

NEEDHAM FACILITIES MASTER PLAN STUDY



Municipal Resources, Inc.



AGENDA

- Master Plan Goals and Objectives
- Master Plan Process
 - Facility Working Group Charge
 - Scope and Timeline
- Overview of sites and buildings involved in Master Plan
- Review of program and potential options for:
 - Department of Public Works
 - Fire and Police Department
 - Schools and School Administration
 - Rosemary Pool, Nike and Ridge Hill sites
- Where to look for additional information on Master Plan
- Questions and Comments

MASTER PLAN GOALS AND OBJECTIVES

- Complete Town wide assessment of municipal structures and sites with focus on projects anticipated for design and construction over the next 10-20 years
- Analyze Town priorities for providing additional space to support the needs of all Town departments including repairs, renovations and new construction
- Establish capital project priorities and a realistic schedule for that work



MASTER PLAN PROCESS: Facility Working Group Charge

- Provide advice and input to the BoS and PPBC in the development of an updated Master Plan
- Assist the PPBC in its evaluation of current and future needs of identified capital facilities
- Evaluate and make recommendations relative to timing and financing of future capital projects
- Evaluate the Town's existing and potential land use inventory and make recommendations as to any beneficial alteration in the location of capital facilities



MASTER PLAN PROCESS: Facility Working Group

- **Committee Members:**
 - Board of Selectmen
 - Permanent Public Building Committee
 - Planning Board
 - School Committee
 - Park & Recreation Commission
 - Finance Committee
 - Conservation Commission
- **Town of Needham Staff:** Town Manager, Assistant Town Managers for Operations and Finance, Public Facilities - Construction and Operations, DPW, Engineering, Planning & Community Development, School Department, Police Department, Fire Department, Park & Recreation, Conservation

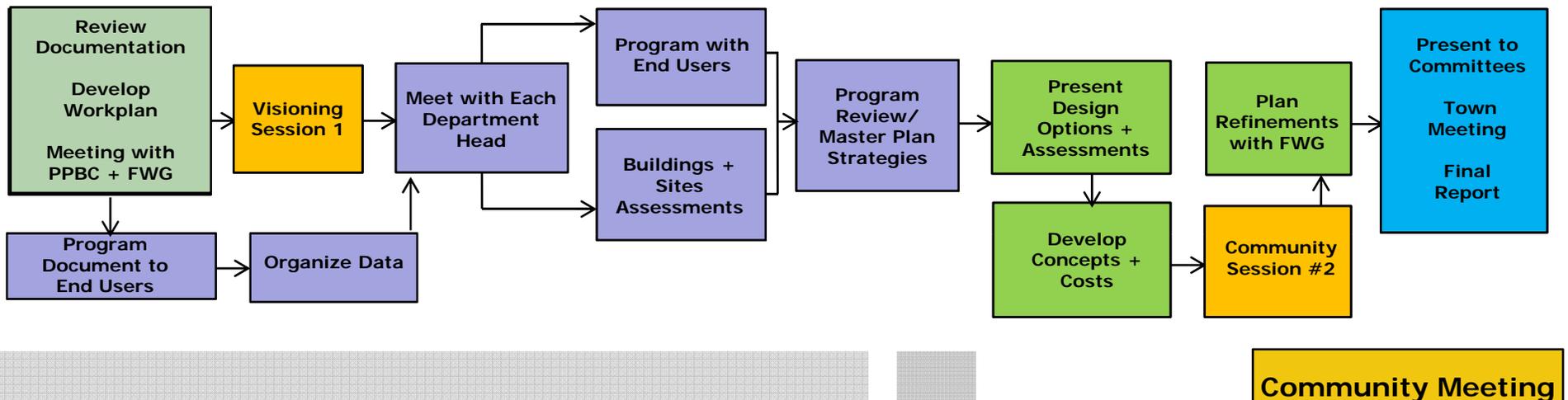
MASTER PLAN PROCESS: Scope and Timeline

- Work includes:
 - Programming and assessment
 - Studying design options for Town held properties
 - Exploring alternative sites
 - Meeting with Town representatives and making public presentations
 - Assisting in establishing capital project priorities and schedules
- Timeline:
 - Work began mid December 2013 and Master Plan report will be completed prior to Fall 2014 Town Meeting



MASTER PLAN PROCESS: Scope and Timeline

- Review documentation + develop workplan; Visioning
- Programming with end users; site and building assessments
- Develop and present conceptual design options
- Community meeting
- Finalize options and develop preliminary budgets
- Refine options and budgets with FWG
- Present Master Plan to Committees and Town Meeting
- Prepare final report



OVERVIEW OF SITES + BUILDINGS INVOLVED IN MASTER PLAN

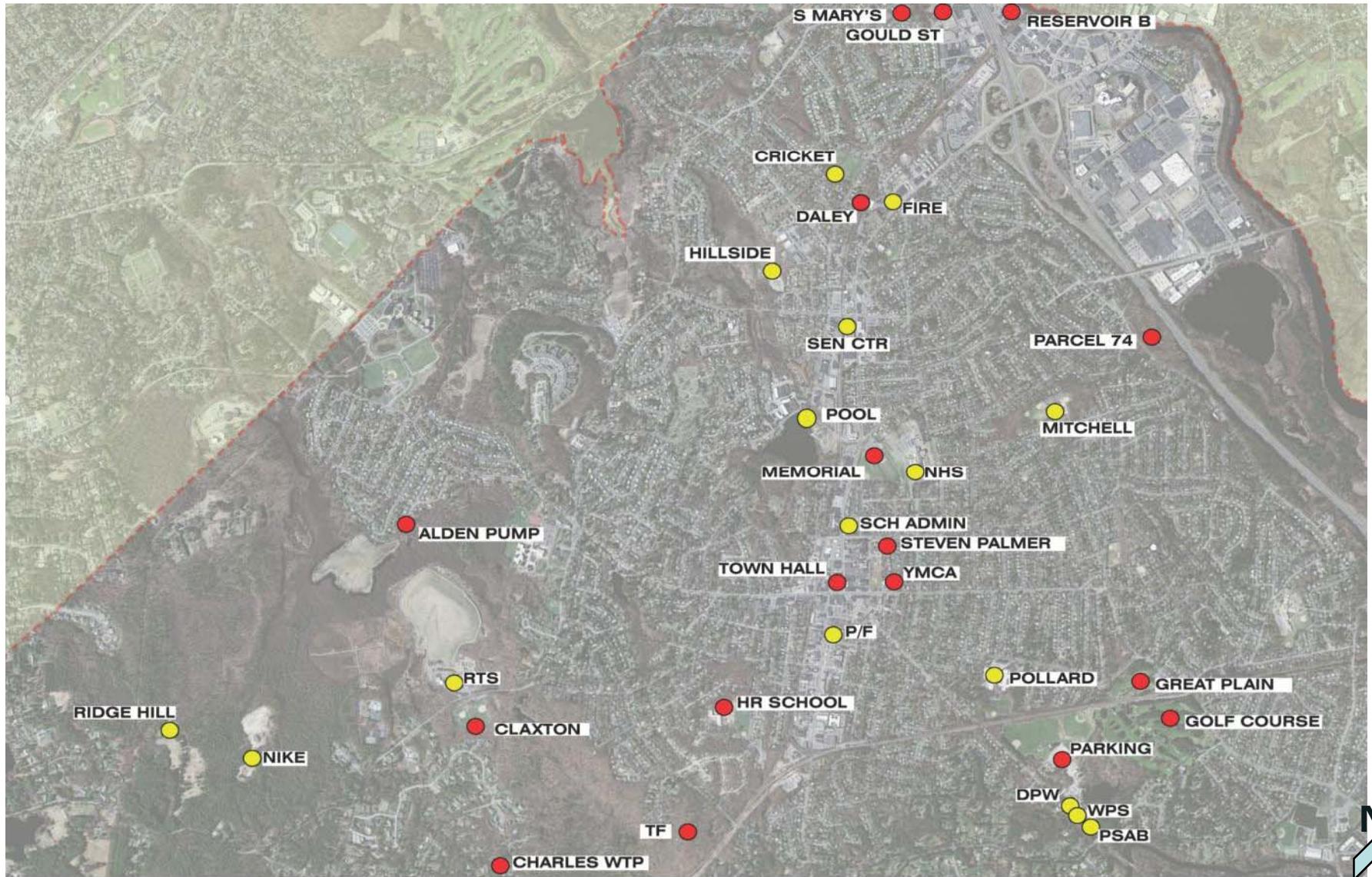
- Police and Fire Buildings
- Department of Public Works Buildings
- School/School Administration Buildings
- Park and Recreation Buildings
- Ridge Hill Buildings
- Various other sites owned by Town



OVERVIEW OF SITES + BUILDINGS INVOLVED IN MASTER PLAN



OVERVIEW OF SITES + BUILDINGS INVOLVED IN MASTER PLAN



PROGRAMMING/DESIGN OPTION PROCESS

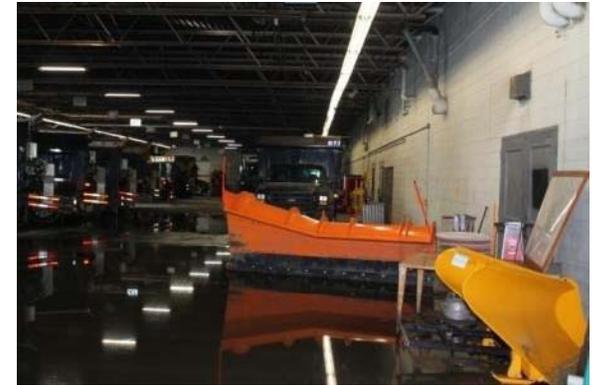
- Programming Process included detailed programming of Fire, Police and Public Works
- Programming and planning for Rosemary Pool has been previously completed and results will be incorporated into Master Plan
 - Programming for any other Community space is ongoing
- Programming of Schools and School Administration has also been completed and results will be incorporated into Master Plan
 - Statement of Interest has been submitted to Massachusetts School Building Authority



**REVIEW OF PROGRAM AND POTENTIAL OPTIONS:
DPW**



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DPW**



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW

- DPW Building: original structure circa 1960, 2nd floor addition circa 1965
 - The building consists of a 1-story vehicle storage area (60'x191') + a 2-story vehicle maintenance/locker room/office area (60'x191'+ 60'x148')
 - A perennial stream/channel is located against the building foundation along the south side
 - First floor is slab on grade
 - Masonry bearing walls supporting steel roof on vehicle storage bay. Two-storey portion is steel frame, with masonry infill walls
 - No seismic restraints in the structural system



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW

- Vehicle Storage and Maintenance bay clear heights are inadequate
 - Garage is 60' width vs 98', height should be minimally 17' clear of structure or systems, 470 Dedham is 18' to top of building
- Maintenance : Should have minimum 6-7 bays (current at 3), storage for fluids, tires and parts and supplies
- Shops: Should provide adequate work and consolidated storage areas



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW

- Open exterior stair as means of egress from the second floor does not meet code; Interior stair from second floor is not enclosed
- Egress doors are unmarked or blocked by equipment



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW

- No fire suppression system
- The building envelope does not meet current energy code
- No accessible means to the second floor
- No accessible toilets



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW

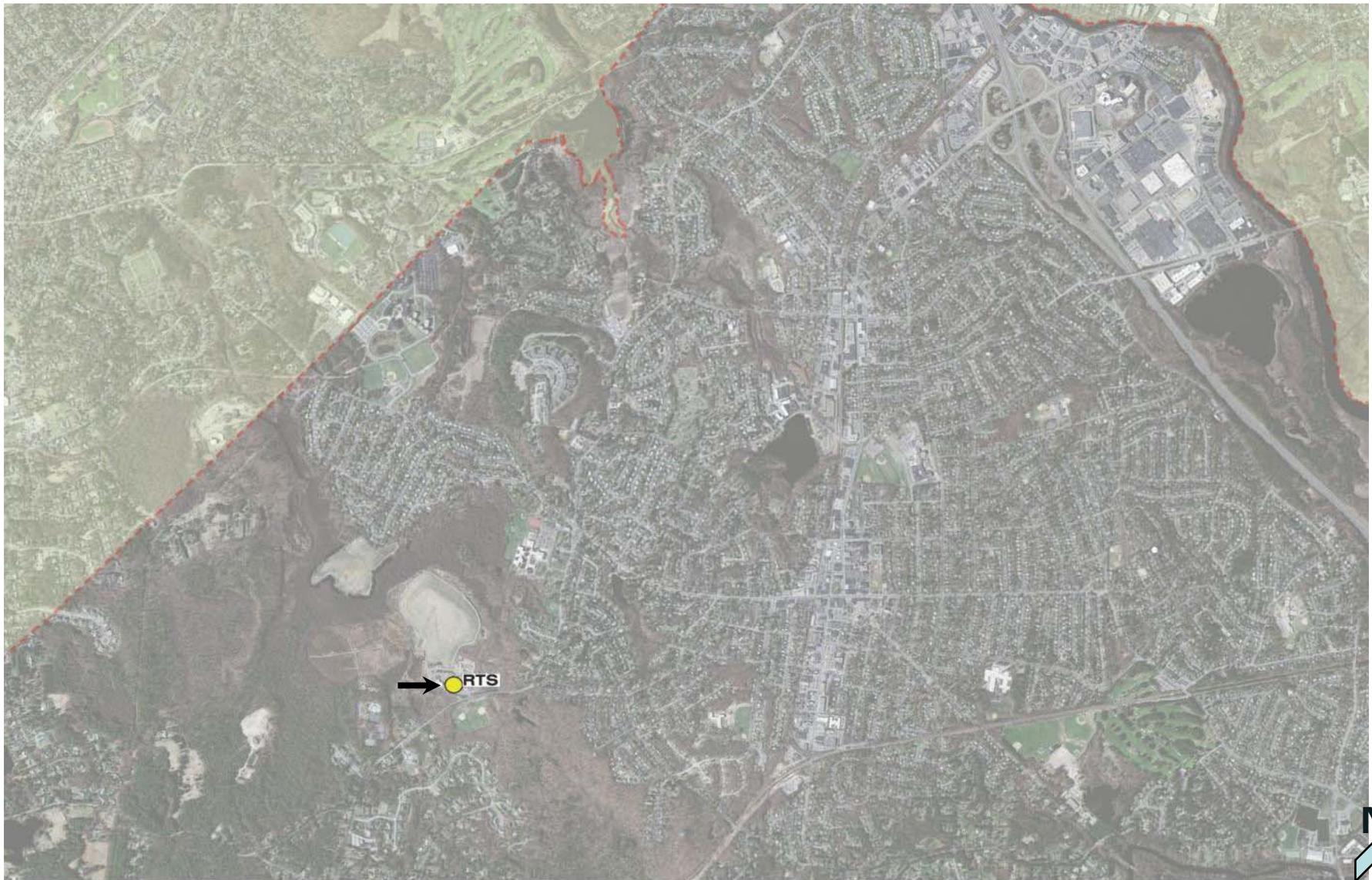
- Vehicles, equipment + materials are located throughout Town:
 - Dedham Ave., RTS, Daley Bldg., Alden Road Pump Station, Charles River WTP, Reservoir B, St. Mary's Pump Station, Ridge Hill, Memorial Field, DeFazio Park, Claxton and Cricket Fields. The DPW would prefer to maintain space at some facilities, fields and parks, because this is where the equipment/materials are primarily used.
 - Vehicles and equipment stored indoors protect these valuable assets and help improve localized site conditions
 - Some storage areas are under the control of other departments and are subject to change as Towns needs change



