



Working With Contractors

November 2024



Agenda

Introduction

Kickoff

Design review

Implementation

Paperwork

Closeout

Lessons learned



Project kickoff

Kickoff with all relevant parties

- District staff, contractor staff, construction & architect staff (if relevant)
- Project scope
- Project timelines
- Communications & project status
- Escalation process
- Work hours & building access
- Equipment disposal, worksite cleaning, & damage
- Contract administration (change orders & payments)
- Training, documentation, testing, & acceptance
- Next steps



Design review

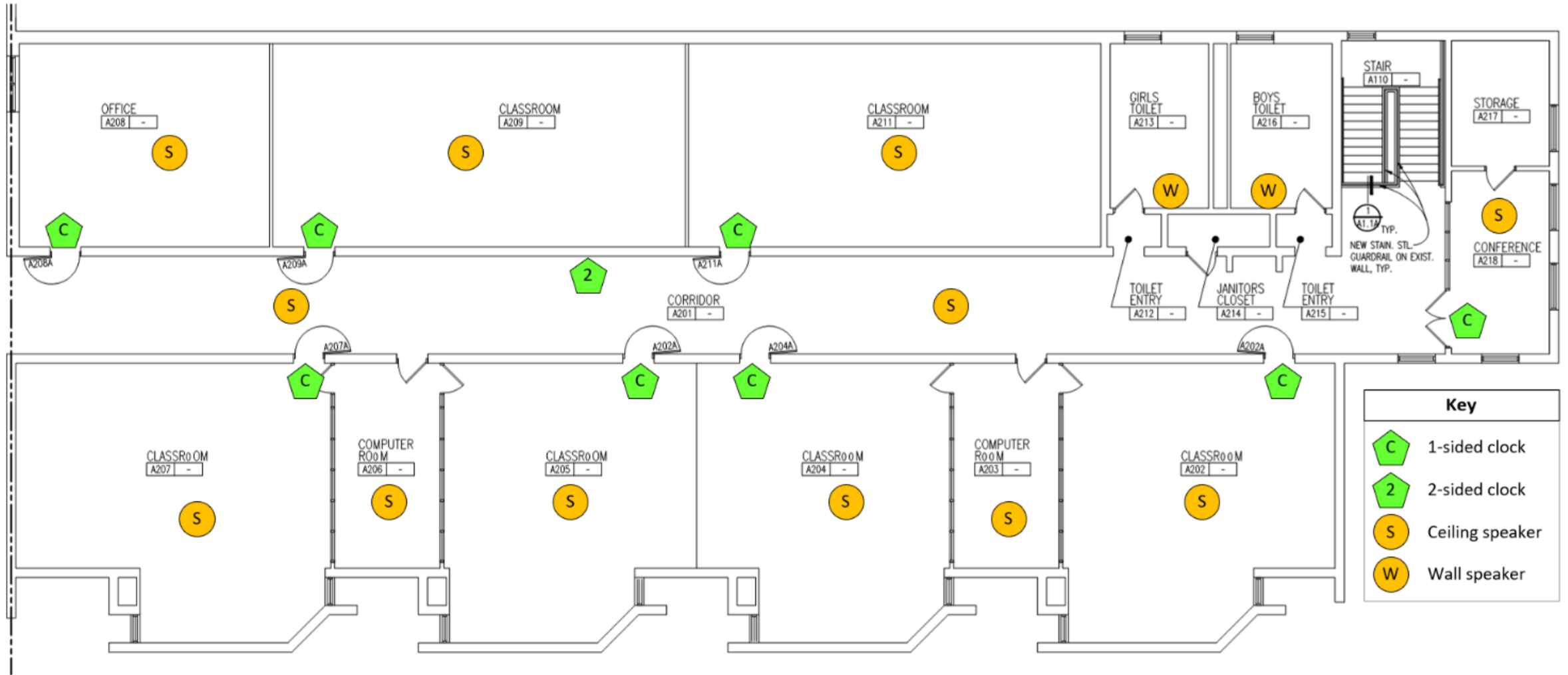
Design review

- Typically follows kickoff and varies in scope based on technology
- Review and/or finalize contractor design documents
- Print review*
- Building walkthrough*
- Notify architect/construction of any necessary changes based on final walkthrough

