4. WINTHROP MIDDLE SCHOOL

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COMPILATION OF BUILDING INFORMATION

WINTHROP MIDDLE SCHOOL

BUILDING DATA INVENTORY

address:	151 Pauline Street	site area:	NA
building type:	Middle School	historical status:	
users:	Grades 6-8	replacement cost:	$10,800,000
building area:	78,000 sf		
number of floors:	3		
year built:	1971		
additions:	none		
major renovations:	none		
occupancy groups:	E-Educational		
construction class:	Non-combustible/Combustible, type 3B		
Principal:	Rosemary Ditullio		
Custodian:	Vincent Vitiello		

4. WINTHROP MIDDLE SCHOOL
EXECUTIVE SUMMARY

A. BUILDING CONDITIONS

1. ARCHITECTURAL / STRUCTURAL COMPONENTS:
   This building is structurally sound. However, the roof system should be replaced immediately. The building's interior finish systems, specifically the classroom partitions and ceiling system, are in poor condition overall.

2. MECHANICAL / ELECTRICAL:
   - There are significant problems with the building's heating and ventilation systems.
   - Toilet rooms are not properly ventilated, and toilets do not flush properly.
   - Boilers need replacement (see Mem. Auditorium/Gymnasium).

3. OTHER:
   Special code issues: because this building is not sprinklered, it does not meet current standards for fire alarming.

B. BUILDING ACCESSIBILITY
Building is accessible by a ramp at the rear of the building, and an interior elevator. However, there are a number of accessibility deficiencies in this building.

C. RECOMMENDATIONS
- Replace the roof system
- Overhaul heating and ventilation system
- A separate facility for new boilers to Middle School should be considered in order to disconnect this school from the older adjacent buildings.

D. FURTHER STUDIES
Include in school system planning study.

E. BUILDING MAINTENANCE

CURRENT PROCEDURES
Adequate for general housekeeping and minor repair.
Inadequate for building system maintenance and upgrade.

RECOMMENDATIONS
Establish regular building maintenance review.

F. COST

repair costs:	$650,850		
further study cost:			
Accessibility compliance:	Full compliance feasible with major renovations	replacement cost:	$10,800,000

G. SCHEDULE

1995	New roof system
	Fire alarm upgrade
1996	Heating/ventilation improvements
1997	interior renovations

I. OVERVIEW

Built in 1971 as a junior high school, the Winthrop Middle School now serves grades six through eight. However, it is expecting to add grade five next year. This building is a reinforced concrete frame and one way slab structure with exterior brick and glazing infill. The building is structurally sound, but has significant deficiencies in a number of key building systems.

A. BUILDING ENVELOPE

1. Roof System: Uninsulated built-up asphalt roof probably original to structure.

   observations:
   - Roof system is well past expected service life.
   - Surface is hard and brittle with some areas of ponding.
   - Flashings around roof penetrations are inadequate.
   - Pitch pockets have voids.
   - Perimeter flashing is inadequate by design with the edge merely adhered to top surface of concrete curb and is failing in a number of locations.
   - Roof over annex connector is not draining properly.

2. Wall System: Exposed concrete frame and brick/masonry infill panels with minimal insulation.

   observations:
   - Construction frame generally sound with two areas of surface failure.
   - Signs of water infiltration through foundation wall and base of windows at music and sewing rooms.

3. Windows: Original anodized aluminum framed 'Kalwal' panels with Plexiglas glazed interior acting 'hopper' windows. Second internal glazing system added recently for sound control.

   Observations:
   - Operable windows protrude at a child's head level causing a dangerous condition when open.
   - Double window system is very difficult to operate.
   - Glazing is foggy.
   - "Kalwal" has been vandalized or otherwise damaged at rear of building (shop area).
   - Some leakage of wind-blown water at window perimeters.
   - Original single glazed window system leaking at stair landings.

4. Doors and Entries: Entries adequate in condition with some exceptions.

   Observations:
   - Hollow metal egress door at rear corner of building requires replacement.
   - Rear exterior egress steps have cracked and spalling concrete.

