MONTGOMERY COLLEGE

The Next Phase of the Catherine and Isiah Leggett Math and Science Building

Takoma Park / Silver Spring Campus

February 8 , 2022

Welcome Remarks

Mr. Michael Akin
President
LINK Strategic Partners

Dr. Brad Stewart
Vice President and Provost, Takoma Park / Silver Spring Campus
Montgomery College

Meeting Agenda

1. **Current Construction Project Status**
    - COVID-19 Operating Procedures

2. **Progress Update**

3. **Logistics**

Barton Malow COVID-19 Operational Procedures

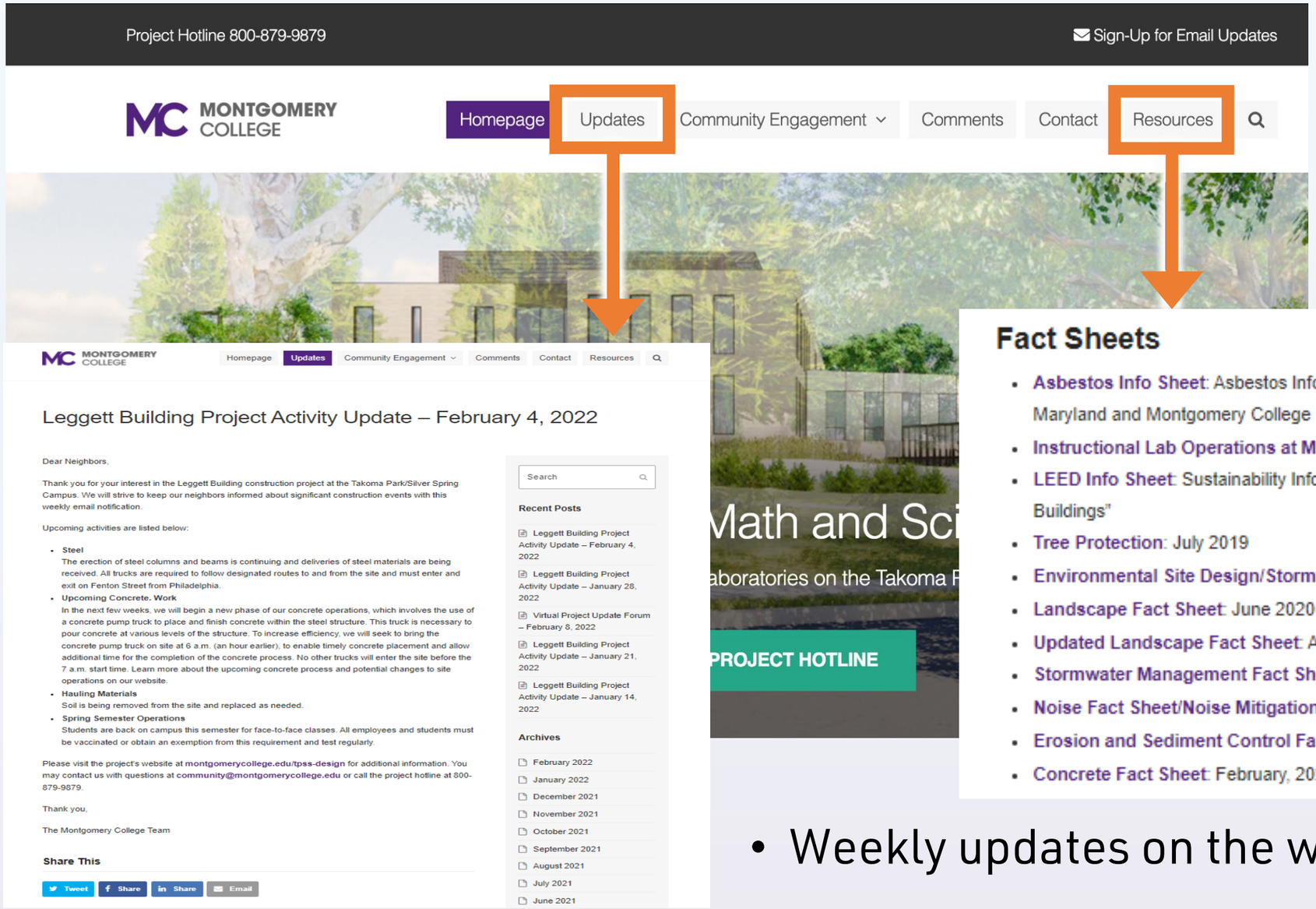
Barton Malow is committed to maintaining a healthy working atmosphere on site and will stay flexible to rapidly evolving guidelines.

