



Tecton
ARCHITECTS

REGIONAL SCHOOL DISTRICT 17 MASTER PLAN

JOINT SPECIAL MEETING

Refining the Plan

Haddam-Killingworth High School
September 21, 2023



PROJECT WEBSITE:

<https://sites.google.com/rsd17.org/masterplanproject>



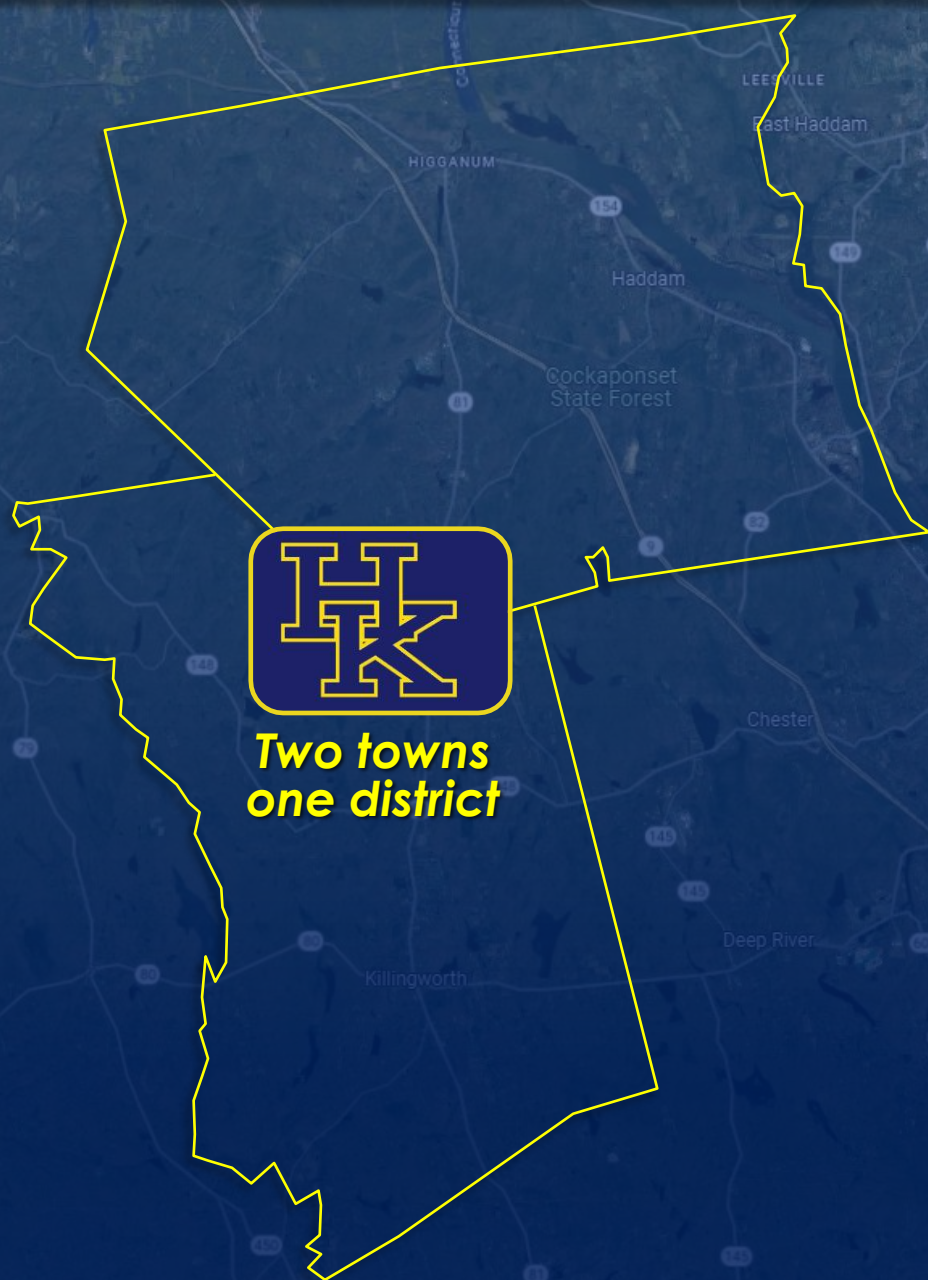
PROJECT EMAIL:

masterplan@rsd17.org



FACEBOOK:

[@HKSchools](https://www.facebook.com/HKSchools)



Welcome

Intro Team, Critical Aspects of the Project, and Schedule

Where we have been

Existing Conditions & Demographics, Surveys & Building Tours, Why it matters

Where we are today

Options Planning ~ Working together to define a preferred option

What is Next

Select preferred Option, Develop Strategy for Step 1, and Recap

Discussion

OVERSIGHT &
DAY-TO-DAY
CONTACT



**JUSTIN
HOPKINS**
RA, NCARB

*Project Manager
Tecton*

PRINCIPAL
IN CHARGE



**JEFF
WYSZYNSKI**
AIA

*Principal-in-Charge
Tecton*

BUILDING
CONDITION
ASSESSMENT



ALISON FROST

*Project Architect
Tecton*

COMMUNITY
ENGAGEMENT



**ANTONIA
CIAVERELLA**
EDAC, LEED AP BD+C,
WELL Faculty, FITWEL

*Architectural Designer
Tecton*

CONSULTANT
EXPERTISE



**DEREK
BRIDE**
LEED AP BD+C

*MEP Engineering
Principal, CES*

CONSULTING ENGINEERING SERVICES
MEP Engineering

MCKIBBEN DEMOGRAPHIC RESEARCH
Enrollment Projections & Demographics Study

Regional School District 17

Jeff Wihbey ~ Superintendent of Schools

Sarah Kaiser ~ Administrative Assistant to the BoE and Central Office

John Mercier ~ Director of Finance and Operations

Brianna Hill ~ Administrative Assistant to Director of Operations

Rob Albert ~ Maintenance Lead

BOE, Facilities Committee, Community

Suzanne Sack (Chair) ~ RSD17 Board of Education

Peter Sonski (Treasurer) ~ RSD17 Board of Education, Chair of Finance/Facilities Subcommittee

Prem Aithal ~ RSD17 Board of Education, Finance/Facilities Subcommittee

Jennifer Favalora ~ RSD17 Board of Education, Finance/Facilities Subcommittee

Lisa Connelly ~ RSD17 Board of Education, Finance/Facilities Subcommittee

Shawna Goldfarb ~ RSD17 Board of Education, Finance/Facilities Subcommittee

Hamish MacPhail ~ RSD17 Board of Education, Finance/Facilities Subcommittee

Kate Anderson ~ Selectwoman, Haddam

Nancy Gorski ~ First Selectman, Killingworth

RSD 17 Board of Education members

Board of Selectmen ~ Haddam & Killingworth

Board of Finance ~ Haddam & Killingworth

Consultant Team

TECTON ARCHITECTS Architecture & Programming

Jeff Wyszynski, AIA, ~ Principal in Charge

Justin Hopkins, RA ~ Project Manager

Antonia Ciaverella, EDAC, WELL AP, LEED AP BD+C, Fitwel

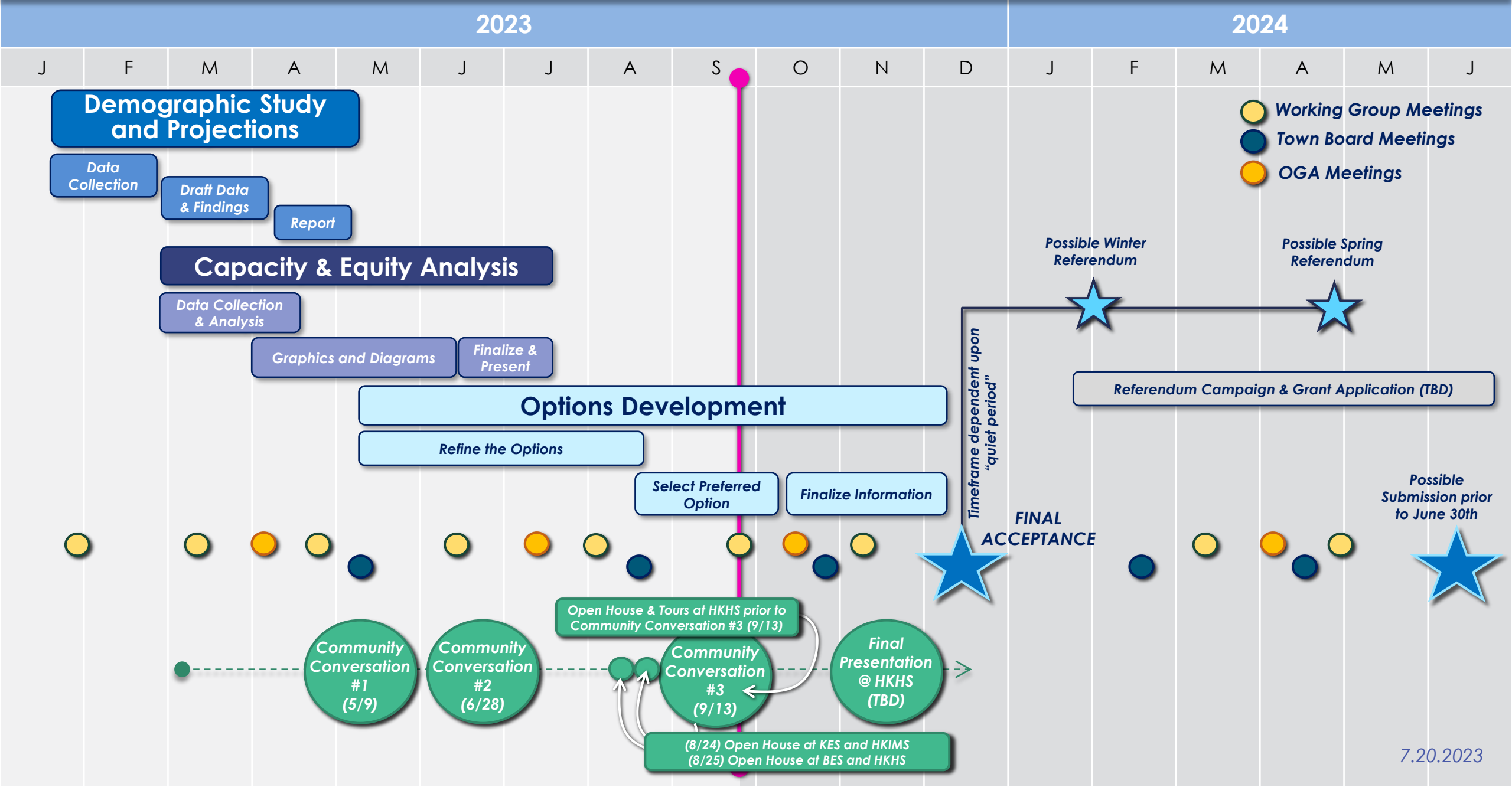
CES Building Systems Engineering

MEP Engineering

Derek Bride, LEED AP BD+C ~ Lead Engineer

- 1** Collectively work toward a common goal to put a project, Step 1, in front of the community for a **referendum by January 2024 +/-**
- 2** Enhance **communication with the community**. Develop a consistent communication plan that is transparent, thorough, and provides the necessary information to make informed decisions
- 3** Develop a Long-Range Plan for the district, **think generational**, multiple phases, and be economically responsible.
- 4** Integrate **capital improvement plan** with the Long-Range Plan to allow for renewal of community assets (planned renewal updates)

- 1 Improve the physical and programmatic condition of the buildings to **provide RSD 17 students and faculty with 21st Century Learning Environments.**
- 2 Maintain and **keep equity top of mind across the district** as planning measures are explored and implemented.
- 3 Look across the Towns and district to **integrate the Master Plan with other concurrent or planned initiatives**/strategic efforts.
- 4 Balance the necessary improvement projects to **meet the district's need while also being fiscally responsible.**



Where we have been...