B. BUILDING INTERIOR

1. Circulation Areas:

   a. Walls: Painted concrete block - in good condition.

   b. Floors: Terrazzo floor finish in main hallways and lower level cafeteria.
   Some cracking observed in hallways.
   Some small raised patches appearing at lower level.

   c. Ceilings: A. T. Ceiling system through-out 1x1 tiles with limited access points and small 1x1 hatches and is in fair to poor condition throughout.
   Recurring leaks from heating system has damaged ceiling in many locations.
   Hallway ceilings are unusually low and prone to damage.
   Upper level hall ceiling is discolored and patchy due to air being drawn through this ceiling and into the plenum space above.
   Damage observed at ceiling and soffit above stairways.

   d. Doors: Wood veneer, solid core doors and hardware are in generally good condition.
   Some toilet room doors have been abused. Louvers damaged or missing.

   e. Specialties: Lockers are in fair to good condition.
   Some problems with kitchen equipment due to advancing age.
   Kitchen steamer is leaking.

2. Interior Spaces:

   a. Walls: Painted concrete block in fair to good condition.
   Numerous demountable partitions between classrooms:
   Room partition system has required reinforced anchor straps at top.
   Are slipping out of alignment.
   Don't accept attachment of additional classroom specialties or wiring for electrical & communication.
   Have damaged finishes.

   b. Floors: V.C. Tile in most classrooms - in fair condition.
   Poor condition in areas where leaking has occurred.
   Carpet in library, office/admin. in fair condition overall.

   c. Ceilings: Acoustic tiles 1x1 in fair to poor condition.
   Numerous repairs required due to leaks, particularly at perimeter of building and in upper level hallways damaged by heating system leaks.
   System should be inspected to assure that ceiling supports are not being diminished by corrosion.

d. Specialties: There are several 'movable' partitions in various states of disrepair.
Some are inoperable or operation would risk damage to ceiling.
Toilet partitions need cosmetic repair.

