DRAFT Meeting Minutes

Special meeting of the

School Building Projects Advisory Council
School Safety Infrastructure Criteria Subcommittee

November 14, 2022 at **11:30 am**
Held via Microsoft Teams

Meeting Video:
https://ctvideo.ct.gov/das/SBPAC_School_Safety_Infrastructure_Criteria_Subcommittee-20221114_113040-Meeting-Recording.mp4

Members present:

First	Last
Noel	Petra
Paul	Hinsch
Don	Poulin
Omarys	Vasquez
Julia	McFadden
Angela	Cahill

Legislators present:
- Rep. Robert Sanchez, Chair, Education Committee

Departmental representatives and staff present:
- Douglas Rogers, Director of the Office of School Construction Grants and Review
- John Woodmansee, CTECS
- Robert Celmer, DAS OSCGR
- John McKay, DAS
- Timothy O'Brien, DAS

1. Called to order by Deputy Commissioner Petra at 11:31 am.
2. Deputy Commissioner Petra gave opening remarks, including introducing Douglas Rogers, the new Director of the Office of School Construction Grants and Review.
3. Deputy Commissioner Petra introduced Julia McFadden, a Senior Associate at TSPK Studios and a member of the SBPAC, and Phil A. Santore, Vice President - Managing Principal, Ross & Baruzzini, for discussion of SSIC features they implemented at Sandy Hook School.
   a. Presentation (McFadden, Santore) (see attached slides) on the design considerations used in the new Sandy Hook Elementary School. Discussion (McFadden, Santore, Petra, Cahill, Rogers, Vasquez) included:
      i. Driveway gates and parking,
      ii. Walking entrances,

    iii. "Forced entry" protection standards more advisable than blast resistance standards,

    iv. SSIC not specifying level of ballistic hardening,

    v. Threat assessment essentially same for every school and not cost effective to have at individual school level,

    vi. Best strategy built around keeping potential perpetrators outside schools or classrooms as long as possible for law enforcement to arrive,

    vii. Need for end user training,

    viii. Design features (example: automatic door closers) being used to implement procedural safety needs,

    ix. Requiring school security committees,

    x. Operable windows.

4. Discussion (Petra) of plan to meet again in two weeks.
5. Adjourned at 12:31 am.

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DVS
Security Consulting & Engineering

School Security:
The Approach at Sandy Hook

Presentation by:
Julia McFadden, AIA, Svigals + Partners
Phil Santore, DVS Security Consultants

Agenda

1. Standards for school security

2. Developing a security program

3. The 3 legs of school security

4. Uncompromising Architecture

5. Sandy Hook School

6. Technology

7. Operations

8. Questions

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Security Standards Development

+ What is being done to generate standards for security?

 - **Prevention, prevention, prevention…**
 - No standards from building code, security industry, or other recognized sanctioning body.
 - There continues to be work done at the federal and state level, but still no true "standards" have been developed or legislated.
 - Wide variance in school setting and demographic make standard development difficult.

 - *Establish security program guidelines:*

   - Threats
   - Vulnerabilities
   - Mitigation
   - Subsequent risks

It's all about time…

Security Program Development

+ How did we arrive at our program?

  - Working group meetings

  - Determine resource base/commitment

  - Identification of threats

  - Understand vulnerabilities resulting from threats

  - Understand the risk profile

  - Develop mitigation strategies using the three legs of school security

  - Reviewed available tools for mitigation

    - Landscape and traffic

    - Architectural features

    - Construction materials

    - Technology

    - Staffing

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Three Legs of School Security

Architecture

School Layout
Traffic
Sightlines
Fencing
Portals

Technology

Surveillance
Access Control
Alarm Point
Monitoring
Communications
Visitor
management

Operations

Staffing
Policies
Procedures
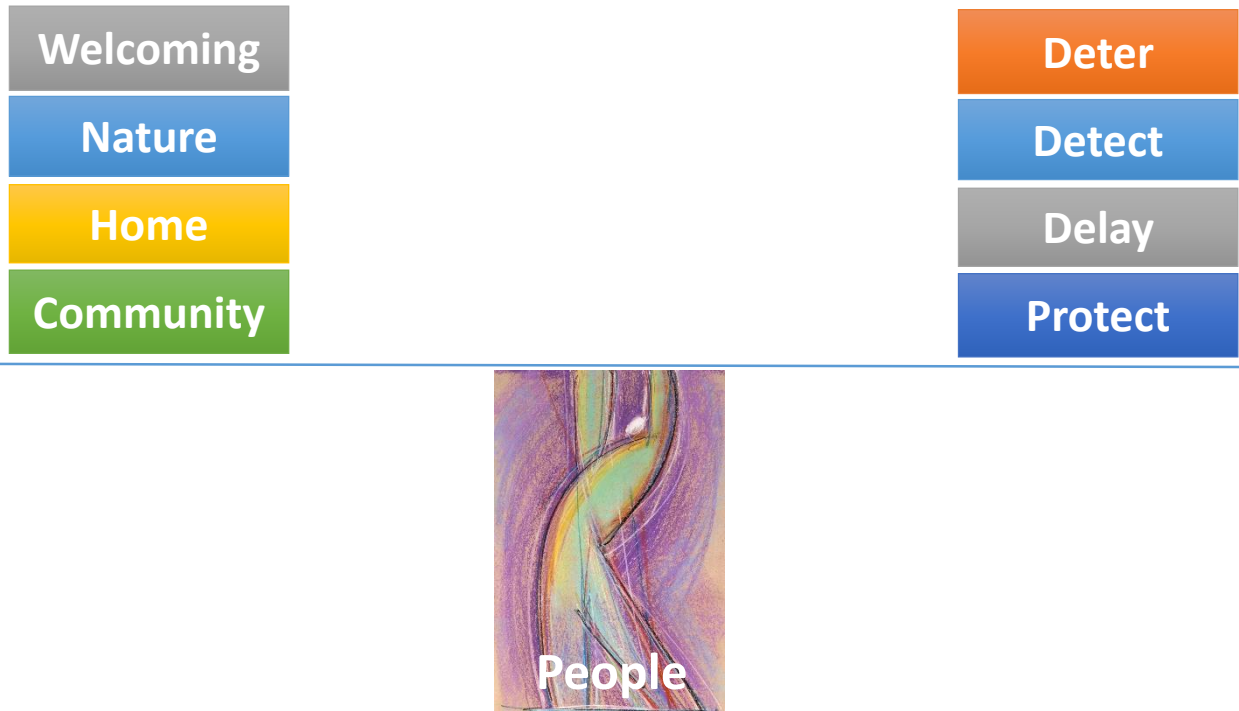Training

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Uncompromising Architecture
Elements of a Nurturing Learning Environment

+ Welcoming Entry

+ Sense of "Home"

