




CITY OF SOMERVILLE, MASSACHUSETTS

BOARD OF ASSESSORS

JOSEPH A. CURTATONE

MAYOR

To: Board of Aldermen, Finance Committee

From: Marc A. Levye, RMA, MMA, Chief Assessor 

Date: January 31, 2013

Subject: Powder House School Assessment

Recently, the Office of Community Development and Strategic Planning requested that the Board of Assessors provide a current assessment for the vacant elementary school building at 1060 Broadway known as the Powder House School. A walk through inspection was conducted by me and Lynda Swartz, Director of Commercial Assessments on January 16, 2013.

Upon review, we presented a value as follows:

Land value	\$1,879,100
Building value	\$3,832,500
Total value	\$5,711,600

The value should be considered a current use value or FY 2013 assessment and does not represent a value based upon potential use.

Approach to Value:

To determine value, the Assessors utilize a market adjusted cost approach to value for most properties. This method establishes land values based upon land sales when available. Due to a lack of sales, the Assessors are often required to consider the sale of improved properties in order to derive land value. This analysis is known as the residual land technique and establishes a land value by subtracting the building value or RCNLD (replacement cost new minus depreciation) from the sale price. The result offers a residual land value and allows the Assessors to develop a land schedule with adjustment for location.

Building value, as stated is determined by the cost approach. A replacement cost new is established for each parcel and is adjusted by the observed level of depreciation in order to determine the RCNLD. The Assessors rely upon cost or base rates published by the Marshall & Swift Valuation Service.

Land Value:

To corroborate the stated land value, the Assessors reviewed recent land sales and as expected, discovered that few were available. To augment the number of sales, sales of properties with improvements were considered as well. A land sale search of surrounding communities including Medford, Cambridge, Arlington, and Everett was also conducted.

Only 2 actual land sales were found. One sale was located in Somerville at 56 Clyde St. and the other in Everett. Eight other sales in Somerville, all involving transactions of properties with improvements were analyzed and can be observed in the attached grid on page 5.

The sales grid shows the subject plus the 10 selected comparables. The two actual land sales show a per sf land value of between almost \$23 per sf to \$24. The sales were of parcels of about the same area of a little over an acre and were about 10 months apart. The Everett sale likely would have commanded a higher sale price in Somerville and both parcels are just a bit over half the size of the subject.

The next 3 sales, including 191 Inner Belt Rd., 130 Broadway, and 600 Windsor Pl. all show a per sf land value ranging from the low \$20 to mid \$20 per sf. In terms of parcel size, 191 Inner Belt Rd. is the most comparable to the subject at about 5,000 sf less in size.

Generally speaking, as pointed out at your last committee meeting, land increases in value at a decreasing rate based upon parcel size. In other words, the larger the parcel, the lower the price per sf and the smaller the lot size, the higher the price per sf. This is demonstrated in the next 3 comparables that include 35 Medford St., 338 Broadway, and 92 Prospect St. All indicate a parcel value in the mid \$30 per sf range yet all are considerably smaller than the previous 3. They are the most recent sales but are much smaller than the subject.

The last 2 comparables are 48 Third St. and 16-42 Weston Ave. 48 Third St. is the oldest sale and the biggest parcel. 16-42 Weston Ave. is most comparable in terms of location, indicates the highest price per sf but is more than 3 times smaller than the Powder House school site.

The median sale price of the comparables is indicated as \$26.49 per sf although the median size of the parcels is 1.13 acres with the school site a shade under 2 acres.

The most comparable property is 191 Inner Belt Rd. as it is roughly the same size as the subject and is of a similar value to the median although slightly less. The 2 properties lie at

opposite ends of the City but both are considered very good locations. The Inner Belt property sits in a well established office and technology locus. The school property is situated in West Somerville between Davis Sq. and Teele Sq.

