

OCTOBER 22, 2014

## NEEDHAM FACILITIES MASTER PLAN STUDY



Municipal Resources, Inc.



BOS

## **AGENDA: BOARD OF SELECTMEN + ALL BOARDS MEETING**

- Facilities Master Plan Work
  - Programming; Building and Site Assessments
  - Possible Sites: Review and Consideration
  - Option Development
- Development of Probable Costs
- Timelines
- Next Steps





## PROJECT SITES



## 5 PRIMARY CATEGORIES OF WORK

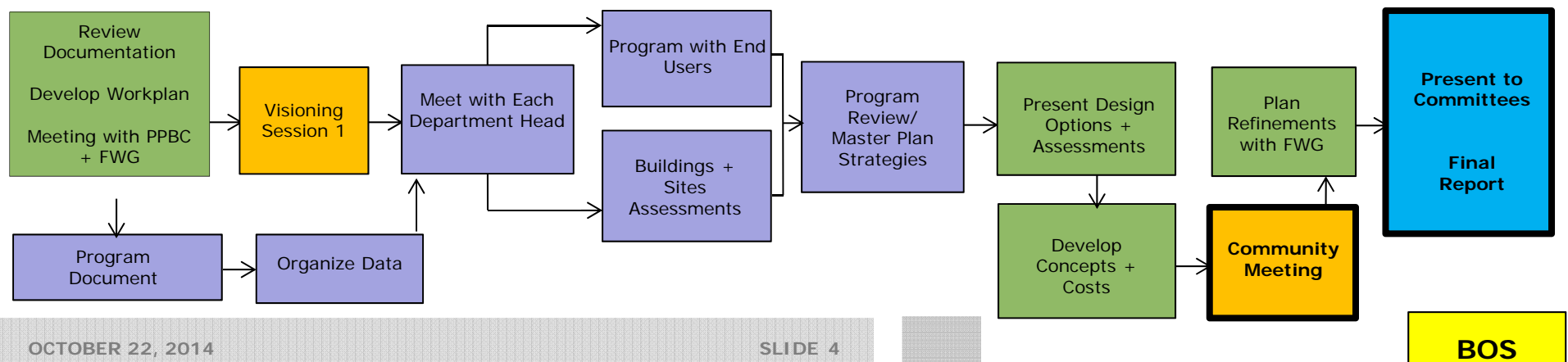
- **Fire + Police:** Public Safety Building (Police + Station #1); Fire Station #2
- **DPW:** 470 Dedham Ave – Vehicle storage and Maintenance; 486 Dedham Ave. – Former Water Pumping Station; Recycling and Transfer Station
- **Schools + Administration:** Hillside + Mitchell Elementary Schools; Pollard Middle School; Needham High School; Emery Grover Building; Daley Building; Nike Site
- **Park + Recreation:** Rosemary Pool and Building; Cricket Field Building; Community Center; Memorial Park Building
- **Ridge Hill Buildings**





**FACILITIES MASTER PLAN: PROCESS**

- Workplan + Visioning
- Programming, Site + Building Assessments + Master Plan Strategies
- Site and Criteria Matrix
- Option Development
- Development of Probable Costs
- Presentations to Boards + Community
- Final Report



**ALTERNATIVE SITES FOR BUILDING PROJECTS:** *Look at the best way of using land resources regardless of Jurisdictional Control*

- Matrices: Overall Options, Detail Site, Evaluation Criteria
  - Which sites are reasonable to explore
  - What are the general characteristics of the sites
  - What are the final criteria for assessing each site
- **How will Matrix influence or define Master Plan:**
  - Evaluation Criteria suggests that multiple sites can meet needs; how does matrix help when recommending best possible site for each program
  - Do land swaps, "Trading" Jurisdictional Control provide benefits to Community
  - If re-organization occurs, how does it affect neighborhood schools, emergency response, conversion of a passive recreation site, historical use of property, neighborhoods in general, operations of department, reuse of property
  - Ideal operations: can needs be met on one site, in the best possible location, in order to meet the request of each department



## PRELIMINARY MATRIX OF SITES

| <div>DRAFT</div> |   | PROJECTS IN MASTER PLAN  |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|------------------|---|--|-----------------|--------------------------------|---------------|---------------|---------------|---------------|--------------|--------------|------------------|-------------|-------------------------------|----------------|--------------------------|--------------------------|------------------------|------------------|--|
|                  |   | Police + Fire #1   | Fire Station #2 | DPW: 470 - 486 - RTS - Various | Hillside Perm | Hillside Temp | Mitchell Perm | Mitchell Temp | Pollard Perm | Pollard Temp | 6th Grade Center | High School | School /Admin at Emery Grover | Daley Building | Nike Site (New Program?) | Rosemary Pool + Building | Cricket Field Building | Community Center | Ridge Hill Bldgs + Site (New Program?) |
| POSSIBLE SITES   | Police + Fire #1 Site                           | ●  |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  | Fire #2 Site                                    |  | ●               |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  | Lester Hollis Public Works 470 Dedham Ave. Site |  |                 | ●                              |               |               |               |               |              |              |                  |             |                               | ?              |                          |                          |                        | ■                |  |
|                  | Former Water Pumping Station - 486 Dedham Site  |  |                 | ●                              |               |               |               |               |              |              |                  |             |                               | ?              |                          |                          |                        | ■                |  |
|                  | Public Service Admin Bldg.                      |  |                 | ●                              |               |               |               |               |              |              |                  |             | ■                             | ?              |                          |                          |                        |                  |  |
|                  | RTS - entire site                               |  |                 | ■                              |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  | Defazio Parking Lot                             |  |                 | ■                              | ●             | ■             |               | ■             |              | ■            | ■                |             |                               |                |                          |                          |                        | ■                |  |
|                  | Hillside Elementary Site                        |  |                 |                                | ●             |               |               |               |              |              |                  |             | ■                             |                |                          |                          |                        |                  |  |
|                  | Mitchell Elementary Site                        |  |                 |                                |               |               | ●             |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  | Pollard Middle School                           |  |                 |                                |               |               |               |               | ●            |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  | High Rock School                                |  |                 |                                | R             |               |               |               |              |              | ●                |             |                               |                |                          |                          |                        |                  |  |
|                  | High School                                     |  |                 |                                |               |               |               |               |              |              |                  | ●           |                               |                |                          |                          |                        |                  |  |
|                  | Public Schools Admin - Emery Grover Building    |  |                 |                                |               |               |               |               |              |              |                  |             | ●                             |                | ?                        |                          |                        |                  |  |
|                  | Daley Building Site                             |  |                 |                                |               |               |               |               |              |              |                  |             |                               | ●              |                          |                          |                        |                  |  |
|                  | Ridge Hill Buildings/Site                       |  |                 |                                |               |               |               |               |              |              |                  |             | ■                             |                |                          |                          |                        | ■                | ●                                      |
|                  | Nike Site                                       |  |                 | ■                              |               |               |               |               |              |              |                  |             | ■                             |                | ●                        |                          |                        | ■                |  |
|                  | Rosemay Pool + Building Site                    |  |                 |                                |               |               |               |               |              |              |                  |             |                               |                | ?                        | ●                        |                        | ■                | ?                                      |
|                  | Cricket Field Building                          |  |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          | ●                      |                  |  |
|                  | Claxton Field Site                              |  |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  | Memorial Field Building                         |  |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        | ■                |  |
|                  | Greendale Ave Site                              |  |                 | ■                              |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        | ■                |  |
|                  | Additional land already acquired at PD/FD       | ●  |                 |                                |               |               |               |               |              |              |                  |             | ■                             |                |                          |                          |                        |                  |  |
|                  | Harris, Great Plain Aves. Site                  |  |                 |                                |               |               |               |               |              |              |                  |             | ■                             |                |                          |                          |                        |                  |  |
|                  | Town Hall                                       |  |                 |                                |               |               |               |               |              |              |                  |             | ?                             |                |                          |                          |                        |                  |  |
|                  | Town Forest                                     |  |                 | ■                              |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  | Future Aquired Land/Other                       |  |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
| ●                |   | Primary location   |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
| ●                |   | Primary Location - No change   |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
| R                |   | Repurposed Site  |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
|                  |   | Sites noted during visioning session or through prgramming conversations |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |
| ■                |   | Possible new sites   |                 |                                |               |               |               |               |              |              |                  |             |                               |                |                          |                          |                        |                  |  |

## CRITERIA MATRIX

| CATEGORY                                      | Actual Value | Max Value  | COMMENTS  |
|---|--------------|------------|---|
| <b>1. LOCATION</b>                            | <b>0</b>     | <b>20</b>  |   |
| 1.1 Geographic location                       |              | 5          | Central to mission; moderate changes to operations; requires change to existing operations  |
| 1.2 Neighborhood                              |              | 5          | Minimal impact on residential neighborhood and community; moderate impact; significant impact   |
| 1.3 Current Use                               |              | 4          | Continued use; compatible use; currently undeveloped and used by others (recreational use open space)   |
| 1.4 Zoning By-laws                            |              | 3          | Allowed - complies with use, dimensional requirements and performance standards; Use allowed with moderate approval; Use will be difficult or costly to win approval (due to constraints such as historic preservation)                         |
| 1.5 Public Facade/Screening                   |              | 3          | No private owner abutters, nothing special required; Abutters with adequate area for screening; Abutters with inadequate area for screening   |
| <b>2. ACCESSIBILITY</b>                       | <b>0</b>     | <b>10</b>  |   |
| 2.1 Site Access                               |              | 5          | Ease of access through existing entry points and roadways; some impact on entry or roadway; significant impact including limited emergency access   |
| 2.2 Traffic                                   |              | 5          | No impact on traffic patterns; some impact; significant impact  |
| <b>3. SITE FEATURES</b>                       | <b>0</b>     | <b>20</b>  |   |
| 3.1 Adequate site size                        |              | 6          | Optimum size - allows for expansion; good size but no expansion capability; undersized for full program   |
| 3.2 Existing Structures/Historic Preservation |              | 4          | Existing structures will not impede development ; some impact on intended use; full impact  |
| 3.3 Operations - ease of use                  |              | 4          | Staff and Visitors use of site: Site easily split; site requires some overlap of uses; site uses overlap negatively   |
| 3.4 Flexibility/Circulation                   |              | 6          | Site can be reconfigured as needs change; site has limited reconfiguration options; site has no flexibility   |
| <b>4. ENVIRONMENTAL</b>                       | <b>0</b>     | <b>15</b>  |   |
| 4.1 Wetlands                                  |              | 4          | No wetlands or all work will occur outside of ConCom jurisdiction; indirect impact (work in buffer zones); direct impact on existing wetlands, flood plains, endangered species   |
| 4.2 Stormwater Management                     |              | 5          | Reasonable cost for stormwater management; moderate costs; excessive costs  |
| 4.3 Conservation/DEP Permitting               |              | 4          | No work within designated vernal pool and/or rare species habitat; normal permitting process; work within vernal pool and/or rare species habitat   |
| 4.4 Existing Tree Cover                       |              | 2          | No major reduction; minimum to moderate clearing; major clearing  |
| <b>5. SITE DEVELOPMENT</b>                    | <b>0</b>     | <b>20</b>  |   |
| 5.1 Utilities                                 |              | 4          | Availability of gas, electricity, water, municipal sewage, storm drainage; some utilities need to be brought on site; most utilities need to be brought on site   |
| 5.2 Topography                                |              | 4          | Slopes range: % to %: appropriate for buildings parking - full access; some revisions to meet needs; significant access issues  |
| 5.3 Soils                                     |              | 4          | Adequate for bearing capacity; non-standard foundations required  |
| 5.4 Hazardous Materials                       |              | 4          | Free of known contaminants; testing required; site history of contaminants  |
| 5.5 Costs of Development                      |              | 4          | Reasonable costs for development; moderate costs; excessive costs (cut/fill, clearing, blasting, reno vs new)   |
| <b>6. AVAILABILITY</b>                        | <b>0</b>     | <b>15</b>  |   |
| 6.1 Jurisdictional Control                    |              | 5          | Jurisdictional control remains same; trade of use acceptable and benefits both; highest and best use displaces traditional use in a less positive manner; change of jurisdictional control or use requires state legislative or agency approval |
| 6.2 Displacement Required                     |              | 5          | Cost of relocation minimal; moderate; excessive   |
| 6.3 Acquisition                               |              | 5          | Cost, availability, time schedule, eminent domain: Reasonable costs, available for sale at this time; Costs high but available to meet schedule; Cost high with eminent domain  |
| <b>TOTAL</b>                                  | <b>0</b>     | <b>100</b> |   |
| <b>7. SPECIAL CONSIDERATIONS</b>              |              |            |   |
| 7.1 Temporary buildings                       |              |            | Costs to temporarily house intended use minimal; moderate; excessive  |
| 7.2 Permanent changes to use                  |              |            | Change in use relatively simple; requires return to state for review, redistricting; loss of traditional use  |
| 7.3 Temporary use of site                     |              |            | Additions benefit traditional use; additions reduce traditional use; temporary elimination of traditional use   |
| 7.4 Time Schedule                             |              |            | Impact of Delay   |



## DEVELOPMENT OF PROBABLE COSTS

- **Current Costs**

- Costs are shown in 2014 dollars
  - Buildings: estimated on a square foot basis
  - Sites: estimated as a percentage of construction
  - Premium costs: items specified as unique to the site or program such as specialty materials, site improvements or allowances for masonry construction or green roofs
  - Total Project Cost: Construction + 25% Soft Costs + 10% Project Contingency

- **Escalated Costs**

- Costs are projected for 10 years
- Costs projections are based on Total Project Costs
- Escalation: 6% first two years, 3.8% all remaining years

