



## ***CAD Drafter Standards and Scope of Work***

### ***Edward Jones***

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#### **Survey Purpose/Critical Information**

**Purpose of Survey:** Client plans to renovate existing commercial spaces for new EDJ stores.

**Critical Survey Information:**

-Existing HVAC equipment

-Existing utilities

-Existing finishes

-Existing MEP

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#### **CAD Drafter Deliverables**

*Note: CAD drawings must be completed in full prior to upload.*

#### **CAD Setup Summary**

**CAD Template:** FSU CAD Template

**CAD Version:** v2010

**CAD Sheet Size:** 11x17

**CAD Plan Orientation:** Entry to Bottom or Right

**CAD Drawing Scale:** Best Fit to Sheet

**CAD Setup General Notes:**

-CAD includes either a building plan or a site plan (depending site conditions). Locations in multi-story commercial buildings require a building plan. Locations in single-story strip centers require a site plan. See site plan setup for additional scope clarifications.

#### **CAD Components**

-Floor Plan

-MEP Plan

-Site Plan (In CAD)

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#### **Photo Key(s) Summary**

**Photo Key Presentation:**

**Photos Key Type:**

**Photo Key General Notes:**

**All Photos to be Keyed?**

**If NO, include the following photo keys:**

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*Note: All surveyor deliverables can be found in individual surveyor folders on Egnyte.*

#### **Surveyor Deliverables**

-Photos

-Field Report

-Floor Plan Info

-MEP Plan Info

-Site Plan Info

-Surveyor CAD (Includes Walk-Around Drawing)

**Note: Surveyors must submit field drawings (including a Walk-Around Drawing) which document ALL required SOW information.**

Surveyors must produce hand-drawn documentation of all elements listed in the project SOW tables below. All information must be clear, neat, and complete. Surveys will be considered incomplete if they do not meet these standards.

Your Walk-Around drawing must meet the following requirements:

- Must be hand-drawn and inclusive of all surveyed spaces.
- Must indicate ALL dimensions, including overalls, incrementals, doors, mullions and windows.
- Must include T-Grid starts at each separate grid system.

**IMPORTANT NOTE:** The “Walk-Around” drawing is required for all projects. No Exceptions.

The following colors must be used for all field drawings (see example field drawings):

- Black - floor plan background (walls, doors, windows, etc)
- Red - dimensions (horizontal)
- Green - all heights (vertical dims)
- Blue - all MEP, RCP, furniture, etc.

Surveyors are required to provide an electronic (.dwg) floor plan drawing which meets the following requirements:

- Electronic drawing must include all walls, columns, doors, windows, soffit/ceiling lines, and t-grid lines.
- Drawings are to be drawn in model space at full scale.
- The floor plan must be oriented with the main entry door at the bottom or to the right of the page.
- Surveyor CAD must meet the following requirements:
  - Produced with an Autodesk product (AutoCAD, AutoSketch)
  - Surveyors must guarantee the accuracy of their CAD.
  - Object snaps must be used.
  - Only object/symbol blocks provided by FSU in project templates are permitted.
  - CAD lines must be straight (unless actual conditions differ).
  - CAD lines must meet cleanly (snapped).
  - Duplicate lines must be purged from the CAD.
  - Door openings must be cut from walls.
  - Window mullion detail must be drawn in CAD.

Special Requirements:

## Floor Plan SOW Summary

Include Finishes? **YES**

Include General Equipment? **NO**

Special Requirements:

