94	0%	94	EA	0.288	27.13	\$ 51.7	\$ 1,402.2	\$ 9.6	\$ 900.6	\$ 2,303	
198	A3, A4	A7, A8, A9, A10	DIV-09	Sheathing	(1) 7/16" OSB sheathing on exterior side (4'x8' Ea.)	94	0%	94	EA	0.384	36.18	\$ 51.7	\$ 1,869.6	\$ 25.7	\$ 2,419.3	\$ 4,289	
199	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	3,015	5%	3,165	SF	0.010	31.65	\$ 51.7	\$ 1,635.9	\$ 0.6	\$ 1,867.6	\$ 3,503	
200	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	4 Mil vapor barrier	3,015	5%	3,165	SF	0.002	6.33	\$ 51.7	\$ 327.2	\$ 0.2	\$ 474.8	\$ 802	
201	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 Wood Studs @ 16" O.C. (10' H)	369	0%	369	EA	0.340	125.30	\$ 51.7	\$ 6,475.4	\$ 12.1	\$ 4,459.2	\$ 10,935	
202	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 P.T Bottom plate	373	5%	392	LF	0.034	13.32	\$ 51.7	\$ 688.4	\$ 1.5	\$ 568.0	\$ 1,256	
203	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	(2) 2x6 Top plate	746	5%	784	LF	0.034	26.64	\$ 51.7	\$ 1,376.7	\$ 1.2	\$ 948.0	\$ 2,325	
204	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	1,492	5%	1,567	LF	0.003	4.70	\$ 69.5	\$ 326.9	\$ 0.1	\$ 78.4	\$ 405	
205					(2) 2x4 Party wall (8'-1" High)	73	5%	77	LF								

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

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206	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	37	0%	37	EA	0.288	10.67	\$ 51.7	\$ 551.2	\$ 9.6	\$ 354.0	\$ 905	
207	A3, A4	A7, A8, A9, A10	DIV-09	Sheathing	(2) sheet of 1" Dense glass shaft liner (firewall)	37	0%	37	EA	0.288	10.67	\$ 51.7	\$ 551.2	\$ 41.6	\$ 1,540.5	\$ 2,092	
208	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	Fiberglass batt insulation	593	5%	622	SF	0.010	6.22	\$ 51.7	\$ 321.5	\$ 0.6	\$ 367.1	\$ 689	
209	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	(2) 2x4 Wood Studs @ 16" O.C. (10' H)	134	0%	134	EA	0.330	44.31	\$ 51.7	\$ 2,289.9	\$ 10.9	\$ 1,466.2	\$ 3,756	
210	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 P.T Bottom plate	147	5%	154	LF	0.033	5.08	\$ 51.7	\$ 262.6	\$ 1.2	\$ 186.3	\$ 449	
211	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	(2) 2x6 Top plate	293	5%	308	LF	0.034	10.47	\$ 51.7	\$ 541.2	\$ 1.2	\$ 372.7	\$ 914	
212	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	293	5%	308	LF	0.003	0.92	\$ 69.5	\$ 64.3	\$ 0.1	\$ 15.4	\$ 80	
213					2x6 Interior wall (8'-1" High)	95	5%	100	LF								
214	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	48	0%	48	EA	0.288	13.82	\$ 51.7	\$ 714.1	\$ 9.6	\$ 458.7	\$ 1,173	
215	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	768	5%	806	SF	0.010	8.06	\$ 51.7	\$ 416.6	\$ 0.6	\$ 475.6	\$ 892	
216	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 Wood Studs @ 16" O.C. (10' H)	93	0%	93	EA	0.340	31.77	\$ 51.7	\$ 1,641.8	\$ 12.1	\$ 1,130.6	\$ 2,772	
217	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 P.T Bottom plate	95	5%	100	LF	0.034	3.39	\$ 51.7	\$ 175.3	\$ 1.5	\$ 144.7	\$ 320	
218	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	(2) 2x6 Top plate	190	5%	200	LF	0.034	6.78	\$ 51.7	\$ 350.6	\$ 1.2	\$ 241.4	\$ 592	
219	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	380	5%	399	LF	0.003	1.20	\$ 69.5	\$ 83.2	\$ 0.1	\$ 20.0	\$ 103	
220					2x4 Interior wall (8'-1" High)	120	5%	126	LF								
221	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	61	0%	61	EA	0.288	17.49	\$ 51.7	\$ 903.7	\$ 9.6	\$ 580.4	\$ 1,484	
222	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	971	5%	1,020	SF	0.010	10.20	\$ 51.7	\$ 527.2	\$ 0.6	\$ 601.8	\$ 1,129	
223	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 Wood Studs @ 16" O.C. (10' H)	170	0%	170	EA	0.330	56.23	\$ 51.7	\$ 2,906.0	\$ 10.9	\$ 1,860.8	\$ 4,767	
224	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 P.T Bottom plate	120	5%	126	LF	0.033	4.17	\$ 51.7	\$ 215.3	\$ 1.2	\$ 152.8	\$ 368	
225	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	(2) 2x4 Top plate	240	5%	252	LF	0.033	8.33	\$ 51.7	\$ 430.6	\$ 1.1	\$ 275.7	\$ 706	
226	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	481	5%	505	LF	0.003	1.51	\$ 69.5	\$ 105.3	\$ 0.1	\$ 25.2	\$ 131	
227					Second Floor												
228	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on interior side (4'X8' Ea.)	92	0%	92	EA	0.288	26.55	\$ 51.7	\$ 1,372.1	\$ 9.6	\$ 881.3	\$ 2,253	
229	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Moisture resistant gypsum board on interior side (4'X8' Ea.)	22	0%	22	EA	0.288	6.46	\$ 51.7	\$ 333.7	\$ 12.6	\$ 282.0	\$ 616	
230	A3, A4	A7, A8, A9, A10	DIV-09	Sheathing	(1) 7/16" OSB sheathing on exterior side (4'X8' Ea.)	115	0%	115	EA	0.384	44.01	\$ 51.7	\$ 2,274.4	\$ 25.7	\$ 2,943.1	\$ 5,217	
231	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	3,667	5%	3,851	SF	0.010	38.51	\$ 51.7	\$ 1,990.1	\$ 0.6	\$ 2,272.0	\$ 4,262	
232	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	4 Mil vapor barrier	3,667	5%	3,851	SF	0.002	7.70	\$ 51.7	\$ 398.0	\$ 0.2	\$ 577.6	\$ 976	
233	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 Wood Studs @ 16" O.C. (10' H)	512	0%	512	EA	0.340	174.22	\$ 51.7	\$ 9,003.6	\$ 12.1	\$ 6,200.1	\$ 15,204	
234	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 Top & Bottom plate	1,294	5%	1,359	LF	0.034	46.21	\$ 51.7	\$ 2,388.1	\$ 1.2	\$ 1,644.5	\$ 4,033	
235	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	1,726	5%	1,812	LF	0.003	5.44	\$ 69.5	\$ 378.0	\$ 0.1	\$ 90.6	\$ 469	
236					(2) 2x4 Party wall (8'-6" High)	80	5%	84	LF								
237	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	43	0%	43	EA	0.288	12.28	\$ 51.7	\$ 634.9	\$ 9.6	\$ 407.8	\$ 1,043	
238	A3, A4	A7, A8, A9, A10	DIV-09	Sheathing	(2) sheet of 1" Dense glass shaft liner (firewall)	43	0%	43	EA	0.288	12.28	\$ 51.7	\$ 634.9	\$ 41.6	\$ 1,774.4	\$ 2,409	
239	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	Fiberglass batt insulation	682	5%	717	SF	0.010	7.17	\$ 51.7	\$ 370.3	\$ 0.6	\$ 422.8	\$ 793	
240	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	(2) 2x4 Wood Studs @ 16" O.C. (10' H)	145	0%	145	EA	0.330	47.76	\$ 51.7	\$ 2,468.4	\$ 10.9	\$ 1,580.5	\$ 4,049	
241	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 Top & Bottom plate	723	5%	759	LF	0.033	25.04	\$ 51.7	\$ 1,294.0	\$ 1.1	\$ 828.5	\$ 2,123	
242	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	321	5%	337	LF	0.003	1.01	\$ 69.5	\$ 70.3	\$ 0.1	\$ 16.9	\$ 87	
243					2x4 Interior wall (8'-6" H)	268	5%	281	LF								
244	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	96	0%	96	EA	0.288	27.64	\$ 51.7	\$ 1,428.6	\$ 9.6	\$ 917.6	\$ 2,346	
245	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Moisture resistant gypsum board on interior side (4'X8' Ea.)	46	0%	46	EA	0.288	13.36	\$ 51.7	\$ 690.4	\$ 12.6	\$ 583.5	\$ 1,274	
246	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	2,278	5%	2,392	SF	0.010	23.92	\$ 51.7	\$ 1,236.1	\$ 0.6	\$ 1,411.2	\$ 2,647	

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247	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 Wood Studs @ 16" O.C. (10' H)	337	0%	337	EA	0.330	111.37	\$ 51.7	\$ 5,755.8	\$ 10.9	\$ 3,685.5	\$ 9,441	
248	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 Top & Bottom plate	804	5%	844	LF	0.033	27.86	\$ 51.7	\$ 1,439.7	\$ 1.1	\$ 921.8	\$ 2,362	
249	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	1,072	5%	1,126	LF	0.003	3.38	\$ 69.5	\$ 234.8	\$ 0.1	\$ 56.3	\$ 291	
250					2x2 Interior wall (8'-6" H)	6	5%	7	LF								
251	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	3	0%	3	EA	0.288	0.95	\$ 51.7	\$ 49.1	\$ 9.6	\$ 31.5	\$ 81	
252	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	53	5%	55	SF	0.010	0.55	\$ 51.7	\$ 28.6	\$ 0.6	\$ 32.7	\$ 61	
253	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x2 Wood Studs @ 16" O.C. (10' H)	21	0%	21	EA	0.300	6.20	\$ 51.7	\$ 320.5	\$ 9.6	\$ 198.4	\$ 519	
254	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x2 Top & Bottom plate	19	5%	20	LF	0.030	0.59	\$ 51.7	\$ 30.3	\$ 1.0	\$ 18.8	\$ 49	
255	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	25	5%	26	LF	0.003	0.08	\$ 69.5	\$ 5.4	\$ 0.1	\$ 1.3	\$ 7	
					Third Floor												
256					2x6 Exterior wall (8'-6" High)	403	5%	423	LF								
257	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on interior side (4'X8' Ea.)	82	0%	82	EA	0.288	23.68	\$ 51.7	\$ 1,223.5	\$ 9.6	\$ 785.9	\$ 2,009	
258	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Moisture resistant gypsum board on interior side (4'X8' Ea.)	25	0%	25	EA	0.288	7.14	\$ 51.7	\$ 368.8	\$ 12.6	\$ 311.7	\$ 680	
259	A3, A4	A7, A8, A9, A10	DIV-09	Sheathing	(1) 7/16" OSB sheathing on exterior side (4'X8' Ea.)	107	0%	107	EA	0.384	41.08	\$ 51.7	\$ 2,123.1	\$ 25.7	\$ 2,747.3	\$ 4,870	
260	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	3,423	5%	3,595	SF	0.010	35.95	\$ 51.7	\$ 1,857.7	\$ 0.6	\$ 2,120.8	\$ 3,979	
261	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	4 Mil vapor barrier	3,423	5%	3,595	SF	0.002	7.19	\$ 51.7	\$ 371.5	\$ 0.2	\$ 539.2	\$ 911	
262	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 Wood Studs @ 16" O.C. (10' H)	497	0%	497	EA	0.340	168.92	\$ 51.7	\$ 8,729.8	\$ 12.1	\$ 6,011.6	\$ 14,741	
263	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x6 Top & Bottom plate	1,208	5%	1,269	LF	0.034	43.14	\$ 51.7	\$ 2,229.2	\$ 1.2	\$ 1,535.1	\$ 3,764	
264	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	1,611	5%	1,692	LF	0.003	5.07	\$ 69.5	\$ 352.9	\$ 0.1	\$ 84.6	\$ 437	
265					(2) 2x4 Party wall (8'-6" High)	79	5%	83	LF								
266	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	42	0%	42	EA	0.288	12.13	\$ 51.7	\$ 626.6	\$ 9.6	\$ 402.5	\$ 1,029	
267	A3, A4	A7, A8, A9, A10	DIV-09	Sheathing	(2) sheet of 1" Dense glass shaft liner (firewall)	42	0%	42	EA	0.288	12.13	\$ 51.7	\$ 626.6	\$ 41.6	\$ 1,751.4	\$ 2,378	
268	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	Fiberglass batt insulation	674	5%	707	SF	0.010	7.07	\$ 51.7	\$ 365.5	\$ 0.6	\$ 417.3	\$ 783	
269	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	(2) 2x4 Wood Studs @ 16" O.C. (10' H)	143	0%	143	EA	0.330	47.25	\$ 51.7	\$ 2,441.7	\$ 10.9	\$ 1,563.4	\$ 4,005	
270	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 Top & Bottom plate	713	5%	749	LF	0.033	24.71	\$ 51.7	\$ 1,277.2	\$ 1.1	\$ 817.8	\$ 2,095	
271	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	317	5%	333	LF	0.003	1.00	\$ 69.5	\$ 69.4	\$ 0.1	\$ 16.6	\$ 86	
272					2x4 Interior wall (8'-6" H)	648	5%	680	LF								
273	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Gypsum board on both side (4'X8' Ea.)	276	0%	276	EA	0.288	79.49	\$ 51.7	\$ 4,108.0	\$ 9.6	\$ 2,638.6	\$ 6,747	
274	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	(1) 1/2" Moisture resistant gypsum board on interior side (4'X8' Ea.)	68	0%	68	EA	0.288	19.58	\$ 51.7	\$ 1,011.9	\$ 12.6	\$ 855.3	\$ 1,867	
275	A3, A4	A7, A8, A9, A10	DIV-09	Insulation	R-19 Bat insulation	5,504	5%	5,779	SF	0.010	57.79	\$ 51.7	\$ 2,986.6	\$ 0.6	\$ 3,409.7	\$ 6,396	
276	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 Wood Studs @ 16" O.C. (10' H)	863	0%	863	EA	0.330	284.74	\$ 51.7	\$ 14,715.5	\$ 10.9	\$ 9,422.4	\$ 24,138	
277	A3, A4	A7, A8, A9, A10	DIV-09	Framer Lumber	2x4 Top & Bottom plate	1,943	5%	2,040	LF	0.033	67.31	\$ 51.7	\$ 3,478.6	\$ 1.1	\$ 2,227.3	\$ 5,706	
278	A3, A4	A7, A8, A9, A10	DIV-09	Joint Sealants	Acoustical Sealant at top and bottom of walls on each side	2,590	5%	2,720	LF	0.003	8.16	\$ 69.5	\$ 567.4	\$ 0.1	\$ 136.0	\$ 703	
279	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	Taping	10,360	5%	10,878	LF	0.010	108.78	\$ 51.7	\$ 5,621.7	\$ 0.0	\$ 108.8	\$ 5,731	
280	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	Mudding Compound	1,757	5%	1,845	LBS	0.220	405.88	\$ 51.7	\$ 20,975.8	\$ 0.5	\$ 922.5	\$ 21,898	
281	A3, A4	A7, A8, A9, A10	DIV-09	Dry Waller	Screws	46,620	0%	46,620	EA	0.001	46.62	\$ 51.7	\$ 2,409.3	\$ 0.2	\$ 9,324.0	\$ 11,733	
					Window Sill												
282	A6	A7, A8, A9, A10	DIV-09	Joint Sealants	Window Sealant Note Please Verify if required.	1,058	5%	1,111	LF	0.003	3.33	\$ 69.5	\$ 231.8	\$ 0.1	\$ 55.5	\$ 287	
283	A6	A7, A8, A9, A10	DIV-09	Water Proofing & Damp Proofing	Warp TYVEK Note Please Verify if required.	529	5%	555	SF	0.005	2.78	\$ 77.7	\$ 215.8	\$ 0.3	\$ 144.4	\$ 360	
284	A6	A7, A8, A9, A10	DIV-09	Water Proofing & Damp Proofing	Minimally Expanding Polyurethane Foam Note Please Verify if required.	1,058	5%	1,111	LF	0.003	3.33	\$ 77.7	\$ 258.9	\$ 0.1	\$ 55.5	\$ 314	

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
					Door Trim												
285	A3,A4	A3,A4	DIV-09	Finish Carpenter	Door Trim	2,514	5%	2,640	LF	0.022	58.07	\$ 39.7	\$ 2,308.3	\$ 1.1	\$ 2,903.7	\$ 5,212	
					Ceiling Finishes												
286	A3 & A4	A2 To A12	DIV-09	Dry Waller	1/2" Sheetrock Gypsum Board Ceiling	10,767	5%	11,305	SF	0.009	101.75	\$ 51.7	\$ 5,258.3	\$ 0.3	\$ 3,377.5	\$ 8,636	
287	A3 & A4	A2 To A12	DIV-09	Dry Waller	4 Mil Vapor Barrier	10,767	5%	11,305	SF	0.002	22.61	\$ 51.7	\$ 1,168.5	\$ 0.2	\$ 1,695.8	\$ 2,864	
					Floor Finishes												
288	A3 & A4	A2 To A12	DIV-09	Flooring	Garage-Sealed Concrete Floor	3,783	5%	3,972	SF	0.035	139.03	\$ 30.4	\$ 4,219.7	\$ 1.0	\$ 3,972.3	\$ 8,192	
289	A3 & A4	A2 To A12	DIV-09	Flooring	Kitchen Flooring-Wood Flooring	932	5%	979	SF	0.050	48.94	\$ 30.4	\$ 1,485.3	\$ 3.0	\$ 2,951.0	\$ 4,436	
290	A3 & A4	A2 To A12	DIV-09	Flooring	DEN Room Flooring-Wood Floor <i>Note: Flooring is assumed</i>	303	5%	318	SF	0.050	15.89	\$ 30.4	\$ 482.3	\$ 3.0	\$ 958.2	\$ 1,441	
291	A3 & A4	A2 To A12	DIV-09	Flooring	Common Area-Wood Flooring <i>Note: Flooring is assumed</i>	402	5%	423	SF	0.050	21.13	\$ 30.4	\$ 641.3	\$ 3.0	\$ 1,274.2	\$ 1,916	
292	A3 & A4	A2 To A12	DIV-09	Flooring	Carpet Flooring	3,811	5%	4,002	SF	0.045	180.07	\$ 30.4	\$ 5,465.4	\$ 2.1	\$ 8,403.3	\$ 13,869	
293	A3 & A4	A2 To A12	DIV-09	Flooring	Deck Flooring-Wood Floor <i>Note: Flooring is assumed</i>	621	5%	652	SF	0.050	32.58	\$ 30.4	\$ 988.9	\$ 4.2	\$ 2,736.9	\$ 3,726	
					Floor Tiles												
294	A3 & A4	A2 To A12	DIV-09	Tiler	Tile Floor Finish <i>Note: Tile size or other Detail is not given.</i>	1,288	5%	1,352	SF	0.089	120.33	\$ 30.4	\$ 3,652.1	\$ 2.8	\$ 3,718.0	\$ 7,370	
					Base												
295	A3 & A4	A2 To A12	DIV-09	Tiler	3" Tile Wall Base	661	5%	694	LF	0.025	17.34	\$ 30.4	\$ 526.3	\$ 3.1	\$ 2,164.2	\$ 2,691	
296	A3 & A4	A2 To A12	DIV-09	Flooring	3" Wood Wall Base	1,616	5%	1,697	LF	0.035	59.39	\$ 30.4	\$ 1,802.4	\$ 2.8	\$ 4,750.9	\$ 6,553	
					Floor Transition												
297	A3 & A4	A2 To A12	DIV-09	Flooring	Floor Transition	210	5%	220	LF	0.038	8.37	\$ 30.4	\$ 254.1	\$ 3.6	\$ 793.1	\$ 1,047	
					Paint												
					Wall Paint												
298	A3 & A4	A2 To A12	DIV-09	Interior Painter	8'-1" Height Paint On Sheetrock Wall	7,449	5%	7,822	SF	0.020	156.44	\$ 37.8	\$ 5,911.4	\$ 0.4	\$ 2,737.7	\$ 8,649	
299	A3 & A4	A2 To A12	DIV-09	Interior Painter	8'-6" Height Paint On Sheetrock Wall	28,289	5%	29,704	SF	0.020	594.08	\$ 37.8	\$ 22,448.6	\$ 0.4	\$ 10,396.4	\$ 32,845	
					Ceiling Paint												
300	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On 1/2" Sheetrock Gypsum Board Ceiling	10,767	5%	11,305	SF	0.022	248.72	\$ 37.8	\$ 9,398.4	\$ 0.4	\$ 3,956.9	\$ 13,355	
					Door Paint												
301	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 3'-0" x 6'-8" Solid. 20 Min. Fire rated Door Type-4	12	0%	12	EA	1.056	12.67	\$ 37.8	\$ 478.8	\$ 19.0	\$ 228.1	\$ 707	
302	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 3'-0" x 4'-6" Solid Custom Door Type-5	4	0%	4	EA	0.915	3.66	\$ 37.8	\$ 138.3	\$ 13.8	\$ 55.2	\$ 194	
303	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 2'-6" x 6'-8" Solid Door Type-7	44	0%	44	EA	0.975	42.90	\$ 37.8	\$ 1,621.1	\$ 16.3	\$ 719.0	\$ 2,340	
304	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 1'-0" x 6'-8" Solid Door Type-8	4	0%	4	EA	0.895	3.58	\$ 37.8	\$ 135.3	\$ 8.3	\$ 33.3	\$ 169	
305	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 2'-8" x 6'-8" Solid Door Type-11	4	0%	4	EA	0.989	3.96	\$ 37.8	\$ 149.5	\$ 17.2	\$ 69.0	\$ 218	
306	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 3'-0" x 6'-8" Solid Double Door Type-12	4	0%	4	EA	1.056	4.22	\$ 37.8	\$ 159.6	\$ 19.0	\$ 76.0	\$ 236	
307	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 1'-8" x 6'-8" Solid Door Type-13	4	0%	4	EA	0.967	3.87	\$ 37.8	\$ 146.2	\$ 11.9	\$ 47.6	\$ 194	
308	A3 & A4	A2 To A12	DIV-09	Interior Painter	Paint On Door 4'-6" x 6'-8" Solid Double Door Type-14	4	0%	4	EA	2.215	8.86	\$ 37.8	\$ 334.8	\$ 27.0	\$ 108.0	\$ 443	
					Trim and Sills												
309			DIV-09	Interior Painter	Paint on Door Trim	2,514	5%	2,640	LF	0.018	47.51	\$ 37.8	\$ 1,795.5	\$ 0.8	\$ 2,111.8	\$ 3,907	
					Misc. Paint												

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

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310	A5 & A6	A2 To A12	DIV-09	Interior Painter	Paint On Exterior Deck <i>Note: Please Verify If Required</i>	301	5%	316	SF	0.035	11.06	\$ 37.8	\$ 417.9	\$ 0.6	\$ 189.6	\$ 608	
					Exterior Paint												
311	A5 & A6	A2 To A12	DIV-09	Exterior Painter	Paint On Stucco	3,091	5%	3,246	SF	0.032	103.86	\$ 39.7	\$ 4,120.8	\$ 0.6	\$ 1,785.1	\$ 5,906	
312	A5 & A6	A2 To A12	DIV-09	Exterior Painter	Paint On 9'-5" H Stucco	152	5%	160	SF	0.032	5.12	\$ 39.7	\$ 203.0	\$ 0.6	\$ 88.0	\$ 291	
313	A5 & A6	A2 To A12	DIV-09	Exterior Painter	Paint On 8'-1" H Stucco	50	5%	53	SF	0.032	1.69	\$ 39.7	\$ 67.0	\$ 0.6	\$ 29.0	\$ 96	
314	A5 & A6	A2 To A12	DIV-09	Exterior Painter	Paint On 36" High Railing	174	5%	182	LF	0.060	10.93	\$ 39.7	\$ 433.9	\$ 1.6	\$ 291.6	\$ 725	
315			DIV-09	Exterior Painter	Scaffolding/Lifts Exterior (H= 29'-8" avg.)	10,946	5%	11,493	SF	0.006	68.96	\$ 39.7	\$ 2,736.1		\$ -	\$ 2,736	
			DIV-10		Specialties												\$ 29,803
					Fireplace & Chimney												
316	A3 & A4	A2 To A12	DIV-10	Fireplace	2' x 3' Masonry Fire Place-FP <i>Note: Provided By Owner</i>	4	0%	4	EA		-	\$ 68.4	\$ -		\$ -	\$ -	
317	A3 & A4	A2 To A12	DIV-10	Fireplace	Factory Built Chimney <i>Note: Provided By Owner</i>	4	0%	4	EA		-	\$ 68.4	\$ -		\$ -	\$ -	
318	A3 & A4	A2 To A12	DIV-10	Awnings / Canopies	3'-0" x 4'-8" Roof Awning	4	0%	4	EA	7.700	30.80	\$ 32.9	\$ 1,013.0	\$ 1,197.4	\$ 4,789.6	\$ 5,803	
					Shower Partition												
319	A3 & A4	A3 & A4	DIV-10	Toilet Partitions	Tempered laminated safety glass partition (8'-6" H)	56	5%	59	LF	1.100	65.19	\$ 28.7	\$ 1,872.1	\$ 215.0	\$ 12,741.3	\$ 14,613	
					Toilet Accessories												
320	A3,A4	A3,A4	DIV-10	Accessories	18" Vertical Grab Bar	16	0%	16	EA	0.312	4.99	\$ 39.7	\$ 198.4	\$ 30.0	\$ 480.0	\$ 678	
321	A3,A4	A3,A4	DIV-10	Accessories	36" Grab Bar	16	0%	16	EA	0.400	6.40	\$ 39.7	\$ 254.4	\$ 37.8	\$ 604.8	\$ 859	
322	A3,A4	A3,A4	DIV-10	Accessories	42" Grab Bar	16	0%	16	EA	0.425	6.80	\$ 39.7	\$ 270.3	\$ 39.6	\$ 633.6	\$ 904	
323	A3,A4	A3,A4	DIV-10	Accessories	Toilet Paper Dispenser	16	0%	16	EA	0.678	10.85	\$ 39.7	\$ 431.2	\$ 65.5	\$ 1,048.0	\$ 1,479	
324	A3,A4	A3,A4	DIV-10	Accessories	Toilet seat cover dispenser	16	0%	16	EA	0.325	5.20	\$ 39.7	\$ 206.7	\$ 33.0	\$ 528.0	\$ 735	
325	A3,A4	A3,A4	DIV-10	Accessories	Napkin disposal	16	0%	16	EA	0.385	6.16	\$ 39.7	\$ 244.9	\$ 39.0	\$ 624.0	\$ 869	
326	A3,A4	A3,A4	DIV-10	Accessories	(5' x 4') Mirror	4	0%	4	EA	2.125	8.50	\$ 39.7	\$ 337.9	\$ 277.8	\$ 1,111.1	\$ 1,449	
327	A3,A4	A3,A4	DIV-10	Accessories	(1'-6" x 3') Mirror	12	0%	12	EA	1.120	13.44	\$ 39.7	\$ 534.2	\$ 62.5	\$ 750.0	\$ 1,284	
328	A3,A4	A3,A4	DIV-10	Accessories	Soap dispenser	16	0%	16	EA	0.345	5.52	\$ 39.7	\$ 219.4	\$ 37.8	\$ 604.8	\$ 824	
329	A3,A4	A3,A4	DIV-10	Accessories	Coat Hook	16	0%	16	EA	0.250	4.00	\$ 39.7	\$ 159.0	\$ 9.2	\$ 146.6	\$ 306	
					<i>Note: All Bath Accessories are assumed please verify if required.</i>												
			DIV-11		Equipment												\$ 23,208
					Appliances												
330	A3,A4	A3,A4	DIV-11	Appliances	Commercial LED Display <i>Note: Assumed 55", For Pricing. -Detail is not given.</i>	4	0%	4	EA	2.205	8.82	\$ 27.8	\$ 245.4	\$ 989.0	\$ 3,956.0	\$ 4,201	
331	A3,A4	A3,A4	DIV-11	Appliances	Refrigerator	4	0%	4	EA	2.231	8.92	\$ 27.8	\$ 248.3	\$ 1,589.0	\$ 6,356.0	\$ 6,604	
332	A3,A4	A3,A4	DIV-11	Appliances	Dishwasher	4	0%	4	EA	1.825	7.30	\$ 27.8	\$ 203.1	\$ 566.0	\$ 2,264.0	\$ 2,467	
333	A3,A4	A3,A4	DIV-11	Appliances	Gas Stove	4	0%	4	EA	1.915	7.66	\$ 27.8	\$ 213.1	\$ 648.0	\$ 2,592.0	\$ 2,805	
334	A3,A4	A3,A4	DIV-11	Appliances	Dust Bin	8	0%	8	EA	0.445	3.56	\$ 27.8	\$ 99.1	\$ 148.5	\$ 1,188.0	\$ 1,287	
335	A3,A4	A3,A4	DIV-11	Appliances	Washer & Dryer	4	0%	4	EA	2.215	8.86	\$ 27.8	\$ 246.5	\$ 1,399.0	\$ 5,596.0	\$ 5,843	
					<i>Note: There is no Detail please verify if required.</i>												
			DIV-12		Furnishing												\$ 141,031
					Millwork & Countertop												
336	A3,A4	A3,A4	DIV-12	Countertops	Solid Surface Countertop	286	5%	301	SF	0.100	30.07	\$ 70.2	\$ 2,112.6	\$ 85.5	\$ 25,712.5	\$ 27,825	
337	A3,A4	A3,A4	DIV-12	Countertops	Solid Surface Backsplash	215	5%	226	LF	0.089	20.10	\$ 70.2	\$ 1,412.3	\$ 37.5	\$ 8,471.1	\$ 9,883	
338	A3,A4	A3,A4	DIV-12	Cabinetry	2' Deep 2'-6" H Base Cabinets	152	5%	160	LF	1.100	175.63	\$ 39.7	\$ 6,981.0	\$ 139.4	\$ 22,257.0	\$ 29,238	
339	A3,A4	A3,A4	DIV-12	Cabinetry	1' Deep 2'-6" H Base Cabinets	66	5%	70	LF	0.933	64.99	\$ 39.7	\$ 2,583.3	\$ 105.4	\$ 7,342.5	\$ 9,926	
340	A3,A4	A3,A4	DIV-12	Cabinetry	1' Deep Walk in Closet	110	5%	116	LF	1.200	139.13	\$ 39.7	\$ 5,530.2	\$ 85.0	\$ 9,855.0	\$ 15,385	
341	A3,A4	A3,A4	DIV-12	Cabinetry	2' Deep Closet with Rod	36	5%	38	LF	1.650	62.96	\$ 39.7	\$ 2,502.5	\$ 170.0	\$ 6,486.7	\$ 8,989	

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
342	A3,A4	A3,A4	DIV-12	Cabinetry	2' Deep Linen Closet	9	5%	10	LF	1.650	16.04	\$ 39.7	\$ 637.7	\$ 170.0	\$ 1,652.9	\$ 2,291	
343	A3,A4	A3,A4	DIV-12	Cabinetry	1'-9" Deep Linen Closet	6	5%	6	LF	1.485	9.32	\$ 39.7	\$ 370.6	\$ 148.8	\$ 934.0	\$ 1,305	
344	A3,A4	A3,A4	DIV-12	Cabinetry	2' Deep Shelf	52	5%	54	LF	0.402	21.81	\$ 39.7	\$ 866.7	\$ 67.0	\$ 3,636.5	\$ 4,503	
					Note: There is no Detail. We assume millwork please verify if required.												
					Furniture												
345	A3,A4	A3,A4	DIV-12	Furniture	2'-6" x 6'-0" Table	4	0%	4	EA	1.285	5.14	\$ 22.4	\$ 114.9	\$ 228.0	\$ 911.8	\$ 1,027	
346	A3,A4	A3,A4	DIV-12	Furniture	3'-0" x 6'-0" Table	4	0%	4	EA	1.327	5.31	\$ 22.4	\$ 118.7	\$ 273.5	\$ 1,094.2	\$ 1,213	
347	A3,A4	A3,A4	DIV-12	Furniture	Chairs	36	0%	36	EA	0.786	28.30	\$ 22.4	\$ 632.7	\$ 65.0	\$ 2,339.6	\$ 2,972	
348	A3,A4	A3,A4	DIV-12	Furniture	1 Seat Sofa	8	0%	8	EA	1.312	10.50	\$ 22.4	\$ 234.7	\$ 252.0	\$ 2,016.0	\$ 2,251	
349	A3,A4	A3,A4	DIV-12	Furniture	3 Seat Sofa	4	0%	4	EA	1.485	5.94	\$ 22.4	\$ 132.8	\$ 799.0	\$ 3,196.0	\$ 3,329	
350	A3,A4	A3,A4	DIV-12	Furniture	2 Seat Sofa	4	0%	4	EA	1.328	5.31	\$ 22.4	\$ 118.8	\$ 378.0	\$ 1,512.0	\$ 1,631	
351	A3,A4	A3,A4	DIV-12	Furniture	2'-10" x 1'-6" Desk	4	0%	4	EA	1.215	4.86	\$ 22.4	\$ 108.7	\$ 204.0	\$ 816.0	\$ 925	
352	A3,A4	A3,A4	DIV-12	Furniture	6'-8" x 6'-0" Bed w/2 Side Tables	4	0%	4	EA	8.852	35.41	\$ 22.4	\$ 791.8	\$ 1,118.0	\$ 4,472.0	\$ 5,264	
353	A3,A4	A3,A4	DIV-12	Furniture	6'-8" x 5'-0" Bed w/1 Side Tables	6	0%	6	EA	6.548	39.29	\$ 22.4	\$ 878.5	\$ 796.3	\$ 4,777.6	\$ 5,656	
354	A3,A4	A3,A4	DIV-12	Furniture	6'-8" x 5'-0" Bed w/2 Side Tables	6	0%	6	EA	7.554	45.32	\$ 22.4	\$ 1,013.5	\$ 999.4	\$ 5,996.3	\$ 7,010	
355	A3,A4	A3,A4	DIV-12	Furniture	1'-0" x 3'-6" Table	6	0%	6	EA	0.672	4.03	\$ 22.4	\$ 90.2	\$ 53.2	\$ 319.2	\$ 409	
			DIV-21		Fire Suppression												\$ 127,518
					Fire protection												
356			DIV-21	Fire Suppression	Allowance for fire suppression system (12506 SF) Note: Please verify , if required	1	0%	1	LS	1406.925	1,406.93	\$ 73.3	\$ 103,115.2	\$ 24,402.3	\$ 24,402.3	\$ 127,518	
			DIV-22		Plumbing												\$ 388,853
					Water												
					Domestic Water Pipe-Copper L Type												
357	PM1.2	PM1.2	DIV-22	Plumber	1" Cold Water Pipe	77	5%	81	LF	0.291	23.49	\$ 69.6	\$ 1,633.8	\$ 5.9	\$ 473.8	\$ 2,108	
358	PM1.2	PM1.2	DIV-22	Plumber	1-1/2" Cold Water Pipe	18	5%	19	LF	0.437	8.25	\$ 69.6	\$ 573.5	\$ 14.2	\$ 268.2	\$ 842	
359	PM1.2	PM1.2	DIV-22	Plumber	1-1/4" Cold Water Pipe	121	5%	127	LF	0.364	46.11	\$ 69.6	\$ 3,206.9	\$ 11.0	\$ 1,398.1	\$ 4,605	
360	PM1.2	PM1.2	DIV-22	Plumber	1/2" Cold Water Pipe	644	5%	676	LF	0.146	98.43	\$ 69.6	\$ 6,846.0	\$ 2.3	\$ 1,549.2	\$ 8,395	
361	PM1.2	PM1.2	DIV-22	Plumber	3/4" Cold Water Pipe	199	5%	209	LF	0.218	45.52	\$ 69.6	\$ 3,166.2	\$ 3.8	\$ 790.5	\$ 3,957	
362	PM1.2	PM1.2	DIV-22	Plumber	3/4" Cold Water Pipe	119	5%	124	LF	0.218	27.16	\$ 69.6	\$ 1,889.1	\$ 3.8	\$ 471.7	\$ 2,361	
363	PM1.2	PM1.2	DIV-22	Plumber	3/4" Hot Water Pipe	547	5%	575	LF	0.218	125.43	\$ 69.6	\$ 8,724.2	\$ 3.8	\$ 2,178.2	\$ 10,902	
364	PM1.2	PM1.2	DIV-22	Plumber	1/2" Hot Water Pipe	304	5%	319	LF	0.146	46.45	\$ 69.6	\$ 3,230.7	\$ 2.3	\$ 731.1	\$ 3,962	
					Valves												
365	PM1.2	PM1.2	DIV-22	Plumber	1" Ball Valve	4	0%	4	EA	1.059	4.24	\$ 69.6	\$ 294.6	\$ 55.4	\$ 221.4	\$ 516	
366	PM1.2	PM1.2	DIV-22	Plumber	1/2" Ball Valve	76	0%	76	EA	0.786	59.74	\$ 69.6	\$ 4,154.8	\$ 13.0	\$ 986.5	\$ 5,141	
367	PM1.2	PM1.2	DIV-22	Plumber	3/4" Ball Valve	40	0%	40	EA	0.903	36.12	\$ 69.6	\$ 2,512.2	\$ 26.1	\$ 1,043.6	\$ 3,556	
					Sanitary												
					Sanitary Pipes-Cast Iron												
368	MP1.1	MP1.1	DIV-22	Plumber	1-1/2" Vent Pipe	790	5%	829	LF	0.207	171.67	\$ 69.6	\$ 11,940.1	\$ 8.0	\$ 6,626.4	\$ 18,567	
369	MP1.1	MP1.1	DIV-22	Plumber	2" Vent Pipe	282	5%	296	LF	0.276	81.75	\$ 69.6	\$ 5,685.7	\$ 13.2	\$ 3,909.6	\$ 9,595	
370	MP1.1	MP1.1	DIV-22	Plumber	3" Sanitary Sewer Pipe Below Grade	51	5%	54	LF	0.414	22.26	\$ 69.6	\$ 1,548.0	\$ 18.3	\$ 983.3	\$ 2,531	
371	MP1.1	MP1.1	DIV-22	Plumber	4" Sanitary Sewer Pipe Below Grade	309	5%	325	LF	0.552	179.26	\$ 69.6	\$ 12,467.8	\$ 23.7	\$ 7,709.4	\$ 20,177	
372	MP1.1	MP1.1	DIV-22	Plumber	3" Sanitary Sewer	479	5%	503	LF	0.414	208.12	\$ 69.6	\$ 14,475.0	\$ 18.3	\$ 9,194.3	\$ 23,669	
373	MP1.1	MP1.1	DIV-22	Plumber	4" Sanitary Sewer Pipe	405	5%	426	LF	0.552	234.91	\$ 69.6	\$ 16,338.6	\$ 23.7	\$ 10,102.9	\$ 26,442	
					Gas												
					Gas Pipes-Schedule 40 Black Iron												
374	MP1.1	MP1.1	DIV-22	Plumber	1" Natural Gas Pipe	8	5%	8	LF	0.294	2.46	\$ 69.6	\$ 170.9	\$ 6.1	\$ 51.2	\$ 222	
375	MP1.1	MP1.1	DIV-22	Plumber	1/2" Natural Gas Pipe	225	5%	237	LF	0.207	49.01	\$ 69.6	\$ 3,408.6	\$ 3.1	\$ 722.1	\$ 4,131	
376	MP1.1	MP1.1	DIV-22	Plumber	3/4" Natural Gas Pipe	580	5%	610	LF	0.246	149.94	\$ 69.6	\$ 10,428.5	\$ 2.3	\$ 1,401.9	\$ 11,830	
					Valves												
377	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	1" Shut Off Valve	8	0%	8	EA	1.002	8.02	\$ 69.6	\$ 557.5	\$ 34.9	\$ 279.2	\$ 837	
378	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	1-1/2" Pressure Reducing Valve	4	0%	4	EA	3.545	14.18	\$ 69.6	\$ 986.2	\$ 502.8	\$ 2,011.3	\$ 2,998	

