



ASHLAND PUBLIC SAFETY BUILDING
MARCH 24, 2020

INTRODUCTIONS

Project Management – The Vertex Companies, Inc.

- Jon Lemieux

Designer – HKT Architects, Inc.

- Janet Slemenda
- Amy Dunlap

INTRODUCTIONS – Public Safety Building Committee

- Joe Magnani
- Brett Walker
- Peter Chisolm
- Michael Herbert
- Jennifer Ball
- Vincent Alfano (Police Chief)
- Keith Robie (Fire Chief)
- Steve Mitchell
- Joe Richardson (ex-officio)
- Paul Carpenter (ex-officio)

AGENDA

- Space needs programming
- Site investigations
 - Survey
 - Wetlands delineation / ANRAD application
 - Sub-surface explorations – soil probes, borings, test pits
 - Traffic analysis
- Schematic design
 - Conceptual test fits on the site
 - Floor plans
 - Elevations
- Budget
- Schedule



SITE CONSTRAINTS

- Property line



SITE CONSTRAINTS

- Property line
- Zoning setbacks
 - 25' front, back + side
 - 50' abutting residential property
- Topography
 - Total 35' grade change
 - Rises to the east



SITE CONSTRAINTS

- Property line
- Zoning setbacks
 - 25' front, back + side
 - 50' abutting residential property
- Topography
 - Total 35' grade change
 - Rises to the east
- Wetlands



SITE CONSTRAINTS

- Property line
- Zoning setbacks
 - 25' front, back + side
 - 50' abutting residential property
- Topography
 - Total 35' grade change
 - Rises to the east
- Wetlands
- Wetlands – 5,000 sf off-site replication



SITE CONSTRAINTS

- Property line
- Zoning setbacks
 - 25' front, back + side
 - 50' abutting residential property
- Topography
 - Total 35' grade change
 - Rises to the east
- Wetlands
- Wetlands – 5,000 sf off-site replication
- Geotechnical investigations
 - Bedrock elevations



SITE CONSTRAINTS

- Property line
- Zoning setbacks
 - 25' front, back + side
 - 50' abutting residential property
- Topography
 - Total 35' grade change
 - Rises to the east
- Wetlands
- Wetlands – 5,000 sf off-site replication
- Geotechnical investigations
 - Bedrock elevations
- Traffic analysis



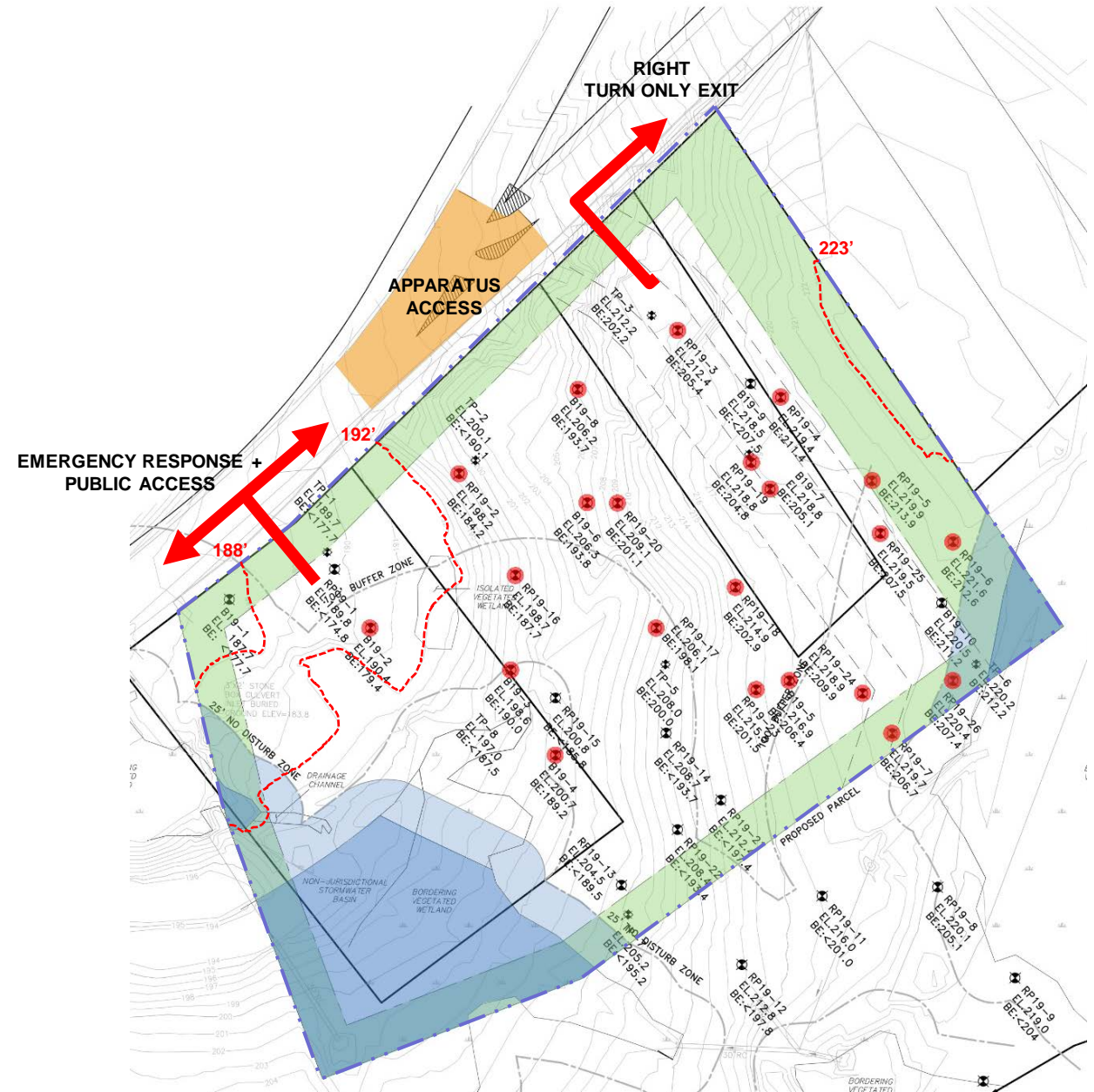
TRAFFIC ANALYSIS

- Mitigate impact to existing traffic at intersection
- Consider possible future geometric realignment of intersection when placing building



SITE CONSTRAINTS

- Property line
- Zoning setbacks
 - 25' front, back + side
 - 50' abutting residential property
- Topography
 - Total 35' grade change
 - Rises to the east
- Wetlands
- Wetlands – 5,000 sf off-site replication
- Geotechnical investigations
 - Bedrock elevations
- Traffic analysis