* If relevant based on technology

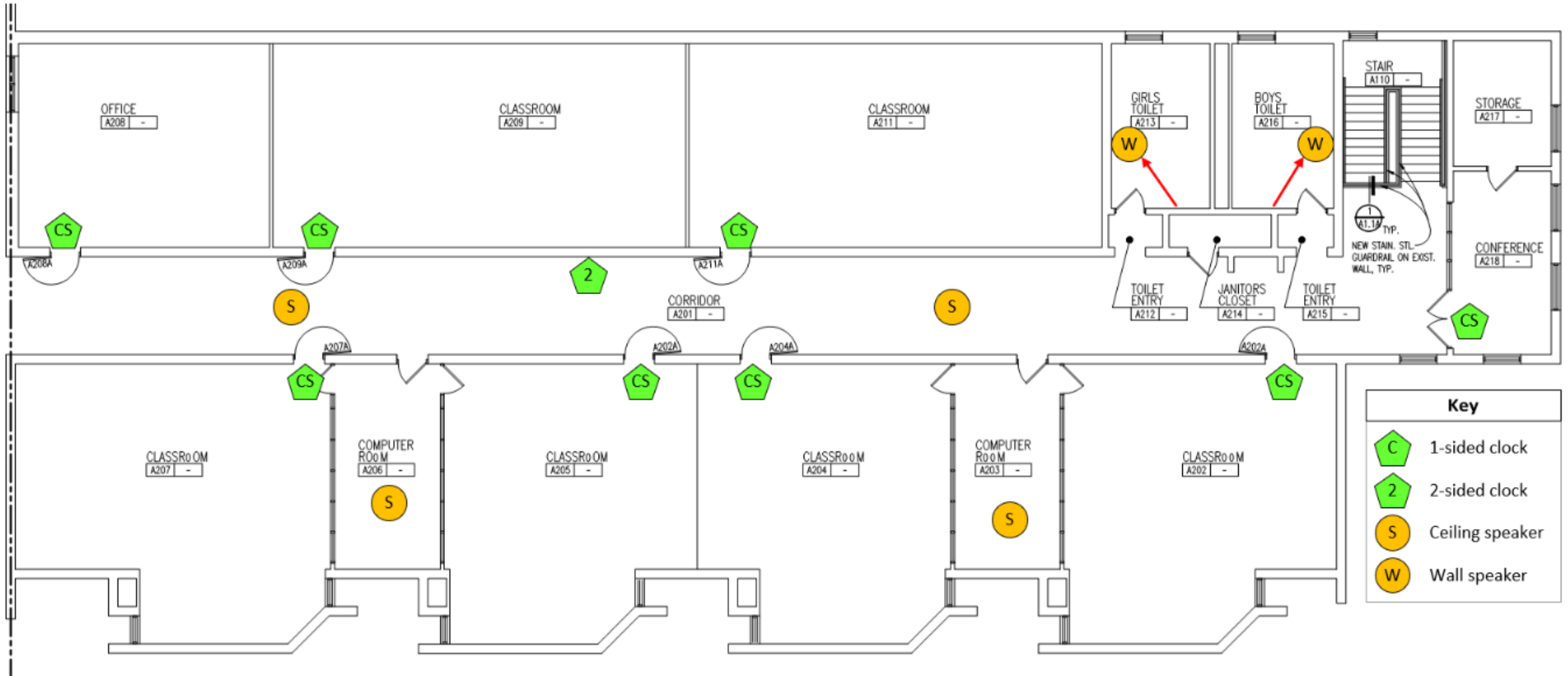


Design review - Example





Design review - Example



Key	
	1-sided clock
	2-sided clock
	Ceiling speaker
	Wall speaker



Implementation

Weekly status meetings

- Progress updates
- Coordination between district and contractor
- Coordination with architects and construction
- Require contractors to attend on-site construction meetings

Building walkthroughs (if relevant)

- Pilot space
- Periodically for some technologies
- Milestone-based for other technologies
- Check status of implementation & construction
- Ensure adherence to proposal/contract requirements
- Ensure adherence to codes (electrical, other)
- Develop and provide documentation of issues to contractor



