

FACILITY CONDITION ASSESSMENT

DLR GROUP

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Riverside, California 92507

Kevin Fleming



FACILITY CONDITION ASSESSMENT OF

MEADOWS ELEMENTARY

1200 North Meadows Avenue
Manhattan Beach, California 90266

PREPARED BY:

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EMG Project #: 112851.15R-003.017

Date of Report: April 7, 2015

On site Date: February 17, 2015

Immediate Repairs Report **Meadows Elementary School** **4/7/2015**



| Report Section | ID | Cost Description | Quantity | Unit | Unit Cost | Subtotal | Deficiency Repair Estimate * |
|---|--------|---|----------|------|------------|----------|------------------------------|
| 1.2 | 327263 | Termite/Vermin/Animal Infestation Consultant | 1 | Each | \$5,500.00 | \$5,500 | \$5,500 |
| 1.2 | 325967 | Civil Engineer Utility Study | 1 | EA | \$5,500.00 | \$5,500 | \$5,500 |
| 3.2 | 327260 | ADA, Install curb cut, concrete, 6" rise | 1 | EA | \$500.00 | \$500 | \$500 |
| 8.1 | 327209 | Replace acoustical ceiling tiles - partial | 2500 | CSF | \$15.00 | \$37,500 | \$37,500 |
| 8.3 | 325968 | Duct Furnace 100 to 225 MBH no AC, roof mounted | 1 | EA | \$5,310.00 | \$5,310 | \$5,310 |
| 8.5 | 325970 | Electrical receptacle and plugs | 70 | EA | \$70.95 | \$4,967 | \$4,967 |
| Immediate Repairs Total | | | | | | | \$59,277 |
| * Location Factor (1.0) included in totals. | | | | | | | |

Draft - For Discussion Purposes Only

Replacement Reserves Report

Meadows Elementary School

4/7/2015

| Report Section | ID | Cost Description | Lifespan (EUL) | E | Age | RUL | Quantity | Unit | Unit Cost | Subtotal | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | Deficiency Repair Estimate | | | | |
|---|--------|---|----------------|----|-----|-------|----------|------|------------|-----------|----------|------|------|----------|-------------|-----------|------|----------|-----------|-----------|----------|-----------|-----------|------|------|-----------|----------|----------|----------|----------|----------------------------|-----|-----|-----|-----|
| 1.2 | 327263 | _0001 Termite/Vermin/Animal Infestation Consultant | 0 | 0 | 0 | 1 | Each | | \$5,500.00 | \$5,500 | \$5,500 | | | | | | | | | | | | | | | | | | | | \$5,500 | | | | |
| 1.2 | 325967 | _0001 Civil Engineer Utility Study | 0 | 0 | 0 | 1 | EA | | \$5,500.00 | \$5,500 | \$5,500 | | | | | | | | | | | | | | | | | | | | \$5,500 | | | | |
| 3.2 | 327260 | G2023A ADA, Install curb cut, concrete, 6" rise | 25 | 25 | 0 | 1 | EA | | \$500.00 | \$500 | \$500 | | | | | | | | | | | | | | | | | | | | \$500 | | | | |
| 5.2 | 325822 | G2022 Patch, Repair and Seal Coat asphalt driveway | 15 | 7 | 8 | 55100 | SF | | \$0.50 | \$27,550 | | | | | | | | | \$27,550 | | | | | | | | | | | | \$27,550 | | | | |
| 5.2 | 325819 | G2022 Patch, Repair and Seal Coat asphalt driveway | 15 | 7 | 8 | 28500 | SF | | \$0.50 | \$14,250 | | | | | | | | | \$14,250 | | | | | | | | | | | | \$14,250 | | | | |
| 6.3 | 325859 | B3011 Replace Existing EPDM Roof with PVC Membrane Roofing | 20 | 16 | 4 | 878 | SQ | | \$1,135.17 | \$996,679 | | | | | \$996,679 | | | | | | | | | | | | | | | | \$996,679 | | | | |
| 6.4 | 325912 | B2011 General painting cost per SF, minor prep work, single story bldg. (up to 15 feet) | 10 | 5 | 5 | 29100 | SF | | \$2.42 | \$70,422 | | | | | | \$70,422 | | | | | | | | | | \$70,422 | | | | | \$140,844 | | | | |
| 6.4 | 325913 | B2011 General painting cost per SF, minor prep work, single story bldg. (up to 15 feet) | 10 | 5 | 5 | 10000 | SF | | \$2.42 | \$24,200 | | | | | | \$24,200 | | | | | | | | | | \$24,200 | | | | | \$48,400 | | | | |
| 6.6 | 327212 | B2023 Replace aluminum storefront up to 10' tall with door | 25 | 20 | 5 | 1380 | SF | | \$39.26 | \$54,179 | | | | | | \$54,179 | | | | | | | | | | | | | | | \$54,179 | | | | |
| 7.6 | 327210 | D5037 Replace central panel | 15 | 12 | 3 | 1 | EA | | \$2,479.25 | \$2,479 | | | | \$2,479 | | | | | | | | | | | | | | \$2,479 | | | \$4,959 | | | | |
| 8.1 | 327208 | C3011 Paint interior walls, CMU, including surface prep | 7 | 4 | 3 | 58000 | SF | | \$0.89 | \$51,620 | | | | \$51,620 | | | | | | | \$51,620 | | | | | | \$51,620 | | | | \$154,860 | | | | |
| 8.1 | 325917 | C3024 Replace Vinyl tile | 18 | 10 | 8 | 800 | SY | | \$67.75 | \$54,200 | | | | | | | | | \$54,200 | | | | | | | | | | | | \$54,200 | | | | |
| 8.1 | 325915 | C3025 Replace carpet, standard commercial, medium traffic | 8 | 4 | 4 | 6000 | SY | | \$59.90 | \$359,400 | | | | | \$359,400 | | | | | | | \$359,400 | | | | | | | | | \$718,800 | | | | |
| 8.1 | 327209 | C3032 Replace acoustical ceiling tiles - partial | 9 | 9 | 0 | 2500 | CSF | | \$15.00 | \$37,500 | \$37,500 | | | | | | | | | \$37,500 | | | | | | | | \$37,500 | | | \$112,500 | | | | |
| 8.3 | 325968 | D3041 Duct Furnace 100 to 225 MBH no AC, roof mounted | 25 | 25 | 0 | 1 | EA | | \$5,310.00 | \$5,310 | \$5,310 | | | | | | | | | | | | | | | | | | | | \$5,310 | | | | |
| 8.3 | 325966 | D3041 Gas-fired furnace 85 to 100 MBH no AC | 25 | 16 | 9 | 24 | EA | | \$1,698.00 | \$40,752 | | | | | | | | | | \$40,752 | | | | | | | | | | | \$40,752 | | | | |
| 8.3 | 327218 | D3052 Heat Pump air to air, 4 Ton, Replace | 20 | 16 | 4 | 8 | EA | | \$5,725.00 | \$45,800 | | | | | \$45,800 | | | | | | | | | | | | | | | | \$45,800 | | | | |
| 8.4 | 327201 | D2023 Water heater, tankless, on-demand, natural gas/propane, 6.4 GPM | 15 | 12 | 3 | 5 | EA | | \$1,415.00 | \$7,075 | | | | \$7,075 | | | | | | | | | | | | | | \$7,075 | | | \$14,150 | | | | |
| 8.4 | 325969 | D2023 50-gallon residential water heater, gas-fired, replace | 12 | 5 | 7 | 6 | EA | | \$1,410.00 | \$8,460 | | | | | | | | \$8,460 | | | | | | | | | | | \$8,460 | | \$16,920 | | | | |
| 8.5 | 325970 | D5021 Electrical receptacle and plugs | 20 | 20 | 0 | 70 | EA | | \$70.95 | \$4,967 | \$4,967 | | | | | | | | | | | | | | | | | | | | \$4,967 | | | | |
| 9.0 | 325921 | G2049 Replace Shed/Wood Playhouse Structure | 20 | 15 | 5 | 2 | EA | | \$3,500.00 | \$7,000 | | | | | | \$7,000 | | | | | | | | | | | | | | | \$7,000 | | | | |
| Totals, Unescalated | | | | | | | | | | | \$59,277 | \$0 | \$0 | \$61,174 | \$1,401,879 | \$155,801 | \$0 | \$8,460 | \$96,000 | \$78,252 | \$51,620 | \$0 | \$359,400 | \$0 | \$0 | \$94,622 | \$0 | \$51,620 | \$47,054 | \$8,460 | \$2,473,619 | | | | |
| Location Factor (1.00) | | | | | | | | | | | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Totals, Escalated (3.0% inflation, compounded annually) | | | | | | | | | | | \$59,277 | \$0 | \$0 | \$66,847 | \$1,577,827 | \$180,616 | \$0 | \$10,405 | \$121,610 | \$102,101 | \$69,373 | \$0 | \$512,418 | \$0 | \$0 | \$147,418 | \$0 | \$85,320 | \$80,107 | \$14,835 | \$3,028,153 | | | | |

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CERTIFICATION

DLR Group retained EMG to perform this Facility Condition Assessment in connection with its Facilities Master Planning Project for the Manhattan Beach Unified School District at Meadows Elementary, 1200 North Meadows Avenue, Manhattan Beach, California 90266, the "Property". It is our understanding that the primary interest of DLR Group is to locate and evaluate materials and building system defects that might significantly affect the value of the property and to determine if the present Property has conditions that will have a significant impact on its continued operations.

The conclusions and recommendations presented in this report are based on the brief review of the plans and records made available to our Project Manager(s) during the site visit, interviews of available property management personnel and maintenance contractors familiar with the Property, appropriate inquiry of municipal authorities, our Project Manager's walk-through observations during the site visit, and our experience with similar properties.

No testing, exploratory probing, dismantling or operating of equipment or in depth studies were performed unless specifically required under Section 2 of this report. This assessment did not include engineering calculations to determine the adequacy of the Property's original design or existing systems. Although walk-through observations were performed, not all areas were observed (See Section 4.2 for areas observed). There may be defects in the Property, which were in areas not observed or readily accessible, may not have been visible, or were not disclosed by management personnel when questioned. The report describes property conditions at the time that the observations and research were conducted.

Any reuse or distribution of this report without such consent shall be at DLR Group's and the recipient's sole risk, without liability to EMG.

Prepared by: Scott Lattimer, Project Manager
Valentin Tinajero, Project Manager

Reviewed by:



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1. EXECUTIVE SUMMARY

1.1. PROPERTY INFORMATION AND GENERAL PHYSICAL CONDITION

The property information is summarized in the table below. More detailed descriptions may be found in the various sections of the report and in the Appendices.

| Property Information | |
|------------------------------------|---|
| Address: | 1200 North Meadows Avenue Manhattan Beach, California, 90266 |
| Year constructed: | 1959 |
| Current owner of property: | Manhattan Beach Unified School District |
| Management Point of Contact: | Paul Ruta Director of Maintenance and Operations 310.318.7345 x5302 pruta@mbusd.org |
| Property type: | Elementary School |
| Site area: | 7.4 Acres |
| Gross floor area: | 37,355 Square Feet |
| Net Leasable area: | N/A |
| Number of buildings: | Seven permanent and eight modular classroom buildings |
| Number of stories: | One-story |
| Parking type and number of spaces: | Forty-seven spaces in open lots |
| Building construction: | Masonry bearing walls and concrete-formed decking. |
| Bay Column Spacing: | N/A |
| Interior vertical clearance: | Varies, approximately 10 Feet |
| Roof construction: | Flat roofs with built-up membrane. |
| Exterior Finishes: | Painted masonry. |
| Heating and/or Air-conditioning: | Main school buildings: Split system gas furnace heating, no cooling. Portable classrooms: Heat pump cooling and heating. |
| Fire and Life/Safety: | Hydrants, smoke detectors, alarms, and extinguishers. |
| Dates of visit: | February 17, 2015 |
| Point of Contact (POC): | Paul Ruta, Director of Maintenance and Operations |
| Assessment and Report Prepared by: | Scott Lattimer Valentin Tinajero |
| Reviewed by: | Kathleen Sullivan Technical Report Reviewer |

Generally, the property appears to have been constructed within industry standards in force at the time of construction. The property appears to have been well maintained in recent years and is in good overall condition.