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GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
379	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	1/2" Shut Off Valve	12	0%	12	EA	0.885	10.62	\$ 69.6	\$ 738.6	\$ 25.9	\$ 310.9	\$ 1,050	
380	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	3/4" Check Valve	4	0%	4	EA	0.822	3.29	\$ 69.6	\$ 228.7	\$ 12.5	\$ 49.8	\$ 278	
381	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	3/4" Pressure Reducing Valve	4	0%	4	EA	1.350	5.40	\$ 69.6	\$ 375.6	\$ 153.0	\$ 612.0	\$ 988	
382	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	3/4" Shut Off Valve	8	0%	8	EA	0.963	7.70	\$ 69.6	\$ 535.8	\$ 31.3	\$ 250.4	\$ 786	
383	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	IAPMO Approved Seismic Shut-Off Valve	1	0%	1	EA	1.155	1.16	\$ 69.6	\$ 80.3	\$ 135.0	\$ 135.0	\$ 215	
384	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	Gas Meter Box	1	0%	1	EA	1.467	1.47	\$ 69.6	\$ 102.0	\$ 160.0	\$ 160.0	\$ 262	
385	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	Gas Pressure Regulator	1	0%	1	EA	1.254	1.25	\$ 69.6	\$ 87.2	\$ 100.9	\$ 100.9	\$ 188	
386	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	Gas Cock	1	0%	1	EA	1.125	1.13	\$ 69.6	\$ 78.2	\$ 70.5	\$ 70.5	\$ 149	
387	1.2 & MP6.1 & MP1.2 & MP6.1 & MP6.2	MP1.2 & MP6.1 & MP6.2	DIV-22	Plumber	Gauge Cock	2	0%	2	EA	0.963	1.93	\$ 69.6	\$ 134.0	\$ 16.6	\$ 33.2	\$ 167	
					Plumbing Fixtures												
388	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	5'-0" x 2'-8" Bathtub - BT-1 Manufacturer: Sterling Model: 71090110	8	0%	8	EA	5.670	45.36	\$ 69.6	\$ 3,154.9	\$ 1,085.0	\$ 8,680.0	\$ 11,835	
389	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Floor Cleanout - FCO-1 Floor Drain - FD-1 (Copper)	4	0%	4	EA	1.266	5.06	\$ 69.6	\$ 352.2	\$ 51.5	\$ 206.0	\$ 558	
390	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Manufacturer: Zurn Model: FD2554	12	0%	12	EA	1.194	14.33	\$ 69.6	\$ 996.5	\$ 43.0	\$ 515.9	\$ 1,512	
391	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Grade Cleanout	4	0%	4	EA	1.107	4.43	\$ 69.6	\$ 308.0	\$ 37.1	\$ 148.4	\$ 456	
392	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Double Compartment Kitchen Sink - S-1 Manufacturer: Kindred Brookmoor Model: BDL2233-9-4	8	0%	8	EA	4.455	35.64	\$ 69.6	\$ 2,478.8	\$ 536.3	\$ 4,290.0	\$ 6,769	
393	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Lavatory - L-1 Manufacturer: China Lavatory Model: Western L-190-4	24	0%	24	EA	3.177	76.25	\$ 69.6	\$ 5,303.2	\$ 279.6	\$ 6,710.4	\$ 12,014	
394	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Shower - SH-1 Manufacturer: Moen Model: T9343	12	0%	12	EA	3.795	45.54	\$ 69.6	\$ 3,167.4	\$ 430.6	\$ 5,166.7	\$ 8,334	
395	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Sill cock - SC-1 Manufacturer: NIBCO Model: 95C	8	0%	8	EA	1.356	10.85	\$ 69.6	\$ 754.5	\$ 46.7	\$ 373.5	\$ 1,128	
396	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Wall Cleanout - WCO-1	12	0%	12	EA	1.641	19.69	\$ 69.6	\$ 1,369.6	\$ 80.8	\$ 969.6	\$ 2,339	
397	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Washing Machine Connection Box - WB-1 Manufacturer: Guy Gray Model: #WBED200	4	0%	4	EA	2.955	11.82	\$ 69.6	\$ 822.1	\$ 235.5	\$ 942.0	\$ 1,764	
398	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Water Closet - WC-1	16	0%	16	EA	3.141	50.26	\$ 69.6	\$ 3,495.4	\$ 275.7	\$ 4,411.7	\$ 7,907	
399	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Racier Pump Model: TACO 008, IF	4	0%	4	EA	2.601	10.40	\$ 69.6	\$ 723.6	\$ 145.6	\$ 582.2	\$ 1,306	
400	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Adjustable Strainer	12	0%	12	EA	1.200	14.40	\$ 69.6	\$ 1,001.6	\$ 44.1	\$ 529.2	\$ 1,531	
401	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	P-Trap Note: Please Verify if required.	80	0%	80	EA	0.954	76.32	\$ 69.6	\$ 5,308.2	\$ 27.0	\$ 2,163.2	\$ 7,471	
402	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Gas Fired Tankless Water Heater TWH-1 Manufacturer: Navien Model: NPE-240A2	4	0%	4	EA	5.925	23.70	\$ 69.6	\$ 1,648.4	\$ 1,926.0	\$ 7,704.0	\$ 9,352	
403	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Watts PLT-12 Expansion Tank	4	0%	4	EA	1.602	6.41	\$ 69.6	\$ 445.7	\$ 58.1	\$ 232.4	\$ 678	
404	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Condensate Neutralization Kit Note: Please Verify if required.	4	0%	4	EA	1.842	7.37	\$ 69.6	\$ 512.5	\$ 100.3	\$ 401.2	\$ 914	
405	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Concentric Vent Note: Please Verify if required.	4	0%	4	EA	1.761	7.04	\$ 69.6	\$ 489.9	\$ 69.0	\$ 276.0	\$ 766	
406	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	Vent Through Roof-VTR-1	8	0%	8	EA	1.211	9.69	\$ 69.6	\$ 673.8	\$ 120.0	\$ 960.0	\$ 1,634	
					Support & Hangers												
407	MP1.1 & MP1.2	MP1.1 & MP1.2 & MP6.2	DIV-22	Plumber	3/4" Threaded Rod @10' O.C Note: Hangers are assumed. Please verify if required.	203	0%	203	EA	0.225	45.63	\$ 69.6	\$ 3,173.7	\$ 2.3	\$ 476.4	\$ 3,650	
					Insulation												

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408	MP0.1	MP0.1	DIV-22	Plumber	1" Fiberglass Insulation (With All Service Jacket And Self-Cap)	851	5%	894	LF	0.120	107.23	\$ 69.6	\$ 7,457.8	\$ 1.9	\$ 1,706.7	\$ 9,164	
409	MP0.1	MP0.1	DIV-22	Plumber	1/2" Fiberglass Insulation With Vapor Barrier	1,177	5%	1,236	LF	0.095	117.41	\$ 69.6	\$ 8,165.8	\$ 1.6	\$ 2,014.4	\$ 10,180	
410			DIV-22	Plumber	Additional Cost Based on plumbing work At	12,506	5%	13,131	SF	0.120	1,575.76	\$ 69.6	\$ 109,597.2	\$ 0.5	\$ 6,565.7	\$ 116,163	
DIV-23 Heating, Ventilating, and Air Conditioning (HVAC)																	\$ 579,307
Mechanical Duct-Sheet Metal																	
411	MP1.3	MP1.3	DIV-23	Mechanical	6" Duct	306	5%	321	LF	0.474	152.18	\$ 56.5	\$ 8,595.8	\$ 9.1	\$ 2,928.0	\$ 11,524	
412	MP1.3	MP1.3	DIV-23	Mechanical	8" Duct	1,388	5%	1,457	LF	0.510	743.21	\$ 56.5	\$ 41,980.4	\$ 12.5	\$ 18,274.2	\$ 60,255	
413	MP1.3	MP1.3	DIV-23	Mechanical	10" Duct	240	5%	252	LF	0.588	148.03	\$ 56.5	\$ 8,361.4	\$ 14.6	\$ 3,670.5	\$ 12,032	
414	MP1.3	MP1.3	DIV-23	Mechanical	35" Duct	66	5%	69	LF	1.520	105.34	\$ 56.5	\$ 5,949.9	\$ 71.8	\$ 4,974.3	\$ 10,924	
415	MP1.3	MP1.3	DIV-23	Mechanical	24/8" Duct	49	5%	51	LF	1.125	57.46	\$ 56.5	\$ 3,245.4	\$ 35.7	\$ 1,823.3	\$ 5,069	
416	MP1.3	MP1.3	DIV-23	Mechanical	12/10" Duct	114	5%	120	LF	0.699	83.96	\$ 56.5	\$ 4,742.7	\$ 22.3	\$ 2,678.7	\$ 7,421	
Louvers/Grille/ Diffusers																	
417	MP1.3	MP1.3	DIV-23	Mechanical	12"x6" Supply Diffuser 175 CFM (Type-2) Manufacturer: Price Model: 500 Series 520D/F/S/A/B12	8	0%	8	EA	2.838	22.70	\$ 56.5	\$ 1,282.4	\$ 140.0	\$ 1,120.0	\$ 2,402	
418	MP1.3	MP1.3	DIV-23	Mechanical	12"x6" Supply Diffuser 200 CFM (Type-2) Manufacturer: Price Model: 500 Series 520D/F/S/A/B12	4	0%	4	EA	2.850	11.40	\$ 56.5	\$ 643.9	\$ 160.0	\$ 640.0	\$ 1,284	
419	MP1.3	MP1.3	DIV-23	Mechanical	12"x6" Supply Diffuser 150 CFM (Type-2) Manufacturer: Price Model: 500 Series 520D/F/S/A/B12	12	0%	12	EA	2.805	33.66	\$ 56.5	\$ 1,901.3	\$ 120.0	\$ 1,440.0	\$ 3,341	
420	MP1.3	MP1.3	DIV-23	Mechanical	12"x6" Supply Diffuser 75 CFM (Type-2) Manufacturer: Price Model: 500 Series 520D/F/S/A/B12	16	0%	16	EA	2.739	43.82	\$ 56.5	\$ 2,475.4	\$ 60.0	\$ 960.0	\$ 3,435	
421	MP1.3	MP1.3	DIV-23	Mechanical	14"x4" Return Grill 150 CFM (Type-4) Manufacturer: Price Model: PDR Series 520D/F/S/A/B12	16	0%	16	EA	2.805	44.88	\$ 56.5	\$ 2,535.1	\$ 120.0	\$ 1,920.0	\$ 4,455	
422	MP1.3	MP1.3	DIV-23	Mechanical	8"x4" Supply Diffuser 100 CFM (Type-1) Manufacturer: Price Model: 500 Series 520D/F/S/A/B12	4	0%	4	EA	2.772	11.09	\$ 56.5	\$ 626.3	\$ 80.0	\$ 320.0	\$ 946	
423	MP1.3	MP1.3	DIV-23	Mechanical	8"x4" Supply Diffuser 50 CFM (Type-1) Manufacturer: Price Model: 500 Series 520D/F/S/A/B12	16	0%	16	EA	2.700	43.20	\$ 56.5	\$ 2,440.2	\$ 40.0	\$ 640.0	\$ 3,080	
424	MP1.3	MP1.3	DIV-23	Mechanical	28"x8" Return Grill 650 CFM (Type-3) Manufacturer: Price Model: PDR Series 520D/F/S/A/B12	4	0%	4	EA	3.300	13.20	\$ 56.5	\$ 745.6	\$ 520.0	\$ 2,080.0	\$ 2,826	
425	MP1.3	MP1.3	DIV-23	Mechanical	28"x8" Return Grill 350 CFM (Type-3) Manufacturer: Price Model: PDR Series 520D/F/S/A/B12	4	0%	4	EA	2.994	11.98	\$ 56.5	\$ 676.5	\$ 280.0	\$ 1,120.0	\$ 1,796	
Mechanical Equipment																	
426	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Dryer Vent Box DVB-1 Manufacturer: IN-O-VATE Model: 350	4	0%	4	EA	2.775	11.10	\$ 56.5	\$ 627.0	\$ 54.3	\$ 217.1	\$ 844	
427	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Electric Heater EH-1 Manufacturer: Markel Model: E3313TS-RP	4	0%	4	EA	4.275	17.10	\$ 56.5	\$ 965.9	\$ 382.4	\$ 1,529.5	\$ 2,495	
428	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Furnace With Acid Neutralizer F-1 Manufacturer: Dalkin Model: DM96TN0303ANA With Oil: CAPFA2318A6	4	0%	4	EA	22.540	90.16	\$ 56.5	\$ 5,092.7	\$ 8,411.5	\$ 33,646.0	\$ 38,739	

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
429	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Furnace With Acid Neutralizer F-2 Manufacturer: Daikin Model: DM96TN0303ANA With Oil: CAPFA2318A6	4	0%	4	EA	22.540	90.16	\$ 56.5	\$ 5,092.7	\$ 8,411.5	\$ 33,646.0	\$ 38,739	
430	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Remote Condensing Unit RCU-1 Manufacturer: Daikin Model: DX16SA0241	4	0%	4	EA	15.540	62.16	\$ 56.5	\$ 3,511.1	\$ 5,500.0	\$ 22,000.0	\$ 25,511	
431	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Remote Condensing Unit RCU-2 Manufacturer: Daikin Model: DX16SA0241	4	0%	4	EA	15.540	62.16	\$ 56.5	\$ 3,511.1	\$ 5,500.0	\$ 22,000.0	\$ 25,511	
432	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Condensate Neutralization Kit Note: Please verify if required.	4	0%	4	EA	2.265	9.06	\$ 56.5	\$ 511.8	\$ 100.3	\$ 401.2	\$ 913	
433	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Concentric Vent Kit Note: Please verify if required.	4	0%	4	EA	1.650	6.60	\$ 56.5	\$ 372.8	\$ 88.6	\$ 354.2	\$ 727	
434	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Filter Drain Note: Please Verify If Required.	4	0%	4	EA	1.305	5.22	\$ 56.5	\$ 294.9	\$ 94.0	\$ 376.0	\$ 671	
435	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	Poly Pad Note: Please Verify If Required.	4	0%	4	EA	0.852	3.41	\$ 56.5	\$ 192.5	\$ 10.0	\$ 40.0	\$ 232	
436	MP1.3 & MP6.1	MP1.3 & MP6.1 & MP6.2	DIV-23	Mechanical	A-Frame type evaporator Coil Note: Please Verify If Required.	8	0%	8	EA	3.336	26.69	\$ 56.5	\$ 1,507.5	\$ 329.7	\$ 2,637.7	\$ 4,145	
					Exhaust Fan												
437	MP1.3	MP0.2	DIV-23	Mechanical	Exhaust Fan Note: Provided By Owner	4	0%	4	EA	2.121	8.48	\$ 56.5	\$ 479.2		\$ -	\$ 479	
438	MP1.3	MP0.2	DIV-23	Mechanical	Exhaust Fan EF-1 Note: Please Verify If Required.	16	0%	16	EA	2.545	40.72	\$ 56.5	\$ 2,300.1	\$ 165.8	\$ 2,652.3	\$ 4,952	
					Thermostat												
439	MP1.3	MP1.3	DIV-23	Mechanical	Thermostat (For Furnace) Note: Please Verify If Required.	8	0%	8	EA	1.500	12.00	\$ 56.5	\$ 677.8	\$ 116.0	\$ 928.0	\$ 1,606	
					Items												
440	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Strainer Note: Please verify if required.	4	0%	4	EA	0.975	3.90	\$ 56.5	\$ 220.3	\$ 30.3	\$ 121.0	\$ 341	
441	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Thermometer	8	0%	8	EA	1.008	8.06	\$ 56.5	\$ 455.5	\$ 61.5	\$ 491.8	\$ 947	
442	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	1" Replaceable Filter Note: Please Verify If Required.	8	0%	8	EA	0.375	3.00	\$ 56.5	\$ 169.5	\$ 3.6	\$ 28.8	\$ 198	
443	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Opposed Blade Damper	60	0%	60	EA	1.674	100.44	\$ 56.5	\$ 5,673.4	\$ 53.0	\$ 3,180.0	\$ 8,853	
444	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Nest 7-Day Programmable Thermostat	8	0%	8	EA	1.755	14.04	\$ 56.5	\$ 793.1	\$ 199.0	\$ 1,592.0	\$ 2,385	
445	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Speed Switch (Controller) Note: Verify if required.	32	0%	32	EA	1.095	35.04	\$ 56.5	\$ 1,979.2	\$ 42.5	\$ 1,358.4	\$ 3,338	
446	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Condensate Drain Note: Please Verify If Required.	8	0%	8	EA	1.275	10.20	\$ 56.5	\$ 576.2	\$ 52.8	\$ 422.6	\$ 999	
447	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Thermal Bulb Note: Please Verify If Required.	8	0%	8	EA	0.879	7.03	\$ 56.5	\$ 397.2	\$ 32.0	\$ 255.9	\$ 653	
448	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Filter Dryer Note: Please verify if required.	8	0%	8	EA	0.897	7.18	\$ 56.5	\$ 405.3	\$ 23.0	\$ 184.1	\$ 589	
449	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Connection Vent Adaptor Box Note: Please Verify If Required.	4	0%	4	EA	0.906	3.62	\$ 56.5	\$ 204.7	\$ 35.0	\$ 140.0	\$ 345	
450	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Gravity Backdraft Damper Note: Please verify if required.	16	0%	16	EA	1.674	26.78	\$ 56.5	\$ 1,512.9	\$ 102.5	\$ 1,639.5	\$ 3,152	
					Valves												
451	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Ball Valve	20	0%	20	EA	1.059	21.18	\$ 56.5	\$ 1,196.4	\$ 55.4	\$ 1,108.0	\$ 2,304	
452	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Check valve	8	0%	8	EA	0.822	6.58	\$ 56.5	\$ 371.4	\$ 12.5	\$ 100.0	\$ 471	
453	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Thermal Expansion Valve	8	0%	8	EA	1.737	13.90	\$ 56.5	\$ 784.9	\$ 92.3	\$ 738.1	\$ 1,523	
454	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Pressure And Temperature Relief Valve	4	0%	4	EA	1.245	4.98	\$ 56.5	\$ 281.3	\$ 29.0	\$ 116.0	\$ 397	
					PRV Station & RPBP												
455	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	1" RPBP Manufacturer: Watts Model: #009M2-QT-S Note: Please Verify If Required.	1	0%	1	EA	2.862	2.86	\$ 56.5	\$ 161.7	\$ 388.0	\$ 388.0	\$ 550	

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456	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	1" PRV-1 Manufacturer: Watts Model: LF223S <i>Note: Please Verify If Required.</i>	1	0%	1	EA	3.168	3.17	\$ 56.5	\$ 178.9	\$ 484.8	\$ 484.8	\$ 664	
457	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	1" Shut Off Valve	4	0%	4	EA	1.002	4.01	\$ 56.5	\$ 226.4	\$ 34.9	\$ 139.6	\$ 366	
458	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Pressure Gauge	2	0%	2	EA	1.056	2.11	\$ 56.5	\$ 119.3	\$ 28.8	\$ 57.6	\$ 177	
459	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	House Bib <i>Note: Please Verify If Required.</i>	1	0%	1	EA	2.061	2.06	\$ 56.5	\$ 116.4	\$ 83.2	\$ 83.2	\$ 200	
460	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	1" Strainer <i>Note: Please Verify If Required.</i>	2	0%	2	EA	0.975	1.95	\$ 56.5	\$ 110.1	\$ 30.3	\$ 60.5	\$ 171	
461	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	A-Frame type evaporator Coil <i>Note: Please Verify If Required.</i>	8	0%	8	EA	3.336	26.69	\$ 56.5	\$ 1,507.5	\$ 329.7	\$ 2,637.7	\$ 4,145	
462	MP6.1 & MP6.2	MP6.1 & MP6.2	DIV-23	Mechanical	Support & Hanger 1" Threaded Rod Hanger @8' O.C. <i>Note: Hangers are assumed.</i>	270	0%	270	EA	0.384	103.78	\$ 56.5	\$ 5,861.8	\$ 2.7	\$ 724.3	\$ 6,586	
					Insulation												
463	MP0.1	MP0.1	DIV-23	Mechanical	2" -0.75 LBS/CU.FT . Fiberglass Duct Wrap Min R-5.	914	5%	959	SF	0.065	62.36	\$ 56.5	\$ 3,522.6	\$ 0.9	\$ 900.0	\$ 4,423	
464	MP0.1	MP0.1	DIV-23	Mechanical	1" - 1.5 lbs/cu.ft. Duct Liner	679	5%	713	SF	0.050	35.66	\$ 56.5	\$ 2,014.5	\$ 0.5	\$ 356.6	\$ 2,371	
465			DIV-23	Mechanical	Additional Cost Based on Mechanical work Area	12,506	5%	13,131	SF	0.24	3,151.51	\$ 56.5	\$ 178,014.1	\$ 6.0	\$ 78,787.8	\$ 256,802	
			DIV-26		Electrical												\$ 682,545
					Lighting Fixtures												
466	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	3 Head Theater Light Bath Fixture	24	0%	24	EA	2.854	68.50	\$ 63.9	\$ 4,377.6	\$ 156.8	\$ 3,763.2	\$ 8,141	
467	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	8'x2' LED Light	12	0%	12	EA	3.685	44.22	\$ 63.9	\$ 2,826.4	\$ 268.6	\$ 3,223.4	\$ 6,050	
468	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Pendent Light Fixture	12	0%	12	EA	2.313	27.75	\$ 63.9	\$ 1,773.5	\$ 76.8	\$ 921.7	\$ 2,695	
469	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Recessed Light Fixture	244	0%	244	EA	2.238	545.95	\$ 63.9	\$ 34,892.0	\$ 74.7	\$ 18,236.6	\$ 53,129	
470	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Standard Ceiling Mount Light Fixture	28	0%	28	EA	2.063	57.75	\$ 63.9	\$ 3,690.8	\$ 54.9	\$ 1,537.5	\$ 5,228	
471	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Standard Ceiling Mount Light With Fan Fixture	8	0%	8	EA	3.488	27.90	\$ 63.9	\$ 1,783.1	\$ 167.1	\$ 1,337.0	\$ 3,120	
472	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Wall Mount Light Fixture	24	0%	24	EA	2.338	56.10	\$ 63.9	\$ 3,585.4	\$ 90.0	\$ 2,159.8	\$ 5,745	
					Power Items												
473	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	220 Volt Outlet	12	0%	12	EA	0.653	7.83	\$ 63.9	\$ 500.4	\$ 10.3	\$ 123.5	\$ 624	
474	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Duplex Outlet	166	0%	166	EA	0.585	97.11	\$ 63.9	\$ 6,206.4	\$ 6.9	\$ 1,145.4	\$ 7,352	
475	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	GFCI Ceiling Outlet	8	0%	8	EA	0.673	5.38	\$ 63.9	\$ 343.8	\$ 13.3	\$ 106.4	\$ 450	
476	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	GFCI Duplex Outlet	96	0%	96	EA	0.673	64.56	\$ 63.9	\$ 4,126.1	\$ 13.3	\$ 1,276.8	\$ 5,403	
477	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Media Data/Jack	20	0%	20	EA	0.550	11.00	\$ 63.9	\$ 703.0	\$ 5.7	\$ 114.0	\$ 817	
478	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Recessed Fan Fixture	16	0%	16	EA	2.188	35.00	\$ 63.9	\$ 2,236.9	\$ 98.9	\$ 1,582.1	\$ 3,819	
479	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Single Switch	196	0%	196	EA	0.498	97.51	\$ 63.9	\$ 6,231.9	\$ 3.0	\$ 588.0	\$ 6,820	
480	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Smoke Detector	16	0%	16	EA	1.450	23.20	\$ 63.9	\$ 1,482.7	\$ 45.5	\$ 728.0	\$ 2,211	
481	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Smoke/Carbon Monoxide Detector	12	0%	12	EA	1.588	19.05	\$ 63.9	\$ 1,217.5	\$ 102.2	\$ 1,226.4	\$ 2,444	
482	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Weather proof GFCI Duplex Outlet	8	0%	8	EA	0.810	6.48	\$ 63.9	\$ 414.1	\$ 23.3	\$ 186.4	\$ 601	
483	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Electrical Panel <i>Note: Detail is not given please verify.</i>	4	0%	4	EA	4.285	17.14	\$ 63.9	\$ 1,095.4	\$ 312.0	\$ 1,248.0	\$ 2,343	
					Wiring & Conduits												
484	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Conduits for Lightning Items	5,632	5%	5,914	LF	0.025	147.84	\$ 63.9	\$ 9,448.5	\$ 1.1	\$ 6,505.0	\$ 15,954	
485	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Wiring for Lightning Items	16,896	5%	17,741	LF	0.015	266.11	\$ 63.9	\$ 17,007.4	\$ 0.2	\$ 3,548.2	\$ 20,556	
486	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Conduits for Power Items	8,864	5%	9,307	LF	0.025	232.68	\$ 63.9	\$ 14,870.7	\$ 1.1	\$ 10,237.9	\$ 25,109	
487	E-1.1 to E-4.2	E-1.1 to E-4.2	DIV-26	Electrician	Wiring for Power Items	26,592	5%	27,922	LF	0.015	418.82	\$ 63.9	\$ 26,767.3	\$ 0.2	\$ 5,584.3	\$ 32,352	
488			DIV-26	Electrician	Additional Cost Based on Electrical work Area	12,506	5%	13,131	SF	0.470	6,171.71	\$ 63.9	\$ 394,438.0	\$ 5.9	\$ 77,146.4	\$ 471,584	
			DIV-28		Electronic Safety and Security												\$ 118,839

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489			DIV-28	Electronic Safety and Security (FA)	Allowance for Electronic Safety and Security (12506 SF) Note: Please verify , if required	1	0%	1	LS	1600.768	1,600.77	\$ 63.9	\$ 102,306.1	\$ 16,532.9	\$ 16,532.9	\$ 118,839	
			DIV-31		Earthwork												\$ 102,952
					Excavation												
490	C3.01	A8	DIV-31	Earth worker	Excavation for cont. footing	64	5%	67	CY	0.250	16.77	\$ 104.3	\$ 1,749.7		\$ -	\$ 1,750	
491	C3.01	A8	DIV-31	Earth worker	Excavation for foundation wall	73	5%	77	CY	0.250	19.20	\$ 104.3	\$ 2,002.7		\$ -	\$ 2,003	
492	C2.01, C4.01	C5.03	DIV-31	Earth worker	Excavation for utility pipes Note: Trench size: 2'-0" Wide x 4'-0" High	282	5%	296	CY	0.250	73.97	\$ 104.3	\$ 7,716.8		\$ -	\$ 7,717	
493	C2.01, C4.01	C5.01	DIV-31	Earth worker	Excavation for water & sewer pipes Note: Trench size: 2'-6" Wide x 5'-6" High	271	5%	285	CY	0.250	71.25	\$ 104.3	\$ 7,433.6		\$ -	\$ 7,434	
494	C2.01, C4.01	C5.01	DIV-31	Earth worker	Excavation for water & sewer pipes (Building) Note: Trench size: 2' Wide x 3' High	80	5%	84	CY	0.250	21.00	\$ 104.3	\$ 2,190.9		\$ -	\$ 2,191	
					Backfill												
495	C2.01, C4.01	C5.03	DIV-31	Earth worker	Stabilization material (starts 6" below pipe) 2" minus sewer rock (APWA 31 05 13) Note: Material must be free of slag or recycled asphalt	18	5%	18	CY	1.000	18.49	\$ 104.3	\$ 1,929.2	\$ 45.0	\$ 832.1	\$ 2,761	
496	C2.01, C4.01	C5.03	DIV-31	Earth worker	Pipe zone material (12" above to 6" below the pipe) Dry Condition: Grade 3/4 UTBC (APWA 32 11 23) Wet Condition: 2" minus sewer rock (APWA 31 05 13) Material: Material must be free slag or recycled asphalt	122	5%	128	CY	0.500	63.89	\$ 104.3	\$ 6,665.4	\$ 45.0	\$ 5,750.0	\$ 12,415	
497	C2.01, C4.01	C5.03	DIV-31	Earth worker	Trench zone material 2" minus granular backfill borrow (APWA 3105 13) Notes: Material must be free of slag or recycled asphalt	106	5%	111	CY	0.500	55.48	\$ 104.3	\$ 5,787.6	\$ 45.0	\$ 4,992.8	\$ 10,780	
498	C2.01, C4.01	C5.01	DIV-31	Earth worker	Pipe zone material: well graded granular material compacted to 95" Modified proctor density	70	5%	74	CY	0.500	36.83	\$ 104.3	\$ 3,842.7	\$ 45.0	\$ 3,315.0	\$ 7,158	
499	C2.01, C4.01	C5.01	DIV-31	Earth worker	Backfill for water & sewer pipes	197	5%	207	CY	0.320	66.33	\$ 104.3	\$ 6,920.0		\$ -	\$ 6,920	
500	C2.01, C4.01	C5.01	DIV-31	Earth worker	Backfill for water & sewer pipes (Building)	79	5%	83	CY	0.350	29.07	\$ 104.3	\$ 3,033.0		\$ -	\$ 3,033	
					Grading												
501	C2.01	C2.01	DIV-31	Earth worker	Cut	184	5%	193	CY	0.150	28.97	\$ 104.3	\$ 3,022.1		\$ -	\$ 3,022	
502	C2.01	C2.01	DIV-31	Earth worker	Fill	98	5%	103	CY	0.200	20.50	\$ 104.3	\$ 2,139.0		\$ -	\$ 2,139	
503	C2.01	C2.01	DIV-31	Earth worker	Soil Dispose off	580	5%	609	CY	0.090	54.81	\$ 104.3	\$ 5,718.3		\$ -	\$ 5,718	
					Misc.												
504			DIV-31	Dewatering	Dewatering (8010 SF) Note: Detail is not given, please verify	1	0%	1	LS	200.250	200.25	\$ 104.3	\$ 20,891.7		\$ -	\$ 20,892	
505			DIV-31	Earth worker	Land Clearing and Grubbing Note: Detail is not given, please verify	8,010	5%	8,411	SF	0.008	67.28	\$ 104.3	\$ 7,019.6		\$ -	\$ 7,020	
			DIV-32		Exterior Improvements												\$ 130,311
					Curbs												
506	C1.01	C5.01	DIV-32	Site Concrete	(6" Wide x 1'-6" H) Concrete curb wall	9	5%	9	CY	3.000	27.29	\$ 42.0	\$ 1,146.3	\$ 145.0	\$ 1,319.2	\$ 2,466	

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507	C1.01	C5.01	DIV-32	Site Concrete	(2) #4 Bars	417	5%	438	LBS	0.010	4.38	\$ 42.0	\$ 183.8	\$ 0.9	\$ 393.8	\$ 578	
508	C1.01	C5.01	DIV-32	Site Concrete	30" Concrete curb & gutter	60	5%	63	LF	0.215	13.65	\$ 42.0	\$ 573.3	\$ 47.2	\$ 2,997.5	\$ 3,571	
					Concrete Slab & Pad												
509	C1.01	C5.01	DIV-32	Site Concrete	3'x4' Concrete pad, 4" Thick concrete	0.4	5%	0	CY	10.000	4.62	\$ 42.0	\$ 194.0	\$ 145.0	\$ 67.0	\$ 261	
510	C1.01	C5.01	DIV-32	Site Concrete	3'x4' Concrete pad, 4" Road base	0.4	5%	0	CY	10.000	4.62	\$ 42.0	\$ 194.0	\$ 145.0	\$ 67.0	\$ 261	
					Sidewalk												
511	C1.01	C5.01	DIV-32	Site Concrete	(4" Thk) Concrete Sidewalk - (146 SF)	2	5%	2	CY	3.000	5.62	\$ 42.0	\$ 236.1	\$ 145.0	\$ 271.7	\$ 508	
512	C1.01	C5.01	DIV-32	Site Concrete	(4" Thk) 3/4" Crushed Stone - (146 SF)	2	5%	2	CY	3.000	5.62	\$ 42.0	\$ 236.1	\$ 32.5	\$ 60.9	\$ 297	
					Walkway												
513	C1.01	C5.01	DIV-32	Site Concrete	(4" Thk) Concrete walkway	7	5%	7	CY	2.000	13.81	\$ 42.0	\$ 580.2	\$ 145.0	\$ 1,001.6	\$ 1,582	
514	C1.01	C5.01	DIV-32	Site Concrete	18"x18" Steeping stone	54	0%	54	EA	0.248	13.39	\$ 42.0	\$ 562.4	\$ 11.9	\$ 640.6	\$ 1,203	
					Pavement												
					Asphalt pavement												
515	C1.01	C5.01	DIV-32	Paving	7" of pg grade super pave mix design asphalt	3	5%	3	CY	1.500	5.00	\$ 37.8	\$ 189.1	\$ 160.0	\$ 533.6	\$ 723	
516	C1.01	C5.01	DIV-32	Paving	6" Untreated course	3	5%	3	CY	1.500	4.31	\$ 37.8	\$ 163.0	\$ 45.0	\$ 129.4	\$ 292	
517	C1.01	C5.01	DIV-32	Paving	12" of granular borrow	5	5%	6	CY	1.500	8.62	\$ 37.8	\$ 326.0	\$ 12.5	\$ 71.9	\$ 398	
					Concrete Driveway												
518	C1.01	C5.01	DIV-32	Paving	6" Concrete pavement	99	5%	104	CY	1.500	156.46	\$ 37.8	\$ 5,913.9	\$ 145.0	\$ 15,124.1	\$ 21,038	
519	C1.01	C5.01	DIV-32	Paving	4" Road base	66	5%	69	CY	1.500	103.26	\$ 37.8	\$ 3,903.2	\$ 32.5	\$ 2,237.3	\$ 6,140	
520	C1.01	C5.01	DIV-32	Paving	4" Concrete slab (Building overhang)	4	5%	4	CY	1.500	5.81	\$ 37.8	\$ 219.4	\$ 145.0	\$ 561.2	\$ 781	
521	C1.01	C5.01	DIV-32	Paving	6" Concrete flare drive approach	4	5%	5	CY	1.500	6.98	\$ 37.8	\$ 264.0	\$ 145.0	\$ 675.0	\$ 939	
522	C1.01	C5.01	DIV-32	Paving	4" Road base	3	5%	3	CY	1.500	4.61	\$ 37.8	\$ 174.2	\$ 32.5	\$ 99.9	\$ 274	
					Joints												
523	C1.01	C5.01	DIV-32	Joint Sealants	Expansion joints	19	5%	20	LF	0.154	3.11	\$ 69.5	\$ 216.0	\$ 0.5	\$ 10.1	\$ 226	
524	C1.01	C5.01	DIV-32	Joint Sealants	Expansion-construction joints	214	5%	225	LF	0.200	45.01	\$ 69.5	\$ 3,129.9	\$ 0.5	\$ 101.3	\$ 3,231	
					Stripe												
525	C1.01	C5.01	DIV-32	Site Paint	(4" Wide) Solid yellow parking stall stripe lines	36	5%	38	LF	0.028	1.06	\$ 37.8	\$ 40.0	\$ 2.1	\$ 79.4	\$ 119	
					Misc.												
526	C1.01	C5.01	DIV-32	Site Concrete	Divider Wall	38	5%	40	SF	0.145	5.86	\$ 42.0	\$ 245.9	\$ 4.5	\$ 181.7	\$ 428	
527	C1.01	C5.01	DIV-32	Site Concrete	Shielded light	2	0%	2	EA	2.150	4.30	\$ 42.0	\$ 180.6	\$ 239.0	\$ 478.0	\$ 659	
528	C3.01	C3.01	DIV-32	Exterior improvements	20' x 10' Construction dumpster	1	0%	1	EA	31.000	31.00	\$ 24.1	\$ 748.6	\$ 14,000.0	\$ 14,000.0	\$ 14,749	
					Signage												
529	C1.01	C5.01	DIV-32	Site Signage	No parking sign	3	0%	3	EA	0.666	2.00	\$ 43.7	\$ 87.3	\$ 30.3	\$ 91.0	\$ 178	
530	C1.01	C5.01	DIV-32	Site Signage	Delivery parking only sign	1	0%	1	EA	0.705	0.71	\$ 43.7	\$ 30.8	\$ 45.4	\$ 45.4	\$ 76	
					Erosion Control												
531	C3.01	C3.01	DIV-32	Erosion Control	Temporary construction entrance	401	5%	421	SF	0.025	10.53	\$ 22.1	\$ 232.5	\$ 1.3	\$ 547.5	\$ 780	
532	C3.01	C3.01	DIV-32	Erosion Control	Silt fence	237	5%	249	LF	0.060	14.92	\$ 22.1	\$ 329.5	\$ 0.7	\$ 174.0	\$ 504	
533	C3.01	C3.01	DIV-32	Erosion Control	Filter socks in gutter	7	5%	7	LF	0.100	0.74	\$ 22.1	\$ 16.4	\$ 21.5	\$ 159.4	\$ 176	
534	C3.01	C3.01	DIV-32	Erosion Control	Portable construction toilet	1	0%	1	EA	1.687	1.69	\$ 22.1	\$ 37.3	\$ 799.0	\$ 799.0	\$ 836	
535	C3.01	C3.01	DIV-32	Erosion Control	10' x 10'-6" Gravel pad	1	5%	1	CY	2.000	2.70	\$ 22.1	\$ 59.5	\$ 32.5	\$ 43.8	\$ 103	
536	C3.01	C3.01	DIV-32	Erosion Control	1'x1' Containment earth berm	1	5%	1	CY	2.000	1.59	\$ 22.1	\$ 35.2	\$ 9.5	\$ 7.6	\$ 43	
537	C3.01	C3.01	DIV-32	Erosion Control	10' x 10'-6" Concrete washout area	1	0%	1	EA	5.775	5.78	\$ 22.1	\$ 127.5	\$ 267.8	\$ 267.8	\$ 395	
538	C3.01	C3.01	DIV-32	Erosion Control	Wash-down area ponding storage	1	0%	1	EA	5.775	5.78	\$ 22.1	\$ 127.5	\$ 267.8	\$ 267.8	\$ 395	
538	C3.01	C3.01	DIV-32	Erosion Control	1'x1' Containment each berm all around	1	5%	1	CY	2.000	1.59	\$ 22.1	\$ 35.2	\$ 9.5	\$ 7.6	\$ 43	

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
539	C3.01	C3.01	DIV-32	Erosion Control	4'-6" x 4'-6" Inlet protection 8" Filter socock Filter fabric	4	0%	4	EA	0.595	2.38	\$ 22.1	\$ 52.6	\$ 38.3	\$ 153.0	\$ 206	
540	C3.01	C3.01	DIV-32	Erosion Control	2'-6" x 2'-6" Inlet protection 8" Filter socock Filter fabric	6	0%	6	EA	0.548	3.29	\$ 22.1	\$ 72.6	\$ 22.5	\$ 135.0	\$ 208	
					Fence												
541	C1.01	C5.01	DIV-32	Fencing and Gates - Wood	6' Tall privacy fencing	494	5%	518	LF	0.700	362.73	\$ 37.3	\$ 13,518.6	\$ 31.0	\$ 16,063.8	\$ 29,582	

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LANDSCAPING																	
542	L2.01	L2.01	DIV-32	Landscaper	Tiny Monster Geranium	727	5%	763	SF	0.025	19.08	\$ 18.4	\$ 351.2	\$ 1.6	\$ 1,209.1	\$ 1,560	
543	L2.01	L2.01	DIV-32	Landscaper	Imperial blue lawn SOD	405	5%	425	SF	0.004	1.70	\$ 18.4	\$ 31.3	\$ 0.7	\$ 276.4	\$ 308	
544	L2.01	L2.01	DIV-32	Landscaper	Wasatch grey crushed rock	141	5%	148	SF	0.025	3.70	\$ 18.4	\$ 68.1	\$ 2.2	\$ 331.6	\$ 400	
545	L2.01	L2.01	DIV-32	Landscaper	Green vasa zelkova	2	0%	2	EA	2.782	5.56	\$ 18.4	\$ 102.4	\$ 233.2	\$ 466.4	\$ 569	
546	L2.01	L2.01	DIV-32	Landscaper	Maidenhair tree	4	0%	4	EA	3.248	12.99	\$ 18.4	\$ 239.1	\$ 513.2	\$ 2,052.8	\$ 2,292	
547	L2.01	L2.01	DIV-32	Landscaper	Frans fontaine hornbeam	3	0%	3	EA	2.568	7.70	\$ 18.4	\$ 141.8	\$ 135.3	\$ 405.8	\$ 548	
548	L2.01	L2.01	DIV-32	Landscaper	Horstmann Blue atlas cedar	4	0%	4	EA	2.793	11.17	\$ 18.4	\$ 205.6	\$ 269.9	\$ 1,079.7	\$ 1,285	
549	L2.01	L2.01	DIV-32	Landscaper	Columnar blue spruce	4	0%	4	EA	2.825	11.30	\$ 18.4	\$ 208.0	\$ 397.0	\$ 1,588.0	\$ 1,796	
550	L2.01	L2.01	DIV-32	Landscaper	Arctic fire dogwood	24	0%	24	EA	2.112	50.69	\$ 18.4	\$ 932.9	\$ 199.9	\$ 4,797.6	\$ 5,730	
551	L2.01	L2.01	DIV-32	Landscaper	Tallhedge buckthorn	8	0%	8	EA	1.875	15.00	\$ 18.4	\$ 276.1	\$ 106.8	\$ 854.3	\$ 1,130	
552	L2.01	L2.01	DIV-32	Landscaper	Standing Ovatio little bluestem	157	0%	157	EA	1.689	265.17	\$ 18.4	\$ 4,880.4	\$ 23.0	\$ 3,603.2	\$ 8,484	
553	L2.01	L2.01	DIV-32	Landscaper	Blue grama grass	10	0%	10	EA	1.675	16.75	\$ 18.4	\$ 308.3	\$ 13.0	\$ 129.9	\$ 438	
554	L2.01	L2.01	DIV-32	Landscaper	South town boulders	13	0%	13	EA	1.824	23.71	\$ 18.4	\$ 436.4	\$ 65.0	\$ 845.0	\$ 1,281	
IRRIGATION																	
Outlets																	
555	L3.01	L3.01	DIV-32	Irrigation	4" Pop-up spray head Manufacturer: Rain Bird Model: 1800 *-SAM-PRS SERIES	2	0%	2	EA	0.100	0.20	\$ 24.5	\$ 4.9	\$ 2.0	\$ 3.9	\$ 9	
556	L3.01	L3.01	DIV-32	Irrigation	4" Pop-up spray head Manufacturer: Rain Bird Model: 1800 *-SAM-PRS SERIES	6	0%	6	EA	0.100	0.60	\$ 24.5	\$ 14.7	\$ 2.0	\$ 11.7	\$ 26	
557	L3.01	L3.01	DIV-32	Irrigation	4" Pop-up spray head Manufacturer: Rain Bird Model: 1800 *-SAM-PRS SERIES	4	0%	4	EA	0.100	0.40	\$ 24.5	\$ 9.8	\$ 2.0	\$ 7.8	\$ 18	
Valves																	
558	L3.01	L3.01	DIV-32	Irrigation	Drip Circuit control valve Manufacturer: Rain Bird Model: XCZ-100-PRB-COM DRIP zone kit with 100-PEB control valve and basket filter with built-in PRV	2	0%	2	EA	1.125	2.25	\$ 24.5	\$ 55.2	\$ 251.4	\$ 502.8	\$ 558	
559	L3.01	L3.01	DIV-32	Irrigation	Lawn circuit control valve Manufacturer: Rain Bird Model: 100-PEB	1	0%	1	EA	0.896	0.90	\$ 24.5	\$ 22.0	\$ 96.5	\$ 96.5	\$ 118	
Other Equipment																	
560	L3.01	L3.01	DIV-32	Irrigation	(3'-0" x 1'-6") Concrete pad	0.08	5%	0	CY	10.000	0.88	\$ 24.5	\$ 21.5	\$ 145.0	\$ 12.7	\$ 34	
561	L3.01	L3.01	DIV-32	Irrigation	Backflow preventer	1	0%	1	EA	1.586	1.59	\$ 24.5	\$ 38.9	\$ 495.4	\$ 495.4	\$ 534	
562	L3.01	L3.01	DIV-32	Irrigation	Point of connection	1	0%	1	EA	0.186	0.19	\$ 24.5	\$ 4.6	\$ 16.9	\$ 16.9	\$ 22	
563	L3.01	L3.01	DIV-32	Irrigation	Irrigation controller Manufacturer: Rain Bird Model: ESP8-LXME Controller	1	0%	1	EA	1.822	1.82	\$ 24.5	\$ 44.7	\$ 500.5	\$ 500.5	\$ 545	
Pipes																	
564	L3.01	L3.01	DIV-32	Irrigation	1" Main line Material: Schedule 40 PVC pipe	205	5%	215	LF	0.165	35.43	\$ 24.5	\$ 869.4	\$ 0.9	\$ 198.8	\$ 1,068	
565	L3.01	L3.01	DIV-32	Irrigation	Drip supply line Material: Schedule 40 PVC pipe	301	5%	316	LF	0.165	52.13	\$ 24.5	\$ 1,279.3	\$ 0.9	\$ 292.6	\$ 1,572	
566	L3.01	L3.01	DIV-32	Irrigation	Lateral line Material: Schedule 40 PVC pipe	94	5%	98	LF	0.165	16.20	\$ 24.5	\$ 397.5	\$ 0.9	\$ 90.9	\$ 488	
Drip																	
567	L3.01	L3.01	DIV-32	Irrigation	Drip area Manufacturer: NETAFIM Model: TECHLINE TLCV-18 Pressure compensating landscape drip area with check valve and anti-siphon feature 0.6 GPH emitters at 18" O.C space rows 18" O.C	1,576	5%	1,655	SF	0.025	41.36	\$ 24.5	\$ 1,015.0	\$ 1.2	\$ 1,923.4	\$ 2,938	

