



FVMS - BUILDING TO CORE CAPACITY:

THE CASE FOR IN-BUILDING CLASSROOMS VS MOBILES

Presentation to Facilities Committee

Elizabeth Wakeford, Senior Facility Planner, Facilities Planning + Construction

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CORE CAPACITY (IN-BUILDING VS MOBILES) | THE WHY



A word cloud for 'In-Building Core Capacity' with 'connection' as the largest word. Other prominent words include 'safety', 'nature', 'accessibility', 'daylight', and 'collaboration'. Smaller words include 'entry', 'parking', 'neighbors', 'amphitheater', 'environment', 'circulation', 'visibility', 'biking', 'walking', 'traffic', 'outside', 'community', 'natural', 'courtyard', 'views', 'welcome', 'landscape', and 'identity'.



A word cloud for 'Mobiles Core Capacity' with 'community' as the largest word. Other prominent words include 'safety', 'collaborative', 'family', and 'pride'. Smaller words include 'flexible', 'students', 'open', 'neighborhoods', 'welcoming', 'future', 'diversity', 'identity', 'belonging', 'teams', 'place', 'teachers', and 'nature'.

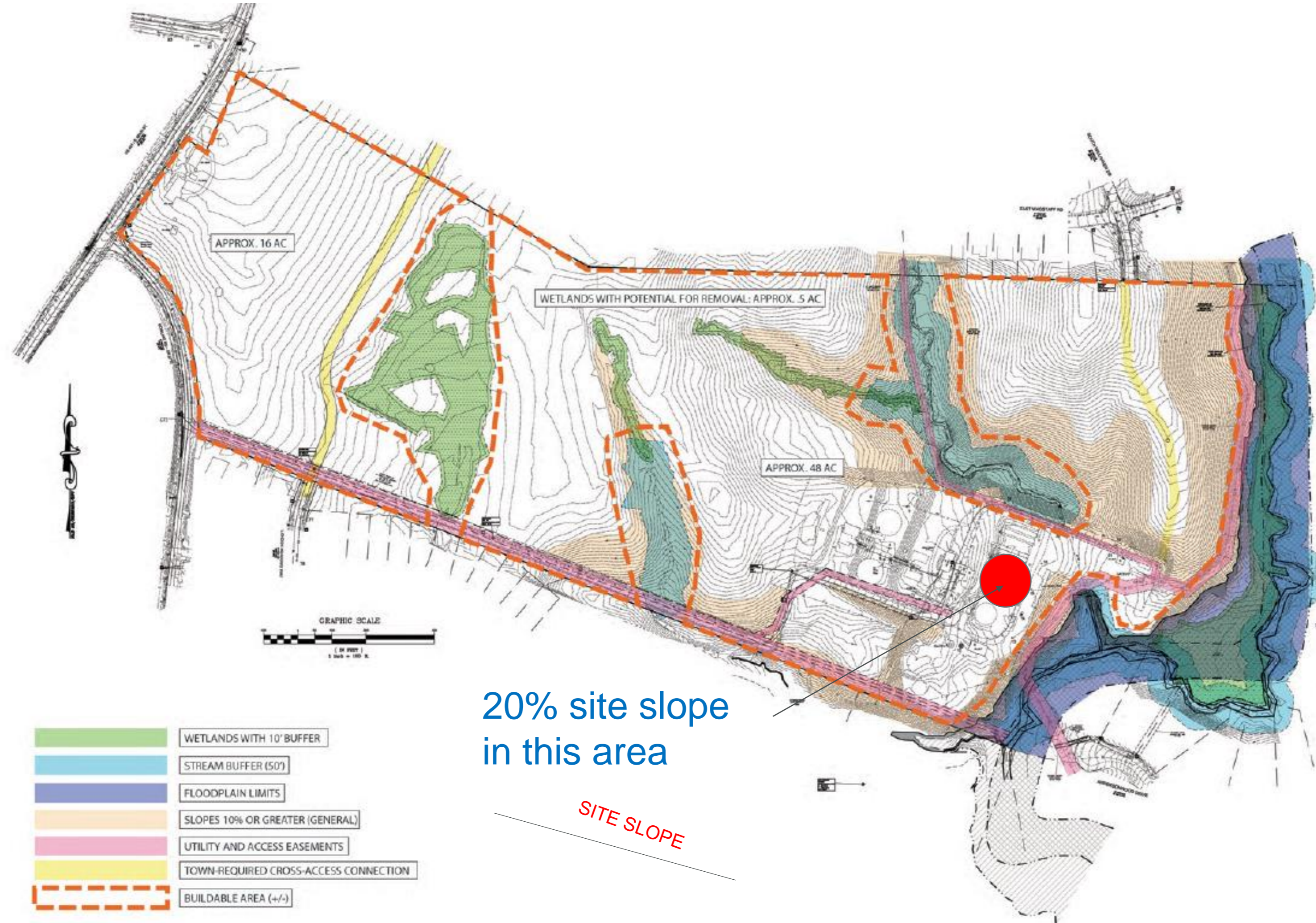
OPTIMAL BALANCE

- Grade-level structure - sense of community both within their respective areas and as part of a larger whole can be compromised if students are split between the building and mobiles
- Sharing of collaborative spaces – small group study and collaboration areas are not available to students in mobiles
- Direct access to all areas of the school building is compromised with mobiles

COST

- Substantial cost savings for in-building construction vs transporting mobiles to and from site and providing infrastructure, along with any site accommodations required.

