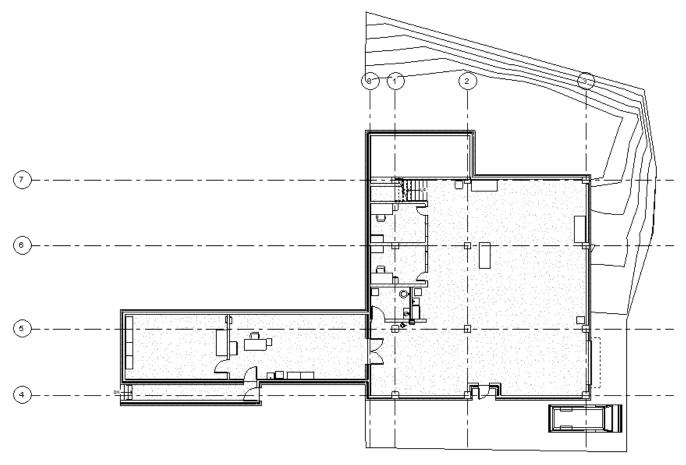
by Kaylee Werner, BS Engineering-Sustainable Design and Architectural Studies Minor 2015 EGR280 Engineering-Architecture Research with J. Wunderlich, PhD





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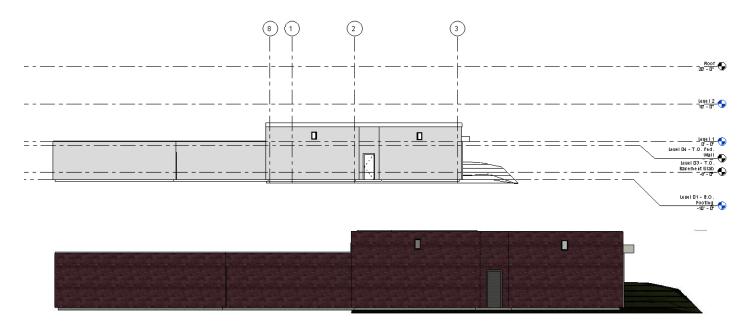


PERSPECTIVE (from gym steps)



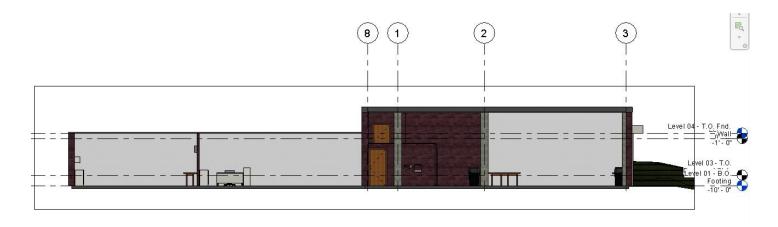
PERSPECTIVE (from College Avenue)

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# SOUTH ELEVATION (i.e., view from gym)

NOTE: Old shop on the left is within first floor of three-story Masters Center (full-building not shown)

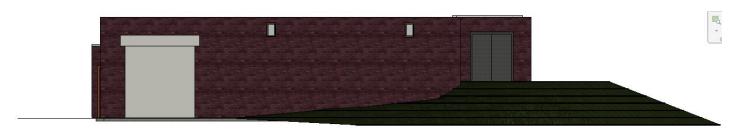


## **EAST-WEST SECTION**

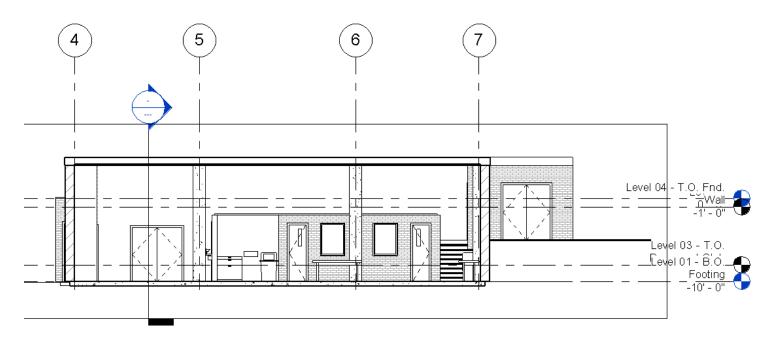
NOTE: Old shop on the left is within first floor of three-story Masters Center (full-building not shown)



