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**Engineering & Related Services**

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DESIGNING SOLUTIONS. ]

**Warrior Run School District:**

## **Summary of Elementary School Site Feasibility Study**

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**April 13, 2015**



# Introduction

- HRG Project Team
- Scope of Elementary School Site Feasibility Study
- Alternatives Evaluated:
  - Option 1: Renovate & Expand Existing Watsontown Elementary School
  - Option 2: Renovate & Expand Existing Turbotville Elementary School
  - Option 3: Construct New Elementary School Adjacent to Middle/High School Campus
  - Option 4: Construct New Elementary School at Site TBD
- Approach

# Option 1: Renovate & Expand Existing Watson Elementary School

## Pro's

- Schematic Designs Appear Feasible;
- Site Provides the Ability to Retrofit;
- Geology is Favorable for Site Design;
- Site Does not Require Bulk Earth Excavation;
- Only Minor Sanitary Sewer/Domestic Water Service Upgrades Needed;
  - No Planning & Permitting Required; and
- Adequate Sight Distance at Existing Access Drives.

## Con's

- Need to Relocate Existing Infrastructure;
- No Ability to Isolate Construction Activities;
  - Safety and Security Concern;
- No Ability to Isolate Construction Access;
  - Safety & Security Concern;
- Potential Inability to Connect Proposed Stormwater Infrastructure to Adjacent Municipal Facilities;
- Exportation of Fill Material may be Required;
- Temporary Construction Easements may be Required;
- No Ability to Permit a Third Access Drive to State Route 405;
- Providing Adequate Circulation for the Increase in Population will be Difficult;
- High Potential that Off-Site Traffic Infrastructure Improvements will be Necessary;
- Limited Area for Additional Parking Spaces; and
- No Ability for Future Expansion.



Option 1(C) – Watson Elementary School

# Option 2: Renovate & Expand Existing Turbotville Elementary School

- **Pro's**
  - Schematic Designs Appear Feasible;
  - Site Provides the Ability to Retrofit;
  - Site Does not Require Bulk Earth Excavation;
  - Only Minor Sanitary Sewer/Domestic Water Service Upgrades Needed;
    - No Planning & Permitting Required;
  - Adequate Sight Distance at Existing Access Drives; and
  - Ability to Permit Additional Access Drives.
- **Con's**
  - Geology is Unfavorable for Site Design;
  - Will Need to Relocate Existing Infrastructure;
  - No Ability to Isolate Construction Activities ;
    - Safety and Security Concern;
  - No Ability to Isolate Construction Access;
    - Safety & Security Concern;
  - Potential Wetland Impacts;
  - Potential Inability to Connect Proposed Stormwater Infrastructure to Adjacent Municipal Facilities;
  - Exportation of Fill Material may be Required;
  - Temporary Construction Easements may be Required;
  - Ability to Provide Adequate Circulation for the Increase in Population will be Difficult;
  - High Potential that Off-site Traffic Infrastructure Improvements will be Necessary;
  - Limited Area for Additional Parking Spaces; and
  - No Ability for Future Expansion.



Option 2: Turbotville Elementary School



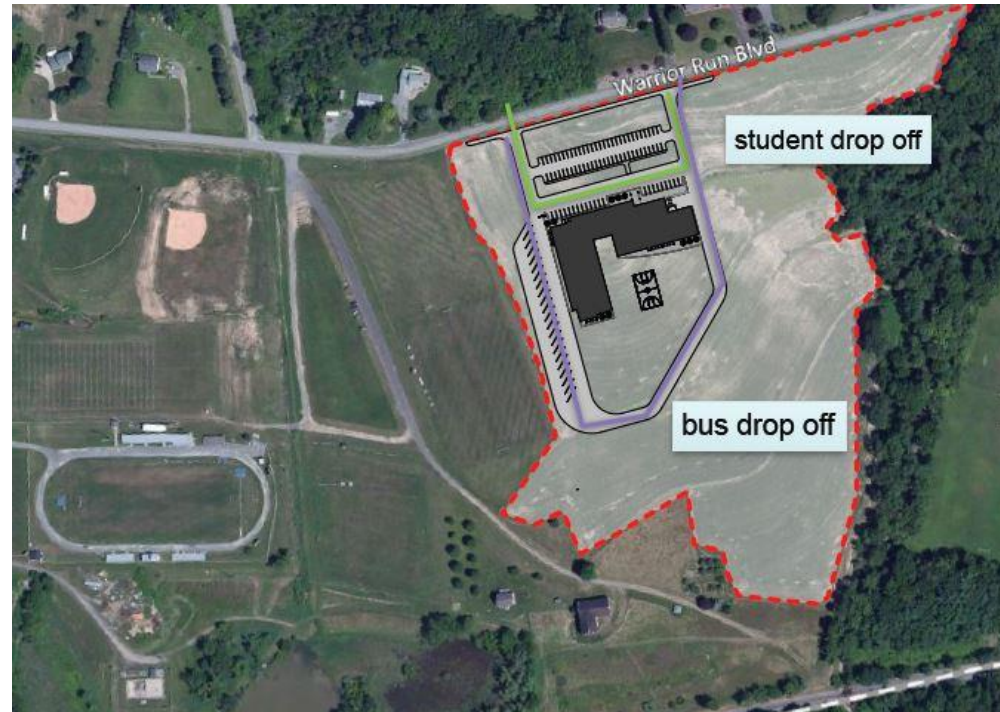
# Option 3: Construct a New Elementary School Adjacent to Middle/High School Campus

