AMERICANS WITH DISABILITES ACT (ADA)
SURVEY AND REPORT

MOUNT GREYLOCK REGIONAL HIGH SCHOOL
WILLIAMSTOWN, MASSACHUSETTS

September, 1992

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MOUNT GREYLOCK REGIONAL HIGH SCHOOL

I. GENERAL:

A. The purpose of this survey is to determine the existing conditions of access at the **Mount Greylock Regional High School**, and review those life safety issues that may be impacted by people with temporary or permanent disabilities. The Commonwealth of Massachusetts Architectural Access Board is responsible for application and conformance to CMR 521. The Department of Justice, Office of the Attorney General, through its Federal Register publication of 28 CFR, part 36, describes the application of Title III of the Americans with Disabilities Act, public law 101-336, referred to hereinafter as the A.D.A. Both CMR 521 and the A.D.A. may be referred to in part or total as necessary in order to develop conformance to the law. In case of conflict between the two codes, the more stringent requirements have been applied. This report does not address those issues raised by Title I of the A.D.A. Employment, as enforced by EEOC.

B. The Mount Greylock Regional High School is a one (1) story structure on an open rural site. The total area of the building, with addition, is as follows:

CONSTR.	AREA	%
1960	74,910	53%
1968	65,223	47%
Total	140,133 SF	100%

Separate entrances serving the School Administration, District Offices and Gymansium wing are all from the east side of the complex. Minimal grade changes and side walk curbs offer the opportunity to develop barrier free access to the full perimeter of the shcool. The north wing (circa 1968) is approximately 4'-0" higher than the main level. Connection between these elements is via separate corridor stairs and ramps. Refer to "Tour of Facility" comments. The building has extensive usage by outside groups, reinforcing the importance of unlimited access for the disabled.

II. SURVEY: TOUR OF FACILITY

A. My inspection of the site and building occured over a two day period on August 13 and 14, 1992. This included a walk around of the full perimeter of the school and the interior. A photographic record was taken and is crossed referenced within the report to specific items of concern. Refer also to Paragraph C, this section.

B. The **Tour of the Facility** describes existing conditions that are in non-conformance to Title III of the ADA and CMR 521. We recognize that there are other items of potential effort that should respond to individual needs of students, staff and the public at large, such as shelving, coathooks, telephone access etc. The following summary describes specific code non-conformance issues, and, in many instances, recommends corrective work.

1. Parking Area - 3 parking spaces presently designated as
* follows: 1 diagonal and 2 open. Vertical signage needed.

2. Wheel chair curb cut (5" to 6" rise). Configuration does not
* conform to CMR 521 guidelines. Asphalt paving has low spots which could cause tripping or "hang up" of wheel chair wheels. Improve signage designating this locus as handicapped entrance. Painted lines on pavement needed to accent and keep curb cut open for its designated use.

3. New concrete side walk has a 2" (+/-) slanted drop off at the
* south end. This should have been graded to a gradual slope meeting flush to asphalt paving. The problem can be resolved when the driveway to receiving (1968 wing) is repaved.

4. Existing asphalt paved sidewalk is in poor condition. Crack-
* ing and settlement behind granite curbing creates a trip hazard.

5. Protected entry to High School Administration. Repaving and
* construction of an appropriate curb cut could develop a handi-

capped entrance. Existing doors (pair 2'-6", 2 sets) should be changed to have one door leaf of 3'-0". Perhaps remainder of opening length could be side light.

6. South entrance from Cafeteria to Play Field has a paved
* asphalt ramp with a 3" rise (+/-) to the concrete landing at a pair of 2'-6" doors. Repaving of entire walk needed. That effort would create the opportunity to raise the grade to the landing using normal side walk slopes (not classified as a ramp), that will not require railings. Change door leafs to one 3'-0" door and side light or reconfigure entire entrance frame developing a handicapped entrance. Hardware conformance to CMR-521 required, including the threshold, which is typically too high. Carpeted mat recess has a lip at one edge. Flash patch substrate to eliminate trip hazard.