C. BUILDING SYSTEMS

1. Fire Protection: Building has no fire suppression system.

2. Plumbing: Piping systems are in good condition.
All toilets do not flush properly.

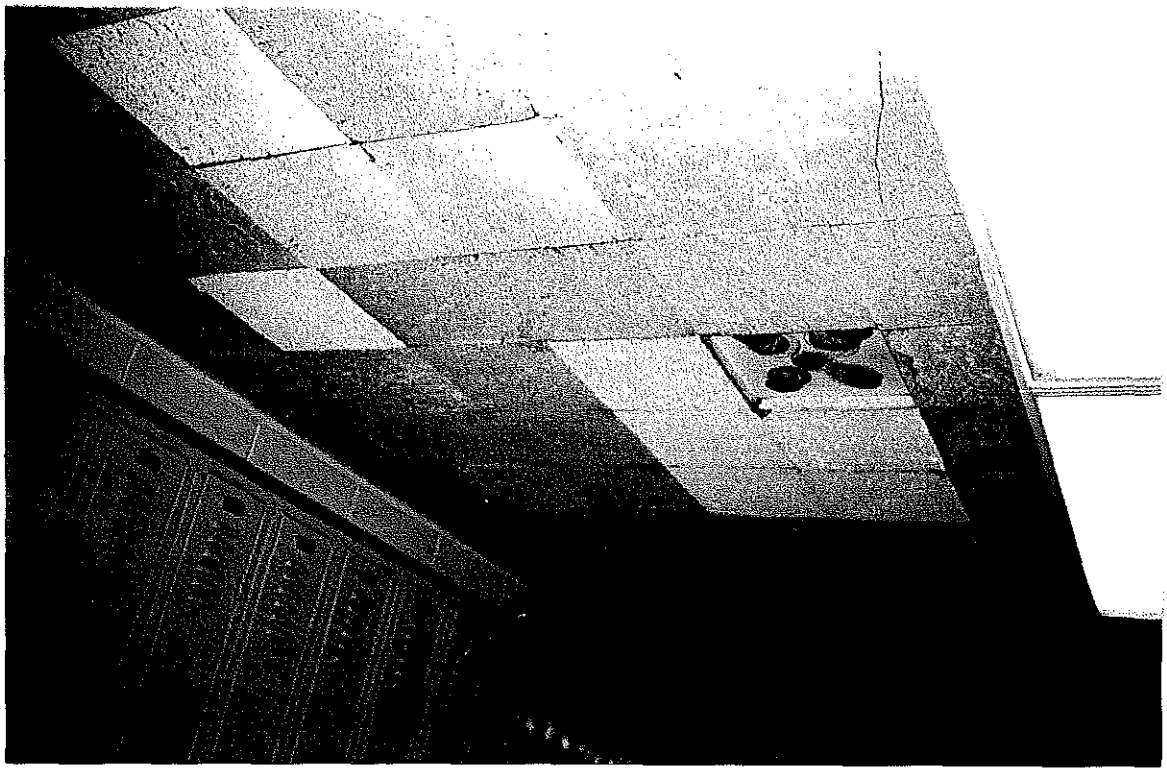
3. HVAC: The heating system is of steam or hot water supplied by a main boiler located behind the Memorial hall and gymnasium with pneumatically controlled valves located above the ceiling. Distribution piping is dropped through ceiling to individual fan coil units, and ventilators on the exterior wall.
Many unit ventilators and fans must be manually activated through main access panel at the front of the unit due to thermostat malfunction.
O.A. dampers closed for the winter should be opened for ventilation.
A number of units have been fitted with booster pumps to draw more heat to units.
Most units cabinets are in fair to poor condition.
Three units are inoperable (lower level shop).
Interior classrooms are heated and cooled by rooftop unit (24 years old). Gas heater section toss not functional, is in poor condition.
Corner rooms at upper level are difficult to heat.
Continuous problems with hot water distribution system is degrading ceiling system in many locations.
Ventilation system is only periodically functional.
Kitchen exhaust not functional, and should be 'up blast' type for N.F.P.A. stnd.
Kitchen and cafeteria air handlers appear in fair to good condition.
Interior rooms (without windows) have insufficient ventilation.
No A. C.
Toilet rooms are not properly ventilated.
Heating system has been fitted with an energy management system.
However, it must be over ridden to keep Memorial Auditorium and Gymnasium from freezing.

4. Electric Power and Lighting: Building has 277 Volt main service. There are secondary transformers and panels in various locations in the building. Florescent light fixtures have been fitted with new electronic ballasts.

