

City of Encinitas



PACIFIC VIEW ELEMENTARY

Rehabilitation & Re-Use Study

608 Third Street
Encinitas, CA 92024

Prepared for:

The City of Encinitas
505 S. Vulcan Avenue
Encinitas, CA 92024

Submitted by:

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Structural Engineer

MA Engineers

Mechanical & Plumbing
Engineers

**Johnson Consulting
Engineers**

Electrical Engineers

August 10, 2015
90% Review Draft

PACIFIC VIEW ELEMENTARY SCHOOL

Rehabilitation and Re-Use Study

TABLE OF CONTENTS

Section A:	Introduction	1
Section B:	Existing Building Description	2
Section C:	Regulations	3
Section D:	Site Rehabilitation Assessment (Civil)	7
Section E:	Building Rehabilitation Assessment (Architectural)	17
Section F:	Building Rehabilitation Assessment (Structural)	38
Section G:	Building Rehabilitation Assessment (Mechanical)	50
Section H:	Building Rehabilitation Assessment (Electrical)	86
Section I:	Sustainable Opportunities	89

APPENDICES

Appendix A:	Topographic Survey & Site Plans
Appendix B:	Floor Plans – Architectural Scope of Work
Appendix C:	Floor Plans – Structural Scope of Work
Appendix D:	Floor Plans – Mechanical Scope of Work
Appendix E:	Floor Plans – Electrical Scope of Work
Appendix F:	Estimate of Probable Cost
Appendix G:	Hazardous Material Reports
Appendix H:	Project Team

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SECTION A

Introduction

Section A – Introduction

SITE WIDE

Introduction:

According to the Request for Proposals, "the City is seeking an architectural consulting firm to prepare a complete Preliminary Design Report (PDR) for the cost effective rehabilitation of the building at the Pacific View site to a code compliant habitable shell."

The intent of this study is to identify the existing buildings and systems, observe these existing conditions and provide recommendations on upgrading or replacing those systems for future re-use of the site by the City of Encinitas and a yet to be determined Operating Partner (OP).

Westberg + White was selected to provide direction for utilization of the site and bringing the existing structure to a habitable, code compliant shell, that a future OP can further improve as necessary to occupy for the intended use(s).

There are no as-built drawings available for the existing buildings. Westberg + White requested all available as-built files from the Division of the State Architect in Sacramento and no additional useable drawings were available. The surveyor for the site provided limited CAD files that were utilized to verify the existing site conditions.

The site was visually inspected and documented with our consultants on May 2015, as well as subsequent visits for additional observations.

In the interest of City Council's wishes to minimize fees associated with the study, it was decided, with the agreement of the City of Encinitas to eliminate underground inspection of the sewer, storm drain and water utility. These items are to be performed by the OP for specific assessment of need, prior to further improvements.

SECTION B

Existing Building Description

Section B – Existing Building Description**SITE WIDE**Existing Building Description:

The existing building site is located at 608 3rd Street, Encinitas, CA 92024. It was originally constructed as Pacific View Elementary School in 1953. The Pacific View Elementary School operated as such up until 2003 when it was closed. The school/site was acquired by the City of Encinitas in 2014. There are three remaining structures on the 2.82 acre site for consideration; an existing School building consisting of two wings. One wing is classrooms, some having been reconfigured as offices, restrooms, etc. over the years, and the other is an administrative area with additional restrooms, offices, utility spaces and an additional classroom. There is an existing carport on the site and also adjacent to the site, but not part of this study, is a historically significant schoolhouse. There are several other temporary structures on the site that will be removed prior to any work commencing.

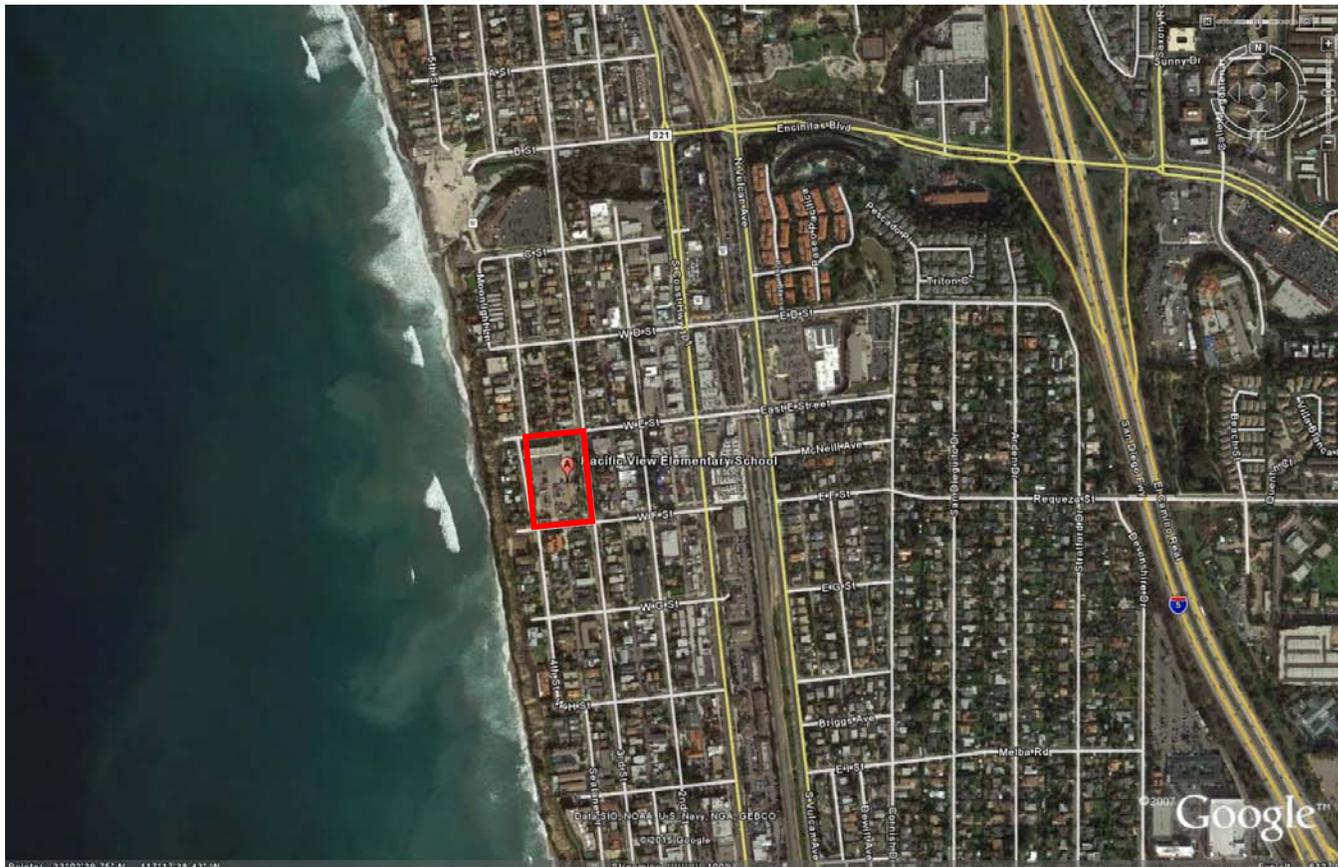
The school building is of Type V, non-protected construction with a stucco finish, a composite asphalt roof over wood deck, single glazed windows and solid core wood doors. Spread footings, slab on grade floors, as well as wood framed bearing and shear walls comprise the structure. The walls are finished with gypsum wall board and the floor is finished with carpeting, VAT, terrazzo and sheet vinyl depending on the space. There is noticeable damage and disrepair to the existing buildings and site. The asphaltic concrete paving is heavily deteriorated across the site. The concrete walks are cracking and chipping and are not compliant with current ADA standards. The landscaping is in poor shape and unkempt. The existing structures are exhibiting extensive damage and disrepair as well. There is extensive rotting in the wood exposed on the existing buildings as well as the covered walk outside of the main classroom building. There is evidence of some repair work that was done, most likely out of safety concerns due to the sagging, failing structure on the walkway canopy. In addition to the structural concerns, there are aesthetic issues as well. Deteriorating exterior plaster and paint is evident as well as the deterioration of finishes on the fascia, doors, windows, etc. The roofing is beyond its useful life and evidence of leaking due to this is evident in various places throughout the classroom and admin portions of the main building. The interior finishes, including carpeting, terrazzo, ceiling tiles, gypsum wall board, paint and floor tiles are generally in disrepair and damaged. There is extensive evidence of vandalism such as broken windows, spray painted surfaces and broken casework, door hardware, etc. Finally, there are hazardous materials present. These have been documented in the Hazardous Material Reports, Appendix G.

The Carport building is of Type V, non-protected construction as well. It is beyond its useful life and recommended to be demolished.

SECTION C
Regulations

Section C – Regulations

SITE WIDE



Zoning:

Site is designated as PUBLIC/SEMI-PUBLIC ZONES P/SP (Public/Semi-Public): This permits activities operated by the City, County, or other governmental agencies such as the fire district, school districts, water districts, and sewer districts; other semi-public uses, such as hospitals and other private institutions may also be included.

Allowable uses have been identified as the following,

Uses Permitted by Right:

- Ambulance Service (private)
- Athletic Field (public gathering)
- Auditorium (public gathering)
- Educational Institution, Public (education)
- Fire Station
- Library (arts/culture)
- Medical/Dental Office
- Museum (arts/culture)
- Parks and Recreational Areas (recreation)
- Police/Sheriff Station/Jail

Post Office Public Utilities, Office
Recreational Facilities, Public (recreation)
Schools, Public (K-12) (education)
Sewage Treatment Plant
Theaters and Places of Public Assembly (public gathering)

Uses Permitted with a Minor Use Permit:

Courts, Commercial (Badminton, Tennis, Racquetball, Other) (recreation)
Fish Hatchery
Hazardous Household Materials Collection Center (see EMC Ch. 30.57)
Hiring Hall
Outdoor Sales
Surf Shop, Retail, with or without manufacturing
Swap Meet

Uses Permitted with a Major Use Permit:

Animal Shelter
Camps
Cemetery
Church/Temple/Religious Institution
Convent and Monastery
Educational Institution, Private
Electrical Distribution Substation
Electrical Transmission Substation
Equestrian Establishment
Fleet Storage
Garage, Public Parking
Golf Driving Range (recreation)
Horses, Raising
Hospital
Hospital, Convalescent
Hospital, Nursing
Hospital, Mental
Medical Complex
Observatory (arts/culture)
Open Air Theater (public gathering)
Public Utility Service Yard
Recycling Facilities
Residential Care, General (7 or more)
Schools, Private (K-12) (education)
Schools, Technical (education)
Stable, Commercial
Stadium (public gathering)
Storage of Sand, Gravel, Etc.
Terminals and Stations (Taxi, Bus, Limousine, etc.)
Towing/Impounding of Vehicles
Transient Habitation

Coastal Development Permit:

A coastal development permit will be required for this project. This is estimated to take 4-6 months, but upwards of a year in some cases.

Planning Department Review/Approval:

Approval from the planning department will be necessary and will be determined by the proposed final use[s]. This process can take anywhere from 4-14 months and will require CEQA approval or exemption as well as the approved Coastal Development Permit.

Building Department Review/Approval:

Once the planning department approval has been obtained, the contract documents can be completed and submitted to the building department for approval which can be a 3-4 month process.

Codes:**CBC 2013:****Sec. 302 - Classification**

While the Operating Partner has not yet been determined, an occupancy classification of A-3, Assembly is appropriate for the intended use and restrictive enough to allow a safe analysis at this point.

Sec. 602 - Construction Classification

The existing structure is of Type VB construction.

Sec. 903.2.1.3 - Group A-3 (sprinkler system requirements)

Because of a change in occupancy from E to A-3, a sprinkler system would be required if any of the conditions exists in this section. None of the conditions exist currently with the exception of occupant load. Due to the final occupancy being unknown, if the occupant load becomes greater than 300 a sprinkler system would be required.

Sec. 503 - General Building Height and Area Limitations

Type VB construction with an occupancy of A-3 allows 6000 square feet of building area. Type VA (sprinklered in lieu of protected construction) allows 11,500 square feet of building area, hence sprinkling the building would increase the allowable square footage to allow the existing building to be compliant. Using open side yards can increase allowable footage to enable the existing building to be compliant as well.

Sec. 508 - Mixed Use and Occupancy

Dependent on the Operating Partner, mixed uses or occupancies could require some fire resistant construction as separation of such uses. This would be determined upon selection of the Operating Partner and the end uses.

Historical Code:

Not a Historically significant or designated building and therefore this code would not allow relief from CBC requirements.

Historic Buildings – 11B-202.5, CBC 2013

Alterations to qualified historic buildings and facilities 11B-202.5 – alterations to qualify historic buildings shall comply with the State Historic Building Code, Part 8, Title 24 of the California Code of Regulations CCR.

Occupancy: The use or character of the occupancy of a qualified historical building or property may be changed from or returned to its historical use or

character, provided the qualified historical building or property conforms to the requirements applicable to the new use or character of occupancy as set forth in the CHBC. Such change in occupancy shall not mandate conformance with new construction requirements as set forth in regular code.

Means of egress Ch. 8-5

8-502.1 General. The enforcing agency shall grant reasonable exceptions to the specific provisions of applicable egress regulations where such exceptions will not adversely affect life safety.

8-502.2. Existing door openings and corridor widths of less than dimensions required by regular code shall be permitted where there is sufficient width and height for the occupants to pass through the opening or traverse the exit.

Accessibility Ch. 8-6

8-603.2 Entry. These alternatives do not allow exceptions for the requirement of level landings in front of doors, except as provided in Section 8-603.4.

1. Access to any entrance used by the general public and no further than 200 feet from the primary entrance.
2. Access at any entrance not used by the general public but open and unlocked with directional signs at the primary entrance and as close as possible to, but no further than 200 feet from, the primary entrance.
3. The accessible entrance shall have a notification system. Where security is a problem, remote monitoring may be used.

8-603.3 Doors. Alternatives listed in order of priority are:

1. Single-leaf door which provides a min. 30 inches of clear opening.
2. Single-leaf door which provides a min. 29 1/2 inches clear opening
3. Double door, one leaf of which provides a min. 29 1/2 inch clear opening.
4. Double doors operable with a power-assist device to provide a min. 29 1/2 inches clear opening when both doors are in the open position.

8-603.5 Toilet rooms. In lieu of separate-gender toilet facilities as required in the regular code, an accessible unisex toilet facility may be designated.

Existing Building Code:

With change in occupancy, any relief is mitigated. In addition, being a public building places increased importance on FLS, Accessibility and structural design.

STRUCTURAL REGULATIONS

SECTION 8-701

PURPOSE, INTENT AND SCOPE

8-701.2 Intent. The intent is to encourage the preservation of qualified historical buildings or structures while providing standards for a min. level of building performance with the objective of preventing partial or total structural collapse such that the overall risk of life threatening injury as a result of structural collapse is low.

8-702.1 The California Historical Building Code shall not be construed to allow the enforcing agency to approve or permit a lower level of safety of structural design and construction than that which is reasonably equivalent to the regular code provisions in occupancies which are critical to the safety and welfare of the public at large.

8-702.2 Nothing in these regulations shall prevent voluntary and partial seismic upgrades when it is demonstrated that such upgrades will improve life safety and when a full upgrade would not otherwise be required.

SECTION D

Site Rehabilitation Assessment

Section D – Site Rehabilitation Assessment**ADA and Accessibility****Existing Observations:**

- **Site Accessibility from Public Right of Way**
An ADA compliant accessible path of travel from the public Right of Way (ROW) was not observed during field investigation. The primary access to the site appears to be located southwest of the intersection at 3rd and West E Street. Access consists of a stairway along 3rd Street and a ramp along West E Street. The existing ramp does not appear to meet ADA requirements for an accessible ramp. Slopes along the path of travel leading to the ramp are in excess of 5% and do not provide adequate hand railing. In addition, thresholds at doorways exceed the 1/4" maximum for accessibility.
- **Accessible Parking**
No designated ADA parking was observed during our field investigation.
- **Interior Accessible Route**
Areas along the common path of travel around the existing buildings appeared to be non-compliant with ADA accessibility requirements. Concrete and asphalt pavements appear to be uneven, damaged, or contain non-compliant fore and cross slopes. Additionally there does not appear to be a compliant accessible path to the lower level of existing East Building.

**Recommendations:**

- **Site Accessibility from Public Right of Way**
Remove existing main entrance access point south of the intersection of 3rd Street and E Street. Reconstruct ADA path from E Street access point to ADA path of travel to the North and East Buildings in compliance with local, state, and federal codes and requirements. An ADA assessment should be performed to

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verify all remaining existing site improvements that are to be used as accessible paths of travel to be in compliant with local, state, and federal codes and requirements. (Refer to Recommended Pacific View – Option IIIA Site Plan)

- **Accessible Parking**
Provide new ADA accessible parking stalls, striping, and signage consistent with local, state and federal requirements. At a minimum one (1) ADA accessible parking stall and loading zone will be required. Additional ADA accessible parking stalls, loading zones, and ADA accessible van parking stall may be required based on the proposed use of the site per the City of Encinitas latest parking requirements.
- **Interior Site Accessible Route**
Provide ADA accessible paths of travel to all building ingress and egress locations that comply with local, state, and federal requirements. An ADA assessment should be performed to verify all remaining existing site improvements that will be used as accessible paths of travel are compliant with local, state and federal codes and requirements.



Existing Secondary Entrance (E Street)

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Existing Main Entrance (3rd Street)



Existing Parking (Looking North)

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Existing Parking (Looking East)



Existing East Building Access (Looking North)

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Existing East Building Access (Looking West)

Parking Lots**Existing Observations:**

- **Travel ways**
The existing parking lot travel way appears to be to be unmaintained and in generally poor condition. Parking and travel way are poorly defined by the lack of adequate pavement striping or signage. Structural damage was observed in some areas of the site consisting of rutting, cracking, raveling, stripping, and potholes. Damage caused by neighboring tree roots was also observed on the south and west portions of the site.
- **Parking Areas**
During our site investigation, vehicles were observed parking in marked asphalt stalls and in unmarked dirt parking areas between travel ways. Asphalt parking areas are in similar physical condition compared to the travel ways. Dirt areas have a light to patchy gravel covering with some areas completely exposed to dirt. Limited erosion and rutting was observed in the dirt parking areas. Pavement stall marking appeared to be unmaintained and well worn.
- **Site Access**
Vehicular site access is through one 30-foot wide concrete driveway entrance at the south of the site along F Street.

Recommendations:

- **Travel ways**
Provide at least 24-feet of improved unobstructed pavement width for all travel areas with an inside turning radius of 28-feet for fire access, including providing any structural sections within unpaved areas that require fire access per the City of Encinitas requirements. It may be necessary to consult with a qualified arborist regarding impact to neighboring trees if trees are to remain (Refer to Recommended Pacific View – Option IIIA Site Plan).
- **Parking Areas**
Provide an adequate number of the parking spaces based on the future use of the building per the City of Encinitas latest parking requirements. Parking stalls should be re-striped after all pavement and other construction work is performed.
- **Site Access**
Provide a new concrete driveway in accordance with the City of Encinitas design requirements. Remove and re-stripe existing diagonal striping along F Street to be reconfigured based on new site access (Refer to Recommended Pacific View – Option IIIA).

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Existing Travel Way (Looking South)



Existing Parking Area Pavement Condition (Looking West)

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Existing Parking Striping (Looking North)



Existing Parking Area Pavement Condition (Looking South)



Existing Vehicular Site Entrance

SITE UTILITIES

Existing Observation:

- A preliminary investigation into as-built utility drawings indicates that the original construction of the site utilities to be over 50 years old and it is anticipated that most utilities are at or near the end of their services life. During our site investigation, we observed several areas where narrow trench resurfacing had taken place within the asphalt parking area. The path of these narrow trenches roughly follows the course of aboveground utility features such as sewer cleanouts, storm drain inlets, and water valves. Based on these observations it is suspected that a portion of the existing site utilities was either replaced or repaired after the original installation. For evaluation of the existing building utilities, refer to the mechanical section of this report.

Recommendations:

- Prior to development of the site a detailed utility investigation should be performed to assess the condition and capacity of all utilities. Depending on the future use of the site it may be necessary to repair, replace, and/or upgrade the existing utility system. The city has elected to forego this investigation until an Operating Partner is selected as well as to reduce cost at this phase of the project.



Existing Narrow Utility Trenching

SECTION E

Building Rehabilitation Assessment (Architectural)

Section E – Building Rehabilitation Assessment (Architectural)

CLASSROOM BUILDING

Existing Observation:

All existing floor, wall and ceiling finishes are outdated, damaged and beyond useful life.

Doors and frames are deteriorating and thresholds and hardware are not ADA compliant.

Casework is beyond useful life and not ADA compliant.

Windows frames are deteriorating and existing single glazing is inefficient, unsafe and damaged.

Accessibility requirements are not achieved, including toilet facilities, window hardware, POT, door thresholds and hardware, door clearances, widths etc.

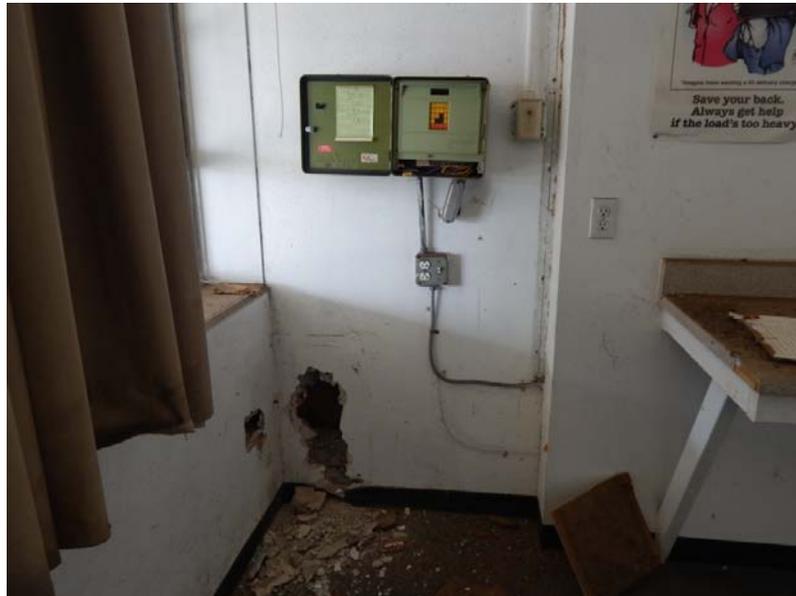
Roofing is beyond its useful life and there is evidence of leaking inside the building.



Existing stained, damaged and missing ceiling tiles



Existing stained and damaged wall finish.



Existing stained and damaged wall finish.



Existing stained and worn floor finish.



Existing stained and worn floor finish.



Damaged door



Non ADA compliant threshold



Non ADA compliant return on lever



Aging door hardware components and lack of required ADA clearance under closer



Deteriorating casework lacking ADA clearances



Damaged and deteriorating door frame



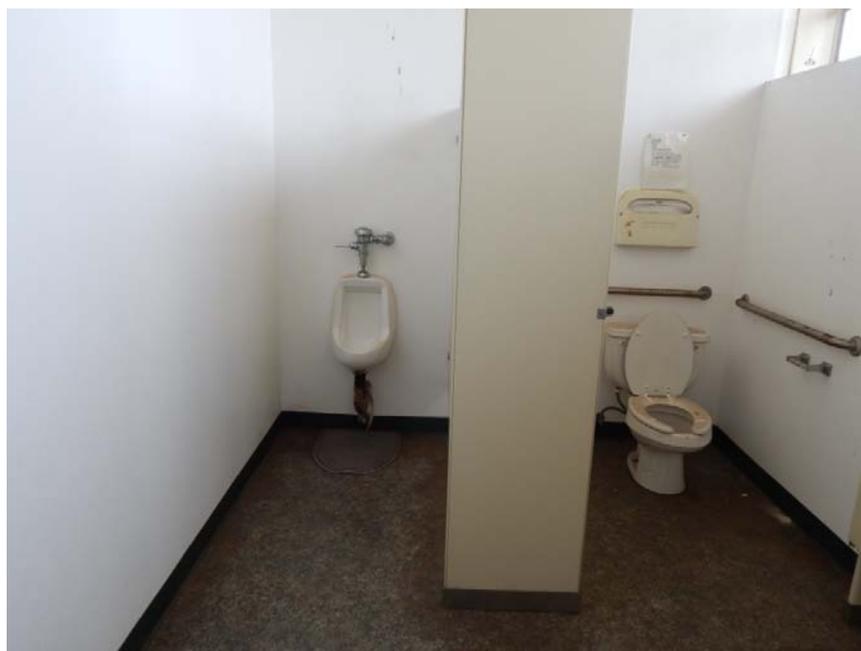
Deteriorating window frames and non ADA accessible hardware



Damaged single glazing



Deteriorating windows with damaged single glazing



Insufficient ADA clearances at toilet facilities



Non ADA compliant threshold. Exceeds 1/4" height in barrier free POT



Insufficient ADA clearances for maneuvering space at doors

Recommendations:

OPTION I: (See Appendix B for plans)

Demolish all finishes. Demolish 2x wood framed partitions and restroom partition walls, and replace, as necessary for new configuration. See Appendix B

Replace insulation with new batt and/or rigid insulation to achieve necessary Title 24 R-values. Replace interior wall finishes with 5/8" type X gyp. bd., taped only. Patch and repair exterior finish with stucco to match existing. See Appendix G for Asbestos report information on hazardous material locations. Demolish all floor finishes. Clean and seal existing concrete floor finish in all areas except restrooms.

In restrooms, provide new framed stud walls and gyp. bd./ceramic tile wall and floor finishes in newly configured restrooms per Appendix B.

Remove and replace doors and frames with Hollow Metal (HM) doors and frames at exterior locations and Solid Core Wood (SC) doors with HM frames at interior locations. All doors to receive new accessible hardware sets. See appendix G for hazardous materials report for lead paint locations.

Demolish non-ADA compliant casework and cap utilities where they occur.

Remove and replace windows with element resistant, energy efficient, thermally broken frames with insulated glazing.

Demolish and replace exterior concrete walk to provide compliant thresholds and accessible Path of Travel (POT) to all spaces.

Remove and replace roofing.

OPTION II: (See Appendix B for plans)

Demolish all finishes. Demolish 2x wood framed partitions and restroom partition walls, and replace, as necessary for new configuration. (See Appendix B)

Replace insulation with new batt and/or rigid insulation to achieve necessary Title 24 R-values. Replace interior wall finishes with 5/8" type X gyp. bd., taped only. Patch and repair exterior finish with stucco to match existing. See Appendix G for Asbestos report information on hazardous material locations. Demolish all floor finishes. Clean and seal existing concrete floor finish in all areas.

Remove plumbing fixtures and cap utilities.

Remove and replace doors and frames with Hollow Metal (HM) doors and frames at exterior locations and Solid Core Wood (SC) doors with HM frames at interior locations. All doors to receive new accessible hardware sets. See Appendix G for hazardous materials report for lead paint locations.

Demolish non-ADA compliant casework and cap utilities where they occur.

Remove and replace windows with element resistant, energy efficient, thermally broken frames with insulated glazing.

Demolish and replace exterior concrete walk to provide compliant thresholds and accessible Path of Travel (POT) to all spaces.

Remove and replace roofing.

OPTION III: (See Appendix B for plans)

Demolish all finishes. Demolish 2x wood framed partitions and restroom partition walls. For new configuration. (See Appendix B)

Replace insulation with new batt and/or rigid insulation to achieve necessary Title 24 R-values. Replace interior wall finishes with 5/8" type X gyp. bd., taped only. Patch and repair exterior finish with stucco to match existing. See Appendix G for Asbestos report information on hazardous material locations. Demolish all floor finishes. Clean and seal existing concrete floor finish in all areas.

Remove plumbing fixtures and cap utilities.

Remove and replace doors and frames with Hollow Metal (HM) doors and frames at exterior locations. All doors to receive new accessible hardware sets. (See hazardous materials report for lead paint locations.)

Demolish non-ADA compliant casework and cap utilities where they occur.

Remove and replace windows with element resistant, energy efficient, thermally broken frames with insulated glazing.

Demolish and replace exterior concrete walk to provide compliant thresholds and accessible Path of Travel (POT) to all spaces.

Remove and replace roofing.

ADMINISTRATION BUILDING

Existing Observation:

All existing floor, wall and ceiling finishes are outdated, damaged and beyond useful life.

Doors and frames are deteriorating and thresholds and hardware are not ADA compliant.

Casework is beyond useful life and not ADA compliant.

Windows frames are deteriorating and existing single glazing is inefficient, unsafe and damaged.

Accessibility requirements are not achieved, including toilet facilities, window hardware, POT, door thresholds and hardware, door clearances, etc.

Roofing is beyond its useful life and there is evidence of leaking inside the building.



Sagging and stained ceiling tiles indicating water damage and age



Missing and sagging ceiling tiles



Water damaged ceiling finish



Stained and damaged tile flooring and damaged and deteriorating door and door frame



Stained and worn carpeting



Damaged wall finish



Threshold exceeds 1/4" max. ht. for ADA and hardware is damaged



Grasping and twisting operation of hardware not ADA compliant



Damaged casework and insufficient ADA clearances

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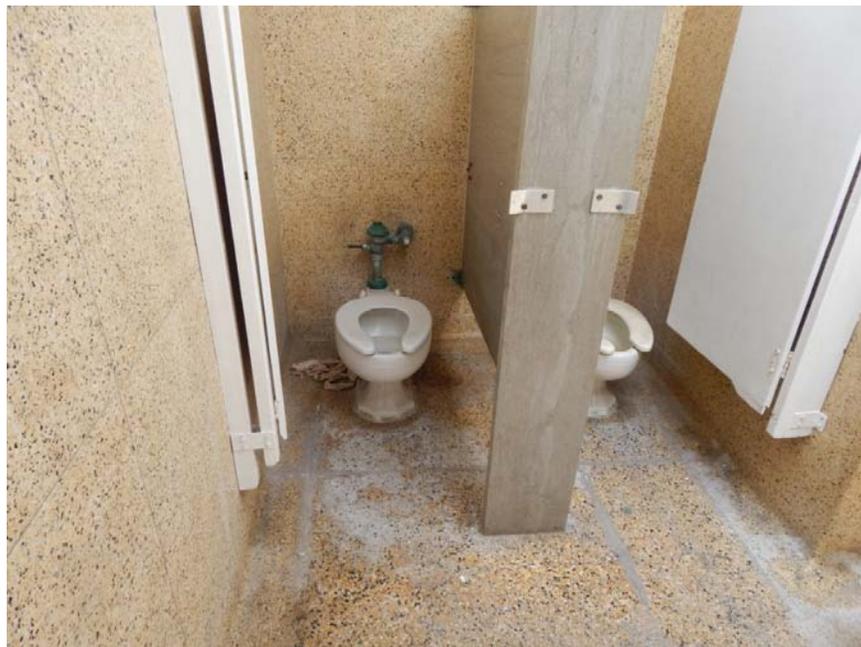
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Deteriorating window frames and broken single glazing



Deteriorating window frames, broken single glazing and rotting canopy structure



Missing ADA required clearances and accessories at toilet facilities



Insufficient ADA clearances and non-compliant faucets at sinks

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Rehabilitation and Re-Use Study



Non ADA compliant door maneuvering clearances and widths



Non ADA compliant ramp in necessary POT



Ramp exceeds max. slope and lacks proper handrails per ADA

Recommendations:

OPTION I: (See Appendix B for plans)

Demolish all finishes. Demolish 2x wood framed partitions and restroom partition walls, and replace, as necessary for new configuration. (See Appendix B)

Replace insulation with new batt and/or rigid insulation to achieve necessary Title 24 R-values. Replace interior wall finishes with 5/8" type X gyp. bd., taped only. Patch and repair exterior finish with stucco to match existing. See Appendix G for Asbestos report information on hazardous material locations. Demolish all floor finishes. Clean and seal existing concrete floor finish in all areas except restrooms.

In restrooms, provide new framed stud walls and gyp. bd./ceramic tile wall and floor finishes in newly configured restrooms per Appendix B.

Remove and replace doors and frames with Hollow Metal (HM) doors and frames at exterior locations and Solid Core Wood (SC) doors with HM frames at interior locations. All doors to receive new accessible hardware sets. See Appendix G for hazardous materials report for lead paint locations.

Demolish non-ADA compliant casework and cap utilities where they occur.

Remove and replace windows with element resistant, energy efficient, thermally broken frames with insulated glazing.

Demolish and replace exterior concrete walk to provide compliant thresholds and accessible Path of Travel (POT) to all spaces including ramps from the upper level to the lower level.

OPTION II: (See Appendix B for plans)

Demolish all finishes. Demolish 2x wood framed partitions and restroom partition walls, and replace, as necessary for new configuration. (See Appendix B)

Replace insulation with new batt and/or rigid insulation to achieve necessary Title 24 R-values. Replace interior wall finishes with 5/8" type X gyp. bd., taped only. Patch and repair exterior finish with stucco to match existing. See Appendix G for Asbestos report information on hazardous material locations. Demolish all floor finishes. Clean and seal existing concrete floor finish in all areas.

Remove plumbing fixtures and cap utilities.

Remove and replace doors and frames with Hollow Metal (HM) doors and frames at exterior locations and Solid Core Wood (SC) doors with HM frames at interior locations. All doors to receive new accessible hardware sets. See Appendix G for hazardous materials report for lead paint locations.

Demolish non-ADA compliant casework and cap utilities where they occur.

Remove and replace windows with element resistant, energy efficient, thermally broken frames with insulated glazing.

Demolish and replace exterior concrete walk to provide compliant thresholds and accessible Path of Travel (POT) to all spaces including ramps from the upper level to the lower level.

OPTION III: (See Appendix B for plans)

Demolish all finishes. Demolish 2x wood framed partitions and restroom partition walls. For new configuration. (See Appendix B)

Replace insulation with new batt and/or rigid insulation to achieve necessary Title 24 R-values. Replace interior wall finishes with 5/8" type X gyp. bd., taped only. Patch and repair exterior finish with stucco to match existing. See Appendix G for Asbestos report information on hazardous material locations. Demolish all floor finishes. Clean and seal existing concrete floor finish in all areas.

Remove plumbing fixtures and cap utilities.

Remove and replace doors and frames with Hollow Metal (HM) doors and frames at exterior locations. All doors to receive new accessible hardware sets. See Appendix G for hazardous materials report for lead paint locations.

Demolish non-ADA compliant casework and cap utilities where they occur.

Remove and replace windows with element resistant, energy efficient, thermally broken frames with insulated glazing.

Demolish and replace exterior concrete walk to provide compliant thresholds and accessible Path of Travel (POT) to all spaces including ramps from the upper level to the lower level.

SECTION F

Building Rehabilitation Assessment (Structural)

Section F – Building Rehabilitation Assessment (Structural)

Structural Summary:

Based on an assessment of the existing condition and original construction of the Pacific View Elementary School buildings, three distinct approaches have been identified to cover a reasonable spectrum of re-use/renovation options. The first option (Option 1) involves the overall modernization of the existing building with minimal change to its overall configuration, obviously limiting the versatility of the final space. In this option, no structural walls will be impacted and no modifications to the existing structural system are required. As a voluntary retrofit measure, we recommend the construction of new shear wall segments with new footings along the north and south walls of the proposed Tenant Space 7 due to the lack of an adequate lateral system in this area.

Option 2 includes the scope and recommended retrofit measures mentioned in Option 1, but also includes the removal of the three non-structural classroom dividing walls to combine the smaller tenant spaces into larger usable areas. As a voluntary retrofit measure, we recommend the construction of three new shear wall segments with new footings along the north wall of the North Building and retrofit of the existing shear wall pier at the south end of the East Building.

Option 3 includes the scope and recommended retrofit measures mentioned in both Options 1 and 2, but also includes the removal of several shear walls (or portions of shear walls) in both the North and East buildings. In this option, the removal of a portion of a shear wall will require retrofit of the remainder of the wall to account for the capacity lost at the new openings. The removal of an entire shear wall will require complete replacement of the existing wall with a braced frame or proprietary moment frame system such as the Simpson Strong Frame. New spread footings will be required at any new frame columns. The existing bearing wall to be removed in the East Building will require re-support of the existing roof framing with new beams and wood posts. Option 3A presents a variation of Option 3 which maintains the original room configuration of the North Building while applying all the proposed modifications to the East Building.

Due to the age of the building and observations of water damage at the exterior canopies and overhangs, the potential for further water damage or other forms of deterioration throughout the structure may be present. Although no significant deterioration was observed, any framing members showing significant damage or deterioration should be replaced in kind during construction regardless of the renovation option.

Building Description:

The North Building is a single-story structure comprised of six classroom modules (Classroom 1 – 6 in **Figure 1**). Each module is approximately 30'-3" long by 31'-10" deep. The North Building roof is composed of sanded paper roofing over 1x8 (nominal) diagonal sheathing over 2x16 roof joists at 24" on center. The roof joists span north-south between wood beams which bear on 4x6 posts at 63" on center along the southern wall and 6x6 posts at 63" on center along the northern wall. In the longitudinal direction (east-west), the walls are comprised of the full-height posts mentioned above and partial height 2x6 studs at 16" on center. At the northern wall, the 2x6 studs extend to a height of approximately 6'-4" above finish floor and are sheathed to the same height with one-sided 1x8 diagonal sheathing (**Figure 2**). At the southern wall, the typical 2x6 studs extend just a couple feet above finish floor and are sheathed with one-sided 1x8 diagonal sheathing (**Figure 3**). Surrounding the

southern door openings, there are three 10'-6" segments of the wall where the studs extend to a height of approximately 8'-0" above finish floor (**Figure 4**). In these regions, the walls are sheathed on two sides with 3/8" plywood and have double posts at the wall ends.

The Addition is a single-story structure attached directly to the east wall of the North Building and is constructed of 1x8 diagonal sheathing over 2x12 roof joists at 24" on center spanning east-west between the original east wall of the North Building and a 4x10 beam supported by 3" dia. steel pipes at 10'-6" on center along the east wall. The three exterior walls of the Addition are comprised mostly of glass framed infill as shown in **Figure 5** which is not part of the gravity or lateral system. The lateral system of the Addition is not readily identifiable, and further investigation may be necessary to determine the adequacy of the existing structure for seismic loads.

The East Building is a single-story structure comprised of one large classroom (Classroom 7 in **Figure 1**) at the south end and various smaller offices at the north. At Classroom 7, the roof is constructed of 1x8 diagonal sheathing over 2x16 roof joists at 24" on center. The roof framing is supported on the west end by a full-height 2x6 stud wall and on the east end by a wood beam bearing on 4x6 posts at 63" on center. The south and east walls of the Admin Building are constructed primarily of glass with only a partial height 2x6 stud wall extending just a couple feet above finish floor. At the north end of the Admin Building, the roof is constructed of 1x8 diagonal sheathing over 2x roof joists spanning east-west. 2x10 roof joists at 24" on center span approximately 19' from the west wall to an interior 2x6 bearing wall. The remainder of the roof is framed with 2x6 joists at 24" on center spanning approximately 10' from the interior bearing wall to the east wall. The south and north portions of the Admin Building are separated by a full height 2x4 stud wall with single-sided 1x8 diagonal sheathing. The exterior walls of the building are constructed of a combination of partially-sheathed wood post walls and sheathed 2x stud walls.

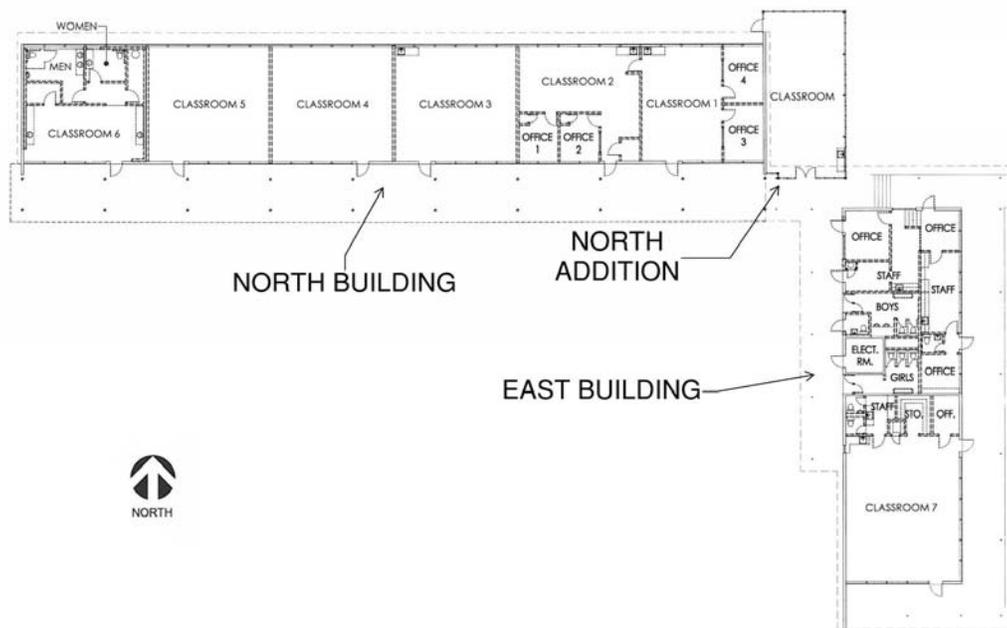


Figure 1. Floor plan of existing structure referenced in this narrative.

Structural Building Code Requirements

In accordance with the California Building Code (CBC) Chapter 34 for existing structures, alterations, repairs and additions to an existing structure are permitted without seismic re-analysis and possible retrofit unless one or more of the following occur:

- a. (CBC 3408) Change of Occupancy – The change in occupancy results in the structure being reclassified to a higher risk category. Based on preliminary assessment of the original building use (classroom area) and the provisions of Section 1004 of the CBC, the existing structure appears to be in Risk Category II. Further investigation will be needed to determine the Risk Category of the building based on the final occupancy.
- b. (CBC 3404) Structural Additions or Alterations – The addition or alteration to the existing structure increases the demand to capacity ratio in any structural element by more than ten percent.
- c. (CBC 3417 and 4-307 and 4-309) Cost of Reconstruction or Alterations –The cost of reconstruction or alterations not including cost of furnishings, fixtures and equipment exceeds 50 percent of the replacement value of the existing building. Based on our experience, this may be revised by authorities in special cases.

RE-USE OPTIONS

Option 1:

In an effort to minimize construction costs, Option 1 consists of limiting the scope of work and changes to only what is necessary to convert the existing structure to a usable, habitable space. Based on this approach, the structural implications are minimal. The structural intent for the scope of Option 1 is to avoid any modifications to the existing building that would trigger any of the requirements stated in chapter 34 of the CBC. Refer to **Option 1 Structural Demo and Proposed Plans** for scope of work associated with this option.

North Building Scope:

- Complete demolition of existing exterior walkway canopy recommended due to significant water damage affecting both the aesthetic quality and structural integrity of the framing in several areas (**Figure 8**).
- Removal and/or reconfiguration of non-structural partition walls in bathrooms, etc. per architect is acceptable without any structural implications.
- Recommend further investigation and repair of any areas showing significant water damage or deterioration to return structural framing to original condition.
- Recommended voluntary seismic upgrade based on ASCE 31-03 Analysis: provide two new 4' to 8' long ½" plywood shear walls with Simpson holdowns at each end and new concrete wall footings along the north and south walls of Tenant Space 7

East Building Scope:

- Removal and/or reconfiguration of non-structural partition walls in bathrooms,

etc. per architect without any structural implications.

- Confirm existing shear wall pier at the south end of the Admin building is sheathed
- Recommend further investigation and repair of any areas showing significant water damage or deterioration to return structural framing to original condition.
- Recommended voluntary seismic upgrade based on ASCE 31-03 Analysis: confirm existing wall pier at the south end of the Admin building is sheathed on both sides with ½" plywood sheathing. If double-sided sheathing not present, existing wall should be retrofitted with double-sided ½" plywood sheathing.

MEP Equipment Considerations – The majority of the proposed equipment for Option 1 appears to be floor-mounted and will not have major structural implications.

Option 2:

Based on the findings presented in KPFF's January 19, 2015 report prepared for the City of Encinitas, the interior walls identified in **Figure 4** were determined to be non-bearing partition walls and not part of the existing lateral force resisting system. Therefore, similarly to the scope identified in Option 1, these walls may be removed without triggering any of the requirements stated in chapter 34 of the CBC. Option 2 was developed as an extension to Option 1 in an effort to maximize usable space while still avoiding modifications to the existing building that would require additional seismic analysis and potential retrofit of the existing structure. Refer to **Option 2 Structural Demo and Proposed Plans** for scope of work associated with this option.

North Building Scope:

- All Option 1 scope to be included in Option 2.
- Alternating interior walls in the building short direction are not part of the structure's lateral or gravity system and may be removed without additional seismic retrofit. Bearing and/or shear walls that should remain are shown in **Figure 4**.
- Recommended voluntary seismic upgrade: provide three new 10' long full-height shear walls along the north side of the North building as shown in **Option 2 Structural Floor Plan**. Shear walls should be constructed with single-sided ½" plywood sheathing and Simpson holdowns at each end. If inadequate concrete footings are present, new footing should be constructed under these shear wall segments.

East Building Scope:

- All Option 1 scope to be included in Option 2.
- Shear walls to remain are shown in **Figure 4** and the **Option 2 Structural Floor Plan**. All other interior walls may be removed and reconfigured without requiring additional seismic retrofit.

MEP Equipment Considerations – Multiple new roof-mounted heat pumps and exhaust fans are proposed to accommodate the reconfigured spaces in Option 2. Depending on the final weights and locations of the proposed pieces of equipment, new equipment may require strengthening of existing roof joists and new equipment support framing

similar to what is shown in **Figure 2**. Any new roof openings for mechanical equipment should be provided per **Figure 3**.

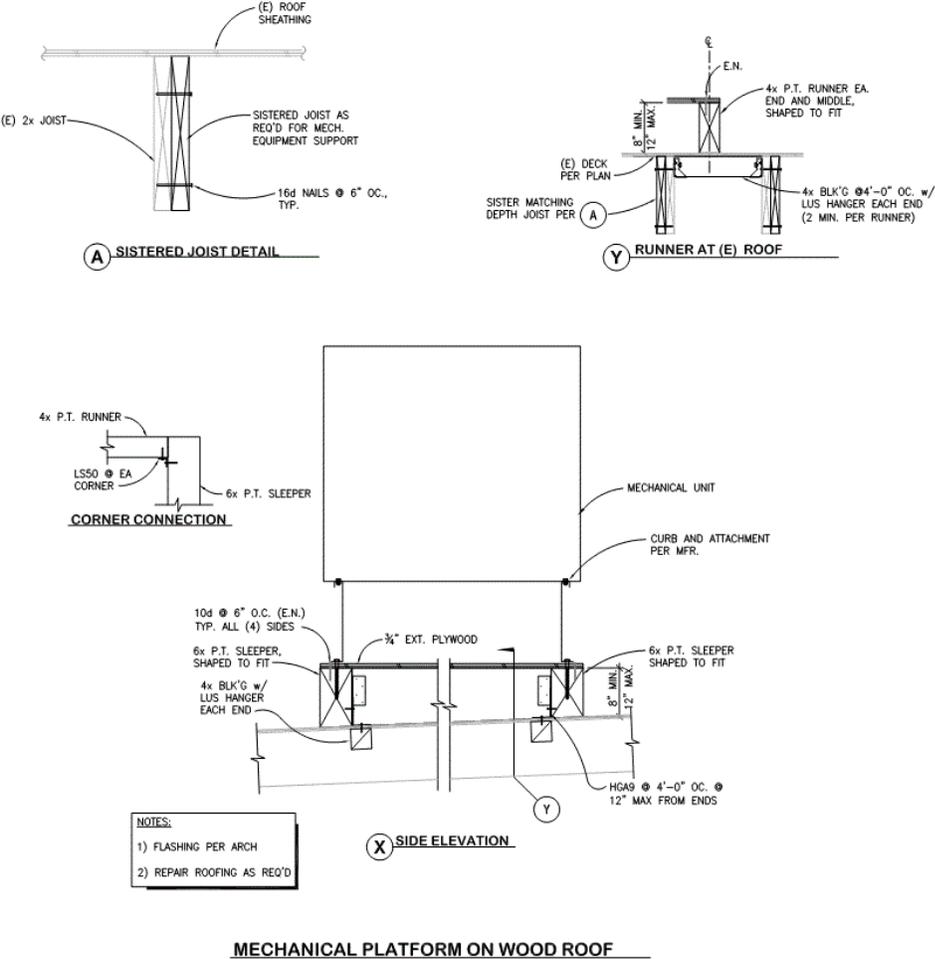


Figure 2. Typical roof joist strengthening and support of new mechanical equipment.

