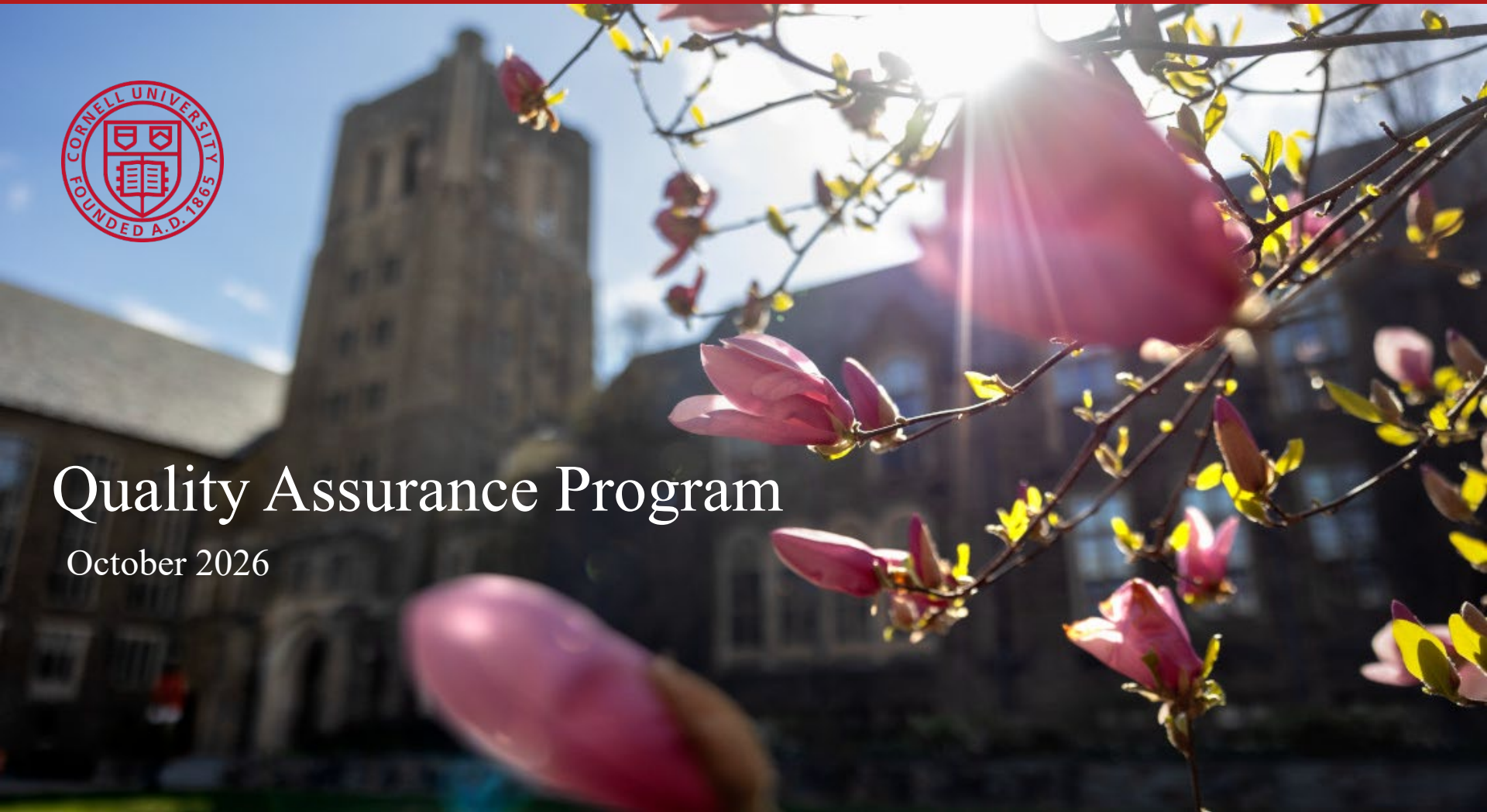
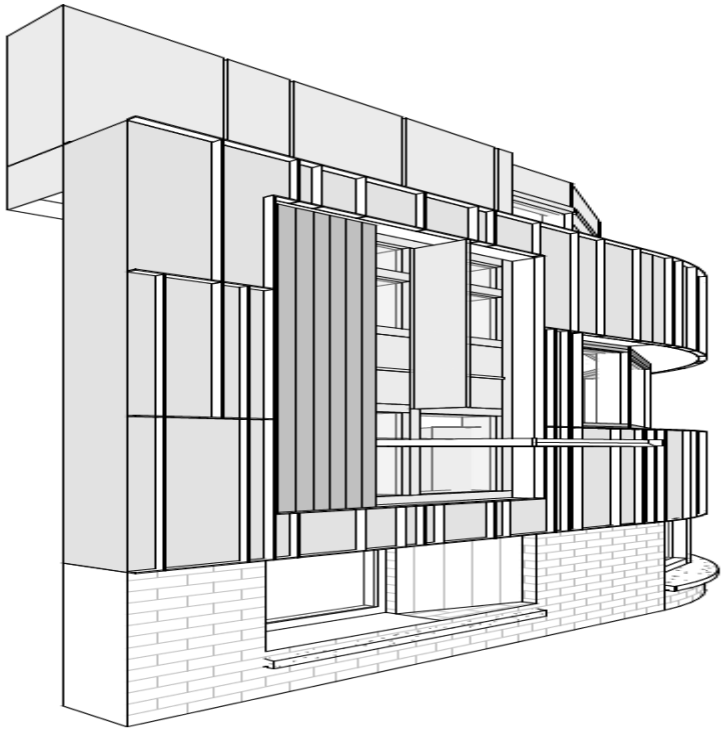