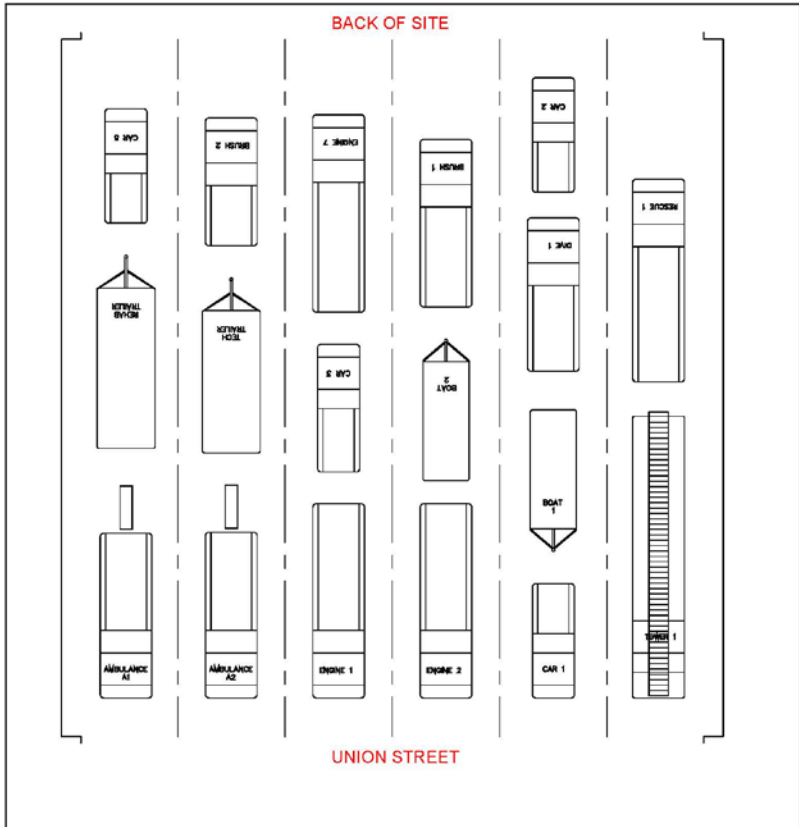
APPARATUS OPTIONS

HKT ARCHITECTS, INC.
 35 Medford Street
 Somerville, MA 02143
 T: 617.776.6545
 F: 617.776.6678
 www.hktarchitects.com

Project
**ASHLAND PUBLIC SAFETY
 ASHLAND, MA**

Date: OCT 9, 2019
 Scale: AS NOTED
 Job num: 21917
 Drawn by: AJD

SKA-1



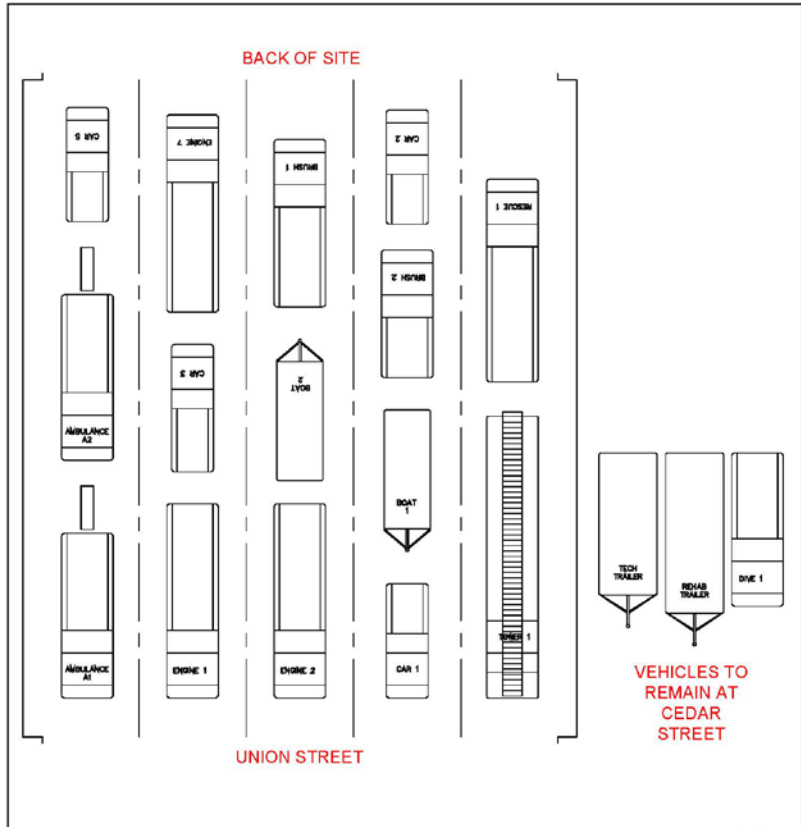
PLAN APPARATUS BAYS - ALL VEHICLES
 1/16" = 1'-0" 1

HKT ARCHITECTS, INC.
 35 Medford Street
 Somerville, MA 02143
 T: 617.776.6545
 F: 617.776.6678
 www.hktarchitects.com

Project
**ASHLAND PUBLIC SAFETY
 ASHLAND, MA**

Date: OCT 9, 2019
 Scale: AS NOTED
 Job num: 21917
 Drawn by: AJD

SKA-2



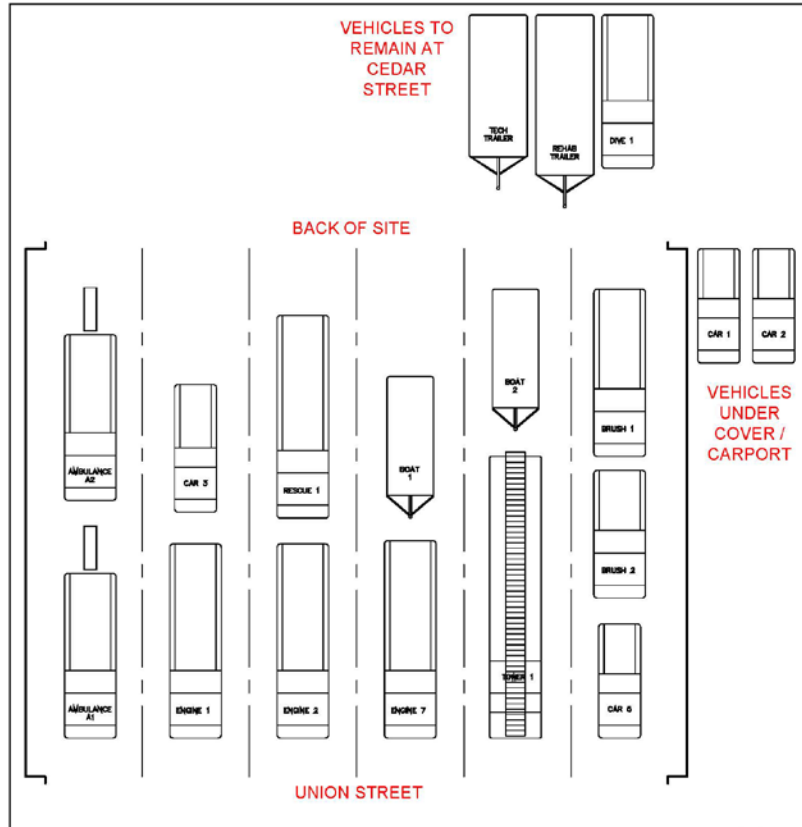
PLAN APPARATUS BAYS - SOME AT CEDAR STREET
 1/16" = 1'-0" 1

HKT ARCHITECTS, INC.
 35 Medford Street
 Somerville, MA 02143
 T: 617.776.6545
 F: 617.776.6678
 www.hktarchitects.com