According to property management personnel, the property has had a limited capital improvement expenditure program over the past three years, primarily consisting of exterior painting. Supporting documentation was not provided in support of these claims but some of the work is evident.

According to property management personnel, no major capital expenditures are planned for next year.

1.2. SPECIAL ISSUES AND FOLLOW-UP RECOMMENDATIONS

As part of the FCA, a limited assessment of accessible areas of the building(s) was performed to determine the presence of mold, conditions conducive to mold growth, and/or evidence of moisture. Property personnel were interviewed concerning any known or suspected mold, elevated relative humidity, water intrusion, or mildew-like odors. Sampling is not a part of this assessment.

There are no visual indications of the presence of mold growth, conditions conducive to mold growth, or evidence of moisture in representative readily accessible areas of the property.

- It is recommended that a plumber inspect the grease traps and sewer lines to ensure that they have been properly maintained.
- It is recommended that the school district ensure that the commercial kitchen exhaust vents are cleaned regularly to avoid grease fires.
- A written request for compliance with the State Architects Office was submitted, and a copy of the request is included in Appendix C. Significant information will be forwarded upon receipt.
- A written request for compliance with the Manhattan Beach Fire Department was submitted, and a copy of the request is included in Appendix C. Significant information will be forwarded upon receipt.

The following issues should be considered:

- Verify that all warranties are transferable.
- Verify that any alterations, installations, or other improvements since the project was first constructed and occupied have been properly permitted and approved by municipal agencies.
- Verify that no defective materials or equipment are used at the property.

Copies of the documents listed below should be obtained:

- All roof, equipment and system warranties/guarantees and transfers. Manufacturers often levy a warranty transfer fee and require that the equipment or system be in pristine condition in order to provide such transfers. This requirement often necessitates upgrades, repairs, or servicing.
- All available site and building construction drawings and specifications.
- All government documents such as Certificates of Occupancy, permits, zoning variances, easements, tax receipts, and other pertinent records.

The following issues require additional study:

- Facilities personnel expressed concern about termites. A follow up study by a specialized consultant should be conducted. The cost of this work is included in the Short Term Cost Report.
- Facilities personnel informed us that the water pressure appears to be inadequate. A follow up study by a specialized consultant should be conducted. The cost of this work is included in the Short Term Cost Report.

1.3. OPINIONS OF PROBABLE COST

Cost estimates are attached at the front of this report (following the cover page).

These estimates are based on Invoice or Bid Document/s provided either by the Owner/facility and construction costs developed by construction resources such as *R.S. Means* and *Marshall & Swift*, EMG's experience with past costs for similar properties, city cost indexes, and assumptions regarding future economic conditions.

Opinions of probable costs should only be construed as preliminary, order of magnitude budgets. Actual costs most probably will vary from the consultant's opinions of probable costs depending on such matters as type and design of suggested remedy, quality of materials and installation, manufacturer and type of equipment or system selected, field conditions, whether a physical deficiency is repaired or replaced in whole, phasing of the work (if applicable), quality of contractor, quality of project management exercised, market conditions, and whether competitive pricing is solicited, etc. ASTM E2018-08 recognizes that certain opinions of probable costs cannot be developed within the scope of this guide without further study. Opinions of probable cost for further study should be included in the PCR.

1.3.1. Methodology

Physical Needs Assessment:

Based upon site observations, research, and judgment, along with referencing Expected Useful Life (EUL) tables from various industry sources, EMG opines as to when a system or component will most probably necessitate replacement. Accurate historical replacement records, if provided, are typically the best source of information. Exposure to the elements, initial quality and installation, extent of use, the quality and amount of preventive maintenance exercised, etc., are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual chronological age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age. Projections of Remaining Useful Life (RUL) are based on continued use of the Property similar to the reported past use. Significant changes in tenants and/or usage may affect the service life of some systems or components.

Where quantities could not be derived from an actual take-off, lump sum costs or allowances are used. Estimated costs are based on professional judgment and the probable or actual extent of the observed defect, inclusive of the cost to design, procure, construct and manage the corrections.

The evaluation period identified in this report is defined as 20 years.

The physical condition of building component to be repaired is typically defined as being in one of five categories: Priority One through Five. For the purposes of this report, the following definitions are used:

Priority One - These items are to be addressed as Immediate. Items in this category require immediate action and include corrective measures to:

1. Correct life safety and/or code hazards
2. Repair item permitting water leaks into the building or structure
3. Repair mold or mildew conditions
4. Down unit repairs
5. Further study investigations

Priority Two - These items are to be addressed within the next 1 year. Items in this category require corrective measures to:

1. Return a system to normal operation
2. Stop deterioration to other systems
3. Stop accelerated deterioration
4. Replace items that have reached or exceeded their useful service life

5. ADA/CBC deficiencies

Priority Three - These items are to be addressed within the next 2-3 years. Items in this category, if not corrected expeditiously, will become critical in the next several years. Items in this category include corrective measures to:

1. Stop intermittent interruptions
2. Correct rapid deterioration
3. Replace items that will reach or exceed their useful service life
4. Correct functionality and/or aesthetic issues that are not critical

Priority Four - These items are to be addressed within the next 3-5 years. Items in this category include conditions requiring appropriate attention to preclude predictable deterioration or potential downtime and the associated damage or higher costs if deferred further.

Priority Five - These items are to be addressed within 6-20 years. Items in this category represent a sensible improvement to the existing conditions. These are not required for the most basic function of the facility; however, Priority 5 projects will improve overall usability and/or reduce long-term maintenance costs.

1.3.2. Immediate Repairs and Short Term Costs

Immediate repairs are opinions of probable costs that require immediate action as a result of: (1) material existing or potential unsafe conditions, (2) material building or fire code violations, or (3) conditions that, if not addressed, have the potential to result in, or contribute to, critical element or system failure within one year or will most probably result in a significant escalation of its remedial cost.

Short term costs are opinions of probable costs to remedy physical deficiencies, such as deferred maintenance, that may not warrant immediate attention, but that require repairs or replacements, which should be undertaken on a priority basis in addition to routine preventive maintenance. Opinions of probable costs may include costs for testing, exploratory probing, and further analysis should this be deemed warranted by the consultant. The performance of such additional services is beyond the FCA scope of work. Generally, the time frame for such repairs is within one to two years. Short Term costs are included in the Replacement Reserves Report.

1.3.3. Replacement Reserves

Replacement Reserves are for recurring probable expenditures, which are not classified as operation or maintenance expenses. The replacement reserves should be budgeted for in advance on an annual basis. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, Replacement Reserves may also include components or systems that have an indeterminable life but, nonetheless, have a potential for failure within an estimated time period.

Replacement Reserves exclude systems or components that are estimated to expire after the reserve term and are not considered material to the structural and mechanical integrity of the subject property. Furthermore, systems and components that are not deemed to have a material effect on the use of the Property are also excluded. Costs that are caused by acts of God, accidents, or other occurrences that are typically covered by insurance, rather than reserved for, are also excluded.

Replacement costs are solicited from ownership/property management, EMG's discussions with service companies, manufacturers' representatives, and previous experience in preparing such schedules for other similar facilities. Costs for work performed by the ownership's or property management's maintenance staff are also considered.

EMG's reserve methodology involves identification and quantification of those systems or components requiring capital reserve funds within the assessment period. The assessment period is defined as the effective age plus the reserve term. Additional information concerning system's or component's respective replacement costs (in today's dollars), typical expected useful lives, and remaining useful lives were estimated so that a funding schedule could be prepared. The Replacement Reserves Schedule presupposes that all required remedial work has been performed or that monies for remediation have been budgeted for items defined in the Immediate Repairs Report.

2. PURPOSE AND SCOPE

2.1. PURPOSE

EMG was retained by the client to render an opinion as to the Property's current general physical condition on the day of the site visit.

Based on the observations, interviews and document review outlined below, this report identifies significant deferred maintenance issues, existing deficiencies, and material code violations of record at municipal offices that affect the Property's use. Opinions are rendered as to its structural integrity, building system condition and the Property's overall condition. The report also notes building systems or components that have realized or exceeded their typical expected useful lives.

The physical condition of building components is typically defined as being in one of three categories: Good, Fair, and Poor. For the purposes of this report, the following definitions are used:

- Good = Satisfactory as-is. Requires only routine maintenance during the assessment period. Repair or replacement may be required due to a system's estimated useful life.
- Fair = Satisfactory as-is. Repair or replacement is required due to current physical condition and/or estimated remaining useful life.
- Poor = Immediate repair, replacement, or significant maintenance is required.

2.2. SCOPE

The standard scope of the Facility Condition Assessment includes the following:

- Visit the Property to evaluate the general condition of the building and site improvements, review available construction documents in order to familiarize ourselves with, and be able to comment on, the in-place construction systems, life safety, mechanical, electrical, and plumbing systems, and the general built environment.
- Identify those components that are exhibiting deferred maintenance issues and provide cost estimates for Immediate, Short Term, and Replacement Reserves based on observed conditions, maintenance history and industry standard useful life estimates. This will include the review of documented capital improvements completed within the last five-year period and work currently contracted for, if applicable.
- Provide a full description of the Property with descriptions of in-place systems and commentary on observed conditions.
- Provide a general statement of the Subject property's compliance with the Americans with Disability Act (ADA). Compliance with Title 24 California Building Code, Chapter 11B and other California Building Code chapters referenced in Chapter 11B, was not surveyed. This report does not constitute a full accessibility survey, but identifies exposure to selected ADA accessibility issues and the need for further accessibility review.
- Perform a limited assessment of accessible areas of the building(s) for the presence of mold, conditions conducive to mold growth, and/or evidence of moisture. EMG will also interview Project personnel regarding the presence of any known or suspected mold, elevated relative humidity, water intrusion, or mildew-like odors. Potentially affected areas will be photographed. Sampling will not be considered in routine assessments.
- List the current utility service providers.

- Review maintenance records and procedures with the in-place maintenance personnel.
- Observe a representative sample of the interior tenant spaces/units, including vacant spaces/units, in order to gain a clear understanding of the property's overall condition. Other areas to be observed include the exterior of the property, the roofs, interior common areas, and mechanical, electrical and elevator equipment rooms.
- Appropriate inquiries of municipal officials regarding the existence of pending unresolved building or fire code violations on file, and a determination of the current zoning category, flood hazard area, and seismic zone for the Property.
- Provide recommendations for additional studies, if required, with related budgetary information.
- Tenant responsibility for maintenance, repair or replacement of finishes, fixtures, or equipment is not addressed by this scope of services.
- Provide an Executive Summary at the beginning of this report with cost estimates as a quick, user-friendly summary of the Property's condition and the assigned costs by category. These costs are tied to the report sections where reference to the issues are clearly defined and expanded.