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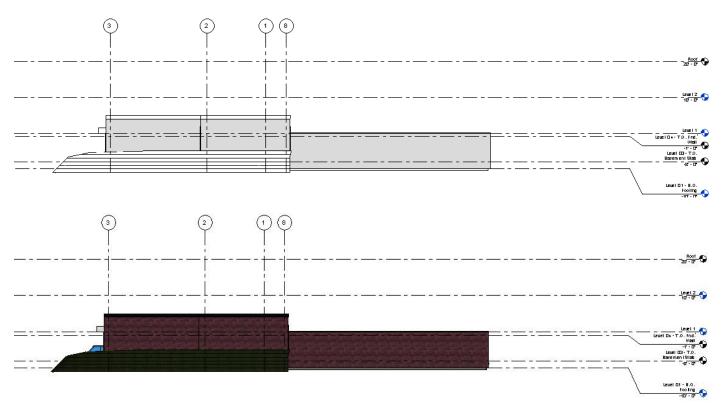
EAST ELEVATION (i.e., view from lake)



# NORTH-SOUTH SECTION



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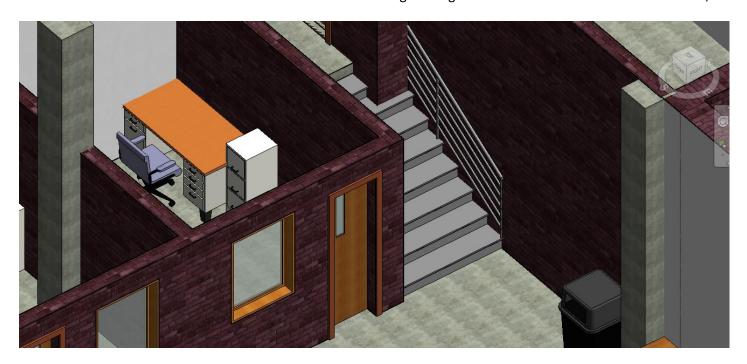


# NORTH ELEVATION (i.e., view from road)

NOTE: Old shop on the right is within first floor of three-story Masters Center (full-building not shown)



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Offices near stairs leading to vestibule that leads to Gibble auditorium and outside.



Eyewash station, water fountain, sink, storage, and trash beside other office in new shop.

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Offices



Office

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# **MATERIAL QUANTITIES:**

	Y	qs-Wall Quantities by Assembly  Calculated To Butt-End Dimensions								
A	Abl. Di-ti	14/-II A				Mean				
Assembly Code	Assembly Description	Wall Assembly	Area	Volume	Length - Center To Center	Width				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	350.88	405.70	23' - 10 7/8"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	754.79	872.73	60' - 6 21/32"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	539.78	624.12	56' - 0 15/16"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	160.00	185.00	16' - 0"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	549.22	635.03	56' - 0 15/16"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	26.86	31.06	4' - 9 7/16"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	312.55	361.39	31' - 10"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	103.24	119.37	10' - 4 5/16"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	371.00	428.97	26' - 6"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	601.40	695.37	50' - 5 25/32"	1.16				
32010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	285.50	330.11	21' - 1 15/16"	1.16				
32010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	340.11	393.26	23' - 10 7/8"	1.16				
B2010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	38.50	44.52	2' - 9"	1.16				
32010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	74.26	85.86	6' - 5 15/16"	1.16				
32010156	Ext. Wall - Brick Composite	Exterior - Brick on Mtl. Stud	22.31	25.80	2' - 9"	1.16				
32010	Exterior Walls	Generic - 6"	127.44	63.72	16' - 0"	0.50				
32010	Exterior Walls	Generic - 8"	218.24	145.49	16' - 6"	0.67				
B2010	Exterior Walls	Generic - 8"	30.33	20.22	1' - 6"	0.67				
32010	Exterior Walls	Generic - 8"	70.93	47.28	7' - 4 7/8"	0.67				
32010	Exterior Walls	Generic Inside Wall - 8" 2	105.29	70.19	13' - 4 7/8"	0.67				
32010	Exterior Walls	Generic Inside Wall - 8" 2	100.67	67.11	19' - 0"	0.67				
32010	Exterior Walls	Generic Inside Wall - 8" 2	99.96	66.64	13' - 4 7/8"	0.67				
32010	Exterior Walls	Generic Inside Wall - 8" 2	99.96	66.64	13' - 4 7/8"	0.67				
32010	Exterior Walls	Generic Inside Wall - 8" 2	81.63	53.52	13' - 4 7/8"	0.67				
C1010145	Partitions - Drywall w/ Metal Stud	Interior Toilet wall - 6 1/8" Partition	59.33	30.28	8' - 1"	0.51				
Grand total: 25			5524.19	5869.40		•				