Implementation – Issue tracking

Issues Lists

	A	B	C	D	E	F	G	H
				Card Swipe Releases	iPhone / Remote Latch	Solid Green Light on Card	ADA Operator w/ Card	
1	School	Door Location	Installed?	Door?	Works?	Swipe	Swipe	Notes
2	High School	Main Entrance	Yes	Yes	Yes	Yes	Yes	
3	High School	East Entrance	Yes	Yes	N/A	No	No	Contractor to revisit/resolve
4	High School	West Entrance	Yes	Yes	N/A	Yes	Yes	
5	High School	Gym Entrance	No	No	N/A	No	No	Contractor to install
6	Middle School 1	Main Entrance	Yes	Yes	No	Yes	No	Contractor to revisit/resolve
7	Middle School 1	North Entrance	No	No	N/A	No	No	Contractor to install
8								



Paperwork – Change orders

Change Orders

- Documentation of additions and deductions to contract
- Validation of scope
- Validation of amount against contract
- Tracking of total contract against award and contingency

G703			
SCOPE CHANGE		Initiated by OWNER <input checked="" type="checkbox"/>	
SCOPE CHANGE ORDER NUMBER:	15	ARCHITECT	<input type="checkbox"/>
DATE:	9/22/2017	DESIGNER	<input type="checkbox"/>
		OTHER	<input type="checkbox"/>
PROJECT:		TO CONTRACTOR:	
		PROJECT #'s:	2017 Classroom AV
		CONTRACT DATE:	5/19/2017
		CONTRACT FOR:	Classroom AV Project
		DIST. PO NUMBER	
<u>The Contract is changed as follows:</u>			
		QTY	UNIT
Additions			
<Building Name> - Labor and Material for Audio Enhancement system - Room D01	1	\$ 1,299.75	\$ 1,299.75
<Building Name> - Labor and Material for Audio Enhancement system & Collaboration - Room B11			
Audio System - Installed	1	\$ 1,299.75	\$ 1,299.75
Classroom Collaboration	1	\$ 756.48	\$ 756.48
District Provided Projector (Wireless Module Not Included)	1	\$ 385.73	\$ 385.73
Epson Wireless Module	1	\$ 79.00	\$ 79.00
		Total Additions	\$ 3,820.71
Net Change			\$ 3,820.71



Paperwork – Change orders

Change Orders

- Identify timing impacts
- Written approval prior to work
- Communication and coordination with construction

Net Change		\$ 3,820.71
The original contract amount was . . . PO#(Amt):		\$ 1,392,551.00
Net change by previously authorized scope change/change orders . . (sum of prev CO#1+CO#2+.....CO#n, to date)		\$ 103,915.46
The contract amount prior to this scope change/change order was		\$ 1,496,466.46
The contract amount will be increased by this scope change/change order in the amount of		\$ 3,820.71
The new contract amount including the scope change/change order will be		\$ 1,500,287.17
The contract time will be increased by		0 days
The new date of completion as of the date of this scope change/change order therefore is		No Change
Not valid until signed by all parties below.		
Designer		
Contractor		
Owner		
Address		
Address		
Address		
BY		
Technology Consultant		
Account Executive		
Director of Technology		
DATE		
DATE		
DATE		



Paperwork - Billing

Billing

- AIA Form G702/703
- Validation of work completed
- Stored materials
- Retainage
- “Architect” must be identified on every pay app