Quality Assurance Program

October 2026

A Case For Quality Assurance at Cornell

- **Cornell Buildings & Renovations** are Complex
- **Construction Schedules** are Aggressive
- **Architect/Engineer Teams** are Variable
- **Project Documentation** is voluminous (and varies in quality)



What are the benefits of QA for Cornell?



Deliver
- Deliver higher quality construction

Reduce
- Reduce change orders

Ensure
- Ensure projects are maintainable

Extend
- Extend the service life and performance of systems and materials

Lifecycle of Quality Assurance Efforts

Design Phase

- Design Reviews
- Page Turns
- Commissioning Agent Liaison
- Existing Conditions Verification
- Value Engineering Consultation

Construction Phase

- Observation of Work through scheduled walk-throughs with coordinated trades (FE and FM and others as necessary)
- Pre-Installation and Coordination Meetings
- Weekly/Bi-Weekly Owner Meetings
- As needed: BIM Coordination Meetings, RFI/Submittal Meetings
- Mechanical Cx and BECx Meetings
- Project support for unforeseen existing conditions
- Documentation of Issues and Observations in Trimble

Own & Operate Phase

- Inventory/Attic Stock Coordination with FM
- Punchlist and Commissioning
- 10-month Warranty Walkthrough
- Owner Training Coordination with FM

