

SUFFOLK

SKANSKA

PERKINS —
EASTMAN

SCHOOL BUILDING COMMITTEE | COMMUNITY MEETING

LOWELL HS PROJECT

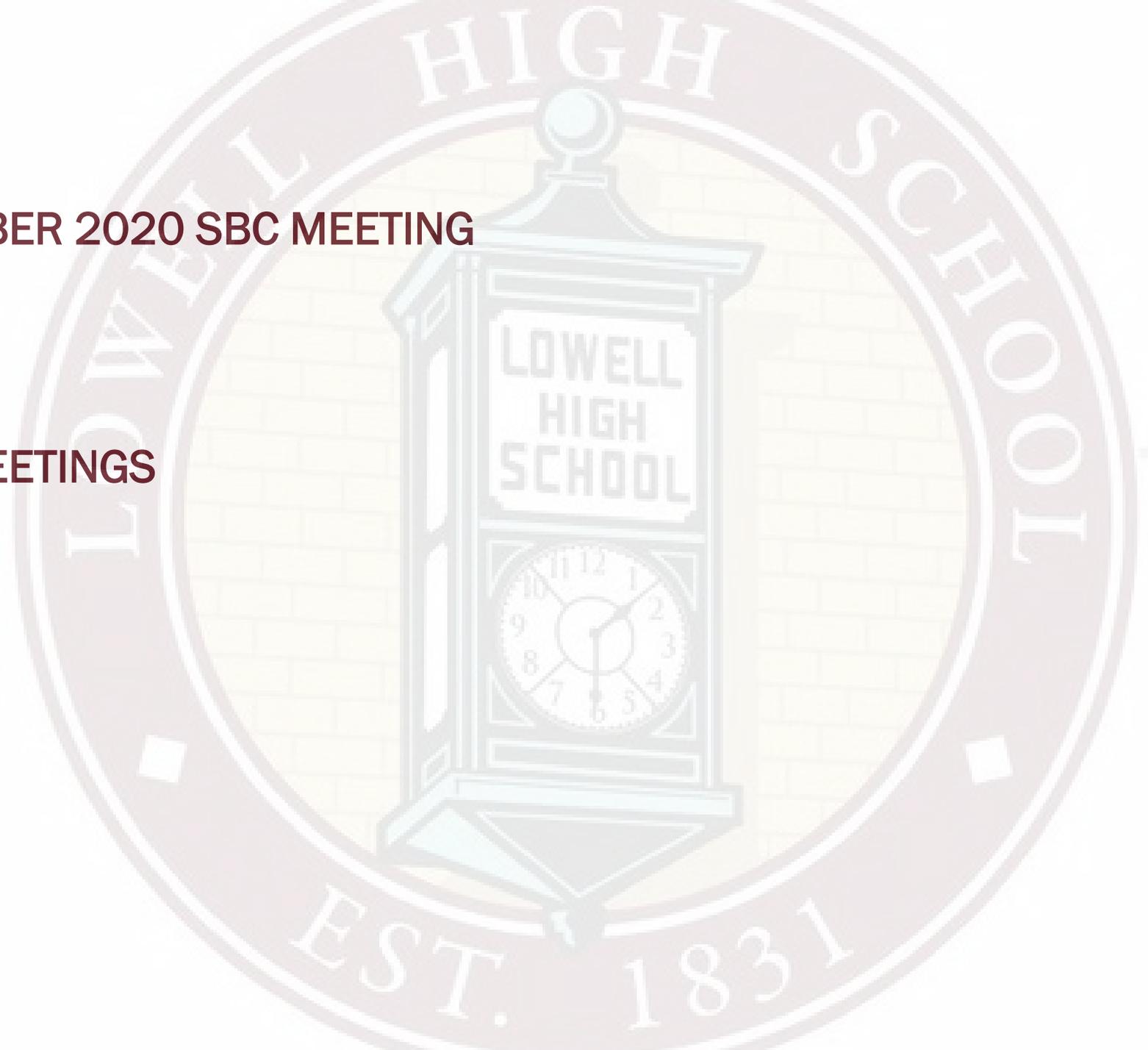


23 JANUARY 2020

LOWELL HIGH SCHOOL

AGENDA: DESIGN DEVELOPMENT UPDATE

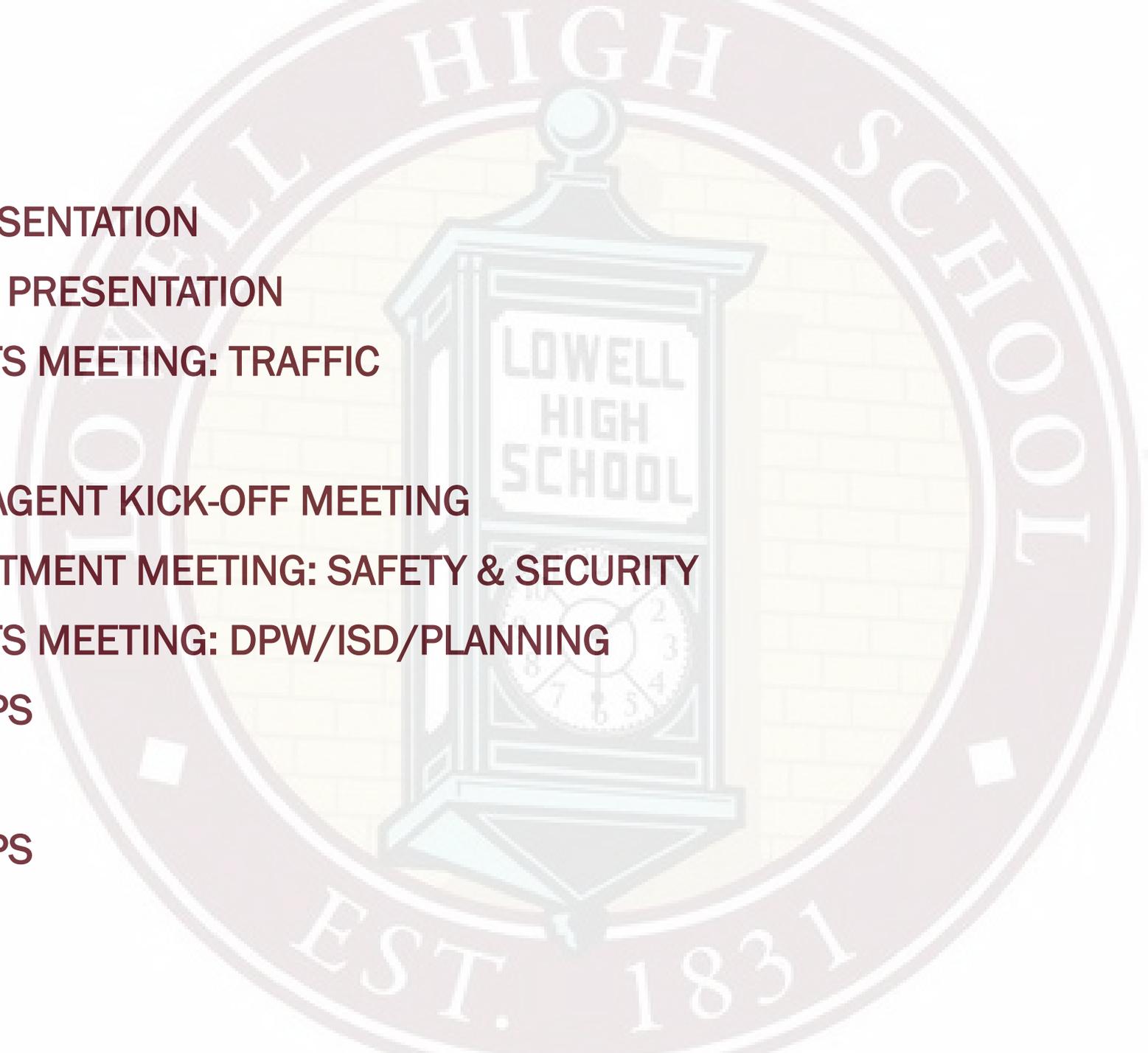
- ACCEPT MINUTES OF OCTOBER 2020 SBC MEETING
- MEETING SUMMARIES
- DESIGN DEVELOPMENT
- NEXT STEPS/UPCOMING MEETINGS



LOWELL HIGH SCHOOL

MEETINGS SUMMARIES – OCTOBER

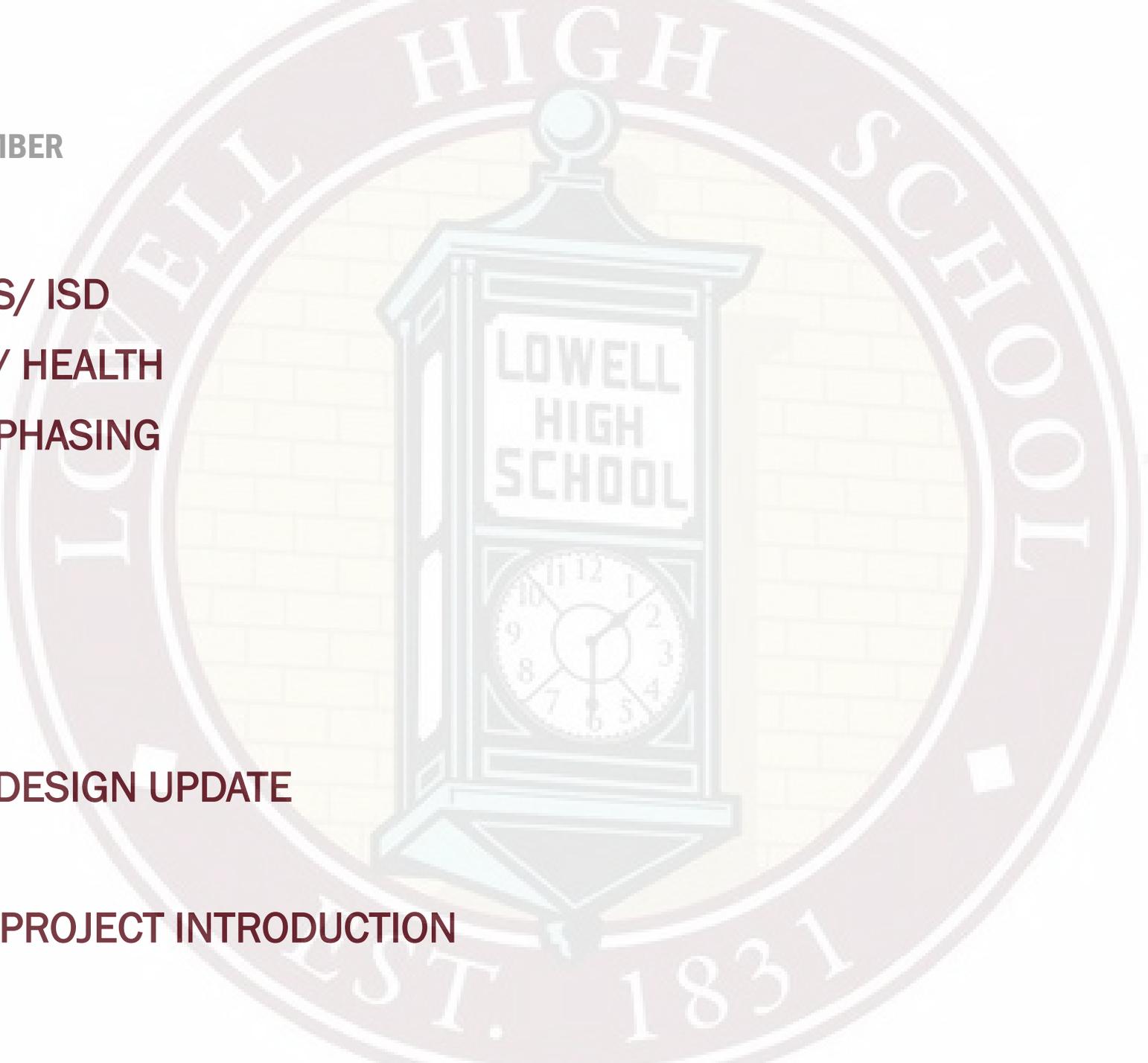
- 10/9 LHS TEACHER PRESENTATION
- 10/9 SUPERINTENDENT PRESENTATION
- 10/9 CITY DEPARTMENTS MEETING: TRAFFIC
- 10/10 OAC MEETING
- 10/10 COMMISSIONING AGENT KICK-OFF MEETING
- 10/10 LHS & CITY DEPARTMENT MEETING: SAFETY & SECURITY
- 10/15 CITY DEPARTMENTS MEETING: DPW/ISD/PLANNING
- 10/17-18 LHS FOCUS GROUPS
- 10/24 OAC MEETING
- 10/24 LHS FOCUS GROUPS
- 10/24 NPS MEETING