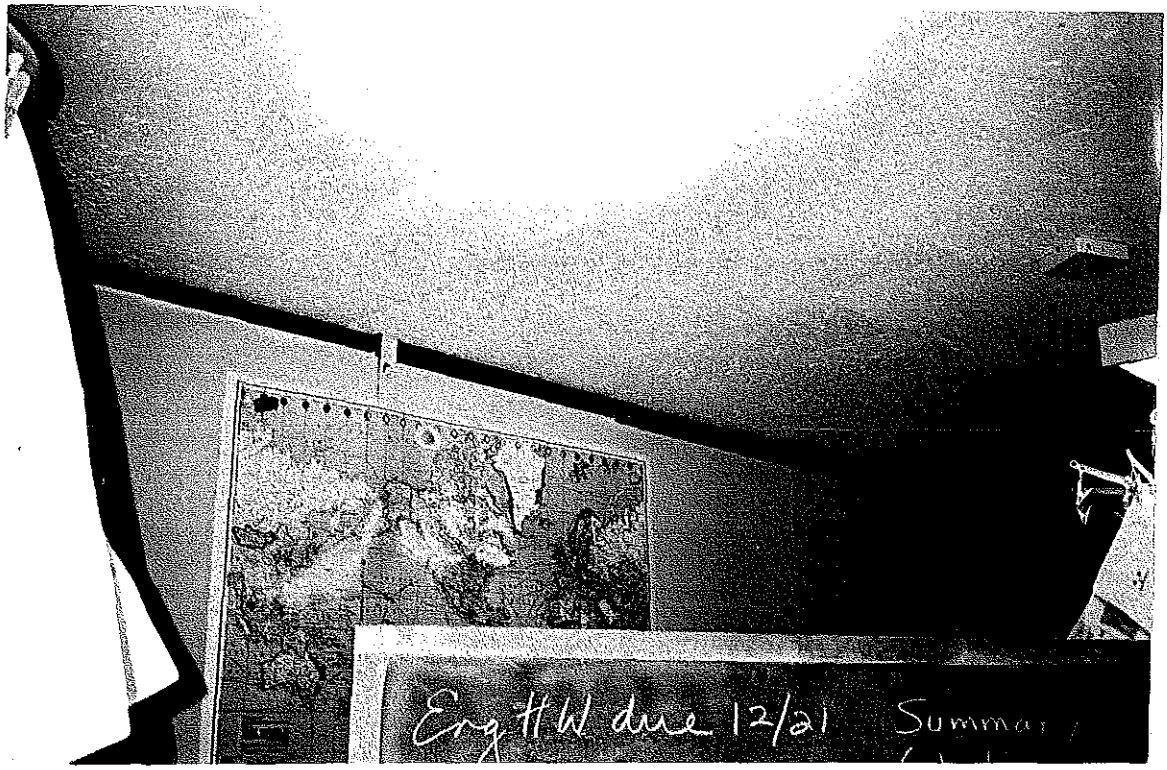
5.	Security and Communications:	Building is alarmed nights and weekends. Motion detection system in corridors. Computer lab has supplemental security system. Original P. A. system with phones in classrooms for communication with Administrative Office. Original centrally controlled simplex clocks in most classrooms and offices.

D. ACCESS FOR THE DISABLED

1.	Entries and Site:	Handicapped Ramp located at rear of building. Accessible side street entry from sidewalk. Accessible auditorium side entrance.
2.	Circulation:	Elevator centrally located near office.
3.	Interior Spaces:	Generally accessible, but not fully fitted-out with proper hardware, railing, water fountains etc. Band practices activity in 'Little Theater". Annex is not accessible.
4.	Toilet Facilities:	Have been modified for H. C. access.
5.	Life Safety:	Needs new fire alarm system

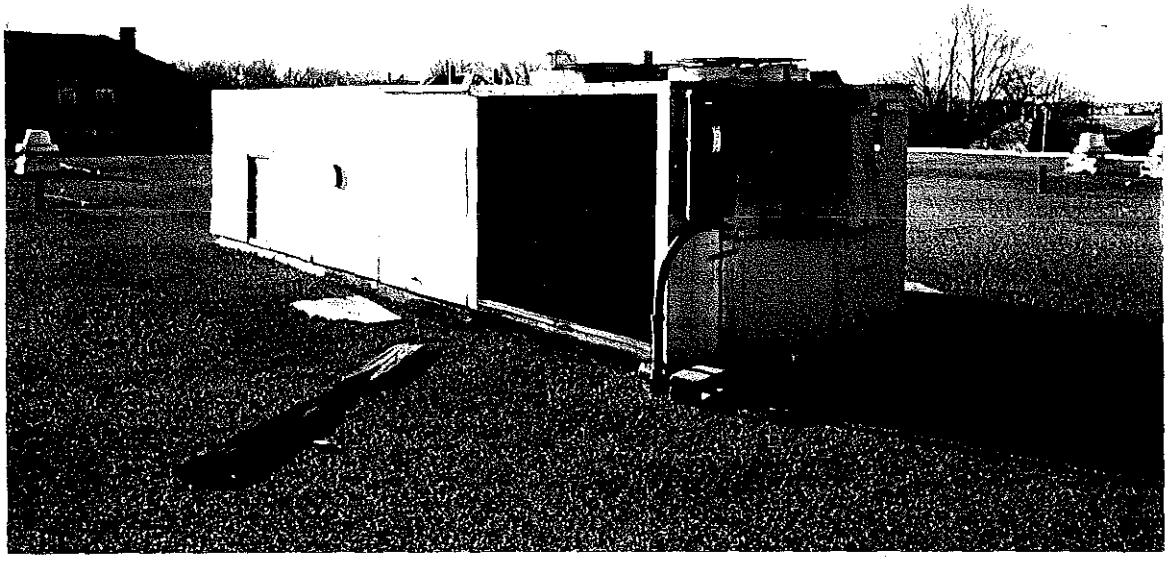


Second level ceiling: evidence of roof and heating system problems ceiling system is decrepit and problematic for access to systems above.



