

**Springfield Senior High School
Master Plan Status Update
Presentation to School Board**

April 28, 2011

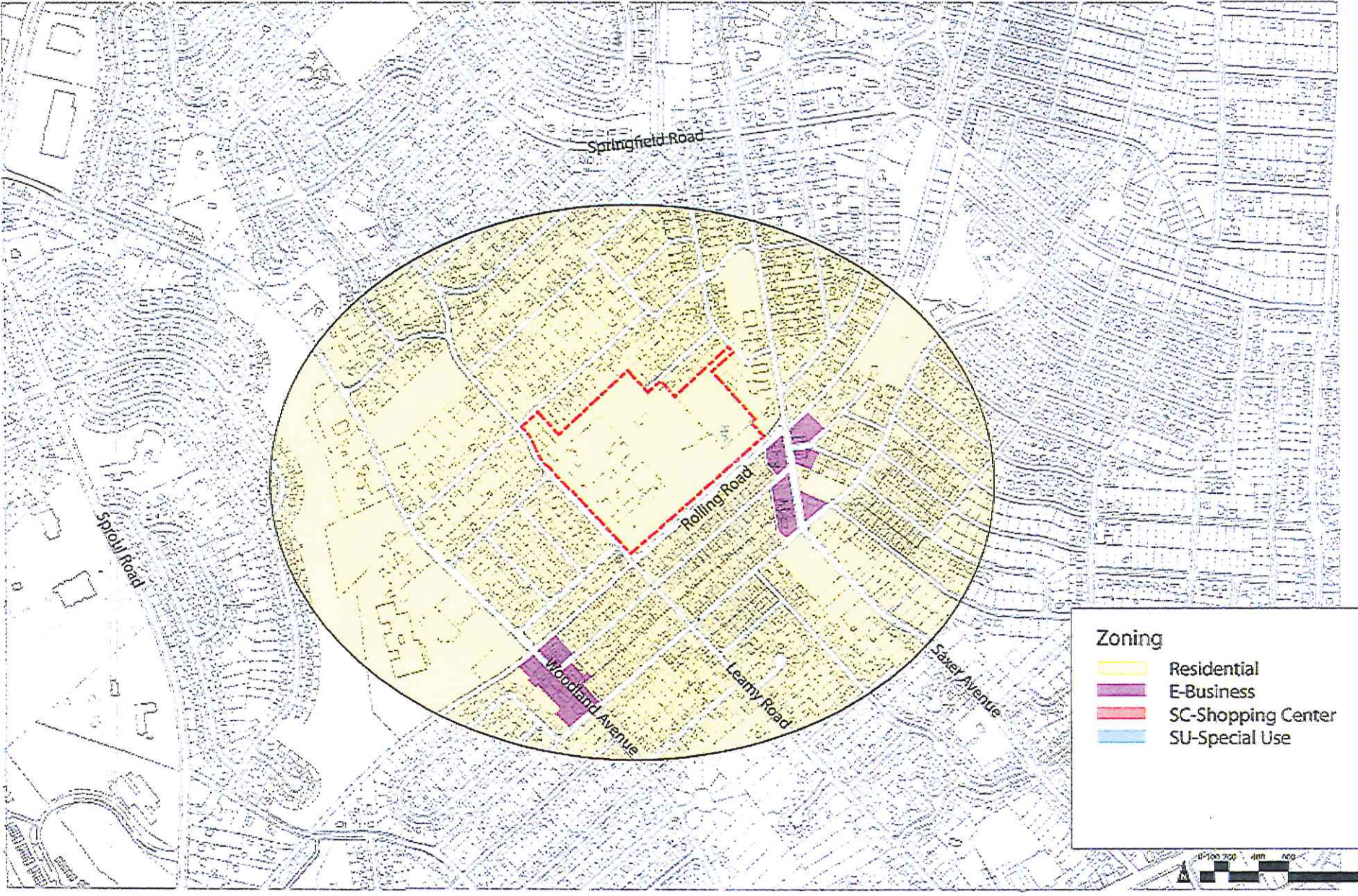
Agenda

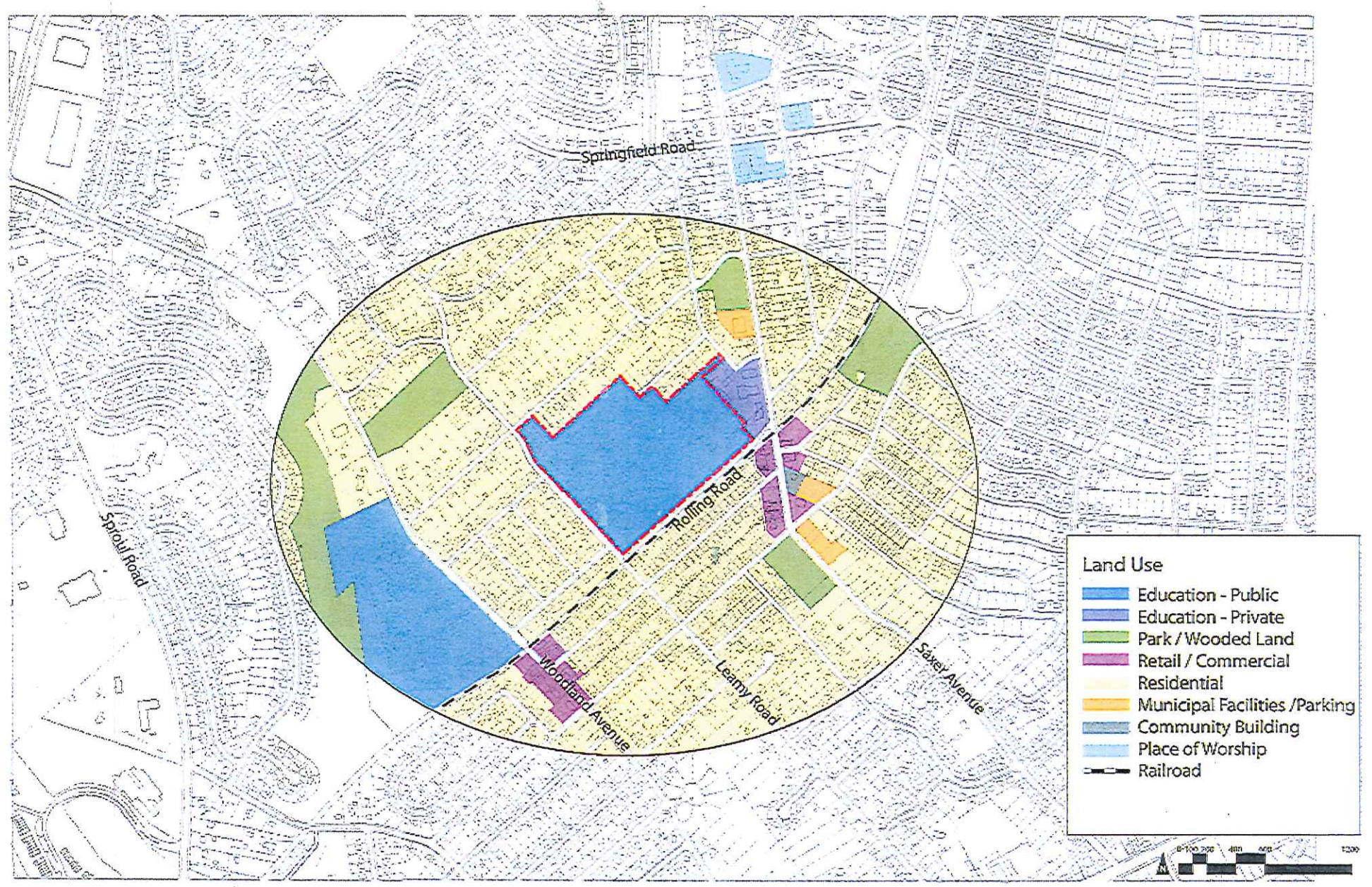
- Neighborhood Context and Existing Campus/Building Analysis
- Right Sizing the 'Box'
- Program Goals
- Initial Options
- Refinement of Options
- Facilities Committee Current Thinking
- Financing and Schedule Discussion

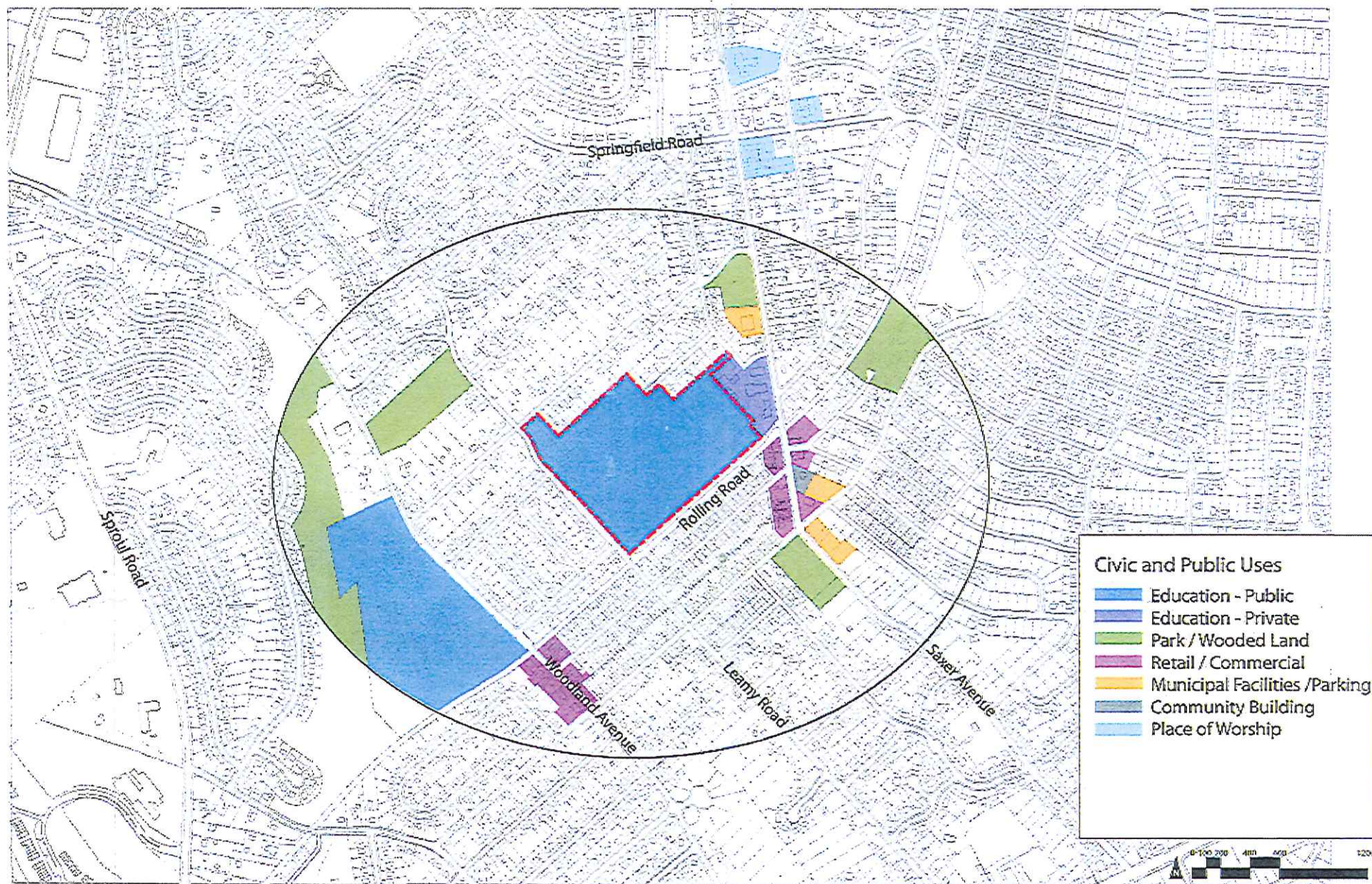


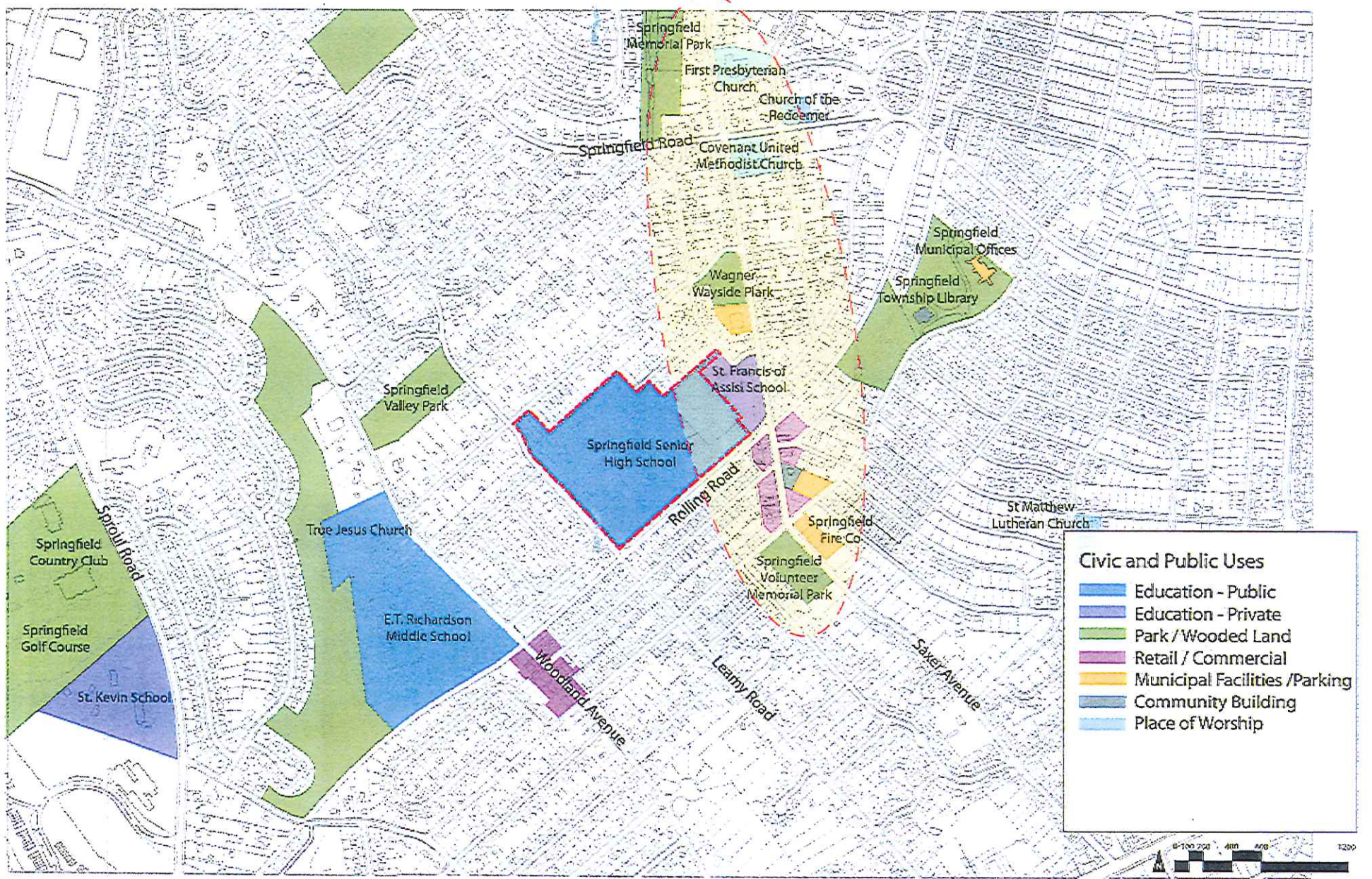
Neighborhood Context Zoning & Land Use







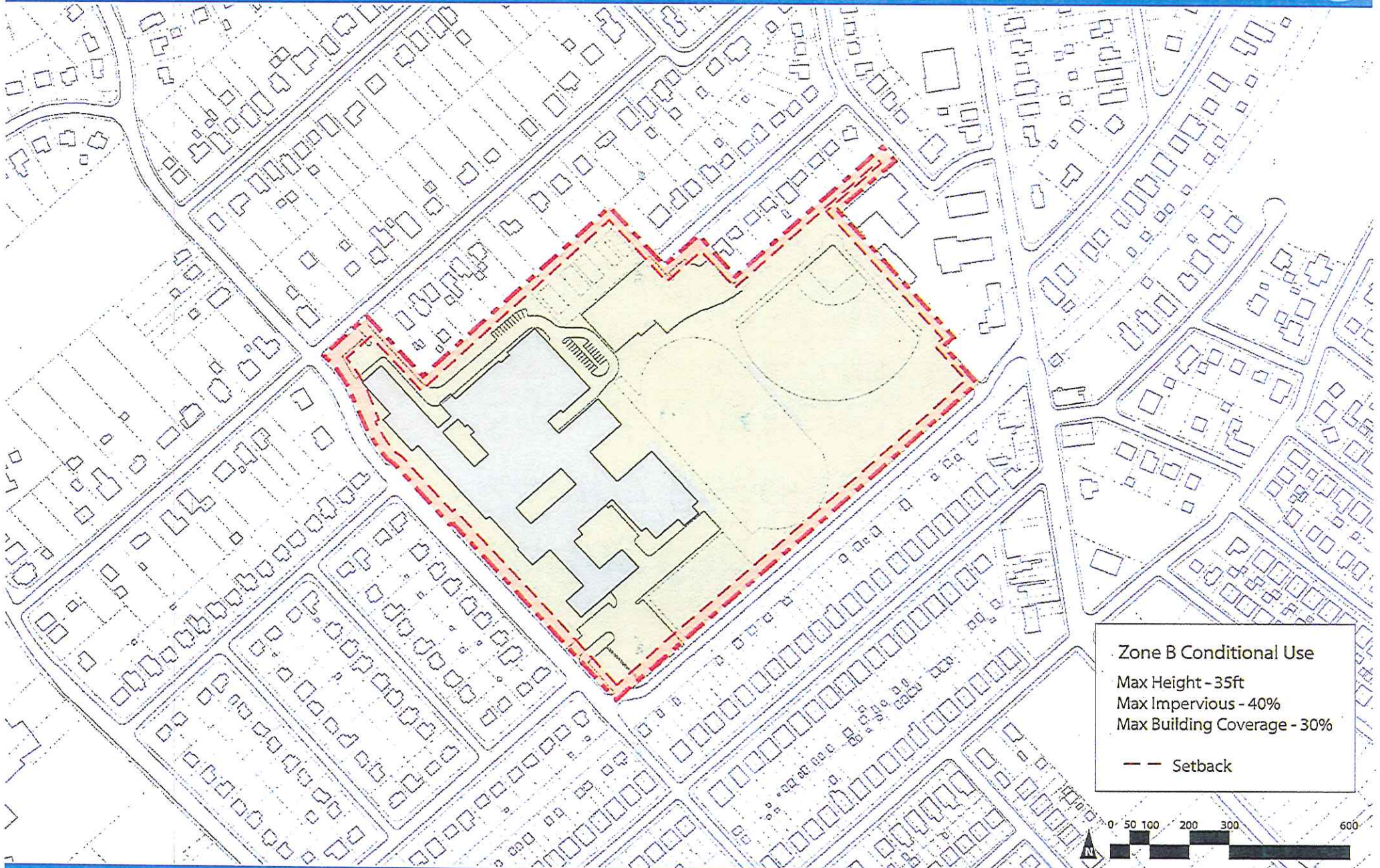






Existing Campus Analysis

- Zoning Regulations
- Site Circulation
- Parking
- Utilities
- Athletics & Fields



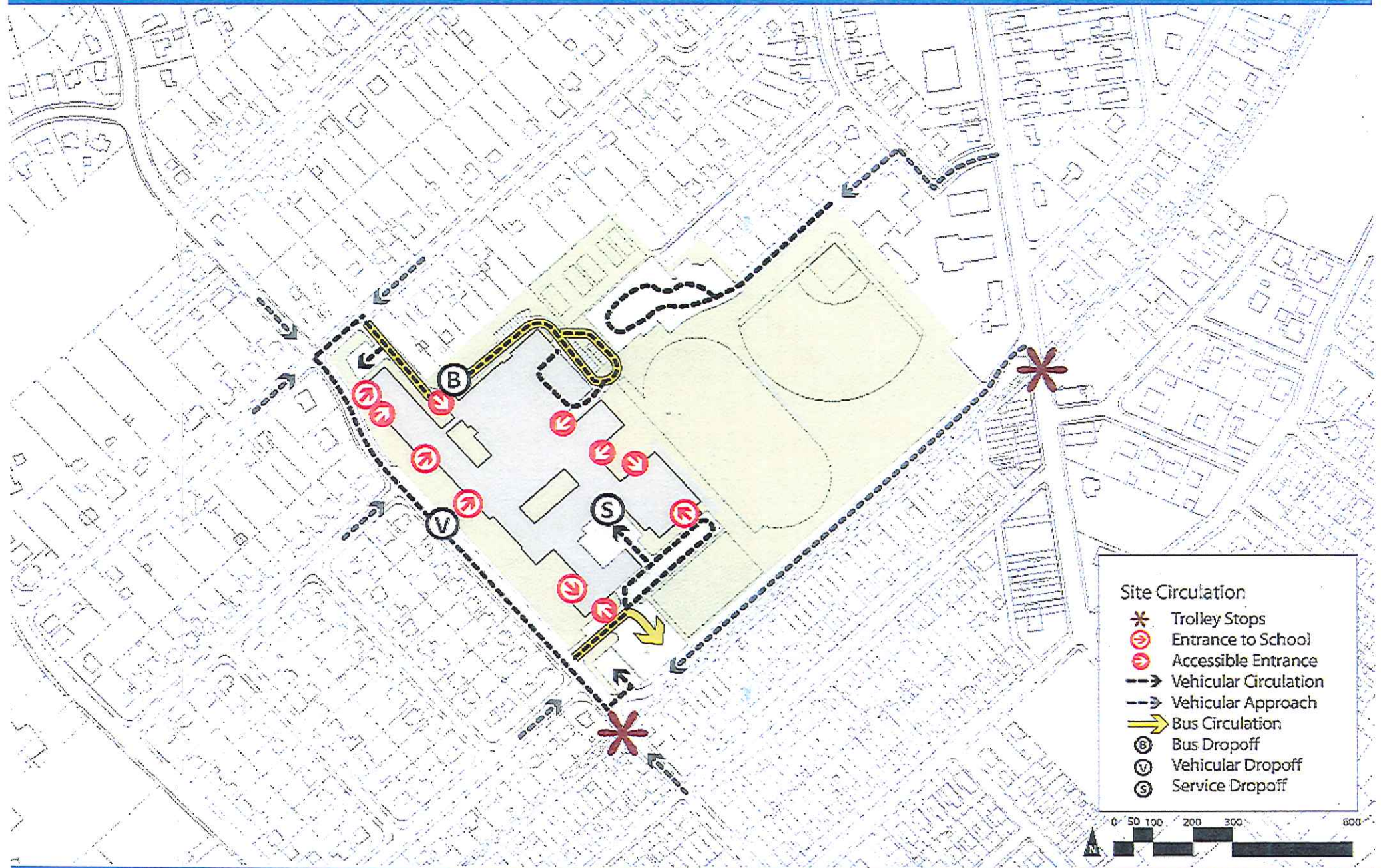
Zoning

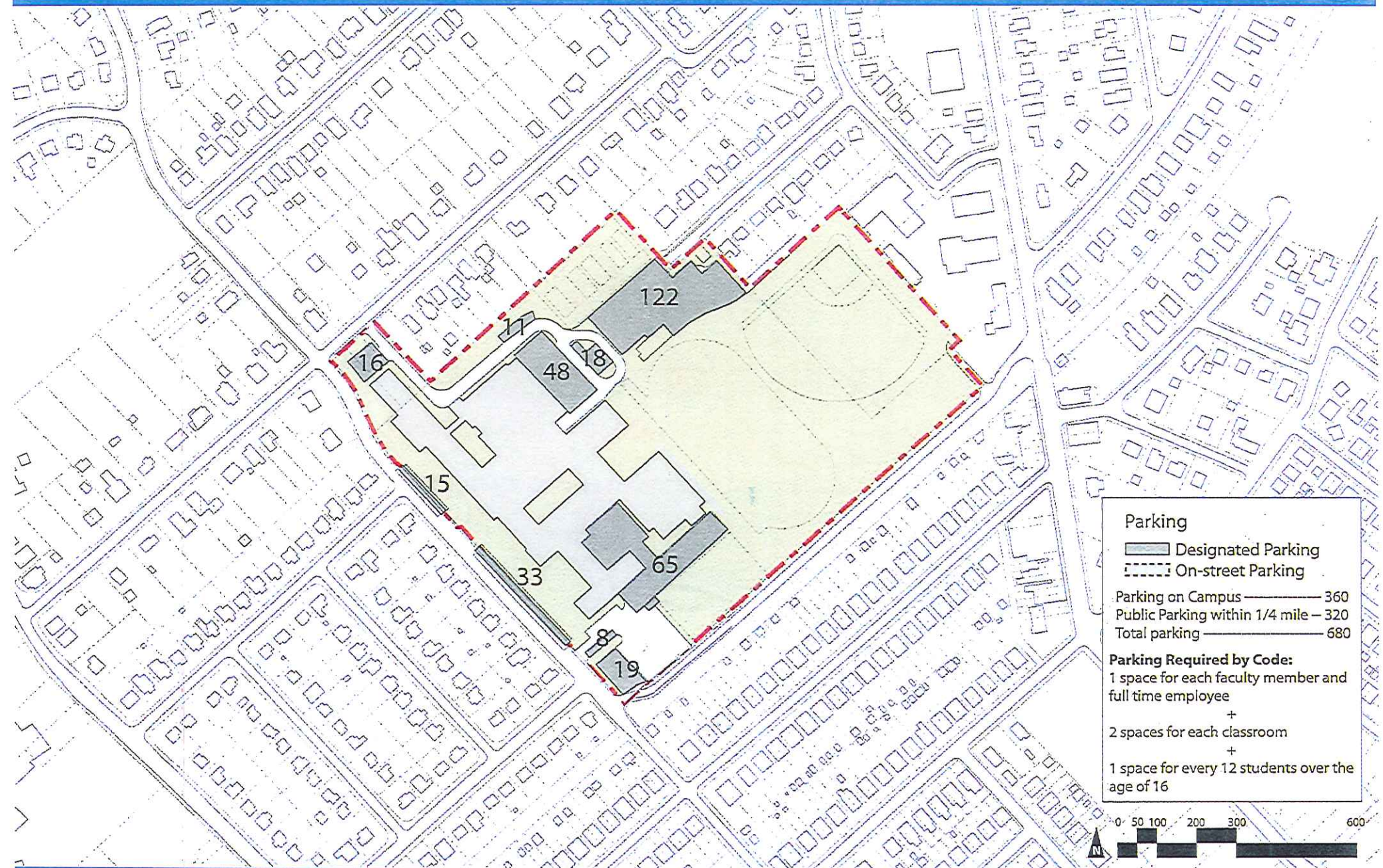
Site Circulation

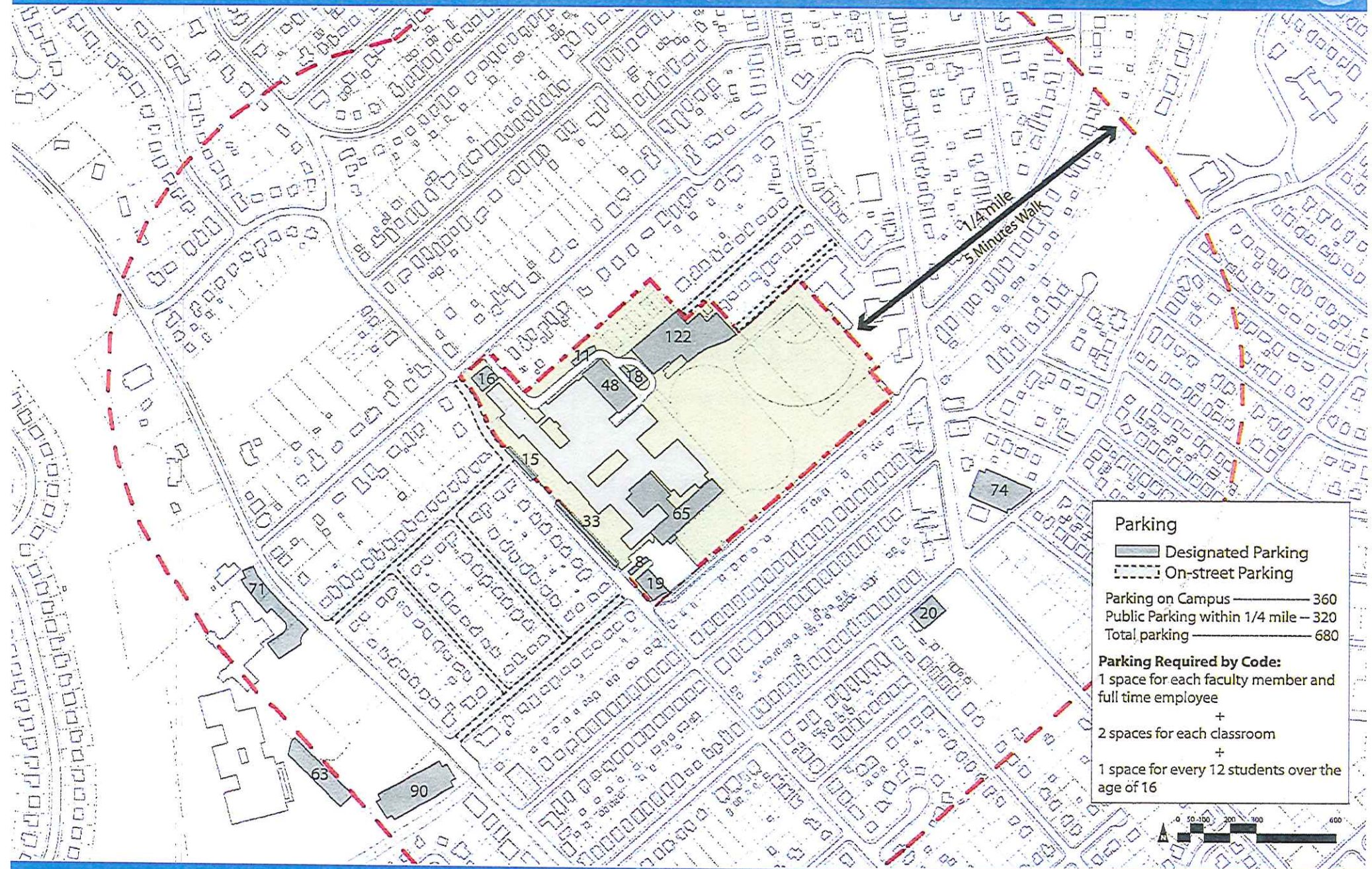
Parking

Utilities

Athletics & Fields



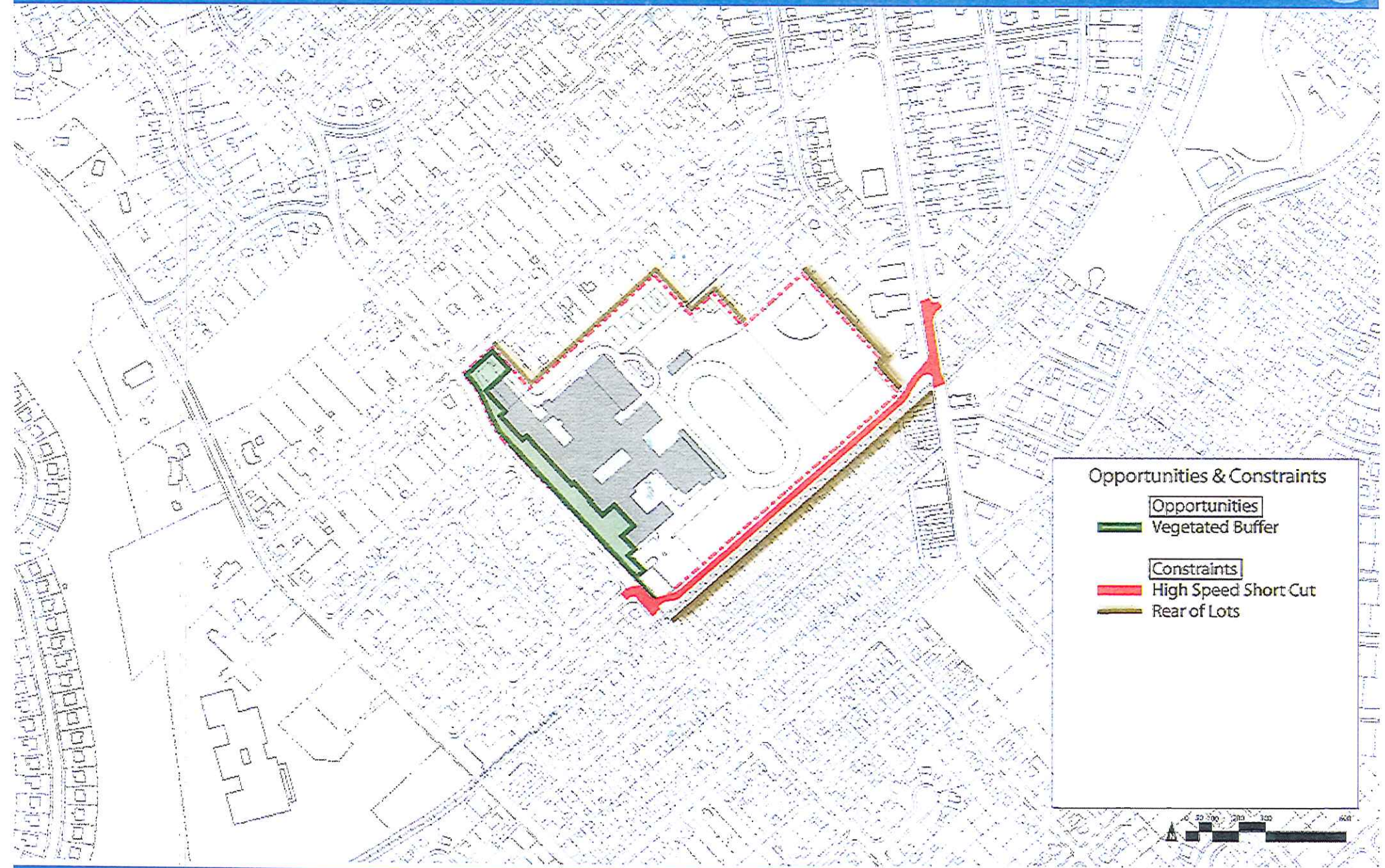




An aerial photograph of a city grid, showing a central green area (likely a park or campus) surrounded by buildings and streets. The image is overlaid with a blue semi-transparent box containing text.