7. South entrance, Science Wing has a paved asphalt ramp with a
* 3" rise (+/-) to the concrete landing at a pair of 2'-6" doors. Repaving of entire walk needed. That effort would create the opportunity to raise the grade to the landing using normal side walk slopes (not classified as a ramp). Change door leafs to one 3'-0" and side light or reconfigure entire entrance frame developing a handicapped entrance. Hardware conformance to CMR-521 required, including threshold. Note that tiled mat recess at interior presents a trip hazard.

8. West entrance connector (1968-60 wing) has a paved asphalt
* ramp with a 3" rise (+/-) to the concrete landing at a pair of 2'-6" doors. Repaving of entire walk needed. That effort would create the opportunity to raise the grade to the landing using normal side walk slopes (not classified as a ramp). Change in door leafs to one 3'-0" and side light or reconfigured entrance frame achieving handicapped entrance. Hardware conformance to CMR-521 required, including threshold.

9. West entrance, "60" wing. There is no walk, however a change in door leafs to one 3'-0" and side light will develop a

handicapped entrance. Hardware conformance to CMR-521 required, including threshold.

10. North entry. Protected "60" wing has a paved asphalt ramp
* with a 3" rise (+/-) to the concrete landing at a pair of 2'-6" doors. Repaving of entire walk needed. That effort would create the opportunity to raise the grade to the landing using normal side walk slopes (not classified as a ramp). Change door leafs to one 3'-0" and side light or reconfigured entrance frame developing handicapped entrance. Hardware conformance to CMR-521 required, including threshold.

11. West entry, low point of ramp connector has a paved asphalt
* ramp with a 3" rise (+/-) to the concrete landing at a pair of 2'-6" doors. Repaving of entire walk needed. That effort would create the opportunity to raise the grade to the landing using normal side walk slopes (not classified as a ramp). Change door leafs to one 3'-0" and side light or reconfigured entrance frame developing a handicapped entrance. Hardware conformance to CMR-521 required, including threshold. Present asphalt ramp (3" to 4" long) is too steep. Gradual grade rise at sidewalk will achieve a flush meeting point without need of handrails (ie. ramp designation).

12. Trapezoidal pan recess in walk should be removed.
*

13. Locker Room access to Play Field. Change hardware on existing 3'-4" door to handicapped type. Raise paving.

14. Locker Room access to Play Field. 3'-4" can remain. Change
* hardware to handicapped type; raise paving to eliminate step.

15. North entry to gym wing. Pair of 2'6" doors. Regrade
* exterior paving and change door leaf(s) to one at 3'-0" with a fixed side light.

16. New concrete walk has been installed that rises to the pro-
* tected entry at gym lobby. Construction of a wheel chair curb cut (existing rise 8"+) can create a handicapped entrance. Change door leaf(s) to one 3'-0". New sidewalk asphalt paving needed. This would resolve 1"+ drop at low edge of new concrete entrance walk.

17. Administrative entrance. Two pair of 2'-6" aluminum doors at
* exterior with off set pulls and 2 pair of 2'-6" steel doors at interior (straight pull handles). At least one set of each should have a 3'-0" door leaf. Exterior push bar is at 3'-2" and exterior and interior door closure is LCN 4040 series. Handicapped rated closure is 4041 which meets the delayed closure requirement and push pressure as per CMR-521.

18. District Office entrance has two pair 2'-6" aluminum doors at
* exterior with offset pulls and 2 pair of 2'6" steel doors at interior (straight pull handles). At least one set of each should have a 3'-0" door leaf. Exterior push bar is at 3'-2". Exterior and interior door closure is LCN 4040 series. Handicapped rated is 4041. Concerned about delayed closure requirement and push pressure as per CMR-521.