# NEEDHAM FACILITIES MASTER PLAN STUDY

## PROBABLE COSTS - MATRIX OF SITES

| Current Costs (2014 dollars)                   |  |        |                   |       |  | 10 year escalated costs - (6% per year for 2015 & 2016, 3.8% average per year 2017 - 2025) |              |              |              |              |              |              |              |              |              |              |              |
|--|--|--------|-------------------|-------|--|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Item #   | Project  | SF     | Construction Cost | \$/SF | Total Project Cost<br>Includes construction +<br>25% soft costs + 10%<br>project contingency | \$/SF  | 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
| SCHOOL OPTIONS                                 |  |        |                   |       |  |  |              |              |              |              |              |              |              |              |              |              |              |
| 1  | TEMPORARY SCHOOL AT DEFAZIO PARK (9-18-14 updated D&W costs)   | 56,296 | \$12,766,598      | \$227 | \$17,234,908   | \$306  | \$18,269,002 | \$19,365,142 | \$20,101,017 | \$20,864,856 | \$21,657,721 | \$22,480,714 | \$23,334,981 | \$24,221,710 | \$25,142,135 | \$26,097,536 | \$27,089,242 |
| 2  | HILLSIDE REBUILD (9-18-14 updated D&W costs)   | 80,650 | \$30,370,400      | \$377 | \$43,687,000   | \$542  | \$46,308,220 | \$49,086,713 | \$50,952,008 | \$52,888,184 | \$54,897,935 | \$56,984,057 | \$59,149,451 | \$61,397,130 | \$63,730,221 | \$66,151,969 | \$68,665,744 |
| 3  | PERMANENT SCHOOL AT DEFAZIO PARK (9-18-14 updated D&W costs)   | 83,200 | \$31,301,000      | \$376 | \$48,003,000   | \$577  | \$50,883,180 | \$53,936,171 | \$55,985,745 | \$58,113,203 | \$60,321,505 | \$62,613,722 | \$64,993,043 | \$67,462,779 | \$70,026,365 | \$72,687,367 | \$75,449,487 |
| 4  | HIGH ROCK RENOVATIONS  | 7,000  | \$2,100,000       | \$300 | \$2,835,000  | \$405  | \$3,005,100  | \$3,185,406  | \$3,306,451  | \$3,432,096  | \$3,562,516  | \$3,697,892  | \$3,838,412  | \$3,984,272  | \$4,135,674  | \$4,292,830  | \$4,455,958  |
| 5  | HIGH SCHOOL RENOVATIONS AND MODULARS (6-4-14 cost provided by town)                                      | 8,062  | \$3,453,220       | \$428 | \$4,144,964  | \$514  | \$4,393,662  | \$4,657,282  | \$4,834,259  | \$5,017,961  | \$5,208,644  | \$5,406,572  | \$5,612,022  | \$5,825,279  | \$6,046,640  | \$6,276,412  | \$6,514,916  |
| 6  | MITCHELL REBUILD (9-18-14 updated D&W costs)   | 82,227 | \$30,244,640      | \$368 | \$43,550,000   | \$530  | \$46,163,000 | \$48,932,780 | \$50,792,226 | \$52,722,331 | \$54,725,780 | \$56,805,360 | \$58,964,564 | \$61,204,595 | \$63,530,370 | \$65,944,524 | \$68,450,416 |
| 7  | POLLARD ADDITION AND RENOVATIONS   |        | \$21,650,570      |       | \$29,228,270   |  | \$30,981,966 | \$32,840,884 | \$34,088,838 | \$35,384,214 | \$36,728,814 | \$38,124,509 | \$39,573,240 | \$41,077,023 | \$42,637,950 | \$44,258,192 | \$45,940,003 |
| 8  | SCHOOL ADMIN: RELOCATION TO PSAB (includes connector, water pump meeting room & site)                    | 25,277 | \$2,166,850       | \$86  | \$2,925,248  | \$116  | \$3,100,763  | \$3,286,809  | \$3,411,708  | \$3,541,353  | \$3,675,924  | \$3,815,609  | \$3,960,602  | \$4,111,105  | \$4,267,327  | \$4,429,485  | \$4,597,805  |
| 9  | SCHOOL ADMIN: RELOCATION TO PSAB WITH ADDED PARKING (includes connector, water pump meeting room & site) | 25,277 | \$3,978,350       | \$157 | \$5,370,773  | \$212  | \$5,693,019  | \$6,034,600  | \$6,263,915  | \$6,501,944  | \$6,749,018  | \$7,005,481  | \$7,271,809  | \$7,548,013  | \$7,834,837  | \$8,132,561  | \$8,441,598  |
| 10   | SCHOOL ADMIN: RENOVATION AT EMERY GROVER   | 21,235 | \$7,920,000       | \$373 | \$10,692,000   | \$504  | \$11,333,520 | \$12,013,531 | \$12,470,045 | \$12,943,907 | \$13,435,775 | \$13,946,334 | \$14,476,119 | \$15,026,394 | \$15,597,397 | \$16,190,098 | \$16,805,322 |
| 11   | SCHOOL ADMIN: NEW AT NIKE SITE   | 20,000 | \$7,680,000       | \$384 | \$10,368,000   | \$518  | \$10,990,080 | \$11,649,485 | \$12,092,165 | \$12,551,677 | \$13,028,630 | \$13,523,718 | \$14,037,619 | \$14,571,049 | \$15,124,749 | \$15,699,489 | \$16,296,070 |
| 12   | SCHOOL ADMIN: NEW AT PD/FO OPTION 1  | 23,000 | \$7,590,000       | \$330 | \$10,246,500   | \$446  | \$10,861,290 | \$11,512,967 | \$11,950,460 | \$12,407,777 | \$12,875,951 | \$13,365,237 | \$13,873,116 | \$14,400,294 | \$14,947,505 | \$15,515,510 | \$16,105,099 |
| 13   | SCHOOL ADMIN: NEW AT PD/FO OPTION 2  | 20,800 | \$6,864,000       | \$330 | \$9,266,400  | \$446  | \$9,822,384  | \$10,411,727 | \$10,807,373 | \$11,218,053 | \$11,644,339 | \$12,086,824 | \$12,546,123 | \$13,022,876 | \$13,517,745 | \$14,031,419 | \$14,564,613 |
| DPW OPTIONS                                    |  |        |                   |       |  |  |              |              |              |              |              |              |              |              |              |              |              |
| 14   | DPW AT PARCEL 74 / GREENDALE AVE   | 92,442 | \$30,591,734      | \$331 | \$41,298,841   | \$447  | \$43,776,771 | \$46,403,377 | \$48,166,705 | \$49,970,040 | \$51,806,928 | \$53,680,011 | \$55,591,033 | \$58,040,842 | \$60,246,394 | \$62,535,757 | \$64,912,116 |
| 15   | RTS RENOVATIONS - SITE IMPROVEMENTS  | 4,320  | \$1,623,000       | \$376 | \$2,191,050  | \$507  | \$2,322,513  | \$2,461,864  | \$2,555,415  | \$2,671,111  | \$2,753,317  | \$2,857,943  | \$2,966,545  | \$3,079,274  | \$3,196,286  | \$3,317,745  | \$3,443,819  |
| 16   | DPW AT RTS OPTION 4  | 91,229 | \$30,290,484      | \$332 | \$40,892,153   | \$448  | \$43,345,682 | \$45,946,423 | \$47,692,387 | \$49,504,111 | \$51,385,877 | \$53,338,540 | \$55,365,405 | \$57,469,290 | \$59,653,123 | \$61,919,942 | \$64,272,900 |
| 17   | DPW TOWN FOREST OPTION   | 89,831 | \$29,483,696      | \$328 | \$39,802,990   | \$443  | \$42,191,169 | \$44,722,639 | \$46,422,099 | \$48,186,139 | \$50,017,212 | \$51,917,866 | \$53,890,745 | \$55,938,593 | \$58,064,260 | \$60,270,702 | \$62,560,989 |
| 18   | DPW REBUILD AT DEDHAM AVE - FULL PROGRAM   | 85,332 | \$24,589,587      | \$288 | \$33,195,942   | \$389  | \$35,181,111 | \$37,298,961 | \$38,716,322 | \$40,187,542 | \$41,714,669 | \$43,299,826 | \$44,945,219 | \$46,653,137 | \$48,425,956 | \$50,266,142 | \$52,176,255 |
| 19   | DPW REBUILD AT DEDHAM AVE - PARTIAL PROGRAM  | 61,034 | \$19,694,235      | \$323 | \$26,587,217   | \$436  | \$28,182,000 | \$29,873,397 | \$31,008,586 | \$32,186,912 | \$33,410,015 | \$34,679,596 | \$35,997,421 | \$37,365,323 | \$38,785,205 | \$40,259,043 | \$41,788,887 |
| POLICE / FIRE / SCHOOL ADMIN / PARKING OPTIONS |  |        |                   |       |  |  |              |              |              |              |              |              |              |              |              |              |              |
| 20   | POLICE / FIRE OPTION 1 (School Admin cost with item 12 above)  | 53,238 | \$22,948,515      | \$431 | \$30,980,495   | \$582  | \$32,839,311 | \$34,809,685 | \$36,132,453 | \$37,505,486 | \$38,930,694 | \$40,410,060 | \$41,945,642 | \$43,539,576 | \$45,194,080 | \$46,911,455 | \$48,694,090 |
| 21   | POLICE / FIRE OPTION 2 + PARKING STRUCTURE (School Admin cost with item 13 above)                        | 50,875 | \$30,501,278      | \$600 | \$41,176,725   | \$809  | \$43,647,311 | \$46,266,169 | \$48,024,283 | \$49,849,206 | \$51,743,476 | \$53,709,728 | \$55,750,698 | \$57,869,225 | \$60,068,256 | \$62,350,850 | \$64,720,182 |
| 22   | POLICE / FIRE OPTION 3 STAND ALONE   | 51,604 | \$22,777,490      | \$432 | \$30,746,612   | \$583  | \$31,879,089 | \$33,791,834 | \$35,075,924 | \$36,408,809 | \$37,792,344 | \$39,228,453 | \$40,719,134 | \$42,266,461 | \$43,872,587 | \$45,539,745 | \$47,270,255 |
| 23   | POLICE / FIRE OPTION 4 RENO AND ADDITION   | 46,844 | \$14,457,078      | \$309 | \$19,555,443   | \$417  | \$20,688,078 | \$21,929,363 | \$22,762,679 | \$23,627,661 | \$24,525,512 | \$25,457,481 | \$26,424,865 | \$27,429,010 | \$28,471,312 | \$29,553,222 | \$30,676,244 |
| 24   | FIRE STATION #2 ADDITION / RENOVATION  |        | \$1,472,550       | \$143 | \$1,615,443  |  | \$2,107,220  | \$2,233,653  | \$2,318,532  | \$2,406,636  | \$2,498,088  | \$2,593,015  | \$2,691,550  | \$2,793,829  | \$2,899,995  | \$3,010,195  | \$3,124,582  |
| OTHER PROJECTS                                 |  |        |                   |       |  |  |              |              |              |              |              |              |              |              |              |              |              |
| 25   | ROSEMARY POOL (W&S costs)  |        | \$6,382,775       |       | \$8,778,869  |  | \$9,305,601  | \$9,863,937  | \$10,238,767 | \$10,627,840 | \$11,031,698 | \$11,450,903 | \$11,886,037 | \$12,337,706 | \$12,806,539 | \$13,293,187 | \$13,798,328 |
| 26   | CRICKET FIELD HOUSE RENOVATIONS (BH+A 2012 costs +12% escalation to 2104)                                |        | \$801,366         |       | \$1,089,858  |  | \$1,155,249  | \$1,224,564  | \$1,271,097  | \$1,319,399  | \$1,369,536  | \$1,421,578  | \$1,475,598  | \$1,531,671  | \$1,589,874  | \$1,650,289  | \$1,713,000  |
| 27   | MEMORIAL PARK BUILDING RENOVATIONS   | 7,260  | \$745,960         | \$103 | \$1,007,046  | \$139  | \$1,067,469  | \$1,131,517  | \$1,174,515  | \$1,219,147  | \$1,265,475  | \$1,313,563  | \$1,363,478  | \$1,415,290  | \$1,469,071  | \$1,524,896  | \$1,582,842  |
| 28   | MEMORIAL PARK BUILDING NEW   | 14,584 | \$4,372,236       | \$300 | \$5,902,519  | \$405  | \$6,256,670  | \$6,632,070  | \$6,884,089  | \$7,145,684  | \$7,417,220  | \$7,699,074  | \$7,991,639  | \$8,295,321  | \$8,610,543  | \$8,937,744  | \$9,277,378  |
| 29   | COMMUNITY CENTER AT NIKE   | 62,000 | \$21,419,250      | \$345 | \$28,915,988   | \$466  | \$30,650,947 | \$32,490,004 | \$33,724,624 | \$35,006,160 | \$36,336,394 | \$37,717,177 | \$39,150,430 | \$40,638,146 | \$42,182,396 | \$43,785,327 | \$45,449,169 |
| 30   | COMMUNITY CENTER AT DEDHAM AVE   | 60,000 | \$22,177,850      | \$370 | \$30,669,098   | \$511  | \$32,509,244 | \$34,459,799 | \$35,769,271 | \$37,128,503 | \$38,539,386 | \$40,002,883 | \$41,524,031 | \$43,101,944 | \$44,739,818 | \$46,439,931 | \$48,204,648 |
| 31   | COMMUNITY CENTER AT PARCEL 74  | 2,000  | \$21,879,000      | \$353 | \$29,536,650   | \$476  | \$31,308,849 | \$33,187,380 | \$34,448,500 | \$35,757,543 | \$37,116,330 | \$38,526,751 | \$39,990,768 | \$41,510,417 | \$43,087,813 | \$44,725,150 | \$46,424,706 |
| 32   | ICE RINK AT 470 DEDHAM AVE   | 35,272 | \$8,817,340       | \$250 | \$11,903,409   | \$337  | \$12,617,614 | \$13,374,671 | \$13,882,908 | \$14,410,459 | \$14,958,056 | \$15,526,462 | \$16,116,468 | \$16,728,894 | \$17,364,592 | \$18,024,446 | \$18,709,375 |
| 33   | ICE RINK AT TOWN FOREST  | 36,839 | \$9,758,860       | \$265 | \$13,174,461   | \$358  | \$13,964,929 | \$14,802,825 | \$15,365,332 | \$15,949,215 | \$16,555,285 | \$17,184,386 | \$17,837,393 | \$18,515,214 | \$19,218,792 | \$19,949,106 | \$20,707,172 |
| 34   | RIDGE HILL   |        | TBD               |       |  |  |              |              |              |              |              |              |              |              |              |              |              |

## SCHOOLS

- Temporary spaces crucial to successful development of schools
- DeFazio Park is key location for new school or swing space
- Neighborhood schools are very important – however, some options require redistricting and/or additional busing
- Preference is to re-build on existing sites – issues that affect site selection include site size, topography, parking, access + wetlands
- Full day kindergarten at all elementary schools – Educational Goal
- Other scenarios: construct new 6<sup>th</sup> Grade Center at DeFazio Park and convert High Rock 6<sup>th</sup> Grade Center back to an elementary school



## SCHOOLS

- Hillside and Mitchell Schools: Permanent versus temporary location
  - Impact on DeFazio Field and DPW of either all temporary or combination temporary + permanent construction
    - Site circulation issues – DPW + school traffic
    - DPW materials lay down areas must be relocated
- Hillside School: Contaminated soils – affects rebuilding project
- Pollard School: Addition/renovation
  - Science classrooms, auditorium and administrative offices
  - New permanent facilities: Replace modular with permanent building





## SCHOOLS

- High School
  - Designed for 1,450 students with ability to accommodate 1,600; now projected to exceed 1,700 for an extended period of time
  - Massachusetts School Building Authority – dictated original program
  - Town student population has exceeded projections during past decade
  - Permanent Modulares/Pre-fab classrooms with expanded cafeteria are being considered



## SCHOOLS

- Emery Grover Building
  - Not accessible for staff or visitors
  - Undersized Meeting Rooms + Offices
  - Physical condition is poor
  - Historic Building
  - Unusable attic
- Daley Building
  - Supports all Town Buildings not just school buildings
- Nike Site: too remote for school, alternate uses?