Existing Conditions
Demographics
Surveys
Building Tours
Why it matters



**Two towns
one district**

Where We've Been – Existing Conditions

SCHOOL BUILDINGS STUDIED



KES



BES



Existing Conditions Summary – RSD 17

Total District Summary



- 669,166sf Total Existing
- \$324,545,510 Replacement Cost
- 36.8% Cost vs. Replacement

Up
\$144

Order of Magnitude Budget

Killingworth ES - \$10,100,321

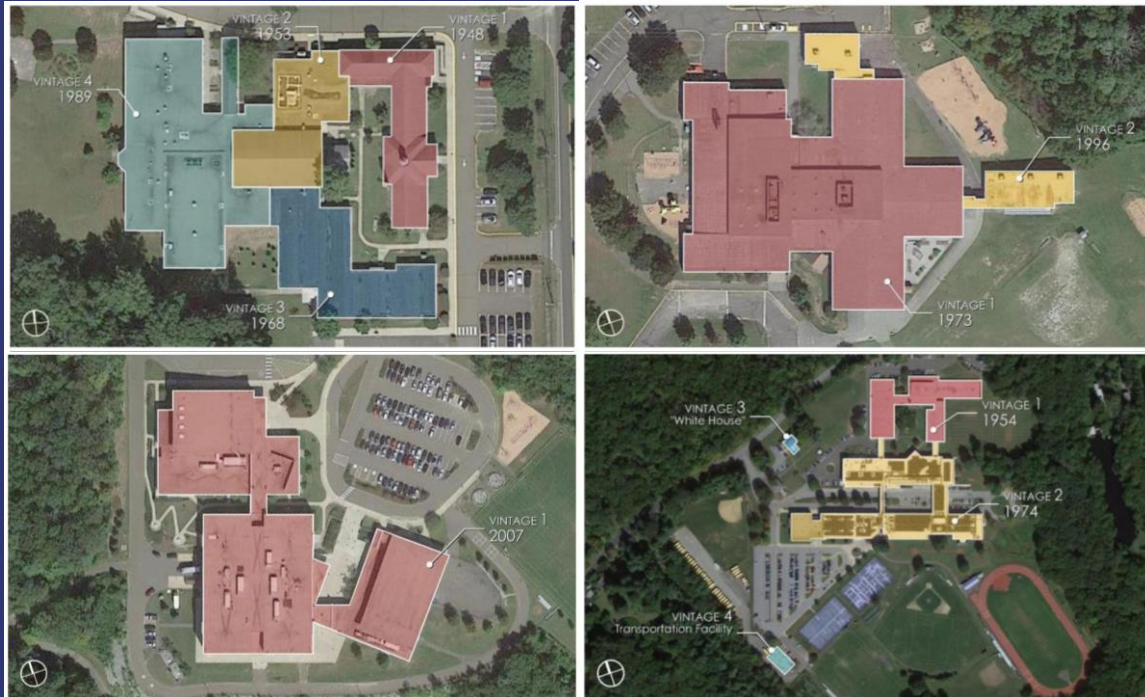
Burr District ES - \$12,055,200

TYPICAL PRIORITY ITEMS

- 1 Replace single-pane windows with insulated units. Add security film to ground floor windows and doors.
- 2 Address ADA compliance in toilet facilities.
- 3 Replace door hardware with ADA compliant hardware.
- 4 Life-cycle finish replacement (floors, walls, ceilings, doors, millwork).
- 5 Install and upgrade fire protection and alarm system throughout.
- 6 Light fixtures upgrades to energy efficient LED fixtures.
- 7 New energy efficient HVAC units for ventilation and AC (IAQ).
- 8 Total replacement of modular classrooms (BES).

Existing Conditions Summary – RSD 17

Total District Summary



Order of Magnitude Budget

Killingworth ES - \$10,100,321

Burr District ES - \$12,055,200

HK IMS - \$26,368,960

HK High School - \$55,280,079

Central Off. & Support - \$15,730,568

- 669,166sf Total Existing
- \$324,545,510 Replacement Cost
- 36.8% Cost vs. Replacement

Total: \$119,535,128

Costs from 10/2021

Updated ROM Budget All Schools
\$144-150 Million (2023)

SCHOOL BUILDINGS STUDIED

HK | Tecton
ARCHITECTS

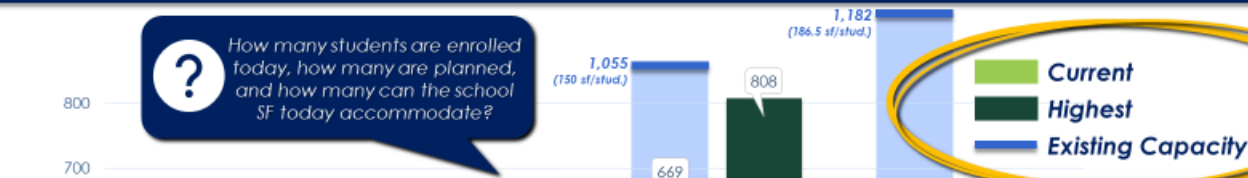
Existing Conditions ~ Key Findings

- Average age of Buildings 52 Years
- Aging infrastructure requires replacement
- Inefficient Building Envelope (roof, doors, windows)
- ADA & Life Safety Code Compliance (Upgrades & compliance)
- Modular Construction @ BES past useful life

- 5 Install and upgrade fire protection and alarm system throughout.
- 6 Light fixtures upgrades to energy efficient LED fixtures.
- 7 New energy efficient HVAC units for ventilation and AC (IAQ).
- 8 Total replacement of modular classrooms (BES).

Where We've Been – Demographics

RSD17 Summary - Enrollment and Capacity



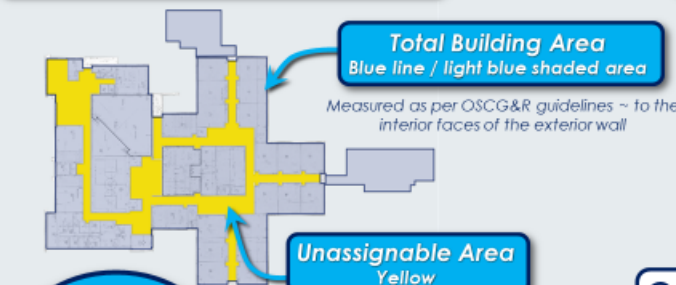
RSD17 Summary – Allowable Area

House Bill 05506 allowable area increase of 25% for a building constructed prior to 1959

BUILDING	GRADE CONFIG.	CUR. ENROLL. Students	FUTURE ENROLL. Students	EXISTING AREA SF Area (OSCG&R)	SF AREA PER STATE STD. (BASED UPON PROJECTED ENROLLMENT)	DELTA SF Area
KILLINGWORTH E.S.	PK-3	2				
BURR E.S.	K-3	3				
HK INTERMEDIATE M.S.	4-8	6				
HK HIGH SCHOOL	9-12	5				
SUBTOTALS		1,8				

Capacity Analysis ~ Where can education take place

Useable Area Analysis ~ Where can education take place?



Burr Elementary School
71%

$11,401 \text{ GSF} + (.05 \times 47,275) + / 47,275 (45,024 \times 1.05) = 29.1\%$
Expected useable area average ranges from 70-75%
(Assignable Area ~ Light Blue/ Total Building Area ~ Blue Building Outline)

Benchmarking ~ Analysis of Core Spaces (Media, Cafeteria, Gymnasium)

Gym ~ 2,153 sf
OSCG&R ~ Typical Gym 6,000 SF

1/3
Of what it should be
(OSCG&R Standard)

Cafeteria ~ 2,826 sf
OSCG&R ~ SF based on 3 waves at 17.5 sf per student
(369/3 x 17.5 ~ 2,153 sf)

31% Larger
(OSCG&R Standard)

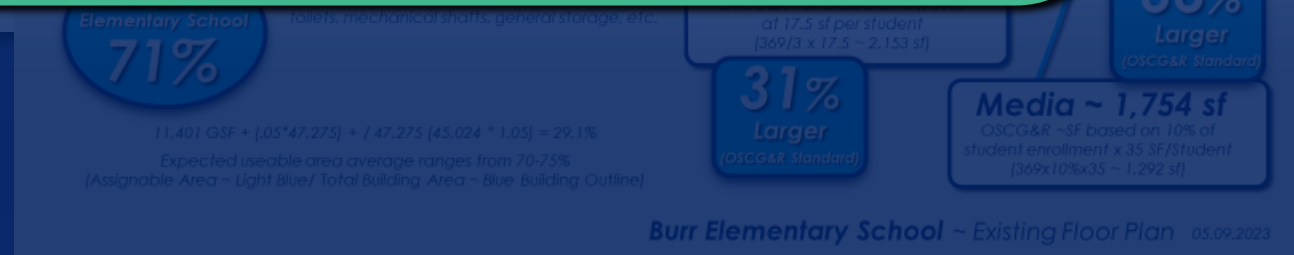
Media ~ 1,754 sf
OSCG&R ~ SF based on 10% of student enrollment x 35 SF/Student
(369 x 10% x 35 ~ 1,292 sf)

36% Larger
(OSCG&R Standard)



Demographics ~ Key Findings

- Enrollment forecasted to increase 2.1% (2023-28)
- Enrollment forecasted to increase 7.6% (2028-33)
- K-3 will slowly increase over the next 10 years.
- Steady to moderate growth over next decade
- Capacity of buildings adequate for increase



Where We've Been – Community Surveys

Summary of Activities... Current Survey Data

Community Survey #1

- Opened on 5/22
- Closed on 6/19

Intended to gather feedback on what's working, not working or missing ~ and what residents