Barton Malow Plan follows CDC & Local Guidelines

Social Distancing Measures

- 6' separation at daily foreman meetings
- Smaller group safety orientation meetings held more often than usual
- All work surfaces (i.e.: tables, chairs) cleaned following the meeting
- Cleaning of portable toilets increase to 2x week – on site staff provided with bleach and cleaners
- Face-to-Face meetings held to a minimum – video meetings encouraged
- Workers to maintain 6' separation when working when possible.
- No congregation for lunch (i.e. no lunch room)
- Should a worker report illness after leaving site, a site investigation will be completed
    - Current Guidelines:
        - A worker with a positive result will return to the site following most recent CDC Guidelines.
        - Contact tracing investigation completed – workers identified that require testing and possible quarantine

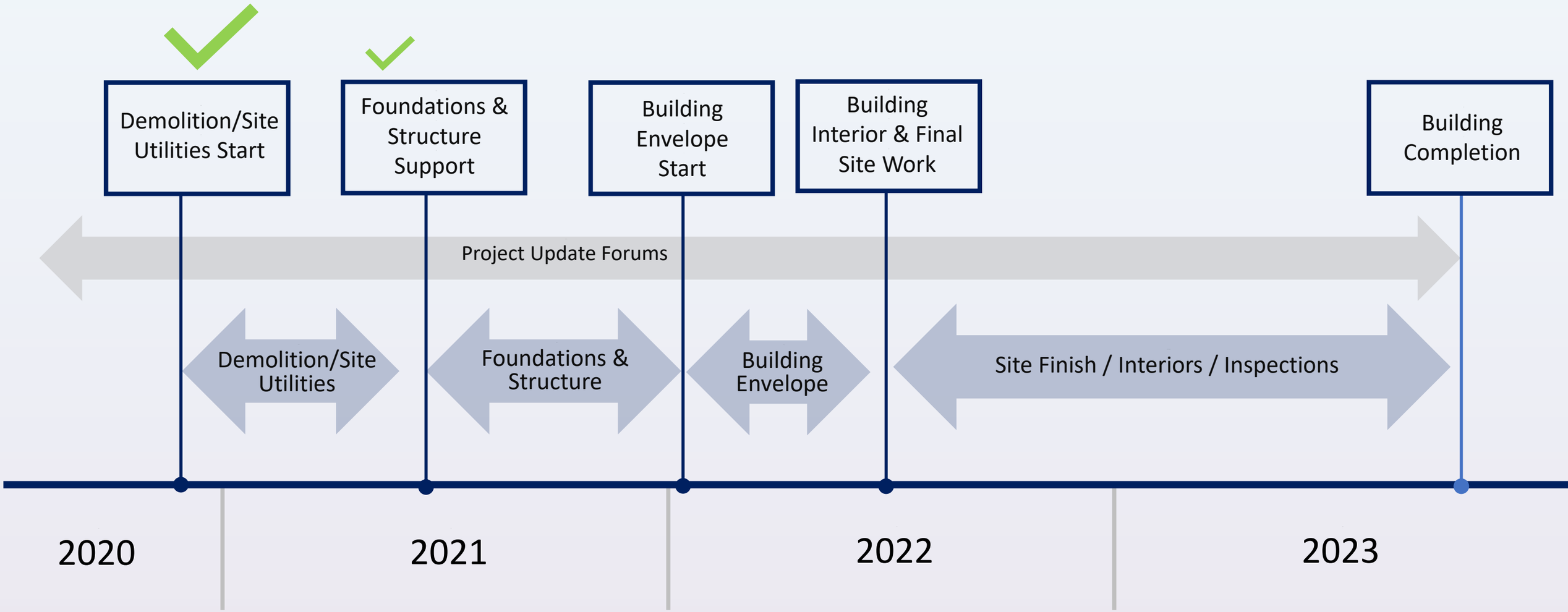
Progress Update



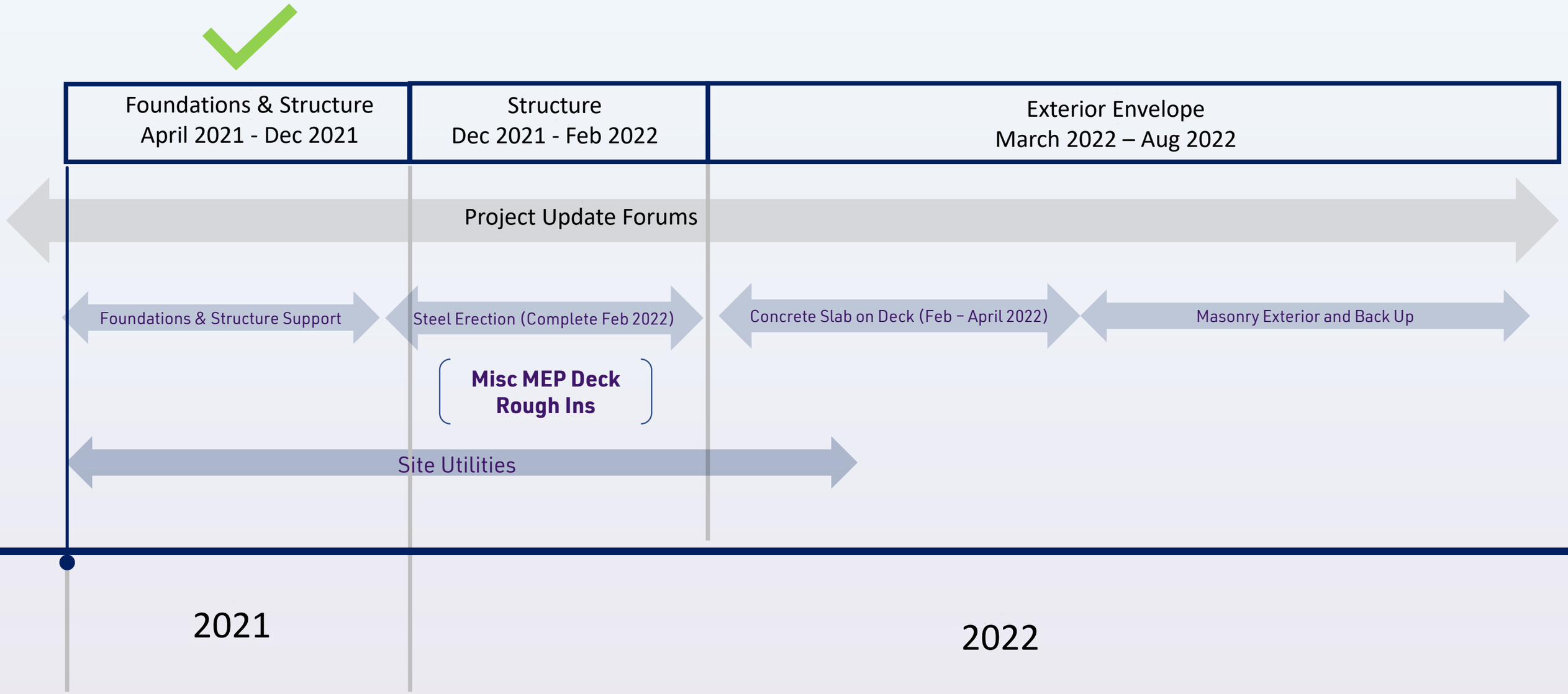
- Weekly updates on the website every Friday
- **Note:** Significant changes occurring between updates will have an additional post