Now Bidding: Plant Sciences Building – Phase 2



In Construction: Rice Hall



In Construction: Life Sciences Pavilion – Phase 2



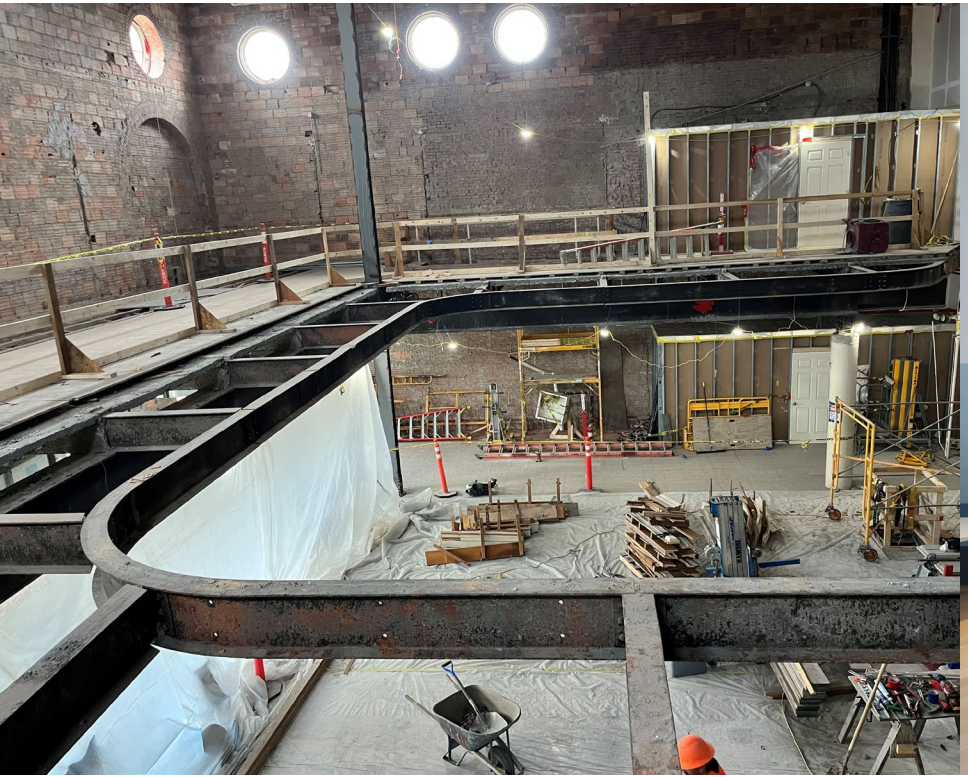


In Construction: Duffield Hall Expansion

Recently Completed: Sibley Dome

