19. Access door to Shop Wing (3'-4") requires change in hardware. Note existing knob set. Wheel chair egress from this corridor requires a minimum side room of 1'6" at strike jamb side. Space is not available to achieve same. Shop doors (3) at 3' do conform to ADA entrance requirements. Change knob set and hardware. Side room at strike jamb conforms to CMR-521.

20. Fire Alarm (F.A.) pull station height is typically, 5'4". This is 10 inches higher than allowed by code. Signal above is horn and flashing strobe.

21. Boiler Room and cleaning fluid storage should have knurled handle knob set designating a hazardous area beyond.

22. Courtyard access doors (pair 2'-6") should be brought into code conformance only if public or student access is allowed.

23. * Side by side, floor mounted electric water cooler (3'-5" to tray) and recessed drinking fountain (3'1"). There are no wheel chair accessible drinking fountains in the school.

24. Boy's Toilet. 3 w.c. (1 open - no stall), 8 urinals, 5 lavs. No handicapped facilities. Reconfiguration could achieve same. Existing 3'-0" door will conform with change in hardware. There is enough area to reconfigure w.c. and lav to handicapped code conformance.

25. Recessed fire extinguisher cabinet, 3'-3" to bottom.

26. Men's private Toilet (1 wc, 1 lav.) There is enough area to reconfigure to private handicapped facility. Change door hardware. 8'x5' floor area available.

27. Women's Toilet (1 wc, 1 lav.). There is enough area to reconfigure to provide handicapped facility. Change door hardware. 8'x5' floor area available.

28. Boy's Toilet (see also 24). One w.c. removed to create a handicapped w.c. enclosure which does not conform. The door to same is 24" wide, (36" required), swings in (must swing out). Interior clearances are 4'9" x 5'6" (must be 5'-0" x 6'-0"). w.c. 16" above floor (17" to 19" required). There is no handicapped lavatory.

29. Girl's Toilet. 5 w.c., 5 lavs. One metal partition enclosure creates a handicapped stall. Grab bar at one wall only. Rear and side wall rails are required. Interior clearances are 4'-7" x 4'-8 1/2" (must be 5'-0" x 6'-0"). w.c. 16" above floor (17" to 19" required), 16" to center line (18" required), grab bar - 2'8" above floor (33" to 36" required.

30. Girl's Toilet. 5 w.c., 5 lavs. There is sufficient area to reconfigure a handicapped facility in same.

31. Music room has a pair of 2'6" doors. Change to 1, 3'-0" leaf with fixed leaf. Note other door is 3'4" but 18" side room not available.

32. Women Faculty. 2 w.c., 2 lavs. Could be reconfigured to 2 w.c. and 2 lav. handicapped facility. However, this would not be an efficient use of the space.

33. Auditorium entrance doors, pair 2'-6". Change to 1 leaf at 3'-0". There appears to be adequate room to set aside wheel chair seating at the rear and/or at the orchestra level. Rail needed at stair(s), (2) to stage level.

34. Private toilet in Health Suite (6'-6"d x 5'-6"w), 3'-0" door swings in reducint usable floor area. W.C. and lav. do not conform to CMR 521.

35. Corridor to Ramp. Access by means of pair 2'-6" doors. Change to single leaf, 3'-0" door with minimum 18" side room. Appropriate closure, pull and push bar required. Existing push pressure shall not exceed 15 pounds. Maximum pull pressure allowed is 5 pounds at interior doors.

36. * Corridor stairs to 1968 wing. Seven (7) risers with sloped nosing handrails are oval shaped, 1 3/4" x 2 3/4". 3'-1+" from nosing to top of rail at bottom and top does not conform to CMR 521 or Life Safety Code requirements. Minimum of 1'-0" horizontal run out at both ends required. Note also lower intermediate wall rail required as per CMR-521.

37. Men's Toilet. 1 w.c., 2 urinals, 2 lavs. Reconfigurations could develop handicapped facilities. Hardware change at 3'-0" door required. 18" side room must be resolved.