Option 3:

The intent of Option 3 is to provide the greatest amount of flexibility in the re-use of the existing structure by gutting the existing building to an open shell space. This option will have the most significant impact to the existing structural system. Since the proposed modifications to the existing structure will potentially eliminate large portions of the existing lateral force resisting system, the structure may require additional analysis to determine the necessary retrofit measures. Refer to **Option 3 Structural Demo and Proposed Plans** for scope of work associated with this option. As a cost-saving measure, **Option 3 – Structural Alternate** provides for access between adjacent tenant spaces without requiring the complete replacement of the shear wall lateral system with a steel frame and new spread footings. Refer to **Option 3 Structural Alternate Demo and Proposed Plans** for scope of work associated with this option.

North Building Scope:

- All Option 1 and 2 scope to be included in Option 3 unless stated otherwise.
- Complete removal of interior shear walls will require replacement with steel braced frames, new Simpson Strong Frame moment frames, or similar lateral frame system. New frames will require construction of concrete spread footings at the column locations.
- Removal of a limited segment of the existing interior shear walls will require strengthening of the existing portion of shear wall to remain. Shear wall piers to remain should be re-sheathed with ½” plywood sheathing and investigated to determine if new Simpson holdowns and new footings are required under the affected walls (**Structural Alternate**).
- Existing lateral system will need to be brought up to current code requirements where adequate load path is not currently provided.

East Building Scope:

- All Option 1 and 2 scope to be included in Option 3 unless stated otherwise.
- Most of the framing in the north end of the Admin building is currently supported by the long wall to be removed. New beams and posts will be required to provide support for the existing roof framing.
- Removal of the interior north-south shear wall will require analysis and retrofit of the remainder of the walls in the building. Proposed new partition walls should be constructed as wood shear walls with ½” plywood sheathing, Simpson holdowns, and new wall footings.

MEP Equipment Considerations – One large rooftop condenser unit is proposed that may require strengthening of the existing roof framing. Multiple smaller roof-mounted heat pumps and exhaust fans are proposed to accommodate the reconfigured spaces in Option 3. Depending on the final weights and locations of the proposed pieces of equipment, new equipment may require strengthening of existing roof joists and new equipment support framing similar to what is shown in **Figure Figure 22**. Any new roof openings for mechanical equipment should be provided per Error! Reference source not found.3.

Option 3A:

The intent of Option 3A is to maintain the original wall configuration in the North Building to limit the amount of reconfiguration and retrofit while creating more usable space in the East Building. In this Option, the scope for the North Building will reflect that of Option 1 presented above. The scope for the East Building will remain the same as that of Option 3.

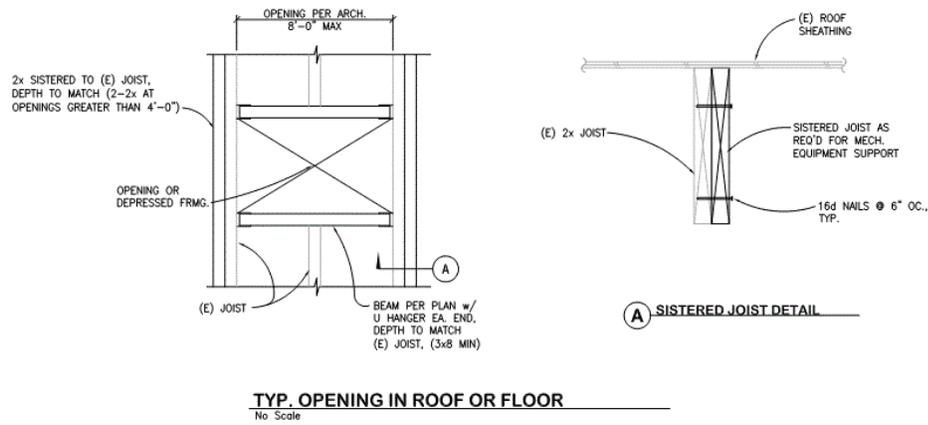


Figure 3. Typical framing around new openings in existing roof.



**Figure 4. Field-identified bearing and/or shear walls shown in solid black lines.
(Image courtesy of Google Earth)**



Figure 3. Typical diagonal roof sheathing over 2x roof joists @ 24" on center



Figure 6. Typical Classroom Building north wall framing.



Figure 7. Typical North Building south wall framing.



Figure 8. Typical shear wall segment in the south wall of the North Building.



Figure 9. East wall of the North Addition.



Figure 10. Typical water damage and corrosion observed at the canopies and overhangs.



Figure 11. South wall of the East Building with 4'-10" shear wall segment potentially requiring retrofit.



Figure 12. Condition of the exterior canopy at the North Building. Demolition is recommended.

SECTION G

Building Rehabilitation Assessment (Mechanical)

Section G – Building Rehabilitation Assessment (Mechanical)Project Intent:

The study is intended to identify and analyze the condition of existing assets for plumbing, heating, ventilating, and air conditioning on the site of Pacific View Elementary School, Encinitas, CA 92024. The assessment is based on a building floor plan, on-site inspection of mechanical systems and photographs taken at the site. No destructive activities were performed to expose possible deficiencies. No operational tests were performed on the existing assets. There are no as-built drawings presently available for the site and buildings. The report will first identify existing conditions and then provide recommendations for the aforementioned assets. The initial assessment will include what it would take to bring this building/site up to a habitable, code compliant shell. For the assessment phase we'll look at options to maximize their flexibility with the spaces, as they do not have tenants/owners yet determined.

Inspection Criteria:

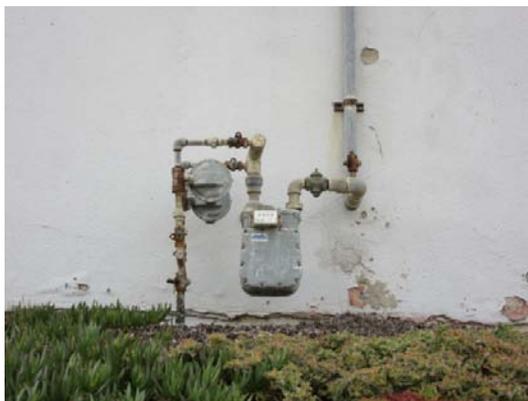
The site was visually inspected on Friday May 1, 2015. A cursory inspection of the interior spaces in the building was performed. No destructive or underground inspection was done. The exterior of the building was also inspected. Roof access was not available for inspection of any rooftop mechanical equipment or piping.

Building Descriptions:

The school is located at 608 3rd St, Encinitas, CA 92024. It was originally constructed in 1953. One building on the site is approximately 210' x 33' and is oriented in an east west direction. The other building on the site is approximately 96' x 30' and is oriented in a north south direction. The east west building has seven classrooms (one classroom has restroom facilities). The north south building has one classroom, offices, and restroom facilities.

SITE WIDEExisting Observations- Site Utilities:

Natural Gas - The buildings are served by natural gas entering the east west oriented building at its west end. The service is 1" high pressure regulated and metered to 2" galvanized piping. The piping proceeds to the roof top and is distributed to use points from roof top piping. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 24).



Natural Gas Service Regulator and Meter



Piping to Rooftop

The piping system looks to be from the original construction of 1953. Because of the marine environment the exterior piping system should be pressure tested to determine its integrity.

Sewer - A visual inspection of the building's exterior did not reveal an entrance point or size for sanitary sewer piping.

Water - A visual inspection of the building's exterior did not reveal an entrance point or size for domestic water piping. There was no visible backflow preventer station on the site.

Fire Protection Water - A visual inspection of the building's exterior did not reveal an entrance point or size for fire protection water piping. No visible fire protection system in the two buildings on the site, as it was not originally required in type V N.R. construction.

Recommendations:

The capacity of the existing site utilities will need further assessment once the city has proposed tenants with proposed utility needs. A determination of the future capacity of the tenants is impractical at this time.

The entire sewer/waste piping system should be video inspected from the use point to its intersection with the street main, as city elected not to perform inspection under initial assessment to reduce cost. Further investigation would be prudent once occupant use becomes known.

Plumbing System:

Plumbing System Overview: The plumbing system, in both buildings, consists of drain, waste and vent piping, gas fired domestic hot water heaters, domestic hot and cold water piping, hose bibbs, drinking fountains, an eye wash, and plumbing fixtures. Plumbing fixtures in the building will adequately support school building occupancy. Except for periodic water heater replacement the entire plumbing piping system visually looks to be from the original construction of 1953.

CLASSROOM WING

East Building:

Existing Observations

Classroom - This room has a stainless steel sink with hot and cold water, and drain, waste and vent piping. The sink looks to be in relatively good condition (age estimated at 15 years or less). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 1).



Sink in Classroom

Recommendations:

Option I (Tenant Space 7)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option II (Tenant Space 4)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option III (This section of the building has been removed in this option)

Existing Observations

Classroom 1 (Including Offices 3 & 4) - This room has a stainless steel sink with drinking fountain, cold water, and drain, waste and vent piping. The sink looks to be in fair condition (age estimated at 25 years or less). It is assumed the piping is from the original construction. The drinking fountain looks to of similar age as the sink. The sink faucet and drinking fountain were not cycled. The integrity of the drain piping under the sink was suspect. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 2).



Sink With Drinking Fountain

Recommendations:

Option I (Tenant Space 6, Offices 3 & 4)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option II (Tenant Space 3)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option III (Part of Tenant Space 1)- Remove sink and cap hot and cold water piping

and drain, waste, and vent piping. Patch wall and floor as required.

Existing Observations

Classroom 2 (Including Offices 1 & 2) - This room has a stainless steel sink with drinking fountain, cold water, and drain, waste and vent piping. The sink looks to be in fair condition (age estimated at 25 years or less). It is assumed the piping is from the original construction. The drinking fountain looks to of similar age as the sink. The sink faucet and drinking fountain were not cycled. The integrity of the drain piping under the sink was suspect. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 3).



Sink with Drinking Fountain

Recommendations:

Option I (Tenant Space 5, Offices 1 & 2)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option II (Tenant Space 3)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option III (Part of Tenant Space 1)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Existing Observations

Classroom 3 - This room has a stainless steel sink with drinking fountain, cold water, and drain, waste and vent piping. The sink looks to be in fair condition (age estimated at 25 years or more). It is assumed the piping is from the original construction. The drinking fountain looks to of similar age as the sink. The sink faucet and drinking fountain were not cycled. The integrity of the drain piping under the sink was suspect. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 4).



Sink with Drinking Fountain

Recommendations:

Option I (Tenant Space 4)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option II - (Tenant Space 2) Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Option III - (Part of Tenant Space 1) Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall and floor as required.

Classroom 4 - This room does not have any plumbing or piping.

Options I (Tenant Space 3) - No plumbing work.

Options II (Tenant Space 2) - No plumbing work.

Options III (Tenant Space 1) - No plumbing work.

Classroom 5 - This room does not have any plumbing or piping.

Options I (Tenant Space 2) - No plumbing work.

Options II (Tenant Space 1) - No plumbing work.

Options III (Tenant Space 1) - No plumbing work.

Existing Observations

Classroom 6 - This room is separated into a number of rooms. The front half is a classroom. The classroom has a sink at each end with hot and cold water piping, and drain, waste and vent piping. The sinks look to be in poor condition (age estimated at 25 years or more). It is assumed the piping is from the original construction. The sink faucets were cycled with water coming from the hot and cold side. The water drained correctly from the sink bowls. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixtures (Keynote - Bubble 5 and 6).



Typical Sink in Classroom Area (West End Keynote - Bubble 5)

Recommendations:

Option I (Tenant Space 1)- Remove sinks and cap hot and cold water piping and drain, waste, and vent piping. Patch wall as required.

Option II (Tenant Space 1)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall as required.

Option III (Tenant Space 1)- Remove sink and cap hot and cold water piping and drain, waste, and vent piping. Patch wall as required.

Existing Observations

Water Heater Room (In Classroom 6) - Another room in this space contains a natural gas fired hot water heater. The water heater has a 30 gallon capacity and was manufactured in March of 2004. The heater looks to be in good condition, but is nearing the end of its useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of the water heater (Keynote - Bubble 7).



Hot Water Heater

Recommendations:

Option I (Part of Tenant Space 1)- Remove hot water heater, seismic strapping, and

flue. Cap natural gas piping above ceiling for future extension to new water heater location. Patch ceiling, walls and roof as required. Provide new 30 gallon natural gas fired hot water heater as shown on Option 1 new work plan. New work to also include natural gas piping, flue to roof (with roof cap above roof) seismic strapping, appliance connector, and water heater stand. Route pressure/temperature relief piping outside the building. Patch an repair roof, walls and ceiling as required.

Option II - (Deleted from Tenant Space 1) Remove hot water heater, seismic strapping, and flue. Cap natural gas piping above ceiling. Patch ceiling, walls and roof as required.

Option III - (Deleted from Tenant Space 1) Remove hot water heater, seismic strapping, and flue. Cap natural gas piping above ceiling. Patch ceiling, walls and roof as required.

Existing Observations

Women's Restroom - Another room in the space contains a Women's restroom. The restroom contains a flush tank water closet and counter mounted lavatory sink, hot and cold water piping, and drain, waste and vent piping. The sink and water closet look to be in poor condition (age estimated at 25 years or more). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. The water closet was flushed with water draining correctly from the water closet bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 8).



Water Closet



Lavatory Sink

Recommendations:

Option I (Part of Tenant Space 1)- Remove water closet and sink. Patch walls and floor as required. Provide new Women's restroom (See Option I New Work drawing). Restroom to include four (4) water closets and one dual bowl gang restroom lavatory. Video inspect waste piping to the street main to determine if piping is viable for proper drainage. Extend existing cold water piping, vent piping, and waste piping to the new water closets and gang lavatory. Extend hot water piping from the new location of the hot water heater to the lavatory. Hot water heater called out above. Cut and patch floor for waste piping. Cut and patch walls, and roof for vent piping. Cut and patch walls for the cold water piping to the water closets. Cut and patch walls for the cold and hot water piping to the lavatory.

Option II (Deleted from Tenant Space 1)- Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option III (Deleted from Tenant Space 1)- Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Existing Observations

Men's Restroom - Another room in the space contains a Men's restroom. The restroom contains one flush tank water closet, two counter mounted lavatory sinks, one flush valve urinal, hot and cold water piping, and drain, waste and vent piping. The sinks, water closet, and urinal look to be in poor condition (age estimated at 25 years or more). It is assumed the piping is from the original construction. The sink faucets were cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. The water closet was flushed with water draining correctly from the water closet bowl. The flush valve on the urinal was flushed with water draining from the fixture correctly. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 9).



Lavatory Sinks



Water Closet



Urinal

Recommendations:

Option I (Part of Tenant Space 1) - Remove water closet, urinal and sinks. Patch walls and floor as required. Provide new Men's restroom (See Option I New Work drawing). Restroom to include two (2) water closets, two (2) urinals and one dual bowl gang restroom lavatory. Video inspect waste piping to the street main to determine if piping

is viable for proper drainage. Extend existing cold water piping, vent piping, and waste piping to the new water closets, urinals and gang lavatory. Extend hot water piping from the new location of the hot water heater to the lavatory. Hot water heater called out above. Cut and patch floor for waste piping. Cut and patch walls, and roof for vent piping. Cut and patch walls for the cold water piping to the water closets. Cut and patch walls for cold and hot water piping to the lavatory.

Option II (Deleted from Tenant Space 1)- Remove water closet, urinal and sinks. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option III (Deleted from Tenant Space 1)- Remove water closet, urinal and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Existing Observations

Emergency Eye Wash - An emergency eye wash is located outside Classroom 6. It looks to be in poor condition. It could not be cycled to determine water flow or proper drainage. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 10).



Emergency Eye Wash

Recommendations:

Option I (Outside Classroom 6) - Remove emergency eye wash. Cap cold water, drain, and vent piping. Patch wall as required.

Option II (Outside Classroom 6)- Remove emergency eye wash. Cap cold water, drain, and vent piping. Patch wall as required.

Option III (Outside Classroom 6)- Remove emergency eye wash. Cap cold water, drain, and vent piping. Patch wall as required.

Existing Observations

Classroom 7 (Including Storage)- This room is separated into a number of rooms. The south end was a classroom. It is presently used by the Encinitas Union School District maintenance department. The classroom has a sink at northwest corner. The sink has a 5 gallon electric hot water heater located under the sink. There is also hot and cold water piping, and drain, waste and vent piping associated with this sink. The sink and faucet look to be in good condition (age estimated at 10 years or less). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. The hot water heater looked to be in good condition (age estimated at 7 years or less). See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 11).



Sink



Hot Water Heater

Recommendations:

Option I (Tenant Space 8) - Remove sink and associated cold and hot water piping. Cap hot and cold water, drain, and vent piping inside wall. Patch wall as required. Remove hot water heater, and hot and cold water piping. Cap piping inside wall. Disconnect electrical service and safe off to an appropriate location. Patch wall as required.

Option II (Tenant Space 8)- Remove sink and associated cold and hot water piping. Cap hot and cold water, drain, and vent piping inside wall. Patch wall as required. Remove hot water heater, and hot and cold water piping. Cap piping inside wall. Disconnect electrical service and safe off to an appropriate location. Patch wall as required.

Option III (Tenant Space 8)- Remove sink and associated cold and hot water piping. Cap hot and cold water, drain, and vent piping inside wall. Patch wall as required. Remove hot water heater, and hot and cold water piping. Cap piping inside wall. Disconnect electrical service and safe off to an appropriate location. Patch wall as required.

Existing Observations

Classroom 7 Staff Area - This area has a kitchen sink and faucet. The sink and faucet look to be in good condition (age estimated at 10 years or less). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 12).



Sink

Recommendations:

Option I (Tenant Space 8 - Becomes an office)- Remove sink and associated cold and hot water piping. Cap hot and cold water, drain, and vent piping. Patch wall as required.

Option II (Tenant Space 8)- Remove sink and associated cold and hot water piping. Cap hot and cold water, drain, and vent piping. Patch wall as required.

Option III (Tenant Space 8) - Remove sink and associated cold and hot water piping. Cap hot and cold water, drain, and vent piping. Patch wall as required.

Existing Observations

Men's Restroom Classroom 7 - This room contains a floor mounted urinal and a water closet. The urinal was not operational. The fixtures look to be in fair condition (age at least 25 years old). It is assumed the piping is from the original construction. The water closet was flushed with water draining correctly from the water closet bowl. The flush valve on the urinal was not flushed therefore the ability to drain properly was not determined. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 13).



Floor Mounted Urinal



Water Closet

Recommendations:

Option I - (Tenant Space 8 - Becomes an office)- Remove water closet and urinal. Cap cold water, waste and vent piping. Patch wall and floor as required.

Option II - (Tenant Space 8)- Remove water closet and urinal. Cap cold water, waste and vent piping. Patch wall and floor as required.

Option III (Tenant Space 8)- Remove water closet and urinal. Cap cold water, waste and vent piping. Patch wall and floor as required.

Existing Observations

Women's Restroom Classroom 7 - This room contains a water closet. The water closet looks to be in fair condition (age at least 25 years old). It is assumed the piping is from the original construction. The water closet was flushed with water draining correctly from the water closet bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 14).



Water Closet

Recommendations:

Option I (Tenant Space 8 - Becomes an office)- Remove water closet. Cap cold water, waste and vent piping. Patch wall and floor as required.

Option II - (Tenant Space 8) Remove water closet. Cap cold water, waste and vent piping. Patch wall and floor as required.

Option III - (Tenant Space 8) Remove water closet. Cap cold water, waste and vent piping. Patch wall and floor as required.

Existing Observations

Water Heater Closet (Closet in STO/JAN Room) - The closet houses a natural gas fired 30 gallon hot water heater that provides hot water to this building. The heater was manufactured in 1991. This unit is well beyond its useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 15).



Water Heater

Recommendations:

Option I (Water Heater Closet in STO/JAN) - Remove hot water heater, seismic strapping, and flue. Provide new 30 gallon natural gas fired hot water heater as shown on Plumbing and Mechanical Systems Option 1 new work plan. New work to also include natural gas piping, flue to roof (with roof cap above roof) seismic strapping, appliance connector, and water heater stand. Route pressure/temperature relief piping outside the building. Patch and repair roof, walls and ceiling as required.

Option II - (Room between STO and MEN Restroom) Remove hot water heater, seismic strapping, and flue. Cap natural gas piping above ceiling for future extension to new water heater location. Patch ceiling, walls and roof as required. Provide new 30 gallon natural gas fired hot water heater as shown on Plumbing and Mechanical Systems Option 2 new work plan. New work to also include natural gas piping, flue to roof (with roof cap above roof) seismic strapping, appliance connector, and water heater stand. Route pressure/temperature relief piping outside the building. Patch and repair roof, walls and ceiling as required.

Option III - (Closet next to STO Room) Remove hot water heater, seismic strapping, and flue. Cap natural gas piping above ceiling for future extension to new water heater location. Patch water heater as shown on Plumbing and Mechanical Systems Option 3 new work plan. New work to also include natural gas piping, flue to roof (with roof cap above roof) seismic strapping, appliance connector, and water heater stand. Route pressure/temperature relief piping outside the building. Patch and repair roof, walls and ceiling as required.

Existing Observations

STO/JAN Room - At the south east corner of this room there are indications a plumbing fixture has been removed. Hot and cold water piping, vent piping, and waste piping have been capped off. It is assumed this piping is from the original construction. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote-Bubble 16).



Removed Fixture

Recommendations:

Option I - Remove drain, vent, hot and cold water piping. Cap the previous inside wall or above ceiling. Patch and repair walls and ceiling as required.

Option II and III - Reconfigured floor plan for Options II, and III will use this space and will be addressed at the end of this section.

Existing Observations

STO/JAN Room - This room has a kitchen sink and faucet. The sink and faucet look to be in fair condition (age estimated at 25 years or more). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 17).



Sink

Recommendations:

Option I - Remove drain, vent, hot and cold water piping. Cap the previous inside wall or above ceiling. Patch and repair walls and ceiling as required.

Option II and III - Reconfigured floor plan for Options II, and III will use this space and will be addressed at the end of this section.

Existing Observations

Office - (South of Office at Northeast Corner of the Building) - This room has a kitchen sink and faucet. The sink and faucet look to be in poor condition (age estimated at 30 years or more). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 18).



Sink

Recommendations:

Option I - Remove drain, vent, hot and cold water piping. Cap the previous inside wall or above ceiling. Patch and repair walls and ceiling as required.

Option II and III - Reconfigured floor plan for Options II, and III will use this space and will be addressed at the end of this section.

Existing Observations

Private Restroom (South of Previous Office) - The restroom contains a flush valve water closet and wall mounted lavatory sink, hot and cold water piping, and drain, waste and vent piping. The sink and water closet look to be in poor condition (age estimated at 35 years or more). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. The water closet was flushed with water draining correctly from the water closet bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 19).



Water Closet and Lavatory

Recommendations:

Option I (STO)- This restroom becomes a storage room. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option II - This restroom becomes part of an office. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option III - (This restroom becomes a storage room) Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Existing Observations

Faculty Restroom - The restroom contains a flush tank water closet and wall mounted lavatory sink, hot and cold water piping, and drain, waste and vent piping. The sink and water closet look to be in poor condition (age estimated at 35 years or more). It is assumed the piping is from the original construction. The sink faucet was cycled with water coming from the hot and cold side. The water drained correctly from the sink bowl. The water closet was flushed with water draining correctly from the water closet bowl. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 20).



Faculty Restroom Water Closet and Lavatory Sink

Recommendations:

Option I - This restroom becomes part of a Women's Restroom. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option II - This restroom becomes janitorial closet. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option III - (This restroom becomes a Men's restroom). Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Existing Observations

Boy's Restroom - The restroom contains two flush valve water closet, two wall mounted urinals, one trough sink, cold water piping, and drain, waste and vent piping. The trough sink was in very poor condition (visually it looked to be from the original construction). The faucets have been removed. The water closets also look to be in very poor condition (original construction). It is assumed the piping is from the original construction. The sink faucets

could not be cycled. The water closets were flushed with water draining correctly from the water closet bowl. The urinals looked to be in fair condition (age estimated at less than 20 years). The urinals were flushed with water draining correctly from the fixture. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 21).



Boy's Trough Sink



Urinals



Water Closet

Recommendations:

Option I - This restroom becomes part of a Women's Restroom. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option II - This restroom becomes part of a janitorial closet. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option III - This restroom becomes a Men's restroom. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Existing Observations

Girl's Restroom - The restroom contains three flush valve water closet and one trough sink, cold water piping, and drain, waste and vent piping. The trough sink was in very poor condition (visually it looked to be from the original construction). The water closets also look to be in very poor condition (original construction). It is assumed the piping is from the original construction. The sink faucets were cycled with water flowing from each one. The water closets were flushed with water draining correctly from the water closet bowl. The urinals were flushed with water draining correctly from the fixture. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 22).



Girl's Trough Sink



Water Closet

Recommendations:

Option I - This restroom becomes part of a Men's Restroom. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option II - This restroom becomes part of a DATA room and Men's restroom. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Option III - This restroom becomes a passage way to other rooms. Remove water closet and sink. Cap sewer pipe below floor. Cap cold and hot water piping in wall. Cap sink drain in wall. Cap vent piping in wall. Patch walls and floor as required.

Existing Observations

Drinking Fountains - There is a drinking fountain located on the east and west side of the building. They are both in very poor condition (original construction). Both units were not operational. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of fixture (Keynote - Bubble 23).



Typical Drinking Fountain

Recommendations:

Option I - Remove drinking fountain on the east side of the building. Cap cold water pipe and drain pipe inside wall. Patch wall as required. Remove drinking fountain on the west side of the building. Provide an ADA and a standard height drinking fountain at the same location as the existing drinking fountain. Provide cold water and drain piping to the new drinking fountains. See Plumbing and Mechanical Systems Option I new floor plan drawing for location

of drinking fountains.

Option II - Remove drinking fountain on the east side of the building. Cap cold water pipe and drain pipe inside wall. Patch wall as required. Remove drinking fountain on the west side of the building. Provide an ADA and a standard height drinking fountain at the new location of the drinking fountains. See Plumbing and Mechanical Systems Option II new floor plan drawing for location of drinking fountains. Provide cold water and drain piping to the new drinking fountains.

Option III - Remove drinking fountain on the east side of the building. Cap cold water pipe and drain pipe inside wall. Patch wall as required. Remove drinking fountain on the west side of the building. Provide an ADA and a standard height drinking fountain at the new location of the drinking fountains. See Plumbing and Mechanical Systems Option III new floor plan drawing for location of drinking fountains. Provide cold water and drain piping to the new drinking fountains.

New Restroom Configurations

Option I - See Plumbing and Mechanical Systems Option I New Floor Plan drawing for new configuration. This configuration will eliminate the existing faculty restroom and provide a new men's and women's restroom. The new Men's restroom shall include three (3) water closets, and one dual bowl gang restroom lavatory. Video inspect waste piping to the street main to determine if piping is viable for proper drainage. Extend existing cold water piping, vent piping, and waste piping to the new water closets and gang lavatory. Extend hot water piping from the location of the hot water heater to the lavatory. Cut and patch floor for waste piping. Cut and patch walls, and roof for vent piping. Cut and patch walls for the cold water piping to the water closets. Cut and patch walls for cold and hot water piping to the lavatory. Women's restroom shall include one water closet, and one single bowl restroom lavatory. Extend existing cold water piping, vent piping, and waste piping to the new water closet and lavatory. Extend hot water piping from the location of the hot water heater to the lavatory. Cut and patch floor for waste piping. Cut and patch walls, and roof for vent piping. Cut and patch walls for the cold water piping to the water closets. Cut and patch walls for cold and hot water piping to the lavatory.

Option II - See Plumbing and Mechanical Systems Option II New Floor Plan drawing for new configuration. This configuration will eliminate the existing faculty restroom and existing Boy's and Girl's restrooms. It will provide a new Men's and Women's restroom, two private restrooms, and one service area. The new Men's restroom shall include two (2) water closets, one urinal, and one dual bowl gang restroom lavatory. Video inspect waste piping to the street main to determine if piping is viable for proper drainage. Extend existing cold water piping, vent piping, and waste piping to the new water closets, urinal, and one gang lavatory. Extend hot water piping from the new location of the hot water heater to the lavatory. Cut and patch floor for waste piping. Cut and patch walls, and roof for vent piping. Cut and patch walls for the cold water piping to the water closets. Cut and patch walls for cold and hot water piping to the lavatory. Women's restroom shall include four (4) water closets, and one dual bowl gang restroom lavatory. Extend existing cold water piping, vent piping, and waste piping to the new water closets and lavatory. Extend hot water piping from the new location of the hot water heater to the lavatory. Cut and patch floor for waste piping. Cut and patch walls, and roof for vent piping. Cut and patch walls for the cold water piping to the water closets. Cut and patch walls for cold and hot water piping to the lavatory. Each private restroom shall include one water closet and one wall hung lavatory. Extend existing cold water piping, vent piping, and waste piping to the new water closet and lavatory. Extend hot water piping from the new location of the hot water heater to the lavatory. Cut and patch floor for waste piping. Cut and patch walls, and roof for vent piping. Cut and patch walls for the cold water piping to the water closet. Cut and patch walls for cold and hot water piping to the lavatory. The service area shall include a deep bowl service sink. Extend existing cold water piping, vent piping, and drain piping to the new service sink. Extend hot water piping from the new location of the hot water heater to the service sink. Cut and patch floor for drain piping. Cut and patch walls,

and roof for vent piping. Cut and patch walls for cold and hot water piping to the service sink.

Option III - See Plumbing and Mechanical Systems Option III New Floor Plan drawing for new configuration. This configuration will be similar to Option II except for the location of the restrooms and service area. The Men's restroom will have one additional urinal, all other option requirements will be the same as Option II.

Grey Water Reclamation System – A grey water reclamation system is a potential scenario for all of the plumbing options. The system would consist of a separate drain piping system from all of the lavatories and sinks. This waste water would gravity drain to a 100 gallon underground tank. Dual sump pumps in the tank would pump the grey water to filter and chlorination modules and then to an above ground storage tank (500 gal). Domestic cold water would be mixed with the filtered/chlorinated grey water and then pumped to water closets for flushing action or landscape irrigation. A controller with solenoid valves would proportion grey water and potable water to provide an appropriate level of treated water concentrations. Volumes of grey water for all three options may not be adequate to warrant a grey water reclamation system. Benefits/costs would have to be analyzed at time of design.

Heating, Ventilating, and Air Conditioning System:

Heating System Overview: The heating system consists of natural gas fired unit heaters, one natural gas fired forced air furnace and ceiling mounted electric heaters. Natural ventilation from windows is utilized in most rooms. Wall mounted exhaust fans are also utilized. Visually, exhaust ventilation for the Boy's and Girl's restrooms utilizes a common shaft to the roof. Roof access was not possible so determination of what the shaft connects to was not possible.

CLASSROOM WING

North Building:

Existing Observations

Classroom (East end of building) - This room has a ceiling hung natural gas fired 45,000 btu/hr unit heater. The heater was manufactured in 1988. The unit was not cycled to determine operability. At 27 years old the unit is beyond it useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 1).



Classroom Unit Heater

Recommendations:

Option I (Tenant Space 7)- Remove the existing unit heater, appliance connector, and wall mounted thermostat. Provide a new 45,000 but/hr natural gas fired unit heater. Also provide a new appliance connector, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit heater. Patch ceiling as required.

Option II (Tenant Space 4) - Same as Option I.

Option III - The space is demolished in this option.

Existing Observations

Classroom 1 (Including Offices 3 & 4) - This room has a ceiling hung natural gas fired unit heater estimated (nameplate not visible) at 45,000 btu/hr (similar size as unit heater in previous classroom). It is assumed this heater is the same vintage as the previous classroom, which was manufactured in 1988. The unit was not cycled to determine operability. At 27 years old the unit is beyond it useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 2).



Classroom 1 Unit Heater

Recommendations:

Option I (Tenant Space 6)- Remove the existing unit heater, appliance connector, and wall mounted thermostat. Provide a new 45,000 btu/hr natural gas fired unit heater. Also provide a new appliance connector, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit heater. Patch ceiling as required.

Option II (Part of Tenant Space 3)- This option removes the wall between Classroom 1 and Classroom 2. A 45,000 btu/hr unit heater in each room will provide adequate heating to the larger room. All items listed in Option 1 above will be required. Another type of system would be two rooftop mounted heat pumps (36,000 btu/hr cooling 45,000 btu/hr heating) or packaged air conditioning units (electric cooling (36,000 btu/hr) and natural gas heating(45,000 btu/hr) will adequately heat and air condition the space. The rooftop units should be mounted in the middle of the each existing room configuration. Rooftop units will require a curb and electric service. The packaged units would require natural gas piping from the existing distribution piping on the roof. Each unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the east wall and west wall of the space will control operation of the units. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of rooftop units.

Option III (Part of Tenant Space 1)- The option will be discussed as an overall building option at the end of this section.

Existing Observations

Classroom 2(Including Offices 1 & 2) - This room has a ceiling hung natural gas fired 45,000 btu/hr unit heater. The heater was manufactured in 1989. The unit was not cycled to determine operability. At 26 years old the unit is beyond it useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 3).



Unit Heater Classroom 2

Recommendations:

Option I - (Part of Tenant Space 5) Remove the existing unit heater, appliance connector, and wall mounted thermostat. Provide a new 45,000 btu/hr natural gas fired unit heater. Also provide a new appliance connector, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit heater. Patch ceiling as required.

Option II (Part of Tenant Space 3) - This option removes the wall between Classroom 1 and Classroom 2. A 45,000 btu/hr unit heater in each room will provide adequate heating to the larger room. All items listed in Option 1 above will be required. Another type of system would be two rooftop mounted heat pumps (36,000 btu/hr cooling 45,000 btu/hr heating) or packaged air conditioning units (electric cooling (36,000 btu/hr) and natural gas heating(45,000 btu/hr) will adequately heat and air condition the space. The rooftop units should be mounted in the middle of the each existing room configuration. Rooftop units will require a curb and electric service. The packaged units would require natural gas piping from the existing distribution piping on the roof. Each unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the east wall and west wall of the space will control operation of the units. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of rooftop units.

Option III - (Part of Tenant Space 1)The option will be discussed as an overall building option at the end of this section.

Existing Observations

Classroom 3 - This room has a ceiling hung natural gas fired 45,000 btu/hr unit heater. The heater was manufactured in 1989. The unit was not cycled to determine operability. At 26 years old the unit is beyond it useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 4).



Classroom 3 Unit Heater

Recommendations:

Option I (Part of Tenant Space 4) - Remove the existing unit heater, appliance connector, and wall mounted thermostat. Provide a new 45,000 btu/hr natural gas fired unit heater. Also provide a new appliance connector, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit heater. Patch ceiling as required.

Option II (Part of Tenant Space 2)- This option removes the wall between Classroom 3 and Classroom 4. A 45,000 btu/hr unit heater in each room will provide adequate heating to the larger room. All items listed in Option 1 above will be required. Another type of system would be two rooftop mounted heat pumps (36,000 btu/hr cooling 45,000 btu/hr heating) or packaged air conditioning units (electric cooling (36,000 btu/hr) and natural gas heating (45,000 btu/hr) will adequately heat and air condition the space. The rooftop units should be mounted in the middle of the each existing room configuration. Rooftop units will require a curb and electric service. The packaged units would require natural gas piping from the existing distribution piping on the roof. Each unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the east wall and west wall of the space will control operation of the units. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of rooftop units.

Option III (Part of Tenant Space 1)- The option will be discussed as an overall building option at the end of this section.

Existing Observations

Classroom 4 - This room has a ceiling hung natural gas fired 36,450 btu/hr unit heater. The heater was manufactured in 1989. The unit was not cycled to determine operability. At 26 years old the unit is beyond it useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 5).



Classroom 4 Unit Heater

Recommendations:

Option I (Part of Tenant Space 3)- Remove the existing unit heater, appliance connector, and wall mounted thermostat. Provide a new 45,000 btu/hr (All other rooms of this size have a 45,000 btu/hr unit) natural gas fired unit heater. Also provide a new appliance connector, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit heater. Patch ceiling as required.

Option II (Part of Tenant Space 2)- This option removes the wall between Classroom 3 and Classroom 4. A 45,000 btu/hr unit heater in each room will provide adequate heating to the larger room. All items listed in Option 1 above will be required. Another type of system would be two rooftop mounted heat pumps (36,000 btu/hr cooling 45,000 btu/hr heating) or packaged air conditioning units (electric cooling (36,000 btu/hr) and natural gas heating(45,000 btu/hr) will adequately heat and air condition the space. The rooftop units should be mounted in the middle of the each existing room configuration. Rooftop units will require a curb and electric service. The packaged units would require natural gas piping from the existing distribution piping on the roof. Each unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the east wall and west wall of the space will control operation of the units. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of rooftop units.

Option III (Part of Tenant Space 1)- The option will be discussed as an overall building option at the end of this section.

Existing Observations

Classroom 5 - This room has a ceiling hung natural gas fired 45,000 btu/hr unit heater. The heater was manufactured in 1989. The unit was not cycled to determine operability. At 26 years old the unit is beyond it useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 6).



Unit Heater Classroom 5

Recommendations:

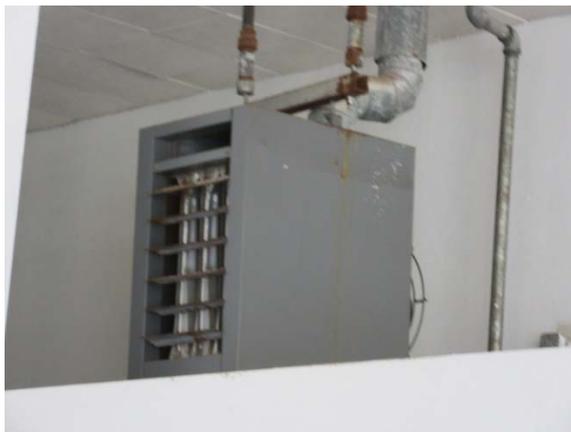
Option I (Part of Tenant Space 2)- Remove the existing unit heater, appliance connector, and wall mounted thermostat. Provide a new 45,000 btu/hr (All other rooms of this size have a 45,000 btu/hr unit) natural gas fired unit heater. Also provide a new appliance connector, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit heater. Patch ceiling as required.

Option II (Part of Tenant Space 2)- This option removes the wall between Classroom 5 and Classroom 6. A 45,000 btu/hr unit heater in each room will provide adequate heating to the larger room. All items listed in Option 1 above will be required. Another type of system would be two rooftop mounted heat pumps (36,000 btu/hr cooling 45,000 btu/hr heating) or packaged air conditioning units (electric cooling (36,000 btu/hr) and natural gas heating(45,000 btu/hr) will adequately heat and air condition the space. The rooftop units should be mounted in the middle of the each existing room configuration. Rooftop units will require a curb and electric service. The packaged units would require natural gas piping from the existing distribution piping on the roof. Each unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the east wall and west wall of the space will control operation of the units. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of rooftop units.

Option III (Part of Tenant Space 1) - The option will be discussed as an overall building option at the end of this section.

Existing Observations

Classroom 6 - This room is separated into a number of rooms. The classroom has a ceiling hung (over the water heater closet) natural gas fired unit heater estimated (nameplate not visible) at 45,000 btu/hr (similar size as unit heater in Classroom 1). It is assumed this heater is the same vintage as that unit, which was manufactured in 1988. The unit was not cycled to determine operability. At 27 years old the unit is beyond it useful life. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 7).



Unit Heater above Water Heater Closet in Classroom 6

Recommendations:

Option I (Part of Tenant Space 1) - Remove the existing unit heater, appliance connector, and wall mounted thermostat. Provide a new 45,000 btu/hr natural gas fired unit heater. Also provide a new appliance connector, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit heater. Patch ceiling as required. The windows above the Men's and Women's restroom will provide adequate natural ventilation for the number of plumbing fixtures in the restrooms.

Option II (Part of Tenant Space 1) - This option removes the wall between Classroom 5 and Classroom 6. A 45,000 btu/hr unit heater in each room will provide adequate heating to the larger room. All items listed in Option 1 above will be required. Another type of system would be two rooftop mounted heat pumps (36,000 btu/hr cooling 45,000 btu/hr heating) or packaged air conditioning units (electric cooling (36,000 btu/hr) and natural gas heating(45,000 btu/hr) will adequately heat and air condition the space. The rooftop units should be mounted in the middle of the each existing room configuration. Rooftop units will require a curb and electric service. The packaged units would require natural gas piping from the existing distribution piping on the roof. Each unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the east wall and west wall of the space will control operation of the units. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of rooftop units.

Option III (Part of Tenant Space 1)- The option will be discussed as an overall building option at the end of this section.

Overall Building - Option III

Option III has removed all of the interior walls in the building to provide a shell of approximately 5,000 square feet. The proximity of the building to the ocean is such that air conditioning to maintain a comfortable interior temperatures is not a necessity. Existing natural gas service in the building will allow tenants the option to connect to this service to provide heating to the space they will occupy. Heating and natural ventilation at this location will provide a comfortable interior temperature for most of the year. If a tenant has specific temperature requirements, air conditioning and heating will be required to maintain those requirements.

System Types:

1. Natural Gas Fired Unit Heaters: Tenants can provide gas fire unit heaters placed in their occupied space. Typical arrangement could be as they are presently place.

2. Rooftop Packaged Air Conditioning Units: Tenants can provide packaged air conditioning units with electric cooling and natural gas heating. Typical arrangement could be as they are presently shown on the Plumbing and Mechanical Systems Option II New Floor plan drawing. Ductwork from the units to the space will be required. Additional ductwork and air distribution devices may be required depending on how the tenants occupied space is divided. Electronic thermostats will be required to control the units.

3. Rooftop Heat Pump Units: Tenants can provide heat pump units with electric cooling and heating. Typical arrangement could be as they are presently shown on the Plumbing and Mechanical Systems Option II New Floor plan drawing. Ductwork from the units to the space will be required. Additional ductwork and air distribution devices may be required depending on how the tenants occupied space is divided. Electronic thermostats will be required to control the units.

4. Variable Refrigerant Flow Central Condenser System: A variable refrigerant flow (VRF) condenser unit would be provided for the building (sized for the entire building square footage). This system would provide a source for refrigerant based heating and cooling (similar to type 3 above). Tenant improvements would connect to this system and provide refrigerant piping, fan coil units, ductwork and controls as needed for the area they will occupy. See Plumbing and Mechanical Systems Option III New Floor plan drawing for potential locations of central plant.

ADMIN WING

East Building:

Existing Observations

Classroom 7 - This room is separated into a number of rooms. The south end was a classroom. It is presently used by the Encinitas Union School District maintenance department. The classroom is heated by a natural gas fired forced air furnace (84,000 btu/hr). The supply exhaust is located above the unit and the return intake is located below the unit. The unit looks very old. The serial number does not coincide with units from 1972 to the present, it is well beyond its useful life. The unit was not cycled to determine its operability. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 8).



Classroom 7 Forced Air Furnace

Recommendations:

Option I (Part of Tenant Space 8)- Remove the existing natural gas fired forced air furnace, appliance connector, ductwork and supply and return air registers. Provide a new 84,000 btu/hr natural gas fired forced air furnace. Also provide a new appliance connector, ductwork, supply and return air registers, and a wall mounted electronic thermostat. Reconnect existing electric service and flue to the new unit. Patch and repair ceiling and wall as required.

Option II (Part of Tenant Space 5)- This option removes the force air furnace closet, office, restrooms, and staff lunch area. The option provides approximately 1400 square feet of open space. Two types of systems could be used for this area:

Type 1: Provide two 45,000 btu/hr unit heaters. One at the northeast corner of the room and the other at the southwest corner of the room. Natural gas piping, appliance connectors, flue, structural support, electronic thermostat, and electric service will also be required.

Type 2: Provide a rooftop mounted heat pump (60,000 btu/hr cooling 80,000 btu/hr heating) or packaged air conditioning unit (electric cooling (60,000 btu/hr) and natural gas heating(80,000 btu/hr) will adequately heat and air condition the space. The rooftop unit should be mounted in the middle of the space. The rooftop unit will require a curb and electric service. The packaged unit would require natural gas piping from the existing distribution piping on the roof. The unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the west wall of the space will control operation of the unit. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of the rooftop unit.

Option III (Part of Tenant Space 2)- Same as Option II above.

Existing Observations

Classroom 7 Staff Area - This area does not have a specific heating source. The exhaust fan

above the Men's restroom draws heated air from the classroom 7 area to provide some heating in the area. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 9).

Recommendations:

Option I (This area becomes part of an office)- The forced air furnace provided in Option I for Classroom 7 will provide heating in the area as it does now. Provide high and low louvers in the door.

Option II - The classroom 7 staff area in this option is removed, see Option II Classroom 7

Option III - Same as Option II above.

Existing Observations

Men's Restroom Classroom 7 Staff Area - There is an exhaust fan located above the Men's and Women's restroom. This unit provides ventilation for the Men's and Women's staff restroom. Nameplate date on the unit was not visible. Age is estimated to be 30 years or more. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 10).



Exhaust Fan above Men's and Women's Restroom

Recommendations:

Option I - This area becomes an office. Remove the existing exhaust fan. Patch wall. The forced air furnace provided in Option I for Classroom 7 will provide heating in the area as it does now.

Option II - The Men's restroom in this option is removed, see Option II Classroom 7

Option III - Same as Option II above.

Existing Observations

Women's Restroom Classroom 7 Staff Area

No heating or ventilation specifically in this area.

Recommendations:

Option I - This area becomes an office. The forced air furnace provided in Option I for Classroom 7 will provide heating in the area as it does now.

Option II - The Women's restroom in this option is removed, see Option II Classroom 7

Option III - Same as Option II above.

Existing Observations

Office Classroom 7 Area - This area has a ceiling mounted electric heater. Age (looks more than 20 years old) and capacity unknown. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 11).



Ceiling Mounted Electric Heater

Recommendations:

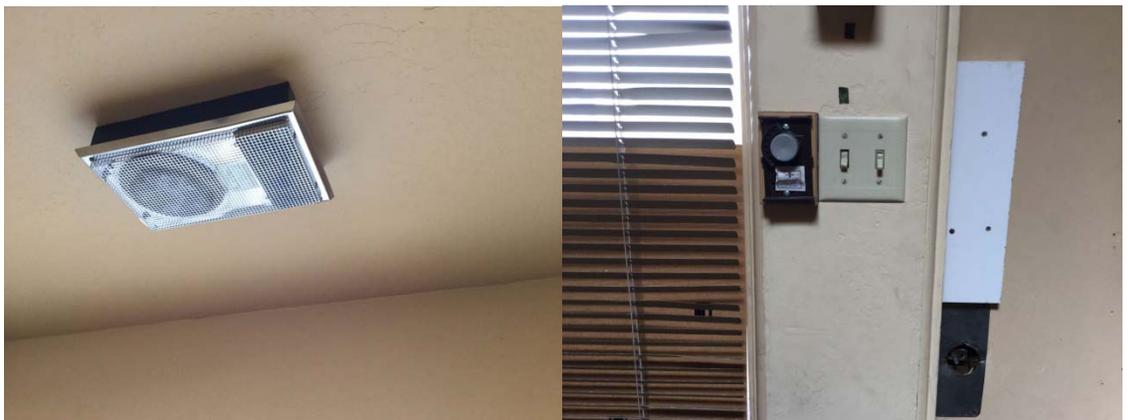
Option I (STO) - Remove the electric heater and thermostat. Patch ceiling as required. This storage does not required heating. Provide louvers at top and bottom of door.

Option II - The office in this option is removed, see Option II Classroom 7

Option III - Same as Option II above.

Existing Observations

Office Northwest Corner of Building - This area has a ceiling mounted electric heater with wall mounted control switch. Age (looks more than 20 years old) and capacity unknown. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 12).



Electric Heater

Wall Mounted Switch Control

Recommendations:

Option I - Remove the electric heater and thermostat. Provide a new 500 watt electric heater with fan and thermostat. Reconnect electric service to the new electric heater.

Option II - The office in this option is removed. The area becomes a restroom. General

restroom ventilation requirements will be addressed at the end of this section.

Option III - The office in this option is removed. The area becomes a janitorial closet. General service area ventilation requirements will be addressed at the end of this section.

Existing Observations

Office Northeast Corner of Building - This area has a ceiling mounted electric heater with wall mounted control switch. Age (looks more than 20 years old) and capacity unknown. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 13).



Electric Heater

Recommendations:

Option I - Remove the electric heater and thermostat. Provide a new ceiling mounted 500 watt electric heater with fan and thermostat. Reconnect electric service to the new electric heater.