Completing Construction: Meinig Field House

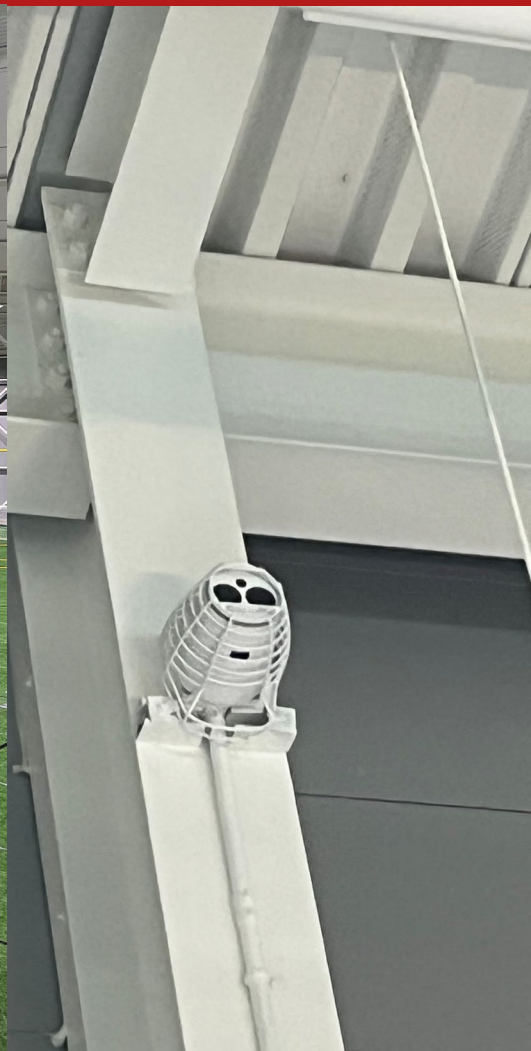



MEINIG FIELDHOUSE


CORNELL
50


CORNELL


CORNELL



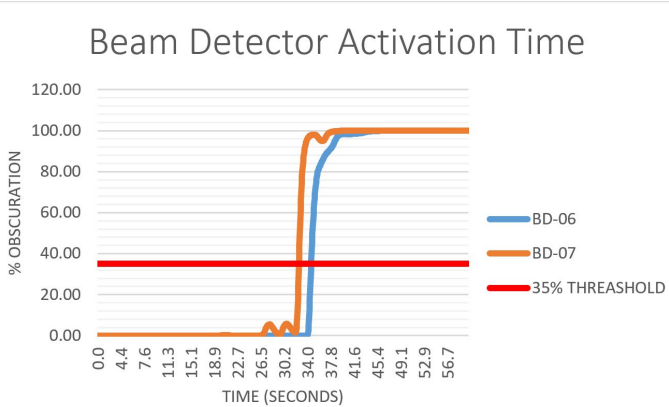
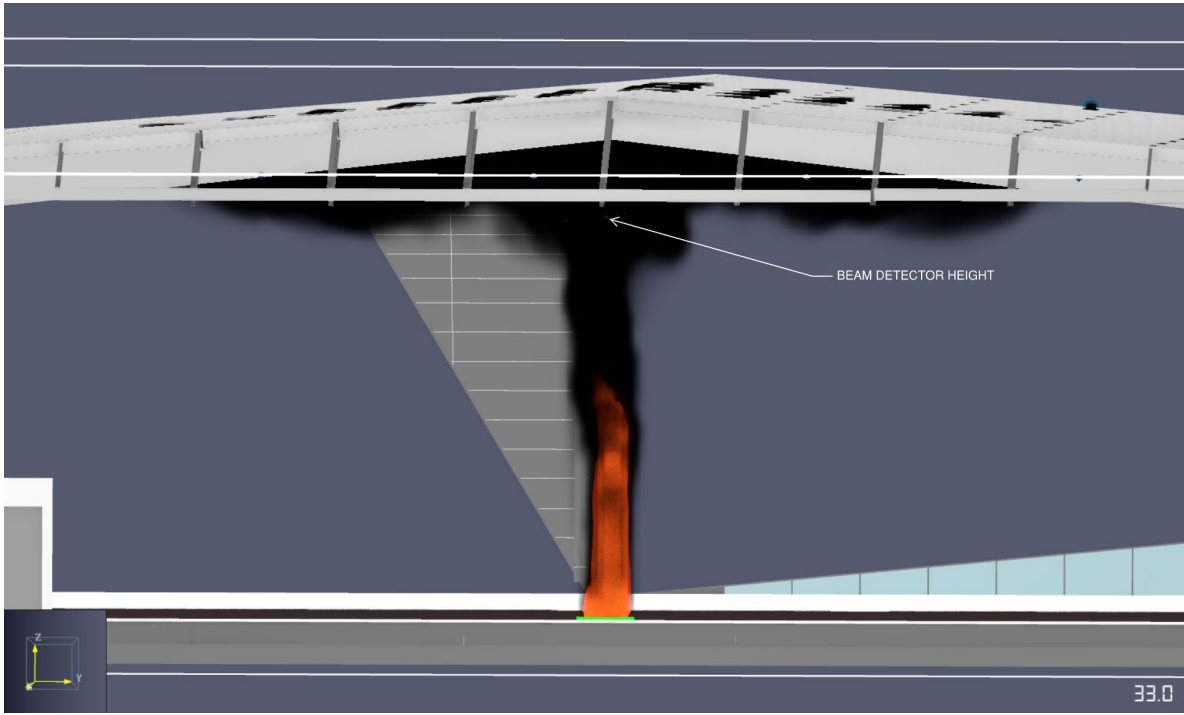