Typical classroom: demountable partition system failure. Panels have slipped out of alignment leaving open gaps at ceiling. Metal strip added to anchor partitions to slab above.

Old roof system: open gaps in flashing, no coping, protection/cover, roof is hard, wavy, cracked. Minimal or no insulation, roof penetration flashing is failing.



Old roof top air handler is on partial operation only, improperly designed roof mounting, penetration pitch packets failing.

4. WINTHROP MIDDLE SCHOOL

COST ESTIMATE

Year	Description	Qty.	Unit	Unit Cost	Amount	Total w/O&P
	A. BUILDING ENVELOPE					
	1 ROOF SYSTEM					
1995	a. remove exising and replace roof system (including connectors to auditorium/gymnasium)	1	LS	$135,000	$135,000	
	SUBTOTAL				$135,000	$162,000
	2 WALL SYSTEM					
1998	a. concrete frame surface repair	150	SF	$6	$900	
1998	b. pointing small areas brick and sills	1500	SF	$5	$7,500	
	SUBTOTAL				$8,400	$10,080
	3 WINDOWS					
1996	a. inspect and reseal exterior window perimeters	100	LS	$45	$4,500	
1996	b. replace vandalized 'kalwal' units	12	LS	$150	$1,800	
1996	c. install protective screens at ground floor	8	LS	$120	$960	
1997	d. reglaze "clouded" plexiglass lights	100	LS	$15	$1,500	
	SUBTOTAL				$8,760	$10,512
	4 DOORS & ENTRIES					
1996	a. replace egress door and frame at rear corner on first floor	1	LS	$700	$700	
1995	b. replace rear doors & thresholds @ rear ramp entry	1	LS	$850	$850	
1996	c. rake & reseal around all doors	5	LS	$80	$400	
	SUBTOTAL				$1,950	$2,340
	5 OTHER EXTERIOR					
1995	a. repair steps from rear corner egress	1	LS	$250	$250	
1995	b. regrade and pave @ repair rear corner egress	1	LS	$400	$400	
1995	c. repair concrete stairs	1	LS	$380	$380	
1998	d. repave rear drive	1	LS	$6,000	$6,000	
	SUBTOTAL				$7,030	$8,436
	B. BUILDING INTERIOR					
	1 CIRCULATION AREAS					
1997	a. replace ceiling in corridors (after roof & heating systems worl	5000	SF	$5	$25,000	
1995	b. repair soffit at stair, first floor	1	LS	$300	$300	
	SUBTOTAL				$25,300	$30,360
	2 INTERIOR SPACES					
1997	a. repair damaged ceilings	15000	SF	$3	$45,000	
1996	b. V.C. tile repairs	1000	SF	$6	$6,000	
1996	c. replace toilet room door louvers	2	LS	$60	$120	
1996	d. repair terazzo floor cracks, holes	250	SF	$10	$2,500	
1998	e. replace ceiling @ lower level	4500	SF	$3	$11,250	
1997	f. replace kitchen ceiling	2000	LS	$4	$8,000	
	SUBTOTAL				$72,870	$87,444