## TEMPORARY SCHOOL AT DEFAZIO PARK



D & W Prefeasibility Study 2012

## PROBABLE COSTS: TEMPORARY SCHOOL AT DEFAZIO PARK: Estimate to Mid-Point of Construction - 2017

| Item #1 | Project                          | SF     | Construction Cost<br>YR 2014 | \$ / SF | Total Project Cost<br>YR 2014 | \$ / SF |
|---------|----------------------------------|--------|------------------------------|---------|-------------------------------|---------|
|         | TEMPORARY SCHOOL AT DEFAZIO PARK | 56,296 | \$12,766,598                 | \$227   | \$17,234,908                  | \$306   |

### 10 Year Escalated Costs

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$18,269,002 | \$19,365,142 | \$20,101,017 | \$20,864,855 | \$21,657,721 | \$22,480,714 | \$23,334,981 | \$24,221,710 | \$25,142,135 | \$26,097,536 | \$27,089,242 |



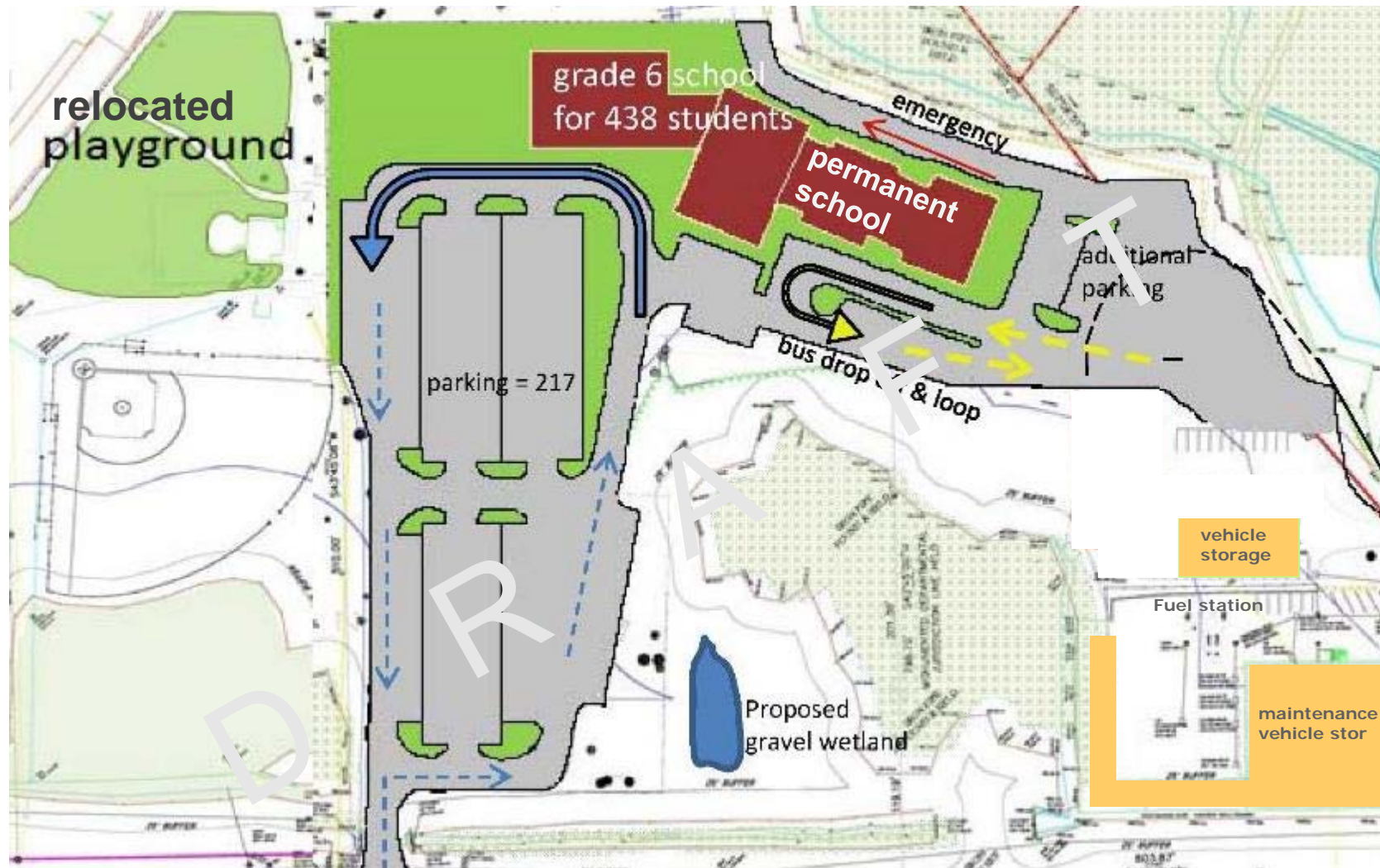
**PROBABLE COSTS: HILLSIDE REBUILD:** Estimate to Mid-Point of Construction  
- 2019

| Item #2 | Project          | SF     | Construction Cost<br>YR 2014 | \$ / SF | Total Project Cost<br>YR 2014 | \$ / SF |
|---------|------------------|--------|------------------------------|---------|-------------------------------|---------|
|         | HILLSIDE REBUILD | 80,650 | \$30,370,400                 | \$377   | \$43,687,000                  | \$542   |

**10 Year Escalated Costs**

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$46,308,220 | \$49,086,713 | \$50,952,008 | \$52,818,184 | \$54,897,935 | \$56,984,057 | \$59,149,451 | \$61,397,130 | \$63,730,221 | \$66,151,969 | \$68,665,744 |

## PERMANENT SCHOOL AT DEFAZIO PARK



D & W Prefeasibility Study 2012

**PROBABLE COSTS: PERMANENT SCHOOL AT DEFAZIO PARK:** Estimate to  
Mid-Point of Construction - 2018

| Item #3 | Project                             | SF     | Construction Cost<br>YR 2014 | \$ / SF | Total Project<br>Cost<br>YR 2014 | \$ / SF |
|---------|-------------------------------------|--------|------------------------------|---------|----------------------------------|---------|
|         | PERMANENT SCHOOL AT DEFAZIO<br>PARK | 83,200 | \$31,301,000                 | \$376   | \$48,003,000                     | \$577   |

**10 Year Escalated Costs**

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$50,883,180 | \$53,936,171 | \$55,985,745 | \$58,113,203 | \$60,321,505 | \$62,613,722 | \$64,993,043 | \$67,462,779 | \$70,026,365 | \$72,687,367 | \$75,449,487 |

**PROBABLE COSTS: HIGH ROCK RENOVATION/ADDITION:** *Project not necessary if a Permanent School is not constructed; Estimate to Mid-Point of Construction – 2019*

| Item #4 | Project                                 | SF<br><i>Estimated</i> | Construction Cost<br>YR 2014 | \$ / SF | Total Project Cost<br>YR 2014 | \$ / SF |
|---------|---|------------------------|------------------------------|---------|-------------------------------|---------|
|         | RENOVATION/ADDITION AT HIGH ROCK SCHOOL | 7,000                  | \$2,100,000                  | \$300   | \$2,835,000                   | \$405   |

#### 10 Year Escalated Costs

| 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| \$3,005,100 | \$3,185,406 | \$3,306,451 | \$3,432,096 | \$3,562,516 | \$3,697,892 | \$3,838,412 | \$3,984,272 | \$4,135,674 | \$4,292,830 | \$4,455,958 |



**PROBABLE COSTS: HIGH SCHOOL RENOVATIONS + MODULARS:** Estimate to Mid-Point of Construction - 2016

| Item #5 | Project                                       | SF    | Construction Cost<br>YR 2014 | \$ / SF | Total Project Cost<br>YR 2014 | \$ / SF |
|---------|---|-------|------------------------------|---------|-------------------------------|---------|
|         | <b>HIGH SCHOOL RENOVATIONS +<br/>MODULARS</b> | 8,062 | \$3,453,220                  | \$428   | \$4,144,964                   | \$514   |

**10 Year Escalated Costs**

| 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| \$4,393,662 | \$4,657,282 | \$4,834,259 | \$5,017,961 | \$5,208,644 | \$5,406,572 | \$5,612,022 | \$5,825,279 | \$6,046,640 | \$6,276,412 | \$6,514,916 |

**PROBABLE COSTS: MITCHELL REBUILD:** Estimate to Mid-Point of Construction – 2021

| Item #6 | Project          | SF<br><i>Estimated</i> | Construction Cost<br>YR 2014 | \$ / SF | Total Project Cost<br>YR 2014 | \$ / SF |
|---------|------------------|------------------------|------------------------------|---------|-------------------------------|---------|
|         | MITCHELL REBUILD | 82,227                 | \$30,244,640                 | \$368   | \$43,550,000                  | \$530   |

**10 Year Escalated Costs**

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$46,163,000 | \$48,932,780 | \$50,792,226 | \$52,722,331 | \$54,725,780 | \$56,805,360 | \$58,963,964 | \$61,204,595 | \$63,530,370 | \$65,944,524 | \$68,450,416 |

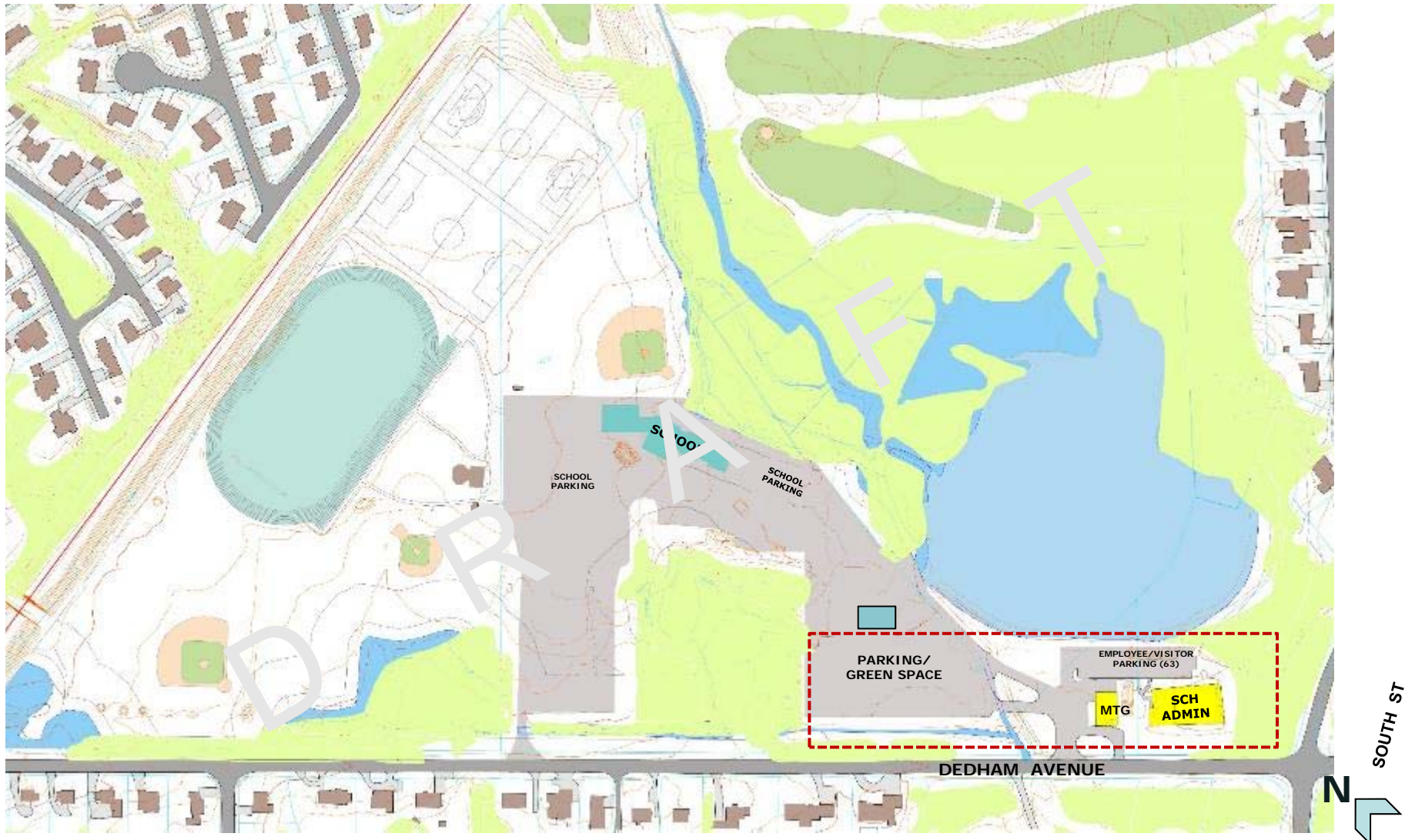
## PROBABLE COSTS: POLLARD ADDITION + RENOVATIONS: Estimate to Mid-Point of Construction – 2024

| Item #7 | Project                        | SF<br><i>Estimated</i> | Construction Cost<br>YR 2014 | \$ / SF | Total Project Cost<br>YR 2014 | \$ / SF |
|---------|--------------------------------|------------------------|------------------------------|---------|-------------------------------|---------|
|         | POLLARD ADDITION + RENOVATIONS |                        | \$21,650,570                 |         | \$29,228,270                  |         |

### 10 Year Escalated Costs

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$30,981,966 | \$32,840,884 | \$34,088,838 | \$35,384,214 | \$36,728,814 | \$38,124,509 | \$39,573,240 | \$41,077,023 | \$42,637,950 | \$44,258,192 | \$45,940,003 |

**RELOCATION OF SCHOOL ADMINISTRATION TO PSAB; Renovation of PSAB, Pump Station Building + Additional Parking**





**PROBABLE COSTS: RELOCATION OF SCHOOL ADMINISTRATION TO PSAB;**  
 Renovation of PSAB, Pump Station Building + Additional Parking: Estimate to Mid-Point of Construction – 2018 or 2019

| Item #9 | Project  | SF            | Construction Cost<br>YR 2014       | \$ / SF      | Total Project Cost<br>YR 2014      | \$ / SF      |
|---------|--|---------------|------------------------------------|--------------|------------------------------------|--------------|
|         | <b>PSAB + PUMP BLDG RENO + PARKING</b>                     |               | <b>\$3,794,850</b><br><i>total</i> |              | <b>\$5,123,048</b><br><i>total</i> |              |
|         | <b>LIGHT RENOVATIONS AT PSAB</b>                           | <b>21,777</b> | <b>\$1,533,850</b>                 | <b>\$50</b>  | <b>\$1,469,948</b>                 | <b>\$68</b>  |
|         | <b>PUMP STATION MEETING ROOM<br/>/ CONNECTOR with SITE</b> | <b>3,500</b>  | <b>\$1,078,000</b>                 | <b>\$308</b> | <b>\$1,455,300</b>                 | <b>\$416</b> |
|         | <b>DEMOLISH DPW + SITE<br/>CLEANUP</b>                     |               | <b>\$1,057,500</b>                 |              | <b>\$1,427,625</b>                 |              |
|         | <b>ADDITIONAL PARKING</b>                                  |               | <b>\$570,500</b>                   |              | <b>\$770,175</b>                   |              |

**10 Year Escalated Costs**

| 2015                        | 2016                        | 2017                        | 2018                               | 2019                               | 2020                        | 2021                        | 2022                        | 2023                        | 2024                        | 2025                        |
|-----------------------------|-----------------------------|-----------------------------|------------------------------------|------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| \$5,430,431<br><i>total</i> | \$5,756,257<br><i>total</i> | \$5,974,094<br><i>total</i> | <b>\$6,202,044</b><br><i>total</i> | <b>\$6,437,722</b><br><i>total</i> | \$6,682,355<br><i>total</i> | \$6,936,285<br><i>total</i> | \$7,199,864<br><i>total</i> | \$7,473,459<br><i>total</i> | \$7,757,450<br><i>total</i> | \$8,052,233<br><i>total</i> |
| \$1,558,145                 | \$1,651,634                 | \$1,744,396                 | <b>\$1,779,543</b>                 | <b>\$1,847,165</b>                 | \$1,917,358                 | \$1,990,217                 | \$2,065,845                 | \$2,144,348                 | \$2,225,833                 | \$2,310,414                 |
| \$1,542,188                 | \$1,635,175                 | \$1,697,312                 | <b>\$1,761,810</b>                 | <b>\$1,828,758</b>                 | \$1,898,251                 | \$1,970,385                 | \$2,045,259                 | \$2,122,979                 | \$2,203,652                 | \$2,287,391                 |
| \$1,513,283                 | \$1,604,079                 | \$1,665,034                 | <b>\$1,728,306</b>                 | <b>\$1,793,981</b>                 | \$1,862,153                 | \$1,932,914                 | \$2,006,365                 | \$2,082,607                 | \$2,161,746                 | \$2,243,893                 |
| \$816,386                   | \$865,369                   | \$898,253                   | <b>\$932,386</b>                   | <b>\$967,817</b>                   | \$1,004,594                 | \$1,042,769                 | \$1,082,394                 | \$1,123,525                 | \$1,166,219                 | \$1,210,535                 |