Figure 3 - Beam Detection Activation Time






CAUTION

Keeping the Feedback Loop Open: Snowmelt Systems

SEQUENCE OF OPERATION

SYSTEM DESCRIPTION
SNOWMELT SYSTEM
SECONDARY SNOWMELT LOOP PUMPS

GENERAL

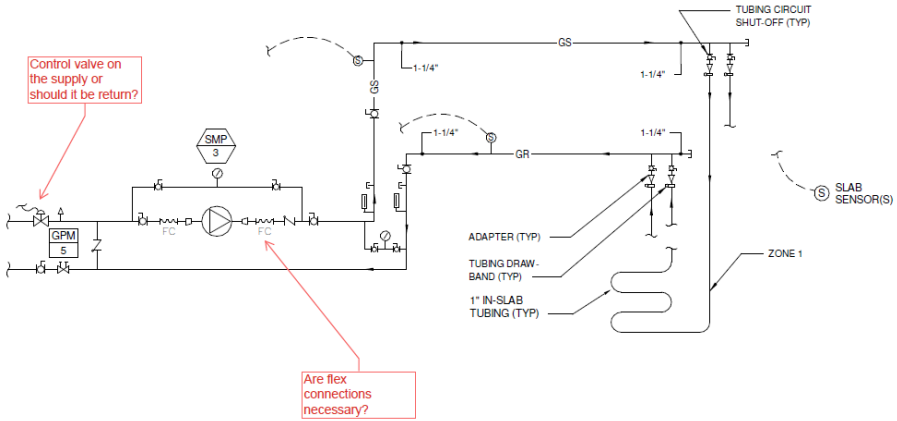
THE SNOW MELT SYSTEMS ARE USED TO PROVIDE HEATING IN WINTER FOR CLEARING SIDEWALKS.
THE SNOW MELT SYSTEMS CONSIST TYPICALLY OF A TWO WAY VALVE, MOISTURE/TEMPERATURE SENSORS AND PUMPS.
SNOW MELT PUMPS SHALL BE CONTROLLED THROUGH THE ENERGY MANAGEMENT AND CONTROL SYSTEM (EMCS).
ALL SETPOINTS SHALL BE ADJUSTABLE.

SETPOINTS

SECONDARY SIDEWALK LOOP SUPPLY TEMPERATURE: SEE SCHEDULES

SECONDARY LOOP PUMPS START/STOP

OPERATION MODE:



SNOW MELT SYSTEM PIPING DETAIL ZONE #1

Installation notes:
1. Position the sensor centered between the heater cables or tubing.
2. Ensure the housing is installed level with the final graded surface, with the sensor flush with the final surface. Screws are for final height adjustments only and should not be used for leveling.
3. Apply duct sealant compound to all conduit connections. Terminations shall be made inside the building junction box if possible. If not possible all terminations shall be made inside the HSC-24 housing. The HSC-24 housing shall be filled with the Magic Power Gel regardless of termination locations.
4. Magic Power Gel should be installed after the checkout has been confirmed by LCS to prevent re-work.