2.3. PERSONNEL INTERVIEWED

The following personnel from the facility and government agencies were interviewed in the process of conducting the FCA:

| Name and Title | Organization | Phone Number |
|---|---|-----------------------|
| Paul Ruta Director of Maintenance and Operations | Manhattan Beach Unified School District | 310.318.7345 x5302 |
| Records Request | State of California Division of the State Architect, Los Angeles Basin Regional Office | 213.897.3995 |
| Records Request | Manhattan Beach Fire Department Fire Prevention Bureau | 310.802.5206 |

The FCA was performed with the assistance of Paul Ruta, Director of Maintenance and Operations, Manhattan Beach Unified School District, the on site Point of Contact (POC), who was cooperative and provided information that appeared to be accurate based upon subsequent site observations. The on site contact is completely knowledgeable about the subject property and answered most questions posed during the interview process. The POC's management involvement at the property has been for approximately five years.

2.4. DOCUMENTATION REVIEWED

Prior to the FCA, relevant documentation was requested that could aid in the knowledge of the subject property's physical improvements, extent and type of use, and/or assist in identifying material discrepancies between reported information and observed conditions. The review of submitted documents does not include comment on the accuracy of such documents or their preparation, methodology, or protocol. The Documentation Request Form is provided in Appendix E.

Although Appendix E provides a summary of the documents requested or obtained, the following list provides more specific details about some of the documents that were reviewed or obtained during the site visit.

- Meadows Elementary District Wide Communications Upgrade construction documents by Smith, Fause, and McDonald, Inc, dated 6/26/95.
- DLR Group letter documenting concerns made by the school principal.

2.5. PRE-SURVEY QUESTIONNAIRE

A Pre-Survey Questionnaire was sent to the POC prior to the site visit. The questionnaire is included in Appendix E. Information obtained from the questionnaire has been used in preparation of this report.

2.6. WEATHER CONDITIONS

Clear, with temperatures in the 70s (°F) and light winds.

3. CODE INFORMATION AND ACCESSIBILITY

3.1. CODE INFORMATION, FLOOD ZONE AND SEISMIC ZONE

A written request for compliance with the State Architects Office was submitted, and a copy of the request is included in Appendix C. Significant information will be forwarded upon receipt.

A written request for compliance with the Manhattan Beach Fire Department was submitted, and a copy of the request is included in Appendix C. Significant information will be forwarded upon receipt.

According to the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) and dated September 26, 2008, the property is located in Zone X, defined as areas outside the 500-year flood plain with less than 0.2% annual probability of flooding. Annual Probability of Flooding of Less than one percent.

According to the 1997 Uniform Building Code Seismic Zone Map of the United States, the property is located in Seismic Zone 4, defined as an area of high probability of damaging ground motion.

According to the Wind Zone Map, published by the Federal Emergency Management Agency (FEMA), the property is located in Zone I and is not located in a Hurricane-Susceptible Region or Special Wind Region.

3.2. ADA ACCESSIBILITY

Generally, Title II of the Americans with Disabilities Act (ADA) applies to State and local government entities. Title II Subtitle A protects qualified individuals with disabilities from discrimination on the basis of disability in services, programs, and activities provided by state and local government entities. Title II extends the prohibition on discrimination established by section 504 of the Rehabilitation Act of 1973, as amended, 29 U.S.C. 794, to all activities of state and local governments, regardless of Federal financial assistance. All state and local government facilities must be maintained and operated in compliance with the Americans with Disabilities Act Accessibility Guidelines (ADAAG). In addition, in the state of California, compliance with the California Building Code (CBC) Chapter 11 *Accessibility to Public Buildings, Public Accommodations, Commercial Buildings, and Publicly Funded Housing* is required.

During the FCA, a limited visual observation for accessibility compliance was conducted. The scope of the visual observation was limited to those areas set forth in EMG's Abbreviated ADA Checklist, provided in Appendix D of this report. It is understood by the Client that the limited observations described herein does not comprise a full Accessibility Compliance Survey, and that such a survey is beyond the scope of EMG's undertaking for this report. The Abbreviated ADA Checklist targets key areas for compliance with 2010 ADA Standards for Accessible Design, and does not include California Building Code accessibility requirements. A full Accessibility Compliance Survey conducted by EMG would include both ADA and State of California accessibility requirements. For the FCA, only a representative sample of areas was observed and, other than those shown on the Abbreviated ADA Checklist, actual measurements were not taken to verify compliance.

The facility does not appear to be accessible with Title II of the Americans with Disabilities Act. Elements as defined by the ADAAG that are not accessible as stated within the priorities of Title II are as follows:

Parking

- Passenger drop off areas are not provided at the building entrances or access routes.

Estimated Cost: 1 @ \$500 each = \$500

A full ADA Compliance Survey may reveal additional aspects of the property that are not in compliance. Corrections of these conditions should be addressed from a liability standpoint, but are not necessarily code violations. The Americans with Disabilities Act Accessibility Guidelines concern civil rights issues as they pertain to the disabled and are not a construction code, although many local jurisdictions have adopted the Guidelines as such. The cost to address the achievable items noted above is \$500 and is included as a lump sum in the Immediate Repairs Report.

4. EXISTING BUILDING ASSESSMENT

4.1 BUILDING/SPACE TYPES

All 37,355 square feet of the building are owned by the Manhattan Beach School District, and occupied by Meadows Elementary.

- The following table identifies the reported space types and mix at the subject property.

| Space Types and Mix | | | |
|---------------------|--------------|---------------|-------------|
| Quantity | Type | Vacant Spaces | Down Spaces |
| 23 | Classroom | 0 | 0 |
| 3 | Office | 0 | 0 |
| 1 | Mixed Use | 0 | 0 |
| 1 | Library | 0 | 0 |
| 0 | Gymnasium | 0 | 0 |
| 7 | Mechanical | 0 | 0 |
| 25 | Restrooms | 0 | 0 |
| 49 | TOTAL | 0 | 0 |

4.2 BUILDINGS/SPACES OBSERVED

The entire facility was observed in order to gain a clear understanding of the property's overall condition. Other areas accessed included the exterior of the property and the roof.

All areas of the property were available for observation during the site visit.

5. SITE IMPROVEMENTS

5.1. UTILITIES

The following table identifies the utility suppliers and the condition and adequacy of the services.

| Site Utilities | | |
|---------------------|---|------------------------|
| Utility | Supplier | Condition and Adequacy |
| Sanitary sewer | City of Manhattan Beach, Utilities Division | Good |
| Storm sewer | City of Manhattan Beach, Utilities Division | Good |
| Domestic water | City of Manhattan Beach, Utilities Division | Good |
| Electric service | Southern California Edison | Good |
| Natural gas service | Southern California Gas | Good |

Observations/Comments:

- The utilities appear to be adequate for the property. There are no unique, on site utility systems such as emergency electrical generators, septic systems, water or waste water treatment plants, or propane gas tanks.

5.2. PARKING, PAVING, AND SIDEWALKS

The main entrance drive is located along North Meadows Avenue on the west side of the property. Additional entrance drives are located along the other adjacent public streets. The parking areas drive aisles, and service drives are paved with asphalt pavement. The entrance driveway aprons are paved with concrete.

Based on a physical count, parking is provided for forty-seven cars. The parking ratio is 0.8 spaces per thousand square feet of floor area. All of the parking stalls are located in open lots. There are two handicapped-accessible parking stalls, one of which is reserved for vans.

The sidewalks throughout the property are constructed of cast-in-place concrete. Cast-in-place concrete steps with metal handrails are located at grade changes.

The curbs and gutters are constructed of cast-in-place concrete. Surface runoff is directed to landscaped areas, which border the paved areas.



Observations/Comments:

- The property does not have a dedicated paving repair and maintenance contractor. On site personnel maintain the paving and flatwork or a contractor is retained when required.
- The asphalt pavement is in good condition. There are no significant signs of cracks or surface deterioration. In order to maximize the pavement life, pothole patching, crack sealing, seal coating, and re-striping of the asphalt paving will be required during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- The concrete pavement is in good condition. There are no significant signs of cracks or surface deterioration. Epoxy sealing of minor cracks will be required during the assessment period as part of the property management's routine maintenance program.
- The concrete curbs and sidewalks throughout the property are in good condition. Routine cleaning and maintenance will be required during the assessment period.

5.3. DRAINAGE SYSTEMS AND EROSION CONTROL

Storm water from the roofs, landscaped areas, and paved areas flows into on site inlets and catch basins with underground piping connected to the municipal storm water management system.

Observations/Comments:

- Facilities personal mentioned that tree roots have interfered with a culvert. Resetting the culvert will be required during the assessment period as part of the property management's routine maintenance program.
- There is no evidence of storm water runoff from adjacent properties. The storm water system appears to provide adequate runoff capacity. There is no evidence of major ponding or erosion.

5.4. TOPOGRAPHY AND LANDSCAPING

The property is relatively flat.

The landscaping consists of trees, shrubs, and grasses. Flower beds are located throughout the site.

Landscaped areas are irrigated by an in-ground sprinkler system, which consists of underground piping, shut-off valves, pop-up sprinkler heads, and automatic timers.

Surrounding are primarily residential developments.

Reinforced concrete and concrete masonry unit (CMU) retaining walls are located at grade changes throughout the site.

**Observations/Comments:**

- The topography and adjacent uses do not appear to present conditions detrimental to the property.
- The landscape materials are in good condition and will require routine maintenance during the assessment period.
- The underground irrigation system appears to be in good working order. Replacement of sprinkler heads and minor repairs will be required during the assessment period. This work is considered to be routine maintenance.

- The retaining walls are in good condition. Routine maintenance will be required during the assessment period.

5.5. GENERAL SITE IMPROVEMENTS

Property identification is provided by an internally illuminated building-mounted sign adjacent to the main entrance drive, and painted school logos are located throughout the property.

Site lighting is provided by metal street light standards. The light standards are spaced along the drive aisles throughout the parking areas. Metal pole-mounted light fixtures are located along walkways and drive aisles throughout the property.

Exterior building illumination is provided by light fixtures surface-mounted on the exterior walls.

A perimeter fence is located along the property lines. The fence is constructed of chain link with metal.

Dumpsters are located in the parking area and are placed on concrete pads. The dumpsters are enclosed by concrete masonry unit fences and are accessed by wood chain link metal gates.



Observations/Comments:

- The property and tenant identification signs are in good condition. Routine maintenance will be required during the assessment period.
- The exterior site and building light fixtures are in good condition. Routine maintenance will be required during the assessment period.
- The site fencing is in good condition and will require routine maintenance during the assessment period.
- The dumpsters are owned and maintained by the refuse contractor. The dumpster enclosures, slabs, and gates are in good condition and will require routine maintenance during the assessment period.

6. BUILDING ARCHITECTURAL AND STRUCTURAL SYSTEMS

6.1. FOUNDATIONS

Based on structures of similar size, configuration, and geographic location, it is assumed that the foundations consist of conventional reinforced concrete spread footings, which support wall and column loads.

Observations/Comments:

- The foundations and footings could not be directly observed during the site visit. There is no evidence of movement that would indicate excessive settlement.

6.2. SUPERSTRUCTURE

Each building has concrete masonry unit (CMU) exterior bearing walls, which support the roof diaphragms. The roofs are cast concrete.

Observations/Comments:

- The superstructure is exposed in some locations, which allows for limited observation. Walls and floors appear to be plumb, level, and stable. There are no significant signs of deflection or movement.



6.3. ROOFING

The primary roofs are classified as flat roofs. The roofs are finished with a mineral-surfaced cap sheet over a multi-ply bituminous built-up membrane and have an added fiberglass composite spray on coating. The roofs are insulated with rigid insulation boards.

There are no attics. The roof structures are exposed.

Observations/Comments:

- The property does not have a dedicated roof repair and maintenance contractor. On site personnel maintain the roofs or a contractor is retained when required. age and warranty statement
- According to the owner's representative, the roof finishes were recoated in 1999, approximately 16 years ago. Information regarding roof warranties or bonds were requested but are not available.