## DEPARTMENT OF PUBLIC WORKS

- Current existing structures + outdoor sites
  - Hollis Building, Sheds + Cold Storage: 38,224 GSF
  - New vehicle storage building: 4,998 GSF
  - PSAB building = 21,777 GSF
  - Water Pumping Station = 2,400 GSF
  - Other Sites: DeFazio, Daley, Alden Road Pump Station, Charles River WTP, Reservoir B, St Mary's Pump Station, Cricket Field, Claxton Field, Memorial Field, Ridge Hill = +/- 47,434 GSF
- Recycle and Transfer Station



## DEPARTMENT OF PUBLIC WORKS: OBSERVATIONS

- Operations and Administration are on same site but not together
- Existing DPW facility is undersized for the fleet + personnel
  - Building is not accessible; Stairs and egress paths must meet code
  - Building Systems neither current nor energy efficient
  - Employee facilities lacking
  - Garage is 60' width vs 98', height should be minimally 17' clear of structure or systems, Hollis is 18' to top of building
  - Maintenance + Shops: Should have minimum 6-7 bays (current at 3), storage for fluids, tires and parts and supplies; shops per department



## DEPARTMENT OF PUBLIC WORKS: OBSERVATIONS

- Existing site: high water table, perennial stream / channel, DEP concerns
- Storage of vehicles, equipment + materials is located throughout Town
  - Some equipment + materials should remain dispersed at sites
- Materials handling areas at DPW site + RTS: storage of stock materials such as sand + gravel and areas to store materials removed during street sweeping, catch basin cleanout or asphalt repairs or from Town construction sites should be defined and controlled
- Areas of cold storage, sander bodies + spreaders, pipes + manhole covers etc. should be located to secure and maintain stock and to be nearby other equipment needed to complete a typical or emergency project



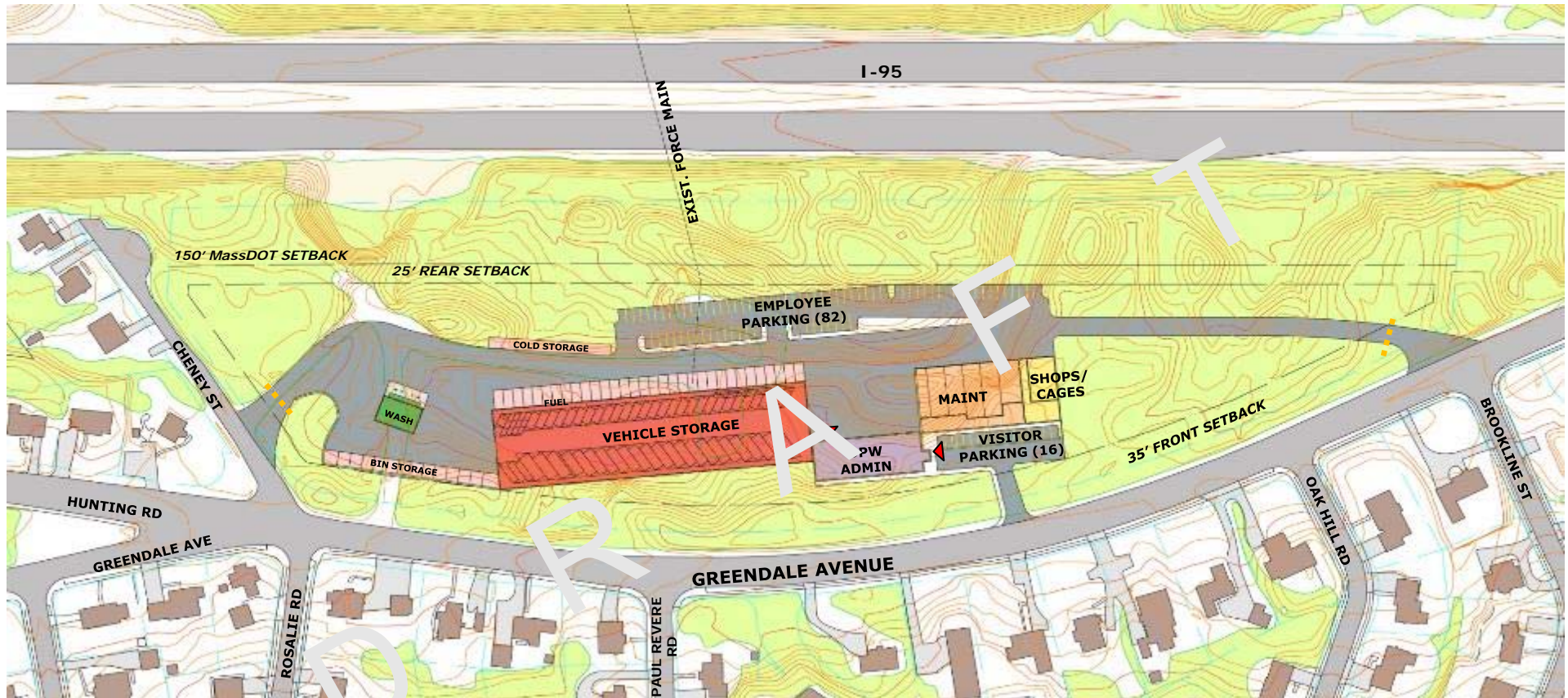


## DEPARTMENT OF PUBLIC WORKS: PROGRAMMING NEEDS

- **Insufficient space to consolidate and build modern facility at Dedham Avenue**
- Benefits to consolidation of personnel + equipment
- Vehicles stored indoors protect these valuable assets and help improve localized site conditions
- Total area required to store vehicles + equipment dependent on decision to build a consolidated facility versus a distributed one
- Program: Administrative and operations offices, operations area including employee support, garage/maintenance, shops, wash bay, fuel, vehicle staging and prep and building and site support



**DEPARTMENT OF PUBLIC WORKS AT PARCEL 74/GREENDALE AVE.**



**PROBABLE COSTS: DEPARTMENT OF PUBLIC WORKS RELOCATES TO PARCEL 74/GREENDALE AVE.:** Estimate to Mid-Point of Construction dependent on decision to build Temporary (2017) or Permanent (2018) School

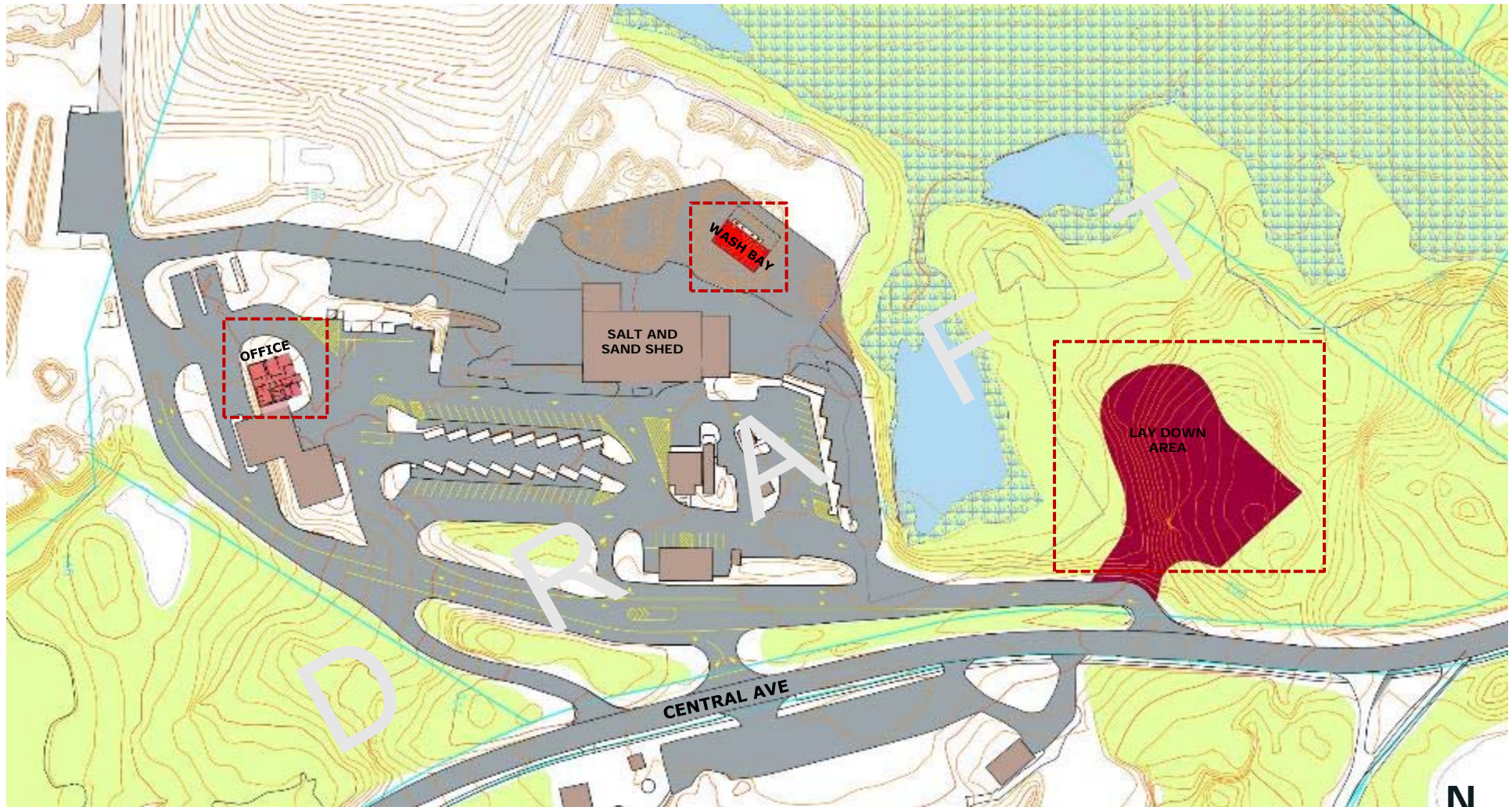
| Item #14 | Project                                  | SF     | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|--|--------|---------------------------|---------|----------------------------|---------|
|          | DPW REBUILD AT PARCEL 74 / GREENDALE AVE | 92,442 | \$30,591,734              | \$331   | \$41,298,841               | \$447   |

**10 Year Escalated Costs**

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$43,776,771 | \$46,403,377 | \$48,166,705 | \$49,997,040 | \$51,892,928 | \$53,869,011 | \$55,916,033 | \$58,040,842 | \$60,246,394 | \$62,535,757 | \$64,912,116 |



## DEPARTMENT OF PUBLIC WORKS AT RTS - RENOVATIONS





## PROBABLE COSTS: RTS RENOVATIONS: Estimate in Year 2014

| Item #15 | Project         | SF    | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|-----------------|-------|---------------------------|---------|----------------------------|---------|
|          | RTS RENOVATIONS | 4,320 | \$1,623,000               | \$376   | \$2,191,050                | \$507   |

### 10 Year Escalated Costs

| 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| \$2,322,513 | \$2,461,864 | \$2,555,415 | \$2,652,521 | \$2,753,317 | \$2,857,943 | \$2,966,545 | \$3,079,274 | \$3,196,286 | \$3,317,745 | \$3,443,819 |

## POLICE AND FIRE DEPARTMENTS

- Current Station #1: +/- 31,145 SF
  - Police: +/- 13,095 SF
  - Fire: +/- 11,634 SF
  - Shared: +/- 6,416 SF
- Current Station #2: +/- 9,630 SF
- Programming Needs at Police + Fire Station #1: 43,966 SF
  - Shared spaces and building support: +/- 6,019 SF
  - Police: +/- 21,609 SF
  - Fire: +/- 16,339 SF



## POLICE AND FIRE DEPARTMENTS: OBSERVATIONS

- Current building is undersized for current vehicles and equipment
- Organization of spaces does not reflect police + fire operational needs
- Building is not accessible
- Shared resources: FD + PD dispatch, waiting area, conference and EOC are not well located
- No sallyport – detainees are escorted across open parking lot; No holding area; Booking area too small and too much prisoner access to personnel and equipment; Evidence area lacking
- Support spaces for apparatus inadequate; height and width do not meet current standards



## POLICE AND FIRE DEPARTMENTS

- Site requirements
  - Visitor Parking: 24 hrs; prime 7am to 10pm
  - Personnel Parking: overlapping shifts for both departments
  - Dumpster
  - Impound area (currently in wash bay)
  - Emergency generator
- Movement of emergency vehicles: Fire and Police Vehicles must be able to move quickly and effortlessly from site



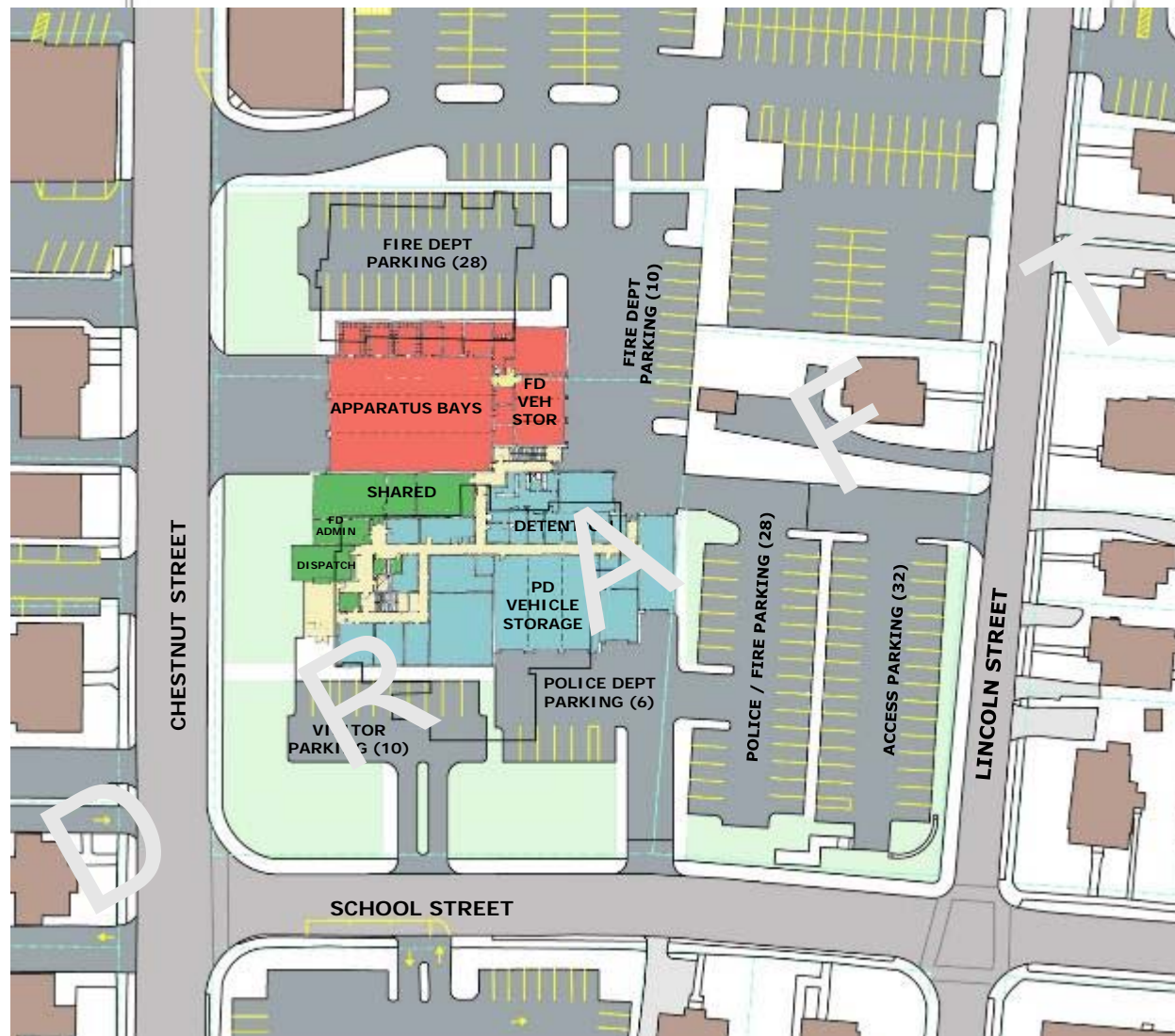


## POLICE AND FIRE DEPARTMENTS: PROGRAMMING NEEDS

- Program
  - Shared public areas
  - Police and Fire administrative offices
  - Operations Areas
    - Employee support
    - Detention
    - Garage/maintenance + Wash bay
    - Apparatus area
    - Site support