		qs-Structi	ıral Column	Schedule						
Assembly C C	ount Length	Description	Assembly	/ Description	Туре	Comments	s Base Le	vel		
B10 12	14.00	<u> </u>	Superstruc	cture	18 x 18		Level 01			
Grand total: 12										
			qs	s-Roof Quantit	ies by Asse	mbly				
Assembly Cod	e Assembly Des	cription	Area	Roof	Assembly		Description		Comments	
B1020	Roof Construct			Fab Lab Roo	f- 12" 2					
Grand total: 1		2927.	58							_
			qs-Floo	or Quantities b	y Assembly					
Assembly Code	Floor Assemb	ily An	ea (Defined	By Modeler)	Perimeter	Desci	ription	С	omments	J
<del></del>	Concrete Slab - 6"	415			592.58					J
Grand total: 6		415	50		592.58					
								(	qp-Plumbing Fixture Q	uantities
Assembly Code	Assembly Descri	ption Cour	ıt Uı	nit Description		Type	De	escription	CW Connection	HW Co
D2010110	Water Closets - Singl	Toilet-Co	ommercial-Wa	I-3 15" S	eat Height					
			Sink - Work		20"x	18"				
		1	Lavatory - Vanity		30"x	18" - Private				
		1	Emerger	ncy Eye Wash	Stan	dard				
		1	Drinking	Fountain - Se	mi- Stan	dard				
Grand total										