APPLICATION AND CERTIFICATION FOR PAYMENT		ALA DOCUMENT G702	PAGE ONE OF	2 PAGES															
TO OWNER:	PROJECT:	APPLICATION NO:	Distribution to:																
			<input type="checkbox"/> OWNER <input type="checkbox"/> ARCHITECT <input type="checkbox"/> CONTRACTOR																
FROM CONTRACTOR:	VIA ARCHITECT:	PERIOD TO:																	
	Plante & Moran 27400 Northwestern Hwy Southfield, MI 48037	PROJECT NOS:																	
CONTRACT	Servers	CONTRACT DATE:																	
CONTRACTOR'S APPLICATION FOR PAYMENT		The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.																	
Application is made for payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.		CONTRACTOR:																	
1. ORIGINAL CONTRACT SUM \$ _____ 2. Net change by Change Orders \$ _____ 3. CONTRACT SUM TO DATE (Line 1 ± 2) \$ _____ 4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$ 0.00 5. RETAINAGE: a. 10 % of Completed Work (Column D + E on G703) \$ 0.00 b. % of Stored Material (Column F on G703) \$ 0 Total Retainage (Lines 5a + 5b or Total in Column I of G703) \$ 0.00 6. TOTAL EARNED LESS RETAINAGE (Line 4 Less Line 5 Total) \$ 0.00 7. LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 6 from prior Certificate) \$ _____ 8. CURRENT PAYMENT DUE \$ 0.00 9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 less Line 6) \$ 0.00		By: _____ Date: _____ State of: _____ County of: _____ Subscribed and sworn to before me this _____ day of _____ Notary Public: My Commission expires: _____																	
<table border="1"> <thead> <tr> <th>CHANGE ORDER SUMMARY</th> <th>ADDITIONS</th> <th>DEDUCTIONS</th> </tr> </thead> <tbody> <tr> <td>Total changes approved in previous months by Owner</td> <td></td> <td></td> </tr> <tr> <td>Total approved this Month</td> <td></td> <td></td> </tr> <tr> <td>TOTALS</td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td>NET CHANGES by Change Order</td> <td>\$0.00</td> <td></td> </tr> </tbody> </table>		CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS	Total changes approved in previous months by Owner			Total approved this Month			TOTALS	\$0.00	\$0.00	NET CHANGES by Change Order	\$0.00		ARCHITECT'S CERTIFICATE FOR PAYMENT In accordance with the Contract Documents, based on on-site observations and the data comprising the application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED. AMOUNT CERTIFIED \$ _____ <i>(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)</i> ARCHITECT: By: _____ Date: _____ This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.		
CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS																	
Total changes approved in previous months by Owner																			
Total approved this Month																			
TOTALS	\$0.00	\$0.00																	
NET CHANGES by Change Order	\$0.00																		
AIA DOCUMENT G702 - APPLICATION AND CERTIFICATION FOR PAYMENT - 1992 EDITION - AIA® - © 1992		THE AMERICAN INSTITUTE OF ARCHITECTS, 1735 NEW YORK AVE., N.W., WASHINGTON, DC 20006-5292																	
Users may obtain validation of this document by requesting a completed AIA Document D401 - Certification of Document's Authenticity from the Licensee.																			



Closeout

Obtain documentation

- Updated and validated as-built documentation
- Warranty documentation
- User/technical manuals
- Training documentation

Acceptance testing/walkthrough

- Perform testing as defined by contract acceptance criteria
- Develop and resolve punch list
- Communication and follow up with contractor

Training

- Confirmation of delivery for all training required by contract
- IT training
- End-user training

Warranty

- Understanding of process
- Documentation received
- Start of warranty period (include in RFP/contract)



Lessons Learned

- **Strong contract**
 - Acceptance process and criteria
 - Contractor staff requirements/right to replace
 - Timing for warranty
 - Training and other requirements
- **Clarity of scope and design**
 - Pilot space
 - Sign off
- **Consistent communications**
 - Ongoing coordination with construction/architects
 - Continued oversight of contractor
- **Strong contractor staff, including project manager**
- **Equipment tracking**
- **Escalation process**
 - Implementation vendor
 - Manufacturer
 - Construction and architect
 - Other contractors
 - District
- **Permits**
- **Knowledge transfer**
- **Acceptance testing**



Thank you.



Dan Queck, Manager
dan.queck@plantemoran.com
(248) 603-5135



Drew Youngstrom, Senior Consultant
drew.youngstrom@plantemoran.com
(248) 603-5338

1993: Plante Moran Financial Advisors registers with the SEC.

1994: Plante Moran CRESA is formed.

1999: Named for the first time to Fortune magazine's list of "100 Best Companies to Work For."

2005: Firm joins Diversity Council.

1996: P&M Corporate Finance LLC (PMCF) is founded.

1995: Firm creates domain and later launches website.

PM cares
2002: Plante Moran Cares launches.

2003: Firm joins the Association of Certified Financial Planners (CFP®) and is named "Top Firm" by the Institute of Professional Accountants (IPA).

2010: Firm is chosen by the U.S. Department of Treasury to help investigate the Greenbacker Plante Moran Trust & Control.

1924: Elorion Plante founds accounting firm in Detroit, Michigan.

1928: Frank Moran, partner; firm becomes known as Plante & Moran.