## NEW POLICE/FIRE: OPTION 3 – STAND ALONE



**PARKING**  
LOSS OF EXISTING PARKING  
ON LINCOLN ST: ACCESS  
PARKING (0)

LOSS OF EXISTING PARKING  
NORTH COMMERCIAL  
BUILDING: (24)

TOTAL NET LOSS  
COMMERCIAL PARKING: (24)

PD/FD PARKING AS SHOWN:  
(82)



## PROBABLE COSTS: NEW POLICE/FIRE OPTION 3 – STAND ALONE:

Estimate to Mid-Point of Construction - 2019

| Item #22 | Project                                 | SF     | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|---|--------|---------------------------|---------|----------------------------|---------|
|          | POLICE/FIRE SITE OPTION 3 – STAND ALONE | 51,604 | \$22,277,490              | \$432   | \$30,074,612               | \$583   |

### 10 Year Escalated Costs

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$31,879,089 | \$33,791,834 | \$35,075,924 | \$36,408,809 | \$37,792,344 | \$39,228,453 | \$40,719,134 | \$42,266,461 | \$43,872,587 | \$45,539,745 | \$47,270,255 |

## **PARKS AND RECREATION/CONSERVATION**

- Parks + Rec and Conservation are largest controllers of land in town
- Current buildings primarily used during summer
- Many buildings include storage component used by DPW
- Ridge Hill site has restricted use
- Many community programming needs have been met in other buildings but there are some that remain. Some can be accommodated in:
  - School buildings
  - Public / Private developments



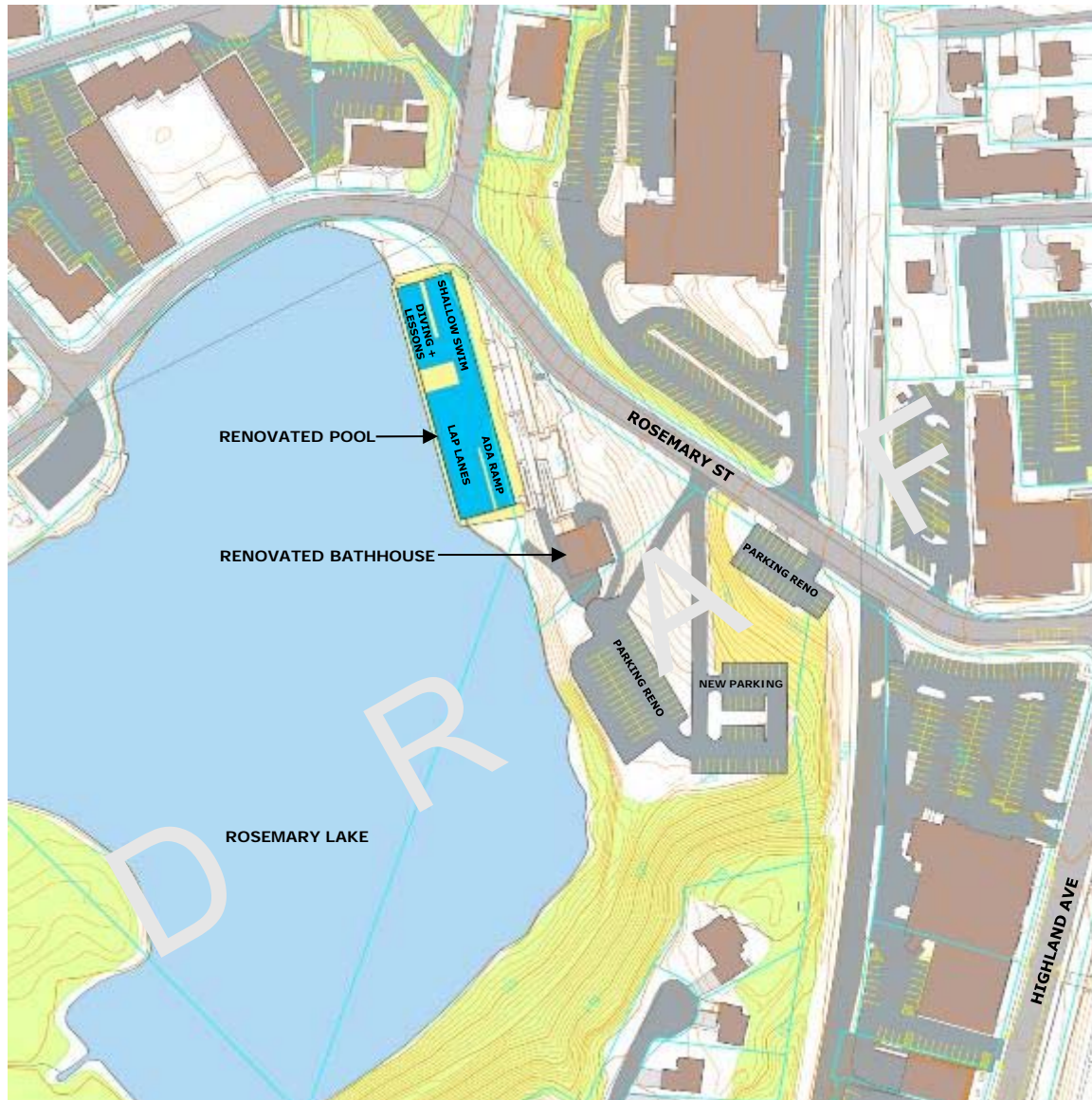


## **PARKS AND RECREATION/CONSERVATION**

- Conservation would like to improve degraded site conditions but recognize current uses
- How can work be accomplished on challenging sites like the existing DPW?
  - Preferable to do mitigation on previously disturbed areas
  - Allow water to move in a more natural manner
  - Provide improvements in another area of the site or on other sites
- Should wildlife, including the appearance of coyotes and an expanding bear population, reduce potential use of any site. What are reasonable mitigation measures?



## ROSEMARY POOL – PROPOSED RENOVATION (OPTION 3B)



W & S Study 2013/2014

OCTOBER 22, 2014

SLIDE 41



BOS

## PROBABLE COSTS: ROSEMARY POOL: Estimate to Mid-Point of Construction - 2018

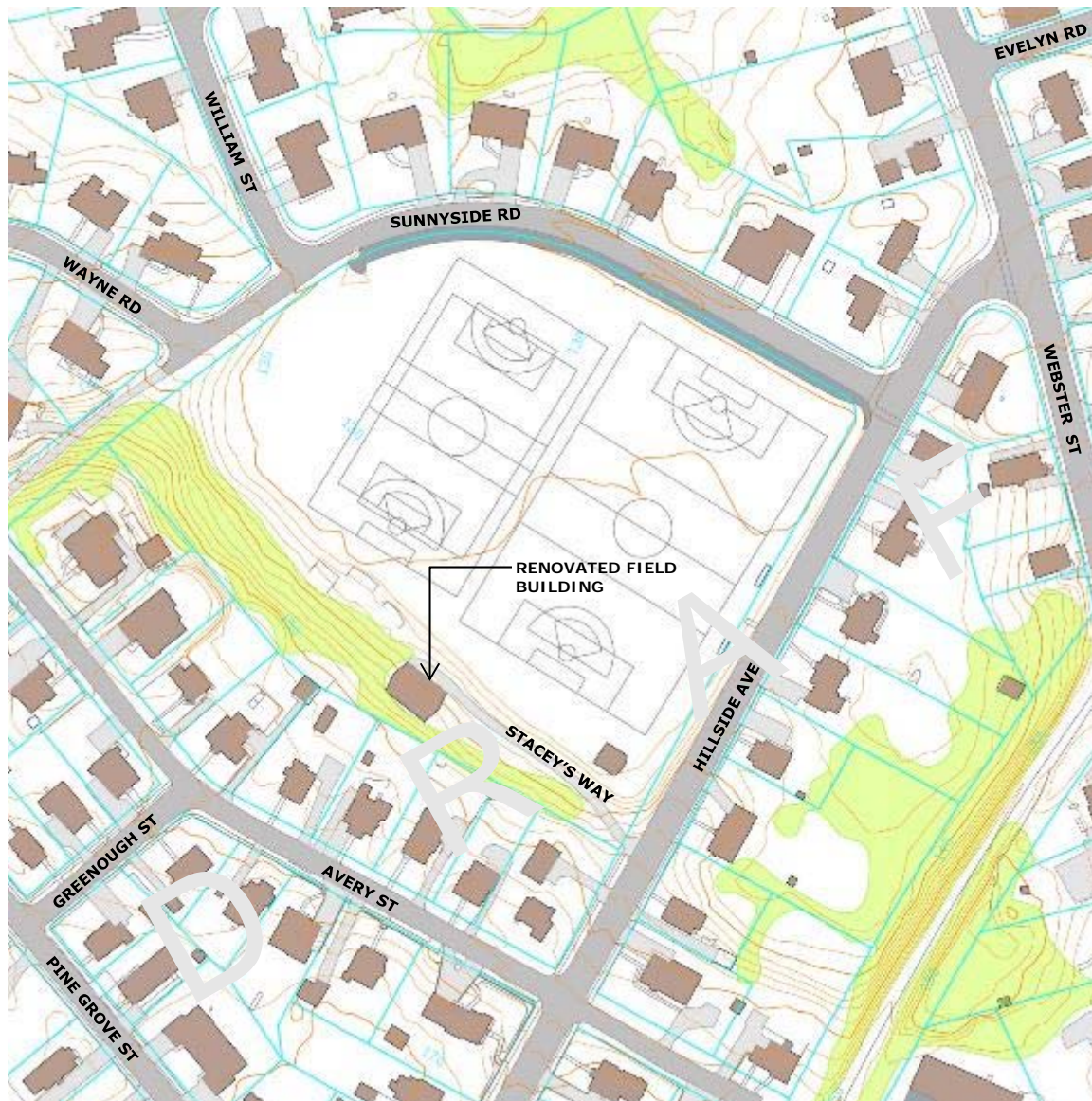
| Item #25 | Project       | SF | Construction Cost | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|---------------|----|-------------------|---------|----------------------------|---------|
|          | ROSEMARY POOL |    | \$6,382,775       |         | \$8,778,869                |         |

### 10 Year Escalated Costs

| 2015        | 2016        | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|-------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$9,305,601 | \$9,863,937 | \$10,238,767 | \$10,627,840 | \$11,031,698 | \$11,450,903 | \$11,886,037 | \$12,337,706 | \$12,806,539 | \$13,293,187 | \$13,798,328 |



## CRICKET FIELD– PROPOSED RENOVATION – 3 SEASON OPTION





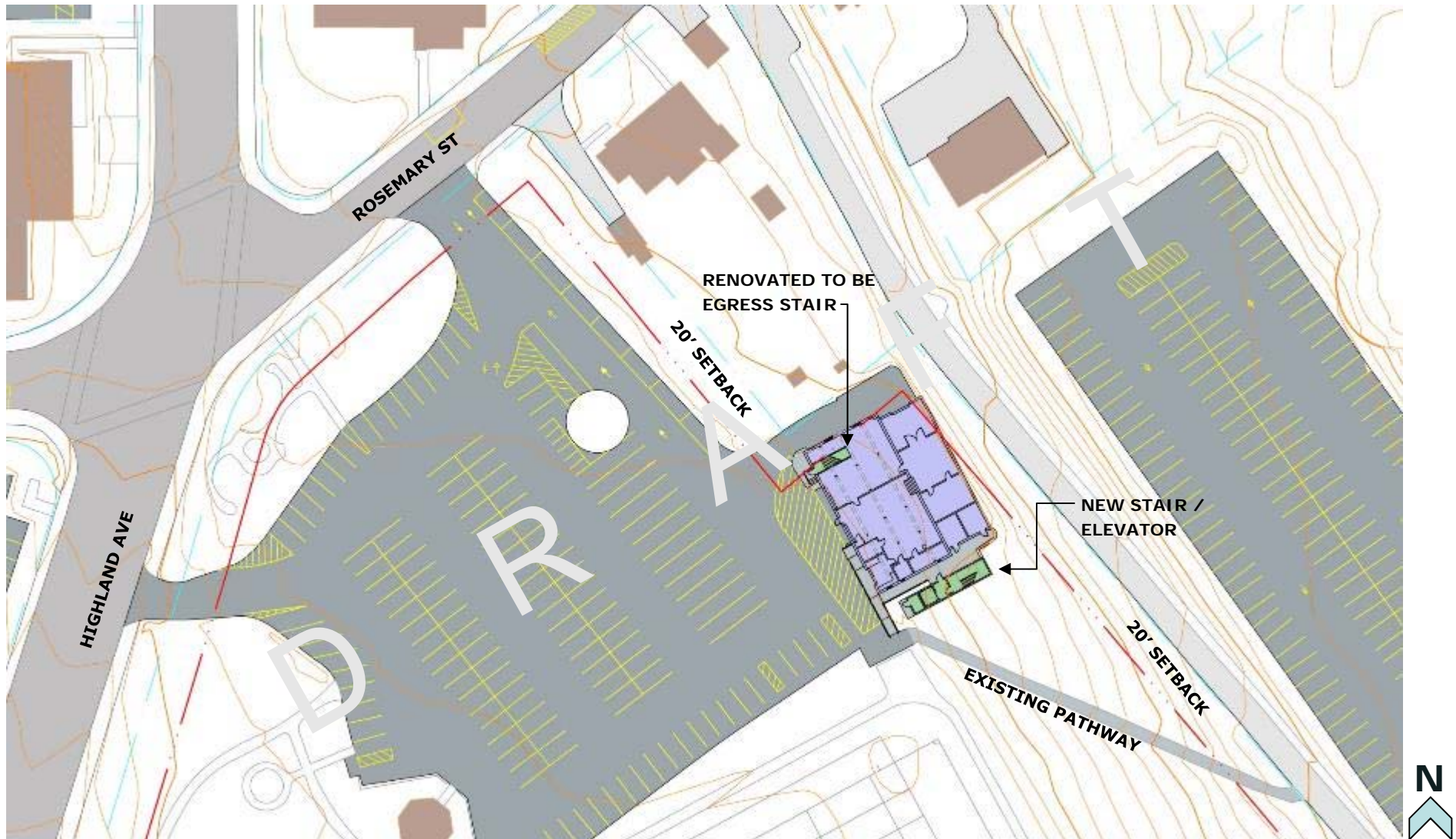
**PROBABLE COSTS: CRICKET FIELD BUILDING:** Estimate to Mid-Point of Construction - 2015

| Item #26 | Project                          | SF | Construction Cost | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|----------------------------------|----|-------------------|---------|----------------------------|---------|
|          | CRICKET FIELD BUILDING: 3 SEASON |    | \$700,566         |         | \$945,764                  |         |