Project
**ASHLAND PUBLIC SAFETY
 ASHLAND, MA**

Date: OCT 11, 2019
 Scale: AS NOTED
 Job num: 21917
 Drawn by: AJD

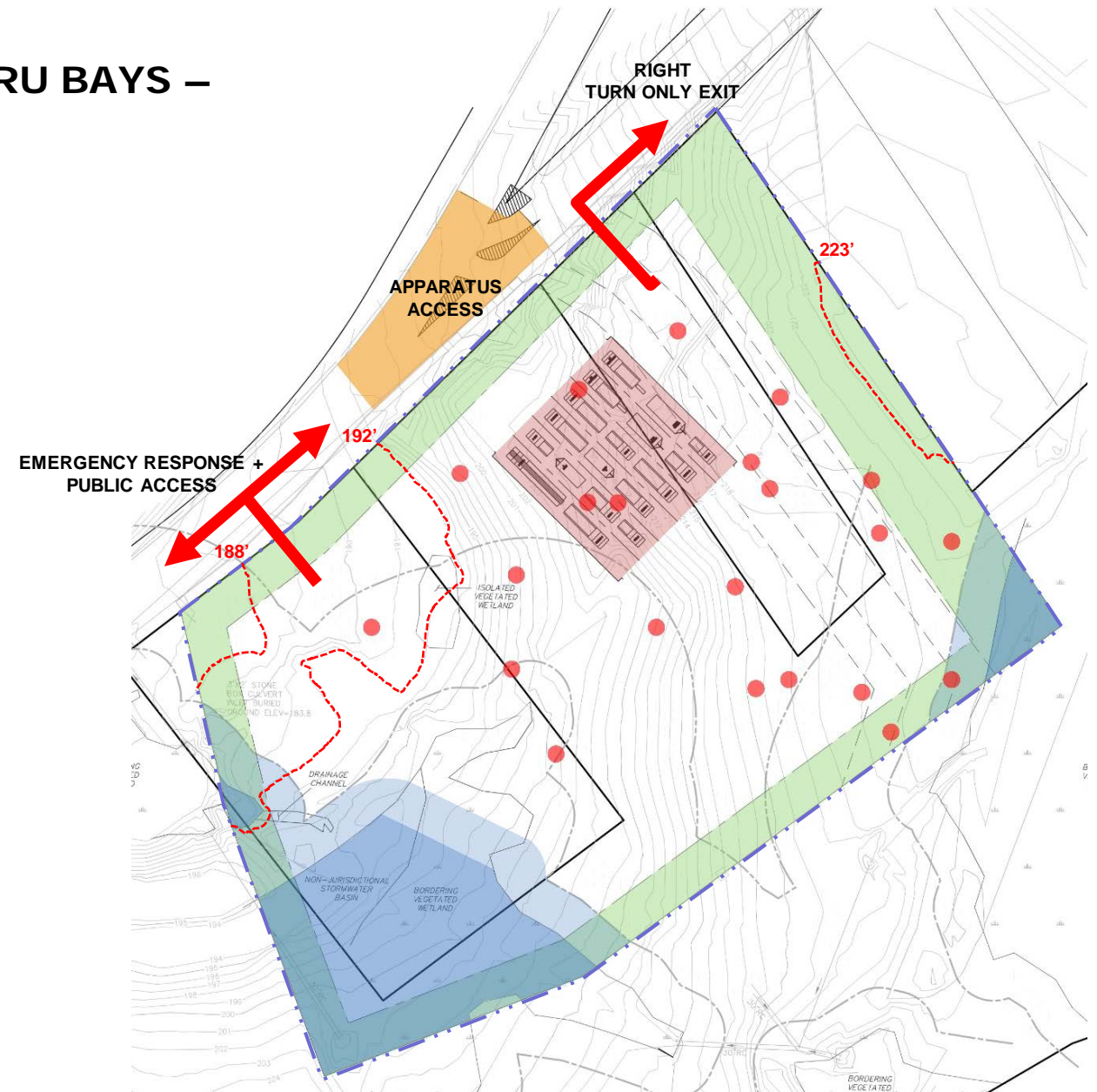
SKA-4



PLAN APPARATUS BAYS - SOME AT CEDAR STREET / CARPORT
 1/16" = 1'-0" 1

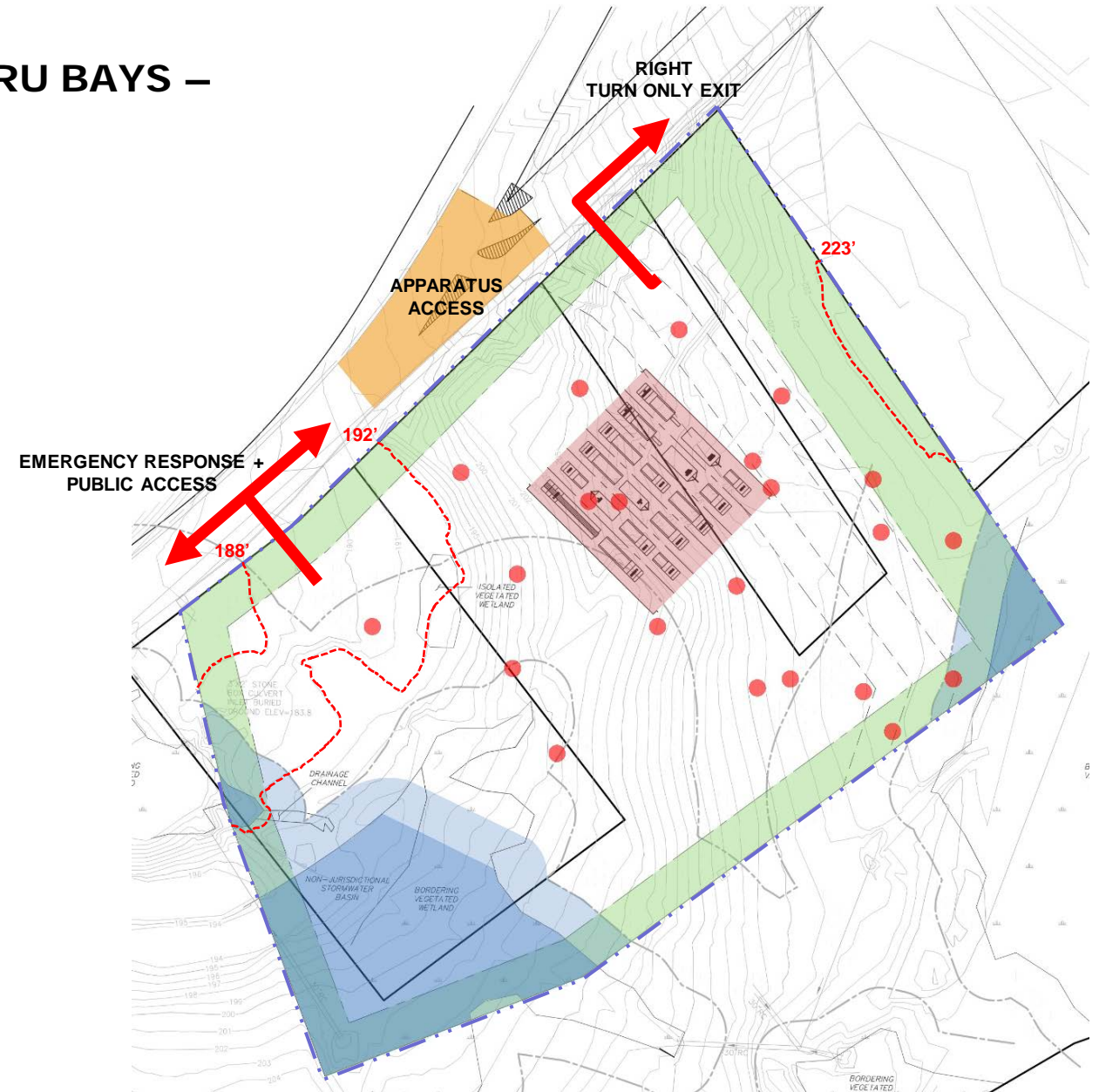
APPARATUS PLACEMENT – OPTION 1 DRIVE-THRU BAYS – CLOSE TO UNION ST

- Elevation at street dictates apparatus floor elevation
- 6' elevation change along Union St within access zone
- Apparatus apron to slope down to street or be flat – avoid going up-hill if possible
- Apparatus bays close to Union St:
 - Slope of apron at steepest point too steep for trucks
- Extensive retaining walls required to allow drive-thru bays