309
Responses

As of 11:30AM on 6/26

55%

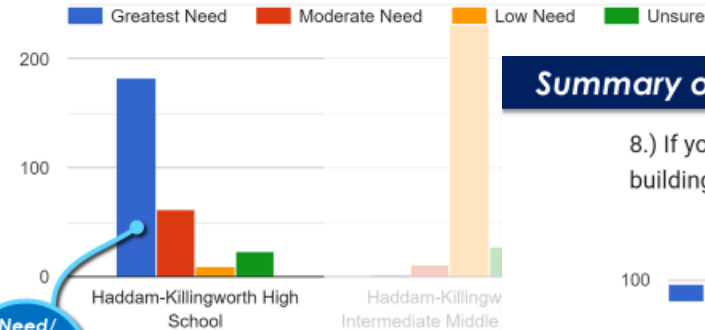
Haddam Residents

Killingworth Residents

36%

Summary of Activities... Current Survey Data

6.) If you see a need to improve the **physical condition**, where is the need greatest? For each building below, please identify Greatest Need, Moderate Need, Low Need, or Unsure:



Need/
Priority
#1

Highest Need/Priority
is at the High School

Summary of Activities... Current Survey Data

8.) If you see a need to improve the **programmatic function**, where is the need greatest? For each building below, please identify Greatest Need, Moderate Need, Low Need, or Unsure:



Many responded "Unsure" across
all schools for this category

Need/
Priority
#2

Highest Need/Priority
is at the High School

Need/
Priority
#3

Summary of Activities... Current Survey Data

Community Survey #1

- Opened on 5/8/23
- Closed on 5/15/23

Intended to gather input from the community on the needs of the district. Responses were missing ~ and

309

Responses

As of 11:30AM on 6/26

Community Input ~ Key Findings

- 81% of those surveyed see the need
- #1 Priority HKHS
- Safety & Security primary importance
- 21st Century Learning a close 2nd

Community
Presentations,
Building Tours
& Surveys

Working
Group
Meetings

Facilities &
Finance
Subcommittee
Meetings

need greatest? For each
or Unsure:

any responded "Unsure" across
all schools for this category

#1

Highest
is at the High School

Need/
Priority
#3

Where We've Been – The Why....21st Century Learning Environments

COLLABORATION SPACES



ADAPTABLE & RECONFIGURABLE



SPATIAL QUALITY + TECHNOLOGY



OWNERSHIP & PERSONALIZATION



SOCIAL ENRICHMENT



NATURE, INQUIRY & STEWARDSHIP



PLACEMAKING



WHOLE CHILD WELLNESS



Why It Matters ~

On average, children
spend...

90%
OF THEIR TIME INDOORS

EPA <https://www.epa.gov/iaq-schools/what-you-can-do-improve-academic-performance>

THE PHYSICAL ENVIRONMENT IMPACTS
STUDENT LEARNING PROGRESS BY

25%

Building and Environment Journal
<https://www.sciencedirect.com/science/article/abs/pii/S0360132312002582>

Where We've Been ~ School Tours Summary

Killingworth Elementary School (KES) Existing Conditions Summary



Priorities:

- Site:**
- 1. Full depth replacement of curbs and sidewalks.
 - 2. Full depth replacement of parking lots and driveways.
 - 3. Install new ADA and BCI compliant concrete stairs and walkways.
- Architectural Exterior:**
- 1. Demolish and replace single pane, non-insulated windows with double-pane, thermally insulated windows.
- Architectural Interior:**
- 1. Add security film to ground floor windows and doors.
 - 2. Upgrade finishes and address ADA compliance in restrooms and multi-stall toilet facilities.
 - 3. Replace carpet.
 - 4. Replace base and upper cabinets and plastic laminate countertops.
- Code - Accessibility/Life Safety**
- 1. Upgrade fire alarm system and make code compliant.



Regional School District #17 School Tours

Thur
8/24
4 & 5 p.m.



Meet at KES Main Office

EXISTING CONDITIONS FEEDBACK FROM STAFF & EDUCATORS:

- Location of the Main Office:**
 - Not a central hub - a long way away from classrooms
 - Temperature control and outdated systems
- Temperature Control & Outdated Systems:**
 - Heat and humidity within the classrooms
- ADA Compliance Issues:**
 - Accessibility of stage
 - Restrooms
 - Doorways
- Preschool Restrooms:**
 - No access from preschool classrooms
- Boiler Room:**
 - Not a central hub - a long way away from classrooms
 - Temperature control and outdated systems
- Electrical Room:**
 - Circuit breakers are obsolete
- Windows:**
 - Single pane windows in the portions of the building are outdated and not energy efficient
- Aging Casework:**
 - Age of the building restricts us from the type of cosmetic and functional improvements we can make
 - Worn carpet throughout the building
- Roof:**
 - School needs a roof replacement soon
- Exterior of Building:**
 - Aging parking lot
 - New playgrounds needed
 - Fields need to be redone



Meet at HKHS Main Office

EXISTING CONDITIONS FEEDBACK FROM STAFF & EDUCATORS:

- Concrete floor settlement:**
 - Large cracks in floors from settlement of building
 - Some classrooms have needed to be re-levelled
- Windows:**
 - The seals of some windows have failed and the Argon gas which helps make them energy efficient has leaked out
- ADA Compliance:**
 - The only school in the district that is predominantly ADA compliant
- Auditorium:**
 - The house lighting for the school plays/concerts is outdated, the current software runs on a floppy disk
- HVAC System:**
 - Although the newest in the district, it wasn't designed adequately for the space
 - Areas of southern exposure are too hot and there is no way to ease the main classroom wings
- Fire Alarm System:**
 - The fire alarm system is aging out and will need to be updated in the near future
- Building Controls & Mechanicals:**
 - Heating the end of their life expectancy
- Aging Casework:**
 - Worn carpet throughout the building
- Former closets, storage rooms and program areas:**
 - Have been converted to offices and intervention areas

Fri
8/25
4 & 5 p.m.



Meet at BES Main Office

EXISTING CONDITIONS FEEDBACK FROM STAFF & EDUCATORS:

- Portable Classrooms:**
 - Temperature control and outdated systems will past useful life
- Aging Casework:**
 - The age of the building restricts us from the type of cosmetic and functional improvements we can make
 - Worn carpet throughout the building
- Boiler Room:**
 - Temperature control and outdated systems will past useful life
- Roof:**
 - Single-pane windows and obsolete door hardware
- Windows & Doors:**
 - Antique single-pane windows and obsolete door hardware
- Underlaid Gym:**
 - Music Room
 - Small Restrooms
- Callings:**
 - Splice ceiling makes it difficult to service mechanics
- Plumbing:**
 - Antiquated plumbing
- Temperature Control & Outdated Systems:**
 - Classrooms do not have air conditioning



Meet at Central Office Main Lobby

EXISTING CONDITIONS FEEDBACK FROM STAFF & EDUCATORS:

- Aging Casework:**
 - The age of the building restricts us from the type of cosmetic and functional improvements we can make
- Windows & Doors:**
 - Antique single-pane windows and obsolete door hardware
- Classroom Portable Walls:**
 - Acoustical walls in classrooms - moveable walls are made of metal, with a gap above the ceiling - noise travels between rooms and is a distraction
- Temperature Control & Outdated Systems:**
 - The HVAC system has far exceeded its lifespan (45+ years old) and is now failing
 - Air quality and temperature issues exist throughout, air conditioning units are old and inefficient
- Boiler Room:**
 - Temperature control and outdated systems will past useful life
- Electrical & Plumbing:**
 - Both are original to the building, outdated, many parts are obsolete, and have exceeded their life expectancy
- ADA Compliance:**
 - High School Main Entrance
 - Classrooms with roll-in ramps (English)
 - Library (2nd floor)
- Classrooms:**
 - Learning spaces are outdated and some lack functionality
 - Science labs do not have gas connection
- Sport Complex:**
 - Track in need of repair
 - Tennis courts
 - Fields

August 24, 2023

4:00 HKIMS: 10
5:00 HKIMS: 4
4:00 KES: 4
5:00 KES: 4

August 25, 2023

4:00 BES: 6
5:00 BES: 1
4:00 HKHS: 5
5:00 HKHS: 12

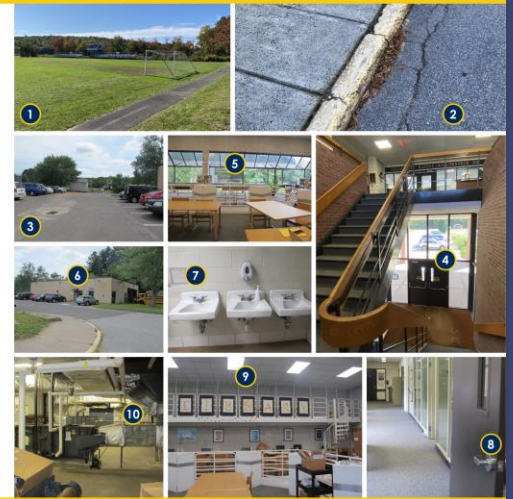


Haddam-Killingworth High School (HKHS) Existing Conditions Summary



Priorities:

- Site:**
- 1. Address ground cover and drainage issues at soccer field.
 - 2. Full depth replacement of curbs and sidewalks.
 - 3. Full depth replacement of parking lots and driveways.
- Architectural Exterior:**
- 1. Add security film to ground floor windows and doors.
 - 2. Replace single-pane windows with double-pane, thermally insulated windows (Central Office).
 - 3. Repair minor cracks in concrete block walls (Transportation Facility).
 - 4. Replace overhead doors (Transportation Facility).
 - 5. Repair leaking storefront and clerestory windows at Library and in shop/art classrooms.
 - 6. Clean and paint exterior in its entirety (Transportation Facility).
- Architectural Interior:**
- 1. Replace partitions in high school administrative offices with stud partition walls.
 - 2. Replace VCT flooring throughout.
 - 3. Upgrade finishes at toilet facilities throughout.
 - 4. Bring fire alarm system up to code.
 - 5. Remove existing hardware and replace with ADA-compliant hardware (throughout site).
 - 6. Upgrade remaining fluorescent fixtures to energy efficient LED fixtures.
 - 7. Provide new energy efficient HVAC units for ventilation and air conditioning.



LEARN MORE AT OUR PROJECT WEBSITE



STAY INFORMED!
Follow along for project updates at our Project Website:
<https://sites.google.com/rsd17.org/masterplanproject>

And visit:
Facebook: @HKSchools

HAVE A QUESTION?
Submit your questions to the committee via email: masterplan@rsd17.org

For more information on existing conditions, please refer to the PDF posted on the project website.





Where we are today...

Options Planning

Working together to define a preferred option



**Two towns
one district**

1

HKHS is the priority, and likely Step 1, for all of the options considered, due to age/condition, programming, and community feedback to date.