Option II - The office in this option is removed and becomes part of the larger room to the south. See Option II for the next office area to the south.

Option III - The office in this option is removed. The area becomes a restroom. General restroom ventilation requirements will be addressed at the end of this section.

Existing Observations

Staff - Area South of Office at Northeast Corner of the Building - This area has a ceiling mounted electric heater with wall mounted control switch. Age (looks more than 20 years old) and capacity unknown. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 14).



Electric Heater

Recommendations:

Option I (OFFICE) - Remove the electric heater and thermostat. Provide a new 1000 watt electric heater with fan and thermostat. Reconnect electric service to the new electric heater.

Option II - The office in this option is removed and becomes part of a larger room that includes the office to the north, the private restroom to the south, and the office to the south of the private restroom. The option provides approximately 500 square feet of open space. Two types of systems could be used for this area:

Type 1: Provide two 20,000 btu/hr unit heaters. One at the northeast corner of the room and the other at the southwest corner of the room. Natural gas piping, appliance connectors, flue, structural support, electronic thermostat, and electric service will also be required.

Type 2: Provide a rooftop mounted heat pump (18,000 btu/hr cooling 40,000 btu/hr heating) or packaged air conditioning unit (electric cooling (18,000 btu/hr) and natural gas heating(40,000 btu/hr) will adequately heat and air condition the space. The rooftop unit should be mounted in the middle of the space. The rooftop unit will require a curb and electric service. The packaged unit would require natural gas piping from the existing distribution piping on the roof. The unit will also require an appliance connector from the gas pipe to the unit. Ductwork from a unit to the space will be required to distribute the conditioned air into the space. An electronic thermostat mounted on the west wall of the space will control operation of the unit. See Plumbing and Mechanical Systems Option II New Floor plan drawing for location of the rooftop unit and unit heaters.

Option III - This area becomes part of new Men's and Women's restrooms. General restroom ventilation requirements will be addressed at the end of this section.

Existing Observations

Private Restroom South of Area South of Office at Northeast Corner of the Building - The restroom contains an exhaust fan mounted in the ceiling. Age (looks more than 20 years old) and capacity unknown. It is assumed exhaust exits above the roof. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 15).



Exhaust Fan

Recommendations:

Option I - This room becomes a storage closet. Remove ceiling fan and electric service. Patch and repair ceiling as required.

Option II - The restroom in this option is removed and becomes part of a larger room that includes the office to the north, the private restroom to the south, and the office to the south of the private restroom. See Option II of the previous area.

Option III - This area becomes part of new Men's and Women's restrooms. General restroom ventilation requirements will be addressed at the end of this section.

Existing Observations

Office South of Private Restroom Above - This office has a ceiling mounted electric unit heater. Age (looks more than 20 years old) and capacity unknown. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 16).



Electric Unit Heater

Recommendations:

Option I - Remove the electric unit heater and thermostat. Provide a new 500 watt electric heater with fan and thermostat. Reconnect electric service to the new electric heater.

Option II - The office in this option is removed and becomes part of a larger room that includes the private restroom to the north, the office to the north, and the office to the north of that office. See Option II of Area South of Office at Northeast Corner of the Building.

Option III (DATA and STO)- This area becomes a small office and storage room. Provide a new ceiling mounted exhaust fan in each room. Provide electric service to new fans.

Existing Observations

Faculty Restroom - The restroom contains an exhaust fan mounted in the ceiling. Age (looks more than 20 years old) and capacity unknown. It is assumed exhaust exits above the roof. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 17).



Exhaust Fan

Recommendations:

Option I - Remove the exhaust fan. Provide a new 150 cfm exhaust fan. Reconnect electric service to the new fan. Reconnect ductwork from fan to roof cap.

Option II - This restroom becomes part of another restroom. General restroom ventilation will be addressed at the end of this section.

Option III - This restroom becomes part of another restroom. General restroom ventilation will be addressed at the end of this section.

Existing Observations

Boy's Restroom - The restroom does not have a heating source. The room is exhausted from a grille located in the south wall above the water closets and urinals. The grille is connected to a duct that goes to the roof. It is assumed the duct is connected to an exhaust fan on the roof. Roof access was not available. Based on the condition of the grille and duct visible behind the grille the exhaust fan is probably 30 or more years old. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 18).



Boy's Restroom Exhaust Grille

Recommendations:

Option I - This Boy's restroom becomes a Women's Restroom. Remove the rooftop exhaust fan, ductwork and grille. Provide a new 500 cfm exhaust fan (capacity for Women's and Men's restroom). Reconnect electric service to the new fan. Provide new ductwork and grille.

Option II - This restroom becomes part of another restroom. Ventilation capacity of the restroom exhaust shall be the same as Option 1.

Option III - This restroom becomes part of another restroom. General restroom ventilation will be addressed at the end of this section.

Existing Observations

Girl's Restroom - The restroom does not have a heating source. The room is exhausted from a grille located in the south wall above the water closets and urinals. The grille is connected to a duct that goes to the roof. It is assume the duct is connected to an exhaust fan on the roof. Roof access was not available. Based on the condition of the grille and duct visible behind the grille the exhaust fan is probably 30 or more years old. See Existing Observations Floor Plan for Plumbing, Heating, and Ventilation for location of heating unit (Keynote - Square 19).



Girl's Restroom Exhaust Grille

Recommendations:

Option I - This Girl's restroom becomes a Men's Restroom. Remove the rooftop exhaust fan (removed in Boy's restroom option), ductwork and grille. Provide a new 500 cfm exhaust fan (provided in Boy's restroom option). Provide new ductwork and grille.

Option II - This restroom becomes part of another restroom. Ventilation capacity of the restroom exhaust shall be the same as Option 1.

Option III - This restroom becomes part of another restroom. General restroom ventilation will be addressed at the end of this section.

General Restroom Ventilation

The minimum standard for restroom ventilation is 10 air changes per hour. Exhaust systems for each restroom shall include a rooftop mounted exhaust fan, roof curb, ductwork to the area where plumbing fixtures (water closets, urinals, and lavatories) are located, electric service to the exhaust fan, and a wall or ceiling exhaust grille.

Option I: The system exhaust fan capacity for the men's and women's restroom shall be 850 cfm. System shall include all items listed in the General Restroom Ventilation paragraph above.

Option II: The system exhaust fan capacity for the men's and women's restroom shall be 850 cfm (combined). System shall include all items listed in the General Restroom Ventilation paragraph above. Each private restrooms shall have a 150 cfm exhaust fan system. The service area shall have a 100 cfm exhaust fan system.

Option III: The system exhaust fan capacity for the men's and women's restroom shall be 1000 cfm (combined). System shall include all items listed in the General Restroom Ventilation paragraph above. The two private restrooms shall have exhaust fan capacity of 150 cfm each. System shall include all items listed in the General Restroom Ventilation paragraph. The service area shall have a 150 cfm exhaust fan system.

SECTION H

Building Rehabilitation Assessment (Electrical)

Section H – Building Rehabilitation Assessment (Electrical)**SITE WIDE****General Scope:**

The existing condition and original construction of the Pacific View Elementary School buildings has been evaluated to determine what will be required to modernize the facility. No destructive activities were performed to expose possible deficiencies. There are no as-built drawings presently available for the site and buildings. A cursory inspection of the interior spaces in the building was performed. The exterior of the building was also inspected.

The existing Power system, lighting, communications and fire alarm systems are all unusable in their current conditions. All electrical building components need to be completely replaced for all three proposed options.

Evaluation of Existing Power Systems:**Main Switchboard:**

The main service switchboard (MS) is rated 400 amp, 120/240 volt, 1 phase, 3W manufactured by Truble Electric, NEMA Type 1. The meter number is 6571849. equipment is not in usable condition. Originally installed in 1953 there are no available replacement parts for this equipment. The existing serving voltage will also need to be revised to 120/208 volt, 3 phase, 4wire, 800 amps in order to serve the proposed plan options.

Panelboards:

All existing building panelboards are unusable and will need to be replaced. Originally installed in 1953 there are no available replacement parts for this equipment.

1. SDG&E Service

3.1 The existing SDG&E transformer will need to be replaced to meet the new serving voltage requirements and service size.

2. Evaluation of Lighting systems

4.1 All existing interior and exterior building lighting systems must be replaced in order to meet current T-24 code requirements.

3. Evaluation of Fire Alarm System

5.1 A complete Fire Alarm system replacement will be required in order to meet current code requirements.

4. Codes

6.1 The electrical system shall conform to latest applicable rules of the California Electrical Code, NFPA 70; California Code of Regulation, Title 24 (Lighting); Life Safety Code, NFPA 101; National Electrical Safety Code; California Building Code; and the Local City Electrical Codes.

7. Standards

7.1 All materials, equipment, fixtures and other appurtenances shall comply with the applicable Underwriters Laboratories, Inc., standards or applicable standards of a similar independent testing organization.

8. Emergency and Standby Service Distribution

- 8.1 The Path of Egress lighting systems will be provided with emergency power backup via lighting inverters. A minimum of 1 footcandle maintained shall be provided along path of egress.

9. Grounding Systems

- 9.1 All electrical systems and services shall be grounded with approved grounding service electrodes and shall be bonded to all metallic piping systems, structural steel, grounding rods, ground rings, etc. Each grounding electrode systems shall be properly connected to the service ground and to the non-current carrying grounded service conductor (neutral) for the main service and for all separately derived systems. Equipment grounding system lug kits and busses will be provided in all switchboards and panelboards.
- 9.2 All non-current carrying metallic enclosures, conduits, raceways, boxes, and devices shall be bonded to the equipment grounding system with approved wires, conductors, and fittings.

10. Wiring Systems

- 10.1 Electrical metallic tubing shall be used above ceilings and in exposed interior space not exposed to physical damage. Rigid galvanized steel conduit shall be used in concrete or where exposed to physical damage. PVC schedule 40 conduit shall be used in concrete walls or below slab on grade. All general use wiring shall be type "THWN" 600 volt, copper. General use wiring for branch circuits shall not be smaller than No. 12 AWG. Circuit breakers for general use branch circuits shall be 20 amp rated.

11. Voltage Drop

- 11.1 Feeder wiring shall be limited to two percent (2%) voltage drop. Branch circuit wiring shall be limited to three percent (3%). Maximum voltage drop (feeder and branch circuit) shall be limited to five percent (5%).

12. Receptacles

- 12.1 Specification grade, NEMA 5-20R, stainless steel cover plates, receptacles shall be provided for all 120 volt outlets. Ground fault interrupting receptacles will be provided for all above counter receptacles in bathrooms, food service areas, locker rooms and for all exterior receptacles. A separate 120 volt circuit shall be provided for each coffee machine, microwave, refrigerator, vending machine, garbage disposal and other equipment.
- 12.2 All 208 volt receptacles shall be on separate (dedicated) circuits.

13. Lighting

- 13.1 In general, all lighting shall be LED, 4,000 degree Kelvin with 0-10V dimming drivers. General lighting for Offices, Storage, Restrooms, classrooms, and general purpose occupancies will consist of 1'x4' and

2'x4' LED fixtures. Equipment room lights will be 4-foot industrial strip fixtures with wire guard and shall be LED type. Exterior lighting will consist of Wall Mounted Led fixtures and Pole Mounted LED fixtures. Illumination levels will meet IES standards for walkways, roadways, and parking areas. Low voltage lighting control with local switching, room occupancy sensors and photocells shall be provided in all interior areas in order to meet all Title 24 requirements. Exterior lights shall be provided with photocell, time clock controls and motion sensors where required.

14. Fire Alarm System

- 14.1 The fire alarm system for this project will be a fully automatic addressable system. New fire alarm shall be provided in the new MDF room. All initiating devices (detectors, pull stations) will be addressable. Detectors will provide individual address and self calibration adjustments for varying environments.
- 14.2 A complete voice evacuation system shall also be provided as part of the modernization as per current code. Existing buildings shall be brought up to current code as we progress through various phases of the project.

15. Intrusion Detection System

- 15.1 The project will include installation of a complete supervised intrusion detection system. The Control/Communicator panel shall be a multiplex micro processed based system. The systems shall be addressable, field configurable, programmable and editable. Each device shall have its own unique address. All interior areas with either an exterior door or an exterior window will be provided a dual technology motion sensor, all exterior doors and roll-up doors will be provided with door contacts. The system will be armed or disarmed with a key pad located near the main entrance. The system shall provide alarm information to be sent by digital dialer to the campus central station alarm monitoring equipment.

16. Telecommunications System

- 16.1 Existing MDF room shall be moved to a new location. Existing MPOE shall be relocated to new MDF Room. All low voltage systems shall be routed through the new MDF. This project will provide voice and data. Voice and data outlets will be provided in offices, classroom and other required spaces with interior wireless access points throughout the building. The project will include the physical infrastructure and logical design. All active networking electronics will be Tenant furnished. The project objective will be to provide a standards based infrastructure with the most sophisticated and advanced capabilities for delivery and origination of voice, video, data and multimedia. This will include Category 6 UTP interior building wiring, and fiber optic wiring between data distribution closets. The wiring infrastructure will be designed to accommodate wireless networking requirements.

SECTION I

Sustainable Opportunities

Section I - Sustainable Opportunities**SUSTAINABLE OPPORTUNITIES****Consideration of Sustainable Opportunities:**

We must also approach the next phase of the design and development of Pacific View's Re-use from a sustainability point of view, whether the developer chooses to pursue LEED certification or not. Sustainability means enhanced performance of both infrastructure and operations designed in a positive environment for the end-users. We must commit to solutions that respond to energy efficiency, programming needs, aesthetics, and low operating and maintenance costs.

Various Site Opportunities***Rainwater***

Design for the capturing of rainwater in barrels or other containment devices for the irrigation of landscaping on the site.

Grey water

As may be acceptable by the local jurisdictions for commercial applications, wastewater from lavatory sinks can be stored and purified in below ground containers for use in landscape.

Plant Palette

The selection of drought tolerant plants must be the requirement for development of the landscape design. Trees will also provide for shading of outdoor activity areas.

Solar Consideration

Provide for the design and installation of solar tubes to supplement and reduce the need for artificial lighting in the tenant spaces. Consider the installation of solar panels as shaded parking canopies.

Natural Ventilation

Take advantage of the site's location near the coast for the prevailing coastal breezes to reduce the dependence of air conditioning to cool the spaces. Design and provide for operable windows to allow the breeze to enter the tenant spaces. Ceiling fans will also assist in the lowering of the need for air conditioning.

Green Roof

Green roof would be a major asset, however one must consider the cost of the installation of this sustainable criteria, as it will impact the need to redesign the structural components of the buildings.

LED Lighting

Provide for LED lighting on site and interior spaces as required by the building codes. Consider the powering of the LED systems by solar or wind energy.

Water Quality

The last several years of drought conditions have emphasized Think Blue. We must adapt behaviors in our practices that improve water quality. We must employ civil engineering firms that have project experience in the application of Storm Water and Water Pollution Control measures. They must have experiences in the use of "Best Management Practices" and engineering design strategies that will reduce and prevent sediment, erosion and other construction discharges from entering the storm drain collection system. Storm Water Pollution Prevention Plans (SWPPPs), in accordance with the NPDES California Construction General Permit (CGP) must be provided.

Plumbing Systems

Design and provide low flow devices and consider the installation of waterless urinals. Provide for energy efficient hot water systems, such as recirculating.

Mechanical Systems

Design and install energy efficient mechanical ventilation systems. The system should be designed with interlocks to prevent the operation of the mechanical system if the windows are open. The interlock would be very practical if air conditioning is selected.

Building Skin

Design for energy efficient insulated exterior walls and roof and current dual insulated windows standards.

Waste

Provide for a recycling location that uses colorful bins and containers to encourage recycling. Consider composting.

Demonstration Site

Consider the implementation of many sustainable elements as a demonstration project for the City of Encinitas.

APPENDIX A

Topographic Survey & Site Plans

TOPOGRAPHIC SURVEY

OWNER:

CITY OF ENCINITAS

ADDRESS:

390 WEST F STREET
ENCINITAS, CALIFORNIA

APN:

258-151-22

BENCHMARK:

CITY OF ENCINITAS CONTROL POINT NO. 1032
2" BRASS DISC STAMPED ENC. T22 LOCATED
ON TOP OF CURB ON EAST SIDE OF VULCAN
AVE 2.5' NORTH OF DRIVE ENTRY TO ENCINITAS
CITY HALL NAVD 83 ELEV. = 92.00'

PROJECT BENCHMARK:

2 1/2" BRASS DISC LOCATED BY N.E.
CORNER OF PROPERTY BY THE BASE OF
FLAG POLE AS ELEV. = 93.49'

LEGAL DESCRIPTION:

ALL OF BLOCK 30, OF ENCINITAS, ACCORDING
TO THE MAP THEREOF NO. 148 IN THE CITY OF
ENCINITAS, COUNTY OF SAN DIEGO, STATE OF
CALIFORNIA, FILED IN THE OFFICE OF COUNTY
RECORDER OF SAN DIEGO COUNTY, JUNE 12, 1983
TOGETHER WITH THE ALLEY AND PORTION OF
FOURTH ST. VACATED.

EASEMENT DATA:

EASEMENTS PROVIDED BY FIDELITY NATIONAL TITLE COMPANY
PER TITLE REPORT DATED OCTOBER 11, 2006 ORDER # 06-9843942

- ① AN EASEMENT TO ENCINITAS SANITARY DISTRICT FOR PUBLIC
SEWER RECORDED APRIL 4, 1952 PER BOOK 4366, PAGE 466 OF O.R.
- ② AN EASEMENT TO SAN DIEGUITO IRRIGATION DISTRICT FOR
PIPELINE PURPOSES RECORDED MAY 12, 1953 PER BOOK 4781,
PAGE 494 OF O.R.
- ③ AN EASEMENT TO SDG & E FOR PIPELINE PURPOSES RECORDED
MARCH 13, 1961 PER INSTRUMENT NO. 44480 OF O.R.
- ④ AN EASEMENT TO SDG & E FOR INCIDENTAL PURPOSES RECORDED
DECEMBER 23, 1998 PER INSTRUMENT NO. 1998-0842327 OF O.R.

NOTE:

PROPERTY OWNERS TO THE WEST ACCESS
THEIR LOTS VIA A DIRT ROAD OVER THE
WESTERLY PORTION OF THE SUBJECT PROPERTY.
A REVIEW OF THE TITLE REPORTS INDICATES NO
ACCESS EASEMENTS TO THESE LOTS.

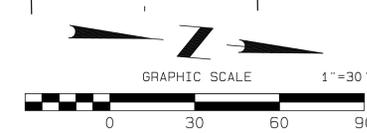
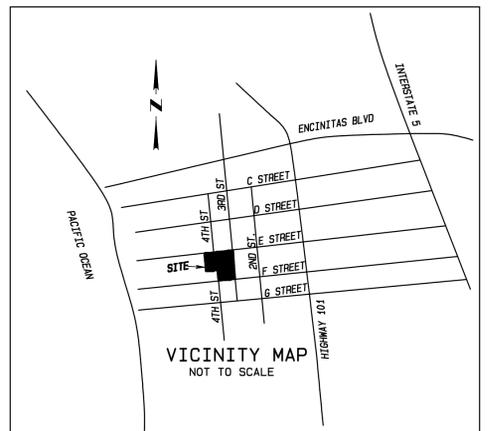
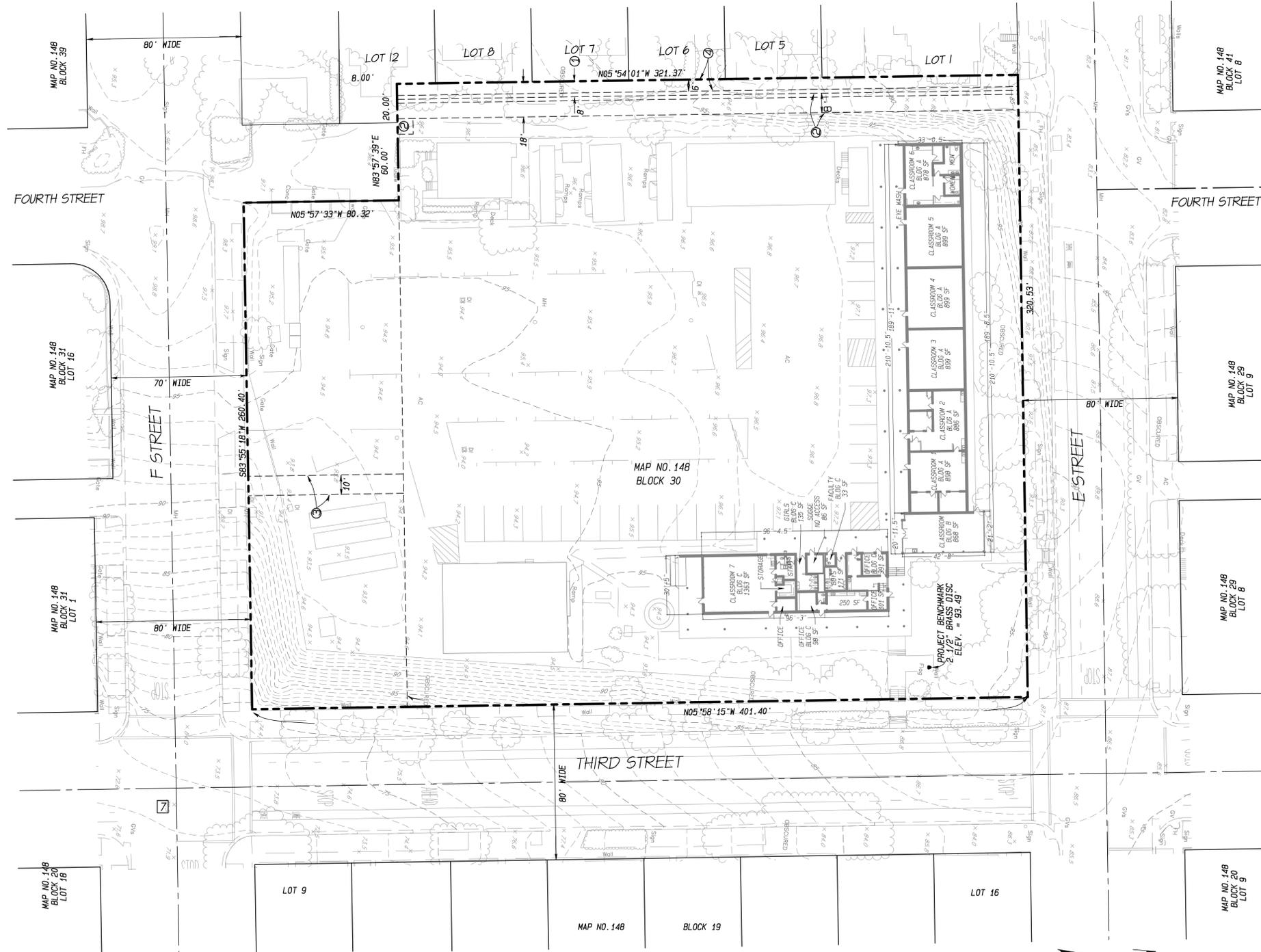
NOTE:

TOPOGRAPHY COMPILED BY AERIAL PHOTOGRAPHIC
METHODS BY SAN-LO AERIAL ON 11/06/06 &
HAND-SHOT FIELD METHODS ON 11/24/14

PREPARED BY:

PASCO LARET SUITER & ASSOCIATES, INC.
535 N. COAST HWY 101, SUITE A
SOLANA BEACH, CA 92075
858-259-8212

DATE: 12/4/06



Joseph L. Suiter
JOSEPH SUITER, LS 5211 DATE
REVISED 12-31-14

PACIFIC VIEW ELEMENTARY SCHOOL

Rehabilitation and Re-Use Study

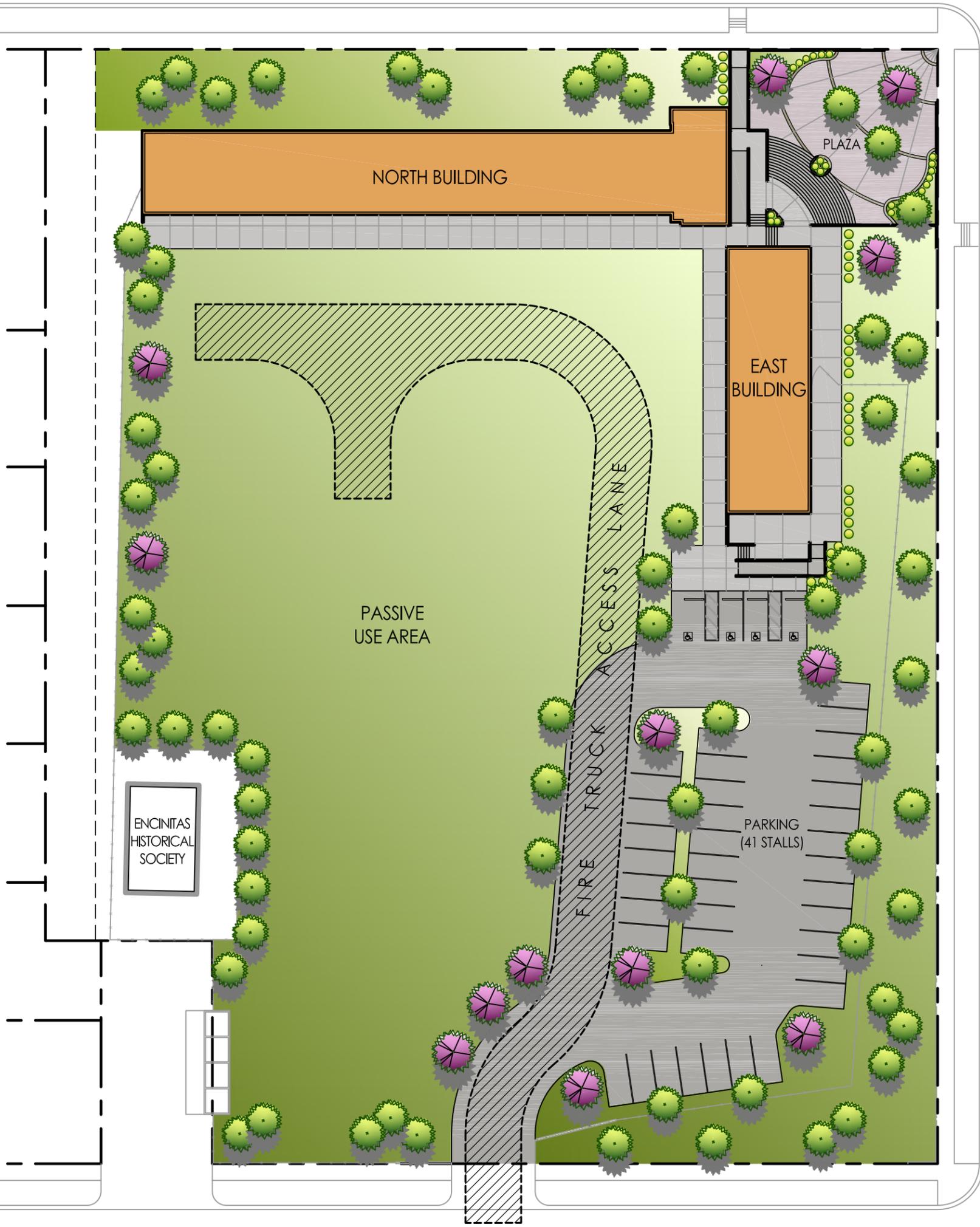
Option 1

Description of Proposed Site Plan

A new Plaza is proposed on the corner of Third Street and E Street as an inviting gateway for the community into the New Pacific View. A new parking area is created in the Southeastern portion of the site accessed off F Street. The North and East Buildings are modernized and a large passive use landscaped area is available for community gathering and activity.

FOURTH STREET

E STREET



THIRD STREET

F STREET

FOURTH STREET

PACIFIC VIEW (PROPOSED SITE PLAN)

OPTION I

1"=40'-0"



PACIFIC VIEW ELEMENTARY SCHOOL

Rehabilitation and Re-Use Study

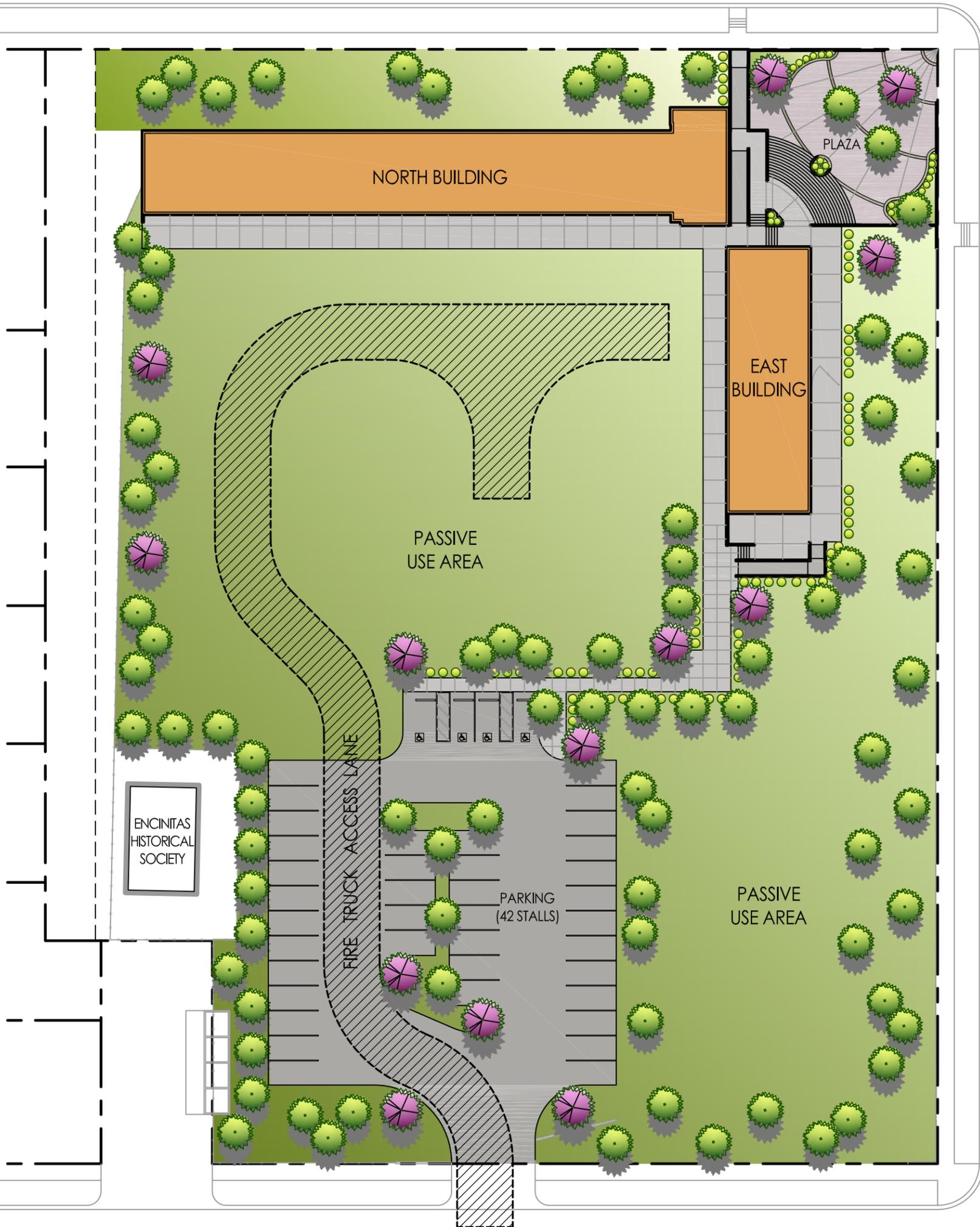
Option 2

Description of Proposed Site Plan

As in Option 1 a new Plaza is proposed on the corner of Third Street and E Street as an inviting gateway for the community into the New Pacific View. However, the new parking area is created in the Southern portion of the site accessed off F Street. The North and East Buildings are modernized and two passive use landscaped areas are available for community gathering and activity.

FOURTH STREET

E STREET



THIRD STREET

F STREET

FOURTH STREET

PACIFIC VIEW (PROPOSED SITE PLAN)

OPTION II

1"=40'-0"



PACIFIC VIEW ELEMENTARY SCHOOL

Rehabilitation and Re-Use Study

Option 3

Description of Proposed Site Plan

As in Option 1 a new Plaza is proposed on the corner of Third Street and E Street as an inviting gateway for the community into the New Pacific View. However, the new parking area is created in the Western portion of the site again accessed off F Street as a buffer to the residence to the West. The North and East Buildings are modernized and a large passive use landscaped area is available for community gathering and activity.

FOURTH STREET

E STREET



THIRD STREET

F STREET

FOURTH STREET

PACIFIC VIEW (PROPOSED SITE PLAN)

OPTION III

1"=40'-0"



NORTH

APPENDIX B

Floor Plans - Architectural Scope of Work

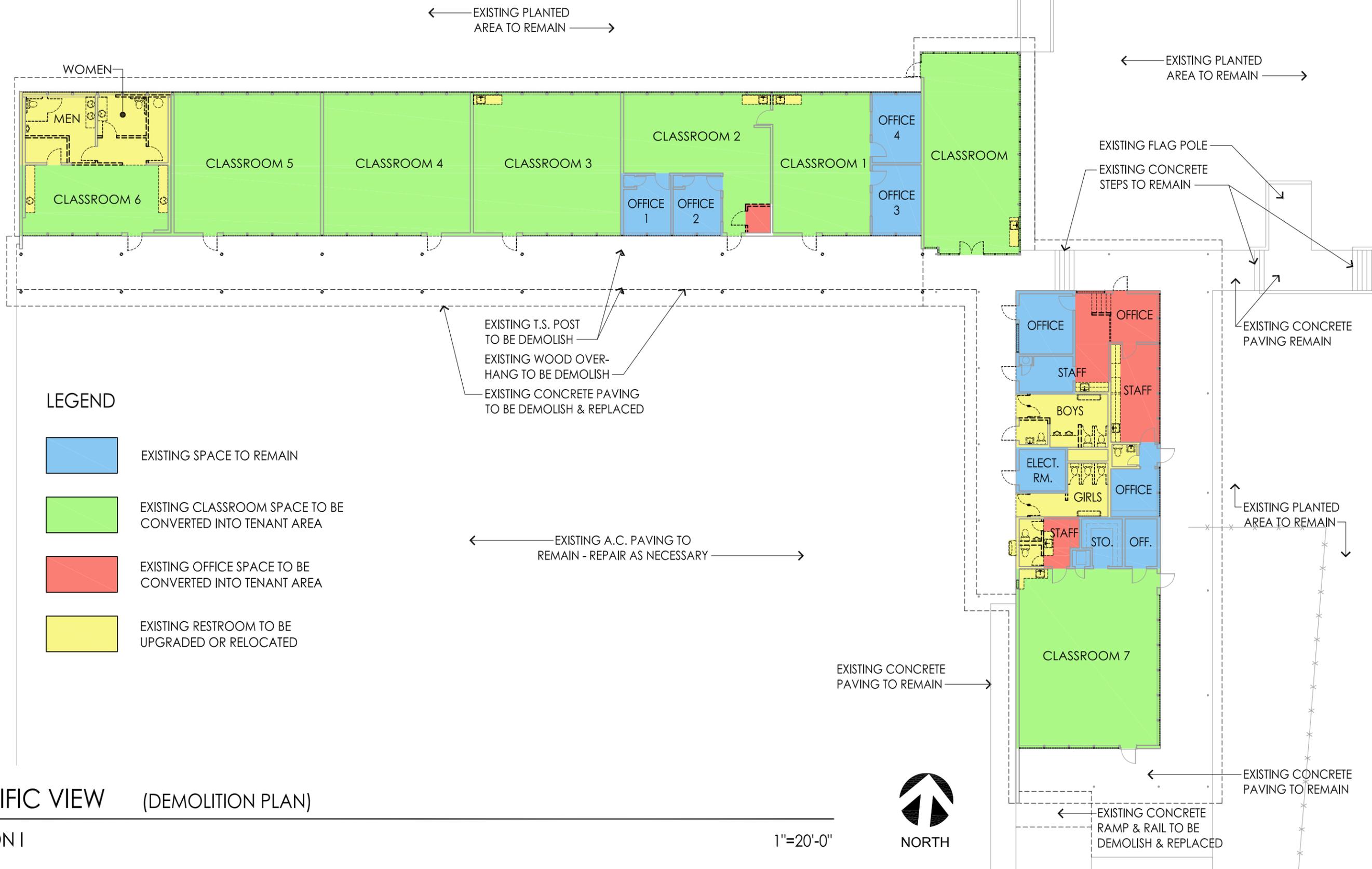
Option 1

Description of Proposed Building Plan

The proposal for the least modernization to bring it into code compliance and usability is Option 1. This option improves the existing structure, mechanical/plumbing/electrical systems and upgrades the restrooms. The existing interior demising walls are to remain.

E STREET

THIRD STREET



LEGEND



EXISTING SPACE TO REMAIN



EXISTING CLASSROOM SPACE TO BE CONVERTED INTO TENANT AREA



EXISTING OFFICE SPACE TO BE CONVERTED INTO TENANT AREA



EXISTING RESTROOM TO BE UPGRADED OR RELOCATED

PACIFIC VIEW (DEMOLITION PLAN)

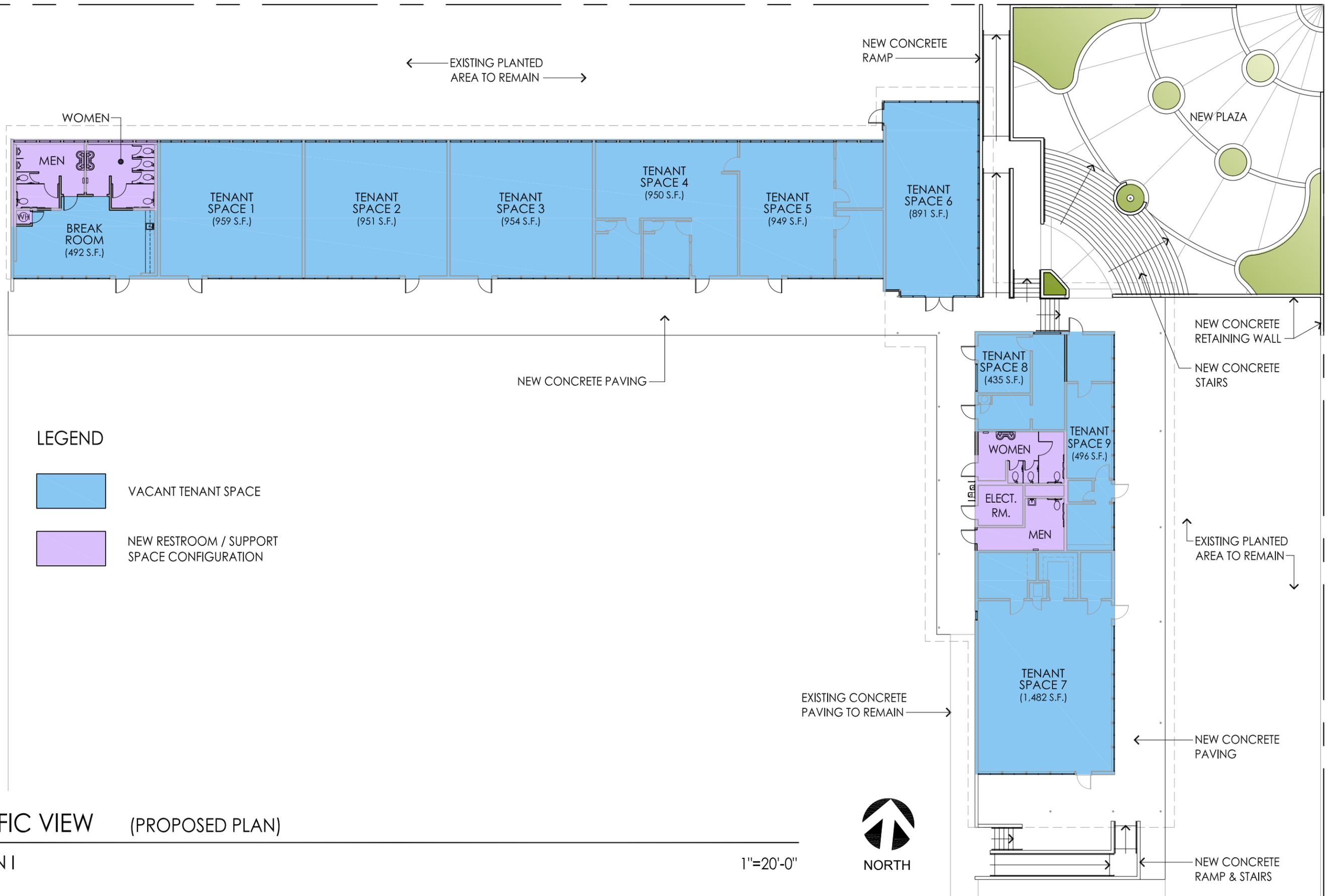
OPTION I

1"=20'-0"



NORTH

E STREET



THIRD STREET

PACIFIC VIEW (PROPOSED PLAN)

OPTION I

1"=20'-0"



PACIFIC VIEW ELEMENTARY SCHOOL

Rehabilitation and Re-Use Study

Option 2

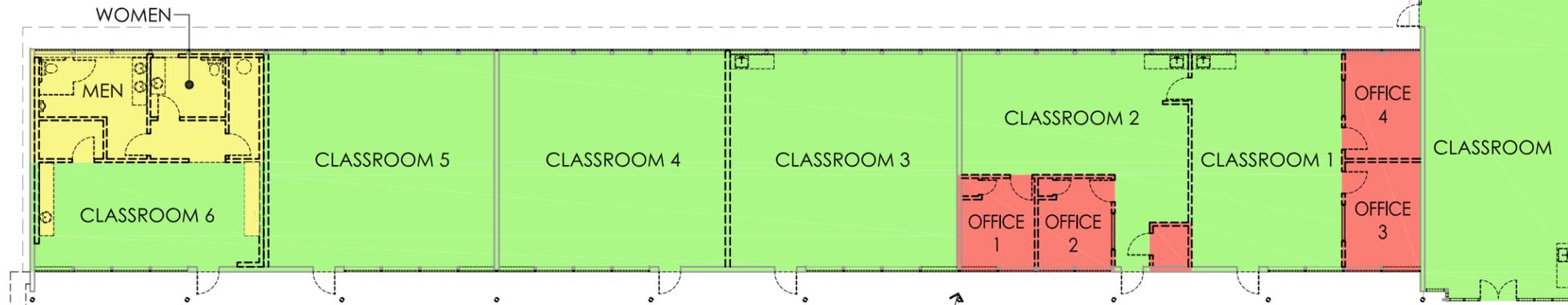
Description of Proposed Building Plan

Option 2 is a proposal for a more intensive modernization of the existing buildings. This option improves the existing structure, mechanical/plumbing/electrical systems similar to Option 1, but relocates the restroom facilities and provides for larger tenant spaces by removing every other non-structural interior demising walls.

E STREET

THIRD STREET

← EXISTING PLANTED AREA TO REMAIN →

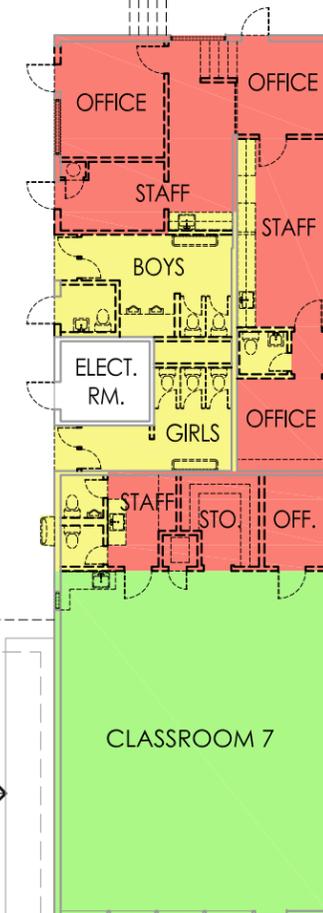


EXISTING T.S. POST TO BE DEMOLISH
 EXISTING WOOD OVERHANG TO BE DEMOLISH
 EXISTING CONCRETE PAVING TO BE DEMOLISH & REPLACED

LEGEND

- EXISTING SPACE TO REMAIN
- EXISTING CLASSROOM SPACE TO BE CONVERTED INTO TENANT AREA
- EXISTING OFFICE SPACE TO BE CONVERTED INTO TENANT AREA
- EXISTING RESTROOM TO BE UPGRADED OR RELOCATED

← EXISTING A.C. PAVING TO REMAIN - REPAIR AS NECESSARY →



← EXISTING CONCRETE PAVING TO BE DEMOLISH & REPLACED

↑ EXISTING PLANTED AREA TO REMAIN ↓

EXISTING CONCRETE PAVING TO REMAIN →

← EXISTING CONCRETE PAVING TO BE DEMOLISH & REPLACED

← EXISTING CONCRETE RAMP & RAIL TO BE DEMOLISH & REPLACED

PACIFIC VIEW (DEMOLITION PLAN)

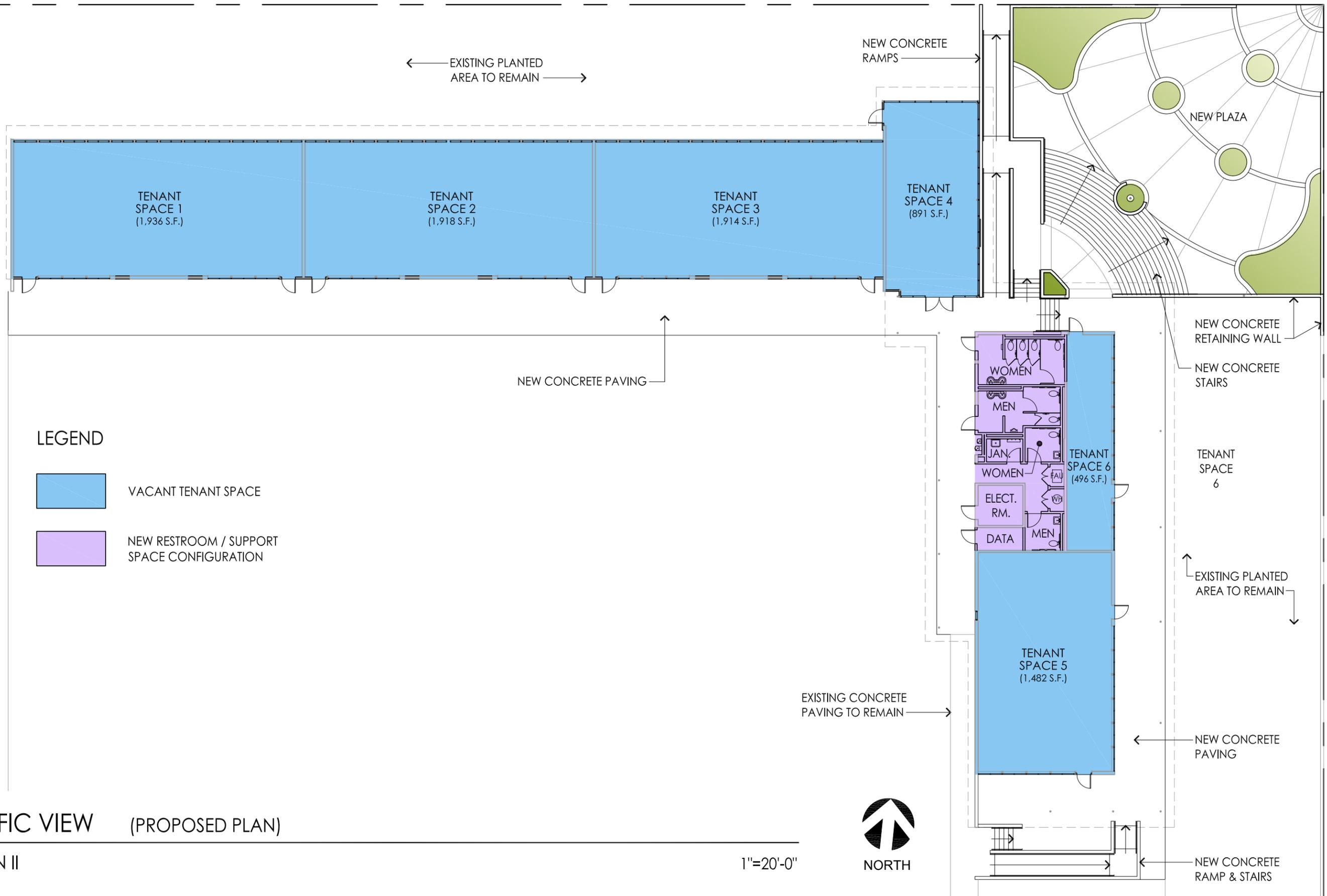
OPTION II

1"=20'-0"



E STREET

THIRD STREET



← EXISTING PLANTED AREA TO REMAIN →

NEW CONCRETE RAMPS

NEW PLAZA

TENANT SPACE 1
(1,936 S.F.)