The selection of 191 Inner Belt Rd. as the most comparable is also supported by the sales of the only 2 actual land sales, (without improvements). The land value for 191 Inner Belt Rd. is \$23.74. The land value for the school is **\$23.24** since the lot is slightly larger.

Building Value:

The Powder House School was built in 1973 and is now 40 years old. The 2 ½ story building was obviously designed as an elementary school and would appear to have limited adaptive re-use potential at best. Functional as a school at one time, it has been vacant for several years and shows signs of deterioration with considerable deferred maintenance. It is also a rather confusing maze of long hallways leading to classrooms that open to other classrooms that seem to go on forever. However, it is still an improvement of 87,203 sf that is not without value.

As mentioned, the Assessors use a cost approach to building value. This approach considers all components of the building such as but not limited to total square foot measurement, exterior and interior wall type, roof structure and type, flooring, heating and cooling system, elevator, and outdoor paving.

Once all variables are known, a price per sf can be determined based upon rates reported by the Marshall & Swift Valuation Service. Before a final building value can be derived, a replacement cost new (RCN) must be established. To arrive at the correct RCN, the Assessors must determine the appropriate grade, (measure of overall construction quality and utility).

The building is considered an average class C building of average or low cost type. A description with per sf costs can be reviewed on page 6 which shows information reproduced from Marshall & Swift. The cost to build this type of building today indicate a range between \$97.83 and \$122.94 per sf. However, this range gets adjusted by 2% when the cost multiplier for the northeast location is applied which changes the range to \$99.79 and \$125.40 respectively. This would be the replacement cost for a new building with all the components and materials of the existing school.

Examples of these kinds of structures can be viewed on pages 7 and 8. Notice that the photo of the low cost class C school bears a surprising resemblance to the Powder House School. Using the low range, the school would have a replacement cost of approximately \$8,702,000 (\$99.79 per sf X 87,203 sf).

This figure, however, must be further adjusted to reflect the current grade and condition. As it exists now, the structure is arguably functionally obsolescent and can no longer be

considered an average grade. In fact, at this point the Assessors maintain that the school is a minimum grade or the lowest possible grade in our model. When a minimum grade is applied, it lowers the RCN to \$6,686,726 (adjusted rate of \$76.68 per sf X 87,203 sf).

The final step in arriving at a building value must account for depreciation. The building is now in poor condition with an effective year built (EYB) of 1969 or less than its actual year of construction of 1973, (EYB reflects overall condition or the level of renovation i.e. renovated to circa 1990, 1995, 2000 or more or less). A building with an EYB of 1969 by definition is considered 44% depreciated (base year of 2013 minus 1969) or 56% good.

So $.56 \times \$6,686,726 =$ an RCNLD of \$3,744,600. To that we have to add the depreciated outbuilding and extra features, (paving, elevator, etc.) value of \$87,900. Final building value is $\$3,744,600 + \$87,900 =$ **\$3,832,500.**

DATE	SALE PRICE	BUILDING VALUE (RCNLD)	RESIDUAL LAND VALUE	LAND PRICE PER SF	COMMENTS
	N/A	N/A	N/A	N/A	
8/4/2010	\$1,125,000	N/A	N/A	\$22.79	
5/24/2011	\$1,135,000	N/A	N/A	\$24.08	
3/30/2011	\$2,975,000	N/A	N/A	\$23.74	
4/25/2011	\$2,000,000	1,174,000	1,801,000	\$26.67	
7/29/2009	\$2,500,000	1,229,000	771,000	\$20.78	
12/20/2012	\$4,200,000	1,272,500	1,227,500	\$37.50	
10/10/2012	\$1,257,511	2,354,000	1,846,000	\$36.95	
12/24/2012	\$1,800,000	543,900	713,611	\$34.15	INCLUDES 97 PROSPECT ST
6/27/2008	\$6,700,000	742,800	1,057,200	\$26.30	
3/10/2011	\$1,598,000	3,503,700	3,196,300	\$38.38	
		578,500	1,019,500		
			MEDIAN	\$26.49	