## Pro's

- Schematic Designs Appear Feasible;
- Geology is Favorable for Site Design;
- No Need for Clearing and Grubbing;
- Site can Isolate Construction Activities;
- Site can Isolate Construction Access Drives;
- No Need to Relocate Student Population and Staff;
- Site is Large Enough to Provide Adequate Circulation for the Population Demand;
- Site is Large Enough to Balance Earthwork;
- No Adjacent Municipal Stormwater Infrastructure Modifications Necessary;
- No Need to remove Existing Infrastructure;
- Additional Access Drives can be permitted;
- Adequate Site Distance may be Achieved if the Access Drives are Placed at Strategic Locations;
- No Need for Temporary Construction Easements; and
- Provides Ability for Future Campus Expansion.

## Con's

- Site Provides No Retrofit Advantage;
- Bulk Earth Excavation will be Required;
- Sanitary Sewer Upgrades Necessary;
  - Planning and Permitting Required;
- There is the High Potential that Off-Site Traffic Infrastructure Improvements will be Necessary; and
- Potential Zoning Variance Required.



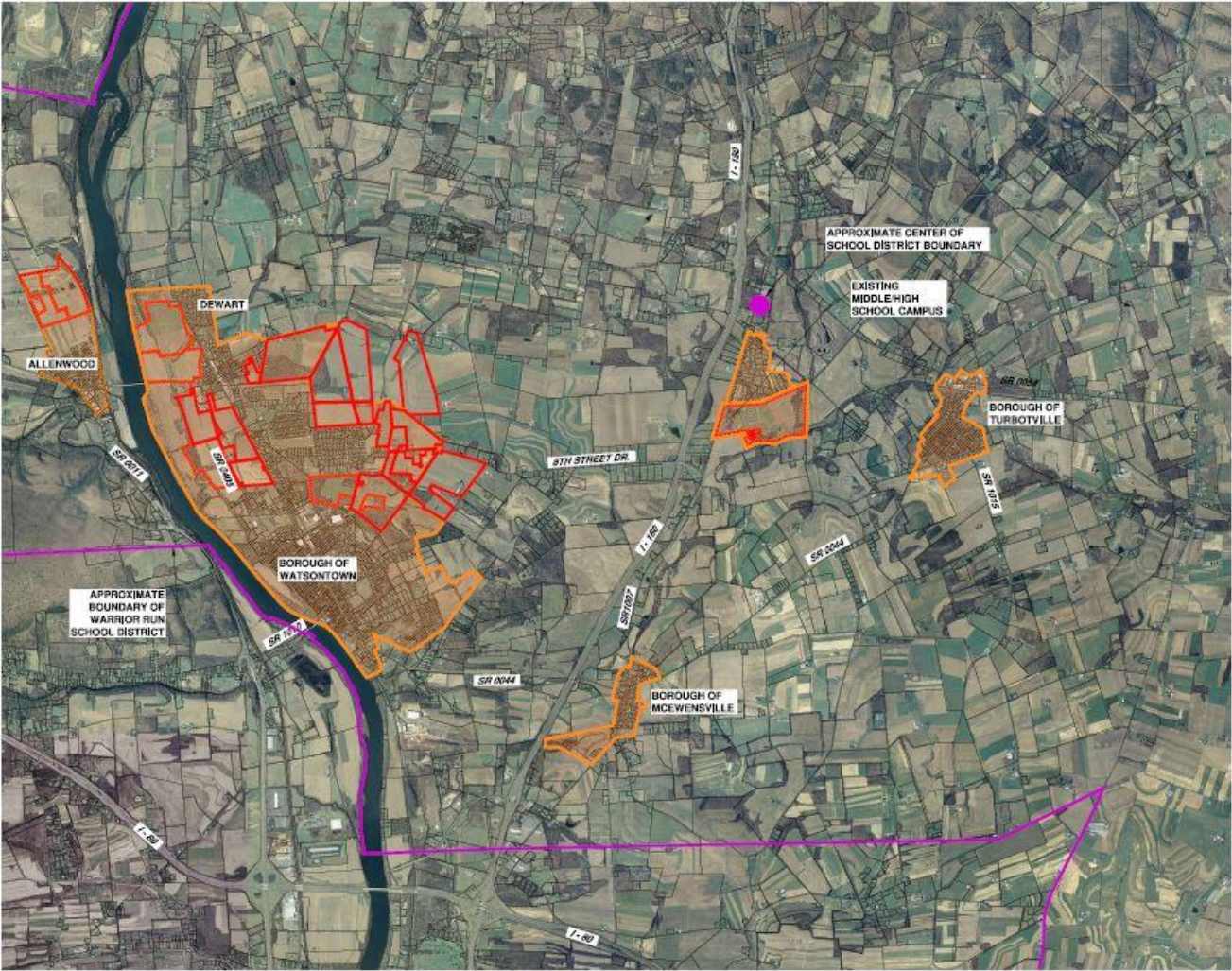
Option 3: New Elementary School at Campus Site