TENANT SPACE 2
(1,918 S.F.)

TENANT SPACE 3
(1,914 S.F.)

TENANT SPACE 4
(891 S.F.)

NEW CONCRETE PAVING

NEW CONCRETE RETAINING WALL

NEW CONCRETE STAIRS

TENANT SPACE 6

← EXISTING PLANTED AREA TO REMAIN →

LEGEND



VACANT TENANT SPACE



NEW RESTROOM / SUPPORT SPACE CONFIGURATION

EXISTING CONCRETE PAVING TO REMAIN

← NEW CONCRETE PAVING

← NEW CONCRETE RAMP & STAIRS

PACIFIC VIEW (PROPOSED PLAN)

OPTION II

1"=20'-0"



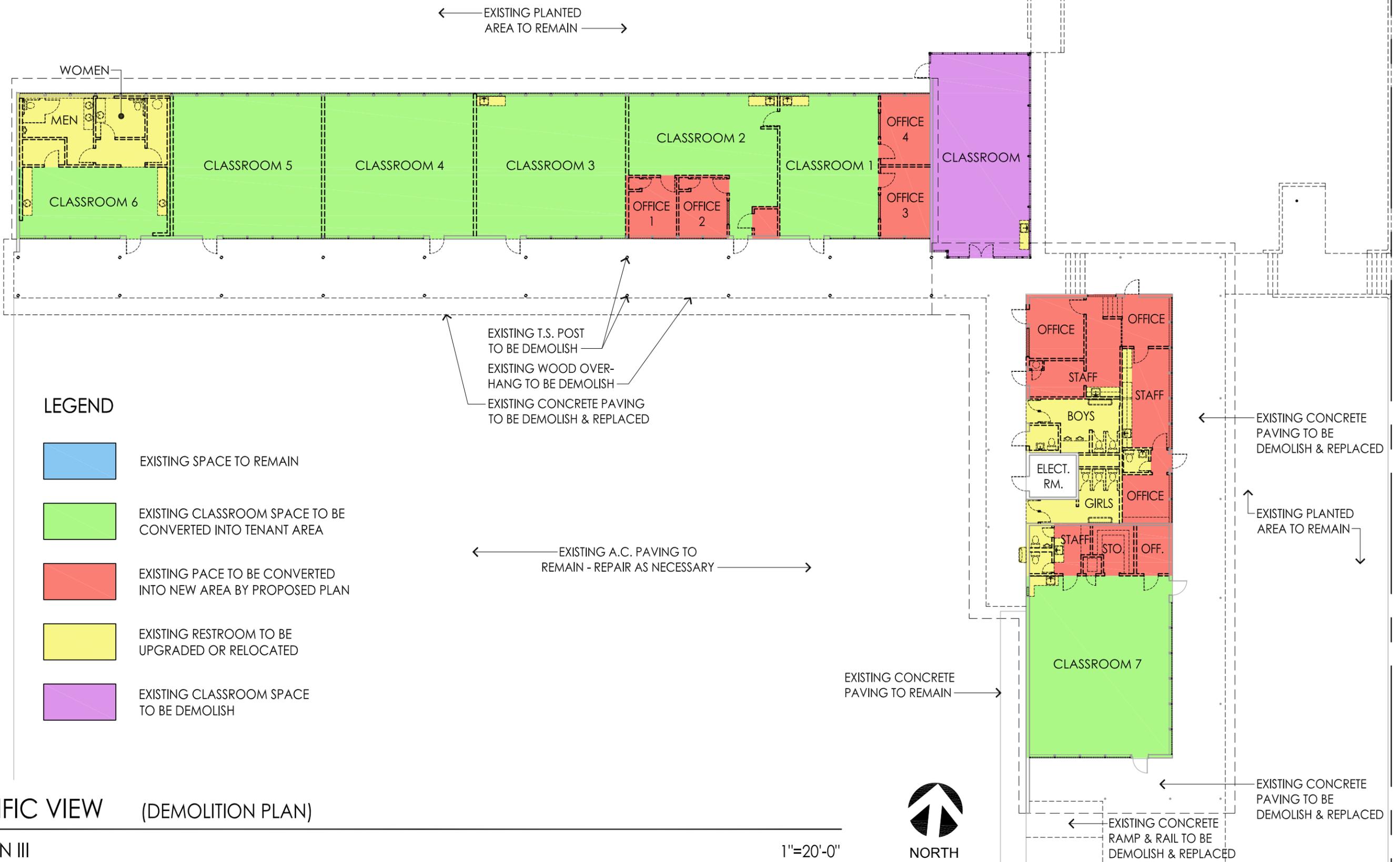
PACIFIC VIEW ELEMENTARY SCHOOL

Rehabilitation and Re-Use Study

Option 3

Description of Proposed Building Plan

The final Option 3 is an even more intensive modernization and reconfiguration of the existing buildings. This option proposes the removal of all demising walls, including structural shear walls, to allow for great flexibility for larger tenant spaces and relocation of the restrooms. This option also removes one classroom to provide a larger New Plaza or as shown in Option III-A tenant space 7 can remain.

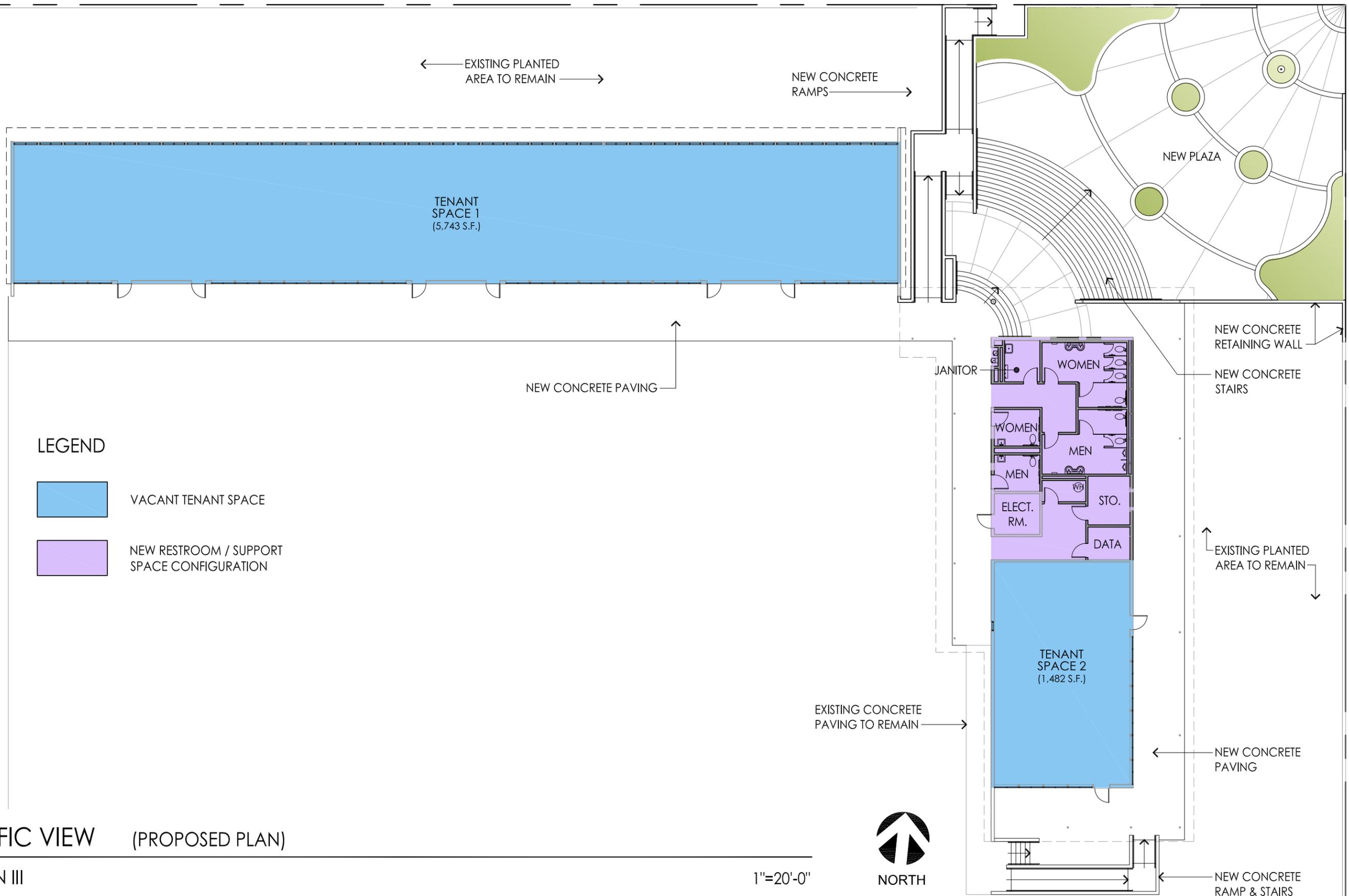


PACIFIC VIEW (DEMOLITION PLAN)

OPTION III

1"=20'-0"





← EXISTING PLANTED AREA TO REMAIN →

NEW CONCRETE RAMPS →

TENANT SPACE 1
(5,743 S.F.)

NEW PLAZA

NEW CONCRETE PAVING

JANITOR

WOMEN

NEW CONCRETE RETAINING WALL

NEW CONCRETE STAIRS

LEGEND



VACANT TENANT SPACE



NEW RESTROOM / SUPPORT SPACE CONFIGURATION

← EXISTING PLANTED AREA TO REMAIN →

TENANT SPACE 2
(1,482 S.F.)

EXISTING CONCRETE PAVING TO REMAIN

← NEW CONCRETE PAVING

← NEW CONCRETE RAMP & STAIRS

PACIFIC VIEW (PROPOSED PLAN)

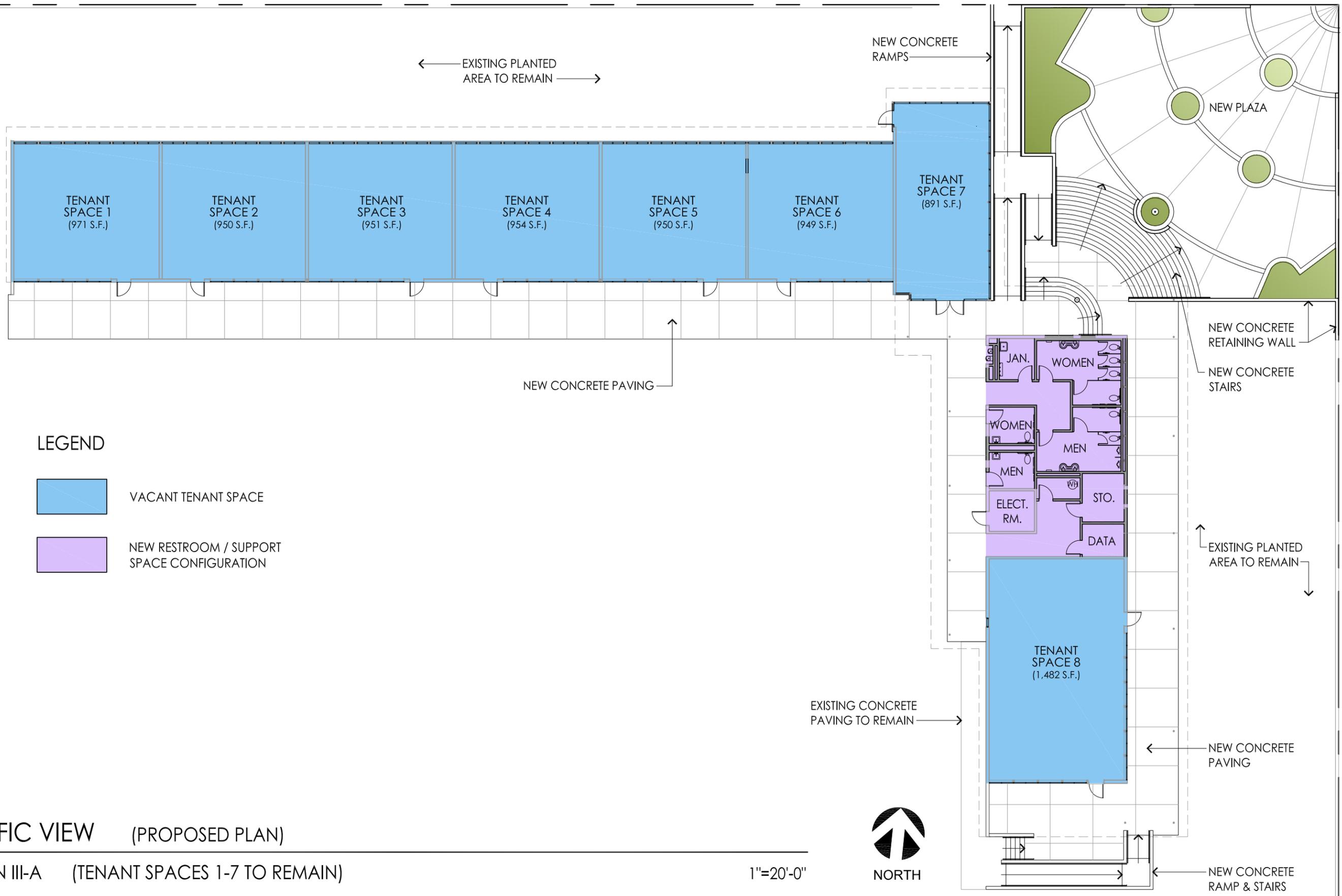
OPTION III

1"=20'-0"



E STREET

THIRD STREET



LEGEND



VACANT TENANT SPACE



NEW RESTROOM / SUPPORT SPACE CONFIGURATION

PACIFIC VIEW (PROPOSED PLAN)

OPTION III-A (TENANT SPACES 1-7 TO REMAIN)

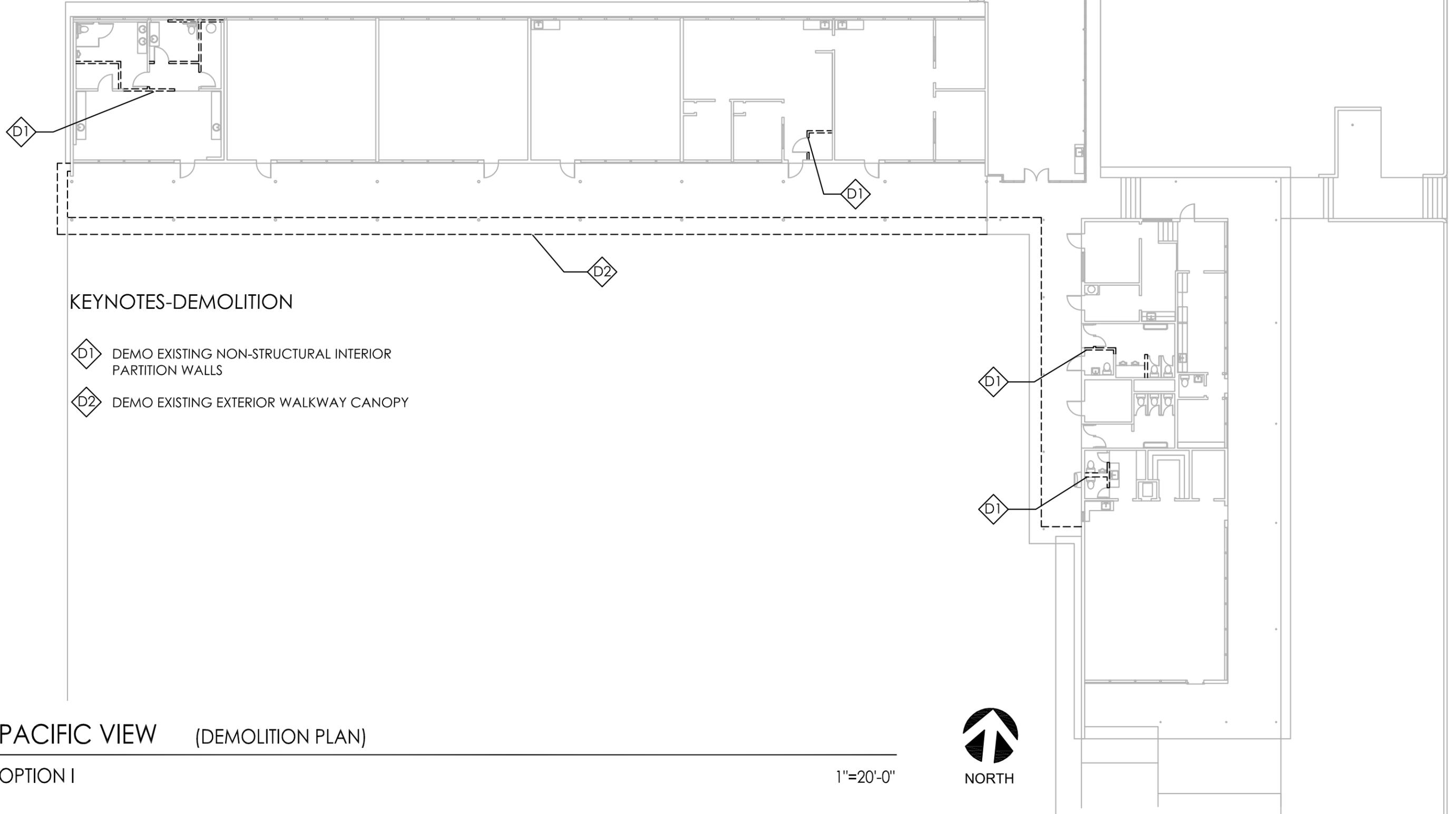
1"=20'-0"



NORTH

APPENDIX C

Floor Plans - Structural Scope of Work



KEYNOTES-DEMOLITION

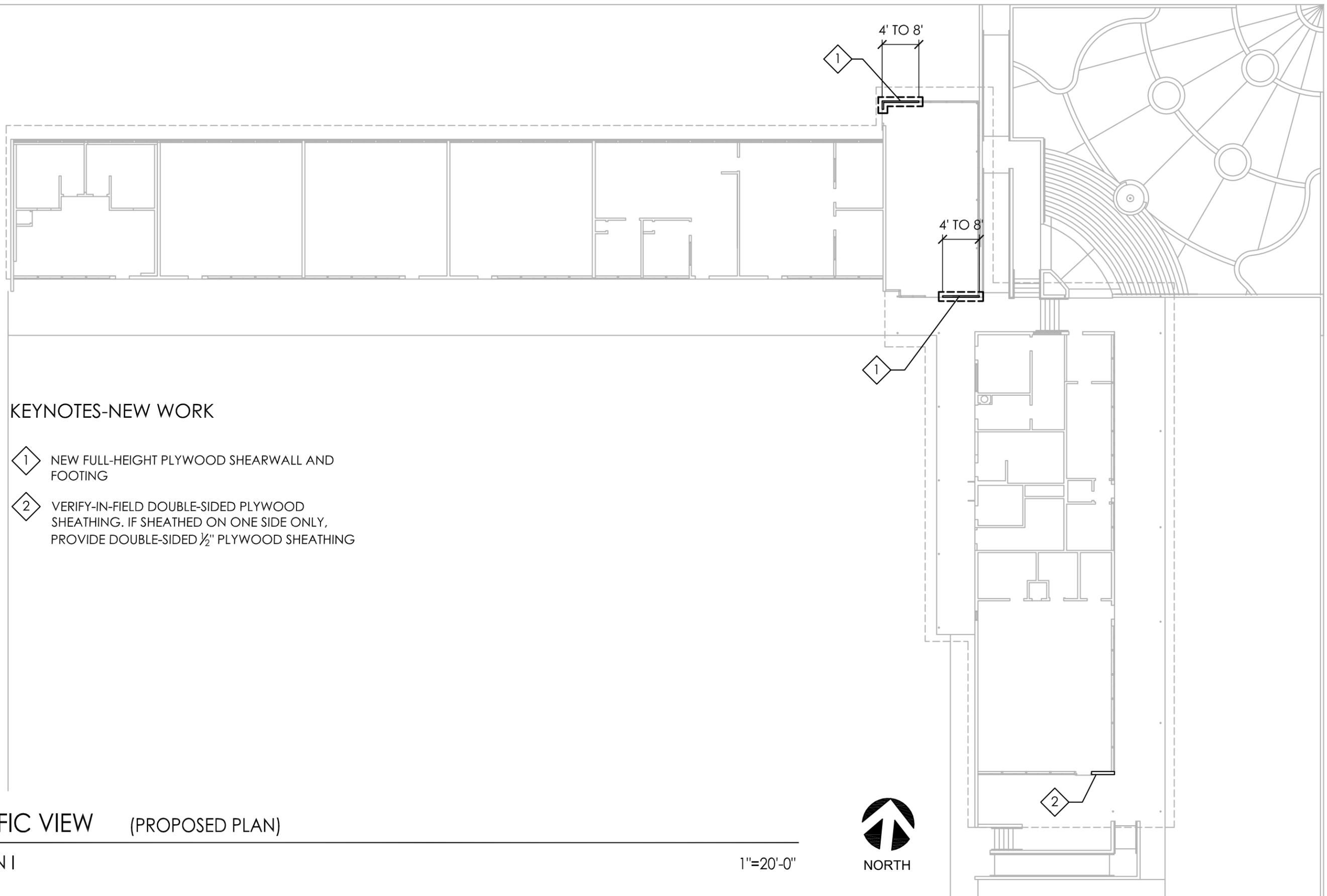
-  DEMO EXISTING NON-STRUCTURAL INTERIOR PARTITION WALLS
-  DEMO EXISTING EXTERIOR WALKWAY CANOPY

PACIFIC VIEW (DEMOLITION PLAN)

OPTION I

1"=20'-0"





KEYNOTES-NEW WORK

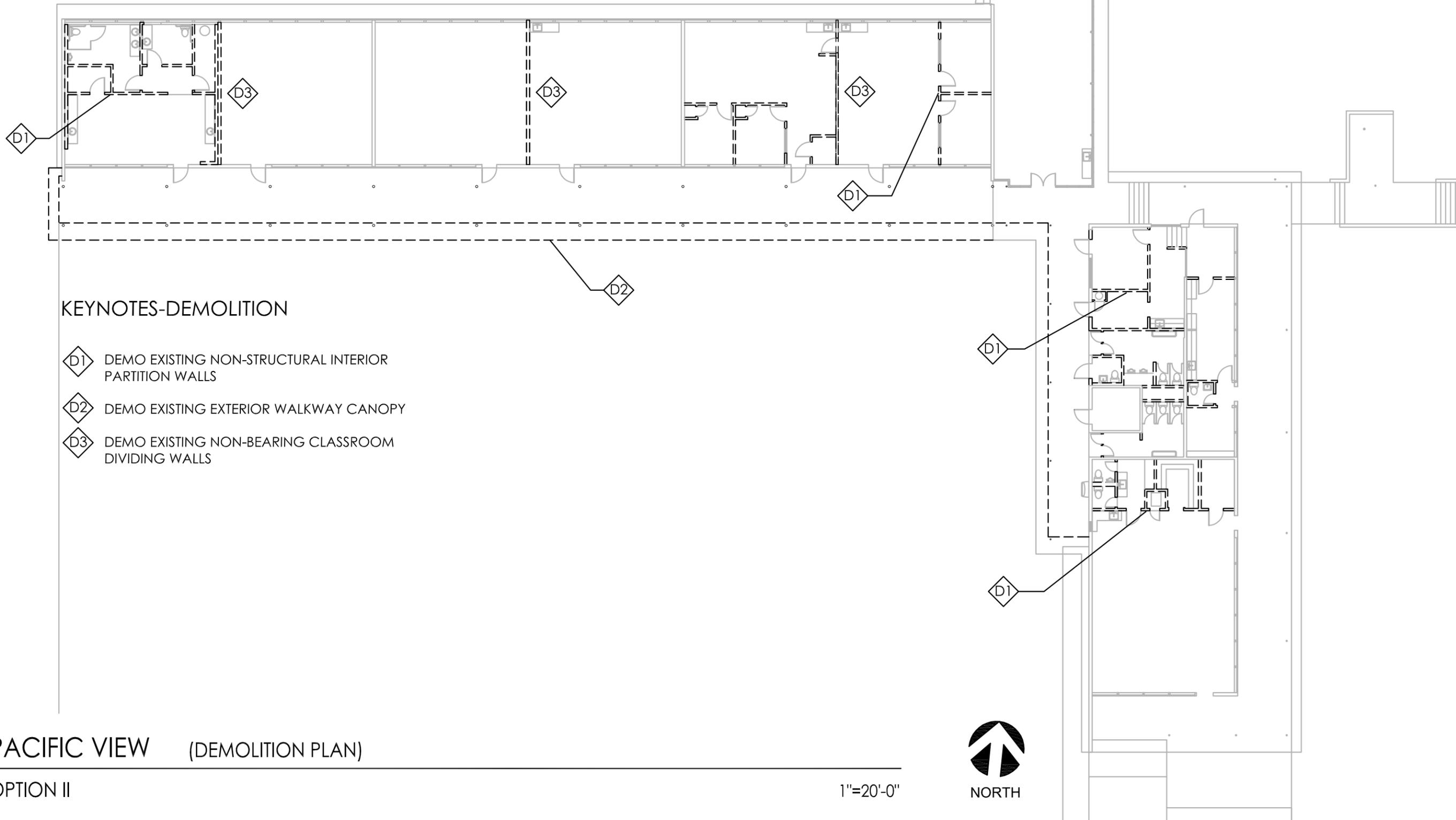
- 1 NEW FULL-HEIGHT PLYWOOD SHEARWALL AND FOOTING
- 2 VERIFY-IN-FIELD DOUBLE-SIDED PLYWOOD SHEATHING. IF SHEATHED ON ONE SIDE ONLY, PROVIDE DOUBLE-SIDED 1/2" PLYWOOD SHEATHING

PACIFIC VIEW (PROPOSED PLAN)

OPTION I

1"=20'-0"





KEYNOTES-DEMOLITION

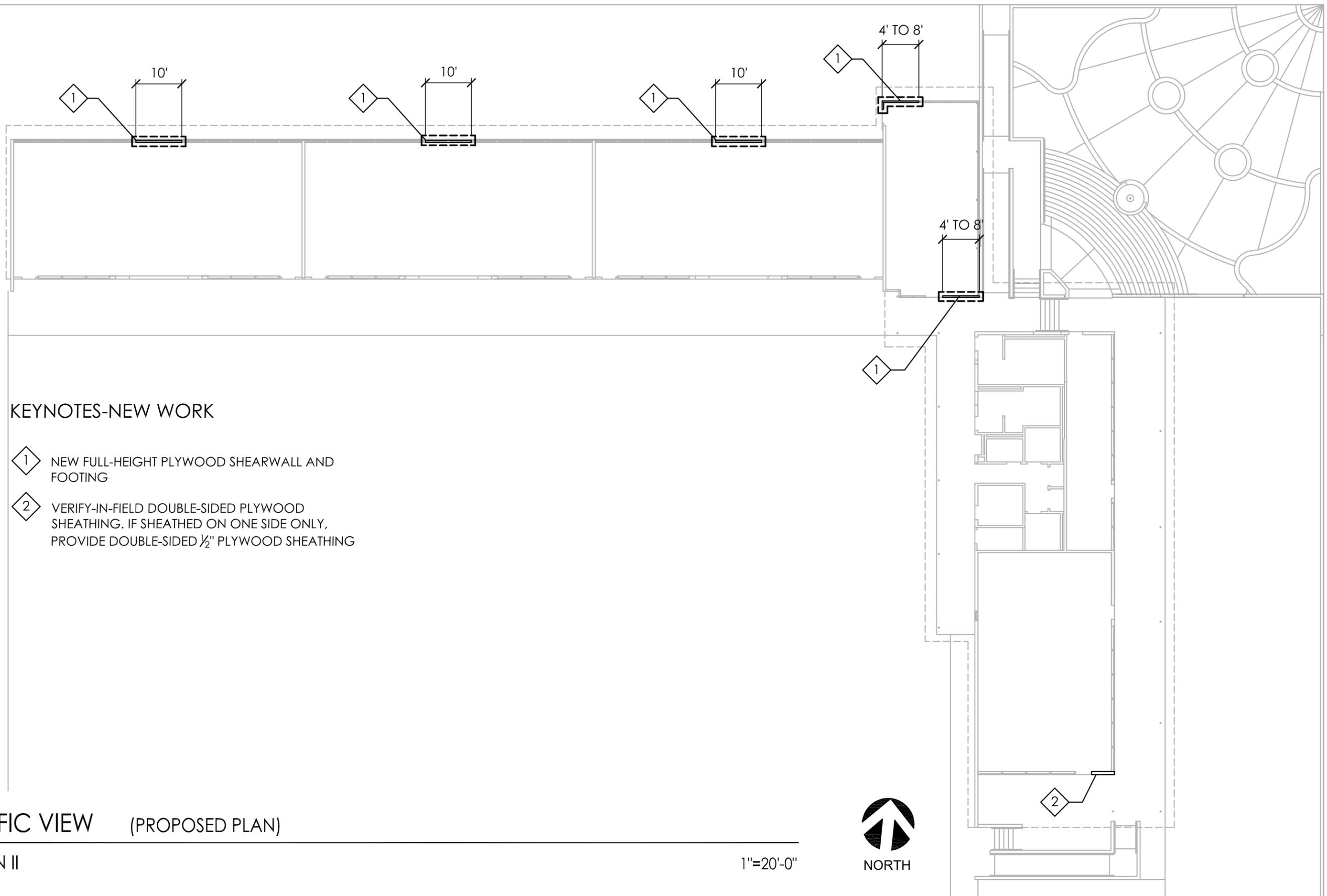
-  DEMO EXISTING NON-STRUCTURAL INTERIOR PARTITION WALLS
-  DEMO EXISTING EXTERIOR WALKWAY CANOPY
-  DEMO EXISTING NON-BEARING CLASSROOM DIVIDING WALLS

PACIFIC VIEW (DEMOLITION PLAN)

OPTION II

1"=20'-0"





KEYNOTES-NEW WORK

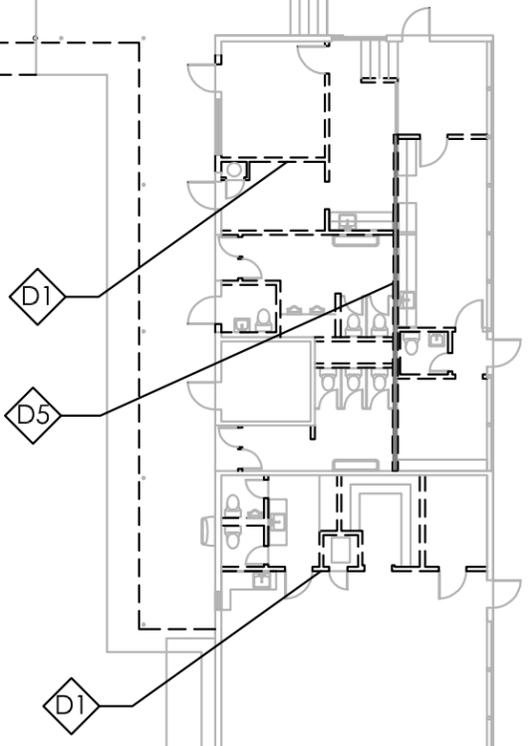
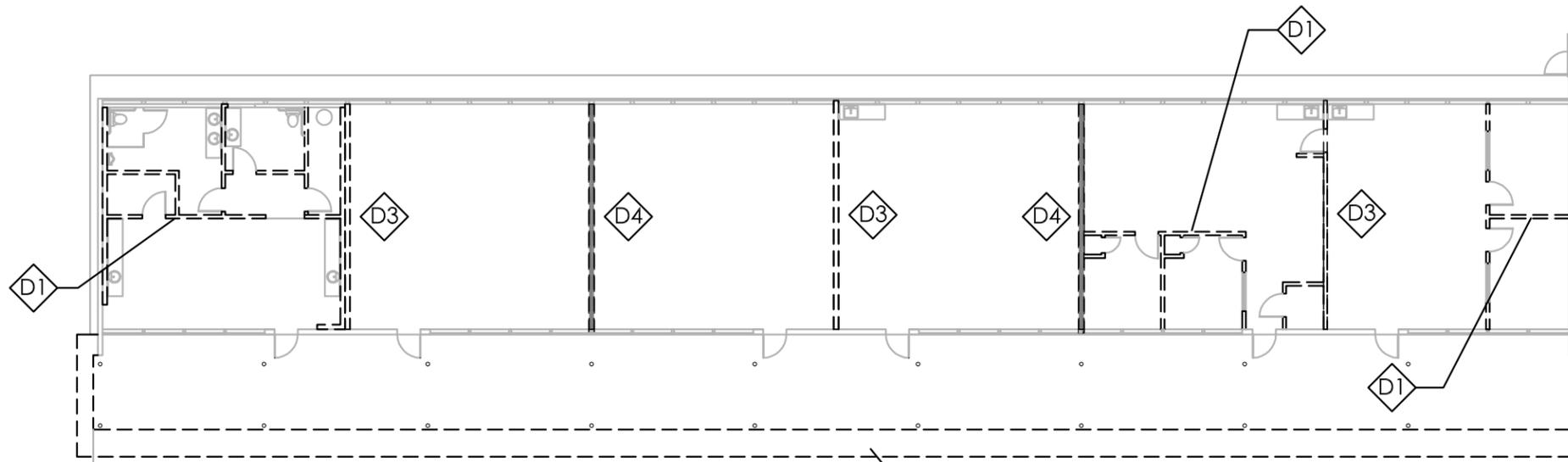
- 1 NEW FULL-HEIGHT PLYWOOD SHEARWALL AND FOOTING
- 2 VERIFY-IN-FIELD DOUBLE-SIDED PLYWOOD SHEATHING. IF SHEATHED ON ONE SIDE ONLY, PROVIDE DOUBLE-SIDED 1/2" PLYWOOD SHEATHING

PACIFIC VIEW (PROPOSED PLAN)

OPTION II

1"=20'-0"





KEYNOTES-DEMOLITION

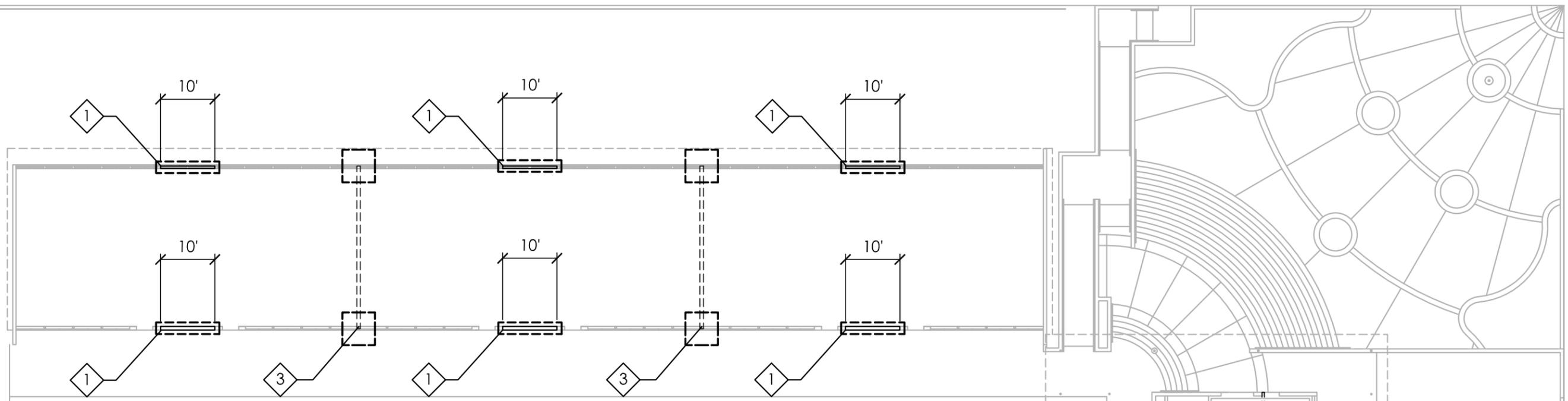
-  DEMO EXISTING NON-STRUCTURAL INTERIOR PARTITION WALLS
-  DEMO EXISTING EXTERIOR WALKWAY CANOPY
-  DEMO EXISTING CLASSROOM DIVIDING WALLS
-  DEMO EXISTING INTERIOR SHEARWALL
-  DEMO EXISTING INTERIOR BEARING/SHEAR WALL. PROVIDE TEMPORARY SHORING OF ROOF FRAMING

PACIFIC VIEW (DEMOLITION PLAN)

OPTION III

1"=20'-0"





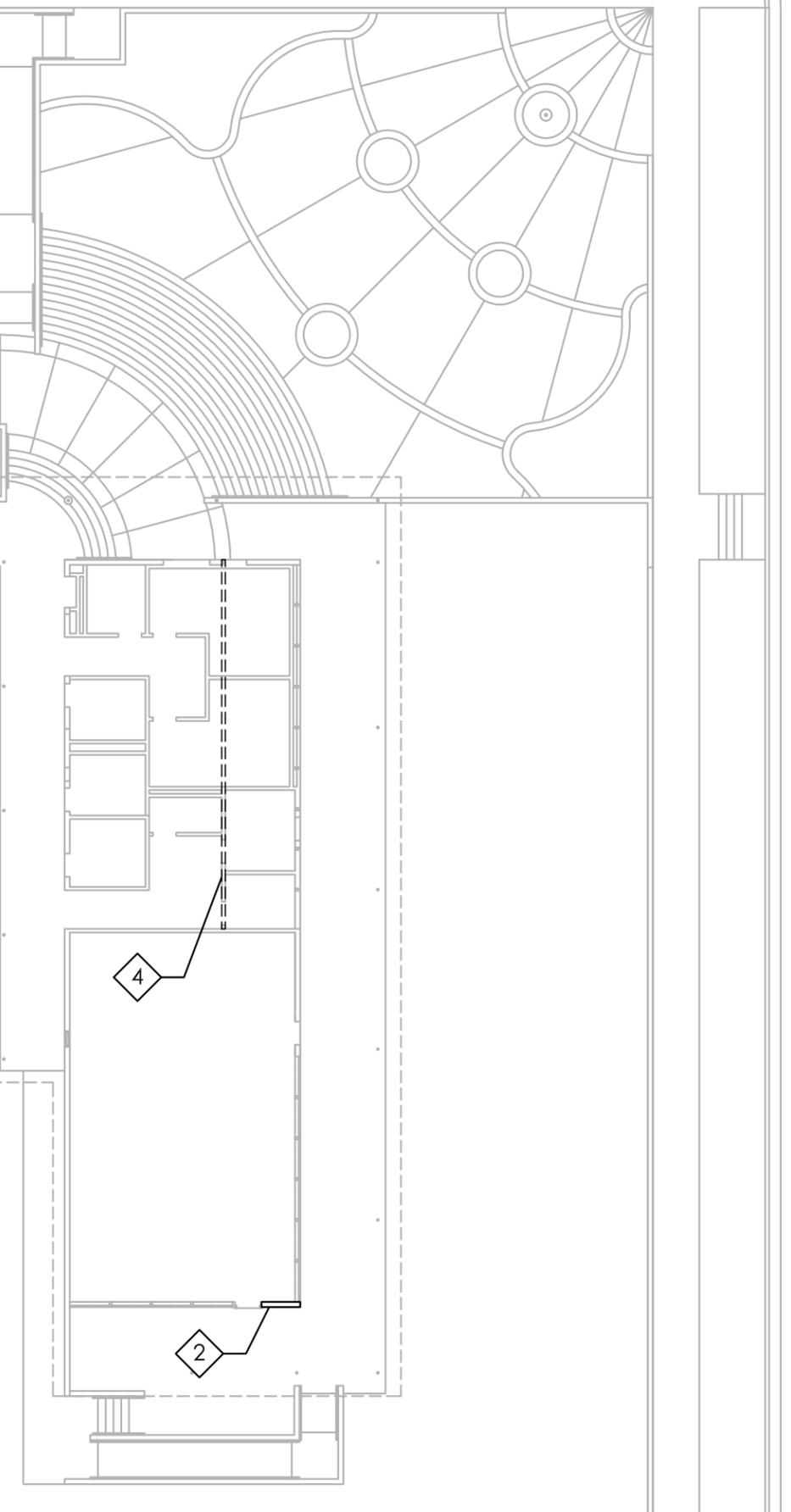
KEYNOTES-NEW WORK

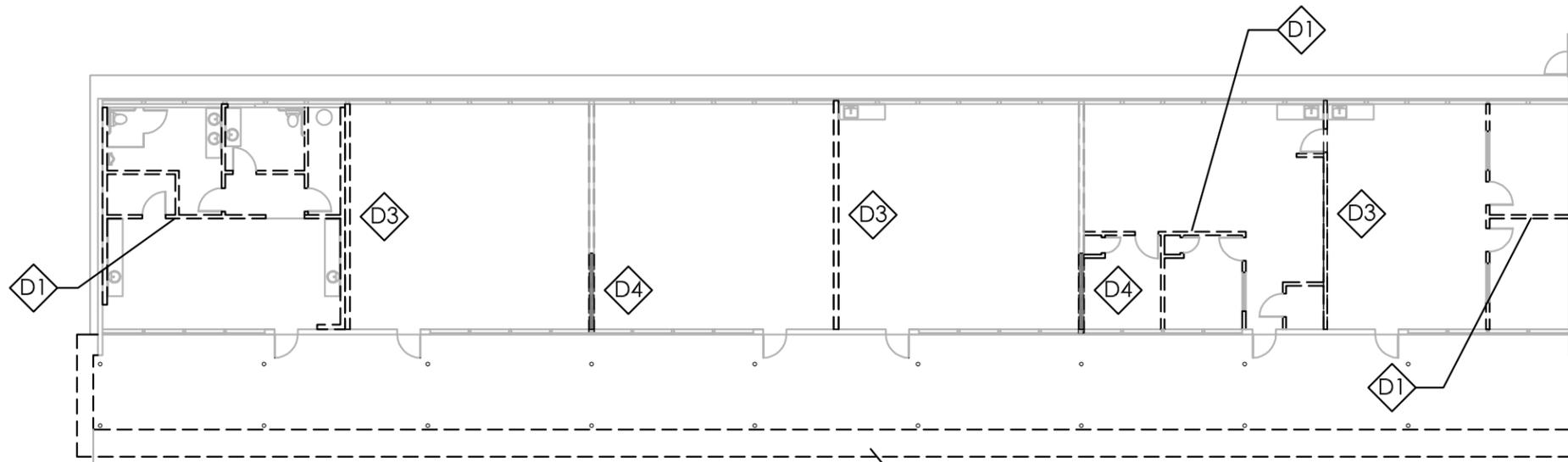
- 1 NEW FULL-HEIGHT PLYWOOD SHEARWALL AND FOOTING
- 2 VERIFY-IN-FIELD DOUBLE-SIDED PLYWOOD SHEATHING. IF SHEATHED ON ONE SIDE ONLY, PROVIDE DOUBLE-SIDED 1/2" PLYWOOD SHEATHING
- 3 WHERE ENTIRE EXISTING SHEAR WALL IS REMOVED, PROVIDE NEW BRACED FRAME/PROPRIETARY MOMENT FRAME AND NEW SPREAD FOOTINGS
- 4 RETROFIT EXISTING SHEAR WALLS AND PROVIDE NEW BEAMS/POSTS TO SUPPORT EXISTING FRAMING AT DEMOED BEARING/SHEAR WALL

PACIFIC VIEW (PROPOSED PLAN)

OPTION III

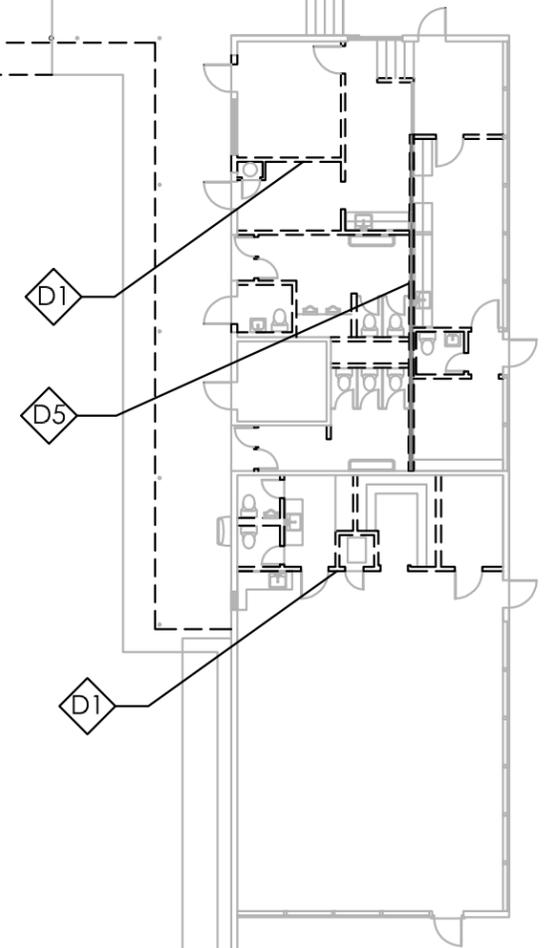
1"=20'-0"





KEYNOTES-DEMOLITION (ALTERNATE)

-  DEMO EXISTING NON-STRUCTURAL INTERIOR PARTITION WALLS
-  DEMO EXISTING EXTERIOR WALKWAY CANOPY
-  DEMO EXISTING CLASSROOM DIVIDING WALLS
-  DEMO PORTION OF EXISTING INTERIOR SHEARWALL
-  DEMO EXISTING INTERIOR BEARING/SHEAR WALL. PROVIDE TEMPORARY SHORING OF ROOF FRAMING

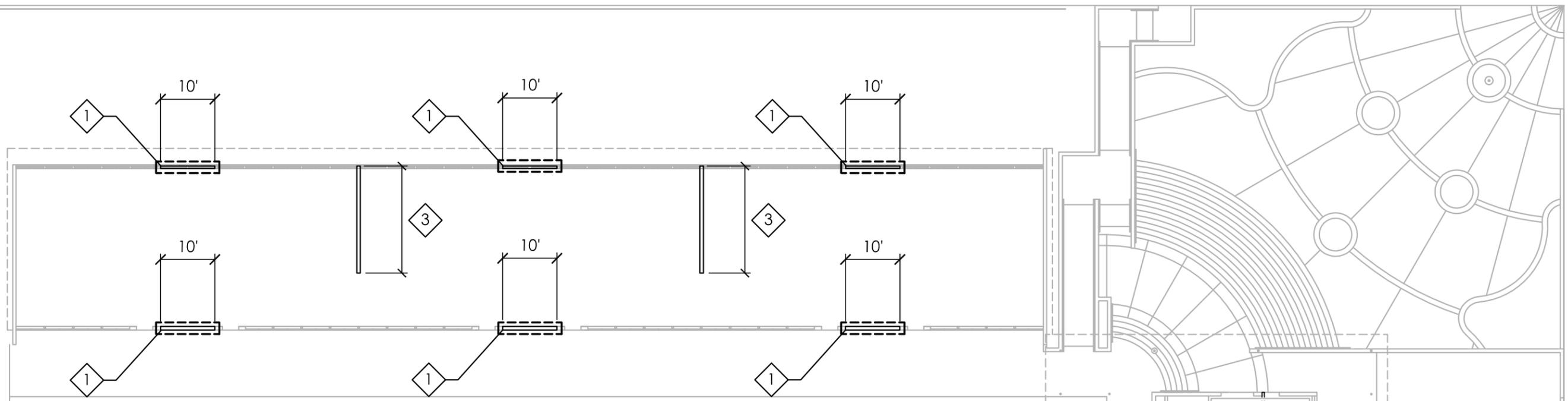


PACIFIC VIEW (DEMOLITION PLAN)

OPTION III - STRUCTURAL ALTERNATE

1"=20'-0"