APPARATUS PLACEMENT – OPTION 1 DRIVE-THRU BAYS – FARTHER BACK FROM UNION ST

- Elevation at street dictates apparatus floor elevation
- 6' elevation change along Union St within access zone
- Apparatus apron to slope down to street or be flat – avoid going up-hill if possible
- Apparatus bays farther back from Union St:
 - Slope of apron is shallower for trucks
- Extensive retaining walls required to allow drive-thru bays



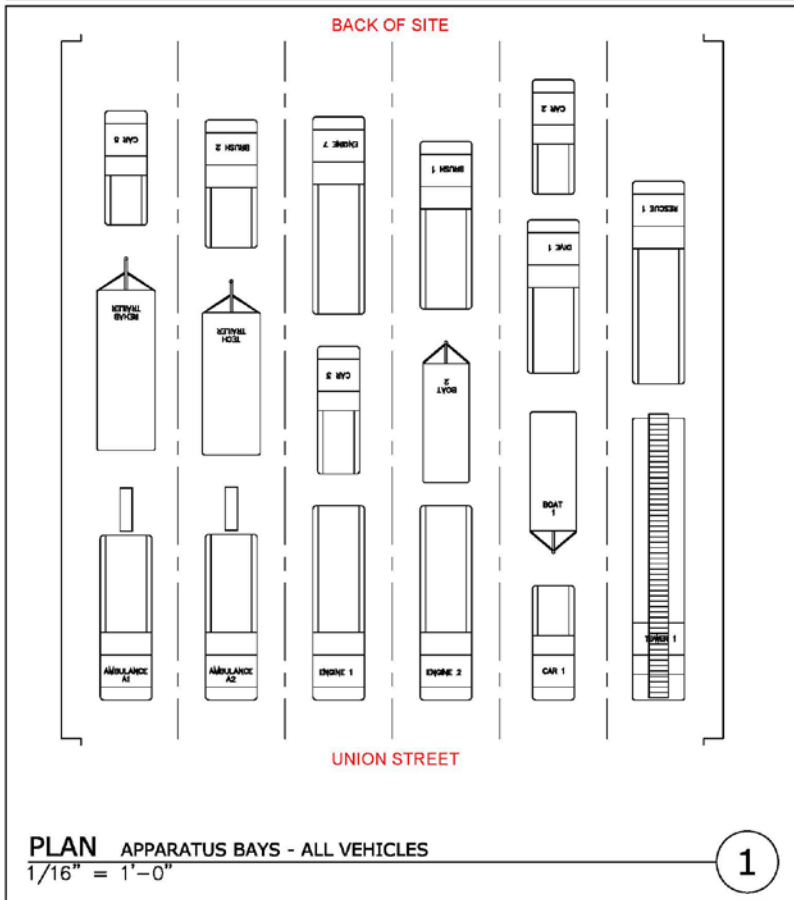
APPARATUS OPTIONS

HKT ARCHITECTS, INC.
 35 Medford Street
 Somerville, MA 02143
 T: 617.776.6545
 F: 617.776.6678
 www.hktarchitects.com

Project
**ASHLAND PUBLIC SAFETY
 ASHLAND, MA**

Date: OCT 9, 2019
 Scale: AS NOTED
 Job num: 21917
 Drawn by: AJD

SKA-1

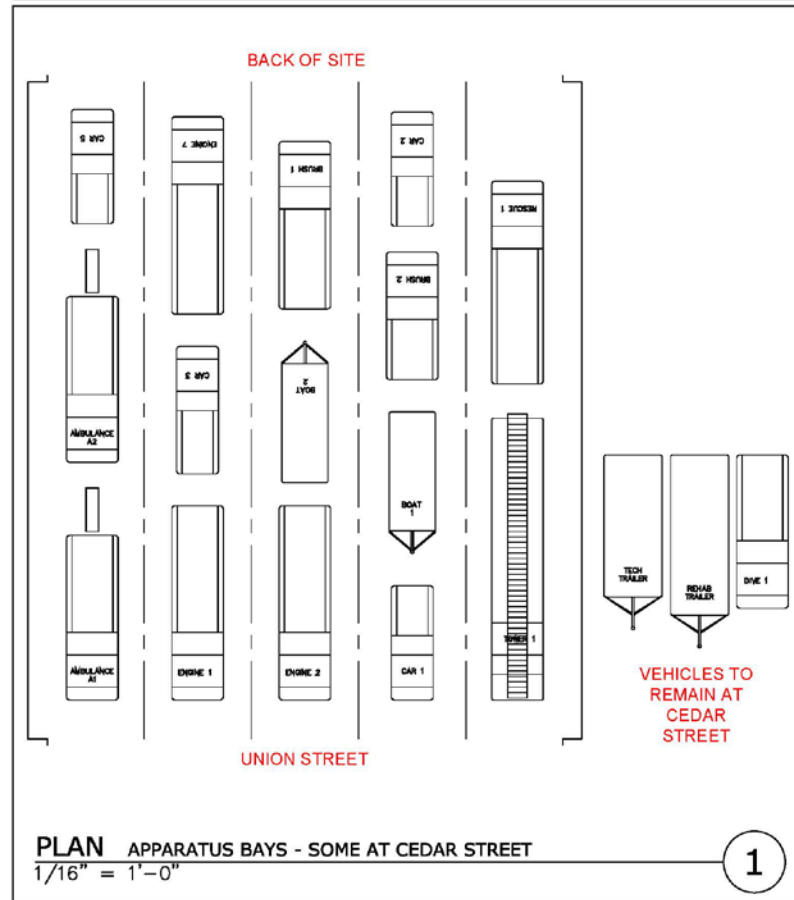


HKT ARCHITECTS, INC.
 35 Medford Street
 Somerville, MA 02143
 T: 617.776.6545
 F: 617.776.6678
 www.hktarchitects.com

Project
**ASHLAND PUBLIC SAFETY
 ASHLAND, MA**

Date: OCT 9, 2019
 Scale: AS NOTED
 Job num: 21917
 Drawn by: AJD

SKA-2

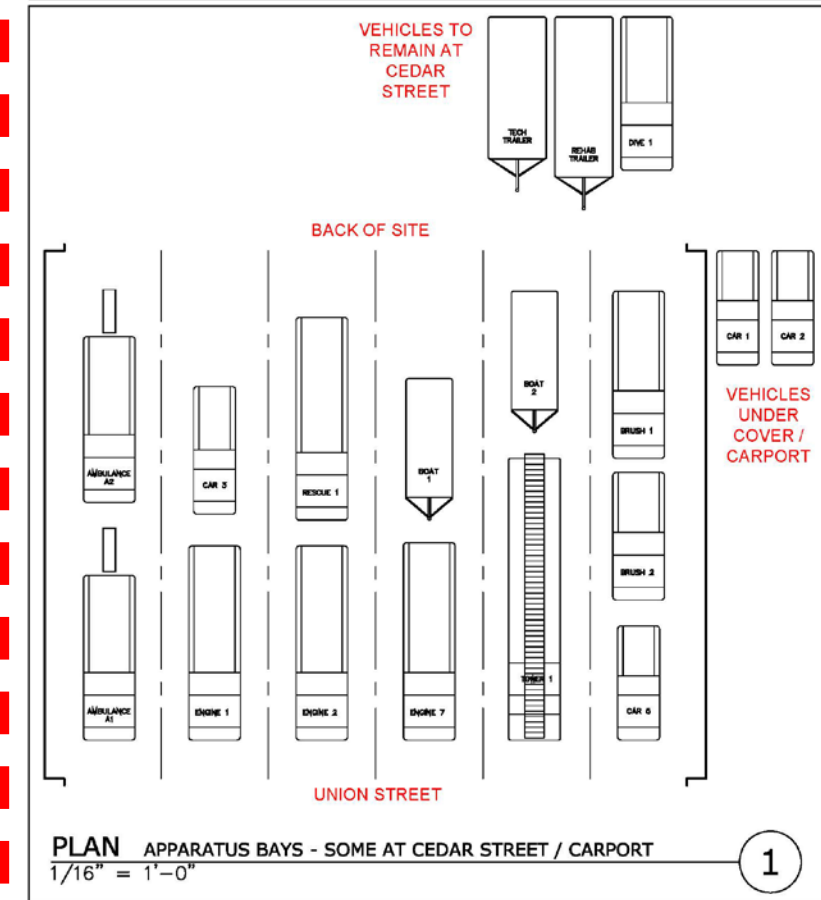


HKT ARCHITECTS, INC.
 35 Medford Street
 Somerville, MA 02143
 T: 617.776.6545
 F: 617.776.6678
 www.hktarchitects.com