	MAJOR FLOOR PLAN ELEMENTS: (REQUIRED IN SURVEYOR CAD)	Placement		Required measurements					Notes
		Exact	General	L	W	H	DIA	AFF	
FSU Default	Exterior walls	✓		✓	✓				Include wall thicknesses
	Interior walls, partitions, partial-ht. walls	✓		✓	✓	✓			Include wall thicknesses
	Bump-outs, recesses, niches	✓		✓	✓	✓		✓	
	Wall openings/pass-throughs	✓		✓	✓	✓		✓	
	Columns, embedded columns	✓		✓	✓	✓	✓		
	Doors	✓			✓	✓			
	Windows	✓		✓	✓	✓		✓	-Include mullion detail -Include sill hts.
	Storefront assemblies	✓		✓	✓	✓			Include mullion detail
	Vestibules	✓		✓	✓	✓			
	MINOR FLOOR PLAN ELEMENTS: (NOT REQUIRED IN SURVEYOR CAD)	Placement		Required measurements					
		Exact	General	L	W	H	DIA	AFF	Notes
FSU Default	Built-in cabinetry, countertops	✓		✓	✓	✓		✓	
	Built-in shelving	✓		✓	✓			✓	
	Built-in Furniture	✓		✓	✓				
	Built-up window display boxes	✓			✓	✓			
	Hand rails (interior only)	✓		✓				✓	
	Floor hatches (access panels)	✓		✓	✓				
	Built-in Display Platforms	✓		✓	✓	✓			
	Steps, Ramps, Changes in Level	✓		✓	✓	✓			Include # and height of risers
	Escalators	✓		✓	✓				
	Elevator Shafts	✓		✓	✓				
	Restroom Partitions	✓		✓	✓				
	FINISHES:	Placement		Required measurements					
		Exact	General	L	W	H	DIA	AFF	Notes
FSU Default	Wall finishes (e.g.: painted drywall, ready for paint, wall paper, wainscoting, slat walls, peg board, exposed brick, CMU, etc.)		✓						-Indicate finish in ALL rooms -Indicate loc. of material changes
	Floor finishes (e.g.: carpet, concrete, tile, VCT, wood, laminate, etc.)		✓						-Indicate finish in ALL rooms -Indicate loc. of material changes
	Ceiling finishes (e.g.: ACT, drywall, open to deck, glued tile, etc.)		✓						-Indicate finish in ALL rooms -Indicate loc. of material changes
	Baseboards		✓						-Indicate ALL locations
	Chair Rails	✓						✓	-Indicate ALL locations
	Crown Moulding		✓						-Indicate ALL locations

## MEP Plan SOW Summary

Primary MEP Equip. Only? **NO**

Include Life Safety Elements? **YES**

Include Restroom Accessories? **NO**

## Special Requirements:

	<b>ELECTRICAL ELEMENTS:</b> <i>(All Elec. Elements)</i>	Placement		Required measurements					Notes
		Exact	General	L	W	H	DIA	AFF	
FSU Default	Tel./Data boards	✓			✓	✓			
	Electrical panels	✓			✓	✓			-Provide depth if SM
	Electrical meters	✓							
	Timers	✓							
	Disconnect switches	✓							
	Control panels	✓							
	Key pads	✓							Indicate type of key pad
	Transformers	✓			✓	✓			
	Outlets	✓							✓ -Indicate typ. AFF -Indicate if surface mounted (SM)
	Switches	✓							✓ -Indicate typ. AFF -Indicate if surface mounted (SM)
	Sensors	✓							
	Cameras	✓							
	Conduit	✓			✓		✓		✓
Wall-mounted lights	✓							✓	
Doorbell equip.	✓								Indicate type of control panel

	<b>MECHANICAL ELEMENTS:</b>	Placement		Required measurements					Notes
		Exact	General	L	W	H	DIA	AFF	
FSU Default	HVAC units	✓		✓	✓				
	Compressors	✓		✓	✓				
	Evaporative coolers	✓		✓	✓				
	Gas meters		✓						
	Thermostats	✓							✓ -Indicate typ. AFF
	Wall-mounted HVAC registers	✓			✓	✓			✓
	Ductwork	✓			✓	✓			✓

	<b>PLUMBING ELEMENTS:</b>	Placement		Required measurements					Notes
		Exact	General	L	W	H	DIA	AFF	
FSU Default	Toilets	✓							Provide CL dim to closest wall
	Urinals	✓							Provide CL dim to closest wall
	Hand sinks	✓							Provide CL dim to closest wall
	Utility sinks, mop sinks	✓			✓	✓			
	3-comp/2-comp sinks	✓			✓	✓			
	Drinking fountains	✓			✓	✓		✓	
	Floor drains, floor sinks	✓			✓	✓		✓	
	Grab bars	✓			✓				Place to center of attachment
	Clean-outs	✓						✓	✓ -Indicate floor and wall clean outs -Provide AFF if wall clean out
	Exposed plumbing (stub-outs, shut-offs)	✓						✓	
	Water heaters/Insta-Hots	✓						✓	
	Water meters		✓						
	Shower stalls	✓			✓	✓			
Restroom Accessories <i>(if required)</i> <i>(Soap disp., TP, paper towels, etc.)</i>		✓							