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ssembly Code	As	sembly De	scription	Area	Per	imeter	Type	De	escription	Height Offse	et From Level	Manufacturer	1	Model	l	JRL	Co	mments
30210	Suspended (	Ceilings - A	Acoustical	4385.89			2' x 4' ACT Sy	ste		-	-		1				1	
d total: 5	,			4385.89														
								ga-Door Qu	antities									
sembly Code	Assembly De	scription	Count	Door Description	Туре	Width	Height	Thickness	Fire Rating	Description	Construction	ype Manu	facturer	Model		URL	Door Type	Com
20	Interior Doors	1	4	Single-Flush	36" x 84"	3' - 0"	7" - 0"	0' - 2"									8	
20	Interior Doors	Ĭ	1	Single-Flush	36" x 80"	3' - 0"	6' - 8"	0' - 2"									13	
20	Interior Doors	Ì	1	Double-Flush	68" x 80"	5' - 8"	6' - 8"	0' - 2"									18	
20	Interior Doors	Î	1	Double-Flush	Shop/vest	6' - 0"	6' - 6"	0' - 2"									20	
20	Interior Doors		1	Double-Flush	Gibble Do	5' - 8"	6' - 8"	0' - 2"									21	
30410	Overhead Doo	ırs	1	Overhead-Rolli	8' x 6'-6"	10" - 0"	10" - 0"	0' - 2"									22	
20	Interior Doors		1	Single-Flush	Outside s	2" - 6"	6' - 8"	0' - 2"									23	
20	Interior Doors		2	Single-Flush Vi	24" x 82"	2' - 0"	6' - 10"	0' - 2"						-			37	
nd total	milener Beere	_	_	i chilgio i lacili i i			, , , ,								_		10.	_
TO TOTAL	ı							ga-Furniture	Quantition							_		
		Assemb	h Codo A	Assembly Description	Count	Unit Desc	rintian	Type	Description	Manufac	cturer Mod	uRL URL	Y	Commer	oto			
	l	ASSEIIL	ny code A	ASSETTION DESCRIPTION	Count	Ullit Desc	приоп	Type	Description	Manula	Mou	I OKL		Conninci	iiis			
	,											1				_		
		E2020200		urniture & Accessori		abinet-File 3		5" x 18"										
		E2020200		urniture & Accessori		esk		60" x 30"										
		E2020200		urniture & Accessori		able-Rectang		'2" x 30"								- 1		
		E2020200		urniture & Accessori	3 C	hair-Task Ar	ns C	Chair-Task Ar										
		Grand total		urniture & Accessori	3 C	hair-Task Ar	ns C	Chair-Task Ar										
				urniture & Accessori	3 C	hair-Task Ar	ms C		re System Quan	tities								
			al	urniture & Accessori	3 C		ns C		re System Quan Type		scription	Manufacturer	Model	I UF	RL	Comr	ments	
	<u>.</u> 	Grand tota	al ly Code A		Count		escription		Туре		scription	Manufacturer	Model	I UF	RL	Comr	ments	
	<u>.</u> 	Grand total	ly Code A	ssembly Description	Count 10	Unit D	escription lestal	qa-Furnitu	Туре		scription	Manufacturer	Model	I UF	RL	Com	ments	
		Assemble E2020	ly Code A	Assembly Description	Count 10	Unit D	escription lestal	qa-Furnitu 20" x 36" x 36	Туре		scription	Manufacturer	Model	I UF	RL	Com	ments	
		Assemble E2020 E2020	ly Code A	Assembly Description	Count 10	Unit D	escription lestal	qa-Furnitu 20" x 36" x 36 Overhead Sto	Type rage Module		scription	Manufacturer	Model	I UF	RL	Com	ments	
		Assemble E2020 E2020	ly Code A	Assembly Description Toveable Furnishings Toveable Furnishings	Count 10 2	Unit D Storage Per Overhead S	escription lestal torage Mod	qa-Furnitu 20" x 36" x 36 Overhead Sto	Type  rage Module	Des	scription				RL		ments	
		Assemble E2020 E2020	ly Code A	Assembly Description Toveable Furnishings Toveable Furnishings	Count 10	Unit D Storage Per Overhead S	escription lestal torage Mod	qa-Furnitu 20" x 36" x 36 Overhead Sto	Type rage Module								nents	
		Assemble E2020 E2020	M M Assem	Interest of the second of the	Count 10 2	Unit D	escription  Jestal  torage Mod  Jount Uni	qa-Furnitu 20" x 36" x 36 Overhead Sto qa-Ra it Description	Type  rage Module  ling Quantities  Length	Des							ments	
		Assemble E2020 E2020	M M Assem	Assembly Description Ioveable Furnishings Ioveable Furnishings Inbly Code Asse	Count  10 2  mbly Descripidrails/Balustr	Unit D	escription lestal torage Mod	qa-Furnitu 20" x 36" x 36 Overhead Sto  qa-Ra it Description	Type  rage Module  ling Quantities  Length  - 0"	Des							ments	
		Assemble E2020 E2020	M M M M C201040 C201040 C201040	Assembly Description foveable Furnishings foveable Furnishings hibly Code Asse  Stair Har	Count 10 2	Unit D Storage Per Overhead S tion C ades 2	escription  Jestal  torage Mod  Jount Uni	qa-Furnitu 20" x 36" x 36 Overhead Sto  qa-Ra it Description	Type  rage Module  ling Quantities  Length	Des							ments	
		Assemble E2020 E2020	M M Assem	Assembly Description foveable Furnishings foveable Furnishings hibly Code Asse  Stair Har	Count  10 2  mbly Descripidrails/Balustr	Unit D	escription lestal torage Mod	qa-Furnitu 20" x 36" x 36 Overhead Sto qa-Ra tt Description	Type  rage Module  lling Quantities  Length  - 0"  - 6 29/32"	Des							ments	