2

Master planning options are considered long range plans **implemented over several decades**. They can and will change as needs evolve.

3

Leverage reimbursement from state to maximize value (FY24 50% RNV, 40% New)

4

Optimize building & campuses ~ “right size” buildings, identify operational and energy efficiencies.

1

Imperative to address physical plant of HKHS (9-12)

- Cited below standard by NEASC
- Issues cited; Non-functioning Science Labs, ADA, Title IX, 50+ year mechanical systems
- Offers many positive community spaces – Work is needed to preserve them

2

Elementary Schools have space but it's inefficient & antiquated

- Loss of valuable time “in the classroom” due to sprawling plan & travel times
- There is a need for both large group and small group instruction
- 20+ year old moduls are still being utilized at BES

3

Grade Level Configuration

- Community values elementary in each town
- Fewer campuses would realize efficiencies (operating & energy)
- There is a value to minimizing school transitions and keeping cohorts together longer

4

Phasing (Over a period of 10 years or more)

- PH.I ~ New or RNV at HKHS to improve educational needs & community/recreational opportunities
- PH. II ~ New or RNV at BES & KES
- PH. III ~ Renovate HKIMS

OPTIONS FOR DISCUSSION...EXISTING BUILDING SUMMARY

BUILDING	GRADE CONFIG.	CUR. ENROLL. Students	FUTURE ENROLL. Students	EXISTING AREA SF Area (OGA)	SF AREA PER STATE STD. (BASED UPON PROJECTED ENROLLMENT WITH 1% MECHANICAL INCREASE)	DELTA SF Area	ORIGINAL CONSTR.	AGE (YEARS)
KILLINGWORTH E.S.	PK-3	265	298	52,188	37,322	+14,866	1948	75 yrs.
BURR E.S.	K-3	331	369	68,665	44,723	+23,942	1973	50 yrs.
HK INTERMEDIATE M.S.	4-8	669	808	158,285	122,738	+35,547	2007	16 yrs.
HK HIGH SCHOOL	9-12	554	532	220,520	100,210	+120,310	1954	69 yrs.
SUBTOTALS		1,819	2,007	499,658	304,993	194,665	AVERAGE AGE:	52 yrs.

House Bill 05506 allowable area increase of 25% for a building constructed prior to 1959

ORIGINAL OPTIONS CONSIDERED

SUMMARY DESCRIPTION		KES	BES	HKIMS	HKHS	# Sites
1	“Maintain As-is” or “Break fix” <i>Resolve issues as they arise as part of a capital improvement program.</i>	PK-3 (298)	K-3 (369)	4-8 (808)	9-12 (532)	4 (4 buildings)
2	“Keep & Right-Size It” <i>Methodically replace (New or RNV) and right-size existing buildings</i>	PK-3 (298)	K-3 (369)	4-8 (808)	9-12 (532)	4 (4 buildings)
3a	“Reconfigure Grades” <i>Increase population at the High School, reconfigure HKIMS</i>	PK-3 (298)	K-3 (369)	4-6 (488)	7-12 (852)	4 (4 buildings)
3b	“Reconfigure Grades” <i>Increase population at HKIMS & High School</i>	PK-2 (233)	K-2 (275)	3-6 (647)	7-12 (852)	4 (4 buildings)
4a	“Relocate & Optimize” <i>Consider relocation of BES to HKHS campus, two buildings,</i>	PK-3 (298)	Relocate & repurpose	4-8 (808)	K-3/9-12 (369)(532)	3 (4 buildings)
4b	“Relocate & Optimize” <i>Consider relocation of BES to HKHS campus, KES to HKIMS</i>	Relocate & repurpose	Relocate & repurpose	PK-3/4-8 (298)/(808)	K-3/9-12 (369)(532)	2 (4 buildings)
5	“School Within A School” <i>Create two New or RNV PK-8's, one High School</i>	Relocate & repurpose	PK-8 (816)	PK-8 (659)	9-12 (532)	3 (3 buildings)
6	“Early & Intermediate” <i>Consolidates campus, keeps elementary identity, reconfigures MS</i>	Relocate & repurpose	Relocate & repurpose	PK-5/6-8 (442)(486)	PK-5/9-12 (547)(532)	2 (4 Buildings)
7	“Uniting the District” <i>Brings students together for their entire educational journey.</i>	Relocate & repurpose	PK-3/4 (667)(827)	4/5 – 8 (808)(648)	9-12 (532)	3 (3 buildings)
8	“Relocate & Optimize” <i>Consolidates from 4 to 2 larger schools.</i>	Relocate & repurpose	Relocate & repurpose	PK-6 (1,155)	7-12 (852)	2 (2 or 4 buildings)

NARROWED ~ OPTIONS

SUMMARY DESCRIPTION		KES	BES	HKIMS	HKHS	# Sites
1	“Maintain As-is” or “Break fix” <i>Resolve issues as they arise as part of a capital improvement program.</i>	PK-3 (298)	K-3 (369)	4-8 (808)	9-12 (532)	4 (4 buildings)
2	“Keep & Right-Size It” <i>Methodically replace (New or RNV) and right-size existing buildings</i>	PK-3 (298)	K-3 (369)	4-8 (808)	9-12 (532)	4 (4 buildings)
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4a	“Relocate & Optimize” <i>Consider relocation of BES to HKHS campus, two buildings,</i>	PK-3 (298)	<i>Relocate & repurpose</i>	4-8 (808)	K-3/9-12 (369)(532)	3 (4 buildings)
4b	“Relocate & Optimize” <i>Consider relocation of BES to HKHS campus, KES to HKIMS</i>	<i>Relocate & repurpose</i>	<i>Relocate & repurpose</i>	PK-3/4-8 (298)/(808)	K-3/9-12 (369)(532)	2 (4 buildings)
5	“School Within A School” <i>Create two New or RNV PK-8's, one High School</i>	<i>Relocate & repurpose</i>	PK-8 (816)	PK-8 (659)	9-12 (532)	3 (3 buildings)
6	“Early & Intermediate” <i>Consolidates campus, keeps elementary identity, reconfigures MS</i>	<i>Relocate & repurpose</i>	<i>Relocate & repurpose</i>	PK-5/6-8 (442)(486)	PK-5/9-12 (547)(532)	2 (4 Buildings)
7	“Uniting the District” <i>Brings students together for their entire educational journey.</i>	<i>Relocate & repurpose</i>	PK-3/4 (667)(827)	4/5 – 8 (808)(648)	9-12 (532)	3 (3 buildings)
8	“Relocate & Optimize” <i>Consolidates from 4 to 2 larger schools.</i>	<i>Relocate & repurpose</i>	<i>Relocate & repurpose</i>	PK-6 (1,155)	7-12 (852)	2 (2 or 4 buildings)

COST/VALUE SUMMARY ~ BY OPTION

	KES	BES	HKIMS	HKHS	# of Sites	
1 “Maintain As-is” or “Break fix” Resolve issues as they arise as part of a capital improvement program.	Break/Fix PK-3 (298)	Break/Fix K-3 (369)	Break/Fix 4-8 (808)	Break/Fix 9-12 (532)	4 (4 buildings)	Over 30+ Years <i>(Code, Life Safety, Building Systems, Building Envelope, Thermal Comfort, Air Quality, ADA / Accessibility, Technology, Finishes, Lighting)</i>
2 “Keep & Right-Size It” Methodically replace (New or RNV) and right-size existing buildings.	New or RNV PK-3 (298)	New or RNV K-3 (369)	New or RNV 4-8 (808)	New or RNV 9-12 (532)	4 (4 buildings)	As a baseline – all options will address: Code Life Safety Building Systems Building Envelope Thermal Comfort Air Quality ADA / Accessibility Technology Finishes Lighting
4b “Relocate & Optimize” Consider relocation of BES to HKHS campus, KES to HKIMS.	Relocate & repurpose	Relocate & repurpose	New/RNV PK-3/4-8 (298)/(808)	New/RNV K-3/9-12 (369)(532)	2 (4 buildings)	
7 “Uniting the District” Brings students together for their entire educational journey.	Relocate & repurpose	RNV PK-3/4 (667)(827)	RNV 4/5 – 8 (808)(648)	RNV 9-12 (532)	3 (3 buildings)	
8 “Relocate & Optimize” Consolidates from 4 to 2 larger schools.	Relocate & repurpose	Relocate & repurpose	RNV w/Add. PK-6 (1,155)	RNV w/Add. 7-12 (852)	2 (2 buildings)	

COST/VALUE SUMMARY ~ BY OPTION



		Safety	Operational Efficiency	Program / 21 st Century	Disruption / Phasing	State Reimb.	# of Campuses	Total Project Cost	Value	Time
1	"Maintain As-is" or "Break fix" Resolve issues as they arise as part of a capital improvement program.						4 (4 buildings)	\$\$\$\$		~30 YRS
2	"Keep & Right-Size It" Methodically replace (New or RNV) and right-size existing buildings.						4 (4 buildings)	\$\$\$\$		~25-30 YRS
4b	"Relocate & Optimize" Consider relocation of BES to HKHS campus, KES to HKIMS.						2 (4 buildings)	\$\$\$		~20-25 YRS
7	"Uniting the District" Brings students together for their entire educational journey.						3 (3 buildings)	\$\$\$		~15-20 YRS
8	"Relocate & Optimize" Consolidates from 4 to 2 larger schools.						2 (2 or 4 buildings)	\$\$		~10-15 YRS

COST/VALUE SUMMARY ~ BY OPTION

	KES	BES	HKIMS	HKHS	# of Sites	Total Project Cost	Cost to RSD17 after Reimb.
1 “Maintain As-is” or “Break fix” Resolve issues as they arise as part of a capital improvement program.	PK-3 (298)	K-3 (369)	4-8 (808)	9-12 (532)	4 (4 buildings)	145-150M (Does not include escalation over 30 Years)	115-120M (Assumes limited eligibility for reimb. For roofs, boilers, etc.)
2 “Keep & Right-Size It” Methodically replace (New or RNV) and right-size existing buildings.	PK-3 (298)	K-3 (369)	4-8 (808)	9-12 (532)	4 (4 buildings)	New ~ 367M	New ~ 231M
						or RNV ~ 380M	or RNV ~ 204M
4b “Relocate & Optimize” Consider relocation of BES to HKHS campus, KES to HKIMS.	Relocate & repurpose	Relocate & repurpose	New/RNV PK-3/4-8 (298)/(808)	New/RNV K-3/9-12 (369)(532)	2 (4 buildings)	384M (46,126,52,160)	215M (29,68,33,85)
7 “Uniting the District” Brings students together for their entire educational journey.	Relocate & repurpose	RNV PK-3/4 (667)(827)	RNV 4/5 – 8 (808)(648)	RNV 9-12 (532)	3 (3 buildings)	384M (98,126,160)	206M (53,68,85)
8 “Relocate & Optimize” Consolidates from 4 to 2 larger schools.	Relocate & repurpose	Relocate & repurpose	RNV w/Add. PK-6 (1,155)	RNV w/Add. 7-12 (852)	2 (2 buildings)	275M (122,153)	146M (66,80)