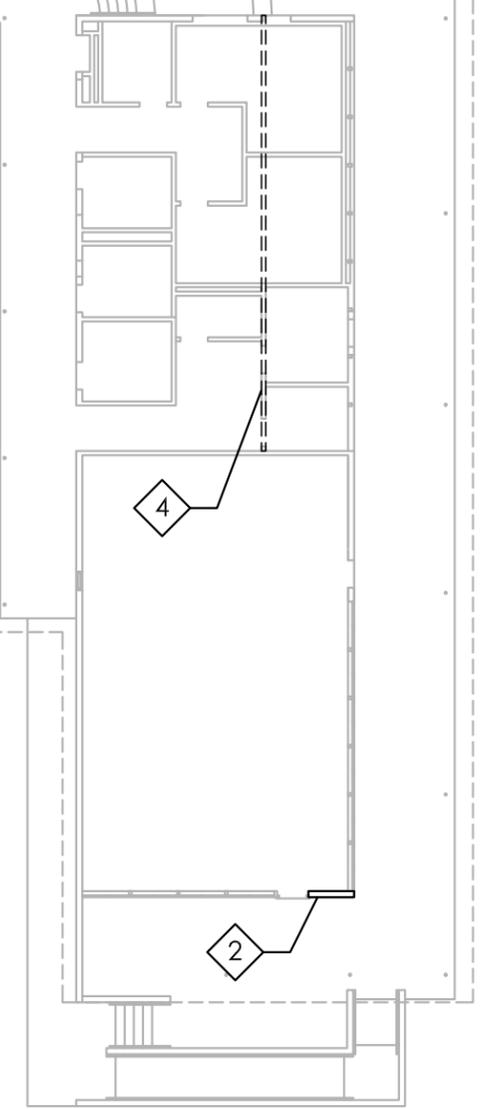
KEYNOTES-NEW WORK (ALTERNATE)

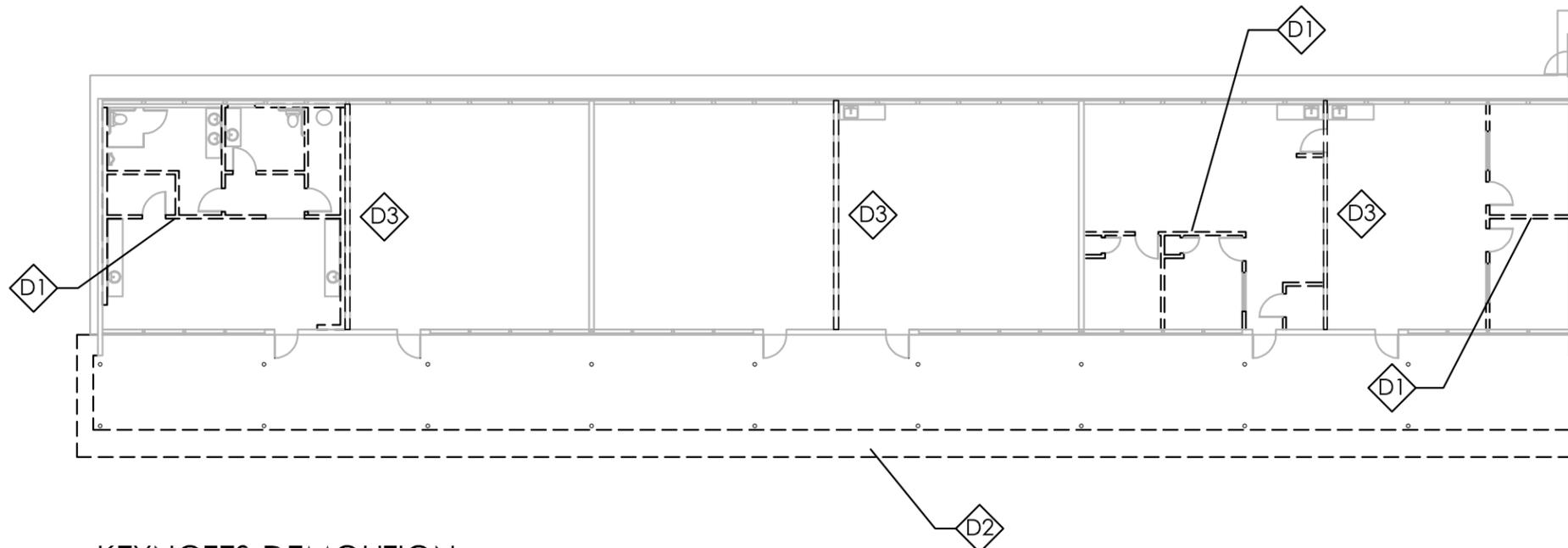
- 1 NEW FULL-HEIGHT PLYWOOD SHEARWALL AND FOOTING
- 2 VERIFY-IN-FIELD DOUBLE-SIDED PLYWOOD SHEATHING. IF SHEATHED ON ONE SIDE ONLY, PROVIDE DOUBLE-SIDED 1/2" PLYWOOD SHEATHING
- 3 RETROFIT REMAINING PORTION OF EXISTING SHEAR WALL WITH NEW 1/2" PLYWOOD SHEATHING, NEW HOLDOWNS
- 4 RETROFIT EXISTING SHEAR WALLS AND PROVIDE NEW BEAMS/POSTS TO SUPPORT EXISTING FRAMING AT DEMOED BEARING/SHEAR WALL

PACIFIC VIEW (PROPOSED PLAN)

OPTION III - STRUCTURAL ALTERNATE

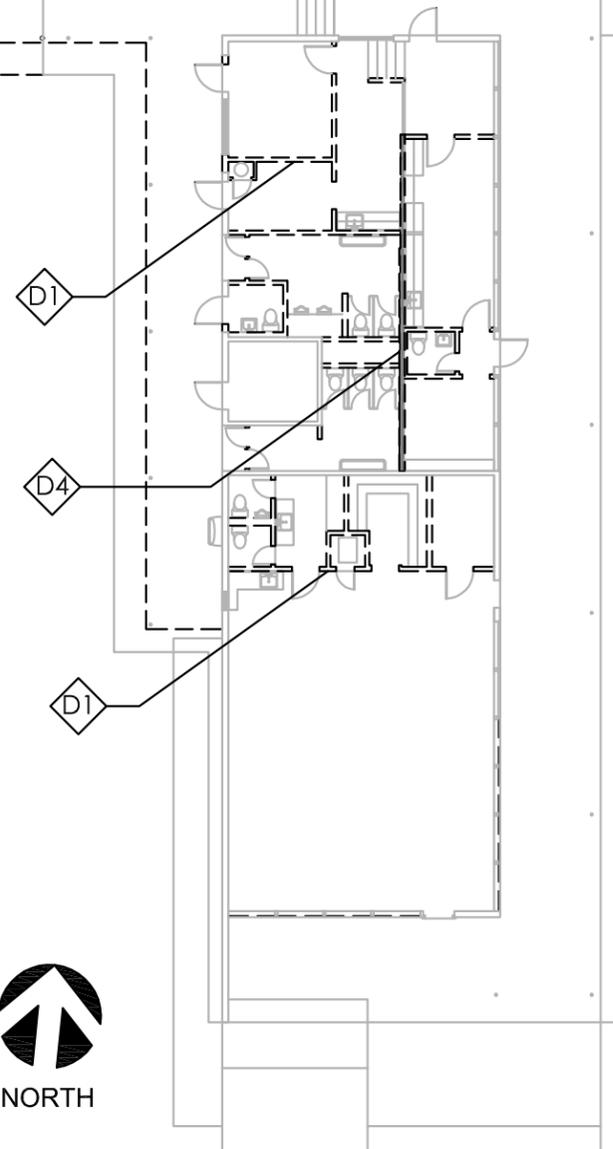
1"=20'-0"





KEYNOTES-DEMOLITION

-  DEMO EXISTING NON-STRUCTURAL INTERIOR PARTITION WALLS
-  DEMO EXISTING EXTERIOR WALKWAY CANOPY
-  DEMO EXISTING CLASSROOM DIVIDING WALLS
-  DEMO EXISTING INTERIOR BEARING/SHEAR WALL. PROVIDE TEMPORARY SHORING OF ROOF FRAMING

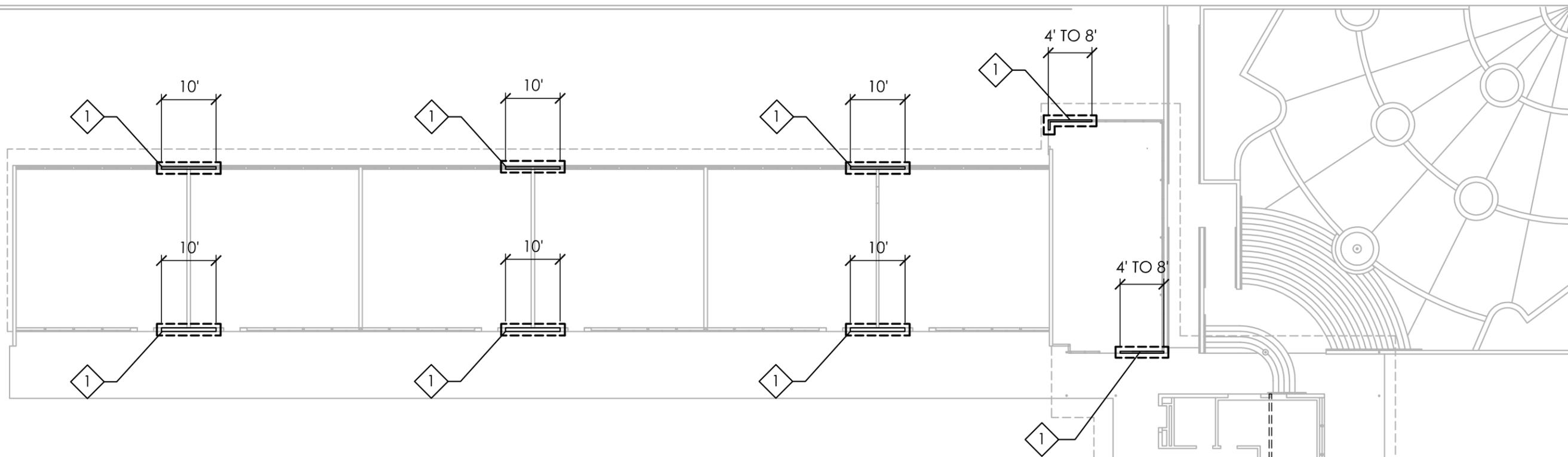


PACIFIC VIEW (DEMOLITION PLAN)

OPTION III-A (TENANT SPACES 1-7 TO REMAIN)

1"=20'-0"





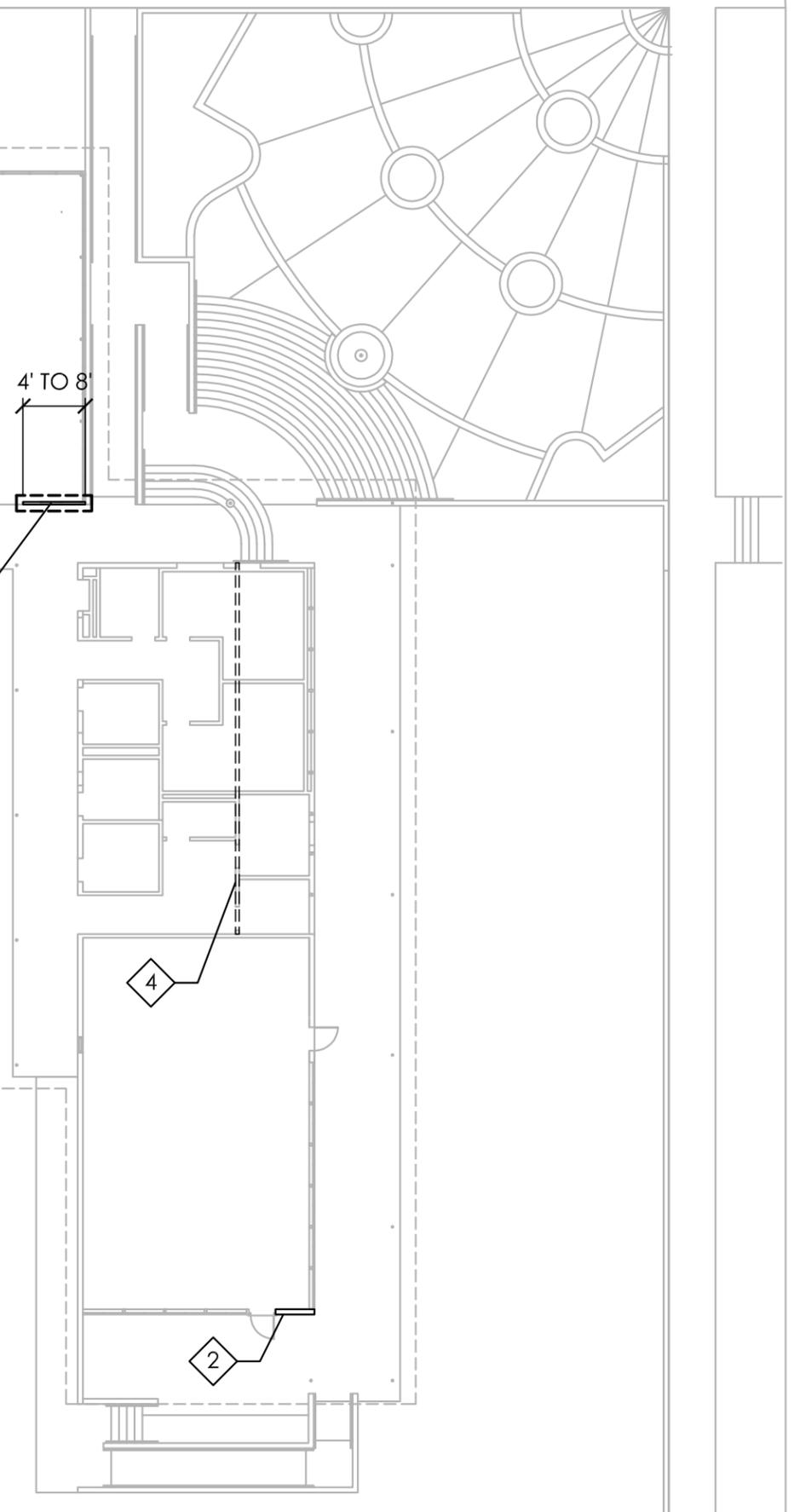
KEYNOTES-NEW WORK

- 1 NEW FULL-HEIGHT PLYWOOD SHEARWALL AND FOOTING
- 2 VERIFY-IN-FIELD DOUBLE-SIDED PLYWOOD SHEATHING. IF SHEATHED ON ONE SIDE ONLY, PROVIDE DOUBLE-SIDED ½" PLYWOOD SHEATHING
- 3 WHERE ENTIRE EXISTING SHEAR WALL IS REMOVED, PROVIDE NEW BRACED FRAME/PROPRIETARY MOMENT FRAME AND NEW SPREAD FOOTINGS
- 4 RETROFIT EXISTING SHEAR WALLS AND PROVIDE NEW BEAMS/POSTS TO SUPPORT EXISTING FRAMING AT DEMOED BEARING/SHEAR WALL

PACIFIC VIEW (PROPOSED PLAN)

OPTION III-A (TENANT SPACES 1-7 TO REMAIN)

1"=20'-0"

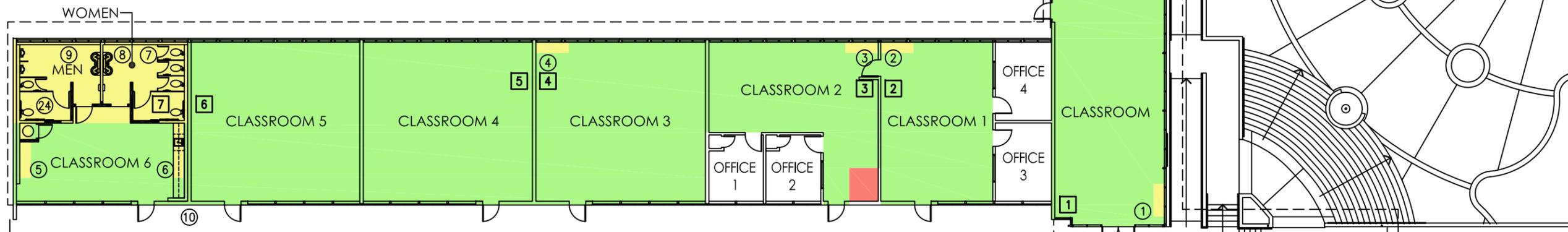


APPENDIX D

Floor Plans - Mechanical Scope of Work

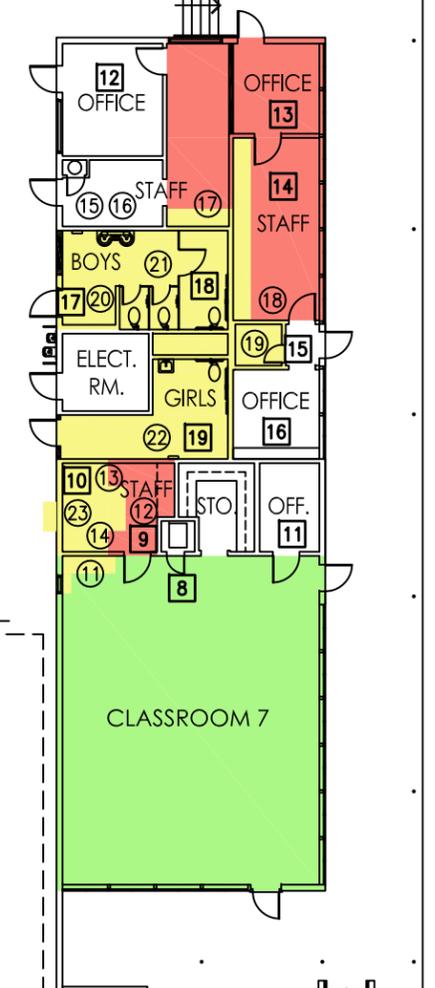
E STREET

THIRD STREET



LEGEND

- EXISTING SPACE TO REMAIN
- EXISTING CLASSROOM SPACE TO BE CONVERTED INTO TENANT AREA
- EXISTING OFFICE SPACE TO BE CONVERTED INTO TENANT AREA
- EXISTING RESTROOM, CLASSROOM SINKS, TO BE UPGRADED OR RELOCATED
- HEATING AND VENTILATING KEYNOTE
- PLUMBING KEYNOTE
(SEE NARRATIVE FOR KEYNOTE DESCRIPTION)

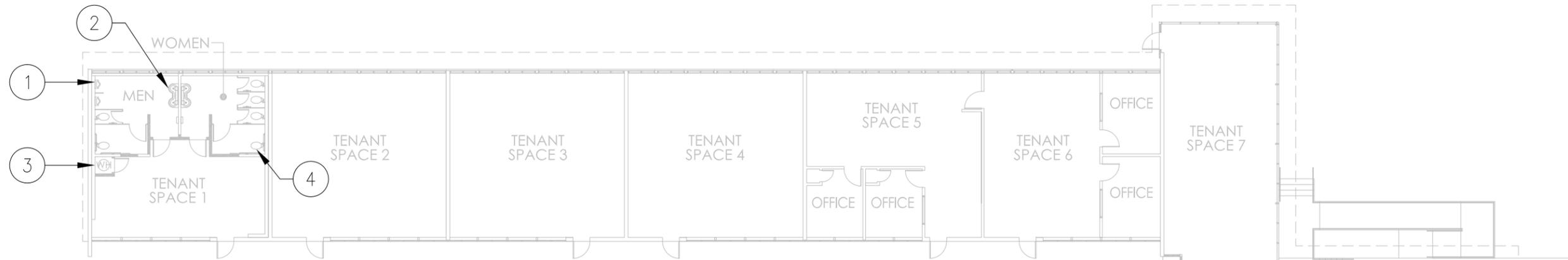


PACIFIC VIEW (DEMOLITION PLAN)

OPTION I

1"=20'-0"

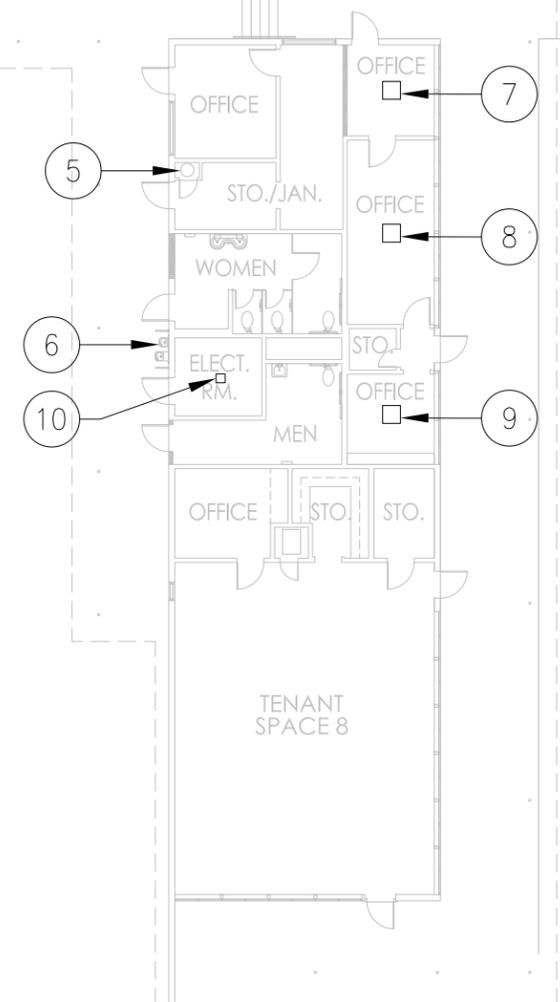




#

KEY NOTES

- | | |
|--|--|
| <p>1 PROVIDE DRAIN, WASTE, AND VENT PIPING TO THE NEW URINALS. ALSO PROVIDE COLD WATER TO THE URINALS.</p> <p>2 PROVIDE ONE DUAL BOWL GANG LAVATORY. ALSO PROVIDE DRAIN, WASTE, VENT, COLD AND HOT WATER PIPING</p> <p>3 NEW 30 GALLON HOT WATER HEATER, FLUE TO ROOF, SEISMIC STRAPPING, NATURAL GAS PIPING, APPLIANCE CONNECTOR, AND WATER HEATER STAND TO MOUNT HEATER 18" ABOVE FLOOR LEVEL.</p> <p>4 PROVIDE DRAIN, WASTE, AND VENT PIPING TO THE NEW WATER CLOSETS. ALSO PROVIDE COLD WATER TO THE WATER CLOSETS.</p> <p>5 NEW 30 GALLON HOT WATER HEATER, FLUE TO ROOF, SEISMIC STRAPPING, NATURAL GAS PIPING, APPLIANCE CONNECTOR, AND WATER HEATER STAND TO MOUNT HEATER 18" ABOVE FLOOR LEVEL.</p> | <p>6 DRINKING FOUNTAINS ADA AND STANDARD HEIGHT.</p> <p>7 PROVIDE A NEW CEILING MOUNTED 500 WATT ELECTRIC HEATER WITH FAN AND THERMOSTAT.</p> <p>8 PROVIDE A NEW CEILING MOUNTED 1000 WATT ELECTRIC HEATER WITH FAN AND THERMOSTAT.</p> <p>9 PROVIDE A NEW CEILING MOUNTED 500 WATT ELECTRIC HEATER WITH FAN AND THERMOSTAT.</p> <p>10 150 CFM EXHAUST FAN</p> |
|--|--|

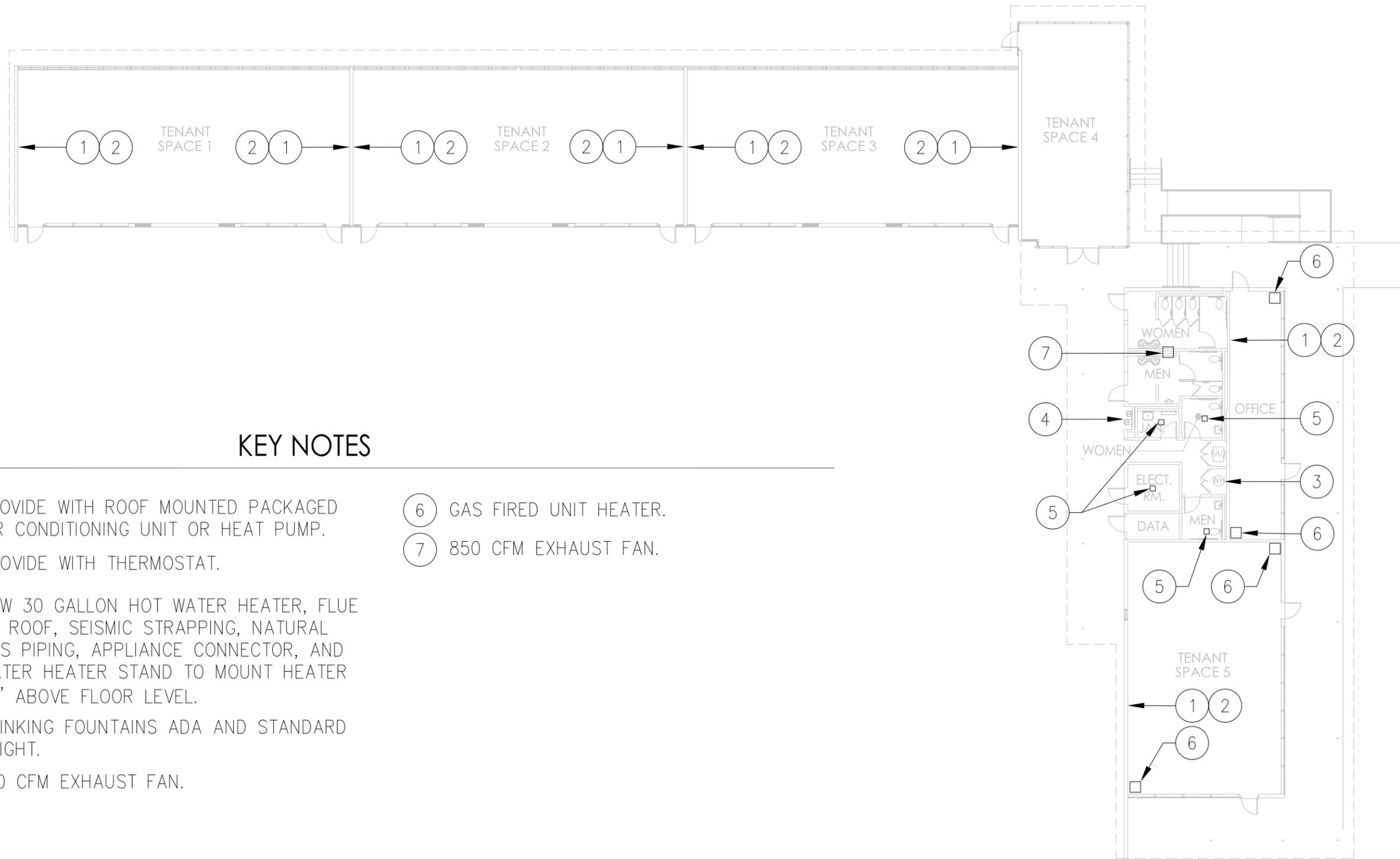


PACIFIC VIEW (NEW FLOOR PLAN)

OPTION I

1"=20'-0"





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KEY NOTES

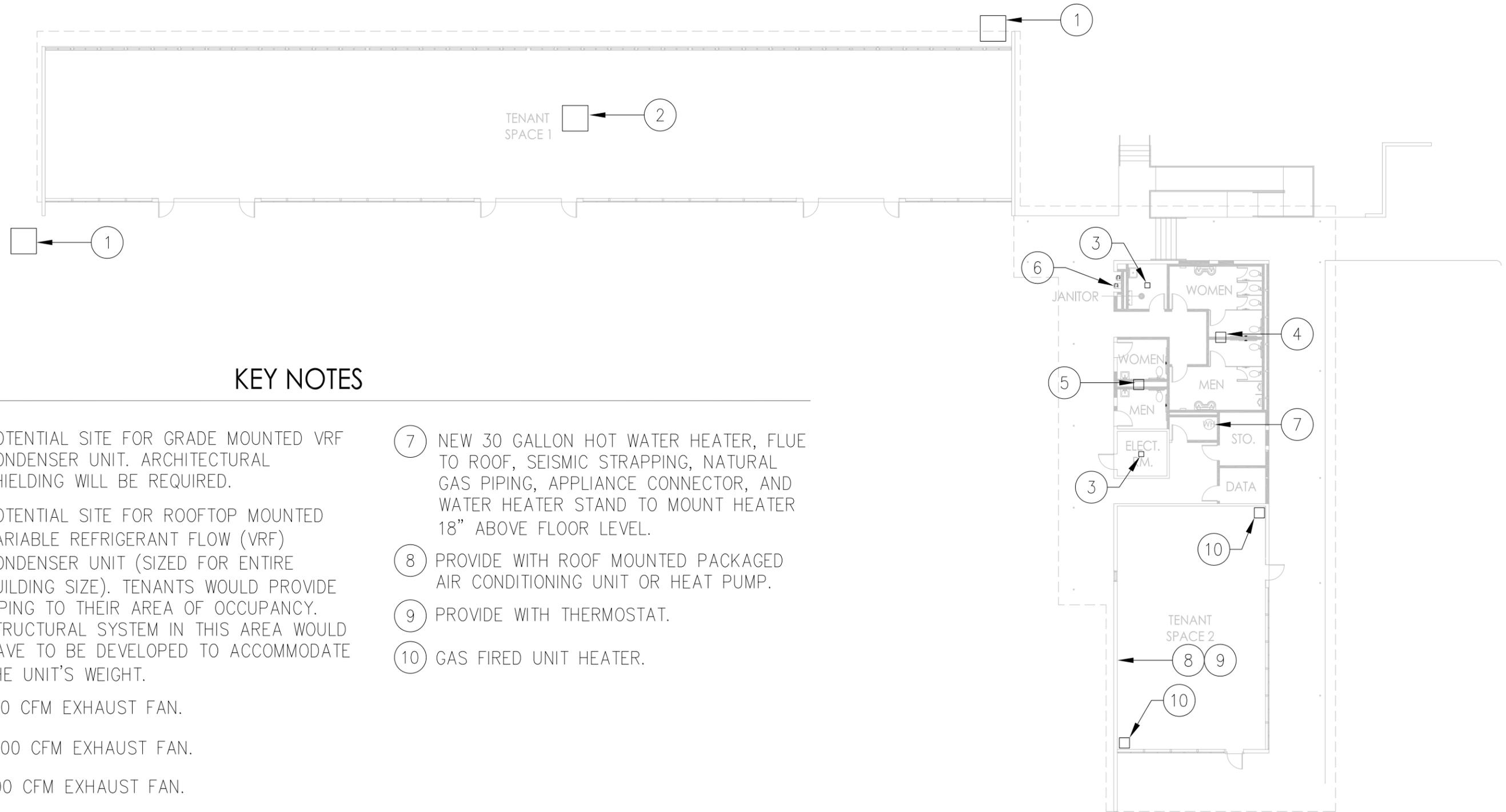
- | | |
|---|--------------------------|
| ① PROVIDE WITH ROOF MOUNTED PACKAGED AIR CONDITIONING UNIT OR HEAT PUMP. | ⑥ GAS FIRED UNIT HEATER. |
| ② PROVIDE WITH THERMOSTAT. | ⑦ 850 CFM EXHAUST FAN. |
| ③ NEW 30 GALLON HOT WATER HEATER, FLUE TO ROOF, SEISMIC STRAPPING, NATURAL GAS PIPING, APPLIANCE CONNECTOR, AND WATER HEATER STAND TO MOUNT HEATER 18" ABOVE FLOOR LEVEL. | |
| ④ DRINKING FOUNTAINS ADA AND STANDARD HEIGHT. | |
| ⑤ 150 CFM EXHAUST FAN. | |

PACIFIC VIEW (NEW FLOOR PLAN)

OPTION II

1"=20'-0"





KEY NOTES

- ① POTENTIAL SITE FOR GRADE MOUNTED VRF CONDENSER UNIT. ARCHITECTURAL SHIELDING WILL BE REQUIRED.
- ② POTENTIAL SITE FOR ROOFTOP MOUNTED VARIABLE REFRIGERANT FLOW (VRF) CONDENSER UNIT (SIZED FOR ENTIRE BUILDING SIZE). TENANTS WOULD PROVIDE PIPING TO THEIR AREA OF OCCUPANCY. STRUCTURAL SYSTEM IN THIS AREA WOULD HAVE TO BE DEVELOPED TO ACCOMMODATE THE UNIT'S WEIGHT.
- ③ 150 CFM EXHAUST FAN.
- ④ 1000 CFM EXHAUST FAN.
- ⑤ 300 CFM EXHAUST FAN.
- ⑥ DRINKING FOUNTAINS
ADA AND STANDARD HEIGHT
- ⑦ NEW 30 GALLON HOT WATER HEATER, FLUE TO ROOF, SEISMIC STRAPPING, NATURAL GAS PIPING, APPLIANCE CONNECTOR, AND WATER HEATER STAND TO MOUNT HEATER 18" ABOVE FLOOR LEVEL.
- ⑧ PROVIDE WITH ROOF MOUNTED PACKAGED AIR CONDITIONING UNIT OR HEAT PUMP.
- ⑨ PROVIDE WITH THERMOSTAT.
- ⑩ GAS FIRED UNIT HEATER.

PACIFIC VIEW (NEW FLOOR PLAN)

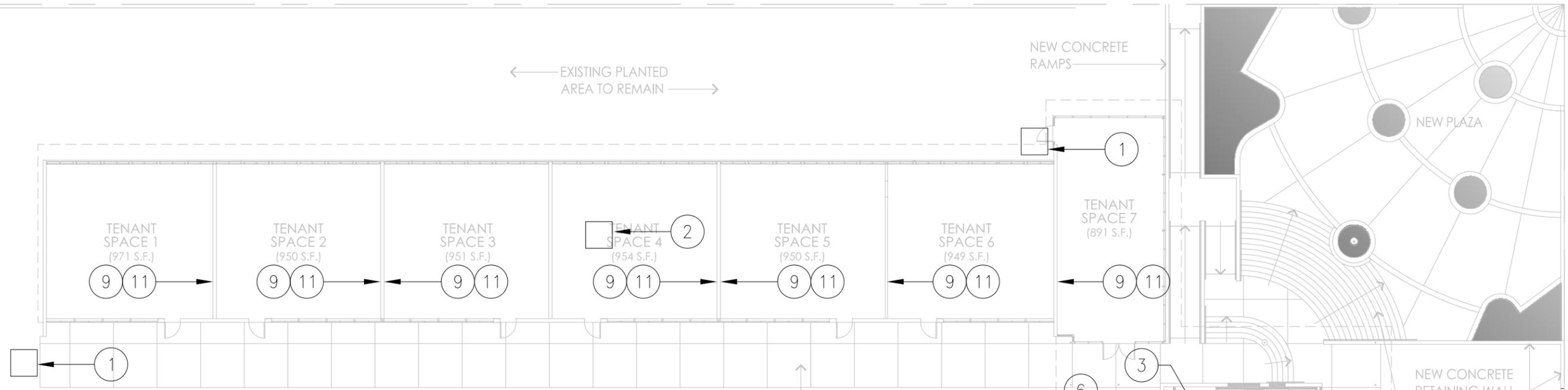
OPTION III

1"=20'-0"



E STREET

THIRD STREET



#

KEY NOTES

NEW CONCRETE PAVING

- ① POTENTIAL SITE FOR GRADE MOUNTED VRF CONDENSER UNIT. ARCHITECTURAL SHIELDING WILL BE REQUIRED.
- ② POTENTIAL SITE FOR ROOFTOP MOUNTED VARIABLE REFRIGERANT FLOW (VRF) CONDENSER UNIT (SIZED FOR ENTIRE BUILDING SIZE). TENANTS WOULD PROVIDE PIPING TO THEIR AREA OF OCCUPANCY. STRUCTURAL SYSTEM IN THIS AREA WOULD HAVE TO BE DEVELOPED TO ACCOMMODATE THE UNIT'S WEIGHT.
- ③ 150 CFM EXHAUST FAN.
- ④ 1000 CFM EXHAUST FAN.
- ⑤ 300 CFM EXHAUST FAN.
- ⑥ DRINKING FOUNTAINS ADA AND STANDARD HEIGHT
- ⑦ NEW 30 GALLON HOT WATER HEATER, FLUE TO ROOF, SEISMIC STRAPPING, NATURAL GAS PIPING, APPLIANCE CONNECTOR, AND WATER HEATER STAND TO MOUNT HEATER 18" ABOVE FLOOR LEVEL.
- ⑧ PROVIDE WITH ROOF MOUNTED PACKAGED AIR CONDITIONING UNIT OR HEAT PUMP.
- ⑨ PROVIDE WITH THERMOSTAT.
- ⑩ GAS FIRED UNIT HEATER.
- ⑪ PROVIDE WITH VFC PER TENANT SPACE.

EXISTING CONCRETE PAVING TO REMAIN

EXISTING PLANTED AREA TO REMAIN

NEW CONCRETE PAVING

NEW CONCRETE RAMP & STAIRS

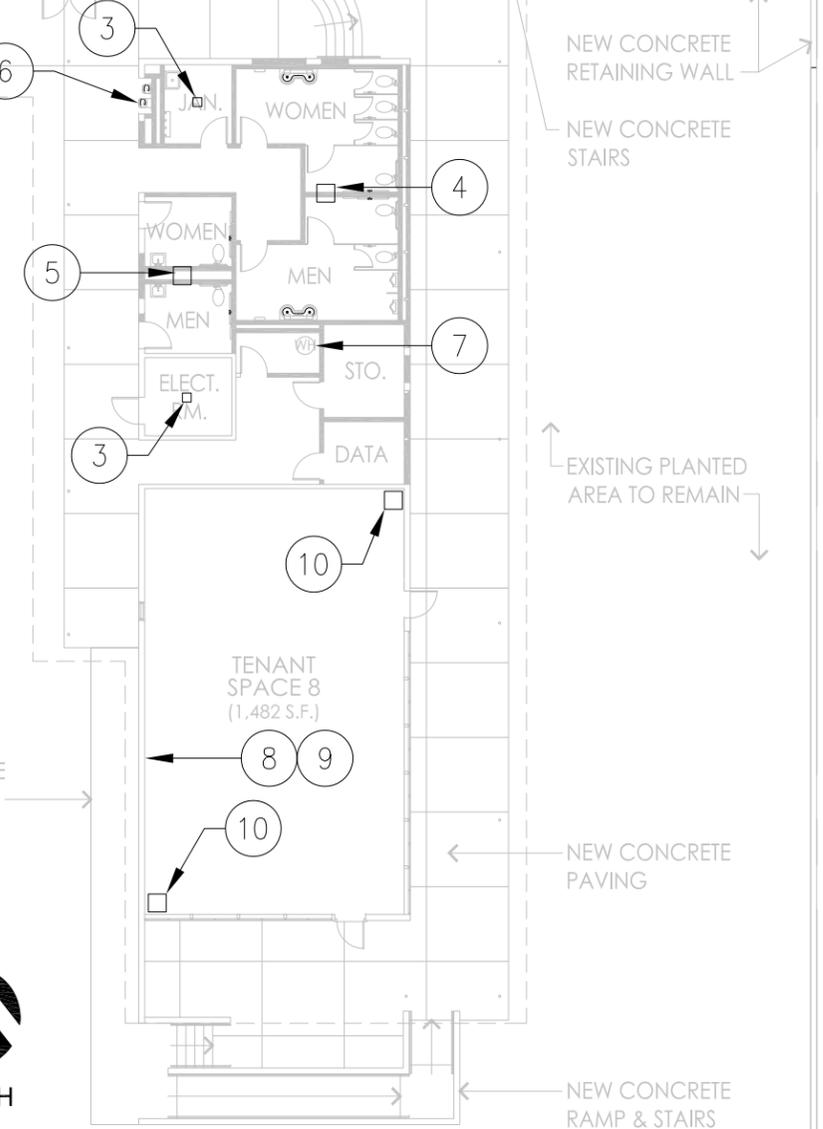
PACIFIC VIEW (PROPOSED PLAN)

OPTION III-A (TENANT SPACES 1-7 TO REMAIN)

1"=20'-0"



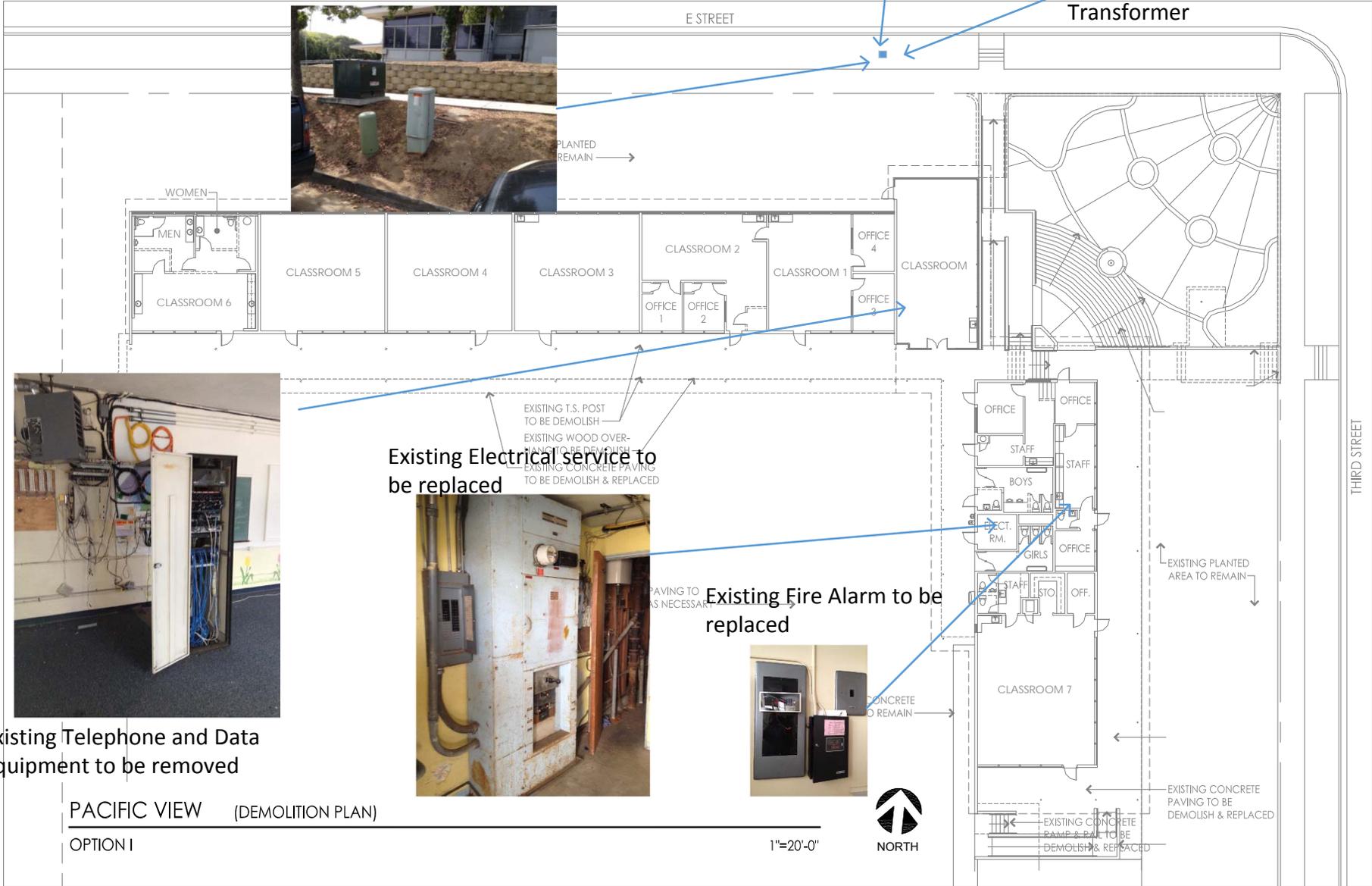
NORTH



APPENDIX E

Floor Plans - Electrical Scope of Work

Existing Telephone Co.
Service pedestal
Existing SDG&E pad Mounted
Transformer



Existing Telephone and Data equipment to be removed

Existing Electrical service to be replaced

Existing Fire Alarm to be replaced

PACIFIC VIEW (DEMOLITION PLAN)
OPTION 1

1"=20'-0"



EXISTING CONCRETE FRAME & FILL TO BE DEMOLISH & REPLACED

EXISTING CONCRETE PAVING TO BE DEMOLISH & REPLACED

EXISTING PLANTED AREA TO REMAIN

PAVING TO AS NECESSARY

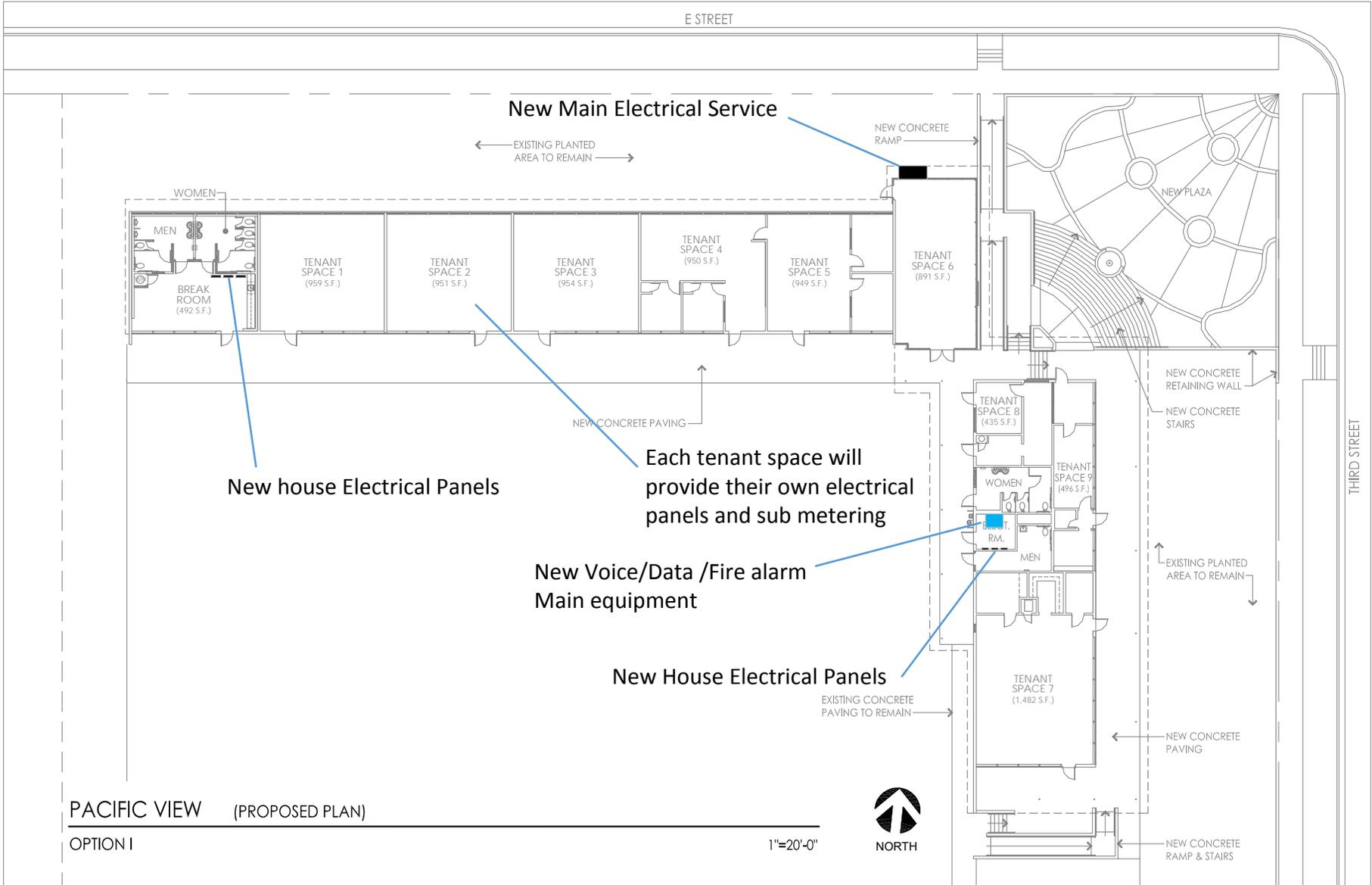
CONCRETE TO REMAIN

EXISTING T.S. POST TO BE DEMOLISH
EXISTING WOOD OVER-PAINT TO BE DEMOLISH
EXISTING CONCRETE PAVING TO BE DEMOLISH & REPLACED

PLANTED REMAIN

E STREET

THIRD STREET



New Main Electrical Service

← EXISTING PLANTED AREA TO REMAIN →

NEW CONCRETE RAMP

NEW PLAZA

WOMEN

MEN

BREAK ROOM (492 S.F.)

TENANT SPACE 1 (959 S.F.)

TENANT SPACE 2 (951 S.F.)

TENANT SPACE 3 (954 S.F.)