**10 Year Escalated Costs**

| 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| \$1,002,510 | \$1,062,660 | \$1,103,042 | \$1,144,957 | \$1,188,465 | \$1,233,627 | \$1,280,505 | \$1,329,164 | \$1,379,672 | \$1,432,100 | \$1,486,520 |

## RENOVATION OF MEMORIAL PARK BUILDING



## PROBABLE COSTS: RENOVATED BUILDING AT MEMORIAL PARK: Estimate in Year 2014

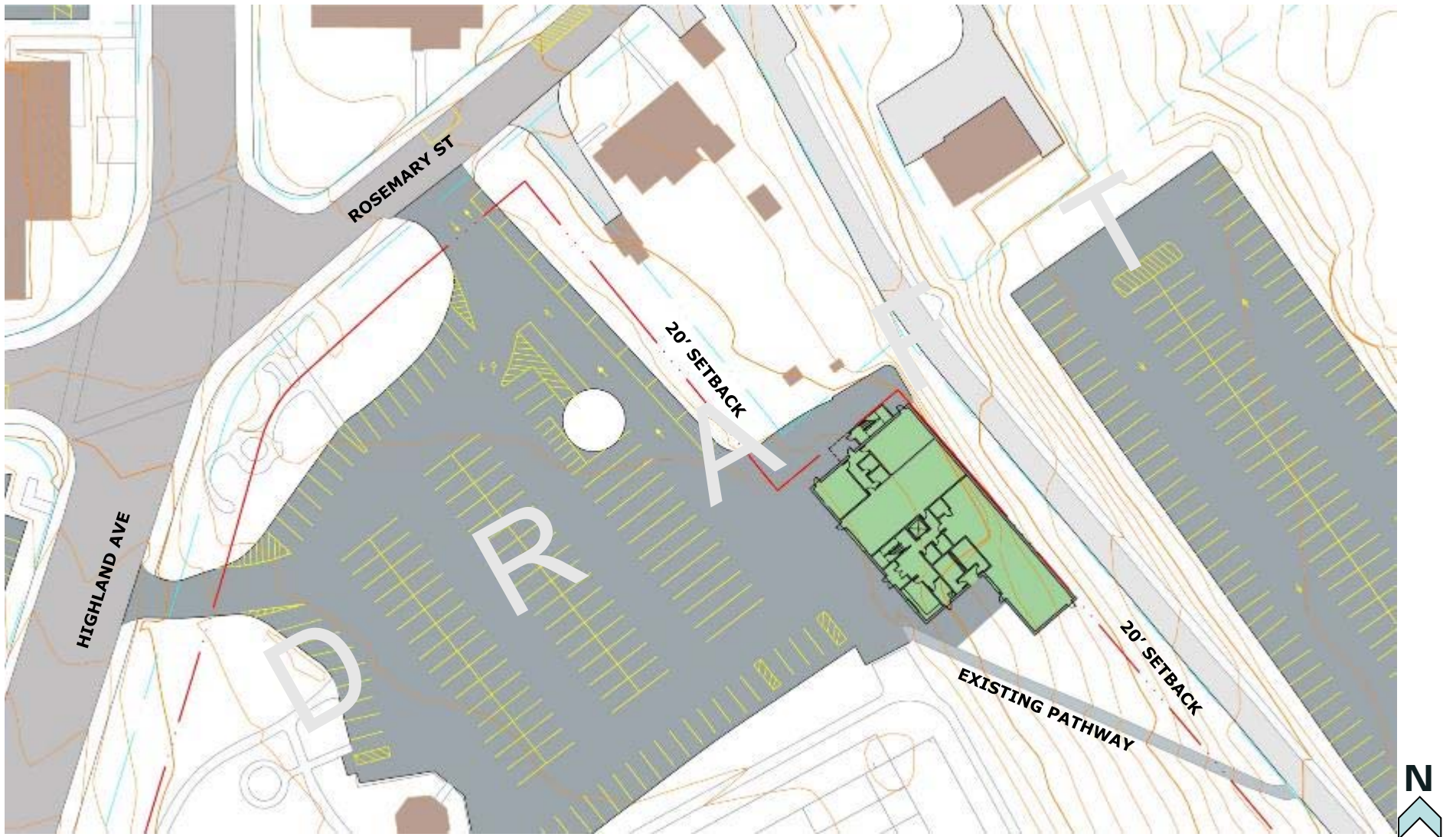
| Item #27 | Project                             | SF    | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|-------------------------------------|-------|---------------------------|---------|----------------------------|---------|
|          | MEMORIAL PARK BUILDING - RENOVATION | 7,260 | \$745,960                 | \$103   | \$1,007,046                | \$139   |

### 10 Year Escalated Costs

| 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| \$1,067,469 | \$1,131,517 | \$1,174,515 | \$1,219,147 | \$1,265,475 | \$1,313,563 | \$1,363,478 | \$1,415,290 | \$1,469,071 | \$1,524,896 | \$1,582,842 |



## NEW BUILDING AT MEMORIAL PARK





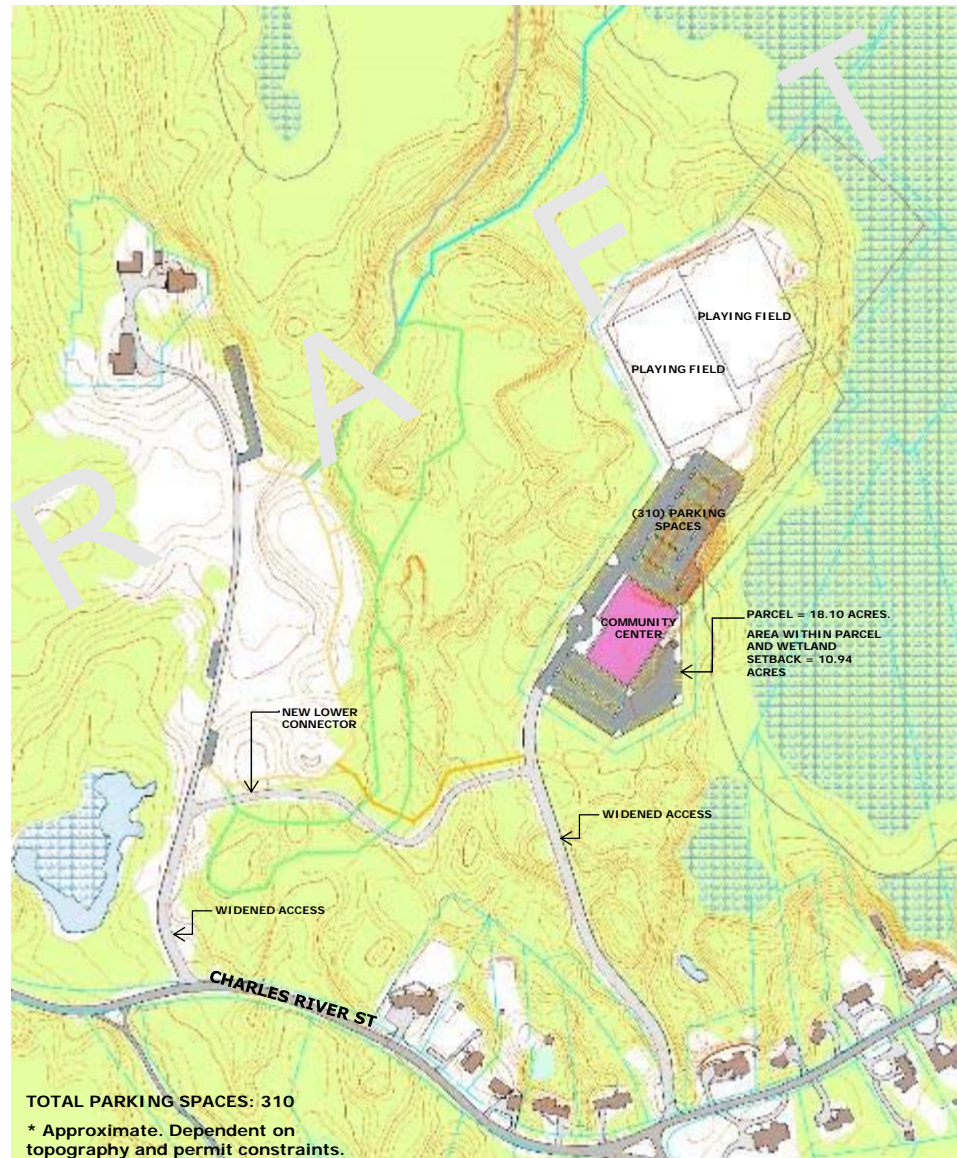
## PROBABLE COSTS: NEW BUILDING AT MEMORIAL PARK: Estimate in Year 2014

| Item #28 | Project                      | SF     | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|------------------------------|--------|---------------------------|---------|----------------------------|---------|
|          | MEMORIAL PARK – NEW BUILDING | 14,584 | \$4,372,236               | \$300   | \$5,902,519                | \$405   |

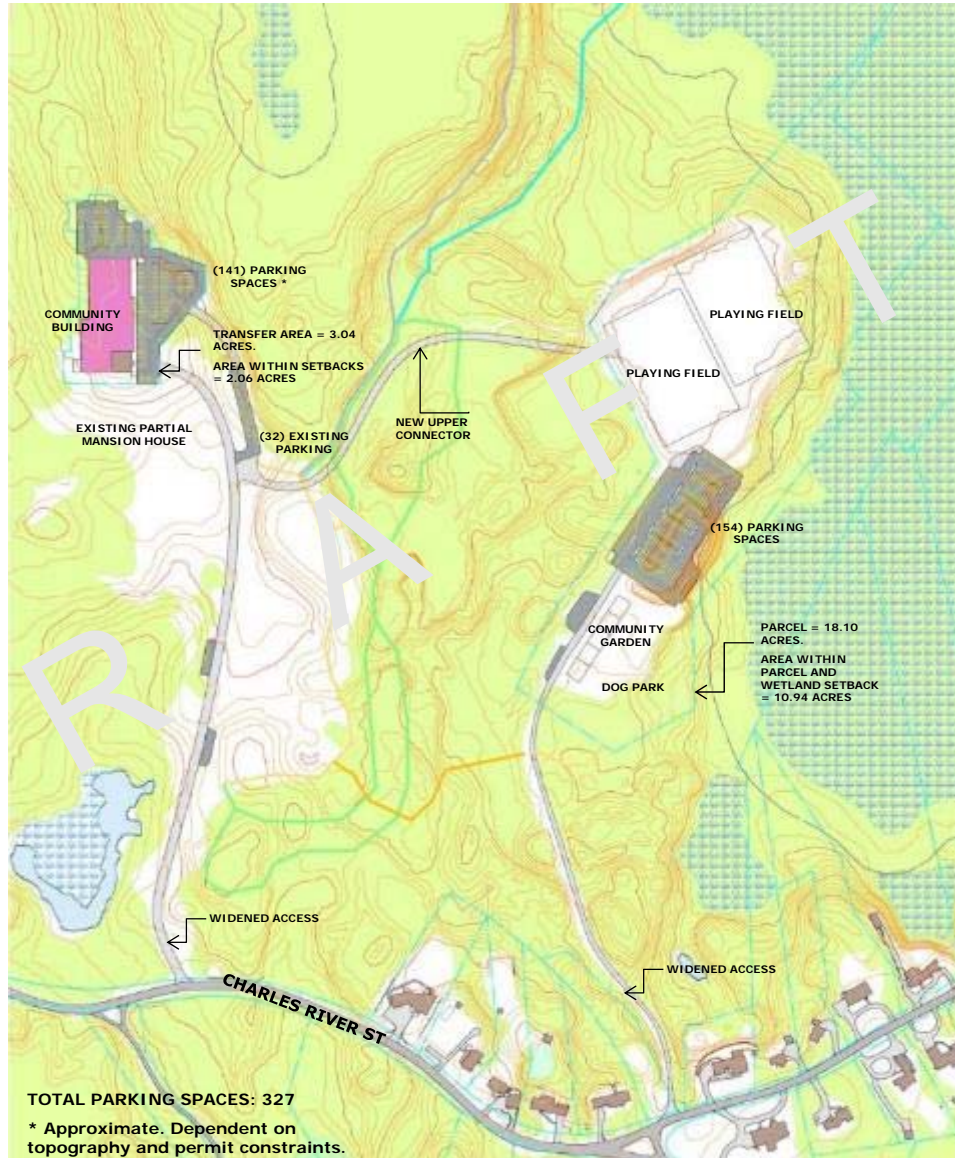
### 10 Year Escalated Costs

| 2015        | 2016        | 2017        | 2018        | 2019        | 2020        | 2021        | 2022        | 2023        | 2024        | 2025        |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| \$6,256,670 | \$6,632,070 | \$6,884,089 | \$7,145,684 | \$7,417,220 | \$7,699,074 | \$7,991,639 | \$8,295,321 | \$8,610,543 | \$8,937,744 | \$9,277,378 |

## COMMUNITY CENTER AT NIKE SITE



## COMMUNITY BUILDING AT RIDGE HILL + SHARED USE OF NIKE SITE





## PROBABLE COSTS: COMMUNITY CENTER AT NIKE SITE: Estimate in Year 2014

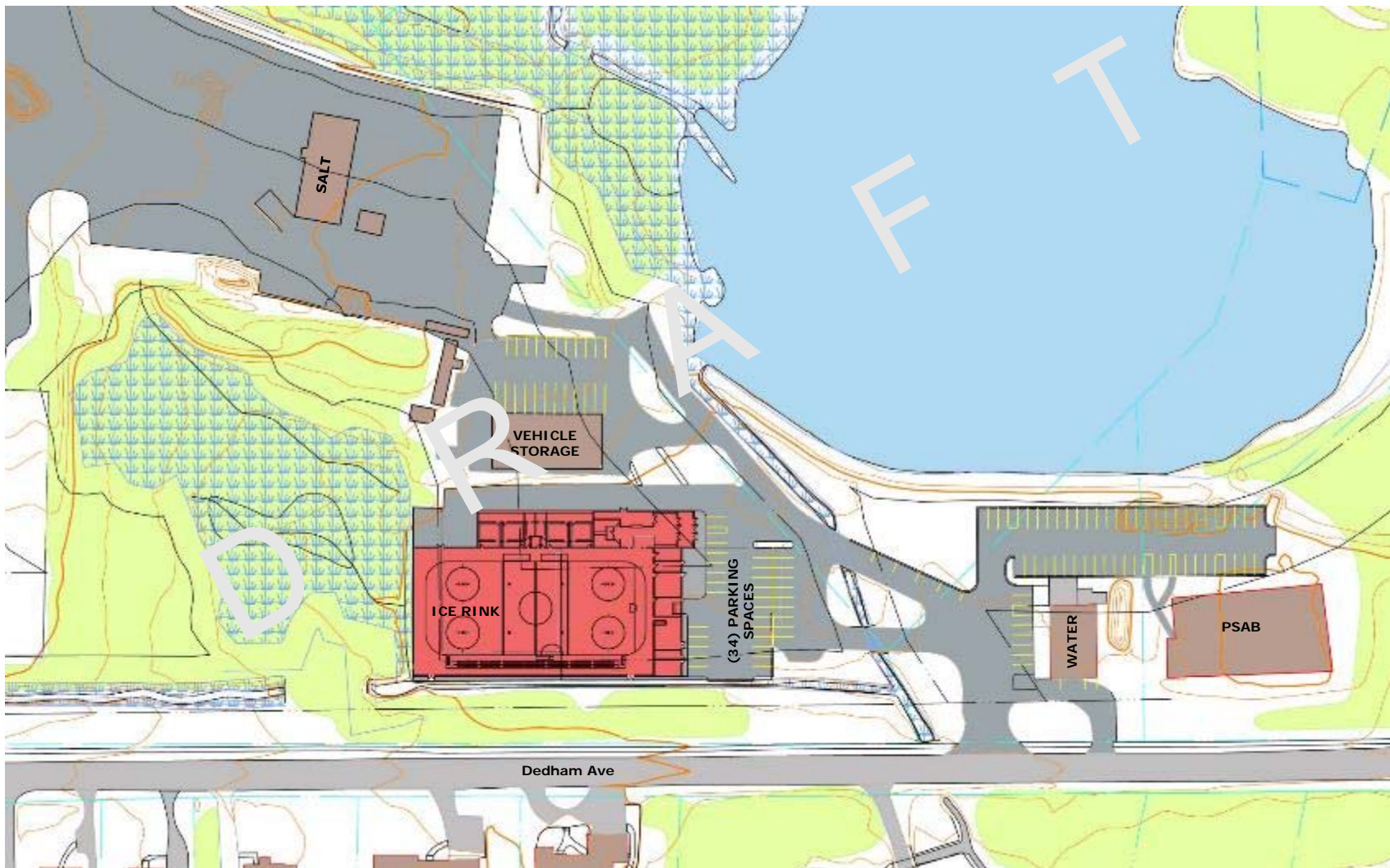
| Item #29 | Project                       | SF     | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|-------------------------------|--------|---------------------------|---------|----------------------------|---------|
|          | COMMUNITY CENTER AT NIKE SITE | 62,000 | \$21,419,250              | \$345   | \$28,915,988               | \$466   |