**Two towns
one district**

HKHS

WHY ~ REINVENTING THE HIGH SCHOOL



HKHS~ Strategic Investments to Maximize Value

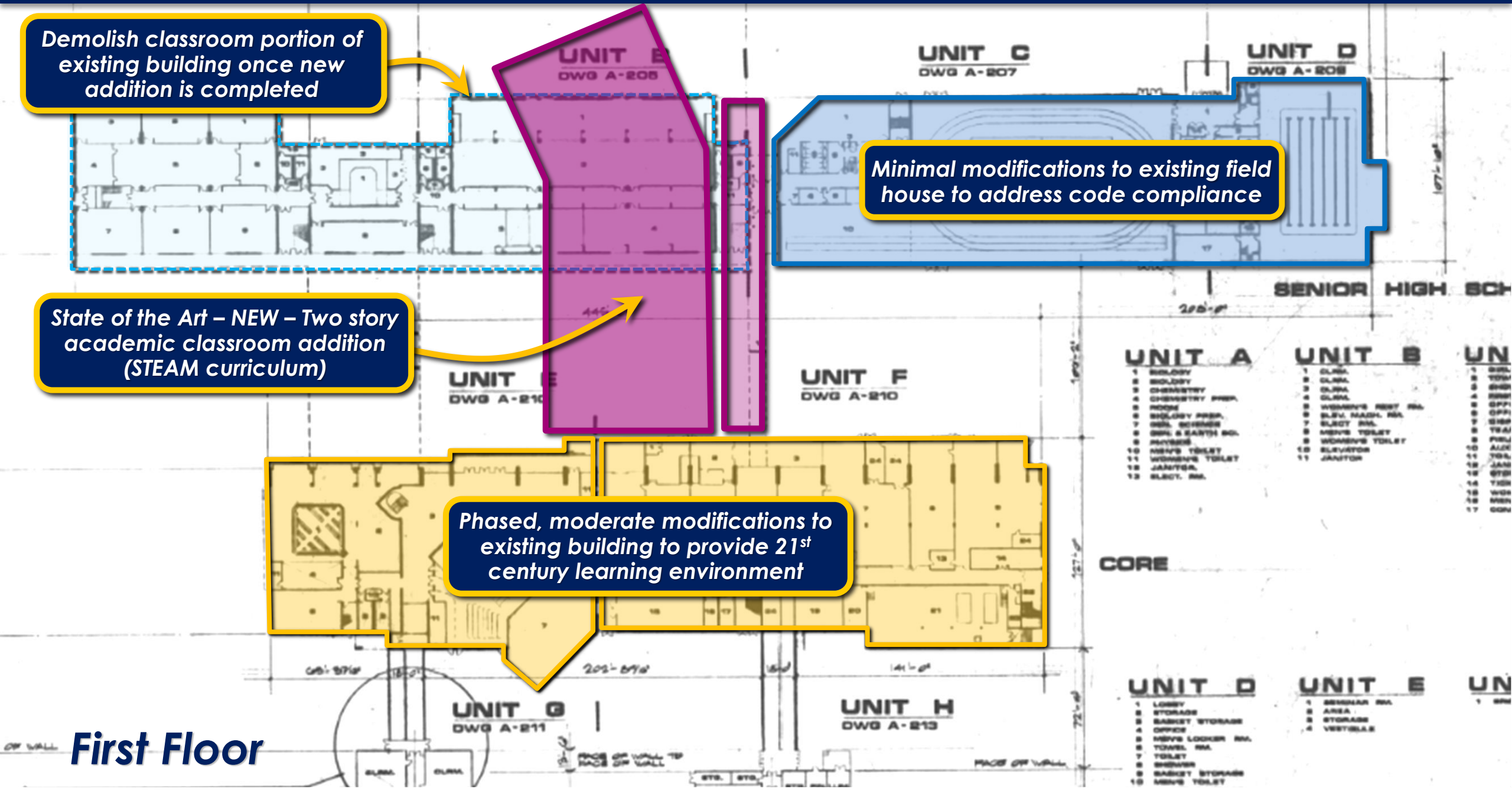
Demolish classroom portion of existing building once new addition is completed

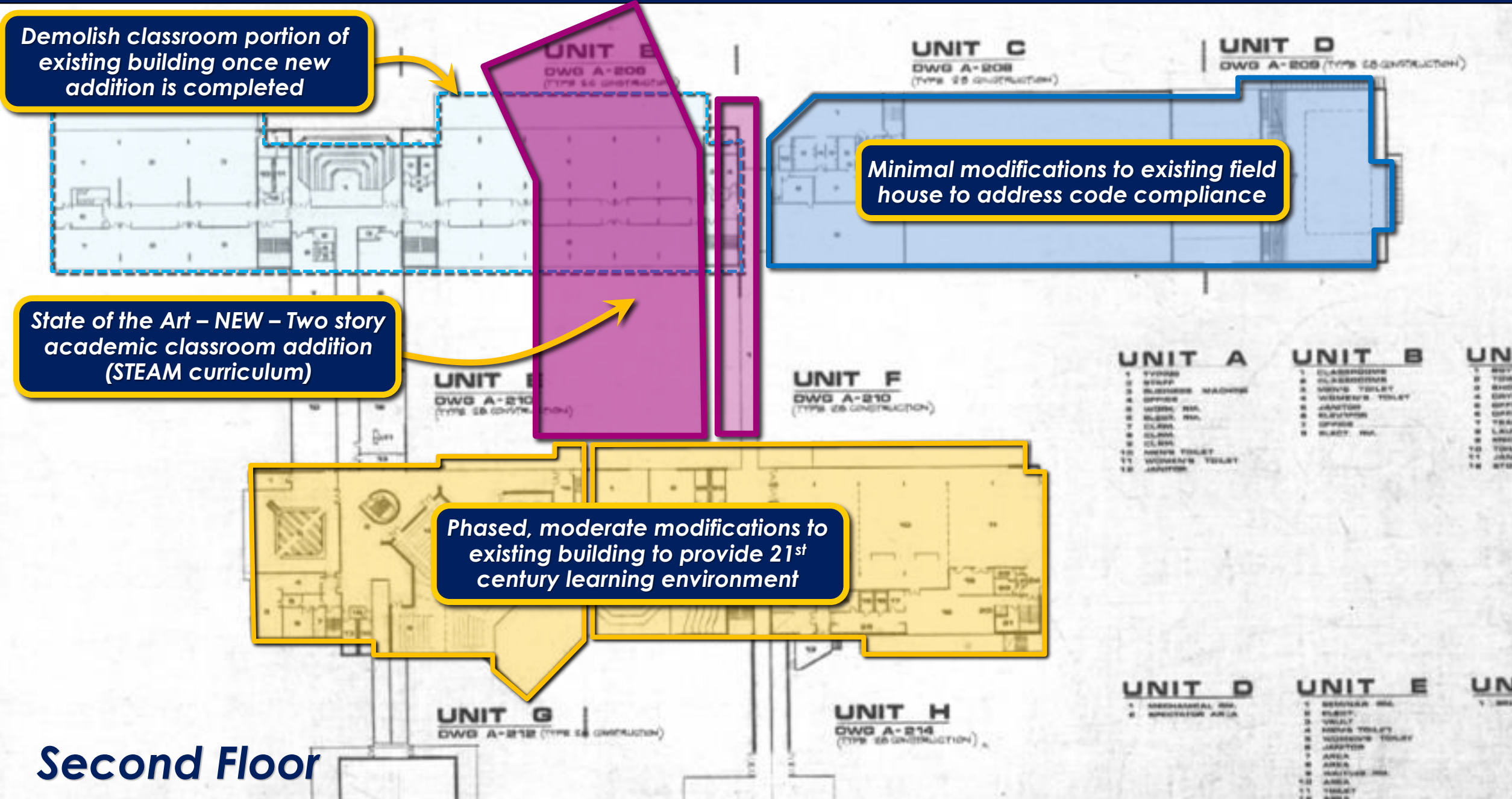
State of the Art – NEW – Two story academic classroom addition (STEAM curriculum)

Minimal modifications to existing field house to address code compliance

Phased, moderate modifications to existing building to provide 21st century learning environment