TENANT SPACE 4 (950 S.F.)

TENANT SPACE 5 (949 S.F.)

TENANT SPACE 6 (891 S.F.)

New house Electrical Panels

Each tenant space will provide their own electrical panels and sub metering

New Voice/Data /Fire alarm Main equipment

New House Electrical Panels

NEW CONCRETE PAVING

NEW CONCRETE RETAINING WALL

NEW CONCRETE STAIRS

TENANT SPACE 8 (435 S.F.)

WOMEN

TENANT SPACE 9 (496 S.F.)

REST. RM.

MEN

← EXISTING PLANTED AREA TO REMAIN →

EXISTING CONCRETE PAVING TO REMAIN

← NEW CONCRETE PAVING

PACIFIC VIEW (PROPOSED PLAN)

OPTION I

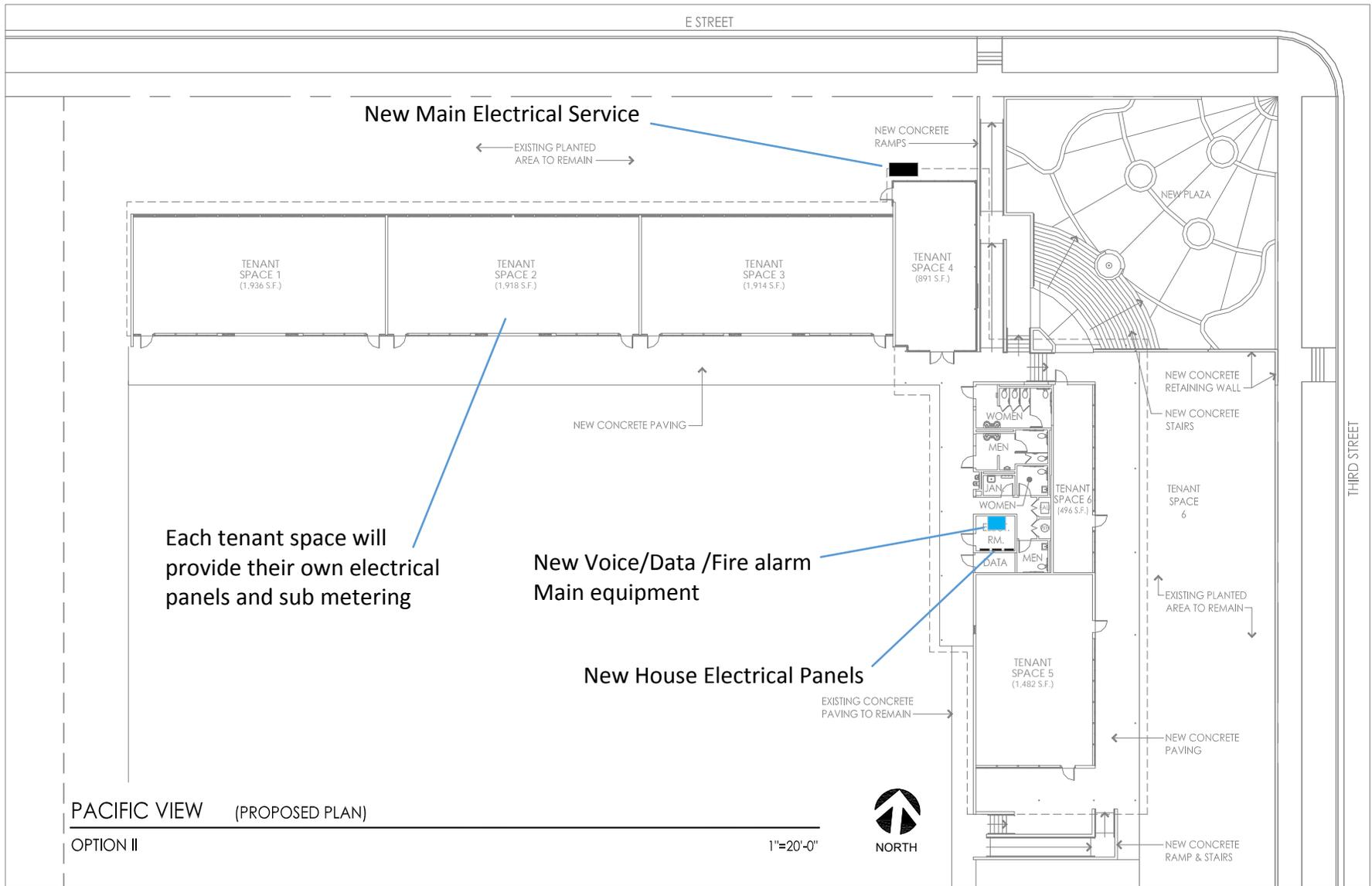
1"=20'-0"



THIRD STREET

E STREET

← NEW CONCRETE RAMP & STAIRS



New Main Electrical Service

← EXISTING PLANTED AREA TO REMAIN →

NEW CONCRETE RAMPS

TENANT SPACE 1
(1,936 S.F.)

TENANT SPACE 2
(1,918 S.F.)

TENANT SPACE 3
(1,914 S.F.)

TENANT SPACE 4
(891 S.F.)

NEW PLAZA

NEW CONCRETE PAVING

NEW CONCRETE RETAINING WALL

NEW CONCRETE STAIRS

TENANT SPACE 6
(1,496 S.F.)

Each tenant space will provide their own electrical panels and sub metering

New Voice/Data /Fire alarm Main equipment

New House Electrical Panels

EXISTING CONCRETE PAVING TO REMAIN

← EXISTING PLANTED AREA TO REMAIN →

TENANT SPACE 5
(1,482 S.F.)

← NEW CONCRETE PAVING

← NEW CONCRETE RAMP & STAIRS

PACIFIC VIEW (PROPOSED PLAN)

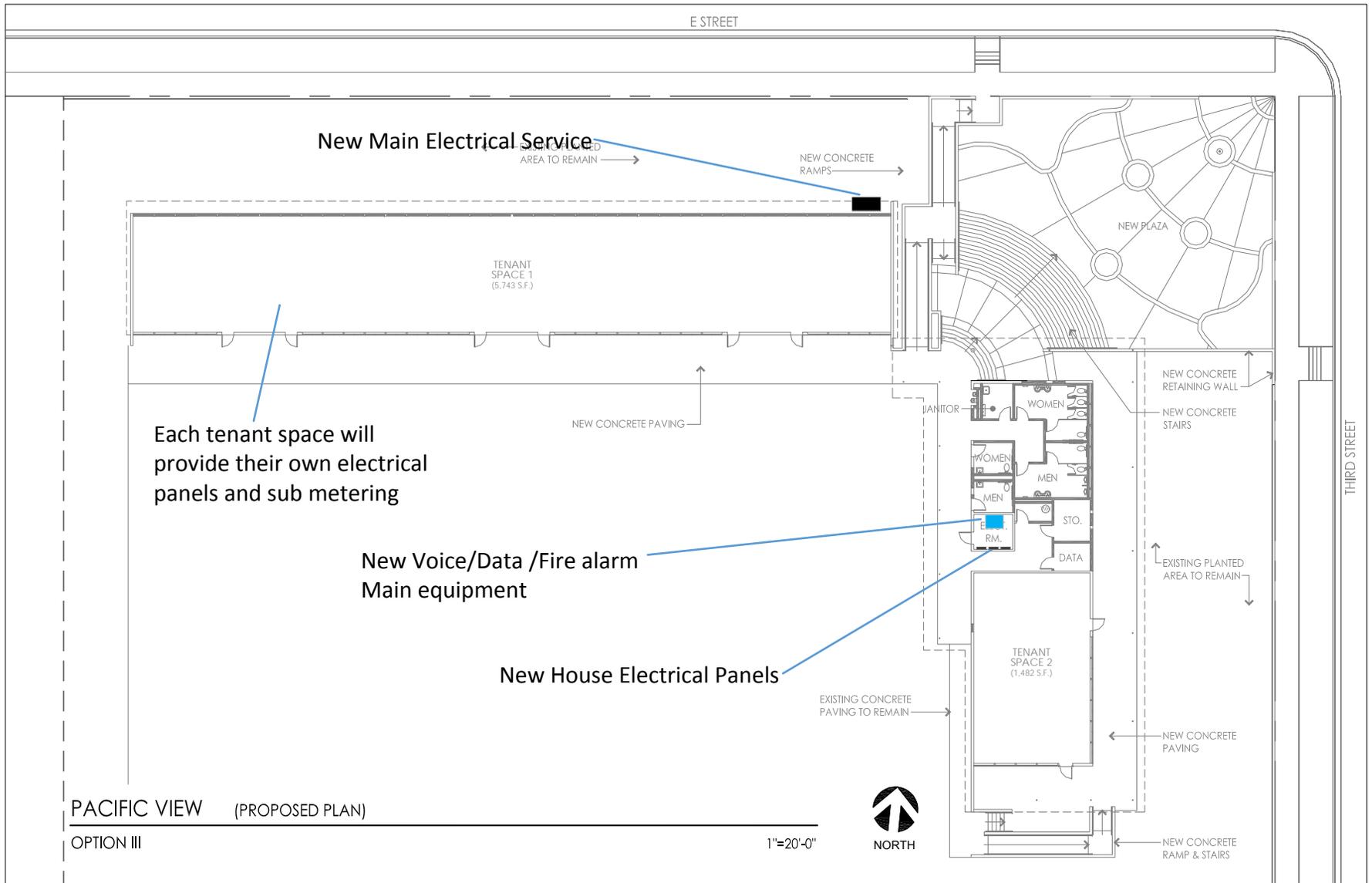
OPTION II

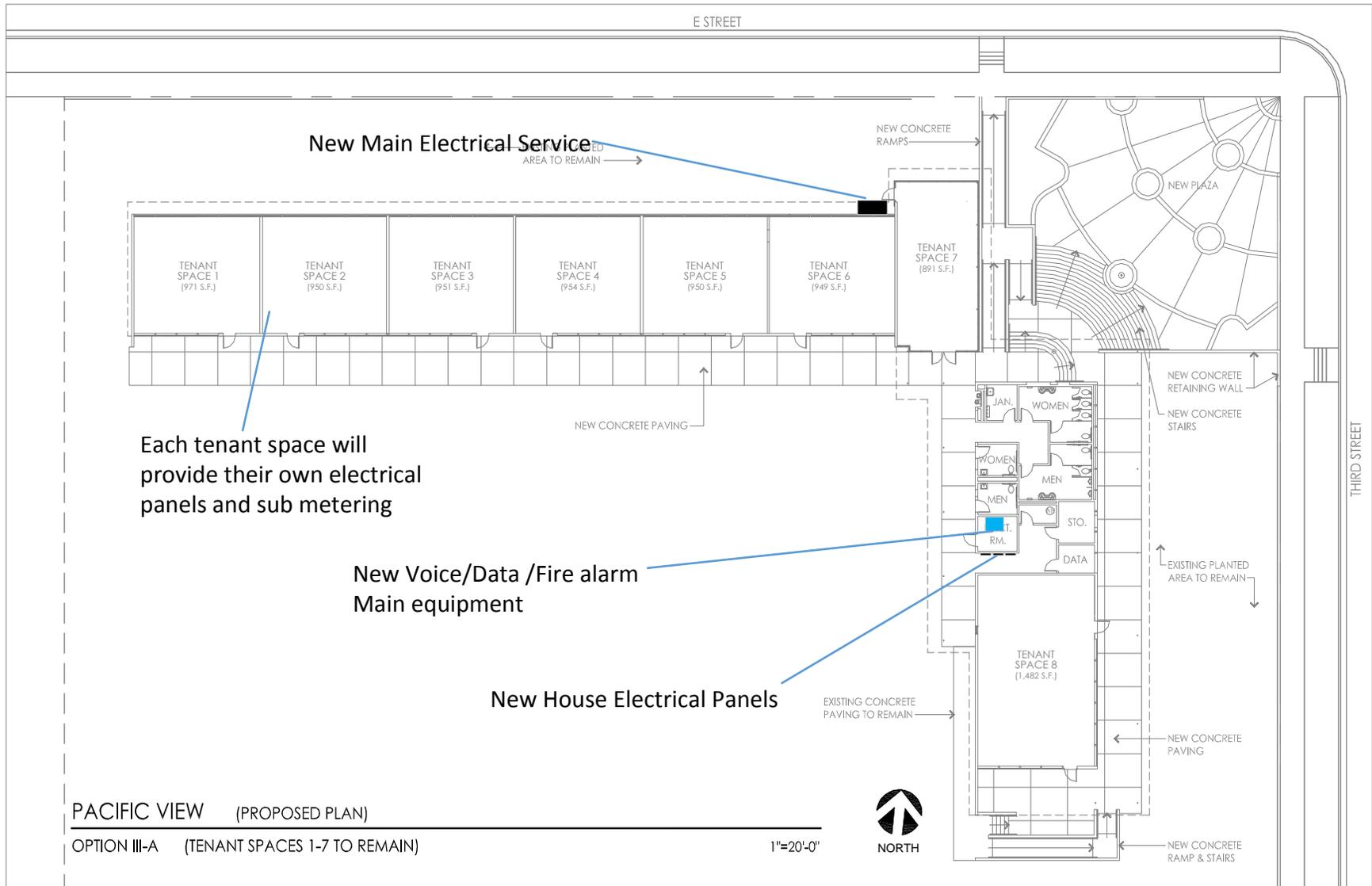
1"=20'-0"



THIRD STREET

E STREET





APPENDIX F

Estimate of Probable Cost

Pacific View Elementary School Rehabilitation and Re-Use Study

Rough Order of Magnitude Cost Estimate
Project Number 15.020

Prepared 7 August 2015

by

Waller Consulting



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
Rough Order of Magnitude Cost Estimate

Introductory Notes

VER: 1.0
7 August 2015

This estimate is based on the following documents received from Westberg + White Inc.:

General Sheets: Pacific View Elementary Rehabilitation and Re-Use Study, dated 10 June 2015.

Received **6 July 2015**

This estimate excludes the following:

- | | | |
|------------------------------|--|--------------------------------------|
| A. Professional Design Fees | F. 8A Award | K. Shift Work |
| B. Building Permits and Fees | G. Escalation beyond January 2017 | L. Per Diem |
| C. Construction Contingency | H. Hazardous materials abatement | M. Furniture, Fixtures and Equipment |
| D. Owner Supervision | I. Compressed Schedule | N. Miscellaneous Owner's Soft Costs |
| E. Construction Management | J. Night Work | |

Estimate Conditions and Assumptions:

This estimate is an opinion of probable cost. The prices reflected are based on various sources including historical data, verbal quotes from installers and suppliers, and cost data books such as RS Means and Lee Saylor. All unit costs shown are burdened to include all subcontractor costs necessary to provide an installed cost to the general contractor. These unit costs include all applicable sales taxes, freight, worker's compensation, subcontractor overhead and profit, material, labor and equipment. Labor costs are based on prevailing wages in San Diego County.

In response to recent market conditions, the estimate is priced at current opinions of cost. Market demands have made it challenging to determine future costs. The escalation rate used is the estimator's best guess tool as to what may costs will be at bid time. The estimate anticipates a reasonable price and is not responsive to other market factors which diminish a competitive bid environment. A low response of bidders can be symptomatic of an unstable bidding market. The results of which could produce the following bid deviation*:

4-5 Bids	-24% to +4%
2-3 Bids	-12% to +12%
1 Bid	-5% to +40%

*From Saylor Publications, Inc. "2007 Current Construction Costs". The deviations above have been adjusted in an attempt to reflect the current bidding climate.

THE COSTS IDENTIFIED ARE A ROUGH ORDER OF MAGNITUDE COST OF PROBABLE CONSTRUCTION COST ONLY. IT DOES NOT INCLUDE ANY PM/CM, PDE, PROJECT CONTINGENCIES OR OTHER SOFT COSTS.



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
 Rough Order of Magnitude Cost Estimate

Bid Schedule

VER: 1.0
 7 August 2015

Pay Item Number	Description	Unit of Measure	Quantity	Unit Cost	Total Cost
1	Option 1				\$ 2,726,644
	Administration Building	SF	2,953	246.19	\$ 726,994
	Classroom Building	SF	6,722	222.23	\$ 1,493,805
	Plaza Sitework	SF	4,884	121.65	\$ 594,152
2	Option 2				\$ 3,032,093
	Administration Building	SF	2,953	332.93	\$ 983,133
	Classroom Building	SF	6,722	229.41	\$ 1,542,062
	Plaza Sitework	SF	4,884	121.65	\$ 594,152
3	Option 3				\$ 3,187,483
	Administration Building	SF	2,953	349.97	\$ 1,033,464
	Classroom Building	SF	5,817	258.10	\$ 1,501,371
	Plaza Sitework, Including Building Demolition	SF	5,968	123.72	\$ 738,333
4	Sitework Option 1 (No Plaza)	SF	91,914	13.40	\$ 1,231,516
	Main Yard and Parking	SF	81,577	14.11	\$ 1,151,201
	North Option	SF	6,490	7.63	\$ 49,490
	East Option	SF	3,847	8.01	\$ 30,824
5	Sitework Option 2 (No Plaza)	SF	91,256	13.65	\$ 1,245,931
	Main Yard and Parking	SF	80,919	14.41	\$ 1,166,286
	North Option	SF	6,490	7.56	\$ 49,078
	East Option	SF	3,847	7.95	\$ 30,567
6	Sitework Option 3 (No Plaza)	SF	92,696	12.52	\$ 1,160,271
	Main Yard and Parking	SF	82,359	13.12	\$ 1,080,626
	North Option	SF	6,490	7.56	\$ 49,078
	East Option	SF	3,847	7.95	\$ 30,567

Alternates

Deductive Alt 1 Option 3: Strengthen existing shear wall in lieu of moment frame	\$	(51,066)
Deductive Alt 2 Options 1, 2, & 3: Delete Canopy	\$	(290,901)
Deductive Alt 3 Site Options 1 & 2: Use DG at Yard instead of turf and irrigation	\$	(287,000)
Additive Alt 1 Rainwater reclamation and storage, barrels	\$	24,000
Additive Alt 2 Photovoltaic array, roof mounted (30kW)	\$	194,000
Additive Alt 3 Roof ventilation units	\$	26,000



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas

Rough Order of Magnitude Cost Estimate

Bid Schedule

VER: 1.0

7 August 2015

Pay Item Number	Description	Unit of Measure	Quantity	Unit Cost	Total Cost
Additive Alt 4	Solar tube skylights			\$	41,000
Additive Alt 5	Circulation fans			\$	32,000



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,132,492
Option 1 (No Plaza)
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary				\$/EA	Total
General Requirements					\$ 27,131
Division 01	General Requirements			\$ 2.8/SF	\$ 27,131
Facility Construction					\$ 668,034
Division 02	Existing Conditions			\$ 11.03/SF	\$ 106,738
Division 03	Concrete			\$ 0.3/SF	\$ 2,897
Division 04	Masonry			\$ 0/SF	-
Division 05	Metals			\$ 10.08/SF	\$ 97,563
Division 06	Wood, Plastics and Composites			\$ 0/SF	-
Division 07	Thermal and Moisture Protection			\$ 11.52/SF	\$ 111,412
Division 08	Openings			\$ 22.5/SF	\$ 217,680
Division 09	Finishes			\$ 11.56/SF	\$ 111,845
Division 10	Specialties			\$ 2.06/SF	\$ 19,899
Division 11	Equipment			\$ 0/SF	-
Division 12	Furnishings			\$ 0/SF	-
Division 13	Special Construction			\$ 0/SF	-
Division 14	Conveying Equipment			\$ 0/SF	-
Facility Services					\$ 336,384
Division 21	Fire Suppression			\$ 6.05/SF	\$ 58,565
Division 22	Plumbing			\$ 6/SF	\$ 58,089
Division 23	Heating, Ventilating, and Air Conditioning			\$ 1.36/SF	\$ 13,167
Division 25	Integrated Automation			\$ 0/SF	-
Division 26	Electrical			\$ 15.46/SF	\$ 149,581
Division 27	Communications			\$ 2.14/SF	\$ 20,665
Division 28	Electronic Safety and Security			\$ 3.75/SF	\$ 36,316
Site and Infrastructure					\$ 76,643
Division 31	Earthwork			\$ 4.42/SF	\$ 42,777
Division 32	Exterior Improvements			\$ 3.5/SF	\$ 33,866
Division 33	Utilities			\$ 0/SF	-
Division 34	Transportation			\$ 0/SF	-
Division 35	Waterway and Marine Construction			\$ 0/SF	-
Process Equipment					\$ -
Division 40	Process Integration			\$ 0/SF	-
Division 41	Material Processing and Handling Equipment			\$ 0/SF	-
Division 42	Process Heating, Cooling, and Drying Equipment			\$ 0/SF	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment			\$ 0/SF	-
Division 44	Pollution Control Equipment			\$ 0/SF	-
Division 45	Industry-Specific Manufacturing Equipment			\$ 0/SF	-
Division 48	Electrical Power Generation			\$ 0/SF	-
Sales Tax	8.00 %		\$ 607,280		\$ 48,582
Subcontractor Mark-up	15 %		\$ 1,117,573		\$ 167,636
Subtotal Net Direct Building Cost				\$ 136.89/SF	\$ 1,324,409
Prime Contractor General Conditions, Home Office Overhead, 12 Months	20 %				\$ 264,882
Prime Contractor Profit	10 %				\$ 158,929
Bonds and Insurance	3.0 %				\$ 52,447
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %				\$ 53,674
Design Contingency	15 %				\$ 278,151
Phasing Factor, Excluded	0 %				\$ -
Total Projected Construction Cost				<i>Project Square Footage</i> 9,675 SF <i>Cost Per Square Foot</i> \$ 220 /SF <i>7,772 HRS</i>	\$ 2,132,492



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,132,492
Option 1 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements										\$ 2.8/SF	\$27,131
01.00.00	General Requirements											
Division 02	Existing Conditions										\$ 11.03/SF	\$106,738
02.00.00	Existing Conditions											\$86,738
02.60.00	Contaminated Site Material Removal											\$20,000
Division 03	Concrete										\$ 0.3/SF	\$2,897
03.00.00	Concrete											\$2,897
Division 04	Masonry										\$ 0/SF	\$0
Division 05	Metals										\$ 10.08/SF	\$97,563
05.00.00	Metals											\$97,563
Division 06	Wood, Plastics and Composites										\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection										\$ 11.52/SF	\$111,412
07.50.00	Membrane Roofing											\$111,412
Division 08	Openings										\$ 22.5/SF	\$217,680
08.10.00	Doors and Frames											\$37,129
08.50.00	Windows											\$180,552
Division 09	Finishes										\$ 11.56/SF	\$111,845
09.00.00	Finishes											\$52,241
09.50.00	Ceilings											\$6,189
09.60.00	Flooring											\$12,139
09.70.00	Wall Finishes											\$20,537
09.90.00	Painting and Coating											\$20,739
Division 10	Specialties										\$ 2.06/SF	\$19,899
10.00.00	Specialties											\$17,968
10.10.00	Information Specialties											\$1,931
Division 11	Equipment										\$ 0/SF	\$0
Division 12	Furnishings										\$ 0/SF	\$0
Division 13	Special Construction										\$ 0/SF	\$0
Division 14	Conveying Equipment										\$ 0/SF	\$0
Division 21	Fire Suppression										\$ 6.05/SF	\$58,565
21.00.00	Fire Suppression											\$58,565
Division 22	Plumbing										\$ 6/SF	\$58,089
22.00.00	Plumbing											\$58,089
Division 23	Heating, Ventilating, and Air Conditioning										\$ 1.36/SF	\$13,167
23.00.00	Heating, Ventilating, and Air-Conditioning (HVAC)											\$13,167
Division 25	Integrated Automation										\$ 0/SF	\$0
Division 26	Electrical										\$ 15.46/SF	\$149,581
26.00.00	Electrical											\$149,581
Division 27	Communications										\$ 2.14/SF	\$20,665
27.00.00	Communications											\$20,665
Division 28	Electronic Safety and Security										\$ 3.75/SF	\$36,316
28.00.00	Electronic Safety and Security											\$36,316
Division 31	Earthwork										\$ 4.42/SF	\$42,777
31.10.00	Site Clearing											\$42,777
Division 32	Exterior Improvements										\$ 3.5/SF	\$33,866
32.30.00	Site Improvements											\$33,866
Division 33	Utilities										\$ 0/SF	\$0
Division 34	Transportation										\$ 0/SF	\$0
Division 35	Waterway and Marine Construction										\$ 0/SF	\$0
Division 40	Process Integration										\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment										\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment										\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment										\$ 0/SF	\$0
Division 44	Pollution Control Equipment										\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment										\$ 0/SF	\$0
Division 48	Electrical Power Generation										\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,132,492
Option 1 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

General Requirements **\$27,131**

Division 01 General Requirements *\$27,131*

01.00.00	General Requirements											
Classroom Building												
	Shoring ALLOWANCE	1	LS	1,200.00	16.000	1.00	58.18	930.88	0.00	16.00	2,130.88	\$2,131
	Dry rot mitigation ALLOWANCE	1	LS				58.18	0.00	0.00	-	25,000.00	\$25,000

Subtotal General Requirements				1,200			931	-	16		\$27,131
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Facility Construction **\$668,034**

Division 02 Existing Conditions *\$106,738*

02.00.00	Existing Conditions											
Administration Building												
	Demolish base cabinet and countertop	40	LF	0.00	0.800	1.00	56.84	45.47	0.00	32.00	45.47	\$1,819
	Demolish upper carbinet	28	LF	0.00	0.533	1.00	56.84	30.30	0.00	14.92	30.30	\$848
	Demolish toilet partition	5	EA	0.00	2.000	1.00	56.84	113.68	0.00	10.00	113.68	\$568
	Demolish carpet flooring	1,602	SF	0.00	0.008	1.00	56.84	0.45	0.00	12.82	0.45	\$728
	Demolish terrazzo flooring	403	SF	0.00	0.053	1.00	56.84	3.01	0.00	21.36	3.01	\$1,214
	Demolish ceiling	2,005	SF	0.00	0.022	1.00	56.84	1.25	0.00	44.11	1.25	\$2,507
	Demolish terrazzo wall	1,697	SF	0.00	0.038	1.00	56.84	2.16	0.00	64.49	2.16	\$3,665
	Demolish interior door, frame and hardware, single	2	EA	0.00	1.000	1.00	56.84	56.84	0.00	2.00	56.84	\$114
	Remove exterior window	903	SF	0.00	0.040	1.00	56.84	2.27	0.00	36.12	2.27	\$2,053
	Demolish exterior wall	96	SF	0.00	0.105	1.00	56.84	5.97	0.00	10.08	5.97	\$573
	Remove gypsum board to exterior walls	1,956	SF	0.00	0.008	1.00	56.84	0.45	0.00	15.65	0.45	\$889
	Demolish interior partition	600	SF	0.00	0.046	1.00	56.84	2.61	0.00	27.60	2.61	\$1,569
	Demolish interior furred partition	204	SF	0.00	0.027	1.00	56.84	1.53	0.00	5.51	1.53	\$313
	Remove gypsum board to interior walls	2,088	SF	0.00	0.008	1.00	56.84	0.45	0.00	16.70	0.45	\$949
	Demolish interior steps	24	LF	0.00	0.200	1.00	56.84	11.37	0.00	4.80	11.37	\$273
	Demolish watercloset	9	EA	0.00	1.143	1.00	74.96	85.68	0.00	10.29	85.68	\$771
	Demolish urinal	3	EA	0.00	1.143	1.00	74.96	85.68	0.00	3.43	85.68	\$257
	Demolish trough lavatory	2	EA	0.00	2.000	1.00	74.96	149.92	0.00	4.00	149.92	\$300
	Demolish drinking fountain	1	EA	0.00	1.000	1.00	74.96	74.96	0.00	1.00	74.96	\$75
	Demolish electrical, data, fire alarm	2,938	SF	0.00	0.040	1.00	56.84	2.27	0.00	117.52	2.27	\$6,680
	Demolish complete building		SF				56.84	0.00	0.00	-	10.00	\$0
	Haul and dispose of spoils	48	TONS	0.00	0.100	1.00	57.07	5.71	6.50	4.81	12.21	\$587
	Tipping fees	48	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	65.00	\$3,125
Classroom Building												
	Demolish slab for plumbing work, ALLOWANCE	405	SF	0.46	0.047	1.00	56.84	2.67	0.92	19.04	4.05	\$1,641
	Demolish slab for structural work, ALLOWANCE	51	SF	0.46	0.047	1.00	56.84	2.67	0.92	2.40	4.05	\$207
	Demolish base cabinet and countertop	45	LF	0.00	0.800	1.00	56.84	45.47	0.00	36.00	45.47	\$2,046
	Demolish lavatory countertop	12	LF	0.00	0.200	1.00	56.84	11.37	0.00	2.40	11.37	\$136



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,132,492
Option 1 (No Plaza)
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 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Demolish toilet partition	1	EA	0.00	2.000	1.00	56.84	113.68	0.00	2.00	113.68	\$114
Demolish carpet flooring	5,191	SF	0.00	0.008	1.00	56.84	0.45	0.00	41.53	0.45	\$2,360
Demolish terrazzo flooring	399	SF	0.00	0.053	1.00	56.84	3.01	0.00	21.15	3.01	\$1,202
Demolish ceiling	5,590	SF	0.00	0.022	1.00	56.84	1.25	0.00	122.98	1.25	\$6,990
Demolish terrazzo wall	844	SF	0.00	0.038	1.00	56.84	2.16	0.00	32.07	2.16	\$1,823
Demolish exterior door, frame and hardware, double	1	PR	0.00	1.250	1.00	56.84	71.05	0.00	1.25	71.05	\$71
Demolish interior door, frame and hardware, single	5	EA	0.00	1.000	1.00	56.84	56.84	0.00	5.00	56.84	\$284
Remove exterior window	3,081	SF	0.00	0.040	1.00	56.84	2.27	0.00	123.24	2.27	\$7,005
Demolish exterior wall	204	SF	0.00	0.105	1.00	56.84	5.97	0.00	21.42	5.97	\$1,218
Remove gypsum board to exterior walls	4,968	SF	0.00	0.008	1.00	56.84	0.45	0.00	39.74	0.45	\$2,259
Demolish interior partition	684	SF	0.00	0.046	1.00	56.84	2.61	0.00	31.46	2.61	\$1,788
Demolish interior furred partition	144	SF	0.00	0.027	1.00	56.84	1.53	0.00	3.89	1.53	\$221
Remove gypsum board to interior walls	4,392	SF	0.00	0.008	1.00	56.84	0.45	0.00	35.14	0.45	\$1,997
Demolish watercloset	2	EA	0.00	1.143	1.00	74.96	85.68	0.00	2.29	85.68	\$171
Demolish urinal	1	EA	0.00	1.143	1.00	74.96	85.68	0.00	1.14	85.68	\$86
Demolish lavatory	5	EA	0.00	0.800	1.00	74.96	59.97	0.00	4.00	59.97	\$300
Demolish sink, cap	10	EA	25.00	1.000	1.00	74.96	74.96	0.00	10.00	99.96	\$1,000
Demolish telephone equipment	1	EA	0.00	4.000	1.00	46.47	185.88	0.00	4.00	185.88	\$186
Demolish data equipment	1	EA	0.00	4.000	1.00	60.47	241.88	0.00	4.00	241.88	\$242
Demolish electrical, data, fire alarm	6,671	SF	0.00	0.040	1.00	56.84	2.27	0.00	266.84	2.27	\$15,167
Haul and dispose of spoils	108	TONS	0.00	0.100	1.00	57.07	5.71	6.50	10.81	12.21	\$1,319
Tipping fees	108	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	65.00	\$7,026
Subtotal Existing Conditions			10,611			74,693		1,435	1,303	\$86,738	
02.60.00 Contaminated Site Material Removal											
Hazardous materials removal and disposal	1	LS				58.18	0.00		-	20,000.00	\$20,000
Subtotal Contaminated Site Material Removal			-			-		-	-	\$20,000	
Division 03 Concrete											\$2,897
03.00.00 Concrete											
Classroom Building											
Shear wall footing, 2'x3'	17	LF	37.53	0.953	1.00	56.84	54.17	17.10	16.20	108.80	\$1,850
Patch concrete slab	51	SF	9.56	0.190	1.00	56.84	10.80	0.17	9.69	20.53	\$1,047
Subtotal Concrete			1,126			1,472		299	26	\$2,897	
Division 05 Metals											\$97,563
05.00.00 Metals											
Classroom Building											
Hold Downs	4	EA	35.00	0.500	1.00	58.18	29.09	0.00	2.00	64.09	\$256
Canopy											



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Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Canopy framing complete	4,734	SF	13.38	0.036	1.00	77.76	2.83	1.20	172.32	17.41	\$82,432
Canopy metal decking	4,734	SF	2.50	0.008	1.00	77.76	0.62	0.02	37.87	3.14	\$14,875
Subtotal Metals			75,318				16,461	5,785	212		\$97,563
Division 07 Thermal and Moisture Protection \$111,412											
07.50.00 Membrane Roofing											
Administration Building											
Remove roofing	5,368	SF	0.00	0.033	1.00	56.84	1.88	0.00	177.14	1.88	\$10,069
Single ply membrane roofing, fiberglass 60, insulated	5,368	SF	3.93	0.015	1.00	46.71	0.72	0.07	82.56	4.72	\$25,328
Classroom Building											
Remove roofing	9,490	SF	0.00	0.033	1.00	56.84	1.88	0.00	313.17	1.88	\$17,801
Single ply membrane roofing, fiberglass 60, insulated	9,490	SF	3.93	0.015	1.00	46.71	0.72	0.07	145.96	4.72	\$44,778
Canopy											
Single ply membrane roofing, fiberglass 48	4,734	SF	2.05	0.015	1.00	46.71	0.72	0.07	72.81	2.84	\$13,437
Subtotal Membrane Roofing			68,097				41,944	1,371	792		\$111,412
Division 08 Openings \$217,680											
08.10.00 Doors and Frames											
Administration Building											
Exterior door, frame and hardware, single	6	EA	1,525.00	12.000	1.00	58.18	698.16	0.00	72.00	2,223.16	\$13,339
Classroom Building											
Exterior door, frame and hardware, single	7	EA	1,525.00	12.000	1.00	58.18	698.16	0.00	84.00	2,223.16	\$15,562
Exterior door, frame and hardware, double	1	PR	3,000.00	16.000	1.00	58.18	930.88	0.00	16.00	3,930.88	\$3,931
Interior door, frame and hardware, single	3	EA	1,025.00	7.000	1.00	58.18	407.26	0.00	21.00	1,432.26	\$4,297
Subtotal Doors and Frames			25,900				11,229	-	193		\$37,129
08.50.00 Windows											
Administration Building											
Exterior windows, operable	903	SF	39.37	0.089	1.00	66.92	5.95	0.00	80.28	45.32	\$40,923
Classroom Building											
Exterior windows, operable	3,081	SF	39.37	0.089	1.00	66.92	5.95	0.00	273.90	45.32	\$139,628
Subtotal Windows			156,850				23,702	-	354		\$180,552
Division 09 Finishes \$111,845											
09.00.00 Finishes											
Administration Building											
New exterior wall infill	132	SF	4.91	0.250	1.00	58.18	14.55	0.00	33.00	19.46	\$2,568
Gypsum board to exterior walls	1,956	SF	0.35	0.042	1.00	58.18	2.44	0.00	82.15	2.79	\$5,464
Insulation to exterior walls	1,956	SF	0.60	0.006	1.00	58.18	0.35	0.00	11.74	0.95	\$1,856
New interior partition	132	SF	1.37	0.105	1.00	58.18	6.11	0.00	13.86	7.48	\$987



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,132,492
Option 1 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Gypsum board to interior walls Classroom Building	2,088	SF	0.35	0.042	1.00	58.18	2.44	0.00	87.70	2.79	\$5,833
Gypsum board to exterior walls	4,968	SF	0.35	0.042	1.00	58.18	2.44	0.00	208.66	2.79	\$13,878
Insulation to exterior walls	4,968	SF	0.60	0.006	1.00	58.18	0.35	0.00	29.81	0.95	\$4,715
New interior partition	504	SF	1.37	0.105	1.00	58.18	6.11	0.00	52.92	7.48	\$3,769
New interior partition, furring	192	SF	1.02	0.063	1.00	58.18	3.67	0.00	12.10	4.69	\$900
Gypsum board to interior walls	4,392	SF	0.35	0.042	1.00	58.18	2.44	0.00	184.46	2.79	\$12,269
Subtotal Finishes			10,561				41,679	-	716		\$52,241
09.50.00 Ceilings											
Administration Building											
Gypsum board ceiling	354	SF	2.10	0.127	1.00	50.40	6.40	0.00	44.96	8.50	\$3,009
Classroom Building											
Gypsum board ceiling	374	SF	2.10	0.127	1.00	50.40	6.40	0.00	47.50	8.50	\$3,179
Subtotal Ceilings			1,529				4,660	-	92		\$6,189
09.60.00 Flooring											
Administration Building											
Ceramic tile flooring	354	SF	6.50	0.087	1.00	58.41	5.08	0.00	30.80	11.58	\$4,100
Ceramic tile base	133	LF	8.50	0.087	1.00	58.41	5.08	0.00	11.57	13.58	\$1,806
Classroom Building											
Ceramic tile flooring	374	SF	6.50	0.087	1.00	58.41	5.08	0.00	32.54	11.58	\$4,332
Ceramic tile base	140	LF	8.50	0.087	1.00	58.41	5.08	0.00	12.18	13.58	\$1,901
Subtotal Flooring			7,053				5,087	-	87		\$12,139
09.70.00 Wall Finishes											
Administration Building											
Ceramic tile wainscot	796	SF	3.86	0.172	1.00	47.53	8.18	0.00	136.91	12.04	\$9,580
Paint above wainscot	531	SF	0.15	0.012	1.00	51.29	0.62	0.00	6.37	0.77	\$406
Classroom Building											
Ceramic tile wainscot	841	SF	3.86	0.172	1.00	47.53	8.18	0.00	144.65	12.04	\$10,122
Paint above wainscot	561	SF	0.15	0.012	1.00	51.29	0.62	0.00	6.73	0.77	\$429
Subtotal Wall Finishes			6,483				14,055	-	295		\$20,537
09.90.00 Painting and Coating											
Administration Building											
Patch and paint exterior walls	3,048	SF	0.61	0.033	1.00	50.40	1.65	0.00	99.97	2.26	\$6,886
Classroom Building											
Patch and paint exterior walls	6,132	SF	0.61	0.033	1.00	50.40	1.65	0.00	201.13	2.26	\$13,853



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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Subtotal Painting and Coating			5,563				15,176	-	301	\$20,739	

Division 10	Specialties	\$19,899
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10.00.00 Specialties
 Administration Building

Toilet Specialties

Standard toilet partition, accessible	1	EA	1,100.00	2.000	1.00	58.18	116.36	0.00	2.00	1,216.36	\$1,216
Standard toilet partition	2	EA	900.00	2.000	1.00	58.18	116.36	0.00	4.00	1,016.36	\$2,033
Toilet paper dispenser	4	EA	25.00	0.350	1.00	58.18	20.36	0.00	1.40	45.36	\$181
Toilet seat cover dispenser	4	EA	26.00	0.500	1.00	58.18	29.09	0.00	2.00	55.09	\$220
Grab bars, per set	1	EA	105.00	0.800	1.00	58.18	46.54	0.00	0.80	151.54	\$152
Sanitary disposal	3	EA	152.30	1.231	1.00	58.18	71.62	0.00	3.69	223.92	\$672
Sanitary deispenser	1	EA	544.57	1.231	1.00	58.18	71.62	0.00	1.23	616.19	\$616
Robe hooks	4	EA	25.00	0.222	1.00	58.18	12.92	0.00	0.89	37.92	\$152
Soap dispenser	3	EA	45.00	0.400	1.00	58.18	23.27	0.00	1.20	68.27	\$205
Mirror	21	SF	22.23	0.111	1.00	58.18	6.45	0.00	2.33	28.68	\$602
Combination paper towel and waste receptacle	2	EA	373.82	1.000	1.00	58.18	58.18	0.00	2.00	432.00	\$864

Classroom Building

Toilet Specialties

Standard toilet partition, accessible	2	EA	1,100.00	2.000	1.00	58.18	116.36	0.00	4.00	1,216.36	\$2,433
Standard toilet partition	4	EA	900.00	2.000	1.00	58.18	116.36	0.00	8.00	1,016.36	\$4,065
Toilet paper dispenser	6	EA	25.00	0.350	1.00	58.18	20.36	0.00	2.10	45.36	\$272
Toilet seat cover dispenser	6	EA	26.00	0.500	1.00	58.18	29.09	0.00	3.00	55.09	\$331
Grab bars, per set	2	EA	105.00	0.800	1.00	58.18	46.54	0.00	1.60	151.54	\$303
Sanitary disposal	4	EA	152.30	1.231	1.00	58.18	71.62	0.00	4.92	223.92	\$896
Sanitary deispenser	1	EA	544.57	1.231	1.00	58.18	71.62	0.00	1.23	616.19	\$616
Robe hooks	6	EA	25.00	0.222	1.00	58.18	12.92	0.00	1.33	37.92	\$227
Soap dispenser	4	EA	45.00	0.400	1.00	58.18	23.27	0.00	1.60	68.27	\$273
Mirror	27	SF	22.23	0.111	1.00	58.18	6.45	0.00	2.99	28.68	\$774
Combination paper towel and waste receptacle	2	EA	373.82	1.000	1.00	58.18	58.18	0.00	2.00	432.00	\$864

Subtotal Specialties	14,808					3,160	-	54	\$17,968
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10.10.00 Information Specialties

Administration Building

Signage ALLOWANCE

1	LS	500.00	8.000	1.00	58.18	465.44	0.00	8.00	965.44	\$965
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Classroom Building

Signage ALLOWANCE

1	LS	500.00	8.000	1.00	58.18	465.44	0.00	8.00	965.44	\$965
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Subtotal Information Specialties	1,000					931	-	16	\$1,931
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Facility Services	\$336,384
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Division 21	Fire Suppression	\$58,565
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21.00.00 Fire Suppression



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
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Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Administration Building											
Standpipe assembly	1	EA	1,600.00	25.000	1.00	74.96	1,874.00	0.00	25.00	3,474.00	\$3,474
Fire sprinkler system	2,953	SF	1.58	0.027	1.00	74.96	2.00	0.00	78.75	3.58	\$10,578
Classroom Building											
Standpipe assembly	1	EA	1,600.00	25.000	1.00	74.96	1,874.00	0.00	25.00	3,474.00	\$3,474
Fire sprinkler system	6,722	SF	1.58	0.027	1.00	74.96	2.00	0.00	179.25	3.58	\$24,080
Canopy											
Fire sprinkler system	4,734	SF	1.58	0.027	1.00	74.96	2.00	0.00	126.24	3.58	\$16,958
Subtotal Fire Suppression			26,014				32,551	-	434		\$58,565

Division 22 Plumbing \$58,089

22.00.00 Plumbing											
Administration Building											
Water closet	2	EA	2,000.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,004.46	\$6,009
Water closet, accessible	2	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,204.46	\$6,409
Gang sink, dual lav	1	EA	2,250.00	13.400	1.00	74.96	1,004.46	0.00	13.40	3,254.46	\$3,254
Drinking fountain, hi-lo, railings	1	EA	3,500.00	13.400	1.00	74.96	1,004.46	0.00	13.40	4,504.46	\$4,504
Water heater, 30 gal, complete, natural gas	1	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	13.40	3,204.46	\$3,204
Classroom Building											
Water closet	4	EA	2,000.00	13.400	1.00	74.96	1,004.46	0.00	53.60	3,004.46	\$12,018
Water closet, accessible	2	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,204.46	\$6,409
Gang sink, dual lav	2	EA	2,250.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,254.46	\$6,509
Urinal	2	EA	2,000.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,004.46	\$6,009
Urinal screens	1	EA	450.00	1.450	1.00	74.96	108.69	0.00	1.45	558.69	\$559
Water heater, 30 gal, complete, natural gas	1	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	13.40	3,204.46	\$3,204
Subtotal Plumbing			39,900				18,189	-	243		\$58,089

Division 23 Heating, Ventilating, and Air Conditioning \$13,167

23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)											
Administration Building											
Gas fired unit heaters, 84,000 btu	1	EA	830.00	8.000	1.00	65.92	527.36	0.00	8.00	1,357.36	\$1,357
Ceiling mounted electric heater, fan, thermostat, 500W	2	EA	830.00	8.000	1.00	65.92	527.36	0.00	16.00	1,357.36	\$2,715
Ceiling mounted electric heater, fan, thermostat, 1000W	1	EA	1,025.00	8.000	1.00	65.92	527.36	0.00	8.00	1,552.36	\$1,552
Exhaust fan, 150 cfm	1	EA	200.00	1.670	1.00	65.92	110.09	0.00	1.67	310.09	\$310
Classroom Building											
Gas fired unit heaters, 45,000 btu	7	EA	769.60	4.000	1.00	65.92	263.68	0.00	28.00	1,033.28	\$7,233
Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			9,102				4,065	-	62		\$13,167

Division 26 Electrical \$149,581

26.00.00 Electrical											
Administration Building											



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 City of Encinitas
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\$ 2,132,492
Option 1 (No Plaza)
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 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Electrical equipment and power distribution	2,953	SF	2.70	0.043	1.00	60.47	2.60	0.00	126.98	5.30	\$15,652
Convenience power outlets and wiring	2,953	SF	1.40	0.022	1.00	60.47	1.31	0.00	63.78	2.71	\$7,991
Temporary lights, wiring and controls	2,953	SF	1.00	0.044	1.00	60.47	2.66	0.00	129.93	3.66	\$10,810
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	2,953	SF	0.88	0.016	1.00	60.47	0.97	0.00	47.25	1.85	\$5,456
Classroom Building											
Electrical equipment and power distribution	6,722	SF	2.70	0.043	1.00	60.47	2.60	0.00	289.05	5.30	\$35,628
Convenience power outlets and wiring	6,722	SF	1.05	0.016	1.00	60.47	0.98	0.00	108.90	2.03	\$13,643
Temporary lights, wiring and controls	6,722	SF	1.00	0.044	1.00	60.47	2.66	0.00	295.77	3.66	\$24,607
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	6,722	SF	0.88	0.016	1.00	60.47	0.97	0.00	107.55	1.85	\$12,419
Canopy											
Lights, wiring and controls	4,734	SF	2.00	0.044	1.00	60.47	2.66	0.00	208.30	4.66	\$22,064
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	4,734	SF	0.13	0.002	1.00	60.47	0.15	0.00	11.36	0.28	\$1,312
Subtotal Electrical			65,597				83,985	-	1,389		\$149,581
Division 27 Communications \$20,665											
27.00.00 Communications											
Administration Building											
Telecommunication infrastructure	2,953	SF	1.16	0.021	1.00	46.47	0.98	0.00	62.01	2.14	\$6,307
Classroom Building											
Telecommunication infrastructure	6,722	SF	1.16	0.021	1.00	46.47	0.98	0.00	141.16	2.14	\$14,357
Subtotal Communications			11,223				9,442	-	203		\$20,665
Division 28 Electronic Safety and Security \$36,316											
28.00.00 Electronic Safety and Security											
Administration Building											
Fire alarm system	2,953	SF	1.16	0.017	1.00	46.47	0.79	0.00	50.20	1.95	\$5,758
Intrusion detection	2,953	SF	1.50	0.017	1.00	46.47	0.79	0.00	50.20	2.29	\$6,762
Classroom Building											
Fire alarm system	6,722	SF	1.16	0.017	1.00	46.47	0.79	0.00	114.27	1.95	\$13,108
Intrusion detection	6,722	SF	0.80	0.017	1.00	46.47	0.79	0.00	114.27	1.59	\$10,688
Subtotal Electronic Safety and Security			21,030				15,286	-	329		\$36,316
Site and Infrastructure \$76,643											
Division 31 Earthwork \$42,777											
31.10.00 Site Clearing											
Site Demolition											
Demolish canopy	4,734	SF	0.00	0.050	1.00	56.84	2.84	0.00	236.70	2.84	\$13,454
Demolish tube steel posts	36	EA	0.00	0.250	1.00	56.84	14.21	5.00	9.00	19.21	\$692



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
 Rough Order of Magnitude Cost Estimate