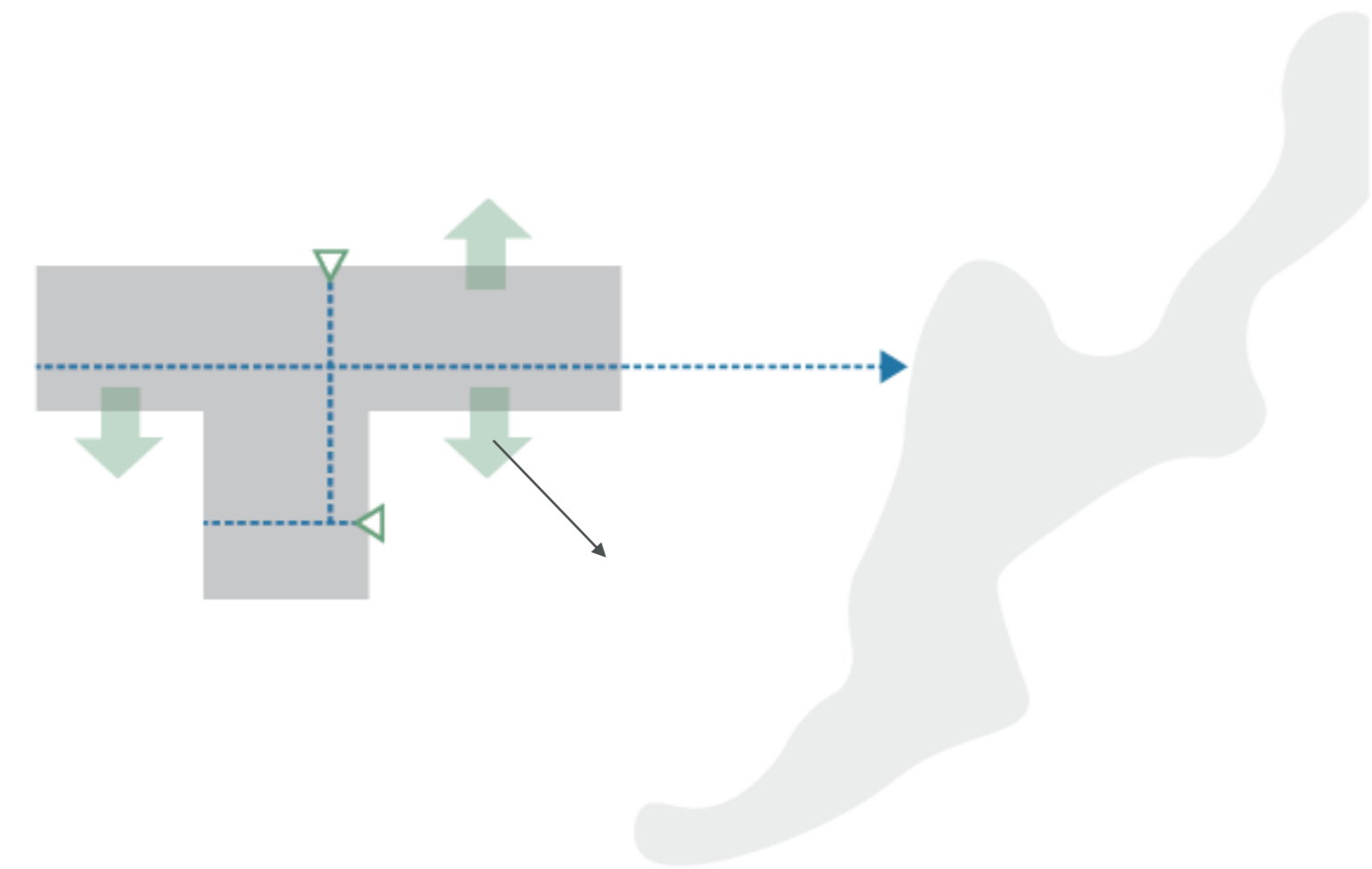
M15 FVMS – CASE STUDY | SITE



SITE ANALYSIS

Area shown in red is where mobiles could be installed on the site. This location has a downward slope toward Kenneth Creek and is on top of the former Town of Fuquay-Varina Wastewater Treatment Plant site.

M15 FVMS | MASTER PLAN



BUILDING PART | CONNECTION TO SITE

Clear and seamless relationship between interior and exterior instructional / learning spaces.