CALCULATOR METHOD

SECTION 18 PAGE 11
February 2011

ELEMENTARY SCHOOLS (365)

CLASS	TYPE	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT	Sq. M.	COST Cu. Ft.	Sq. Ft.
A-B	Excellent	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)	\$2,555.70	\$23.74	\$237.43
	Good	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl	High level lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)	2,021.05	18.78	187.76
	Average	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Warm and cool air (zoned)	1,665.62	15.47	154.74
C	Excellent	Steel frame, face brick, metal panels, tile	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)	2,193.06	20.37	203.74
	Good	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)	1,706.85	15.86	158.57
	Average	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system	1,323.33	12.29	122.94
D	Low cost	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced Air	1,053.04	9.78	97.83
	Excellent	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)	2,101.46	19.52	195.23
	Good	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)	1,624.61	15.09	150.93
DPOLE	Average	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.	1,250.45	11.62	116.17
	Low cost	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, inoleum or wood floors	Minimum school lighting and plumbing	Forced Air	989.10	9.19	91.89
	Average	Pole frame, good metal panels, finished inside, some trim	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.	1,184.58	11.01	110.05
S	Low cost	Pole frame, metal siding, finished interior, insulated, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced Air	930.66	8.65	86.46
	Good	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)	1,617.29	15.03	150.25
	Average	Pre-engineered, sandwich panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.	1,233.88	11.46	114.63
A-B	Low cost	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced Air	967.47	8.99	89.88
	Finished classroom	Reinforced concrete, plaster interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Warm and cool air (zoned)	\$1,166.60	\$10.84	\$108.38
	Parking	Unfinished interior	Concrete with hardener, lines and stops	Exposed lighting, drains	Ventilation	576.09	5.35	53.52
CDS	Unfinished	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None	508.17	4.72	47.21
	Finished classroom	Reinforced concrete, plaster or drywall interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Forced air	797.07	7.41	74.05
	Parking	Unfinished interior	Finished ceiling, concrete floor with hardener	Exposed lighting, adequate drains	Ventilation	385.67	3.58	35.83
CDS	Unfinished	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None	320.12	2.97	29.74

SCHOOL BASEMENTS

A-B	Finished classroom	Reinforced concrete, plaster interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Warm and cool air (zoned)	\$1,166.60	\$10.84	\$108.38
	Parking	Unfinished interior	Concrete with hardener, lines and stops	Exposed lighting, drains	Ventilation	576.09	5.35	53.52
CDS	Unfinished	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None	508.17	4.72	47.21
	Finished classroom	Reinforced concrete, plaster or drywall interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Forced air	797.07	7.41	74.05
	Parking	Unfinished interior	Finished ceiling, concrete floor with hardener	Exposed lighting, adequate drains	Ventilation	385.67	3.58	35.83
CDS	Unfinished	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None	320.12	2.97	29.74

For fire-resistant Type I basements with concrete slab separation under C, D, or S units, add \$5.25 per square foot (\$56.51 per square meter). Where utilized as courtyard deck on top side, add \$10.80 per square foot (\$116.25 per square meter).

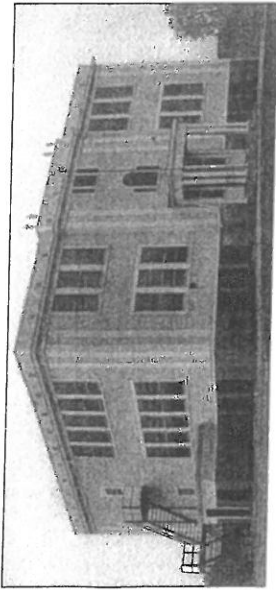
NOTE: For dressing/shower room basements, see Page 23.
See bottom of Page 10 for other refinement notes.
MEZZANINES: See Page 25 for mezzanine costs.