### 10 Year Escalated Costs

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$30,650,947 | \$32,490,004 | \$33,724,624 | \$35,006,160 | \$36,336,394 | \$37,717,177 | \$39,150,430 | \$40,638,146 | \$42,182,396 | \$43,785,327 | \$45,449,169 |



## ICE RINK AT 470 DEDHAM AVE



## PROBABLE COSTS: ICE RINK AT 470 DEDHAM AVE: Estimate in Year 2014

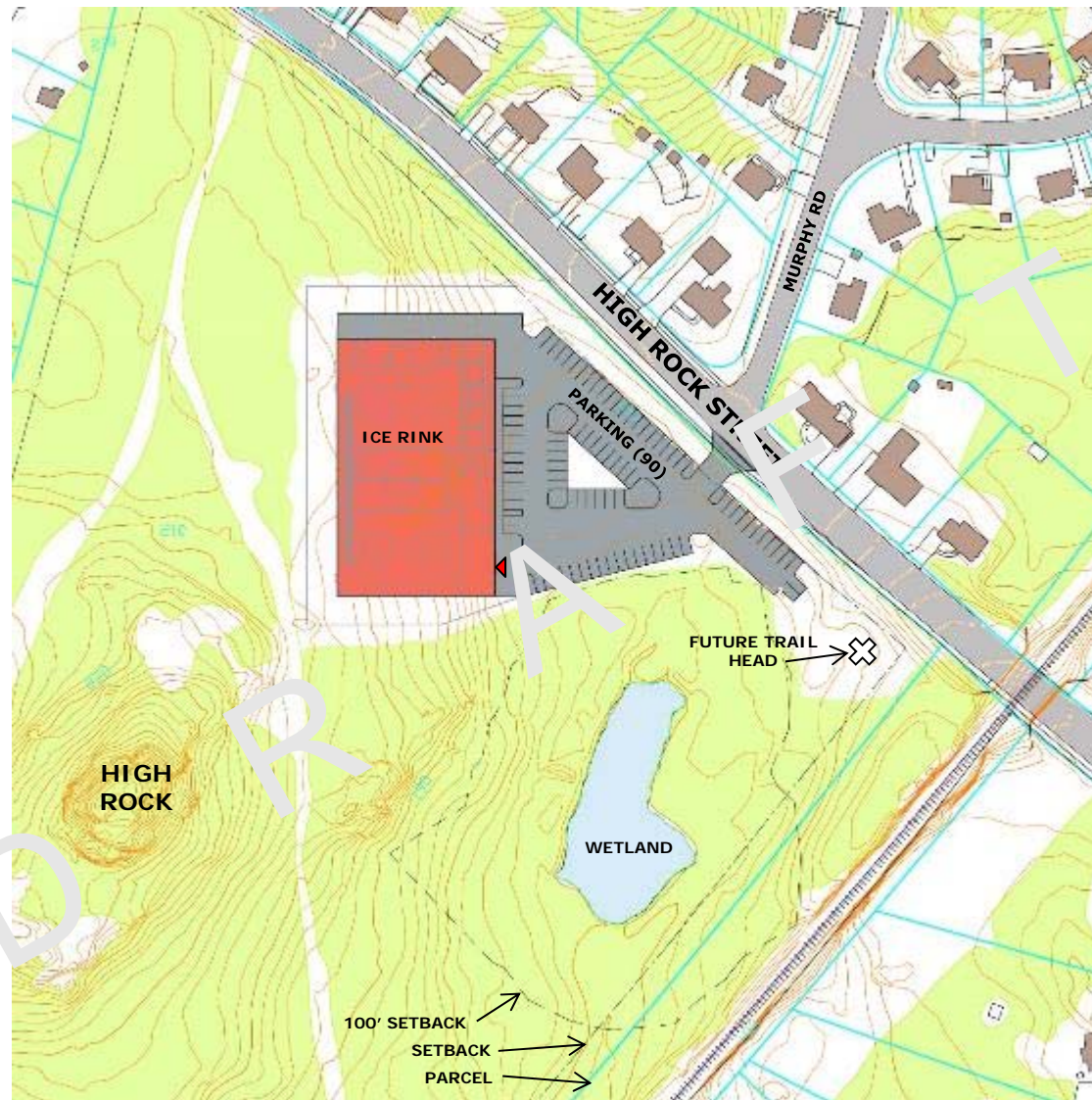
| Item #32 | Project             | SF     | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|---------------------|--------|---------------------------|---------|----------------------------|---------|
|          | DEDHAM AVE ICE RINK | 35,272 | \$8,817,340               | \$250   | \$11,903,409               | \$337   |

### 10 Year Escalated Costs

| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$12,617,614 | \$13,374,671 | \$13,882,908 | \$14,410,459 | \$14,958,056 | \$15,526,462 | \$16,116,468 | \$16,728,894 | \$17,364,592 | \$18,024,446 | \$18,709,375 |



## ICE RINK AT TOWN FOREST



## PROBABLE COSTS: ICE RINK AT TOWN FOREST: Estimate in Year 2014

| Item #33 | Project              | SF     | Construction Cost YR 2014 | \$ / SF | Total Project Cost YR 2014 | \$ / SF |
|----------|----------------------|--------|---------------------------|---------|----------------------------|---------|
|          | TOWN FOREST ICE RINK | 36,839 | \$9,758,860               | \$265   | \$13,174,461               | \$358   |

### 10 Year Escalated Costs

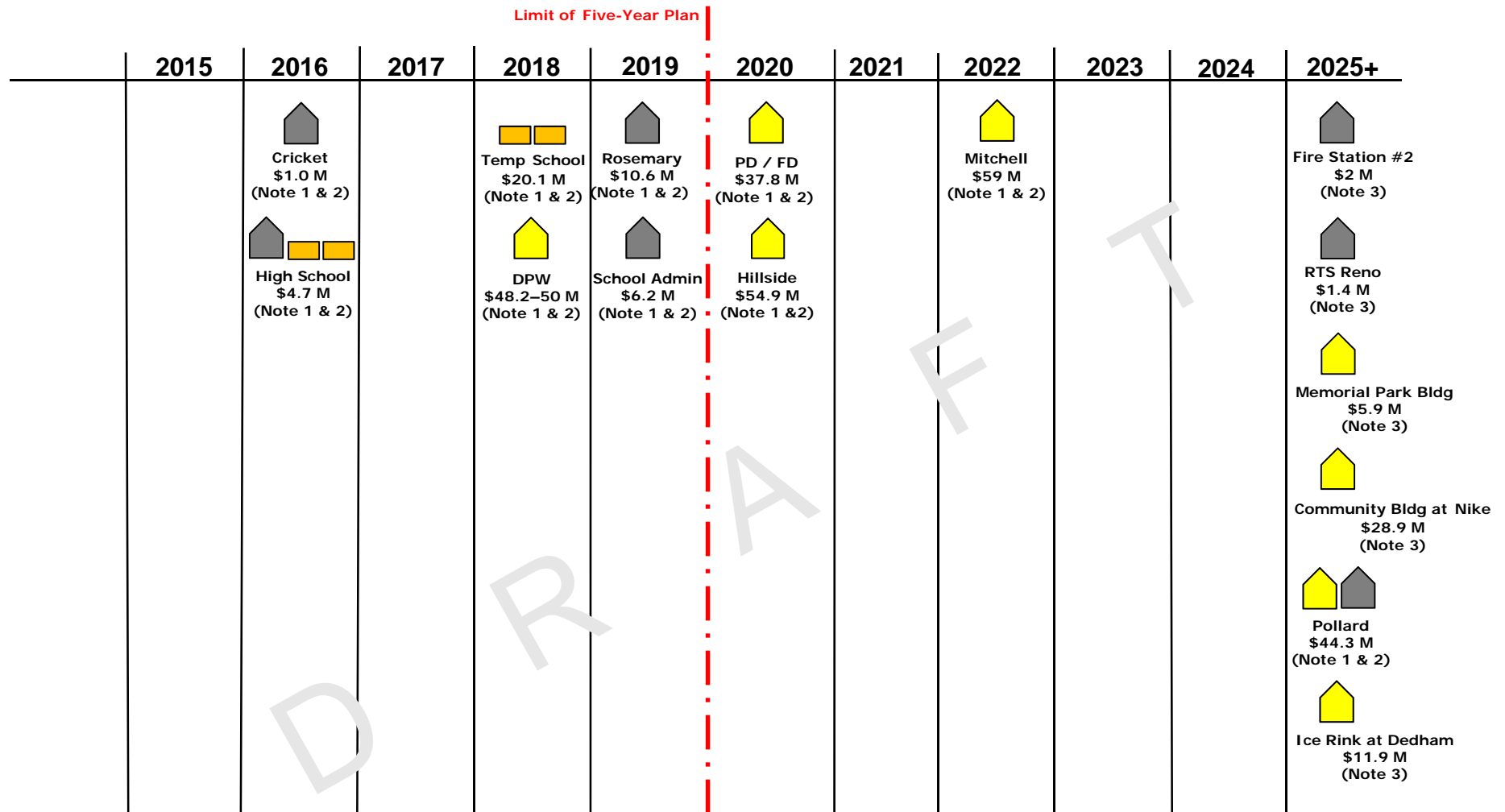
| 2015         | 2016         | 2017         | 2018         | 2019         | 2020         | 2021         | 2022         | 2023         | 2024         | 2025         |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| \$13,964,929 | \$14,802,825 | \$15,365,332 | \$15,949,215 | \$16,555,285 | \$17,184,386 | \$17,837,393 | \$18,515,214 | \$19,218,792 | \$19,949,106 | \$20,707,172 |



# MASTER PLAN TIMELINE: EXPENDITURE FORECAST




| Master Plan Timeline - DRAFT - October 22, 2014   |  |                     |  |                           |      |      |      |      |      |      |      |      |      |      |           |
|---|--|---------------------|--|---------------------------|------|------|------|------|------|------|------|------|------|------|-----------|
| Item #  | Project  | Projected Occupancy | Design to Occupancy Timeframe                                | Cost                      | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 plus |
| <i>Schools Scenario 1: Construction of Temporary School at DeFazio Park</i>   |  |                     |  |                           |      |      |      |      |      |      |      |      |      |      |           |
| 1   | Temporary School at DeFazio Park   | Fall 2018           | 3 yrs: 1 yr design, 2 yrs pre-fab + construct                | \$20.1 M; Note 1          |      |      |      |      |      |      |      |      |      |      |           |
| 2   | Hillside Rebuild/Temp Occupancy at DeFazio Park                                  | Fall 2020           | 5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct       | \$54.9 M; Note 1          |      |      |      |      |      |      |      |      |      |      |           |
| <i>Schools Scenario 2: Construction of Permanent School at DeFazio Park</i>   |  |                     |  |                           |      |      |      |      |      |      |      |      |      |      |           |
| 3   | Permanent School at DeFazio Park   | Fall 2019           | 5 yrs: 2 yrs feasibility, 1.25 yr design, 2.25 yrs construct | \$58.1 M; Note 1          |      |      |      |      |      |      |      |      |      |      |           |
| 4   | High Rock Renovation into Elementary School: Note 4                              | Winter 2020         | 1.5 yrs: 11 mo design, 7 mo construct                        | \$3.6 M; Note 1           |      |      |      |      |      |      |      |      |      |      |           |
| <i>Other School Project Options</i>   |  |                     |  |                           |      |      |      |      |      |      |      |      |      |      |           |
| 5   | High School Renovation and Modularity  | Fall 2016           | 1.5 yrs: 11 mo design, 7 mo construct                        | \$4.7 M; Note 1           |      |      |      |      |      |      |      |      |      |      |           |
| 6   | Mitchell Rebuild/Temp Occupancy at DeFazio or Hillside                           | Fall 2022           | 5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct       | \$59.0 M; Note 1          |      |      |      |      |      |      |      |      |      |      |           |
| 7   | Pollard Addition + Renovations/Temp Occupancy at DeFazio                         | Fall 2025           | 5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct       | \$44.3 M; Note 1          |      |      |      |      |      |      |      |      |      |      |           |
|   | Hillside or Temporary Modular Classrooms as Swing Space                          | TBD                 | Plus 10 years of Design thru possible Occupancy              | Note 7                    |      |      |      |      |      |      |      |      |      |      |           |
| 9   | School Administration: Relocation to PSAB: Note 3                                | Fall 2019 or 2020   | 2.5 yrs: 1 yr design, 1.5 yr construct                       | \$6.2 - \$6.4 M; Note 1   |      |      |      |      |      |      |      |      |      |      |           |
| 10  | School Administration: Reno at Emery Grover                                      | TBD                 | 2.5 yrs: 1 yr design, 1.5 yr construct                       | \$10.7 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 11  | School Administration: New at Nike   | TBD                 | 2.5 yrs: 1 yr design, 1.5 yr construct                       | \$10.4 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 12+13   | School Administration: New at PD/FD  | TBD                 | 2.5 yrs: 1 yr design, 1.5 yr construct                       | \$9.3 - \$10.2 M; Note 2  |      |      |      |      |      |      |      |      |      |      |           |
| 14  | DPW Relocates to Parcel 74: Note 3   | Summer 2018 or 2019 | 3.5 yrs: 2 yrs design, 1.5 yrs construction                  | \$48.2 - \$50.0 M; Note 1 |      |      |      |      |      |      |      |      |      |      |           |
| 15  | RTS Renovations  | TBD                 | 2.5 yrs: 1 yr design, 1.5 yr construct                       | \$2.2 M; Note 2           |      |      |      |      |      |      |      |      |      |      |           |
| 16  | DPW Relocates to RTS   | TBD                 | 3.5 yrs: 2 yrs design, 1.5 yrs construction                  | \$40.9 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 17  | DPW Relocates to Town Forest   | TBD                 | 3.5 yrs: 2 yrs design, 1.5 yrs construction                  | \$39.8; Note 2            |      |      |      |      |      |      |      |      |      |      |           |
| 18  | DPW Rebuild at Dedham Ave. - Entire Program                                      | TBD                 | 3.5 yrs: 2 yrs design, 1.5 yrs construct                     | \$33.2 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 19  | DPW Rebuild at Dedham Ave. - Partial Program: Note 6                             | TBD                 | 3.5 yrs: 2 yrs design, 1.5 yrs construct                     | \$26.6 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 20  | New Police/Fire Station Option 1; Site shared with School Admin                  | TBD                 | 2.75 yrs: 1.25 yrs design, 1.5 yrs construct                 | \$41.2 M; Note 2 + 5      |      |      |      |      |      |      |      |      |      |      |           |
| 21  | New Police/Fire Station Option 2; Site shared with School Admin + Park Structure | TBD                 | 2.75 yrs: 1.25 yrs design, 1.5 yrs construct                 | \$41.2 M; Note 2 + 5      |      |      |      |      |      |      |      |      |      |      |           |
| 22  | New Police/Fire Station Option 3 - Stand Alone                                   | Fall 2020           | 2.75 yrs: 1.25 yrs design, 1.5 yrs construct                 | \$37.8 M; Note 1          |      |      |      |      |      |      |      |      |      |      |           |
| 23  | Police/Fire Station Option 4 Reno + Addition                                     | TBD                 | 2.75 yrs: 1.25 yrs design, 1.5 yrs construct                 | \$19.5 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 24  | Fire Station #2  | TBD                 | 2 yrs: 1 yr design, 1 yr construct                           | \$2.0 M; Note 2           |      |      |      |      |      |      |      |      |      |      |           |
| 25  | Rosemary Pool  | Spring 2019         | 3.5 yrs: 1.5 yrs design, 1 yr construct                      | \$10.6 M; Note 1          |      |      |      |      |      |      |      |      |      |      |           |
| 26  | Crickit Field House Renovations  | Summer 2016         | 1 yr: 5 yr design, 1 yr construct                            | \$1.0 M; Note 1           |      |      |      |      |      |      |      |      |      |      |           |
| 27  | Memorial Park Building: Renovation   | TBD                 | 2 yrs: 1 yr design, 1 yr construct                           | \$1.0 M; Note 2           |      |      |      |      |      |      |      |      |      |      |           |
| 28  | Memorial Park Building: New Building   | TBD                 | 2 yrs: 1 yr design, 1 yr construct                           | \$5.9 M; Note 2           |      |      |      |      |      |      |      |      |      |      |           |
| <i>Potential Public Private Opportunities</i>   |  |                     |  |                           |      |      |      |      |      |      |      |      |      |      |           |
| 29  | Community Center at Nike   | TBD                 | 2 yrs: 1 yr design, 1 yr construct                           | \$28.9 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 30  | Community Center at Dedham Ave   | TBD                 | 2 yrs: 1 yr design, 1 yr construct                           | \$30.7 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 31  | Community Center at Parcel 74  | TBD                 | 2 yrs: 1 yr design, 1 yr construct                           | \$28.5 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 32  | Ice Rink at 470 Dedham Ave.  | TBD                 | 3.5 yrs: 1.5 yr design, 2 yr construct                       | \$11.9 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
| 33  | Ice Rink at Town Forest  | TBD                 | 3.5 yrs: 1.5 yr design, 2 yr construct                       | \$13.2 M; Note 2          |      |      |      |      |      |      |      |      |      |      |           |
|   | Ridge Hill   | TBD                 | Ongoing maintenance funds required                           | TBD                       |      |      |      |      |      |      |      |      |      |      |           |
|   | Nike   | TBD                 | X  | TBD                       |      |      |      |      |      |      |      |      |      |      |           |
| Note 1: Costs: Projected to mid-point of construction.<br>Note 2: Costs: Shown as 2014 dollars.<br>Note 3: If a permanent school is built at DeFazio Park, the relocation of the DPW could be extended until the Fall of 2019, coinciding with the occupancy of the school. Relocation of School Administration follows relocation of DPW.<br>Note 4: High Rock renovations not necessary if Hillside rebuild at DeFazio Park.<br>Note 5: Costs: Shown for PD/PD only.<br>Note 6: DPW Partial Program does not include development costs for remainder of program that would need to be constructed in another location.<br>Note 7: Minor renovations required for temporary occupancy transitions. |  |                     |  |                           |      |      |      |      |      |      |      |      |      |      |           |