** Requires further study*

Year	Description	Qty.	Unit	Unit Cost	Amount	Total w/O&P
	3 FITTINGS & EQUIPMENT					
1996	a. replace broken moveable partitions	2	LS	$6,500	$13,000	
1996	b. toilet partition repairs	1	LS	$650	$650	
					$13,650	$16,380
	C. BUILDING SYSTEMS					
	1 FIRE PROTECTION					
	SUBTOTAL					
	2 PLUMBING					
1996	a. replace flushometers	24	LS	$200	$4,800	
	SUBTOTAL				$4,800	$5,760
	3 HVAC					
1996	a. bathroom ventilation	6	LS	$800	$4,800	
1996	b. replace rooftop unit	1	LS	$45,000	$45,000	
1996	c. upgrade unit ventilation controls(1,200/rm)*	30	LS	$1,200	$36,000	
1996	d. boiler replacement anticipated* (see Mem. Aud./Gym)					
	SUBTOTAL				$85,800	$102,960
	4 ELECTRICAL					
	SUBTOTAL					
	5 SECURITY & COMMUNICATIONS					
	a. wire all classrooms for computer and CATV*	1	LS		$0	
	SUBTOTAL				$0	$0
	6 LIFE SAFETY					
1995	a. add non-slip to stair treads	1	LS	$400	$400	
1995	b. up-grade fire alarm system	1	LS	$50,000	$50,000	
1995	c. up-grade emergency lighting	1	LS	$7,500	$7,500	
	SUBTOTAL				$57,900	$69,480
	D. ACCESSIBILITY IMPROVEMENTS					
	The building is only nominally accessible. Full ADA compliance would be most effectively accomplished with a major interior renovation. (Cost would exceed $50,000) The items below are the most 'readily achievable' improvements.					
1995	a. provide access instruction signage @ entries	3	LS	$65	$195	
1995	b. modify railings @ existing ramp	1	LS	$1,100	$1,100	
1997	c. provide compliant door hardware	1	LS	$6,000	$6,000	
	SUBTOTAL				$7,295	$8,754

** Requires further study*

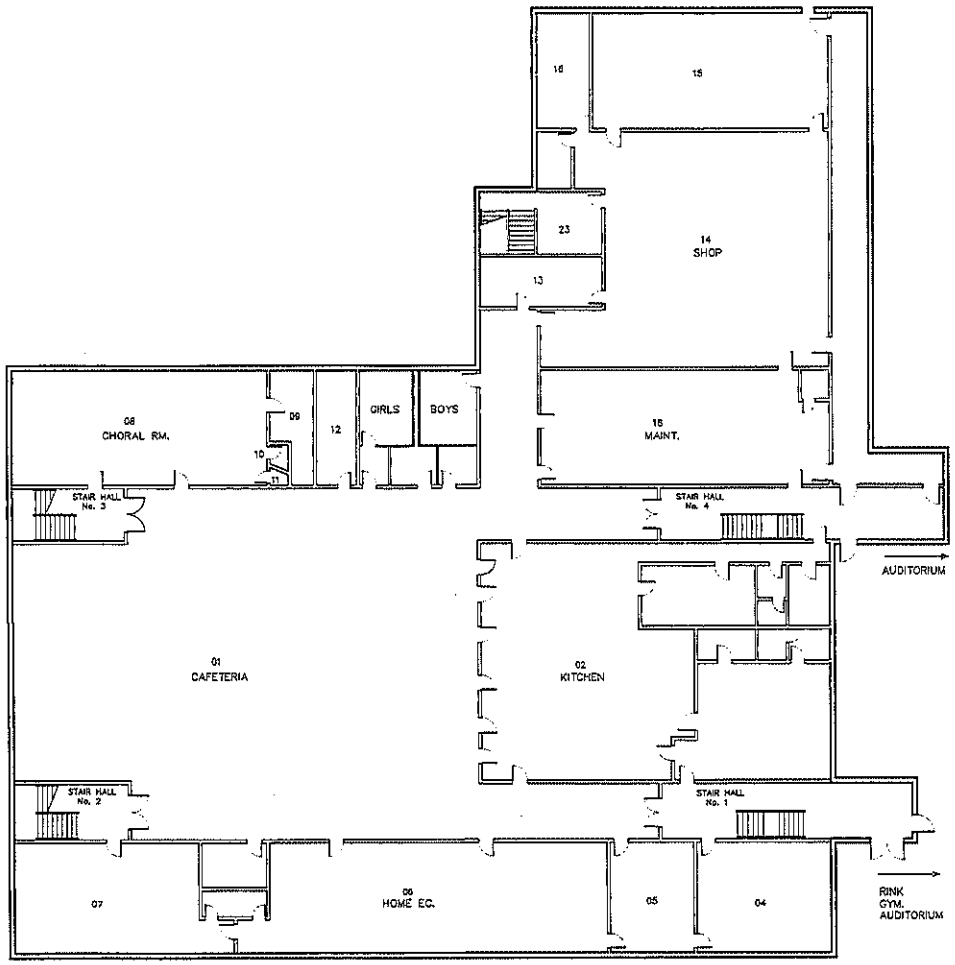
Year	Description	Qty.	Unit	Unit Cost	Amount	Total w/O&P