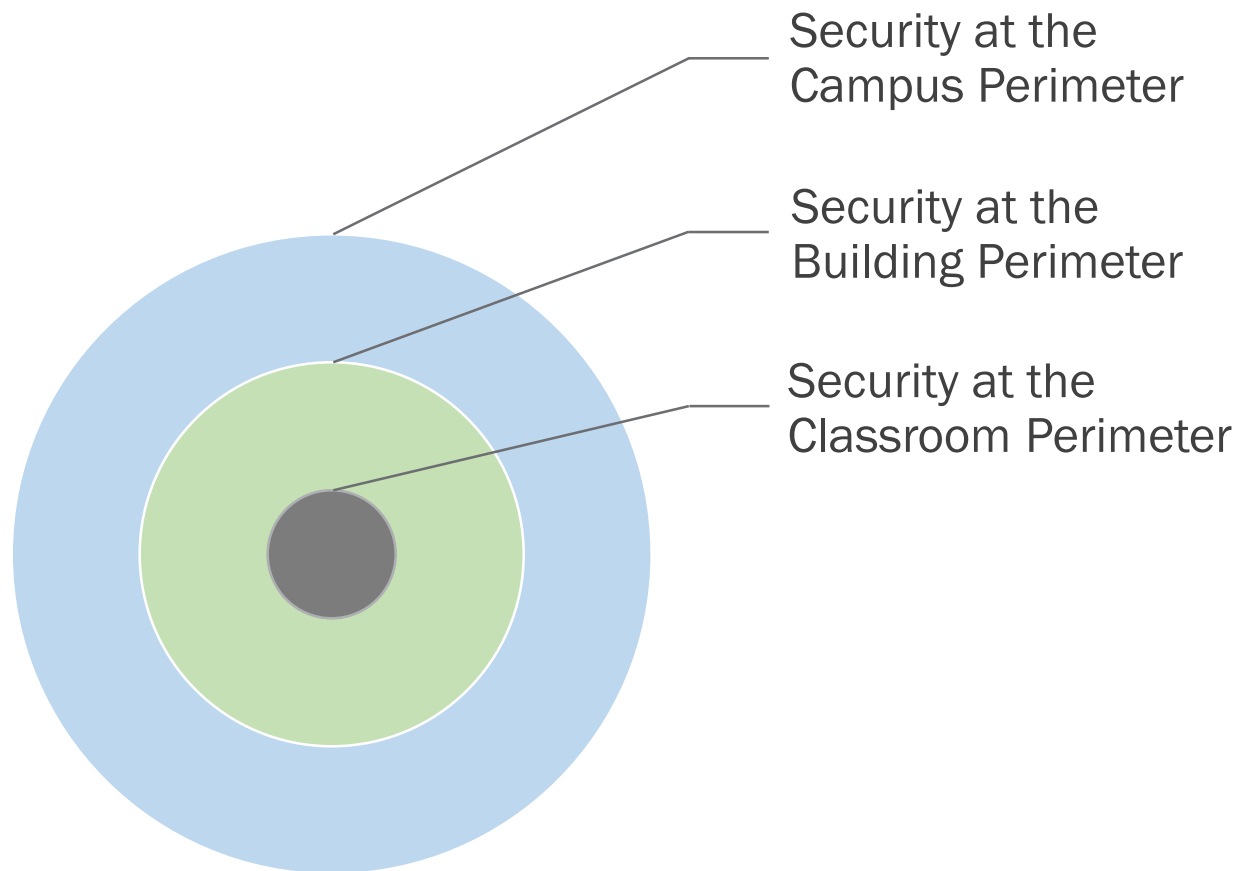+ Coherent Circulation

+ Daylight / Views / Air

+ Nature / Biophilia

Balancing Act
Nurture / Protect

Welcoming		Deter
Nature		Detect
Home		Delay
Community		Protect

People

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Security through Architecture
Using Layers to Deter, Detect and Delay

Security at the
Campus Perimeter

Security at the
Building Perimeter

Security at the
Classroom Perimeter

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Security through Architecture
Site Strategies

+ ## Define Area / Express Ownership

  - Fences

  - Gates / Intercom

  - Natural Features / Modify Landscape

  - Signage / Lighting

  - Barriers

+ ## Parking Management

  - Controlled lots

  - Early warning of approaching vehicles