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Quantity Takeoff Sheet

GC- Residential Apartments (Prevailing Wages)

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WASTA GE	QTY WITH WASTAG E	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
					Mobilization For Concrete												
568			DIV-32	Site Concrete	Mobilization For Concrete	125	5%	131	CY	0.300	39.35	\$ 42.0		\$ 12.6	\$ 1,652.7	\$ 1,653	
					Mobilization For Aggregate												
569			DIV-32	Site Concrete	Mobilization For Aggregate	3	5%	3	TONS	0.200	0.65	\$ 42.0		\$ 8.4	\$ 27.5	\$ 27	
570			DIV-32	Paving	Mobilization For Aggregate	104	5%	109	TONS	0.200	21.75	\$ 37.8		\$ 7.6	\$ 822.0	\$ 822	
					Mobilization For Fill material												
571			DIV-32	Paving	Mobilization For Fill Material	4	5%	4	TONS	0.500	2.01	\$ 37.8		\$ 18.9	\$ 76.1	\$ 76	
					Mobilization For Asphalt												
572			DIV-32	Paving	Mobilization For Asphalt	6	5%	7	TONS	0.500	3.38	\$ 37.8		\$ 18.9	\$ 127.6	\$ 128	
			DIV-33		Utilities												\$ 85,194
					Utility Pipes												
573	C2.01, C4.01	C5.03	DIV-33	Utilities	18" HDPE pipe	145	5%	152	LF	1.014	154.21	\$ 73.0	\$ 11,262.0	\$ 21.0	\$ 3,193.7	\$ 14,456	
574	C2.01, C4.01	C5.03	DIV-33	Utilities	12" HDPE	216	5%	227	LF	0.785	177.83	\$ 73.0	\$ 12,986.7	\$ 14.0	\$ 3,172.3	\$ 16,159	
575	C2.01, C4.01	C5.03	DIV-33	Utilities	18" RCP	17	5%	18	LF	1.035	18.23	\$ 73.0	\$ 1,331.3	\$ 29.5	\$ 518.9	\$ 1,850	
576	C2.01, C4.01	C5.03	DIV-33	Utilities	12" RCP	57	5%	60	LF	0.894	53.76	\$ 73.0	\$ 3,926.0	\$ 21.4	\$ 1,285.1	\$ 5,211	
577	C2.01, C4.01	C5.03	DIV-33	Utilities	8" PVC SDR-35	226	5%	237	LF	0.544	128.94	\$ 73.0	\$ 9,416.2	\$ 13.4	\$ 3,164.2	\$ 12,580	
578	C2.01, C4.01	C5.03	DIV-33	Utilities	1-1/2" Type K copper water services line	216	5%	227	LF	0.355	80.52	\$ 73.0	\$ 5,880.5	\$ 15.0	\$ 3,411.4	\$ 9,292	
579	C2.01, C4.01	C5.03	DIV-33	Utilities	2" Type K copper fire line	91	5%	96	LF	0.228	21.85	\$ 73.0	\$ 1,595.5	\$ 24.5	\$ 2,351.5	\$ 3,947	
580	C2.01, C4.01	C5.03	DIV-33	Utilities	Natural gas line Note: Installed and provided by Dominion Company	259	5%	271	LF		-	\$ 73.0	\$ -		\$ -	\$ -	
581	C2.01, C4.01	C5.03	DIV-33	Utilities	Electrical lines	236	5%	248	LF	0.008	1.98	\$ 73.0	\$ 144.8	\$ 0.4	\$ 99.1	\$ 244	
582	C2.01, C4.01	C5.03	DIV-33	Utilities	1" Landscape stub	22	5%	23	LF	0.050	1.16	\$ 73.0	\$ 84.9	\$ 2.4	\$ 56.5	\$ 141	
583	C2.01, C4.01	C5.03	DIV-33	Utilities	4" Perforated Trench drain	734	5%	771	LF	0.154	118.68	\$ 73.0	\$ 8,667.3	\$ 1.2	\$ 924.8	\$ 9,592	
584	C2.01, C4.01	C5.03	DIV-33	Utilities	Cleanout box	2	0%	2	EA	0.772	1.54	\$ 73.0	\$ 112.8	\$ 85.0	\$ 170.0	\$ 283	
585	C2.01, C4.01	C5.03	DIV-33	Utilities	Area drain	6	0%	6	EA	0.935	5.61	\$ 73.0	\$ 409.8	\$ 26.4	\$ 158.6	\$ 568	
586	C2.01, C4.01	C5.03	DIV-33	Utilities	1-1/2" Water meter	1	0%	1	EA	1.342	1.34	\$ 73.0	\$ 98.0	\$ 247.8	\$ 247.8	\$ 346	
					Natural gas meter												
587	C2.01, C4.01	C5.03	DIV-33	Utilities	Note: Installed and provided by Dominion Company	4	0%	4	EA	2.150	8.60	\$ 73.0	\$ 628.1	\$ 185.0	\$ 740.0	\$ 1,368	
588	C2.01, C4.01	C5.03	DIV-33	Utilities	Fire hydrant	1	0%	1	EA	3.254	3.25	\$ 73.0	\$ 237.6	\$ 2,909.8	\$ 2,909.8	\$ 3,147	
589	C2.01, C4.01	C5.03	DIV-33	Utilities	Electricity meter	4	0%	4	EA	1.085	4.34	\$ 73.0	\$ 316.9	\$ 150.0	\$ 600.0	\$ 917	
					Inlet/Catch Basin												
590	C2.01, C4.01	C5.03	DIV-33	Utilities	(4'-0" x 4'-0") Storm drain cleanout (SDCO box)	2	0%	2	EA	3.220	6.44	\$ 73.0	\$ 470.3	\$ 1,355.0	\$ 2,709.9	\$ 3,180	
591	C2.01, C4.01	C5.03	DIV-33	Utilities	(2'-10" x 2'-10") Storm drain catch basin with grate (SDCB)	2	0%	2	EA	2.545	5.09	\$ 73.0	\$ 371.7	\$ 770.0	\$ 1,540.0	\$ 1,912	
SUB TOTAL										Total Lab. Hours =	42,307	Total Lab	\$ 2,370,197	Total Mat. Cost	\$ 1,445,136	\$ 3,815,333	\$ 3,504,320
MATERIAL TAX											9.5%			\$ 137,288	\$ 137,288	\$ 137,288	
OVERHEAD AND PROFIT											25%	\$ 592,549		\$ 361,284	\$ 953,833	\$ 953,833	
TOTAL BASE BID												\$ 2,962,746		\$ 1,943,707	\$ 4,906,454	\$ 4,595,441	

- 2x6 Exterior wall (8'-1" H)
- (2) 2x4 Party wall (8'-1" H)
- 2x6 Interior wall (8'-1" H)
- 2x4 Interior wall (8'-1" H)
- Extra studs @ 2x6 Exterior wall (8'-1" H)
- Extra studs @ (2) 2x4 Party wall (8'-1" H)
- Extra studs @ 2x6 Interior wall (8'-1" H)
- Extra studs @ 2x4 Interior wall (8'-1" H)
- 2x6 Exterior wall (8'-6" H)
- Extra studs @ 2x6 Exterior wall (8'-6" H)
- (2) 2x4 Party wall (8'-6" H)
- Extra studs @ (2) 2x4 Party wall (8'-6" H)
- 2x4 Interior wall (8'-6" H)
- 2x2 Interior wall (8'-6" H)
- Extra studs @ 2x4 Interior wall (8'-6" H)
- Extra studs @ 2x2 Interior wall (8'-6" H)
- M.R gyp board @ 2x4 wall
- M.R gyp board @ 2x6 wall
- (3) 2x12 Stringer
- (3'-6" Long x 0'-10" Wide) Wood tread (15 EA)
- (3'-6" x 3'-6") Wood landing
- Handrail
- Wood guardrail (3'-0" H)
- 5/8" Type X gyp board
- Tempered laminated safety glass partition (8'-6" H)

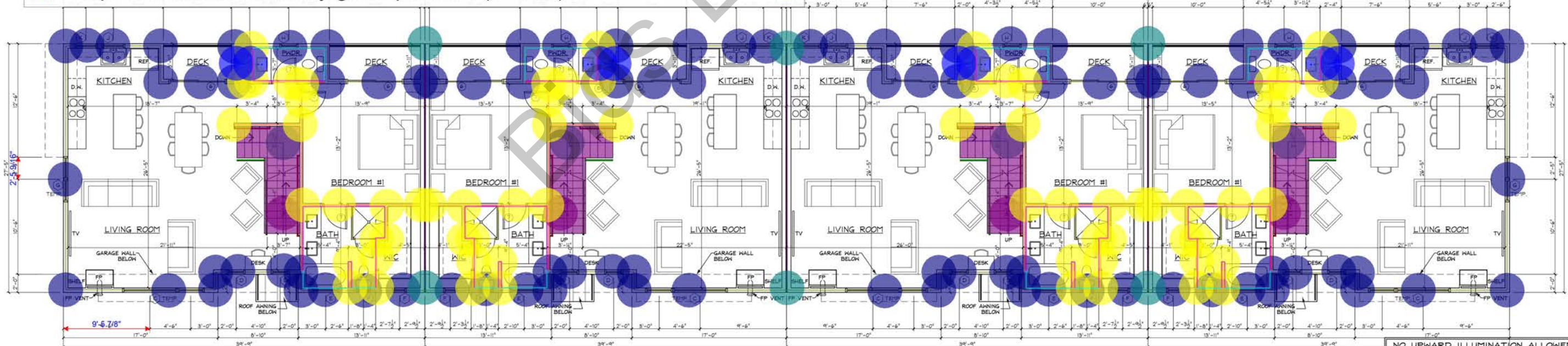
373.1 FT	
73.3 FT	
95.0 FT	
120.2 FT	
44.0 EA	
6.0 EA	
11.0 EA	
40.0 EA	
431.5 FT	
94.0 EA	
80.3 FT	
6.0 EA	
268.0 FT	
6.2 FT	
68.0 EA	
8.0 EA	
174.6 FT	
84.4 FT	
61.1 FT	
4.0 EA	
4.0 EA	
54.8 FT	
46.1 FT	
228.0 SQ FT	
24.4 FT	



OR PLAN

1,013 TOTAL SQ.FT. (79 LIVING SQ.FT.) PER UNIT

SEE GENERAL GARAGE NOTES ON SHEET 2 FOR SPECIAL GARAGE CODE REQUIREMENTS.



NO UPWARD ILLUMINATION ALLOWED
NO LIGHT MAY TRESPASS ON TO
ADJACENT LOTS.

SEE SHEET #A-2 FOR ADD. NOTES

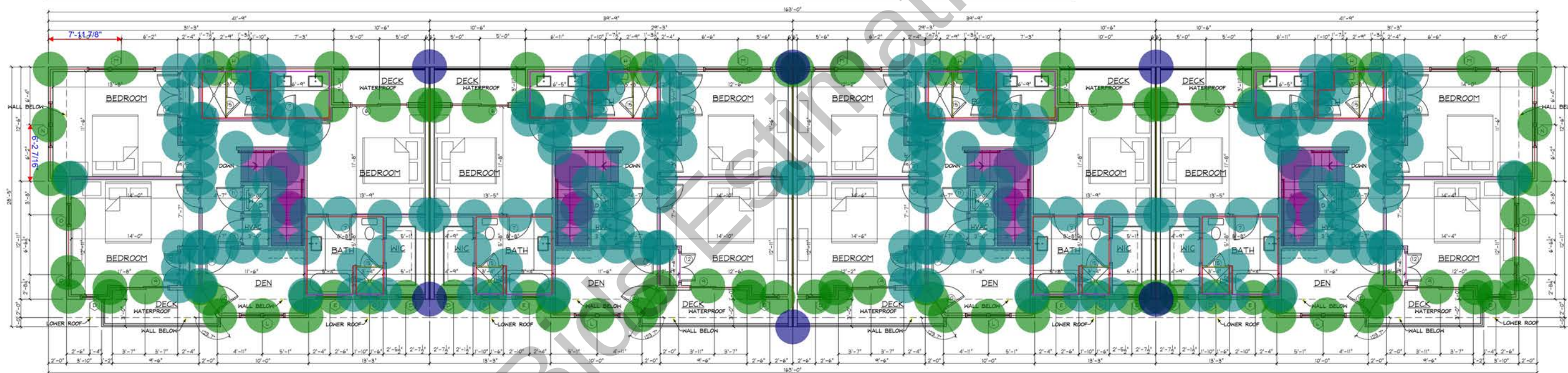
SECOND FLOOR PLAN

SCALE: 3/16"=1'-0" 1,002 SQ.FT. PER UNIT



- 2x6 Exterior wall (8'-6" H)
- Extra studs @ 2x6 Exterior wall (8'-6" H)
- (2) 2x4 Party wall (8'-6" H)
- Extra studs @ (2) 2x4 Party wall (8'-1" H)
- 2x4 Interior wall (8'-6" H)
- Extra studs @ 2x4 Interior wall (8'-6" H)
- M.R gyp board @ 2x4 wall
- M.R gyp board @ 2x6 wall
- (3'-6" Long x 0'-10" Wide) Wood tread (15 EA)
- (3'-6" x 3'-6") Wood landing
- (3) 2x12 Stringer
- Handrail
- 5/8" Type X gyp board
- Tempered laminated safety glass partition (8'-6" H)

402.8 FT	
97.0 EA	
79.3 FT	
6.0 EA	
647.5 FT	
188.0 EA	
256.0 FT	
93.3 FT	
4.0 EA	
4.0 EA	
55.6 FT	
47.5 FT	
197.8 SQ FT	
32.0 FT	



SEE SHEET #A-2 FOR ADD. NOTES

THIRD FLOOR PLAN

SCALE: 1/4" = 1'-0" 1,006 SQ.FT. PER UNIT



- (2) 2x6-C-1 (8'-6" H)
- (3) 2x6-C-2 (8'-6" H)
- (2) 2x8 (HDR-1)
- (2) 2x8 (HDR-2)
- Engineered trusses @ 24" O.C
- 1/2" CDX or OSB plywood sheathing
- R-49 Batt insulation

- 64.0 EA
- 36.0 EA
- 117.7 FT
- 113.1 FT
- 4791.0 SQ FT
- 4794.0 SQ FT
- 4136.7 SQ FT

FLOOR BEAM SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
FB-1	(3) 1 3/4"x18"	LVL	2.0E	
FB-2	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-3	(3) 1 3/4"x18"	LVL	2.0E	
FB-4	(3) 1 3/4"x9 1/2"	LVL	2.0E	
FB-5	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-5a	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-5b	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6a	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6b	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6c	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6d	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-7	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-7a	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-8	(3) 1 3/4"x18"	LVL	2.0E	
FB-8a	(3) 1 3/4"x18"	LVL	2.0E	
FB-9	(2) 1 3/4"x11 7/8"	LVL	2.0E	

STRUCTURAL HEADER SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 2x8	#2 DF	#2 DF	
HDR-1a	(2) 2x8	#2 DF	#2 DF	
HDR-1b	(2) 2x8	#2 DF	#2 DF	
HDR-2	(2) 2x8	#2 DF	#2 DF	
HDR-3	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-3a	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-3b	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-3c	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-4	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-4a	(2) 1-3/4" x 7-1/4"	LVL	2.0E	

STRUCTURAL COLUMN SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	(2) 2x6	#2 DF	#2 DF	
C-2	(3) 2x6	#2 DF	#2 DF	
C-3	6x6	#2 DF	#2 DF	



ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

PRELIMINARY DRAWINGS ONLY
NOT RELEASED FOR CONSTRUCTION

-  TJI' s @ 16" O.C
-  2x10 @ 16" O.C
-  (2) 2x6-C-1a (8'-6" H)
-  (3) 2x6-C-2a (8'-6" H)
-  (3) 2x6-C-2 (8'-6" H)
-  (2) 2x6-C-1 (8'-6" H)
-  6x6-C-3 (8'-6" H)
-  (2) 2x8 (HDR-1)
-  (2) 1-3/4"x7-1/4" LVL (HDR-3)
-  (2) 1-3/4"x11-7/8" LVL (FB-9)
-  (3) 1-3/4"x18" LVL (FB-8)
-  (3) 1-3/4"x18" LVL (FB-3)
-  (2) 1-3/4"x11-7/8" LV (FB-7)
-  (2) 1-3/4"x11-7/8" LVL (FB-6)
-  (2) 1-3/4"x11-7/8" LVL (FB-10)
-  (2) 2x8 (HDR-2)
-  2x12 Rim joist
-  Engineered trusses @ 24" O.C
-  1/2" CDX or OSB plywood sheathing

3805.1 SQ FT

335.0 SQ FT

38.0 EA

62.0 EA

1.0 EA

5.0 EA

6.0 EA

62.3 FT

118.2 FT

25.3 FT

89.3 FT

12.0 FT

72.7 FT

175.0 FT

27.9 FT

29.4 FT

320.8 FT

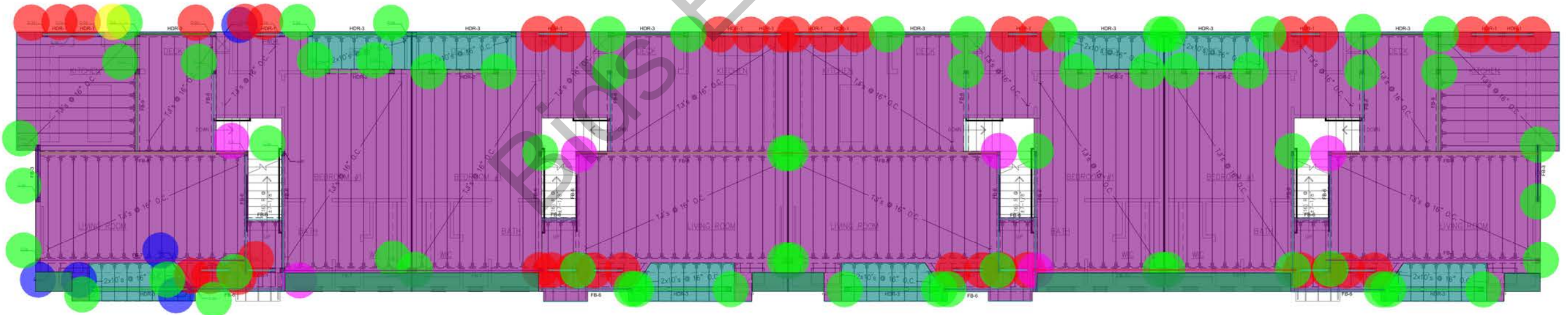
135.8 SQ FT

136.2 SQ FT

MARK	SIZE	TYPE	GRADE	COMMENTS
FB-1	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-2	(2) 1 3/4"x11 7/8"	LVL	2.00	OPT WINDS
FB-3	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-4	(2) 1 3/4"x11 7/8"	LVL	2.00	OPT WINDS
FB-5	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-7	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-8	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-9	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-10	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-11	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-12	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-13	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-14	(2) 1 3/4"x11 7/8"	LVL	2.00	OPT WINDS
FB-15	(2) 1 3/4"x11 7/8"	LVL	2.00	OPT WINDS
FB-16	(2) 1 3/4"x11 7/8"	LVL	2.00	

MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 2x8	#2 DF	#2 DF	
HDR-2	(2) 2x8	#2 DF	#2 DF	
HDR-3	(2) 2x8	#2 DF	#2 DF	
HDR-4	(2) 2x8	#2 DF	#2 DF	
HDR-5	(2) 2x8	#2 DF	#2 DF	
HDR-6	(2) 2x8	#2 DF	#2 DF	
HDR-7	(2) 2x8	#2 DF	#2 DF	
HDR-8	(2) 2x8	#2 DF	#2 DF	
HDR-9	(2) 2x8	#2 DF	#2 DF	
HDR-10	(2) 2x8	#2 DF	#2 DF	
HDR-11	(2) 2x8	#2 DF	#2 DF	
HDR-12	(2) 2x8	#2 DF	#2 DF	
HDR-13	(2) 2x8	#2 DF	#2 DF	
HDR-14	(2) 2x8	#2 DF	#2 DF	
HDR-15	(2) 2x8	#2 DF	#2 DF	
HDR-16	(2) 2x8	#2 DF	#2 DF	
HDR-17	(2) 2x8	#2 DF	#2 DF	
HDR-18	(2) 2x8	#2 DF	#2 DF	
HDR-19	(2) 2x8	#2 DF	#2 DF	
HDR-20	(2) 2x8	#2 DF	#2 DF	
HDR-21	(2) 2x8	#2 DF	#2 DF	
HDR-22	(2) 2x8	#2 DF	#2 DF	
HDR-23	(2) 2x8	#2 DF	#2 DF	
HDR-24	(2) 2x8	#2 DF	#2 DF	
HDR-25	(2) 2x8	#2 DF	#2 DF	
HDR-26	(2) 2x8	#2 DF	#2 DF	
HDR-27	(2) 2x8	#2 DF	#2 DF	
HDR-28	(2) 2x8	#2 DF	#2 DF	
HDR-29	(2) 2x8	#2 DF	#2 DF	
HDR-30	(2) 2x8	#2 DF	#2 DF	
HDR-31	(2) 2x8	#2 DF	#2 DF	
HDR-32	(2) 2x8	#2 DF	#2 DF	
HDR-33	(2) 2x8	#2 DF	#2 DF	
HDR-34	(2) 2x8	#2 DF	#2 DF	
HDR-35	(2) 2x8	#2 DF	#2 DF	
HDR-36	(2) 2x8	#2 DF	#2 DF	
HDR-37	(2) 2x8	#2 DF	#2 DF	
HDR-38	(2) 2x8	#2 DF	#2 DF	
HDR-39	(2) 2x8	#2 DF	#2 DF	
HDR-40	(2) 2x8	#2 DF	#2 DF	
HDR-41	(2) 2x8	#2 DF	#2 DF	
HDR-42	(2) 2x8	#2 DF	#2 DF	
HDR-43	(2) 2x8	#2 DF	#2 DF	
HDR-44	(2) 2x8	#2 DF	#2 DF	
HDR-45	(2) 2x8	#2 DF	#2 DF	
HDR-46	(2) 2x8	#2 DF	#2 DF	
HDR-47	(2) 2x8	#2 DF	#2 DF	
HDR-48	(2) 2x8	#2 DF	#2 DF	
HDR-49	(2) 2x8	#2 DF	#2 DF	
HDR-50	(2) 2x8	#2 DF	#2 DF	
HDR-51	(2) 2x8	#2 DF	#2 DF	
HDR-52	(2) 2x8	#2 DF	#2 DF	
HDR-53	(2) 2x8	#2 DF	#2 DF	
HDR-54	(2) 2x8	#2 DF	#2 DF	
HDR-55	(2) 2x8	#2 DF	#2 DF	
HDR-56	(2) 2x8	#2 DF	#2 DF	
HDR-57	(2) 2x8	#2 DF	#2 DF	
HDR-58	(2) 2x8	#2 DF	#2 DF	
HDR-59	(2) 2x8	#2 DF	#2 DF	
HDR-60	(2) 2x8	#2 DF	#2 DF	
HDR-61	(2) 2x8	#2 DF	#2 DF	
HDR-62	(2) 2x8	#2 DF	#2 DF	
HDR-63	(2) 2x8	#2 DF	#2 DF	
HDR-64	(2) 2x8	#2 DF	#2 DF	
HDR-65	(2) 2x8	#2 DF	#2 DF	
HDR-66	(2) 2x8	#2 DF	#2 DF	
HDR-67	(2) 2x8	#2 DF	#2 DF	
HDR-68	(2) 2x8	#2 DF	#2 DF	
HDR-69	(2) 2x8	#2 DF	#2 DF	
HDR-70	(2) 2x8	#2 DF	#2 DF	
HDR-71	(2) 2x8	#2 DF	#2 DF	
HDR-72	(2) 2x8	#2 DF	#2 DF	
HDR-73	(2) 2x8	#2 DF	#2 DF	
HDR-74	(2) 2x8	#2 DF	#2 DF	
HDR-75	(2) 2x8	#2 DF	#2 DF	
HDR-76	(2) 2x8	#2 DF	#2 DF	
HDR-77	(2) 2x8	#2 DF	#2 DF	
HDR-78	(2) 2x8	#2 DF	#2 DF	
HDR-79	(2) 2x8	#2 DF	#2 DF	
HDR-80	(2) 2x8	#2 DF	#2 DF	
HDR-81	(2) 2x8	#2 DF	#2 DF	
HDR-82	(2) 2x8	#2 DF	#2 DF	
HDR-83	(2) 2x8	#2 DF	#2 DF	
HDR-84	(2) 2x8	#2 DF	#2 DF	
HDR-85	(2) 2x8	#2 DF	#2 DF	
HDR-86	(2) 2x8	#2 DF	#2 DF	
HDR-87	(2) 2x8	#2 DF	#2 DF	
HDR-88	(2) 2x8	#2 DF	#2 DF	
HDR-89	(2) 2x8	#2 DF	#2 DF	
HDR-90	(2) 2x8	#2 DF	#2 DF	
HDR-91	(2) 2x8	#2 DF	#2 DF	
HDR-92	(2) 2x8	#2 DF	#2 DF	
HDR-93	(2) 2x8	#2 DF	#2 DF	
HDR-94	(2) 2x8	#2 DF	#2 DF	
HDR-95	(2) 2x8	#2 DF	#2 DF	
HDR-96	(2) 2x8	#2 DF	#2 DF	
HDR-97	(2) 2x8	#2 DF	#2 DF	
HDR-98	(2) 2x8	#2 DF	#2 DF	
HDR-99	(2) 2x8	#2 DF	#2 DF	
HDR-100	(2) 2x8	#2 DF	#2 DF	

MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	(2) 2x8	#2 DF	#2 DF	
C-2	(2) 2x8	#2 DF	#2 DF	
C-3	(2) 2x8	#2 DF	#2 DF	
C-4	(2) 2x8	#2 DF	#2 DF	
C-5	(2) 2x8	#2 DF	#2 DF	
C-6	(2) 2x8	#2 DF	#2 DF	
C-7	(2) 2x8	#2 DF	#2 DF	
C-8	(2) 2x8	#2 DF	#2 DF	
C-9	(2) 2x8	#2 DF	#2 DF	
C-10	(2) 2x8	#2 DF	#2 DF	
C-11	(2) 2x8	#2 DF	#2 DF	
C-12	(2) 2x8	#2 DF	#2 DF	
C-13	(2) 2x8	#2 DF	#2 DF	
C-14	(2) 2x8	#2 DF	#2 DF	
C-15	(2) 2x8	#2 DF	#2 DF	
C-16	(2) 2x8	#2 DF	#2 DF	
C-17	(2) 2x8	#2 DF	#2 DF	
C-18	(2) 2x8	#2 DF	#2 DF	
C-19	(2) 2x8	#2 DF	#2 DF	
C-20	(2) 2x8	#2 DF	#2 DF	
C-21	(2) 2x8	#2 DF	#2 DF	
C-22	(2) 2x8	#2 DF	#2 DF	
C-23	(2) 2x8	#2 DF	#2 DF	
C-24	(2) 2x8	#2 DF	#2 DF	
C-25	(2) 2x8	#2 DF	#2 DF	
C-26	(2) 2x8	#2 DF	#2 DF	
C-27	(2) 2x8	#2 DF	#2 DF	
C-28	(2) 2x8	#2 DF	#2 DF	
C-29	(2) 2x8	#2 DF	#2 DF	
C-30	(2) 2x8	#2 DF	#2 DF	
C-31	(2) 2x8	#2 DF	#2 DF	
C-32	(2) 2x8	#2 DF	#2 DF	
C-33	(2) 2x8	#2 DF	#2 DF	
C-34	(2) 2x8	#2 DF	#2 DF	
C-35	(2) 2x8	#2 DF	#2 DF	
C-36	(2) 2x8	#2 DF	#2 DF	
C-37	(2) 2x8	#2 DF	#2 DF	
C-38	(2) 2x8	#2 DF	#2 DF	
C-39	(2) 2x8	#2 DF	#2 DF	
C-40	(2) 2x8	#2 DF	#2 DF	
C-41	(2) 2x8	#2 DF	#2 DF	
C-42	(2) 2x8	#2 DF	#2 DF	
C-43	(2) 2x8	#2 DF	#2 DF	
C-44	(2) 2x8	#2 DF	#2 DF	
C-45	(2) 2x8	#2 DF	#2 DF	
C-46	(2) 2x8	#2 DF	#2 DF	
C-47	(2) 2x8	#2 DF	#2 DF	
C-48	(2) 2x8	#2 DF	#2 DF	
C-49	(2) 2x8	#2 DF	#2 DF	
C-50	(2) 2x8	#2 DF	#2 DF	
C-51	(2) 2x8	#2 DF	#2 DF	
C-52	(2) 2x8	#2 DF	#2 DF	
C-53	(2) 2x8	#2 DF	#2 DF	
C-54	(2) 2x8	#2 DF	#2 DF	
C-55	(2) 2x8	#2 DF	#2 DF	
C-56	(2) 2x8	#2 DF	#2 DF	
C-57	(2) 2x8	#2 DF	#2 DF	
C-58	(2) 2x8	#2 DF	#2 DF	
C-59	(2) 2x8	#2 DF	#2 DF	
C-60	(2) 2x8	#2 DF	#2 DF	
C-61	(2) 2x8	#2 DF	#2 DF	
C-62	(2) 2x8	#2 DF	#2 DF	
C-63	(2) 2x8	#2 DF	#2 DF	
C-64	(2) 2x8	#2 DF	#2 DF	
C-65	(2) 2x8	#2 DF	#2 DF	
C-66	(2) 2x8	#2 DF	#2 DF	
C-67	(2) 2x8	#2 DF	#2 DF	
C-68	(2) 2x8	#2 DF	#2 DF	
C-69	(2) 2x8	#2 DF	#2 DF	
C-70	(2) 2x8	#2 DF	#2 DF	
C-71	(2) 2x8	#2 DF	#2 DF	
C-72	(2) 2x8	#2 DF	#2 DF	
C-73	(2) 2x8	#2 DF	#2 DF	
C-74	(2) 2x8	#2 DF	#2 DF	
C-75	(2) 2x8	#2 DF	#2 DF	
C-76	(2) 2x8	#2 DF	#2 DF	
C-77	(2) 2x8	#2 DF	#2 DF	
C-78	(2) 2x8	#2 DF	#2 DF	
C-79	(2) 2x8	#2 DF	#2 DF	
C-80	(2) 2x8	#2 DF	#2 DF	
C-81	(2) 2x8	#2 DF	#2 DF	
C-82	(2) 2x8	#2 DF	#2 DF	
C-83	(2) 2x8	#2 DF	#2 DF	
C-84	(2) 2x8	#2 DF	#2 DF	
C-85	(2) 2x8	#2 DF	#2 DF	
C-86	(2) 2x8	#2 DF	#2 DF	
C-87	(2) 2x8	#2 DF	#2 DF	
C-88	(2) 2x8	#2 DF	#2 DF	
C-89	(2) 2x8	#2 DF	#2 DF	
C-90	(2) 2x8	#2 DF	#2 DF	
C-91	(2) 2x8	#2 DF	#2 DF	
C-92	(2) 2x8	#2 DF	#2 DF	
C-93	(2) 2x8	#2 DF	#2 DF	
C-94	(2) 2x8	#2 DF	#2 DF	
C-95	(2) 2x8	#2 DF	#2 DF	
C-96	(2) 2x8	#2 DF	#2 DF	
C-97	(2) 2x8	#2 DF	#2 DF	
C-98	(2) 2x8	#2 DF	#2 DF	
C-99	(2) 2x8	#2 DF	#2 DF	
C-100	(2) 2x8	#2 DF	#2 DF	



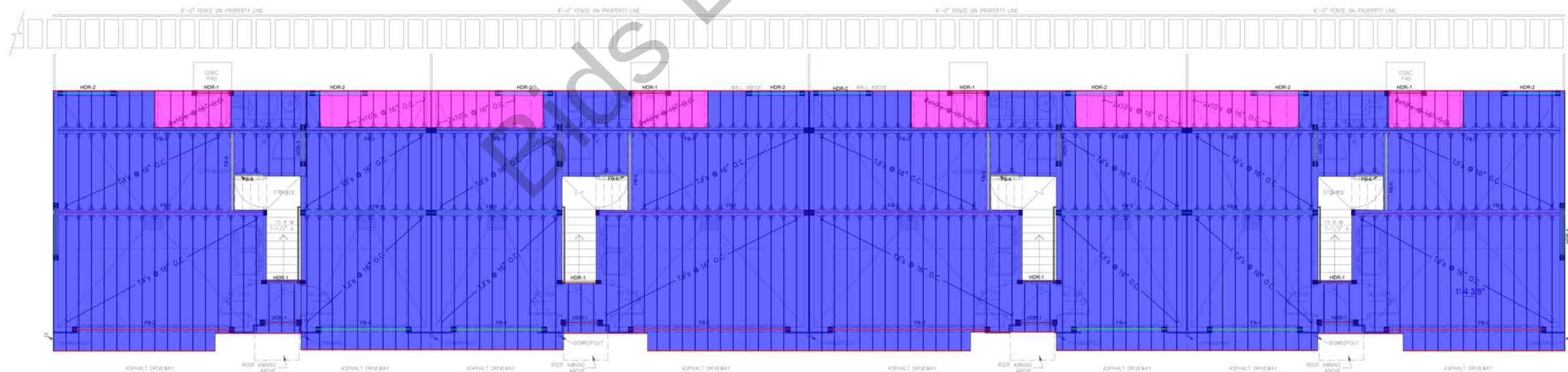
SECOND FLOOR FRAMING PLAN

SCALE: 3/16"=1'-0"

PRELIMINARY DRAWINGS ONLY
NOT RELEASED FOR CONSTRUCTION

- 2x12 Rim joist

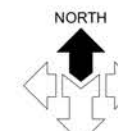
STRUCTURAL COLUMN SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	(2) 2x8	#2 DF	#2 DF	
C-2	(1) 2x8	#2 DF	#2 DF	
C-3	6x8	#2 DF	#2 DF	



THIRD FLOOR FRAMING PLAN

SCALE: $1/4"=1'-0"$

PRELIMINARY DRAWINGS ONLY
NOT RELEASED FOR CONSTRUCTION



GENERAL NOTES:
ALL WORK TO COMPLY WITH GOVERNING AGENCY'S STANDARDS AND SPECIFICATIONS.
COORDINATE WITH GOVERNING AGENCY PRIOR TO DEMOLITION OF ANY PUBLIC UTILITY.

UTILITY TYPE	PROVIDER
WATER	SALT LAKE CITY PUBLIC UTILITIES
STORM	SALT LAKE CITY PUBLIC UTILITIES
COMMUNICATIONS	COMCAST
COMMUNICATIONS	CENTURY LINK
COMMUNICATIONS	INTEGRA
SANITARY SEWER	MOUNT OLYMPUS IMPROVEMENT DISTRICT
NATURAL GAS	DOMINION ENERGY
POWER	ROCKY MOUNTAIN POWER

KEYED NOTES:
DEMOLISH AND/OR REMOVE THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.

- EXISTING SITE FEATURES (FENCES, GATES, BOLLARDS, GRAVEL DRIVEWAYS, IRRIGATION GATES, CONCRETE DITCHES, WHEEL STOPS, LANDSCAPING, GROUND LIGHTING, IRRIGATION, MOWSTRIPS, ETC.) TO BE REMOVED/DEMOLISHED AND PROPERLY DISPOSED OF.
- EXISTING WALL, INCLUDING FOOTINGS TO BE REMOVED/DEMOLISHED AND PROPERLY DISPOSED OF.
- EXISTING TREE(S) TO BE REMOVED AND PROPERLY DISPOSED OF.
- EXISTING BUILDING/STRUCTURE/BASEMENT (INCLUDING WALLS, FOOTINGS, CONCRETE SLABS, LIFTS, OVERHANGS, AWNINGS, ETC.) TO BE REMOVED/DEMOLISHED AND PROPERLY DISPOSED OF.
- EXISTING WATER SERVICE TO BE KILLED AT MAIN, PER SALT LAKE CITY PUBLIC UTILITIES STANDARDS AND SPECIFICATIONS.
- CONTRACTOR TO REMOVE EXISTING WATER METER EQUIPMENT AND COORDINATE THE RETURN TO SALT LAKE CITY PUBLIC UTILITIES. EXISTING WATER METER VAULT AND ASSOCIATED WATER SERVICE LINE TO BE REMOVED/DEMOLISHED AND PROPERLY DISPOSED OF.
- COORDINATE WITH DOMINION ENERGY TO PINCH EXISTING GAS SERVICE AT PROPERTY LINE.
- COORDINATE WITH ROCKY MOUNTAIN POWER TO TERMINATE EXISTING POWER SERVICE.
- EXISTING SITE FEATURE TO REMAIN.