Construction Overview Timeline

Looking Ahead



Construction Look Ahead



Existing Conditions

Existing Conditions

Foundation & Structure Support

- Concrete foundations and walls complete
- Steel erection underway; expected completion late February

Foundation - Progress

Ongoing Work – Concrete Foundations

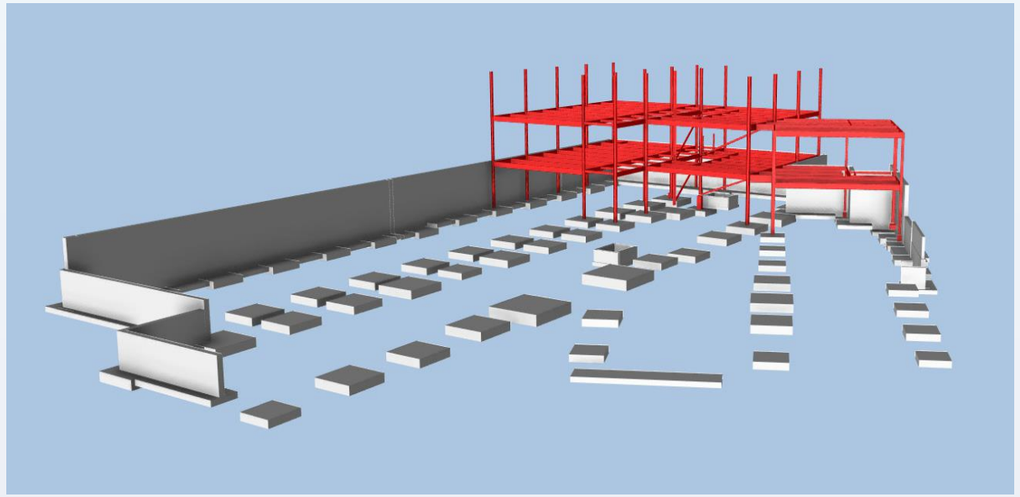
- Underground concrete foundations t started Sept 2021
- Deliveries
  - Steel rebar trucks
  - Concrete trucks
  - Formwork
- Work Activities
  - Cutting of fo
  - Saw cutti
  - Excav s
  - Co tiveries
- Noise Ma nt
  - No unn ssary equipment idling
  - Concrete trucks “rotation” at a lower turn until on site
- Estimated duration: 3 Months