38. Women's Toilet. 2 w.c., 2 lavs. Reconfiguration could develop handicapped facilities. Hardware change at 3'-0" door required. 18" side room must be resolved.

39. Exercise Room access, pair 2'-6" doors. Change one entrance to a single leaf, 3'-0" door.

40. Gymnasium. Pair 2'6" doors from Exercise Room vestibules. At least one (1) set must have 3'-0" leaf. Rise at interface with gym wood floor (2"+/-) reduces headroom at door closure to 6'-5"+, less than that required as a minimum by the SBC. Sloped entry threshold does create some difficulty for disabled and is a potential hazard for slips. Slope is steeper than allowed by CMR-521 for ramps without railings.

41. Weight Room - Change hardware on existing 3'-6" door.

42. Recording Room - Pair of 2'-6" doors, push pull.

43. * Ramp Corridor, developes a 3'-4" vertical rise. The uninterrupted length of ramp is 58'-6". The maximum horizontal uninterrupted run allowed by code is 32'-0". Any length beyond this must have an intermediate landing. The single, steel, 1 5/8" diameter handrail at each side is mounted at 3'-1". This exceeds the required 2'-10". Lower intermediate rail at 1'-7" needed also. Ramp suface is standard vinyl tile and not "non slip" type. The ramp terminates at the Girl's Locker Room basket rack storage area which may limit the use of this particular gym access. Note one pair 2'-6" doors at top of ramp. This must change to a single leaf 3'-0" minimum width. Door onto gym floor has a threshold problem. See item 40.

44. Boy's Toilet. 1 w.c., 1 lav. Insufficient area to provide handicapped facility.

45. Girl's Toilet. 1 w.c., 1 lav. Insufficient area to provide handicapped facility.

46. Men's Toilet. 1 w.c., 1 urinal, 2 lavs. Sufficient area to reconfigure as a handicapped facility, but not an efficient use of space.

47. Women's Toilet. 2 w.c., 2 lav. Sufficient area to reconfigure as a handicapped facility, but not an efficient use of space.

48. Student Center. 3 risers, paired 2'-6" doors. Change one set to provide one, 3'-0" leaf with appropriate hardware.

49. Chorus. Paired 2'-6" doors. Change to provide one 3'-0" leaf with appropriate hardware.

50. Library - IMC. - Entrance opposite history Room 52 consists of 2 pairs of 2'-6" doors. Reconfigure at least one (1) set to provide 3'-0" leaf with appropriate hardware. Note side clearance requirement of 1'-6" at strike jamb.

51. * Library, Mezzanine, 10 risers above main level. Existing handrails do not conform to code. This is typical at north and south access to same. Library reference material at this level could also be available to disabled persons at the main level. Handicapped access (wheel chair) to mezzanine not feasible or cost effective.

52. * Library. Lower study carrel area, directly under the mezzanine is 6 risers below the main level. Handrails do not conform to code. Typical at east and west access to same. Study carrel function is provided at the main level. Handicapped access (wheel chair) to lower level not feasible or cost effective. Verify that portable equipment and furniture throughout, is handicapped accessible.

53. Two sets (1 north, 1 south) of paired 2'-6" corridor doors. Reconfigure so that at least one leaf is 3'-0". It appears feasible to remove both sets and replace with one pair 3'-0" doors. Note floor mounted electro-magnetic door hold openers.

54. Boy's Toilet, 4 w.c., 11 urinals, 7 lavs. Total number of plumbing fixtures exceed code requirements and could be reduced. There is sufficient area to reconfigure this toilet room to provide both handicapped accessible fixtures and conventional fixtures. Suggest changing w.c. alcoves to metal toilet partition screens with doors.

55. Girl's Toilets, 8 w.c., 7 lavs. Total number of plumbing fixtures exceed code requirements and could be reduced. There is sufficeint area to reconfigure this toilet room to provide handicapped accessible fixtures and conventional fixtures. Suggest changing w.c. alcoves to metal toilet partition screens with doors.