LOWELL HIGH SCHOOL

MEETINGS SUMMARIES – NOVEMBER, DECEMBER

- 11/7 OAC
- 11/7 CITY DEPARTMENTS/ ISD
- 11/14 CITY DEPARTMENT/ HEALTH
- 11/14 WORKING GROUP: PHASING
- 11/18 LHS FOCUS GROUP
- 11/20 LHS FOCUS GROUP
- 11/21 OAC
- 12/5 OAC
- 12/5 WORKING GROUP: DESIGN UPDATE
- 12/19 OAC
- 12/19 COUNCILOR-ELECT PROJECT INTRODUCTION



LOWELL HIGH SCHOOL

MEETINGS SUMMARIES – JANUARY

- 1/8 CONSERVATION COMMISSION
- 1/9 OAC
- 1/16 OAC
- 1/16 COMMUNICATION MEETING
- 1/16 CITY DEPARTMENTS/DPW: BIORENTION/ LANDSCAPE DESIGN



LOWELL HIGH SCHOOL

SCHEMATIC DESIGN AERIAL



LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT AERIAL



LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

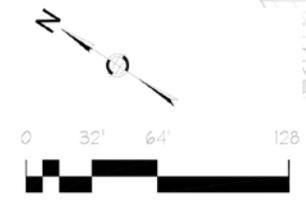
- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS



MAIN FLOOR



BASEMENT



FIRST FLOOR

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS

LOWELL COMM. HEALTH & TRIO
(MOVED TO SOLVE PHASING)

NURSE, CULINARY, FUNDAMENTALS, & SPED CONF.

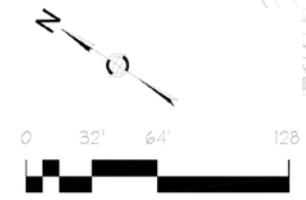
COMMUNITY STAIR

LOWER GYM

MAIN FLOOR

ENTRY RAMP

TV STUDIO



FIRST FLOOR



BASEMENT

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS



FIRST FLOOR

MAIN FLOOR



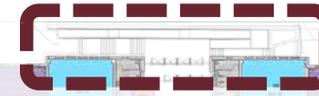
BASEMENT



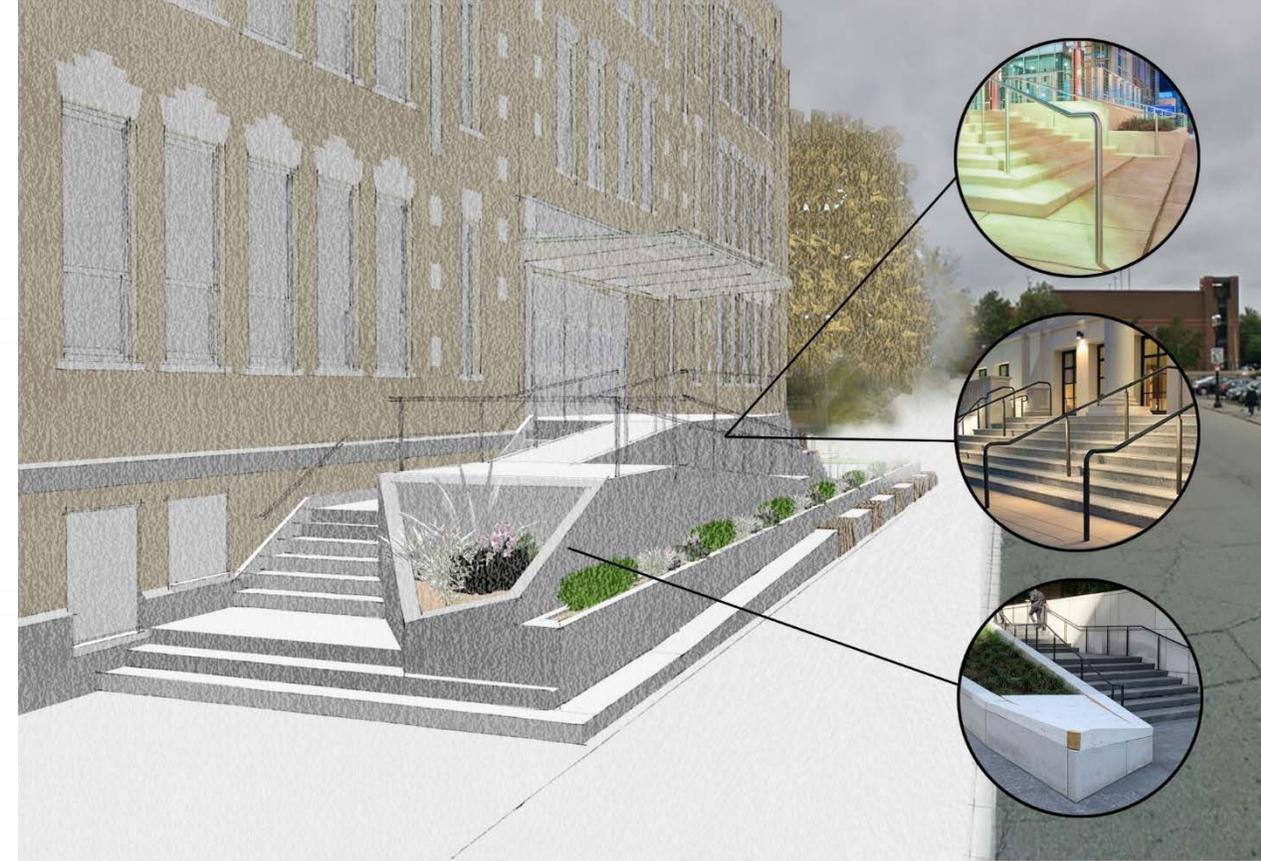
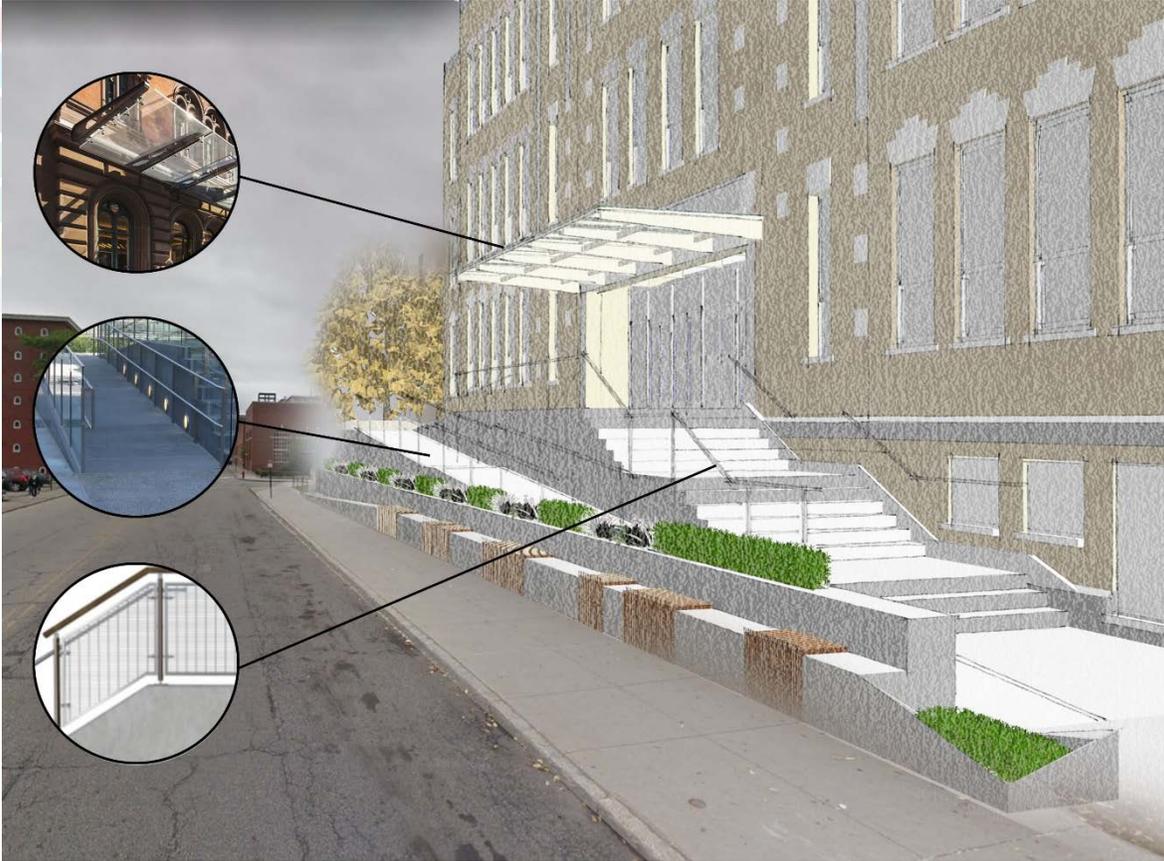
LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

