

# AEP America – “Mountain Mikes”

## SCOPE OF WORK

### SURVEYOR

#### VERSION LOG:

Version	Date:	Revision notes:

#### INTRODUCTION TO PROJECT:

Welcome to the “Mountain Mikes – AEP America” Project with FSU!

Our goals for this project are to collect all the information needed for our client to design new stores. FSU will be acting as the client’s eyes and ears on site to document the following scope of work for demolition, taking over current restaurant spaces and turning them in to Mountain Mikes. Please pay attention for items that look out of the ordinary or expensive to correct. The size of the spaces are approximately 1,400 to 3,000 sq. ft.

<b>SURVEYOR CRITICAL PROJECT INFORMATION:</b>			
<b>Project Fee:</b>	Can be viewed in Quickbase		
<b>Turnaround/Upload Time Frame:</b>	24 hours from Site Survey Completion		
<b>FSU Project Contacts</b>			
<b>Project Manager:</b>	Project Manager	<b>Scheduling:</b>	Project Coordinator
<b>Project Manager phone:</b>	303-355-7274	<b>Scheduling phone:</b>	303-355-7274
<b>Project Manager email:</b>	Project Manager’s Email	<b>Scheduling email:</b>	scheduling@fsusurveyor.com
<b>FSU Project Escalation:</b>	For on-site survey issues		
<b>1. Project Manager:</b>	Project Manager		
<b>2. Vice President of Operations:</b>	Vice President of Business Operations		
<b>3. After hours contact:</b>	Project Manager’s Cell Phone		
<b>Dress Code:</b>	Shirt with a Collar and Khaki or any non-denim trousers		
<b>Reimbursable Expenses:</b>	<ul style="list-style-type: none"> <li>o Reimbursable expenses are due no later than 7 days from the date of survey. Any expenses submitted past 7 days will not be paid.</li> <li>o Surveyor will fill out the expense report through their vendor portal on QuickBase</li> <li>o Receipts are required for all expenses</li> </ul>		
<b>Surveyor Responsibilities:</b>	<ul style="list-style-type: none"> <li>o Thoroughly review the Scope of Work and address any questions with the Project Manager prior to survey</li> <li>o Coordinate the feasible survey dates with FSU scheduling, then book travel</li> <li>o Coordinate with site contact prior to survey for site visit timing &amp; any additional requirements</li> <li>o Surveys are to be conducted during operating hours while management or team member is present.</li> <li>o Site contacts are to ensure roof access to surveyors. FSU’s surveyors will not be traveling with ladders to gain access to the roof.</li> <li>o Contact Project Manager with any on-site issues or concerns</li> </ul>		

	<ul style="list-style-type: none"> <li>o Enter “date surveyor deliverables in” in QuickBase upon uploading of deliverables</li> <li>o Upload all documentation/deliverables to QuickBase within the required timeframe, send notification to Project Manager. Note: all deliverables must be completed in full prior to upload, partial deliverable uploads will not be accepted</li> </ul>
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## SURVEYOR DELIVERABLES PACKAGE:

The following items are required to be delivered to FSU:

1. Field Drawings
2. Surveyor CAD
3. Still Photos
4. Laser Photos

\*IF ITEMS HAVE \*OPTIONAL PLEASE CHECK WITH YOUR PROJECT MANAGER BEFORE SURVEYING (CHECK SITE NOTES)

### I. HAND DRAWING IS REQUIRED FOR THE SURVEYED SPACE

Extents/Column Dimension Plan	<ul style="list-style-type: none"> <li>o Sketch of layout of space with overall dimensions front to back and side to side noted. If columns exist within space, Full placement, size, and spacing dimensions will be required as part of this drawing or as a separate drawing if necessary. Photos of the overall dimensions as shown on the laser are required for this plan. See attached examples in section V at the end of this Scope of Work.</li> </ul>
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### II. SURVEY INFORMATION