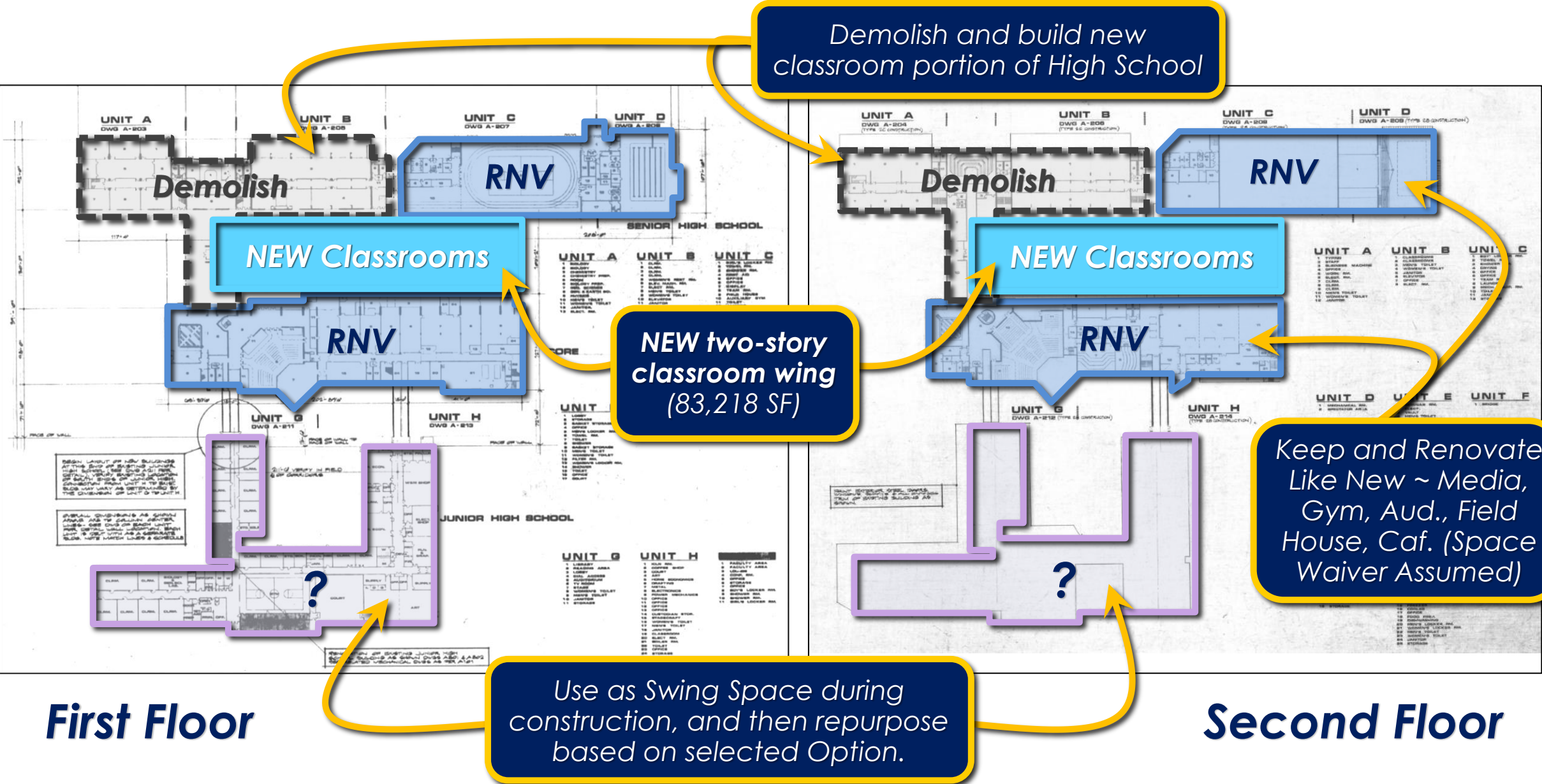
First Floor





Second Floor

1. **Renovate to Last** ~ Complete new or renovate as new building to last several generations (30 plus years)
2. **Future Proof** ~ Will address all capacity, educational space and curriculum needs (today & future)
3. **Preserve & Reinvent** ~ Transforms building to create educational environment that is adaptable, flexible, innovative, with a focus on wellness & health (daylighting, air quality, acoustics)
4. **Like New** ~ Addresses all existing conditions reported for site, building envelope, interiors, building and life safety systems, accessibility and code.



Total Project Costs ~ What is Included?

Construction Costs + Soft Costs

(A comprehensive approach to costs)

Site Development

Scope of Work

Site Improvements
Parking Lot & Vehicular Circ.
Play Areas (Age Appropriate @ 6,500 sf)
Sanitary System Expansion/Upgrade

Building Summary

Scope of Work

Demolition (+ haz mat, environ.)
PCB
ACM
Avg. Building Demo

Renovate as New

New Construction

Sustainability / Carbon Neutral ~ Initiative

Scope of Work

Geothermal Bore Field
Photo Voltaic Array
Soft Costs (Design, FF&E, Fees, Printing)
Reimbursement Rate - New
Reimbursement Rate - RNV
Ineligibles

Soft Cost Itemized Listing

1	Architectural and Engineer Services
1-1	Architectural Design - Pre referendum
1-2	Architect Fees
1-3	Offsite Roadway & Utility Engineering
2	Other Professional Fees (Owner's Oversight Fees)
2-1	Project Management / OPM
2-2	Commissioning
2-3	Site - Environmental Consultant (Testing and Reports)
2-4	Building - Environmental Consultant (Testing and Reports)
2-5	Environmental Consultant (Drawings and Specifications)
2-6	Wetlands Review and Identification / Specialist
2-7	Third Party Review (Land Use Approvals)
2-8	Property Survey
2-9	Geotechnical Boring and Report
2-10	Traffic Study
2-11	Independent Cost Estimator
2-12	Special Testing and Inspections
2-13	Other consultants (building envelope, specialists)
2-14	Moving
3	Town Professional Fees
3-1	Town Legal Services
3-2	Bond Counsel Fees
3-3	Builders Risk Insurance

Soft Cost Itemized Listing

4	Administrative Fees
4-1	Postage, Printing, Advertising
4-2	Town Inspection Costs
4-3	Building Permit Fees
4-4	Misc. Administration Costs
4-5	State Permit Fees
4-6	Utility Allowances/Contributions
5	Construction Related Items
5-1	CM Preconstruction Fee
5-2	CM Investigation Allowance (Building Due Diligence)
6	FF&E/Technology/Communications/Playground
6-1	Fixtures, Furnishings and Equipment
6-2	Communication Technology Hardware
6-3	AV Equipment
6-4	Telephone Systems
6-5	Security Systems
6-6	Playground Equipment
6-7	Specialty Signage (Exterior Monumental)
6-8	Furniture Design Consultant
6-9	Technology Design Consultant
6-10	Security Systems Design Consultant
7	Owner Contingency

Optimized High School footprint with
21st Century Environment and
streamlined site circulation

Could keep
or remove
connectors

Could become BES,
or Gr. 7-8, (other)
based on Option

Area Summary

New ~ 75,590 sf
RNV ~ 123,138 sf
Total Area ~ 198,728 sf

Allowable Area:

Existing Area: 220,520 SF

100,210 SF

Typical H.S. Gym:

10,000 SF

Typical H.S. Cafeteria:

4,000 SF

Typical H.S. Media:

2,000 SF

Arts + Career Technical:

14,500 SF

TOTAL:

30,500 SF

Area Remaining:

69,710 SF

(Space Waiver assumed for portions of the High School ~
Field House, Gym, Media, Auditorium etc.)

Typical classrooms (Music, Math, Social
Studies, Languages, Literature, etc.)
Sciences, Special Education.

Total Project Cost: \$144 M - \$176 M

Cost to HK: \$76.5 M - \$93.5 M

Assumes 50% Base Reimbursement + Space Waiver

RNV (Renovate as New)

Allowable Area: 100,210 SF

Building Area: 220,520 SF

Cost: 220,520 SF x \$720/SF (TPC)

Total Project Cost: \$142 M - \$174 M

Cost to HK: \$75.4 M - \$92.1 M

***Assumes 50% Base Reimbursement
+ Space Waiver***

New Construction Option

Allowable Area: 100,210 SF

Building Area: 107,225 SF

Existing Area: 220,520 SF

Cost: 107,225 SF x \$825/SF (TPC)

Total Project Cost: \$86.5 M - \$100 M

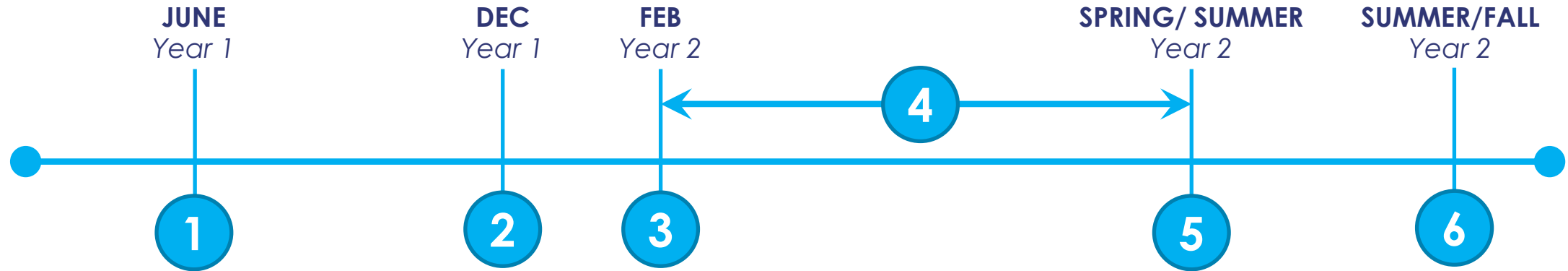
Cost to HK: \$54.5 M - \$63.1 M

Assumes 40% Base Reimbursement



**Two towns
one district**

***Putting it all into
perspective...***



1. **June 30th** – Annual Application Deadline (*requires funding in place)
2. **December 15th** – DAS submits Priority List to Governor and Education Committee
3. **February 1st** – Education Committee submits approved or modified Priority List to Governor and General Assembly
4. **Spring/Summer** – General Assembly authorizes the Commissioner of DAS to enter into grant commitments on behalf of the State. DAS notifies applicants of grant commitments.
5. **Grant Letter received** – send packages out to bid
6. **Commence Construction**

Consultant Team

Enrollment Projections (highest in 8-year period)

Space Standards Worksheet (SCG-2500)

Site Analysis SCG-053 (Site impacts, FMC, Phase I, geotechnical, CT Gen Stat § 8-24)

Cost Estimate (SCG-2000, Uniformat online)

RSD17 Public Schools & Consultant Team

Educational Specifications

School Safety and Security Letter SCG-9000, Approval from DEMHS

Approval for Renovation Status (As appropriate) (SCG-3500)

Town of HK & RSD17 Public Schools

BOE Approval of Educational Specifications

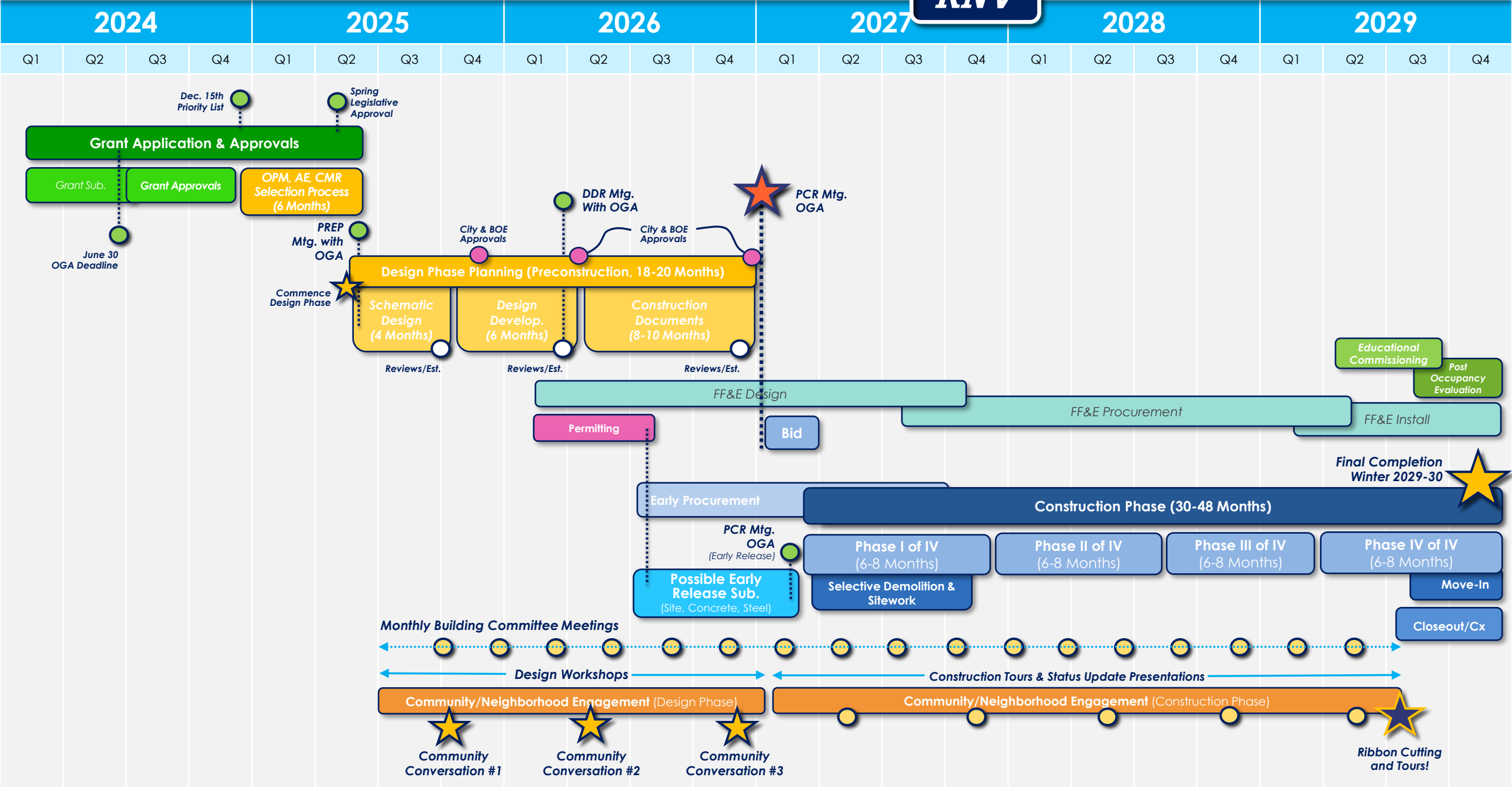
Certified Resolutions (building committee, filing of grant, SD drawings)