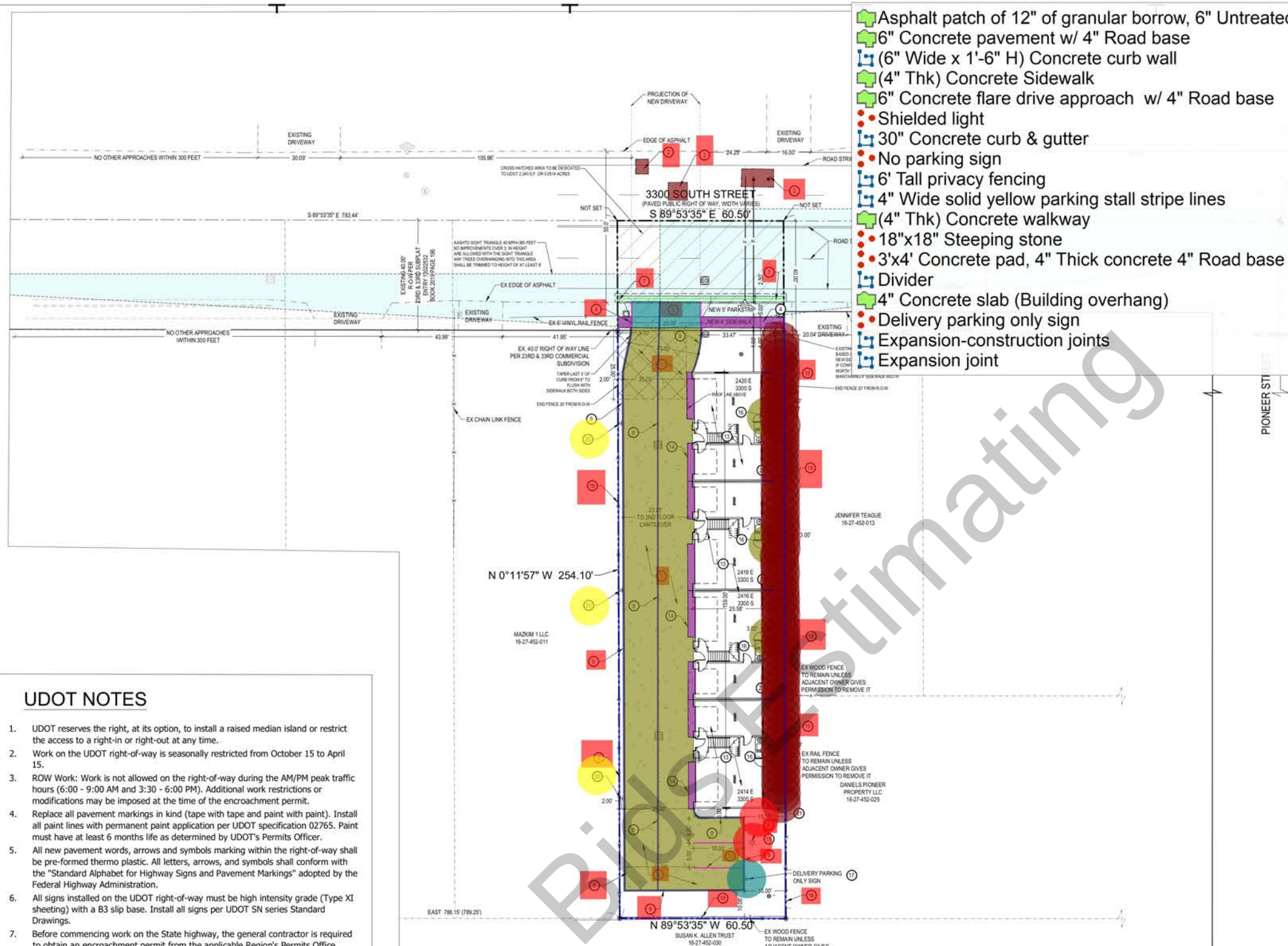
- Remove wire fence
- Remove tree
- Remove existing building/structure/basement (including wall, footing, concrete slabs, lift, overhang, awning etc)
- Remove concrete driveway & drive approach
- Remove concrete
- Remove concrete stair
- Remove gas meter
- Remove Railroad tie wall
- Remove iron fence
- Remove asphalt driveway
- Remove existing wall including footing
- Remove sign

- 218.8 FT
- 13.0 EA
- 891.5 SQ FT
- 696.0 SQ FT
- 654.8 SQ FT
- 36.9 SQ FT
- 1.0 EA
- 29.5 FT
- 39.5 FT
- 148.1 SQ FT
- 62.5 FT
- 3.0 EA



UDOT NOTES

- UDOT reserves the right, at its option, to install a raised median island or restrict the access to a right-in or right-out at any time.
- Work on the UDOT right-of-way is seasonally restricted from October 15 to April 15.
- ROW Work: Work is not allowed on the right-of-way during the AM/PM peak traffic hours (6:00 - 9:00 AM and 3:30 - 6:00 PM). Additional work restrictions or modifications may be imposed at the time of the encroachment permit.
- Replace all pavement markings in kind (tape with tape and paint with paint). Install all paint lines with permanent paint application per UDOT specification 02765. Paint must have at least 6 months life as determined by UDOT's Permits Officer.
- All new pavement words, arrows and symbols marking within the right-of-way shall be pre-formed thermo plastic. All letters, arrows, and symbols shall conform with the "Standard Alphabet for Highway Signs and Pavement Markings" adopted by the Federal Highway Administration.
- All signs installed on the UDOT right-of-way must be high intensity grade (Type XI sheeting) with a B3 slip base. Install all signs per UDOT SN series Standard Drawings.
- Before commencing work on the State highway, the general contractor is required to obtain an encroachment permit from the applicable Region's Permits Office before working within the State right-of-way.
- Road cuts within UDOT ROW are only allowed as shown on plan.
- For all utility taps (road cuts), use flowable fill per UDOT's current mix design (50-150 psi) UDOT spec. 03575.
- All utilities within the paved surface must be bored.
- For excavations outside of the roadway, back fill with UDOT approved granular borrow and road base. Compaction per UDOT spec. 2056 and 2721.
- Owner, developer, and/or the contractor is required to hire an independent company for all testing within the UDOT right-of-way.
- Owner, developer, and the contractor are responsible for any damage to the UDOT right-of-way that may be directly or indirectly caused by the development activity.
- Traffic signal installation or modification requires a separate warranty bond once the work has been completed and accepted. The permittee is responsible for hiring an independent inspection company to perform inspection services for all signal work completed. For a list of the UDOT approved contractors and consultants contact the appropriate Regions Traffic Signals Engineer.
- Partial concrete panel replacement is not allowed. When panels are removed, the entire panel is required to be replaced per UDOT standards, specifications, and standard drawings.
- Double saw cut the concrete to prevent the spalling of other concrete panels and to avoid over cuts. Over cuts and spalls will require full panel replacement.
- All above ground features including utilities (poles, fire hydrants, boxes, etc.) must be relocated out of the AASHTO clear zone or a minimum of 18" behind curb.



- Asphalt patch of 12" of granular borrow, 6" Untreated course and 7" of pg grade super pave mix design asph...
- 6" Concrete pavement w/ 4" Road base
- (6" Wide x 1'-6" H) Concrete curb wall
- (4" Thk) Concrete Sidewalk
- 6" Concrete flare drive approach w/ 4" Road base
- Shielded light
- 30" Concrete curb & gutter
- No parking sign
- 6' Tall privacy fencing
- 4" Wide solid yellow parking stall stripe lines
- (4" Thk) Concrete walkway
- 18"x18" Steeping stone
- 3'x4' Concrete pad, 4" Thick concrete 4" Road base
- Divider
- 4" Concrete slab (Building overhang)
- Delivery parking only sign
- Expansion-construction joints
- Expansion joint

GENERAL NOTES

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.

- CONCRETE PAVEMENT TO MEET HS-20 LOADING WITH GRANULAR BASE PER DETAIL D1, SHEET C5.01.
- ASPHALT PATCH, 12" OF GRANULAR BORROW, 6" UNTREATED BASE COURSE, AND 7" OF PG GRADE SUPERPAVE MIX DESIGN ASPHALT CONFORMING TO UDOT SPECIFICATION 02741.
- NOT USED
- CONCRETE SIDEWALK, PER UDOT STANDARDS AND SPECIFICATIONS.
- CONCRETE FLARE DRIVE APPROACH, PER UDOT STD DRAWING GW 3A, SEE DETAIL SHEET C5.01
- NEW SHIELDED LIGHT DIRECTED DOWNWARD AND BASE, SEE ELECTRICAL PLANS FOR DETAILS.
- 30" CONCRETE CURB AND GUTTER, PER UDOT STD DRAWING GW 2A TYPE B1, SEE DETAIL SHEET C5.01
- INSTALL CONCRETE SLAB TO TOP OF CONCRETE (TOC) & FLOWLINE (FL) ELEVATIONS SHOWN TO CONVEY RUNOFF TO STORM DRAIN INLETS.
- 6" CONCRETE CURB WALL, SEE DETAIL 'C4', SHEET C5.01.
- 6" X12" CONCRETE CURB WALL, INSTALLED FLUSH WITH ASPHALT AND GRASSCRETE, SEE DETAIL 'C4', SHEET C5.01.
- 4" WIDE SOLID YELLOW PARKING STALL STRIPE LINES.
- 4" WIDE SOLID YELLOW PEDESTRIAN STRIPE LINES.
- PROPOSED TOWNHOME BUILDING WITH MULTIPLE UNITS, SEE ARCHITECTS PLANS FOR DETAILS.
- 2' BUILDING OVERHANG, SEE ARCHITECTS PLANS FOR DETAILS. OVERHANG DOES NOT OBSTRUCT CLEARANCE REQUIREMENTS (20' WIDE, 13.5' HIGH) OF THE FIRE DEPT.
- PICNIC / PLAY AREA, SEE LANDSCAPE PLANS FOR DETAILS.
- PRIVATE YARD AREA WITH 3'X4' CONCRETE PAD, 4" THICK CONCRETE 4" ROADBASE IN FRONT OF DOOR.
- DELIVERY DROP OFF STALL, ADD 'DELIVERY ONLY' SIGN.
- NEW 6' TALL PRIVACY FENCING ALONG EAST AND WEST PROPERTY LINES PER MILLCREEK ZONING STANDARDS.
- 3' WALKWAY WITH ~18" STEEPING STONES.
- INSTALL NO PARKING SIGN.
- NEW DIVIDER, SEE ARCHITECTURAL PLANS FOR DETAILS.
- 25' FUTURE SHARED ACCESS EASEMENT GRANTED TO UDOT, 625 S.F. OR 0.0143 ACRES
- AREA TO BE DEDICATED TO UDOT 2,240 S.F. OR 0.0514 ACRES.



NOTICE!

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.

- (3'-0" x 3'-0") Storm drain cleanout (SDCO box)
- (2'-10" x 2'-10") Storm drain catch basin with grate (SDCB)
- Cleanout box
- Area drain
- 12" RCP
- 18" RCP
- 18" HDPE pipe
- 12" HDPE
- 4618-4619
- 4619-4619
- 4619-4620
- 4620-4620
- 4618.58-4618.58
- 4619-4620
- 4620-4621
- 4617-4618

- 2.0 EA
- 2.0 EA
- 2.0 EA
- 6.0 EA
- 57.3 FT
- 16.8 FT
- 144.8 FT
- 215.8 FT
- 4860.4 SQ FT
- 6310.6 SQ FT
- 1822.2 SQ FT
- 855.0 SQ FT
- 4075.0 SQ FT
- 9032.3 SQ FT
- 146.2 SQ FT
- 257.0 SQ FT



GENERAL NOTES:
SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE SOILS REPORT. ALL EXCAVATED OR FILL AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST D-1557 EXCEPT UNDER BUILDING FOUNDATION WHERE IT SHALL BE 98% MIN. OF MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 2% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED SOILS ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED, HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS & SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.

THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. SPECIFIC DETAILS SHOWN ON SHEET C2.10 SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.

EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.

ALL ELEVATIONS SHOWN AT TOP AND BOTTOM OF WALL(S), IF ANY, ARE ELEVATIONS AT FINISH GRADE, UNLESS OTHERWISE NOTED.

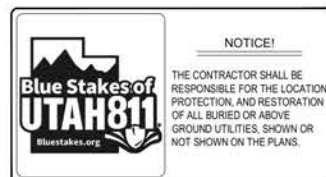
KEYED NOTES:
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.

1. GRADE SITE TO ELEVATIONS AND CONTOURS SHOWN ON PLAN.
2. STORM DRAIN CATCH BASIN WITH HEAVY DUTY BICYCLE SAFE GRATE.
3. STORM DRAIN CLEANOUT BOX.
4. STORM DRAIN CLEANOUT BOX WITH ORIFICE AND OVERFLOW WEIR. BOX TO ACT AS OUTLET DISCHARGE CONTROL STRUCTURE. SEE DETAIL 'A5', SHEET C5.01.
5. 12" HOPE IN-LINE DRAIN BASIN WITH HEAVY DUTY, PEDESTAL SAFE GRATE. SEE DETAIL 'A1', SHEET C5.01.
6. 12" DIAMETER HOPE STORM DRAIN LINE. SEE APWA PLANS NO. 361 & 362 FOR TRENCHING DETAIL.
7. 24" DIAMETER HOPE STORM DRAIN LINE. SEE APWA PLANS NO. 361 & 362 FOR TRENCHING DETAIL.
8. 18" DIAMETER RCP STORM DRAIN LINE. SEE APWA PLANS NO. 361 & 362 FOR TRENCHING DETAIL.

STORMWATER NOTES:
STORM WATER INFRASTRUCTURE SHALL NOT INFRINGE ON THE OPEN SPACE REQUIREMENT PER MILLCREEK CITY REQUIREMENT.
THERE ARE NO STORM WATER SURFACE PONDS SHOWN OR PLANNED FOR WITH THIS DEVELOPMENT THAT WOULD INFRINGE ON THE OPEN SPACE.

COMMON GRADING ABBREVIATIONS:
SEE SHEET C0.01 FOR ADDITIONAL ABBREVIATIONS

- BFE BASEMENT FLOOR ELEVATION
- BW FINISH GRADE AT BOTTOM OF WALL
- EX EXISTING
- EOA EDGE OF ASPHALT
- EOC EDGE OF CONCRETE
- FFE FINISH FLOOR ELEVATION
- FG FINISH GRADE
- FL FLOW LINE
- GB GRADE BREAK
- HP HIGH POINT
- LP LOW POINT
- NG NATURAL GROUND
- SDCB STORM DRAIN CATCH BASIN
- SDCO STORM DRAIN CLEANOUT BOX
- SDCB STORM DRAIN CATCH BASIN
- SDMH STORM DRAIN MANHOLE
- TBC TOP BACK OF CURB
- TOA TOP OF ASPHALT
- TOC TOP OF CONCRETE
- TOG TOP OF GRATE
- TOW TOP OF WALL
- TW FINISH GRADE AT TOP OF WALL
- WW WATERWAY



 McNeil Engineering 8610 S. Sandy Pkwy., Sandy, UT	STORM RUNOFF CALCULATION SHEET		Title: IRVA Townhomes	
	Project No. 20100		Scope: Site Drainage Design	
	Authority: Milcreek City Rev. No. 1		Detention Facilities	
			Engineer: RJP Check: RJP	

Design Philosophy:
The storm water runoff from the project site will flow into catch basins designed around the project site. It will then be conveyed by a system of pipes to an outlet control structure box where the water will be detained by means of an orifice that will only allow a max discharge rate of 0.20 cfs / acre which results in a discharge of 0.06 cfs. The detained water will back up into the system of pipes that have been sized sufficiently to hold the backed up detained water for the 10 year storm. Inside the outlet control structure box will be an overflow weir that will allow the 100 year overflow to overtop it and flow out to the city system if the water raises above the highwater level of the 10 year storm. The discharged water will be conveyed to the public storm drain system in 3300 South Street. (See the outlet control structure box with orifice and overflow weir details in the plan set on sheet C5.01)

Area Identification	Runoff Coefficient		
(A)	(C)	(C*A)	
Paved 5,586 sf	(0.13 ac) 0.85	=	4,748 sf
Roof Area 4,067 sf	(0.09 ac) 0.90	=	3,660 sf
Landscaped 3,300 sf	(0.08 ac) 0.15	=	495 sf
Total 12,953 sf	(0.30 ac) 0.69 (ave)	=	8,903 sf

10-Year, 24-Hour Storm:							
Time (min)	Rate (in/hr)	Rainfall (Inches)	Q in (cfs)	Add'l Q in (cfs)	Total Q in (cfs)	Q out (cfs)	Storage (cf)
5	3.22	0.268	0.66	0.00	0.66	0.06	181
10	2.45	0.408	0.50	0.00	0.50	0.06	267
15	2.02	0.506	0.42	0.00	0.42	0.06	322
30	1.36	0.681	0.28	0.00	0.28	0.06	398
60	0.84	0.843	0.17	0.00	0.17	0.06	411
120	0.49	0.971	0.10	0.00	0.10	0.06	292
180	0.35	1.050	0.07	0.00	0.07	0.06	137
360	0.21	1.270	0.04	0.00	0.04	0.04	0
720	0.13	1.550	0.03	0.00	0.03	0.03	0
1440	0.07	1.750	0.02	0.00	0.02	0.02	0

Storm Pipe Detention Provided:			
Pipe Size	Length (LF)	Unit Storage (CF/LF)	Storage (cf)
8 in. Pipe	0	0.348	0 cf
12 in. Pipe	154	0.785	121 cf
18 in. Pipe	143	1.757	253 cf
30 in. Pipe	0	4.909	0 cf
Total Pipe Storage			374 cf

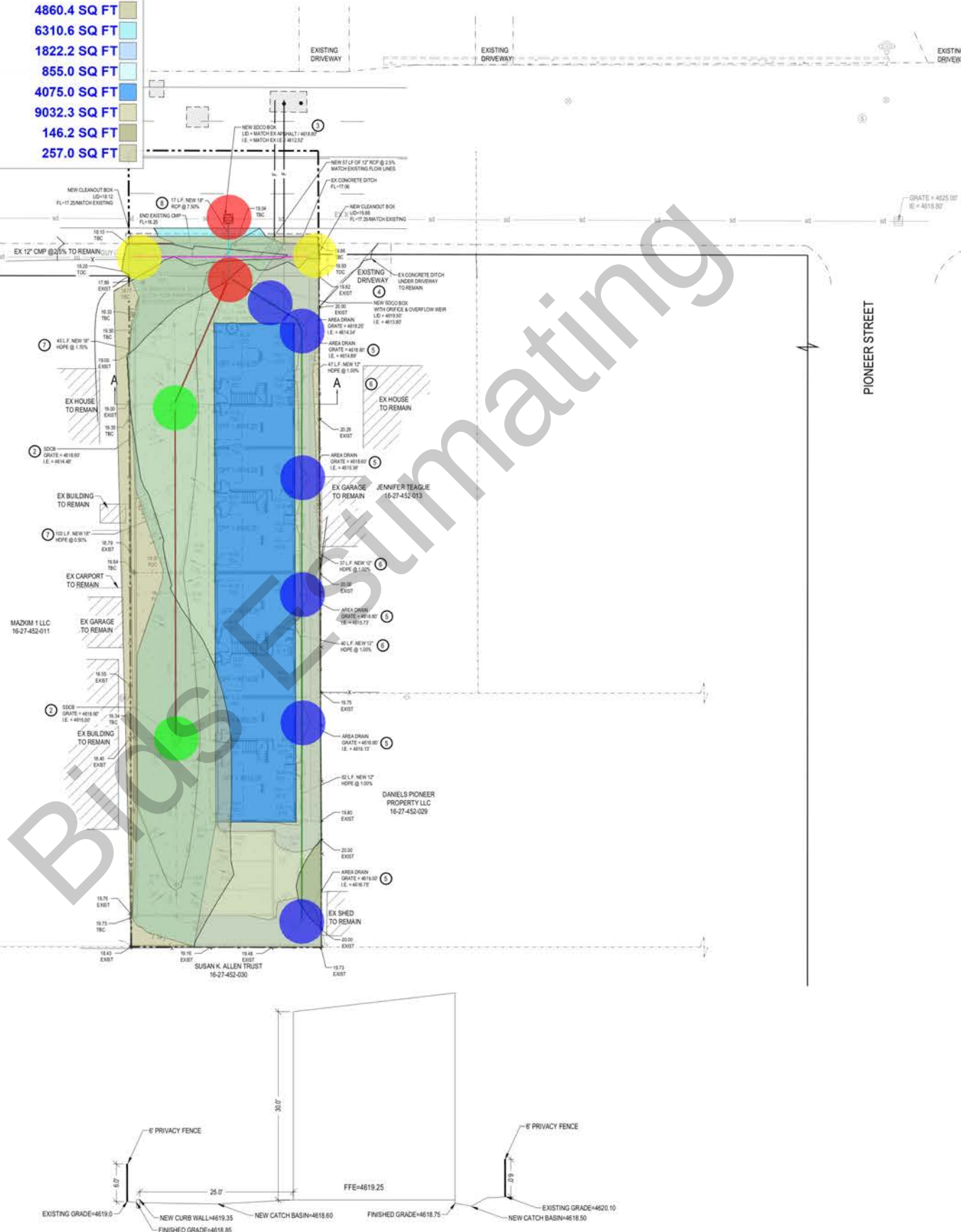
Storm Structure Detention Provided:			
Amount	Box Length	Box Width	Av. Depth
2	3	3	3.75 ft
Total Structure Storage			68 cf

Surface Storage Provided:			
Pond	Area (sf)	Depth (ft)	Volume (cu. ft.)
Ponding in Parking Area	0	0	0 cf
Detention Pond Area	0	0	0 cf
Total Surface Storage			0 cf

Total Detention Provided: 441 cf
Total Detention Required: 411 cf

Orifice Design:
The orifice is designed upon the following data:
Total acreage of development: 0.30 acres
Allowable discharge: 0.06 cfs / 0.2 cfs / acre
Max head (center orifice to hw): 4.70 ft
Diameter for new orifice: 1.0 inch
Use 2.0" min to avoid clogs

$Q = C_d A_o \sqrt{2gh}$

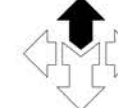


SITE SECTION VIEW A-A

-  Silt fence
-  4'-6" x 4'-6" Inlet protection
-  Temporary construction entrance
-  2'-6" x 2'-6" Inlet protection
-  10' x 10'-6" Concrete washout area
-  10' x 10'-6" Portable construction toilet
-  20' x 10' Construction dumpster
-  Filter socks in gutter

236.8 FT
4.0 EA
401.1 SQ FT
6.0 EA
1.0 EA
1.0 EA
1.0 EA
7.1 FT

NORTH



SCALE: 1" = 20'



GENERAL NOTES:

THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. SPECIFIC DETAILS SHOWN ON SHEET CS-02 SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.

ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LOCAL AGENCY'S EROSION CONTROL STANDARDS AND SPECIFICATIONS AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE AGENCY HAVING JURISDICTION. ALSO INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATIONS OF ALL EXISTING UTILITIES. IF CONFLICTS OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.

THE CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL.

WHEN GRADING OPERATIONS HAVE BEEN COMPLETED AND THE DISTURBED GROUND SHALL BE LEFT "OPEN" FOR 30 DAYS OR MORE THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS OF THE AREA.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

MAINTENANCE:

THE OWNER'S REPRESENTATIVE SHALL MAKE ROUTINE CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIRS OR SEDIMENT REMOVAL IS NECESSARY DUE TO CONDITIONS THAT MAY ARISE IN THE FIELD. ADDITIONAL CONTROL MAY BE DETERMINED TO BE NECESSARY.

SILT FENCE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT THE LEAST DAILY DURING PROLONGED RAINFALL.

CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCES, END RUNS, AND UNDERCUTTING BENEATH SILT FENCING.

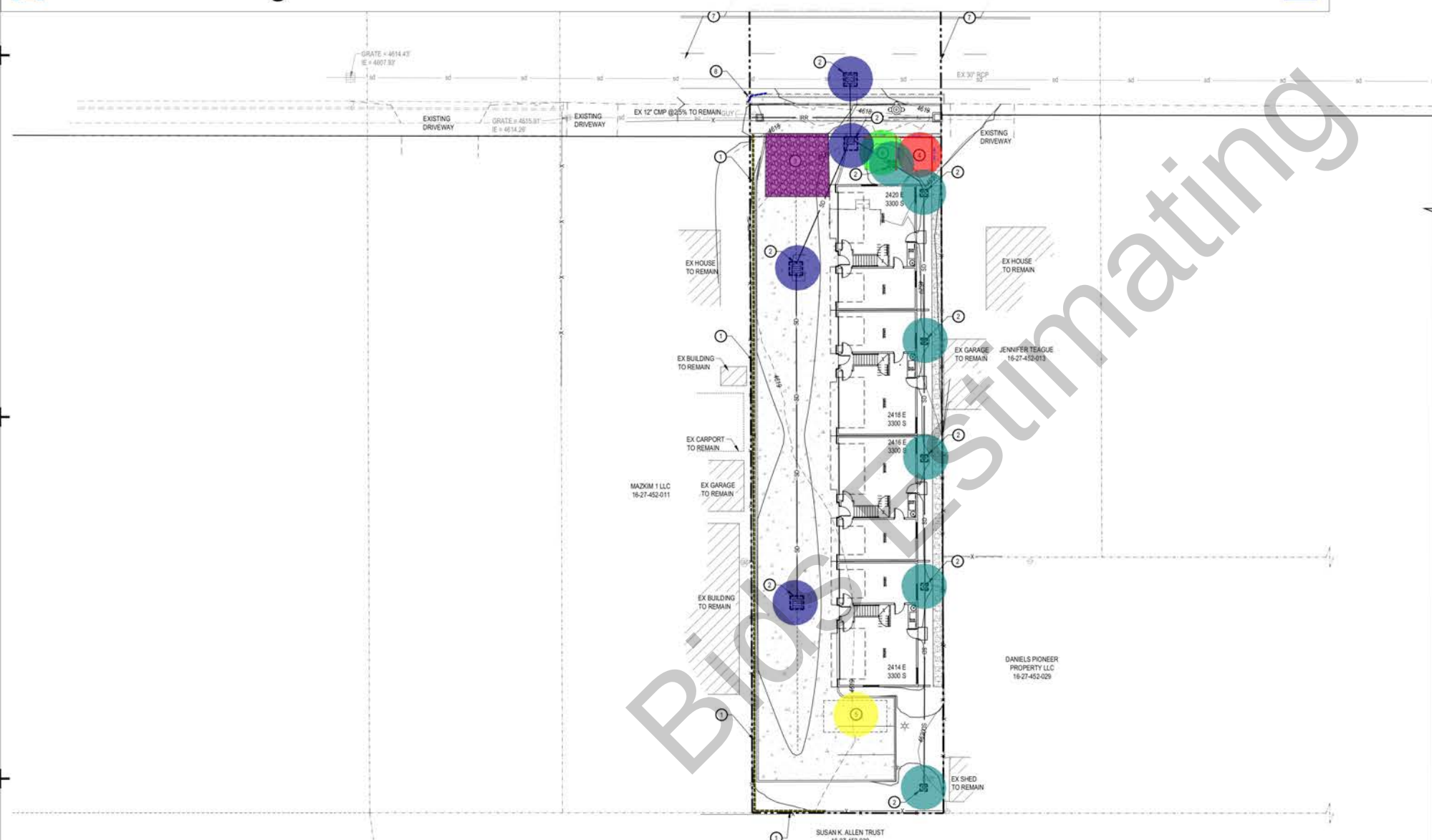
NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SILT FENCING SHALL BE ACCOMPLISHED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

KEYED NOTES:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- 1 SILT FENCE AS SHOWN ON PLAN. SEE DETAIL 'C3', SHEET CS-02.
- 2 INLET PROTECTION AROUND EXISTING OR NEW STORM DRAIN CATCH BASINS OR CURB INLETS. SEE DETAIL 'A1', SHEET CS-02.
- 3 TEMPORARY CONSTRUCTION ENTRANCE. SEE DETAIL 'C1', SHEET CS-02. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
- 4 CONCRETE WASHOUT AREA. CREATE A MIN. 10'X10' AREA WITH A 1" HIGH BERM. LINE AREA WITH PLASTIC. DISCARD WASTE IN DUMPSTER WHEN FULL AND LEGALLY DISPOSE OF. SEE DETAIL 'A5', SHEET CS-02. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
- 5 CONSTRUCTION DUMPSTER. CHECK LEVEL DAILY. LEGALLY DISPOSE OF WASTE AS NEEDED. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
- 6 PORTABLE CONSTRUCTION TOILET. TOILET TO BE PROPERLY SECURED TO PREVENT TIPPING. BUILD 6" BERM AROUND TOILET TO CONTAIN ANY SPILLS OR LEAKAGE. CHECK LEVEL DAILY. LEGALLY DISPOSE OF WASTE AS NEEDED. SEE DETAIL 'A3', SHEET CS-02. LOCATION SHOWN IS SUGGESTIVE. CONTRACTOR TO RELOCATE AS NEEDED.
- 7 NO TRACKING OF MUD ONTO STREETS IS ALLOWED. ANY OCCURRENCE SHALL BE SWEEP IMMEDIATELY.
- 8 INSTALL FILTER SOCK IN GUTTER AS SHOWN ON PLANS.



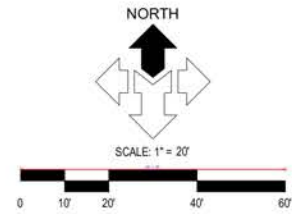


NOTICE!

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.

- 1-1/2" Water meter
- 1-1/2" Type K copper water services line
- 2" Type K copper fire line
- 8" PVC SDR-35
- Natural gas line
- Natural gas meter
- 1" Landscape stub
- Electrical lines
- Remove water meter
- Remove water line
- Fire hydrant
- Electricity meter

- 1.0 EA
- 216.0 FT
- 91.3 FT
- 225.7 FT
- 258.5 FT
- 4.0 EA
- 22.1 FT
- 236.0 FT
- 1.0 EA
- 50.4 FT
- 1.0 EA
- 4.0 EA



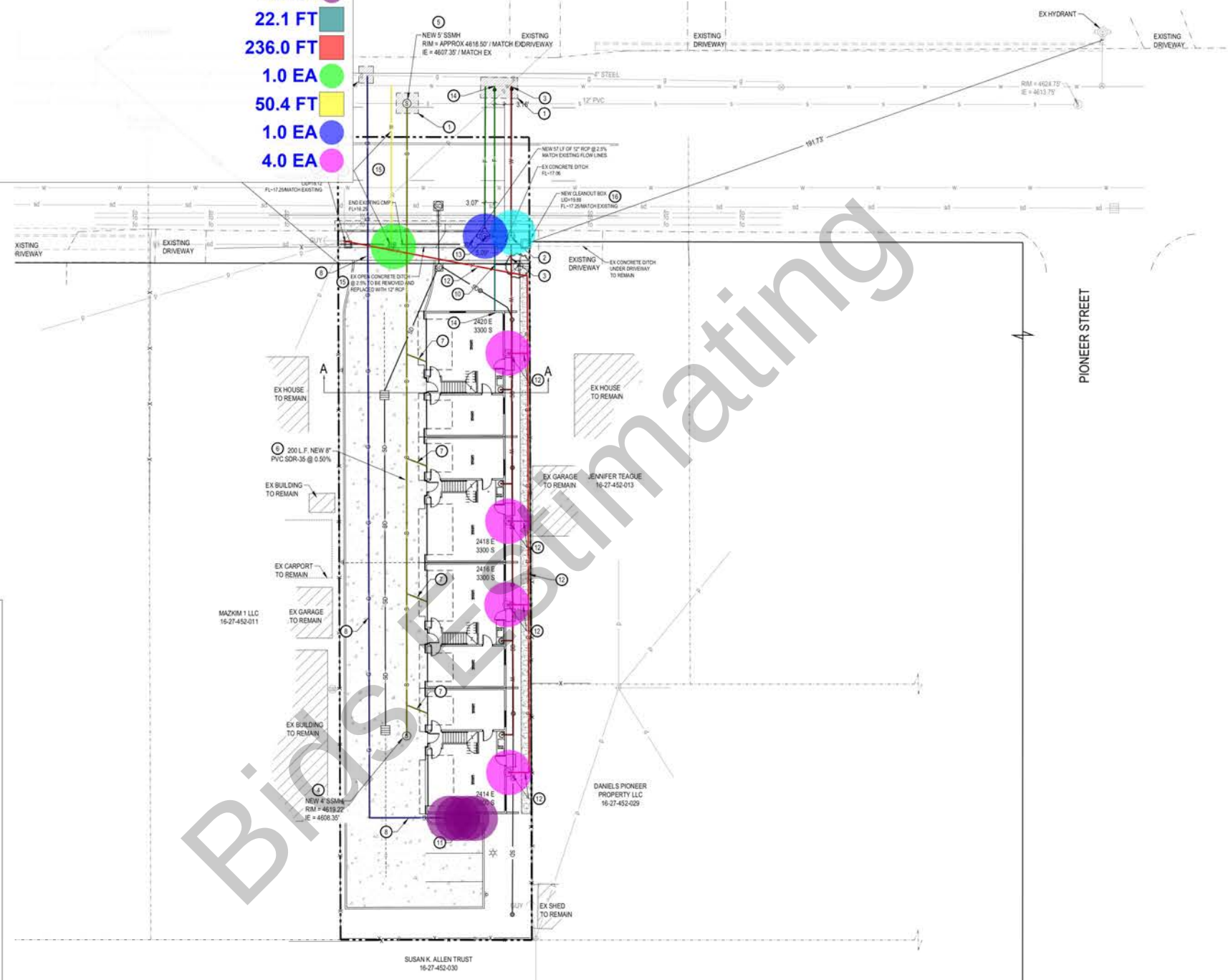
GENERAL NOTES:
CONTRACTOR IS TO COORDINATE ALL UTILITIES WITH MECHANICAL DRAWINGS.
ALL UTILITIES MUST BE BORED ACROSS THE UDOT RIGHT-OF-WAY. NO OPEN TRENCHES ALLOWED.
ALL NEW WATER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH SALT LAKE PUBLIC UTILITIES STANDARDS & SPECIFICATIONS.
ALL NEW SANITARY SEWER CONSTRUCTION TO BE DONE IN ACCORDANCE WITH MOUNT OLYMPUS IMPROVEMENT DISTRICT STANDARDS & SPECIFICATIONS.
CONTRACTOR IS TO COORDINATE LOCATIONS OF NEW TELEPHONE SERVICE TO BUILDING WITH CENTURY LINK. A PVC CONDUIT, PLYWOOD BACKBOARD, AND GROUND WIRE IS REQUIRED FOR SERVICE THROUGH PROPERTY. COORDINATE SIZES AND LOCATION WITH CENTURY LINK.
CONTRACTOR IS TO SUBMIT SITE PLAN TO QUESTAR GAS FOR DESIGN OF GAS LINE SERVICE TO BUILDING. CONTRACTOR TO COORDINATE WITH QUESTAR GAS FOR CONTRACTOR LIMITS OF WORK VERSUS QUESTAR GAS LIMITS.
LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE LOCATIONS. CONTRACTOR IS TO VERIFY CONNECTION POINTS WITH EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES AND UTILITY STRUCTURE THAT ARE TO REMAIN.
UTILITY ALERT PHONE NUMBERS
WATER: SALT LAKE PUBLIC UTILITIES
SEWER: MOUNT OLYMPUS IMPROVEMENT DISTRICT
NATURAL GAS: QUESTAR GAS
ELECTRICAL POWER: POWER PROVIDER
TELEPHONE: CENTURY LINK

- KEYED NOTES:**
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED AND THE DETAILS NOTED AND AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- 1 ASPHALT PATCH, 12" OF GRANULAR BORROW, 8" UNTREATED BASE COURSE, AND 1" OF PG GRADE SUPERPAVE MIX DESIGN ASPHALT CONFORMING TO UDOT SPECIFICATION 02741.
 - 2 1-1/2" WATER SERVICE METER SET PER APWA STD PLAN S22. SEE DETAIL SHEET CS-02.
 - 3 1-1/2" TYPE K COPPER WATER SERVICE LINE. CONNECT TO EXISTING WATER MAIN PER APWA STD PLAN S22. SEE DETAIL SHEET CS-03. UTILITY MUST BE BORED ACROSS RIGHT-OF-WAY. NO OPEN TRENCHES ALLOWED.
 - 4 4" DIAMETER SANITARY SEWER MANHOLE PER MOUNT OLYMPUS IMPROVEMENT DISTRICT STANDARDS AND SPECIFICATIONS.
 - 5 5" DIAMETER POUR-IN-PLACE SANITARY SEWER MANHOLE PER MOUNT OLYMPUS IMPROVEMENT DISTRICT STANDARDS AND SPECIFICATIONS.
 - 6 8" PVC SDR-35 SANITARY SEWER LINE, INCLUDING ALL FITTINGS. SEE DETAIL 'CS' SHEET CS-01 FOR TRENCHING. UTILITY MUST BE BORED ACROSS THE RIGHT-OF-WAY. NO OPEN TRENCHES ALLOWED.
 - 7 4" PVC SDR-35 SANITARY SEWER LATERAL, INCLUDING NEW CLEANOUTS AT 100-FOOT MAXIMUM SPACING PER MOUNT OLYMPUS IMPROVEMENT DISTRICT STANDARDS AND SPECIFICATIONS. SEE DETAIL 'CS' SHEET CS-01 FOR TRENCHING.
 - 8 APPROXIMATE LOCATION OF NEW NATURAL GAS LINE. CONTRACTOR TO COORDINATE SIZE, DESIGN AND INSTALLATION BY DOMINION ENERGY WITH OTHER CONSTRUCTION. UTILITY MUST BE BORED ACROSS RIGHT-OF-WAY. NO OPEN TRENCHES ALLOWED.
 - 9 EXISTING WATER METER TO BE REMOVED AND SERVICE LINE TO BE TERMINATED AT THE MAIN PER SALT LAKE CITY PUBLIC UTILITIES STANDARDS AND SPECIFICATIONS.
 - 10 NEW 1" LANDSCAPE STUB.
 - 11 APPROXIMATE LOCATION OF NEW NATURAL GAS METER(S). CONTRACTOR TO COORDINATE SIZE, DESIGN AND INSTALLATION WITH DOMINION ENERGY AND WITH MECHANICAL PLANS.
 - 12 APPROXIMATE LOCATION OF NEW ELECTRICAL LINES AND METERS. CONTRACTOR TO COORDINATE DESIGN AND INSTALLATION WITH ROCKY MOUNTAIN POWER AND WITH ELECTRICAL PLANS.
 - 13 NEW FIRE HYDRANT INSTALLED PER SLC STANDARDS AND SPECIFICATIONS.
 - 14 NEW 2" TYPE K COPPER FIRE LINE AND 2" CORP STOP CONNECTED TO THE EXISTING 8" MAIN PER APWA STD PLAN S52. SEE DETAIL SHEET CS-03 EACH UNIT TO HAVE 130 TYPE FIRE SPRINKLING SYSTEM.
 - 15 EXISTING 8" Y IRRIGATION DITCH TO BE PIPED ACROSS FRONTAGE OF PROPERTY WITH 12" RCP, MATCH EXISTING FLOW LINES.
 - 16 24" MINIMUM CLEANOUT BOX PER UDOT STD'S WITH SOLID LID. EXISTING CONCRETE DITCH TO BE CUTBACK TO LOCATION SHOWN. DITCH SHALL BE GROUTED WATER TIGHT TO OPENING IN CLEANOUT BOX.
 - 17 24" MINIMUM CLEANOUT BOX PER UDOT STD'S WITH SOLID LID. BOX TO BE CONNECTED TO NEW RCP AND EXISTING CMP. MATCH EXISTING FLOW LINE. GROUT CMP AND RCP WATER TIGHT TO CLEANOUT BOX.

FIRE FLOW REQUIREMENT:
TYPE V CONSTRUCTION - OCCUPANCY B
BUILDING AREA = 8,000 SQ. FT.
FIRE FLOW REQUIREMENT WITH FIRE SPRINKLERS: 2,250 GPM FOR 2 HOURS, WITH A 75% REDUCTION
REDUCTION FOR FIRE SPRINKLERS THE FIRE FLOW REQUIREMENT = 562.5 GPM FOR A DURATION OF 2 HOURS.
DESIGN FOR A DURATION OF 2 HOURS
NUMBER OF FIRE HYDRANTS NEEDED: 1
NUMBER OF FIRE HYDRANTS ON SITE: 1
(PER IFC APPENDIX B - TABLE B105.1(2)(B))

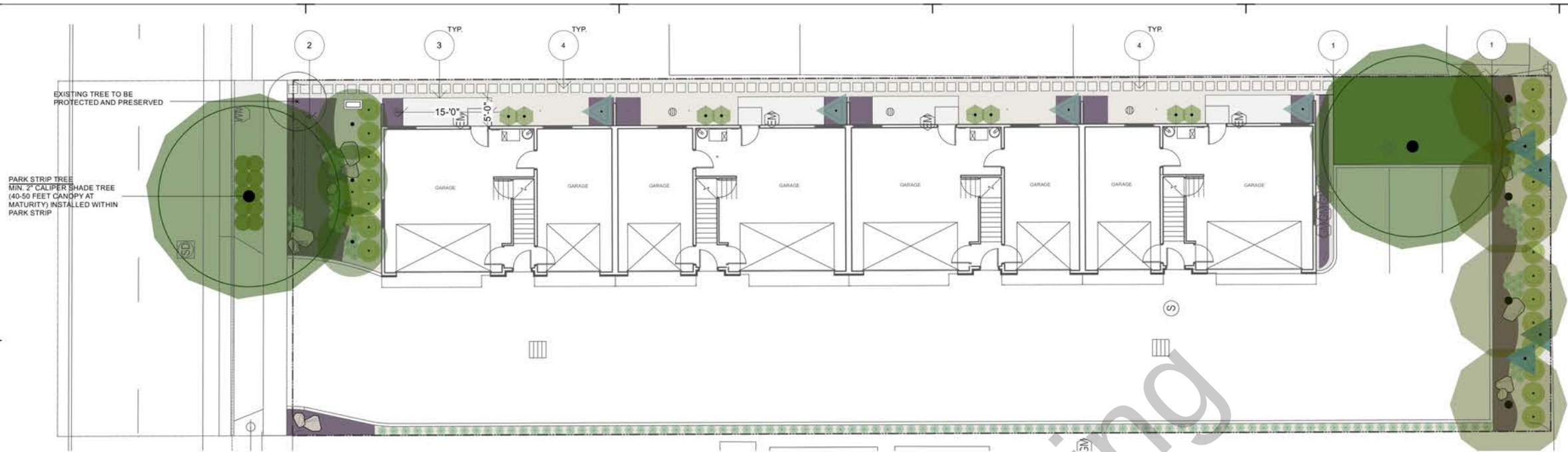
UDOT NOTES

- UDOT reserves the right, at its option, to install a raised median island or restrict the access to a right-in or right-out at any time.
- Work on the UDOT right-of-way is seasonally restricted from October 15 to April 15.
- ROW Work: Work is not allowed on the right-of-way during the AM/PM peak traffic hours (6:00 - 9:00 AM and 3:30 - 6:00 PM). Additional work restrictions or modifications may be imposed at the time of the encroachment permit.
- Replace all pavement markings in kind (tape with tape and paint with paint). Install all paint lines with permanent paint application per UDOT specification 02765. Paint must have at least 6 months life as determined by UDOT's Permits Officer.
- All new pavement words, arrows and symbols marking within the right-of-way shall be pre-formed thermo plastic. All letters, arrows, and symbols shall conform with the "Standard Alphabet for Highway Signs and Pavement Markings" adopted by the Federal Highway Administration.
- All signs installed on the UDOT right-of-way must be high intensity grade (Type XI sheeting) with a B3 slip base. Install all signs per UDOT SN series Standard Drawings.
- Before commencing work on the State highway, the general contractor is required to obtain an encroachment permit from the applicable Region's Permits Office before working within the State right-of-way.
- Road cuts within UDOT ROW are only allowed as shown on plan.
- For all utility taps (road cuts), use flowable fill per UDOT's current mix design (50-150 psi) UDOT spec. 03575.
- All utilities within the paved surface must be bored.
- For excavations outside of the roadway, back fill with UDOT approved granular borrow and road base. Compaction per UDOT spec. 2056 and 2721.
- Owner, developer, and/or the contractor is required to hire an independent company for all testing within the UDOT right-of-way.
- Owner, developer, and the contractor are responsible for any damage to the UDOT right-of-way that may be directly or indirectly caused by the development activity.
- Traffic signal installation or modification requires a separate warranty bond once the work has been completed and accepted. The permittee is responsible for hiring an independent inspection company to perform inspection services for all signal work completed. For a list of the UDOT approved contractors and consultants contact the appropriate Regions Traffic Signals Engineer.
- Partial concrete panel replacement is not allowed. When panels are removed, the entire panel is required to be replaced per UDOT standards, specifications, and standard drawings.
- Double saw cut the concrete to prevent the spalling of other concrete panels and to avoid over cuts. Over cuts and spalls will require full panel replacement.
- All above ground features including utilities (poles, fire hydrants, boxes, etc.) must be relocated out of the AASHTO clear zone or a minimum of 18" behind curb.