M15 FVMS | SITE PLAN WITH MOBILES

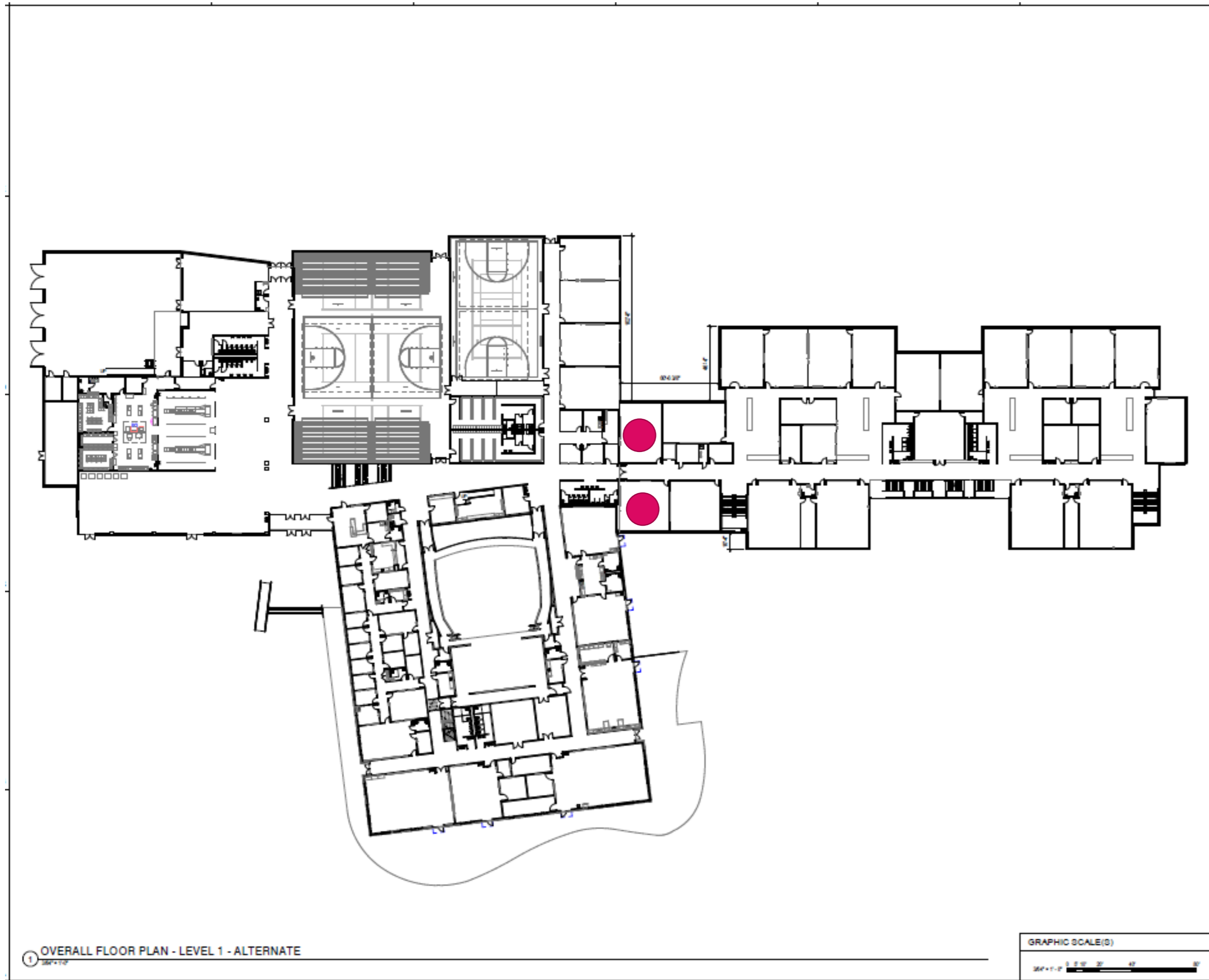


- Substantial disruption of seamless transition between interior and exterior instructional / learning spaces
- Interruption of views to natural site features from classroom wing.
- Additional site remediation required to accommodate mobiles on the significantly sloping site.
- Estimated cost of retaining wall: \$550k - \$750k.

M15 FVMS | INDOOR – OUTDOOR RELATIONSHIPS



M15 FVMS | PROVIDING CORE CAPACITY WITHIN THE BUILDING



Six total additional instructional spaces. (Five general classrooms and one science classroom distributed across three floors.)
Can create an additional team on one floor.

Benefits:

- Integration with other classrooms.
- Can be used as much-needed flex space (electives, pull-out space, temporary additional classroom space, collaboration) until core capacity is reached.

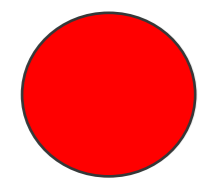
COST COMPARISON OF NEW CONSTRUCTION + RELOCATED MOBILES

	CONVENTIONAL CONSTRUCTION	RELOCATED MOBILE CLASSROOMS
DIRECT TRADE COSTS	\$1,769,126	\$3,472,334
INDIRECT COSTS	\$684,656	\$932,785
TOTAL	\$2,453,782	\$4,405,119

RECENT HISTORY OF COSTS FOR MOBILES

LARGE MODULAR CLASSROOM COSTS

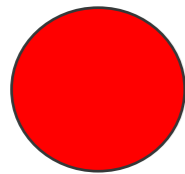
Year	Modular Building Size	From	To	Construction Cost	Design Cost
2014	8-classrm Modular	Garner HS	Cedar Fork ES	\$470,621	\$28,000
2017	6-classrm Modular	Lincoln Heights ES	Scotts Ridge ES	\$685,146	\$50,000
2019	8-classrm Modular	Fuquay-Varina HS	Apex Friendship HS	\$796,800	\$65,340
2021	7-classrm Modular	Neuse River MS	Northwoods ES	\$1,477,750	\$180,100