Site Opportunities & Constraints

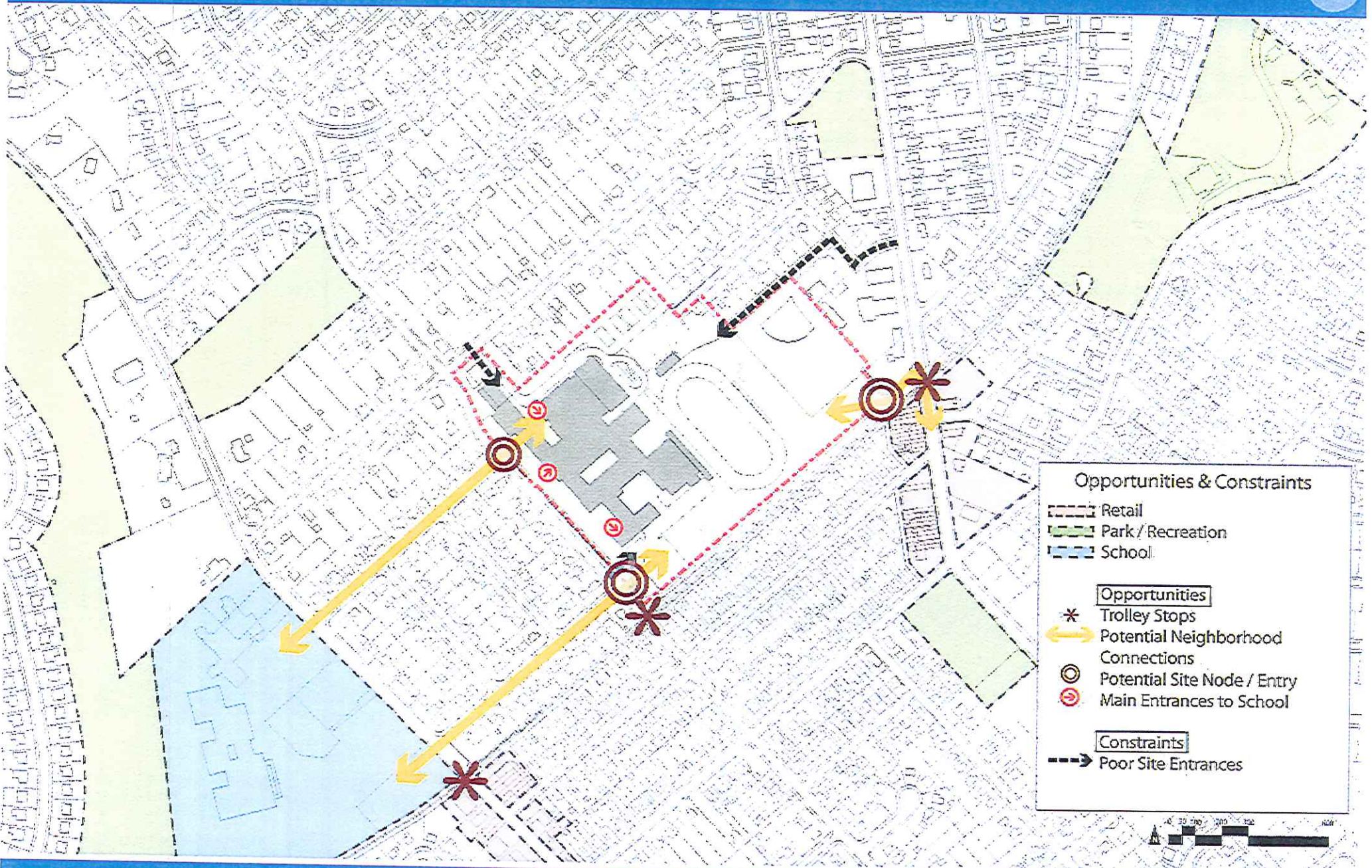
- Campus Edges
- Connections
- Construction Limits /
Potential Land Exchanges



Campus Edges

Connections

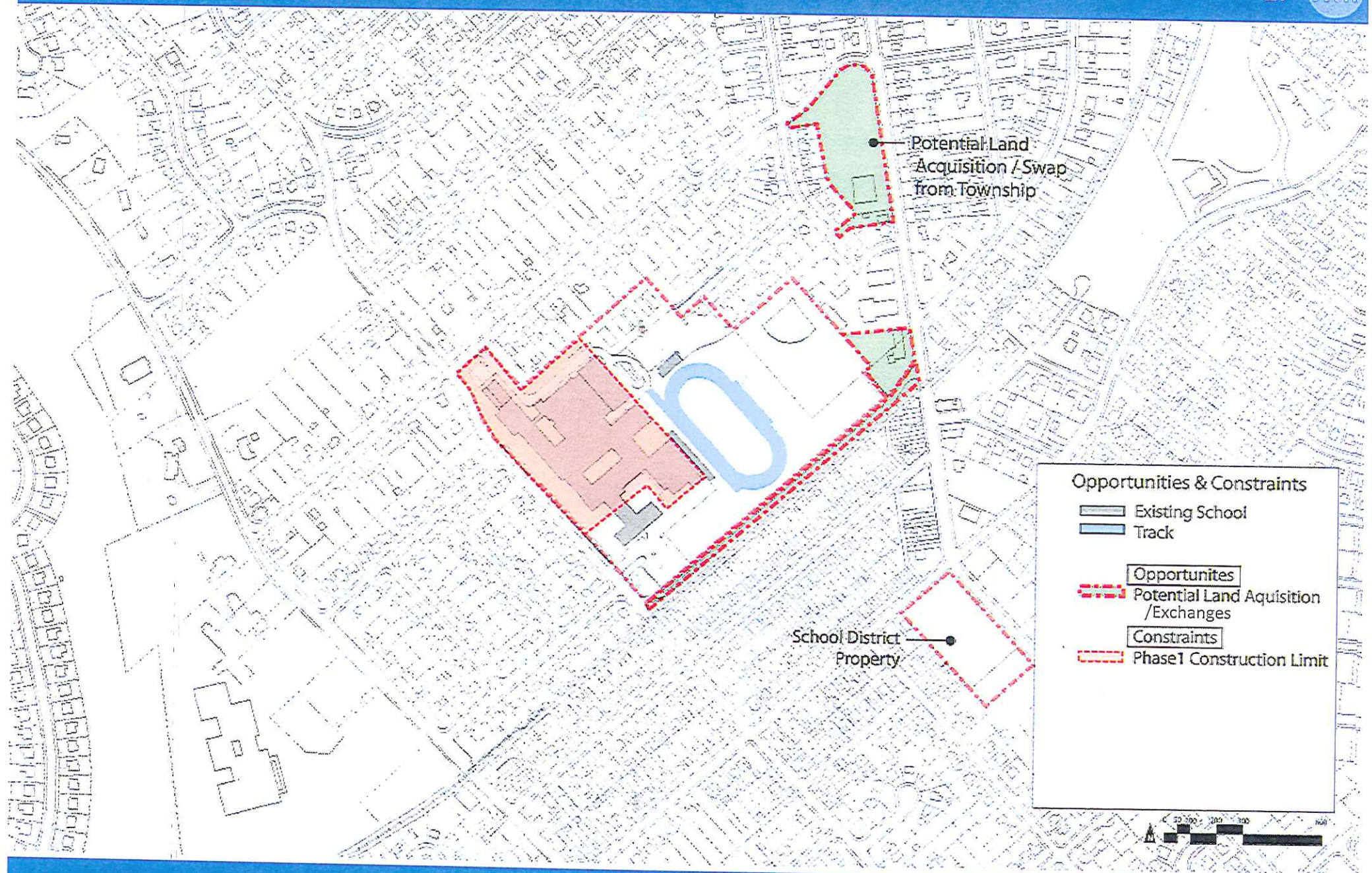
Construction Limits



Campus Edges

Connections

Construction Limits



Campus Edges

Connections

Construction Limits

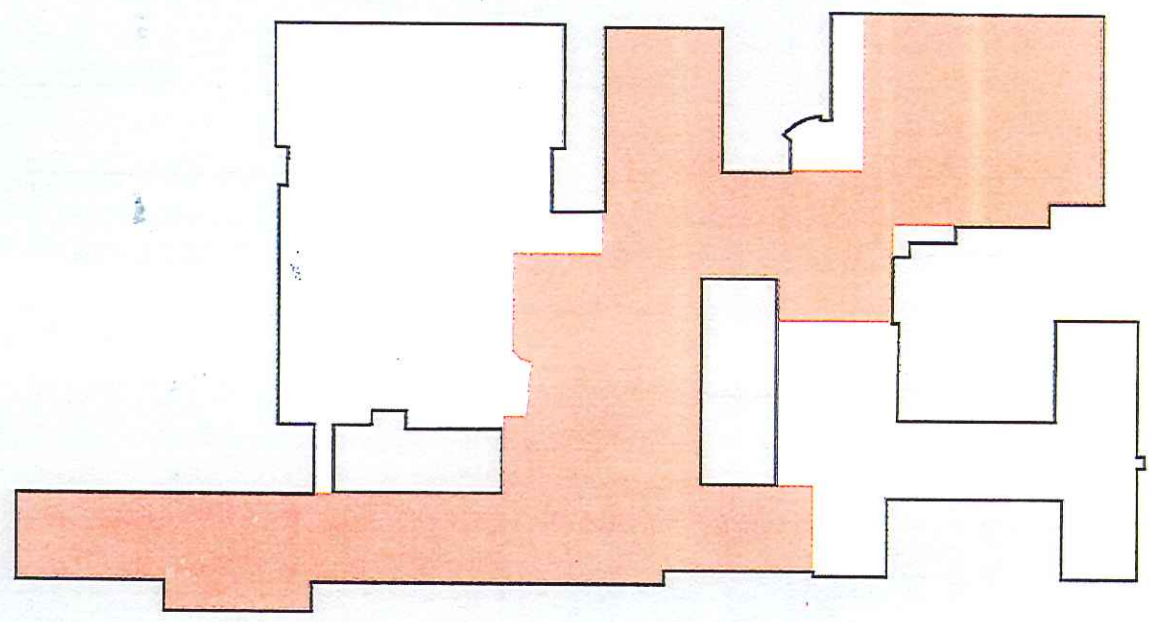


Existing Building Analysis

- Renovation Challenges
- Building Performance
- Summary



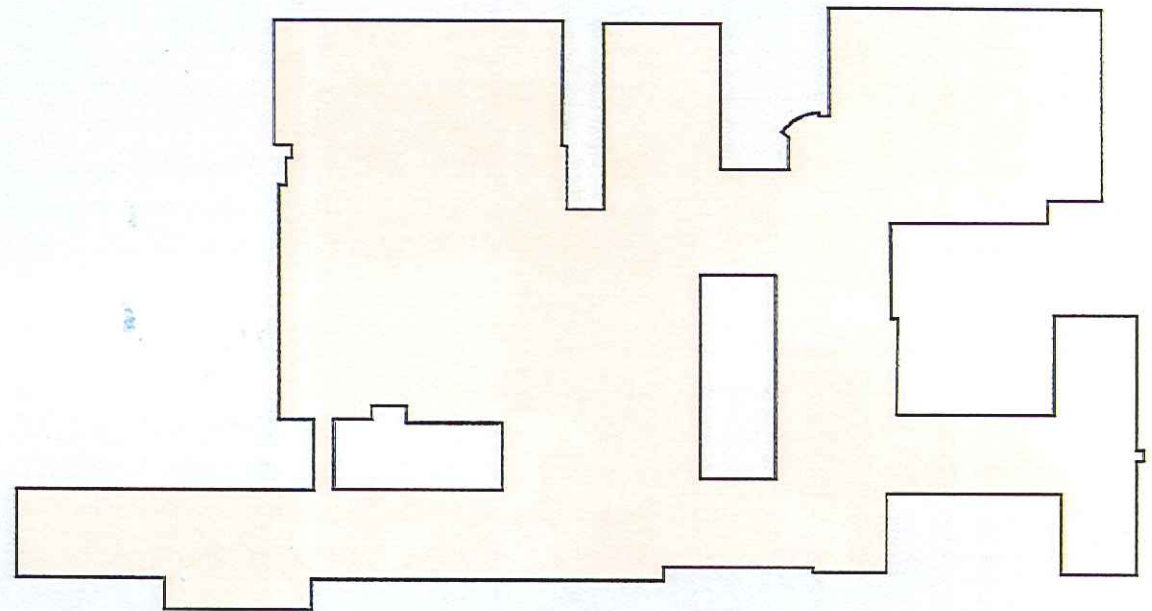
Minor challenge
Moderate challenge
Difficult challenge



Composite of All Floors



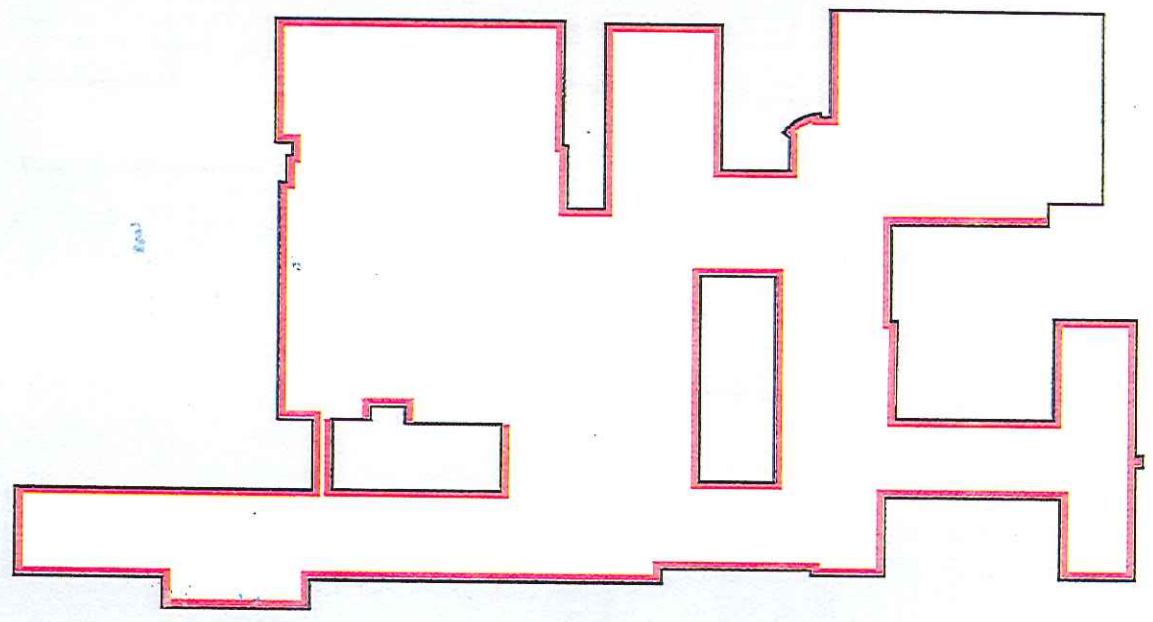
Minor challenge
Moderate challenge
Difficult challenge



Composite of All Floors



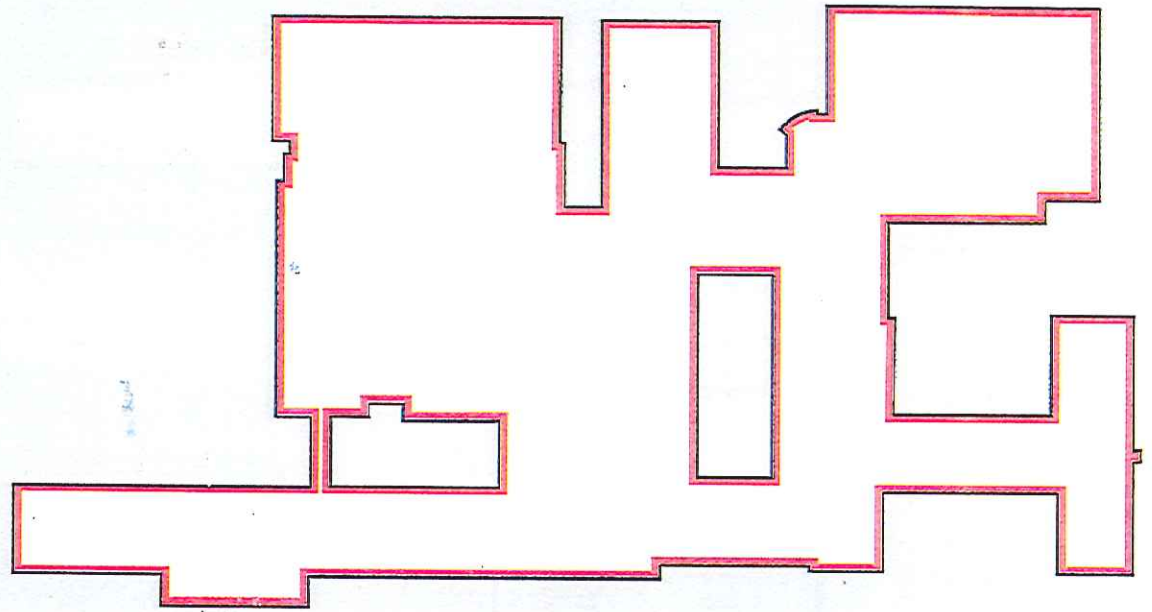
Minor challenge
Moderate challenge
Difficult challenge



Composite of All Floors



Minor challenge
Moderate challenge
Difficult challenge



Composite of All Floors

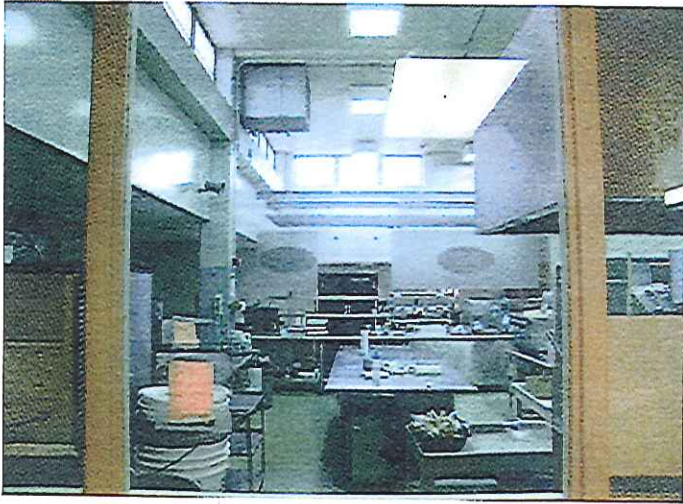
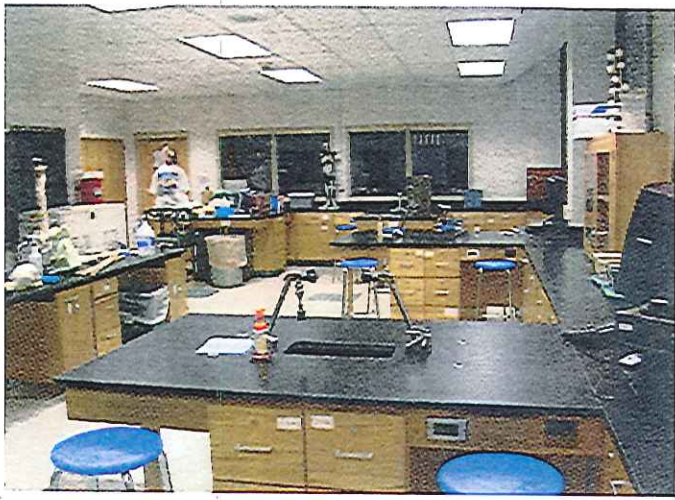
“ The only thing worth saving are the tools.”



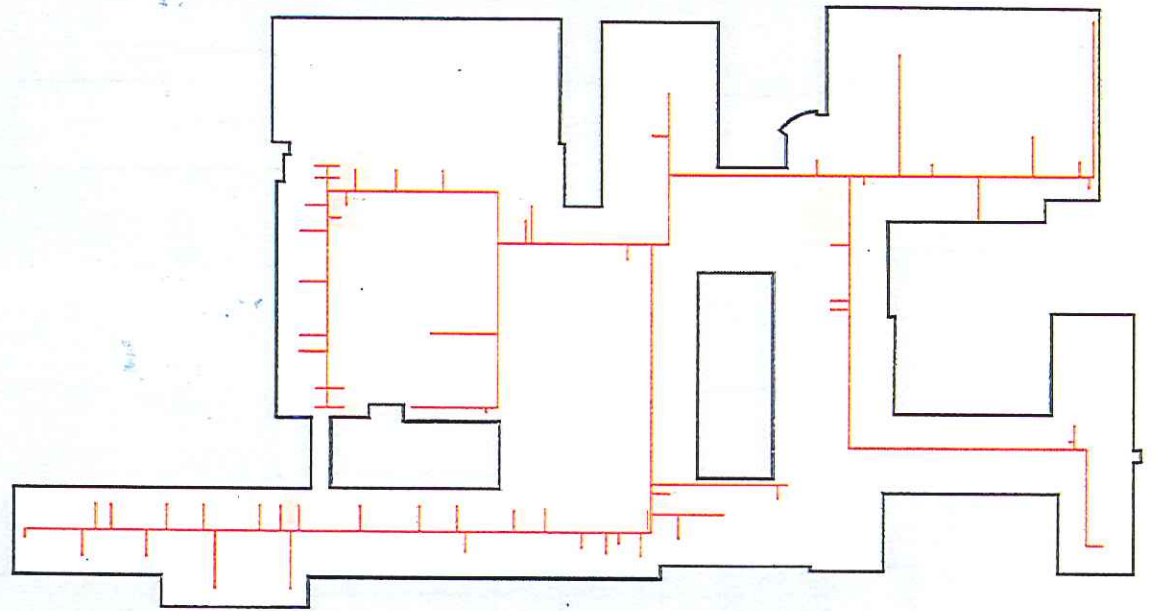
Minor challenge
Moderate challenge
Difficult challenge



Composite of All Floors



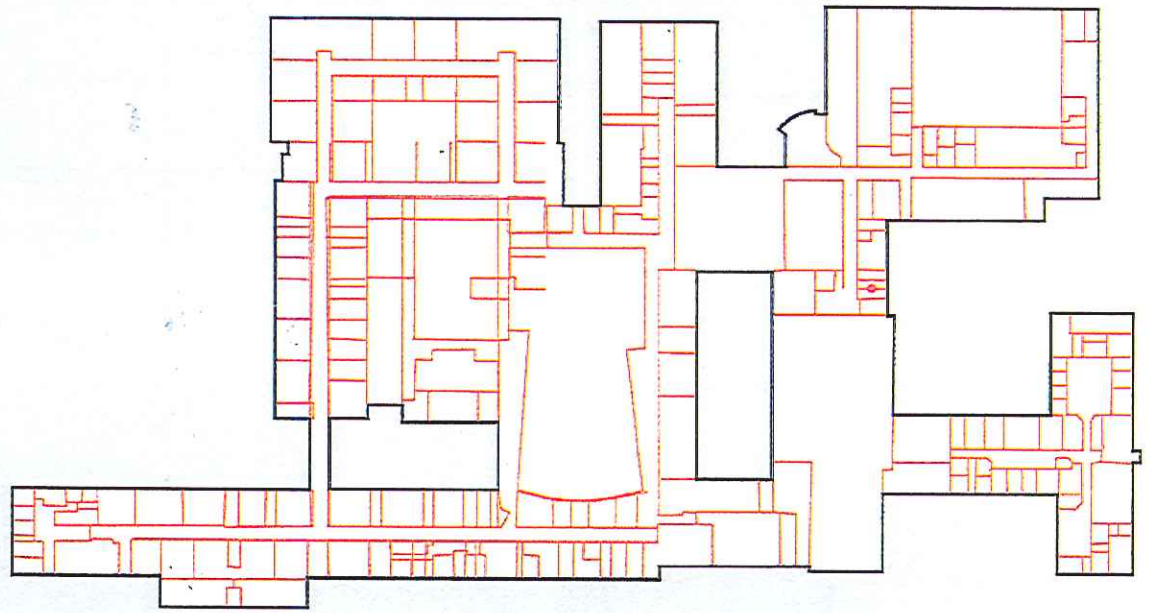
Minor challenge
Moderate challenge
Difficult challenge



Composite of All Floors



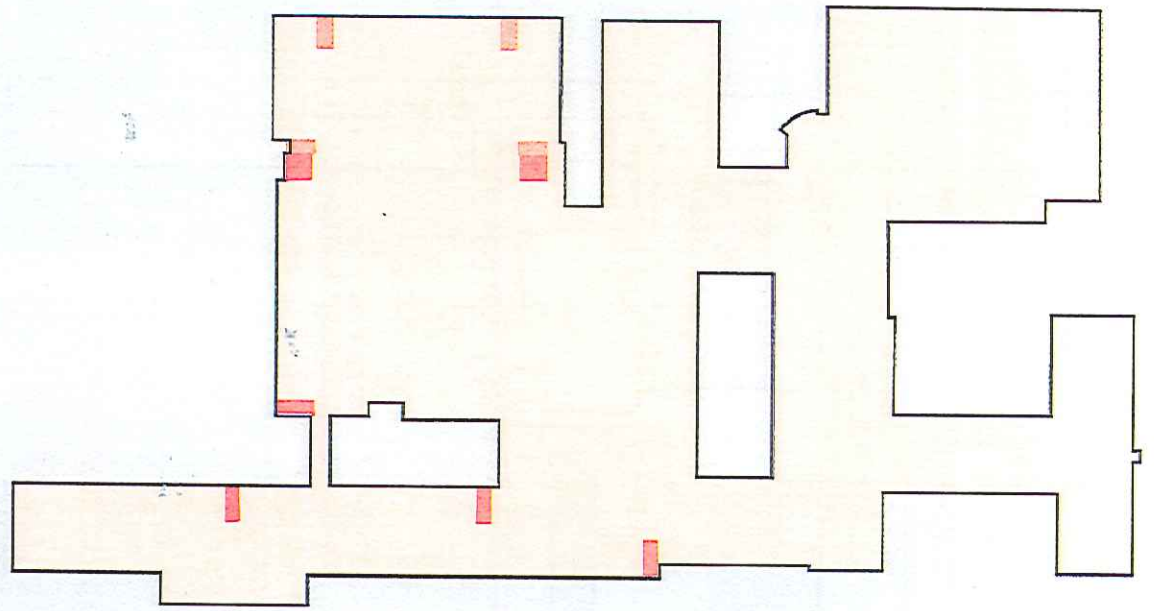
Minor challenge
Moderate challenge
Difficult challenge