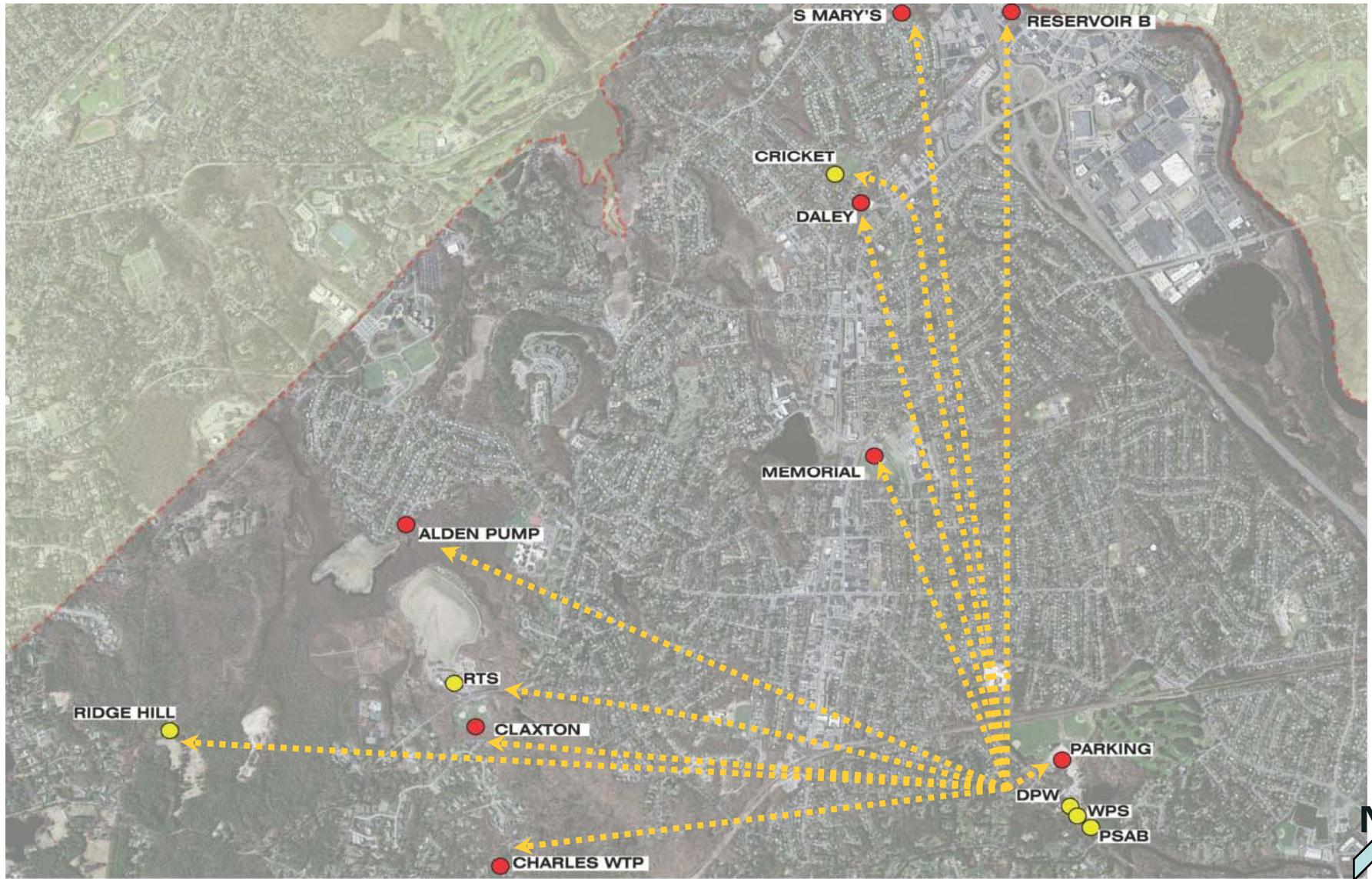
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW



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- Materials handling areas: storage of stock materials such as sand + gravel and areas to store materials removed during street sweeping, catch basin cleanout or asphalt repairs and from Town construction sites needs should be defined and controlled
 - Currently stored at DPW site near original salt shed + RTS
 - 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 the project



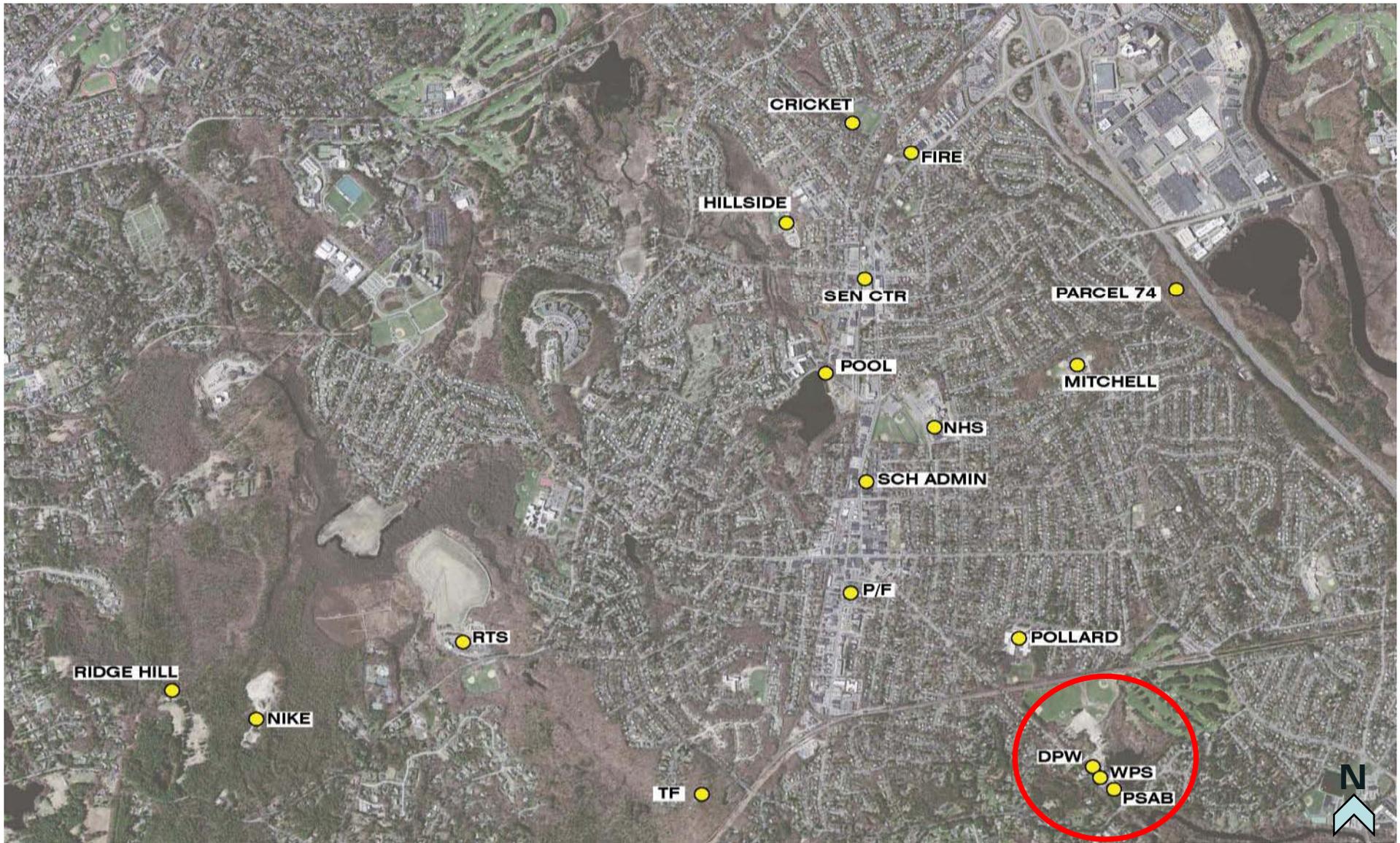
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW

Division	Existing GSF	Existing Total GSF	Proposed GSF	Proposed Total GSF
Administration - Shared	12,872★		4,751	
Administration	Included above		2,398	
Administration - Operations	Included above		2,073	
Administration - Engineering	Included above		4,571	
Operations – Employee Support	3,918		3,812	
Operations – Garage/Maintenance	5,200		14,818	
Operations - Shops	4,620		5,746	
Operations – Wash Bay/ Vehicle Storage + Prep	18,022		46,244	
Building Support (Other storage included)	9,100		2,291	
SUBTOTAL		53,732		86,704
Other Buildings (Not including RTS)	11,200		Est 5,000	
SUBTOTAL		64,932		91,704
Bin Storage Estimated	3,000		Est 5,000	
Outdoor Areas (Including covered storage)	32,800		Max available	
Other Departments in PSAB	8,905■		8,905	
TOTAL INCLUDING ALL OF PSAB		73,837		100,609

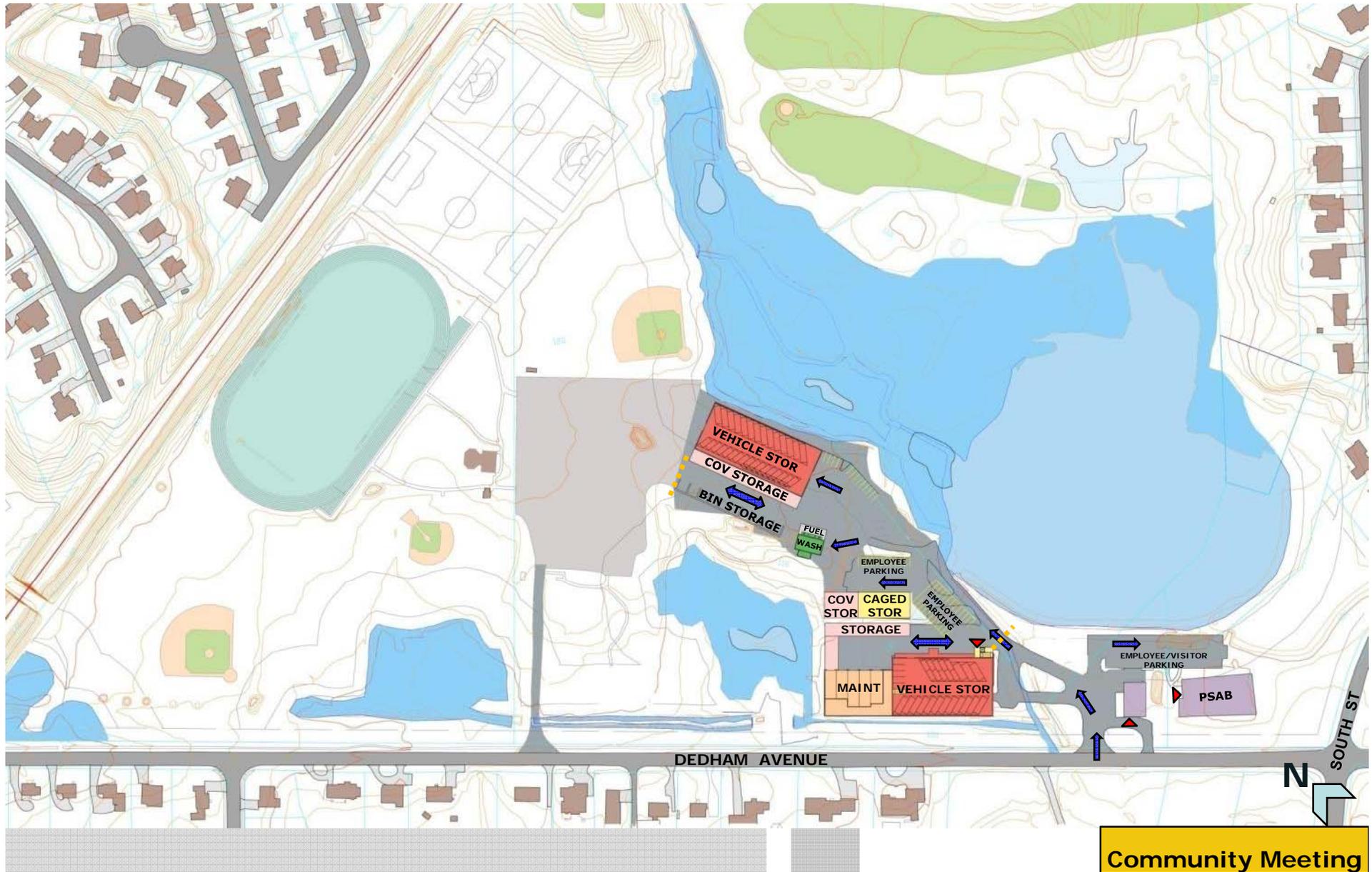
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: DPW