+ ## Maximize Natural Surveillance

  - View Corridor to/from Building Entry

  - "Eyes on the Street"

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Riverside Road

Riverside Road

SENIOR/ DAYCARE CENTER

FIRE STATION

Dickinson Drive

BUS LANE

99 SPACES
STAFF PARKING

51 SPACES
VISITOR PARKING

BUS LANE

BASEBALL
FIELD

SOCCER FIELD

PARENT DROP-OFF/
PICK-UP

PRE-K/K PARENT
DROP-OFF/ PICK-UP

BUS LOADING

BUS LOADING

BUS LOADING

SERVICE
AREA

SANDY HOOK ELEMENTARY SCHOOL

GRADE 1-4
PLAY AREA

OUTDOOR
LEARNING
AREA

OUTDOOR
LEARNING
AREA

OUTDOOR
LEARNING
AREA

PRE-K/K
PLAY AREA

MAIN ACCESS ROAD

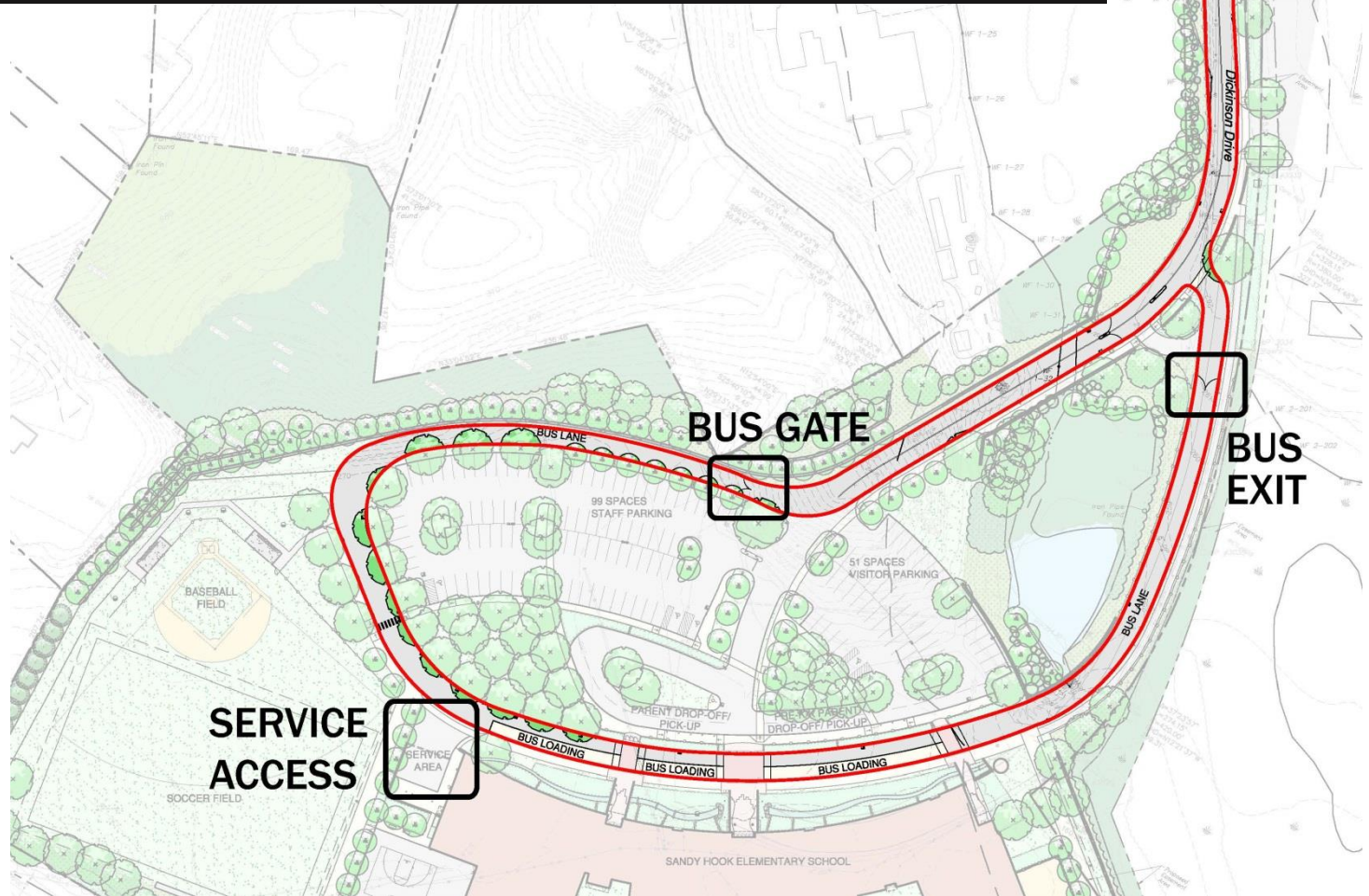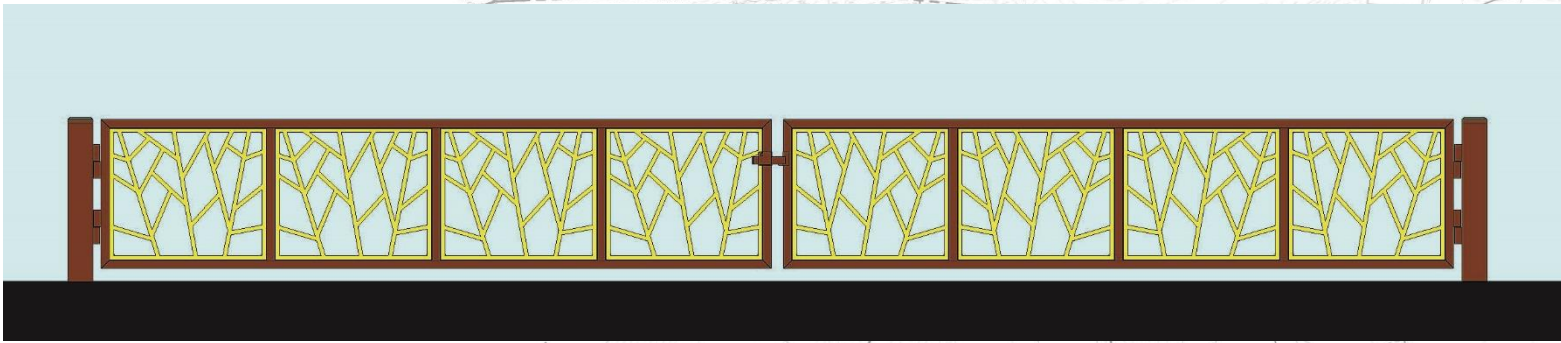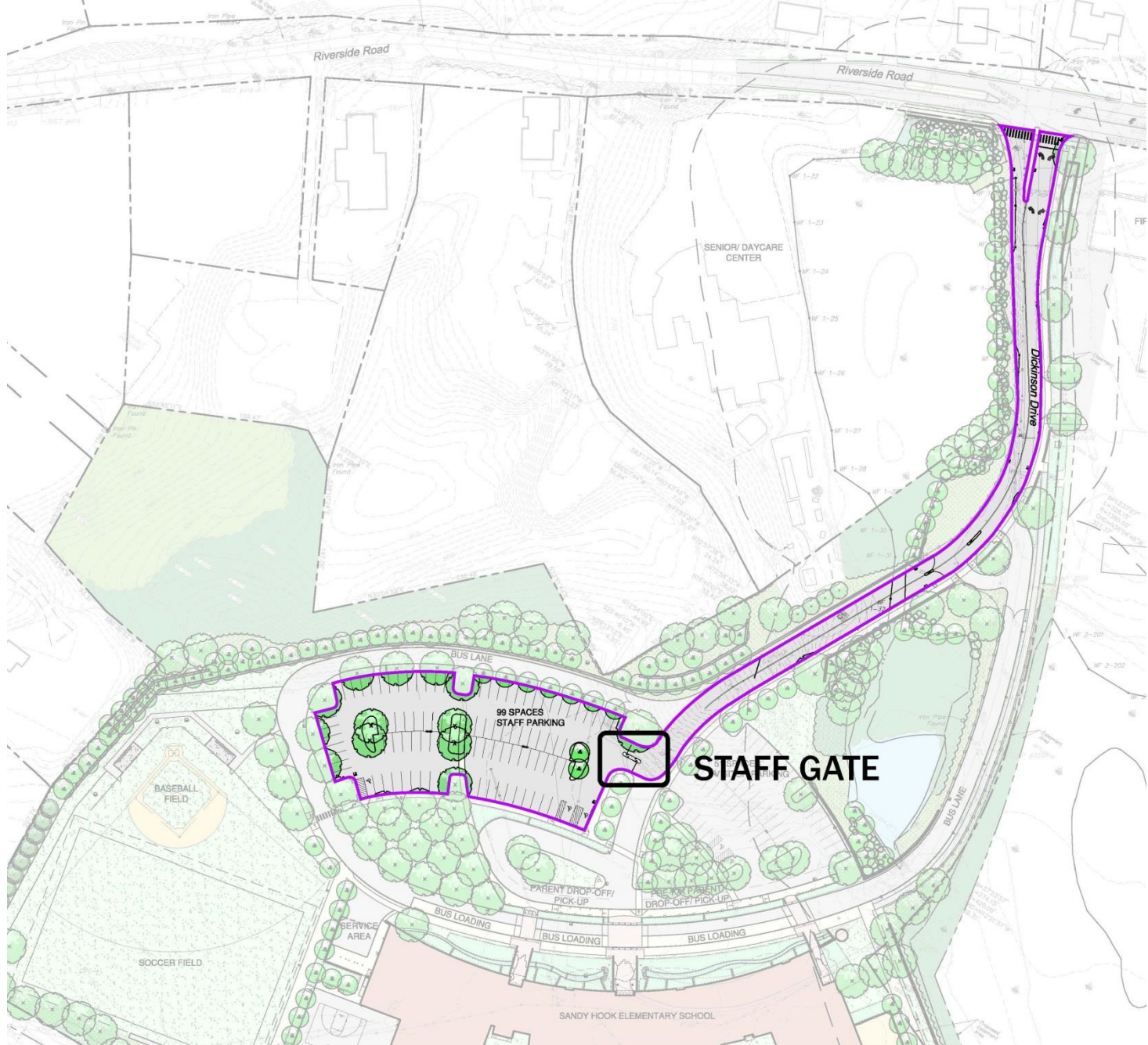FORESTED HILLS