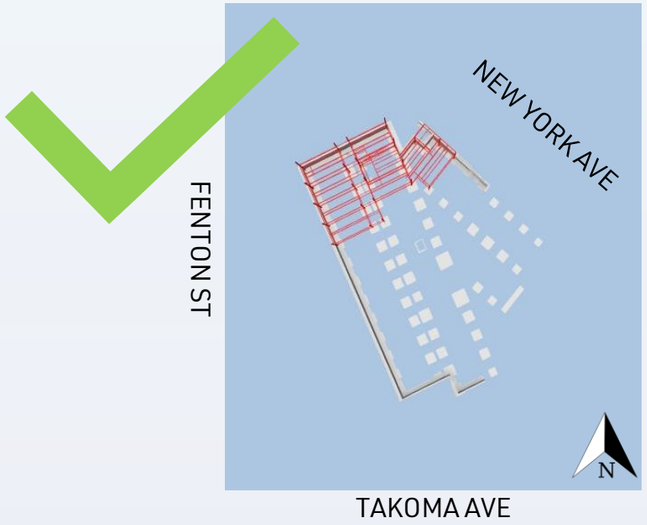
COMPLETE

Ongoing Work – Steel Erection

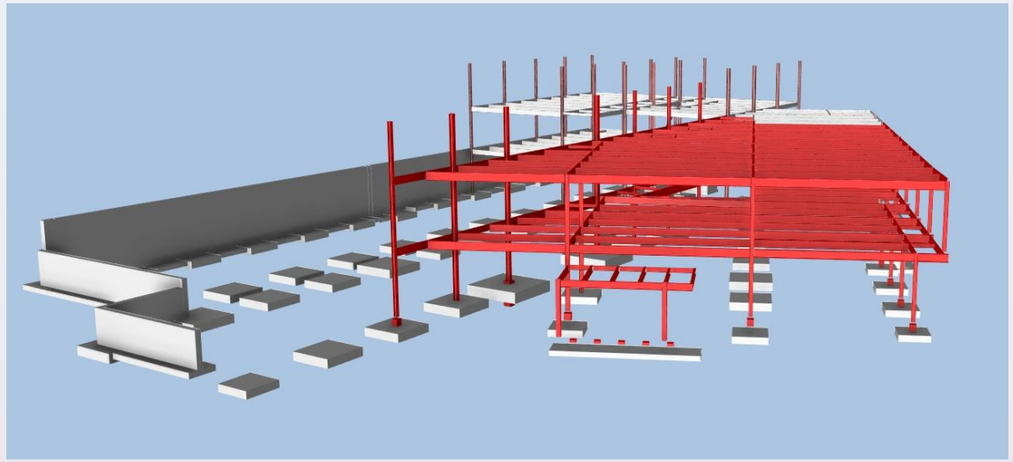
(Anticipated Completion Feb 2022)