- The roof membranes are in good to fair condition. Based on their estimated Remaining Useful Life (RUL), the roof membranes will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- There is no evidence of active roof leaks.
- There is no evidence of roof deck or insulation deterioration. The roof substrate and insulation should be inspected during any future roof repair or replacement work.
- There is no evidence of fire retardant treated plywood (FRT).
- The roof flashings are in good condition and will require routine maintenance during the assessment period.
- Roof drainage appears to be adequate. Clearing and minor repair of drain system components should be performed regularly as part of the property management's routine maintenance program.

6.4. EXTERIOR WALLS

The buildings have painted concrete masonry unit (CMU) exterior walls. Portions of the exterior walls are finished with stucco.

Building sealants (caulking) are located between dissimilar materials, at joints, and around window and door openings.

Observations/Comments:

- The exterior finishes are in good condition. Painting and patching will be required during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- The sealant is flexible, smooth, and in good condition and will require routine maintenance during the assessment period.



6.5. EXTERIOR AND INTERIOR STAIRS

The exterior stairs are constructed of reinforced concrete. The handrails and balusters are constructed of metal.

Observations/Comments:

- The exterior stairs, balusters, and handrails are in good condition and will require routine maintenance during the assessment period.



6.6. EXTERIOR WINDOWS AND DOORS

The windows are metal-framed units with single-glazed panes of tinted glazing.

The exterior doors are painted solid-core wood doors set in wood frames. The entrance doors have cylindrical locksets with lever handle hardware and keyed deadbolts.

The classrooms have metal-framed exterior sliding doors, which operate on metal tracks. The sliding doors have fixed lever handle hardware and manual locks.



Observations/Comments:

- There is no evidence of window leaks or window condensation. The windows are in good condition and will require routine maintenance during the assessment period.
- The exterior doors and door hardware are in good condition and will require routine maintenance during the assessment period.

6.7. PATIO, TERRACE, AND BALCONY

Patios are located adjacent to the cafeteria and serve as an outdoor dining area as well as adjacent to the sliding doors of many of the classrooms.

Observations/Comments:

- The concrete patio slabs are in good condition. There are no significant signs of movement, settlement, or cracking. The patios will require routine maintenance during the assessment period.

6.8. COMMON AREAS, ENTRANCES, AND CORRIDORS

Not applicable. There are no interior common areas.

7. CENTRAL MECHANICAL AND PLUMBING SYSTEMS

7.1. CENTRAL HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

There are no central HVAC systems. See Section 8.3. for descriptions and comments regarding the space unit HVAC systems.

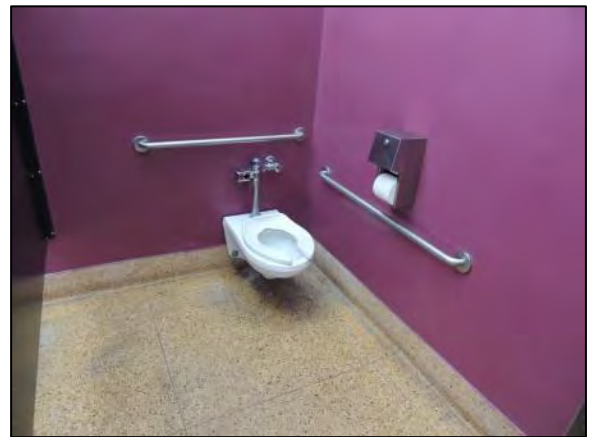
7.2. CENTRAL PLUMBING AND DOMESTIC HOT WATER

The plumbing systems include the incoming water service, the cold water piping system, and the sanitary sewer and vent system. The risers and the horizontal distribution piping are copper. The soil piping is cast iron, and the vent systems are PVC.

The water meters are located in vaults adjacent to the public streets. There are two water meters. One meter serves the potable water and the second meter serves the reclaimed water system that is used for irrigation.

There are no central hot water systems. See Section 8.4. for descriptions and comments regarding individual building or classroom hot water systems.

The restrooms have commercial-grade fixtures and accessories including water closets and lavatories.



Observations/Comments:

- The plumbing systems appear to be well maintained and in fair condition.
- Facilities personnel informed us that the water pressure appears to be inadequate. A follow up study by a specialized consultant should be conducted. See Section 1.2.
- There is no evidence that the property uses polybutylene piping for the domestic water distribution system.
- The accessories and fixtures in the restrooms are in fair condition and will require routine maintenance during the assessment period. Facilities personnel informed us that there are some leaks that will require repairs. The cost to repair water leaks is relatively insignificant, and the work can be performed as part of the property management's routine maintenance program.

7.3. CENTRAL GAS DISTRIBUTION

Gas service is supplied from the gas main on the adjacent public street. The gas meter and regulator is located along the exterior walls of the school. The gas distribution piping within each building is malleable steel (black iron).

Observations/Comments:

- The pressure and quantity of gas appear to be adequate.

- The gas meter and regulator appear to be in fair condition and will require routine maintenance during the assessment period.
- Only limited observation of the gas distribution piping can be made due to hidden conditions. The gas piping appears to be in fair condition.

7.4. BUILDING ELECTRICAL

The electrical supply lines run underground to pad-mounted transformers, which feed exterior-mounted electrical meters.

The main electrical service size is 1,000 amps, 120/208 volt three-phase four-wire alternating current (AC). The electrical wiring is copper, installed in metallic conduit. Circuit breaker panels are located throughout the campus.

Observations/Comments:

- The on site electrical systems up to the meters are owned and maintained by the respective utility company.
- The electrical service and capacity appear to be adequate for the property's demands.
- The switchgear, circuit breaker panels, and electrical meters appear to be in fair condition and will require routine maintenance during the assessment period.



7.5. BUILDING ELEVATORS AND CONVEYING SYSTEMS

Not applicable. There are no elevators or conveying systems.

7.6. FIRE PROTECTION AND SECURITY SYSTEMS

The fire protection system consists of portable smoke detectors, pull stations, alarm horns, and strobe light alarms.

Pull stations, alarm horns, and strobe light alarms are located throughout the school. Hard-wired smoke detectors are located throughout the classrooms. Cafeteria and office buildings are equipped with illuminated exit signs. The nearest fire hydrants are located along the public streets bordering the property.

A central fire alarm panel monitors the pull stations and smoke detectors. The alarm panel also sounds the alarm and automatically notifies the monitoring service or the fire department in the event of trouble.



Observations/Comments:

- Information regarding fire department inspections is included in Section 3.1.
- The pull stations and alarm horns appear to be in good condition and will require routine maintenance during the assessment period.
- Smoke detector replacement is considered to be routine maintenance.
- Exit sign and emergency light replacement is considered to be routine maintenance.
- The central alarm panel appears to be in good condition and is serviced regularly by a qualified fire equipment contractor. Equipment testing is not within the scope of a Facility Condition Assessment. Based on inspection documents displayed by the panel, the central alarm panel has been inspected within the last year. Fire alarm panels contain sophisticated electronic circuits that are constantly energized. Over time, circuit components deteriorate or become obsolete. Even though an alarm panel may continue to function well past its estimated design life, replacement parts may become difficult to obtain and in many cases the alarm panel will not communicate with new devices it is supposed to monitor. Based on its estimated Remaining Useful Life (RUL), replacement is recommended during the reserve term. The estimated cost of this work is included in the Replacement Reserves Report. Note that replacement of a fire alarm panel or other components may trigger a requirement to update to a fully automatic system to comply with current codes.

8. INTERIOR SPACES

8.1. INTERIOR FINISHES

The following table generally describes the interior finishes in tenant units:

| Typical Tenant Unit Finishes | | | |
|------------------------------|------------|-----------------|--|
| Room | Floor | Walls | Ceiling |
| Office Areas | Carpet | Painted drywall | Suspended T-bar system with acoustical tiles |
| Classrooms | Carpet | Painted drywall | Acoustical tiles |
| Modular Classrooms | Carpet | Wall panels | Suspended T-bar system with acoustical tiles |
| Multipurpose | Vinyl tile | Painted drywall | Acoustical tiles |
| Kitchens | Vinyl tile | Painted drywall | Acoustical tiles |
| Restrooms | Travertine | Painted drywall | Painted drywall |

The entry doors are painted wood doors set in wood frames. The interior doors have cylindrical locksets with lever handle hardware.

Observations/Comments:

- The interior finishes are in good to fair condition. Based on the estimated Remaining Useful Life (RUL), the carpet and vinyl flooring will require replacement over the assessment period. Painting will also need to occur. The cost of this work is included in the Replacement Reserves Report.
- Some acoustical tile ceiling panels need replacement. The cost of this work is included in the Replacement Reserves Report.
- The interior doors and door hardware are in good condition and will require routine maintenance during the assessment period.

8.2. COMMERCIAL KITCHEN EQUIPMENT

The kitchen includes the following major appliances, fixtures, and equipment:



| Appliance | Comment |
|-------------------|----------------------------|
| Refrigerators | Up-right |
| Freezers | Up-right |
| Ranges | No |
| Ovens | Gas |
| Griddles / Grills | No |
| Fryers | No |
| Hood | Exhaust ducted to exterior |
| Dishwasher | No |
| Microwave | Yes |
| Ice Machines | No |
| Steam tables | No |
| Work tables | Stainless steel |
| Shelving | Stainless steel |

Observations/Comments:

- The kitchen appliances appear to be in good condition. The appliances will require routine maintenance.

8.3. HVAC

Heating is provided in the permanent classrooms, administration building, and teacher's lounge by individual gas-fired furnaces. There are a total of 23 gas-fired units, with an average capacity of 100 MBH. The furnaces are located overhead, within ceiling soffits at each of the spaces.

The multipurpose room is heated by a Hayes furnace of unknown capacity.

Heating and cooling is provided in the modular classrooms by heat pump units. There are a total of eight heat pumps with 4-tons cooling capacity and 34,130 MBH heating capacity each. The heat pumps use R-22 as a refrigerant.

Air distribution is provided to supply air registers by ducts concealed above the ceilings. Return air grilles are located in each space. The heating and cooling system are controlled by local thermostats.

The bathrooms and multipurpose room are ventilated by mechanical exhaust fans. Low capacity ventilation fans are mounted on the roof and are connected by concealed ducts to each ventilated space.

Observations/Comments:

- The property does not have a dedicated HVAC repair and maintenance contractor. School District personnel maintain the HVAC equipment or a contractor is retained when required.
- Maintenance personnel were contacted to provide information on maintenance practices and recent replacements. According to the maintenance personnel, the mechanical equipment serving the permanent classrooms, offices, cafeteria, and lounge areas was installed in 1999.
- Records of filter replacements and annual furnace maintenance have been maintained since the units were installed in 1999.
- Most of HVAC equipment appears to be in good condition. Based on its estimated Remaining Useful Life (RUL), the gas-fired furnaces and split AC units will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.
- The gas furnace serving the multipurpose room is in poor condition and should be replaced. The cost for this work is included in the Short Term Cost report.
- The mechanical ventilation system and equipment appear to be in good condition and will require routine maintenance during the assessment period. Equipment or component replacements can be performed as part of the property management's routine maintenance program.

8.4. PLUMBING

Each permanent classroom and three of the modular classrooms include at least one faucet.

Five point-of-use electric water heaters provide hot water to five of the modular classrooms. Six 50-gallon gas heaters provide hot water to the multipurpose room, teacher's lounge, and permanent classrooms.