VIEW 2



VIEW 1



VIEW 1

VIEW 2

MAIN FLOOR

BASEMENT

1922 BUILDING MAIN ENTRY RAMP



FIRST FLOOR

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS



MAIN FLOOR



TV STUDIO



BASEMENT

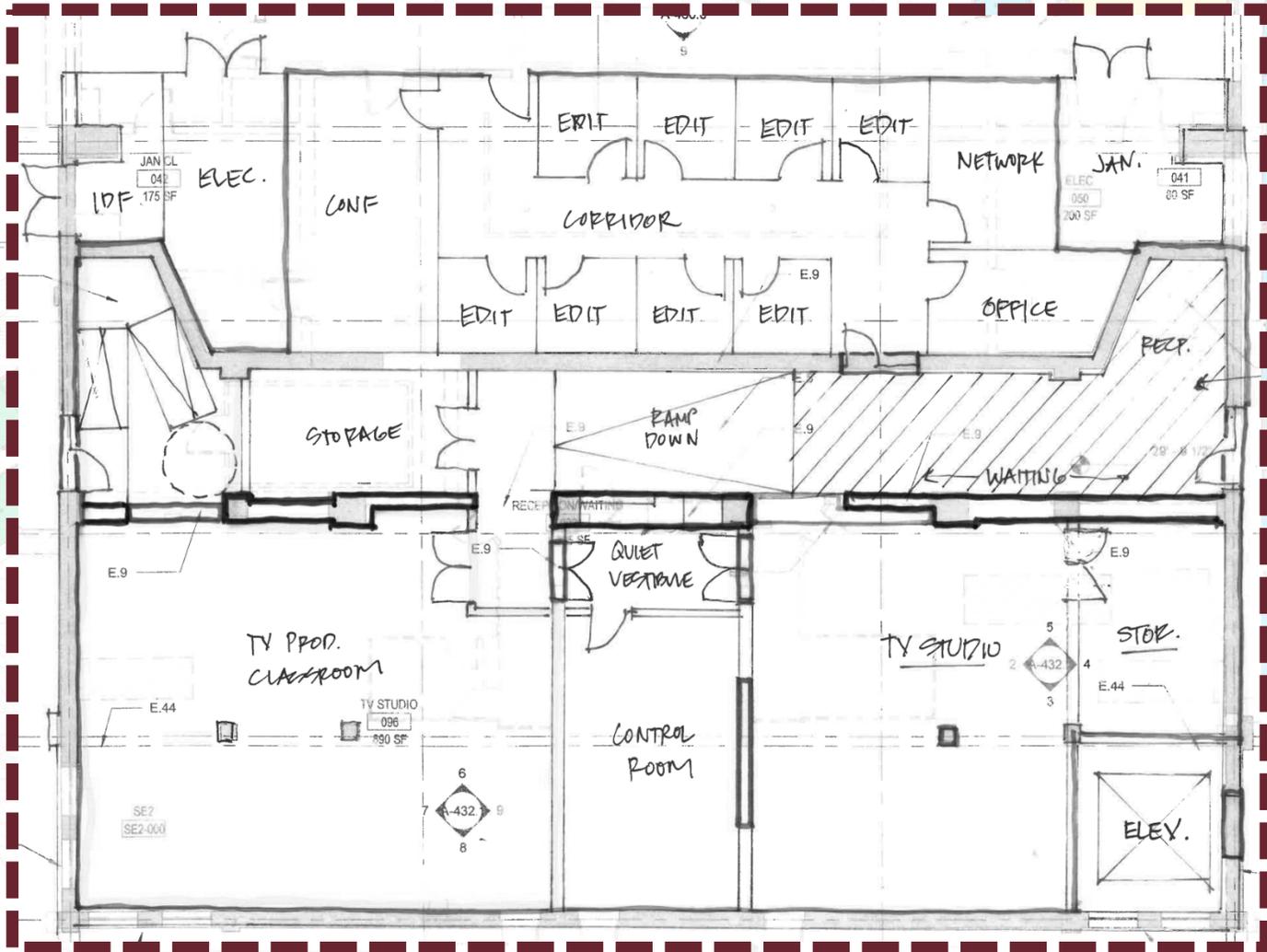
FIRST FLOOR

LOWELL HIGH SCHOOL

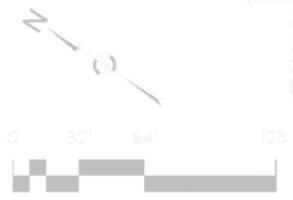
DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
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- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAF.

TV STUDIO



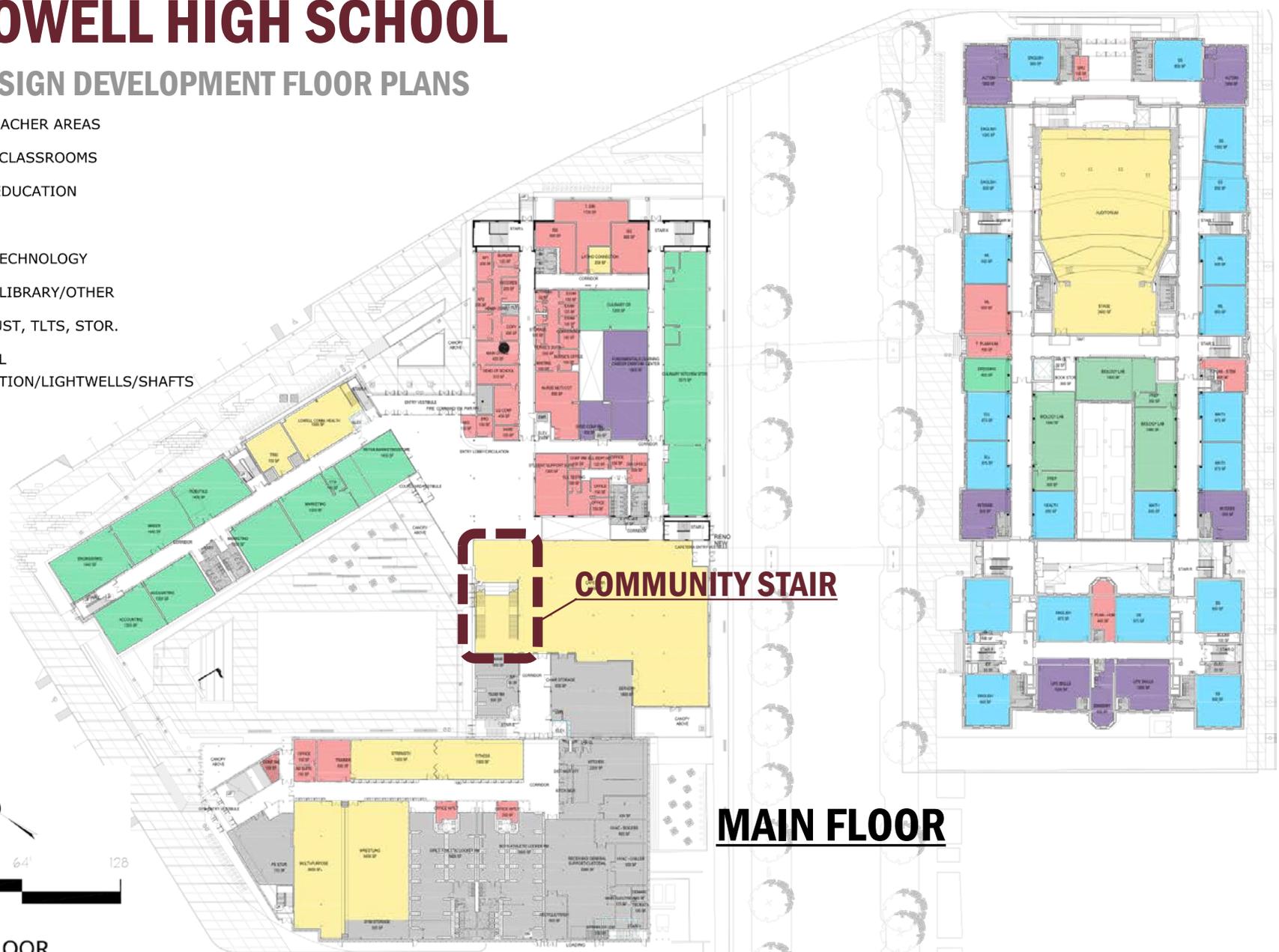
BASEMENT



LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
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- CAREER/TECHNOLOGY
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MAIN FLOOR

FIRST FLOOR

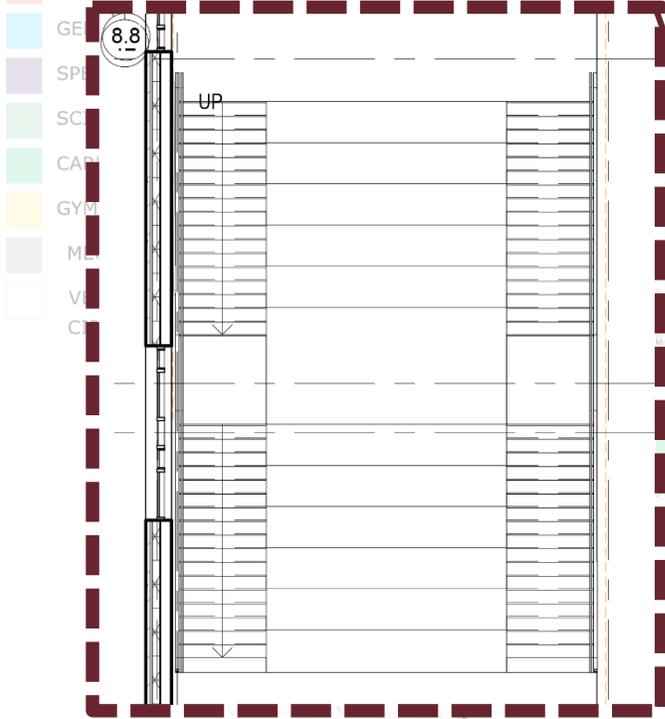


BASEMENT

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

ADMIN/TEACHER AREAS



- IMPROVES CONNECTIVITY BETWEEN FIRST AND SECOND FLOORS
- INCREASES EXIT WIDTH OUT OF GYMNASIUM
- PROVIDES ADDITIONAL SEATING FOR LUNCHEES