C. The "Tour of Facility" notes violations and corrective effort through specific code references. It is the intent of these Codes and laws to make existing buildings as barrier free as possible using "readily achievable" procedures. There are a broad range of access issues waiting to be heard on all public facilities. Some may be enforced by EEOC (Equal Employment Opportunity Commission), and civil rights Act of 1964; some by the ADAAG (Americans with Disabilities Act Guildelines); and locally, CMR 521 as enforced by the Architectural Access Board, Commonwealth of Maassachusetts. All of this, along with budget constraints, will eventually develop a detailed schedule of activity within the building that will remove barriers and provide accessible equipment and facilities for the disabled.

III. RECOMMENDATIONS - SITE DESIGN:

A. The placement of the building on the site simplifies those changes required to make the complex fully accessible to the handicapped. The spirit of ADA Title III and 521 CMR can be accommodated by bringing featured or regularly used entrances into conformance. In our opinion, every entrance does not have to be addressed, only those that serve the majority of the public on a regular basis.

B. The following corrective work is not necessarily a prioritized schedule of effort but is an attempt to bring forward those observations described in Part II, Survey - Tour of Facility, noting their impact on CMR 521 and ADA - 28 CFR Part 36.

1. Designated handicapped parking spaces shall be in a ratio to total spaces. CMR 521 schedules a series of ratios but our observation of potential parking spaces suggests at least four (4) designated spaces. These should be at two (2) locations - Administration and Gymnasium. Each space shall have a painted international symbol on the paving and have vertical signage no less than five (5) feet, nor more than eight (8) feet high. All shall be as set forth in Section 23, CMR 521.

2. Curb cuts from driveways to sidewalks should be placed in line with or contiguous to building entrances. Dimensional limits and slopes shall conform to Section 21, CMR 521. Our inspection of numerous schools throughout the State find this one of the most misunderstood requirements. Proper slope design is essential. Locate one at the Gymnasium, District Office and High School Administration.

3. Sidewalks, driveway and parking lot paving are in poor condition and present a number of trip hazards to both the public at large and those persons who are disabled. It is our understanding that repaving, which will require a significant capital expenditure, may be scheduled in the near future. This potential work effort is encouraged as it will create the opportunity to correct a number of issues identified "in the survey".

4. The main entrance to the school should have a "No Parking" area to be used, strictly, as a passenger loading zone. This can be accomplished by signage, yellow cross hatching in the drive land and an adjacent wheel chair curb cut. Refer to Section 20, CMR 521. The gym wing would benefit from a similar approach.

IV. RECOMMENDATIONS - ARCHITECTURAL DESIGN:

A. The "survey" section of this report describes physical building characteristics that impair access, either through doorways, corridor systems, stairs etc. It also continues with commentary on Life Safety equipment, sanitary facilities and fixtures used by students and staff and normally identified with an educational complex. It shall be understood that ADA Title I - Employment, may develop specific issues that are not addressed in this report.

B. The following corrective work is not necessarily a prioritized schedule of effort but is an attempt to bring forward those observations described in Part II, Survey - Tour of Facility, noting their impact on CMR 521 and ADA 28 CFR Part 36.

1. Exterior doors primarily used by the public are typically paired 2'6" wide door leafs. This is often matched to interior vestibule doors of the same size. None conform to the law. We found at least five (5) perimeter entrances that, in our opinion, should conform to CMR 521 and the ADA.
   a. School District Office and Auditorium.
   b. School Administration - 1968 Wing.
   c. Cafeteria and Library.
   d. Gymnasium locker facility.
   e. Access to west playfields.

   These aforementioned entrances should be modified to have a minimum, single, door leaf of 36 inches with side room at the latch strike of at least 18 inches, all as set forth in Section 26, CMR 521. Hardware, including threshold, closures,

pulls, pressure and closing speeds shall conform to the ADA 4.13.11 and CMR 521, Section 27.