NOTICE!

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LANDSCAPE SCHEDULE

SYMBOL	QTY.	COMMON NAME	BOTANICAL NAME	SIZE	DETAIL
EXISTING TREES					
	1	EXISTING SYCAMORE TREE TO REMAIN			
DECIDUOUS TREES					
	2	GREEN VASE ZELKOVA	ZELKOVA SERRATA 'GREEN VASE'	2" CAL.	
	4	MAIDENHAIR TREE	GINKGO BLOBA	2" CAL.	
	3	FRANS FONTAINE HORNBEAM	CARPINUS BETULUS 'FRANS FONTAINE'	2" CAL.	
	4	HORSTMANN BLUE ATLAS CEDAR	CEDRUS ATLANTICA 'HORSTMANN'	6" HT.	
	4	COLUMNAR BLUE SPRUCE	PICEA PUNGENS GLAUCA 'FASTIGIATA'	6" HT.	
EVERGREEN TREES					
	24	ARCTIC FIRE DOGWOOD	CORNUS STOLONIFERA 'FARROW'	5 GAL.	
	8	TALLHEDGE BUCKTHORN	RHAMNUS FRANGULA 'COLUMNARIS'	5 GAL.	
SHRUBS					
	157	STANDING OVATIO LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM 'STANDING OVATION'	1 GAL.	A/L.S. 01
	10	BLUE GRAMA GRASS	BOULELOUS GRACILIS	1 GAL.	A/L.S. 01
ORNAMENTAL GRASSES					
	727 S.F.	TINY MONSTER GERANIUM	GERANIUM 'TINY MONSTER'	2" O.C.	B/L.S. 01
GROUNDCOVERS					
	405 S.F.	"IMPERIAL BLUE" LAWN SOD			F/L.S. 01
SYMBOL					
LAWN					
	141 S.F.	"WASATCH GREY" CRUSHED ROCK		2"-3" DIAMETER	G/L.S. 01
	13	"SOUTH TOWN" BOULDERS		2'-4"	H/L.S. 01
ROCK & BOULDERS					

MILLCREEK CITY DATA

TITLE 19.77 - WATER EFFICIENT LANDSCAPE DESIGN AND DEVELOPMENT STANDARDS

- Green vasa zelkova (2 EA)
- Maidenhair tree (4 EA)
- Frans fontaine hornbeam (3 EA)
- Horstmann Blue atlas cedar (4 EA)
- Columnar blue spruce (4 EA)
- Arctic fire dogwood (24 EA)
- Tallhedge buckthorn (8 EA)
- Standing Ovatio little bluestem (157 EA)
- Blue grama grass (10 EA)
- Tiny Monster Geranium (727 SF)
- Imperial blue lawn SOD (405 SF)
- Wasatch grey crushed rock (141 SF)
- South town boulders (13 EA)

1.0 EA

1.0 EA

1.0 EA

1.0 EA

1.0 EA

1.0 EA

1.0 EA

1.0 EA

1.0 EA

1.0 EA

1.0 EA

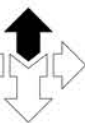
1.0 EA

1.0 EA

GENERAL NOTE

1. ALL EXISTING SITE TREES TO BE REMOVED IN ACCORDANCE WITH THE TREE INSPECTION REPORT.
2. REFER TO SHEET L.O.01 FOR COMMON EARTHWORK REQUIREMENTS AND PLANTING NOTES.

NORTH



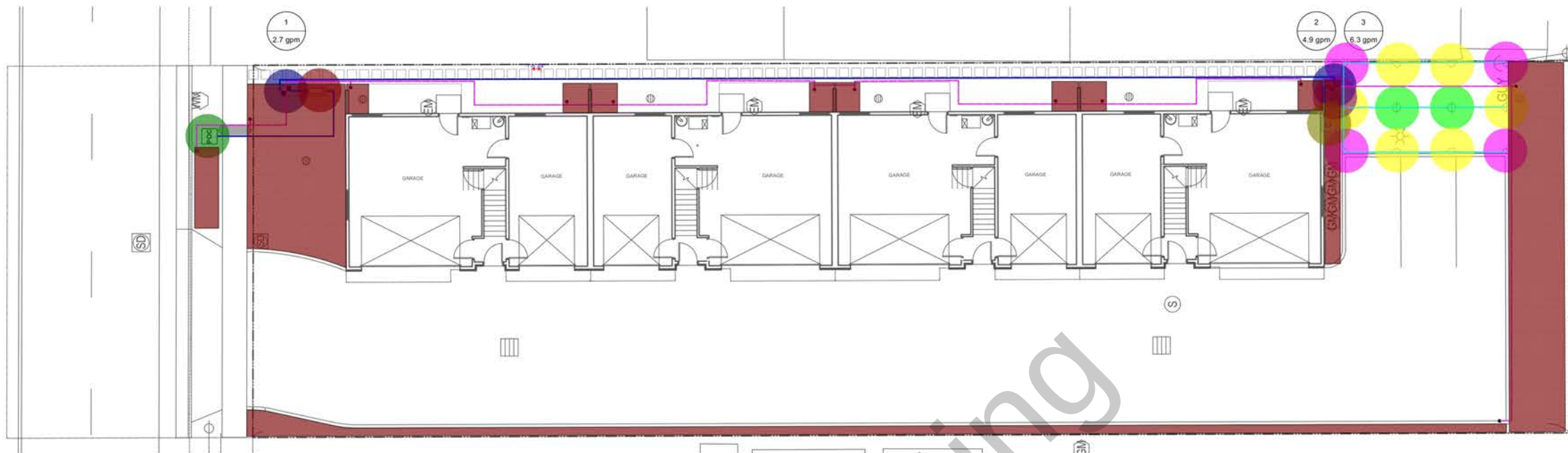
AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY.

Call BEFORE YOU Dig

1-800-462-4111

NOTICE!

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IRRIGATION SCHEDULE

SYMBOL	OUTLETS	DESCRIPTION	MANUFACTURER	MODEL	NOZZLE	DETAIL
--------	---------	-------------	--------------	-------	--------	--------

- 1" Main line
- Drip supply line
- (3'-0" x 1'-6") Concrete pad for backflow preventer
- Point of connection
- Irrigation controller
- Drip Circuit control valve
- Lawn circuit control valve
- 4" Pop-up spray head
- 4" Pop-up spray head
- 4" Pop-up spray head
- Lateral line
- Drip area

204.5 FT

300.9 FT

1.0 EA

1.0 EA

1.0 EA

2.0 EA

1.0 EA

2.0 EA

6.0 EA

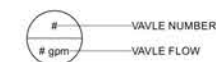
4.0 EA

93.5 FT

1575.7 SQ FT

EMITTER SCHEDULE

PLANT NAME	DRIP EMISSION DEVICE	DETAIL
COLUMNAR BLUE SPRUCE		
TALLHEDGE BUCKTHORN	(1) 2 GPH Emitter	HL5.03



Bids Estimating

DRIP SUPPLY LINE	SCHEDULE 40 PVC PIPE WITH SCHEDULE 80 PVC FITTINGS.	C/L5.02
1" MAIN LINE	SCHEDULE 40 PVC PIPE WITH SCHEDULE 80 PVC FITTINGS	C/L5.02
LATERAL LINE	SCHEDULE 40 PVC PIPE WITH SCHEDULE 40 PVC FITTINGS.	C/L5.02
PIPE SLEEVE UNDER EXISTING PAVING	SCHEDULE 40 PVC	D/L5.02

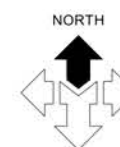
AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY.

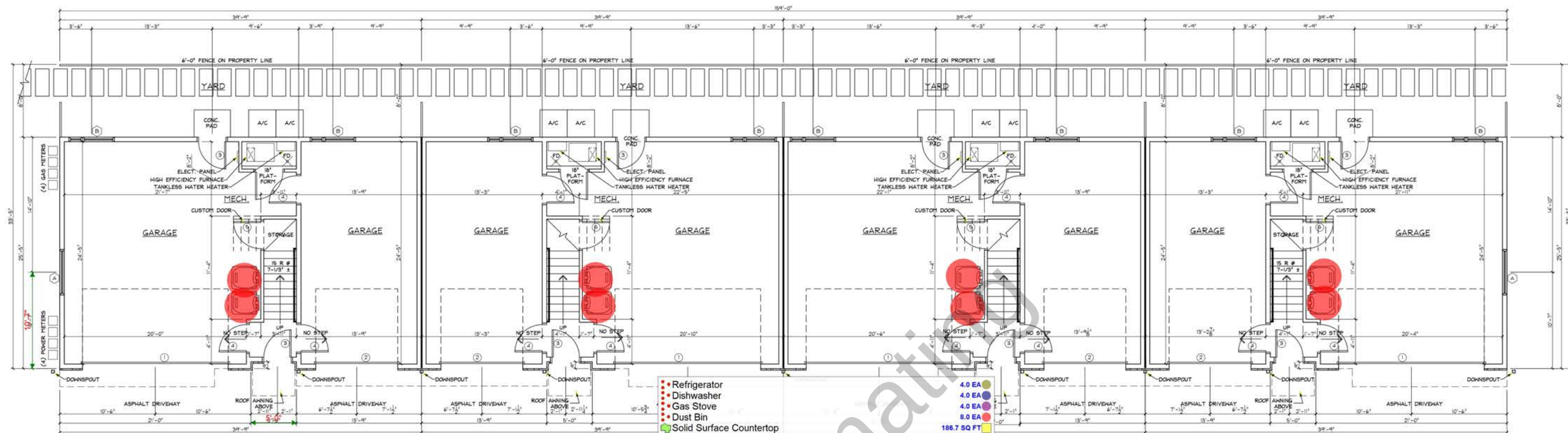
Call Digs

1-800-662-4111

NOTICE!

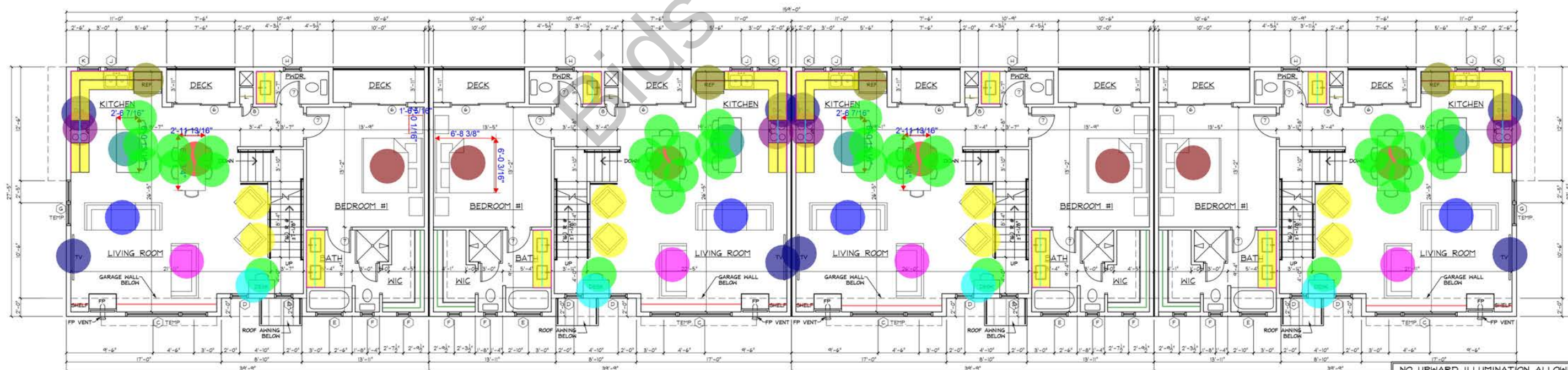
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION, AND RESTORATION OF ALL BURIED OR ABOVE GROUND UTILITIES, SHOWN OR NOT SHOWN ON THE PLANS.





- Refrigerator
 - Dishwasher
 - Gas Stove
 - Dust Bin
 - Solid Surface Countertop
 - Solid Surface Backsplash
 - 2' Deep 2'-6" H Base Cabinets
 - 1' Deep 2'-6" H Base Cabinets
 - 1' Deep Walk in Closet
 - 2'-6" x 6'-0" Table
 - 3'-0" x 6'-0" Table
 - Chairs
 - 1 Seat Sofa
 - 3 Seat Sofa
 - 2 Seat Sofa
 - 2'-10" x 1'-6" Desk
 - 6'-8" x 6'-0" Bed w/2 Side Tables
 - 1'-9" Deep Linen Closer
 - 55" TV
 - 2' Deep Shelf
- | | |
|---------|-------------|
| 4.0 EA | 186.7 SQ FT |
| 4.0 EA | 133.6 FT |
| 4.0 EA | 103.4 FT |
| 4.0 EA | 66.3 FT |
| 8.0 EA | 50.4 FT |
| 4.0 EA | 4.0 EA |
| 4.0 EA | 4.0 EA |
| 36.0 EA | 4.0 EA |
| 8.0 EA | 4.0 EA |
| 4.0 EA | 4.0 EA |
| 4.0 EA | 4.0 EA |
| 4.0 EA | 4.0 EA |
| 4.0 EA | 4.0 EA |
| 6.0 FT | 4.0 EA |
| 4.0 EA | 51.7 FT |
2. FT.) PER UNIT

SEE GENERAL GARAGE NOTES ON SHEET 2 FOR SPECIAL GARAGE CODE REQUIREMENTS.

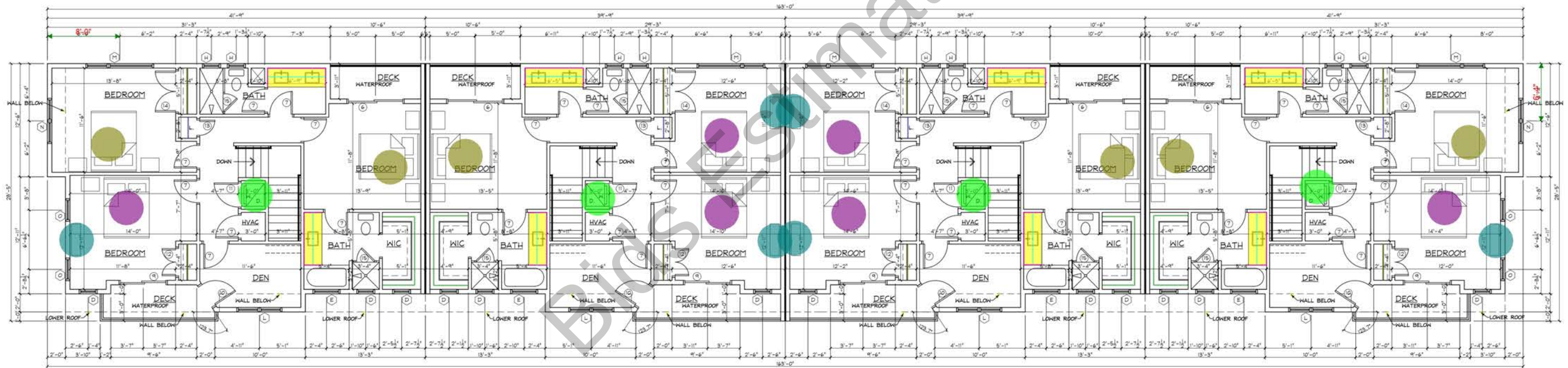


NO UPWARD ILLUMINATION ALLOWED. NO LIGHT MAY TRESPASS ON TO ADJACENT LOTS.

SEE SHEET #A-2 FOR ADD. NOTES

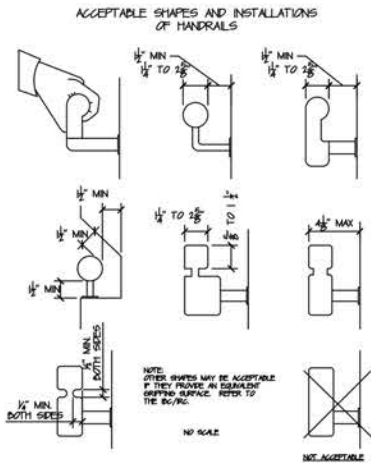
- Washer & Dryer
- 2' Deep Closet with Rod
- 2' Deep Linen Closet
- Solid Surface Countertop
- Solid Surface Backsplash
- 2' Deep 2'-6" H Base Cabinets
- 1' Deep Walk in Closet
- 6'-8" x 6'-0" Bed w/2 Side Tables
- 6'-8" x 5'-0" Bed w/1 Side Tables
- 1'-0" x 3'-6" Table
- 6'-8" x 5'-0" Bed w/2 Side Tables

- 4.0 EA
- 36.3 FT
- 9.3 FT
- 99.7 SQ FT
- 81.5 FT
- 48.6 FT
- 60.0 FT
- 0.0 EA
- 6.0 EA
- 6.0 EA
- 6.0 EA



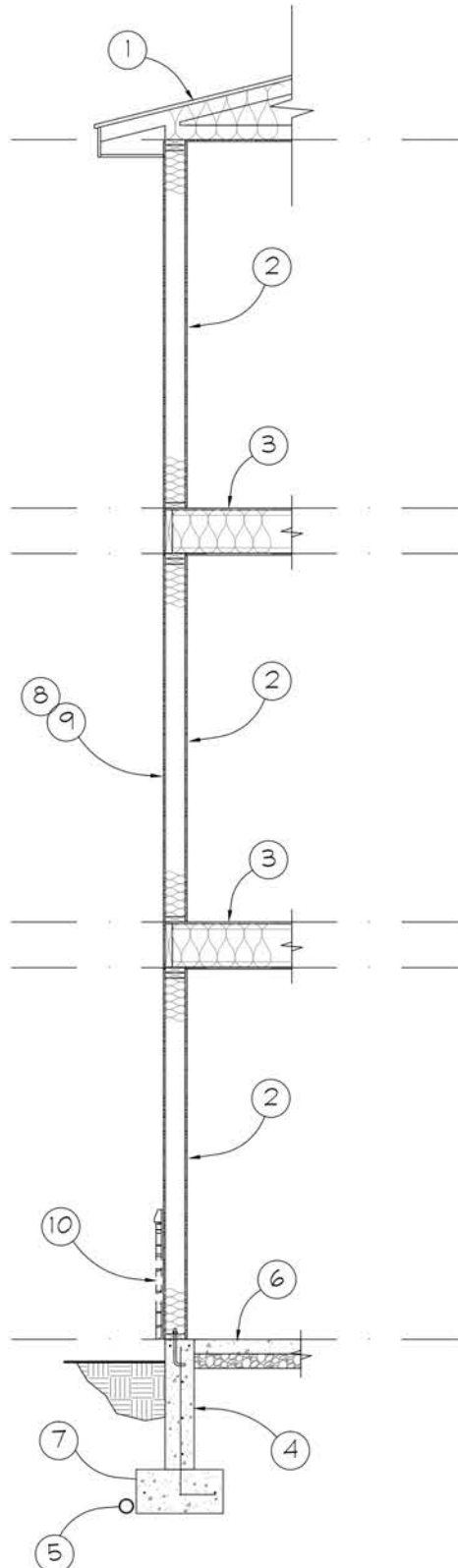
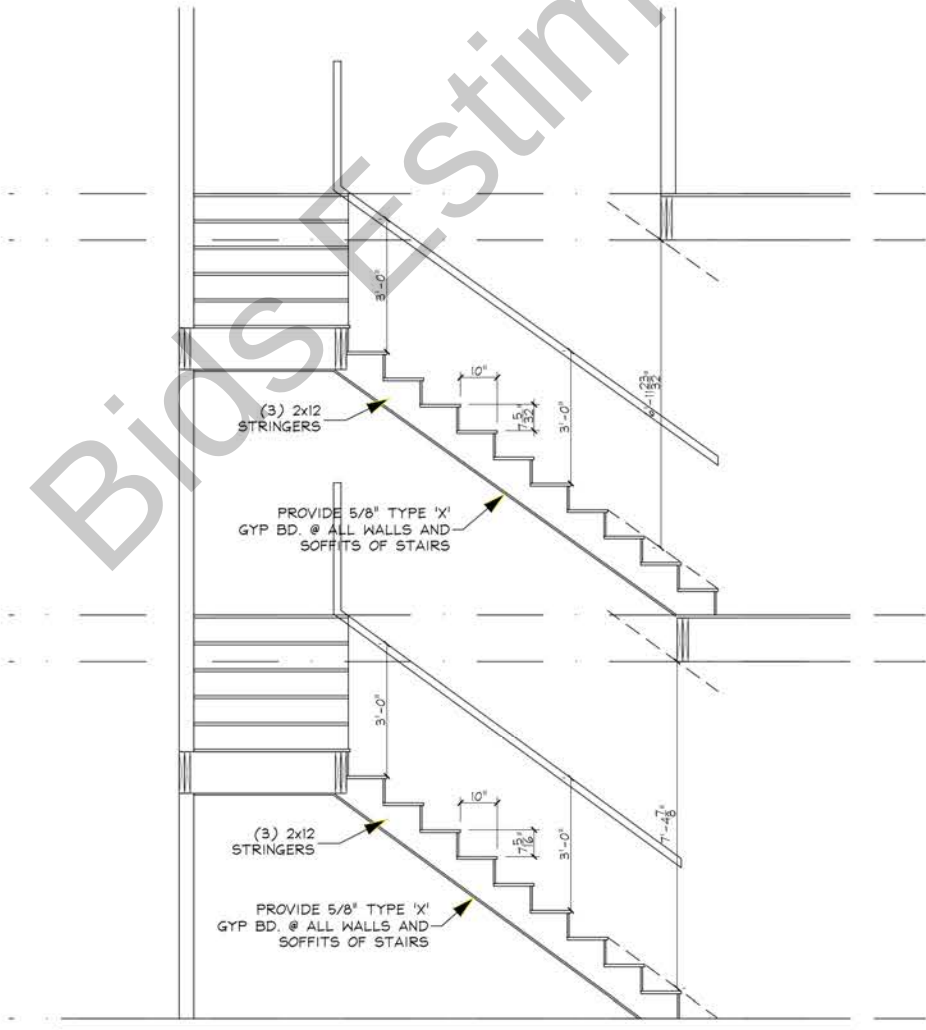
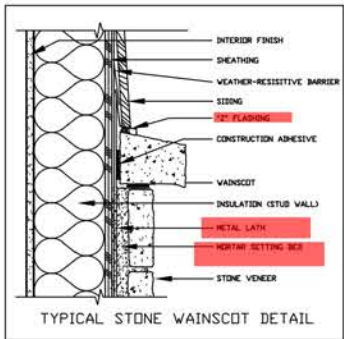
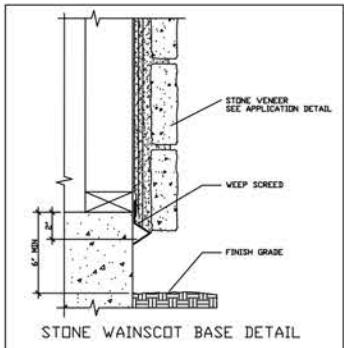
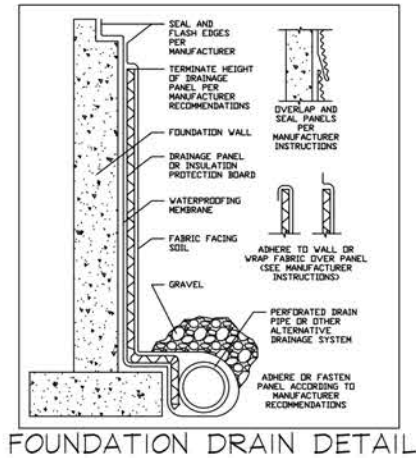
SEE SHEET #A-2 FOR ADD. NOTES

GENERAL STAIR / HANDRAIL NOTES	
1.	R311.7.1 WIDTH. STAIRWAYS SHALL NOT BE LESS THAN 36 INCHES IN CLEAR WIDTH AT ALL POINTS ABOVE THE PERMITTED HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT PROJECT MORE THAN 4.5 INCHES ON EITHER SIDE OF THE STAIRWAY AND THE CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL NOT BE LESS THAN 31-1/2 INCHES WHERE A HANDRAIL IS INSTALLED ON ONE SIDE AND 27 INCHES WHERE HANDRAILS ARE PROVIDED ON BOTH SIDES. I.I. EXCEPTION: THE WIDTH OF SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.7.10.1.
2.	R311.7.2 HEADROOM. THE HEADROOM IN STAIRWAYS SHALL NOT BE LESS THAN 6 FEET 8 INCHES MEASURED VERTICALLY FROM THE SLOPED LINE ADJOINING THE TREAD NOSING OR FROM THE FLOOR SURFACE OF THE LANDING OR PLATFORM ON THAT PORTION OF THE STAIRWAY.
3.	R311.7.3 VERTICAL RISE. A FLIGHT OF STAIRS SHALL NOT HAVE A VERTICAL RISE LARGER THAN 147 INCHES BETWEEN FLOOR LEVELS OR LANDINGS.
4.	R311.7.4 WALKLINE. THE WALKLINE ACROSS WINDER TREADS SHALL BE CONCENTRIC TO THE CURVED DIRECTION OF TRAVEL THROUGH THE TURN AND LOCATED 12 INCHES FROM THE SIDE WHERE THE WINDERS ARE NARROWER. THE 12-INCH DIMENSION SHALL BE MEASURED FROM THE WIDEST POINT OF THE CLEAR STAIR WIDTH AT THE WALKING SURFACE OF THE WINDER. IF WINDERS ARE ADJACENT WITHIN THE FLIGHT, THE POINT OF THE WIDEST CLEAR STAIR WIDTH OF THE ADJACENT WINDERS SHALL BE USED.
5.	R311.7.5.1 RISERS. THE RISER HEIGHT SHALL BE NOT MORE THAN 7-3/4 INCHES. THE RISER SHALL BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH. RISERS SHALL BE VERTICAL OR SLOPED FROM THE UNDERSIDE OF THE NOSING OF THE TREAD ABOVE AT AN ANGLE NOT MORE THAN 30 DEGREES FROM THE VERTICAL. OPEN RISERS ARE PERMITTED PROVIDED THAT THE OPENINGS LOCATED MORE THAN 30 INCHES, AS MEASURED VERTICALLY, TO THE FLOOR OR GRADE BELOW DO NOT PERMIT THE PASSAGE OF A 4-INCH-DIAMETER SPHERE.
6.	R311.7.5.2 TREADS. THE TREAD DEPTH SHALL BE NOT LESS THAN 10 INCHES. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8 INCH.
7.	R311.7.5.2.1 WINDER TREADS. WINDER TREADS SHALL HAVE A TREAD DEPTH OF NOT LESS THAN 10 INCHES MEASURED BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AT THE INTERSECTIONS WITH THE WALKLINE. WINDER TREADS SHALL HAVE A TREAD DEPTH OF NOT LESS THAN 6 INCHES AT ANY POINT WITHIN THE CLEAR WIDTH OF THE STAIR. WITHIN ANY FLIGHT OF STAIRS, THE LARGEST WINDER TREAD DEPTH AT THE WALKLINE SHALL NOT EXCEED THE SMALLEST WINDER TREAT BY MORE THAN 3/8 INCH. CONSISTENTLY SHAPED WINDERS AT THE WALKLINE SHALL BE ALLOWED WITHIN THE SAME FLIGHT OF STAIRS AS RECTANGULAR TREADS AND DO NOT HAVE TO BE WITHIN 3/8 INCH OF THE RECTANGULAR TREAD DEPTH. EXCEPTION: THE TREAD DEPTH AT SPIRAL STAIRWAYS SHALL BE IN ACCORDANCE WITH SECTION R311.7.10.1.
8.	R311.7.5.3 NOSINGS. THE RADIUS OF CURVATURE AT THE NOSING SHALL BE NO GREATER THAN 9/16 INCH. A NOSING PROJECTION NOT LESS THAN 3/4 INCH BUT NOT MORE THAN 1 1/4 INCHES SHALL BE PROVIDED ON STAIRWAYS WITH SOLID RISERS. THE GREATEST NOSING PROJECTION SHALL NOT EXCEED THE SMALLEST NOSING PROJECTION BY MORE THAN 3/8 INCH BETWEEN TWO STORIES, INCLUDING THE NOSING AT THE LEVEL OF FLOORS AND LANDINGS. BEVELING OF NOSINGS SHALL NOT EXCEED 1/2 INCH. EXCEPTION: A NOSING PROJECTION IS NOT REQUIRED WHERE THE TREAD DEPTH IS NOT LESS THAN 11 INCHES.
9.	R311.7.5.4 EXTERIOR PLASTIC COMPOSITE STAIR TREADS SHALL COMPLY WITH THE PROVISIONS OF SECTION R907.3.
10.	R311.7.8 HANDRAILS. HANDRAILS SHALL BE PROVIDED ON AT LEAST ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS.
11.	R311.7.8.1 HEIGHT. HANDRAIL HEIGHT, MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES.
12.	R311.7.8.2 CONTINUITY. HANDRAILS FOR STAIRWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT, FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1-1/2 INCH BETWEEN THE WALL AND THE HANDRAILS.
13.	R311.7.9 ILLUMINATION. ALL STAIRS SHALL BE PROVIDED WITH ILLUMINATION IN ACCORDANCE WITH SECTION R303.7.



GENERAL GUARDRAIL NOTES	
R312.1.1 WHERE REQUIRED. GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS AND LANDINGS, THAT ARE LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPEN SIDE. INSECT SCREENING SHALL NOT BE CONSIDERED AS A GUARD.	
R312.1.2 HEIGHT. REQUIRED GUARDS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES OR LANDINGS, SHALL BE NOT LESS THAN 36 INCHES IN HEIGHT MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE LEADING EDGES OF THE TREADS.	
EXCEPTIONS: 1. GUARDS ON THE OPEN SIDES OF STAIRS SHALL HAVE A HEIGHT NOT LESS THAN 34 INCHES MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS. 2. WHERE THE TOP OF THE GUARD SERVES AS A HANDRAIL ON THE OPEN SIDES OF STAIRS, THE TOP OF THE GUARD SHALL BE NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES AS MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS.	
R312.1.3 OPENING LIMITATIONS. REQUIRED GUARDS SHALL NOT HAVE OPENINGS FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT WHICH ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.	
EXCEPTIONS: 1. THE TRIANGULAR OPENINGS AT THE OPEN SIDE OF STAIR, FORMED BY THE RISER, TREAD AND BOTTOM RAIL OF A GUARD, SHALL NOT ALLOW THE PASSAGE OF A SPHERE 6 INCHES IN DIAMETER. 2. GUARDS ON THE OPEN SIDE OF STAIRS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 4-3/8 INCHES IN DIAMETER.	

2015 IECC BUILDING ENVELOPE REQUIREMENTS FOR HOMES IN UTAH											PREScriptive PATH
THIS PROJECT IS LOCATED IN CLIMATE ZONE 5 - SALT LAKE COUNTY	WINDOWS			INSULATION				FOUNDATION			
	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE AND DEPTH	CRAWL SPACE WALL R-VALUE	
	CLIMATE ZONE 6	0.32	0.55	NR	49	20+5 OR 13+10	15/20	30	15/19	10, 4FT	15/19
CLIMATE ZONE 5	0.32	0.55	NR	49	20 OR 13+5	13/17	30	15/19	10, 2FT		15/19
CLIMATE ZONE 3	0.35	0.55	0.25	38	20 OR 13+5	8/13	19	5/13	0		5/13
NR INDICATES NO REQUIREMENT											



WALL SECTION NOTES	
1	ROOF CONSTRUCTION: ARCHITECTURAL GRADE ASPHALT SHINGLES/TILE ON (2) LAYERS 15# FELT W/ ICE AND WATER SHIELD EXTENDING AT LEAST 24" INSIDE THE WARM SIDE OF THE HOUSE @ ALL VALLEYS AND EAVES ON CDX PLYWOOD OR OSB W/ NAILING PER ENGINEER'S SPECS** ON PREFAB TRUSSES OR RAFTERS (UNLESS OTHERWISE NOTED ON FRAMING PLANS) W/ R-49 BATT INSULATION WITH INSULATION BAFFLES W/ 1" AIRSPACE BETWEEN BAFFLE AND SHEATHING AND VENTED SOFFITS AND SOLID BLOCKING @ BEARING W/ HURRICANE TIES @ EACH RAFTER/TRUSS 4 MIL VAPOR BARRIER (WARM SIDE) UNDER 1/2" GYPSUM BOARD.
2	TYPICAL STUD WALL CONSTRUCTION: 7/16" OSB BOARD W/ 1/8" GAPS NAILED PER ENGINEER'S SPECS ON 2x6 STUD WALL W/ BLOCKING @ ALL PANEL EDGES W/ R-19 BATT INSULATION AND 4 MIL VAPOR BARRIER (WARM SIDE) UNDER 1/2" GYPSUM BOARD AND OVER 7/16" OSB ON WALLS W/ DBL SHEATHING PER ENGINEER'S SPECS.
3	TYPICAL FLOOR CONSTRUCTION: FLOOR COVERING (PER OWNER/CONTRACTOR CHOICE) ON 3/4" T&G CDX PLYWOOD OR OSB BOARD W/ NAILING PER ENGINEER'S SPECS** ON JOISTS PER PLAN W/ SOLID BLOCKING @ ALL BEARING POINTS AND WALLS.
4	TYPICAL FOUNDATION WALL CONSTRUCTION: 5/8"x10" FOUNDATION ANCHOR BOLTS PER ENGINEER'S SPECS** IN (1) TREATED 2x6 CONTINUOUS SILL PLATE ON 8" 3000 PSI CONCRETE FOUNDATION WALL W/ ASPHALTIC WATERPROOFING W/ REINFORCING PER FOUNDATION WALL SCHEDULE OR PER ENGINEER'S SPECS** OR SEPARATE DETAILS.
5	TYPICAL PERIMETER FOOTING CONSTRUCTION: CONTINUOUS FOOTING PER ENGINEER SPECS @ MIN 30" BELOW FINISH GRADE W/ (MIN 40" IN PARK CITY AND SUMMIT COUNTY) REBAR PER ENGINEER SPECS W/ ASPHALTIC WATERPROOFING AND W/ 4" CONTINUOUS PERFORATED FOUNDATION DRAIN @ UPHILL AND SIDE HILL SIDES OF BUILDING.
6	TYPICAL CONCRETE SLAB FLOOR CONSTRUCTION: FLOOR COVERING (PER OWNER/CONTRACTOR CHOICE) ON 4" CONCRETE SLAB W/ 4" COMPACTED FILL OR GRAVEL (ON CLAY SOIL) W/ RIGID INSULATION BETWEEN CONCRETE SLAB AND FOUNDATION WALL EXTENDING UNDER SLAB OR ALONG FOUNDATION WALL TO SPECIFIED LENGTH WHEN NEEDED PER MODEL ENERGY CODE ANALYSIS.
7	TYPICAL 4" PERFORATED FRENCH DRAIN:
8	STUCCO FINISH APPLICATION: "BTO-ONE COAT" ACRYLIC STUCCO SYSTEM (ICBO # 3804) ON (2) LAYERS 15# FELT PAPER ON TYPICAL STUD WALL CONSTRUCTION (SEE NOTES BELOW).
9	STONE VENEER CONSTRUCTION: 2" STONE VENEER WITH STONE OR PRECAST CAP (PER OWNER/CONTRACTOR CHOICE) W/ 22 GAUGE TIES @ 16" O.C. BOTH WAYS AND W/ #9 WIRE MESH IN 1" GROUT SPACE ON (1) LAYER 15# FELT PAPER ON TYPICAL STUD WALL CONSTRUCTION (SEE NOTES BELOW).
10	SIDING APPLICATION: SIDING INSTALLED PER MANUFACTURER'S SPECS ON (1) LAYER 15# FELT PAPER ON TYPICAL STUD WALL CONSTRUCTION (SEE NOTES BELOW).