Floor Plan	<ul style="list-style-type: none"> <li>o Floor Plan Elements: <b>Exact placement</b> of <b>ALL</b> items listed below. <ul style="list-style-type: none"> <li>▪ Exterior Walls (including demising wall and exterior wall thickness)</li> <li>▪ Interior Walls, Partitions, Partial Wall Heights</li> <li>▪ Wall Openings/Pass Throughs (WxH, Sill Ht, and Header Ht)</li> <li>▪ Visible Columns, Visible Embedded Columns</li> <li>▪ Doors (WxH)</li> <li>▪ Windows (WxH, Sill and Header Height)</li> <li>▪ Storefront (WxH, Sill and Header Height)</li> <li>▪ Bump-Outs, Recesses, Niches (WxHxD)</li> <li>▪ Steps, Ramps, Changes in Level (#Treads, Slope, and Height)</li> </ul> </li> <li>o Floor Plan Elements: <b>General placement</b> of <b>ALL</b> items listed below. <ul style="list-style-type: none"> <li>▪ Identify Demising Walls – (Fire Rated)</li> <li>▪ Identify Chase</li> </ul> </li> <li>o Finishes Plan Elements: <b>Exact placement</b> of <b>ALL</b> items listed below. <ul style="list-style-type: none"> <li>▪ Floor Finishes (e.g.: carpet, concrete, tile, VCT, wood, laminate, etc.)</li> <li>▪ Ceiling Finishes (e.g.: ACT, drywall, open to deck, glued tile, etc.)</li> </ul> </li> </ul>
Major Mechanical, Electrical, Plumbing Plan (MEP Plan)	<ul style="list-style-type: none"> <li>o Mechanical: <b>Exact placement</b> of <b>ALL</b> mechanical elements listed below. <ul style="list-style-type: none"> <li>▪ HVAC Units (WxHxD and AFF) (# of Units, Model #'s, Serial #'s, Placement, Condition, Type)</li> <li>▪ Compressors (WxHxD and AFF)</li> <li>▪ Evaporative Coolers (WxHxD and AFF)</li> <li>▪ Gas Meters</li> <li>▪ Identify if Gas is on site, location of Gas line, and size</li> </ul> </li> <li>o Mechanical: <b>General placement</b> of <b>ALL</b> mechanical elements listed below. <ul style="list-style-type: none"> <li>▪ Wall mounted HVAC registers</li> <li>▪ Ductwork – Identify Type and Height at front, middle, and rear of space</li> </ul> </li> <li>o Electrical: <b>Exact placement</b> of <b>ALL</b> electrical elements listed below.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Electrical Panels (WxHxD and AFF) (Service Size, Voltage, and Service Details)</li> <li>▪ Electrical Meters (AFF)</li> <li>▪ Timers (AFF)</li> <li>▪ Disconnect Switches (WxHxD and AFF)</li> <li>▪ Control Panels</li> <li>▪ Key Pads</li> <li>▪ Transformers (WxHxD)</li> <li>▪ Main Point of Entry (MPOE)</li> <li>○ Plumbing: <b>Exact placement</b> of <b>ALL</b> plumbing elements listed below including AFFs. <ul style="list-style-type: none"> <li>▪ Toilets</li> <li>▪ Urinals</li> <li>▪ Hand Sinks</li> <li>▪ Utility Sinks, Mop Sinks</li> <li>▪ 3-comp/2-comp Sinks</li> <li>▪ Drinking Fountains</li> <li>▪ Floor Drains, Floor Sinks</li> <li>▪ Sanitary Line Location and Size</li> <li>▪ Clean-Outs</li> <li>▪ Exposed Plumbing (Stub-Outs, Shut-Offs) (Main Shut Offs)</li> <li>▪ Water Heaters/Insta-Hots</li> <li>▪ Water Meters</li> <li>▪ Water Supply Location, Water Line Size</li> <li>▪ Grease Interceptor</li> </ul> </li> <li>○ Fire/Life Safety: <b>Exact placement</b> of <b>ALL</b> elements listed below. <ul style="list-style-type: none"> <li>▪ Fire Alarm Control Panels and Equipment to Identify</li> </ul> </li> </ul>
<p>Reflected Ceiling Plan (RCP) - *OPTIONAL</p>	<ul style="list-style-type: none"> <li>○ <b>General placement</b> of <b>ALL</b> elements listed below. <ul style="list-style-type: none"> <li>▪ Ceiling Heights</li> <li>▪ Soffits/Changes in Ceiling Height</li> <li>▪ Headers/Beams</li> <li>▪ HVAC Registers (Supply/Return)</li> <li>▪ Identify if Fire Sprinklers are within surveyed space</li> </ul> </li> </ul>
<p>Sprinkler Plan – REQUIRED</p>	<ul style="list-style-type: none"> <li>○ Sprinkler Plan Elements: <b>True placement</b> of <b>ALL</b> items listed below. <ul style="list-style-type: none"> <li>▪ Water and Plumbing Line and Size with MPOE</li> </ul> </li> </ul> <p>*To identify any obstruction above grid with height and general placement.</p>
<p>HVAC Plan* – OPTIONAL</p>	<ul style="list-style-type: none"> <li>○ HVAC Plan Elements: <b>True placement</b> of <b>ALL</b> items listed below. <ul style="list-style-type: none"> <li>▪ HVAC Registers/Diffusers</li> </ul> </li> <li>○ HVAC Plan Elements: <b>General placement</b> of <b>ALL</b> items listed below. <ul style="list-style-type: none"> <li>▪ HVAC Ductwork (Height only at front, middle, and rear of space)</li> </ul> </li> </ul> <p>*To identify any obstruction above grid with height and general placement.</p>
<p>Structural Plan* - OPTIONAL</p>	<ul style="list-style-type: none"> <li>○ Structural Plan Elements: <b>General placement</b> of <b>ALL</b> items listed below. (Height at front, middle, and rear of space) <ul style="list-style-type: none"> <li>▪ Structural Beams – Identify Type (Need Angle Measurements, Thickness for Both TC and BC *See Below)</li> <li>▪ Structural Walls – Identify Type</li> <li>▪ Columns – Identify Type</li> <li>▪ Joists (Roof, Floor, Ceiling) – Identify Type</li> <li>▪ Roof Deck – Identify Type (Type of Roof Construction, Metal Deck, Bulb-Tee, Etc.)</li> </ul> </li> </ul> <p>*Beams and joists to be identified:</p> <ul style="list-style-type: none"> <li>▪ Depth</li> <li>▪ Top Chord = TC <ul style="list-style-type: none"> <li>▪ Angle</li> </ul> </li> <li>▪ Bottom Chord = BC</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Web Members <ul style="list-style-type: none"> <li>▪ Configuration of Web Members, Spacing of Panel Points</li> </ul> </li> <li>▪ Gap = G</li> <li>▪ Span = S <ul style="list-style-type: none"> <li>▪ Dimensional Info of Support Members and Their spans, depth, Width, and Thickness</li> </ul> </li> <li>▪ Spacing = SP <ul style="list-style-type: none"> <li>▪ Ang. Spacing</li> </ul> </li> </ul> <p>*To identify any obstruction above grid with height and general placement.</p>
Roof Plan* - <b>OPTIONAL</b>	<ul style="list-style-type: none"> <li>o <b>True placement</b> of <b>ALL</b> elements listed below. <ul style="list-style-type: none"> <li>▪ Parapet Walls (Height)</li> <li>▪ Direction of Roof Slope</li> <li>▪ RTU's (WxHxD)</li> <li>▪ Roof Drains</li> </ul> </li> <li>o <b>General placement</b> of <b>ALL</b> elements listed below. <ul style="list-style-type: none"> <li>▪ Roof Vents</li> <li>▪ Exhaust Fans</li> <li>▪ Condensers</li> </ul> </li> </ul>
Site Plan* - <b>OPTIONAL</b>	<ul style="list-style-type: none"> <li>o <b>Exact placement</b> of <b>ALL</b> elements listed below. <ul style="list-style-type: none"> <li>▪ Exterior Utilities (Meters, Panels)</li> <li>▪ Curb at Perimeter of Surveyed Space</li> <li>▪ Slopes &amp; ramps</li> </ul> </li> </ul> <p>*20'-0" Radius around Surveyed Space</p>
Photo Key	<ul style="list-style-type: none"> <li>o Floor plan with photos grouped by area or room</li> <li>o Surveyor deliverable for photo bubble must be clear and accurate for the actual photo location.</li> <li>o Above grid plan with group bubbles <ul style="list-style-type: none"> <li>▪ Surveyor deliverable for photo bubble must be clear and accurate for the actual photo location.</li> </ul> </li> </ul>