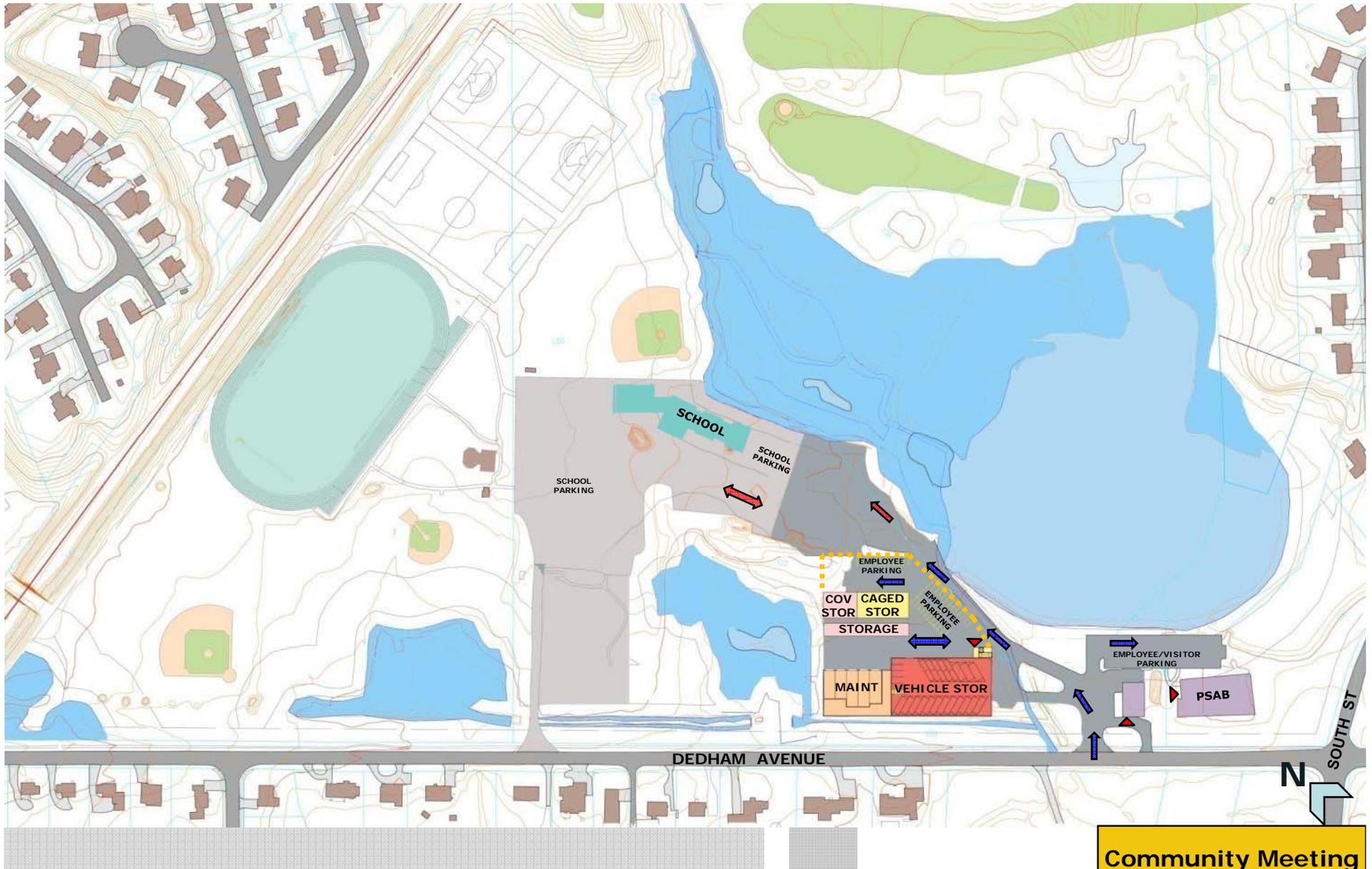
DEPARTMENT OF PUBLIC WORKS: DEDHAM AVE OPTION - EXISITNG



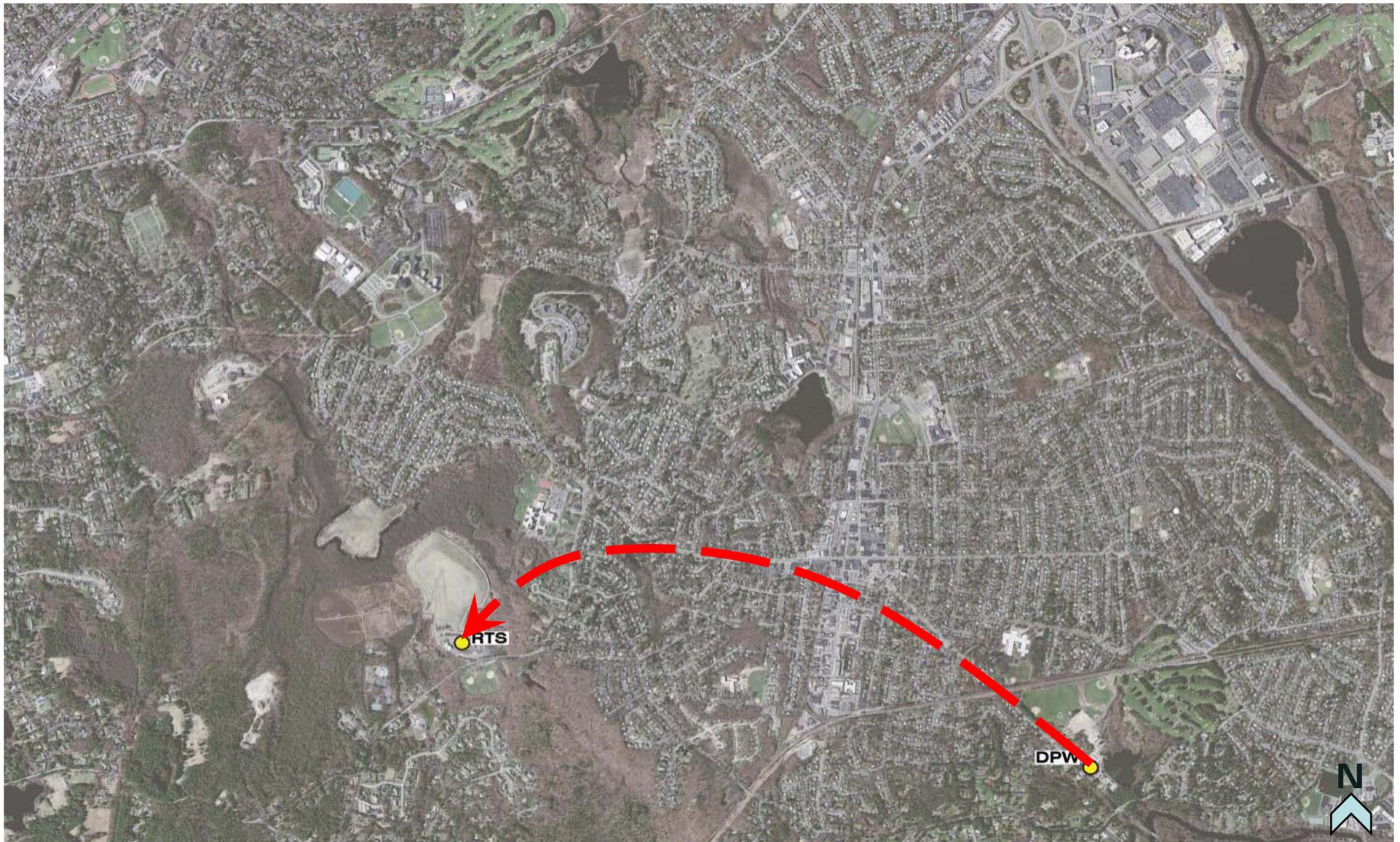
DEPARTMENT OF PUBLIC WORKS: DEDHAM AVE OPTION – FULL PROGRAM



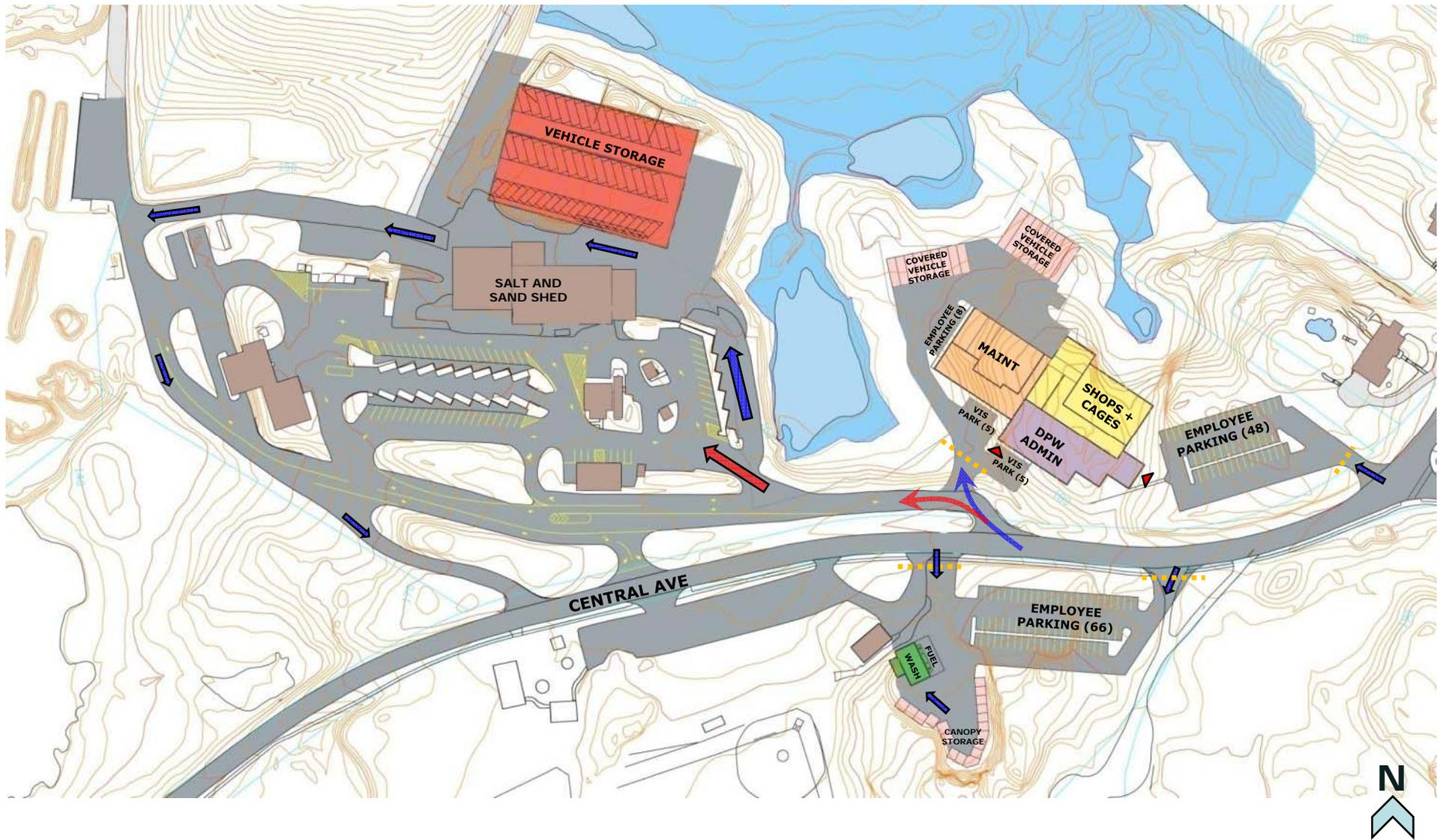
DEPARTMENT OF PUBLIC WORKS: DEDHAM AVE OPTION – PARTIAL PROGRAM