# Options 1-3: Summary of Site Feasibility

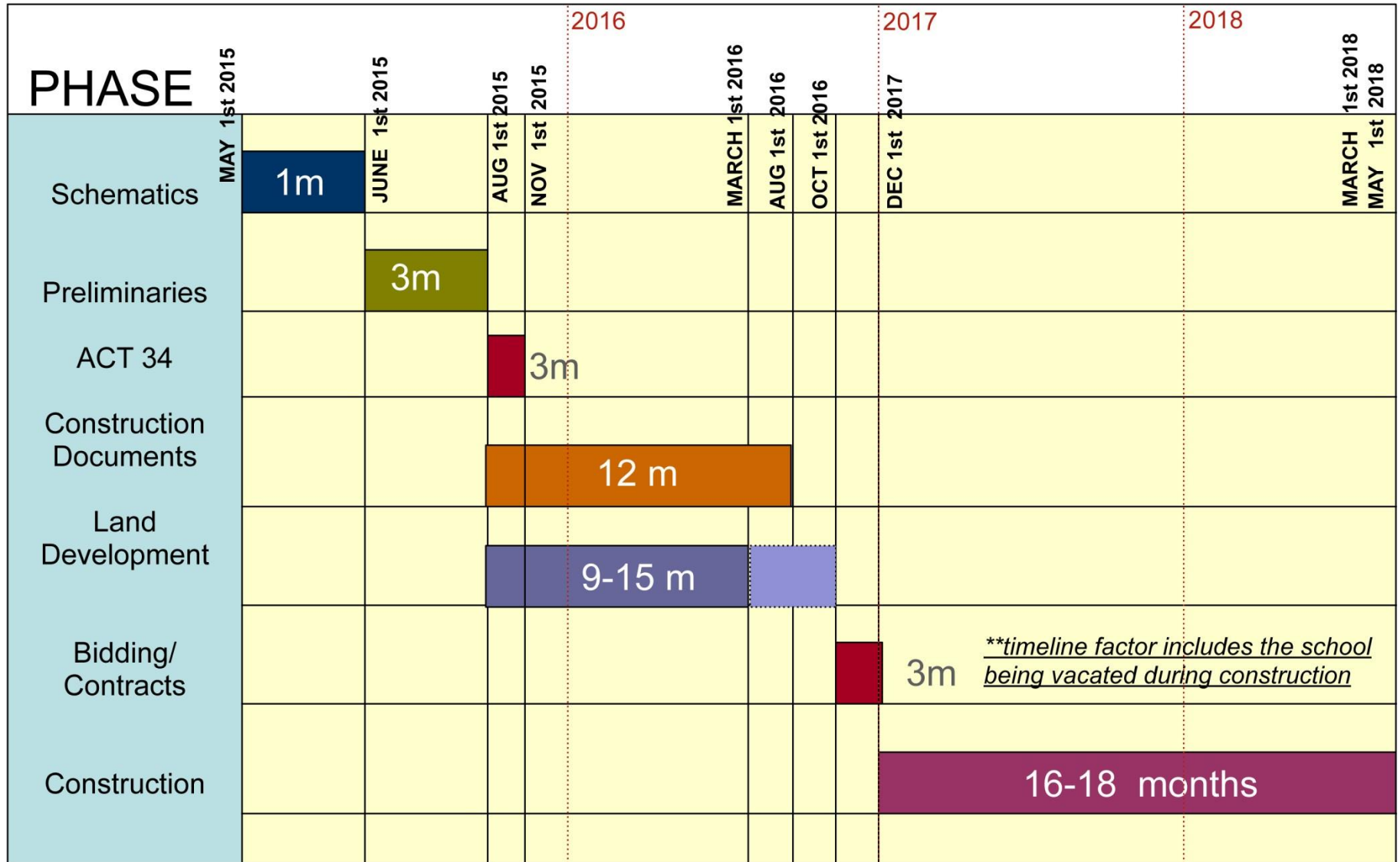
Review Categories		Summarized Site Feasibility Results		
		Option 1	Option 2	Option 3
		Renovate & Expand Watson <span>town</span> Elementary School	Renovate & Expand Turbotville Elementary School	New Elementary School Adjacent to the Middle/High School Campus
Schematic Design	Topography/Geology	Favorable	Neutral	Neutral
	Hydrology/Stormwater	Favorable	Favorable	Neutral
	Constructability	Not Favorable	Not Favorable	Favorable
Site Access	Access Drives/Circulation	Neutral, TIS Required	Neutral, TIS Required	Favorable, TIS Required
	Sight Distance	Favorable	Favorable	Neutral
	Studies/Approval Requirements/Permitting	Neutral	Neutral	Neutral
	Potential Improvements	Neutral, As Required by TIS	Neutral, As Required by TIS	Neutral, As Required by TIS
Utilities	Sanitary Sewer	Favorable, ~(\$120,000) PW Cost Savings	Not Favorable, ~\$140,000 PW Cost Increase	Not Favorable, Upgrade Necessary, ~\$450,000 PW Cost Increase
	Water	Neutral, 65-70 psi Available & Minor Upgrades necessary ~\$9,700 PW Cost Increase	Not Favorable, 35 psi Available, ~\$85,000 PW Cost Increase	Not Favorable, 50 psi Available, ~\$115,000 PW Cost Increase
	Electric & Gas	Favorable, ~\$(399,000) PW Cost Savings	Favorable, ~\$(824,000) PW Cost Savings	Favorable, ~\$(1,057,000) PW Cost Savings
	Telecommunications	Neutral	Neutral	Neutral
	Overall 20-Year Present Worth Utility Cost Savings	Favorable, ~\$(509,000) PW Cost Savings	Favorable, ~\$(599,000) PW Cost Savings	Favorable, ~\$(492,000) PW Cost Savings
Ordinances	Zoning Ordinance	Favorable	Favorable	Neutral, Zoning Variance Required
	SALDO	Neutral	Neutral	Neutral
Site Budget		Neutral	Neutral	Neutral
Land Development Timeline		Neutral, 9-15 Months for Approval	Neutral, 9-15 Months for Approval	Not Favorable, 18-24 Months for Approval