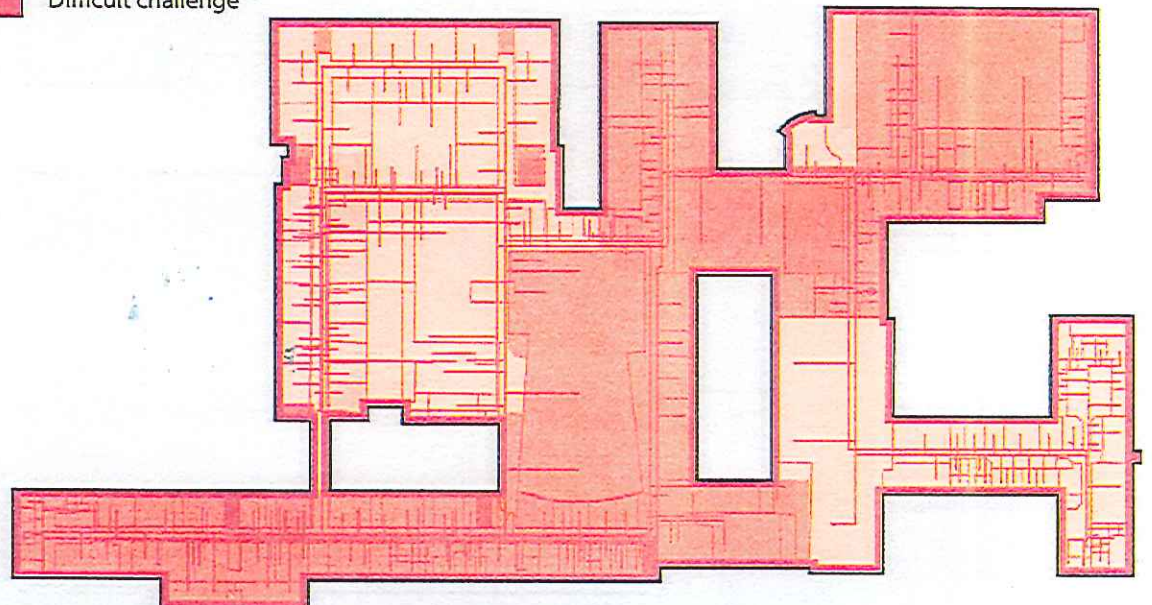
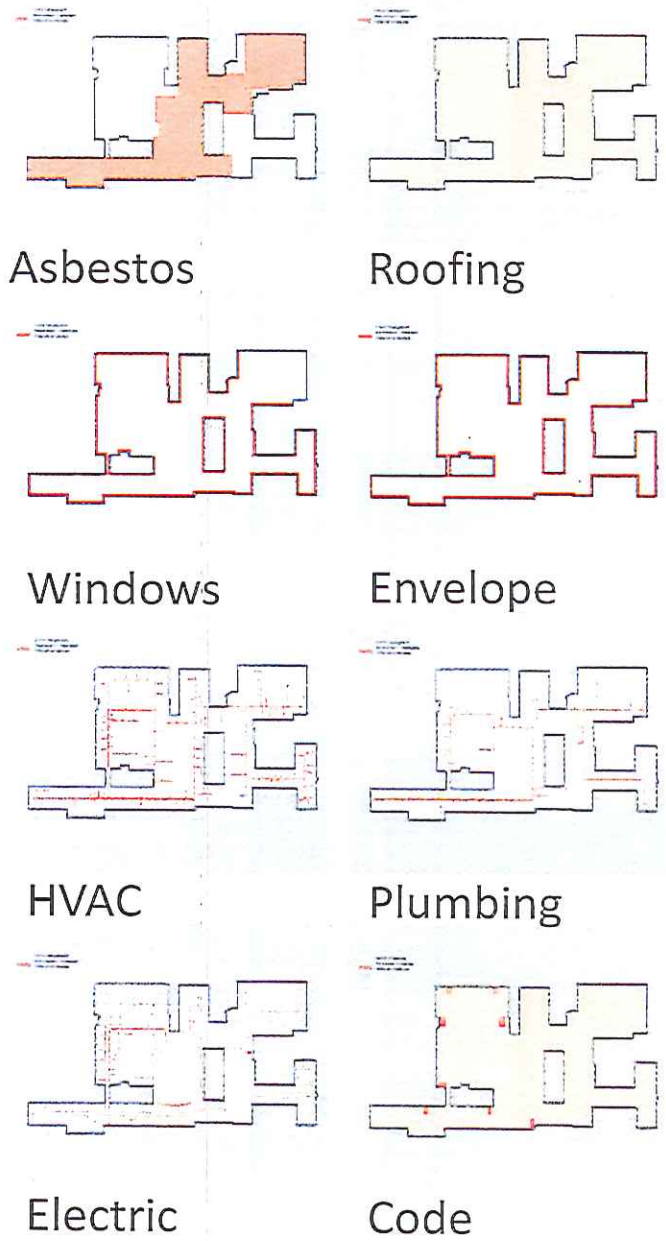
Composite of All Floors



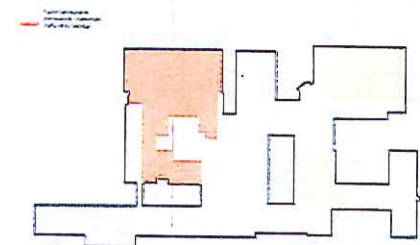
Minor challenge
Moderate challenge
Difficult challenge



Composite of All Floors



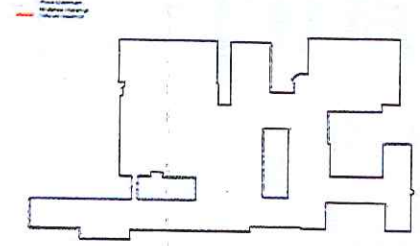
Composite of Issues



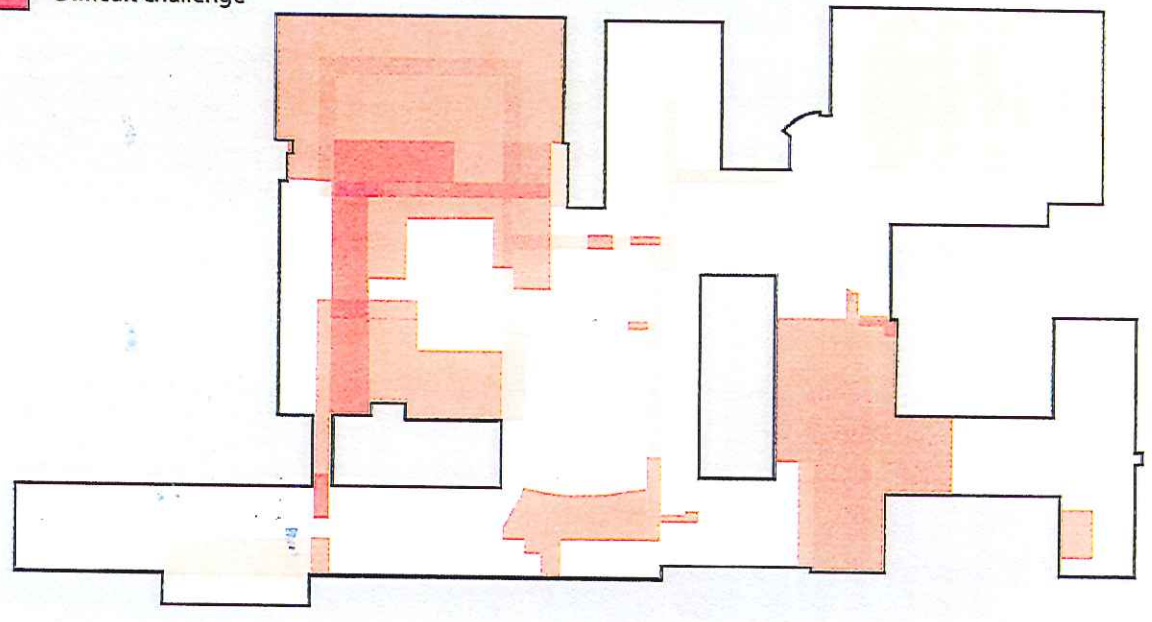
Glare issues
Along Leamy Facade
Access to Daylight



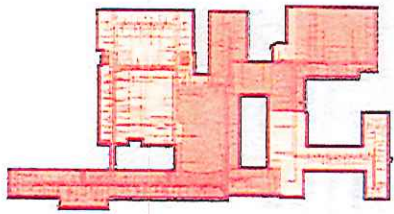
Circulation & Accessibility



Programmatic Fit



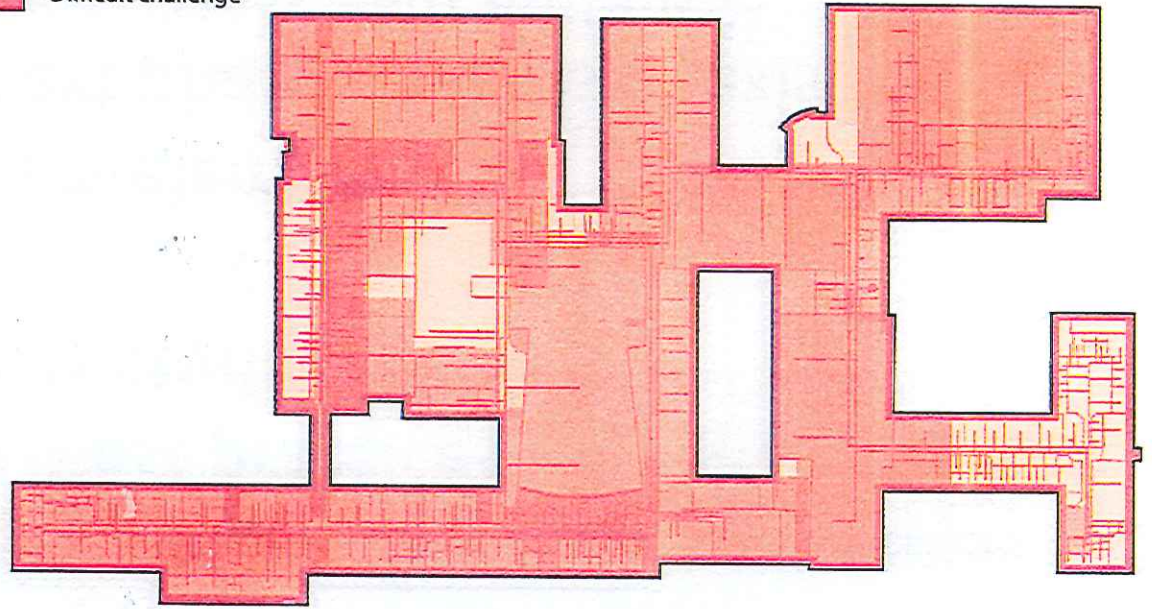
Composite of Issues



Renovation Challenges



Building Performance



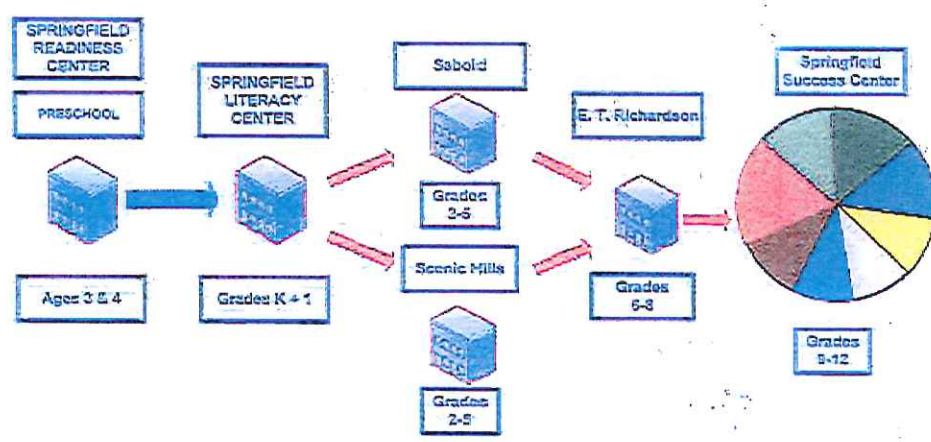
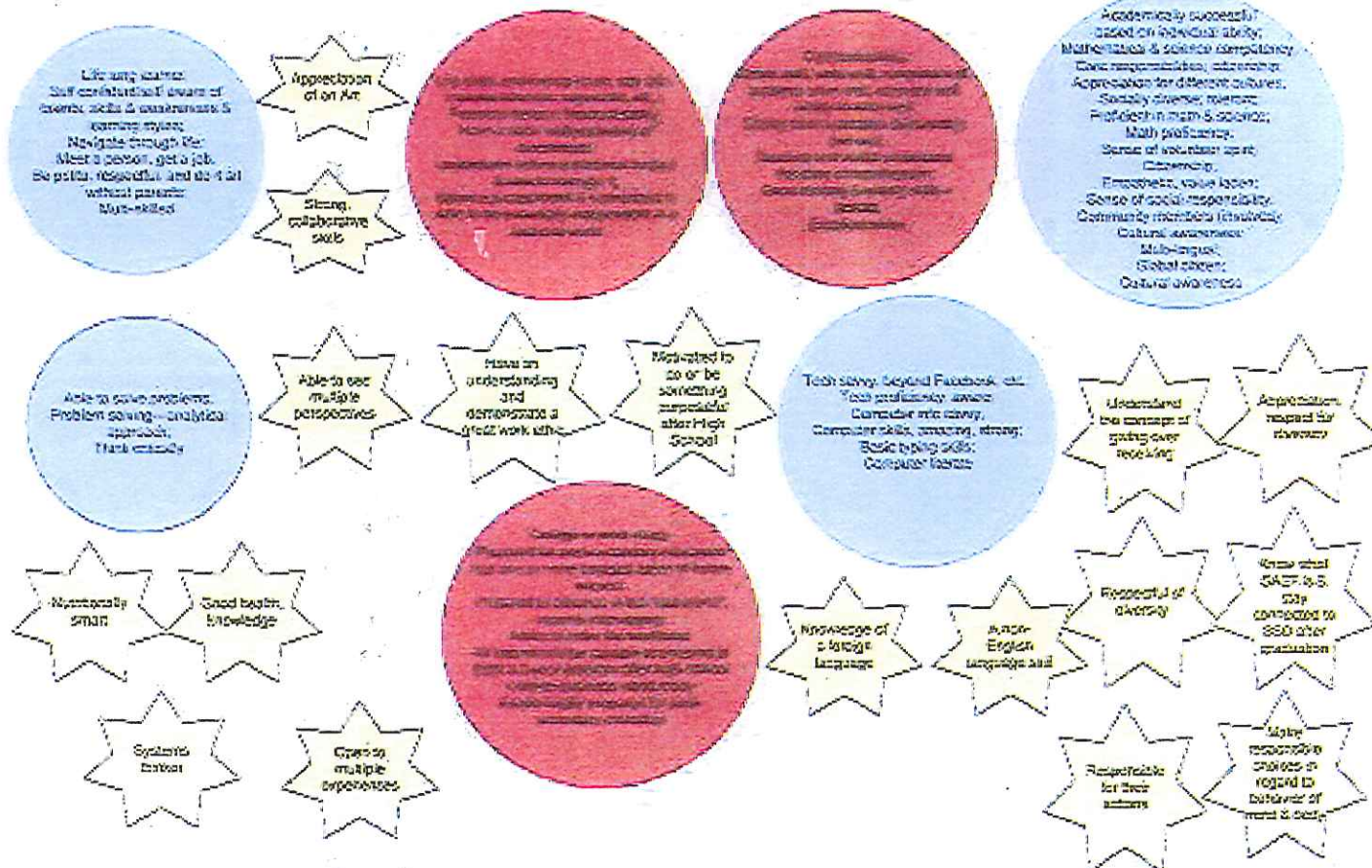
Composite of Issues

Process to date

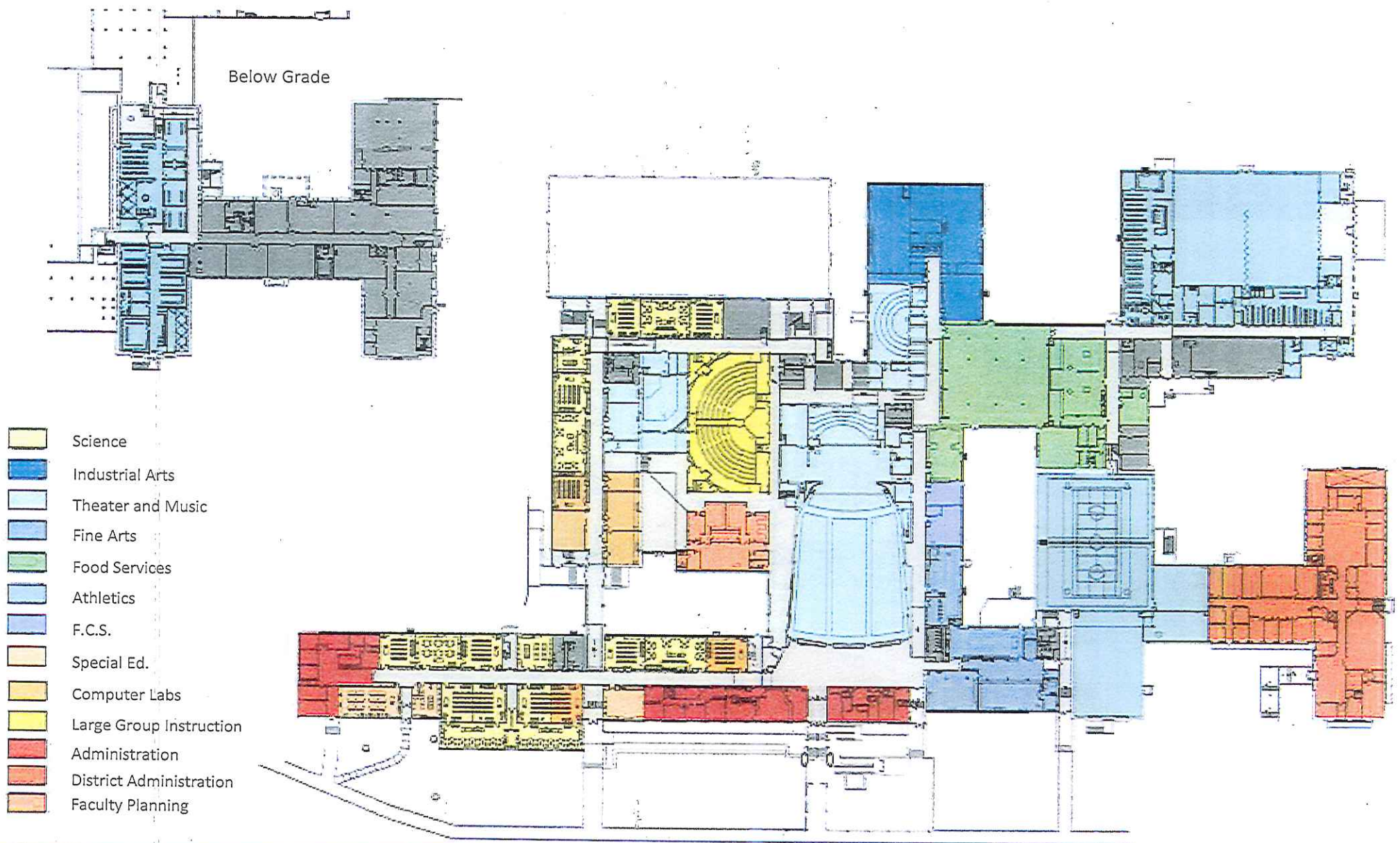
- Interview some staff to discuss educational vision
- Assessment of existing facility – (physical & educational)
- **Benchmarking/Best practices for high school building area per student**
- **right sizing the BOX**
- Estimate program elements
- Preparing for next phase analysis of existing building and theoretical new buildings

21st century education at Springfield School District

What Will Future Springfield High School Graduates Look Like

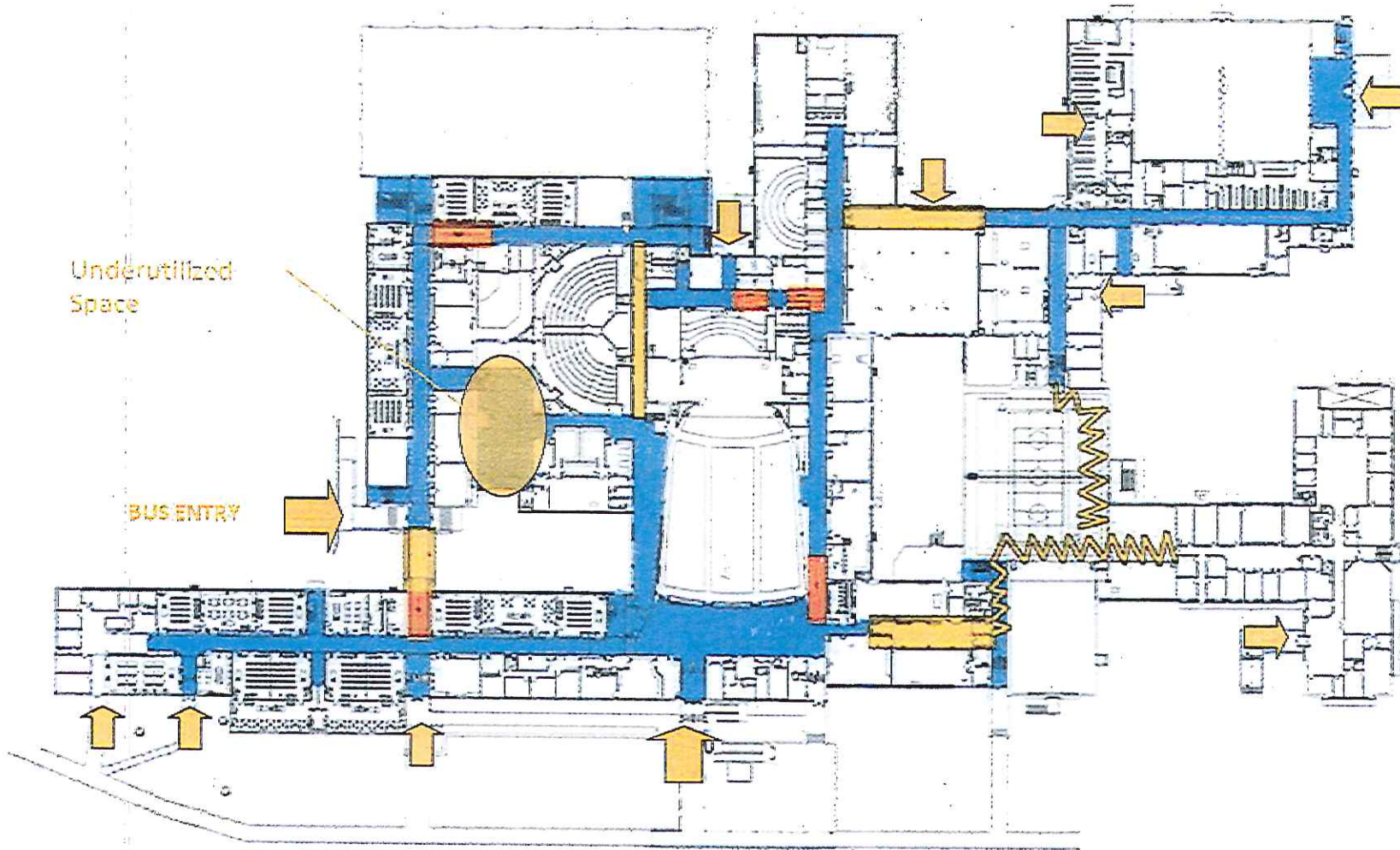


What is IT? (again)



Existing Building Program

Circulation

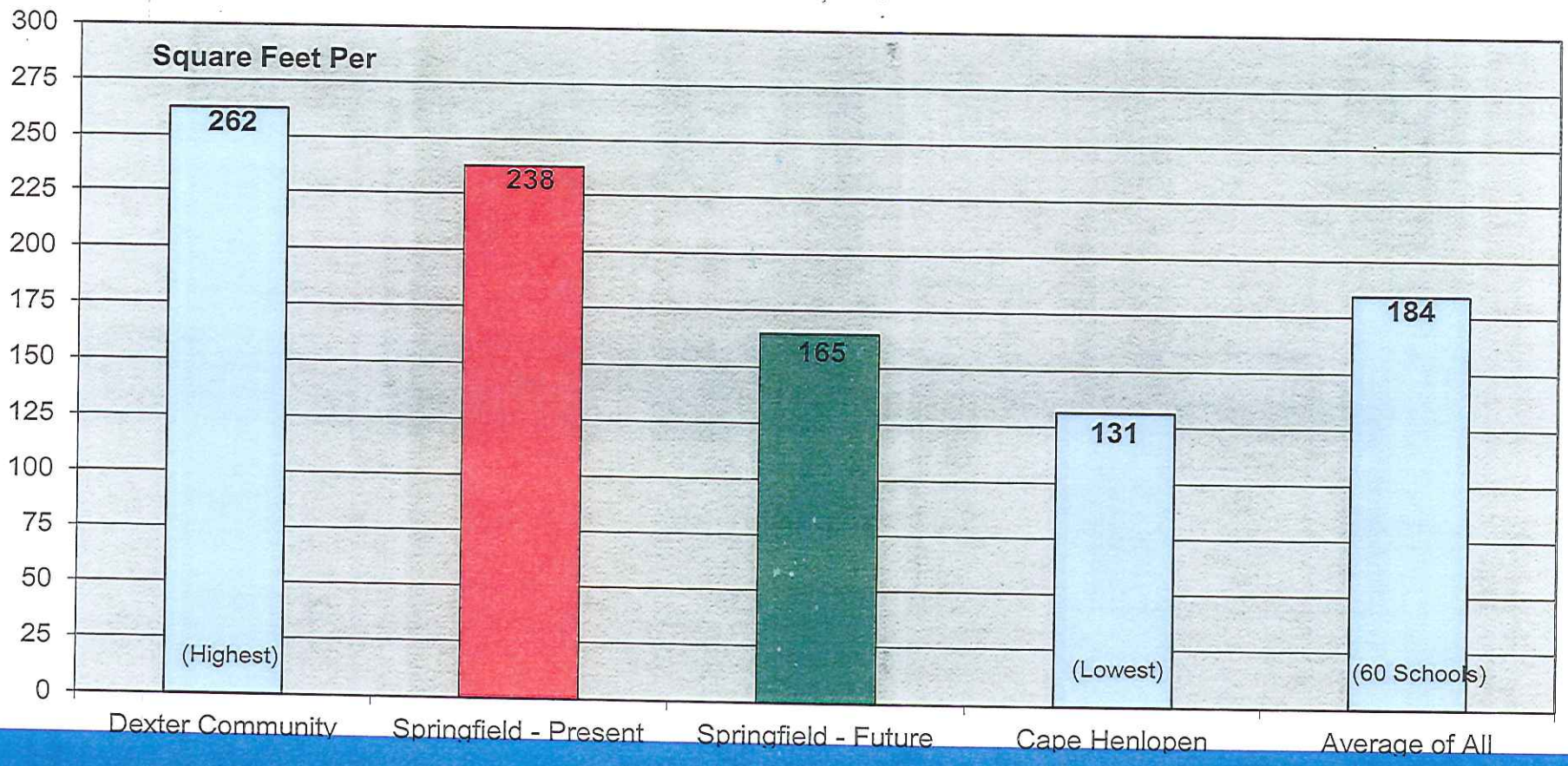


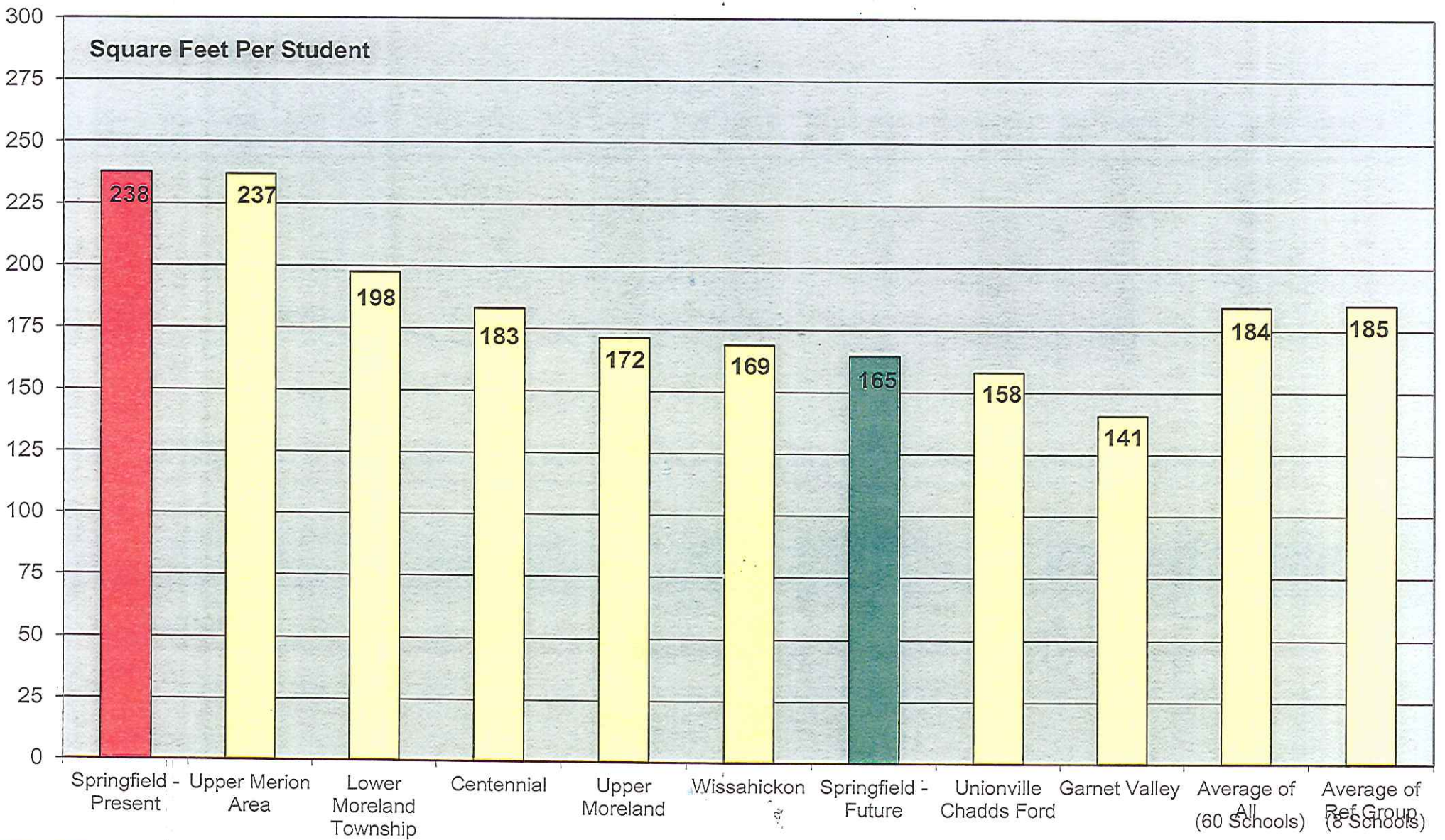
- Security is a problem
- Student entrance is too small
- Limited Accessible Access
- Large Quantity of Exterior access
- Poorly defined visitor Entry
- Multiple levels create Difficult accessible Transitions
- Unorganized circulation Difficult for way finding And monitoring
- Blind corners, stairways