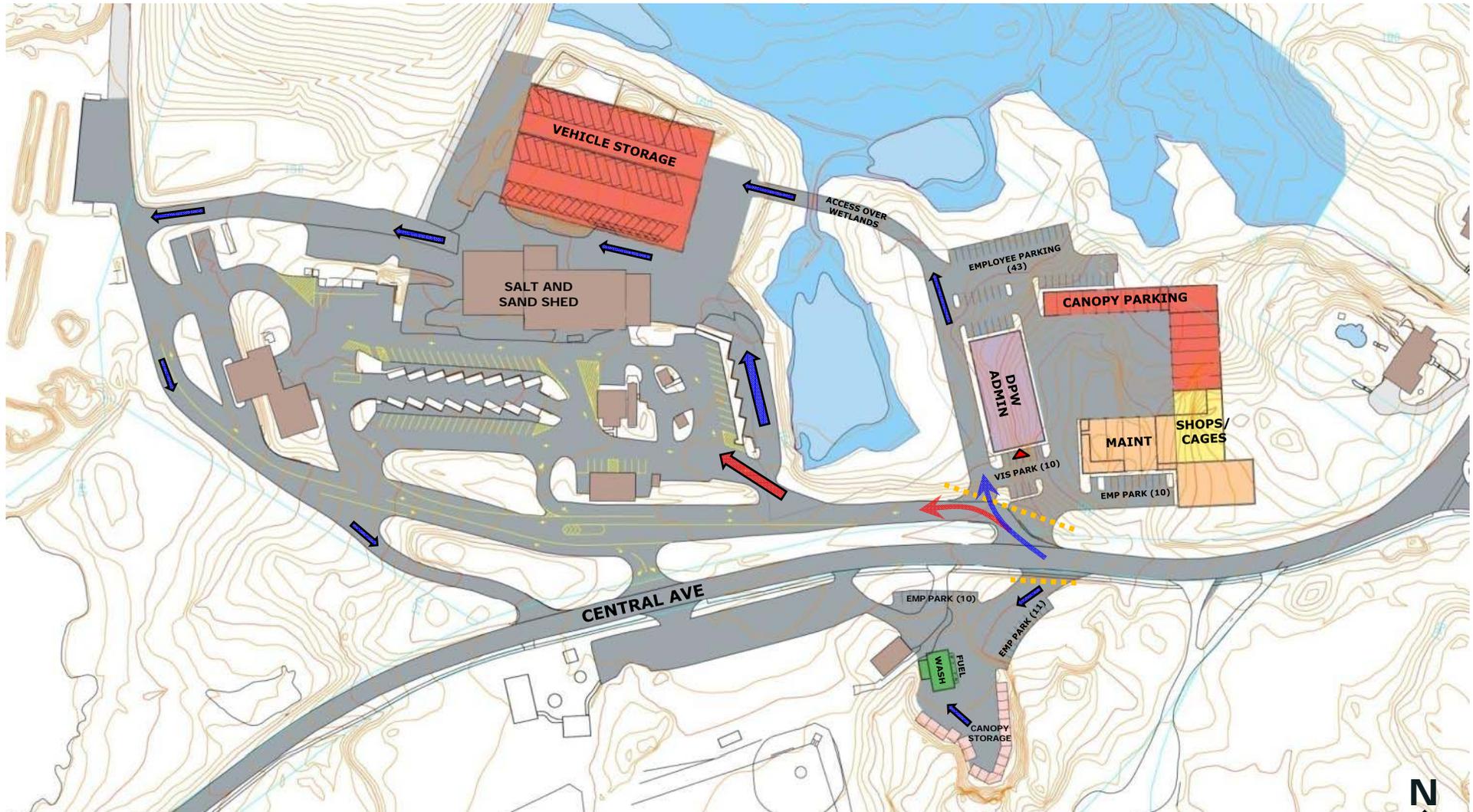
IF DEPARTMENT OF PUBLIC WORKS MOVES TO RTS



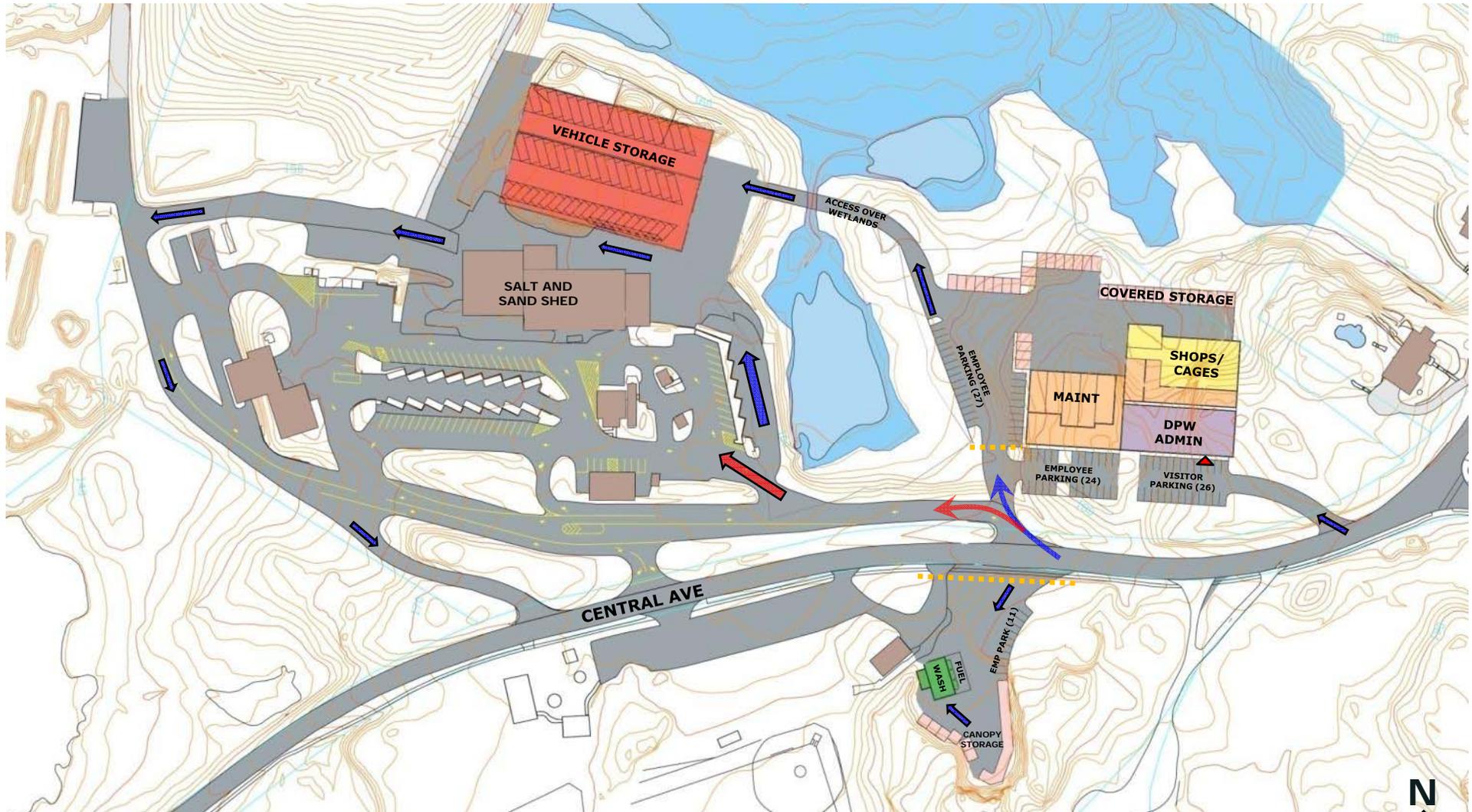
DEPARTMENT OF PUBLIC WORKS: RTS OPTION 1



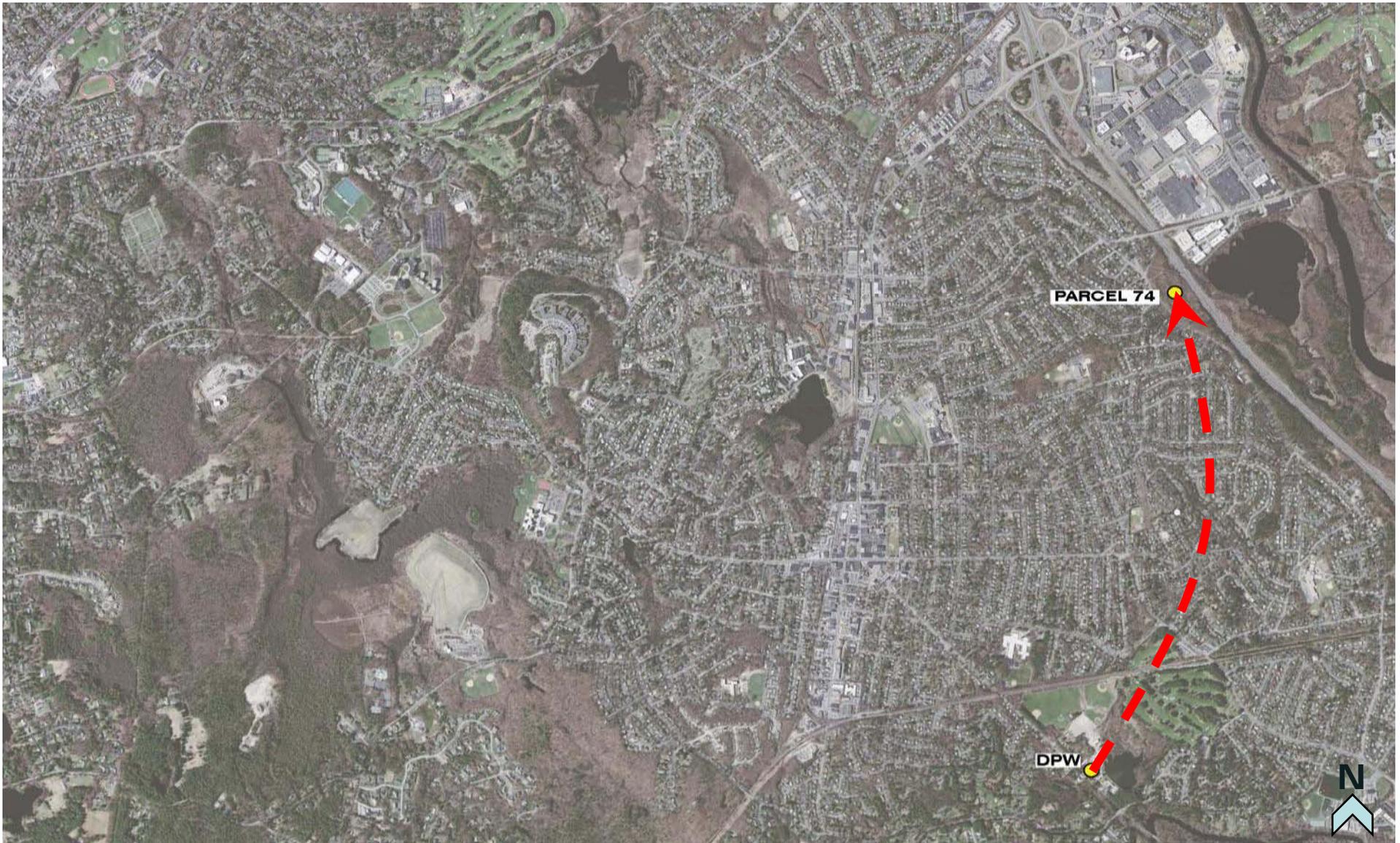
DEPARTMENT OF PUBLIC WORKS: RTS OPTION 2



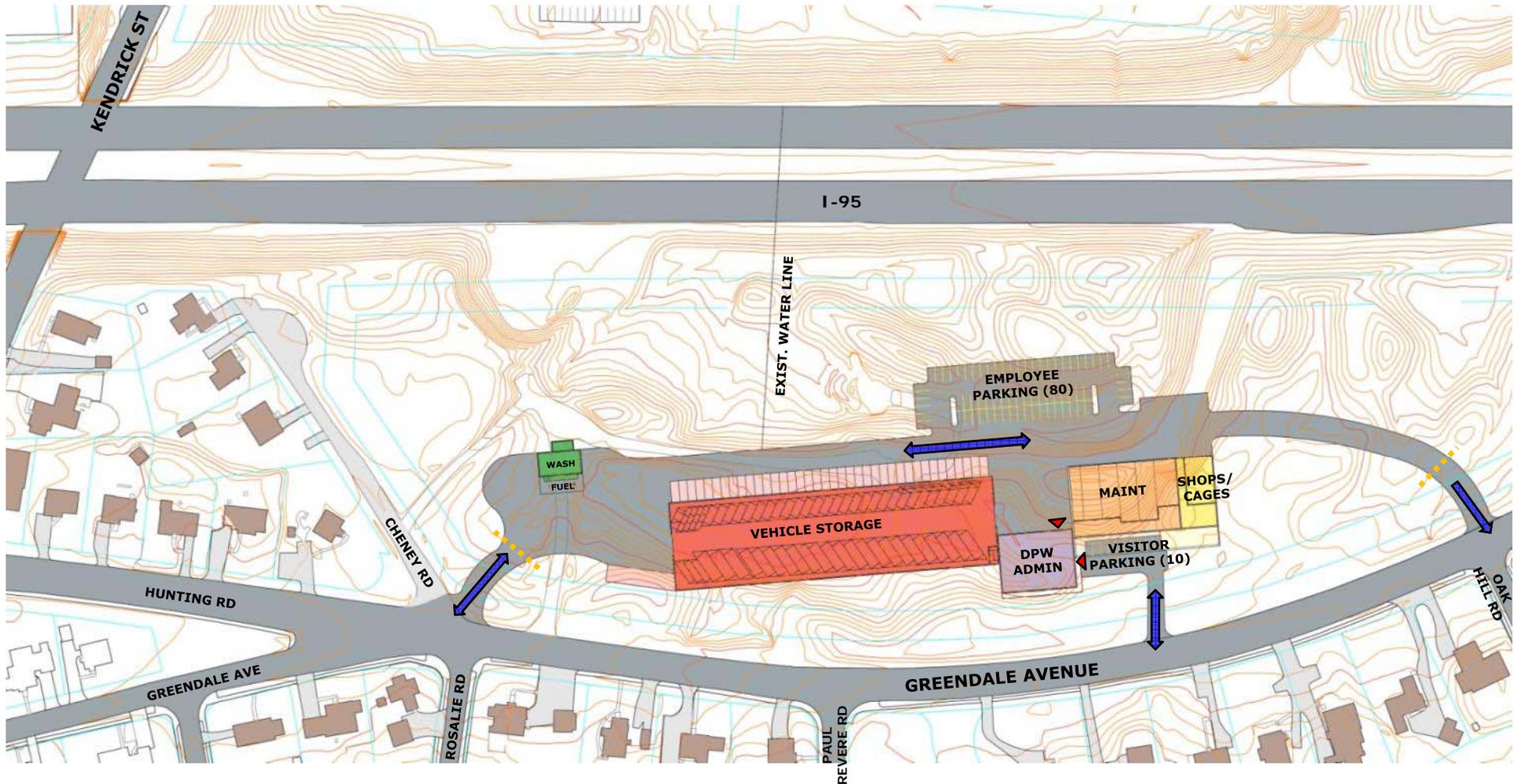
DEPARTMENT OF PUBLIC WORKS: RTS OPTION 3