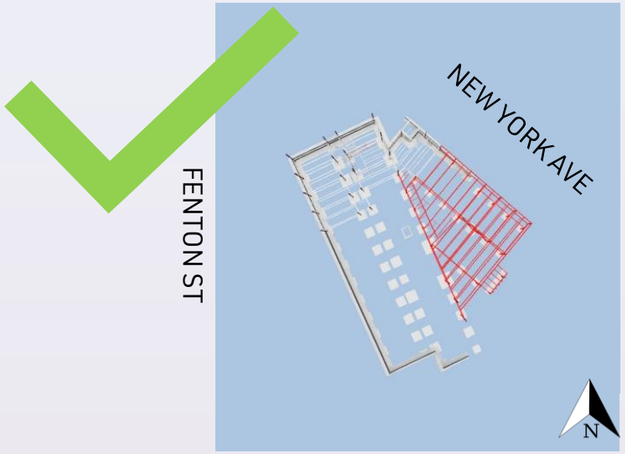
Steel Erection - Phase 1





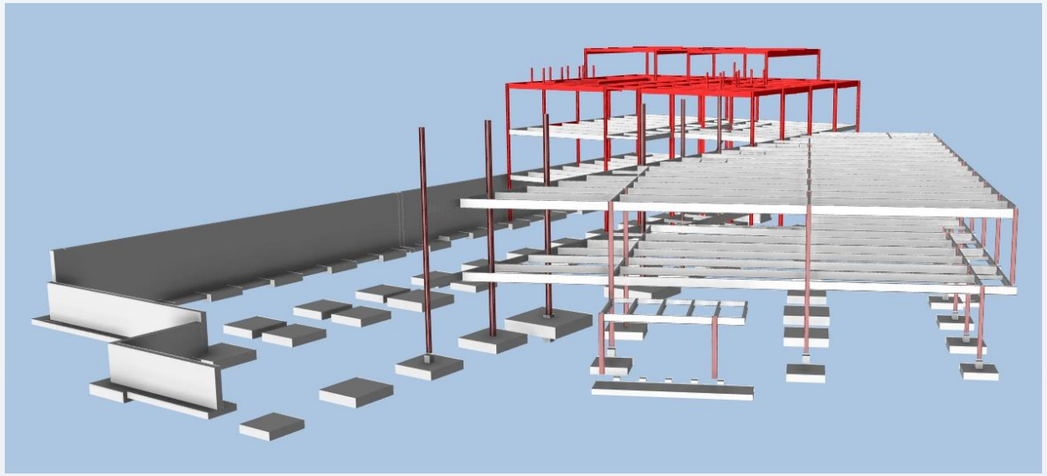
Steel Erection Phase 2

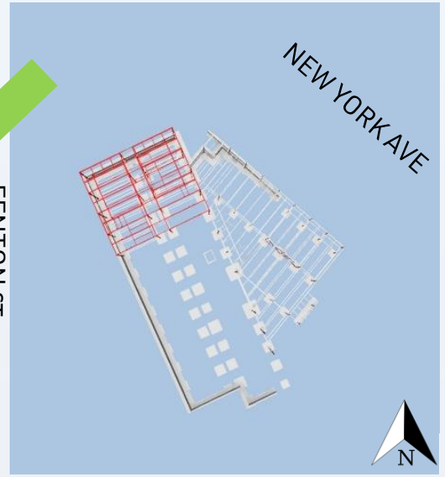




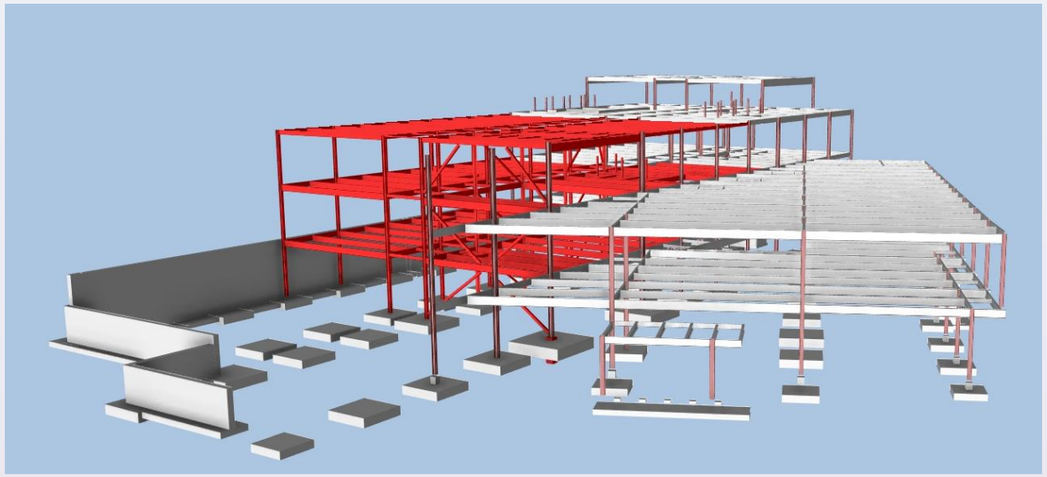
Ongoing Work – Steel Erection

Steel Erection Phase 3



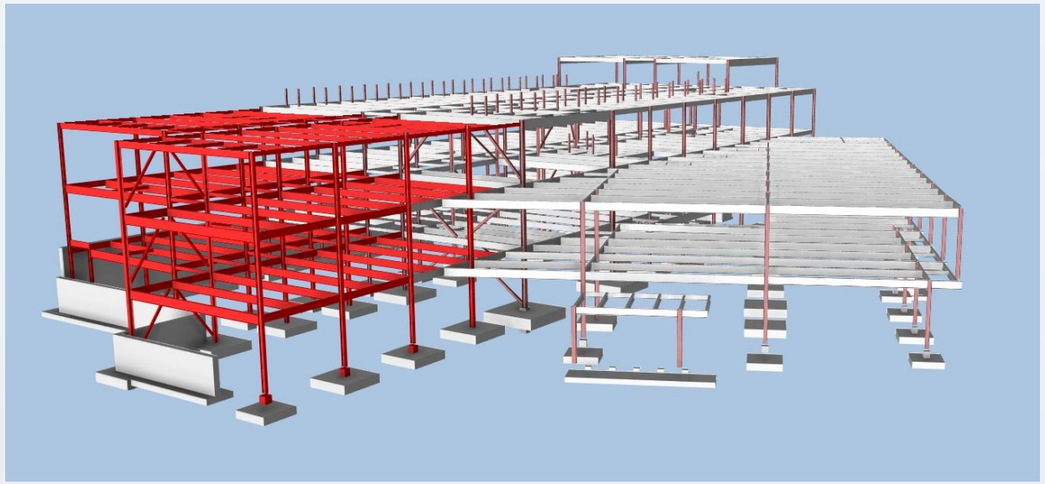


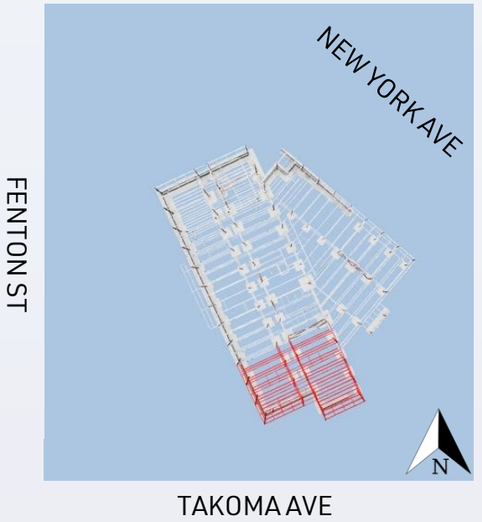
Steel Erection Phase 4



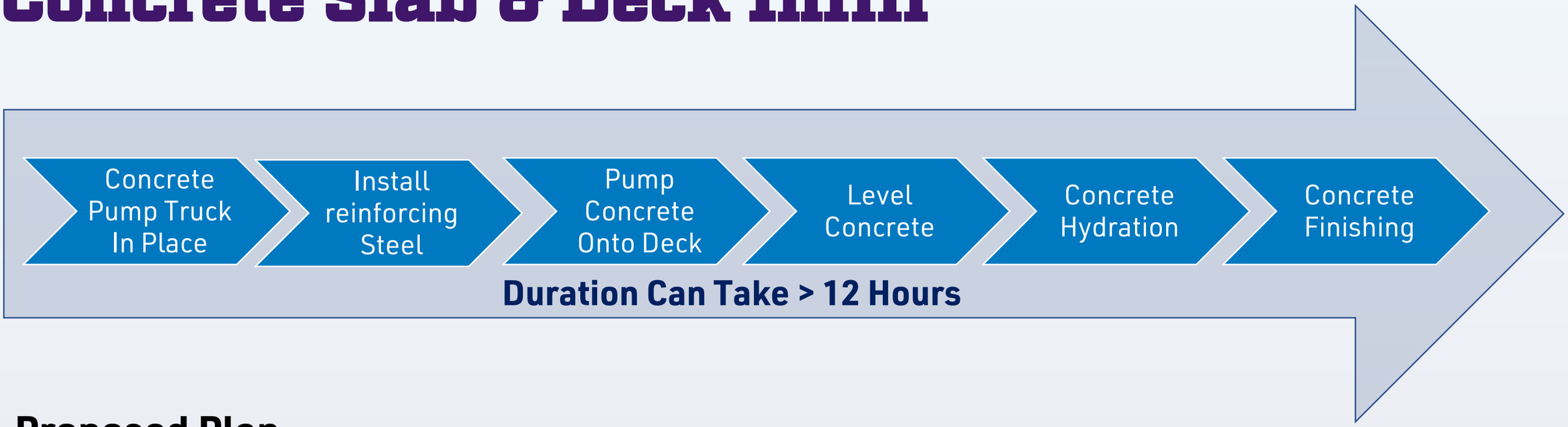
Ongoing Work – Steel Erection

Steel Erection Phase 5





Upcoming Work – Concrete Slab & Deck Infill



Proposed Plan

- Pump truck arrives at 6 AM for set up
- Concrete trucks arrive at 7 AM
- Blankets placed to mitigate any noise / light

Upcoming Work – Concrete Slab & Deck Infill

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Catherine and Isiah Leggett Math and Science Building

Concrete Fact Sheet

February 2022

Foundation Concrete Placement Phase Complete

Concrete and concrete materials have been utilized throughout the construction of the Catherine and Isiah Leggett Math and Science Building to support the construction of a strong foundation. As steel placement nears completion, the next phase of construction will involve placing concrete within the steel building structure, which requires the use of different techniques from the current concrete operations. As a result, concrete operations will look different than in previous phases of the project.

Concrete Basics

Concrete is a rock-like material made by mixing together three main components: water, cement, and aggregate (stone). A chemical reaction involving water called hydration glues the aggregate together, hardening the mixture and gaining the strength to form concrete. Despite the fact that concrete appears to be drying, hydration is not evaporation, and the water must remain in the concrete as it cures or sets.

Next Phase Concrete Placement Timing

Unlike concrete used in the building foundations, concrete placement and finishing within the steel structure frame is a process that can take up to 12 hours or more to complete each day. The process is affected by temperature, humidity, and wind. During the finishing process, the team will use power trowels or finishers on the concrete surface once the surface water is absorbed into concrete. Once started, it is essential to continue the process until the concrete is finished completely, or risk having to remove the damaged concrete with jackhammers. The surface water on the concrete must be absorbed back into the concrete (hydration) to allow the finishing process to proceed to its conclusion. However, the timeframe for the hydration process is unpredictable given that it is dependent on a variety of factors outside of our control.

Mitigation and Management Strategies

Efficiency is central to successful concrete placement and can assist with mitigating the impacts of this phase of the project. There are several ways to increase efficiency throughout this process. A key mitigation strategy is to prepare early to start placing concrete at 7 a.m. In order to do this, the concrete pump truck will need to arrive earlier in the day.