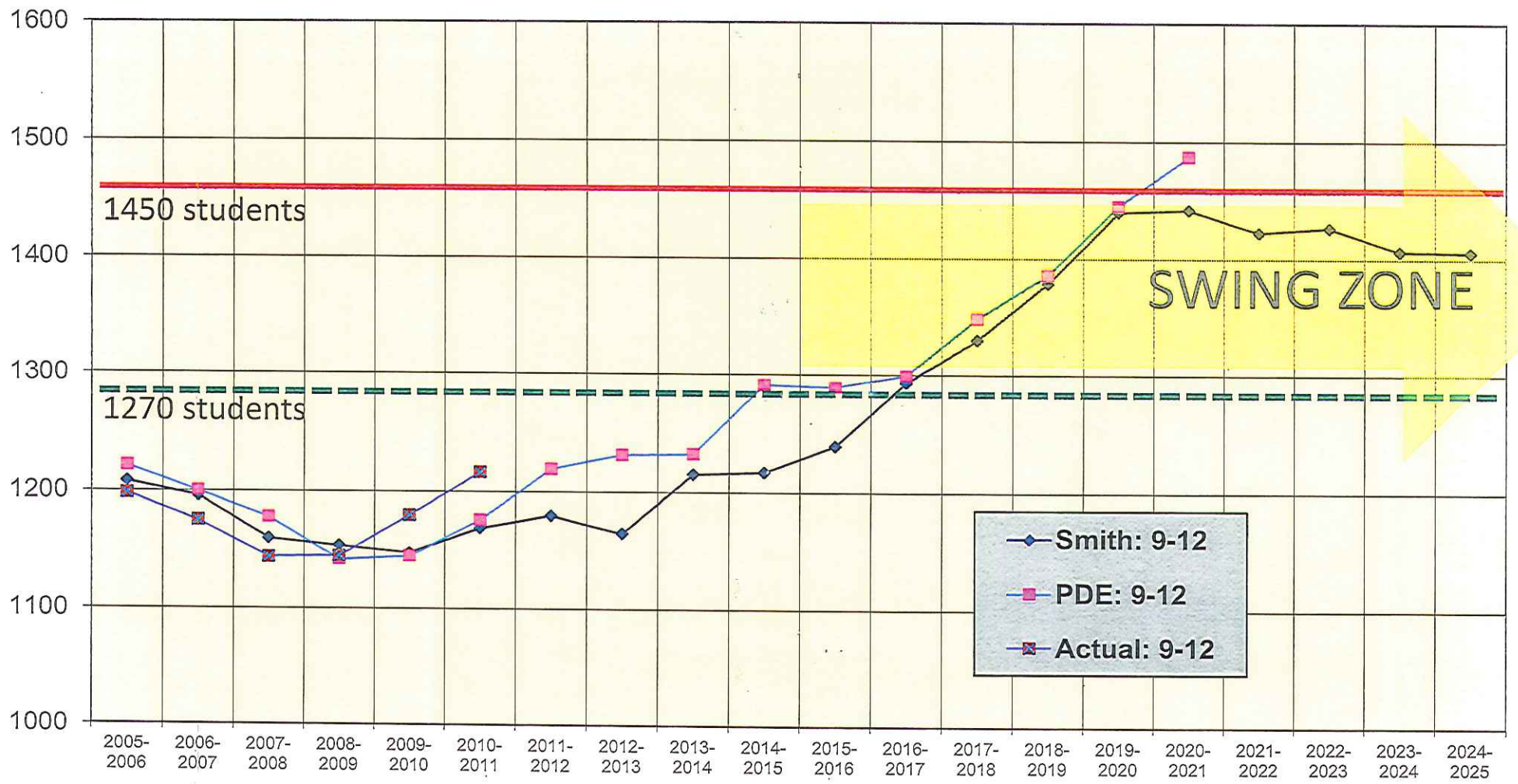
Existing Building Program

Sources:

- SD's in the reference group
- Burt Hill project experience
- Other neighboring districts with recently constructed high schools (if not already included)
- Similar schools in trade publications
- School Planning and Management annual benchmarking report







COMMITTEE CHARGE:

Assume maximum projection 1270 - expandable to 1450 students (implies 4400 total students)

Recommended building area

1270 X 165 = 209,550 GSF

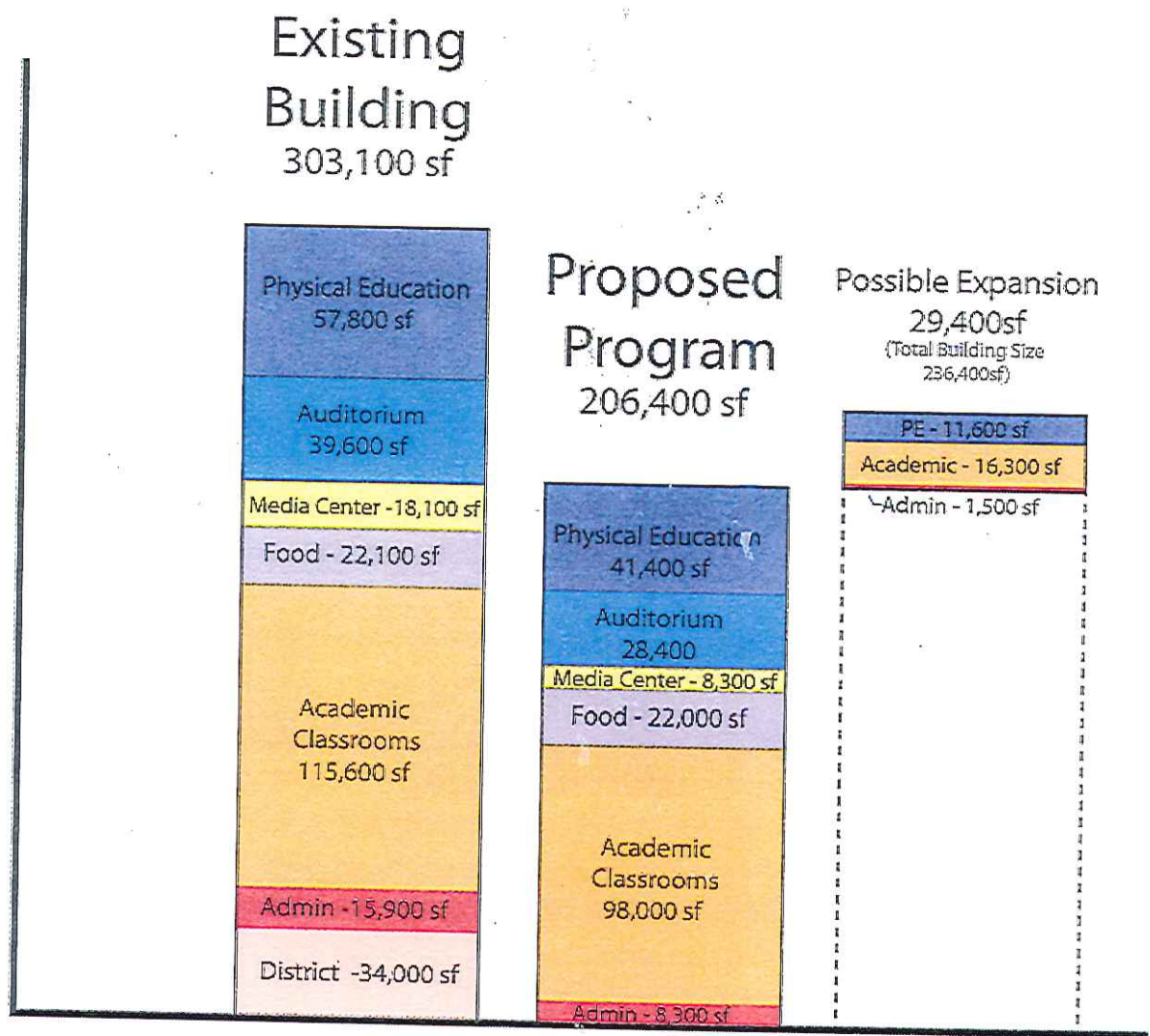
Committee goal

203,000 GSF

Committee challenge

180,000 GSF

<u>Program breakdown</u>	<u>Existing School</u>	<u>Proposed School</u>
Classrooms/Labs/SGL's/S.E./ LGI Business/Computer Labs	60,652 NSF	47,725 NSF
Art/Music/Band/Choral	13,000 NSF	9,500 NSF
Auditorium/Stage	14,982 NSF	11,900 NSF
Tech Ed./F.C.S.	8,565 NSF	3,600 NSF
Support/Admin./Kitchen/Cafeteria	30,914 NSF	18,300 NSF
Athletics	41,648 NSF	25,120 NSF
Media Center	12,941 NSF	5,000 NSF
Gross Area	270, 584 GSF	209,550 GSF



Proposed on June 26th, 2009

Guiding Principles & Goals

- Guiding Principles
- Site / Campus Goals
- Sustainability Goals
- Planning Assumptions

Guiding Principles

- Strengthen **connections** to the broader community
- Promote the use of the School as a place for the community :
Town Center
- Create the **optimal learning environment** for education.
- Create a **sustainable** School that deploys the best in high performance building design to reduce energy consumption and promote classroom achievement.

Site/Campus Goals

- Improve **circulation** and connections to school.
- Add **athletic fields** and improve their quality.
- Increase **parking capacity** of campus without impacting goals for athletic program.
- **Minimize vehicular circulation** within the campus.
- Promote **walking** and public transit.
- Protect the existing **track**, if possible.

Sustainability Goals for Planning

- Reduce **storm water** runoff from the site.
- Reduce nighttime **light pollution**.
- Employ techniques that reduce the **heat island** effect of the property.
- Building orientation for **daylighting**.

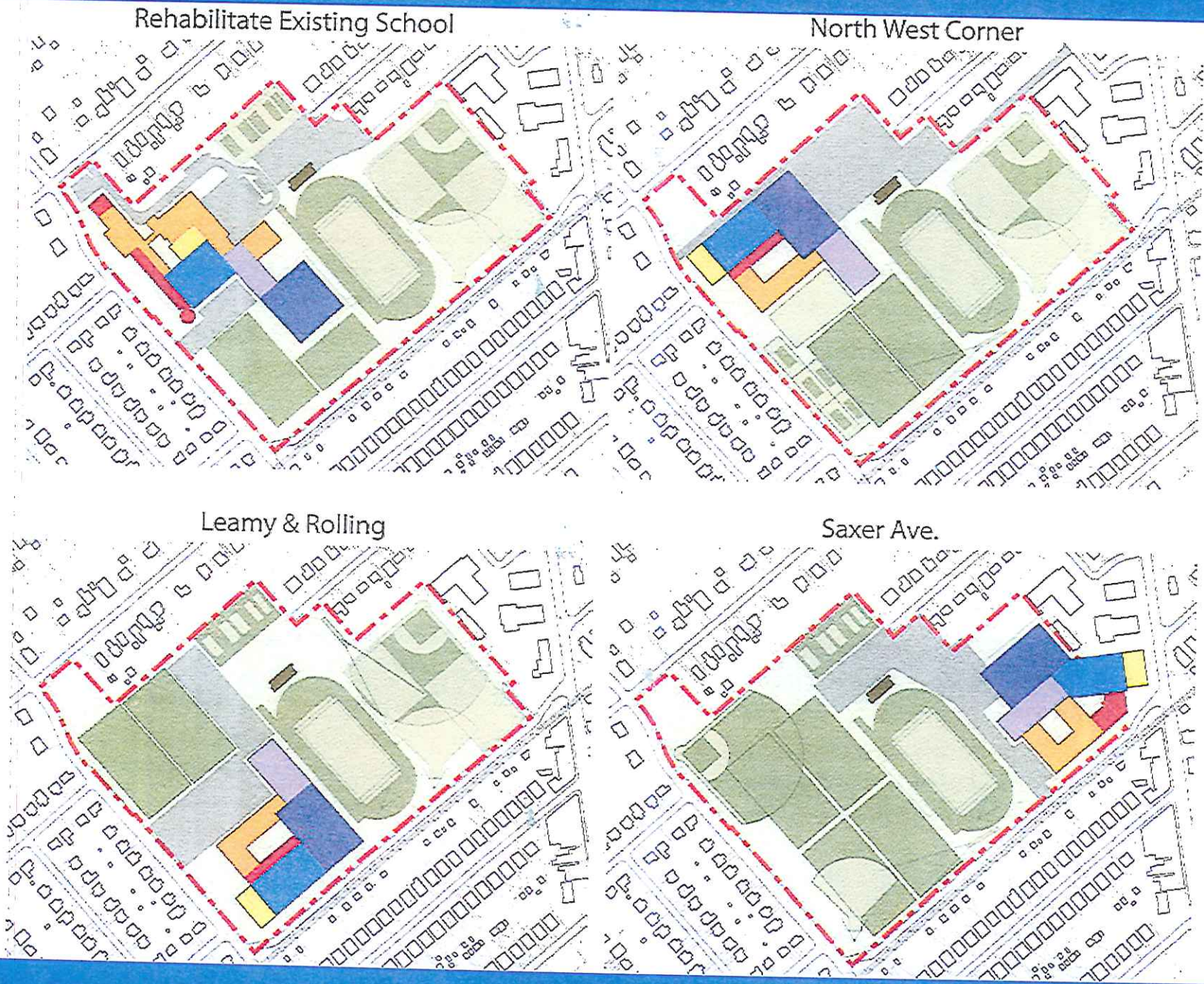
Planning Assumptions

- Program size and outline based on Burt, Hill derived values.
(dated June 26, 2009)
- Onsite parking count to match existing.
- District Offices to be relocated offsite.
(Including District IT network servers)
- District Bus parking to be relocated offsite.
- Phasing : maintain full operation of School
without use of modular classrooms.



Preliminary Site Planning Options

A variety of building locations were proposed as 'test fits'

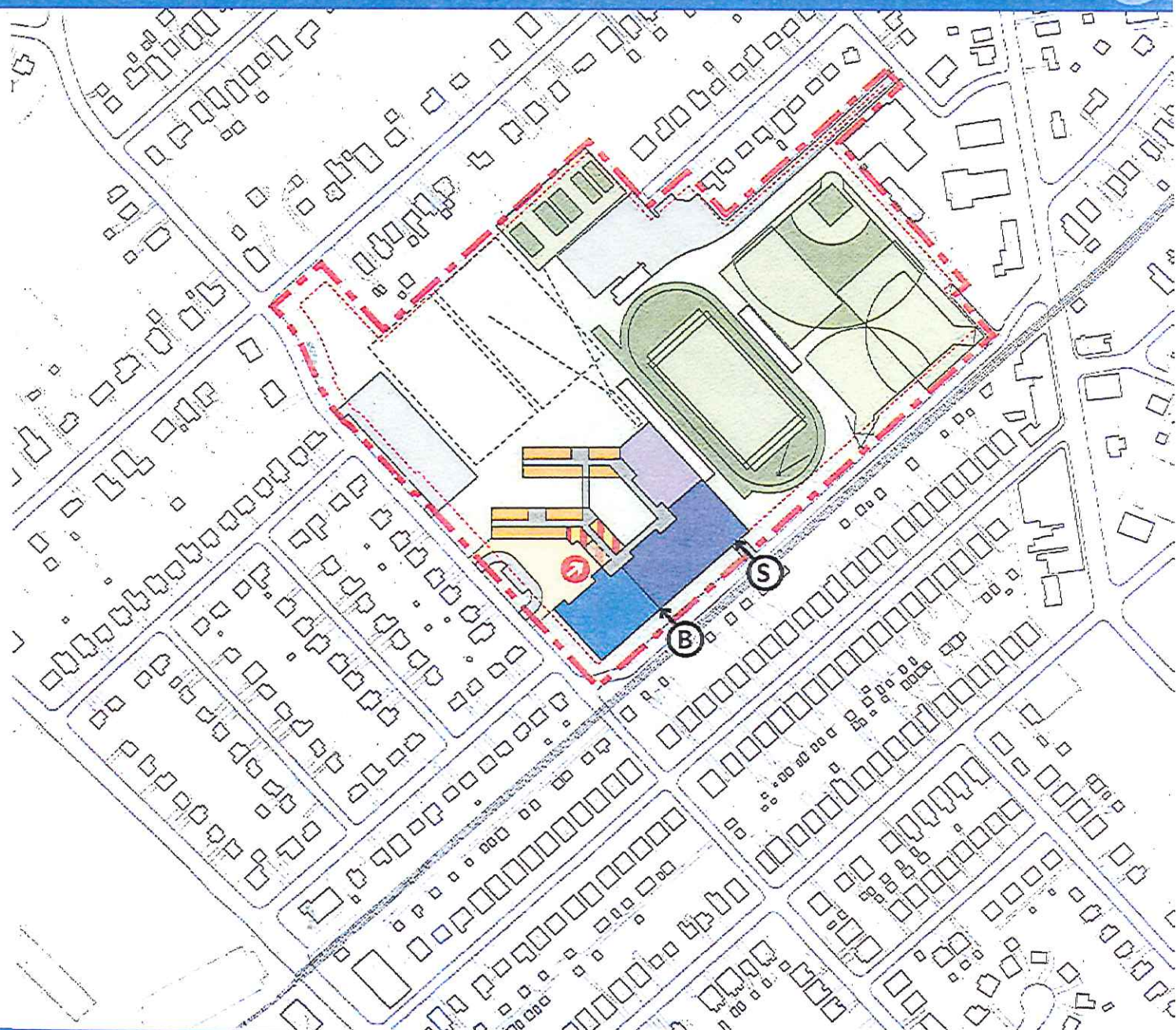


Conceptual Refinement

Two Options, and a Third Alternative emerges

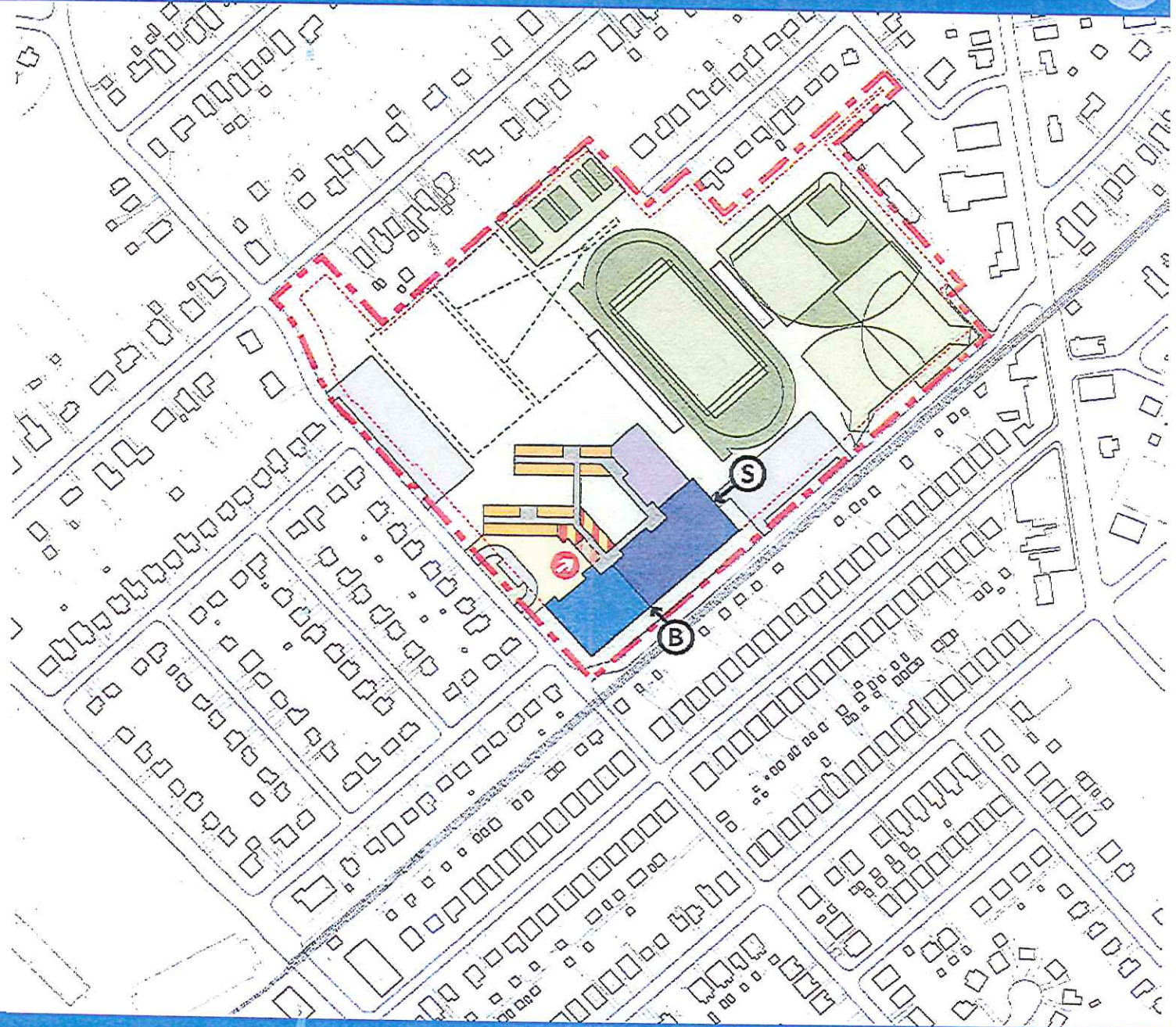
- Leamy Ave.
- Saxer Ave./St. Francis land swap
- Saxer Ave Site, within campus bounds

- Academic Core
- Food Services
- Media Center
- Theater & Music
- Physical Education
- Administration



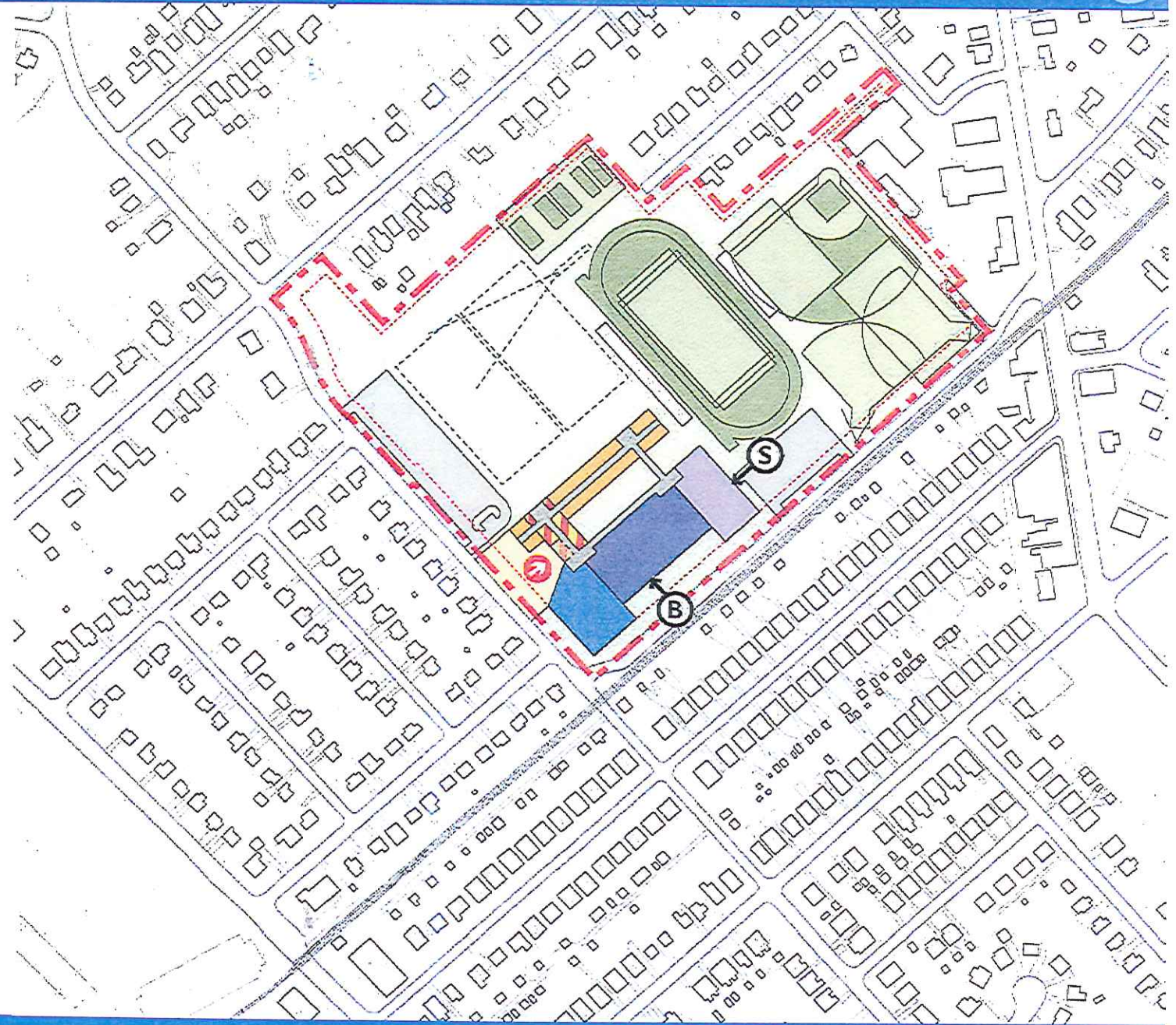
Leamy Ave. – 4 Stories

- Academic Core
- Food Services
- Media Center
- Theater & Music
- Physical Education
- Administration



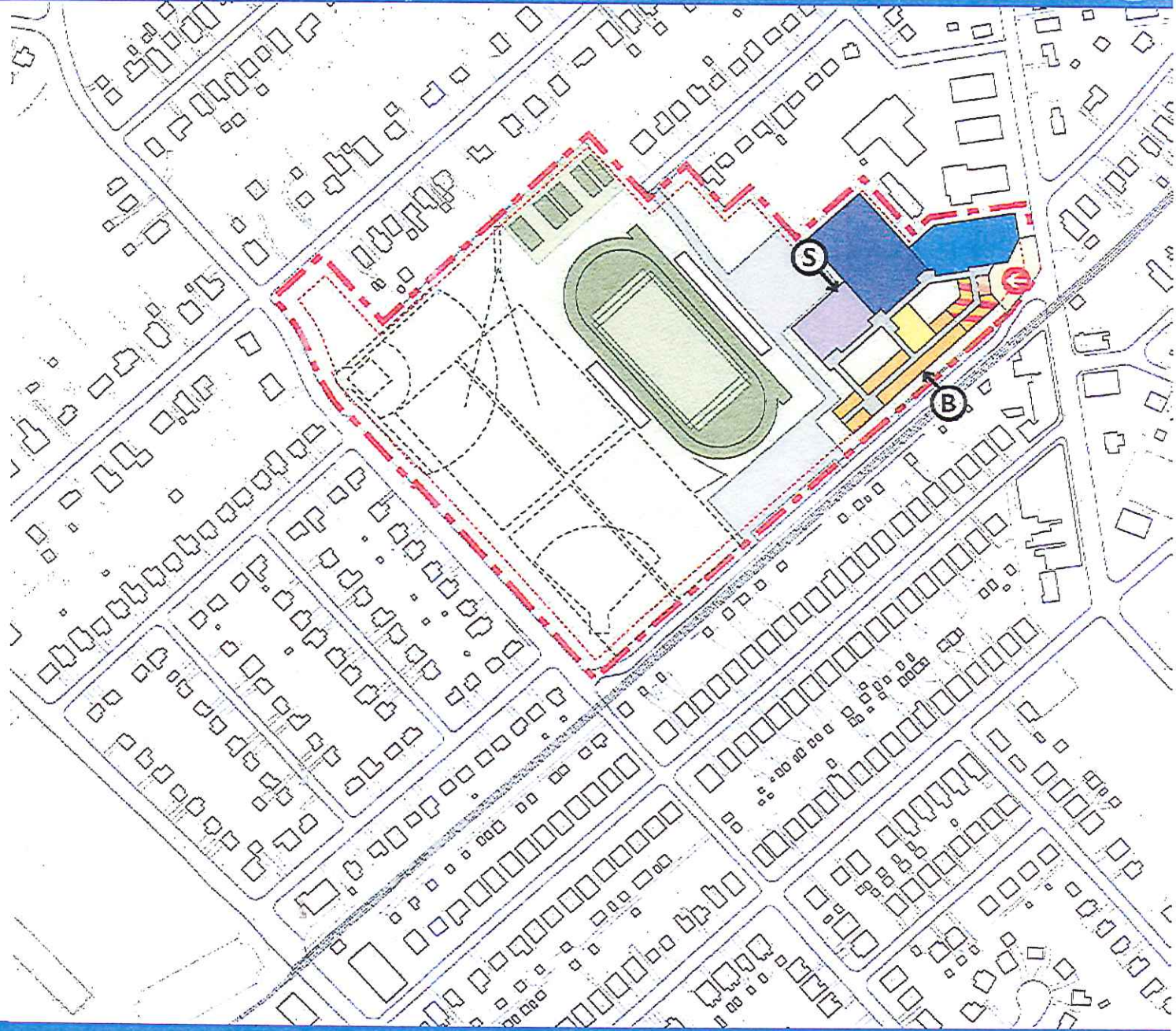
Leamy Ave. – 4 Stories & Relocated Track

- Academic Core
- Food Services
- Media Center
- Theater & Music
- Physical Education
- Administration