<b>III. PHOTOS</b>	
Photos	<ul style="list-style-type: none"> <li>o Exterior photos <b>ARE NOT</b> to be taken at night</li> <li>o Photos to include: <ul style="list-style-type: none"> <li>▪ All Sides of Building</li> <li>▪ Adjacent Tenants</li> <li>▪ Remote Utility Rooms (With Path of Travel from Site)</li> <li>▪ Remote Storage Rooms (With Path of Travel from Site)</li> <li>▪ Parking Lot and Accessible Spaces</li> <li>▪ Signage</li> <li>▪ Visible Damage/Areas of Concern</li> <li>▪ Photos of Mechanical Equipment (Thermostats), Mechanical, Electrical, and Plumbing</li> <li>▪ All Rooms and Spaces Within the Survey Space</li> <li>▪ Above Grid/Structural Design and Configuration of Structural Members</li> <li>▪ Roof – To Include RTUs with Tags and General Photo Array</li> <li>▪ Entrances/Exits – Both Sides, To Include Threshold</li> <li>▪ MEP Equipment – To Include Close Up of Labels</li> </ul> </li> <li>o Photo resolution: 1280 x 960 minimum</li> <li>o Photos to be taken in landscape format only</li> <li>o Photo sequence order: regardless of the order of the photos taken, the surveyor will reorder the photos to this sequence: <ol style="list-style-type: none"> <li>1. Exterior (front then rear)</li> <li>2. Interior</li> <li>3. Above ceiling</li> </ol> </li> </ul>