# Option 4: Construct a New Elementary School, Location TBD

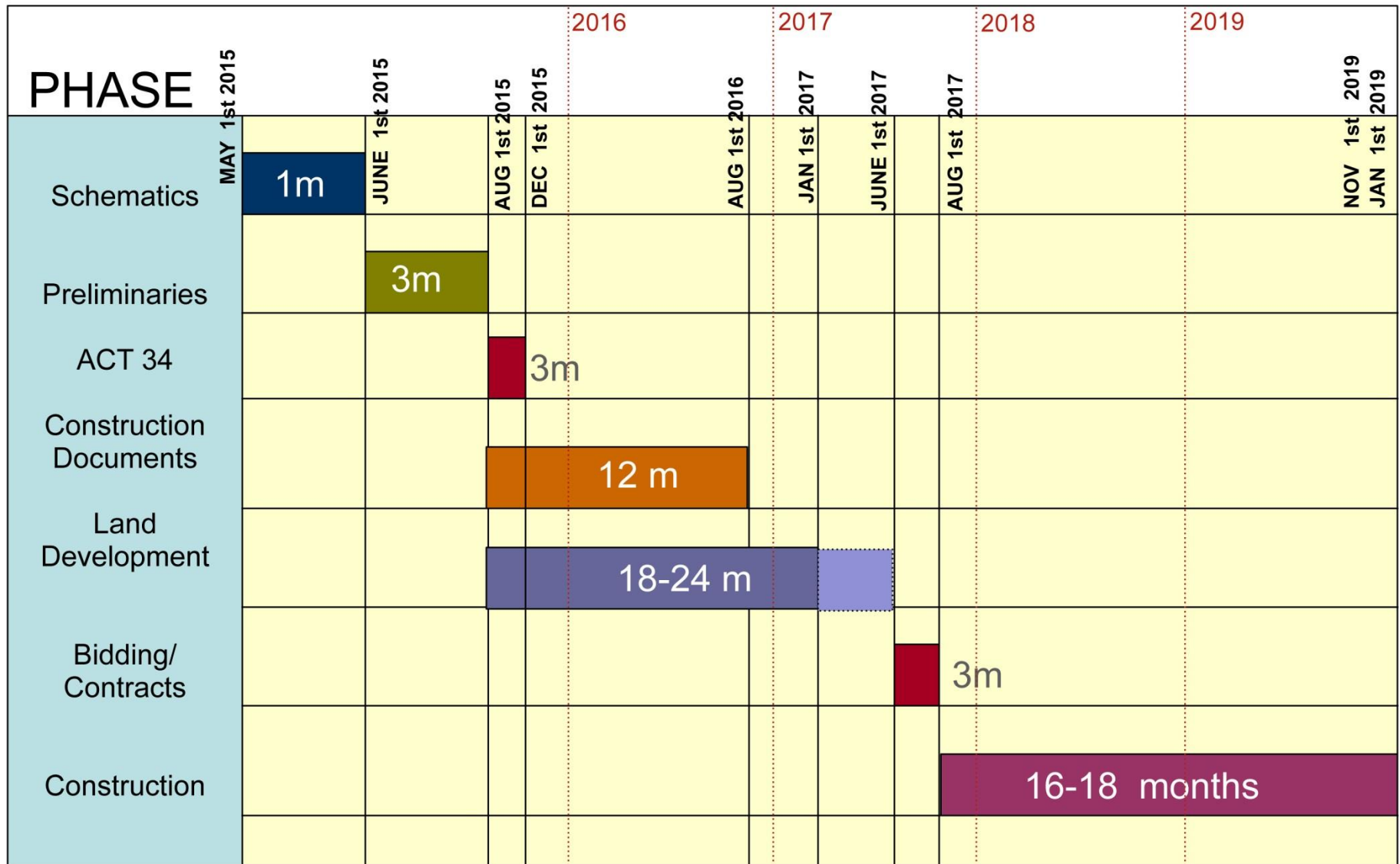


# Project Timeline - renovation





# Project Timeline - new construction



## COST SAVINGS OF CONSOLIDATION 2 ELEMENTARY'S TO 1-

### Option- 1C Major -WATSONTOWN

Energy savings - \$37,793  
w rate reduction -\$73,783  
Water/sewer -\$9,618  
Busing Savings - \$0\*  
Staffing Savings - \$724,000

TOTAL - \$771,411- \$807,401

### Option- Option 3- CAMPUS

Energy savings - \$79,531  
Water/sewer - \$3,089  
Busing Savings - \$10,000\*  
Staffing Savings- \$724,000

TOTAL - \$816,620

### Option- Option 4- NEAR CAMPUS

Energy savings - \$79,531  
Water/sewer -\$9,618  
Busing Savings - \$5,000  
Staffing Savings- \$724,000

TOTAL - \$818,149

- energy savings shows w & wo elec. rate change with borough
- all energy cost include Air Conditioning
- \* estimate- conservative figures
- \* If adjustments in school start times Option 3/4 could yield more savings
- \* fine tune of hourly rates of each driver vrs. drive time reduction
- \* potential increased ride times for options 1C maj for Turbotville elem. students
- \* potential slightly decreased ride times for option 3 for all elementary students

# Summary of Elementary Options:

OPTION #1C MAJOR Warrior run elementary at Watsontown location, concentrated class sizes adding minor additions to include all programs -

19.6 to 21.1 million

*\*requires Modular unit rental or purchase- vacate building - cost +/- \$300,000 additional students and teachers move into mods at christmas break- 1.5 years or at beginning of year - 2 yrs.*

OPTION #3 @ 62,759 SF shown -

New Warrior Run Elementary at Campus location- facility + site development -

18.1 to 20.1 million

*potential 9 months additional time to take occupancy compared to renovation.*