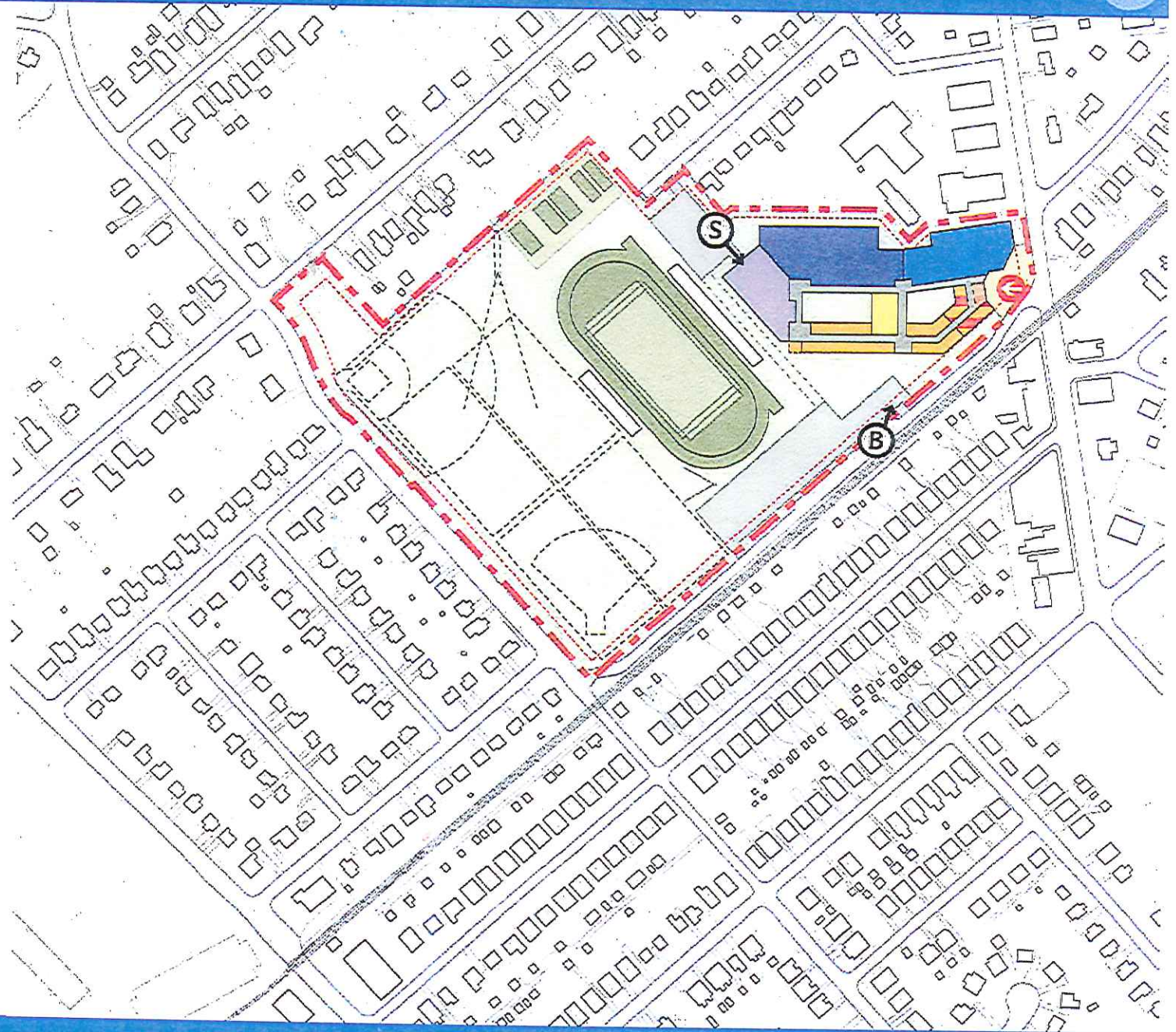
Leamy Ave. – 4 Stories & Relocated Track Option 2

- Academic Core
- Food Services
- Media Center
- Theater & Music
- Physical Education
- Administration












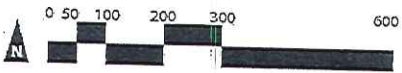
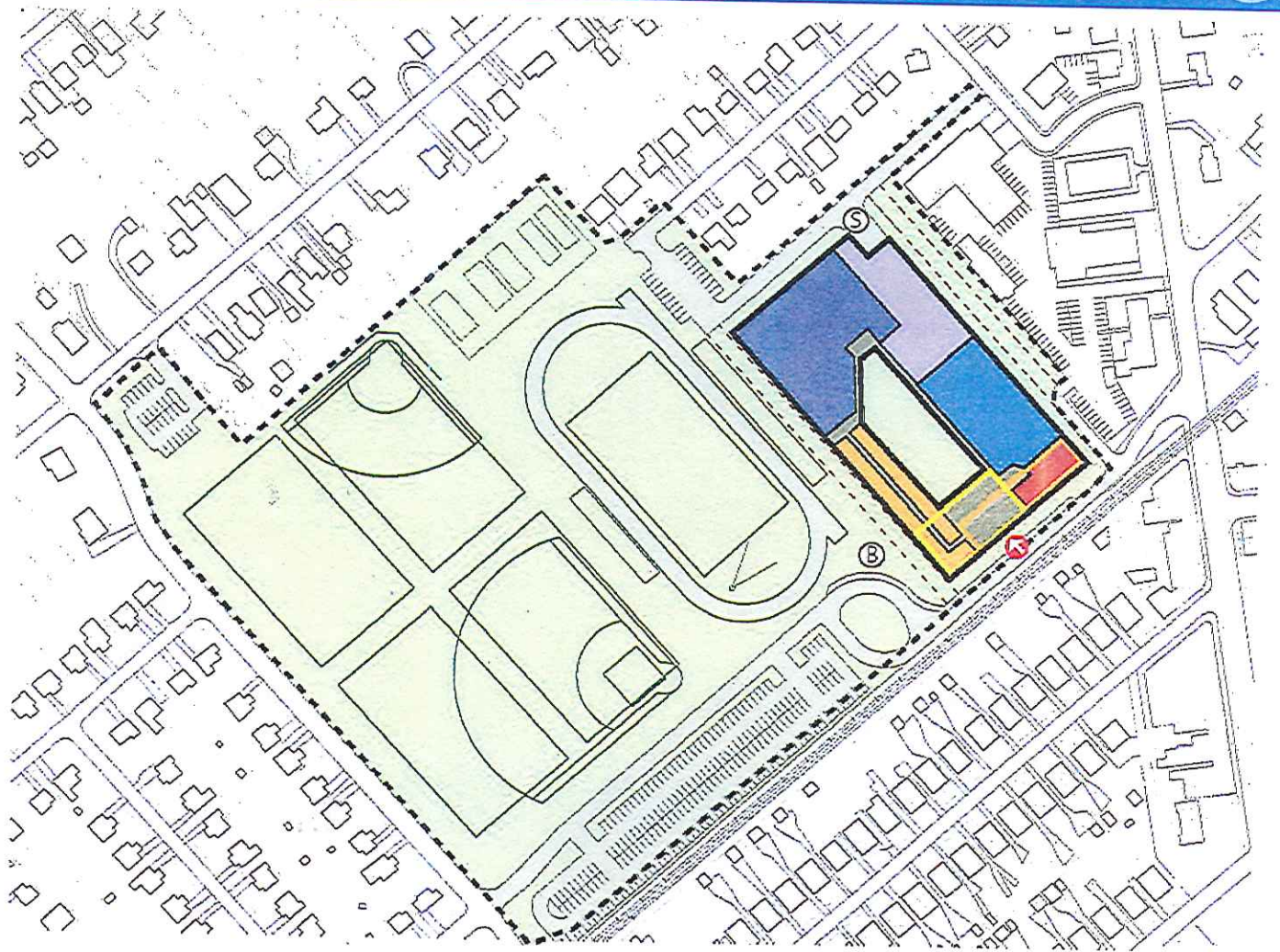
Saxer Ave./St. Francis – 4 Stories & Relocated Track

- Academic Core
- Food Services
- Media Center
- Theater & Music
- Physical Education
- Administration



Saxer Ave./St. Francis - 4 Stories & Relocated Track

-  ACADEMIC CLASSROOMS
-  MEDIA CENTER
-  ADMINISTRATION
-  AUDITORIUM
-  FOOD SERVICE
-  PHYSICAL EDUCATION
-  PROGRAM USE ABOVE GROUND FLOOR
-  PROPERTY LINE
-  FIRE LANE



Saxer Avenue Site – Within Campus Limits

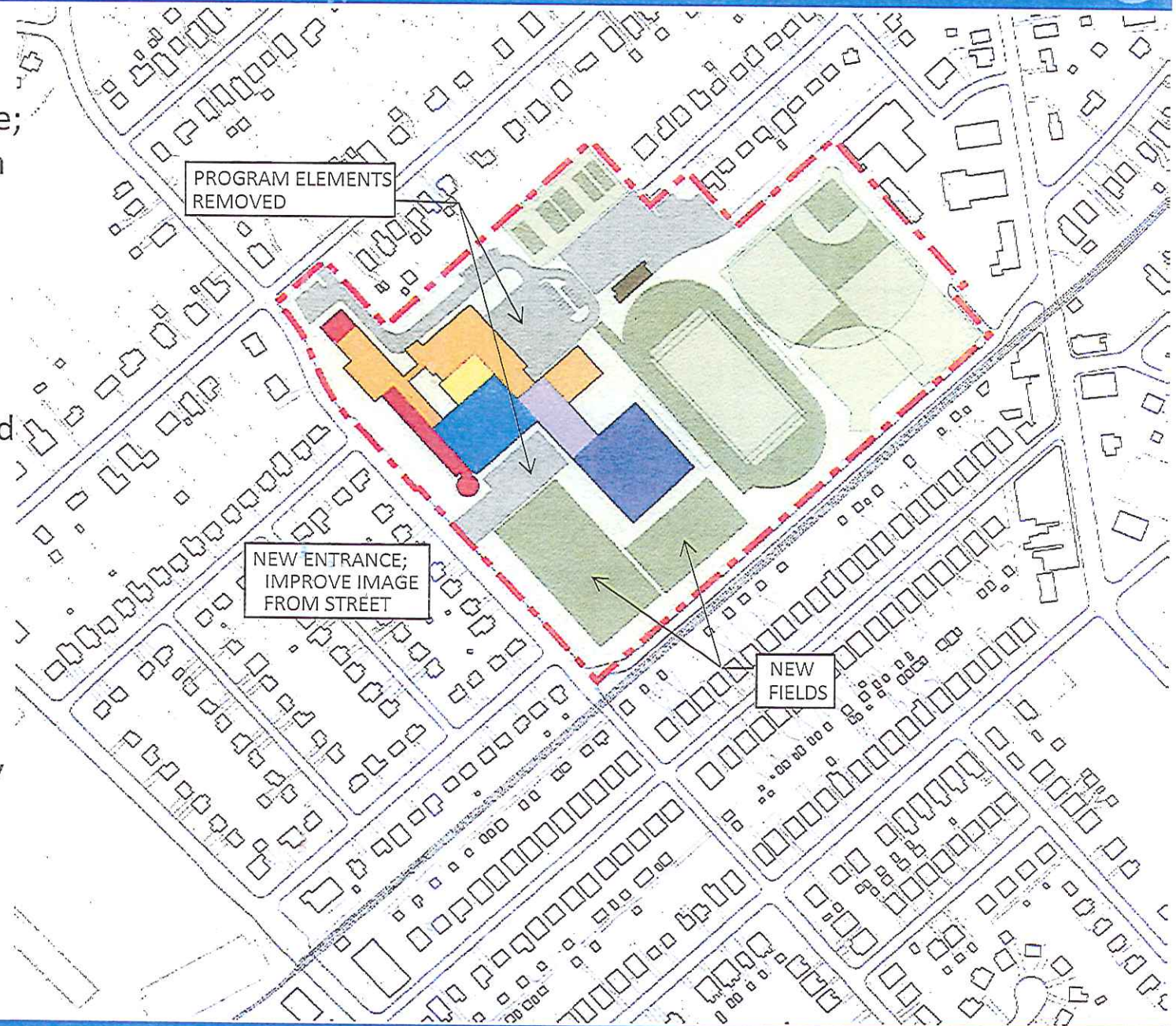
Four Options Compared

Review for Phasing

- Existing Building – Service Life Extension
- Leamy Ave. Site
- Saxer Ave./St. Francis : land swap
- Saxer Ave. Site, within campus bounds

KEY SCOPE ITEMS

- Reduction of building size; consolidation of program components.
- Relocation of District Office and Bus Parking
- Building Performance and design upgrades :
 - Hazmat removal
 - Life-safety
 - Energy performance
 - Building Systems
 - Accessibility
- Building Design / Identity



PHASING CHALLENGES

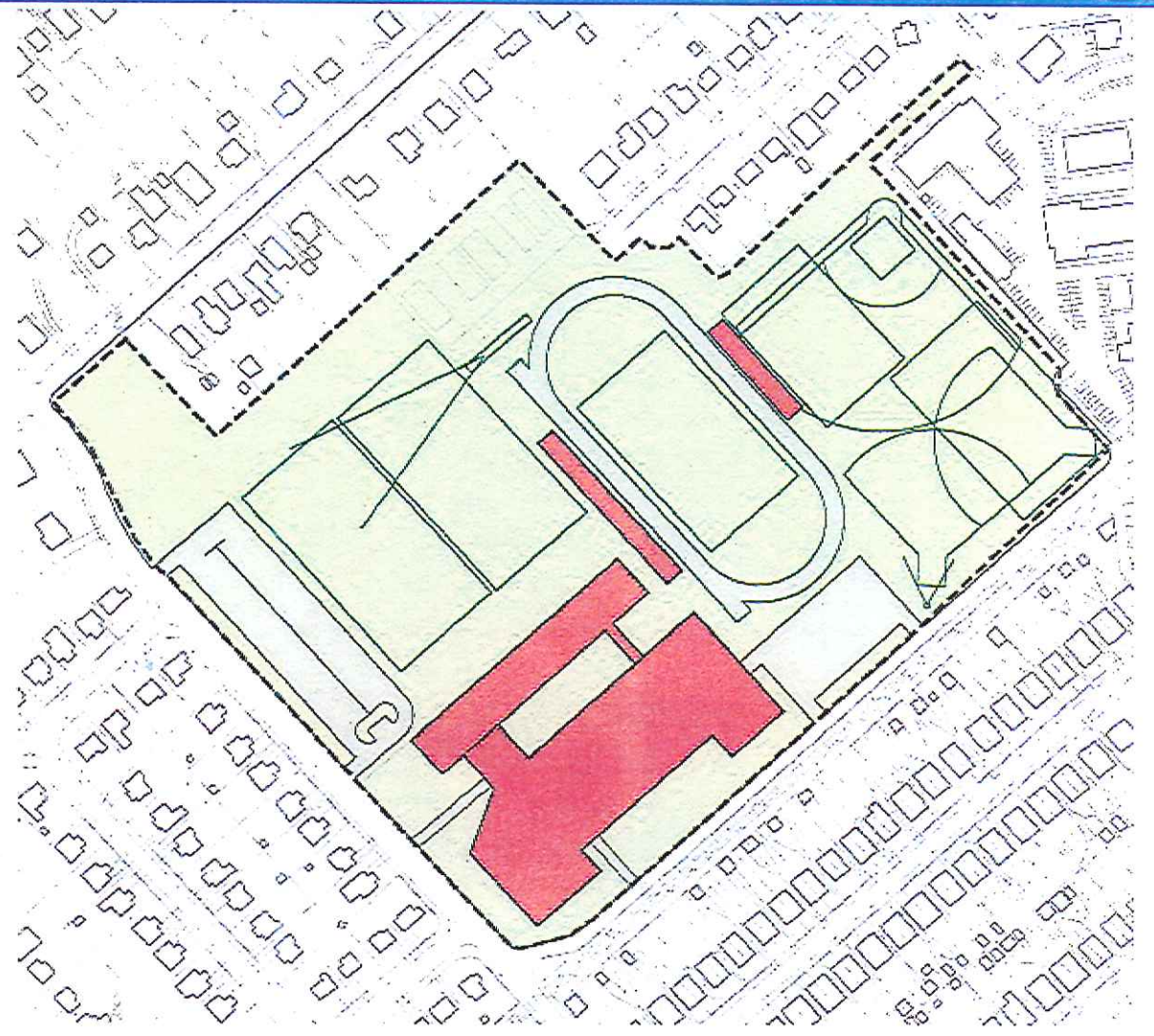
- Remediation of Roof Deck and building envelope : exposure to elements.
- Building Systems : service interruptions
- Significant Building Renovation scope :
 - Cannot to be completed within Summer periods
 - Construction Phasing Schedule long and complex



Existing School – Service Life Extension

Phasing

LEAMY AVENUE SITE

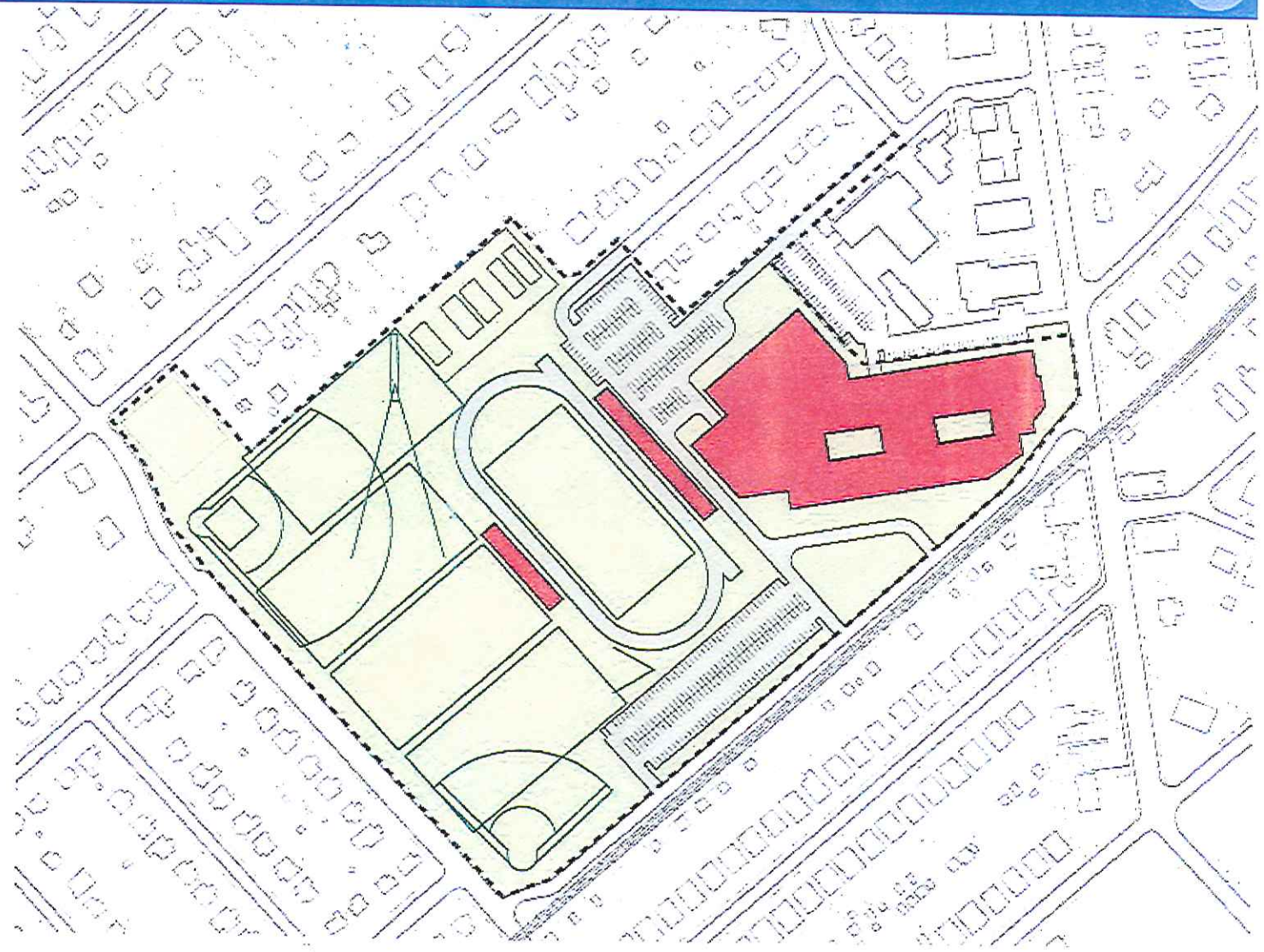


LEAMY AVENUE SITE

-  EXISTING HIGH SCHOOL
-  NEW BUILDING FOOTPRINT



SAXER AVE./
ST. FRANCIS SITE



SAXER AVE./
ST. FRANCIS SITE

 SPRINGFIELD HIGH SCHOOL
EXISTING BUILDINGS

 ST. FRANCIS SCHOOL
EXISTING BUILDINGS


 CONSTRUCTION ZONE

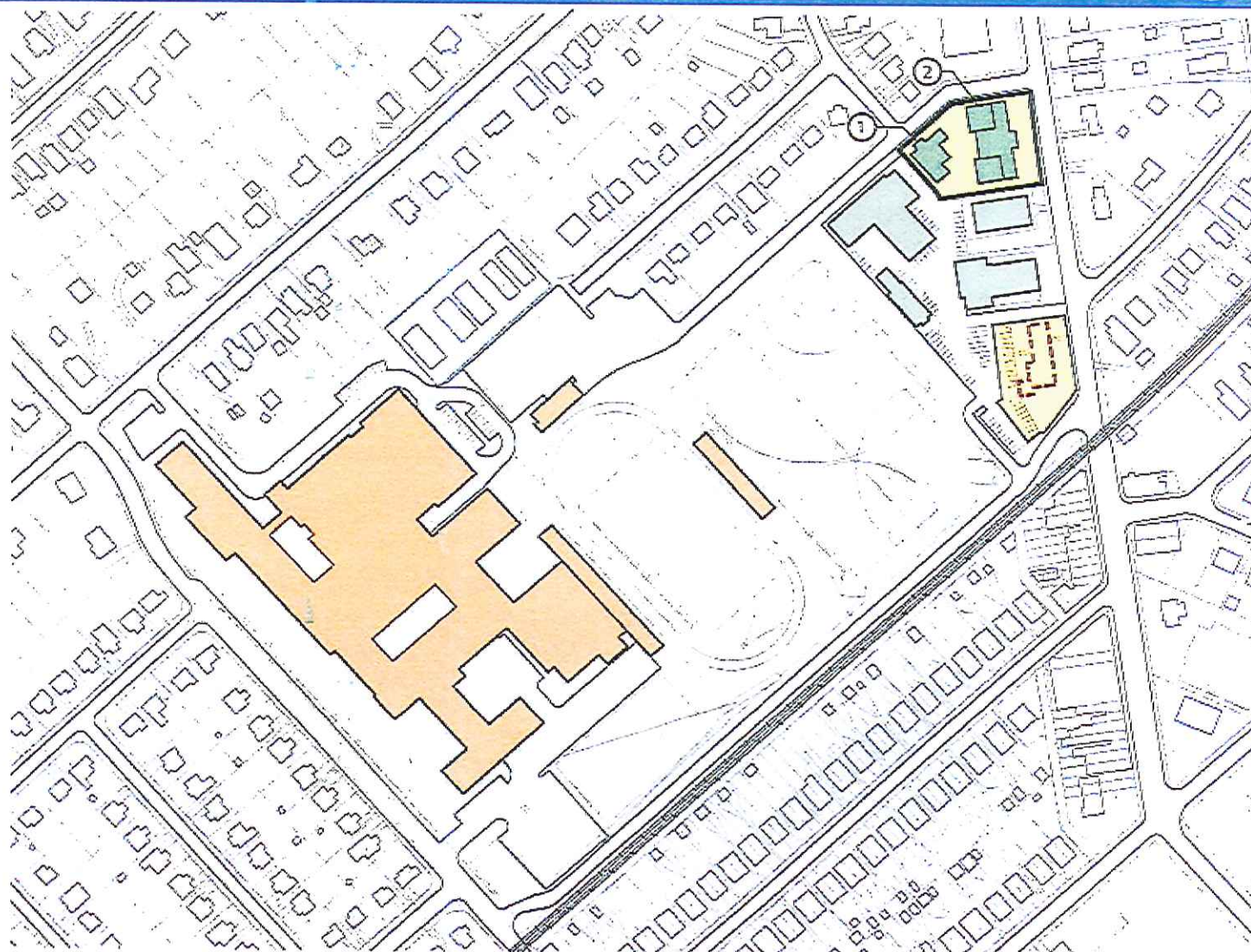
 ST. FRANCIS SCHOOL
NEW CONSTRUCTION

① RECTORY RESIDENCE WITH
ATTACHED GARAGE & CHAPEL

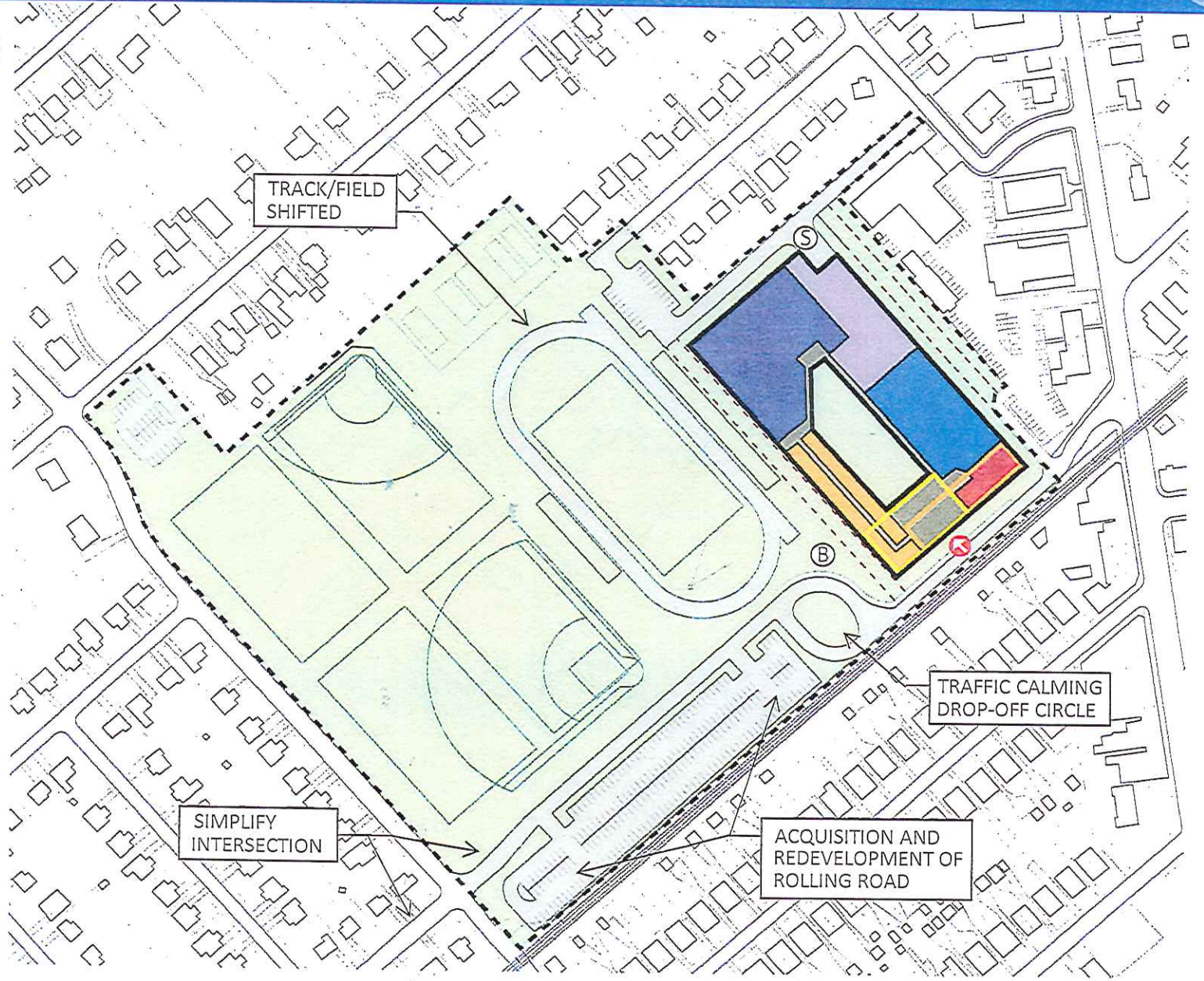
② RECTORY CENTER WITH
CHILD CARE & WHITE
ELEPHANT

THEN:

 DEMOLITION OF
EXISTING RECTORY BUILDING



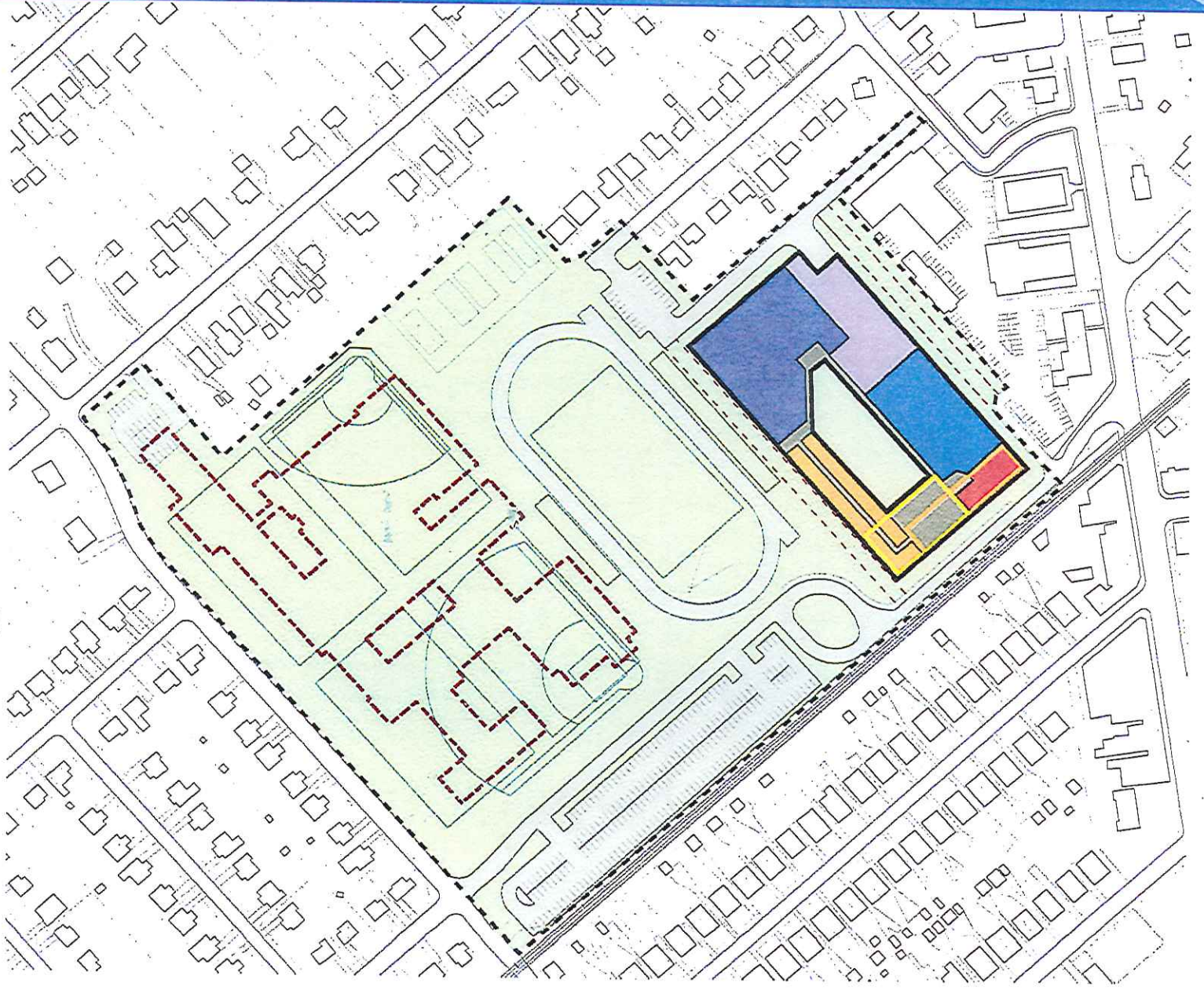
SAXER AVENUE SITE



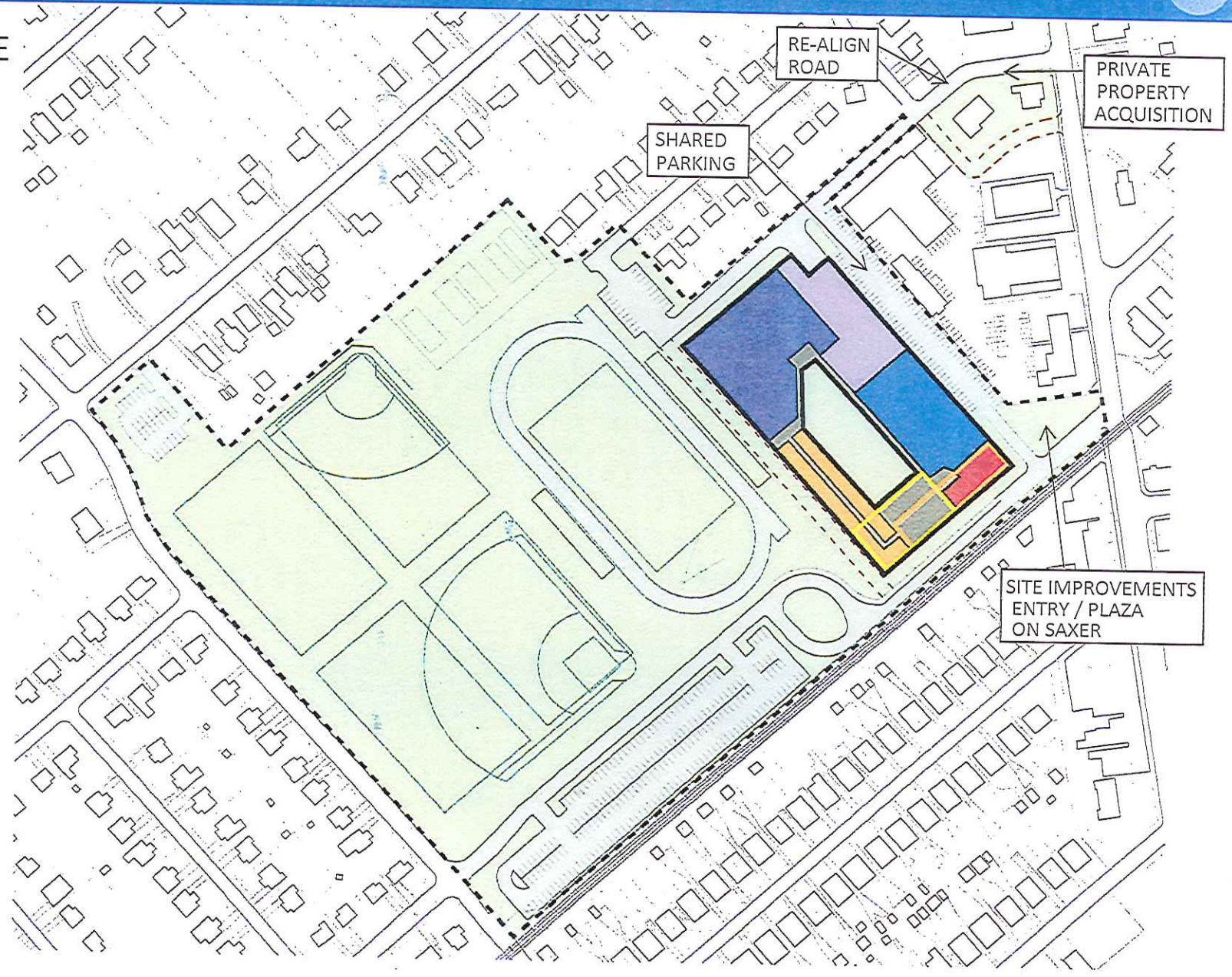
SAXER AVENUE SITE

Phasing Notes

- New School can be developed while Existing School remains fully operational
- Track and Field can be relocated prior to any other work; only rear parking would be displaced
- Geothermal Wellfield : under track or parking.