SEE SHEET #A-2 FOR ADD. NOTES

FLOOR BEAM SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
FB-1	(3) 1 3/4"x18"	LVL	2.0E	
FB-2	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-3	(3) 1 3/4"x18"	LVL	2.0E	
FB-4	(3) 1 3/4"x9 1/2"	LVL	2.0E	
FB-5	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-5a	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-5b	(3) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6a	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6b	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6c	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-6d	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-7	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-7a	(2) 1 3/4"x11 7/8"	LVL	2.0E	
FB-8	(3) 1 3/4"x18"	LVL	2.0E	
FB-8a	(3) 1 3/4"x18"	LVL	2.0E	
FB-9	(2) 1 3/4"x11 7/8"	LVL	2.0E	

STRUCTURAL HEADER SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 2x8	#2 DF	#2 DF	
HDR-1a	(2) 2x8	#2 DF	#2 DF	
HDR-1b	(2) 2x8	#2 DF	#2 DF	
HDR-2	(2) 2x8	#2 DF	#2 DF	
HDR-3	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-3a	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-3b	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-3c	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-4	(2) 1-3/4" x 7-1/4"	LVL	2.0E	
HDR-4a	(2) 1-3/4" x 7-1/4"	LVL	2.0E	

COLUMN SCHEDULE		
TYPE	GRADE	COMMENTS
#2 DF	#2 DF	
#2 DF	#2 DF	
#2 DF	#2 DF	

 Asphalt Shingle/Tile (2) Layer of #15 Felt Paper

 2' Wide Ice and Water Shield

 Metal Gutter and Drip Edge

 Roof Flashing (Verify if required)

 2x4 Wood Blocking

 1'-6" Wide Vented Metal Soffit

4790.6 SQ FT

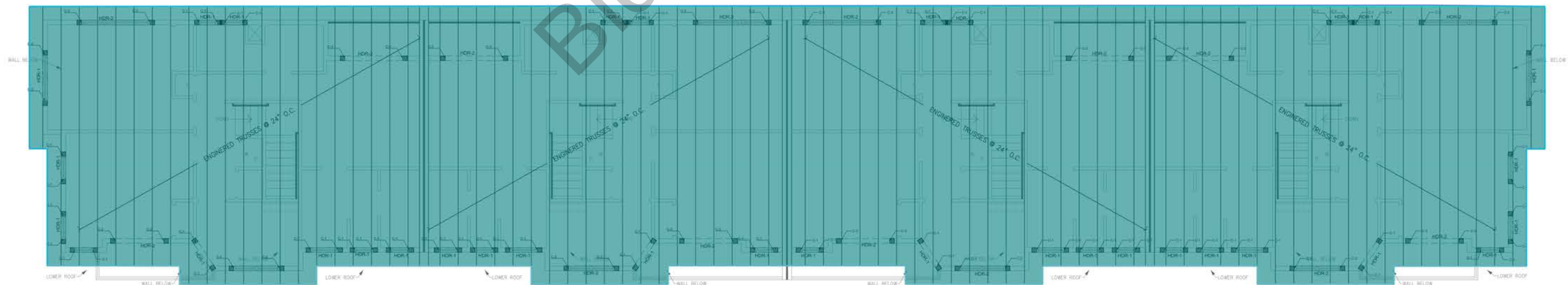
405.0 FT

178.2 FT

226.8 FT

178.2 FT

405.0 FT



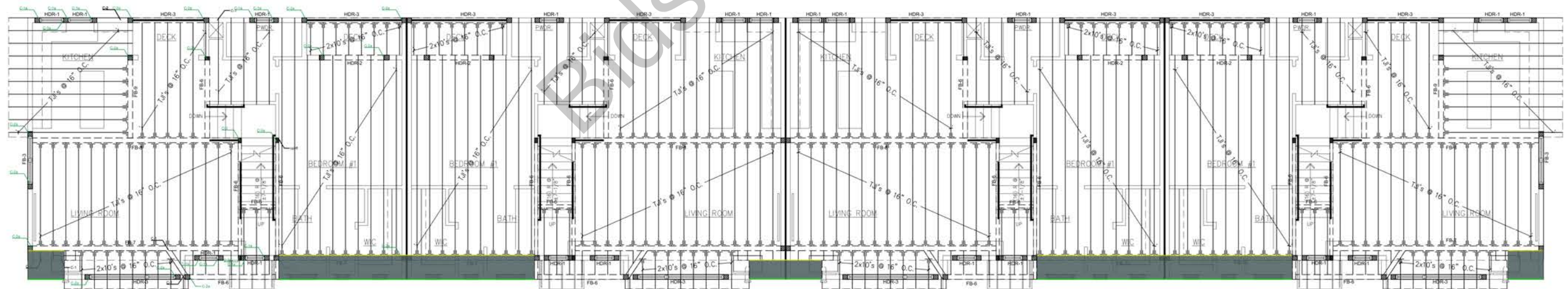
-  Asphalt Shingle/Tile (2) Layer of #15 Felt Paper
-  Metal Drip Edge and Metal Gutter
-  Wall To Roof Flashing

172.4 SQ FT

68.8 FT

68.8 FT

FLOOR BEAM SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
FB-1	(2) 1 3/4"x10"	LVL	2.00	OPT W/SHS
FB-2	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-3	(2) 1 3/4"x10"	LVL	2.00	OPT W/SHS
FB-4	(2) 1 3/4"x10 1/2"	LVL	2.00	
FB-5	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6a	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6b	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6c	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6d	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6e	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6f	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6g	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6h	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6i	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6j	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6k	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6l	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6m	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6n	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6o	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6p	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6q	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6r	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6s	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6t	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6u	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6v	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6w	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6x	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6y	(2) 1 3/4"x11 7/8"	LVL	2.00	
FB-6z	(2) 1 3/4"x11 7/8"	LVL	2.00	
STRUCTURAL HEADER SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
HDR-1	(2) 2x6	#2 DF	#2 DF	
HDR-1a	(2) 2x6	#2 DF	#2 DF	
HDR-1b	(2) 2x6	#2 DF	#2 DF	
HDR-1c	(2) 2x6	#2 DF	#2 DF	
HDR-2	(2) 2x6	#2 DF	#2 DF	
HDR-3	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3a	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3b	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3c	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3d	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3e	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3f	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3g	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3h	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3i	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3j	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3k	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3l	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3m	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3n	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3o	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3p	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3q	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3r	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3s	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3t	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3u	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3v	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3w	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3x	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3y	(2) 3 1/2"x8 1/2"	LVL	2.00	
HDR-3z	(2) 3 1/2"x8 1/2"	LVL	2.00	
STRUCTURAL COLUMN SCHEDULE				
MARK	SIZE	TYPE	GRADE	COMMENTS
C-1	(2) 2x6	#2 DF	#2 DF	
C-2	(2) 2x6	#2 DF	#2 DF	
C-3	6x6	#2 DF	#2 DF	



ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
	STANDARD CEILING MOUNT LIGHT FIXTURE
	WALL MOUNT LIGHT FIXTURE
	THEATER LIGHT BATH FIXTURE
	PENDANT LIGHT FIXTURE
	RECESSED LIGHT FIXTURE
	RECESSED FAN FIXTURE
	8' x 2' LED
	FLOOD LIGHTS
	SMOKE DETECTOR

CARBON MONOXIDE ALARMS SECTION R315

- R315.1 GENERAL**
SMOKE ALARMS SHALL COMPLY WITH SECTION R315
- R315.1.1 LISTINGS**
CARBON MONOXIDE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 204. COMBINATION CARBON MONOXIDE AND SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 204 AND UL 217.
- R315.2 WHERE REQUIRED**
CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN ACCORDANCE WITH SECTIONS R315.2.1 AND R315.2.2
- R315.2.1 NEW CONSTRUCTION**
FOR NEW CONSTRUCTION, CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN DWELLING UNITS WHERE EITHER OR BOTH OF THE FOLLOWING CONDITIONS

4.0 EA

8.0 EA

32.0 EA

36.0 EA

4.0 EA

8.0 EA

12.0 EA

16.0 EA

8.0 EA

16.0 EA

WHERE MORE THAN ONE CARBON MONOXIDE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT IN ACCORDANCE WITH SECTION R315.1, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. PHYSICAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM. EXCEPTION: INTERCONNECTION OF CARBON MONOXIDE ALARMS IN EXISTING AREAS SHALL NOT BE REQUIRED WHERE ALTERATIONS OR REPAIRS DO NOT RESULT IN REMOVAL OF INTERIOR WALL OR CEILING FINISHES EXPOSING THE STRUCTURE. UNLESS THERE IS AN ATTIC, CRAWL SPACE OR BASEMENT AVAILABLE WHICH COULD PROVIDE ACCESS FOR INTERCONNECTION WITHOUT THE REMOVAL OF INTERIOR FINISHES

SMOKE ALARMS SECTION R314

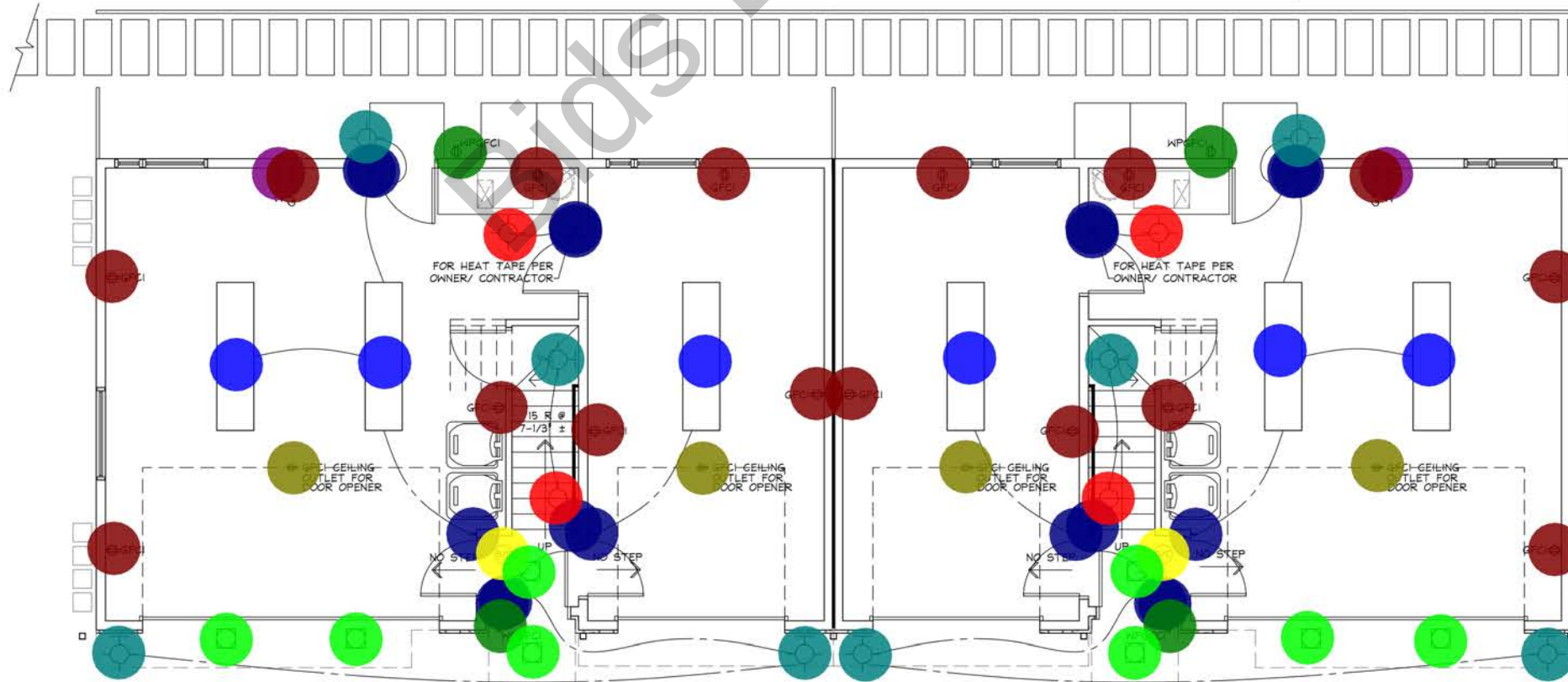
- R314.1 GENERAL**
SMOKE ALARMS SHALL COMPLY WITH NFPA 72 AND SECTION R314
- R314.1.1 LISTINGS**
SMOKE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217. COMBINATION SMOKE AND CARBON MONOXIDE ALARMS SHALL BE LISTED IN ACCORDANCE WITH UL 217 AND UL 204.
- R314.2 WHERE REQUIRED**
SMOKE ALARMS SHALL BE PROVIDED IN ACCORDANCE WITH THIS SECTION
- R314.2.1 NEW CONSTRUCTION**
SMOKE ALARMS SHALL BE PROVIDED IN DWELLING UNITS
- R314.2.2 ALTERATIONS, REPAIRS AND ADDITIONS**
WHERE ALTERATIONS, REPAIRS OR ADDITIONS REQUIRING PERMIT OCCUR, OR WHERE ONE OR MORE SLEEPING ROOMS ARE ADDED OR CREATED IN EXISTING DWELLINGS, THE INDIVIDUAL DWELLING UNITS SHALL BE EQUIPPED WITH SMOKE ALARMS LOCATED AS REQUIRED FOR NEW DWELLINGS. EXCEPTIONS:
1. WORK INVOLVING THE EXTERIOR SURFACES OF DWELLINGS, SUCH AS THE REPLACEMENT OF ROOFING OR SIDING, THE ADDITION OR REPLACEMENT OF WINDOWS OR DOORS, OR THE ADDITION OF A PORCH OR A DECK, ARE EXEMPT FROM THE REQUIREMENTS OF THIS SECTION.
2. INSTALLATION, ALTERATION OR REPAIRS OF PLUMBING OR MECHANICAL SYSTEMS ARE EXEMPT FROM THE REQUIREMENTS OF THIS SECTION.
- R314.3 - LOCATION**
SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:
1. IN EACH SLEEPING ROOM.
2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.
3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING BASEMENTS AND HABITABLE ATTICS AND NOT INCLUDING CRAWL SPACES AND UNHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.
4. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3 FEET HORIZONTALLY FROM THE DOOR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY SECTION R314.3
- R314.3.1 - INSTALLATION NEAR COOKING APPLIANCES**
SMOKE ALARMS SHALL NOT BE INSTALLED IN THE FOLLOWING LOCATIONS UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM IN A LOCATION REQUIRED BY SECTION R314.3:
1. IONIZATION SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 20 FEET HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
2. IONIZATION SMOKE ALARMS WITH AN ALARM-SILENCING SWITCH SHALL NOT BE INSTALLED LESS THAN 10 FEET HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
3. PHOTOELECTRIC SMOKE ALARMS SHALL NOT BE INSTALLED LESS THAN 6 FEET HORIZONTALLY FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.
- R314.4 - INTERCONNECTION**
WHERE MORE THAN ONE SMOKE ALARM IS REQUIRED TO BE INSTALLED WITHIN AN INDIVIDUAL DWELLING UNIT IN ACCORDANCE WITH SECTION R314.3, THE ALARM DEVICES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL DWELLING UNIT. PHYSICAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM.
- R314.5 - COMBINATION ALARMS**
COMBINATION SMOKE AND CARBON MONOXIDE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF SMOKE ALARMS.
- R314.6 - POWER SOURCE**
SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHEN SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE, AND WHEN PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTING SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION. EXCEPTIONS:
1. SMOKE ALARMS SHALL BE PERMITTED TO BE BATTERY OPERATED WHERE INSTALLED IN BUILDINGS WITHOUT COMMERCIAL POWER.
2. SMOKE ALARMS INSTALLED IN ACCORDANCE WITH SECTION R314.2.2 SHALL BE PERMITTED TO BE BATTERY POWERED.

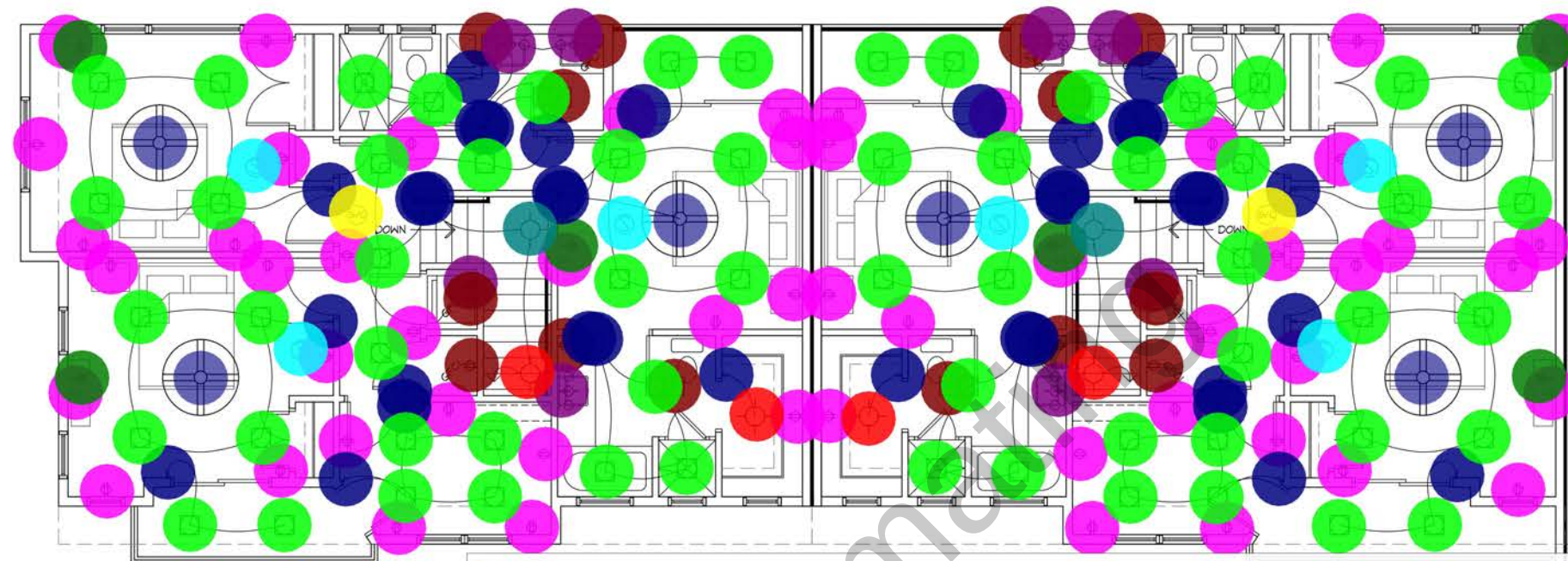
GENERAL ELECTRICAL NOTES

- ALL WORK TO BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR CONSISTENT WITH THE BEST PRACTICES OF THE TRADE AND IN COMPLIANCE WITH THE 2015 I.B.C. & NAT. ELECT. CODE.
- ELECTRICAL CONTRACTOR TO PERFORM A "WALK-THROUGH" WITH OWNER AND ARCHITECT PRIOR TO INSTALLATION.
- E3608.1.2 - UPER GROUND: AN ELECTRODE ENCASED IN CONCRETE LOCATED WITHIN AND NEAR THE BOTTOM OF A CONCRETE FOUNDATION OR FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH SHALL BE CONSIDERED AS A GROUNDING ELECTRODE PER I.B.C. SECTION E3608.1.2
- PROVIDE MIN. 200 AMP SERVICE WITH MIN. 42-CIRCUIT PANEL(S)
- GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION
E3902.1 - ALL RECEPTACLES INSTALLED IN BATHROOMS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
- E3902.2 - ALL RECEPTACLES INSTALLED IN GARAGES AND GRADE-LEVEL PORTIONS OF UNFINISHED ACCESSORY BUILDINGS USED FOR STORAGE OR WORK AREAS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
- E3902.3 - ALL RECEPTACLES INSTALLED OUTDOORS SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
- E3902.4 - WHERE A CRAWL SPACE IS AT OR BELOW GRADE LEVEL, ALL RECEPTACLES INSTALLED IN SUCH SPACES SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
- E3902.6 - ALL RECEPTACLES THAT SERVE COUNTERTOP SURFACES SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL.
- E3902.7 - SINK RECEPTACLES. ALL RECEPTACLES THAT ARE LOCATED WITHIN 6 FEET OF THE OUTSIDE EDGE OF A SINK THAT IS LOCATED IN AN AREA OTHER THAN A KITCHEN, SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. RECEPTACLE OUTLETS SHALL NOT BE INSTALLED IN A FACE-UP POSITION IN THE WORK SURFACES OR COUNTERTOPS.
- E3902.10 GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL SHALL BE PROVIDED FOR ELECTRICALLY HEATED FLOORS IN BATHROOMS, KITCHENS AND IN HYDROMASSAGE BATHTUB, SPA AND HOT TUB LOCATIONS.
- E3901.2.1 - RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT MEASURED HORIZONTALLY ALONG THE FLOOR LINE OF ANY WALL SPACE IS MORE THAN 6 FEET, FROM A RECEPTACLE OUTLET
- E3901.4.1 WALL COUNTERTOP SPACE. A RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH WALL COUNTERTOP SPACE 12 INCHES OR WIDER. RECEPTACLE OUTLETS SHALL BE INSTALLED SO THAT NO POINT ALONG THE WALL LINE IS MORE THAN 24 INCHES, MEASURED HORIZONTALLY FROM A RECEPTACLE OUTLET IN THAT SPACE.
- E3901.9 BASEMENTS, GARAGES AND ACCESSORY BUILDINGS NOT LESS THAN ONE RECEPTACLE OUTLET, IN ADDITION TO ANY PROVIDED FOR SPECIFIC EQUIPMENT, SHALL BE INSTALLED IN EACH SEPARATE UNFINISHED PORTION OF A BASEMENT, IN EACH ATTACHED GARAGE, AND IN EACH DETACHED GARAGE OR ACCESSORY BUILDING THAT IS PROVIDED WITH ELECTRICAL POWER. THE BRANCH CIRCUIT SUPPLYING THE RECEPTACLES IN A GARAGE SHALL NOT SUPPLY OUTLETS OUTSIDE OF THE GARAGE AND NOT LESS THAN ONE RECEPTACLE OUTLET SHALL BE INSTALLED FOR EACH MOTOR VEHICLE SPACE.
- ALL CONVENIENCE OUTLETS SHALL BE ON A #12 WIRE CIRCUIT FUSED AT 20 AMPS. NOT MORE THAN 8 OUTLETS PERMITTED ON ANY CIRCUIT SERVING CONVENIENCE OUTLETS. LIGHTING OUTLETS SHALL BE ON A #14 OR #12 WIRE CIRCUIT WITH A MAXIMUM OF 12 OUTLETS. -N.E.C.
- E3902.12 - ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION. ALL BRANCH CIRCUITS THAT SUPPLY 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE OUTLETS INSTALLED IN FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DEN, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS AND SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT.
- N101.16 - A PERMANENT CERTIFICATE SHALL BE POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL LISTING THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON CEILING, ROOF, WALLS FOUNDATIONS, (SLAB, BASEMENT WALL, CRAWLSPACE WALL AND/OR FLOOR) AND DUCTS OUTSIDE THE CONDITIONED SPACES; U-FACTORS OF WINDOWS, THE TYPE AND EFFICIENCY OF HEATING, COOLING AND SERVICE WATER HEATING EQUIPMENT SHALL ALSO BE LISTED. NOTE: THE LISTING WILL NOT ALLOW YOU TO DRILL OR MODIFY THE PANEL OR COVER IN ANY WAY TO ACCOMPLISH THIS.
- E4002.14 - TAMPER PROOF OUTLETS REQUIRED THROUGHOUT.
- E3901.4.2 - ISLAND COUNTERTOP SPACES. AT LEAST ONE RECEPTACLE OUTLET SHALL BE INSTALLED AT EACH ISLAND COUNTERTOP SPACE WITH A LONG DIMENSION OF 24 INCHES OR GREATER AND A SHORT DIMENSION OF 12 INCHES OR GREATER.
- E3901.12 - HVAC OUTLET. A 125-VOLT, SINGLE-PHASE, 15- OR 20-AMPERE-RATED RECEPTACLE OUTLET SHALL BE INSTALLED AT AN ACCESSIBLE LOCATION FOR THE SERVICING OF HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT. THE RECEPTACLE SHALL BE LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF THE HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT. THE RECEPTACLE OUTLET SHALL NOT BE CONNECTED TO THE LOAD SIDE OF THE HVAC EQUIPMENT DISCONNECTING MEANS.
- E3901.6 - BATHROOM. AT LEAST ONE WALL RECEPTACLE OUTLET SHALL BE INSTALLED IN BATHROOMS AND SUCH OUTLET SHALL BE LOCATED WITHIN 36 INCHES OF THE OUTSIDE EDGE OF EACH LAVATORY BASIN. THE RECEPTACLE OUTLET SHALL BE LOCATED ON A WALL OR PARTITION THAT IS ADJACENT TO THE LAVATORY BASIN LOCATION, OR INSTALLED ON THE SIDE OR FACE OF THE BASIN CABINET NOT MORE THAN 12 INCHES BELOW THE COUNTERTOP.
- E4003.10 LAMP HOLDERS IN WET OR DAMP LOCATIONS. LAMP HOLDERS INSTALLED IN WET LOCATIONS SHALL BE LISTED FOR USE IN WET LOCATIONS. LAMP HOLDERS INSTALLED IN DAMP LOCATIONS SHALL BE LISTED FOR DAMP LOCATIONS OR SHALL BE LISTED FOR WET LOCATIONS
- E4003.11 BATHTUB AND SHOWER AREAS. CORD-CONNECTED LUMINAIRES, CHAIN-, CABLE-, OR CORD-SUSPENDED LUMINAIRES, LIGHTING TRACK, PENDANTS, AND CEILING-SUSPENDED (PADDED) FANS SHALL NOT HAVE ANY PARTS LOCATED WITHIN A ZONE MEASURED 3 FEET HORIZONTALLY AND 8 FEET VERTICALLY FROM THE TOP OF A BATHTUB RIM OR SHOWER STALL THRESHOLD. THIS ZONE IS ALL ENCOMPASSING AND INCLUDES THE SPACE DIRECTLY OVER THE TUB OR SHOWER. LUMINAIRES WITHIN THE ACTUAL OUTSIDE DIMENSION OF THE BATHTUB OR SHOWER TO A HEIGHT OF 8 FEET VERTICALLY FROM THE TOP OF THE BATHTUB RIM OR SHOWER THRESHOLD SHALL BE MARKED FOR DAMP LOCATIONS AND WHERE SUBJECT TO SHOWER SPRAY, SHALL BE MARKED FOR WET LOCATIONS.
- ALL RECEPTACLES IN THE GARAGE NEED TO BE A MIN. OF 18" OFF OF THE GARAGE FLOOR.
- MAXIMUM SINGLE PENETRATION IN RATED GARAGE SHALL NOT EXCEED 16 SQUARE INCHES. (DOUBLE GANG BOXES MAXIMUM. SEPARATE 4 SWITCHES INTO 2 AND 2.)
- ELECTRICIAN TO ADVISE ABOUT PROVISIONS FOR FUTURE AUXILIARY GENERATOR.
- ELECTRICIAN TO ADVISE ON PROPER FLUORESCENT BALLAST IN COOLER STORAGE AREAS.
- SECURITY SYSTEM IS BY ALLOWANCE AND SHALL BE APPROVED BY THE OWNER.
- ADVISE AND COORDINATE OWNER INSTALLED AUDIO-VIDEO, COMPUTER, ETC., WIRING.
- PROVIDE OWNER WITH INTERCOM OPTIONS TO SELECT FROM.
- PROVIDE 4 PHONE LINE CAPABILITY.
- PROVIDE POWER STUB FOR EXTERIOR LANDSCAPE LIGHTING.
- PROVIDE ADEQUATE CONDUITS FROM SPRINKLER TIMERS TO EXTERIOR LOCATION APPROVED BY OWNER.
- OWNER TO APPROVE HEAT TAPE & HOLIDAY LIGHT OUTLET LOCATIONS.
- KEEP GAS AND ELECTRICAL METERS IN AN AREA THAT IS PROTECTED FROM SNOW AND ICE.
- ELECTRICAL PANELS SHALL COMPLY WITH N.E.C. 100-16. PROVIDE MIN. CLEARANCE OF 30" WIDTH BY 36" DEPTH BY 6-6" HEIGHT FOR PANEL AREA.

SEE SHEET #A-2 FOR ADD. NOTES

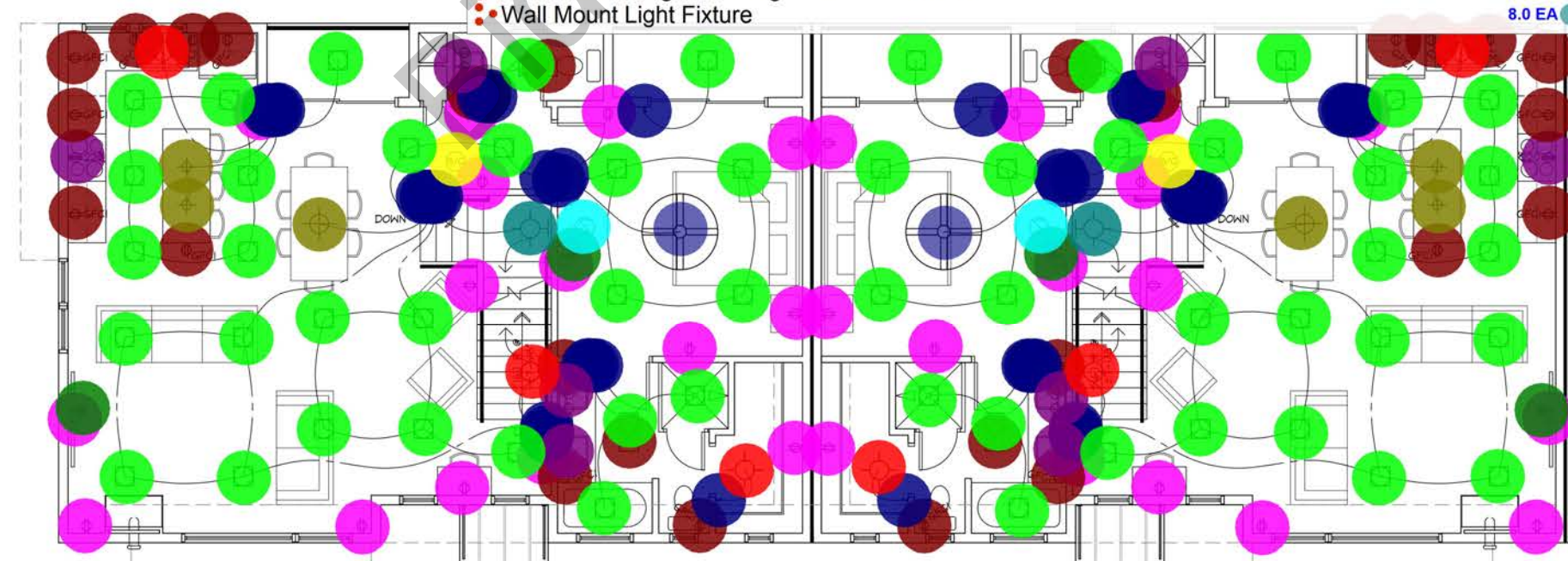
- 220 Volt Outlet
- GFCI Ceiling Outlet
- GFCI Duplex Outlet
- Single Switch
- Smoke/Carbon Monoxide Detector
- Weather proof GFCI Duplex Outlet
- 8'x2' LED Light
- Recessed Light Fixture
- Standard Ceiling Mount Light Fixture
- Wall Mount Light Fixture





- 220 Volt Outlet
- Duplex Outlet
- GFCI Duplex Outlet
- Media Data/Jack
- Recessed Fan Fixture
- Single Switch
- Smoke Detector
- Smoke/Carbon Monoxide Detector
- 3 Head Theater Light Bath Fixture
- Pendant Light Fixture
- Recessed Light Fixture
- Standard Ceiling Mount Light Fixture
- Standard Ceiling Mount Light With Fan Fixture
- Wall Mount Light Fixture

- 8.0 EA
- 166.0 EA
- 64.0 EA
- 20.0 EA
- 16.0 EA
- 160.0 EA
- 16.0 EA
- 8.0 EA
- 24.0 EA
- 12.0 EA
- 228.0 EA
- 20.0 EA
- 8.0 EA
- 8.0 EA



ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
	STANDARD CEILING MOUNT LIGHT FIXTURE
	WALL MOUNT LIGHT FIXTURE
	THEATER LIGHT BATH FIXTURE
	PENDANT LIGHT FIXTURE
	RECESSED LIGHT FIXTURE
	RECESSED FAN FIXTURE
	8' x 2' LED
	FLOOD LIGHTS
	SMOKE DETECTOR
	CARBON MONOXIDE DETECTOR
	SMOKE/CARBON MONOXIDE DETECTOR
	SINGLE SWITCH
	THREE OR FOUR WAY SWITCH
	DIMMER SWITCH
	DUPLEX OUTLET
	DUPLEX OUTLET, TOP HALF SWITCHED
	220 VOLT OUTLET
	WEATHERPROOF DUPLEX OUTLET
	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX OUTLET
	FLOOR OUTLET
	DOORBELL
	TELEPHONE JACK
	TV JACK
	MEDIA/DATA JACK

ALL ELECTRICAL SWITCHES, RECEPTACLES, ETC. IN A GARAGE NEED TO BE A MINIMUM OF 18" OFF OF GARAGE FLOOR.

KEEP GAS AND ELECTRICAL METERS IN AN AREA THAT IS PROTECTED FROM SNOW AND ICE.

SEE SHEET #A-2 FOR ADD. NOTES

PIPING LEGEND			
GATE VALVE		CHILLED WATER SUPPLY	CWS
OS & Y PATTERN GATE VALVE		CHILLED WATER RETURN	CWR
BALL VALVE		CONDENSER WATER SUPPLY	CDS
BUTTERFLY VALVE		CONDENSER WATER RETURN	COR
MOTORIZED BUTTERFLY VALVE		HEATING WATER SUPPLY	HWS
HEAT TRACING		HEATING WATER RETURN	HWR
DEIONIZED WATER	DI	WATER TREATMENT	WT
CHECK VALVE (SWING OR LIFT AS REQ'D)		FIRE DEPT. HORN & LIGHT	
SOLENOID VALVE		HOT GAS	HG
AUTOMATIC CONTROL VALVE (2-WAY)		FLEXIBLE PIPE CONNECTION	
AUTOMATIC CONTROL VALVE (3-WAY)		REDUCED PRESSURE BACKFLOW PREVENTER	RBPB
PRESSURE REDUCING VALVE		DIRECTION OF FLOW	
PRESSURE INDEPENDENT VALVE		ELBOW DOWN	
P & T RELIEF VALVE		ELBOW UP	
AIR VENT (AUTOMATIC)		PIPE CAP	
REFRIGERANT LIQUID	RL	TEE DOWN	
REFRIGERANT SUCTION	RS	UNION	
THERMAL EXPANSION VALVE		DOMESTIC COLD WATER	
STRAINER		DOMESTIC HOT WATER	
CIRCUIT SETTER		HOT WATER CIRC.	
FLOW METER		TEMPERED WATER	T
PET COCK OR GAUGE COCK		SANITARY (PLEG) VENT	
PRESSURE GAUGE W/GAUGE COCK		SANITARY SEWER ABOVE GRADE	
THERMOMETER		SANITARY SEWER BELOW GRADE	
TEMPERATURE & PRESSURE TEST PLUG		DRAIN	D
IN-LINE PUMP		ROOF DRAIN PIPING	RD
FLOW SWITCH		OVERFLOW DRAIN PIPING	OD
AQUASTAT		STORM DRAIN PIPING ABOVE GRADE	SD
HOSE BIBB OR SILLCOCK		STORM DRAIN PIPING BELOW GRADE	SD
VACUUM	V	FIRE SERVICE	F
FLOOR DRAIN		NATURAL GAS	G
FLOOR SINK		COMPRESSED AIR	CA
HOT GAS BYPASS	HGBP	VENT THROUGH ROOF	
WALL CLEANOUT		STEAM	S
FLOOR OR GRADE CLEANOUT		CONDENSATE	C
GRADE CLEANOUT W/ CONCRETE PAD		GREASE WASTE	GW
		SNOWMELT PIPING 2" O.C.	
		ROOF DRAIN WITH SNOWMELT PIPING INSTALLED INSIDE PIPE	

MECHANICAL LEGEND	
RETURN OR EXHAUST DUCT DOWN	
RETURN OR EXHAUST DUCT UP	
SUPPLY AIR DUCT DOWN	
SUPPLY AIR DUCT UP	
SPIN-IN FITTING W/ MVD	
FLEXIBLE DUCT CONNECTION	
CEILING SLOT DIFFUSER	
CEILING DIFFUSER	
CEILING EXHAUST GRILLE	
CEILING GRILLE	
ACCESS PANEL	
MANUAL VOLUME DAMPER	
MOTORIZED DAMPER	
FIRE DAMPER	
THERMOSTAT OR TEMP SENSOR	
POINT OF CONNECTION TO EXISTING	
DETAIL NO. DRAWING NO.	
KEYED NOTE	
SECTION CUT LINE	
CONTROL TRANSFORMER	
FIRE DAMPER (FUSIBLE LINK)	
WALL RATING (SEE PLANS)	
COMBINATION FIRE/SMOKE DAMPER	
MOTORIZED 120v POWER	
WALL RATING (SEE PLANS)	
SMOKE DAMPER	
MOTORIZED 120v POWER	
WALL RATING (SEE PLANS)	
MOTORIZED CONTROL DAMPER	
TYP. 24v POWER (SEE PLANS)	
OPPOSED BLADE DAMPER (NO MOTOR) W/ INTERLOCKING SEALS AND BLADES	
IRIS DAMPER (NO MOTOR) W/ INTERLOCKING SEALS AND BLADES	
BACK DRAFT DAMPER (NO MOTOR) W/ INTERLOCKING SEALS AND BLADES	
COUNTERWEIGHTED DAMPER (NO MOTOR) W/ INTERLOCKING SEALS AND BLADES	

GENERAL NOTES:

- INDICATES POINT OF CONNECTION OF NEW TO EXISTING MECHANICAL, EQUIPMENT, PIPING OR DUCTWORK.
- COORDINATE ALL FIRE SPRINKLER HEADS AND AIR DEVICE LOCATIONS WITH REFLECTED CEILING PLANS AND ELECTRICAL DRAWINGS.
- ALL RIGID ROUND DUCTWORK SHALL RECEIVE 2" x .075 LBS/SQ.FT. FIBERGLASS DUCT WRAP - MIN. R-5. ALL LOW PRESSURE RECTANGULAR DUCT SHALL RECEIVE 1" x 1.5 LBS/SQ.FT. DUCT LINER. ATTACH TO DUCT WITH MECHANICAL FASTENERS AND TRIM AND SEAL JOINTS. LOW PRESSURE ROUND FLEXIBLE DUCT TO BE 1-1/2" THICK INSULATED AND A MAXIMUM OF 5 FT. LONG. ALL INSULATION TO MEET NFPA 90 PER UL 181-CLASS 1. NO DUCT BOARD ALLOWED.
- DUCTWORK AND PIPE ROUTING AS SHOWN ON DRAWINGS IS DIAGRAMMATIC AND IS NOT TO BE SCALED. WHERE ALTERNATE ROUTING, OFFSETS AND TRANSITIONS ARE REQUIRED FOR COORDINATION OF WORK, THIS CONTRACTOR SHALL MAKE CHANGES WITHOUT ADDITIONAL COSTS.
- THIS CONTRACTOR SHALL CLOSELY COORDINATE NEW MECHANICAL WITH NEW AND EXISTING MECHANICAL, ELECTRICAL, ARCHITECTURAL AND BUILDING STRUCTURE.
- THIS CONTRACTOR SHALL FIELD VERIFY ALL MECHANICAL ITEMS PRIOR TO STARTING NEW WORK. ADDITIONAL COST WILL NOT BE ALLOWED FOR CONTRACTOR'S FAILURE TO BECOME FAMILIAR WITH EXISTING SITE CONDITIONS.
- THIS CONTRACTOR SHALL USE SMACNA DUCT CONSTRUCTION STANDARDS FOR SHEET METAL DUCTS. ALL HIGH PRESSURE DUCTWORK UPSTREAM OF VAV TERMINAL BOXES SHALL BE CONSTRUCTED FOR 2" W.C. STATIC PRESSURE, SEAL CLASS "A". ALL OTHER DUCTWORK (UNLESS OTHERWISE NOTED ON FLOOR PLANS) SHALL BE CONSTRUCTED OF 1" W.C. SEAL CLASS "B".
- ALL MECHANICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT ADOPTED EDITION OF THE BUILDING CODES, FIRE CODES, MECHANICAL CODES AND PLUMBING CODES.
- THIS CONTRACTOR SHALL PROVIDE SUBMITTALS ON ITEMS LISTED IN MECHANICAL EQUIPMENT LIST TO THE ENGINEER FOR REVIEW PRIOR TO THE ORDER, PURCHASE OR INSTALLATION.
- ALL VAV BOXES, RTU's, WATER FLOW RATES AND DIFFUSERS MUST BE BALANCED TO THE VALUES INDICATED ON THE FLOOR PLANS. PROVIDE BALANCE REPORT TO ENGINEER PRIOR TO PROJECT CLOSEOUT.
- DUCT DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS.
- FIRE SPRINKLER CONTRACTOR SHALL ADD AND/OR RELOCATE SPRINKLER HEADS PER REFLECTED CEILING PLAN AND THE CURRENT ADOPTED EDITION OF NFPA AND BUILDING CODE.
- PIPING MATERIAL REQUIREMENTS:
DOMESTIC COLD WATER PIPING - TYPE "L" COPPER OR PEX
DOMESTIC HOT WATER PIPING - TYPE "L" COPPER OR PEX
WASTE AND VENT PIPING - CAST IRON, OR SCH. 40 PVC.
REFRIGERANT PIPING - TYPE "K" COPPER - 100% BRAZED, NOT SOLDERING ALLOWED.
NATURAL GAS PIPING - SCH. 40 BLACK IRON - 2" AND BELOW THREADED, 2.5" AND ABOVE WELDED.
* NO PLASTIC PIPING IS ALLOWED IN RETURN AIR FLENUMS *
- VENT THE HIGH POINTS OF NEW MECHANICAL PIPING.
- PROVIDE INSULATION FOR THE FOLLOWING:
a. DOMESTIC HOT WATER PIPING:
1" THICK FOR ALL PIPE SIZES.
b. DOMESTIC COLD WATER PIPING:
1/2" THICK FOR PIPE SIZES 1/2" TO 6".
(PROVIDE CONTINUOUS VAPOR BARRIER.)
c. REFRIGERANT SUCTION LINE PIPING
1-1/2" THICK FOR ALL PIPE SIZES.
- INSULATE PIPING WITH FIBERGLASS PIPE COVERING WITH ALL SERVICE JACKET AND SELF-CAP SEAL. FITTINGS SHALL BE MITERED PIPING COVERING OF GLASS FIBER MOLDED FITTINGS FOR USE IN A RETURN AIR FLENUM. THERMAL CONDUCTIVITY SHALL BE A MAXIMUM OF .25/INCH THICKNESS AT 75°F.
- INDICATES EXISTING OR FUTURE. INDICATES NEW MATERIAL. IF THERE ARE ANY DISCREPANCIES AS TO WHAT IS NEW AND WHAT IS EXISTING, CONTRACTOR IS TO CONTACT THE ARCHITECT AND/OR MECHANICAL ENGINEER. THE EXISTING SHELL DOCUMENTS ARE AVAILABLE THROUGH THE ARCHITECT. ADDITIONAL COSTS WILL NOT BE TOLERATED FOR THE CONTRACTOR'S FAILURE TO BECOME FAMILIAR WITH EXISTING SHELL AND SITE CONDITIONS.
- MECHANICAL CONTRACTOR IS TO COORDINATE WITH ELECTRICAL ON SIZE/QUANTITY OF MOTORIZED DAMPERS. I. E. FIRE/SMOKE DAMPERS, FIRE DAMPERS, MOTORIZED DAMPERS, ETC.
- EACH TRADE IS RESPONSIBLE THEIR OWN FIRE CAULKING. ALL PENETRATIONS THROUGH ALL RATED WALLS MUST BE PROPERLY SEALED AND CAULKED FOR THE APPROPRIATE WALL RATING AND UL SYSTEM.
- DIVISION 15 MUST PROVIDE AND INSTALL ALL ACCESS DOORS FOR FCU's, VALVES, FLOW METERS, ETC. COORDINATE LOCATION WITH GENERAL CONTRACTOR.
- HOUSEKEEPING PADS FOR ALL EQUIPMENT IS PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. COORDINATE LOCATION WITH MECHANICAL CONTRACTOR.
- ALL TAKE-OFFS THROUGHOUT THE ENTIRE BUILDING SHALL BE HIGH EFFICIENCY TAKE-OFFS (HET's). NO EXCEPTIONS TAKEN.
- DIVISION 15 TO SUBMIT TO ENGINEER ALL AS-BUILDS OF BUILDINGS MECHANICAL AND PLUMBING SYSTEMS PRIOR TO JOB COMPLETION AND FINAL PAYMENT.
- ALL PIPING EXPOSED TO THE OUTSIDE IS TO BE INSULATED AND WEATHERPROOFED. SEE SPEC SECTION 15080.
- ALL INVERT ELEVATIONS SHOWN ON PLANS ARE BASED OFF OF FINISHED FLOOR ELEVATION AT 100.0'. CONTRACTOR TO COORDINATE WITH ARCHITECTURAL AND CIVIL DRAWINGS FOR EXACT INVERT ELEVATIONS OF ALL LEVELS.
- ALL FLOOR DRAINS / FLOOR SINKS THROUGH-OUT THE ENTIRE BUILDING ARE TO HAVE TRAP SEAL PRIMER VALVES PROVIDED / INSTALL BY PLUMBING CONTRACTOR. TRAP GUARDS MAY ALSO BE USED WHERE ALLOWED BY THE LOCAL JURISDICTION.
- ALL GAS METER REGULATORS ARE TO BE VENTED TO THE OUTSIDE OF THE BUILDING BY THE MECHANICAL CONTRACTOR OR PROVIDE / INSTALL VENTLESS REGULATORS IF ALLOWED BY THE LOCAL JURISDICTION. NONE OF THE VENT PIPING OFF THE REGULATORS ARE SHOWN ON THE PLANS FOR CLARITY.
- ALL FIRE DAMPERS SHOWN ON PLANS SHALL COMPLY WITH THE REQUIREMENTS OF UL 555. ALL SMOKE DAMPERS SHOWN ON PLANS SHALL COMPLY WITH UL 555. ALL COMBINATION FIRE / SMOKE DAMPERS SHOWN ON PLANS ARE TO COMPLY WITH BOTH UL 555 AND UL 555S. FOR ALL FIRE DAMPERS CONTRACTOR IS TO PROVIDE / INSTALL "NCA MODEL F80" (OR EQUAL) TO MEET STANDARD UL 555 RATINGS. FOR ALL SMOKE DAMPERS AND COMBINATION FIRE SMOKE DAMPERS CONTRACTOR IS TO PROVIDE / INSTALL "NCA MODEL F80-3V-211" (OR EQUAL) TO MEET STANDARD UL 555 AND UL 555S RATINGS.
- THE MECHANICAL CONTRACTOR IS TO HAVE THE MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR EACH TYPE OF FIRE DAMPER, SMOKE DAMPER AND COMBO FIRE / SMOKE DAMPERS ON THE JOB SITE AT TIME OF INSPECTIONS.
- ALL DUCTWORK THAT IS LOCATED IN UNCONDITIONED SPACES (MEANING EXPOSED TO THE OUTSIDE OR IN ATTICS) IS TO HAVE MIN. OF R-8 INSULATION INSTALLED.
- ALL T-STATS MUST BE MOUNTED AT 48" A.F.F. TO THE TOP OF THE STAT AND TO HAVE FULL DIGITAL DISPLAY READOUT OF CURRENT TEMPERATURE AND TEMPERATURE SET POINTS.
- ALL DUCT ELBOUS ARE TO BE PROVIDED / INSTALLED WITH RADIUS ELBOUS. ANY ALTERATIONS OR CHANGES IN DUCTWORK FROM WHAT IS SHOWN ON THE PLANS MUST BE PRE-APPROVED BY THE ENGINEER IN WRITING PRIOR TO ORDERING, FABRICATION, OR INSTALLATION.
- ALL EXTERIOR WALL VENTS, GRILLES, OR PIPING IS TO BE PAINTED BY THE GENERAL CONTRACTOR TO MATCH THE ADJACENT SURFACE.
- ALL DUCTWORK IS TO BE COMPLETELY SEALED USING DESIGN POLYMERS DPM1010 DUCT SEALER OR APPROVED EQUAL.
- CONTRACTORS TO COMPLY WITH MANUFACTURER'S INSTRUCTIONS, INCLUDING EACH STEP IN SEQUENCE. WHEN MANUFACTURERS' INSTRUCTIONS CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ARCHITECT/ENGINEER BEFORE PROCEEDING WITH ANY WORK. IF THIS IS NOT DONE, ITS THE CONTRACTOR'S FULL RESPONSIBILITY TO COVER ALL COSTS.