Currently, any trucks and deliveries do not enter the site before 7 a.m. To reduce the likelihood that the concrete finishing process will run into the late evening, we propose to bring the concrete pump truck on site at 6 a.m. More details on the mitigation and management strategies are as follows:

- The City/County will be contacted and engaged regarding the pump truck entering the site at 6 a.m. This will be a single truck with a crew of four workers. The truck will be positioned and prepared for the concrete trucks which will not be allowed to enter the site until 7 a.m.
- The sound levels will be monitored. The only noise that will be generated by bringing the pump truck on site early will be the sound of the diesel truck idling on the work site. The truck will idle as it maneuvers into the correct position and makes the necessary preparations for beginning the work; however, the truck will not need to idle for the full hour between 6 and 7 a.m. As a result, it is unlikely this setup will violate the noise ordinance or be disruptive. All trucks will be using the established trucking routes to maneuver materials onto the site.
- Backup alarms will be disabled during the amended work hours to eliminate disruptions and noise. Flaggers and alternate methods will be used in place of the alarms to ensure the safety of workers during that time.
- During the finishing process, blankets will be draped over the edge of the steel structure closest to the neighborhoods to minimize any sound or light pollution generated by the process. This process may continue into the late evening depending on the concrete cure times encountered. The drapes will be placed on the floor below where (if necessary) heating will take place to help expedite the hydration process.
- The equipment used for the finishing process typically produces sound equivalent to that created by a lawn mower. About four pieces of equipment will be in use at one time during the finishing process. Again, blankets will be utilized to help stay within the parameters of the noise ordinance.
- The estimated time of completion for this phase of the concrete work is around a month.

Starting the concrete placement process early is a way to ensure concrete work is completed in a timely manner and in a timeframe that is not an inconvenience to the community. This is a typical practice utilized on construction sites to complete the concrete slab placement process in an effective and timely manner which assures quality work and creates a solid building structure.

It is imperative that once this process commences, there are no interruptions or delays. This would create the risk of having to remove the concrete (using jackhammers, etc.)

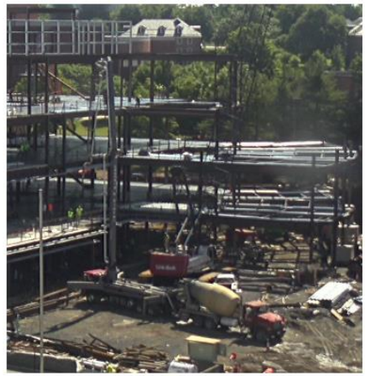
result in much more time-consuming and intrusive

vide information on this phase of the project. The
f the Environment as well as the City of Takoma Park
ghout this next phase of the project.

k may be submitted to
edu or for immediate concerns, call the project hotline

Concrete Delivery Truck

Examples of the Concrete Process



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Upcoming Work – Concrete Slab & Deck Infill

Concrete Deliveries

Concrete Pump Truck

Blanket

Upcoming Work – Concrete Slab & Deck Infill

Concrete Finishing Crew

Upcoming Work – Enclosure

What is "enclosure"?