IF DEPARTMENT OF PUBLIC WORKS MOVES TO PARCEL 74/GREENDALE AVE



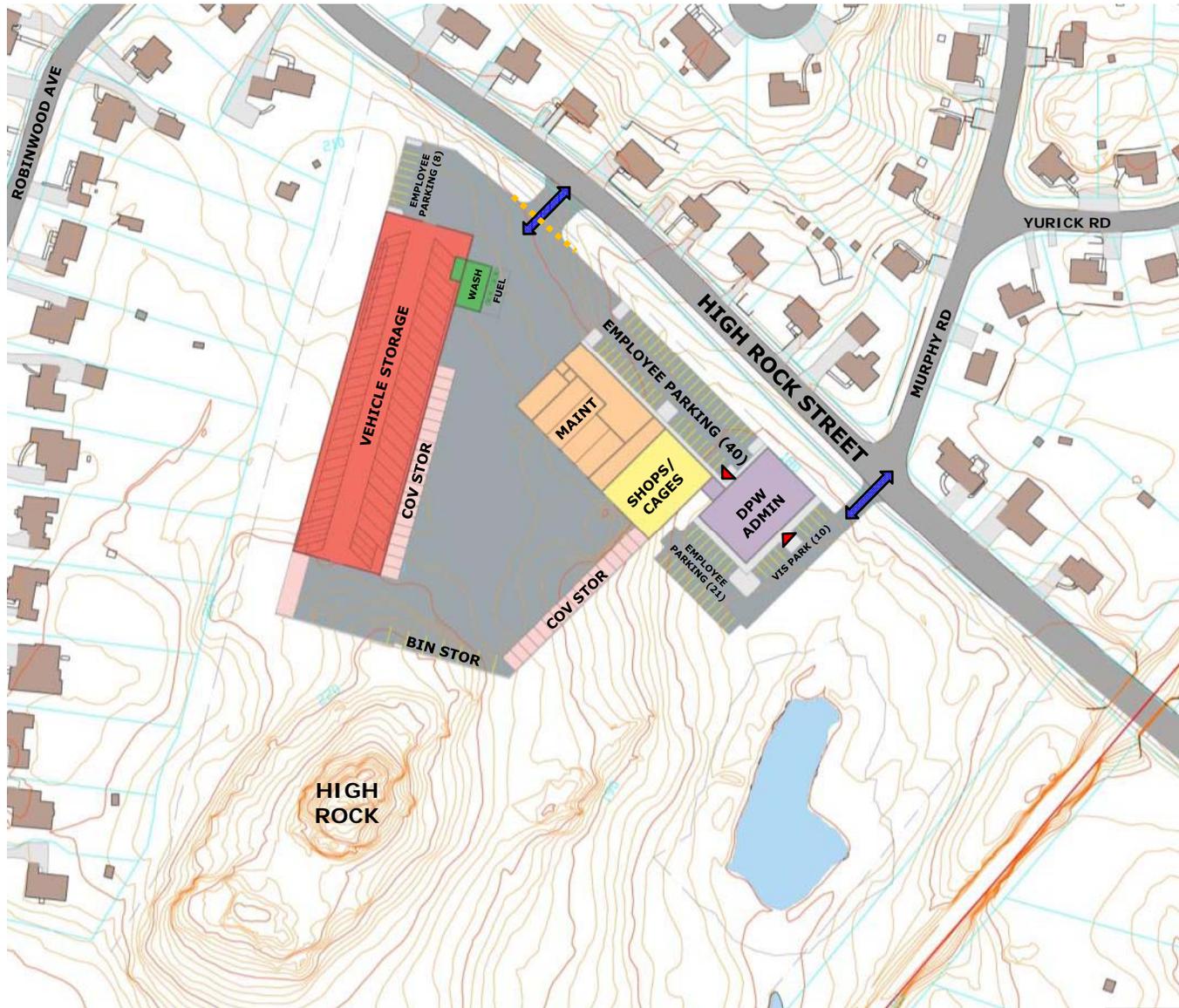
DEPARTMENT OF PUBLIC WORKS: PARCEL 74/GREENDALE AVE. OPTION



IF DEPARTMENT OF PUBLIC WORKS MOVES TO TOWN FOREST



DEPARTMENT OF PUBLIC WORKS: TOWN FOREST OPTION



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE



**REVIEW OF PROGRAM AND POTENTIAL OPTIONS:
FIRE + POLICE**



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE

- Police/Fire Building: original structure circa 1930, additions circa 1989
 - Based upon a review of existing plans:
 - Additions: generally 2-stories with loading-bearing reinforced CMU and brick veneer or steel columns; second floor structure is steel joist with concrete-on-metal deck; roofs are framed with steel joists supporting metal roof deck
 - The additions have at least partial basements with concrete foundation walls
 - The original building was designed prior to seismic code requirements. The additions were designed after seismic requirements were added to the code.
 - It is unknown if the original building was upgraded for lateral loading when the addition was done

REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE

- Current building is undersized for current vehicles and equipment
- Organization of spaces does not reflect current police and fire operational needs
- Shared resources: FD + PD dispatch, waiting area, conference and EOC are not well located
- No sallyport; no holding area; booking area too small and too much prisoner access to personnel and equipment
- Support spaces for apparatus inadequate; height and width do not meet current standards



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE

- 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



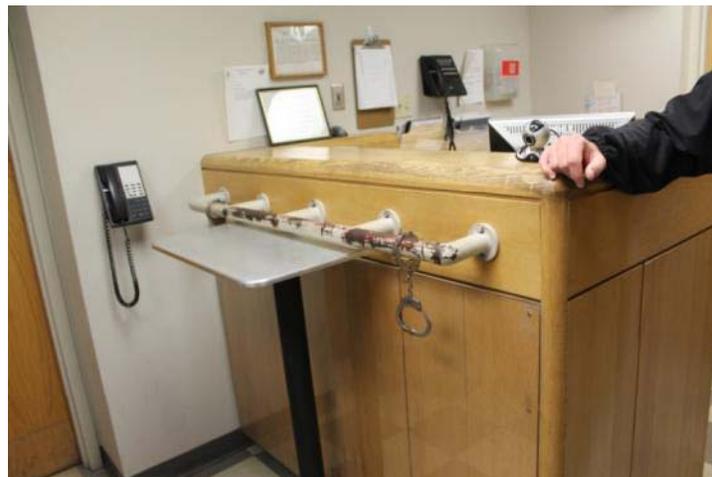
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE

- Apparatus bay is too low
- Accessible entry does not meet current AAB regulations; inaccessible second floor (no elevator)
- Spaces are generally too small to fit current programmatic needs
- Inadequate Storage



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE

- Inadequate booking area
- Inadequate evidence area
- Potential sally port but steps to access to booking
- Suspect entry is very public

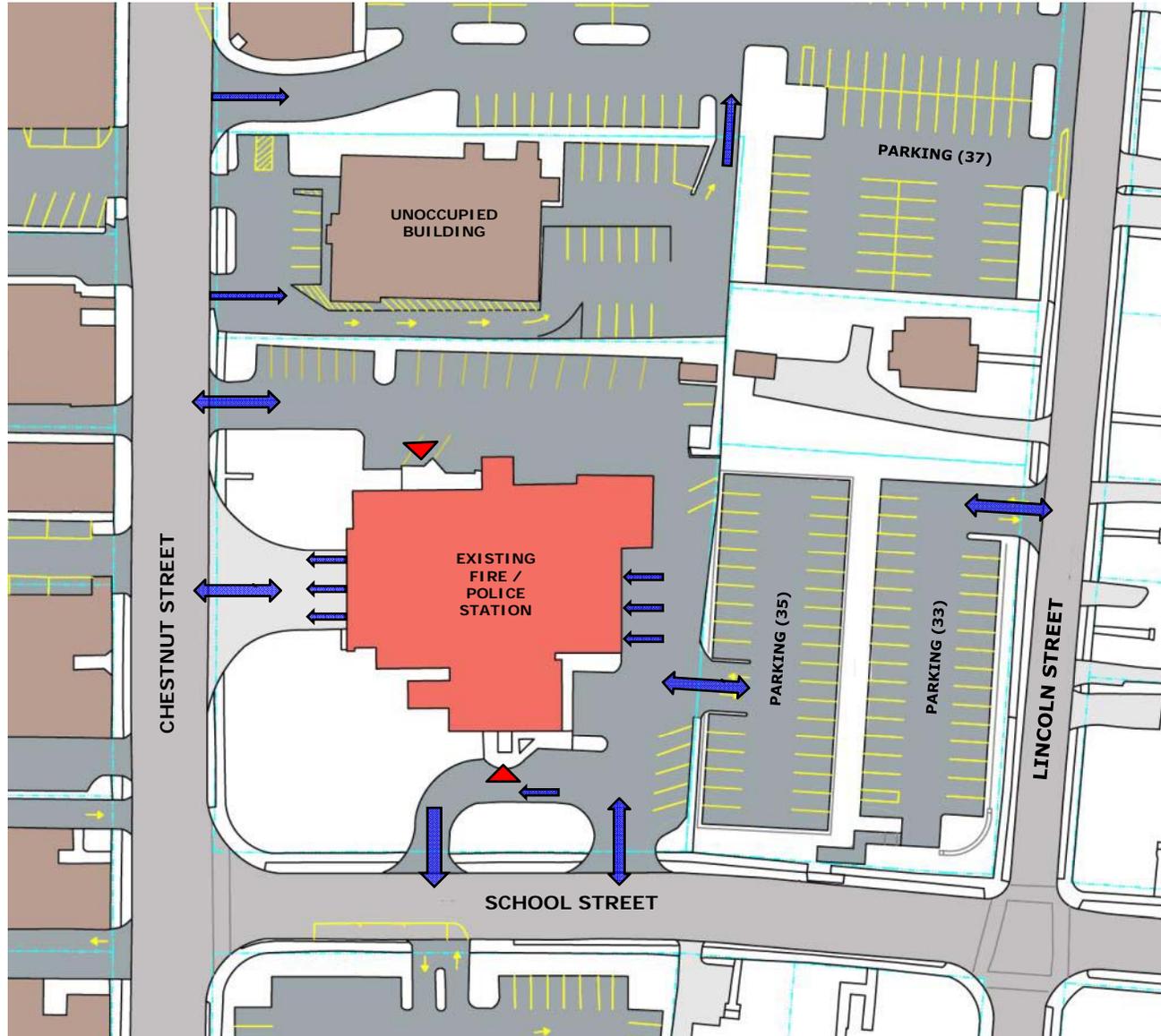


REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE

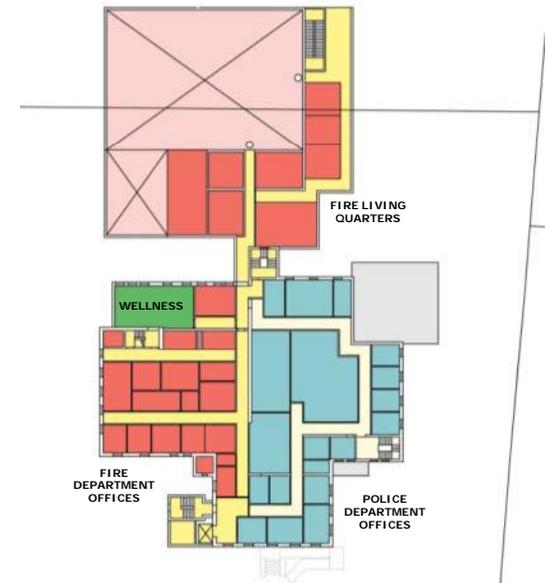
- Program assumes remaining on site

DIVISION	GSF	TOTAL GSF
Public Areas - Shared	658	
PD + FD Shared	3,069	
SUBTOTAL		3,727
PD: Operations + Support	12,127	
PD: Operations - Detention	2,217	
PD: Administration	4,990	
SUBTOTAL		19,333
FD: Operations	10,276	
FD: Administration	2,217	
FD: Staff Support	2,911	
SUBTOTAL		16,388
Building Support		2,505
TOTAL		41,953