Project
**ASHLAND PUBLIC SAFETY
 ASHLAND, MA**

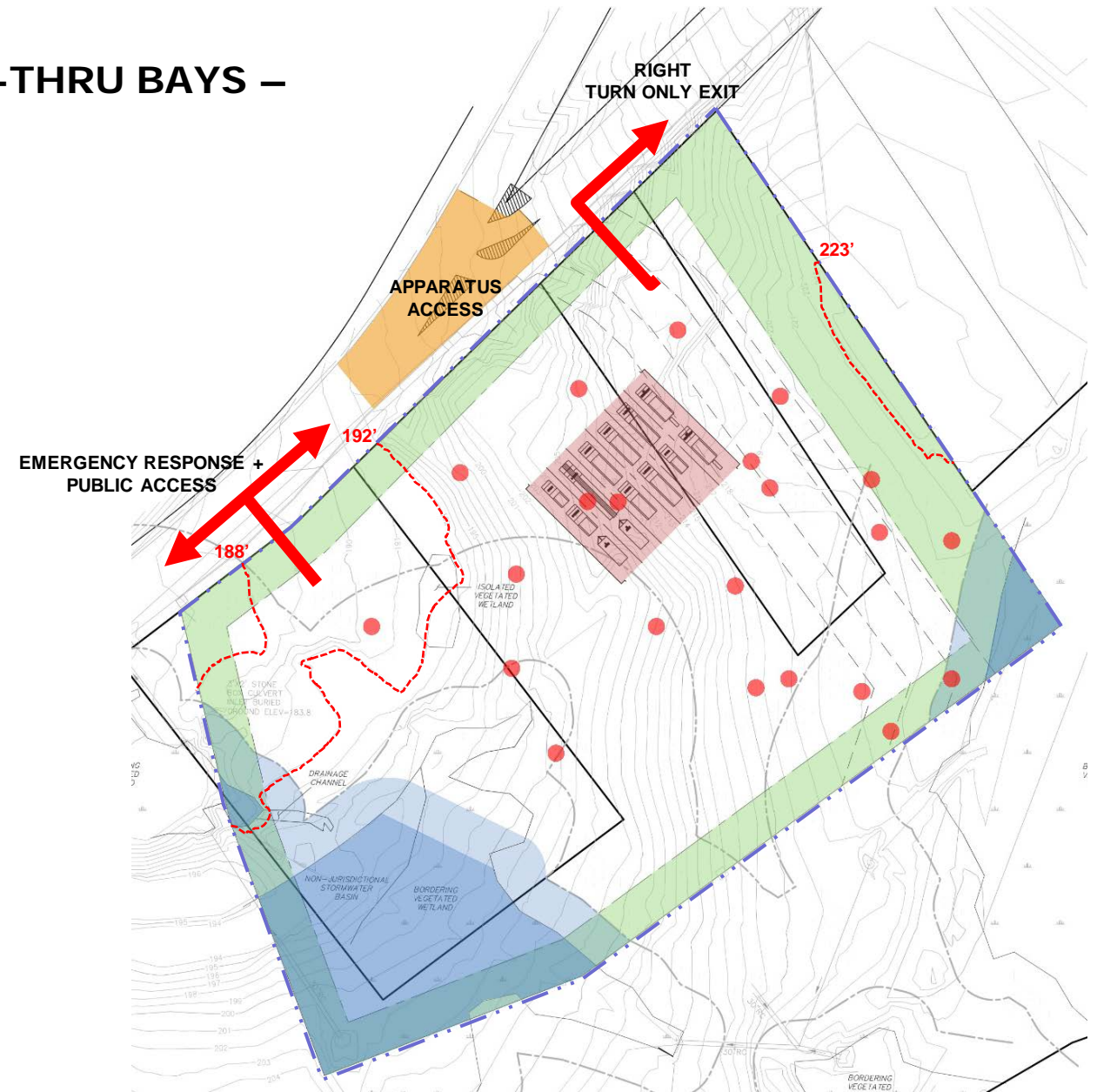
Date: OCT 11, 2019
 Scale: AS NOTED
 Job num: 21917
 Drawn by: AJD