WETLANDS

EMERGENCY ACCESS

FOREST & WETLANDS

SENIOR/DAYCARE CENTER

FIRE STATION

Dickinson Drive

99 SPACES STAFF PARKING

51 SPACES VISITOR PARKING

BUS LANE

Bus Lane

BASEBALL FIELD

SOCCER FIELD

PARENT DROP-OFF/ PICK-UP

PARENT DROP-OFF/PICK-UP

SERVICE AREA

BUS LOADING

BUS LOADING

BUS LOADING

SANDY HOOK ELEMENTARY SCHOOL

GRADE 1-4 PLAY AREA

OUTDOOR LEARNING AREA

OUTDOOR LEARNING AREA

OUTDOOR LEARNING AREA

PRE-K/K PLAY AREA

Riverside Road

WETLAND AREA

RETAINING WALLS

99 SPACES
STAFF PARKING

51 SPACES
VISITOR PARKING

BASEBALL
FIELD

BUS LANE

BUS LANE

PARENT DROP-OFF/
PICK-UP

PRE-K/K PARENT
DROP-OFF/ PICK-UP

SOCCER FIELD

SITE FENCING

SERVICE
AREA

BUS LOADING

BUS LOADING

BUS LOADING

SANDY HOOK ELEMENTARY SCHOOL

GRADE 1-4
PLAY AREA

OUTDOOR
LEARNING
AREA

OUTDOOR
LEARNING
AREA

OUTDOOR
LEARNING
AREA

PRE-K/K
PLAY AREA

FORESTED AREA

SITE FENCING

Dickinson Drive

+ Perimeter Enhancement

MAIN GATE

BUS EXIT

BUS GATE

STAFF

STAFF GATE

VISITORS

SERVICE ACCESS

BOLLARDS

+ Access Controls

+ Bus & Service Circulation

99 SPACES STAFF PARKING

STAFF GATE

Dickinson Drive

Riverside Road

SENIOR/ DAYCARE CENTER

BASEBALL FIELD

SOCCER FIELD

SERVICE AREA

BUS LANE

BUS LOADING

BUS LOADING

BUS LOADING

PARENT DROP-OFF/ PICK-UP

PRE-K/K PARENT DROP-OFF/ PICK-UP

BUS LANE

SANDY HOOK ELEMENTARY SCHOOL

+ Staff Circulation

MAIN GATE
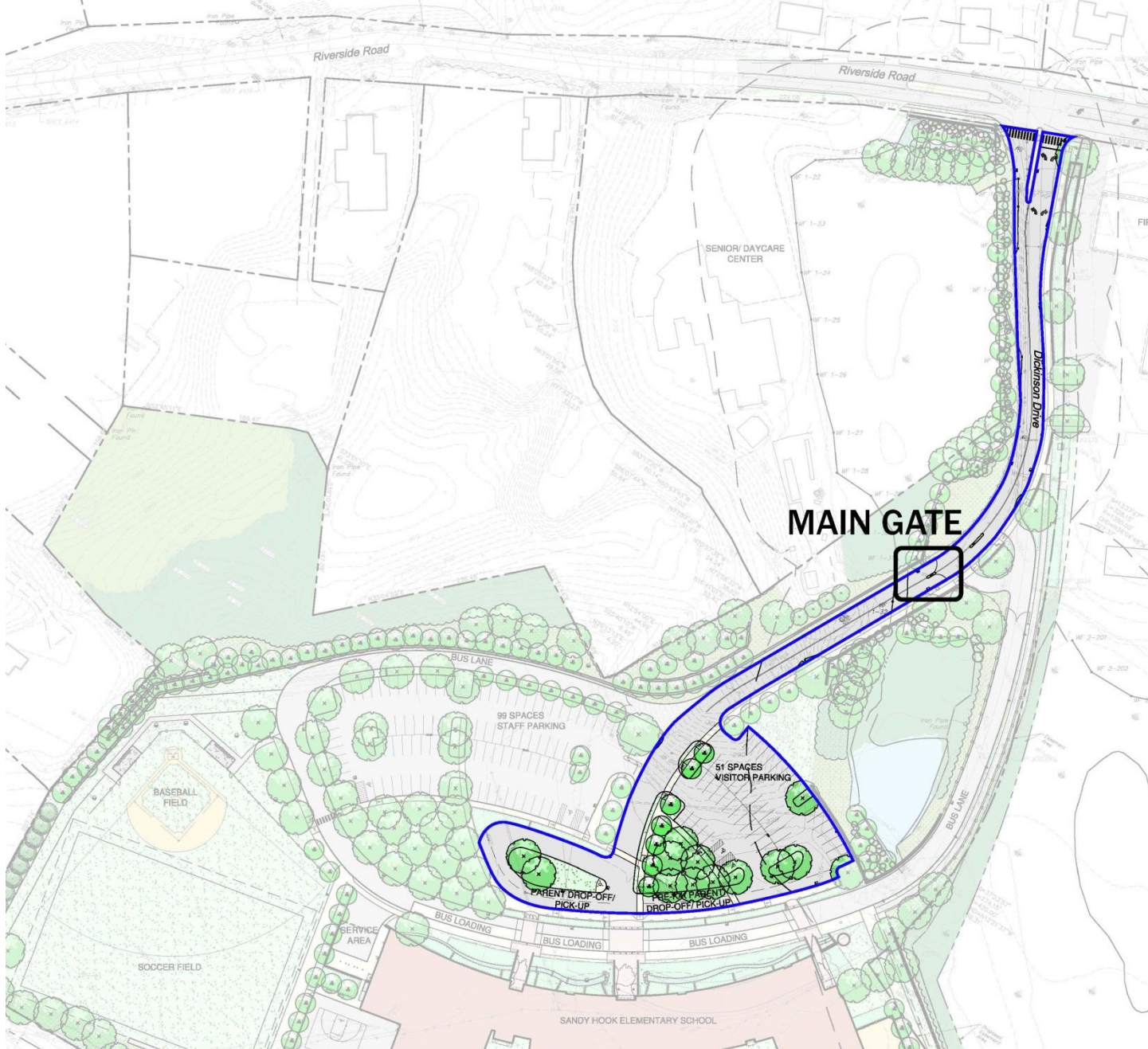
+ Visitor Circulation
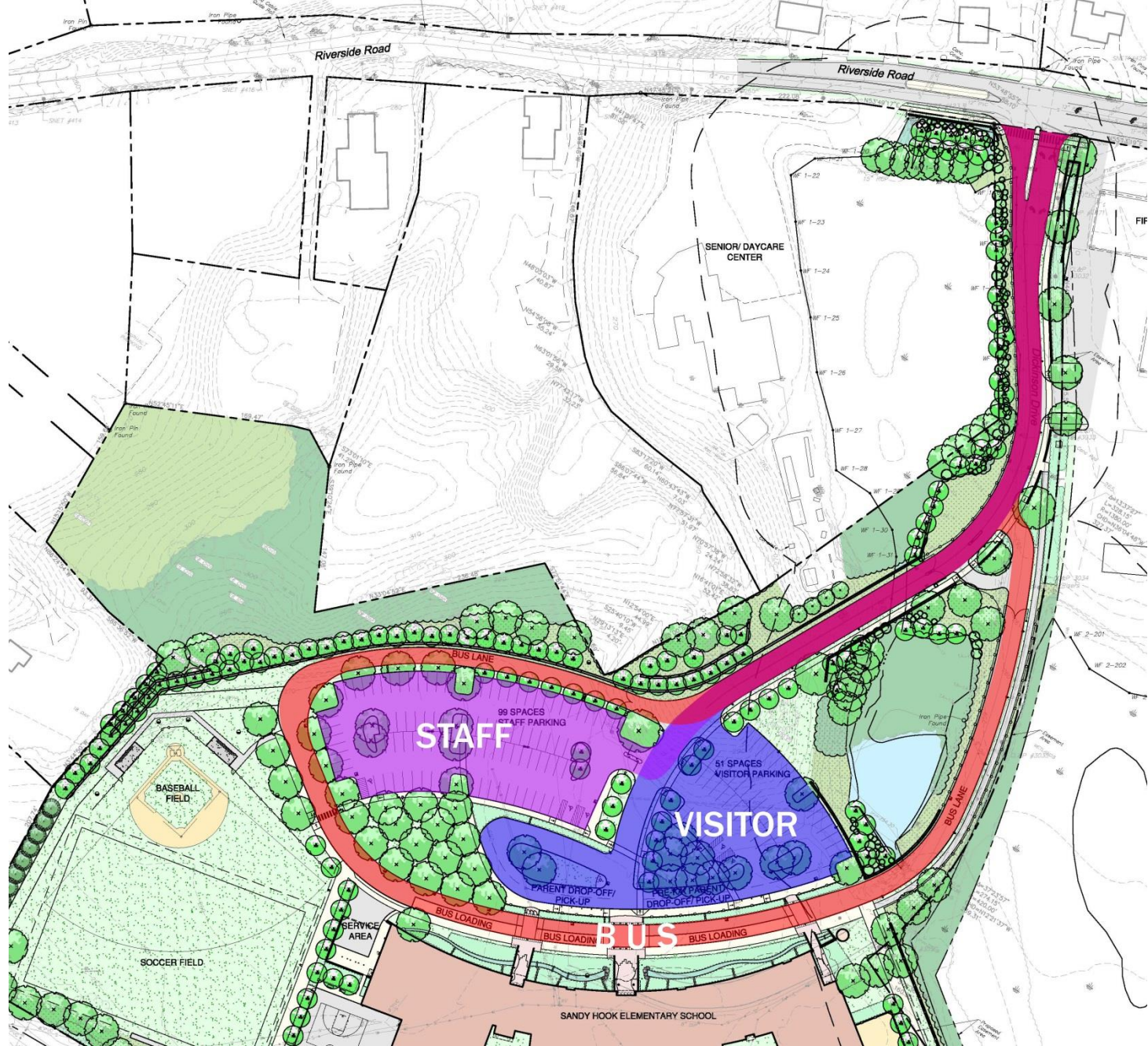
+ Composite Circulation
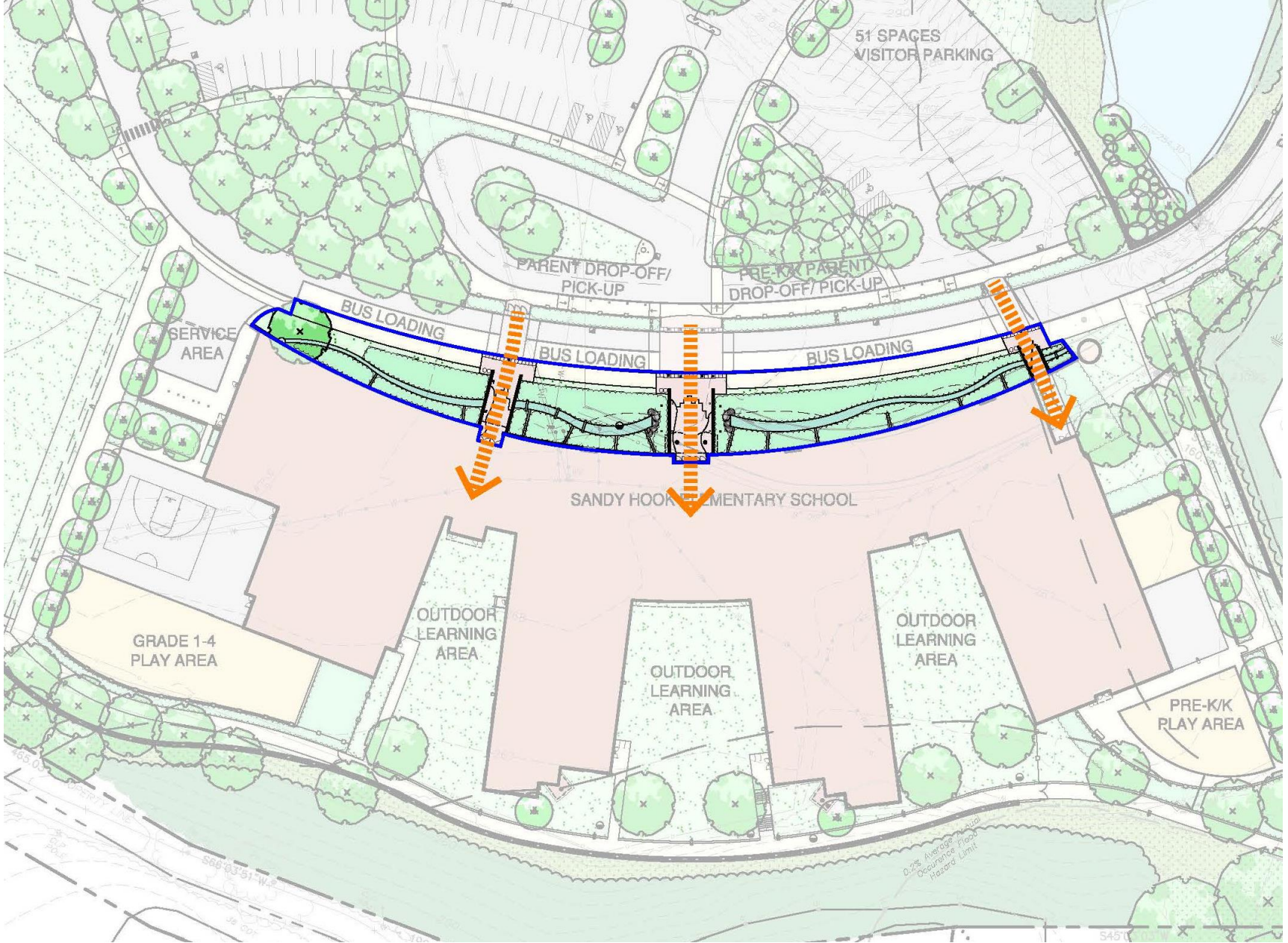
+ Rain Garden