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Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total	
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment				
Demolish concrete paving	5,405	SF	0.26	0.019	1.00	56.84	1.08	0.36	102.70	1.70	\$9,188	
Haul and dispose of spoils	252	TONS	0.00	0.100	1.00	57.07	5.71	6.50	25.18	12.21	\$3,074	
Tipping Fee, broker mitigated	252	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	65.00	\$16,369	
Subtotal Site Clearing			17,774			21,240			3,763	374	\$42,777	
Division 32 Exterior Improvements											\$33,866	
32.30.00 Site Improvements												
Concrete walkways												
Concrete sidewalk	5,405	SF	3.24	0.052	1.00	56.84	2.96	0.07	281.06	6.27	\$33,866	
Subtotal Site Improvements			17,512			15,975			378	281	\$33,866	



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,437,941
Option 2 (No Plaza)
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary				\$/EA	Total
General Requirements					\$ 30,327
Division 01	General Requirements			\$ 3.13/SF	\$ 30,327
Facility Construction					\$ 708,320
Division 02	Existing Conditions			\$ 13.66/SF	\$ 132,134
Division 03	Concrete			\$ 1.22/SF	\$ 11,757
Division 04	Masonry			\$ 0/SF	-
Division 05	Metals			\$ 10.12/SF	\$ 97,948
Division 06	Wood, Plastics and Composites			\$ 0/SF	-
Division 07	Thermal and Moisture Protection			\$ 11.52/SF	\$ 111,412
Division 08	Openings			\$ 23.33/SF	\$ 225,692
Division 09	Finishes			\$ 11.74/SF	\$ 113,628
Division 10	Specialties			\$ 1.63/SF	\$ 15,750
Division 11	Equipment			\$ 0/SF	-
Division 12	Furnishings			\$ 0/SF	-
Division 13	Special Construction			\$ 0/SF	-
Division 14	Conveying Equipment			\$ 0/SF	-
Facility Services					\$ 461,941
Division 21	Fire Suppression			\$ 6.05/SF	\$ 58,565
Division 22	Plumbing			\$ 4.92/SF	\$ 47,567
Division 23	Heating, Ventilating, and Air Conditioning			\$ 15.69/SF	\$ 151,811
Division 25	Integrated Automation			\$ 0/SF	-
Division 26	Electrical			\$ 15.2/SF	\$ 147,017
Division 27	Communications			\$ 2.14/SF	\$ 20,665
Division 28	Electronic Safety and Security			\$ 3.75/SF	\$ 36,316
Site and Infrastructure					\$ 76,643
Division 31	Earthwork			\$ 4.42/SF	\$ 42,777
Division 32	Exterior Improvements			\$ 3.5/SF	\$ 33,866
Division 33	Utilities			\$ 0/SF	-
Division 34	Transportation			\$ 0/SF	-
Division 35	Waterway and Marine Construction			\$ 0/SF	-
Process Equipment					\$ -
Division 40	Process Integration			\$ 0/SF	-
Division 41	Material Processing and Handling Equipment			\$ 0/SF	-
Division 42	Process Heating, Cooling, and Drying Equipment			\$ 0/SF	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment			\$ 0/SF	-
Division 44	Pollution Control Equipment			\$ 0/SF	-
Division 45	Industry-Specific Manufacturing Equipment			\$ 0/SF	-
Division 48	Electrical Power Generation			\$ 0/SF	-
Sales Tax	8.00 %		\$ 708,410		\$ 56,673
Subcontractor Mark-up	15 %		\$ 1,286,213		\$ 192,932
Subtotal Net Direct Building Cost				\$ 157.81/SF	\$ 1,526,835
Prime Contractor General Conditions, Home Office Overhead, 12 Months	19 %				\$ 290,099
Prime Contractor Profit	10 %				\$ 181,693
Bonds and Insurance	3.0 %				\$ 59,959
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %				\$ 61,363
Design Contingency	15 %				\$ 317,992
Phasing Factor, Excluded	0 %				\$ -
Total Projected Construction Cost				\$ 252 /SF	\$ 2,437,941
		<i>Project Square Footage</i>	9,675 SF	<i>Cost Per Square Foot</i>	\$ 252 /SF
			8,880 HRS		



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
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\$ 2,437,941
Option 2 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements										\$ 3.13/SF	\$30,327
01.00.00	General Requirements		\$ 3.13/SF									
Division 02	Existing Conditions										\$ 13.66/SF	\$132,134
02.00.00	Existing Conditions		\$ 11.59/SF									\$112,134
02.60.00	Contaminated Site Material Removal		\$ 2.07/SF									\$20,000
Division 03	Concrete										\$ 1.22/SF	\$11,757
03.00.00	Concrete		\$ 1.22/SF									\$11,757
Division 04	Masonry										\$ 0/SF	\$0
Division 05	Metals										\$ 10.12/SF	\$97,948
05.00.00	Metals		\$ 10.12/SF									\$97,948
Division 06	Wood, Plastics and Composites										\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection										\$ 11.52/SF	\$111,412
07.50.00	Membrane Roofing		\$ 11.52/SF									\$111,412
Division 08	Openings										\$ 23.33/SF	\$225,692
08.10.00	Doors and Frames		\$ 4.67/SF									\$45,140
08.50.00	Windows		\$ 18.66/SF									\$180,552
Division 09	Finishes										\$ 11.74/SF	\$113,628
09.00.00	Finishes		\$ 5.7/SF									\$55,130
09.50.00	Ceilings		\$ 0.59/SF									\$5,674
09.60.00	Flooring		\$ 0.85/SF									\$8,224
09.70.00	Wall Finishes		\$ 2.47/SF									\$23,861
09.90.00	Painting and Coating		\$ 2.14/SF									\$20,739
Division 10	Specialties										\$ 1.63/SF	\$15,750
10.00.00	Specialties		\$ 1.43/SF									\$13,819
10.10.00	Information Specialties		\$ 0.2/SF									\$1,931
Division 11	Equipment										\$ 0/SF	\$0
Division 12	Furnishings										\$ 0/SF	\$0
Division 13	Special Construction										\$ 0/SF	\$0
Division 14	Conveying Equipment										\$ 0/SF	\$0
Division 21	Fire Suppression										\$ 6.05/SF	\$58,565
21.00.00	Fire Suppression		\$ 6.05/SF									\$58,565
Division 22	Plumbing										\$ 4.92/SF	\$47,567
22.00.00	Plumbing		\$ 4.92/SF									\$47,567
Division 23	Heating, Ventilating, and Air Conditioning										\$ 15.69/SF	\$151,811
23.00.00	Heating, Ventilating, and Air-Conditioning (HVAC)		\$ 15.69/SF									\$151,811
Division 25	Integrated Automation										\$ 0/SF	\$0
Division 26	Electrical										\$ 15.2/SF	\$147,017
26.00.00	Electrical		\$ 15.2/SF									\$147,017
Division 27	Communications										\$ 2.14/SF	\$20,665
27.00.00	Communications		\$ 2.14/SF									\$20,665
Division 28	Electronic Safety and Security										\$ 3.75/SF	\$36,316
28.00.00	Electronic Safety and Security		\$ 3.75/SF									\$36,316
Division 31	Earthwork										\$ 4.42/SF	\$42,777
31.10.00	Site Clearing		\$ 4.42/SF									\$42,777
Division 32	Exterior Improvements										\$ 3.5/SF	\$33,866
32.30.00	Site Improvements		\$ 3.5/SF									\$33,866
Division 33	Utilities										\$ 0/SF	\$0
Division 34	Transportation										\$ 0/SF	\$0
Division 35	Waterway and Marine Construction										\$ 0/SF	\$0
Division 40	Process Integration										\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment										\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment										\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment										\$ 0/SF	\$0
Division 44	Pollution Control Equipment										\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment										\$ 0/SF	\$0
Division 48	Electrical Power Generation										\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,437,941
Option 2 (No Plaza)
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Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

General Requirements											\$30,327
<i>Division 01 General Requirements</i>											<i>\$30,327</i>
01.00.00 General Requirements											
Classroom Building											
Shoring ALLOWANCE	1	LS	3,000.00	40.000	1.00	58.18	2,327.20	0.00	40.00	5,327.20	\$5,327
Dry rot mitigation ALLOWANCE	1	LS				58.18	0.00	0.00	-	25,000.00	\$25,000
Subtotal General Requirements			3,000				2,327	-	40		\$30,327

Facility Construction											\$708,320
<i>Division 02 Existing Conditions</i>											<i>\$132,134</i>
02.00.00 Existing Conditions											
Administration Building											
Demolish slab for plumbing work, ALLOWANCE	628	SF	0.46	0.047	1.00	56.84	2.67	0.92	29.52	4.05	\$2,544
Demolish base cabinet and countertop	81	LF	0.00	0.800	1.00	56.84	45.47	0.00	64.80	45.47	\$3,683
Demolish upper cabinet	54	LF	0.00	0.533	1.00	56.84	30.30	0.00	28.78	30.30	\$1,636
Demolish toilet partition	5	EA	0.00	2.000	1.00	56.84	113.68	0.00	10.00	113.68	\$568
Demolish carpet flooring	2,124	SF	0.00	0.008	1.00	56.84	0.45	0.00	16.99	0.45	\$966
Demolish terrazzo flooring	403	SF	0.00	0.053	1.00	56.84	3.01	0.00	21.36	3.01	\$1,214
Demolish ceiling	2,527	SF	0.00	0.022	1.00	56.84	1.25	0.00	55.59	1.25	\$3,160
Demolish terrazzo wall	1,697	SF	0.00	0.038	1.00	56.84	2.16	0.00	64.49	2.16	\$3,665
Demolish interior door, frame and hardware, single	10	EA	0.00	1.000	1.00	56.84	56.84	0.00	10.00	56.84	\$568
Remove exterior window	903	SF	0.00	0.040	1.00	56.84	2.27	0.00	36.12	2.27	\$2,053
Demolish exterior wall	96	SF	0.00	0.105	1.00	56.84	5.97	0.00	10.08	5.97	\$573
Remove gypsum board to exterior walls	2,169	SF	0.00	0.008	1.00	56.84	0.45	0.00	17.35	0.45	\$986
Demolish interior partition	2,568	SF	0.00	0.046	1.00	56.84	2.61	0.00	118.13	2.61	\$6,714
Demolish interior furred partition	696	SF	0.00	0.027	1.00	56.84	1.53	0.00	18.79	1.53	\$1,068
Remove gypsum board to interior walls	984	SF	0.00	0.008	1.00	56.84	0.45	0.00	7.87	0.45	\$447
Demolish interior steps	24	LF	0.00	0.200	1.00	56.84	11.37	0.00	4.80	11.37	\$273
Demolish watercloset	9	EA	0.00	1.143	1.00	74.96	85.68	0.00	10.29	85.68	\$771
Demolish urinal	3	EA	0.00	1.143	1.00	74.96	85.68	0.00	3.43	85.68	\$257
Demolish trough lavatory	2	EA	0.00	2.000	1.00	74.96	149.92	0.00	4.00	149.92	\$300
Demolish drinking fountain	1	EA	0.00	1.000	1.00	74.96	74.96	0.00	1.00	74.96	\$75
Demolish electrical, data, fire alarm	2,938	SF	0.00	0.040	1.00	56.84	2.27	0.00	117.52	2.27	\$6,680
Haul and dispose of spoils	87	TONS	0.00	0.100	1.00	57.07	5.71	6.50	8.66	12.21	\$1,057
Tipping fees	87	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	65.00	\$5,626
Classroom Building											
Demolish slab for structural work, ALLOWANCE	207	SF	0.46	0.047	1.00	56.84	2.67	0.92	9.73	4.05	\$839
Demolish base cabinet and countertop	45	LF	0.00	0.800	1.00	56.84	45.47	0.00	36.00	45.47	\$2,046
Demolish lavatory countertop	12	LF	0.00	0.200	1.00	56.84	11.37	0.00	2.40	11.37	\$136
Demolish toilet partition	1	EA	0.00	2.000	1.00	56.84	113.68	0.00	2.00	113.68	\$114



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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment						
Demolish carpet flooring	5,728	SF	0.00	0.008	1.00	56.84	0.45	0.00	45.82	0.45	\$2,605			
Demolish terrazzo flooring	399	SF	0.00	0.053	1.00	56.84	3.01	0.00	21.15	3.01	\$1,202			
Demolish ceiling	6,127	SF	0.00	0.022	1.00	56.84	1.25	0.00	134.79	1.25	\$7,662			
Demolish terrazzo wall	844	SF	0.00	0.038	1.00	56.84	2.16	0.00	32.07	2.16	\$1,823			
Demolish exterior door, frame and hardware, double	1	PR	0.00	1.250	1.00	56.84	71.05	0.00	1.25	71.05	\$71			
Demolish interior door, frame and hardware, single	11	EA	0.00	1.000	1.00	56.84	56.84	0.00	11.00	56.84	\$625			
Remove exterior window	3,081	SF	0.00	0.040	1.00	56.84	2.27	0.00	123.24	2.27	\$7,005			
Demolish exterior wall	564	SF	0.00	0.105	1.00	56.84	5.97	0.00	59.22	5.97	\$3,366			
Remove gypsum board to exterior walls	6,048	SF	0.00	0.008	1.00	56.84	0.45	0.00	48.38	0.45	\$2,750			
Demolish interior partition	3,288	SF	0.00	0.046	1.00	56.84	2.61	0.00	151.25	2.61	\$8,597			
Demolish interior furred partition	828	SF	0.00	0.027	1.00	56.84	1.53	0.00	22.36	1.53	\$1,271			
Remove gypsum board to interior walls	2,088	SF	0.00	0.008	1.00	56.84	0.45	0.00	16.70	0.45	\$949			
Demolish watercloset	2	EA	0.00	1.143	1.00	74.96	85.68	0.00	2.29	85.68	\$171			
Demolish urinal	1	EA	0.00	1.143	1.00	74.96	85.68	0.00	1.14	85.68	\$86			
Demolish lavatory	5	EA	0.00	0.800	1.00	74.96	59.97	0.00	4.00	59.97	\$300			
Demolish sink, cap	10	EA	25.00	1.000	1.00	74.96	74.96	0.00	10.00	99.96	\$1,000			
Demolish telephone equipment	1	EA	0.00	4.000	1.00	46.47	185.88	0.00	4.00	185.88	\$186			
Demolish data equipment	1	EA	0.00	4.000	1.00	60.47	241.88	0.00	4.00	241.88	\$242			
Demolish electrical, data, fire alarm	6,671	SF	0.00	0.040	1.00	56.84	2.27	0.00	266.84	2.27	\$15,167			
Haul and dispose of spoils	117	TONS	0.00	0.100	1.00	57.07	5.71	6.50	11.70	12.21	\$1,429			
Tipping fees	117	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	65.00	\$7,607			
Subtotal Existing Conditions			13,867			96,175			2,091		1,681		\$112,134	
02.60.00 Contaminated Site Material Removal														
Hazardous materials removal and disposal	1	LS				58.18	0.00		-	20,000.00	\$20,000			
Subtotal Contaminated Site Material Removal			-			-			-		\$20,000			
Division 03 Concrete											\$11,757			
03.00.00 Concrete														
Classroom Building														
Shear wall footing, 2"x3"	69	LF	37.53	0.953	1.00	56.84	54.17	17.10	65.76	108.80	\$7,507			
Patch concrete slab	207	SF	9.56	0.190	1.00	56.84	10.80	0.17	39.33	20.53	\$4,250			
Subtotal Concrete			4,568			5,973			1,215		105		\$11,757	
Division 05 Metals											\$97,948			
05.00.00 Metals														
Classroom Building														
Hold Downs	10	EA	35.00	0.500	1.00	58.18	29.09	0.00	5.00	64.09	\$641			
Canopy														
Canopy framing complete	4,734	SF	13.38	0.036	1.00	77.76	2.83	1.20	172.32	17.41	\$82,432			



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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Canopy metal decking	4,734	SF	2.50	0.008	1.00	77.76	0.62	0.02	37.87	3.14	\$14,875
Subtotal Metals			75,528				16,635	5,785	215		\$97,948
Division 07 Thermal and Moisture Protection \$111,412											
07.50.00 Membrane Roofing											
Administration Building											
Remove roofing	5,368	SF	0.00	0.033	1.00	56.84	1.88	0.00	177.14	1.88	\$10,069
Single ply membrane roofing, fiberglass 60, insulated	5,368	SF	3.93	0.015	1.00	46.71	0.72	0.07	82.56	4.72	\$25,328
Classroom Building											
Remove roofing	9,490	SF	0.00	0.033	1.00	56.84	1.88	0.00	313.17	1.88	\$17,801
Single ply membrane roofing, fiberglass 60, insulated	9,490	SF	3.93	0.015	1.00	46.71	0.72	0.07	145.96	4.72	\$44,778
Canopy											
Single ply membrane roofing, fiberglass 48	4,734	SF	2.05	0.015	1.00	46.71	0.72	0.07	72.81	2.84	\$13,437
Subtotal Membrane Roofing			68,097				41,944	1,371	792		\$111,412
Division 08 Openings \$225,692											
08.10.00 Doors and Frames											
Administration Building											
Exterior door, frame and hardware, single	8	EA	1,525.00	12.000	1.00	58.18	698.16	0.00	96.00	2,223.16	\$17,785
Exterior door, frame and hardware, double	2	PR	3,000.00	16.000	1.00	58.18	930.88	0.00	32.00	3,930.88	\$7,862
Classroom Building											
Exterior door, frame and hardware, single	7	EA	1,525.00	12.000	1.00	58.18	698.16	0.00	84.00	2,223.16	\$15,562
Exterior door, frame and hardware, double	1	PR	3,000.00	16.000	1.00	58.18	930.88	0.00	16.00	3,930.88	\$3,931
Subtotal Doors and Frames			31,875				13,265	-	228		\$45,140
08.50.00 Windows											
Administration Building											
Exterior windows, operable	903	SF	39.37	0.089	1.00	66.92	5.95	0.00	80.28	45.32	\$40,923
Classroom Building											
Exterior windows, operable	3,081	SF	39.37	0.089	1.00	66.92	5.95	0.00	273.90	45.32	\$139,628
Subtotal Windows			156,850				23,702	-	354		\$180,552
Division 09 Finishes \$113,628											
09.00.00 Finishes											
Administration Building											
New exterior wall infill	72	SF	4.91	0.250	1.00	58.18	14.55	0.00	18.00	19.46	\$1,401
Gypsum board to exterior walls	2,169	SF	0.35	0.042	1.00	58.18	2.44	0.00	91.10	2.79	\$6,060
Insulation to exterior walls	2,169	SF	0.60	0.006	1.00	58.18	0.35	0.00	13.01	0.95	\$2,059
New interior partition	1,248	SF	1.37	0.105	1.00	58.18	6.11	0.00	131.04	7.48	\$9,334
New interior partition, furring	1,080	SF	1.02	0.063	1.00	58.18	3.67	0.00	68.04	4.69	\$5,060



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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Gypsum board to interior walls Classroom Building	984	SF	0.35	0.042	1.00	58.18	2.44	0.00	41.33	2.79	\$2,749
Gypsum board to exterior walls	6,048	SF	0.35	0.042	1.00	58.18	2.44	0.00	254.02	2.79	\$16,895
Insulation to exterior walls	6,048	SF	0.60	0.006	1.00	58.18	0.35	0.00	36.29	0.95	\$5,740
Gypsum board to interior walls	2,088	SF	0.35	0.042	1.00	58.18	2.44	0.00	87.70	2.79	\$5,833
Subtotal Finishes			12,046				43,084	-	741		\$55,130
09.50.00 Ceilings Administration Building											
Gypsum board ceiling	465	SF	2.10	0.127	1.00	50.40	6.40	0.00	59.06	8.50	\$3,953
Acoustic ceiling tiles	52	SF	0.41	0.040	1.00	50.40	2.02	0.00	2.08	2.43	\$126
Stucco ceiling	106	SF	4.56	0.208	1.00	50.40	10.48	0.00	22.05	15.04	\$1,595
Subtotal Ceilings			1,481				4,192	-	83		\$5,674
09.60.00 Flooring Administration Building											
Sealed concrete flooring	177	SF	0.40	0.015	1.00	56.84	0.85	0.00	2.66	1.25	\$222
Sheet vinyl flooring	52	SF	2.71	0.040	1.00	47.53	1.90	0.00	2.08	4.61	\$240
Ceramic tile flooring	465	SF	6.50	0.087	1.00	58.41	5.08	0.00	40.46	11.58	\$5,385
Ceramic tile base	175	LF	8.50	0.087	1.00	58.41	5.08	0.00	15.23	13.58	\$2,377
Subtotal Flooring			4,722				3,502	-	60		\$8,224
09.70.00 Wall Finishes Administration Building											
Stucco walls	614	SF	4.91	0.250	1.00	50.40	12.60	0.00	153.50	17.51	\$10,751
Ceramic tile wainscot	1,045	SF	3.86	0.172	1.00	47.53	8.18	0.00	179.74	12.04	\$12,577
Paint above wainscot	697	SF	0.15	0.012	1.00	51.29	0.62	0.00	8.36	0.77	\$534
Subtotal Wall Finishes			7,153				16,708	-	342		\$23,861
09.90.00 Painting and Coating Administration Building											
Patch and paint exterior walls Classroom Building	3,048	SF	0.61	0.033	1.00	50.40	1.65	0.00	99.97	2.26	\$6,886
Patch and paint exterior walls	6,132	SF	0.61	0.033	1.00	50.40	1.65	0.00	201.13	2.26	\$13,853
Subtotal Painting and Coating			5,563				15,176	-	301		\$20,739
Division 10 Specialties											\$15,750
10.00.00 Specialties Administration Building											



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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Toilet Specialties											
Standard toilet partition, accessible	2	EA	1,100.00	2.000	1.00	58.18	116.36	0.00	4.00	1,216.36	\$2,433
Standard toilet partition	4	EA	900.00	2.000	1.00	58.18	116.36	0.00	8.00	1,016.36	\$4,065
Toilet paper dispenser	8	EA	25.00	0.350	1.00	58.18	20.36	0.00	2.80	45.36	\$363
Toilet seat cover dispenser	8	EA	26.00	0.500	1.00	58.18	29.09	0.00	4.00	55.09	\$441
Grab bars, per set	4	EA	105.00	0.800	1.00	58.18	46.54	0.00	3.20	151.54	\$606
Sanitary disposal	5	EA	152.30	1.231	1.00	58.18	71.62	0.00	6.16	223.92	\$1,120
Sanitary dispenser	2	EA	544.57	1.231	1.00	58.18	71.62	0.00	2.46	616.19	\$1,232
Robe hooks	8	EA	25.00	0.222	1.00	58.18	12.92	0.00	1.78	37.92	\$303
Soap dispenser	6	EA	45.00	0.400	1.00	58.18	23.27	0.00	2.40	68.27	\$410
Mirror	39	SF	22.23	0.111	1.00	58.18	6.45	0.00	4.32	28.68	\$1,118
Combination paper towel and waste receptacle	4	EA	373.82	1.000	1.00	58.18	58.18	0.00	4.00	432.00	\$1,728
Subtotal Specialties			11,311				2,508	-	43		\$13,819
10.10.00 Information Specialties											
Administration Building											
Signage ALLOWANCE	1	LS	500.00	8.000	1.00	58.18	465.44	0.00	8.00	965.44	\$965
Classroom Building											
Signage ALLOWANCE	1	LS	500.00	8.000	1.00	58.18	465.44	0.00	8.00	965.44	\$965
Subtotal Information Specialties			1,000				931	-	16		\$1,931
Facility Services											\$461,941
Division 21 Fire Suppression											\$58,565
21.00.00 Fire Suppression											
Administration Building											
Standpipe assembly	1	EA	1,600.00	25.000	1.00	74.96	1,874.00	0.00	25.00	3,474.00	\$3,474
Fire sprinkler system	2,953	SF	1.58	0.027	1.00	74.96	2.00	0.00	78.75	3.58	\$10,578
Classroom Building											
Standpipe assembly	1	EA	1,600.00	25.000	1.00	74.96	1,874.00	0.00	25.00	3,474.00	\$3,474
Fire sprinkler system	6,722	SF	1.58	0.027	1.00	74.96	2.00	0.00	179.25	3.58	\$24,080
Canopy											
Fire sprinkler system	4,734	SF	1.58	0.027	1.00	74.96	2.00	0.00	126.24	3.58	\$16,958
Subtotal Fire Suppression			26,014				32,551	-	434		\$58,565
Division 22 Plumbing											\$47,567
22.00.00 Plumbing											
Administration Building											
Water closet	4	EA	2,000.00	13.400	1.00	74.96	1,004.46	0.00	53.60	3,004.46	\$12,018
Water closet, accessible	4	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	53.60	3,204.46	\$12,818
Gang sink, dual lav	2	EA	2,250.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,254.46	\$6,509
Lavatory	2	EA	1,750.00	13.400	1.00	74.96	1,004.46	0.00	26.80	2,754.46	\$5,509



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Urinal	1	EA	2,000.00	13.400	1.00	74.96	1,004.46	0.00	13.40	3,004.46	\$3,004
Drinking fountain, hi-lo, railings	1	EA	3,500.00	13.400	1.00	74.96	1,004.46	0.00	13.40	4,504.46	\$4,504
Water heater, 30 gal, complete, natural gas	1	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	13.40	3,204.46	\$3,204
Subtotal Plumbing			32,500				15,067	-	201		\$47,567

Division 23 Heating, Ventilating, and Air Conditioning \$151,811

23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)

Administration Building

HVAC miscellaneous, shell	2,846	SF	2.04	0.012	1.00	65.92	0.81	0.00	35.01	2.85	\$8,118
Roof mounted heat pump, 60,000 bth cooling/80,000 btuh heating	1	EA	17,583.00	85.000	1.00	65.92	5,603.20	150.00	85.00	23,336.20	\$23,336
Gas fired unit heaters, 45,000 btu	4	EA	769.60	4.000	1.00	65.92	263.68	0.00	16.00	1,033.28	\$4,133
Exhaust fan, 150 cfm	4	EA	200.00	1.670	1.00	65.92	110.09	0.00	6.68	310.09	\$1,240
Exhaust fan, 850 cfm	1	EA	1,035.00	5.560	1.00	65.92	366.52	0.00	5.56	1,401.52	\$1,402

Classroom Building

HVAC miscellaneous, shell	6,696	SF	2.04	0.012	1.00	65.92	0.81	0.00	82.36	2.85	\$19,099
Roof mounted heat pump, 36,000 bth cooling/45,000 btuh heating	6	EA	10,415.00	76.000	1.00	65.92	5,009.92	150.00	456.00	15,574.92	\$93,450
Gas fired unit heaters, 45,000 btu	1	EA	769.60	4.000	1.00	65.92	263.68	0.00	4.00	1,033.28	\$1,033

Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			105,236				45,525	1,050	691		\$151,811
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Division 26 Electrical \$147,017

26.00.00 Electrical

Administration Building

Electrical equipment and power distribution	2,953	SF	2.70	0.043	1.00	60.47	2.60	0.00	126.98	5.30	\$15,652
Convenience power outlets and wiring	2,953	SF	1.26	0.019	1.00	60.47	1.18	0.00	57.41	2.44	\$7,192
Exterior lights, wiring and controls	97	SF	3.90	0.044	1.00	60.47	2.66	0.00	4.27	6.56	\$636
Temporary lights, wiring and controls	2,856	SF	1.00	0.044	1.00	60.47	2.66	0.00	125.66	3.66	\$10,455
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	2,953	SF	0.88	0.016	1.00	60.47	0.97	0.00	47.25	1.85	\$5,456

Classroom Building

Electrical equipment and power distribution	6,722	SF	2.70	0.043	1.00	60.47	2.60	0.00	289.05	5.30	\$35,628
Convenience power outlets and wiring	6,722	SF	0.89	0.014	1.00	60.47	0.83	0.00	92.56	1.73	\$11,597
Exterior lights, wiring and controls		SF	3.90	0.044	1.00	60.47	2.66	0.00	-	6.56	\$0
Temporary lights, wiring and controls	6,722	SF	1.00	0.044	1.00	60.47	2.66	0.00	295.77	3.66	\$24,607
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	6,722	SF	0.88	0.016	1.00	60.47	0.97	0.00	107.55	1.85	\$12,419

Canopy

Lights, wiring and controls	4,734	SF	2.00	0.044	1.00	60.47	2.66	0.00	208.30	4.66	\$22,064
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	4,734	SF	0.13	0.002	1.00	60.47	0.15	0.00	11.36	0.28	\$1,312

Subtotal Electrical			64,406				82,611	-	1,366		\$147,017
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15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,437,941
Option 2 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 27 Communications \$20,665											
27.00.00 Communications											
Administration Building											
Telecommunication infrastructure	2,953	SF	1.16	0.021	1.00	46.47	0.98	0.00	62.01	2.14	\$6,307
Classroom Building											
Telecommunication infrastructure	6,722	SF	1.16	0.021	1.00	46.47	0.98	0.00	141.16	2.14	\$14,357
Subtotal Communications			11,223				9,442	-	203		\$20,665
Division 28 Electronic Safety and Security \$36,316											
28.00.00 Electronic Safety and Security											
Administration Building											
Fire alarm system	2,953	SF	1.16	0.017	1.00	46.47	0.79	0.00	50.20	1.95	\$5,758
Intrusion detection	2,953	SF	1.50	0.017	1.00	46.47	0.79	0.00	50.20	2.29	\$6,762
Classroom Building											
Fire alarm system	6,722	SF	1.16	0.017	1.00	46.47	0.79	0.00	114.27	1.95	\$13,108
Intrusion detection	6,722	SF	0.80	0.017	1.00	46.47	0.79	0.00	114.27	1.59	\$10,688
Subtotal Electronic Safety and Security			21,030				15,286	-	329		\$36,316
Site and Infrastructure \$76,643											
Division 31 Earthwork \$42,777											
31.10.00 Site Clearing											
Site Demolition											
Demolish canopy	4,734	SF	0.00	0.050	1.00	56.84	2.84	0.00	236.70	2.84	\$13,454
Demolish tube steel posts	36	EA	0.00	0.250	1.00	56.84	14.21	5.00	9.00	19.21	\$692
Demolish concrete paving	5,405	SF	0.26	0.019	1.00	56.84	1.08	0.36	102.70	1.70	\$9,188
Haul and dispose of spoils	252	TONS	0.00	0.100	1.00	57.07	5.71	6.50	25.18	12.21	\$3,074
Tipping Fee, broker mitigated	252	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	65.00	\$16,369
Subtotal Site Clearing			17,774				21,240	3,763	374		\$42,777
Division 32 Exterior Improvements \$33,866											
32.30.00 Site Improvements											
Concrete walkways											
Concrete sidewalk	5,405	SF	3.24	0.052	1.00	56.84	2.96	0.07	281.06	6.27	\$33,866
Subtotal Site Improvements			17,512				15,975	378	281		\$33,866



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,449,150
Option 3 (No Plaza)
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary				\$/EA	Total
General Requirements					\$ 35,654
Division 01	General Requirements			\$ 4.07/SF	\$ 35,654
Facility Construction					\$ 751,313
Division 02	Existing Conditions			\$ 16.74/SF	\$ 146,827
Division 03	Concrete			\$ 2.78/SF	\$ 24,350
Division 04	Masonry			\$ 0/SF	-
Division 05	Metals			\$ 12.61/SF	\$ 110,621
Division 06	Wood, Plastics and Composites			\$ 0.36/SF	\$ 3,124
Division 07	Thermal and Moisture Protection			\$ 11.67/SF	\$ 102,365
Division 08	Openings			\$ 23.6/SF	\$ 206,953
Division 09	Finishes			\$ 16.12/SF	\$ 141,338
Division 10	Specialties			\$ 1.79/SF	\$ 15,732
Division 11	Equipment			\$ 0/SF	-
Division 12	Furnishings			\$ 0/SF	-
Division 13	Special Construction			\$ 0/SF	-
Division 14	Conveying Equipment			\$ 0/SF	-
Facility Services					\$ 422,362
Division 21	Fire Suppression			\$ 6.31/SF	\$ 55,323
Division 22	Plumbing			\$ 6.14/SF	\$ 53,885
Division 23	Heating, Ventilating, and Air Conditioning			\$ 14.46/SF	\$ 126,801
Division 25	Integrated Automation			\$ 0/SF	-
Division 26	Electrical			\$ 15.34/SF	\$ 134,509
Division 27	Communications			\$ 2.14/SF	\$ 18,732
Division 28	Electronic Safety and Security			\$ 3.78/SF	\$ 33,113
Site and Infrastructure					\$ 84,843
Division 31	Earthwork			\$ 4.88/SF	\$ 42,777
Division 32	Exterior Improvements			\$ 4.8/SF	\$ 42,066
Division 33	Utilities			\$ 0/SF	-
Division 34	Transportation			\$ 0/SF	-
Division 35	Waterway and Marine Construction			\$ 0/SF	-
Process Equipment					\$ -
Division 40	Process Integration			\$ 0/SF	-
Division 41	Material Processing and Handling Equipment			\$ 0/SF	-
Division 42	Process Heating, Cooling, and Drying Equipment			\$ 0/SF	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment			\$ 0/SF	-
Division 44	Pollution Control Equipment			\$ 0/SF	-
Division 45	Industry-Specific Manufacturing Equipment			\$ 0/SF	-
Division 48	Electrical Power Generation			\$ 0/SF	-
Sales Tax	8.00 %		\$ 700,636		\$ 56,051
Subcontractor Mark-up	15 %		\$ 1,310,875		\$ 196,631
Subtotal Net Direct Building Cost				\$ 176.38/SF	\$ 1,546,854
Prime Contractor General Conditions, Home Office Overhead, 12 Months	18 %				\$ 278,434
Prime Contractor Profit	10 %				\$ 182,529
Bonds and Insurance	3.0 %				\$ 60,234
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %				\$ 61,645
Design Contingency	15 %				\$ 319,454
Phasing Factor, Excluded	0 %				\$ -
Total Projected Construction Cost				\$ 279 /SF	\$ 2,449,150
	<i>Project Square Footage</i>	8,770 SF	<i>Cost Per Square Foot</i>	\$ 279 /SF	
		9,028 HRS			



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,449,150
Option 3 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure					Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor			
Division 01	General Requirements									
01.00.00	General Requirements	\$ 4.07/SF	\$35,654					\$ 4.07/SF	\$35,654	
Division 02	Existing Conditions							\$ 16.74/SF	\$146,827	
02.00.00	Existing Conditions	\$ 14.46/SF	\$126,827							
02.60.00	Contaminated Site Material Removal	\$ 2.28/SF	\$20,000							
Division 03	Concrete							\$ 2.78/SF	\$24,350	
03.00.00	Concrete	\$ 2.78/SF	\$24,350							
Division 04	Masonry							\$ 0/SF	\$0	
Division 05	Metals							\$ 12.61/SF	\$110,621	
05.00.00	Metals	\$ 12.61/SF	\$110,621							
Division 06	Wood, Plastics and Composites							\$ 0.36/SF	\$3,124	
06.10.00	Rough Carpentry	\$ 0.36/SF	\$3,124							
Division 07	Thermal and Moisture Protection							\$ 11.67/SF	\$102,365	
07.50.00	Membrane Roofing	\$ 11.67/SF	\$102,365							
Division 08	Openings							\$ 23.6/SF	\$206,953	
08.10.00	Doors and Frames	\$ 4.25/SF	\$37,278							
08.50.00	Windows	\$ 19.35/SF	\$169,675							
Division 09	Finishes							\$ 16.12/SF	\$141,538	
09.00.00	Finishes	\$ 8.47/SF	\$74,295							
09.50.00	Ceilings	\$ 1.18/SF	\$10,363							
09.60.00	Flooring	\$ 1.35/SF	\$11,829							
09.70.00	Wall Finishes	\$ 2.96/SF	\$25,983							
09.90.00	Painting and Coating	\$ 2.15/SF	\$18,868							
Division 10	Specialties							\$ 1.79/SF	\$15,732	
10.00.00	Specialties	\$ 1.57/SF	\$13,802							
10.10.00	Information Specialties	\$ 0.22/SF	\$1,931							
Division 11	Equipment							\$ 0/SF	\$0	
Division 12	Furnishings							\$ 0/SF	\$0	
Division 13	Special Construction							\$ 0/SF	\$0	
Division 14	Conveying Equipment							\$ 0/SF	\$0	
Division 21	Fire Suppression							\$ 6.31/SF	\$55,323	
21.00.00	Fire Suppression	\$ 6.31/SF	\$55,323							
Division 22	Plumbing							\$ 6.14/SF	\$53,885	
22.00.00	Plumbing	\$ 6.14/SF	\$53,885							
Division 23	Heating, Ventilating, and Air Conditioning							\$ 14.46/SF	\$126,801	
23.00.00	Heating, Ventilating, and Air-Conditioning (HVAC)	\$ 14.46/SF	\$126,801							
Division 25	Integrated Automation							\$ 0/SF	\$0	
Division 26	Electrical							\$ 15.34/SF	\$134,509	
26.00.00	Electrical	\$ 15.34/SF	\$134,509							
Division 27	Communications							\$ 2.14/SF	\$18,732	
27.00.00	Communications	\$ 2.14/SF	\$18,732							
Division 28	Electronic Safety and Security							\$ 3.78/SF	\$33,113	
28.00.00	Electronic Safety and Security	\$ 3.78/SF	\$33,113							
Division 31	Earthwork							\$ 4.88/SF	\$42,777	
31.10.00	Site Clearing	\$ 4.88/SF	\$42,777							
Division 32	Exterior Improvements							\$ 4.8/SF	\$42,066	
32.00.00	Exterior Improvements	\$ 0.94/SF	\$8,200							
32.30.00	Site Improvements	\$ 3.86/SF	\$33,866							
Division 33	Utilities							\$ 0/SF	\$0	
Division 34	Transportation							\$ 0/SF	\$0	
Division 35	Waterway and Marine Construction							\$ 0/SF	\$0	
Division 40	Process Integration							\$ 0/SF	\$0	
Division 41	Material Processing and Handling Equipment							\$ 0/SF	\$0	
Division 42	Process Heating, Cooling, and Drying Equipment							\$ 0/SF	\$0	
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment							\$ 0/SF	\$0	
Division 44	Pollution Control Equipment							\$ 0/SF	\$0	
Division 45	Industry-Specific Manufacturing Equipment							\$ 0/SF	\$0	
Division 48	Electrical Power Generation							\$ 0/SF	\$0	



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,449,150
Option 3 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

General Requirements **\$35,654**

Division 01 General Requirements **\$35,654**

01.00.00	General Requirements										
Administration Building											
Shoring ALLOWANCE	1	LS	1,200.00	16.000	1.00	58.18	930.88	0.00	16.00	2,130.88	\$2,131
Classroom Building											
Shoring ALLOWANCE	1	LS	4,800.00	64.000	1.00	58.18	3,723.52	0.00	64.00	8,523.52	\$8,524
Dry rot mitigation ALLOWANCE	1	LS				58.18	0.00	0.00	-	25,000.00	\$25,000

Subtotal General Requirements			6,000			4,654	-	80		\$35,654
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Facility Construction **\$751,313**

Division 02 Existing Conditions **\$146,827**

02.00.00	Existing Conditions										
Administration Building											
Demolish slab for plumbing work, ALLOWANCE	352	SF	0.46	0.047	1.00	56.84	2.67	0.92	16.54	4.05	\$1,426
Demolish base cabinet and countertop	81	LF	0.00	0.800	1.00	56.84	45.47	0.00	64.80	45.47	\$3,683
Demolish upper carbinet	54	LF	0.00	0.533	1.00	56.84	30.30	0.00	28.78	30.30	\$1,636
Demolish toilet partition	5	EA	0.00	2.000	1.00	56.84	113.68	0.00	10.00	113.68	\$568
Demolish carpet flooring	2,121	SF	0.00	0.008	1.00	56.84	0.45	0.00	16.97	0.45	\$964
Demolish terrazzo flooring	403	SF	0.00	0.053	1.00	56.84	3.01	0.00	21.36	3.01	\$1,214
Demolish ceiling	2,524	SF	0.00	0.022	1.00	56.84	1.25	0.00	55.53	1.25	\$3,156
Demolish terrazzo wall	1,697	SF	0.00	0.038	1.00	56.84	2.16	0.00	64.49	2.16	\$3,665
Demolish interior door, frame and hardware, single	10	EA	0.00	1.000	1.00	56.84	56.84	0.00	10.00	56.84	\$568
Remove exterior window	663	SF	0.00	0.040	1.00	56.84	2.27	0.00	26.52	2.27	\$1,507
Demolish exterior wall	1,056	SF	0.00	0.105	1.00	56.84	5.97	0.00	110.88	5.97	\$6,302
Remove gypsum board to exterior walls	1,488	SF	0.00	0.008	1.00	56.84	0.45	0.00	11.90	0.45	\$677
Demolish interior partition	2,688	SF	0.00	0.046	1.00	56.84	2.61	0.00	123.65	2.61	\$7,028
Demolish interior furred partition	684	SF	0.00	0.027	1.00	56.84	1.53	0.00	18.47	1.53	\$1,050
Demolish interior steps	24	LF	0.00	0.200	1.00	56.84	11.37	0.00	4.80	11.37	\$273
Demolish watercloset	9	EA	0.00	1.143	1.00	74.96	85.68	0.00	10.29	85.68	\$771
Demolish urinal	3	EA	0.00	1.143	1.00	74.96	85.68	0.00	3.43	85.68	\$257
Demolish trough lavatory	2	EA	0.00	2.000	1.00	74.96	149.92	0.00	4.00	149.92	\$300
Demolish drinking fountain	1	EA	0.00	1.000	1.00	74.96	74.96	0.00	1.00	74.96	\$75
Demolish electrical, data, fire alarm	2,938	SF	0.00	0.040	1.00	56.84	2.27	0.00	117.52	2.27	\$6,680
Haul and dispose of spoils	79	TONS	0.00	0.100	1.00	57.07	5.71	6.50	7.89	12.21	\$963
Tipping fees	79	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	65.00	\$5,127
Classroom Building											
Demolish slab for structural work, ALLOWANCE	380	SF	0.46	0.047	1.00	56.84	2.67	0.92	17.86	4.05	\$1,540
Demolish base cabinet and countertop	45	LF	0.00	0.800	1.00	56.84	45.47	0.00	36.00	45.47	\$2,046
Demolish lavatory countertop	12	LF	0.00	0.200	1.00	56.84	11.37	0.00	2.40	11.37	\$136



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,449,150
Option 3 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Demolish toilet partition	1	EA	0.00	2.000	1.00	56.84	113.68	0.00	2.00	113.68	\$114
Demolish carpet flooring	5,725	SF	0.00	0.008	1.00	56.84	0.45	0.00	45.80	0.45	\$2,603
Demolish terrazzo flooring	399	SF	0.00	0.053	1.00	56.84	3.01	0.00	21.15	3.01	\$1,202
Demolish ceiling	6,124	SF	0.00	0.022	1.00	56.84	1.25	0.00	134.73	1.25	\$7,658
Demolish terrazzo wall	844	SF	0.00	0.038	1.00	56.84	2.16	0.00	32.07	2.16	\$1,823
Demolish exterior door, frame and hardware, double	1	PR	0.00	1.250	1.00	56.84	71.05	0.00	1.25	71.05	\$71
Demolish interior door, frame and hardware, single	11	EA	0.00	1.000	1.00	56.84	56.84	0.00	11.00	56.84	\$625
Remove exterior window	3,081	SF	0.00	0.040	1.00	56.84	2.27	0.00	123.24	2.27	\$7,005
Demolish exterior wall	732	SF	0.00	0.105	1.00	56.84	5.97	0.00	76.86	5.97	\$4,369
Remove gypsum board to exterior walls	5,256	SF	0.00	0.008	1.00	56.84	0.45	0.00	42.05	0.45	\$2,390
Demolish interior partition	4,020	SF	0.00	0.046	1.00	56.84	2.61	0.00	184.92	2.61	\$10,511
Demolish interior furred partition	648	SF	0.00	0.027	1.00	56.84	1.53	0.00	17.50	1.53	\$994
Demolish watercloset	2	EA	0.00	1.143	1.00	74.96	85.68	0.00	2.29	85.68	\$171
Demolish urinal	1	EA	0.00	1.143	1.00	74.96	85.68	0.00	1.14	85.68	\$86
Demolish lavatory	5	EA	0.00	0.800	1.00	74.96	59.97	0.00	4.00	59.97	\$300
Demolish sink, cap	10	EA	25.00	1.000	1.00	74.96	74.96	0.00	10.00	99.96	\$1,000
Demolish telephone equipment	1	EA	0.00	4.000	1.00	46.47	185.88	0.00	4.00	185.88	\$186
Demolish data equipment	1	EA	0.00	4.000	1.00	60.47	241.88	0.00	4.00	241.88	\$242
Demolish electrical, data, fire alarm	6,671	SF	0.00	0.040	1.00	56.84	2.27	0.00	266.84	2.27	\$15,167
Demolish complete building	905	SF				56.84	0.00	0.00	-	10.00	\$9,050
Haul and dispose of spoils	125	TONS	0.00	0.100	1.00	57.07	5.71	6.50	12.49	12.21	\$1,525
Tipping fees	125	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	65.00	\$8,121
Subtotal Existing Conditions			13,835			101,944		1,998	1,782	\$126,827	
02.60.00 Contaminated Site Material Removal											
Hazardous materials removal and disposal	1	LS				58.18	0.00		-	20,000.00	\$20,000
Subtotal Contaminated Site Material Removal			-			-		-	-	\$20,000	
Division 03 Concrete											\$24,350
03.00.00 Concrete											
Classroom Building											
Shear wall footing, 2'x3'?	60	LF	37.53	0.953	1.00	56.84	54.17	17.10	57.18	108.80	\$6,528
Base: Braced frame, spread footing, 7'x7'x2'?	4	EA	1,052.16	19.880	1.00	56.84	1,129.98	323.10	79.52	2,505.24	\$10,021
Patch concrete slab	380	SF	9.56	0.190	1.00	56.84	10.80	0.17	72.20	20.53	\$7,801
Subtotal Concrete			10,093			11,874		2,383	209	\$24,350	
Division 05 Metals											\$110,621
05.00.00 Metals											
Classroom Building											
Base: Braced frame, beam	60	LF	93.14	0.148	1.00	77.76	11.48	3.90	8.86	108.52	\$6,511



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,449,150
Option 3 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Base: Braced frame, column	4	EA	465.69	1.738	1.00	77.76	135.15	46.80	6.95	647.64	\$2,591
Base: Braced frame, moment frame	4	EA	450.00	4.000	1.00	77.76	311.04	100.00	16.00	861.04	\$3,444
Hold Downs	12	EA	35.00	0.500	1.00	58.18	29.09	0.00	6.00	64.09	\$769
Canopy											
Canopy framing complete	4,734	SF	13.38	0.036	1.00	77.76	2.83	1.20	172.32	17.41	\$82,432
Canopy metal decking	4,734	SF	2.50	0.008	1.00	77.76	0.62	0.02	37.87	3.14	\$14,875
Subtotal Metals			84,849				19,167	6,606	248		\$110,621
Division 06 Wood, Plastics and Composites \$3,124											
06.10.00 Rough Carpentry											
Classroom Building											
Infill lowered floor to adjacent height	388	SF	5.26	0.048	1.00	58.18	2.79	0.00	18.62	8.05	\$3,124
Subtotal Rough Carpentry			2,041				1,084	-	19		\$3,124
Division 07 Thermal and Moisture Protection \$102,365											
07.50.00 Membrane Roofing											
Administration Building											
Remove roofing	5,368	SF	0.00	0.033	1.00	56.84	1.88	0.00	177.14	1.88	\$10,069
Single ply membrane roofing, fiberglass 60, insulated	5,368	SF	3.93	0.015	1.00	46.71	0.72	0.07	82.56	4.72	\$25,328
Classroom Building											
Remove roofing	8,118	SF	0.00	0.033	1.00	56.84	1.88	0.00	267.89	1.88	\$15,227
Single ply membrane roofing, fiberglass 60, insulated	8,118	SF	3.93	0.015	1.00	46.71	0.72	0.07	124.85	4.72	\$38,304
Canopy											
Single ply membrane roofing, fiberglass 48	4,734	SF	2.05	0.015	1.00	46.71	0.72	0.07	72.81	2.84	\$13,437
Subtotal Membrane Roofing			62,705				38,385	1,275	725		\$102,365
Division 08 Openings \$206,953											
08.10.00 Doors and Frames											
Administration Building											
Exterior door, frame and hardware, single	8	EA	1,525.00	12.000	1.00	58.18	698.16	0.00	96.00	2,223.16	\$17,785
Classroom Building											
Exterior door, frame and hardware, single	7	EA	1,525.00	12.000	1.00	58.18	698.16	0.00	84.00	2,223.16	\$15,562
Exterior door, frame and hardware, double	1	PR	3,000.00	16.000	1.00	58.18	930.88	0.00	16.00	3,930.88	\$3,931
Subtotal Doors and Frames			25,875				11,403	-	196		\$37,278
08.50.00 Windows											
Administration Building											
Exterior windows, operable	663	SF	39.37	0.089	1.00	66.92	5.95	0.00	58.94	45.32	\$30,047
Classroom Building											
Exterior windows, operable	3,081	SF	39.37	0.089	1.00	66.92	5.95	0.00	273.90	45.32	\$139,628