SKA-4



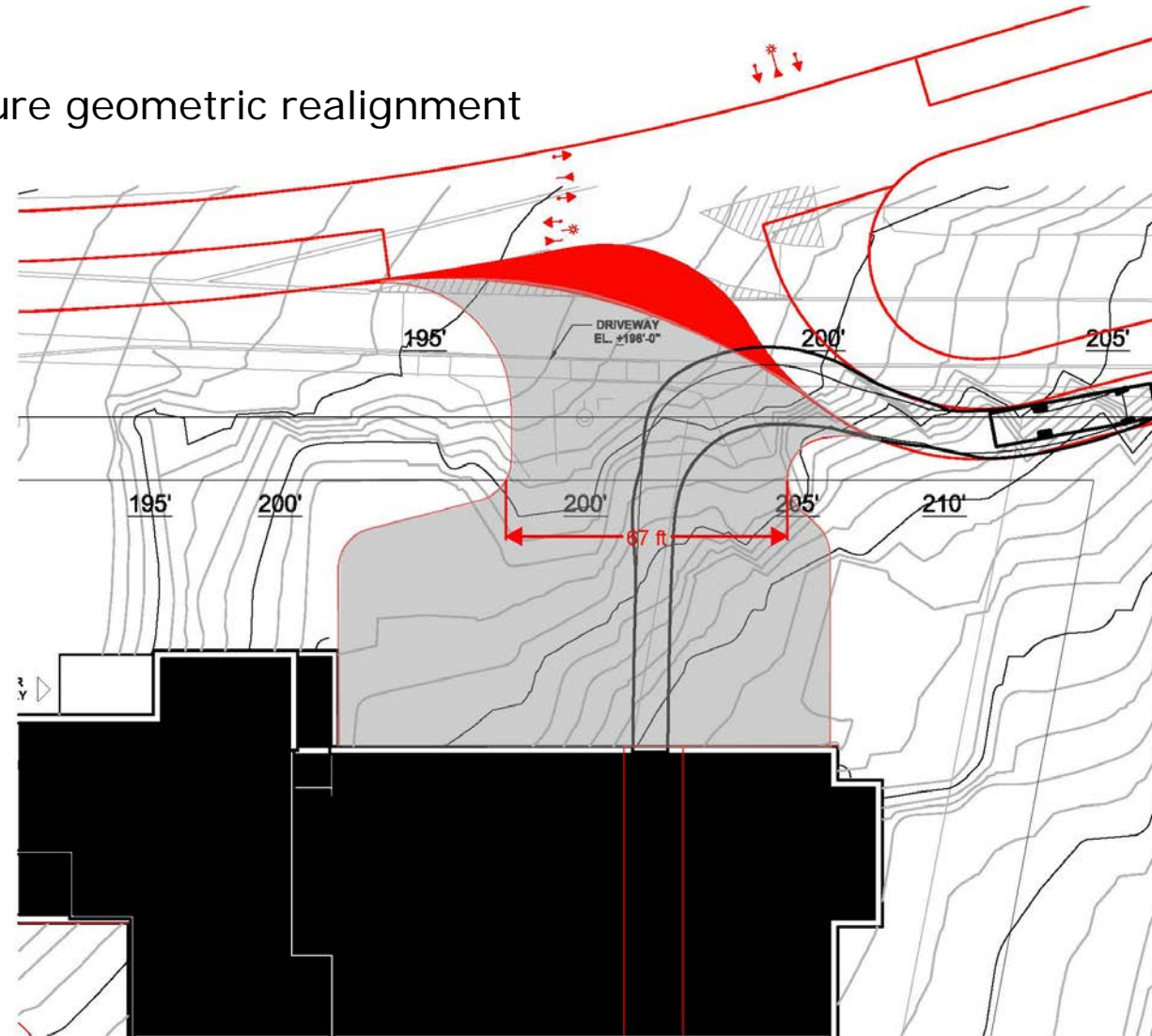
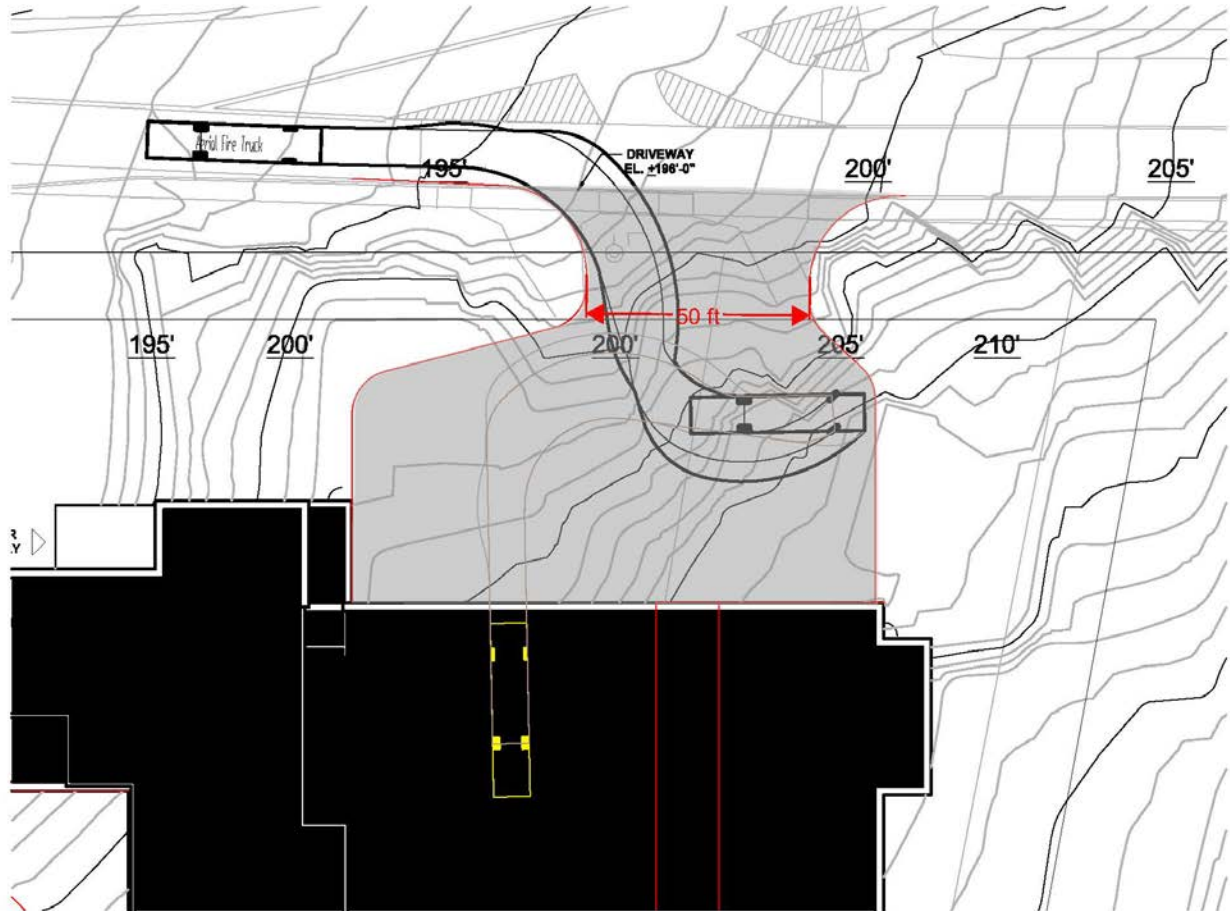
APPARATUS PLACEMENT – OPTION 3 NO DRIVE-THRU BAYS – FARTHER BACK FROM UNION ST

- Elevation at street dictates apparatus floor elevation
- 6' elevation change along Union St within access zone
- Apparatus apron to slope down to street or be flat – avoid going up-hill if possible
- Apparatus bays farther back from Union St:
 - Slope of apron is shallower for trucks
- Reduce retaining walls – grade at back of bays can be higher than apparatus floor elevation
 - Some retaining walls will be required for drive access or other reasons