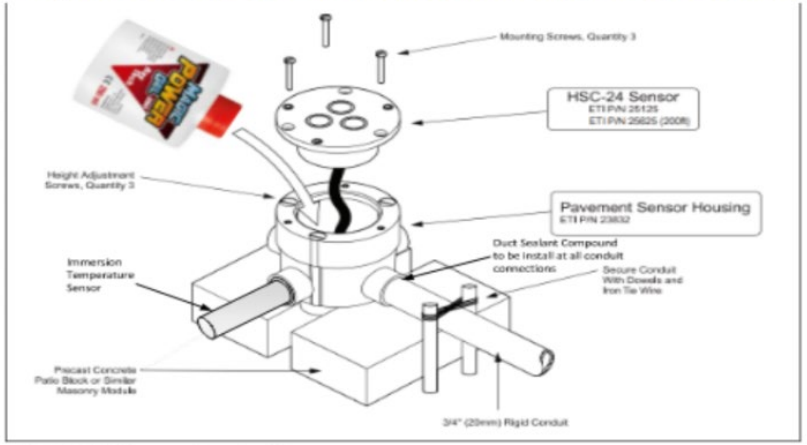
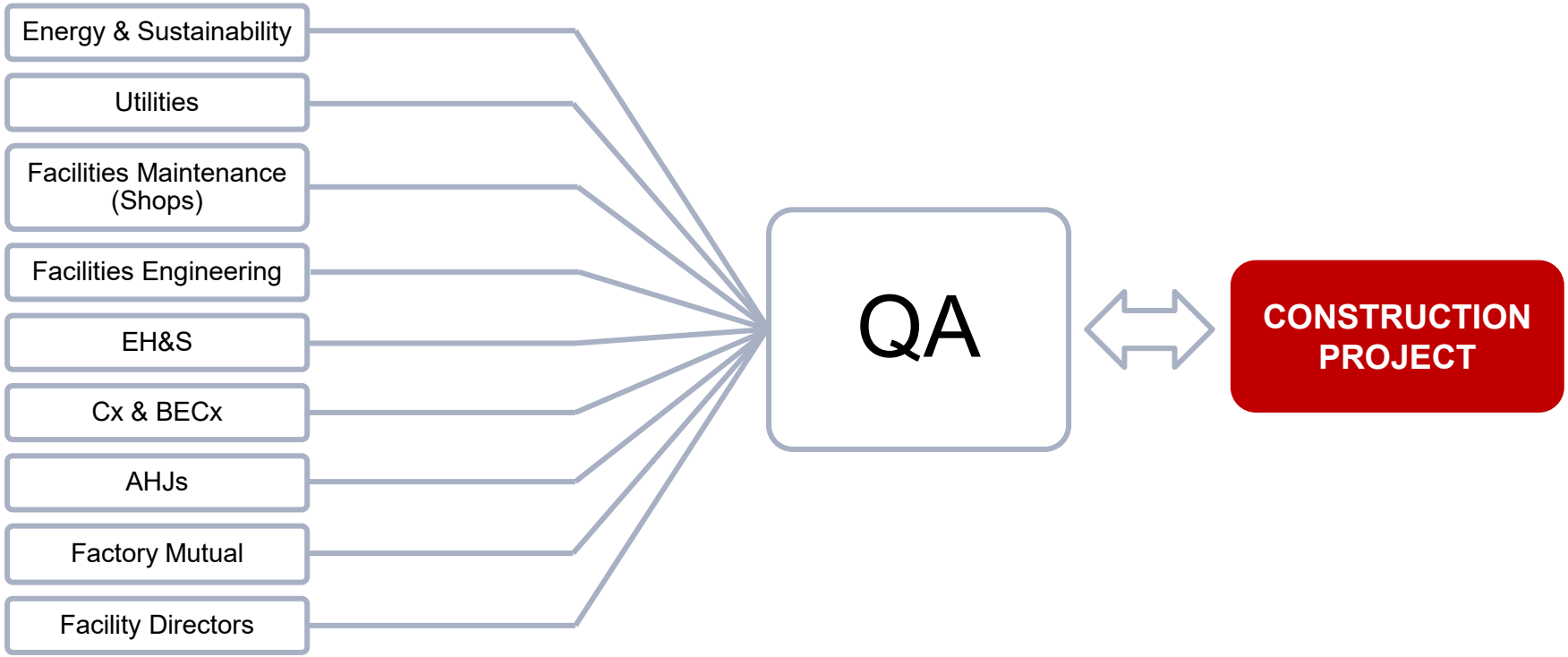


FIGURE 1. HSC-24 Pavement Sensor Installation.

How does this help a construction project?

QA focuses feedback from many Cornell stakeholders into a response; a single point of contact




Thank You
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