Approval of funding (certified vote count)

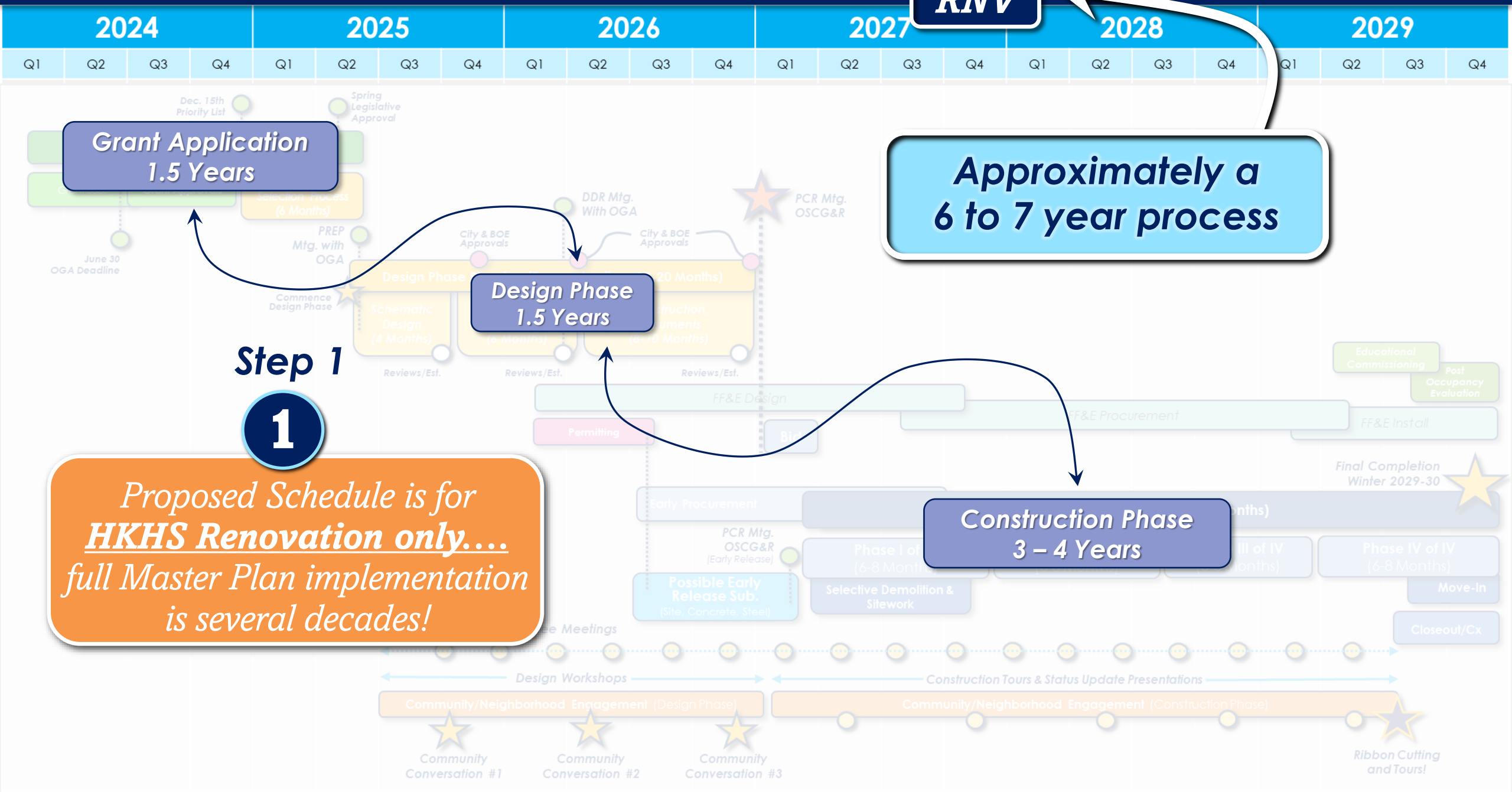
June 30th Grant Application

Putting It Into Perspective ~ Milestone Schedule

RNV

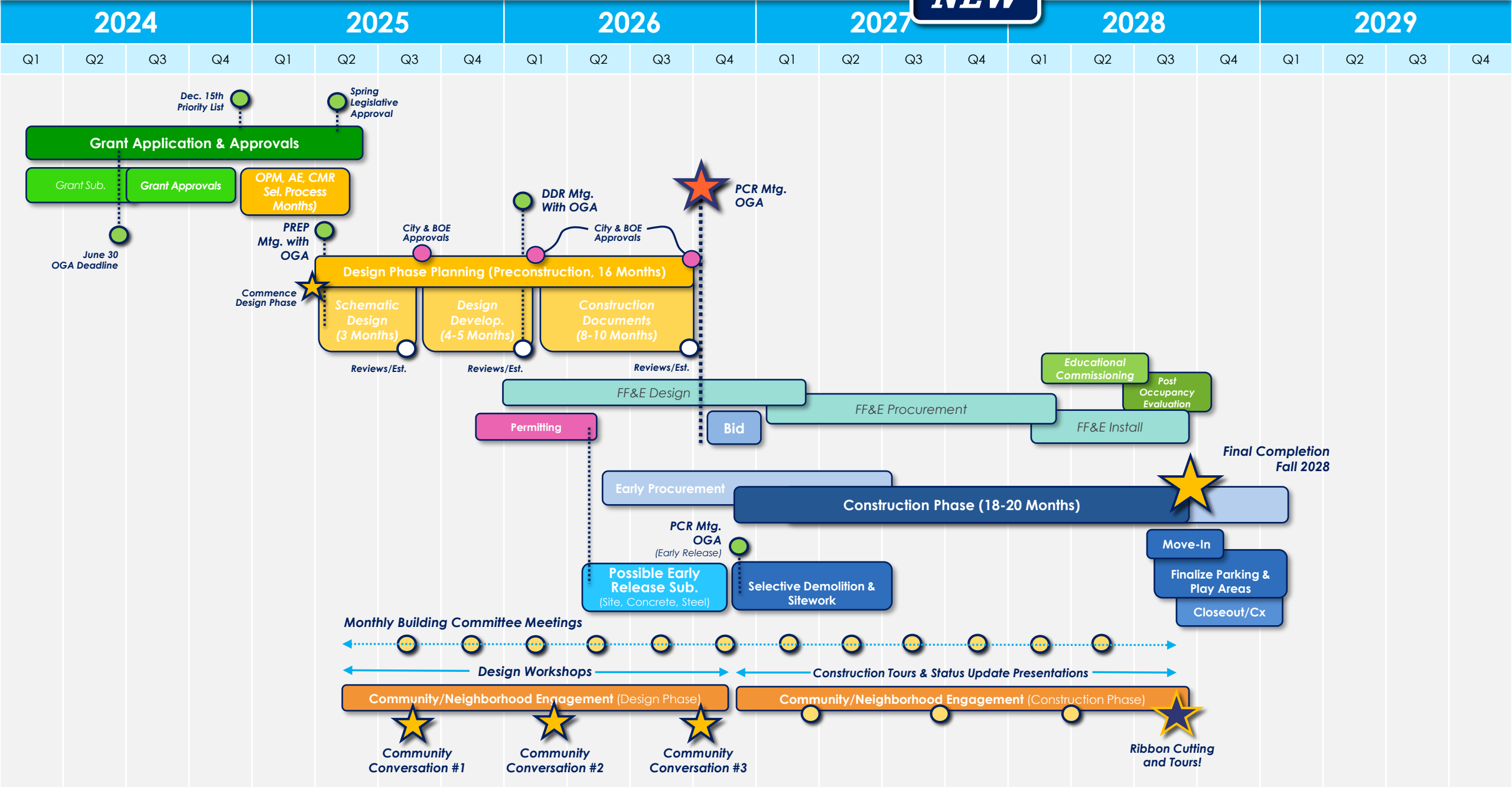


Putting It Into Perspective ~ Milestone Schedule



Putting It Into Perspective ~ Milestone Schedule

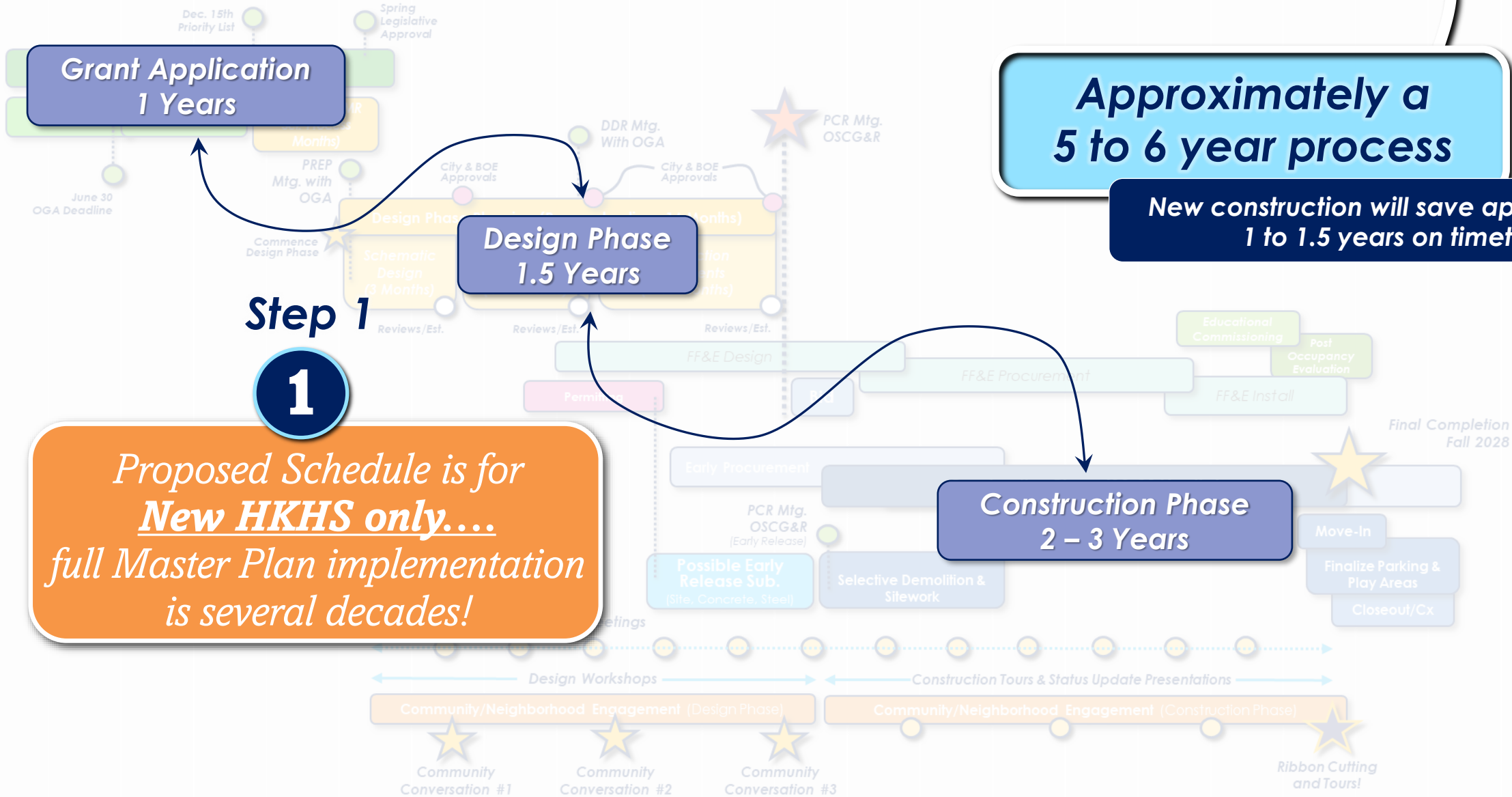
NEW