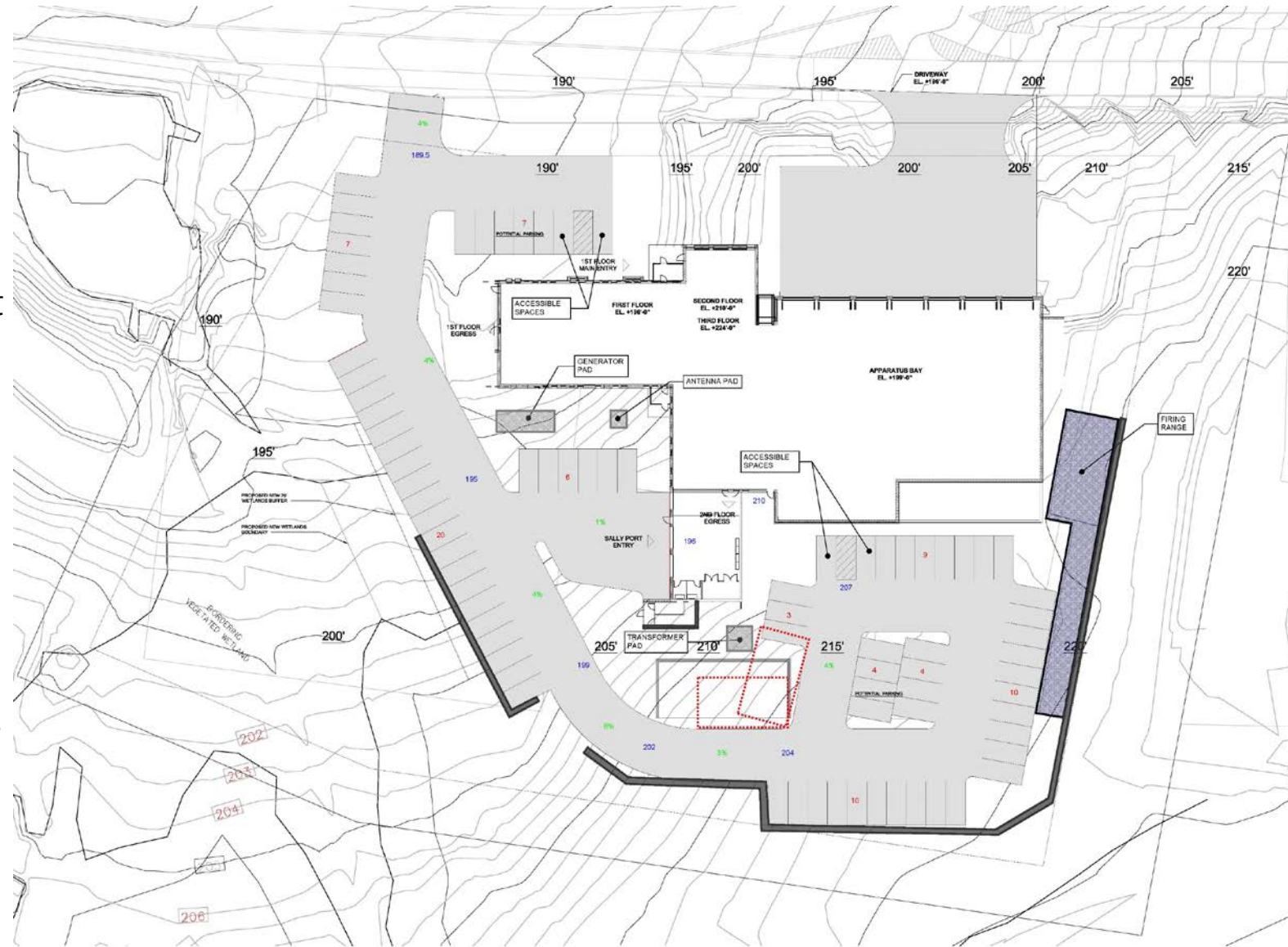
TEST FITS + TRAFFIC ANALYSIS

- Apparatus apron configuration planned + with future geometric realignment



CONCEPTUAL SITE PLAN

- Three story – minimize footprint
- Apparatus bays increased to 7
 - Current – House trailers that otherwise would be stored at Cedar Street
 - Future – Accommodate a third ambulance
 - Narrow width of apron for curb cut
- Carport – four additional vehicles
- Firing range built into hill to act as retaining wall
- Minimum 70 parking spaces
- Grading – Ramp/Stair at entrance



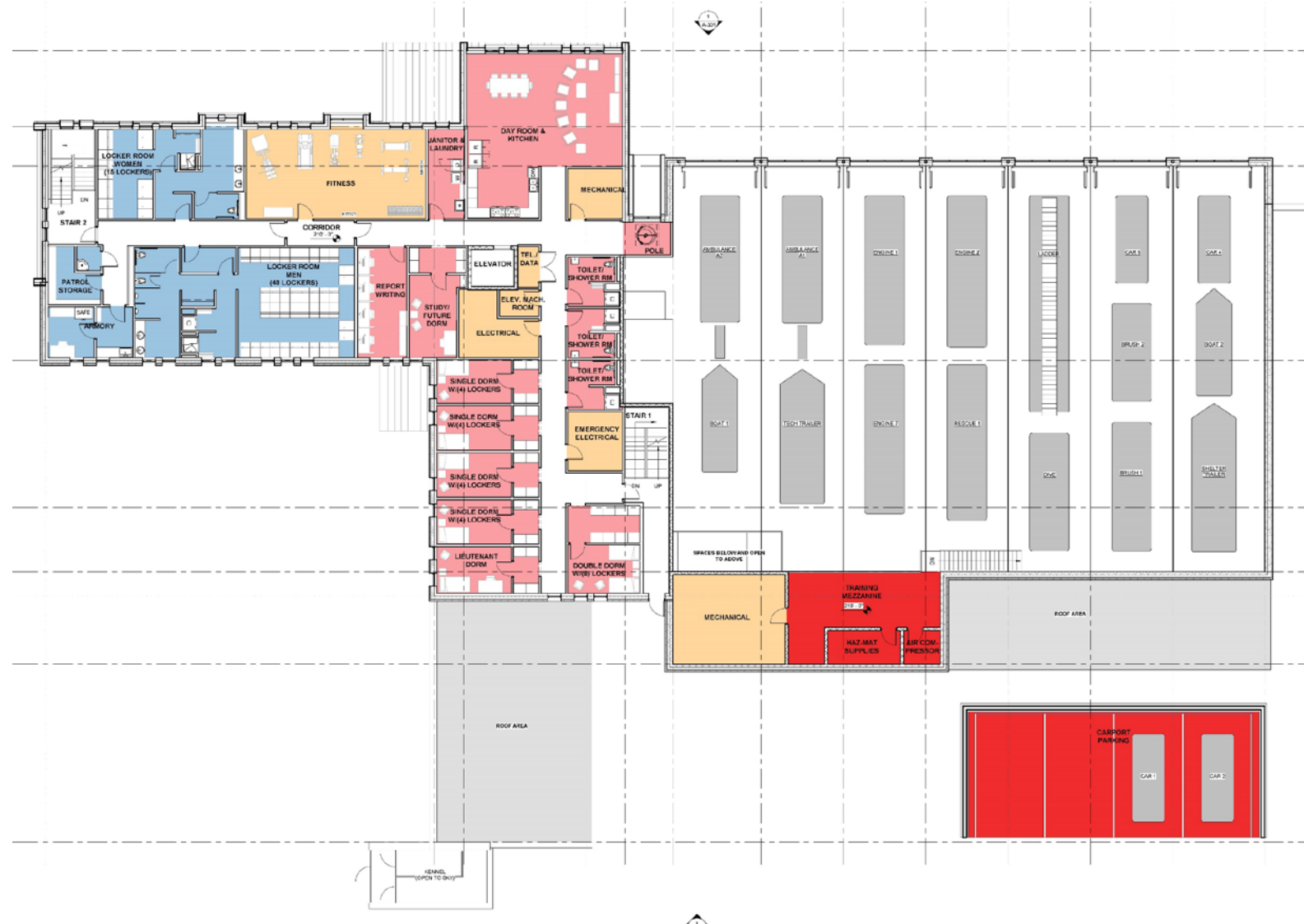
SCHEMATIC FIRST FLOOR PLAN

- Shared spaces
 - Training room
 - Dispatch
 - Building support
- Police department
 - Records clerk + storage
 - Evidence
 - Sergeants
 - Roll Call
 - Detention
- Fire department
 - Apparatus bays
 - Operations