SAXER AVENUE SITE



Saxer Avenue Site – Proposed Off-Campus Improvements Land Swap/Acquisition

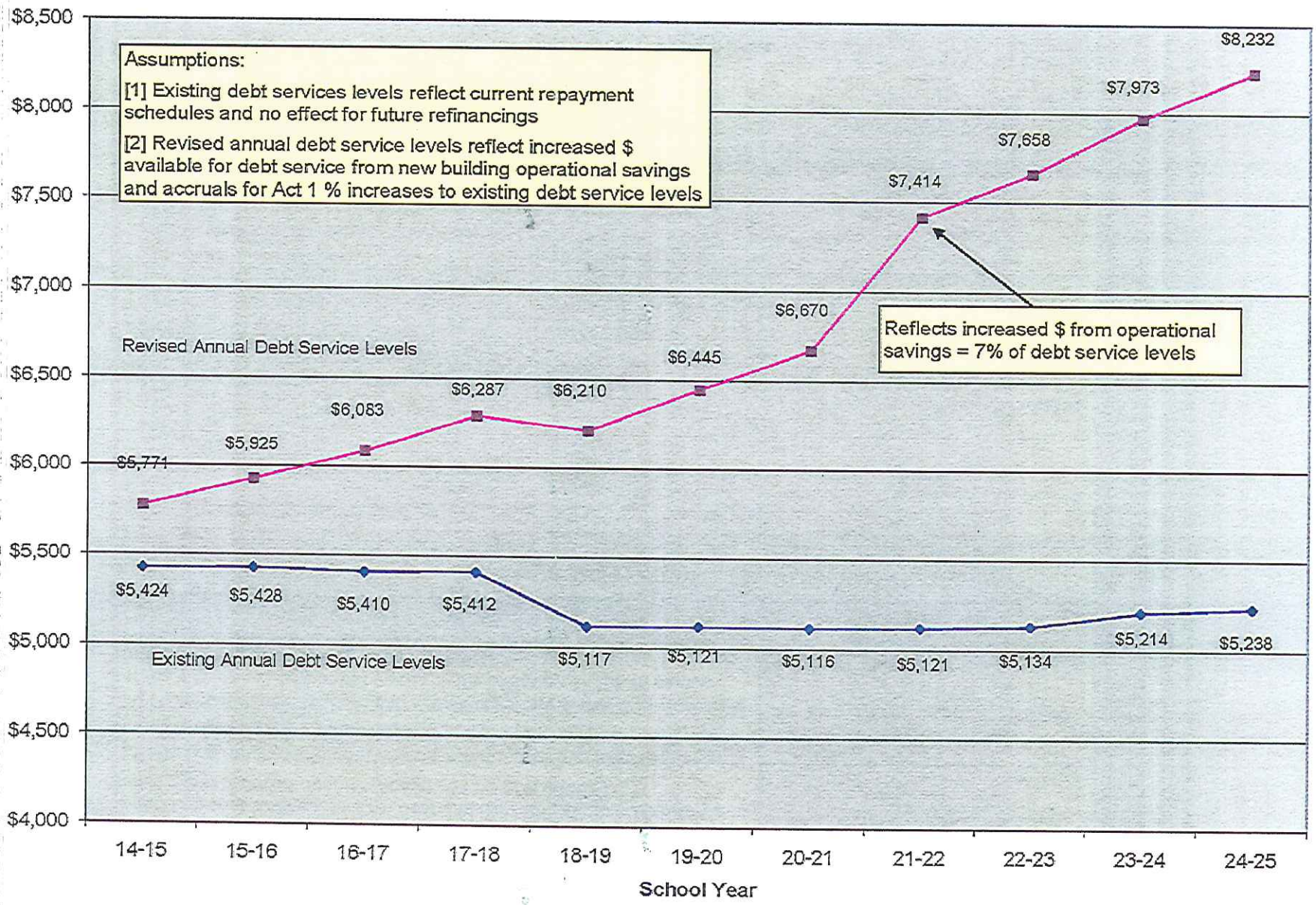
Facilities Committee Current Thinking

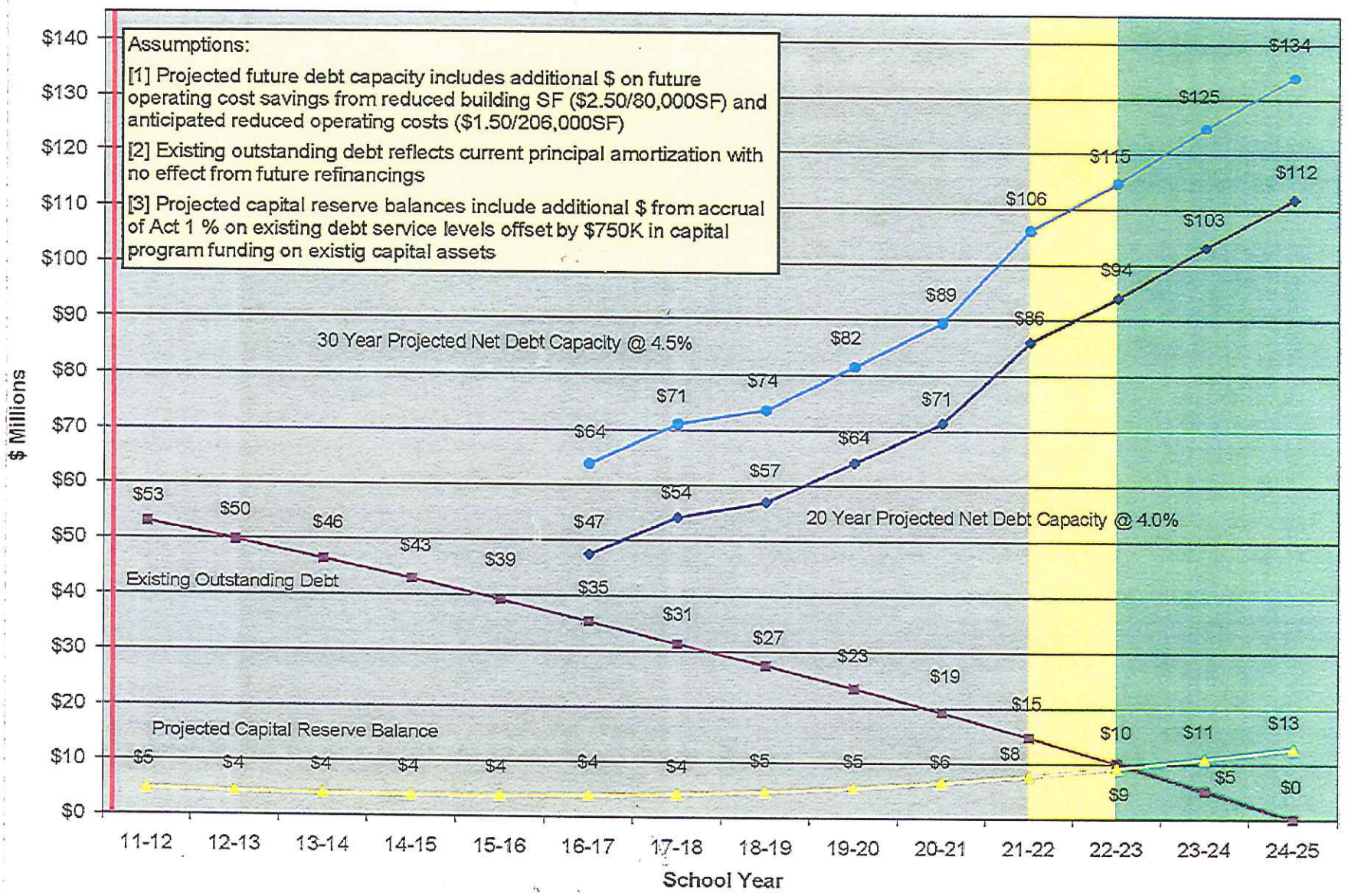
Continued Evaluation of Scope and Cost
for Three Options :

- Existing Building – Service Life Extension
- Leamy Avenue Site
- Saxer Avenue Site

Financing and Schedule









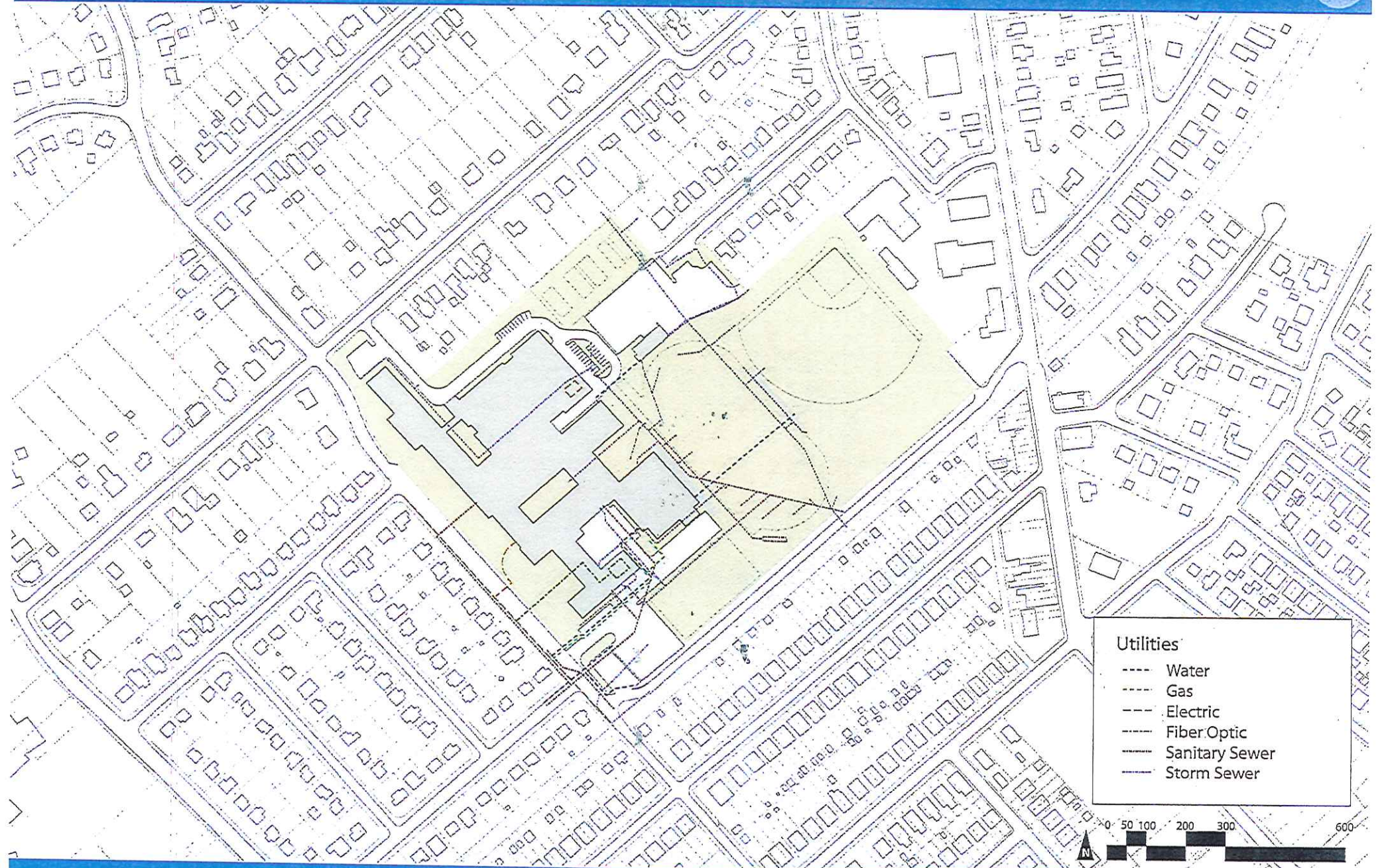
Series	Optional Call Date	Principal at Call Date	Final Maturity
2001	3/15/2012	\$7,090,000	2016
2006	10/1/2012	\$9,140,000	2023
2007	10/1/2012	\$9,630,000	2024
2004	3/15/2013	\$8,950,000	2019
2004A	3/15/2014	\$10,995,000	2021
2010	4/1/2016	\$7,680,000	2022
Totals		\$53,485,000	

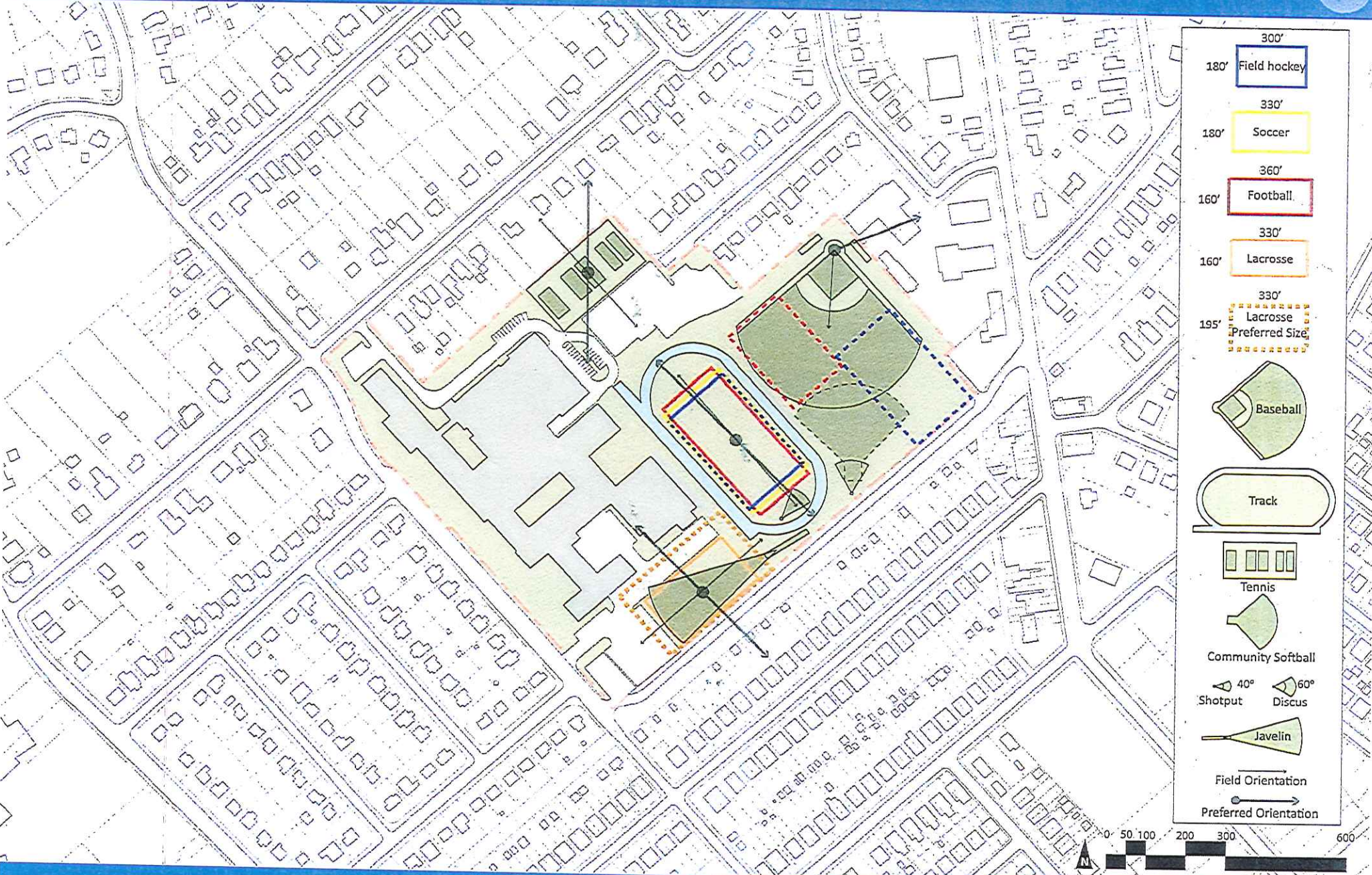
Activity Name	Original Dur.	Start	Finish	Year										
				2011	2012	2013	2014	2015	2016	2017	2018	2019		
1 SHS Master Plan - Project Schedule	2857	1/20/2011	1/2/2022	[Timeline bar from 2011 to 2022]										
2 Master Plan Development	687	1/20/2011	9/6/2013	[Timeline bar from 2011 to 2013]										
3 Plan Refinement/Critical Activities	247	1/20/2011	12/30/2011	[Timeline bar from 2011 to 2011]										
4 SLEP Program	222	1/20/2011	11/25/2011	[Timeline bar from 2011 to 2011]										
5 Initial "in-house" SLEP update	20	1/20/2011	2/16/2011	[Timeline bar from 2011 to 2011]										
6 Update Overall SLEP	80	5/2/2011	8/19/2011	[Timeline bar from 2011 to 2011]										
7 Develop SLEP Strategy/Budget	70	8/22/2011	11/25/2011	[Timeline bar from 2011 to 2011]										
8 Title Search & Survey	80	4/21/2011	7/13/2011	[Timeline bar from 2011 to 2011]										
9 Finalize options being evaluated	0	8/17/2011	8/17/2011	[Timeline bar from 2011 to 2011]										
10 Conceptual Scope Refinement of Options	60	8/20/2011	9/8/2011	[Timeline bar from 2011 to 2011]										
11 Costing of Options	80	9/12/2011	12/30/2011	[Timeline bar from 2011 to 2011]										
12 Community Input & Presentations	480	4/25/2011	2/22/2013	[Timeline bar from 2011 to 2013]										
13 Initial Board Progress Presentations	40	4/25/2011	8/17/2011	[Timeline bar from 2011 to 2011]										
14 Public Present - advance present FC	0	1/30/2012	1/30/2012	[Timeline bar from 2012 to 2012]										
15 St. Francis - Public Acknowledgement	0	2/27/2012	2/27/2012	[Timeline bar from 2012 to 2012]										
16 Community Presentations & Input	280	2/27/2012	2/22/2013	[Timeline bar from 2012 to 2013]										
17 St. Francis: go-no-go decision	0	5/21/2012	5/21/2012	[Timeline bar from 2012 to 2012]										
18 Final Option Selected	0	2/22/2013	2/22/2013	[Timeline bar from 2013 to 2013]										
19 RFP Process and Selection of Design Team	80	2/25/2013	6/14/2013	[Timeline bar from 2013 to 2013]										
20 Demographic Study Check	60	8/17/2013	9/8/2013	[Timeline bar from 2013 to 2013]										
21 Bus Relocation	200	9/17/2012	6/21/2013	[Timeline bar from 2012 to 2013]										
22 Administration Relocation	200	9/7/2013	6/13/2014	[Timeline bar from 2013 to 2014]										
23 Final Selected Option Development	1360	7/1/2013	9/14/2018	[Timeline bar from 2013 to 2018]										
24 Land Development Approvals	260	7/1/2013	6/27/2014	[Timeline bar from 2013 to 2014]										
25 PDE Submissions	430	7/1/2013	2/20/2015	[Timeline bar from 2013 to 2015]										
26 Construction Documentation	150	3/10/2014	10/3/2014	[Timeline bar from 2014 to 2014]										
27 Bidding & Award	70	10/6/2014	1/9/2015	[Timeline bar from 2014 to 2015]										
28 Construction	960	1/12/2015	9/14/2018	[Timeline bar from 2015 to 2018]										
29 True Jesus Lease Expires	0	5/19/2017	5/19/2017	[Timeline bar from 2017 to 2017]										
30 Ability to Finance Project in Total	0	1/3/2022	1/3/2022	[Timeline bar from 2022 to 2022]										

Continued thoughts . . .