DRAWING INDEX

MPO.1	MECHANICAL & PLUMBING SCHEDULE
MPO.2	MECHANICAL & PLUMBING SCHEDULE
MP1.1	MECHANICAL & PLUMBING OVER ALL PLANS
MP2.1	PLUMBING ENLARGED PLANS
MP2.2	MECHANICAL ENLARGED PLANS
MP6.1	MECHANICAL & PLUMBING DETAILS
MP6.2	MECHANICAL & PLUMBING DETAILS

CODES AND STANDARDS (UTAH)

PLUMBING: 2018 IPC
MECHANICAL: 2018 IMC
ENERGY: 2018 IECC
ELEVATION: 4300'



PLUMBING FIXTURE CONNECTION SCHEDULE									
PLAN CODE	DESCRIPTION	CONNECTION SIZE				SPECIFICATIONS			
		COLD WATER	HOT WATER	WASTE	VENT				
L-1	LAVATORY	1/2"	1/2"	2"	1 1/2"	VITEROUS CHINA LAVATORY, WESTERN L-190-4 COUNTER TOP MOUNT. MOEN FL469TONE 47711L 1.5 GPM WATER SENSE, LABELED, SINGLE HANDLE FAUCET, WITH POP-UP DRAIN, COMPLETE WITH CHROME PLATED ANGLE STOPS.			
S-1	KITCHEN SINK	1/2"	1/2"	2"	1 1/2"	STAINLESS STEEL TOP MOUNT, KINDRED BROOKMORE BDL2233-9-4 ROUGH IN AND INSTALL DISPOSAL IN SINK ERATOR BADGER 1, PROVIDE WITH CRG 47513 2.0 GPM MAX FAUCET, DEARBORN BRASS DRAIN BASKETS PROVIDE CHROME PLATED ANGLE STOPS AND SUPPLIES.			
SH-1	SHOWER	1/2"	1/2"	2"	1 1/2"	MOEN T9343 SERIES, COMPLETE WITH SHOWER HEAD, 2.0 GPM MIXING VALVE, STOPS, LOOP HANDLE, POLISH CHROME FINISH, DIVERTING VALVE, IN-LINE VACUUM BREAKER, 2.0 GPM HAND SHOWER AND 5' FLEXIBLE METAL HOSE, 30" SLIDER BAR. SHOWER TO BE WATER SENSE LABELED AND ADA COMPLIANT, PROVIDE WITH FD-1.			
FD-1	FLOOR DRAIN	N/A	N/A	2"	1 1/2"	FLOOR DRAIN, TURN FD354, COMPLETE WITH STRAINER AND PROVIDE WITH PROSET TRAP GUARD.			
BT-1	BATHTUB	1/2"	1/2"	2"	1-1/2"	BATH TUB, STERLING T1090110 COLOR WHITE WITH TUB PROTECTIVE COVER, COVERING TUB DURING CONSTRUCTION, 2.0 GPM WATER SENSE LABELED SHOWER HEAD, TUB COMPLETE WITH TUB AND SHOWER FAUCET MOEN CHATEAU 82496EP.			
WB-1	WASHING MACHINE CONNECTION BOX	1/2"	1/2"	2"	1-1/2"	CLOTHES WASHING MACHINE WATER SUPPLY BOX, GUY GRAY #UBED200, COMPLETE WITH 20 GAUGE BOX WITH 18 GAUGE FACEPLATE, 20 AMP 110 DUPLEX RECEPTACLE, 30 AMP 220 VOLT DRYER RECEPTACLE, SINGLE LEVER HOT AND COLD WATER HOSE VALVE AND 2" DRAIN FITTING WITH LOCKNUT.			
WC-1	FLOOR MOUNT TANK WATER CLOSET	1/2"	N/A	3"	2"	FLOOR MOUNTED VITEROUS CHINA TANK TOILET, WESTERN 822 STANDARD HEIGHT ELONGATED BOWL, COMPLETE WITH CHROME PLATED ANGLE STOP, AND CHROME PLATED SUPPLY, SEAT WITH COVER AND CHROME PLATED FLUSH ACTUATOR, WATER CLOSET TO BE WATER SENSE LABELED AND 1.28 GPF.			
SC-1	SILLCOCK	3/4"	N/A	N/A	N/A	NIBCO 95C, FROST PROOF SILLCOCK, WALL HYDRANT TO BE SIZED FOR WALL THICKNESS, MOUNT AT 24" A.F.F.			

NOTE: ALL PLUMBING FIXTURES ARE TO HAVE 1/4 TURN STOPS INSTALLED (NO EXCEPTIONS TAKEN). ALL PLUMBING FIXTURES THAT HAVE EXPOSED SUPPLY LINES I.E. WATER CLOSETS, WALL HUNG LAVS, ETC., CONTRACTOR IS TO PROVIDE / INSTALL STAINLESS STEEL BRAIDED HOSES. IF THE SUPPLY LINES ARE NOT EXPOSED (HIDDEN BELOW CASEWORK ETC.), THEY CAN BE PLASTIC, RIGID, OR STAINLESS STEEL BRAIDED.

* COORDINATE ALL FIXTURE FINISHES WITH ARCHITECT AND INTERIOR DESIGNER PRIOR TO ORDERING.

* NOTE: NOT ALL FIXTURES MAY BE USED. SEE DRAWINGS FOR ALL PLUMBING FIXTURES AND CALLOUTS.

FURNACE SCHEDULE F-																		
PLAN CODE	CR1 (ALT.)	MIN. OUTSIDE AIR	ESP (ALT.) WC	BTU/H INPUT MBH (S.L.)	BTU/H OUTPUT MBH (S.L.)	BTU/H OUTPUT MBH (ELEV.)	TOTAL COOLING CAPACITY MBH	CONTROL	BLOWER		DISCHARGE HORIZ. / VERT.	UNIT DIMENSIONS			SHIP WEIGHT (lbs.)	INTAKE/FLUE SIZE Ø	MANUFACTURER & MODEL NO	ACCESSORIES
									HP	VOLT / PH		W (in.)	D (in.)	H (in.)				
F-1	883/708	ref. duct.	Ø.50	30.0	28.83	25.7	24.0	T-STAT	1/2	115V	VERT.	14	29	34.5	108	2'1" 2'	DAIKIN DM96TN0303ANA WITH COIL: CAFFA231846	* PROVIDE THERMOSTAT AND LINE SET. * PROVIDE MIN. 95% AFUE UNIT * PROVIDE 1" REPLACEABLE FILTER
F-2	883/708	ref. duct.	Ø.50	30.0	28.83	25.7	24.0	T-STAT	1/2	115V	VERT.	14	29	34.5	108	2'1" 2'	DAIKIN DM96TN0303ANA WITH COIL: CAFFA231846	* PROVIDE THERMOSTAT AND LINE SET. * PROVIDE MIN. 95% AFUE UNIT * PROVIDE 1" REPLACEABLE FILTER

* NOTES: 1) ALL VALUES ARE RATED AT 4500' ELEVATION.
2) PROVIDE CONDENSATE NEUTRALIZATION KIT AND CONCENTRIC VENT KIT.
3) PROVIDE ENERGY STAR RATED FURNACES.
4) COORDINATE FLUE AND INTAKE SIZES WITH MANUFACTURERS REQUIREMENTS.

REMOTE CONDENSING UNIT <u>RCU-</u>																	
PLAN CODE	SYSTEM SERVED	WEIGHT (LBS.)	COND. FAN (RPM)	TOTAL COOLING CAPACITY (MEH)	TOTAL HEATING CAPACITY (MEH)	ENTERING AIR (°F)	SPEED (DUAL / SINGLE)	MIN. SEER RATING	MCA (AMP.)	MOP (AMP.)	VOLT/PH	FAN HP	UNIT DIMENSIONS			MANUFACTURER & MODEL NO.	ACCESSORIES
													W (IN.)	D (IN.)	H (IN.)		
RCU-1	F-1	138	-	23.0	N/A	95/75	SINGLE	13	-	30	208 / 10	1/8	26	26	27.5	DAIKIN DX16SA0241	* PROVIDE UNIT WITH FILTER DRIER AND POLY PAD.
RCU-2	F-2	138	-	23.0	N/A	95/75	SINGLE	13	-	30	208 / 10	1/8	26	26	27.5	DAIKIN DX16SA0241	* PROVIDE UNIT WITH FILTER DRIER AND POLY PAD.

* ALL REFRIGERATION PIPING TO BE INSTALLED WITH HARD OF SOFT DRAIN TYPE "L" COPPER TUBING.
* ALL SUCTION PIPING SHALL BE INSULATED WITH ARMAFLEX INSULATION AND SEALED WITH ARMAFLEX GLUE, NO TAPE WILL BE ALLOWED.
* UPSIZE REFRIGERANT LINE SETS IF PIPING LENGTH EXCEEDS 100'
* PROVIDE ENERGY STAR RATED CONDENSING UNITS.

DRYER VENT BOX SCHEDULE		
PLAN CODE	MANUFACTURER & MODEL NUMBER	SPECIFICATIONS
DVB-1	N-O-VATE MODEL 35Ø	UL LISTED FOR FIRE STOP SYSTEM, 22 GAUGE ALUMINIZED STEEL WITH 4-7/8" X 3-1/8" OVAL SHAPED CONNECTION FOR 4"Ø DRYER DUCT CONNECTION. SEAL SIDES OF BOX AND CONNECTION TO PREVENT GAPS. USE FIRE RATED SEALANT WHERE REQUIRED, FOR FIRE RATED WALLS.

ELECTRIC HEATER EH-						
PLAN CODE	BTUH OUTPUT	WATTS	DIMENSIONS	VOLTAGE & PHASE	MANUFACTURER & MODEL NO.	REMARKS
EH-1	5115	1500	20" HIGH 15" WIDE 4" DEEP	120/1	MARKEL E33137S-RP SURFACE MOUNTED	PROVIDE WITH INTEGRAL THERMOSTAT SET TO 45

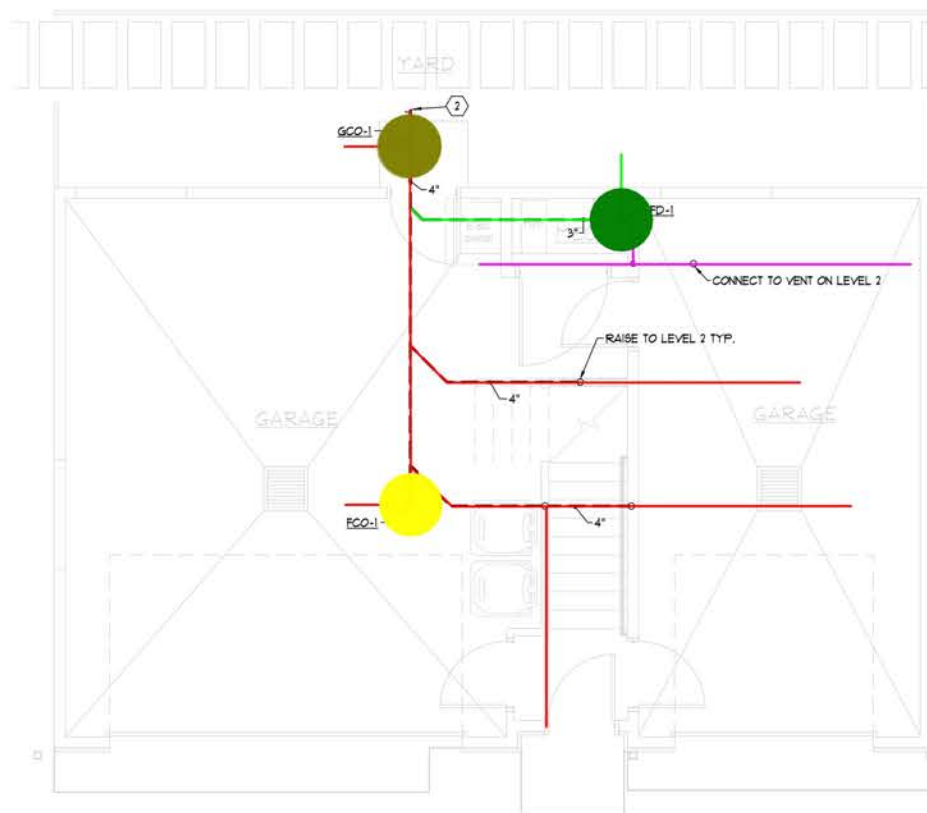
EXHAUST FAN SCHEDULE (EF)															
PLAN CODE	AREA SERVED	TYPE	CFM @ ELEV.	ESP. @ ELEV. (in. W.G.)	FAN RPM	MOTOR			DAMPER (GRAVITY OR MOTOR)	METHOD OF CONTROL	FAN OPENING (IN.)	FAN SONES	OPER. WEIGHT (lbs)	MANUFACTURER & MODEL NO.	REMARKS
						BHP Oper.	H.P.	VOLTAGE & PHASE							
EF-1	BATHROOM EXHAUST	CEILING VENTILATOR	30 / 70	0.375	640	N/A	37 Watts	120 / 10	GRAVITY	2 SPEED WALL SWITCH	4"0	2	17	PANASONIC FV-05-11VKS1	* PROVIDE MODEL 6-41 WALL CAP * PROVIDE FAN WITH 2 SPEEDS

NOTE: ALL VALUES ARE RATED AT 15Ø R. ELEVATION.
NOTE: ALL STARTERS PROVIDED AND INSTALLED BY ELECTRICAL.

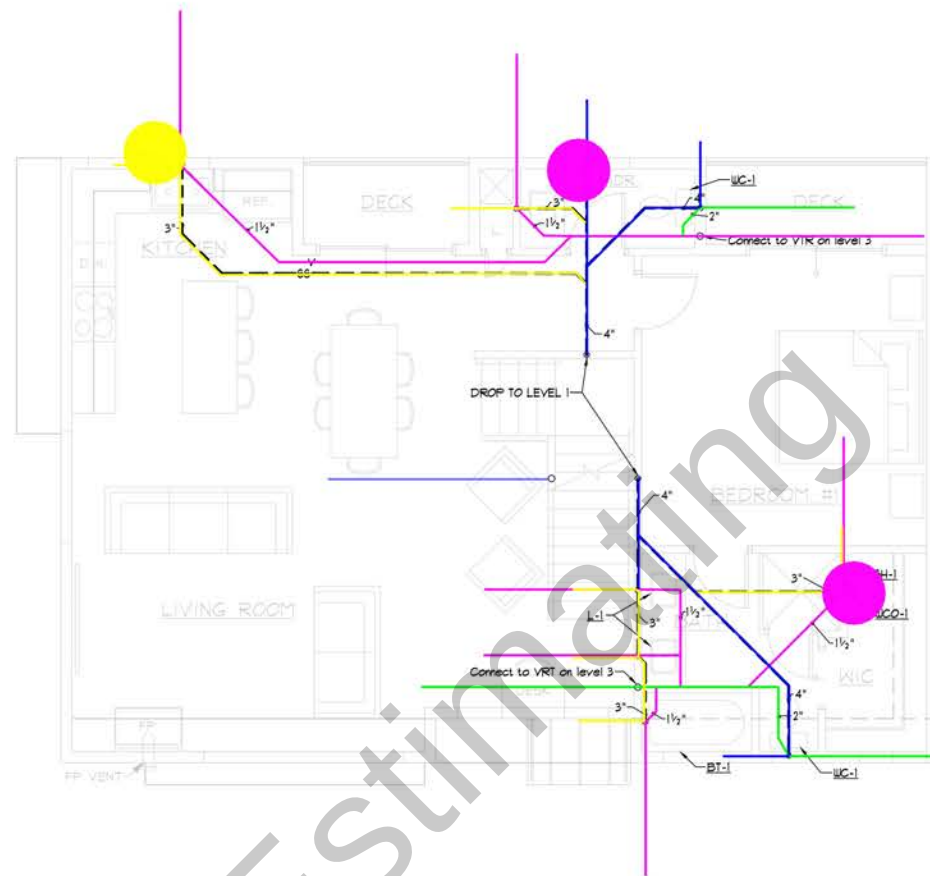
GAS FIRED TANKLESS WATER HEATER SCHEDULE TWH-																		
PLAN CODE	AREA SERVED	MBH CAPACITY			FUEL	TEMP. RISE (°F)	GPM @ 67	FLUE DIA.	INTAKE DIA.	FLUE/INT. TYPE	ELECTRICAL		DIMENSIONS			OPERATING WEIGHT	MANUFACTURER & MODEL NO.	REMARKS
		OUTPUT @ 400 FT.	OUTPUT @ SEA LEVEL	INPUT @ SEA LEVEL							VOLTS / PHASE	MAX POWER (WATTS)	H	W	D			
TWH-1	KITCHEN	191	191	199	NG	67°F	5.8	2"Ø	2"Ø	PVC ASTM RATED	12Ø	35Ø	27.4"	17.3"	13.2"	73 lbs.	NAVLEN NPE-24ØA2	* PROVIDE WITH WATTS PLT-12 EXPANSION TANK

* NOTES: 1) ALL VALUES ARE RATED AT 4500' ELEVATION.
2) PROVIDE CONDENSATE NEUTRALIZATION KIT AND CONCENTRIC VENT KIT.
3) USE MODEL WITH RECIRCULATION PUMP, SEE DETAIL 5 MP6.1 FOR DETAILS. IF RECIRCULATION PUMP MODEL IS NOT ACCESSIBLE, PROVIDE TACO ØØ8 RECIRC PUMP

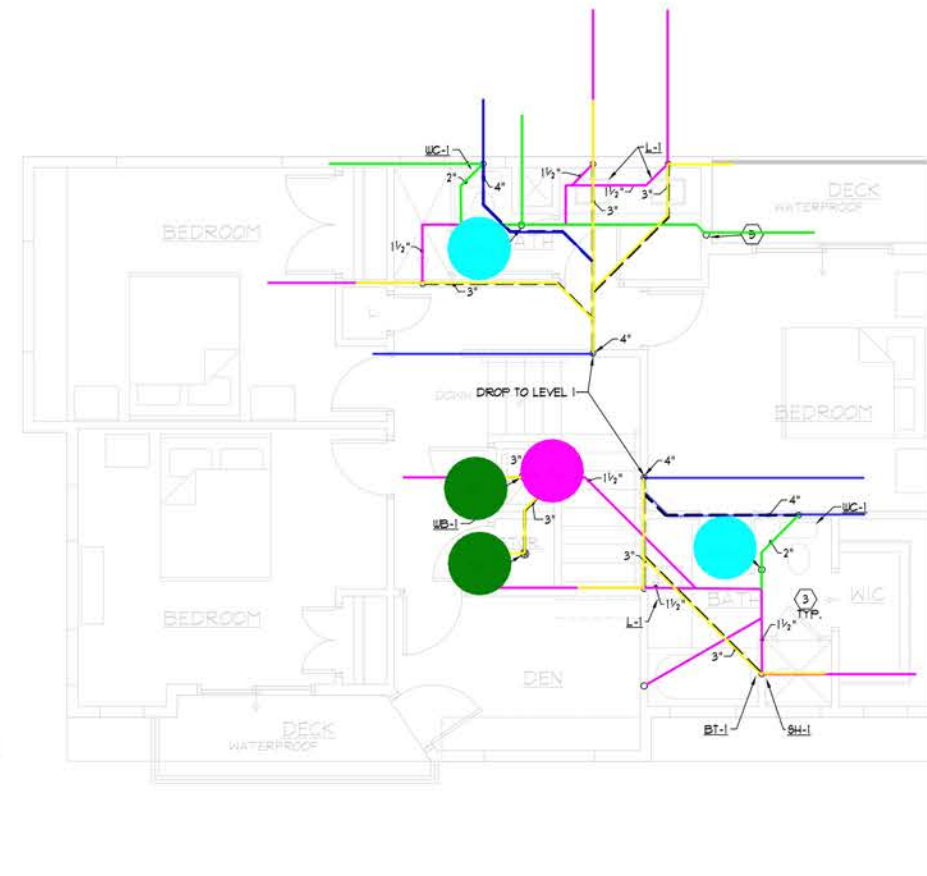
DIFFUSERS & GRILLE SCHEDULE							GRILLE NUMBER	GRILLE ORN
PLAN CODE	TYPE & DUTY	NECK SIZE	CEILING TYPE	N.C. LEVEL MAX	MAX. CR1	MANUFACTURER & MODEL NO.	REMARKS	
1	8" x 4" SUPPLY	8" x 4"	Gyp. Sideswall	2Ø	7Ø	PRICE 5ØØ SERIES 8"x4"52ØØ/F/S/A/B12	PROVIDE W/ OPPOSED BLADE DAMPER	
2	12" x 6" SUPPLY	12" x 6"	Gyp. Sideswall	23	26Ø	PRICE 5ØØ SERIES 12"x6"52ØØ/F/S/A/B12	PROVIDE W/ OPPOSED BLADE DAMPER	
3	28" x 8" RETURN	28" x 8"	See Plans	26	2353	PRICE FOR SERIES 28" x 8"52ØØ/F/S/A/B12		
4	14" x 4" RETURN	14" x 4"	See Plans	2Ø	18Ø	PRICE FOR SERIES 14" x 4"52ØØ/F/S/A/B12		



1 SANITARY SEWER AND VENT LEVEL 1
MPI.1 SCALE: 1/4" = 1' - 0"



2 SANITARY SEWER AND VENT LEVEL 1
MPI.1 SCALE: 1/4" = 1' - 0"



3 SANITARY SEWER AND VENT LEVEL 1
MPI.1 SCALE: 1/4" = 1' - 0"

- 1-1/2" Vent Pipe
- 3" Sanitary Sewer Pipe Below Grade
- 4" Sanitary Sewer Pipe Below Grade
- Floor Cleanout - FCO-1
- Floor Drain - FD-1
- Grade Cleanout
- Double Compartment Kitchen Sink - S-1
- Lavatory - L-1
- Shower - SH-1
- Wall Cleanout
- Washing Machine Connection Box - WB-1
- Water Closet - WC-1
- 2" Vent Pipe
- 3" Sanitary Sewer
- 4" Sanitary Sewer Pipe
- 2'-8" x 5' Bathtub - BT-1
- Vent Through Roof-VTR-1

ITEM	QTY	UNIT	QTY	UNIT
1-1/2" VENT PIPE	1	EA	1	EA
3" SANITARY SEWER PIPE	1	EA	1	EA
4" SANITARY SEWER PIPE	1	EA	1	EA
FLOOR CLEANOUT	1	EA	1	EA
FLOOR DRAIN	1	EA	1	EA
GRADE CLEANOUT	1	EA	1	EA
DOUBLE COMPARTMENT KITCHEN SINK	1	EA	1	EA
LAVATORY	1	EA	1	EA
SHOWER	1	EA	1	EA
WALL CLEANOUT	1	EA	1	EA
WASHING MACHINE CONNECTION BOX	1	EA	1	EA
WATER CLOSET	1	EA	1	EA
2" VENT PIPE	1	EA	1	EA
3" SANITARY SEWER	1	EA	1	EA
4" SANITARY SEWER PIPE	1	EA	1	EA
2'-8" x 5' BATHTUB	1	EA	1	EA
VENT THROUGH ROOF	1	EA	1	EA
TOTAL	18		18	

- 789.8 FT
- 51.2 FT
- 292.1 FT
- 4.0 EA
- 12.0 EA
- 4.0 EA
- 4.0 EA
- 0.0 EA
- 0.0 EA
- 12.0 EA
- 0.0 EA
- 0.0 EA
- 282.1 FT
- 478.8 FT
- 405.3 FT
- 0.0 EA
- 8.0 EA

GENERAL PLUMBING NOTES:

- ALL HORIZONTAL 3" AND LARGER SEWER PIPING IS TO SLOPED AT A MINIMUM 1/8" DROP PER FOOT.
- MAINTAIN 10" MINIMUM FROM OUTSIDE AIR INTAKES AND VENT THROUGH ROOFS.
- INSTALL ALL VALVES, METERS AND REGULATORS IN AN ACCESSIBLE LOCATION. IF INSTALLED ABOVE CEILING, PROVIDE AND INSTALL ACCESS PANELS. COORDINATE ACCESS PANELS WITH ARCHITECT.
- ALL WATER PIPING INSTALLED IN CORRIDOR WALLS, TOP FLOOR CEILING AND EXTERIOR WALLS SHALL BE INSULATED.
- RISER LOCATIONS ARE SHOWN IN PARTY AND FLUE WALLS FOR CLARITY. WHERE ALTERNATE RISER LOCATIONS ARE POSSIBLE, THE CONTRACTOR SHALL MOVE RISER LOCATION TO AVOID INSTALLING RISERS IN PARTY AND FLUE WALLS. RISERS SHALL BE THE SAME SIZE AS SHOWN ON MPI.1.
- FIRE CAULK ALL PENETRATIONS THROUGH RATED WALLS, FLOORS, CEILING AND ETC. TO MAINTAIN RATING. SEE ARCHITECTURAL PLANS FOR LOCATIONS.
- ALL PIPING INSTALLED IN EXTERIOR WALLS, CORRIDOR WALL INCLUDED TO BE INSTALLED ON THE WARM SIDE OF THE INSULATION.
- DO NOT INSTALL PIPING IN CONTACT AND / OR ALONG COMBUSTION AIR DUCTS, DRYER EXHAUST DUCTS AND BATHROOM EXHAUST DUCTS WHICH COULD CAUSE / CONTRIBUTE TO FREEZING.
- INSTALL HORIZONTAL WASTE PIPING OUTSIDE OF FLUE AND PARTY WALLS WHERE POSSIBLE.
- SEE MP6.1 AND MP6.2 SHEETS FOR DETAILS.
- CONNECT GAS PIPING TO FURNACES AND WATER HEATERS WITH FLEX CONNECTION, UNION, GAS COCK AND 6" DIRT LEG.
- PROVIDE / INSTALL REFRIGERANT PIPING FROM FURNACE TO CONDENSING UNIT.

PLUMBING KEYED NOTES:

- CONNECT INTO CIVIL DOMESTIC COLD WATER LINE. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND SIZE BEFORE CONNECTING.
- CONNECT SANITARY SEWER LINE INTO CIVIL SANITARY SEWER. FIELD VERIFY EXACT LOCATION, SIZE, AND DIRECTION OF FLOW BEFORE CONNECTING.
- DOMESTIC COLD WATER AND DOMESTIC HOT WATER PIPES PLUMBED THROUGH FLOOR. SEE LEVEL 2.
- ROUTE DOW, DHW AND WASTE FROM DISHWASHER TO SINK WITH 1" AIR GAP.
- ROUTE VENT THROUGH ROOF AND TERMINATE.
- NATURAL GAS REGULATOR TO REDUCE PRESSURE FROM 2 LB TO 4 OZ. PROVIDE WITH GAS COCK BEFORE PRV.
- WATER HEATER BURNER MUST BE AT LEAST 18" AFF.
- CONTRACTOR TO PROVIDE RECIRC PUMP MODEL TACO 008. IF TANKLESS WATER HEATER DOES NOT HAVE AN INTERNAL RECIRC PUMP.
- WRAP PIPE IN 1" INSULATION TO PREVENT FREEZING.
- NG LINE NOT TO PENETRATE THE FOUNDATION WALL.

4" Sanitary Sewer Pipe Below Grade

1-1/2" Cold Water Pipe

3/4" Natural Gas Pipe

Gas Meter Box

17.2 FT

12.1 FT

382.2 FT

1.0 EA

1

CIVIL TO PLUMBING PLANS

MPI.1

SCALE: 1/8" = 1' - 0"

6'

0'

4'

8'

12'

16'

N

E

S

W

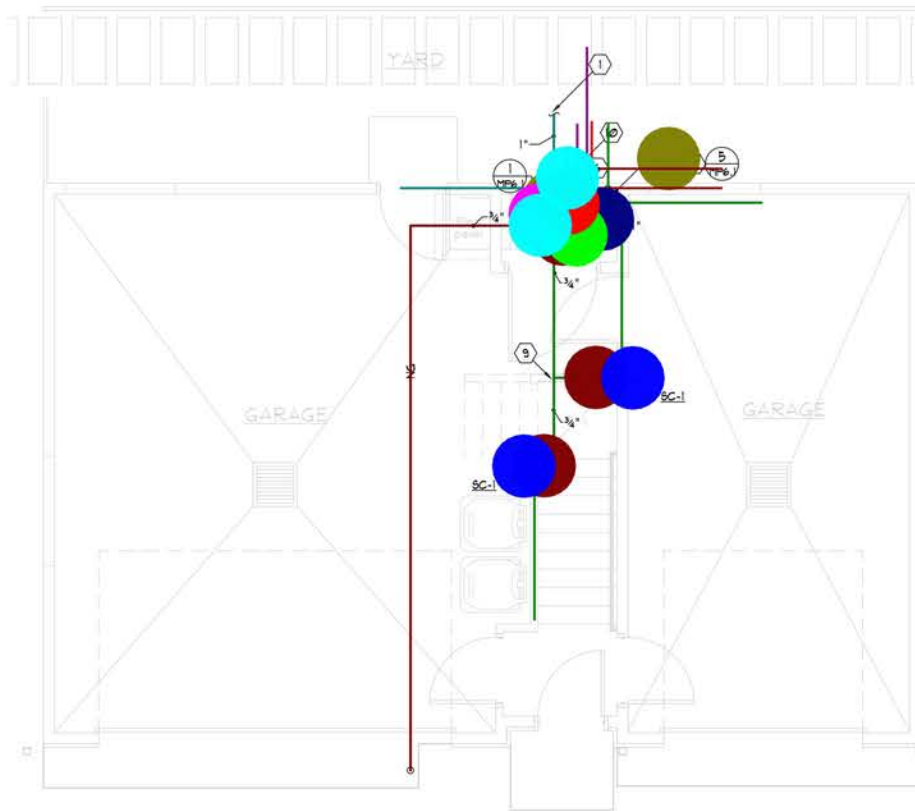
MECHANICAL/PLUMBING KEYED NOTES:

1. CONNECT DOMESTIC COLD WATER INTO CIVIL LINES.
2. CONNECT SANITARY SEWER LINE INTO CIVIL SANITARY SEWER. FIELD VERIFY EXACT LOCATION, SIZE, AND DIRECTION OF FLOW BEFORE CONNECTING.
3. CONNECT TO NG METER TO BE PREFORMED BY LOCAL GAS COMPANY.

GENERAL NOTES:

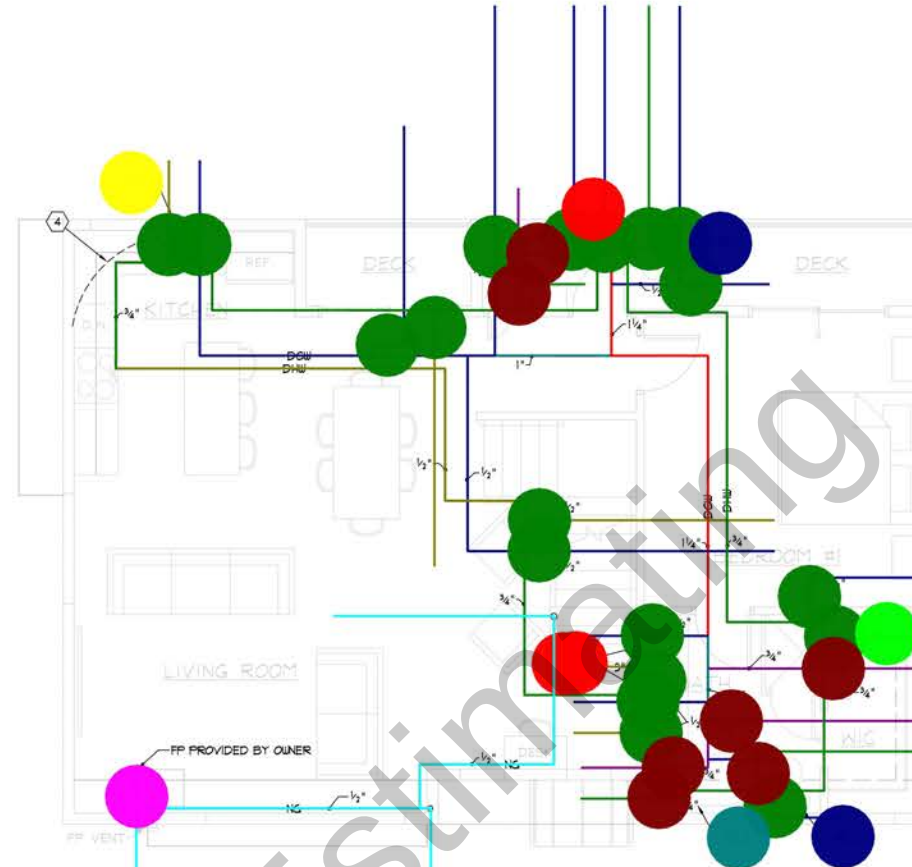
1. ALL DRAWINGS ARE DIAGRAMMATIC.
2. ENSURE ALL DOMESTIC COLD WATER AND SANITARY SEWER ARE BURIED AT LEAST 3' BELOW GRADE UNDER FROST DEPTH.
3. ALL NON-METALLIC PIPES MUST BE BURIED WITH TRACER WIRE.

NATURAL GAS LOAD CALCULATIONS, HEATING VALUE OF 890 FOR SLG		
FIXTURE	MBTU/H.	CFH
FURNACE LEVEL 1	30.0	34.0
FURNACE LEVEL 3	30.0	34.0
TANKLESS WATER HEATER	199.0	224.0
FIRE PLACE	17.5	20
TOTAL	276.5	311
FOR NG PIPE OF LENGTH OF 200 FT AT 2LB, THE DIAMETER WILL BE 3/4", AT 40Z, THE DIAMETER WILL BE 1" AS PER TABLE 402.4(5) AND TABLE 402.4(3) RESPECTIVELY.		