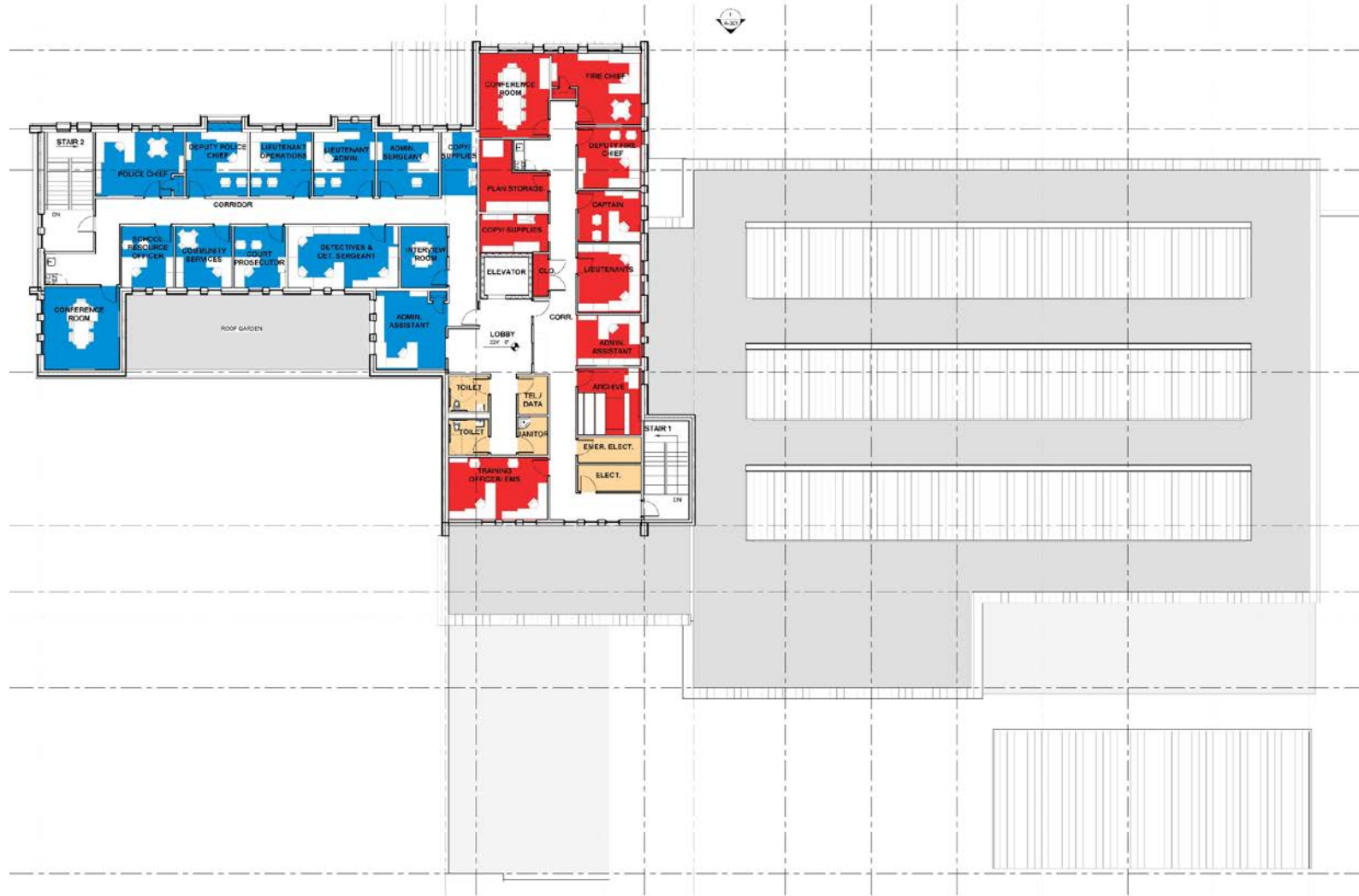
SCHEMATIC SECOND FLOOR PLAN

- Shared spaces
 - Fitness
 - Building support
- Police department
 - Locker Rooms
 - Patrol Storage
 - Armory
- Fire department
 - Living quarters
- Mezzanine in Apparatus Bays
 - Training
 - Storage
 - Mechanical



SCHEMATIC THIRD FLOOR PLAN

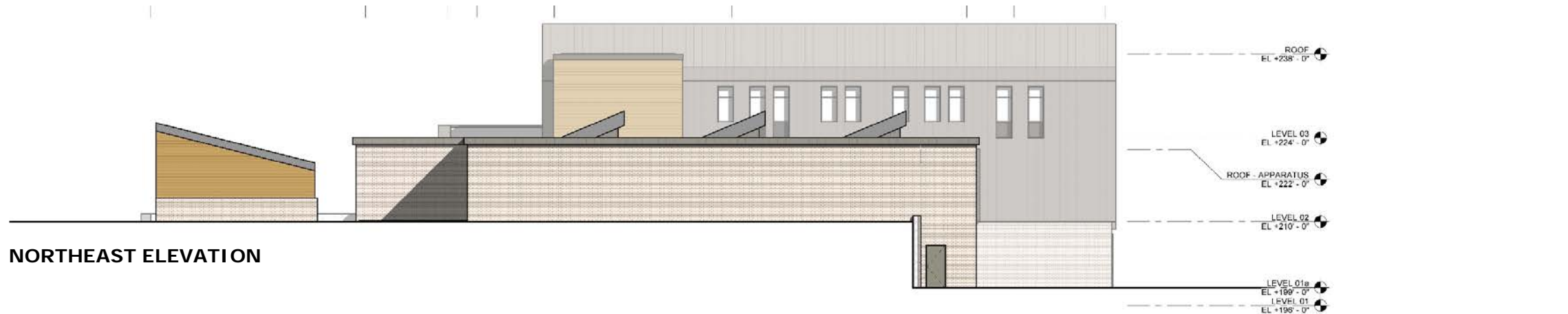
- Shared spaces
 - Building support
- Police department
 - Administration
- Fire department
 - Administration



SCHEMATIC ELEVATIONS



NORTHWEST ELEVATION

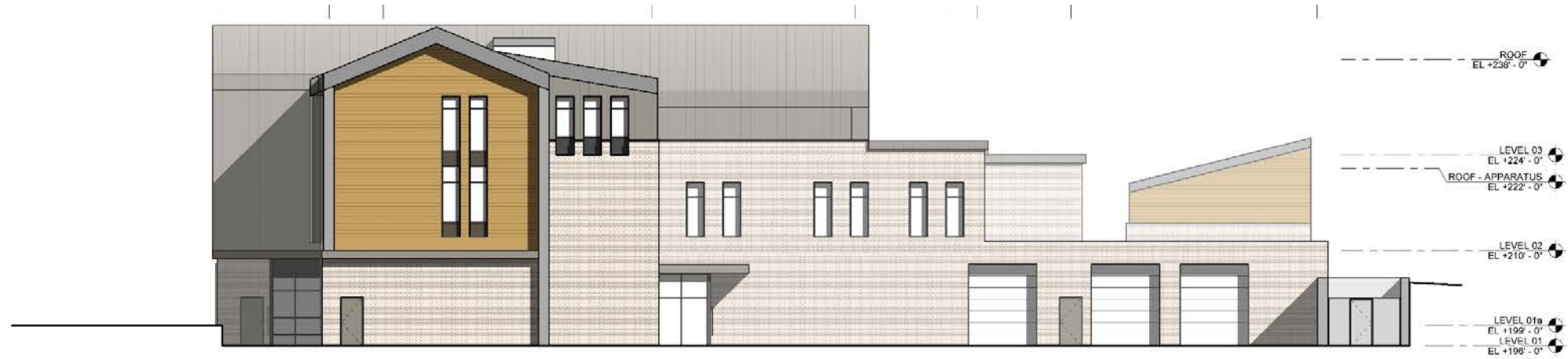


NORTHEAST ELEVATION

SCHEMATIC ELEVATIONS



SOUTHEAST ELEVATION



SOUTHWEST ELEVATION

NEXT STEPS

- Energy modeling / Life Cycle Cost Assessment to influence mechanical systems selection
- Engineering narratives (structural, mechanical, electrical, plumbing, fire protection, technology)
- Site design to be advanced (civil engineering + landscape architecture)
- Sustainability analysis – LEED + Net Zero
- Schematic design level cost estimate



BUDGET

Item	Amount
Construction (42,000 sf @ \$600/sf)	\$25,200,000
Rock removal (per Pare 2017)	\$1,550,700
Rock removal escalation to 2021	\$158,947
Subtotal	\$26,909,647
Traffic signal work	\$300,000
Soft Costs (Designer, OPM, FFE, etc.)	\$6,802,412
Total Project Budget	\$34,171,005

Notes:

1. Concept-level estimate
2. Final program square footage being finalized
3. LEED and Net Zero aspects of project are still being evaluated

SCHEDULE

	Start	Finish
• Schematic Design	01/06/20	03/30/20
• Design Development	03/31/20	07/07/20
• Construction Documents	07/08/20	10/28/20
• Bidding	10/29/20	12/07/20
• <i>Town Meeting</i>	<i>11/2020</i>	
• <i>Town Ballot Vote</i>	<i>12/2020</i>	
• Construction (NTP)	01/07/21	06/21/22