## MASTERPLAN TIMELINE: SCENARIO 1 - Temporary School at DeFazio Park



### Notes

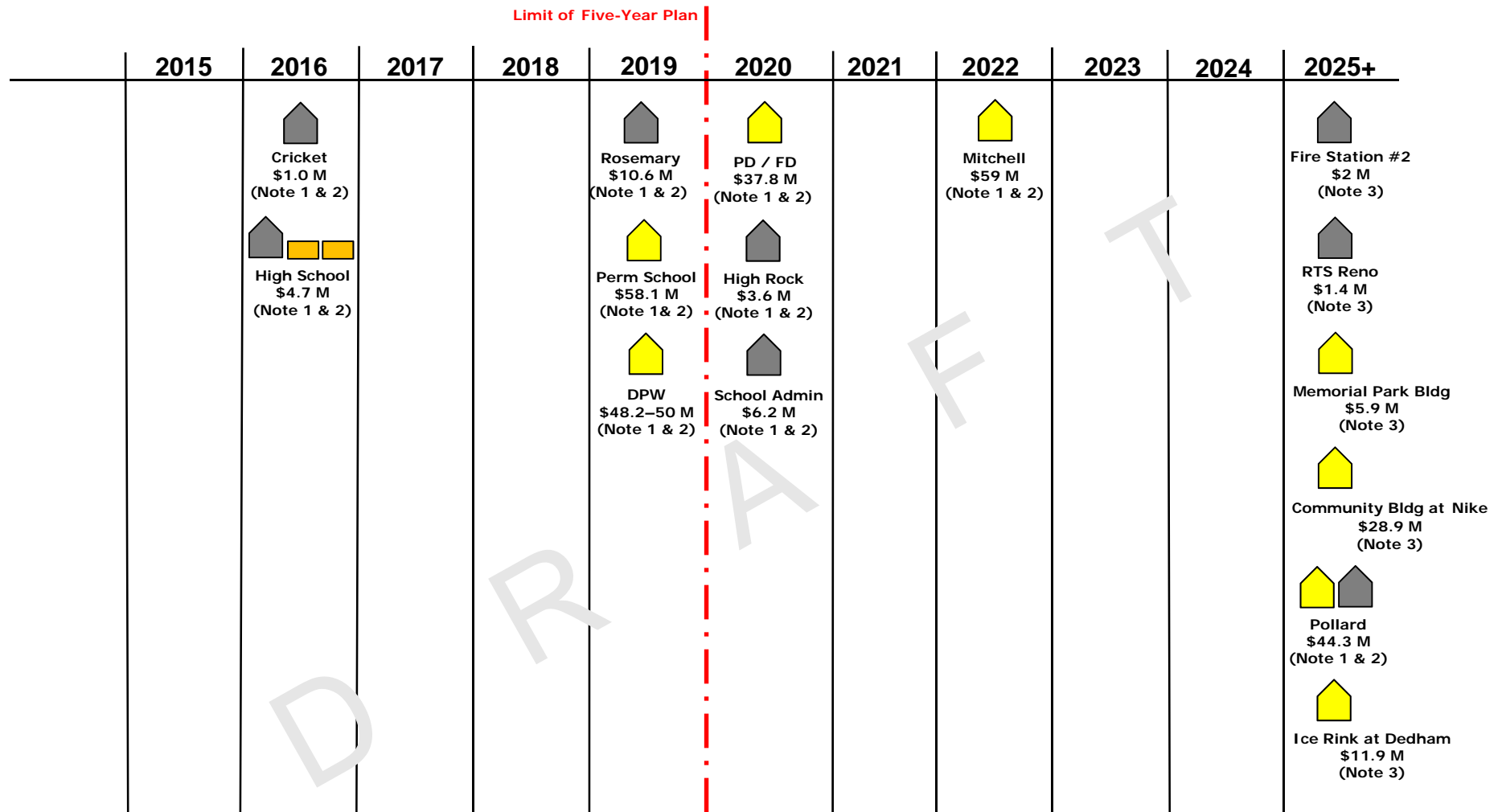
1. Projects are shown at projected occupancy date.
2. Project costs are projected to the midpoint of construction.
3. Project costs are estimated to 2014.

| Key   |                      |
|---|----------------------|
|  | = New Building       |
|  | = Renovation         |
|  | = Modular Classrooms |

DRAFT




BOS

## MASTERPLAN TIMELINE: SCENARIO 2 - Permanent School at DeFazio Park

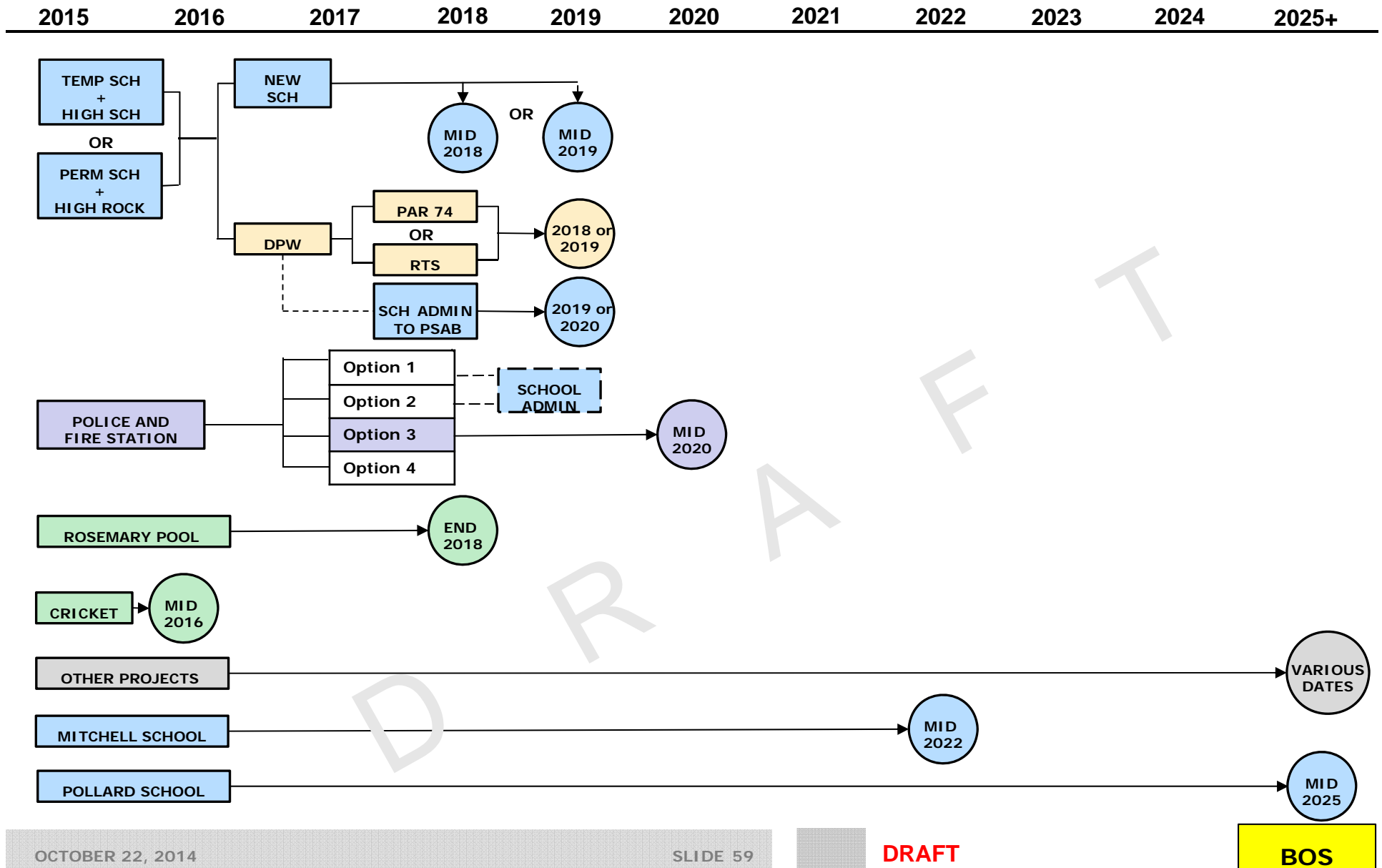


### Notes

1. Projects are shown at projected occupancy date.
2. Project costs are projected to the midpoint of construction.
3. Project costs are estimated to 2014.

| Key   |                      |
|---|----------------------|
|  | = New Building       |
|  | = Renovation         |
|  | = Modular Classrooms |

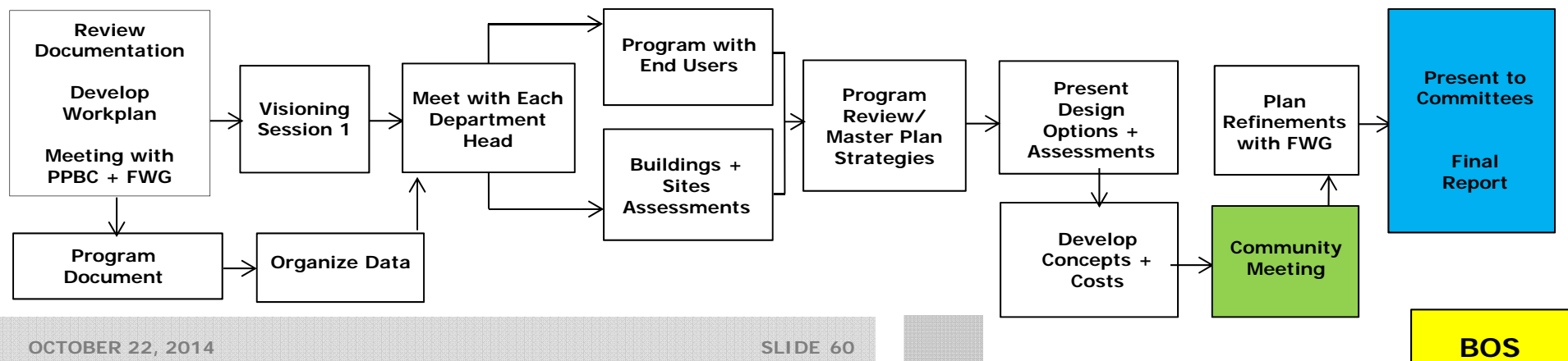
## MASTERPLAN TIMELINE: INTERCONNECTIONS

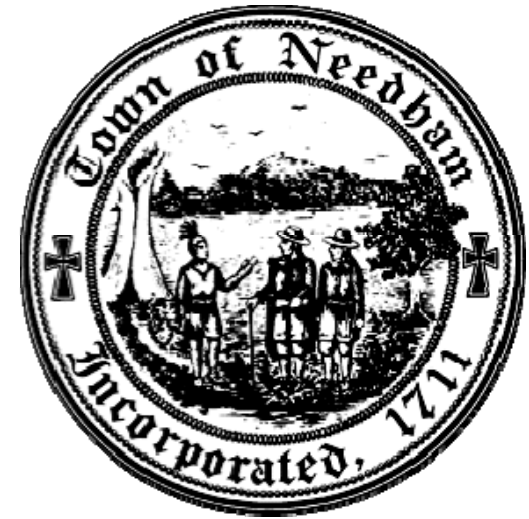




## NEXT STEPS

- Community/PPBC Meeting on November 24, 2014 at 7:00 PM
- Final Report





OCTOBER 22, 2014

**THANK YOU**

**BOS**