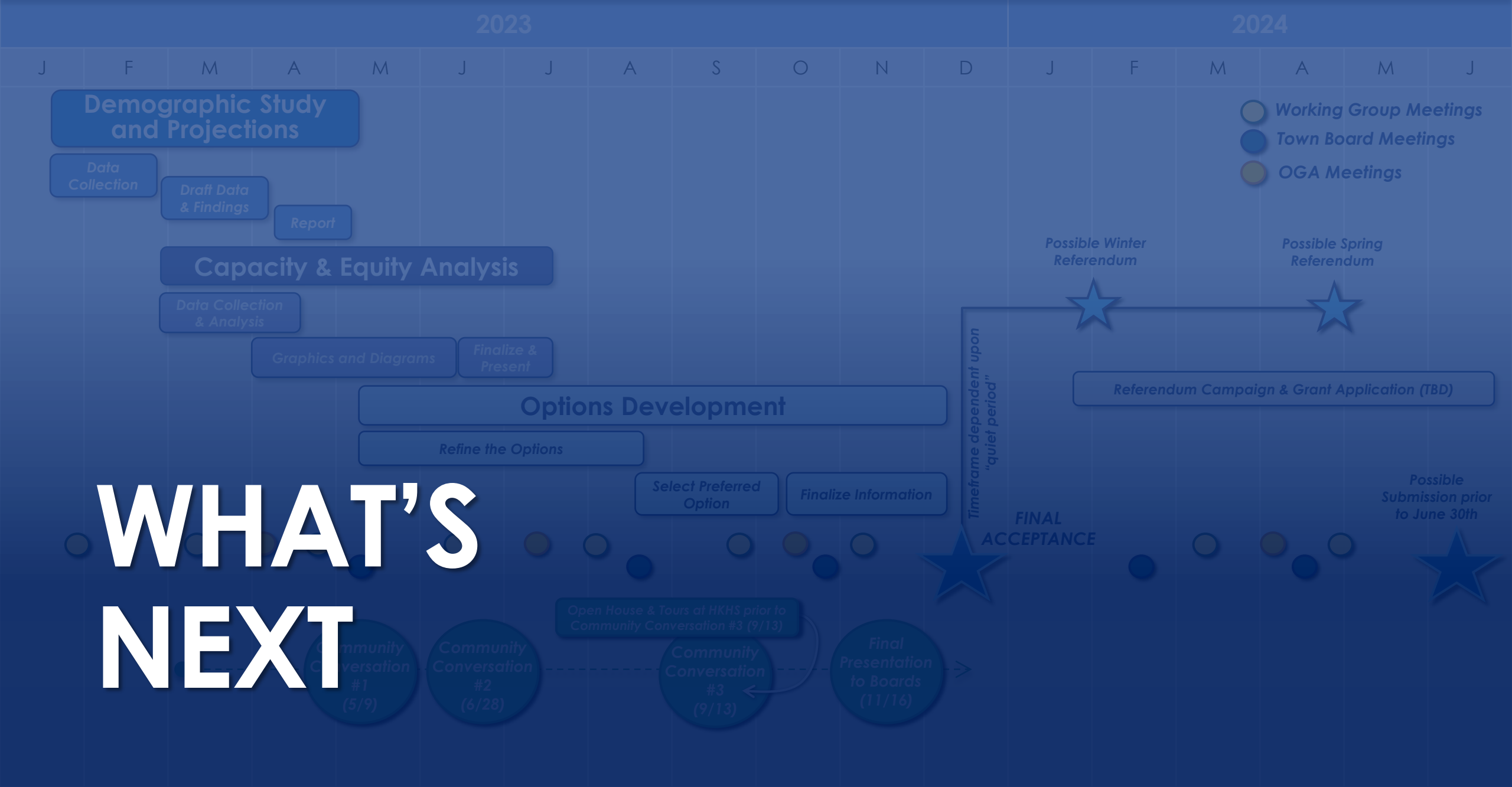


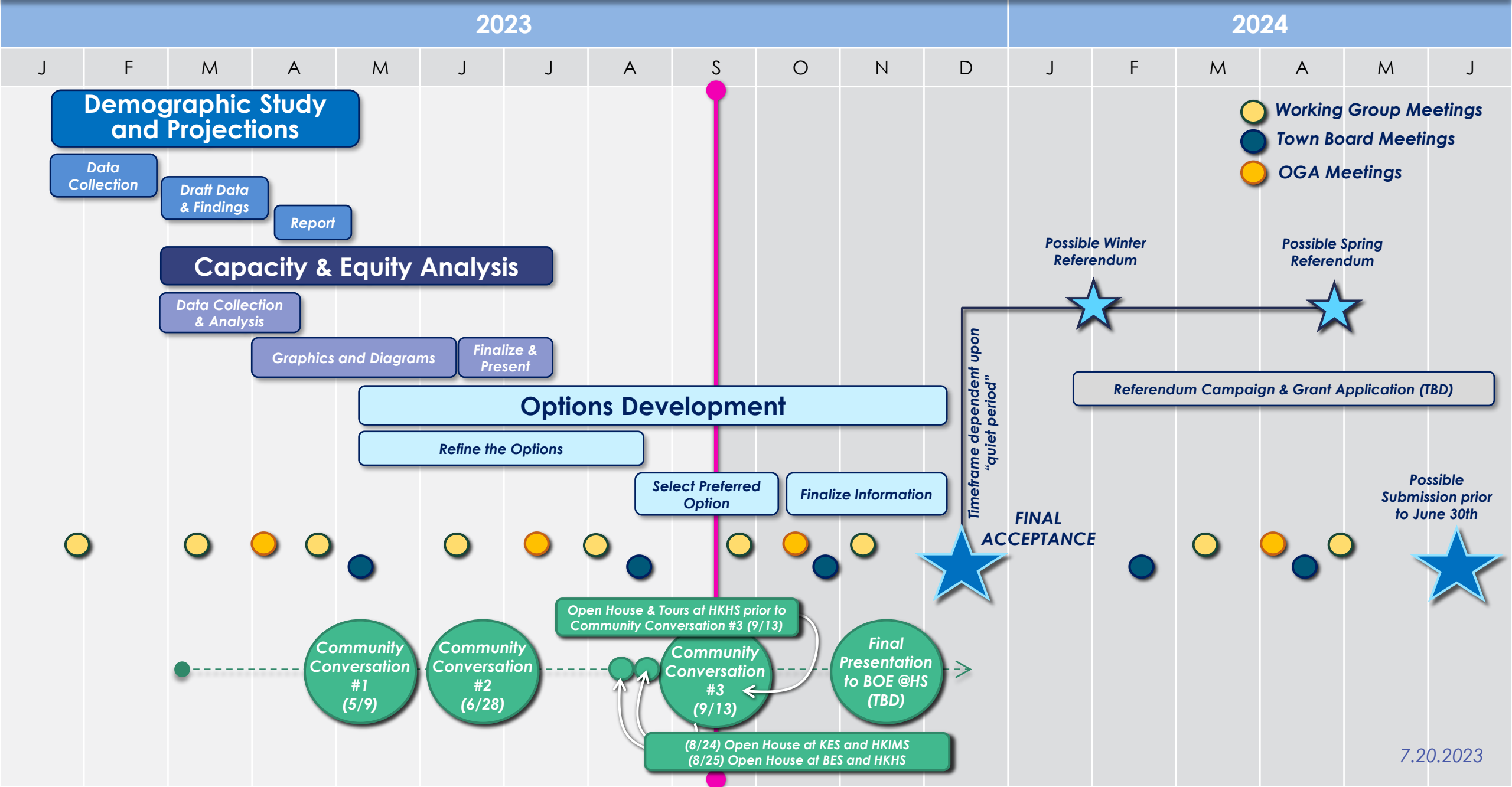
Putting It Into Perspective ~ Milestone Schedule

2024				2025				2026				2027				2028				2029			
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

NEW









Tecton
ARCHITECTS

REGIONAL SCHOOL DISTRICT 17 MASTER PLAN

JOINT SPECIAL MEETING

Refining the Plan

Haddam-Killingworth High School
September 21, 2023