+ Rain Garden

Security through Architecture
Building Strategies

+ Discourage Easy Access

- Plinthing the building
- Landscaping

+ Layer the Building

- Managed entries
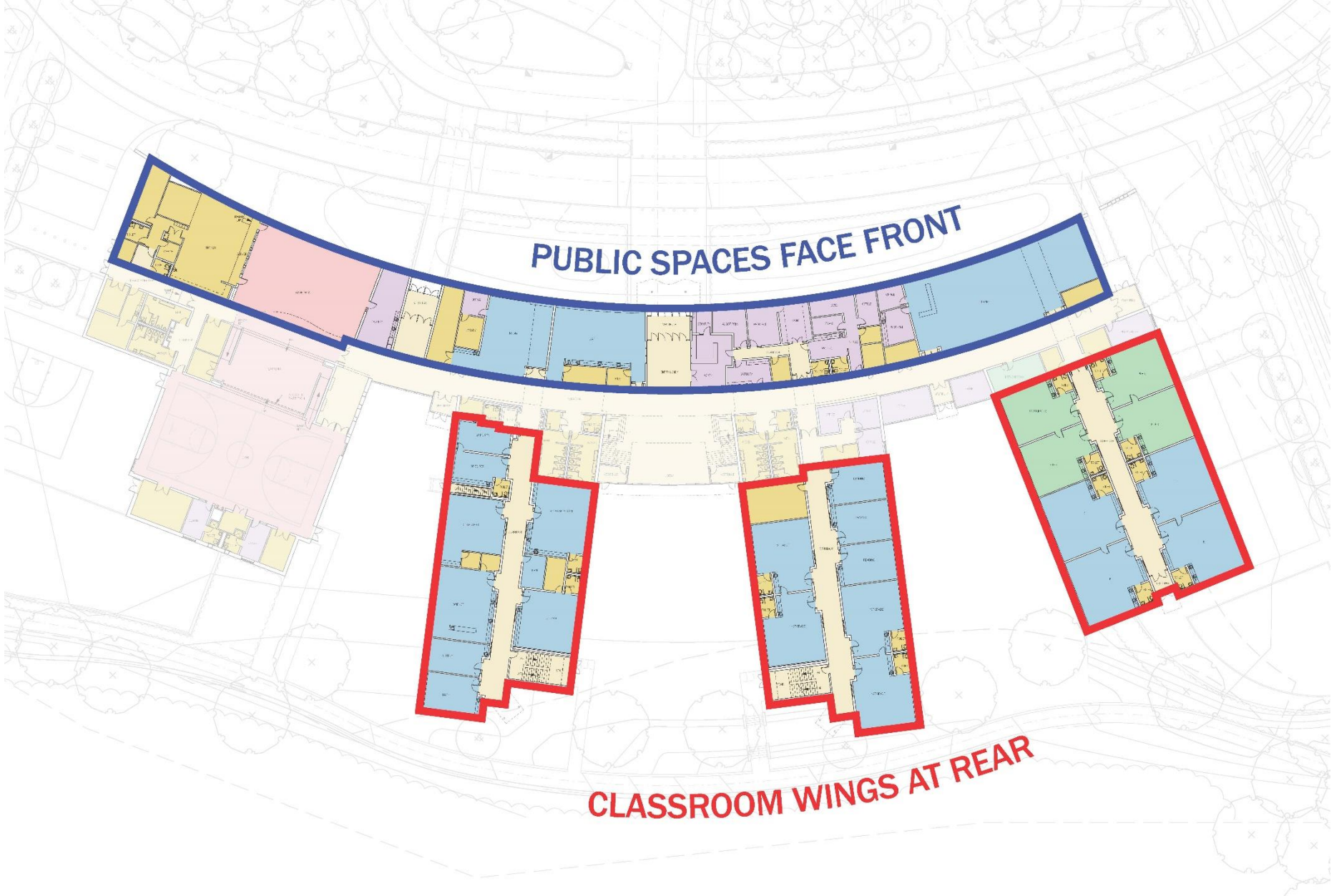- Public spaces