COMMUNITY STAIR



MAIN FLOOR



ROOSEVELT HIGH SCHOOL, WASHINGTON DC



TEMPLE BETH AM SCHOOL, PINECREST FLORIDA

LOWELL HIGH SCHOOL

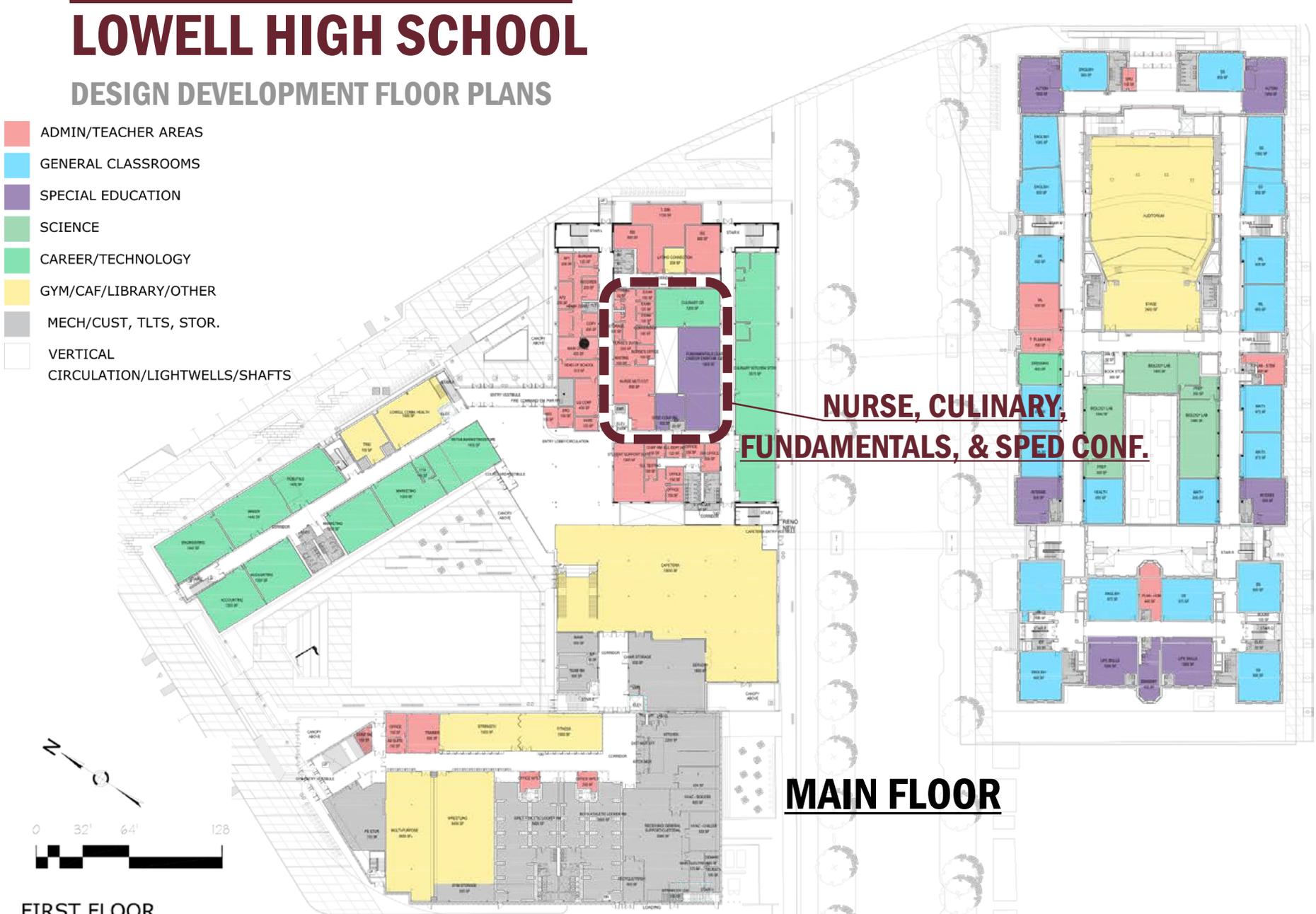
RENDERING OF PROPOSED COMMUNITY STAIR AT HEART OF THE SCHOOL



LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
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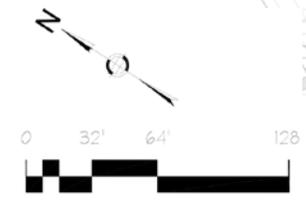


**NURSE, CULINARY,
FUNDAMENTALS, & SPED CONF.**

MAIN FLOOR



BASEMENT

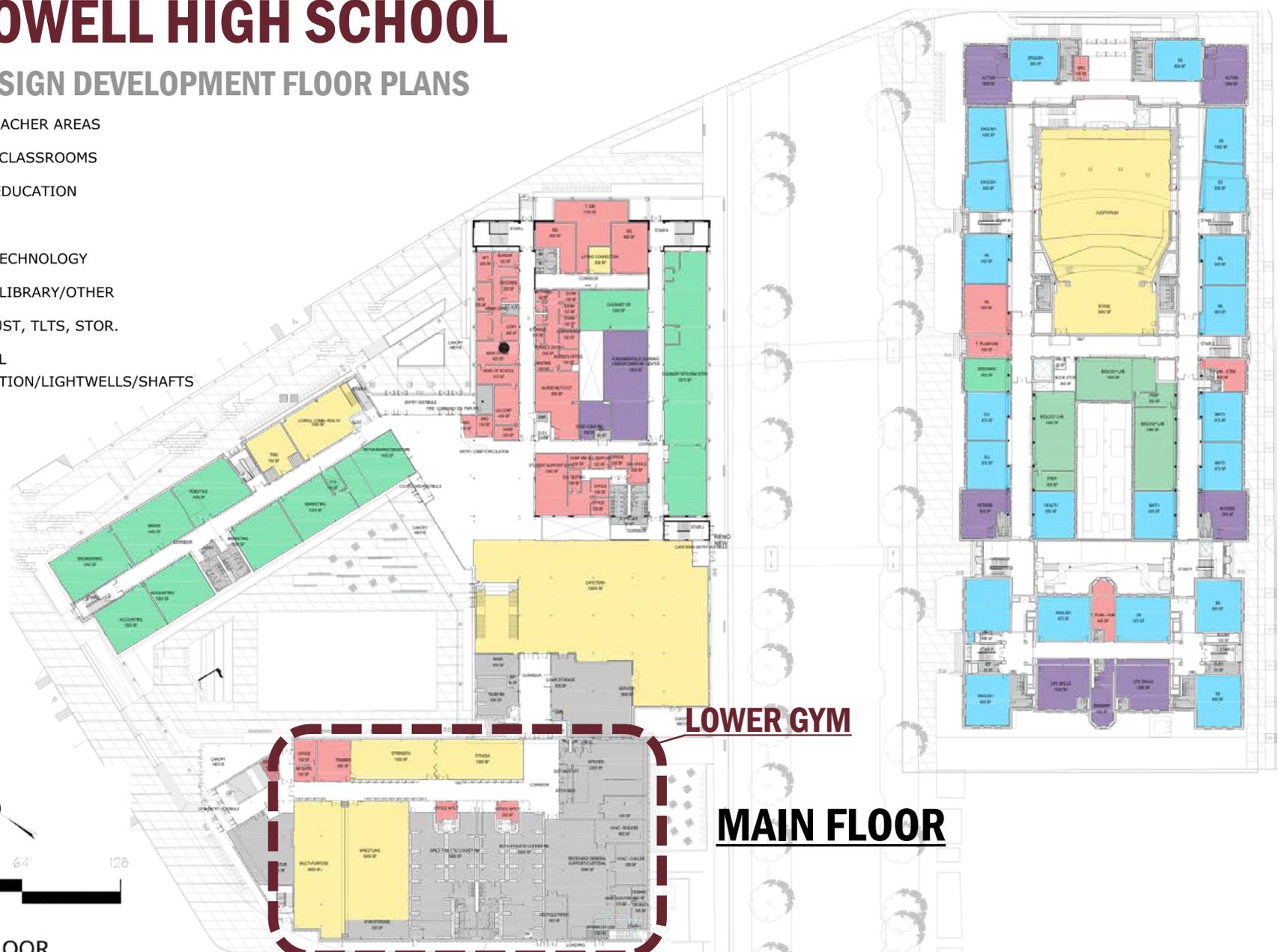


FIRST FLOOR

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS



LOWER GYM

MAIN FLOOR

BASEMENT

FIRST FLOOR

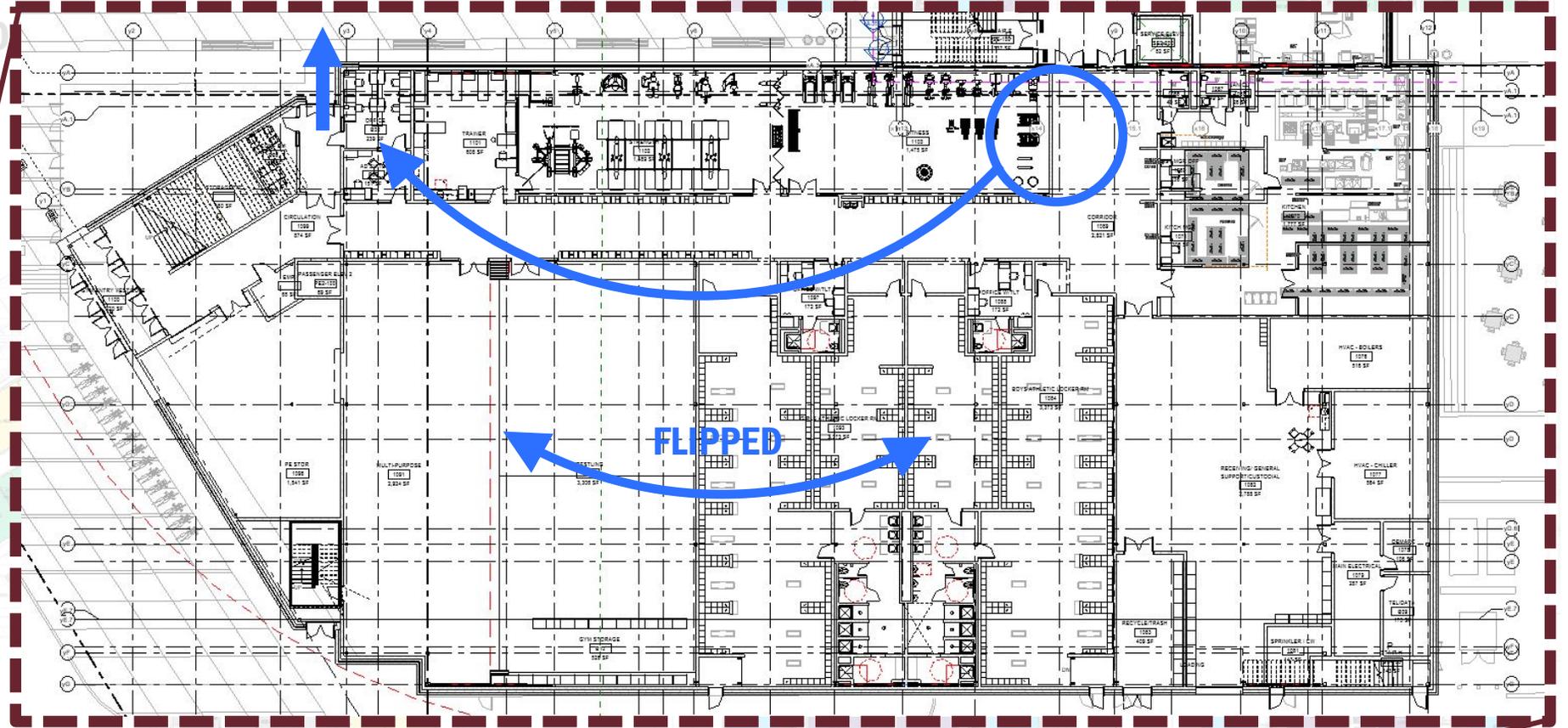
LOWELL HIGH SCHOOL

**DIRECT ACCESS TO
QUAD PROVIDED**

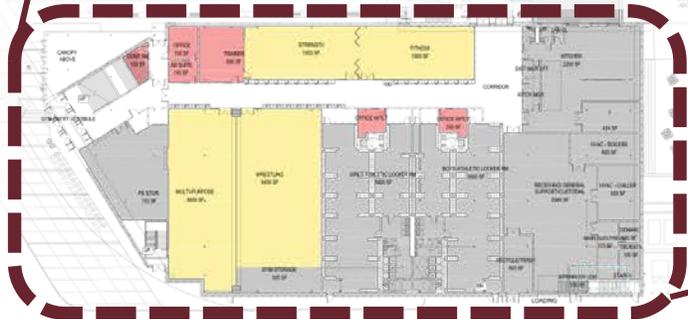
**AD OFFICE
MOVED**

DESIGN DEVELOPMENT FLOOR PLAN

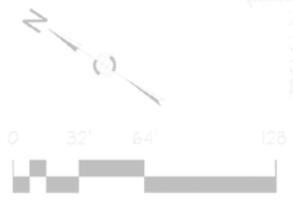
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- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS



LOWER GYM FLOOR PLAN



MAIN FLOOR



LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS

**LOWELL COMM.
HEALTH & TRIO
(MOVED TO SOLVE PHASING)**



FIRST FLOOR

MAIN FLOOR

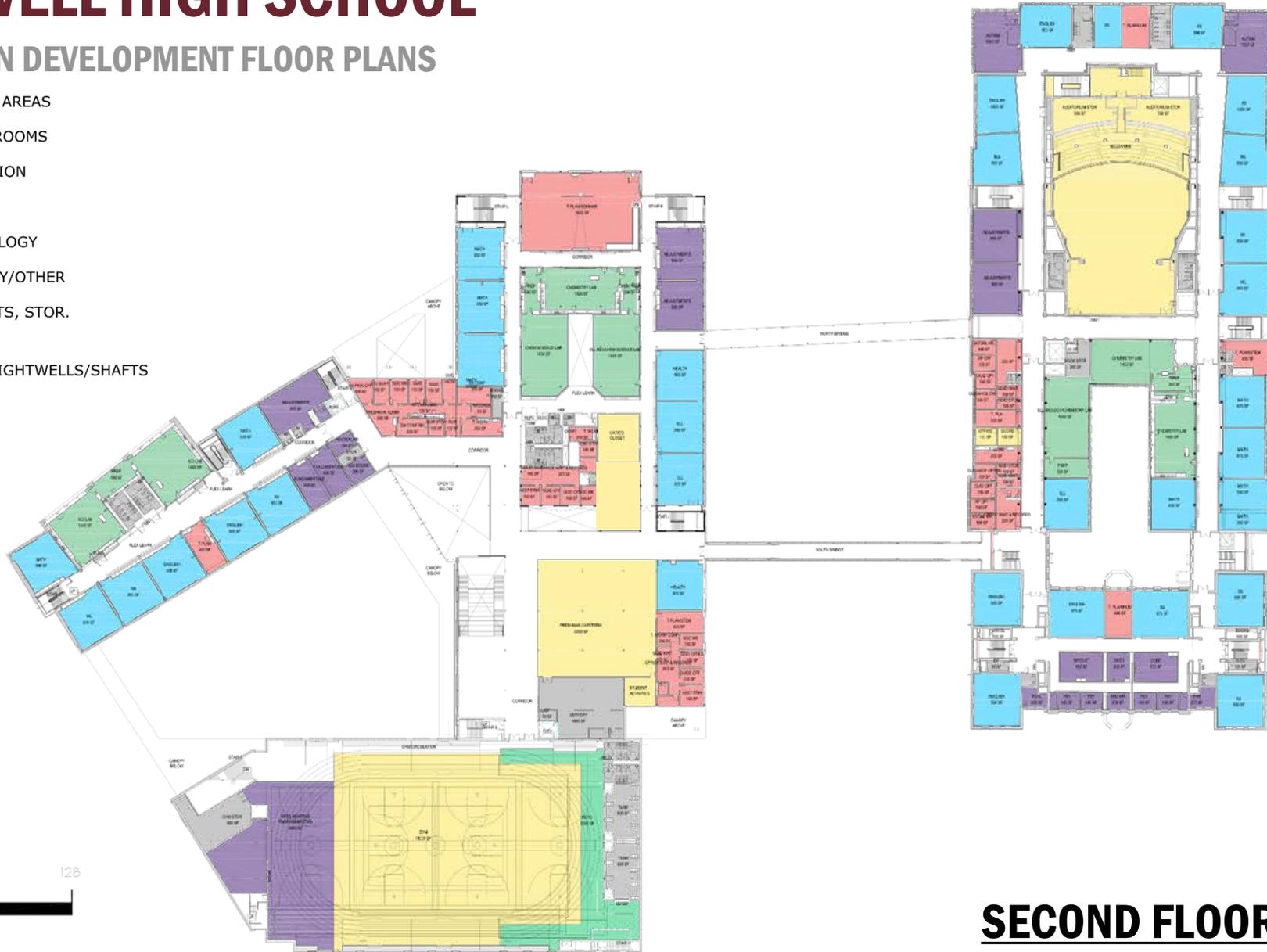


BASEMENT

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
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SECOND FLOOR

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

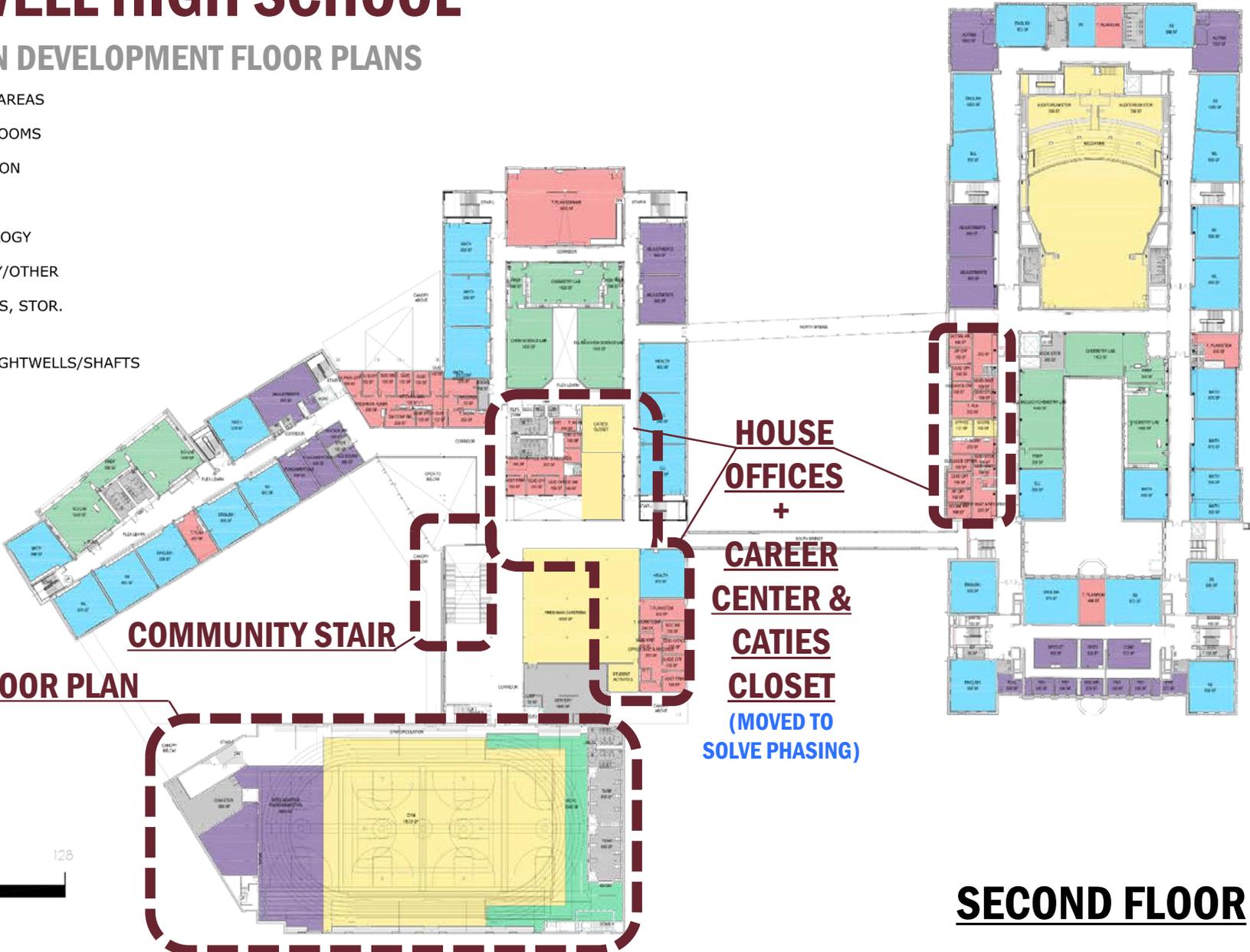
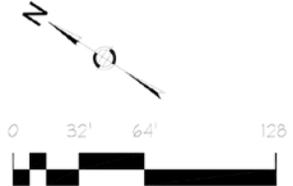
- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS

GYM FLOOR PLAN

COMMUNITY STAIR

HOUSE OFFICES + CAREER CENTER & CATIES CLOSET (MOVED TO SOLVE PHASING)

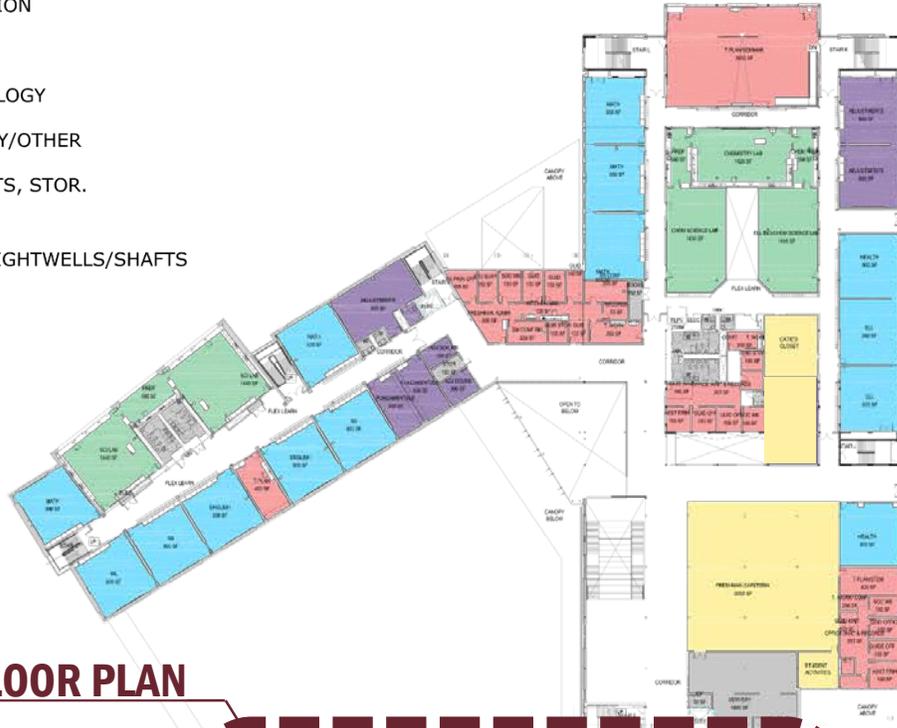
SECOND FLOOR



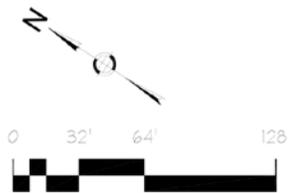
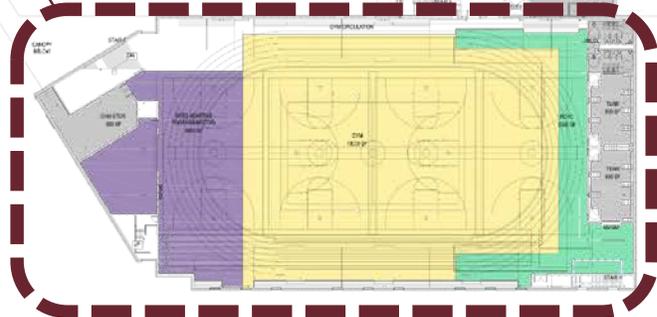
LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
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- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS



GYM FLOOR PLAN



SECOND FLOOR

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLAN

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL SERVICES
- SCIENCE
- CAREER/TECHNOLOGY
- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TENTS, STOR.
- VESTIBULE
- CIRCULATION/LIGHTWELLS/SHAFTS

MAXIMIZE GYM CAPACITY

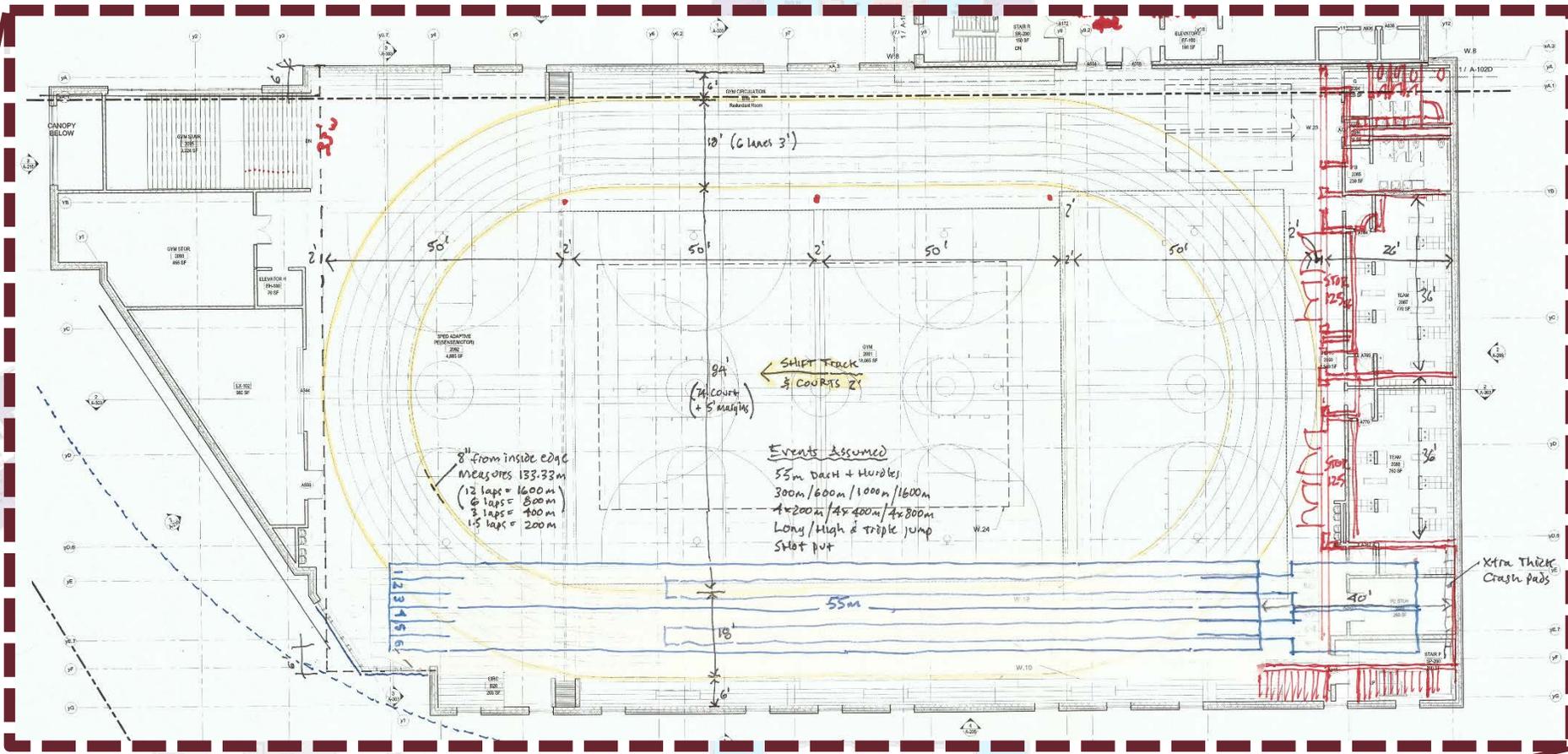
PROVIDE ADDITIONAL

EGRESS WIDTH

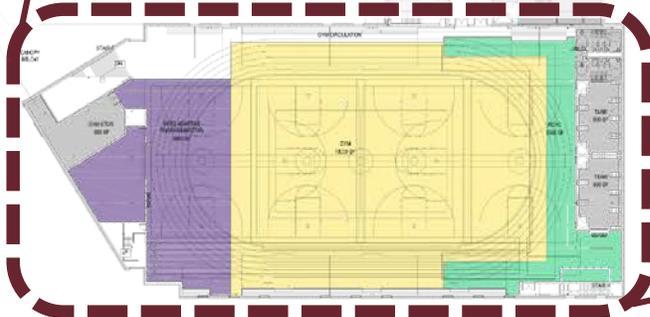
PROVIDE 55m RUNOFF

STUDY BLEACHER

CAPACITY



GYM FLOOR PLAN

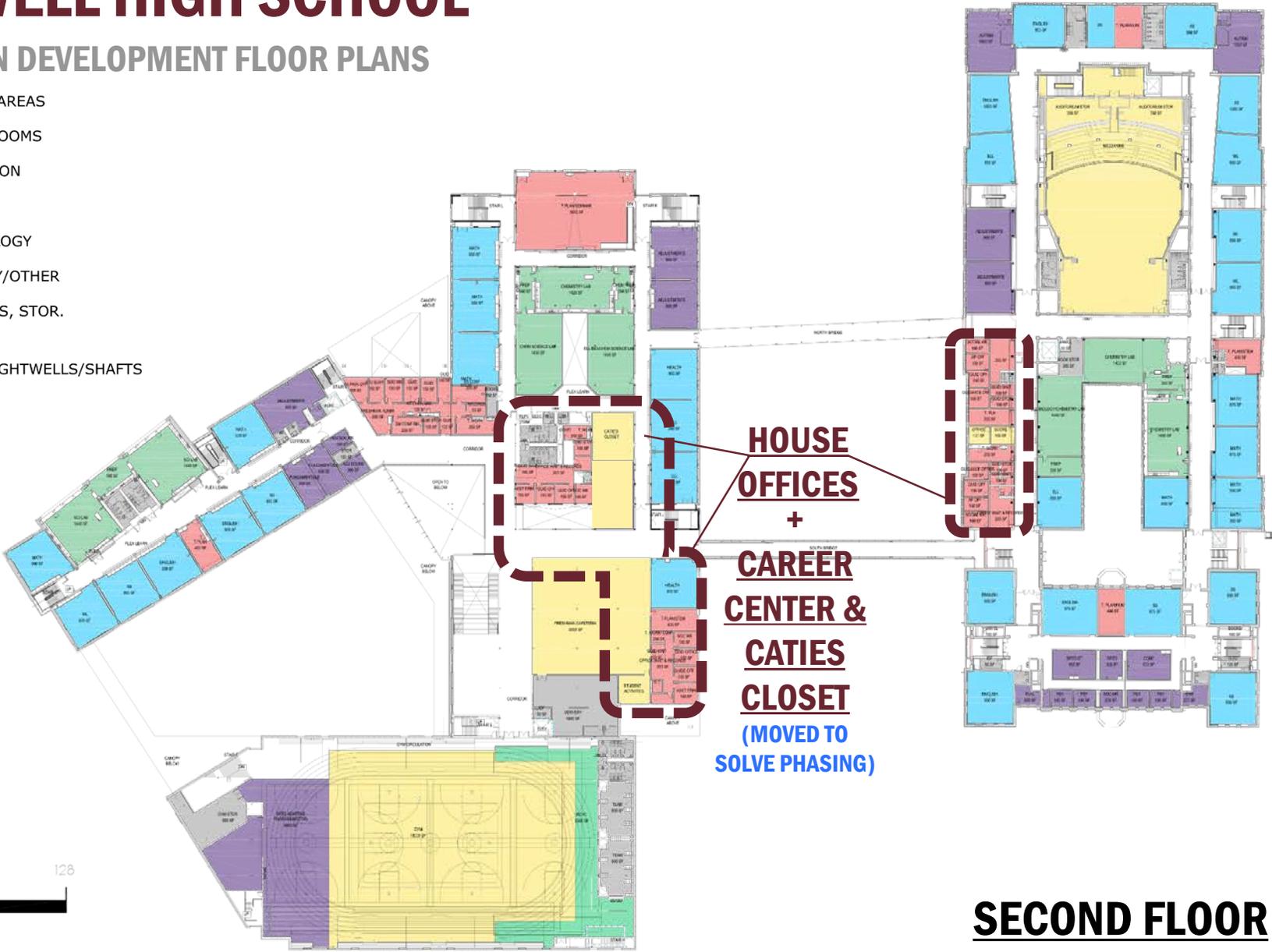


SECOND FLOOR

LOWELL HIGH SCHOOL

DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
- GENERAL CLASSROOMS
- SPECIAL EDUCATION
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SECOND FLOOR

LOWELL HIGH SCHOOL

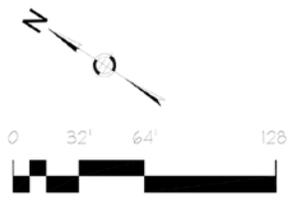
DESIGN DEVELOPMENT FLOOR PLANS

- ADMIN/TEACHER AREAS
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- SPECIAL EDUCATION
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- GYM/CAF/LIBRARY/OTHER
- MECH/CUST, TLTS, STOR.
- VERTICAL CIRCULATION/LIGHTWELLS/SHAFTS