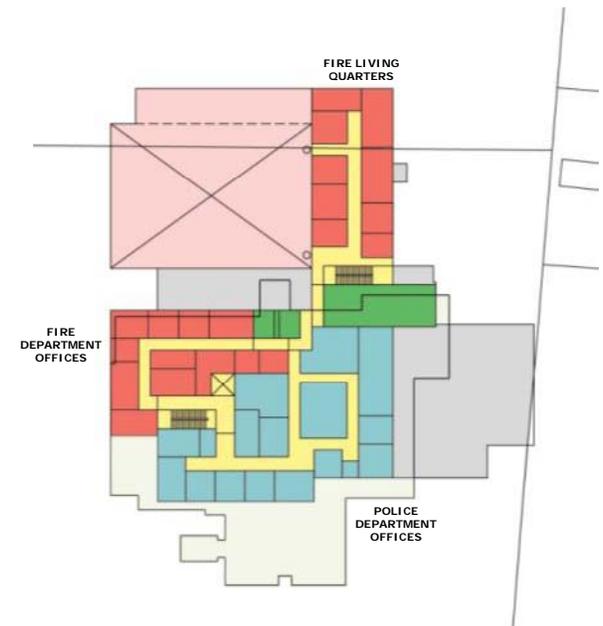
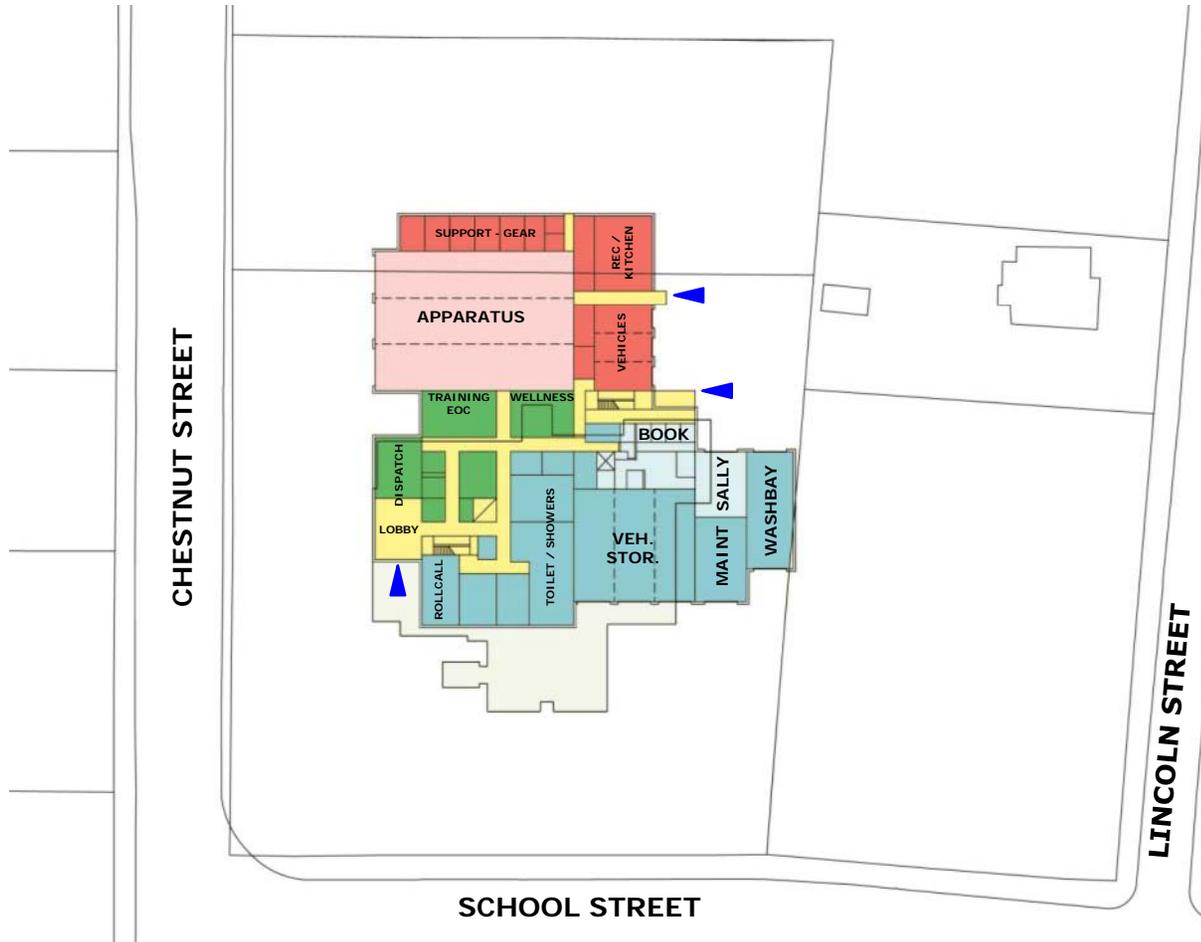
EXISTING POLICE/FIRE SITE



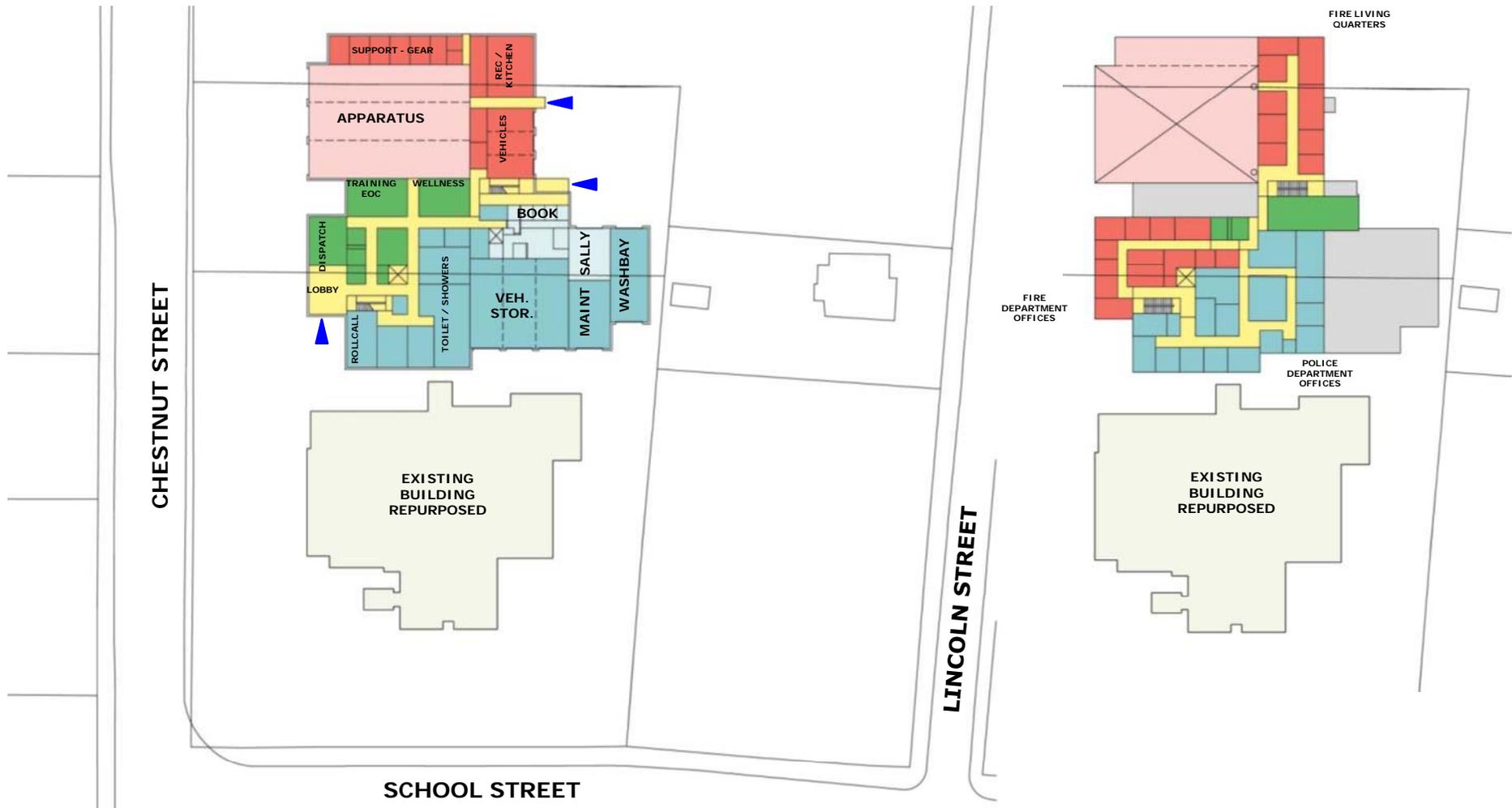
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE



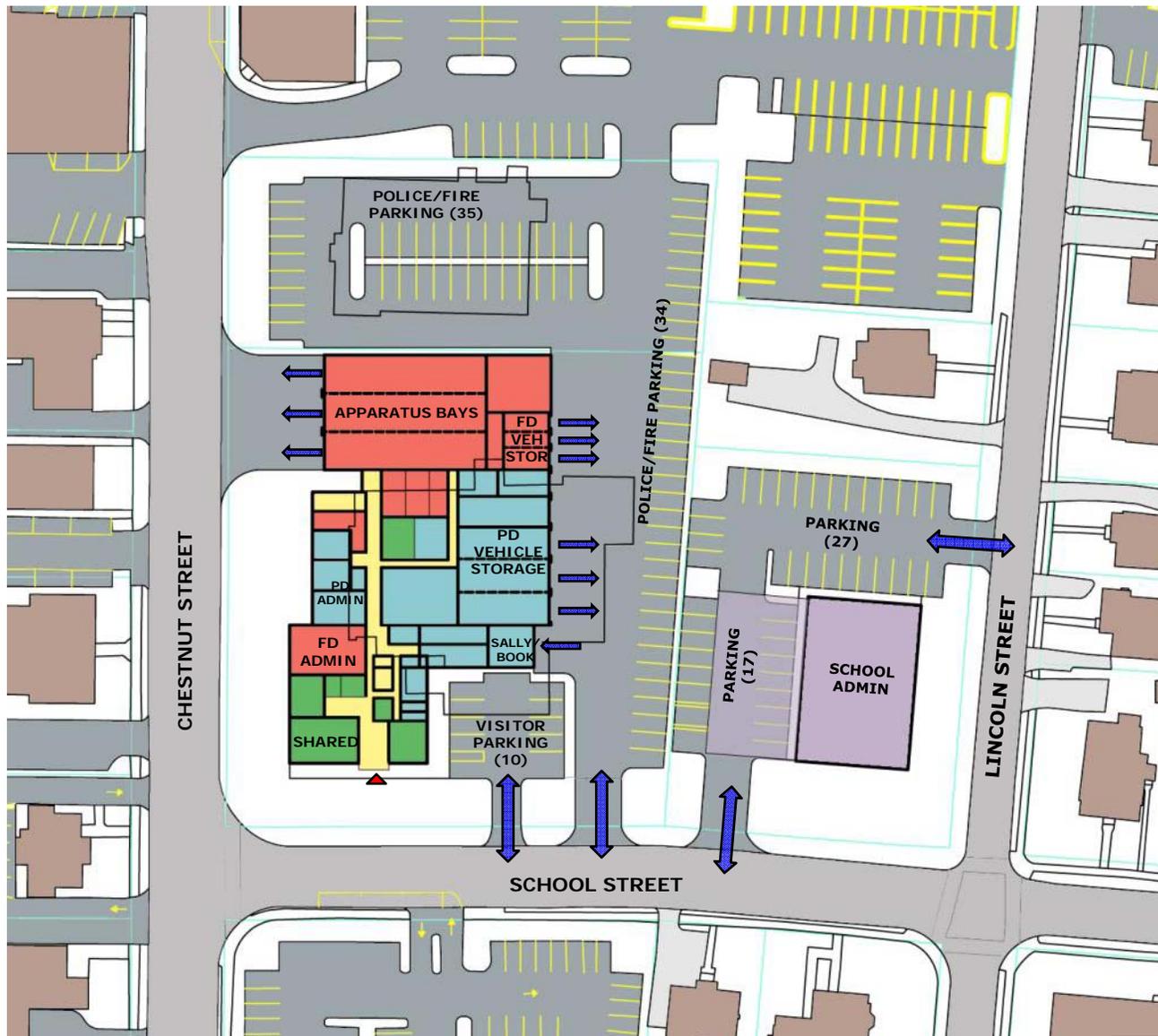
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE



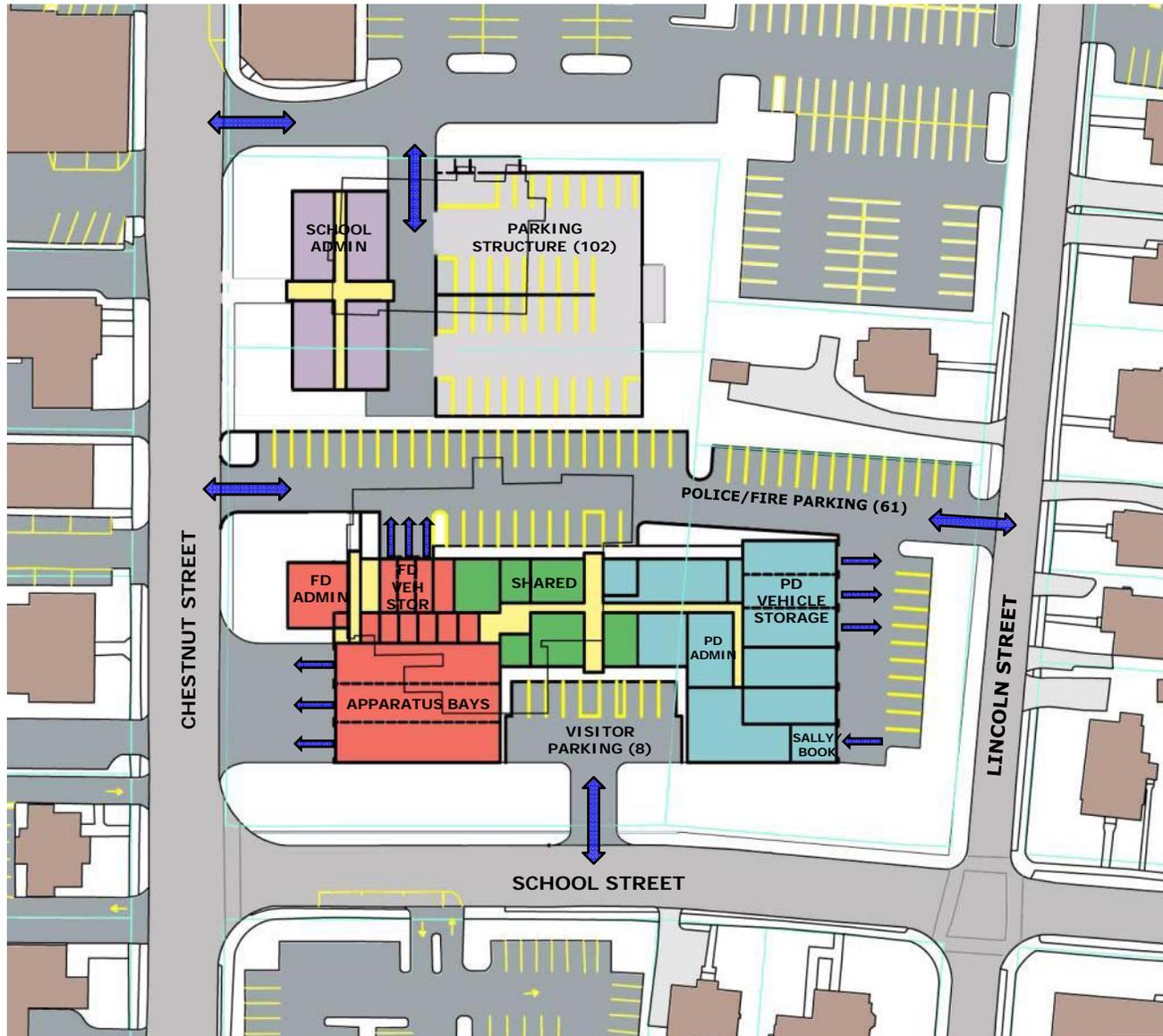
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REVIEW OF PROGRAM AND POTENTIAL OPTIONS: FIRE + POLICE