	<ul style="list-style-type: none"> <li>4. Roof</li> <li>5. Extra space (remote power or phone room)</li> <li>o Interior photos: <ul style="list-style-type: none"> <li>▪ Complete store front photos</li> <li>▪ Corner photos facing into the space (each corner, 2 photos with your back in the corner facing the opposite corner. 1 eye level photo, 1 ceiling photo)</li> <li>▪ Architectural details such as millwork, wainscoting, structural relationships</li> <li>▪ Utility equipment (HVAC units, filter systems, water heaters, electrical, water, gas...etc.</li> <li>▪ Above ceiling photos: limited amount. Take several photos to document the duct placements and structure type.</li> </ul> </li> <li>o Photo Folder naming protocol: <b>APMM_XXXX (5 digit site number)_CityST_Photos</b></li> <li>o Photo naming protocol: <b>APMM_XXXX (5 digit site number)_###</b></li> <li>o Include any equipment outside of the space, MPOE, Dmarc, and panels.</li> <li>o Include detail photos of any electrical panels that serve the space (detail photos of panels not within the space are still required) if equipment is not in the space please take a path of travel from the space to the equipment location.</li> <li>o Close-up photos of: <ul style="list-style-type: none"> <li>▪ Electrical equipment including panel boxes (with all marking-make, model, serial number, amps, volts, phase, wire, as well as individual circuits on the box).</li> <li>▪ Meters.</li> <li>▪ MPOE and demarks.</li> <li>▪ Utilities that service the space</li> <li>▪ Rear door hardware from inside and outside of the space</li> <li>▪ Roof Equipment</li> </ul> </li> </ul>
Roof Photos	<ul style="list-style-type: none"> <li>o Photos completely documenting the roof conditions</li> <li>o Photos of all roof mounted equipment and their information plates/tags</li> </ul>
Laser Photos	<ul style="list-style-type: none"> <li>o <u><b>Laser photos are to be delivered separately from regular site photos</b></u></li> <li>o Folder Naming Protocol: <b>APMM_XXXX (5 digit site number)_CityST_Laser</b></li> <li>o Photo Naming Protocol: <b>APMM_XXXX (5 digit site number)_###</b></li> </ul>