Observations and Comments

- The classroom plumbing accessories and fixtures are in good condition.
- According to facilities personnel, the water pressure is not adequate. A study by a specialized consultant is recommended. See Section 1.2.
- The water heaters appear to be in good condition. Based on their estimated Remaining Useful Life (RUL), some of the water heaters will require replacement during the assessment period. The cost of this work is included in the Replacement Reserves Report.

8.5. ELECTRICAL

The electrical service to each classroom ranges upward from 100 amps. Circuit breaker panels throughout the school supply the classroom HVAC systems, receptacles, and light fixtures.

The classrooms have fluorescent light fixtures.

Observations and Comments

- The electrical service to each classroom appears to be adequate.
- The interior light fixtures appear to be in good condition. Light fixture replacement is considered to be routine maintenance.

- School personnel have informed us that the classrooms do not have enough power and data outlets. The cost of adding additional outlets has been included in the Short Term Cost Report.

8.6. FURNITURE, FIXTURES AND EQUIPMENT (FF&E)

The school's furniture, fixtures and equipment (FF&E) consist of casework, marker and tack boards, screens and projectors, shelving, desks, tables and chairs, computers, task lights, fire extinguishers and bleachers.

- The school's FF&E vary in age and are in good condition. Based on the estimated Remaining Useful Life (RUL), the FF&E will require replacement over the assessment period. This work is considered routine maintenance and is part of the school's operational expense.
- The fire extinguishers are serviced annually and appear to be in good condition. The fire extinguishers were serviced and inspected within the last year.

9. OTHER STRUCTURES

A total of eight modular classrooms are located on at the east area of the property. The modular classrooms are pre-manufactured wood structures set on concrete slabs. The exteriors are clad with wood siding and have flat roofs.

A total of two maintenance and storage sheds are located at the east area of the property. The sheds are pre-manufactured wood structures set on asphalt pavement.



Observations/Comments:

- The modular classrooms are in good to fair condition and will require routine maintenance during the assessment period.
- The maintenance and storage sheds are in fair to poor condition, the roofing and siding are exhibiting signs of deterioration. The cost of this work is included in the Immediate Reserves Report.

10. APPENDICES

APPENDIX A: Photographic Record

APPENDIX B: Site Plan

APPENDIX C: Supporting Documentation

APPENDIX D: EMG Abbreviated ADA Checklist

APPENDIX E: Pre Survey Questionnaires and Documentation Request
Checklist

APPENDIX F: Terminology

APPENDIX A:

PHOTOGRAPHIC RECORD



EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



| | |
|-----------|------------------|
| Photo #1: | Property signage |
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| Photo #2: | Exterior |
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| Photo #3: | Classrooms |
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| Photo #4: | Classrooms |
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| Photo #5: | Classroom windows |
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| Photo #6: | Portable classrooms |
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EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



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|--------------|---------------------|
| Photo #7: | Portable classrooms |
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| Photo #8: | Storage building |
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| Photo #9: | Roofing |
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| Photo #10: | Dumpster |
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| Photo #11: | Parking |
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| Photo #12: | Playground equipment |
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EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



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|---------------|-----------------|
| Photo #13: | Turf playground |
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| Photo #14: | Asphalt playground |
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| Photo #15: | Outdoor dining |
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| Photo #16: | Main office |
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| Photo #17: | Office area |
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| Photo #18: | Multipurpose room stage |
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EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



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|---------------|-------------------|
| Photo #19: | Multipurpose room |
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| Photo #20: | Serving line |
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| Photo #21: | Kitchen |
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| Photo #22: | Library |
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| Photo #23: | Classroom |
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| Photo #24: | Classroom |
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EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



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| Photo #25: | Classroom windows |
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| Photo #26: | Classroom sliding door |
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| Photo #27: | Portable classroom |
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| Photo #28: | Portable classroom |
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| Photo #29: | Portable classroom |
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| Photo #30: | Covered walkway |
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EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



Photo #31: Typical gas furnace in mechanical closet



Photo #32: Typical gas furnace in ceiling space



Photo #33: Thermostat and timer in classroom



Photo #34: Thermostat and timer in portable classroom



Photo #35: Typical 4-way diffuser



Photo #36: Typical outside air intake louver in classroom



EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



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| Photo #37: | Multipurpose room gas furnace |
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| Photo #38: | Electrical equipment |
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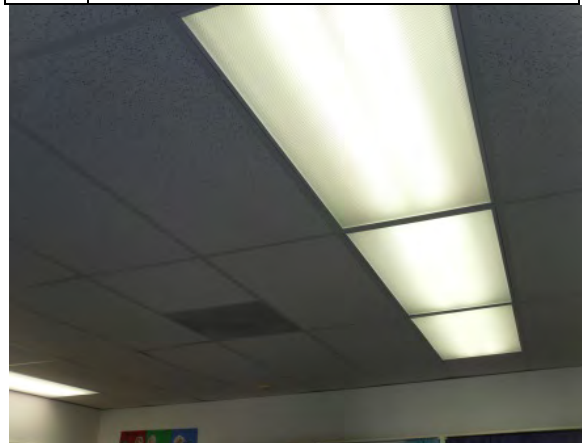
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| Photo #39: | Electrical equipment |
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| Photo #40: | Classroom lighting |
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| Photo #41: | Typical classroom light fixture |
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| Photo #42: | Typical portable classroom light fixture |
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EMG PHOTOGRAPHIC RECORD

Project No.: 112851.15R-003.017

Project Name: Meadows Elementary



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| Photo #43: | Backflow prevention assembly |
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| Photo #44: | Hot water heater |
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| Photo #45: | Typical classroom sink |
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| Photo #46: | Cafeteria appliances |
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| Photo #47: | Kitchen appliances |
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| Photo #48: | Kitchen hood |
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APPENDIX B:

SITE PLAN

Site Plan



EMG



Source:

SFM
Smith, Fause & McDonald, Inc.
Communications Engineering Group
Site Plan Dated 6/26/95

Not drawn to scale. The north arrow indicator is an approximation of 0° North.

Project Number:

112851.15R-003.017

Project Name:

Meadows Elementary

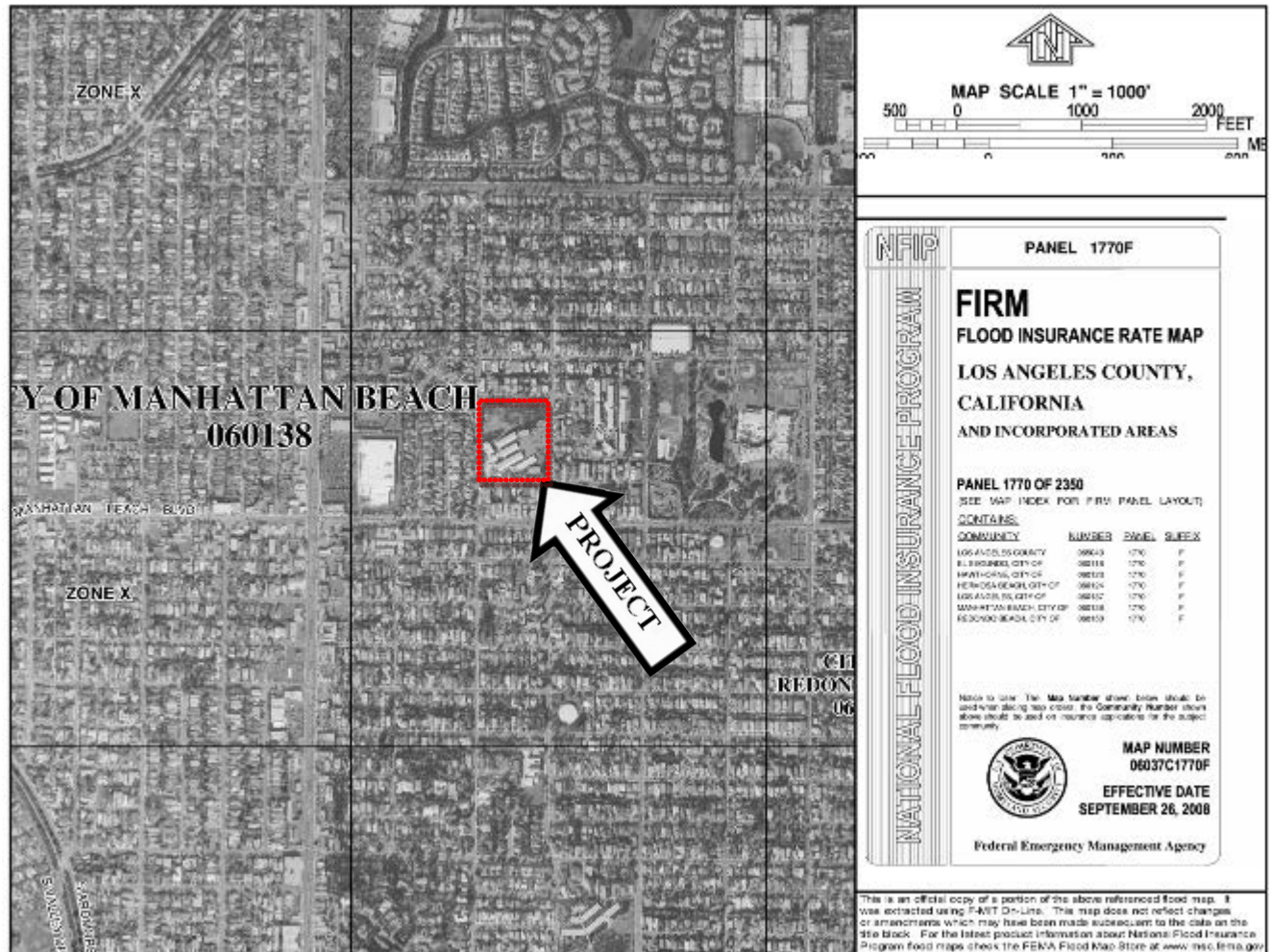
On-Site Date:

February 17, 2015

APPENDIX C:

SUPPORTING DOCUMENTATION

Flood Map



EMG

Source:

FEMA
Map Number:06037C1770F
Dated: September 26, 2008

Project Number:

112851.15R-003.017

Project Name:

Meadows Elementary

On-Site Date:

February 17, 2015



Not drawn to scale. The north arrow indicator is an approximation of 0° North.

Aerial Site Map



EMG



Source:

Google Maps

Project Number:

112851.15R-003.017

Project Name:

Meadows Elementary

On-Site Date:

February 17, 2015

Not drawn to scale. The north arrow indicator is an approximation of 0° North.



**Building, Fire & Planning
Request for Information**

To: State of California
Division of the State Architect
DSA Los Angeles Basin Regional Office
Douglas Humphrey, Regional Manager

Date: March 27, 2015
Phone #: 213.897.3995
Fax #: 213.897.3159

Re: Meadows Elementary
1200 North Meadows Avenue
Manhattan Beach, CA 90266

EMG Project No: 112851.15R-003.017

Project Manager: Scott Lattimer

Dear Mr. Humphrey:

EMG is an engineering firm currently conducting a property condition survey of the above-referenced property. As part of the due-diligence process, we are submitting this letter to obtain information specific to the property. We request your assistance by providing us with the following information concerning the site and buildings:

1. Date of last BUILDING inspection ____/____/____
mo. day year
2. Date of last FIRE inspection ____/____/____
mo. day year
3. Are there any OUTSTANDING building code violations? YES / NO
(circle one)
4. Are there any OUTSTANDING fire code violations? YES / NO
(circle one)
5. Are there any OUTSTANDING zoning code violations? YES / NO
(circle one)
6. How often is the subject property inspected? annually / biennially / other
(circle one)
7. What is the zoning designation for the subject property? _____
(Residential/Commercial/Industrial/Other)
(circle one)
8. Is the subject property, in general, a conforming use? YES / NO
(circle one)
9. Is the original **Certificate of Occupancy** or Permit on file? YES / NO
If such documents are on file, please fax them to the number noted below.