FIFTH FLOOR

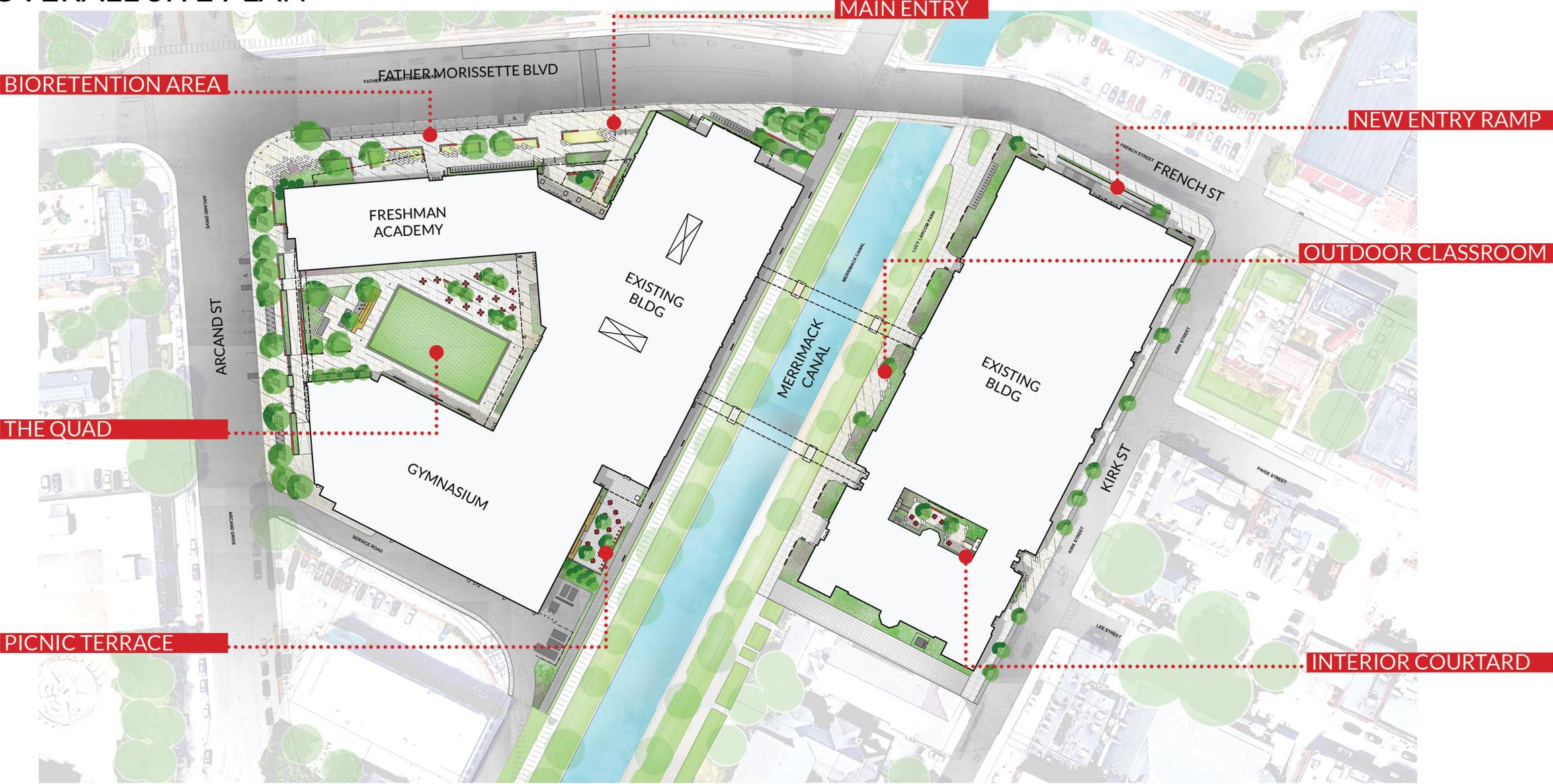
FOURTH FLOOR

THIRD FLOOR



LOWELL HIGH SCHOOL

OVERALL SITE PLAN



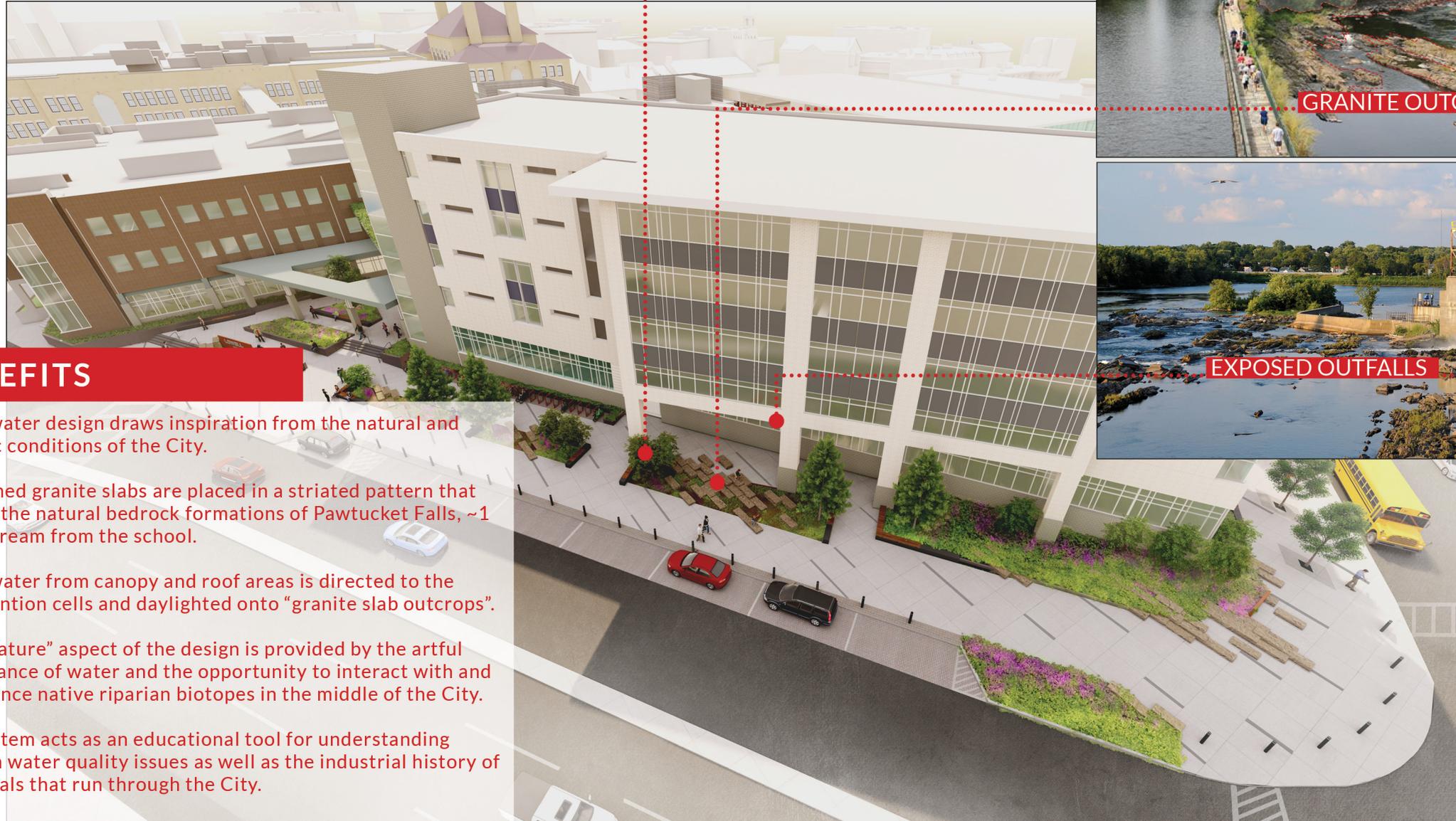
LOWELL HIGH SCHOOL

BIORETENTION DESIGN



LOWELL HIGH SCHOOL

BIORETENTION DESIGN



FORESTED RIVERBANKS

GRANITE OUTCROPS

EXPOSED OUTFALLS

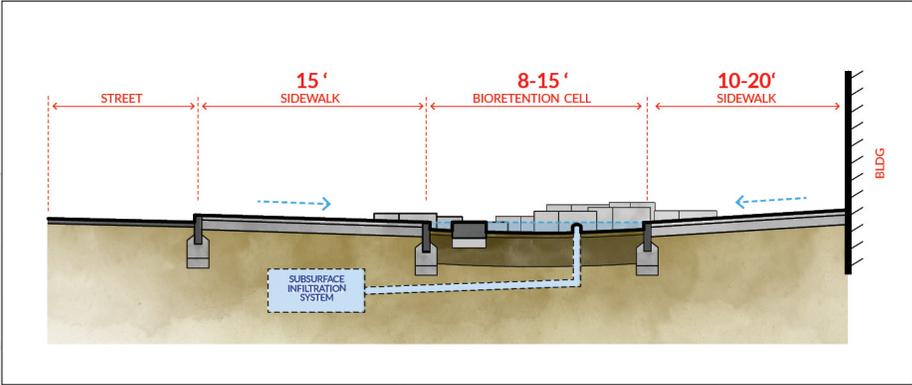
DESIGN INSPIRATION

BENEFITS

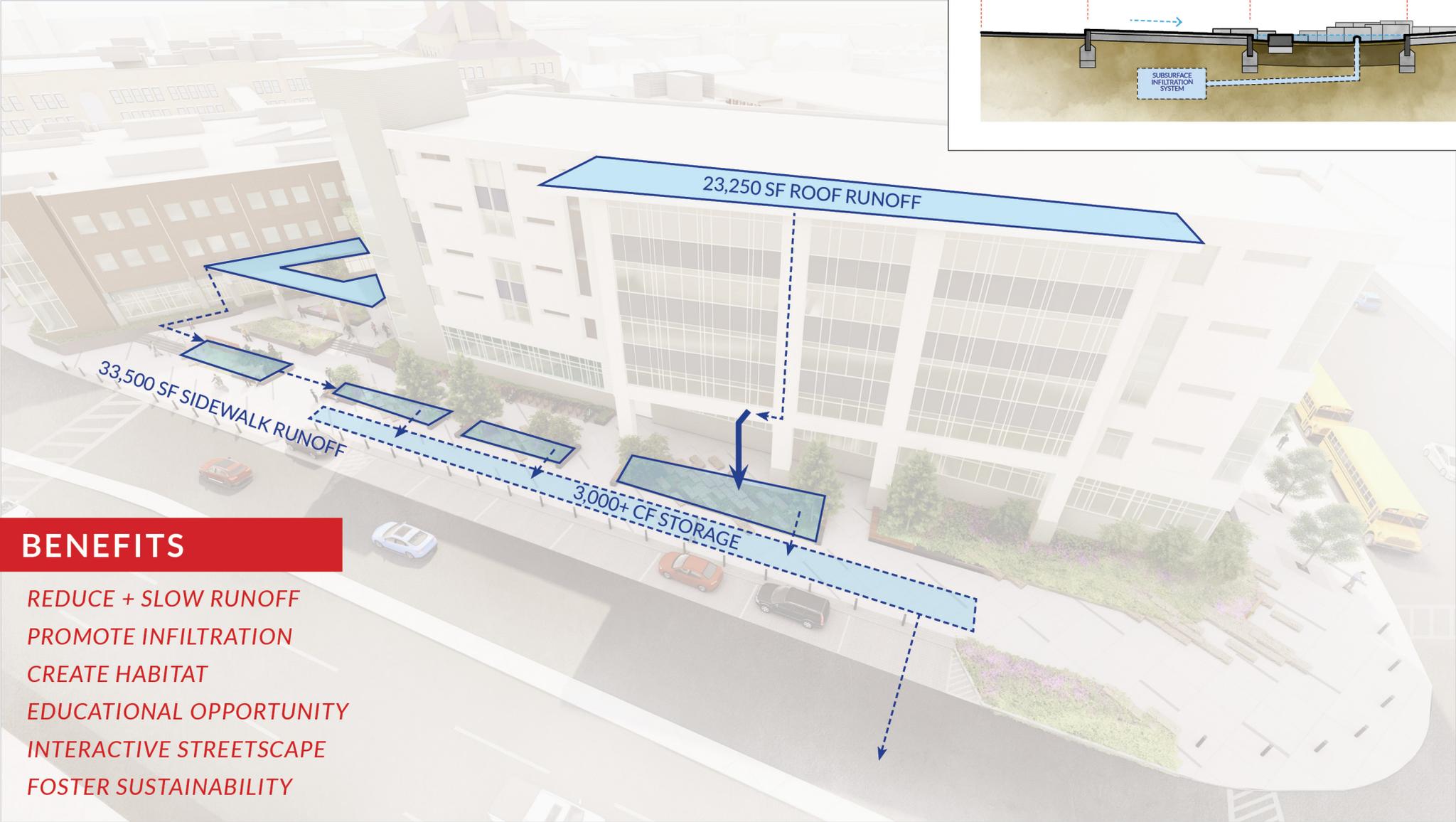
- Stormwater design draws inspiration from the natural and historic conditions of the City.
- Reclaimed granite slabs are placed in a striated pattern that mimics the natural bedrock formations of Pawtucket Falls, ~1 mi upstream from the school.
- Stormwater from canopy and roof areas is directed to the bioretention cells and daylighted onto "granite slab outcrops".
- The "feature" aspect of the design is provided by the artful conveyance of water and the opportunity to interact with and experience native riparian biotopes in the middle of the City.
- The system acts as an educational tool for understanding modern water quality issues as well as the industrial history of the canals that run through the City.