- What everyone sees from the outside and the support / back up required.
- Materials: metal studs, masonry/brick, roof, windows/glazing

STEP 1 → **STEP 2** → **STEP 3**

Upcoming Work – Enclosure

Deliveries

- Block
- Brick
- Mortar
- Rebar

Tools / Process

- Mortar Storage Silo
- Mortar Mixer
- Sawcutting
  - Masonry / Rebar

Mortar Storage Silo

Mortar Mixer

Current Delivery Situation

- Typical deliveries (concrete, pick up truck, box trucks, trailers) all enter / exit at Fenton St. - **this will not change**

Site Logistics

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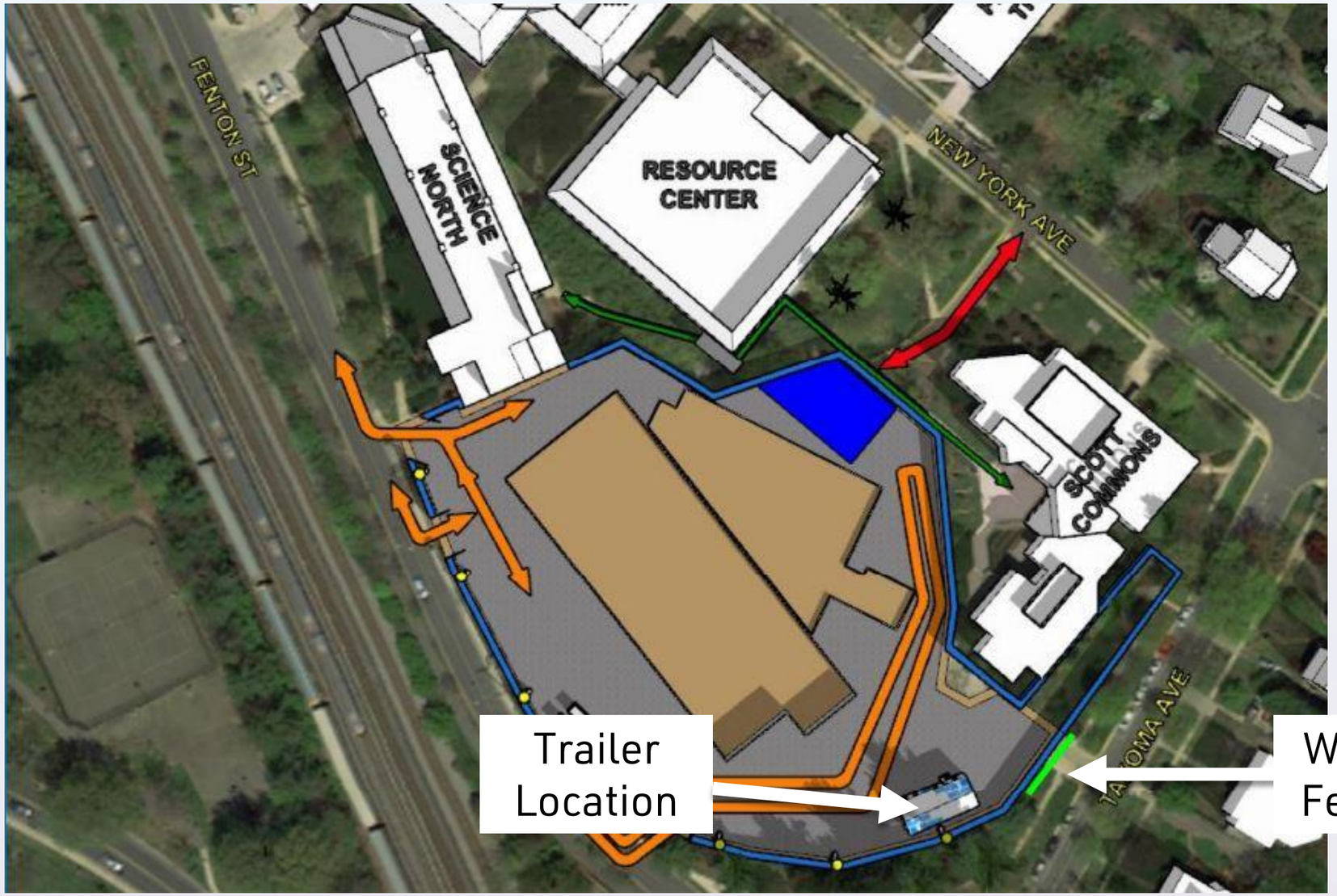
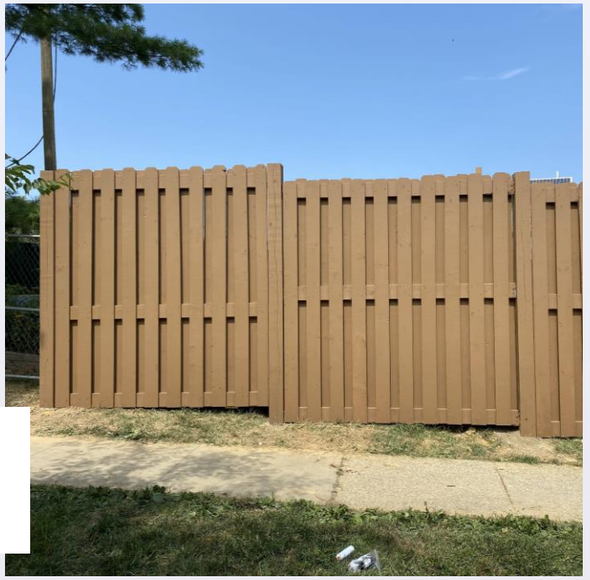
Logistics