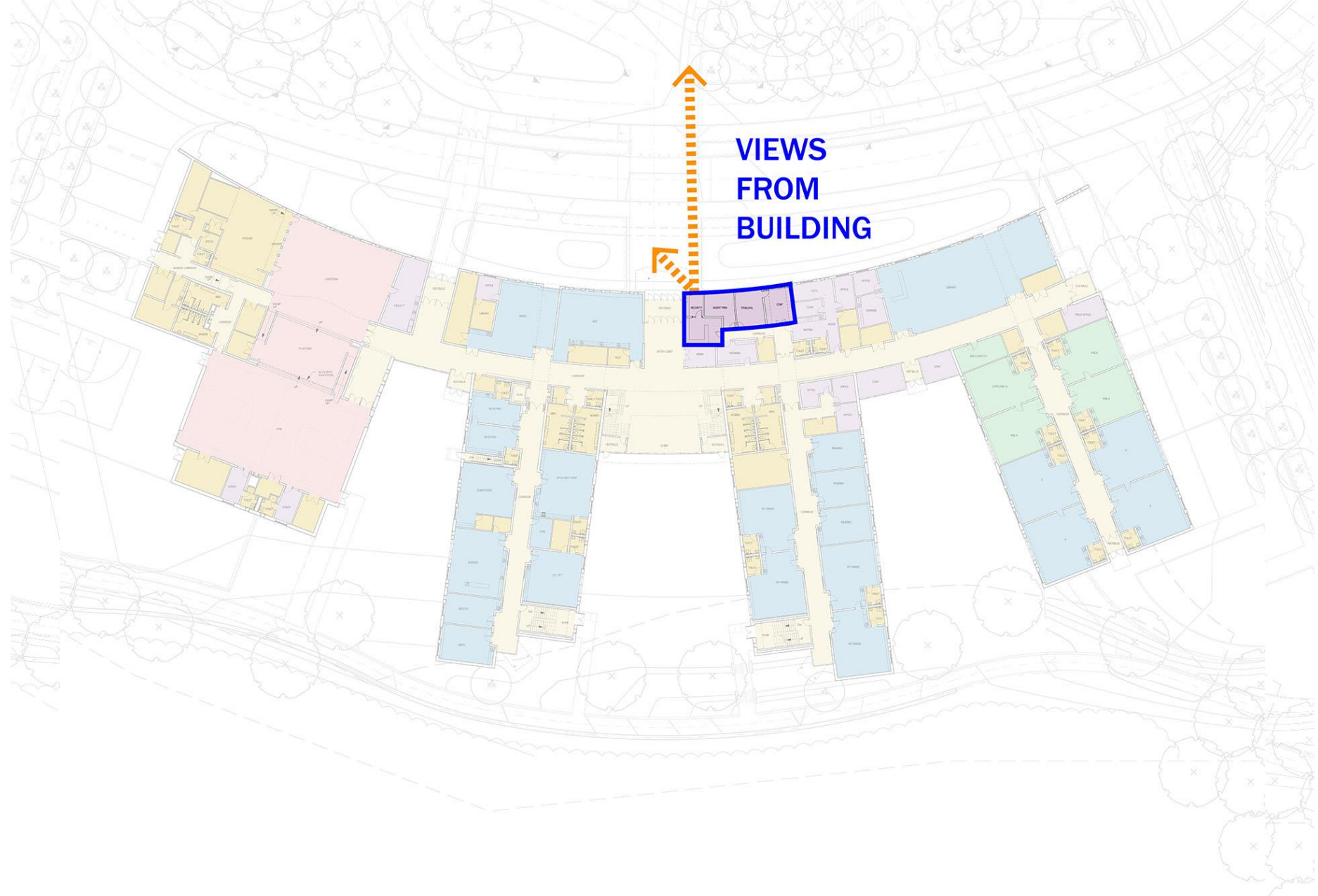- Partitionable wings
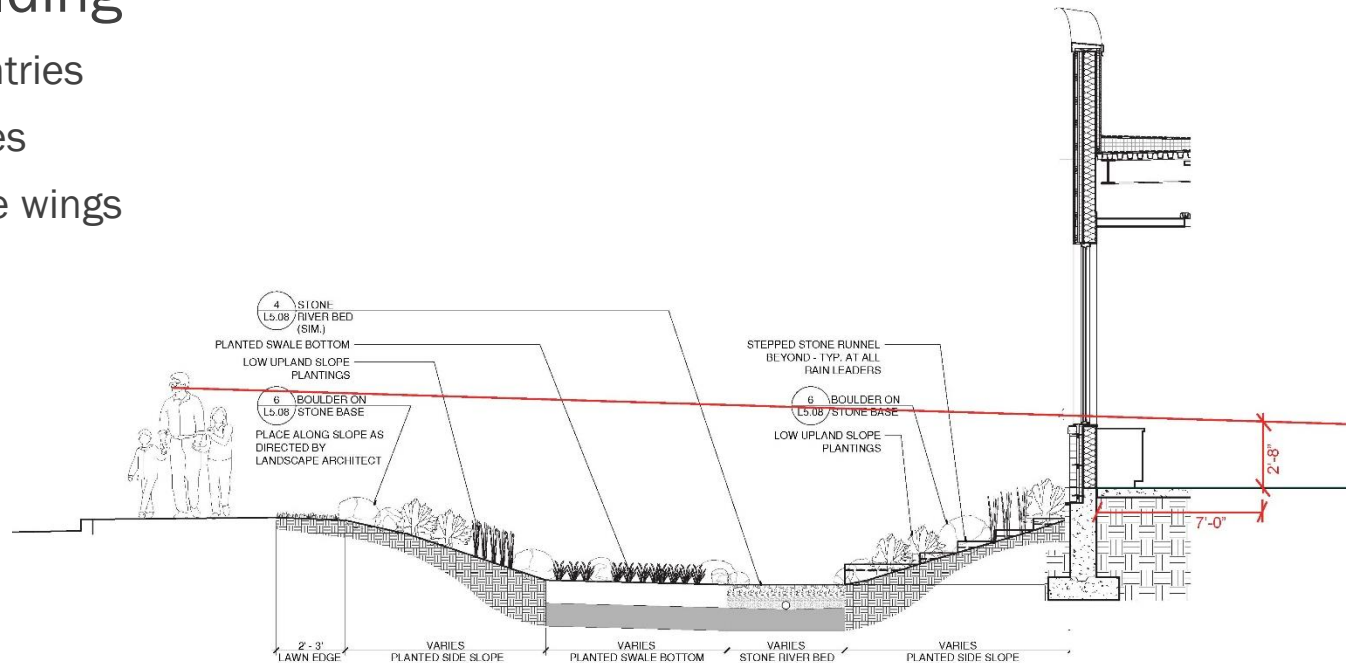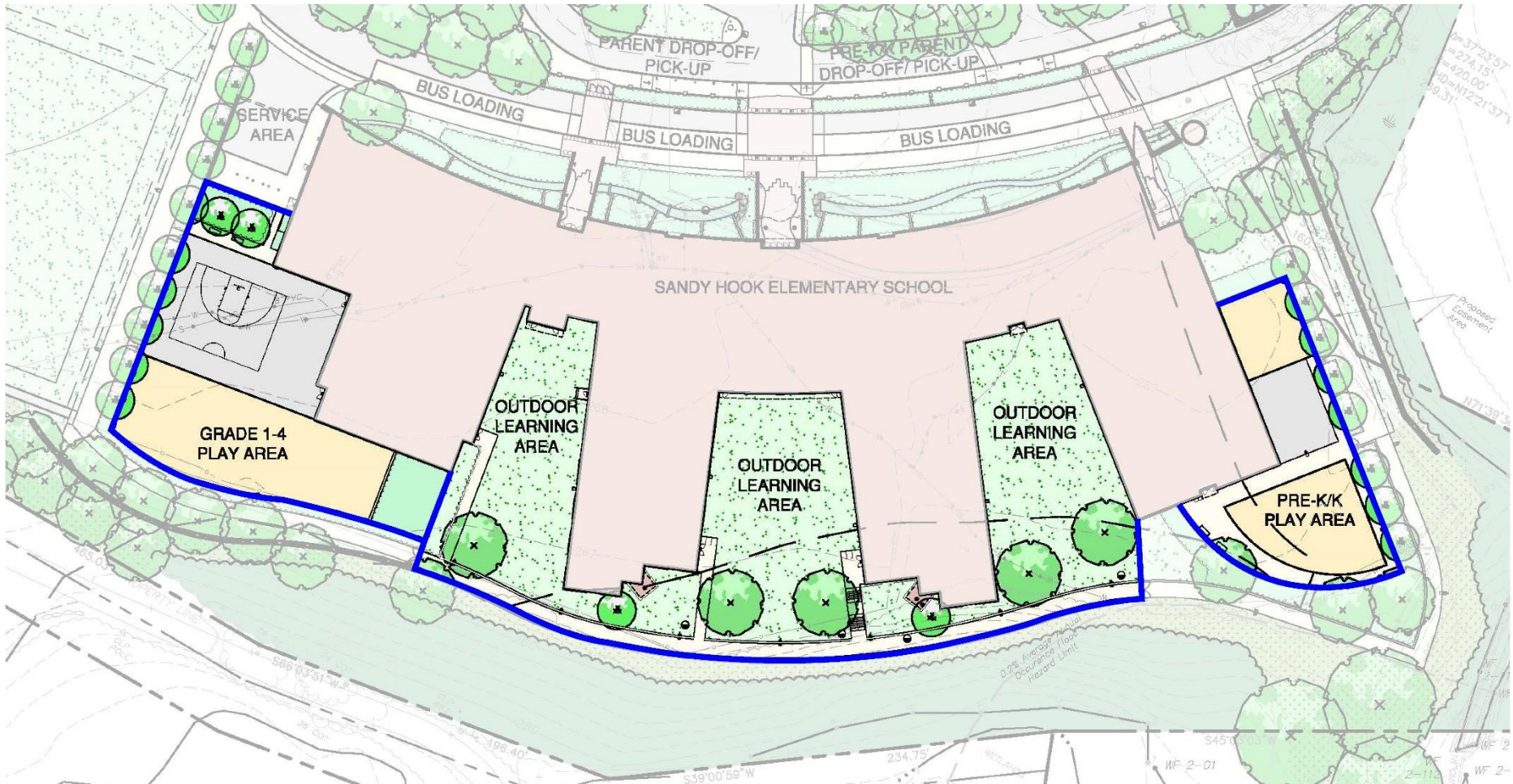
+ Enclosed Courtyards and Playgrounds