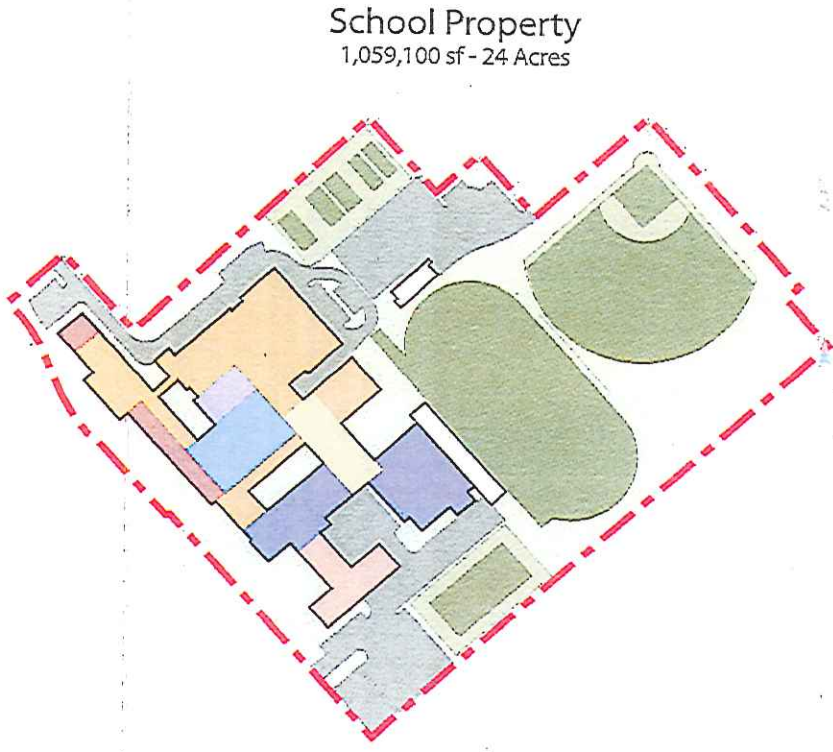






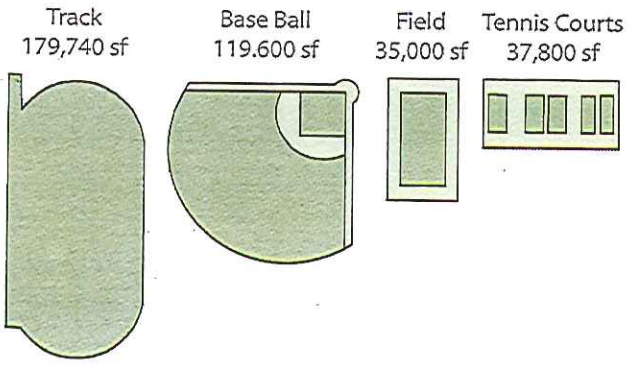
Site Planning and Programming

- Community Amenities
- Building Program and Site Use Adjacencies



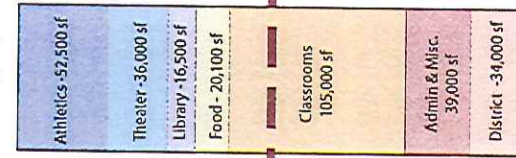
Community Amenities

Athletic Fields



Building

Existing High School 303,100 sf



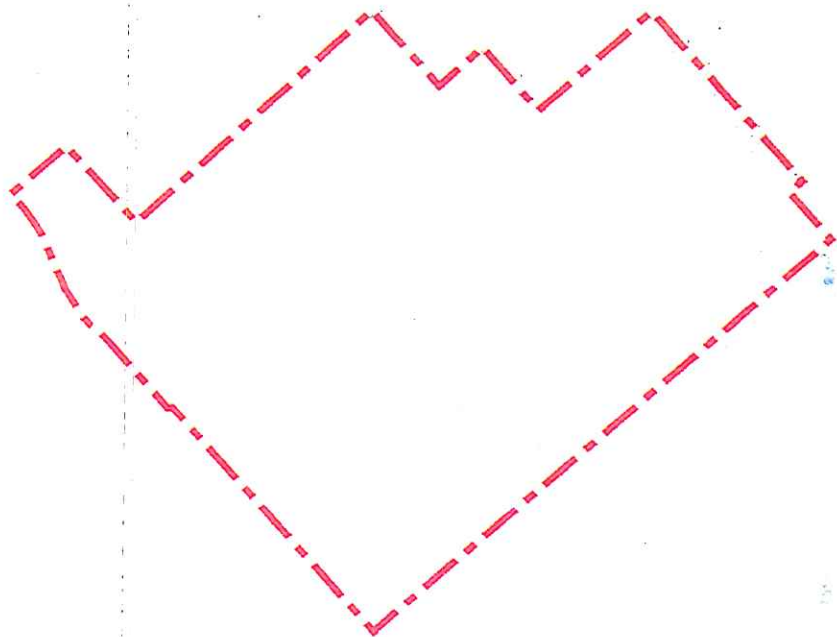
Parking

360 Spaces
87,500 sf

Bus Parking
15,400 sf

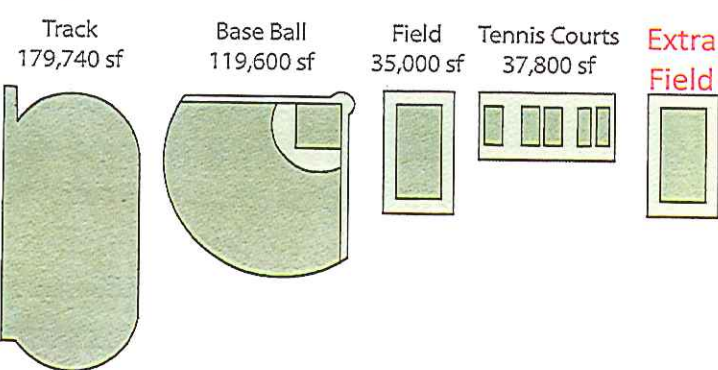


School Property
1,059,100 sf - 24 Acres

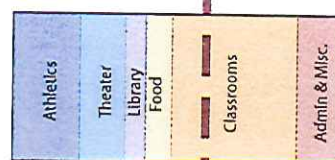


Community Amenities

Athletic Fields

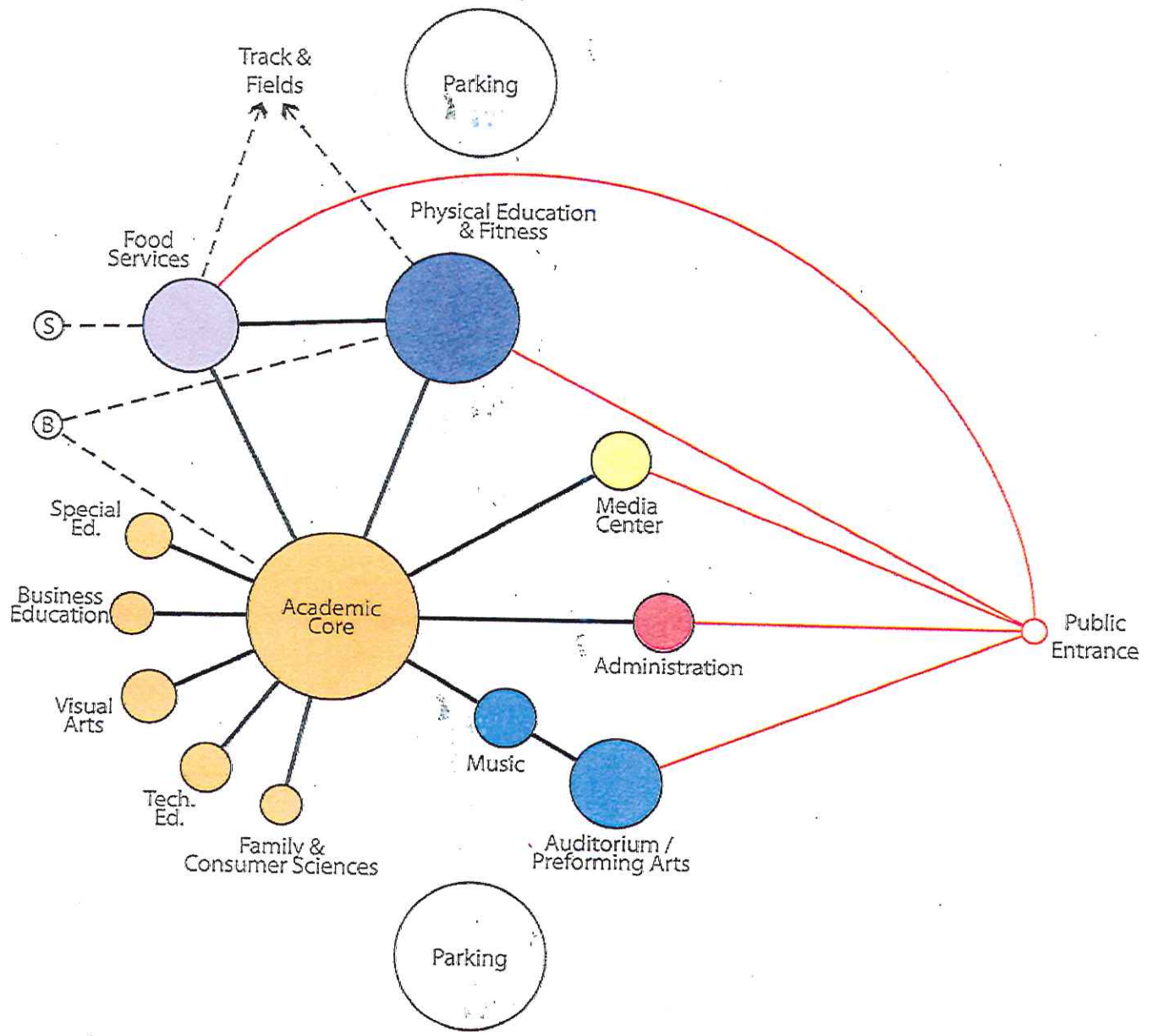


Building



Parking





Building Program and Site Use Adjacencies



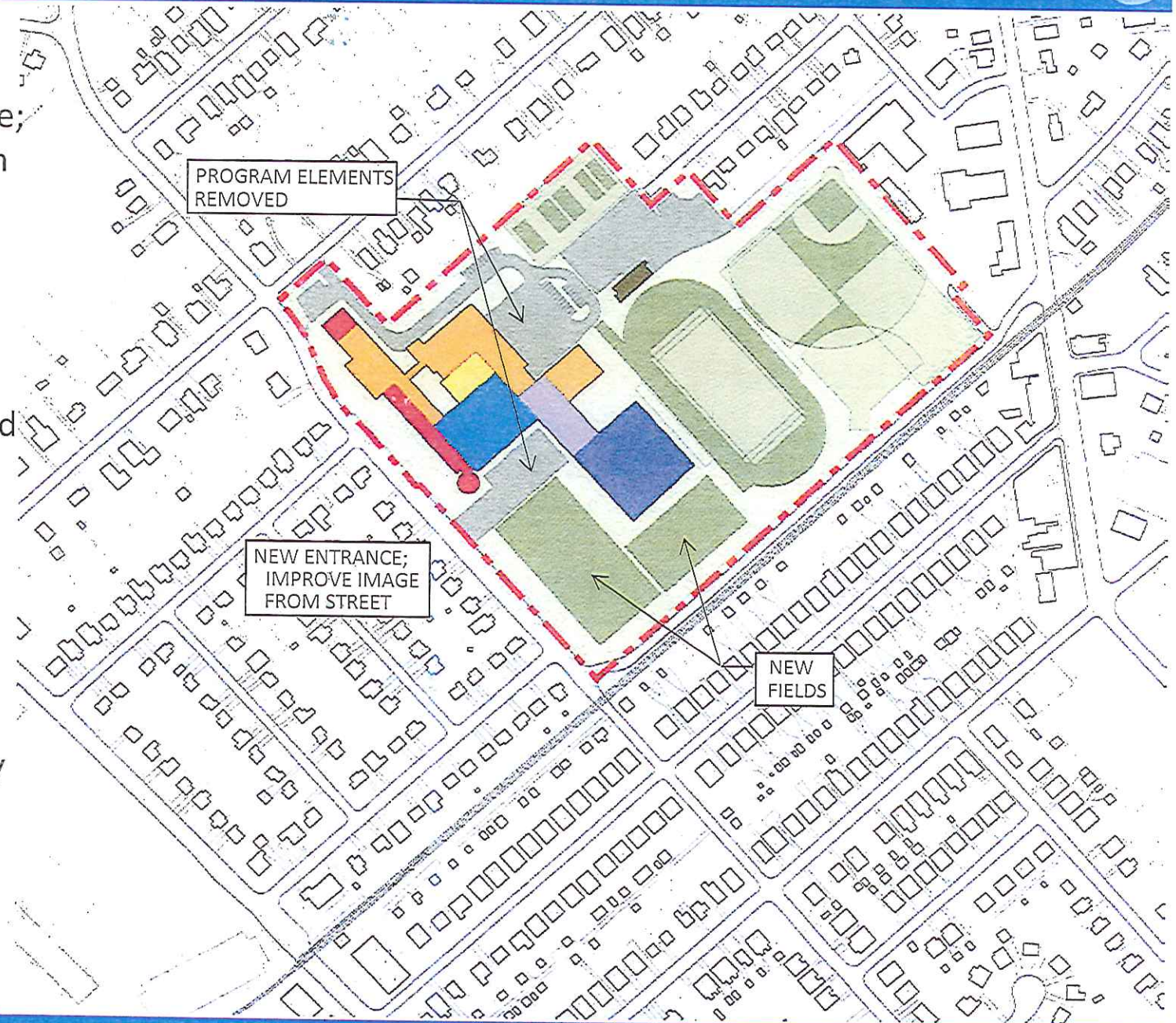
Four Options Compared

Detailed Review for Phasing / Process

- Existing Building – Service Life Extension
- Leamy Ave. Site
- Saxer Ave./St. Francis : land swap
- Saxer Ave. Site, within campus bounds

KEY SCOPE ITEMS

- Reduction of building size; consolidation of program components.
- Relocation of District Office and Bus Parking
- Building Performance and design upgrades :
 - Hazmat removal
 - Life-safety
 - Energy performance
 - Building Systems
 - Accessibility
- Building Design / Identity



Existing School – Service Life Extension

Plan

PHASING CHALLENGES

- Remediation of Roof Deck and building envelope : exposure to elements.
- Building Systems : service interruptions
- Significant Building Renovation scope :
 - Cannot to be completed within Summer periods
 - Construction Phasing Schedule long and complex



Existing School – Service Life Extension

Phasing

LEAMY AVENUE SITE


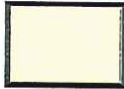



- EXISTING HIGH SCHOOL
- NEW BUILDING FOOTPRINT



Leamy Ave. Site

Existing Site with New Building Overlay

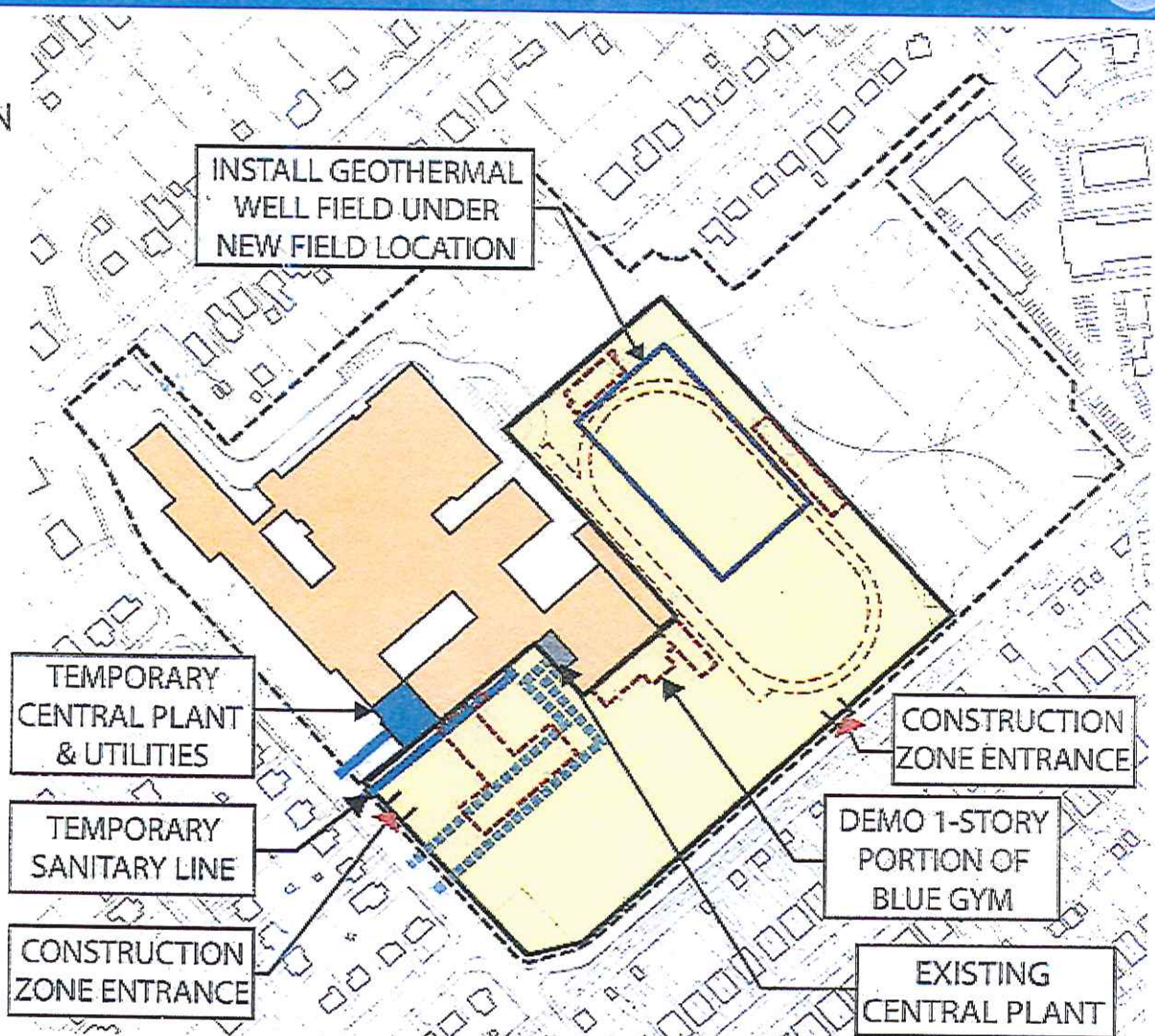
LEAMY AVENUE SITE
PHASE 1A - PREPARE FOR NEW CONSTRUCTION

-  EXISTING HIGH SCHOOL
-  CONSTRUCTION ZONE
-  BUILDINGS & SITE FEATURES TO TO BE DEMOLISHED
-  UTILITIES REMOVED
-  NEW UTILITIES

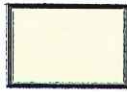
NOTES:

CREATE TEMPORARY CENTRAL PLANT AT AUXILARY GYM

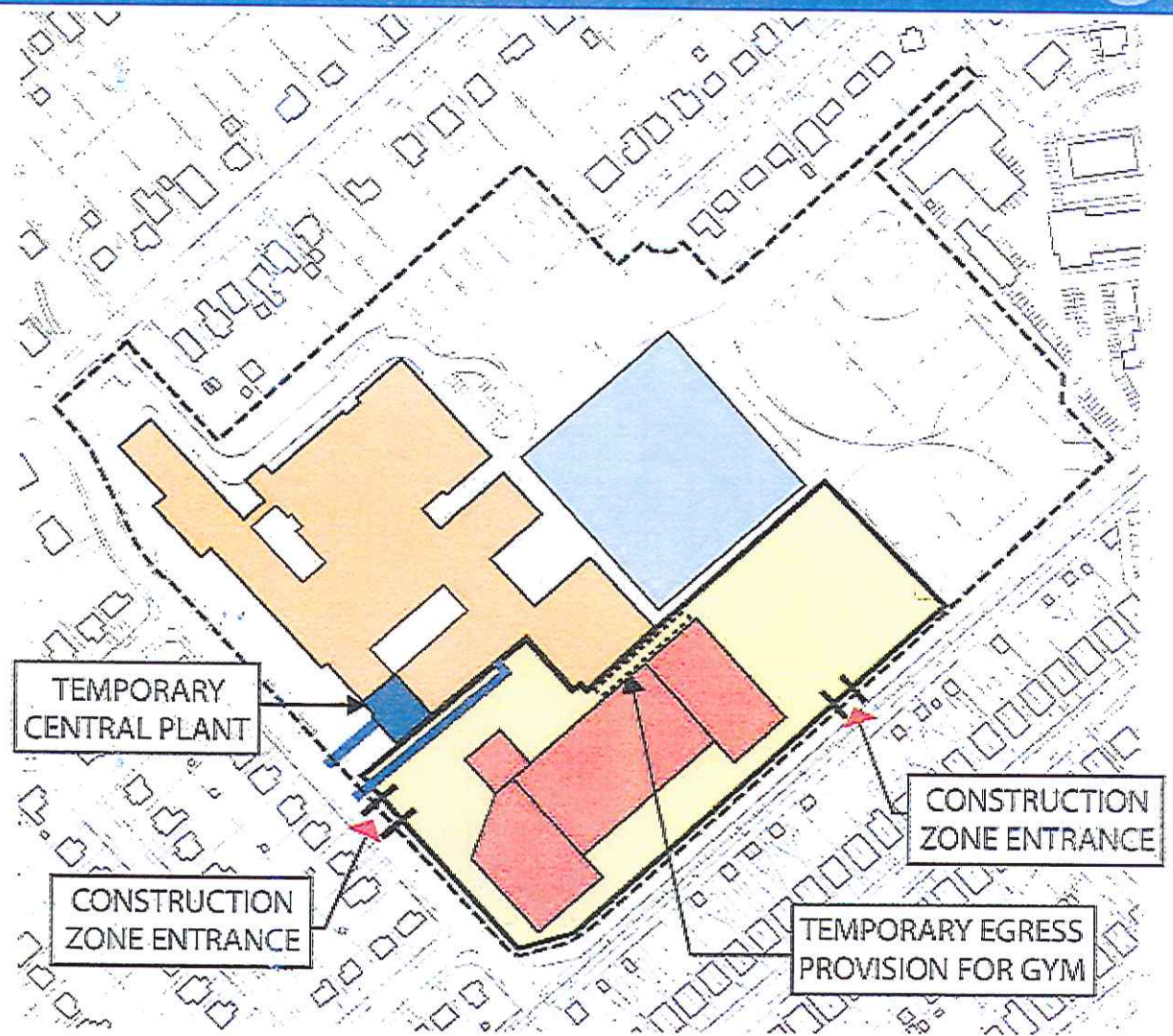
- DEMOLITION/ RELOCATION WORK
- EXISTING SCHOOL DISTRICT OFFICES
 -RELOCATE IT/NETWORK HUB
 - DEMO PORTION OF BLUE GYM
 - TRACK & PORTION OF BLEACHERS







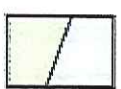

LEAMY AVENUE SITE
PHASE 1B -
CONSTRUCTION OF "BIG BOX" ELEMENTS
(THEATER, GYM, & CAFETERIA)

-  EXISTING HIGH SCHOOL
-  CONSTRUCTION ZONE
-  NEW HIGH SCHOOL
-  TEMPORARY FIELDS

NOTES:
BEGIN CONSTRUCTION OF NEW HIGH SCHOOL
("BIG BOX" PROGRAM ELEMENTS)

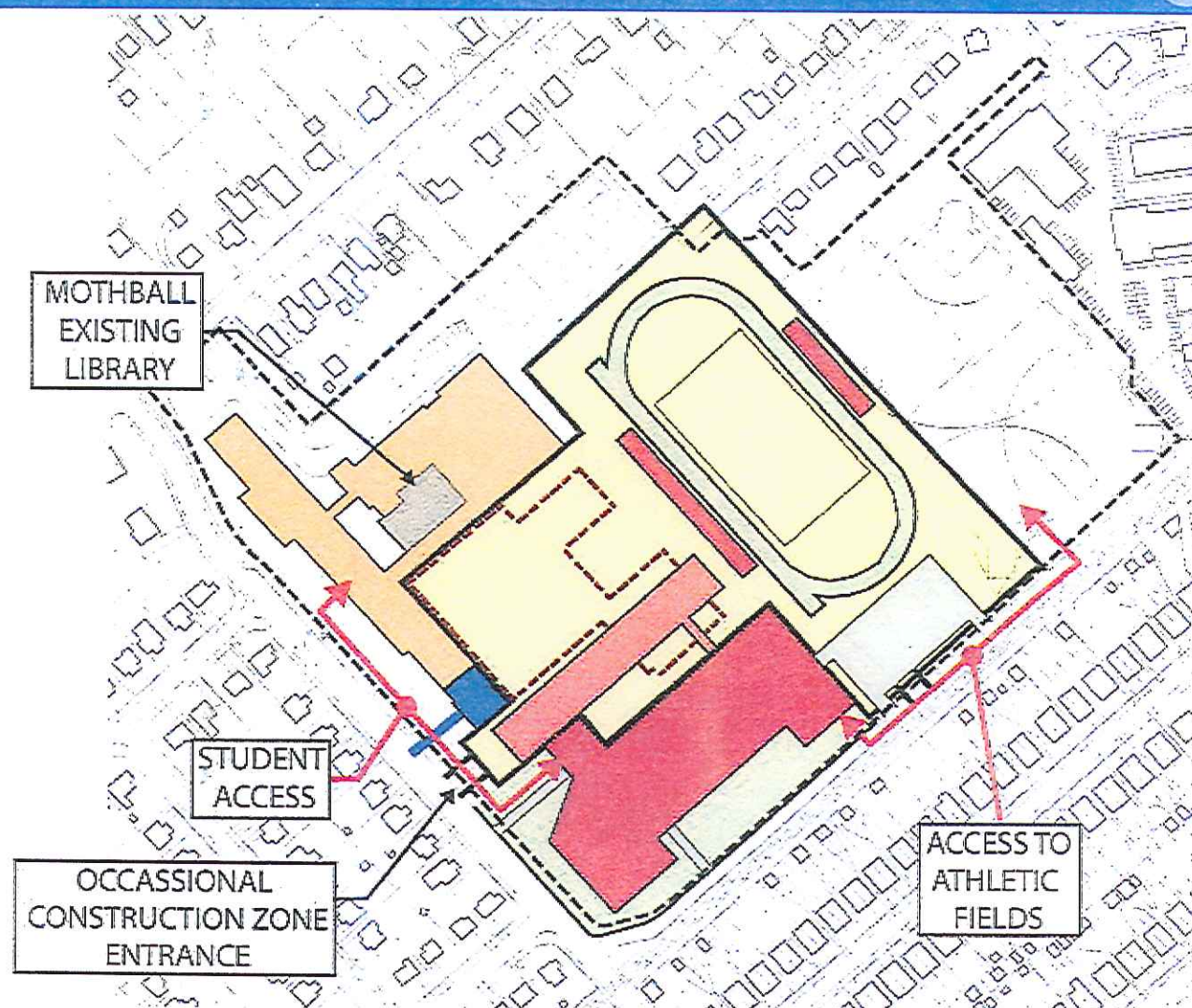


LEAMY AVENUE SITE
 PHASE 2
 CONSTRUCTION OF ACADEMIC WING



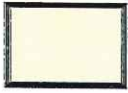

-  EXISTING HIGH SCHOOL ACADEMIC PROGRAM
-  DEMOLITION OF REDUNDANT PROGRAMING (SUMMER WORK)
-  NEW HIGH SCHOOL COMPLETED PHASE
-  NEW HIGH SCHOOL CONSTRUCTION
-  NEW SITE IMPROVEMENTS TRACK & PARKING (SUMMER WORK)
-  CONSTRUCTION ZONE

NOTES:

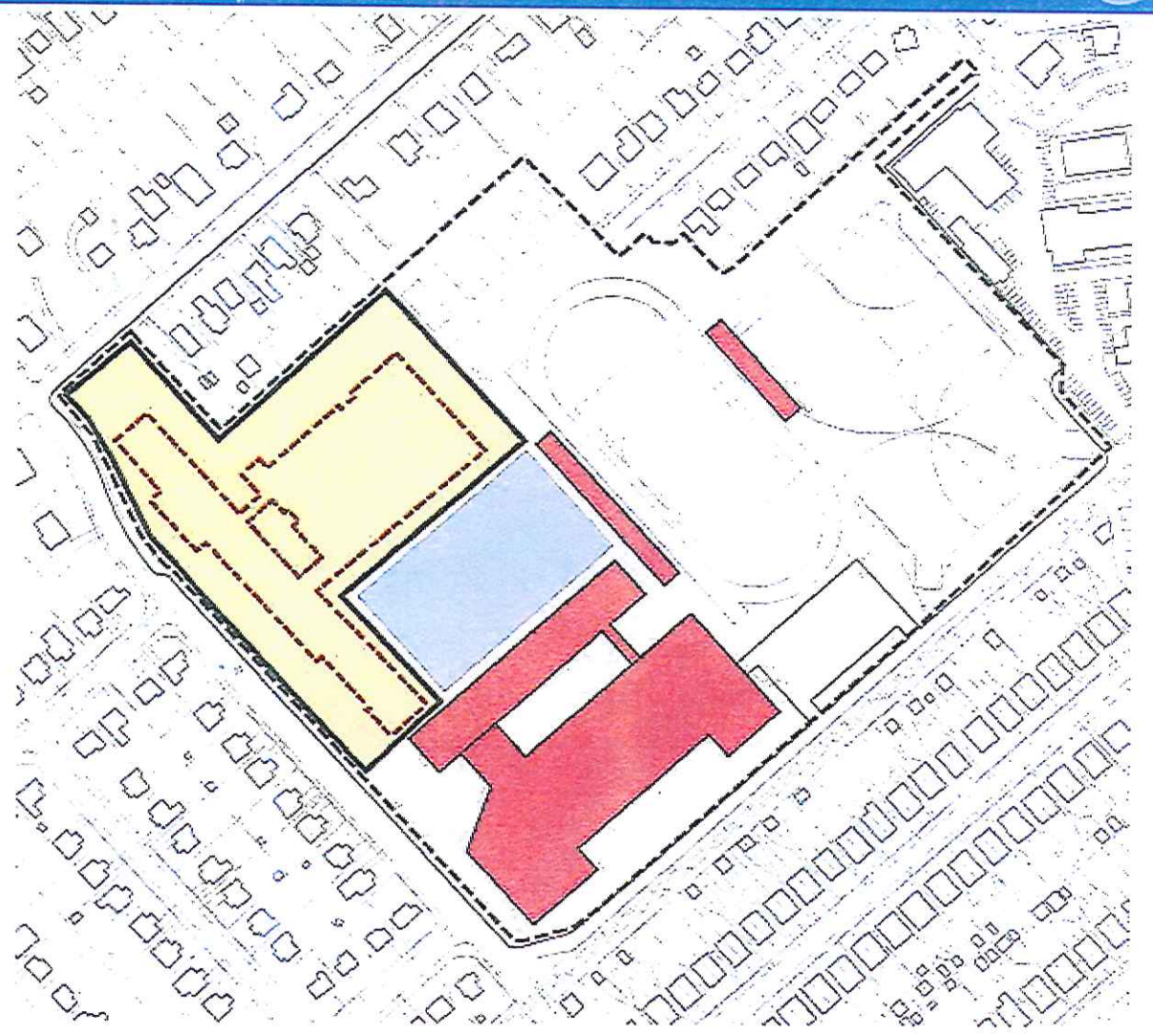
- CONSTRUCTION OF CLASSROOM WING
- CONSTRUCTION OF TRACK & FIELD



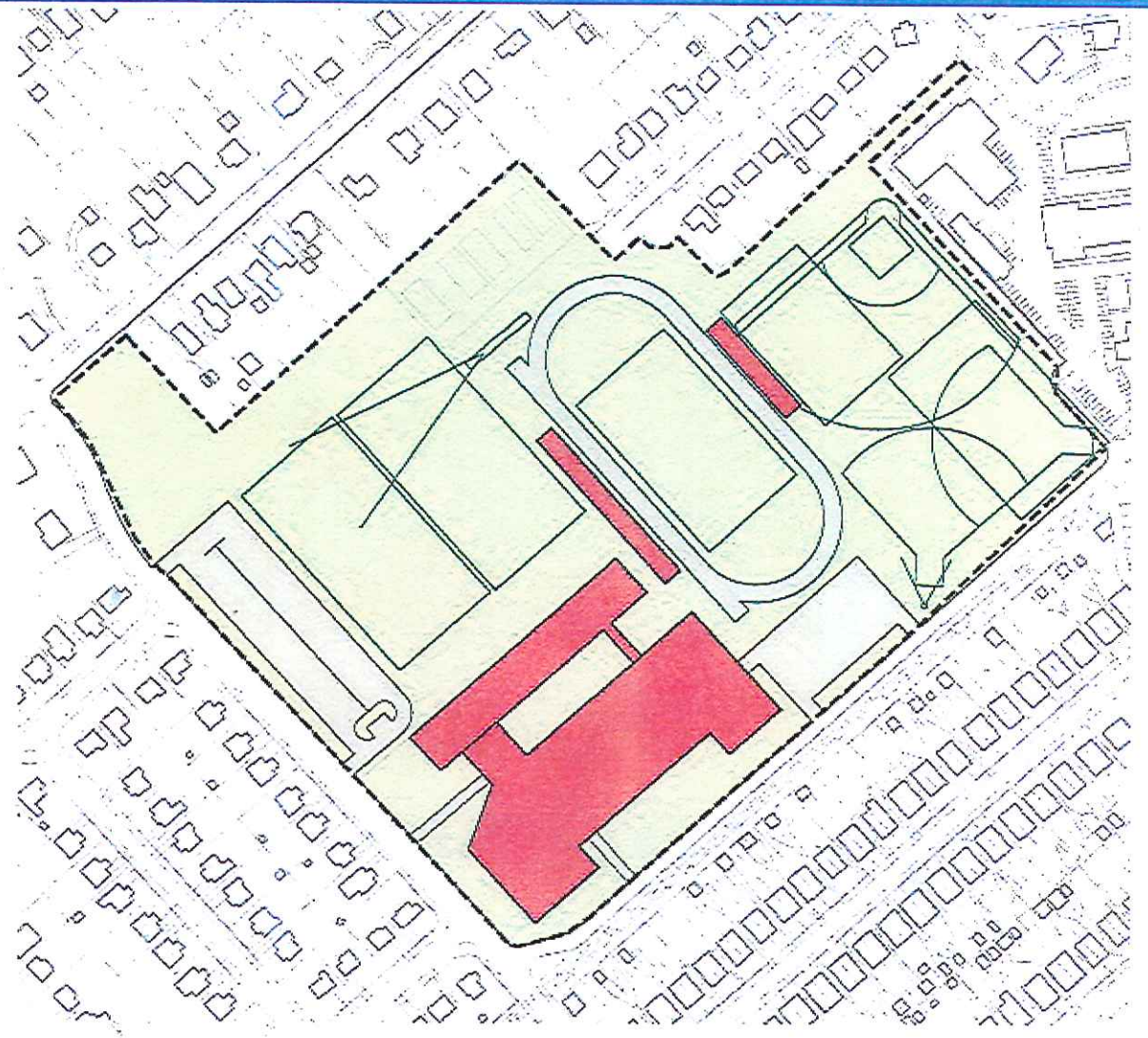
LEAMY AVENUE SITE
PHASE 3
COMPLETE DEMO OF OLDER SCHOOL

-  COMPLETED HIGH SCHOOL
-  AREA TO BE REMOVED
-  CONSTRUCTION ZONE
-  TEMPORARY FIELD

NOTES:
REMOVE REMAINING PORTION OF EXISTING SCHOOL
CONSTRUCTION OF NEW PLAYING FIELDS



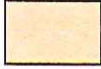
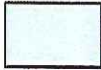