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: SCHOOLS + SCHOOL ADMINISTRATION

- Transition spaces key to successful development of schools + other Town buildings: DeFazio Park is key
- Neighborhood schools are very important – some possibilities are non-neighborhood, require redistricting or additional busing
- Preference is to re-build on existing sites – what are the issues that might affect that preference (access, wetlands)
- Full day kindergarten at all elementary schools
- Other scenarios: convert schools from elementary to middle or middle to elementary, or new 6th grade option



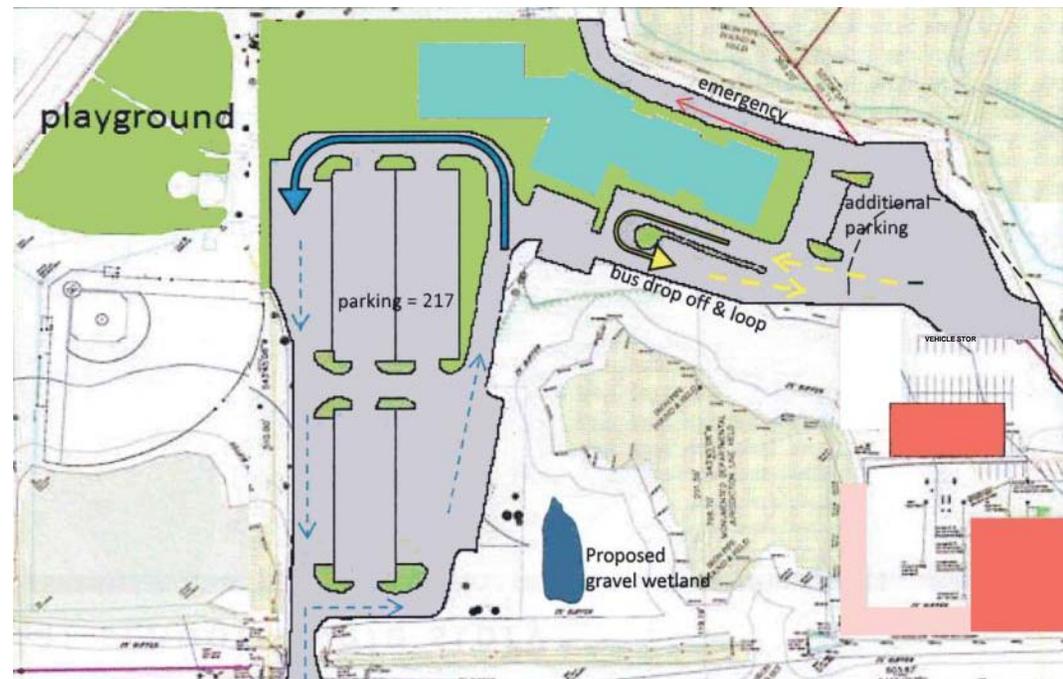
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: SCHOOLS + SCHOOL ADMINISTRATION

- Hillside and Mitchell Schools - Permanent versus temporary location
 - Impact on DeFazio Park and DPW of either all temporary or combination temporary + permanent construction
 - Site circulation issues
 - Materials handling area
- Hillside School: contaminated soils – how does this affect rebuilding project
- Pollard School: long term versus short term needs
 - Science classrooms and cafeteria
 - New permanent facilities: Replace modular with modular or stick-built



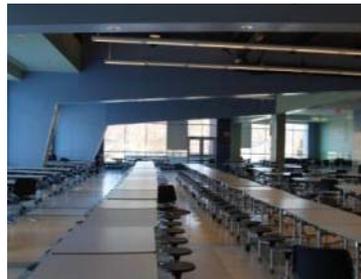
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: SCHOOLS + SCHOOL ADMINISTRATION

- Temporary/Permanent Elementary School Site: Per Dore & Whittier 2012



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: SCHOOLS + SCHOOL ADMINISTRATION

- High School
 - Designed for 1,400 students, at 1,600 projected to 1,800
 - Permanent Modular's/Pre-fab with expanded cafeteria
 - Other support spaces to handle students and staff: gymnasium, auditorium, office and conference space
 - Other office functions that could move out of high school
 - Other changes to support increased enrollment
 - Year to year rearrangement of spaces to accommodate needs



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: SCHOOLS + SCHOOL ADMINISTRATION

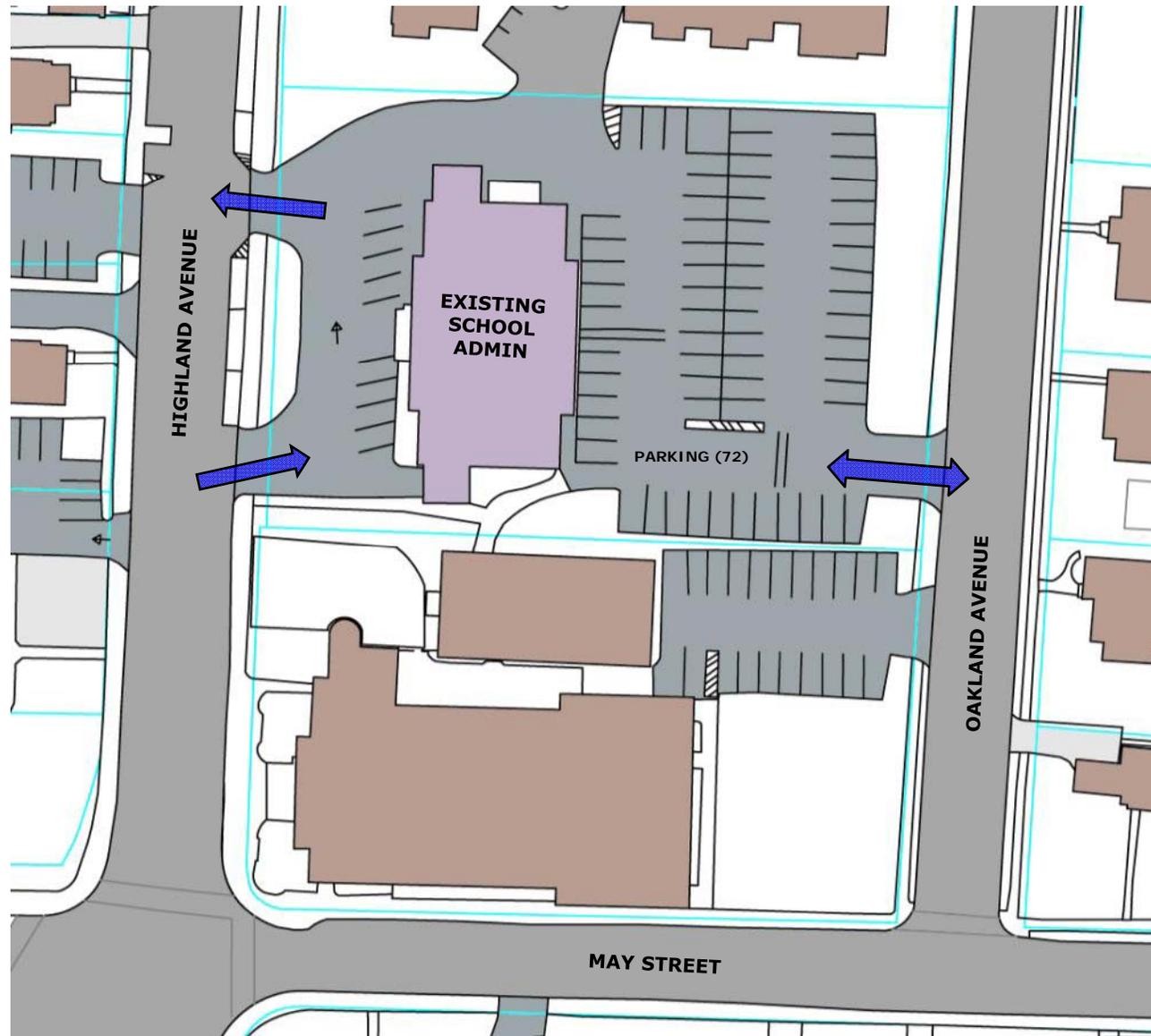
- Emery Grover Building
 - Not accessible for staff or visitors
 - Undersized Meeting Rooms + Offices
 - Physical condition is poor
 - Unused space
- Daley Building
 - Supports all Town Buildings not just school buildings
 - Is this building at its full potential
- Nike Site: use versus location



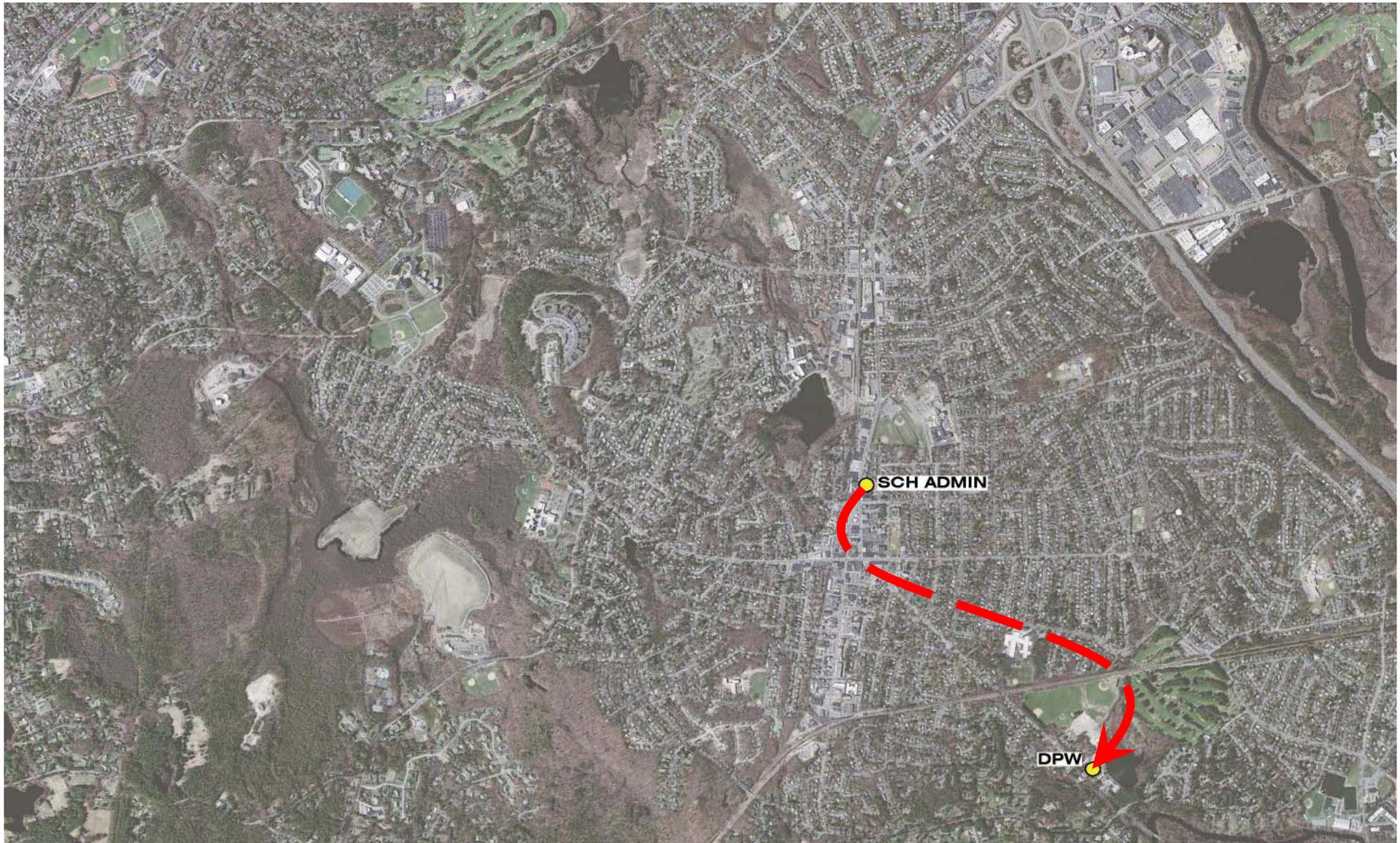
REVIEW OF PROGRAM AND POTENTIAL OPTIONS: SCHOOLS + SCHOOL ADMINISTRATION

DEPARTMENTS	GSF	TOTAL GSF
Shared Building Services	6,796	
Superintendent Suite	1,176	
Student Development Department	2,586	
Finance Operations Department	4,483	
Program Development Department	1,325	
Innovative Technology	572	
SUBTOTAL w/o Building Support		16,939
Building Support	1,863	
SUBTOTAL		1,863
TOTAL		18,802