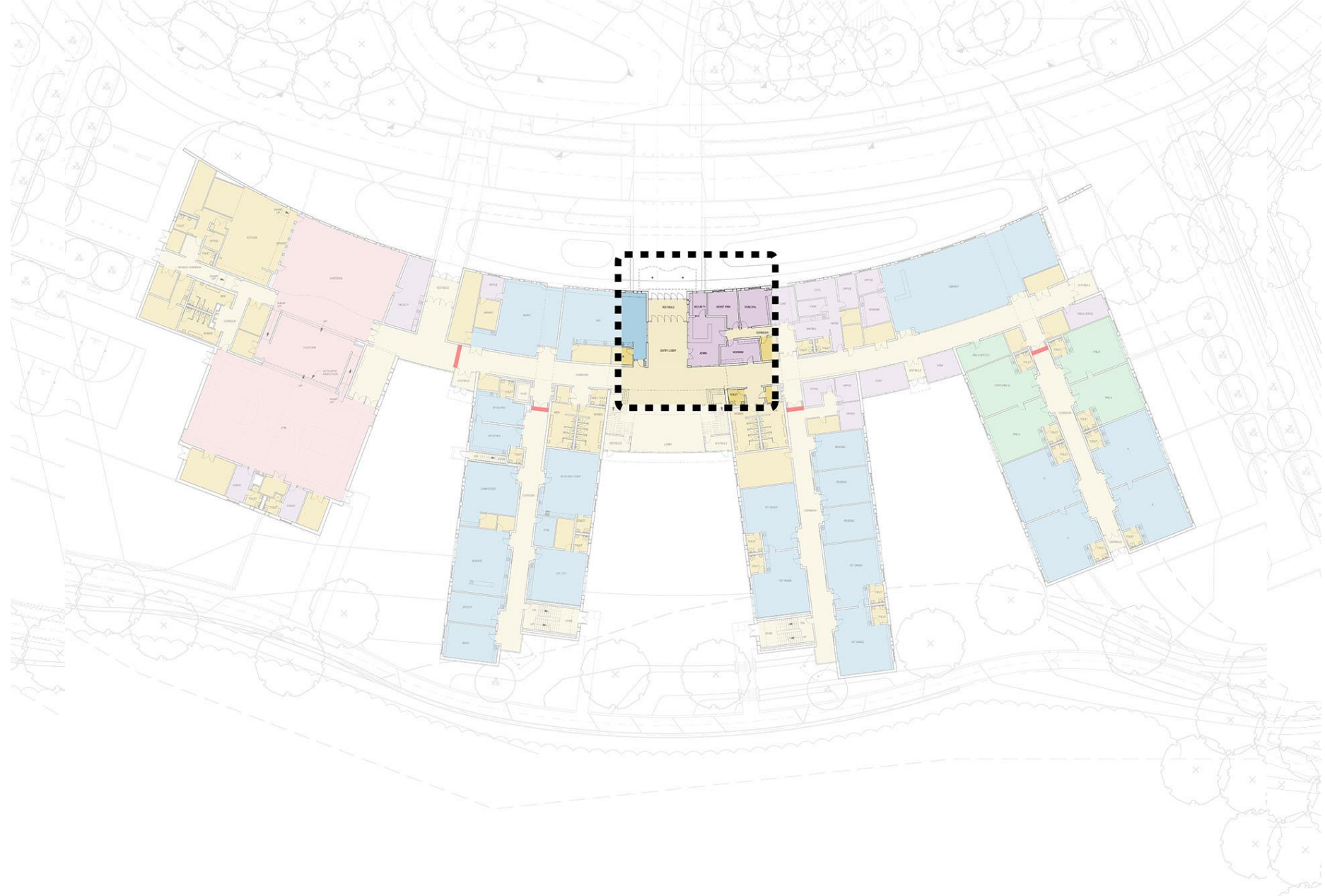**+ Building Organization**

PUBLIC SPACES FACE FRONT

CLASSROOM WINGS AT REAR

+ Building Organization
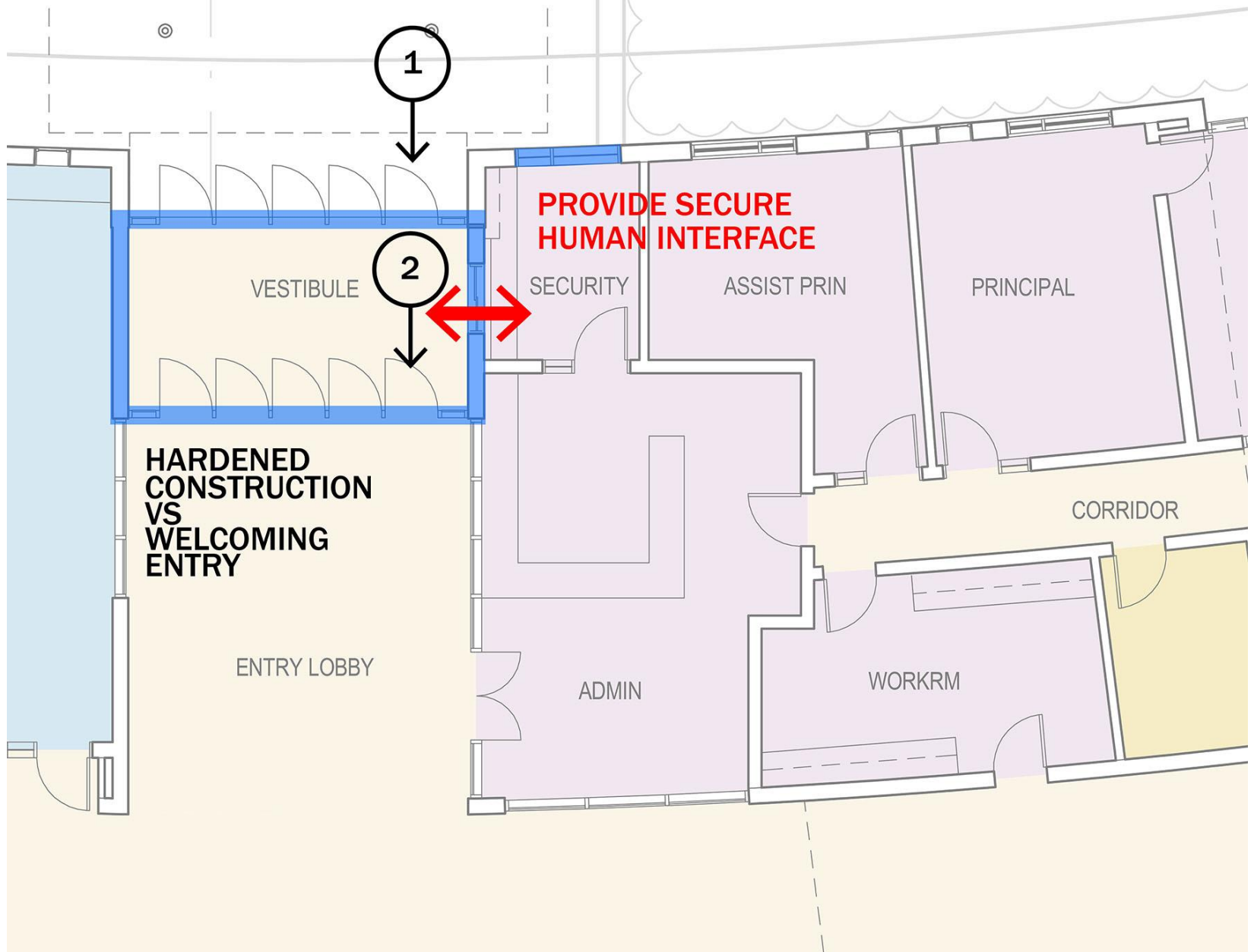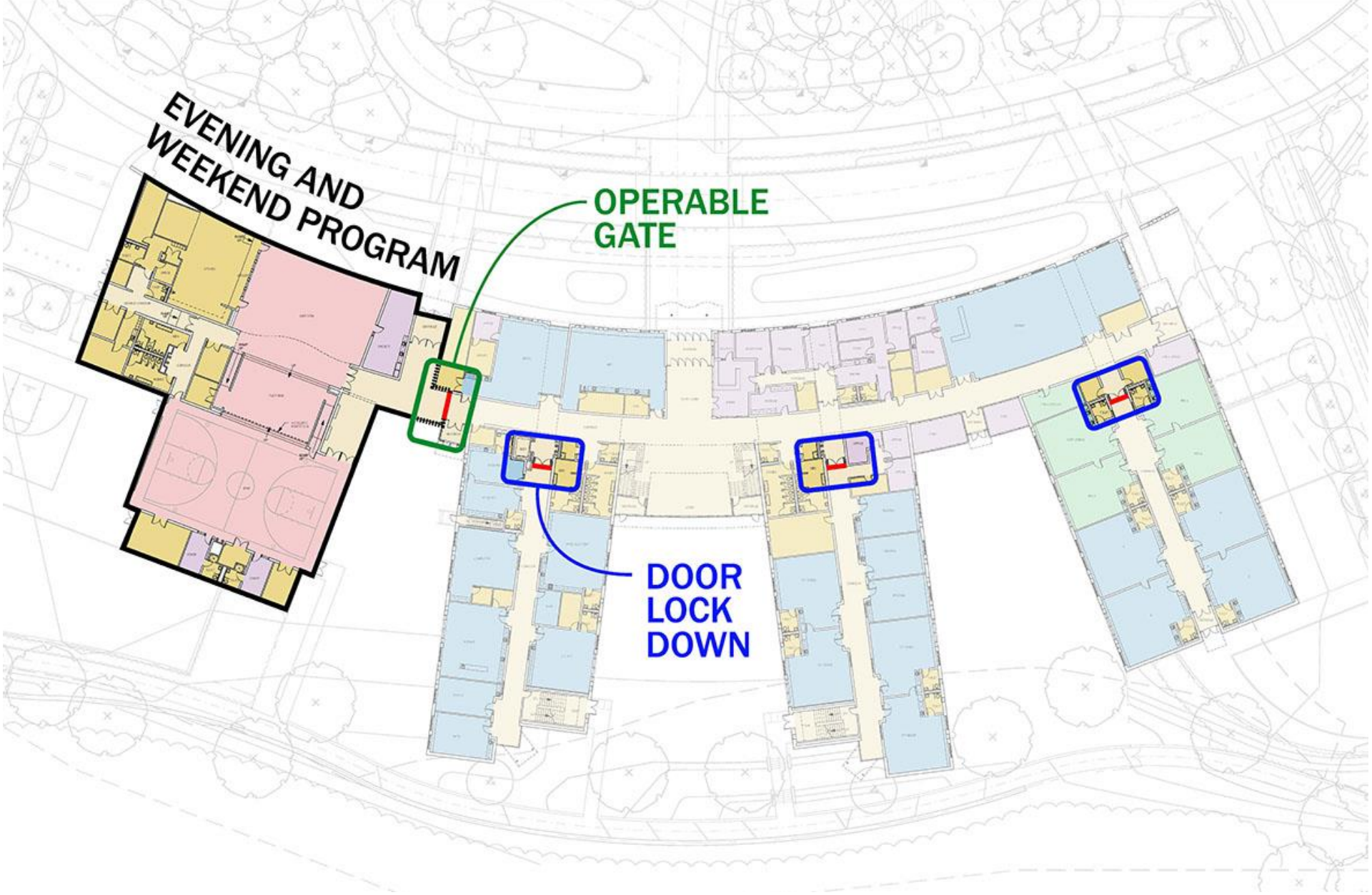
VIEWS
FROM
BUILDING

+ Natural Surveillance

+ Hardened Entry / Human Interaction

PROVIDE SECURE HUMAN INTERFACE

VESTIBULE

SECURITY

ASSIST PRIN

PRINCIPAL

HARDENED CONSTRUCTION VS WELCOMING ENTRY

ENTRY LOBBY

ADMIN

WORKRM

CORRIDOR

+ Hardened Entry / Human Interaction

EVENING AND WEEKEND PROGRAM

OPERABLE GATE

DOOR LOCK DOWN

+ Building Zoning / Extra Delay Layers

Security through Architecture
Approaches for the Classroom

+ ## The Classroom as a Safe Room

  - Door / Wall construction

  - Forced entry resistance

  - Alternate escape route?