<b>IV. SURVEYOR CAD</b>	
Surveyor CAD	<ul style="list-style-type: none"> <li>o <u><b>CAD Floorplan Orientation: Main entry facing right or bottom depending on space layout</b></u></li> <li>o Surveyor must provide a base CAD (<b>Completed on Site</b>) that shows all walls, half-walls, doors, windows, columns, vertical floor changes, and soffits</li> <li>o Surveyor must guarantee the accuracy of their CAD to ¼ inch</li> <li>o Completed surveyor CAD must be saved in AutoCAD compatible format saved to version 2013</li> <li>o Object snaps must be used</li> <li>o Surveyor must use the correct project template and layers</li> <li>o Door openings must be cut into walls</li> <li>o Surveyor CAD must show exterior and demising wall thickness (Be sure to note if demising wall thickness is assumed)</li> <li>o <u><b>Surveyor CAD requested to annotate the title block with the following: Address, Site Number, North Arrow, Date, and Surveyor Name</b></u></li> </ul>

**V. REQUIRED HAND DRAWING EXAMPLES**

Extents Dimension Plan

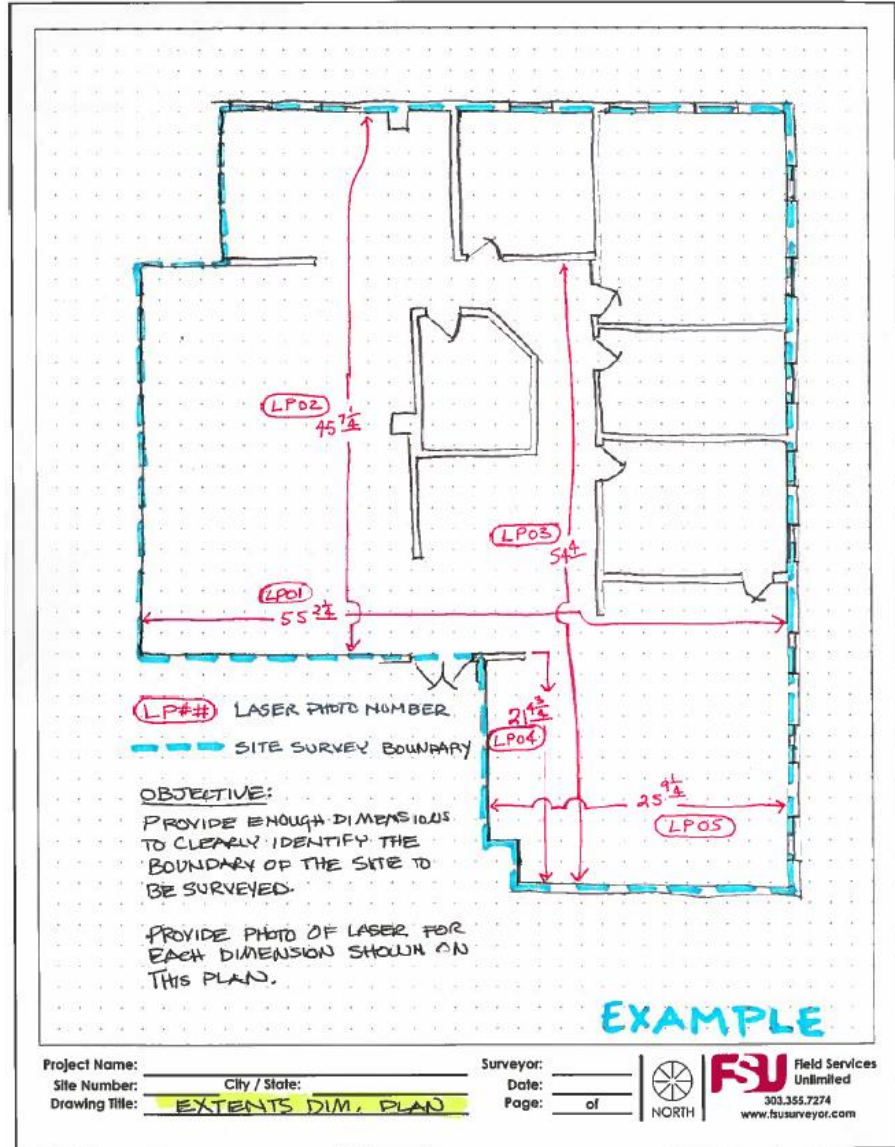
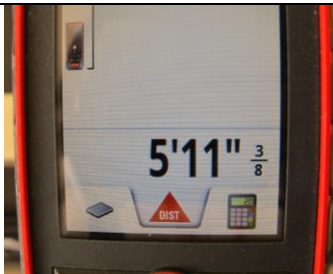