	<b>LIFE SAFETY ELEMENTS:</b>	Placement		Required measurements					Notes
		Exact	General	L	W	H	DIA	AFF	
FSU Default	Fire extinguishers		✓						
	Fire alarm pulls	✓							
	Fire pin (ansul) pull panel	✓							
	Fire strobes	✓							
	Fire alarm control panels	✓							
	Exit signs	✓							
	Emergency Lights	✓							
	Sprinkler system equipment	✓			✓	✓			

### Site Plan SOW Summary

Site Plan Drawn: In CAD

Site Plan Scale: Diagrammatic (Drawn From Google Earth Image)

## Include ADA Info? Yes

If YES, Include the following ADA info:

### -HC Parking Spaces and Signage

Site Plan Special Requirements:

-General placement of HC parking (if applicable)

-CAD includes either a building plan or a site plan (depending site conditions). Locations in multi-story commercial buildings require a building plan. Locations in single-story strip centers require a site plan.

-Building plan includes common restrooms, utility rooms, stairways, elevators, etc. (general placement, diagrammatic).

	SITE PLAN ELEMENTS:	Placement		Required measurements					Notes
		Exact	General	L	W	H	DIA	AFF	
FSU Default	Ext utilities (meters, panels)		✓						
	Curb at perimeter of surveyed space		✓			✓			
	Parking lot islands		✓						
	Trash enclosures		✓	✓	✓				
	Light posts		✓						
	Signage		✓	✓	✓				
	Ingress/Egress to site/shopping center		✓						
	Main Entry to Surveyed Space		✓						
	Bollards (if required)	✓					✓	✓	
	Loading Docks/Areas (if required)	✓		✓	✓	✓			
	Non-compliant slopes (if required)	✓		✓	✓				Indicate location and slope
	HC parking spaces (if required)	✓		✓	✓				
	HC paths of travel (if required)	✓		✓	✓				Provide min. width along path

## CAD Drawing Standards:

- CAD drafter must use the latest CAD template found in the project toolbox.
- CAD drafter is responsible for transferring surveyor CAD to project-specific CAD template.
- CAD files must be named: *Project\_Site#\_CityST* (E.g.: XXX\_12345\_DenverCO)
- CAD files must be produced with AutoCAD 2009 or newer.
- The floor plan must be oriented with the main entry door at the bottom of the page or to the right of the page (whichever maximizes use of sheet space).
- Drawings must be scaled as indicated in CAD setup below.
- Object snaps must be used (lines must meet cleanly).
- Only object/symbol blocks provided by FSU in project templates are permitted.
- CAD lines must be straight (unless actual conditions differ).
- CAD lines must meet cleanly (snapped).
- Duplicate lines must be purged from the CAD.
- Door openings must be cut from walls.
- Window mullion detail must be drawn in CAD.

## CAD Submittal Procedure

Completed CADs must be submitted via email to Alex Lopez (alopez@fsusurveyor.com) and Chris Lozyniak (clozyniak@fsusurveyor.com).

## CAD Turnaround Time

All CAD assignments are due **48 hours** from the date the assignment is received.

Note: assignments made on Fridays and before holidays are due the following Monday or working business day.

## FSU Customer Service Standard

Field Services Unlimited aims to exceed all client expectations with a high level of professionalism. Surveys are customized and tailored to the needs of each client and should be produced with care and pride.

## FSU Survey Quality Assurance

Field Services Unlimited assures the quality of its surveys through maintaining strict protocols and review procedures. It is the responsibility of all FSU contractors to guarantee the quality of their work while adhering to all FSU standards.

### **CAD Drafter Communication Standards**

- ∅ CAD drafters must contact surveyors to address survey questions or missing data.
  - ∅ CAD drafters must notify FSU of any delays in CAD production.
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### **CAD Fee**

**\$75.00** per site completed to full CAD specifications.

- ∅ By accepting and conducting this work this CAD Drafter accepts the scope of work, deliverable requirements, delivery time-line, and CAD fee.

### **Payment terms**

- Pay when paid. FSU pays its vendors after it has been paid by its clients.
- Payment terms vary from client to client. Most are net 30 or 45 day terms.
- Clients are invoiced after full delivery of all survey components.
  - Note: Vendor payment timeline starts once FSU submits the project invoice to the client
  - (*Not* when independent contractors submit their invoices to FSU).
- It takes approx. 7 days for FSU CAD and QC staff to process surveys from the field if there are no quality or accuracy issues.
- FSU will pay vendor invoices within a maximum of 5 business days from receipt of client payments.