LEAMY AVENUE SITE



Leamy Ave. Site

Completion of site improvements

**SAXER AVE./
ST. FRANCIS SITE**
PHASE 1A

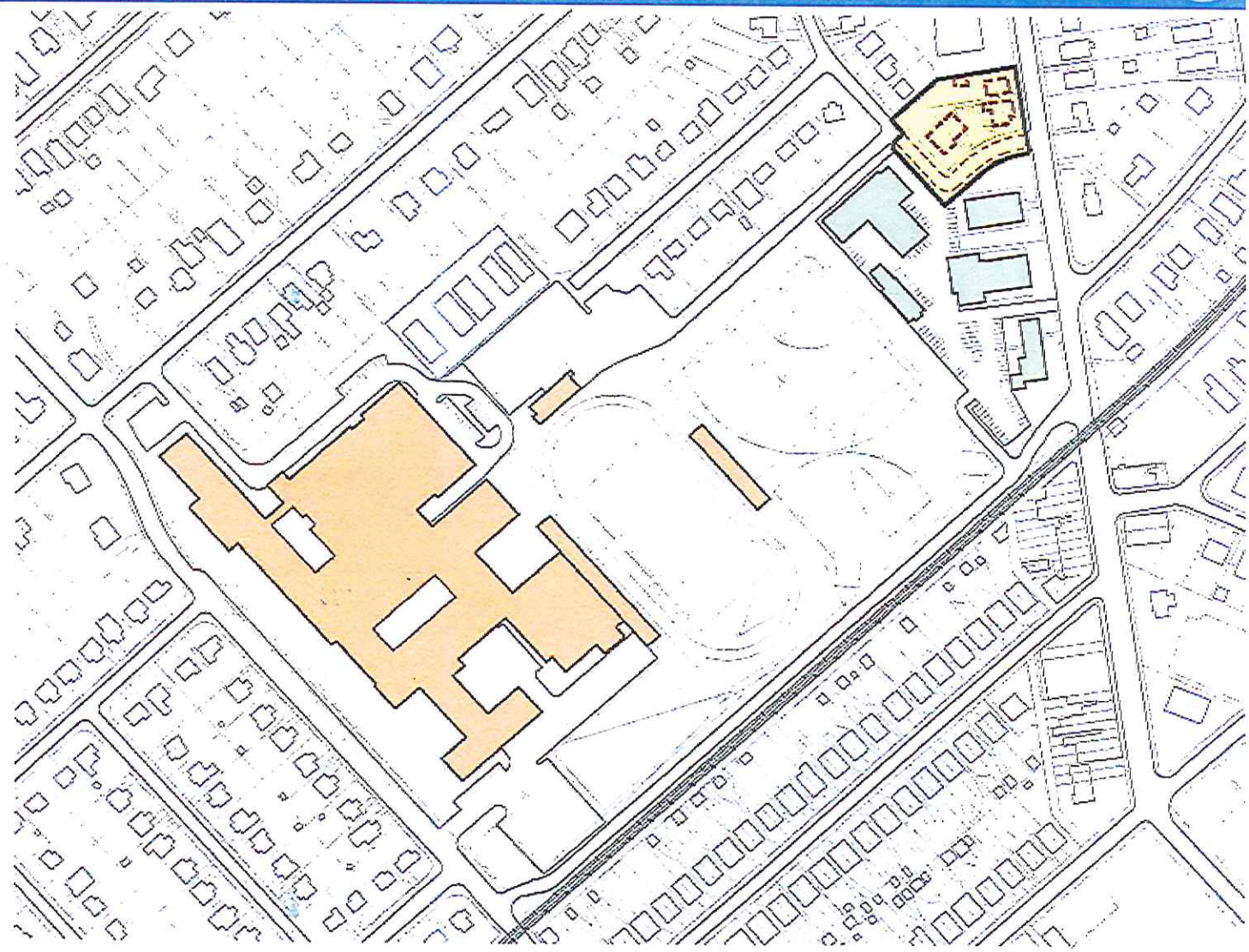
-  SPRINGFIELD HIGH SCHOOL
EXISTING BUILDINGS
-  ST. FRANCIS SCHOOL
EXISTING BUILDINGS
-  DEMOLITION OF RESIDENTIAL
STRUCTURES & RELOCATION
OF ROAD/UTILITIES
-  CONSTRUCTION ZONE

NOTES:



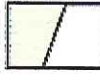

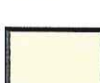



- ACQUISITION OF PRIVATE
RESIDENTIAL PROPERTY

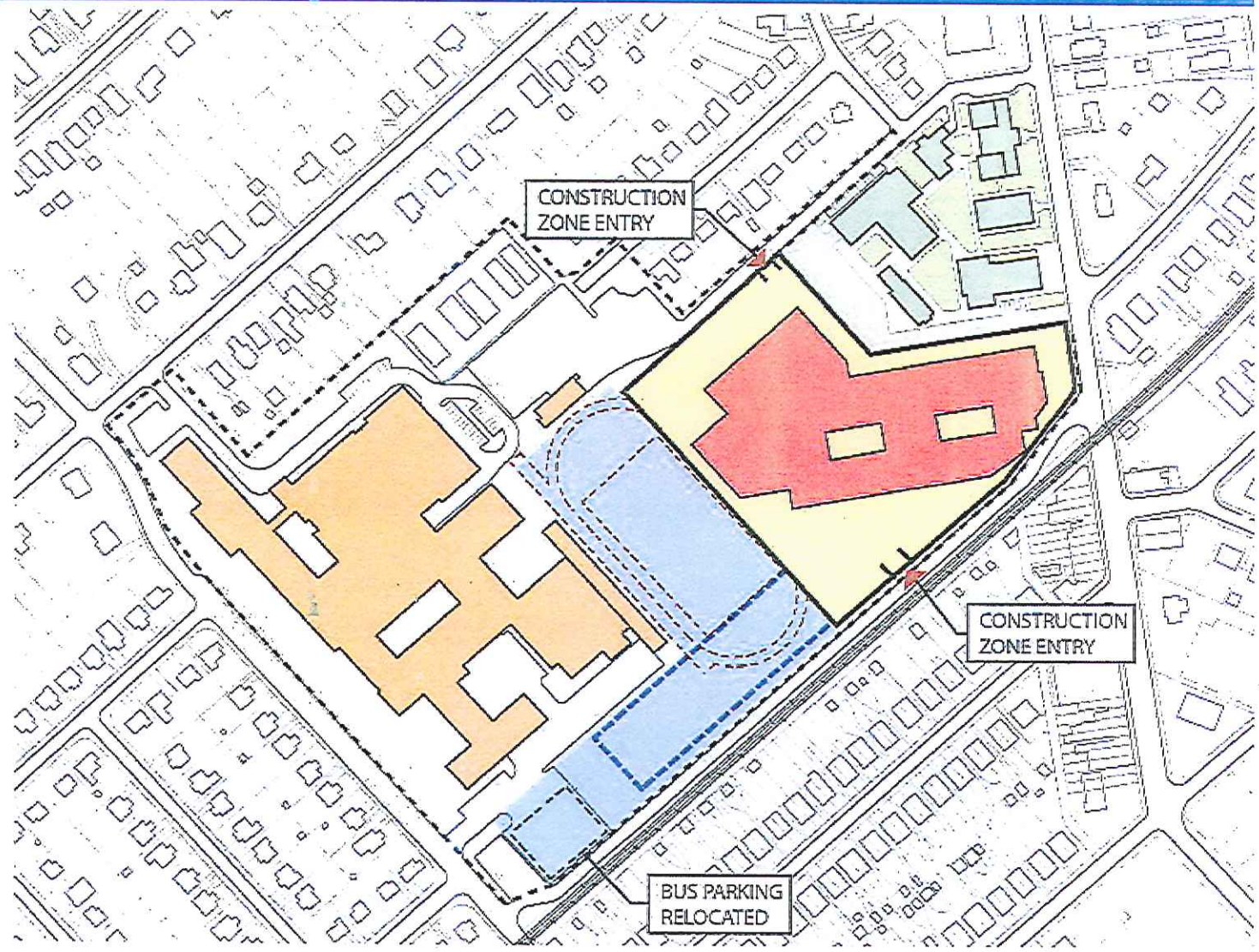
TEMPORARY PROVISIONS REQUIRED:

- ROAD ACCESS
- AFTER-SCHOOL CARE
- WHITE ELEPHANT SHOP



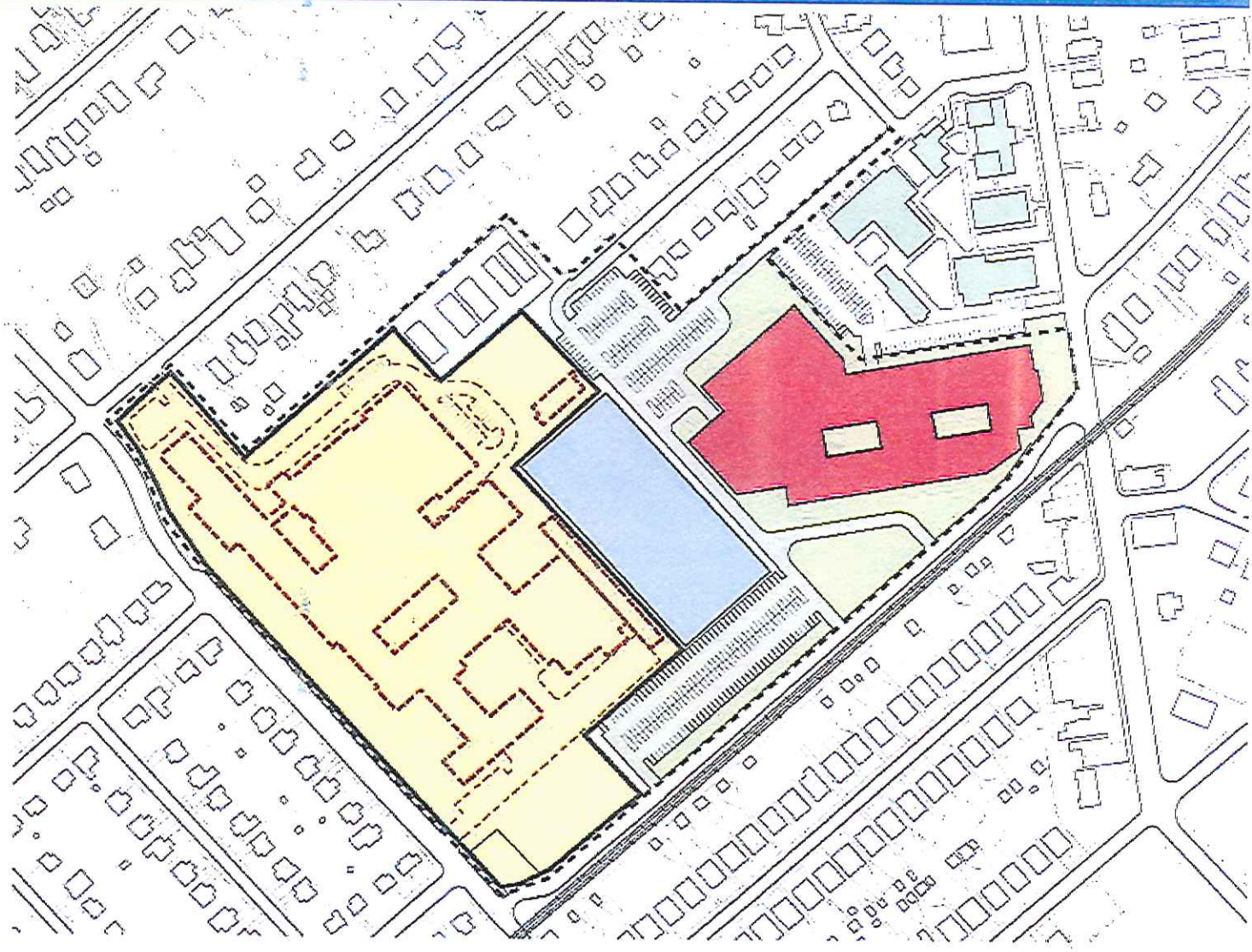
SAXER AVE./ ST. FRANCIS SITE PHASE 2

-  SPRINGFIELD HIGH SCHOOL
EXISTING BUILDINGS
-  ST. FRANCIS SCHOOL
EXISTING BUILDINGS
-  ST. FRANCIS SCHOOL
SITE IMPROVEMENTS
-  SPRINGFIELD HIGH SCHOOL
NEW CONSTRUCTION
-  CONSTRUCTION ZONE
-  REMOVAL OF TRACK
(SUMMER WORK)
-  GEOTHERMAL WELL FIELD
(SUMMER WORK)
-  TEMPORARY FIELDS







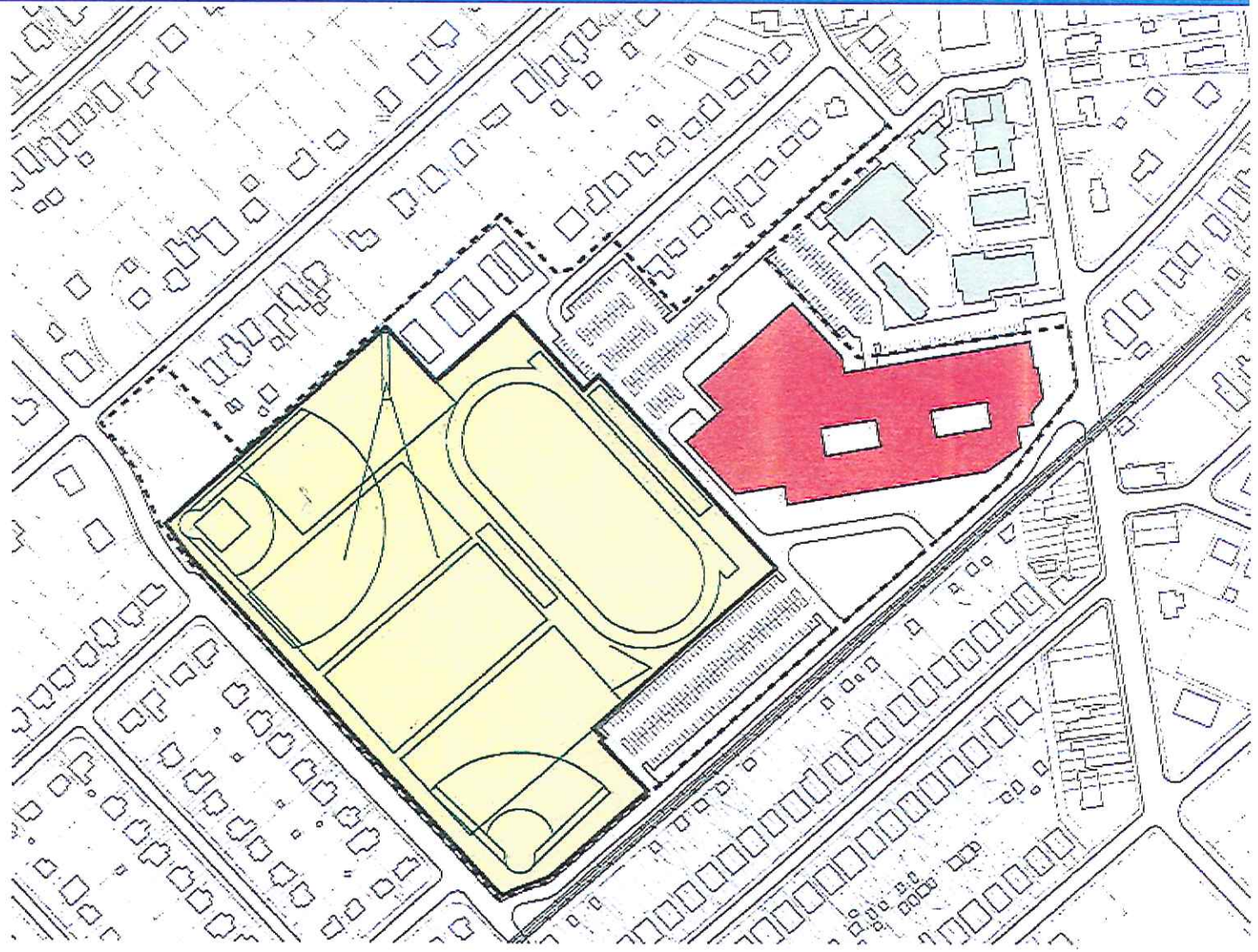
SAXER AVE./
ST. FRANCIS SITE
PHASE 3

-  SPRINGFIELD HIGH SCHOOL COMPLETE
-  SITE IMPROVEMENTS
-  EXISTING SCHOOL DEMOLITION
-  CONSTRUCTION ZONE
-  TEMPORARY FIELDS

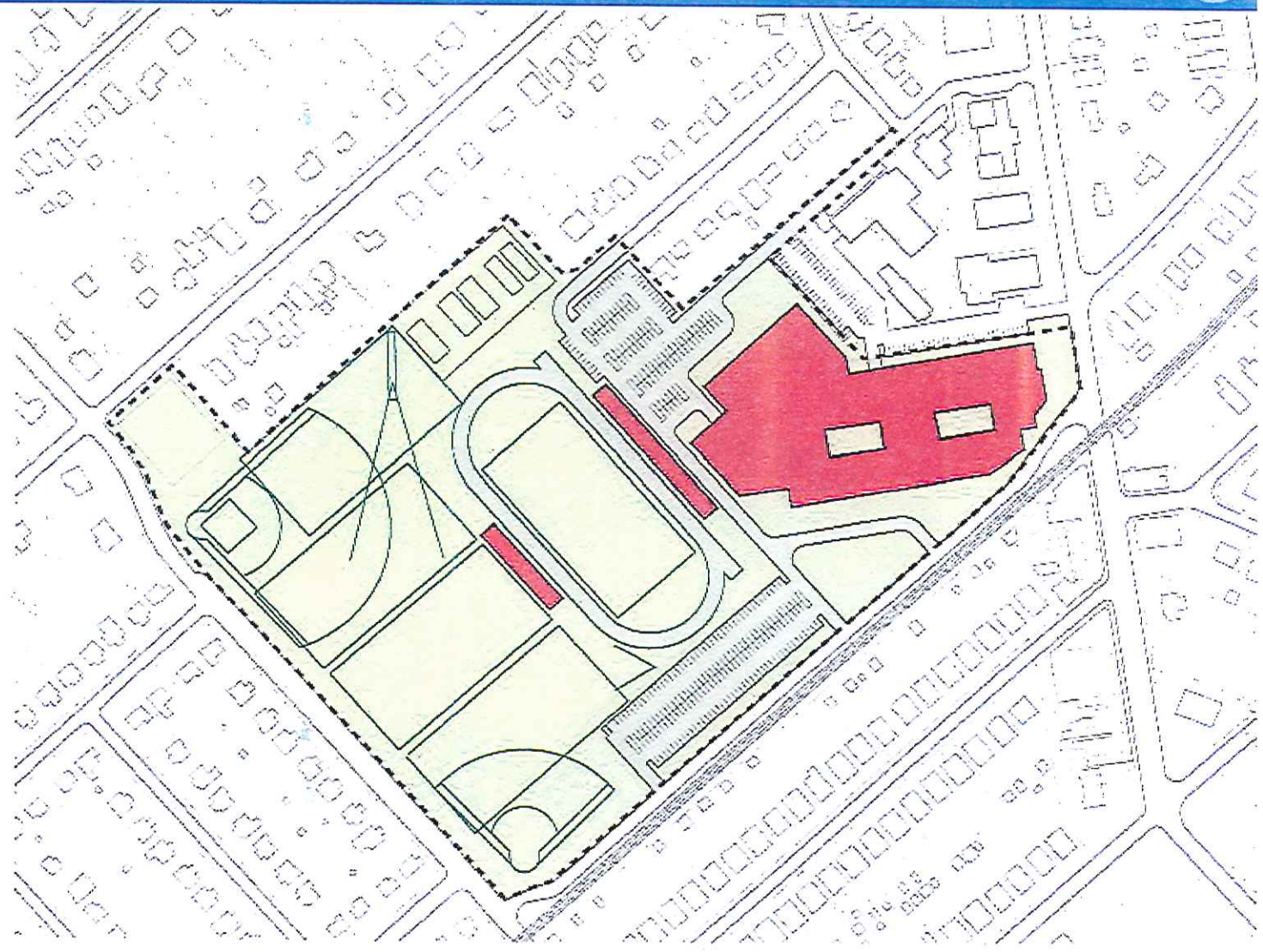


SAXER AVE./ ST. FRANCIS SITE PHASE 4

-  ST. FRANCIS SCHOOL
EXISTING BUILDINGS
-  SPRINGFIELD HIGH SCHOOL
NEW BUILDING
-  CONSTRUCTION ZONE
-  NEW SPORTS FIELDS

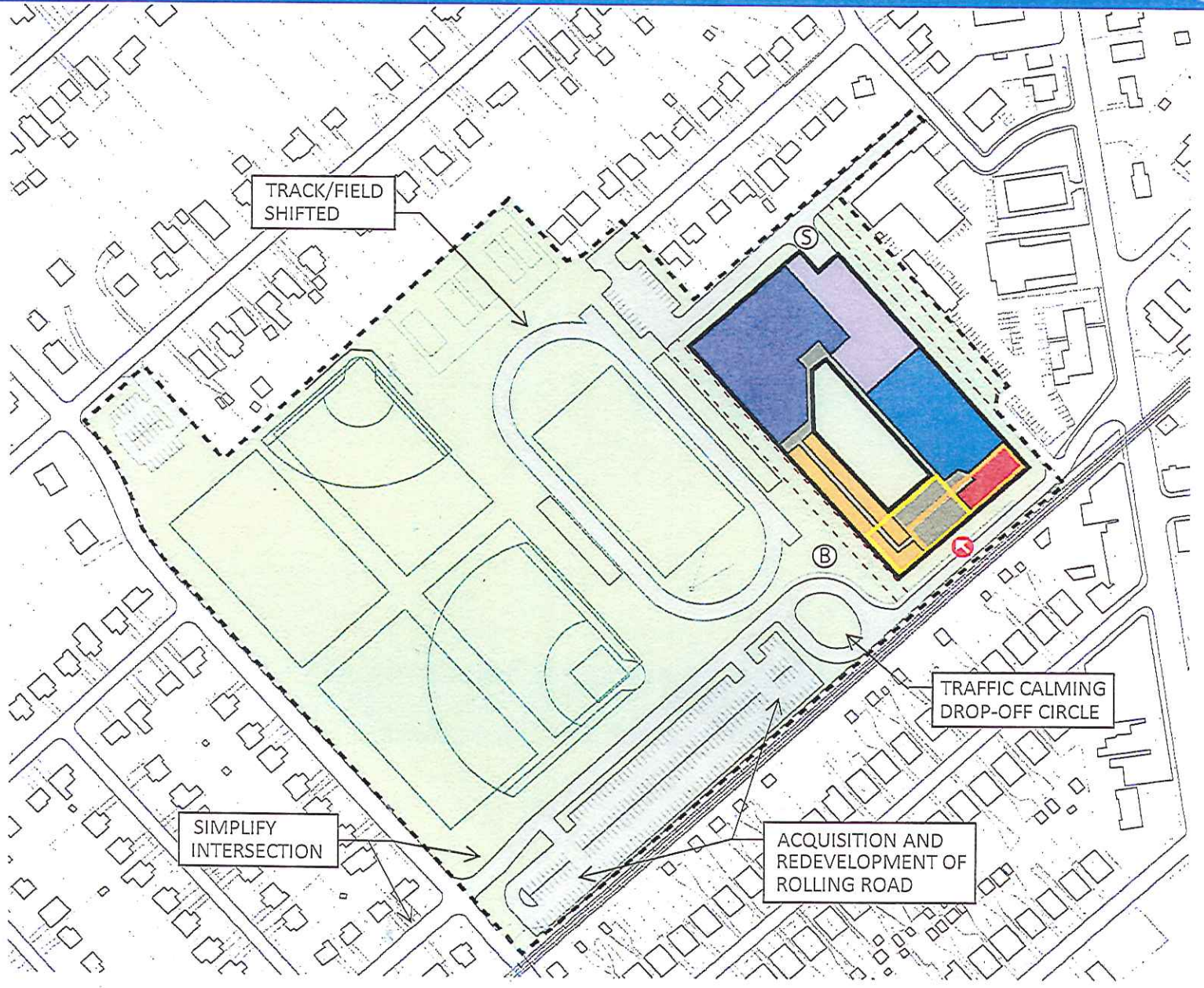


SAXER AVE./
ST. FRANCIS SITE



Saxer Ave. /St. Francis Land Swap – Completion of site improvements

SAXER AVENUE SITE

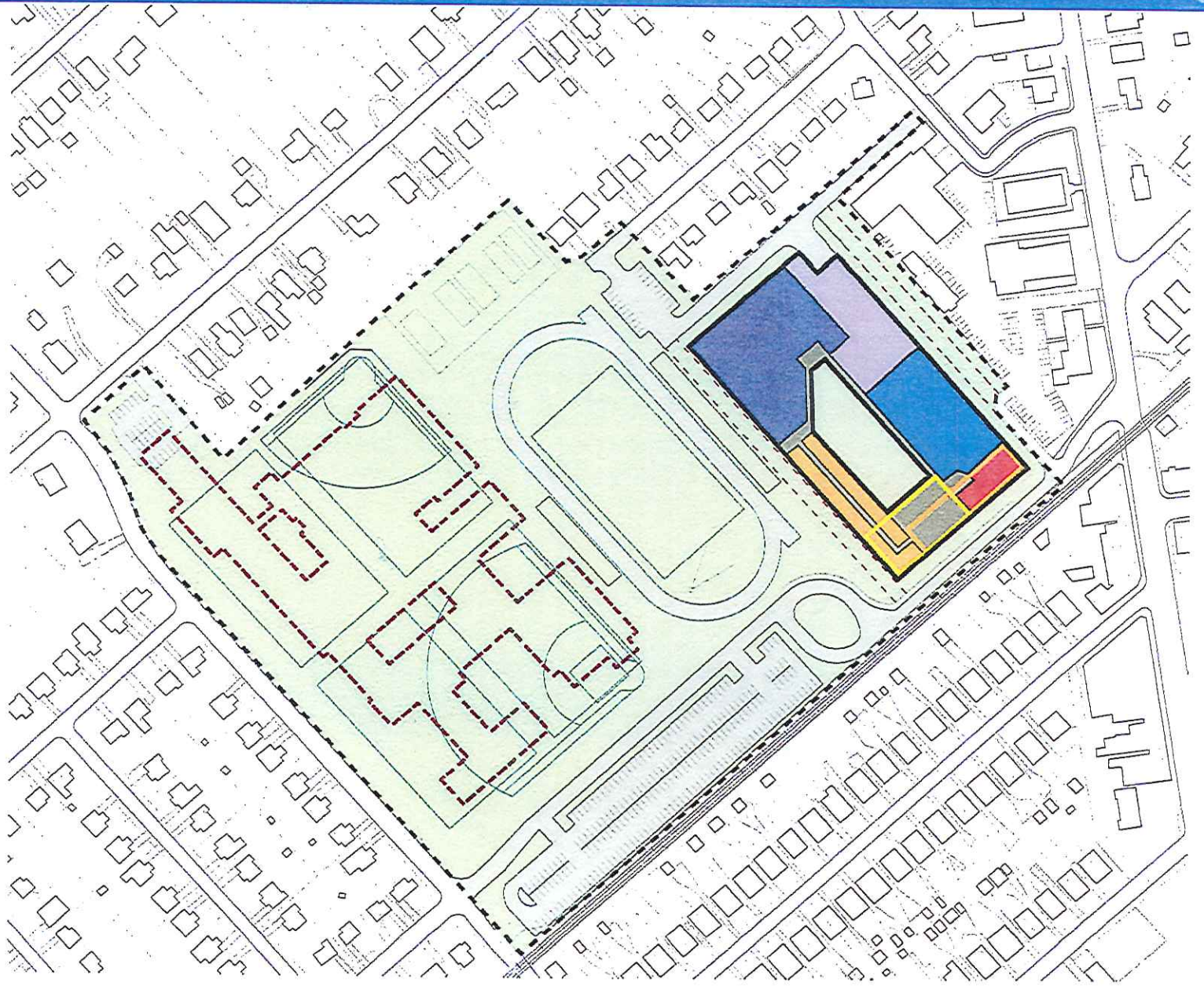


Saxer Avenue Site – Within Campus Limits

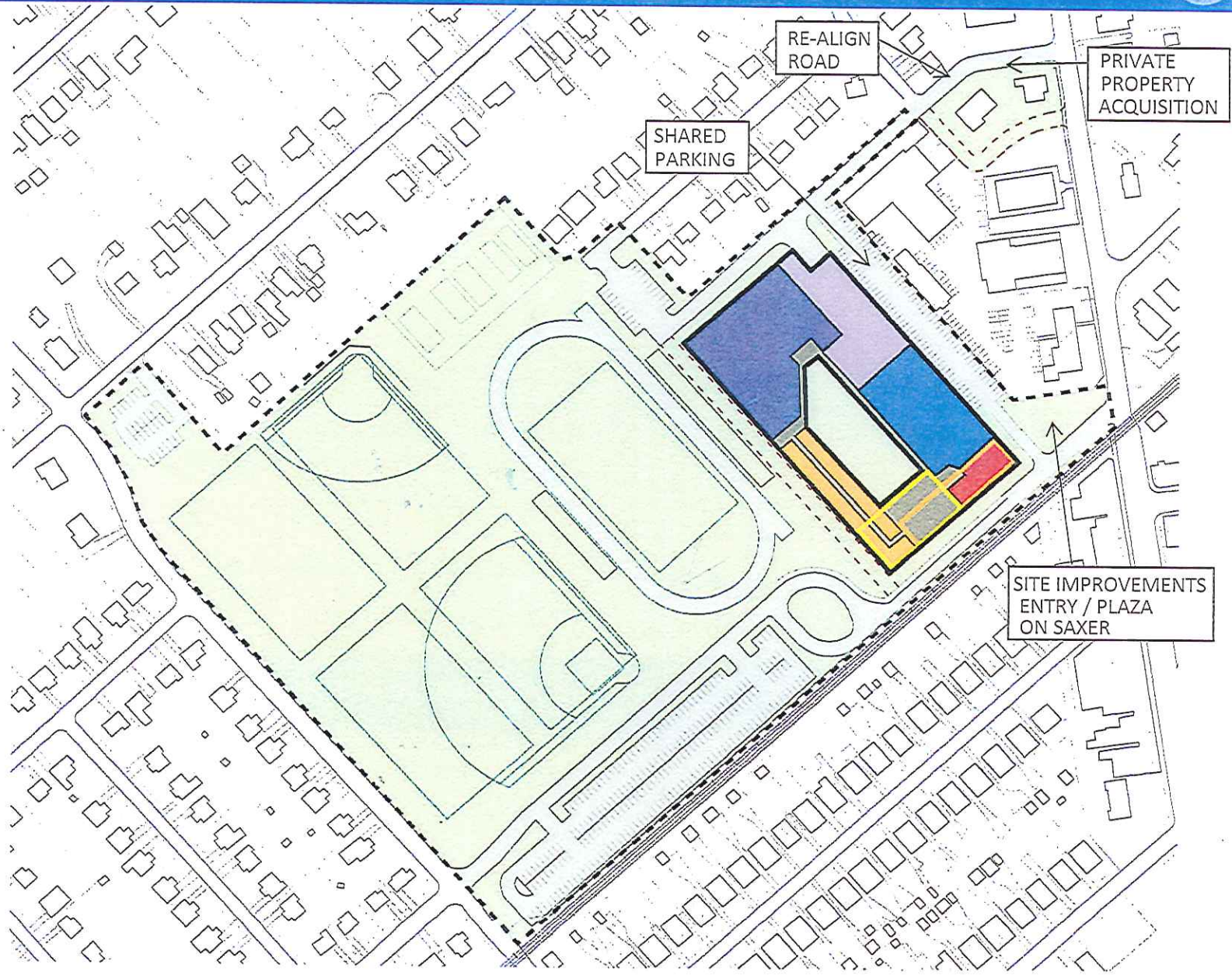
SAXER AVENUE SITE

Phasing Notes

- New School can be developed while Existing School remains fully operational
- Track and Field can be relocated prior to any other work; only rear parking would be displaced
- Geothermal Wellfield : under track or parking



SAXER AVENUE SITE



Saxer Avenue Site – Proposed Off-Campus Improvements Land Swap/Acquisition