2. Fire Alarm signals throughout are typically in code conformance with a strobe light and horn configuration. However, the pull station handle exceeds the allowed maximum mounting height by 10 inches. CMR 521, Section 38 requires a 4'-6" meximum height above the floor. Sound levels should be verified as per ADA 4-28-2, ie. 15 dbA, above background but total shall not exceed 120 dbA.

3. None of the existing drinking fountains meet the code. Refer to CMR 521, Section 36. Provide three (3), ie. gymnasium wing, cafeteria and classroom wing (centralized).

4. Handicapped toilet facilities have been provided at one site within the complex. Refer to Part II, Item 28 and 29. Additional work is required to bring the two toilet rooms into full code conformance. We recommend additional toilet facilities be provided elsewhere through renovation in order to improve distribution and access in the following areas. Refer also to "Survey". Staff or private toilets might also be appropriate.
   a. Gymnasium Lobby.
   b. Auditorium area.
   c. South wing (1968), service classrooms, Library, Cafeteria.

5. Paired 2'-6" wide entrance doors to specialized areas should have at least one entrance to each reconfigured to provide one leaf that is 3'-0" wide as required by CMR 521, Section 27. Life satety codes might be interperted to require two. Locations are as follows:
   a. Exercise Room(s).
   b. Gymnasium.
   c. Auditorium.
   d. Cafeteria.
   e. Library.
   f. Student Center.

6. The ramp connector from the academic wing to the gymnasium is described as non-conforming in Part II, Item B-43. It is suggested that a new ramp be constructed in the vicinity of the gym lobby that will conform to appropriate slopes and landings as set forth in the Code. This could occur as an addition or by alteration within existing areas.

V. COST ESTIMATES:

A. The following cost estimates, in many instances, group recommended construction activities in the same manner as they are referred to in the narrative. Values are based on current market conditions using our historic bid data on similar work and cost estimating references such as R. S. Means Company Inc. and F. W. Dodge Corporation. Costs presented shall be considered as "ball park" estimates only. It is not intended that these estimates by-pass the more detailed preliminary estimates that are associated with the design of actual work that will take place.

B. Cost Estimate - Reference Section III, SITE

Item	Paragraph	($) Value
1.	B-1 - Parking Spaces (3 locations)	$ 900.00
2.	B-2 - Curb Cuts (minimum of 3)	2,500.00
3.	B-3 - Paving Repair (capital improvement) Not included in this scope of work (est. $60,000.)	N.C.