PENTON ST
SCIENCE NORTH
RESOURCE CENTER
NEW YORK AVE
SCOTT COMMONS
Trailer Location


Wood Fence

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Delivery Conditions

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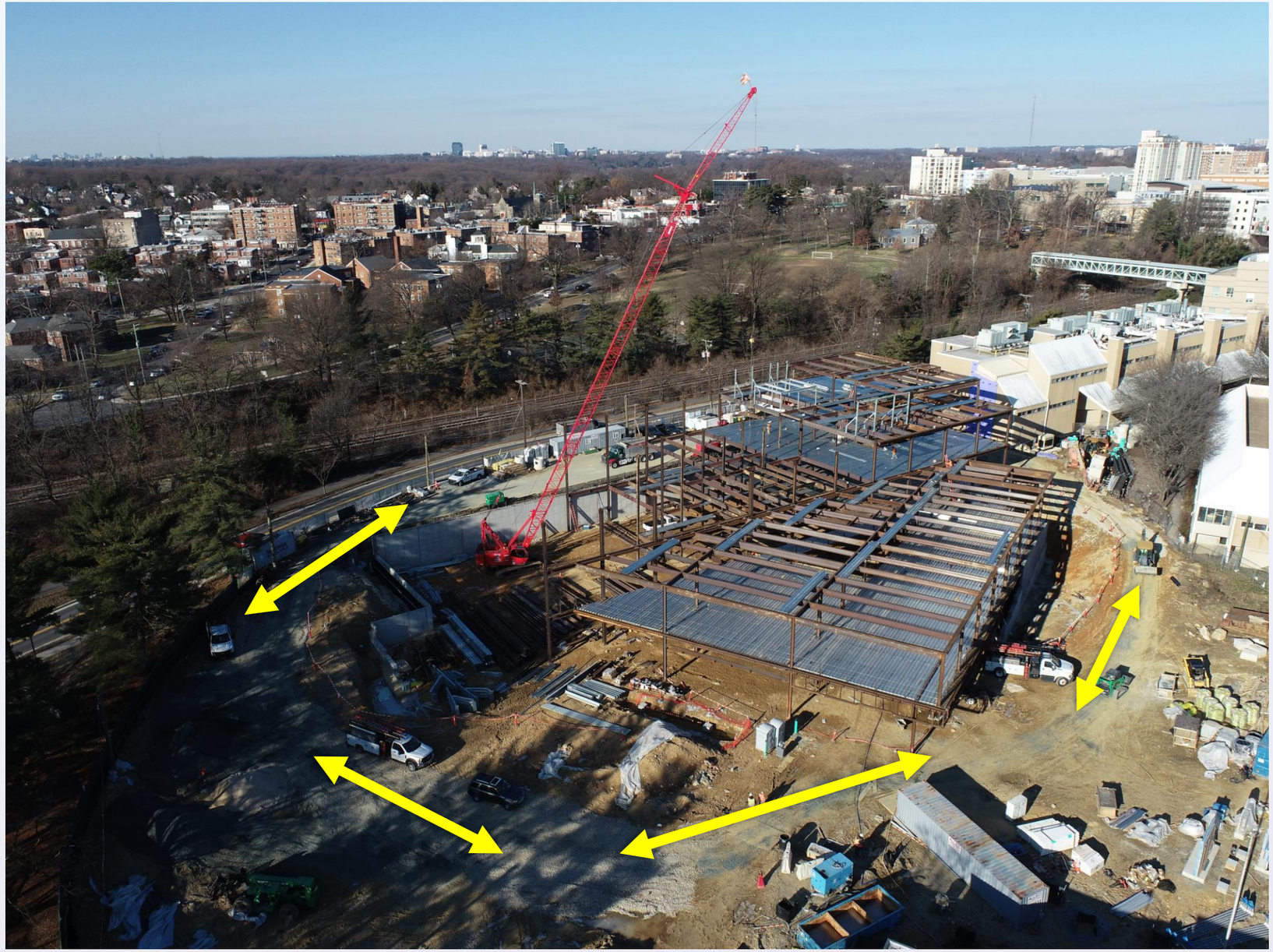

Delivery Conditions

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Engagement

HOTLINE
800-879-9879

SCHEDULED MEETINGS BY APPOINTMENT

Virtual Meetings

WEBSITE
montgomerycollege.edu/tpss-design

PROJECT EMAIL
community@montgomerycollege.edu

MEETING SCHEDULE REGULAR PROJECT UPDATE FORUMS

Look forward to our

Next Project Updates

Project Update Forum: Summer 2022

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