MARSHALL VALUATION SERVICE

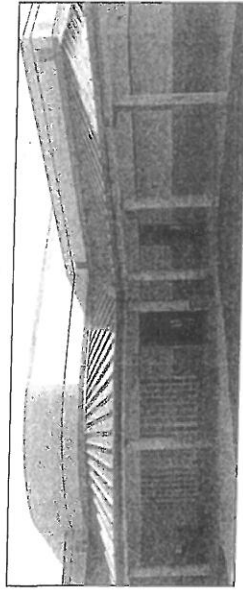
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The data included on this page becomes obsolete after January 2013.

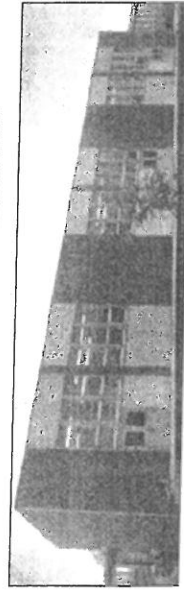
SCHOOL BUILDINGS



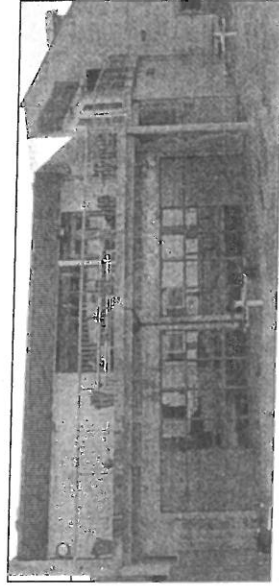
15. AVERAGE - LOW COST CLASS D SCHOOL



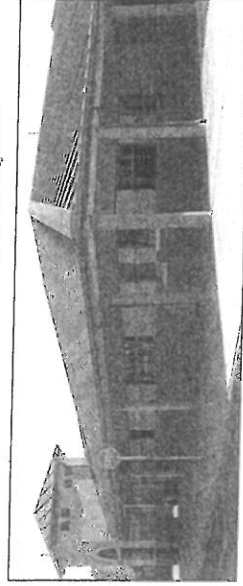
18. GOOD CLASS D MEDIA CENTER



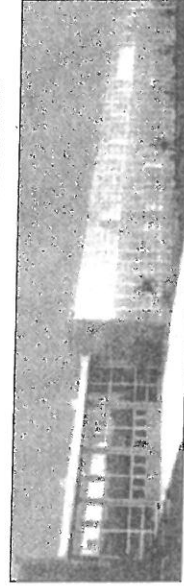
21. GOOD CLASS D MANUAL ARTS



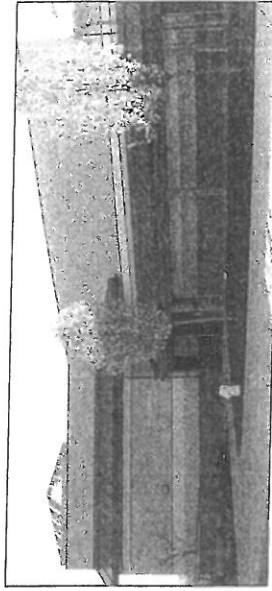
16. LOW COST CLASS C COMMONS



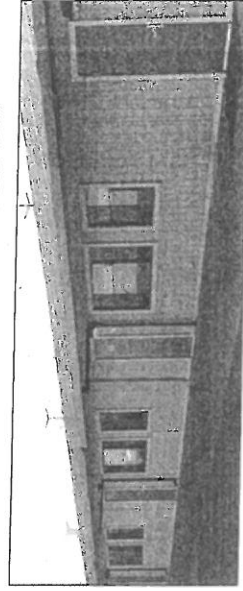
19. AVERAGE CLASS D ADMINISTRATION



22. GOOD CLASS C CLASSROOM



17. GOOD CLASS C MULTIPURPOSE



20. AVERAGE RELOCATABLE CLASSROOM



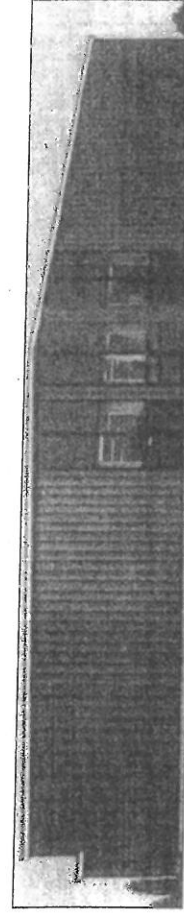
23. AVERAGE - GOOD CLASS C CLASSROOM



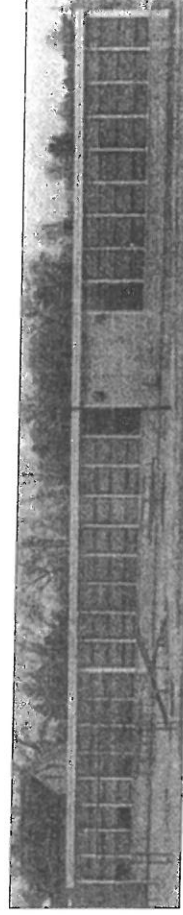
24. AVERAGE CLASS C CLASSROOM



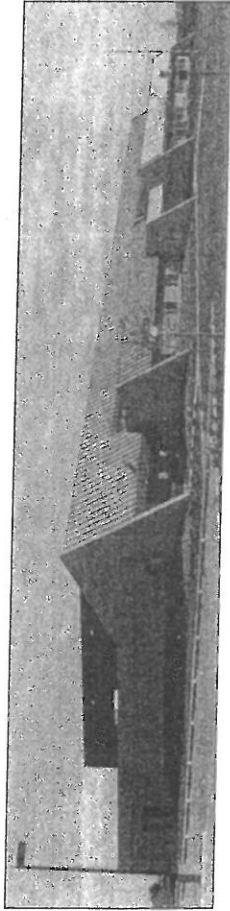