Photo of Laser



Column Dimension Plan

WHEN COLUMNS ARE LOCATED WITHIN THE SPACE, PROVIDE A COLUMN DIMENSION PLAN AND DIMENSION AS SHOWN.

LASER PHOTO NOT REQUIRED FOR THIS PLAN.

**EXAMPLE**

Project Name: \_\_\_\_\_ City / State: \_\_\_\_\_ Surveyor: \_\_\_\_\_  
 Site Number: \_\_\_\_\_ Date: \_\_\_\_\_  
 Drawing Title: COLUMN DIMENSION PLAN Page: \_\_\_\_\_ of \_\_\_\_\_

**FSU** Field Services Unlimited  
 303.355.7274  
 www.fsusurveyor.com

NORTH

## VI. TABLE SUMMARY

Summary Table o The following SOW tables define required elements and placements in greater detail.

	MAJOR FLOOR PLAN ELEMENTS: (REQUIRED IN SURVEYOR CAD)	Placement		Required Measurements					
		Exact	General	L	W	H	DIA	AFF	Notes
FSU Default	Exterior Walls	✓		✓	✓	✓			
	Interior Walls, Partitions, Partial-Ht. Walls	✓		✓	✓	✓			
	Bump-outs, Recesses, Niches	✓		✓	✓	✓		✓	
	Wall openings/Pass-Through	✓		✓	✓	✓		✓	
	Columns, Embedded Columns	✓		✓	✓	✓			
	Doors	✓		✓	✓	✓			
	Windows	✓		✓	✓	✓		✓	
	Storefront assembly	✓		✓	✓	✓		✓	
	Demising Walls	✓		✓	✓	✓			
	Chase	✓		✓	✓	✓			

	MINOR FLOOR PLAN ELEMENTS: (NOT REQUIRED IN SURVEYOR CAD)	Placement		Required Measurements					
		Exact	General	L	W	H	DIA	AFF	Notes
	Steps, ramps, changes in level	✓		✓	✓	✓		✓	
	Ceiling finishes	✓							
	Floor finishes	✓							