+ ## Views In / Out

  - Hardened glass on first floor windows and Sidelites / Door lites

  - Operable exterior windows

+ ## Door Hardware
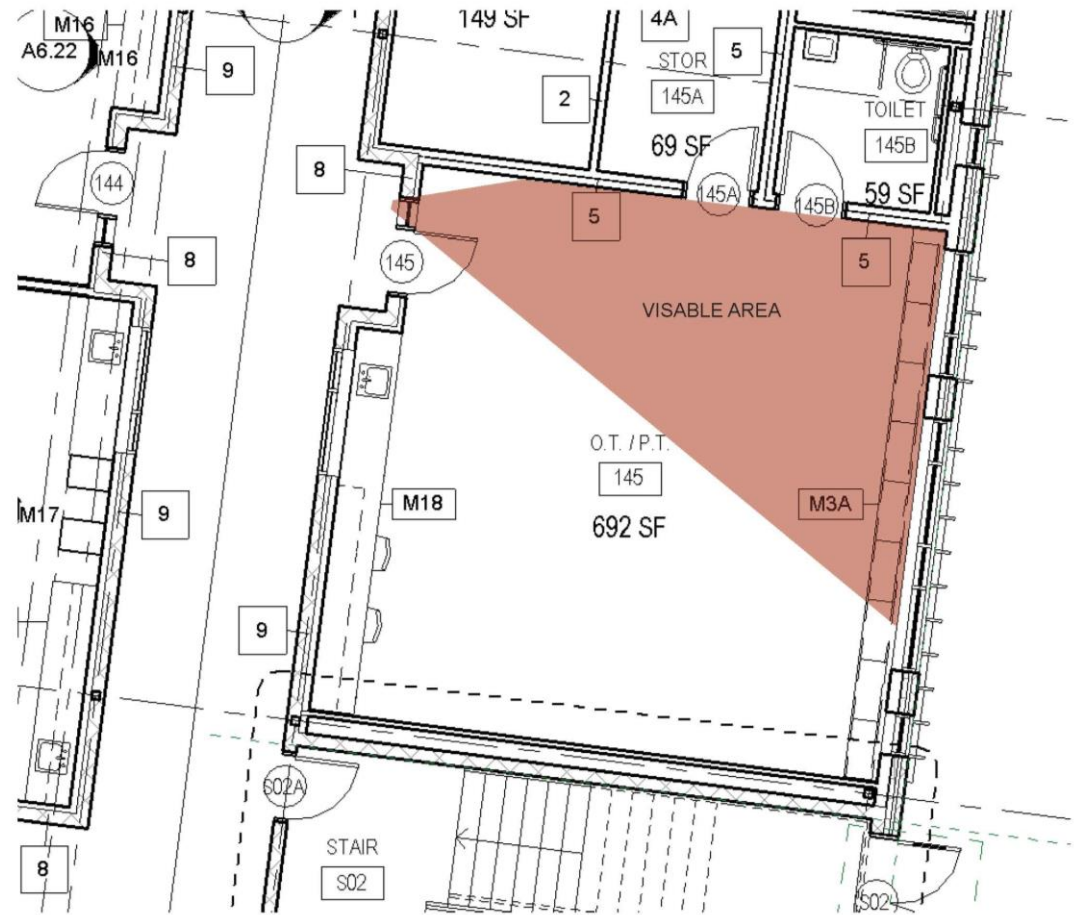
  - Automatic locking for ease of mind

+ ## Communication

  - Phones / PA system

  - Panic button

  - Cell phones / text message

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Security through Architecture
Classroom as the Safe Zone

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Security through Technology
Designing the Right Tools for the Environment

Is this man effectively monitoring video cameras?

+ Common Technology Pitfalls/Misconceptions:

- Technology supports security, and more tools provide more security

- Support tools and technology should form the basis of any security program

- Security staff are incredibly efficient and effective at using security technology tools

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Security through Technology
Designing the Right Tools for the Environment

+ Technology Design - Best Practices:

- **Develop** the security program <u>first</u>, then the supportive tools to go with it

- Use technology as a tool to help mitigate your school's risk profile

- Understand your manpower and what they are capable of

- Organize and implement your security technology so it can be used as a force <u>multiplier</u>

Security through Technology
## Designing the Right Tools for the Environment

+ Technology Design – Most Common System Elements:

- Leverage existing technology systems and investments

- Alarm monitoring of perimeter doors

- Access control for building and city staff

- Visitor management system implementation

- Semi-automated dispatch and lockdown capabilities

- Video surveillance of entryways and perimeter locations

- Digital video recording for archival and pre-alarm response

- Local monitoring and control capabilities

- Networking of multiple schools for centralized monitoring and management

- Intercom communications to all exterior reader controlled doors and gates

- Vehicle management through gates, card readers, intercoms

- Vehicle detection loops for automatic detection of vehicles in specific areas

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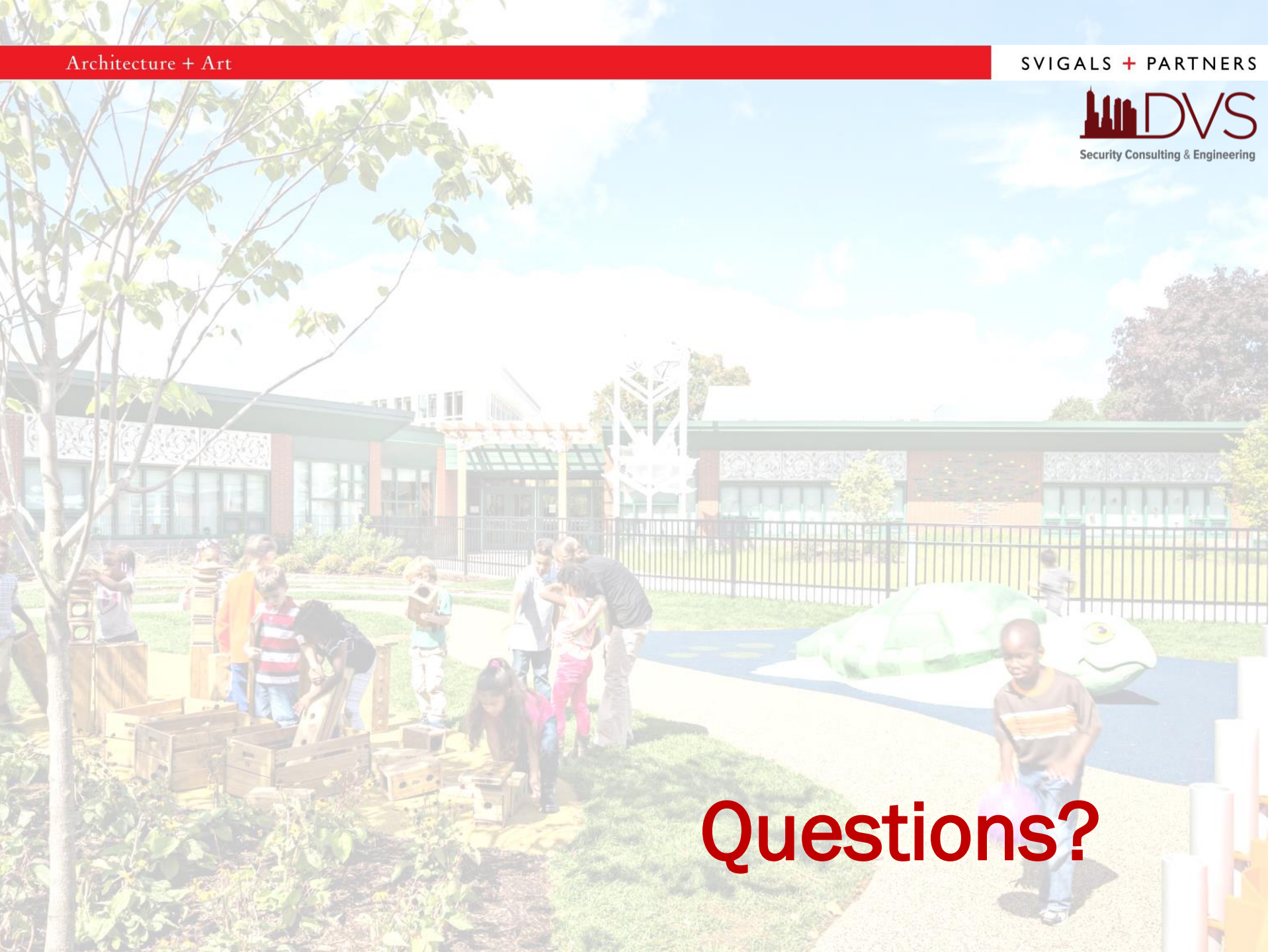# Security through Technology
A Few Advanced Tools for Particular Applications
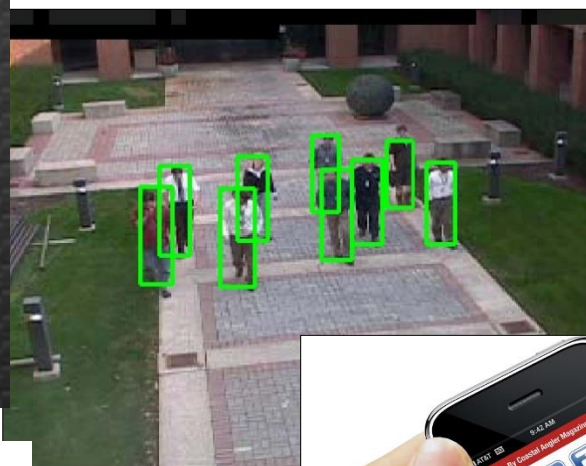
Security through Operations

+ It all comes down to a live, thinking human being (no robots...yet)

  - Situational awareness – what is happening around and in my school?

  - The value of the permanent post

  - C3I – Communications, Coordination, Control, and Information

  - Training, training, training

    - Staff (after hours)

    - Teachers (after hours)

    - Other town or district stakeholders

  - How are operations affected by the type of school?

Questions?