25. AVERAGE CLASS D CLASSROOM



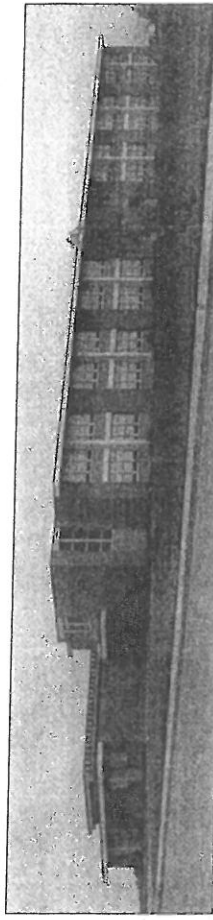
26. AVERAGE CLASS S CLASSROOM



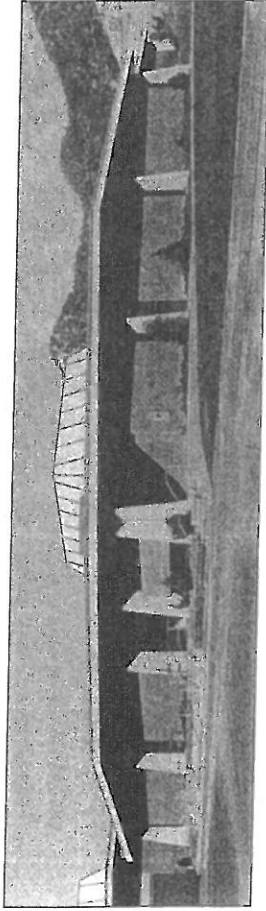
27. LOW COST CLASS D CLASSROOM



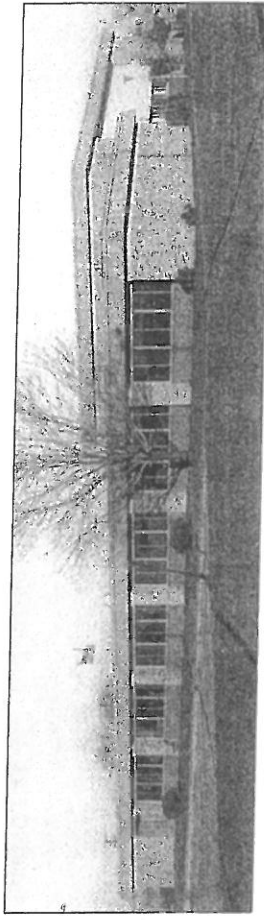
9. GOOD CLASS D



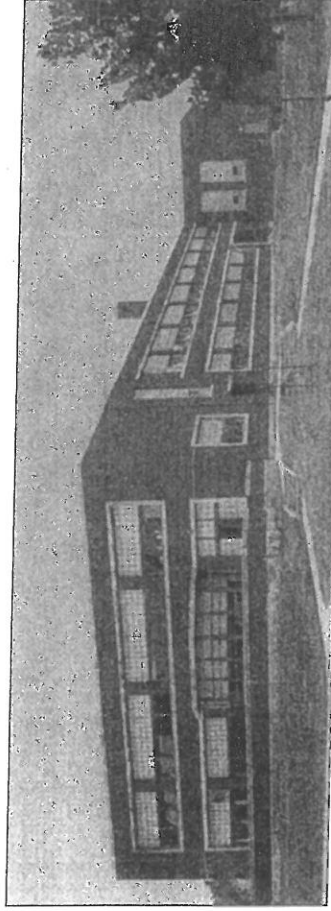
10. GOOD CLASS C



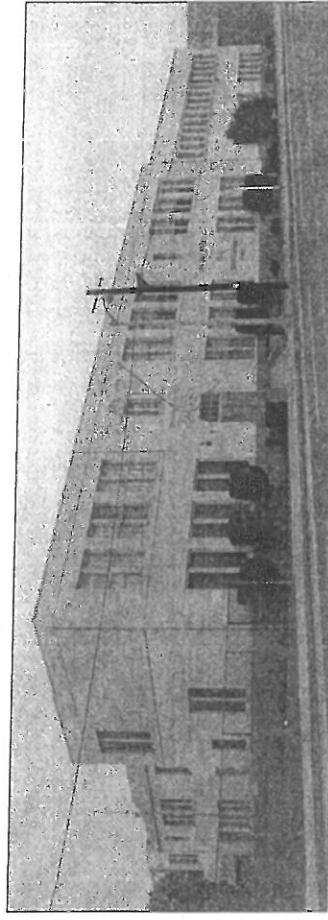
11. AVERAGE CLASS C



12. AVERAGE CLASS C



13. AVERAGE CLASS C



14. AVERAGE CLASS C

SUMMARY OF ILLUSTRATIONS

GENERAL: The exterior appearance and interior finish of schools more often conform in quality than any other type of property. However, this is not a specific rule, particularly in older buildings where the electrical and mechanical items are generally inferior to the modern schools of today.

1. & 2. These Average Class A and B schools could be Class C with changes in the floor and roof structures which are not visible from an exterior inspection.

3. An Excellent Class C school with steel frame, heat-absorbent walls and a general air of excellence.

4. This Good Class C steel-framed school will tend toward the high side of this cost range.

5. This Good Class C will be very close in base cost to Nos. 1 & 2, where the quality must be picked commensurate with the class.

6. - 10. These represent the variety of Good school buildings.

11. - 13. These are Average schools tending toward the high side of the range depending upon the number of interior amenities.

14. This older school might have rated higher when it was built, but the lack of modern electrical circuits and fixtures and generally outmoded plumbing put it in the Average classification.

SUMMARY: Buildings of different classes of construction may look alike. Buildings with identical facades may differ in quality. Costs may be interpolated for quality or class of construction.