E. ITEMS FOR FURTHER STUDY

Investigate water infiltration in basement (@ music and sewing rooms)
Replacement of demountable partition systems
Kitchen equipment condition/needs
Replacement of aged 'Kalwall' glazing systems

BUILDING TOTAL	$514,506
CONTINGENCY @ 10%	$51,451
A/E Fee Design and Construction Administration @ 15%	$84,893
TOTAL PROJECT COST	$650,850

** Requires further study*



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SCALE OF FEET

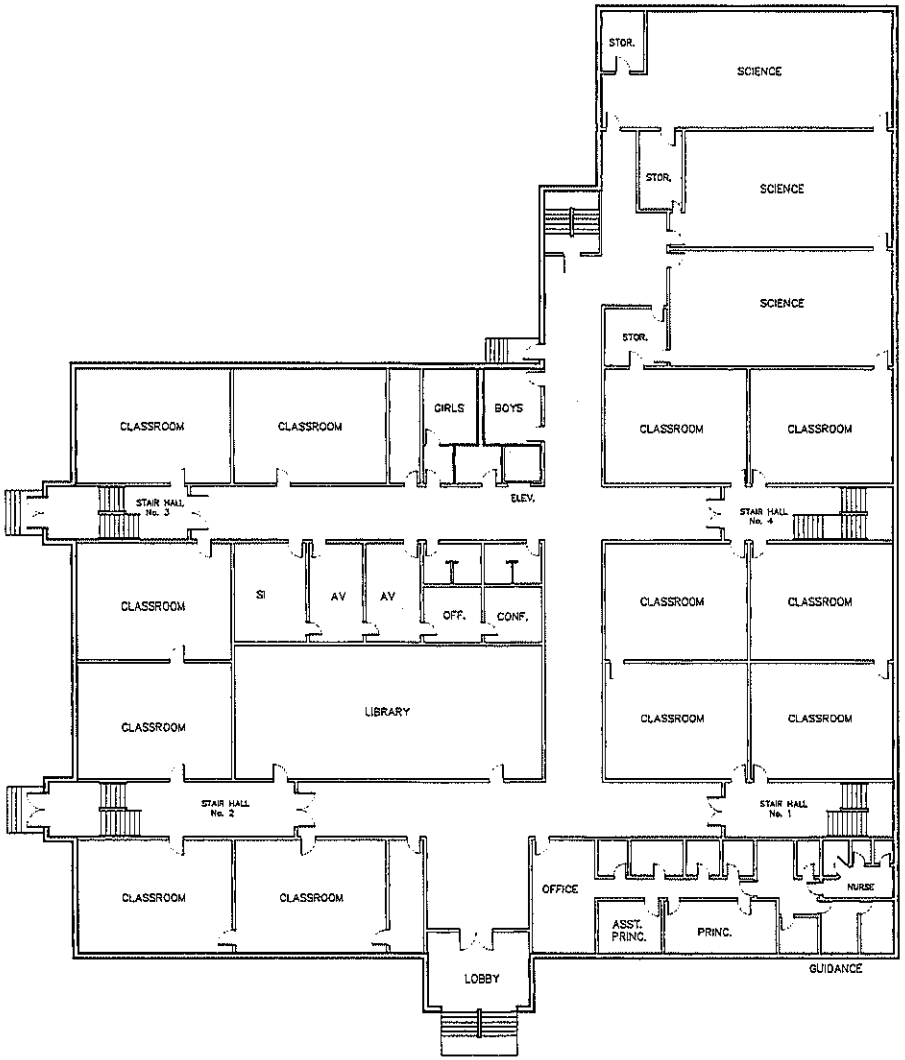
Facility study of the
Town of Winthrop

Winthrop Middle School
Existing Conditions
Ground Floor Plan

MID-G

Project No: 1742.00