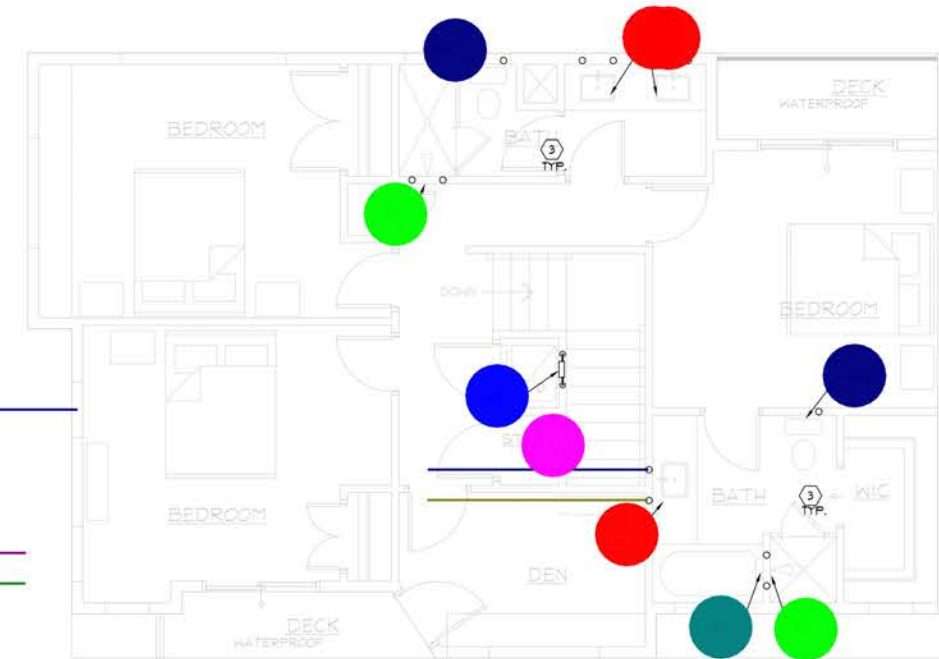
1 PLUMBING FLOOR PLAN LEVEL 1
MPI.2 SCALE: 1/4" = 1' - 0"

- 1" Cold Water Pipe
- 1-1/2" Cold Water Pipe
- 1-1/4" Cold Water Pipe
- 1/2" Cold Water Pipe
- 1/2" Hot Water Pipe
- 3/4" Cold Water Pipe
- 3/4" Hot Water Pipe
- 3/4" Cold Water Pipe
- 1" Ball Valve
- 1/2" Ball Valve
- 3/4" Ball Valve
- 2'-8" x 5' Bathtub - BT-1
- Double Compartment Kitchen Sink - S-1
- Lavatory - L-1
- Shower - SH-1
- Sillcock - SC-1
- Washing Machine Connection Box - WB-1
- Water Closet - WC-1
- 1" Natural Gas Pipe
- 1/2" Natural Gas Pipe
- 3/4" Natural Gas Pipe
- 1" Shut Off Valve
- 1-1/2" Pressure Reducing Valve
- 1/2" Shut Off Valve
- 3/4" Check Valve
- 3/4" Pressure Reducing Valve
- 3/4" Shut Off Valve



2 PLUMBING FLOOR PLAN LEVEL 2
MPI.2 SCALE: 1/4" = 1' - 0"

- 76.9 FT
- 5.9 FT
- 120.7 FT
- 644.3 FT
- 304.0 FT
- 198.7 FT
- 547.4 FT
- 118.5 FT
- 4.0 EA
- 76.0 EA
- 40.0 EA
- 8.0 EA
- 4.0 EA
- 24.0 EA
- 12.0 EA
- 8.0 EA
- 4.0 EA
- 16.0 EA
- 8.0 FT
- 225.5 FT
- 198.2 FT
- 4.0 EA
- 4.0 EA
- 12.0 EA
- 4.0 EA
- 4.0 EA



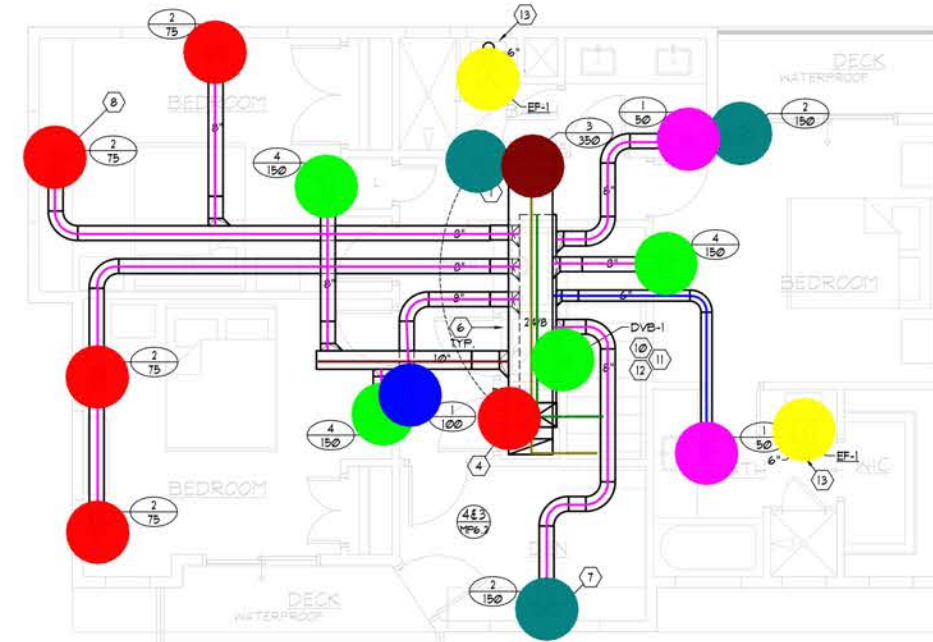
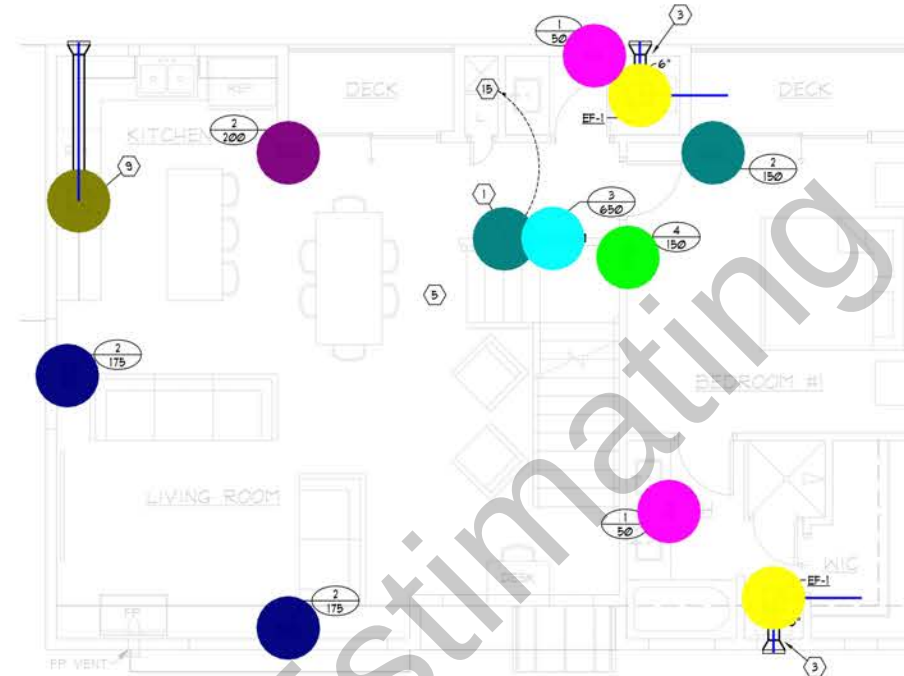
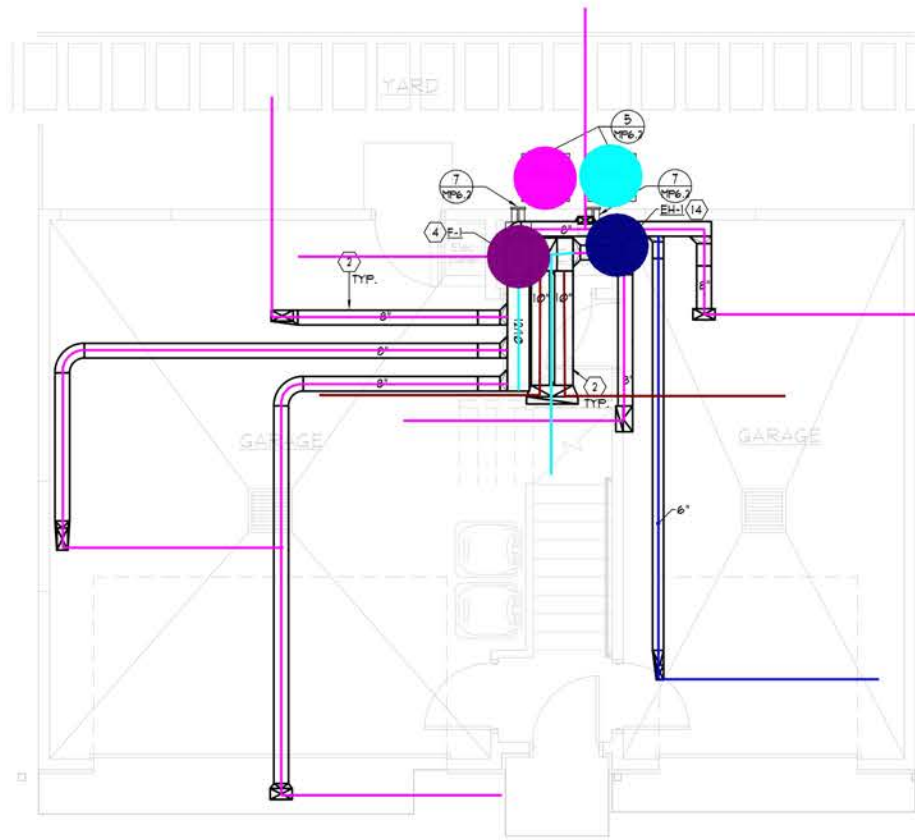
3 PLUMBING FLOOR PLAN LEVEL 3
MPI.2 SCALE: 1/4" = 1' - 0"

GENERAL PLUMBING NOTES:

1. ALL HORIZONTAL 3" AND LARGER SEWER PIPING IS TO SLOPED AT A MINIMUM 1/8" DROP PER FOOT.
2. MAINTAIN 10" MINIMUM FROM OUTSIDE AIR INTAKES AND VENT THROUGH ROOFS.
3. INSTALL ALL VALVES, METERS AND REGULATORS IN AN ACCESSIBLE LOCATION. IF INSTALLED ABOVE CEILING, PROVIDE AND INSTALL ACCESS PANELS. COORDINATE ACCESS PANELS WITH ARCHITECT.
4. ALL WATER PIPING INSTALLED IN CORRIDOR WALLS, TOP FLOOR CEILING AND EXTERIOR WALLS SHALL BE INSULATED.
5. RISER LOCATIONS ARE SHOWN IN PARTY AND FLUE WALLS FOR CLARITY. WHERE ALTERNATE RISER LOCATIONS ARE POSSIBLE, THE CONTRACTOR SHALL MOVE RISER LOCATION TO AVOID INSTALLING RISERS IN PARTY AND FLUE WALLS. RISERS SHALL BE THE SAME SIZE AS SHOWN ON MPI.1.
6. FIRE CAULK ALL PENETRATIONS THROUGH RATED WALLS, FLOORS, CEILING AND ETC. TO MAINTAIN RATING. SEE ARCHITECTURAL PLANS FOR LOCATIONS.
7. ALL PIPING INSTALLED IN EXTERIOR WALLS, CORRIDOR WALL INCLUDED TO BE INSTALLED ON THE WARM SIDE OF THE INSULATION.
8. DO NOT INSTALL PIPING IN CONTACT AND / OR ALONG COMBUSTION AIR DUCTS, DRYER EXHAUST DUCTS AND BATHROOM EXHAUST DUCTS WHICH COULD CAUSE / CONTRIBUTE TO FREEZING.
9. INSTALL HORIZONTAL WASTE PIPING OUTSIDE OF FLUE AND PARTY WALLS WHERE POSSIBLE.
10. COORDINATE FLOOR DRAIN LOCATIONS IN MECHANICAL ROOMS WITH EQUIPMENT LOCATIONS. DO NOT INSTALL FLOOR DRAIN UNDER EQUIPMENT. ROUTE ALL CONDENSATE AND OTHER DRAINS FROM EQUIPMENT TO FLOOR DRAIN.
11. SEE MPI.1 AND MPI.2 SHEETS FOR DETAILS.
12. CONNECT GAS PIPING TO FURNACES AND WATER HEATERS WITH FLEX CONNECTION, UNION, GAS COCK AND 6" DIRT LEG.
13. PROVIDE / INSTALL REFRIGERANT PIPING FROM FURNACE TO CONDENSING UNIT.

PLUMBING KEYED NOTES:

1. CONNECT INTO CIVIL DOMESTIC COLD WATER LINE. CONTRACTOR TO FIELD VERIFY EXACT LOCATION AND SIZE BEFORE CONNECTING.
2. CONNECT SANITARY SEWER LINE INTO CIVIL SANITARY SEWER. FIELD VERIFY EXACT LOCATION, SIZE, AND DIRECTION OF FLOW BEFORE CONNECTING.
3. DOMESTIC COLD WATER AND DOMESTIC HOT WATER PIPES PLUMBED THROUGH FLOOR. SEE LEVEL 2.
4. ROUTE DOW, DHW AND WASTE FROM DISHWASHER TO SINK WITH 1" AIR GAP.
5. ROUTE VENT THROUGH ROOF AND TERMINATE.
6. NATURAL GAS REGULATOR TO REDUCE PRESSURE FROM 2 LB TO 4 OZ. PROVIDE WITH GAS COCK BEFORE PRV.
7. WATER HEATER BURNER MUST BE AT LEAST 18" AFF.
8. CONTRACTOR TO PROVIDE RECIRC PUMP MODEL TACO 008. IF TANKLESS WATER HEATER DOES NOT HAVE AN INTERNAL RECIRC PUMP.
9. WRAP PIPE IN 1" INSULATION TO PREVENT FREEZING.
10. NG LINE NOT TO PENETRATE THE FOUNDATION WALL.



1 MECHANICAL FLOOR PLAN LEVEL 1
SCALE: 1/4" = 1' - 0"

- Exhaust Fan (Provided By Owner)
- 6" Duct
- 8" Duct
- 10" Duct
- 12/10" Duct
- 24/8" Duct
- 35" Duct
- Dryer Vent Box DVB-1
- Nest 7-Day Programmable Thermostat
- Electrical Heater EH-1
- Exhaust Fan EF-1
- Furnace With Acid Neutralizer F-1
- Furnace With Acid Neutralizer F-2
- Remote Condensing Unit-RCU-1
- Remote Condensing Unit-RCU-2
- 12"x6" Supply Diffuser 175 CFM
- 12"x6" Supply Diffuser 200 CFM
- 12"x6" Supply Diffuser 150 CFM
- 12"x6" Supply Diffuser 75 CFM
- 14"x4" Return Grill 150 CFM
- 8"x4" Supply Diffuser 100 CFM
- 8"x4" Supply Diffuser 50 CFM
- 28"x8" Return Grill 650 CFM
- 28"x8" Return Grill 350 CFM

2 MECHANICAL FLOOR PLAN LEVEL 2
SCALE: 1/4" = 1' - 0"

- 4.0 EA
- 305.8 FT
- 1387.9 FT
- 239.8 FT
- 114.4 FT
- 48.6 FT
- 66.0 FT
- 4.0 EA
- 8.0 EA
- 4.0 EA
- 16.0 EA
- 4.0 EA
- 4.0 EA
- 4.0 EA
- 4.0 EA
- 8.0 EA
- 4.0 EA
- 12.0 EA
- 16.0 EA
- 16.0 EA
- 4.0 EA
- 16.0 EA
- 4.0 EA
- 4.0 EA

3 MECHANICAL FLOOR PLAN LEVEL 3
SCALE: 1/4" = 1' - 0"

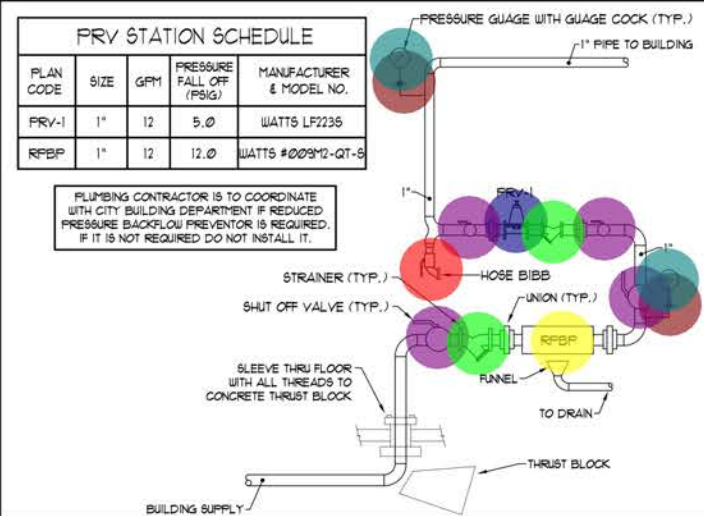
GENERAL MECHANICAL NOTES:

1. FOR REACH RANGES AND MOUNTING HEIGHTS OF ENVIRONMENTAL CONTROLS REFER TO ARCHITECTURAL SHEETS.
2. DRYER VENT DUCTWORK TO BE A MINIMUM OF 26 GAUGE ALUMINUM WITH SMOOTH INTERIOR SURFACE INSTALLED WITHOUT FASTENERS THAT PROTRUDE INTO THE INSIDE OF THE DUCT SYSTEM. SEAL DUCTWORK WATER TIGHT. INSTALLED DRYER VENT LENGTH SHALL BE MARKED ON DRYER DUCT BOX. THE INSTALLATION MANUAL OF INSTALLED DRYER SHALL BE FURNISHED TO THE CODE INSPECTOR DURING INSTALLATION. NO SCREENS TO BE INSTALLED ON DRYER OUTLET TERMINATION.
3. ALL DUCT PENETRATIONS INTO THE RATED WALLS SHALL BE SEALED WITH FIRE CAULKING TO MEET FIRE RATING. SEE ARCHITECTURAL DRAWINGS FOR CONSTRUCTION.
4. COORDINATE ALL DUCTWORK WITH STRUCTURE AND ARCHITECTURAL SOFFITS.
5. ALL SIDEWALL TERMINATIONS SHALL BE INSTALLED AT THE SAME LEVEL TO LINE UP AND LOOK UNIFORM.
6. SEE MP6.2 AND MP6.2 SHEETS FOR DETAILS.
7. ALL EXHAUST AIR DUCTS (BATHROOM EXHAUST, DRYER VENTS, FLUES & ETC.) ARE TO TERMINATE A MINIMUM OF 3' FROM ANY BUILDING OPENINGS AND A MINIMUM 10' FROM ALL MECHANICAL AIR INTAKES (OUTSIDE AIR & ETC.).

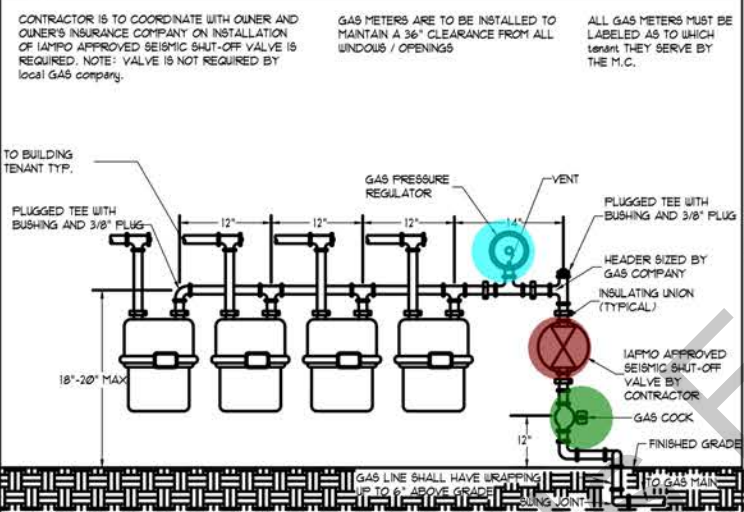
MECHANICAL KEYED NOTES:

1. PROVIDE/INSTALL NEST 7-DAY PROGRAMMABLE THERMOSTAT AT 48" AFF. CONFIRM FINAL LOCATION WITH OWNER'S REPRESENTATIVE.
2. RUN DUCT WORK BETWEEN NEAREST JOIST.
3. RUN EXHAUST THROUGH NEAREST WALL AND TERMINATE WITH BACKDRAFT DAMPER AND OWNER APPROVED TERMINATION.
4. FURNACE TO BE INSTALLED WITH ACID NEUTRALIZER BEFORE DRAINING INTO SANITARY SEWER. IF DRAINING INTO FLOOR DRAIN, TERMINATE WITH A 1" AIR GAP. BURNER MUST BE AT LEAST 18" AFF.
5. ALL DUCT WORK ON THIS LEVEL TO BE INSTALLED IN FLOOR. SEE LEVEL 1
6. ALL DUCT WORK ON THIS LEVEL TO BE INSTALLED IN ATTIC.
7. TERMINATE DUCTWORK BEFORE ROOF SLOPE WITH ENOUGH ROOM FOR DROP.
8. FOR INNER TOWNHOUSES, TERMINATE IN SIMILAR LOCATION NEXT TO WALL.
9. EXHAUST TO BE PROVIDED BY OWNER.
10. DROP 4" DRYER DUCT DOWN WALL THROUGH THE ROOF AND PROVIDE / INSTALL ALL FINAL CONNECTIONS TO DRYER PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. PROVIDE PERMANENT LABEL OR TAG WITHIN SIX FEET OF DRYER CONNECTION IDENTIFYING THE INSTALLED EQUIVALENT LENGTH OF THE EXHAUST DUCT INCLUDING ELBOWS.
11. COORDINATE THE VENTING REQUIREMENTS FOR THE DRYER. PROVIDE DRYER CUT SHEET TO THE ARCHITECT / ENGINEER FOR REVIEW OF DRYER VENTING REQUIREMENTS PRIOR TO THE INSTALLATION OF THE VENTING SYSTEM.
12. HVAC CONTRACTOR TO PROVIDE / INSTALL BACK DRAFT DRYER VENT CAP. (COLOR BY OWNER) SEAL ALL PENETRATIONS WATER TIGHT.
13. 6" EXHAUST UP THROUGH ROOF WITH BACK DRAFT DAMPER AT ROOF PENETRATION AND RAIN CAP ABOVE ROOF.
14. ELECTRIC HEATER FOR MECHANICAL ROOM TO HAVE INTEGRAL THERMOSTAT SET TO 45.
15. CONNECT TO F-1 ON LEVEL 1

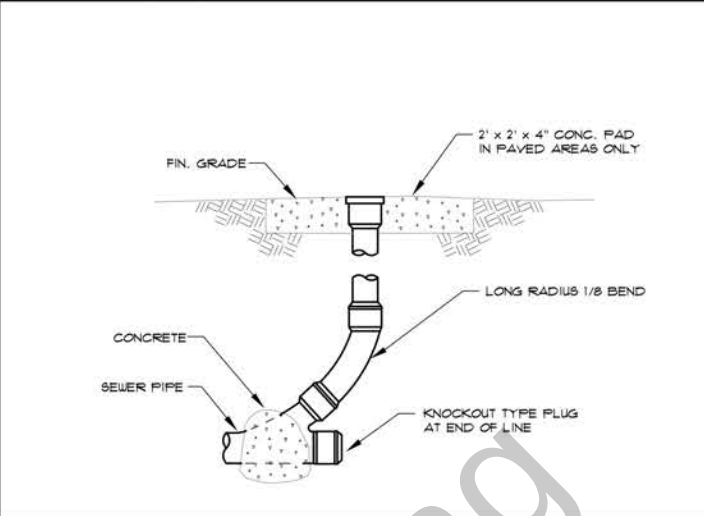




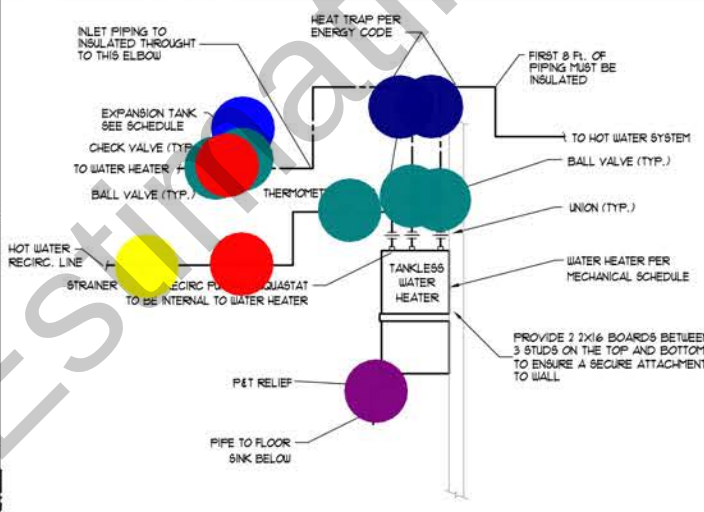
1 TOWNHOME PRV STATION DETAIL
MP6.1 NOT TO SCALE PVED-PUMP-1



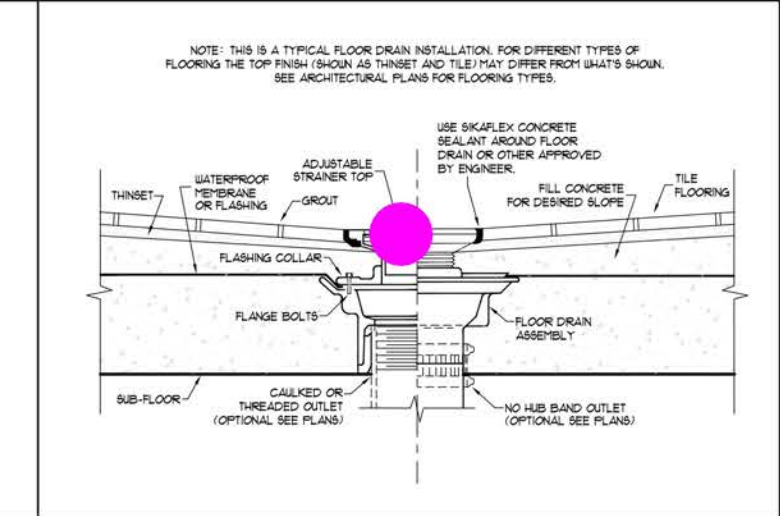
4 GAS METER BANK



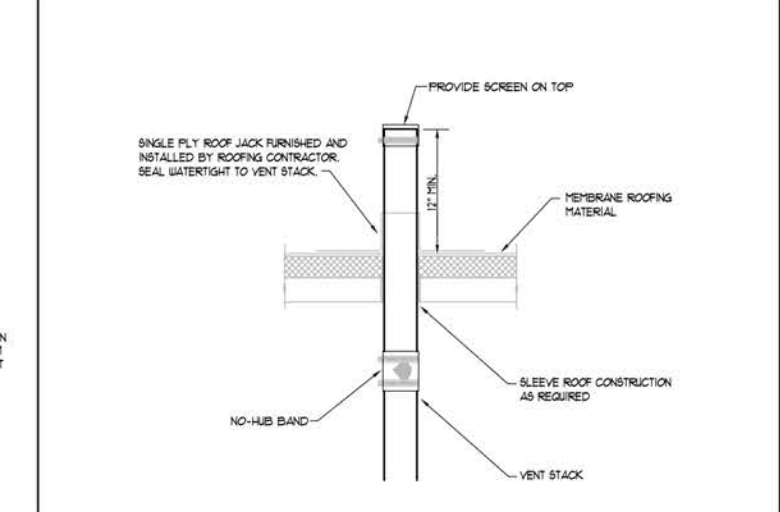
2 SURFACE CLEANOUT DETAIL
MP6.1 NOT TO SCALE PVED-SURFCO



5 TANKLESS WATER HEATER PIPING DETAIL
MP6.1 NOT TO SCALE



3 TYPICAL FLOOR DRAIN / SINK DETAIL
MP6.1 NOT TO SCALE PVED-CABUNT



6 VENT THROUGH ROOF DETAIL
MP6.1 SCALE: NTS PVED-VENT

- Adjustable Strainer Top
- Gas Pressure Regulator
- IAPMO Approved Seismic Shut-Off Valve
- Gas Cock
- 1" RFBP
- 1" PRV-1
- 1" Shut Off Valve
- Pressure Guage With Guage Cock
- House Bib
- 1" Strainer
- Expansion Tank
- Thermometer
- Strainer
- Ball Valve
- Check valve
- Pressure And Temprature Relief Valve

- 12.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 4.0 EA
- 2.0 EA
- 1.0 EA
- 2.0 EA
- 4.0 EA
- 8.0 EA
- 4.0 EA
- 20.0 EA
- 8.0 EA
- 4.0 EA

- 1/2" ST. PLATE RED TO WALL.
- TRAP
- TRAP
- 2" x 1/4" WALL 1" BOLT TO WALL W/ 3/4" BOLT W/ W/ ANCHORS. EMBEDMENT INTO GROUTED SECTION SONARY WALL.
- DED WANT
- TER

1 MP6.2 VENT / FLUE ROOF PENETRATION DETAIL PVED-CABUNIT	2 MP6.2 DUCT LINER DETAIL	3 MP6.2 TYPICAL APARTMENT FURNACE INSTALLATION DETAIL SCALE: NTS
4 MP6.2 CONCENTRIC ROOF TERMINATION DETAIL NOT TO SCALE	5 MP6.2 REFRIGERANT PIPING SCHEMATIC SCALE: NTS 15850-12	6 MP6.2 GAS FIRED UNIT HEATER DETAIL 15850-10
		4.0 EA 8.0 EA 8.0 EA 8.0 EA 8.0 EA 4.0 EA 8.0 EA
7 MP6.2 PVC EQUIPMENT EXHAUST AND INTAKE WALL DETAIL	- MP6.2	- MP6.2

- 1" Shut Off Valve
- A-Frame type evaporator Coil
- Condensate Drain
- Thermal Bulb
- Filter Dryer
- Connection Vent Adaptor Box
- Thermal Expansion Valve



- 16'-0" x 7'-0" Sect. Overhead Door Type-1
- 9'-0" x 7'-0" Sect. Overhead Door Type-2
- 3'-0" x 6'-8" Glass Tempered Door Type-3
- 3'-0" x 6'-8" Solid, 20 Min. Fire-rated Door Type-4
- 3'-0" x 4'-6" Solid Custom Door Type-5
- 6'-0" x 6'-8" Glass Double Tempered Door Type-6
- 2'-6" x 6'-8" Solid Door Type-7
- 1'-0" x 6'-8" Solid Door Type-8
- 5'-0" x 1'-6" Fixed Window Type-A
- 5'-0" x 1'-6" (1) Casement Window Type-B
- 9'-0" x 7'-0" (1) Casement Window Type-C
- 5'-0" x 7'-0" (2) Casement Window Type-G
- 2'-0" x 2'-0" Fixed Window Type-D
- 3'-0" x 2'-0" Casement Window Type-E
- 1'-6" x 2'-0" Fixed Window Type-F
- 2'-6" x 1'-0" Fixed Window Type-K
- 2'-6" x 4'-0" Casement Window Type-J
- 2'-0" x 3'-0" Casement Window Type-H
- Sheetrock Ceiling
- Sheetrock Ceiling
- Seale Concrete Floor-Garage
- Kitchen Flooring-Wood Flooring
- Bed Room Flooring-Carpet
- Bath, Wic, Pwdr Room Floor-Tile Floor
- Deck Flooring-Wood Floor (Assumed)
- Living Room-Carpet Flooring
- 3" Wood Wall Base
- Deck 3" Wall Base-Wood Wall Base (Assumed)
- Bath, Wic, Pwdr Room 3" Wall Base-Tile Wall Base
- 2' x 3' Fire Place-FP
- 8'-1" Height Paint On Sheetrock Wall
- 8'-6" Height Paint On Sheetrock Wall
- 8'-1" Height Stucco
- 3'-0" x 4'-8" Roof Awning
- 9'-5" Height Stucco
- Floor Transition
- Lap TYVEK Metal Flashing

FIRST FLOOR PLAN

SCALE: 3/16" = 1'-0" TOTAL SQ.FT. (75

- 6590.6 SQ.FT.
- 579.4 SQ.FT.
- 3783.1 SQ.FT.
- 932.2 SQ.FT.
- 681.4 SQ.FT.
- 574.0 SQ.FT.
- 281.5 SQ.FT.
- 1199.6 SQ.FT.
- 572.3 FT
- 81.5 FT
- 297.1 FT
- 4.0 EA
- 931.2 FT
- 1352.1 FT
- 6.3 FT
- 4.0 EA
- 16.1 FT
- 144.2 FT
- 115.5 FT

SQ.FT.) PER UNIT

SEE GENERAL GARAGE NOTES ON SHEET 2 FOR SPECIAL GARAGE CODE REQUIREMENTS.



NO UPWARD ILLUMINATION ALLOWED. NO LIGHT MAY TRESPASS ON TO ADJACENT LOTS.

SEE SHEET #A-2 FOR ADD. NOTES

- 2'-6" x 6'-8" Solid Door Type-7
- 6'-0" x 6'-8" Glass Double Tempered Door Type-6
- 5'-0" x 6'-8" Glass Double Tempered Door Type-9
- 3'-0" x 6'-8" Glass Tempered Door Type-10
- 2'-8" x 6'-8" Solid Door Type-11
- 3'-0" x 6'-8" Solid Double Door Type-12
- 1'-8" x 6'-8" Solid Door Type-13
- 2'-0" x 6'-0" Shower, Glass Tempered Door Type-15
- 4'-6" x 6'-8" Solid Double Door Type-14
- 5'-0" x 5'-0" (2) Casement Window Type-L
- 2'-0" x 2'-0" Fixed Window Type-D
- 2'-6" x 3'-0" Casement Window Type-O
- 3'-0" x 2'-0" Casement Window Type-E
- 5'-0" x 3'-0" (2) Casement Window Type-N
- 7'-6" x 5'-0" (2) Casement Window Type-M
- 2'-0" x 3'-0" Casement Window Type-H
- Sheetrock Ceiling
- Sheetrock Ceiling
- Bed Room Flooring-Carpet
- Deck Flooring-Wood Floor (Assumed)
- DEN Room Flooring-Wood Floor (Assumed)
- Common Area-Wood Flooring (Assumed)
- Bath, Wic, Pwdr Room Floor-Tile Floor
- 3" Bedroom Wall Base-Wood Base
- Deck 3" Wall Base-Wood Wall Base (Assumed)
- Bath, Wic, Pwdr Room 3" Wall Base-Tile Wall Base
- DEN Room 3" Wall Base-Wood Base
- 3" Common Area Wall Base-Wood Base (Assumed)
- 8'-6" Height Paint On Sheetrock Wall
- 8'-6" Height Wood Siding
- Floor Transition
- Lap TYVEK Metal Flashing

32.0 EA	
4.0 EA	
4.0 EA	
4.0 EA	
4.0 EA	
4.0 EA	
4.0 EA	
8.0 EA	
4.0 EA	
4.0 EA	
12.0 EA	
4.0 EA	
4.0 EA	
2.0 EA	
4.0 EA	
8.0 EA	
2902.3 SQ FT	
694.5 SQ FT	
1929.6 SQ FT	
339.1 SQ FT	
302.7 SQ FT	
402.5 SQ FT	
713.6 SQ FT	
558.9 FT	
83.7 FT	
363.6 FT	
117.3 FT	
202.2 FT	
1976.1 FT	
8.0 FT	
65.6 FT	
22.9 FT	



SEE SHEET #A-2 FOR ADD. NOTES



FRONT / WEST ELEVATION

SCALE: 3/16"=1'-0"

DOOR AND WINDOW NOTES

R301.1 - BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE REQUIRED IN EACH SLEEPING ROOM. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY, OR TO A YARD OR COURT THAT OPENS TO A PUBLIC WAY.

R301.1 - HABITABLE ROOMS
HABITABLE ROOMS SHALL HAVE AN AGGREGATE GLAZING AREA OF NOT LESS THAN 8 PERCENT OF THE FLOOR AREA OF SUCH ROOMS. NATURAL VENTILATION SHALL BE THROUGH WINDOWS, SKYLIGHTS, DOORS, LOUVERS OR OTHER APPROVED OPENINGS TO THE OUTDOOR AIR. SUCH OPENINGS SHALL BE PROVIDED WITH READY ACCESS OR SHALL OTHERWISE BE READILY CONTROLLABLE BY THE BUILDING OCCUPANTS. THE OPENABLE AREA TO THE OUTDOORS SHALL BE NOT LESS THAN 4 PERCENT OF THE FLOOR AREA BEING VENTILATED.

EXCEPTIONS:
1. THE GLAZED AREAS NEED NOT BE OPENABLE WHERE THE OPENING IS NOT REQUIRED BY SECTION R310 AND A WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM IS INSTALLED IN ACCORDANCE WITH SECTION M1507.
2. THE GLAZED AREAS NEED NOT BE INSTALLED IN ROOMS WHERE EXCEPTION 1 IS SATISFIED AND ARTIFICIAL LIGHT IS PROVIDED CAPABLE OF PRODUCING AN AVERAGE ILLUMINATION OF 6 FOOT-CANDLES OVER THE AREA OF THE ROOM AT A HEIGHT OF 30 INCHES ABOVE THE FLOOR LEVEL.
3. USE OF SUNROOM AND PATIO COVERS, AS DEFINED IN SECTION R202, SHALL BE PERMITTED FOR NATURAL VENTILATION IF IN EXCESS OF 40 PERCENT OF THE EXTERIOR SUNROOM WALLS ARE OPEN, OR ARE ENCLOSED ONLY BY INSECT SCREENING.

R301.3 BATHROOMS, BATHROOMS, WATER CLOSET COMPARTMENTS AND OTHER SIMILAR ROOMS SHALL BE PROVIDED WITH AGGREGATE GLAZING AREA IN WINDOWS OF NOT LESS THAN 3 SQUARE FEET, ONE-HALF OF WHICH MUST BE OPENABLE.

EXCEPTION: THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A LOCAL EXHAUST SYSTEM ARE PROVIDED. THE MINIMUM LOCAL EXHAUST RATES SHALL BE DETERMINED IN ACCORDANCE WITH SECTION M1507. EXHAUST AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS.

WINDOW HEADS ARE TO BE DOOR HEIGHT. BEDROOM WINDOW SILLS SHALL BE WITHIN 44" OF THE FINISHED FLOOR.

ALL WINDOWS SHALL BE DOUBLE GLAZED WITH 1/2" MINIMUM AIR SPACE AND SHALL CONFORM TO I.C.C.

GLASS USED IN SHOWER DOORS OR TUB ENCLOSURES SHALL BE NOT LESS THAN 3/16" THICK WHEN FULLY TEMPERED OR 1/4" THICK WHEN LAMINATED.

PROVIDE SCREENS ON ALL DOORS AND OPERABLE WINDOWS.

PROVIDE PROPER FLASHING AND COUNTER FLASHING AROUND WINDOWS AND DOORS.

HAZARDOUS GLAZING LOCATIONS

R308.4 HAZARDOUS LOCATIONS
THE LOCATIONS SPECIFIED IN SECTIONS R308.4.1 THROUGH R308.4.7 SHALL BE CONSIDERED TO BE SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSE OF GLAZING.

R308.4.1 GLAZING IN DOORS
GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING, AND BIFOLD DOORS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.
EXCEPTIONS:
1. GLAZED OPENING OF A SIZE THROUGH WHICH A 3-INCH-DIAMETER SPHERE IS UNABLE TO PASS.
2. DECORATIVE GLAZING.

R308.4.2 GLAZING ADJACENT TO DOORS
GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR SHALL BE CONSIDERED A HAZARDOUS LOCATION WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE AND IT MEETS EITHER OF THE FOLLOWING CONDITIONS:
1. WHERE THE GLAZING IS WITHIN 24 INCHES OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION.
2. WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES OF THE HINGE SIDE OF AN IN-SWINGING DOOR.

EXCEPTIONS:
1. DECORATIVE GLAZING.
2. WHERE THERE IS AN INTERVENING WALL OR OTHER PERMANENT BARRIER BETWEEN THE DOOR AND THE GLAZING.
3. WHERE ACCESS THROUGH THE DOOR IS TO A CLOSET OR STORAGE AREA 3 FEET OR LESS IN DEPTH. GLAZING IN THIS APPLICATION SHALL COMPLY WITH SECTION R308.4.3.
4. GLAZING THAT IS ADJACENT TO THE FIXED PANEL OF PATIO DOORS.

R308.4.3 GLAZING IN WINDOWS
GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION:
1. THE EXPOSED AREA OF AN INDIVIDUAL PANE IS LARGER THAN 9 SQ. FT.
2. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FLOOR.
3. THE TOP EDGE OF THE GLAZING IS MORE THAN 36 INCHES ABOVE THE FLOOR; AND
4. ONE OR MORE WALKING SURFACES ARE WITHIN 36 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, OF THE GLAZING.

R308.4.4 GLAZING IN GUARDS AND RAILINGS
GLAZING IN GUARDS AND RAILINGS, INCLUDING STRUCTURAL BALUSTER PANELS AND NONSTRUCTURAL IN-FILL PANELS, REGARDLESS OF AREA OR HEIGHT ABOVE WALKING SURFACE SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

R308.4.5 GLAZING AND WET SURFACES
GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION. THIS SHALL APPLY TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.
EXCEPTION: GLAZING THAT IS MORE THAN 60 INCHES, MEASURED HORIZONTALLY AND IN A STRAIGHT LINE, FROM THE WATER'S EDGE OF A BATHTUB, HOT TUB, SPA, WHIRLPOOL OR SWIMMING POOL OR FROM THE EDGE OF A SHOWER, SAUNA OR STEAM ROOM.

R308.4.6 GLAZING ADJACENT TO STAIRS AND RAMPS
GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES ABOVE THE PLANE OF THE ADJACENT WALKING SURFACE OF STAIRWAYS, LANDINGS BETWEEN FLIGHTS OF STAIRS AND RAMPS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

SEE CODE FOR EXCEPTIONS.

R308.4.7 GLAZING ADJACENT TO THE BOTTOM STAIR LANDING
GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF A STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60-INCH HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.
EXCEPTION: THE GLAZING IS PROTECTED BY A GUARD COMPLYING WITH SECTION R312 AND THE PLANE OF THE GLASS IS MORE THAN 18 INCHES FROM THE GUARD.

- Wood Siding
- Stucco
- Stone Veneer
- 36" High Railing
- Down Spout
- Paint On Exterior
- Precast Stone Veneer Cap
- Z Flashing

2210.0 SQ FT
576.6 SQ FT
708.4 SQ FT
62.4 FT
257.8 FT
159.3 SQ FT
189.0 FT
84.0 FT

"OUTWARD" AND "UPWARD" EXTERIOR LIGHTING NOT PERMITTED.

SEE SHEET #A-2 FOR ADD. NOTES





REAR / EAST ELEVATION

SCALE: 3/16"=1'-0"

WINDOW SCHEDULE			
SYM	SIZE	TYPE	COMMENTS
A	5'-0" x 1'-6"	FIXED	
B	5'-0" x 1'-6"	(1) FIXED, (1) CASEMENT	
C	9'-0" x 7'-0"	(3) FIXED, (1) CASEMENT	TEMPERED
D	2'-0" x 2'-0"	FIXED	
E	3'-0" x 2'-0"	CASEMENT	
F	1'-6" x 2'-0"	FIXED	
G	5'-0" x 7'-0"	(1) FIXED, (2) CASEMENTS	TEMPERED
H	2'-0" x 3'-0"	CASEMENT	
J	2'-6" x 4'-0"	CASEMENT	
K	2'-6" x 1'-0"	FIXED	
L	5'-0" x 5'-0"	(2) CASEMENTS	
M	7'-6" x 5'-0"	(2) CASEMENTS	
N	5'-0" x 3'-0"	(2) CASEMENTS	
O	2'-6" x 3'-0"	CASEMENT	
NOTES: * WINDOW SUPPLIER TO VERIFY ALL WINDOW TYPES, SIZES, QUANTITIES, AND LOCATIONS WITH OWNER PRIOR TO ORDERING. ** NOTE: ALL WINDOW SIZES ARE MEASURED TO OUTSIDE OF FRAME *** NOTE: WINDOWS TO HAVE A U-FACTOR OF 0.32 TYPICAL OR BETTER			

DOOR SCHEDULE			
SYM	SIZE	TYPE	COMMENTS
1	16'-0" x 7'-0"	SECT. OV.	
2	9'-0" x 7'-0"	SECT. OV.	
3	3'-0" x 6'-8"	GLASS (1)	
4	3'-0" x 6'-8"	SOLID, 20	
5	3'-0" x 4'-6"	SOLID, GL	
6	6'-0" x 6'-8"	GLASS, DOUBLE (TEMP)	EXTERIOR
7	2'-6" x 6'-8"	SOLID	INTERIOR
8	1'-0" x 6'-8"	SOLID	INTERIOR
9	5'-0" x 6'-8"	GLASS, DOUBLE (TEMP)	EXTERIOR
10	3'-0" x 6'-8"	GLASS (TEMP)	EXTERIOR
11	2'-8" x 6'-8"	SOLID	INTERIOR
12	3'-0" x 6'-8"	SOLID, DOUBLE	INTERIOR
13	1'-8" x 6'-8"	SOLID	INTERIOR
14	4'-6" x 6'-8"	SOLID, DOUBLE	INTERIOR
15	2'-0" x 6'-0"	SHOWER, GLASS (TEMP)	INTERIOR
* NOTE: DOOR SUPPLIER TO VERIFY ALL DOOR TYPES & SIZES WITH OWNER PRIOR TO ORDERING ** NOTE: ALL DOOR SIZES ARE MEASURED TO INSIDE OF FRAME *** NOTE: ALL DOORS TO HAVE A U-FACTOR OF 0.32 TYPICAL OR BETTER			

- Wood Siding
- Stucco
- Stone Veneer
- 36" Height Railing
- Down Spout
- Paint On Exterior
- Precast Stone Veneer Cap
- Z Flashing

1433.3 SQ FT
2514.4 SQ FT
862.2 SQ FT
111.2 FT
32.4 FT
141.7 SQ FT
154.1 FT
47.5 FT

"OUTWARD" AND "UPWARD" EXTERIOR LIGHTING NOT PERMITTED.

SEE SHEET #A-2 FOR ADD. NOTES