LOWELL HIGH SCHOOL

BIORETENTION FUNCTION



CROSS SECTION



BENEFITS

- REDUCE + SLOW RUNOFF
- PROMOTE INFILTRATION
- CREATE HABITAT
- EDUCATIONAL OPPORTUNITY
- INTERACTIVE STREETScape
- FOSTER SUSTAINABILITY

LOWELL HIGH SCHOOL

RECLAIMED + REPURPOSED GRANITE

~30% RECLAIMED FROM CITY



PHOTOS OF CITY STOCKPILES

LOWELL HIGH SCHOOL

BIORETENTION PLANTINGS



SASKATOON SERVICEBERRY

Amelanchier Alnifolia 'Regent'



TAMARACK

Larix Laricina



DWARF ARCTIC WILLOW

Salix Purpurea 'Nana'



SOFT RUSH

Juncus Effusus



PURPLE DOME NE ASTER

Aster Novea-Angliae



HIDCOTE ST JOHN'S WORT

Hypericum x 'Hidcote'



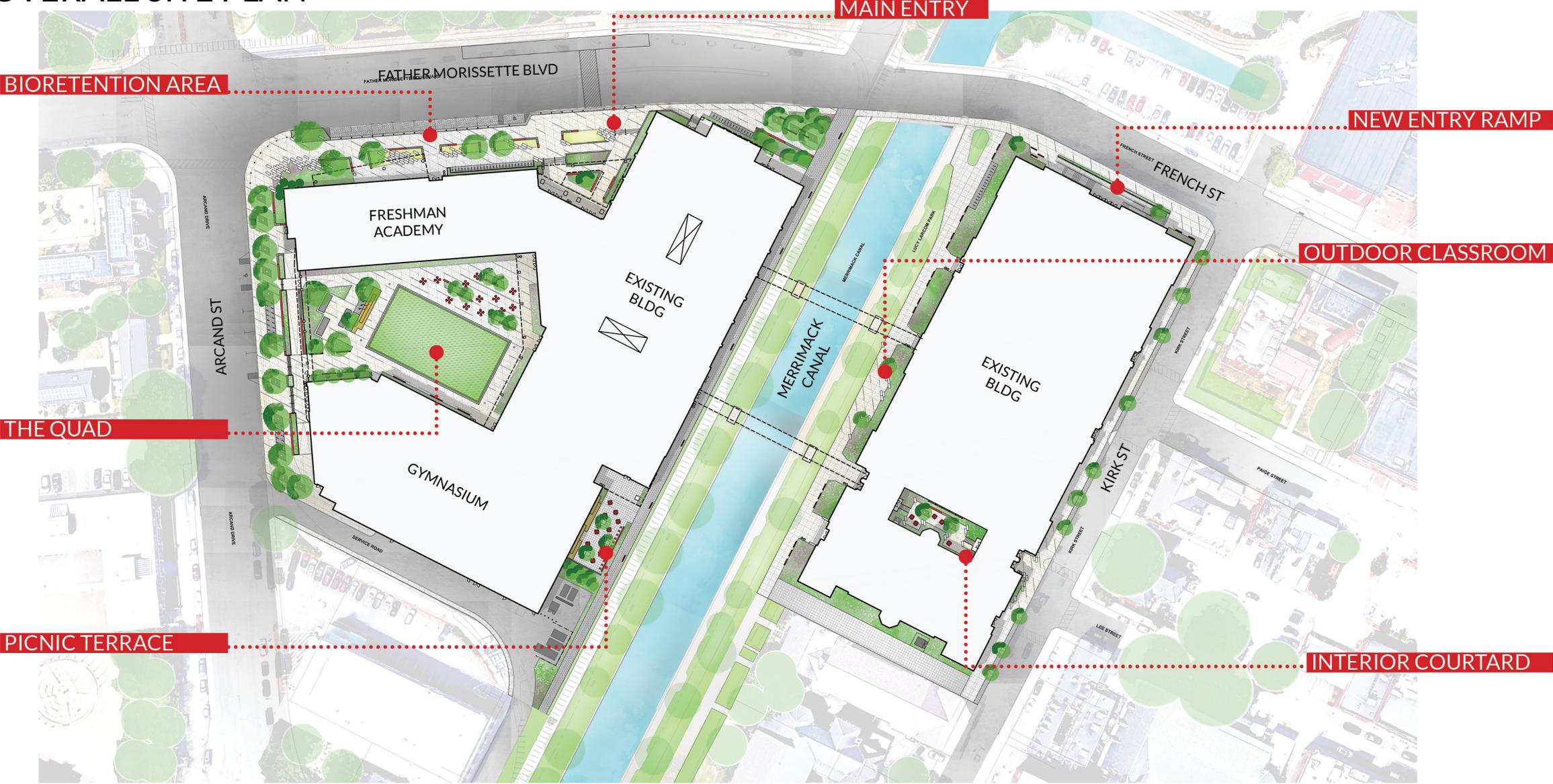
LOWELL
HIGH SCHOOL





LOWELL HIGH SCHOOL

OVERALL SITE PLAN



LOWELL HIGH SCHOOL

THE QUAD





LOWELL HIGH SCHOOL

WHAT WE'RE GETTING EXCITED ABOUT

- HISTORIC OVERLAY
- ENVIRONMENTAL OVERLAY

BIORETENTION + RIPARIAN HABITAT

NATIVE PLANTINGS

HISTORIC SIGNAGE

SILVA CELLS

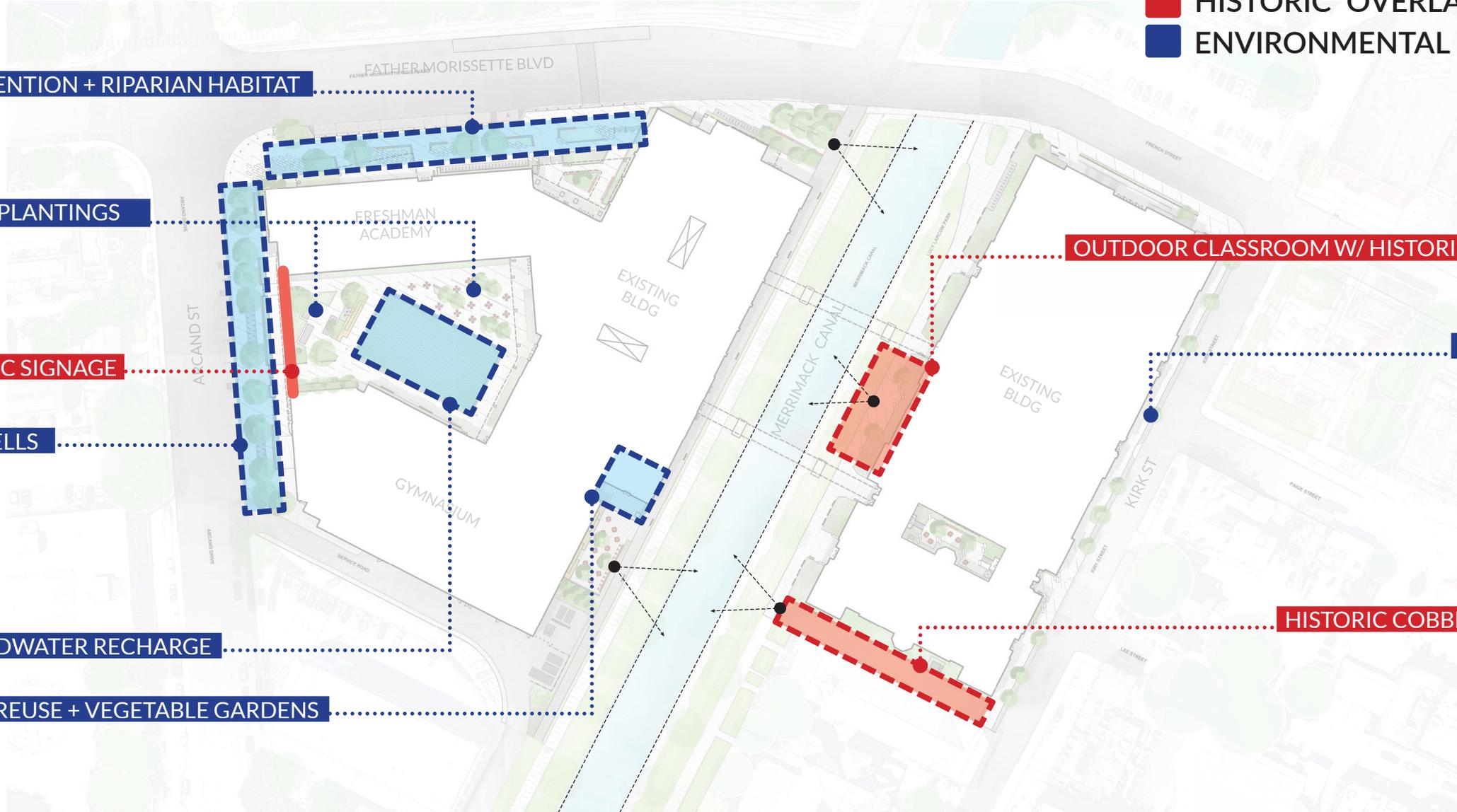
GROUNDWATER RECHARGE

WATER REUSE + VEGETABLE GARDENS

OUTDOOR CLASSROOM W/ HISTORIC INSPIRATION

STREET TREES

HISTORIC COBBLESTONE PATH



LOWELL HIGH SCHOOL

NEXT STEPS/ UPCOMING MEETINGS

- 2/4 PARENT FORUM
- 2/13 OAC MEETING
- 2/24 SBC MEETING: AUTHORIZATION TO SUBMIT DD
- 2/28 MSBA DD SUBMISSION
- TBD CONSERVATION COMMISSION
- 4/13 MSBA DD DESIGN REVIEW





SUFFOLK

SKANSKA

PERKINS —
EASTMAN

SCHOOL BUILDING COMMITTEE | COMMUNITY MEETING

LOWELL HS PROJECT