**Building, Fire & Planning
Request for Information**

Responses may be faxed directly to our office, at 410.785.6220, or mailed to our corporate offices:

EMG
Attn: Mark Surdam, Senior Engineering Consultant
222 Schilling Circle, Suite 275
Hunt Valley, Maryland 21031

If **outstanding** violations are on file, please provide copies of the reports/citations. Please note the EMG Project Number on all correspondence. If you need additional information to complete this request, please contact me at 800.733.0660. Thank you for your prompt attention to this matter.

Sincerely,

Scott Lattimer
Project Manager



**Fire Department:
Request for Information**

To: Manhattan Beach Fire Department
Fire Prevention Bureau
Chief Robert Espinosa

Date: March 27, 2015
Phone #: 310.802.5206
Fax #: 310.802.5201

Re: Meadows Elementary
1200 North Meadows Avenue
Manhattan Beach, CA 90266

EMG Project No: 112851.15R-003.017

Project Manager: Scott Lattimer

Dear Chief Espinosa:

EMG is an engineering firm currently conducting a property condition survey of the above-referenced property. As part of the due-diligence process, we are submitting this letter to obtain information specific to the property. We request your assistance by providing us with the following information concerning the site and buildings:

1. Date of last fire department inspection ____/____/____
mo. day year
2. Are there any OUTSTANDING fire code violations? YES / NO
(circle one)
3. How often is the subject property inspected? annually / biennially / other
(circle one)

Responses may be faxed directly to our office, at 410.785.6220, or mailed to our corporate offices:

EMG
Attn: Mark Surdam, Senior Engineering Consultant
222 Schilling Circle, Suite 275
Hunt Valley, Maryland 21031

If **outstanding** violations are on file, please provide copies of the reports/citations. Please note the EMG Project Number on all correspondence. If you need additional information to complete this request, please contact me at 800.733.0660. Thank you for your prompt attention to this matter.

Sincerely,

Scott Lattimer
Project Manager

APPENDIX D:
EMG ABBREVIATED ADA CHECKLIST

Property Name: Meadows Elementary

Date: March 9, 2015

Project Number: 112851.15R-003.017

| EMG Abbreviated ADA Checklist | | | | | |
|-------------------------------|--|-----|----|-----|---------------|
| | Building History | Yes | No | N/A | Comments |
| 1. | Has the management previously completed an ADA review? | | ✓ | | Not disclosed |
| 2. | Have any ADA improvements been made to the property? | ✓ | | | |
| 3. | Does a Barrier Removal Plan exist for the property? | | ✓ | | Not disclosed |
| 4. | Has the Barrier Removal Plan been reviewed/approved by an arms-length third party such as an engineering firm, architectural firm, building department, other agencies, etc.? | | | ✓ | |
| 5. | Has building ownership or management received any ADA related complaints that have not been resolved? | | ✓ | | Not disclosed |
| 6. | Is any litigation pending related to ADA issues? | | ✓ | | Not disclosed |
| | Parking | Yes | No | N/A | Comments |
| 1. | Are there sufficient parking spaces with respect to the total number of reported spaces? | ✓ | | | |
| 2. | Are there sufficient van-accessible parking spaces available (96" wide/ 96" aisle for van)? | ✓ | | | |
| 3. | Are accessible spaces marked with the International Symbol of Accessibility? Are there signs reading "Van Accessible" at van spaces? | ✓ | | | |
| 4. | Is there at least one accessible route provided within the boundary of the site from public transportation stops, accessible parking spaces, passenger loading zones, if provided, and public streets and sidewalks? | ✓ | | | |
| 5. | Do curbs on the accessible route have depressed, ramped curb cuts at drives, paths, and drop-offs? | ✓ | | | |
| 6. | Does signage exist directing you to accessible parking and an accessible building entrance? | | | ✓ | |

| | Ramps | Yes | No | N/A | Comments |
|----|---|-----|----|-----|----------|
| 1. | If there is a ramp from parking to an accessible building entrance, does it meet slope requirements? (1:12) | ✓ | | | |
| 2. | Are ramps longer than 6 ft complete with railings on both sides? | ✓ | | | |
| 3. | Is the width between railings at least 36 inches? | ✓ | | | |
| 4. | Is there a level landing for every 30 ft horizontal length of ramp, at the top and at the bottom of ramps and switchbacks? | ✓ | | | |
| | Entrances/Exits | Yes | No | N/A | Comments |
| 1. | Is the main accessible entrance doorway at least 32 inches wide? | ✓ | | | |
| 2. | If the main entrance is inaccessible, are there alternate accessible entrances? | | | ✓ | |
| 3. | Can the alternate accessible entrance be used independently? | | | ✓ | |
| 4. | Is the door hardware easy to operate (lever/push type hardware, no twisting required, and not higher than 48 inches above the floor)? | ✓ | | | |
| 5. | Are main entry doors other than revolving door available? | ✓ | | | |
| 6. | If there are two main doors in series, is the minimum space between the doors 48 inches plus the width of any door swinging into the space? | | | ✓ | |
| | Paths of Travel | Yes | No | N/A | Comments |
| 1. | Is the main path of travel free of obstruction and wide enough for a wheelchair (at least 36 inches wide)? | ✓ | | | |
| 2. | Does a visual scan of the main path reveal any obstacles (phones, fountains, etc.) that protrude more than 4 inches into walkways or corridors? | | ✓ | | |
| 3. | Are floor surfaces firm, stable, and slip resistant (carpets wheelchair friendly)? | ✓ | | | |
| 4. | Is at least one wheelchair-accessible public telephone available? | ✓ | | | |
| 5. | Are wheelchair-accessible facilities (toilet rooms, exits, etc.) identified with signage? | ✓ | | | |
| 6. | Is there a path of travel that does not require the use of stairs? | ✓ | | | |

| | Paths of Travel | Yes | No | N/A | Comments |
|----|--|-----|----|-----|----------|
| 7. | If audible fire alarms are present, are visual alarms (strobe light alarms) also installed in all common areas? | ✓ | | | |
| | Elevators | Yes | No | N/A | Comments |
| 1. | Do the call buttons have visual signals to indicate when a call is registered and answered? | | | ✓ | |
| 2. | Are there visual and audible signals inside cars indicating floor change? | | | ✓ | |
| 3. | Are there standard raised and Braille marking on both jambs of each host way entrance? | | | ✓ | |
| 4. | Do elevator doors have a reopening device that will stop and reopen a car door if an object or a person obstructs the door? | | | ✓ | |
| 5. | Do elevator lobbies have visual and audible indicators of car arrival? | | | ✓ | |
| 6. | Does the elevator interior provide sufficient wheelchair turning area (51" x 68")? | | | ✓ | |
| 7. | Are elevator controls low enough to be reached from a wheelchair (48 inches front approach/54 inches side approach)? | | | ✓ | |
| 8. | Are elevator control buttons designated by Braille and by raised standard alphabet characters (mounted to the left of the button)? | | | ✓ | |
| 9. | If a two-way emergency communication system is provided within the elevator cab, is it usable without voice communication? | | | ✓ | |
| | Restrooms | Yes | No | N/A | Comments |
| 1. | Are common area public restrooms located on an accessible route? | ✓ | | | |
| 2. | Are pull handles push/pull or lever type? | ✓ | | | |
| 3. | Are there audible and visual fire alarm devices in the toilet rooms? | ✓ | | | |
| 4. | Are corridor access doors wheelchair-accessible (at least 32 inches wide)? | ✓ | | | |
| 5. | Are public restrooms large enough to accommodate a wheelchair turnaround (60" turning diameter)? | ✓ | | | |
| 6. | In unisex toilet rooms, are there safety alarms with pull cords? | | ✓ | | |
| 7. | Are stall doors wheelchair accessible (at least 32" wide)? | ✓ | | | |

| | Restrooms | Yes | No | N/A | Comments |
|-----|--|-----|----|-----|-----------------------------|
| 8. | Are grab bars provided in toilet stalls? | ✓ | | | |
| 9. | Are sinks provided with clearance for a wheelchair to roll under (29" clearance)? | ✓ | | | |
| 10. | Are sink handles operable with one hand without grasping, pinching or twisting? | ✓ | | | |
| 11. | Are exposed pipes under sink sufficiently insulated against contact? | | ✓ | | Missing on women's restroom |
| 12. | Are soap dispensers, towel, etc. reachable (48" from floor for frontal approach, 54" for side approach)? | ✓ | | | |
| 13. | Is the base of the mirror no more than 40" from the floor? | ✓ | | | |

APPENDIX E:
PRE SURVEY QUESTIONNAIRES AND
DOCUMENTATION REQUEST CHECKLIST

PHYSICAL NEEDS ASSESSMENT: PRE-SURVEY QUESTIONNAIRE

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. **The completed form must be presented to EMG's Field Observer prior to or on the day of the site visit.** If the form is not completed, EMG's Project Manager will require **additional time** during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final Property Condition Report.

Name of person completing
questionnaire: _____

Association with property: _____

Length of association with property: _____

Date Completed: _____

Phone Number: _____

Property Name: MBUSD MEADOWS ELEMENTARY SCHOOL

EMG Project Number: _____

Directions: Please answer all questions to the best of your knowledge and in good faith. Please provide additional details in the Comments column, or backup documentation for any Yes responses.

| INSPECTIONS | | DATE LAST INSPECTED | LIST ANY OUTSTANDING REPAIRS REQUIRED |
|-------------|--|-----------------------|---------------------------------------|
| 1 | Elevators | NA | |
| 2 | HVAC, Mechanical, Electric, Plumbing | as needed | |
| 3 | Life-Safety/Fire | annual SUMMER 2014 | |
| 4 | Roofs | as needed | |
| QUESTION | | | RESPONSE |
| 5 | List any major capital improvement within the last three years. | Painted exterior | |
| 6 | List any major capital expenditures planned for the next year. | | |
| 7 | What is the age of the roof(s)? | recovered in 1999 | |
| 8 | What building systems (HVAC, roof, interior/exterior finishes, paving, etc.) are the responsibilities of the tenant to maintain and replace? | none | |

| Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. (NA indicates "Not Applicable", Unk indicates "Unknown") | | | | | | |
|--|--|----------|---|-----|----|--|
| QUESTION | | RESPONSE | | | | COMMENTS |
| | | Y | N | Unk | NA | |
| 9 | Are there any unresolved building, fire, or zoning code issues? | | ✓ | | | |
| 10 | Are there any "down" or unusable units? | | ✓ | | | |
| 11 | Are there any problems with erosion, stormwater drainage or areas of paving that do not drain? | ✓ | | | | bank retaining walls culvert outside of classroom are lifted by tree roots |
| 12 | Is the property served by a private water well? | | ✓ | | | |
| 13 | Is the property served by a private septic system or other waste treatment systems? | | ✓ | | | |
| 14 | Are there any problems with foundations or structures? | | ✓ | | | |
| 15 | Is there any water infiltration in basements or crawl spaces? | | ✓ | | | |
| 16 | Are there any wall, or window leaks? | | ✓ | | | |
| 17 | Are there any roof leaks? | | ✓ | | | need maintenance |
| 18 | Is the roofing covered by a warranty or bond? | | ✓ | | | |
| 19 | Are there any poorly insulated areas? | | | ✓ | | |
| 20 | Is Fire Retardant Treated (FRT) plywood used? | | ✓ | | | |
| 21 | Is exterior insulation and finish system (EIFS) or a synthetic stucco finish used? | | ✓ | | | |
| 22 | Are there any problems with the utilities, such as inadequate capacities? | ✓ | | | | water pressure to school inadequate |
| 23 | Are there any problems with the landscape irrigation systems? | ✓ | | | | water pressure |
| 24 | Has a termite/wood boring insect inspection been performed within the last year? | | ✓ | | | need inspection + treatment |
| 25 | Do any of the HVAC systems use R-11, 12, or 22 refrigerants? | ✓ | | | | Possible on Portable |
| 26 | Has any part of the property ever contained visible suspect mold growth? | | ✓ | | | |

| Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. (NA indicates "Not Applicable", Unk indicates "Unknown") | | | | | | |
|--|---|----------|---|-----|----|------------------------------------|
| QUESTION | | RESPONSE | | | | COMMENTS |
| | | Y | N | Unk | NA | |
| 27 | Is there a mold Operations and Maintenance Plan? | | ✓ | | | |
| 28 | Have there been indoor air quality or mold related complaints from tenants? | | ✓ | | | |
| 29 | Is polybutylene piping used? | | ✓ | | | |
| 30 | Are there any plumbing leaks or water pressure problems? | ✓ | | | | low water pressure to school |
| 31 | Are there any leaks or pressure problems with natural gas service? | | ✓ | | | |
| 32 | Does any part of the electrical system use aluminum wiring? | | ✓ | | | |
| 33 | Do Residential units have a less than 60-Amp service? | | | ✓ | | |
| 34 | Do Commercial units have less than 200-Amp service? | | | ✓ | | |
| 35 | Are there any recalled fire sprinkler heads (Star, GEM, Central, Omega)? | | | | ✓ | |
| 36 | Is there any pending litigation concerning the property? | | ✓ | | | |
| 37 | Has the management previously completed an ADA review? | ✓ | | | | |
| 38 | Have any ADA improvements been made to the property? | ✓ | | | | |
| 39 | Does a Barrier Removal Plan exist for the property? | | | ✓ | | |
| 40 | Has the Barrier Removal Plan been approved by an arms-length third party? | | | ✓ | | |
| 41 | Has building ownership or management received any ADA related complaints? | | ✓ | | | |
| 42 | Does elevator equipment require upgrades to meet ADA standards? | | | | ✓ | |
| 43 | Are there any problems with exterior lighting? | | ✓ | | | |
| 44 | Are there any other significant issues/hazards with the property? | ✓ | | | | all sliding doors need replacement |

| Mark the column corresponding to the appropriate response. Please provide additional details in the Comments column, or backup documentation for any Yes responses. (NA indicates "Not Applicable", Unk indicates "Unknown") | | | | | | |
|--|--|----------|---|-----|----|----------|
| QUESTION | | RESPONSE | | | | COMMENTS |
| | | Y | N | Unk | NA | |
| 45 | Are there any unresolved construction defects at the property? | | ✓ | | | |
| | | | | | | |

Signature of person Interviewed or completing form_____
Date



Energy Audit Pre-Survey Questionnaire

Draft - For Discussion Purposes Only

This questionnaire must be completed by the property owner, the owner's designated representative, or someone knowledgeable about the subject property. If the form is not completed, EMG's Project Manager will require **additional time** during the on-site visit with such a knowledgeable person in order to complete the questionnaire. During the site visit, EMG's Field Observer may ask for details associated with selected questions. This questionnaire will be utilized as an exhibit in EMG's final report.

| | | | |
|----------------------|---------------------------------|--|--|
| Name of Institution: | MBUSD MEADOWS ELEMENTARY SCHOOL | | |
| Name of Building: | Building #: | | |

| Unk = Unknown, NA = Not Applicable | Yes | No | NA | Unk | Comments |
|--|-------------------------------------|-------------------------------------|--------------------------|--------------------------|----------|
| 1. Are the plumbing fixtures Low Flow (Below 2.0GPM, 1.6GPF) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2. Are there any vacant buildings or significant building areas? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3. Do tenants pay for utilities at leased properties? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4. Does the owner pay for exterior site lighting electricity? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

| Site Information | | | | | |
|--|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| Primary Heating System & Fuel? | GAS | | | | |
| Secondary Heating System & Fuel? | GAS | | | | |
| If Oil Used For Heating- Tank Capacity | Gallons | No. of Tanks | | | |
| Primary Cooling System & Capacity? | | | | | |
| Year of Construction? | 1959 | | | | |
| No. of Stories? | 1 Floors. | | | | |
| Total Site Area? | 7.8 Acres | | | | |
| Total Building Area? | 37,000 sqft | | | | |
| Area Heated (%) | 90 % | | | | |
| Area Cooled (%) | 10 % | | | | |
| Total Conditioned Area (%) | 90 % | | | | |
| | Elec. | Natural Gas | Propane | No.2 Oil | Dist. Steam |
| Primary Heating Fuel? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Secondary Heating Fuel? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Domestic Water Heater Fuel? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |

| Building Occupancy/Schedule | | |
|--|--------------------------|--------------------------|
| Facility Occupancy (avg. people ea. day) | 540 | |
| After Hours Facility Occupancy (avg. people ea. day) | varies | |
| Standard Building Occupancy Timing | 7:30 AM/PM - 4:00 AM/PM | |
| Maintenance Staff Hours | 6:00 AM/PM - 11:30 AM/PM | |
| | Hours open to Public | Hours open to Staff |
| Monday | 8:00 AM/PM - 4:00 AM/PM | 6:00 AM/PM - 11:30 AM/PM |
| Tuesday | 8:00 AM/PM - 4:00 AM/PM | 6:00 AM/PM - 11:30 AM/PM |
| Wednesday | 8:00 AM/PM - 4:00 AM/PM | 6:00 AM/PM - 11:30 AM/PM |
| Thursday | 8:00 AM/PM - 4:00 AM/PM | 6:00 AM/PM - 11:30 AM/PM |
| Friday | 8:00 AM/PM - 4:00 AM/PM | 6:00 AM/PM - 11:30 AM/PM |
| Saturday | 8:00 AM/PM - 4:00 AM/PM | 6:00 AM/PM - 11:30 AM/PM |
| Sunday | 8:00 AM/PM - 4:00 AM/PM | 6:00 AM/PM - 11:30 AM/PM |
| Number of Months the Facility Operates in a Year? | Months | 10 |
| Estimated Percentage of Male Staff and Guests (%) | 25 % | |

Energy Audit Pre-Survey Questionnaire

Draft - For Discussion Purposes Only

| Building Structure | | | | | | |
|--------------------|----------|-------------------------------------|-----------|-------------------------------------|------------|-------------------------------------|
| | | Y/N | | Y/N | | Y/N |
| Roof Type: | Pitched? | <input checked="" type="checkbox"/> | Flat | | Both | |
| Attic Insulation: | Batt | | Cellulose | | Fiberglass | <input checked="" type="checkbox"/> |
| Window Frame: | Wooden | <input checked="" type="checkbox"/> | Vinyl | | Metal | <input checked="" type="checkbox"/> |
| Window Glazing: | Single | <input checked="" type="checkbox"/> | Double | <input checked="" type="checkbox"/> | Triple | |
| Structure | Wooden | <input checked="" type="checkbox"/> | Metal | | Conc. | |

| Building Lighting | | | |
|--|-------------|---|--------------|
| Type of Linear Fluorescent Lamps? (T8/T12) | <i>both</i> | Exterior Lighting Control (Timer/Photocell) | <i>Timer</i> |
| Type of Common Lamps? (Incand/CFLs) | <i>CFL</i> | Exterior Light Timing | <i>7 Hrs</i> |
| Lighting Sensors? (Y/N) | <i>N</i> | EXIT Lights (Incand/Fluor/LED) | <i>Fluor</i> |

| Preventive Maintenance of Mechanical System | | |
|---|---|-------------------------------------|
| Systems | Annual Professional Maintenance | Seldom or Never Maintained |
| Tenant Space Heating Systems (Furnace/Boilers/Heat pumps) | <input checked="" type="checkbox"/> <i>in house</i> | <input type="checkbox"/> |
| Tenant Space Cooling Systems (Condensers/Window AC) | <input checked="" type="checkbox"/> <i>in house</i> | <input type="checkbox"/> |
| Domestic Water Heaters | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| Other Systems | | | |
|-----------------------|-----------|-------------------------|----------------------|
| | Qty | Selection | Additional Comments? |
| # of Elevators | <i>NA</i> | Hydraulic/Traction | |
| # of Electric Meters | <i>1</i> | Master/Sub | |
| # of Nat. Gas Meters | <i>1</i> | Resi/Commercial/Indust. | |
| # of Water Meters | <i>2</i> | | |
| # of Backup Generator | <i>NA</i> | Generator Fuel? | |

| Issues or Concerns That EMG Should Know About? | |
|--|--|
| 1. | |
| 2. | |
| 3. | |

| Items Provided to EMG Auditors | | | | |
|--|-------------------------------------|----|-----|----------------------|
| | Yes | No | N/A | Additional Comments? |
| Access to All Mechanical Spaces | <input checked="" type="checkbox"/> | | | |
| Access to Roof/Attic Space | <input checked="" type="checkbox"/> | | | |
| Access to Building As-Built Drawings | <input checked="" type="checkbox"/> | | | |
| Access to last 12/24 Months Utility Data | <input checked="" type="checkbox"/> | | | |
| Access to last 12/24 Month Water & Sewer Bills | | | | <i>not yet given</i> |

REQUEST FOR DOCUMENTATION

On the day of the site visit, provide EMG's Field Observer the documents listed below. Signify which documents will be copied, available for review at the site, not available, or not applicable by placing a check mark in the appropriate columns. Also provide this completed checklist.

| | | Copies Provided | Reviewed at Site | Not Available | Not Applicable |
|----|--|--------------------|---------------------|------------------|-------------------|
| 1 | Maintenance Contractor List. Provide the company name, phone number, and contact person of all maintenance contractors who serve the property, such as mechanical contractors, roof contractors, fire sprinkler and fire alarm testing contractors, and elevator contractors. | ✓ | | | |
| 2 | Construction Documents (Blueprints). Provide all available construction documents for the original construction of the building or for any tenant improvement work or other recent construction work. | | | | |
| 3 | Site plan. Provide a site plan, preferably 8 1/2" X 11", which depicts the arrangement of buildings, roads, parking stalls, and other site features. | | | | |
| 4 | Certificates of Occupancy and original Building Permits. | | | | |
| 5 | Tenant List. For commercial properties, provide a tenant list, which identifies the names of each tenant, vacant tenant units, the floor area of each tenant space, and the gross and net leasable area of the building(s). | | | | |
| 6 | Apartment Unit Summary. For apartment properties, provide a summary of the apartment unit types and quantities, including the floor area of each apartment unit as measured in square feet. | | | | |
| 7 | Hotel and Nursing Home Room Summary. For hotel or nursing home properties, provide a summary of the room types and room type quantities, including the floor area of each room type. | | | | |
| 8 | Occupancy Percentage. Provide the current occupancy percentage and typical turnover rate records (for commercial and apartment properties). | | | | |
| 9 | Inspection Documents and Certificates. Fire, building, and health department inspection reports and elevator inspection certificates. | | | | |
| 10 | Warranties. Roof and HVAC warranties, or any other similar relevant documents. | | | | |
| 11 | Utility Companies. The names of the local utility companies which serve the property, including the water, sewer, electric, gas, and phone companies. | | | | |
| 12 | Capital Improvement Summary. A summary of recent (over the last 5 years) capital improvement work which describes the scope of the work and the cost of the improvements. | | | | |
| 13 | Proposed Improvements. Pending contracts or proposals for future improvements. | | | | |
| 14 | Historical Costs. Costs for repairs, improvements, and replacements. | | | | |
| 15 | Records. Records of system and material ages (roof, MEP, paving, finishes, furnishings). | | | | |
| 16 | Brochures or Marketing Information. | | | | |
| 17 | Appraisal, either current or previously prepared. | | | | |
| 18 | Previous reports pertaining to the physical condition of property. | | | | |
| 19 | ADA survey and status of improvements implemented. | | | | |
| 20 | Litigation. Current / pending litigation related to property condition. | | | | |