	MECHANICAL ELEMENTS:	Placement		Required Measurements					
		Exact	General	L	W	H	DIA	AFF	Notes
FSU Default	Gas meter	✓							
	HVAC unit	✓		✓	✓	✓		✓	
	Wall mounted HVAC registers		✓	✓	✓	✓		✓	
	Compressors	✓		✓	✓	✓		✓	
	Evaporative coolers	✓		✓	✓	✓		✓	
	Ductwork		✓					✓	
	Gas meter MPOE	✓					✓	✓	

	ELECTRICAL ELEMENTS:	Placement		Required Measurements					
		Exact	General	L	W	H	DIA	AFF	Notes
FSU Default	Electrical panels	✓		✓	✓	✓		✓	
	Electrical meter	✓						✓	
	Transformers	✓		✓	✓	✓		✓	
	Timer	✓						✓	
	Disconnect switches	✓		✓	✓	✓		✓	
	Control panels	✓						✓	
	Keypads	✓						✓	
	Main Point of Entry	✓						✓	

	PLUMBING ELEMENTS:	Placement		Required Measurements					
		Exact	General	L	W	H	DIA	AFF	Notes
FSU Default	Toilets	✓						✓	
	Urinals	✓						✓	

	Hand sinks	✓						✓	(Top and clear AFF)
	Floor Drains	✓					✓		
	Floor Sinks	✓		✓	✓	✓	✓		
	Cleanouts	✓					✓	✓	
	Water Meters	✓					✓	✓	
	Utility sinks/mop sinks	✓		✓	✓	✓		✓	
	3-comp/2-comp sinks	✓		✓	✓	✓		✓	
	Drinking fountains	✓						✓	
	Water heater/Insta-hot	✓						✓	✓
	Water Supply Line	✓						✓	✓
	Sanitary Line	✓						✓	✓
	Grease Interceptor	✓							
	Exposed plumbing (stub-outs, shut-offs)	✓						✓	✓

	LIFE SAFETY ELEMENTS:	Placement		Required Measurements						
		Exact	General	L	W	H	DIA	AFF	Notes	
	Fire Alarm Control Panel	✓		✓	✓	✓			✓	

	SITE PLAN ELEMENTS - OPTIONAL	Placement		Required Measurements						
		Exact	General	L	W	H	DIA	AFF	Notes	
FSU Default	Meters	✓								
	Ramps	✓								
	Exterior Utilities	✓								
	Curb	✓								
	Sidewalk	✓								

	RCP ELEMENTS - OPTIONAL	Placement		Required Measurements						
		Exact	General	L	W	H	DIA	AFF	Notes	
	Ceiling heights		✓						✓	
	Soffit/changes in ceiling height		✓						✓	
	Headers/Beams		✓						✓	
	HVAC registers (Supply/Return)		✓						✓	

	ROOF PLAN ELEMENTS - OPTIONAL	Placement		Required Measurements						
		Exact	General	L	W	H	DIA	AFF	Notes	
FSU Default	RTU/HVAC units	✓		✓	✓	✓				
	Parapet walls	✓		✓	✓	✓				
	Direction of roof slope	✓								
	Roof vents		✓							
	Exhaust fans		✓							
	Condensers		✓							
	Roof drains	✓						✓		

	ABOVE GRID/STRUCTURAL ELEMENTS	Placement		Required Measurements						
		Exact	General	L	W	H	DIA	AFF	Notes	
FSU Default	HVAC Ductwork		✓						✓	-optional
	HVAC Registers/Diffusers	✓							✓	-optional
	Structural Beams		✓	✓	✓	✓			✓	-optional
	Structural Walls		✓	✓	✓	✓				-optional

Joists (Roof, Floor, Ceiling)		✓	✓	✓	✓	✓	✓	✓	<b>-optional</b>
Roof Deck		✓						✓	<b>-optional</b>
Columns		✓	✓	✓	✓	✓			<b>-optional</b>
Water and Plumbing Lines	✓						✓	✓	