SUMMARY OF ADDED COSTS TO THE PROJECT FOR MOBILES

COST TO MOVE FOUR SINGLE MOBILE CLASSROOMS

Year	4 Single Classroom Mobiles	From	To	Const. Cost	Design Cost
2018	4 Mobile Classrooms	Rock Quarry Rd Storage Area	Beaverdam ES	\$476,020	\$69,000
2021	4 Mobile Classrooms	Leesville ES	Alston Ridge ES	\$637,567	\$80,200



RECENT HISTORY OF ADDING MOBILES TO NEW CONSTRUCTION

2018

4 mobiles to Beaverdam ES (new construction 2016)

6 mobiles to Oakview ES (new construction 2016)

4 mobiles to Rogers Lane ES (new construction 2017)

6-classroom mobile to Scotts Ridge ES (new construction 2016)

2019

6-classroom mobile to Apex Friendship HS (new construction 2015)

2021

4 mobiles to Buckhorn Creek ES (new construction 2018)

SUMMARY OF IMPACT TO NEW PROJECTS RE: MOBILES

Benefits of all classrooms in building:

- Cost savings vs adding mobiles post construction
- More area available for outdoor learning
- All students have same access to collaborative spaces
- Grade-level Teams can stay contiguous
- Faster and easier class change
- Building and site aesthetics maintained
- Sustainability

Drawbacks of mobiles on new sites:

- Time and Cost of transporting mobiles to and from site
- Additional Infrastructure
- Additional Site Space (uses areas which could be available for outdoor educational purposes)
- Additional Site Costs (could include retaining walls, additional ADA parking, etc)
- Maintenance on mobiles
- Additional costs of designers and contractors post building construction along with escalating costs of mobilization
- Disruption of school operations within 2-5 years after school opening



Questions Comments Feedback