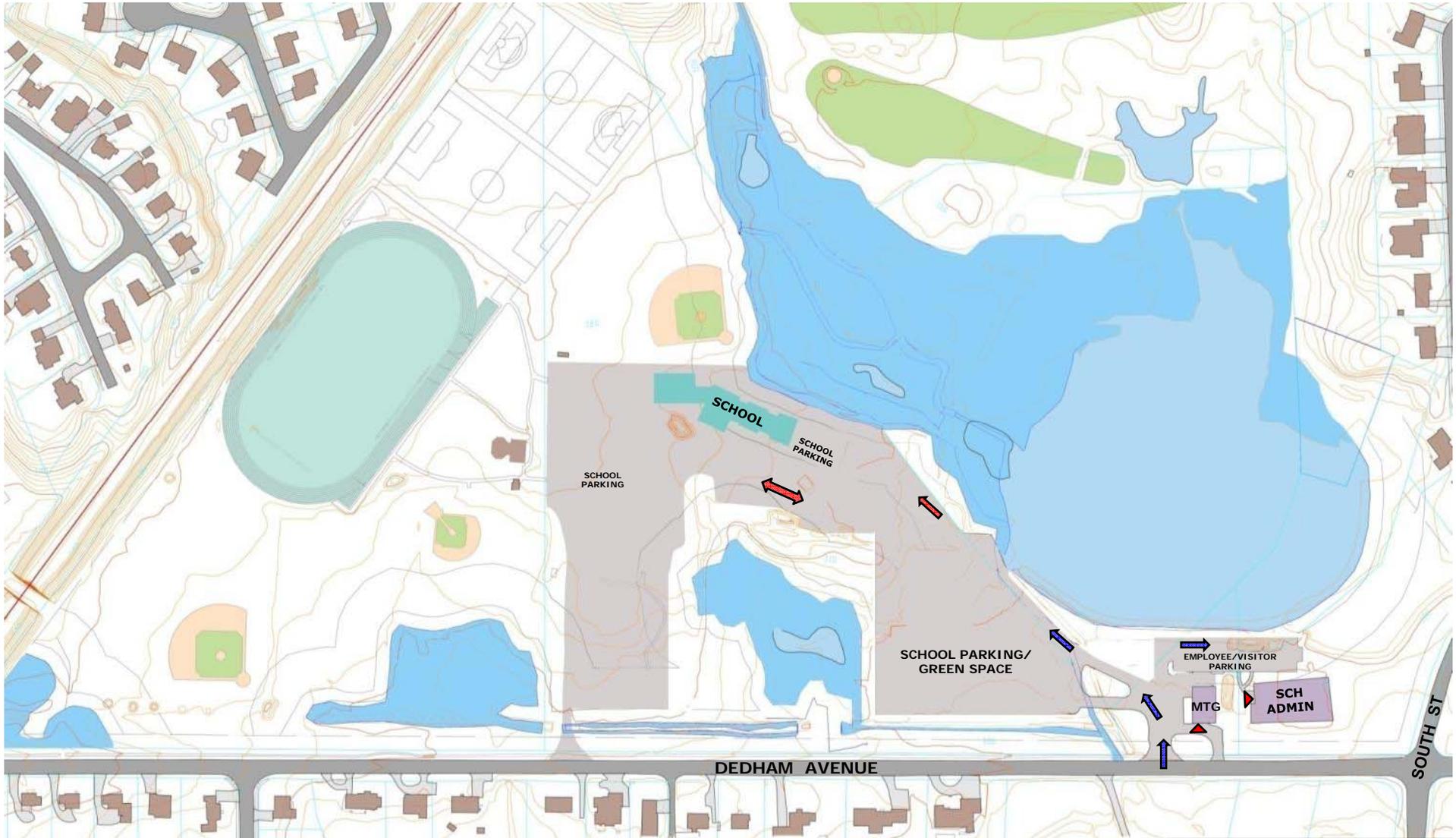
SCHOOL ADMINISTRATION: RENOVATION AT EXISTING SITE



IF DPW MOVES OFFSITE: SCHOOL ADMIN MOVES TO DEDHAM AVE

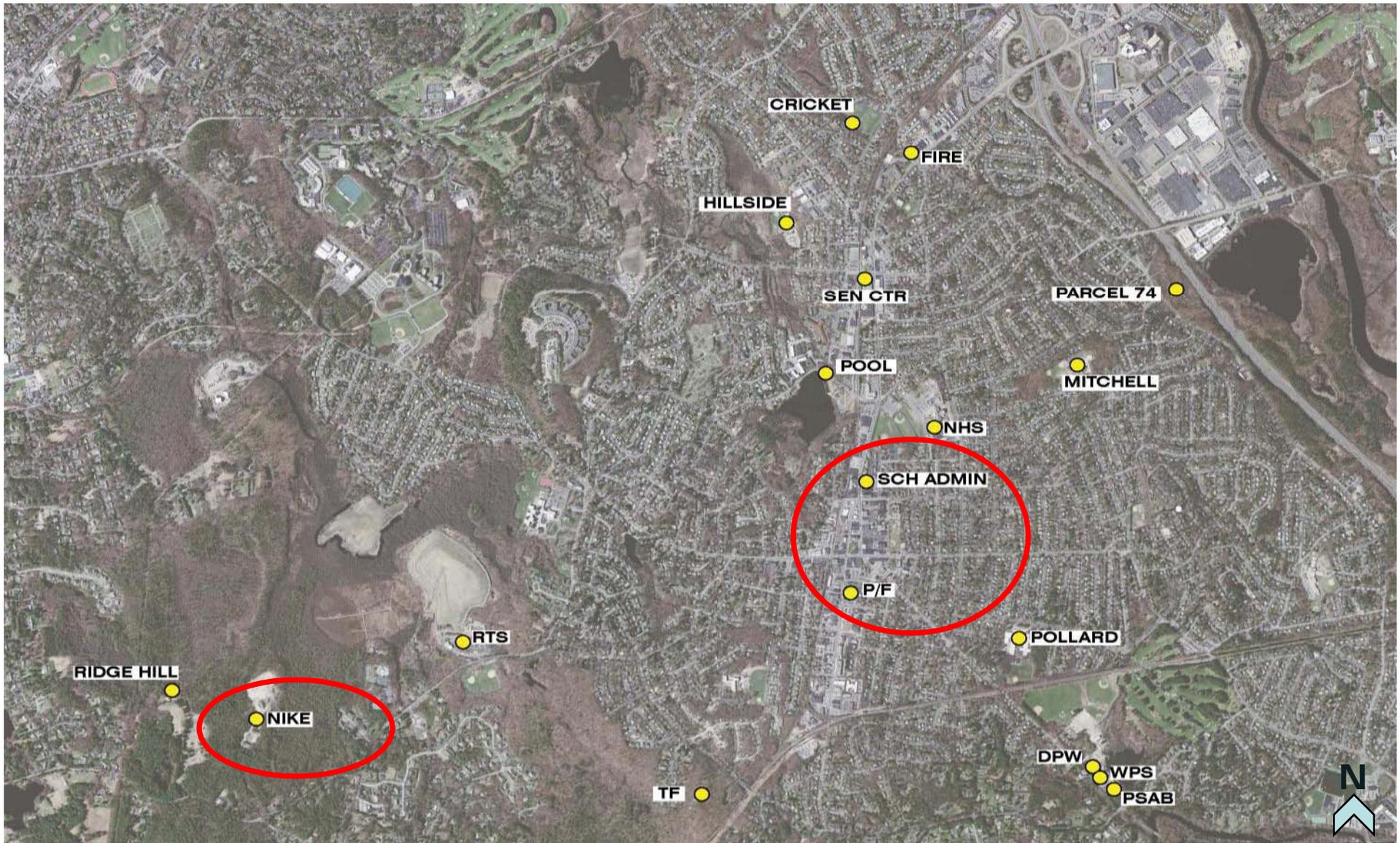


IF DPW MOVES: SCHOOL ADMIN, PARKING + SCHOOL ACTIVITIES OPTION AT DEDHAM AVE

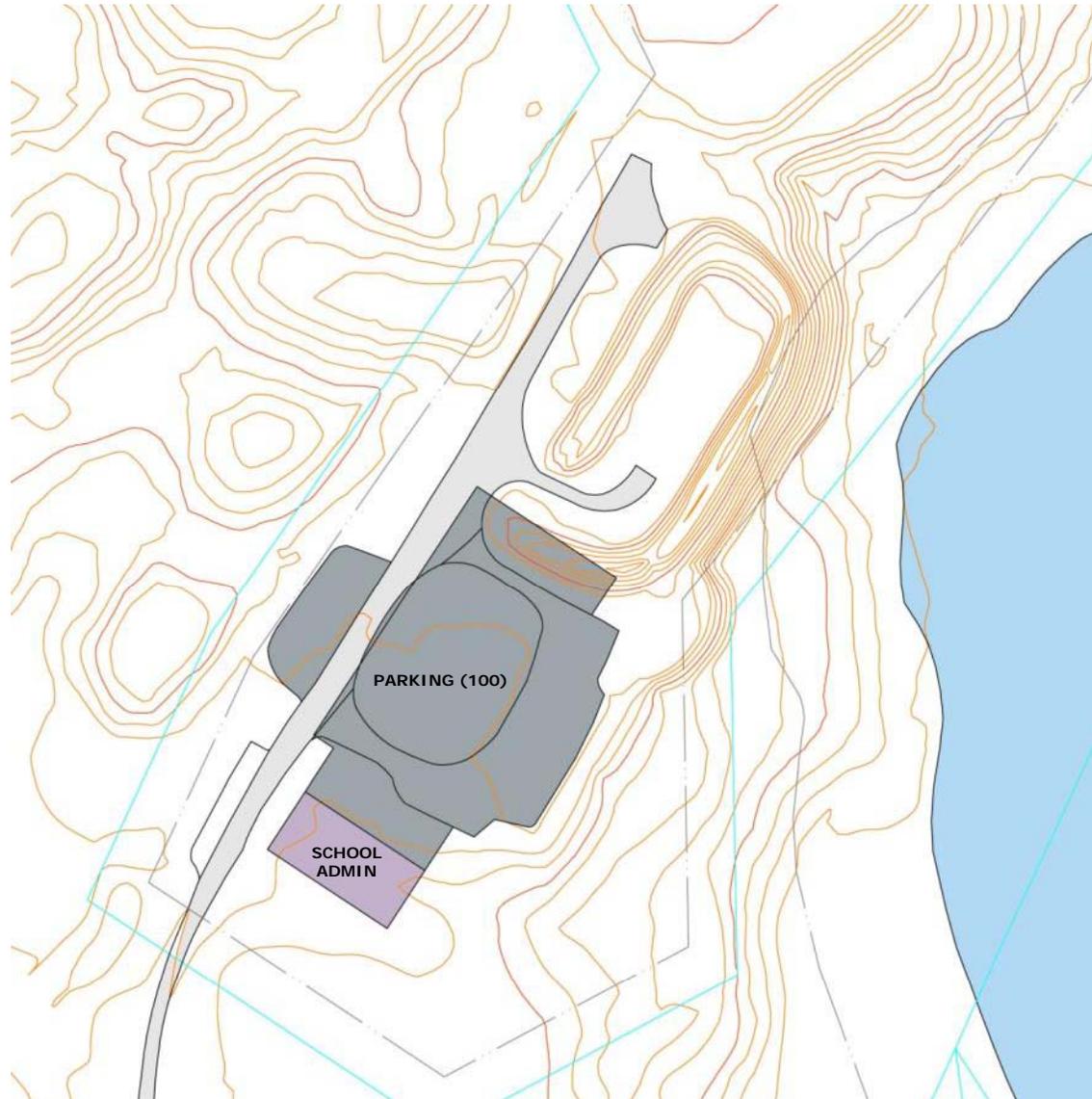


Community Meeting

TOWN OF NEEDHAM: FIRE/POLICE + SCHOOL ADMIN LOCATIONS



SCHOOL ADMINISTRATION: MOVES TO NIKE SITE



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: PARKS + 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
- Some other community building needs have been met in other buildings but there are some that remain; we will define those and see how they can be accommodated in the long term
- What sites should be planned for low impact development and usage?
 - Nike and Ridge Hill



REVIEW OF PROGRAM AND POTENTIAL OPTIONS: PARKS + RECREATION - CONSERVATION

- Preliminary programming suggests a community building between 60,000 SF and 89,000 SF depending what features it includes. Possible amenities include a natatorium, studios and wellness spaces, gymnasium, teen center and various classroom spaces
- Site needs may include outdoor spaces such as soccer fields or other multi-purpose outdoor spaces
- Parking requirements depend on the use of the venues: competition pools and gymnasiums require significant parking counts
- Siting building will require a careful review of zoning to determine if building type is permitted, requires a Special Permit or a zoning change

REVIEW OF PROGRAM AND POTENTIAL OPTIONS: PARKS + RECREATION - CONSERVATION

- Conservation would like to improve degraded site conditions but recognizes current uses
- Conservation will work with us on challenging sites like the existing DPW
 - Preferable to do mitigation on a previously disturbed area
 - Can water be allowed to move in a more natural manner or can improvements be made in other areas 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?



WHERE TO LOOK FOR ADDITIONAL INFORMATION ON MASTER PLAN

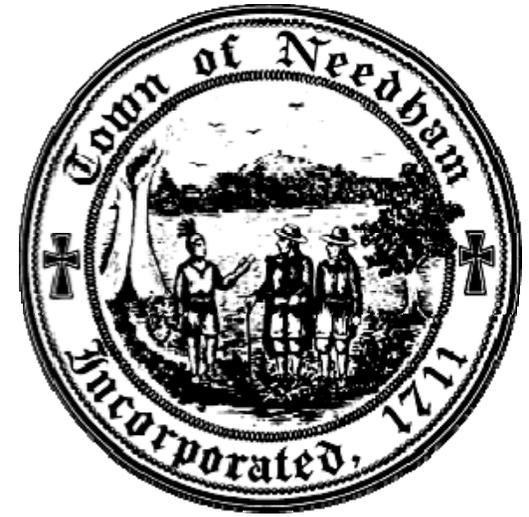
The Facilities Working Group has a page on the Town of Needham web site that notes the Meetings, Agendas & Meeting Notes, Members and Committee Charge with a link to the Status/updates and Resources.

- The following link will take you to this web page:
 - [Needham, MA - Facility Working Group](#)
- There are imbedded links to the Town Calendar, agendas and meeting notes, resources (with slide shows) and a Sign up to receive notifications of changes and updates. If navigating you can use the following sequence:
 - <http://www.needhamma.gov/> go to the button for Town Government>Boards, Commissions & Committees> Facilities Working Group



QUESTIONS AND COMMENTS





THANK YOU

Community Meeting