		Assemble E2020 E2020 Grand tota	M M M M M M M M M M M M M M M M M M M	Ioveable Furnishings Ioveable Furnishings Ioveable Furnishings Inbly Code Asset Io Stair Har Io Stair Har Iat: 4	Count  10 2  embly Descript drails/Balustr	Storage Per Overhead Storage In Communication Communicatio	escription lestal torage Mod count Uni Rail	qa-Furnitu  20" x 36" x 36  Overhead Sto  qa-Ra  it Description  ing 3' ing 8'	Type  rage Module  liing Quantities  Length  - 0"  - 6 29/32"  - Stair Quantities	Description	Manufactur	or Model	U	JRL C	commen	ts		
		Assemble E2020 E2020 Grand tota	M M M M C201040 C201040 C201040	Ioveable Furnishings Ioveable Furnishings Ioveable Furnishings Inbly Code Asset Io Stair Har Io Stair Har Iat: 4	Count  10 2  embly Descript drails/Balustr	Unit D	escription lestal torage Mod	qa-Furnitu  20" x 36" x 36  Overhead Sto  qa-Ra  it Description  ing 3' ing 8'	Type  rage Module  liing Quantities  Length  - 0"  - 6 29/32"  - Stair Quantities	Description		or Model	U			ts		Commen
	Assembly	Assemble E2020 E2020 Grand tota	M M M M M M M M M M M M M M M M M M M	Assembly Description Investigation of the second of the se	Count  10 2  embly Descript drails/Balustr	Storage Per Overhead Storage In Communication Communicatio	escription lestal torage Mod count Uni Rail	qa-Furnitu  20" x 36" x 36  Overhead Sto  qa-Ra  it Description  ing 3' ing 8'	Type  rage Module  liing Quantities  Length  - 0"  - 6 29/32"  - Stair Quantities	Description	Manufactur	or Model	U	JRL C	commen	ts		Commen
		Assemble E2020 E2020 Grand total	M M M M M M M M M M M M M M M M M M M	Assembly Description Inveable Furnishings Inveable Furnishings Inbly Code Asse In Stair Har	Count  10 2  embly Descript drails/Balustr	Unit D Storage Pei Overhead S tion C ades 2 ades 2	escription lestal torage Mod count Uni Rail	qa-Furnitu     20" x 36" x 36" x 36   Overhead Sto     Qa-Ra   t Description     3"   ing   6"     6"	Type  rage Module  liing Quantities  Length  - 0"  - 6 29/32"  - Stair Quantities	Description	Manufactur	or Model	U	JRL C	commen	ts		Commen
	Assembly	Assemble E2020 E2020 Grand total	M M M I Assembly D Assembly D	Assembly Description Inveable Furnishings Inveable Furnishings Inbly Code Asse In Stair Har	Count  10 2  drails/Balustr  Unit De	Unit D Storage Pei Overhead S tion C ades 2 ades 2	escription lestal torage Mod ount Uni Rail Base Level	qa-Furnitu     20" x 36" x 36" x 36   Overhead Sto     Qa-Ra   t Description     3"   ing   6"     6"	Type  rage Module  lling Quantities  Length  - 0°  - 6 29/32"  - Stair Quantities  Multistory Top L	Description	Manufactur	or Model	U	JRL C	commen	ts		Commen
Aşşeml	Assembly C2010 Grand total:	Assemble E2020 E2020 Grand total or Code	M M M I Assembly D Stair Constru	Assembly Description Investigation of the second of the se	Count  10 2  Imply Descrip  Idrails/Balustr  Unit De  Assembl	Unit D Storage Per Overhead S tion (C ades 2 ades 2 ades 2	escription lestal torage Mod ount Uni Rail Base Level	qa-Furnitu	Type  rage Module  lling Quantities   Length  - 0°   - 6 29/32°  -Stair Quantities Multistory Top Lone  qa-Window Qu	Description  Description	Manufactur	er Model	U U	JRL C	commen	ts	URL	
Assemb	Assembly C2010 Grand total:	Assemble E2020 E2020 Grand total	M M M I Assembly D Stair Constru	Assembly Description Investigation of the second of the se	Count  10 2  drails/Balustr  Unit De	Unit D Storage Pei Overhead S tion C ades 2 ades 2	escription lestal torage Mod ount Uni Rail Base Level	qa-Furnitu	Type  rage Module  lling Quantities   Length  - 0°   - 6 29/32°  -Stair Quantities Multistory Top Lone  qa-Window Qu	Description  Description	Manufactur	er Model	U U	URL C	commen	ts	URL	Comment ow Type
	Assembly C2010 Grand total:	Assemble E2020 E2020 Grand total r Code 2	M M M I Assembly D Stair Constru	Interest of the second of the	Count  10 2  Imply Descrip  Idrails/Balustr  Unit De  Assembl	Storage Per Overhead Storage P	lestal torage Mod  Rail Rail  Base Level  Level 01 -	qa-Furnitu 20" x 36" x 36" x 36 Overhead Sto qa-Ra tt Description ling 3' ling 8'  Top Level  N	Type  rage Module  lling Quantities   Length  - 0°   - 6 29/32°  -Stair Quantities Multistory Top Lone  qa-Window Qu	Description  Description	Manufactur	er Model	U U	URL C	commen	ts	URL   1	
Asseml	Assembly  C2010 Grand total:	Assemble E2020 E2020 Grand total crowd Code 2	M M M I Assembly D Stair Constru	Interest of the second of the	Count  10 2  Imply Descrip  Idrails/Balustr  Unit De  Assembl	Unit D Storage Per Overhead S tion (C ades 2 ades 2 ades 2	escription lestal torage Mod ount Uni Rail Base Level	qa-Furnitu	Type  rage Module  lling Quantities   Length  - 0°   - 6 29/32°  -Stair Quantities Multistory Top Lone  qa-Window Qu	Description  Description	Manufactur	er Model	U U	URL C	commen	ts	URL	