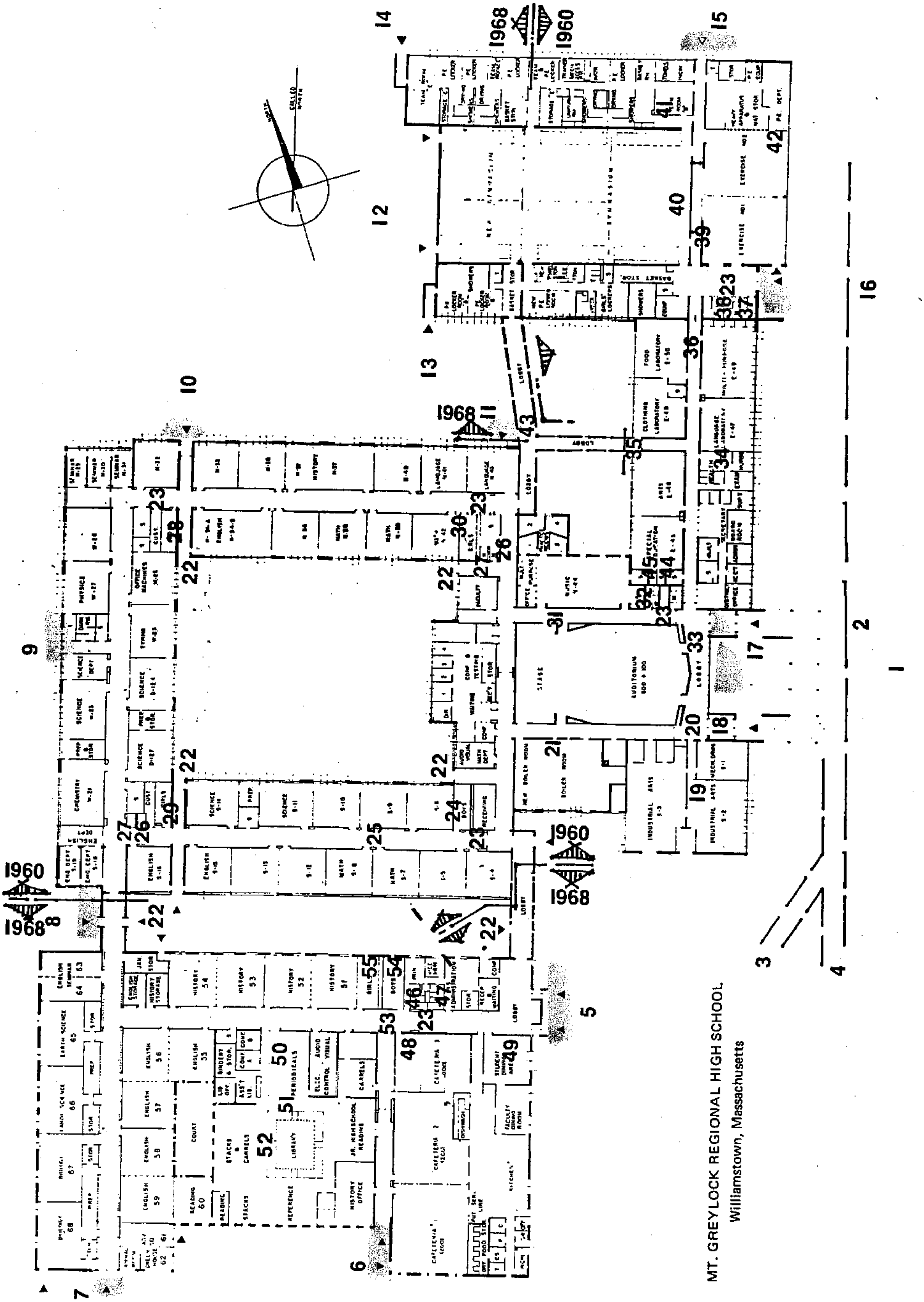
C. Cost Estimate - Reference Section IV, ARCHITECTURAL

Item	Paragraph	($) Value
1.	B-1 - Exterior and Vestibule Doors (5 sites)	$28,500.00
2.	B-2 - Fire Alarm Pull Stations	3,000.00
3.	B-3 - Drinking Fountains (3 sites)	3,300.00
4.	B-4 - Handicapped Toilet Facilities (3 sites)	20,000.00
5.	B-5 - Doors at corridors - specialized areas	20,500.00
6.	B-6 - Ramp connector, Gym-Academic	30,000.00

VI. CONCLUSION:

A. **SITE** - Access from driveways and parking lots can readily be upgraded to be fully accessible. The Code requires passenger loading zones and parking spaces less than 200'0" away from the building entrance. Closer parking and improvement to curb cuts is an early priority and will not cost a great deal. Future paving of all areas may be at least one to two years away. This presents too long a delay in addressing curb cut problems.

B. **Architectural** - Interior access to specialized areas and typical classrooms is emphasized. Fully accessible, male and female toilets should be constructed at the earliest opportunity, perhaps in a central location. Impact as multi-use facility. Expand as per employee potential or rights staff related issues. At least two, main, exterior entrance should be constructed that conform to CMR 521. Other issues can be a phased program, however, it is important to note that Title III of the ADA does not stand alone and in impacted by four other parts particularly, Title I - Employment, and Title II - Public Service. Pressures from these areas could reassemble and expand any listing of priorities.



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Note: The original version of this report includes 6 pages of photographs which are omitted from this version.