Date: 1/15/95
Cad File: MIDDLE-G.DGS

Archetype
Architecture, Inc.



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SCALE OF FEET

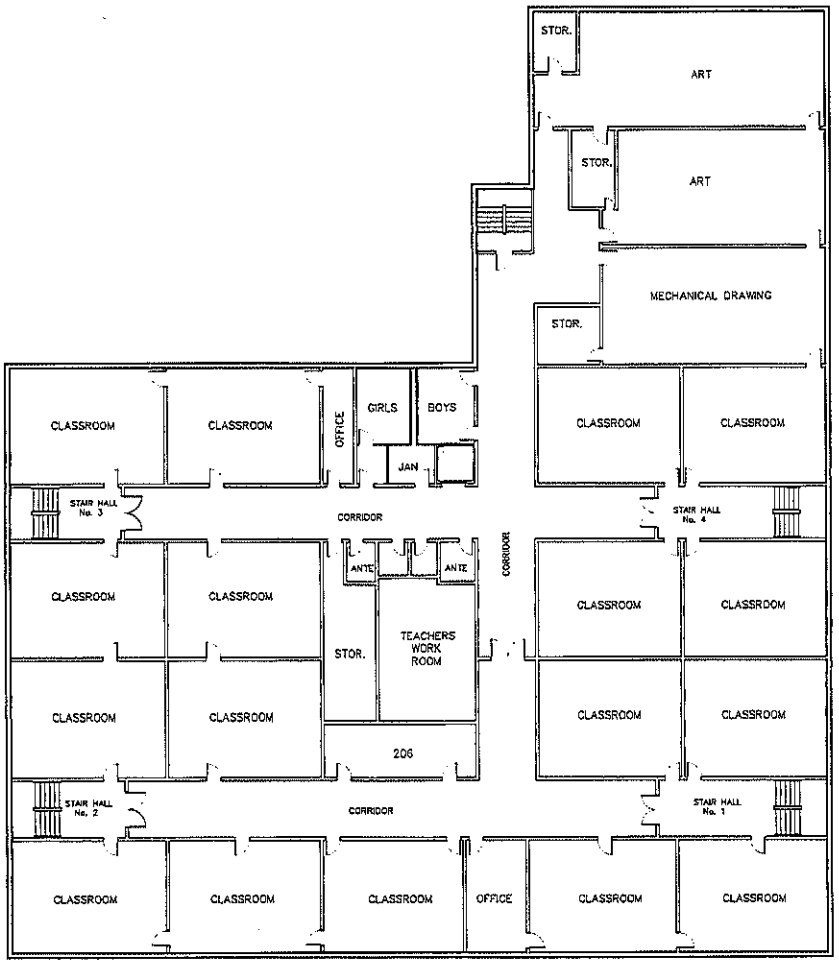
Facility study of the
Town of Winthrop

Winthrop Middle School
Existing Conditions
First Floor Plan

MID-1

Project No: 1762.00
Date: 1/31/95
Cad File: MIDDLE-1DGS

Archetype
Architecture, Inc.



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SCALE OF FEET

Facility study of the
Town of Winthrop

Winthrop Middle School
Existing Conditions
Second Floor Plan

MID-2

Project No: 1162.00
Date: 1/11/15
Cad File: MIDDLE-2.DGN

Archetype
Architecture, Inc.