APPENDIX F:

TERMINOLOGY

The following are definitions of terms utilized in this report.

| TERMINOLOGY | |
|------------------------------------|---|
| Actual Knowledge | Information or observations known first hand by EMG. |
| ADA | The Americans with Disabilities Act |
| Ancillary Structures | Structures that are not the primary improvements of the Property but which may have been constructed to provide support uses. |
| Appropriate Inquiry | A requests for information from appropriate entity conducted by a Freedom of Information Letter (FOIL), verbal request, or by written request made either by fax, electronic mail, or mail. A good-faith one time effort conducted to obtain the information in light of the time constraints to deliver the FCA. |
| ASTM | American Society for Testing and Materials |
| Base Building | That portion of the building (common area) and its systems that are not typically subject to improvements to suit tenant requirements. |
| Baseline | A minimum scope level of observation, inquiry, research, documentation review, and cost estimating for conducting a Facility Condition Assessment as normally conducted by EMG. |
| BOMA | Building Owners and Managers Association |
| Building | Referring to the primary building or buildings on the Property, which are within the scope of the FCA as defined under Section 2. |
| Building Codes | A compilation of rules adopted by the municipal, county and/or state governments having jurisdiction over the Property that govern the property's design and/or construction of buildings. |
| Building Department Records | Information concerning the Property's compliance with applicable Building, Fire and Zoning Codes that is readily available for use by EMG within the time frame required for production of the Facility Condition Assessment. |
| Building Systems | Interacting or interdependent components that comprise a building such as structural, roofing, side wall, plumbing, HVAC, water, sanitary sewer and electrical systems. |
| BUR | Built Up Roof |
| Client | The entity identified on the cover of this document as the Client. |
| Commercial Real Estate | Real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes, and property used for residential purposes that has more than four (4) residential dwelling units. |
| Commercial Real Estate Transaction | The transfer of either a mortgage, lease, or deed; the re-financing of a commercial property by an existing mortgagee; or the transferring of an equity interest in commercial property. |
| Component | A piece of equipment or element in its entirety that is part of a system. |
| Consultant | The entity or individual that prepares the Facility Condition Assessment and that is responsible for the observance of, and reporting on the physical condition of Commercial Property. |
| Dangerous or Adverse Conditions | Situations which may pose a threat or possible injury to the Project Manager, or those situations which may require the use of special protective clothing, safety equipment, access equipment, or any precautionary measures. |
| Deferred Maintenance | Deficiencies that result from postponed maintenance, or repairs that have been put off until a later time and that require repair or replacement to an acceptable condition relative to the age of the system or property. |
| Dismantle | To take apart; disassemble; tear down any component, device or piece of equipment that is bolted, screwed, secured, or fastened by other means. |
| DWV | Drainage Waste Ventilation |

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| EIFS | Exterior Insulation and Finish System |
| EMS | Energy Management System |
| Engineering | Analysis or design work requiring extensive formal education, preparation and experience in the use of mathematics, chemistry, physics, and the engineering sciences as provided by a Professional Engineer licensed to practice engineering by any state of the 50 states. |
| Expected Useful Life (EUL) | The average amount of time in years that a system or component is estimated to function when installed new. |
| FEMA | Federal Emergency Management Agency |
| FFHA | Federal Fair Housing Act |
| Fire Department Records | Information generated or acquired by the Fire Department having jurisdiction over the Property, and that is readily available to EMG within the time frame required for production of the FCA. |
| FIRM | Flood Insurance Rate Maps |
| FM | Factory Mutual |
| FOIA | U.S. Freedom of Information Act (5 USC 552 et seq.) |
| FOIL | Freedom of Information Letter |
| FRT | Fire Retardant Treated |
| Guide | A series of options or instructions that do not recommend a specific course of action. |
| His | Referring to either a male or female Project Manager, or individuals interviewed by the Project Manager. |
| HVAC | Heating, Ventilating and Air-conditioning |
| IAQ | Indoor Air Quality |
| Immediate Repairs | Physical deficiencies that require immediate action as a result of: (i) existing or potentially material unsafe conditions, (ii) significant negative conditions impacting tenancy/marketability, (iii) material building code violations, or (iv) poor or deteriorated condition of critical element or system, or (v) a condition that if left "as is", with an extensive delay in addressing same, has the potential to result in or contribute to critical element or system failure within one (1) year. |
| Interviews | Interrogatory with those knowledgeable about the Property. |
| Material | Having significant importance or great consequence to the asset's intended use or physical condition. |
| MEP | Mechanical, Electrical, and Plumbing |
| NFPA | National Fire Protection Association |
| Observations | The results of the Project Manager's Walk-through Survey. |
| Observe | The act of conducting a visual, unaided survey of items, systems or conditions that are readily accessible and easily visible on a given day as a result of the Project Manager's walk-through. |
| Obvious | That which is plain or evident; a condition that is readily accessible and can be easily seen by the Project Manager as a result of his Walk-through without the removal of materials, moving of chattel, or the aid of any instrument, device, or equipment. |
| Owner | The entity holding the deed to the Property that is the subject of the FCA. |
| FCA | Facility Condition Assessment, the Purpose and Scope of which is defined in Section 2. of this report. |

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| Physical Deficiency | <p>Patent, conspicuous defects, or significant deferred maintenance of the Property's material systems, components, or equipment as observed during the Project Manager's Walk-through Survey.</p> <p>Material systems, components, or equipment that are approaching, have realized, or have exceeded their typical Expected Useful Life (EUL); or, that have exceeded their useful life result of abuse, excessive wear and tear, exposure to the elements, or lack of proper or adequate maintenance.</p> <p>This definition specifically excludes deficiencies that may be remedied with routine maintenance, miscellaneous repairs, normal operating maintenance, and conditions that do not present a material deficiency to the Property.</p> |
| PML | Probable Maximum Loss |
| Practically Reviewable | Information that is practically reviewable means that the information is provided by the source in a manner and form that, upon examination, yields information relevant to the property without the need for extraordinary analysis of irrelevant data. |
| Practice | A definitive procedure for performing one or more specific operations or functions that does not produce a test result. |
| Primary Improvements | The site and building improvements that are of fundamental importance with respect to the Property. |
| Project Manager | The individual Professional Engineer or Registered Architect having a general, well rounded knowledge of all pertinent site and building systems and components that conducts the on site visit and walk-through observation. |
| Property | The site and building improvements, which are specifically within the scope of the FCA to be prepared in accordance with the agreement between the Client and EMG. |
| Readily Accessible | Those areas of the Property that are promptly made available for observation by the Project Manager without the removal of materials or chattel, or the aid of any instrument, device, or equipment at the time of the Walk-through Survey. |
| Reasonably Ascertainable | Information that is publicly available, provided to EMG's offices from either its source or an information research/retrieval concern, practically reviewable, and available at a nominal cost for either retrieval, reproduction or forwarding. |
| Recreational Facilities | Spas, saunas, steam baths, swimming pools, tennis courts, playground equipment, and other exercise, entertainment, or athletic facilities. |
| Remaining Useful Life (RUL) | <p>The consultant's professional opinion of the number of years before a system or component will require replacement or reconditioning. The estimate is based upon observation, available maintenance records, and accepted EUL's for similar items or systems.</p> <p>Inclement weather, exposure to the elements, demand on the system, quality of installation, extent of use, and the degree and quality of preventive maintenance exercised are all factors that could impact the RUL of a system or component. As a result, a system or component may have an effective age greater or less than its actual age. The RUL may be greater or less than its Expected Useful Life (EUL) less actual age.</p> |
| Replacement Costs | Costs to replace the system or component "in kind" based on Invoices or Bid Documents provided by the current owner or the client, construction costs developed by construction resources such as <i>Means</i> and <i>Dodge</i> , EMG's experience with past costs for similar properties, or the current owner's historical incurred costs. |
| Replacement Reserves | Major recurring probable expenditures, which are neither commonly classified as an operation or maintenance expense. Replacement Reserves are reasonably predictable both in terms of frequency and cost. However, they may also include components or systems that have an indeterminable life but nonetheless have a potential liability for failure within the reserve term. |

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| RTU | Rooftop Unit |
| RUL | Remaining Useful Life (See definition) |
| Short Term Repair Costs | Opinions of Costs to remedy Physical Deficiencies, such as deferred maintenance, that may not warrant immediate attention, but requiring repairs or replacements that should be undertaken on a priority basis, taking precedence over routine preventive maintenance work within a zero to one year time frame. Included are such Physical Deficiencies resulting from improper design, faulty installation and/or substandard quality of original system or materials. Components or systems that have realized or exceeded their Expected Useful Life (EUL) that may require replacement to be implemented within zero to one-year time frame are also included. |
| Shut-Down | Equipment or systems that are not operating at the time of the Project Manager's Walk-through Survey. Equipment or systems may be considered shutdown if it is not in operation as a result of seasonal temperatures. |
| Significant | Important, material, and/or serious. |
| Site Visit | The visit to the property by EMG's Project Manager including walk-through visual observations of the Property, interviews of available project personnel and tenants (if appropriate), review of available documents and interviews of available municipal personnel at municipal offices, all in accordance with the agreement for the Facility Condition Assessment. |
| Specialty Consultants | Practitioners in the fields of engineering, architecture; or, building system mechanics, specialized service personnel or other specialized individuals that have experience in the maintenance and repair of a particular building component, equipment, or system that have acquired detailed, specialized knowledge in the design, assessment, operation, repair, or installation of the particular component, equipment, or system. |
| Structural Component | A component of the building, which supports non-variable forces or weights (dead loads) and variable forces or weights (live loads). |
| Suggested Remedy | A preliminary opinion as to a course of action to remedy or repair a physical deficiency. There may be alternate methods that may be more commensurate with the Client's requirements. Further investigation might make other schemes more appropriate or the suggested remedy unworkable. The suggested remedy may be to conduct further research or testing, or to employee Specialty Consultants to gain a better understanding of the cause, extent of a deficiency (whether observed or highly probable), and the appropriate remedy. |
| Survey | Observations as the result of a walk-through scan or reconnaissance to obtain information by EMG of the Property's readily accessible and easily visible components or systems. |
| System | A combination of interacting or interdependent components assembled to carry out one or more functions. |
| Technically Exhaustive | The use of measurements, instruments, testing, calculations, exploratory probing or discover, and/or other means to discover and/or troubleshoot Physical Deficiencies, develop scientific or Engineering findings, conclusions, and recommendations. Such efforts are not part of this report unless specifically called for under Section 2.2. |
| Term | Reserve Term: The number of years that Replacement Reserves are projected for as specified in the Replacement Reserves Cost Estimate. |
| Timely Access | Entry provided to the Project Manager at the time of his site visit. |
| UST | Underground Storage Tank |

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| Walk-through Survey | The Project Manager's site visit of the Property consisting of his visual reconnaissance and scan of readily accessible and easily visible components and systems. This definition connotes that such a survey should not be considered in depth, and is to be conducted without the aid of special protective clothing, exploratory probing, removal of materials, testing, or the use of special equipment such as ladders, scaffolding, binoculars, moisture meters, air flow meters, or metering/testing equipment or devices of any kind. It is literally the Project Manager's walk of the Property and observations. |