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,449,150
Option 3 (No Plaza)
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Subtotal Windows			147,401			22,274			-	333	\$169,675
Division 09 Finishes										\$141,338	
09.00.00 Finishes											
Administration Building											
New exterior wall infill	948	SF	4.91	0.250	1.00	58.18	14.55	0.00	237.00	19.46	\$18,443
Gypsum board to exterior walls	1,488	SF	0.35	0.042	1.00	58.18	2.44	0.00	62.50	2.79	\$4,157
Insulation to exterior walls	1,488	SF	0.60	0.006	1.00	58.18	0.35	0.00	8.93	0.95	\$1,412
New interior partition	1,644	SF	1.37	0.105	1.00	58.18	6.11	0.00	172.62	7.48	\$12,295
New interior partition, furring	1,260	SF	1.02	0.063	1.00	58.18	3.67	0.00	79.38	4.69	\$5,904
Retrofit existing shear wall	576	SF	5.26	0.048	1.00	58.18	2.79	0.00	27.65	8.05	\$4,638
Classroom Building											
New exterior wall infill	400	SF	4.91	0.250	1.00	58.18	14.55	0.00	99.90	19.46	\$7,774
Gypsum board to exterior walls	5,256	SF	0.35	0.042	1.00	58.18	2.44	0.00	220.75	2.79	\$14,683
Insulation to exterior walls	5,256	SF	0.60	0.006	1.00	58.18	0.35	0.00	31.54	0.95	\$4,988
Subtotal Finishes			19,591			54,704			-	940	\$74,295
09.50.00 Ceilings											
Administration Building											
Gypsum board ceiling	639	SF	2.10	0.127	1.00	50.40	6.40	0.00	81.15	8.50	\$5,432
Acoustic ceiling tiles	160	SF	0.41	0.040	1.00	50.40	2.02	0.00	6.40	2.43	\$388
Stucco ceiling	302	SF	4.56	0.208	1.00	50.40	10.48	0.00	62.82	15.04	\$4,543
Subtotal Ceilings			2,785			7,579			-	150	\$10,363
09.60.00 Flooring											
Administration Building											
Sealed concrete flooring	344	SF	0.40	0.015	1.00	56.84	0.85	0.00	5.16	1.25	\$431
Sheet vinyl flooring	160	SF	2.71	0.040	1.00	47.53	1.90	0.00	6.40	4.61	\$738
Ceramic tile flooring	639	SF	6.50	0.087	1.00	58.41	5.08	0.00	55.59	11.58	\$7,401
Ceramic tile base	240	LF	8.50	0.087	1.00	58.41	5.08	0.00	20.88	13.58	\$3,260
Subtotal Flooring			6,765			5,064			-	88	\$11,829
09.70.00 Wall Finishes											
Administration Building											
Stucco walls	455	SF	4.91	0.250	1.00	50.40	12.60	0.00	113.75	17.51	\$7,967
Ceramic tile wainscot	1,436	SF	3.86	0.172	1.00	47.53	8.18	0.00	246.99	12.04	\$17,282
Paint above wainscot	958	SF	0.15	0.012	1.00	51.29	0.62	0.00	11.50	0.77	\$733
Subtotal Wall Finishes			7,921			18,062			-	372	\$25,983



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Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
09.90.00 Painting and Coating Administration Building											
Patch and paint exterior walls	3,048	SF	0.61	0.033	1.00	50.40	1.65	0.00	99.97	2.26	\$6,886
Classroom Building											
Patch and paint exterior walls	5,304	SF	0.61	0.033	1.00	50.40	1.65	0.00	173.97	2.26	\$11,982
Subtotal Painting and Coating			5,061				13,807	-	274		\$18,868

Division 10	Specialties	\$15,732
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10.00.00 Specialties Administration Building											
Toilet Specialties											
Standard toilet partition, accessible	2	EA	1,100.00	2.000	1.00	58.18	116.36	0.00	4.00	1,216.36	\$2,433
Standard toilet partition	4	EA	900.00	2.000	1.00	58.18	116.36	0.00	8.00	1,016.36	\$4,065
Toilet paper dispenser	8	EA	25.00	0.350	1.00	58.18	20.36	0.00	2.80	45.36	\$363
Toilet seat cover dispenser	8	EA	26.00	0.500	1.00	58.18	29.09	0.00	4.00	55.09	\$441
Grab bars, per set	4	EA	105.00	0.800	1.00	58.18	46.54	0.00	3.20	151.54	\$606
Sanitary disposal	5	EA	152.30	1.231	1.00	58.18	71.62	0.00	6.16	223.92	\$1,120
Sanitary dispenser	2	EA	544.57	1.231	1.00	58.18	71.62	0.00	2.46	616.19	\$1,232
Robe hooks	8	EA	25.00	0.222	1.00	58.18	12.92	0.00	1.78	37.92	\$303
Soap dispenser	7	EA	45.00	0.400	1.00	58.18	23.27	0.00	2.80	68.27	\$478
Mirror	36	SF	22.23	0.111	1.00	58.18	6.45	0.00	3.99	28.68	\$1,032
Combination paper towel and waste receptacle	4	EA	373.82	1.000	1.00	58.18	58.18	0.00	4.00	432.00	\$1,728
Subtotal Specialties			11,289				2,512	-	43		\$13,802

10.10.00 Information Specialties Administration Building											
Signage ALLOWANCE	1	LS	500.00	8.000	1.00	58.18	465.44	0.00	8.00	965.44	\$965
Classroom Building											
Signage ALLOWANCE	1	LS	500.00	8.000	1.00	58.18	465.44	0.00	8.00	965.44	\$965
Subtotal Information Specialties			1,000				931	-	16		\$1,931

Facility Services		\$422,362
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Division 21	Fire Suppression	\$55,323
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21.00.00 Fire Suppression Administration Building											
Standpipe assembly	1	EA	1,600.00	25.000	1.00	74.96	1,874.00	0.00	25.00	3,474.00	\$3,474
Fire sprinkler system	2,953	SF	1.58	0.027	1.00	74.96	2.00	0.00	78.75	3.58	\$10,578
Classroom Building											
Standpipe assembly	1	EA	1,600.00	25.000	1.00	74.96	1,874.00	0.00	25.00	3,474.00	\$3,474
Fire sprinkler system	5,817	SF	1.58	0.027	1.00	74.96	2.00	0.00	155.12	3.58	\$20,838
Canopy											



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Fire sprinkler system	4,734	SF	1.58	0.027	1.00	74.96	2.00	0.00	126.24	3.58	\$16,958
Subtotal Fire Suppression			24,581			30,742		-	410		\$55,323
Division 22 Plumbing \$53,885											
22.00.00 Plumbing											
Administration Building											
Water closet	4	EA	2,000.00	13.400	1.00	74.96	1,004.46	0.00	53.60	3,004.46	\$12,018
Water closet, accessible	4	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	53.60	3,204.46	\$12,818
Gang sink, dual lav	2	EA	2,250.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,254.46	\$6,509
Lavatory	3	EA	1,750.00	13.400	1.00	74.96	1,004.46	0.00	40.20	2,754.46	\$8,263
Urinal	2	EA	2,000.00	13.400	1.00	74.96	1,004.46	0.00	26.80	3,004.46	\$6,009
Urinal screens	1	EA	450.00	1.450	1.00	74.96	108.69	0.00	1.45	558.69	\$559
Drinking fountain, hi-lo, railings	1	EA	3,500.00	13.400	1.00	74.96	1,004.46	0.00	13.40	4,504.46	\$4,504
Water heater, 30 gal, complete, natural gas	1	EA	2,200.00	13.400	1.00	74.96	1,004.46	0.00	13.40	3,204.46	\$3,204
Subtotal Plumbing			36,700			17,185		-	229		\$53,885
Division 23 Heating, Ventilating, and Air Conditioning \$126,801											
23.00.00 Heating, Ventilating, and Air-Conditioning (HVAC)											
Administration Building											
HVAC miscellaneous, shell	2,846	SF	2.04	0.012	1.00	65.92	0.81	0.00	35.01	2.85	\$8,118
Roof mounted heat pump, 60,000 bth cooling/80,000 btuh heating	1	EA	17,583.00	85.000	1.00	65.92	5,603.20	150.00	85.00	23,336.20	\$23,336
Gas fired unit heaters, 45,000 btu	4	EA	769.60	4.000	1.00	65.92	263.68	0.00	16.00	1,033.28	\$4,133
Exhaust fan, 150 cfm	2	EA	200.00	1.670	1.00	65.92	110.09	0.00	3.34	310.09	\$620
Exhaust fan, 300 cfm	1	EA	325.00	2.780	1.00	65.92	183.26	0.00	2.78	508.26	\$508
Exhaust fan, 1000 cfm	1	EA	1,200.00	6.000	1.00	65.92	395.52	0.00	6.00	1,595.52	\$1,596
Classroom Building											
HVAC system, shell	5,817	SF	10.89	0.066	1.00	65.92	4.32	0.00	381.60	15.21	\$88,490
Subtotal Heating, Ventilating, and Air-Conditioning (HVAC)			91,732			34,919		150	530		\$126,801
Division 26 Electrical \$134,509											
26.00.00 Electrical											
Administration Building											
Electrical equipment and power distribution	2,953	SF	2.70	0.043	1.00	60.47	2.60	0.00	126.98	5.30	\$15,652
Convenience power outlets and wiring	2,953	SF	1.26	0.019	1.00	60.47	1.18	0.00	57.41	2.44	\$7,192
Exterior lights, wiring and controls	306	SF	3.90	0.044	1.00	60.47	2.66	0.00	13.46	6.56	\$2,008
Temporary lights, wiring and controls	2,647	SF	1.00	0.044	1.00	60.47	2.66	0.00	116.47	3.66	\$9,690
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	2,953	SF	0.88	0.016	1.00	60.47	0.97	0.00	47.25	1.85	\$5,456
Classroom Building											
Electrical equipment and power distribution	5,817	SF	2.70	0.043	1.00	60.47	2.60	0.00	250.13	5.30	\$30,831
Convenience power outlets and wiring	5,817	SF	0.74	0.011	1.00	60.47	0.69	0.00	65.96	1.42	\$8,264



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 City of Encinitas
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\$ 2,449,150
Option 3 (No Plaza)
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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Temporary lights, wiring and controls	5,817	SF	1.00	0.044	1.00	60.47	2.66	0.00	255.95	3.66	\$21,294
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	5,817	SF	0.88	0.016	1.00	60.47	0.97	0.00	93.07	1.85	\$10,747
Canopy											
Lights, wiring and controls	4,734	SF	2.00	0.044	1.00	60.47	2.66	0.00	208.30	4.66	\$22,064
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	4,734	SF	0.13	0.002	1.00	60.47	0.15	0.00	11.36	0.28	\$1,312
Subtotal Electrical			59,143				75,366		-	1,246	\$134,509
Division 27 Communications \$18,732											
27.00.00 Communications											
Administration Building											
Telecommunication infrastructure	2,953	SF	1.16	0.021	1.00	46.47	0.98	0.00	62.01	2.14	\$6,307
Classroom Building											
Telecommunication infrastructure	5,817	SF	1.16	0.021	1.00	46.47	0.98	0.00	122.16	2.14	\$12,424
Subtotal Communications			10,173				8,558		-	184	\$18,732
Division 28 Electronic Safety and Security \$33,113											
28.00.00 Electronic Safety and Security											
Administration Building											
Fire alarm system	2,953	SF	1.16	0.017	1.00	46.47	0.79	0.00	50.20	1.95	\$5,758
Intrusion detection	2,953	SF	1.50	0.017	1.00	46.47	0.79	0.00	50.20	2.29	\$6,762
Classroom Building											
Fire alarm system	5,817	SF	1.16	0.017	1.00	46.47	0.79	0.00	98.89	1.95	\$11,343
Intrusion detection	5,817	SF	0.80	0.017	1.00	46.47	0.79	0.00	98.89	1.59	\$9,249
Subtotal Electronic Safety and Security			19,256				13,856		-	298	\$33,113
Site and Infrastructure \$84,843											
Division 31 Earthwork \$42,777											
31.10.00 Site Clearing											
Site Demolition											
Demolish canopy	4,734	SF	0.00	0.050	1.00	56.84	2.84	0.00	236.70	2.84	\$13,454
Demolish tube steel posts	36	EA	0.00	0.250	1.00	56.84	14.21	5.00	9.00	19.21	\$692
Demolish concrete paving	5,405	SF	0.26	0.019	1.00	56.84	1.08	0.36	102.70	1.70	\$9,188
Haul and dispose of spoils	252	TONS	0.00	0.100	1.00	57.07	5.71	6.50	25.18	12.21	\$3,074
Tipping Fee, broker mitigated	252	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	65.00	\$16,369
Subtotal Site Clearing			17,774				21,240		3,763	374	\$42,777



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 2,449,150
Option 3 (No Plaza)
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Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Division 32 Exterior Improvements										\$42,066	
32.00.00 Exterior Improvements											
Architectural shielding of mechanical units on ground	40	LF				58.18	0.00	0.00	-	205.00	\$8,200
Subtotal Exterior Improvements										\$8,200	
32.30.00 Site Improvements											
Concrete walkways											
Concrete sidewalk	5,405	SF	3.24	0.052	1.00	56.84	2.96	0.07	281.06	6.27	\$33,866
Subtotal Site Improvements										\$33,866	



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
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\$ 1,231,516
Site Option 1
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Hard Costs: Section Summary			\$/EA	Total												
General Requirements																
Division 01	General Requirements		\$ 0/SF	\$ -												
Facility Construction																
Division 02	Existing Conditions		\$ 0/SF	\$ -												
Division 03	Concrete		\$ 0/SF	\$ -												
Division 04	Masonry		\$ 0/SF	\$ -												
Division 05	Metals		\$ 0/SF	\$ -												
Division 06	Wood, Plastics and Composites		\$ 0/SF	\$ -												
Division 07	Thermal and Moisture Protection		\$ 0/SF	\$ -												
Division 08	Openings		\$ 0/SF	\$ -												
Division 09	Finishes		\$ 0/SF	\$ -												
Division 10	Specialties		\$ 0/SF	\$ -												
Division 11	Equipment		\$ 0/SF	\$ -												
Division 12	Furnishings		\$ 0/SF	\$ -												
Division 13	Special Construction		\$ 0/SF	\$ -												
Division 14	Conveying Equipment		\$ 0/SF	\$ -												
Facility Services																
Division 21	Fire Suppression		\$ 0/SF	\$ -												
Division 22	Plumbing		\$ 0/SF	\$ -												
Division 23	Heating, Ventilating, and Air Conditioning		\$ 0/SF	\$ -												
Division 25	Integrated Automation		\$ 0/SF	\$ -												
Division 26	Electrical		\$ 0/SF	\$ -												
Division 27	Communications		\$ 0/SF	\$ -												
Division 28	Electronic Safety and Security		\$ 0/SF	\$ -												
Site and Infrastructure																
Division 31	Earthwork		\$ 0.96/SF	\$ 87,802												
Division 32	Exterior Improvements		\$ 4.27/SF	\$ 392,504												
Division 33	Utilities		\$ 1.71/SF	\$ 157,500												
Division 34	Transportation		\$ 0/SF	\$ -												
Division 35	Waterway and Marine Construction		\$ 0/SF	\$ -												
Process Equipment																
Division 40	Process Integration		\$ 0/SF	\$ -												
Division 41	Material Processing and Handling Equipment		\$ 0/SF	\$ -												
Division 42	Process Heating, Cooling, and Drying Equipment		\$ 0/SF	\$ -												
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment		\$ 0/SF	\$ -												
Division 44	Pollution Control Equipment		\$ 0/SF	\$ -												
Division 45	Industry-Specific Manufacturing Equipment		\$ 0/SF	\$ -												
Division 48	Electrical Power Generation		\$ 0/SF	\$ -												
Sales Tax	8.00 %	\$	340,986	\$ 27,279												
Subcontractor Mark-up	15 %	\$	665,084	\$ 99,763												
Subtotal Net Direct Building Cost			\$ 8.32/SF	\$ 764,847												
Prime Contractor General Conditions, Home Office Overhead, 12 Months	20 %	\$		\$ 152,969												
Prime Contractor Profit	10 %	\$		\$ 91,782												
Bonds and Insurance	3.0 %	\$		\$ 30,288												
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %	\$		\$ 30,997												
Design Contingency	15 %	\$		\$ 160,632												
Phasing Factor, Excluded	0 %	\$		\$ -												
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Total Projected Construction Cost</td> <td style="width: 20%;"><i>Project Square Footage</i></td> <td style="width: 10%; text-align: right;">91,914 SF</td> <td style="width: 10%;"><i>Cost Per Square Foot</i></td> <td style="width: 10%; text-align: right;">\$ 13 /SF</td> <td style="width: 10%; text-align: right;">\$ 1,231,516</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">1,623 HRS</td> <td></td> <td></td> <td></td> </tr> </table>					Total Projected Construction Cost	<i>Project Square Footage</i>	91,914 SF	<i>Cost Per Square Foot</i>	\$ 13 /SF	\$ 1,231,516			1,623 HRS			
Total Projected Construction Cost	<i>Project Square Footage</i>	91,914 SF	<i>Cost Per Square Foot</i>	\$ 13 /SF	\$ 1,231,516											
		1,623 HRS														



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,231,516
Site Option 1
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			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements									\$ 0/SF	\$0
Division 02	Existing Conditions									\$ 0/SF	\$0
Division 03	Concrete									\$ 0/SF	\$0
Division 04	Masonry									\$ 0/SF	\$0
Division 05	Metals									\$ 0/SF	\$0
Division 06	Wood, Plastics and Composites									\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection									\$ 0/SF	\$0
Division 08	Openings									\$ 0/SF	\$0
Division 09	Finishes									\$ 0/SF	\$0
Division 10	Specialties									\$ 0/SF	\$0
Division 11	Equipment									\$ 0/SF	\$0
Division 12	Furnishings									\$ 0/SF	\$0
Division 13	Special Construction									\$ 0/SF	\$0
Division 14	Conveying Equipment									\$ 0/SF	\$0
Division 21	Fire Suppression									\$ 0/SF	\$0
Division 22	Plumbing									\$ 0/SF	\$0
Division 23	Heating, Ventilating, and Air Conditioning									\$ 0/SF	\$0
Division 25	Integrated Automation									\$ 0/SF	\$0
Division 26	Electrical									\$ 0/SF	\$0
Division 27	Communications									\$ 0/SF	\$0
Division 28	Electronic Safety and Security									\$ 0/SF	\$0
Division 31	Earthwork									\$ 0.96/SF	\$87,802
31.10.00	Site Clearing		\$ 0.96/SF		\$87,802						
Division 32	Exterior Improvements									\$ 4.27/SF	\$392,504
32.10.00	Bases, Ballasts, and Paving		\$ 0.72/SF		\$65,925						
32.30.00	Site Improvements		\$ 3.55/SF		\$326,579						
Division 33	Utilities									\$ 1.71/SF	\$157,500
33.00.00	Utilities		\$ 1.71/SF		\$157,500						
Division 34	Transportation									\$ 0/SF	\$0
Division 35	Waterway and Marine Construction									\$ 0/SF	\$0
Division 40	Process Integration									\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment									\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment									\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment									\$ 0/SF	\$0
Division 44	Pollution Control Equipment									\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment									\$ 0/SF	\$0
Division 48	Electrical Power Generation									\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,231,516
Site Option 1
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

Site and Infrastructure	\$637,806
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Division 31 Earthwork	\$87,802
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31.10.00 Site Clearing											
Site Demolition											
Demolish AC paving	81,577	SF	0.02	0.006	1.00	56.84	0.34	0.07	489.46	0.43	\$35,163
Haul and dispose of spoils	3,059	TONS	0.00	0.100	1.00	57.07	5.71	6.50	305.91	12.21	\$37,343
Tipping Fee, broker mitigated	3,059	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	5.00	\$15,296

Subtotal Site Clearing			200,475			45,280	25,595	795			\$87,802
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Division 32 Exterior Improvements	\$392,504
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32.10.00 Bases, Ballasts, and Paving											
AC paving, standard	7,016	SF	1.57	0.008	1.00	75.91	0.61	0.37	56.13	2.55	\$17,872
AC paving, fire lane	10,053	SF	2.91	0.013	1.00	75.91	0.99	0.64	130.69	4.54	\$45,609
Accessible parking stall, sign and post	4	EA	200.00	3.500	1.00	56.84	198.94	0.00	14.00	398.94	\$1,596
Standard parking stall	37	EA	19.26	0.072	1.00	51.29	3.69	0.00	2.66	22.95	\$849

Subtotal Bases, Ballasts, and Paving			41,782			15,114	9,030	203			\$65,925
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32.30.00 Site Improvements											
Concrete walkways											
Concrete sidewalk	914	SF	3.24	0.052	1.00	56.84	2.96	0.07	47.53	6.27	\$5,727
Yard											
Yard landscaping and irrigation	62,297	SF				56.84	0.00	0.00	-	3.00	\$186,891
Fire Access landscape grid	6,561	SF	3.50	0.052	1.00	56.84	2.96	0.00	341.17	6.46	\$42,356
Median landscaping and irrigation	1,297	SF				56.84	0.00	0.00	-	7.00	\$9,079
Trees	61	EA	475.00	3.000	1.00	56.84	170.52	0.00	183.00	645.52	\$39,377
Shrubs	6	EA	65.00	0.250	1.00	56.84	14.21	0.00	1.50	79.21	\$475
East Option											
Landscaping and irrigation	3,847	SF				56.84	0.00	0.00	-	3.00	\$11,541
Trees	5	EA	475.00	3.000	1.00	56.84	170.52	0.00	15.00	645.52	\$3,228
Shrubs	20	EA	65.00	0.250	1.00	56.84	14.21	0.00	5.00	79.21	\$1,584
North Option											
Landscaping and irrigation	6,490	SF				56.84	0.00	0.00	-	3.00	\$19,470
Trees	10	EA	475.00	3.000	1.00	56.84	170.52	0.00	30.00	645.52	\$6,455
Shrubs	5	EA	65.00	0.250	1.00	56.84	14.21	0.00	1.25	79.21	\$396

Subtotal Site Improvements			64,040			35,494	64	624			\$326,579
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Division 33 Utilities	\$157,500
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15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,231,516
Site Option 1
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure					Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor			
33.00.00 Utilities										
Site Utilities										
Domestic water, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Sanitary sewer, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Storm drainage, ALLOWANCE	1	LS				58.18	0.00	-	40,000.00	\$40,000
Electrical utilities, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Communication utilities, ALLOWANCE	1	LS				58.18	0.00	-	2,500.00	\$2,500
Utility relocation ALLOWANCE	1	LS				58.18	0.00	-	100,000.00	\$100,000
Subtotal Utilities			-			-		-		\$157,500



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,245,931
Site Option 2
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary				\$/EA	Total
General Requirements					\$ -
Division 01	General Requirements			\$ 0/SF	\$ -
Facility Construction					\$ -
Division 02	Existing Conditions			\$ 0/SF	\$ -
Division 03	Concrete			\$ 0/SF	\$ -
Division 04	Masonry			\$ 0/SF	\$ -
Division 05	Metals			\$ 0/SF	\$ -
Division 06	Wood, Plastics and Composites			\$ 0/SF	\$ -
Division 07	Thermal and Moisture Protection			\$ 0/SF	\$ -
Division 08	Openings			\$ 0/SF	\$ -
Division 09	Finishes			\$ 0/SF	\$ -
Division 10	Specialties			\$ 0/SF	\$ -
Division 11	Equipment			\$ 0/SF	\$ -
Division 12	Furnishings			\$ 0/SF	\$ -
Division 13	Special Construction			\$ 0/SF	\$ -
Division 14	Conveying Equipment			\$ 0/SF	\$ -
Facility Services					\$ -
Division 21	Fire Suppression			\$ 0/SF	\$ -
Division 22	Plumbing			\$ 0/SF	\$ -
Division 23	Heating, Ventilating, and Air Conditioning			\$ 0/SF	\$ -
Division 25	Integrated Automation			\$ 0/SF	\$ -
Division 26	Electrical			\$ 0/SF	\$ -
Division 27	Communications			\$ 0/SF	\$ -
Division 28	Electronic Safety and Security			\$ 0/SF	\$ -
Site and Infrastructure					\$ 650,815
Division 31	Earthwork			\$ 0.95/SF	\$ 87,093
Division 32	Exterior Improvements			\$ 4.45/SF	\$ 406,222
Division 33	Utilities			\$ 1.73/SF	\$ 157,500
Division 34	Transportation			\$ 0/SF	\$ -
Division 35	Waterway and Marine Construction			\$ 0/SF	\$ -
Process Equipment					\$ -
Division 40	Process Integration			\$ 0/SF	\$ -
Division 41	Material Processing and Handling Equipment			\$ 0/SF	\$ -
Division 42	Process Heating, Cooling, and Drying Equipment			\$ 0/SF	\$ -
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment			\$ 0/SF	\$ -
Division 44	Pollution Control Equipment			\$ 0/SF	\$ -
Division 45	Industry-Specific Manufacturing Equipment			\$ 0/SF	\$ -
Division 48	Electrical Power Generation			\$ 0/SF	\$ -
Sales Tax	8.00 %		\$	346,365	\$ 27,709
Subcontractor Mark-up	15 %		\$	678,524	\$ 101,779
Subtotal Net Direct Building Cost				\$ 8.55/SF	\$ 780,303
Prime Contractor General Conditions, Home Office Overhead, 12 Months	19 %		\$		\$ 148,258
Prime Contractor Profit	10 %		\$		\$ 92,856
Bonds and Insurance	3.0 %		\$		\$ 30,642
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %		\$		\$ 31,360
Design Contingency	15 %		\$		\$ 162,513
Phasing Factor, Excluded	0 %		\$		\$ -
Total Projected Construction Cost					\$ 1,245,931
	<i>Project Square Footage</i>	<i>91,256 SF</i>	<i>Cost Per Square Foot</i>	<i>\$ 14 /SF</i>	
		<i>1,736 HRS</i>			



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,245,931
Site Option 2
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements									\$ 0/SF	\$0
Division 02	Existing Conditions									\$ 0/SF	\$0
Division 03	Concrete									\$ 0/SF	\$0
Division 04	Masonry									\$ 0/SF	\$0
Division 05	Metals									\$ 0/SF	\$0
Division 06	Wood, Plastics and Composites									\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection									\$ 0/SF	\$0
Division 08	Openings									\$ 0/SF	\$0
Division 09	Finishes									\$ 0/SF	\$0
Division 10	Specialties									\$ 0/SF	\$0
Division 11	Equipment									\$ 0/SF	\$0
Division 12	Furnishings									\$ 0/SF	\$0
Division 13	Special Construction									\$ 0/SF	\$0
Division 14	Conveying Equipment									\$ 0/SF	\$0
Division 21	Fire Suppression									\$ 0/SF	\$0
Division 22	Plumbing									\$ 0/SF	\$0
Division 23	Heating, Ventilating, and Air Conditioning									\$ 0/SF	\$0
Division 25	Integrated Automation									\$ 0/SF	\$0
Division 26	Electrical									\$ 0/SF	\$0
Division 27	Communications									\$ 0/SF	\$0
Division 28	Electronic Safety and Security									\$ 0/SF	\$0
Division 31	Earthwork									\$ 0.95/SF	\$87,093
31.10.00	Site Clearing		\$ 0.95/SF		\$87,093						
Division 32	Exterior Improvements									\$ 4.45/SF	\$406,222
32.10.00	Bases, Ballasts, and Paving		\$ 0.63/SF		\$57,586						
32.30.00	Site Improvements		\$ 3.82/SF		\$348,635						
Division 33	Utilities									\$ 1.73/SF	\$157,500
33.00.00	Utilities		\$ 1.73/SF		\$157,500						
Division 34	Transportation									\$ 0/SF	\$0
Division 35	Waterway and Marine Construction									\$ 0/SF	\$0
Division 40	Process Integration									\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment									\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment									\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment									\$ 0/SF	\$0
Division 44	Pollution Control Equipment									\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment									\$ 0/SF	\$0
Division 48	Electrical Power Generation									\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,245,931
Site Option 2
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

Site and Infrastructure	\$650,815
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Division 31 Earthwork	\$87,093
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31.10.00 Site Clearing											
Site Demolition											
Demolish AC paving	80,919	SF	0.02	0.006	1.00	56.84	0.34	0.07	485.51	0.43	\$34,879
Haul and dispose of spoils	3,034	TONS	0.00	0.100	1.00	57.07	5.71	6.50	303.45	12.21	\$37,042
Tipping Fee, broker mitigated	3,034	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	5.00	\$15,172

Subtotal Site Clearing		198,858	44,914	25,388	789		\$87,093
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Division 32 Exterior Improvements	\$406,222
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32.10.00 Bases, Ballasts, and Paving											
AC paving, standard	7,436	SF	1.57	0.008	1.00	75.91	0.61	0.37	59.49	2.55	\$18,942
AC paving, fire lane	7,974	SF	2.91	0.013	1.00	75.91	0.99	0.64	103.66	4.54	\$36,177
Accessible parking stall, sign and post	4	EA	200.00	3.500	1.00	56.84	198.94	0.00	14.00	398.94	\$1,596
Standard parking stall	38	EA	19.26	0.072	1.00	51.29	3.69	0.00	2.74	22.95	\$872

Subtotal Bases, Ballasts, and Paving		36,411	13,321	7,855	180		\$57,586
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32.30.00 Site Improvements											
Concrete walkways											
Concrete sidewalk	1,859	SF	3.24	0.052	1.00	56.84	2.96	0.07	96.67	6.27	\$11,648
Yard											
Yard landscaping and irrigation	62,343	SF				56.84	0.00	0.00	-	3.00	\$187,029
Fire Access landscape grid	7,467	SF	3.50	0.052	1.00	56.84	2.96	0.00	388.28	6.46	\$48,205
Median landscaping and irrigation	1,307	SF				56.84	0.00	0.00	-	7.00	\$9,149
Trees	76	EA	475.00	3.000	1.00	56.84	170.52	0.00	228.00	645.52	\$49,060
Shrubs	11	EA	65.00	0.250	1.00	56.84	14.21	0.00	2.75	79.21	\$871
East Option											
Landscaping and irrigation	3,847	SF				56.84	0.00	0.00	-	3.00	\$11,541
Trees	5	EA	475.00	3.000	1.00	56.84	170.52	0.00	15.00	645.52	\$3,228
Shrubs	20	EA	65.00	0.250	1.00	56.84	14.21	0.00	5.00	79.21	\$1,584
North Option											
Landscaping and irrigation	6,490	SF				56.84	0.00	0.00	-	3.00	\$19,470
Trees	10	EA	475.00	3.000	1.00	56.84	170.52	0.00	30.00	645.52	\$6,455
Shrubs	5	EA	65.00	0.250	1.00	56.84	14.21	0.00	1.25	79.21	\$396

Subtotal Site Improvements		77,723	43,594	130	767		\$348,635
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Division 33 Utilities	\$157,500
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15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,245,931
Site Option 2
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure					Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor			
33.00.00 Utilities										
Site Utilities										
Domestic water, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Sanitary sewer, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Storm drainage, ALLOWANCE	1	LS				58.18	0.00	-	40,000.00	\$40,000
Electrical utilities, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Communication utilities, ALLOWANCE	1	LS				58.18	0.00	-	2,500.00	\$2,500
Utility relocation ALLOWANCE	1	LS				58.18	0.00	-	100,000.00	\$100,000
Subtotal Utilities			-			-		-		\$157,500



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,160,271
Site Option 3
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary			\$/EA	Total		
General Requirements				\$ -		
Division 01	General Requirements		\$ 0/SF	\$ -		
Facility Construction				\$ -		
Division 02	Existing Conditions		\$ 0/SF	\$ -		
Division 03	Concrete		\$ 0/SF	\$ -		
Division 04	Masonry		\$ 0/SF	\$ -		
Division 05	Metals		\$ 0/SF	\$ -		
Division 06	Wood, Plastics and Composites		\$ 0/SF	\$ -		
Division 07	Thermal and Moisture Protection		\$ 0/SF	\$ -		
Division 08	Openings		\$ 0/SF	\$ -		
Division 09	Finishes		\$ 0/SF	\$ -		
Division 10	Specialties		\$ 0/SF	\$ -		
Division 11	Equipment		\$ 0/SF	\$ -		
Division 12	Furnishings		\$ 0/SF	\$ -		
Division 13	Special Construction		\$ 0/SF	\$ -		
Division 14	Conveying Equipment		\$ 0/SF	\$ -		
Facility Services				\$ -		
Division 21	Fire Suppression		\$ 0/SF	\$ -		
Division 22	Plumbing		\$ 0/SF	\$ -		
Division 23	Heating, Ventilating, and Air Conditioning		\$ 0/SF	\$ -		
Division 25	Integrated Automation		\$ 0/SF	\$ -		
Division 26	Electrical		\$ 0/SF	\$ -		
Division 27	Communications		\$ 0/SF	\$ -		
Division 28	Electronic Safety and Security		\$ 0/SF	\$ -		
Site and Infrastructure				\$ 605,057		
Division 31	Earthwork		\$ 0.96/SF	\$ 88,635		
Division 32	Exterior Improvements		\$ 3.87/SF	\$ 358,922		
Division 33	Utilities		\$ 1.7/SF	\$ 157,500		
Division 34	Transportation		\$ 0/SF	\$ -		
Division 35	Waterway and Marine Construction		\$ 0/SF	\$ -		
Process Equipment				\$ -		
Division 40	Process Integration		\$ 0/SF	\$ -		
Division 41	Material Processing and Handling Equipment		\$ 0/SF	\$ -		
Division 42	Process Heating, Cooling, and Drying Equipment		\$ 0/SF	\$ -		
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment		\$ 0/SF	\$ -		
Division 44	Pollution Control Equipment		\$ 0/SF	\$ -		
Division 45	Industry-Specific Manufacturing Equipment		\$ 0/SF	\$ -		
Division 48	Electrical Power Generation		\$ 0/SF	\$ -		
Sales Tax	8.00 %	\$	335,213	\$ 26,817		
Subcontractor Mark-up	15 %	\$	631,874	\$ 94,781		
Subtotal Net Direct Building Cost			\$ 7.84/SF	\$ 726,655		
Prime Contractor General Conditions, Home Office Overhead, 12 Months	19 %	\$		\$ 138,064		
Prime Contractor Profit	10 %	\$		\$ 86,472		
Bonds and Insurance	3.0 %	\$		\$ 28,536		
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %	\$		\$ 29,204		
Design Contingency	15 %	\$		\$ 151,340		
Phasing Factor, Excluded	0 %	\$		\$ -		
Total Projected Construction Cost		<i>Project Square Footage</i>	92,696 SF	<i>Cost Per Square Foot</i>	\$ 13 /SF	\$ 1,160,271
			1,563 HRS			



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,160,271
Site Option 3
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements									\$ 0/SF	\$0
Division 02	Existing Conditions									\$ 0/SF	\$0
Division 03	Concrete									\$ 0/SF	\$0
Division 04	Masonry									\$ 0/SF	\$0
Division 05	Metals									\$ 0/SF	\$0
Division 06	Wood, Plastics and Composites									\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection									\$ 0/SF	\$0
Division 08	Openings									\$ 0/SF	\$0
Division 09	Finishes									\$ 0/SF	\$0
Division 10	Specialties									\$ 0/SF	\$0
Division 11	Equipment									\$ 0/SF	\$0
Division 12	Furnishings									\$ 0/SF	\$0
Division 13	Special Construction									\$ 0/SF	\$0
Division 14	Conveying Equipment									\$ 0/SF	\$0
Division 21	Fire Suppression									\$ 0/SF	\$0
Division 22	Plumbing									\$ 0/SF	\$0
Division 23	Heating, Ventilating, and Air Conditioning									\$ 0/SF	\$0
Division 25	Integrated Automation									\$ 0/SF	\$0
Division 26	Electrical									\$ 0/SF	\$0
Division 27	Communications									\$ 0/SF	\$0
Division 28	Electronic Safety and Security									\$ 0/SF	\$0
Division 31	Earthwork									\$ 0.96/SF	\$88,635
31.10.00	Site Clearing		\$ 0.96/SF		\$88,635						
Division 32	Exterior Improvements									\$ 3.87/SF	\$358,922
32.10.00	Bases, Ballasts, and Paving		\$ 0.62/SF		\$57,249						
32.30.00	Site Improvements		\$ 3.25/SF		\$301,673						
Division 33	Utilities									\$ 1.7/SF	\$157,500
33.00.00	Utilities		\$ 1.7/SF		\$157,500						
Division 34	Transportation									\$ 0/SF	\$0
Division 35	Waterway and Marine Construction									\$ 0/SF	\$0
Division 40	Process Integration									\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment									\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment									\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment									\$ 0/SF	\$0
Division 44	Pollution Control Equipment									\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment									\$ 0/SF	\$0
Division 48	Electrical Power Generation									\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,160,271
Site Option 3
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

Site and Infrastructure	\$605,057
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Division 31 Earthwork	\$88,635
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31.10.00 Site Clearing											
Site Demolition											
Demolish AC paving	82,359	SF	0.02	0.006	1.00	56.84	0.34	0.07	494.15	0.43	\$35,500
Haul and dispose of spoils	3,088	TONS	0.00	0.100	1.00	57.07	5.71	6.50	308.80	12.21	\$37,695
Tipping Fee, broker mitigated	3,088	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	5.00	\$15,440

Subtotal Site Clearing	202,367	45,711	25,837	803	\$88,635
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Division 32 Exterior Improvements	\$358,922
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32.10.00 Bases, Ballasts, and Paving											
AC paving, standard	13,675	SF	1.57	0.008	1.00	75.91	0.61	0.37	109.40	2.55	\$34,834
AC paving, fire lane	4,346	SF	2.91	0.013	1.00	75.91	0.99	0.64	56.50	4.54	\$19,717
Accessible parking stall, sign and post	4	EA	200.00	3.500	1.00	56.84	198.94	0.00	14.00	398.94	\$1,596
Standard parking stall	48	EA	19.26	0.072	1.00	51.29	3.69	0.00	3.46	22.95	\$1,102

Subtotal Bases, Ballasts, and Paving	35,841	13,566	7,841	183	\$57,249
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32.30.00 Site Improvements											
Concrete walkways											
Concrete sidewalk	1,196	SF	3.24	0.052	1.00	56.84	2.96	0.07	62.19	6.27	\$7,494
Yard											
Yard landscaping and irrigation	58,194	SF				56.84	0.00	0.00	-	3.00	\$174,582
Fire Access landscape grid	4,948	SF	3.50	0.052	1.00	56.84	2.96	0.00	257.30	6.46	\$31,943
Median landscaping and irrigation		SF				56.84	0.00	0.00	-	7.00	\$0
Trees	66	EA	475.00	3.000	1.00	56.84	170.52	0.00	198.00	645.52	\$42,604
Shrubs	30	EA	65.00	0.250	1.00	56.84	14.21	0.00	7.50	79.21	\$2,376
East Option											
Landscaping and irrigation	3,847	SF				56.84	0.00	0.00	-	3.00	\$11,541
Trees	5	EA	475.00	3.000	1.00	56.84	170.52	0.00	15.00	645.52	\$3,228
Shrubs	20	EA	65.00	0.250	1.00	56.84	14.21	0.00	5.00	79.21	\$1,584
North Option											
Landscaping and irrigation	6,490	SF				56.84	0.00	0.00	-	3.00	\$19,470
Trees	10	EA	475.00	3.000	1.00	56.84	170.52	0.00	30.00	645.52	\$6,455
Shrubs	5	EA	65.00	0.250	1.00	56.84	14.21	0.00	1.25	79.21	\$396

Subtotal Site Improvements	63,243	32,753	84	576	\$301,673
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Division 33 Utilities	\$157,500
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15.020 Pacific View Elementary School Rehabilitation and Re-Use Study

City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 1,160,271
Site Option 3
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure					Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor			
33.00.00 Utilities										
Site Utilities										
Domestic water, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Sanitary sewer, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Storm drainage, ALLOWANCE	1	LS				58.18	0.00	-	40,000.00	\$40,000
Electrical utilities, ALLOWANCE	1	LS				58.18	0.00	-	5,000.00	\$5,000
Communication utilities, ALLOWANCE	1	LS				58.18	0.00	-	2,500.00	\$2,500
Utility relocation ALLOWANCE	1	LS				58.18	0.00	-	100,000.00	\$100,000
Subtotal Utilities			-			-		-		\$157,500



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 594,152
Plaza Option 1/2
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary				\$/EA	Total
General Requirements					\$ 15,982
Division 01	General Requirements			\$ 3.27/SF	\$ 15,982
Facility Construction					\$ -
Division 02	Existing Conditions			\$ 0/SF	\$ -
Division 03	Concrete			\$ 0/SF	\$ -
Division 04	Masonry			\$ 0/SF	\$ -
Division 05	Metals			\$ 0/SF	\$ -
Division 06	Wood, Plastics and Composites			\$ 0/SF	\$ -
Division 07	Thermal and Moisture Protection			\$ 0/SF	\$ -
Division 08	Openings			\$ 0/SF	\$ -
Division 09	Finishes			\$ 0/SF	\$ -
Division 10	Specialties			\$ 0/SF	\$ -
Division 11	Equipment			\$ 0/SF	\$ -
Division 12	Furnishings			\$ 0/SF	\$ -
Division 13	Special Construction			\$ 0/SF	\$ -
Division 14	Conveying Equipment			\$ 0/SF	\$ -
Facility Services					\$ -
Division 21	Fire Suppression			\$ 0/SF	\$ -
Division 22	Plumbing			\$ 0/SF	\$ -
Division 23	Heating, Ventilating, and Air Conditioning			\$ 0/SF	\$ -
Division 25	Integrated Automation			\$ 0/SF	\$ -
Division 26	Electrical			\$ 0/SF	\$ -
Division 27	Communications			\$ 0/SF	\$ -
Division 28	Electronic Safety and Security			\$ 0/SF	\$ -
Site and Infrastructure					\$ 294,406
Division 31	Earthwork			\$ 14.62/SF	\$ 71,405
Division 32	Exterior Improvements			\$ 34.62/SF	\$ 169,101
Division 33	Utilities			\$ 11.04/SF	\$ 53,900
Division 34	Transportation			\$ 0/SF	\$ -
Division 35	Waterway and Marine Construction			\$ 0/SF	\$ -
Process Equipment					\$ -
Division 40	Process Integration			\$ 0/SF	\$ -
Division 41	Material Processing and Handling Equipment			\$ 0/SF	\$ -
Division 42	Process Heating, Cooling, and Drying Equipment			\$ 0/SF	\$ -
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment			\$ 0/SF	\$ -
Division 44	Pollution Control Equipment			\$ 0/SF	\$ -
Division 45	Industry-Specific Manufacturing Equipment			\$ 0/SF	\$ -
Division 48	Electrical Power Generation			\$ 0/SF	\$ -
Sales Tax	8.00 %		\$ 131,082		\$ 10,487
Subcontractor Mark-up	15 %		\$ 320,874		\$ 48,131
Subtotal Net Direct Building Cost				\$ 75.55/SF	\$ 369,005
Prime Contractor General Conditions, Home Office Overhead, 12 Months	20 %				\$ 73,801
Prime Contractor Profit	10 %				\$ 44,281
Bonds and Insurance	3.0 %				\$ 14,613
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %				\$ 14,955
Design Contingency	15 %				\$ 77,498
Phasing Factor, Excluded	0 %				\$ -
Total Projected Construction Cost					\$ 594,152
	<i>Project Square Footage</i>	<i>4,884 SF</i>	<i>Cost Per Square Foot</i>	<i>\$ 122 /SF</i>	
		<i>2,131 HRS</i>			



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 594,152
Plaza Option 1/2
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

General Requirements **\$15,982**

Division 01 General Requirements **\$15,982**

01.00.00	General Requirements										
Administration Building											
Shoring ALLOWANCE	1	LS	3,000.00	40.000	1.00	58.18	2,327.20	0.00	40.00	5,327.20	\$5,327
Classroom Building											
Shoring ALLOWANCE	1	LS	6,000.00	80.000	1.00	58.18	4,654.40	0.00	80.00	10,654.40	\$10,654

Subtotal General Requirements			9,000				6,982	-	120		\$15,982
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Site and Infrastructure **\$294,406**

Division 31 Earthwork **\$71,405**

31.00.00	Earthwork										
Excavate plaza area											
	1,190	CY	0.00	0.291	1.00	75.91	22.09	0.00	346.29	22.09	\$26,287
Export soil											
	1,926	TONS	0.00	0.100	1.00	57.07	5.71	6.50	192.60	12.21	\$23,511
Tipping fee, broker mitigated											
	1,926	TONS	5.00	0.000	0.00	57.07	0.00	0.00	-	5.00	\$9,630

Subtotal Earthwork			9,630				37,279	12,519	539		\$59,428
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31.10.00	Site Clearing										
Site Demolition											
Demolish concrete paving	1,167	SF	0.26	0.019	1.00	56.84	1.08	0.36	22.17	1.70	\$1,984
Demolish concrete steps	77	LF	0.00	0.200	1.00	56.84	11.37	0.00	15.40	11.37	\$875
Demolish guardrail	55	LF	0.00	0.250	1.00	56.84	14.21	0.00	13.75	14.21	\$782
Demolish retaining wall, complete	228	LF	0.00	0.500	1.00	56.84	28.42	0.00	114.00	28.42	\$6,480
Haul and dispose of spoils											
	108	TONS	0.00	0.100	1.00	57.07	5.71	6.50	10.79	12.21	\$1,317
Tipping Fee, broker mitigated											
	108	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	5.00	\$540

Subtotal Site Clearing			7,318				10,013	1,122	176		\$11,977
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Division 32 Exterior Improvements **\$169,101**

32.00.00	Exterior Improvements										
Retaining wall											
	1,328	SF	6.95	0.215	1.00	59.35	12.76	1.30	285.52	21.01	\$27,902
Subdrainage ALLOWANCE											
	1,328	SF	6.50	0.050	1.00	56.84	2.84	0.00	66.40	9.34	\$12,406
Retaining wall, footings											
	424	LF	37.53	0.714	1.00	56.84	40.58	15.08	302.74	93.19	\$39,514

Subtotal Exterior Improvements			33,774				37,927	8,120	655		\$79,822
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32.30.00 Site Improvements
 Concrete walkways



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 594,152
Plaza Option 1/2
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total	
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment				
Concrete scoring	343	LF	0.00	0.010	1.00	56.84	0.57	0.00	3.43	0.57	\$195	
Concrete landing	35	SF	3.24	0.052	1.00	56.84	2.96	0.07	1.82	6.27	\$219	
Concrete ramp	437	SF	4.05	0.065	1.00	56.84	3.69	0.07	28.41	7.81	\$3,415	
Concrete steps	605	LF	25.00	0.500	1.00	56.84	28.42	0.00	302.50	53.42	\$32,319	
Guardrails	253	LF	55.00	0.250	1.00	77.76	19.44	0.00	63.25	74.44	\$18,833	
Plaza												
Plaza landscaping and irrigation	631	SF				56.84	0.00	0.00	-	3.00	\$1,893	
Plaza paving	3,781	SF	3.24	0.052	1.00	56.84	2.96	0.07	196.61	6.27	\$23,691	
Plaza paving, concrete banding	327	LF	4.05	0.065	1.00	56.84	3.69	0.07	21.26	7.81	\$2,555	
Plaza trees	5	EA	475.00	3.000	1.00	56.84	170.52	0.00	15.00	645.52	\$3,228	
Plaza shrubs	37	EA	65.00	0.250	1.00	56.84	14.21	0.00	9.25	79.21	\$2,931	
Subtotal Site Improvements						49,278			37,787	321	642	\$89,279
Division 33 Utilities											\$53,900	
33.00.00 Utilities												
Site Utilities												
Storm drainage, ALLOWANCE	1	LS				58.18	0.00		-	24,500.00	\$24,500	
Electrical utilities, ALLOWANCE	1	LS				58.18	0.00		-	29,400.00	\$29,400	
Subtotal Utilities						-			-	-	-	\$53,900



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 738,333
Plaza Option 3
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary			\$/EA	Total		
General Requirements				\$ 37,290		
Division 01	General Requirements		\$ 6.25/SF	\$ 37,290		
Facility Construction				\$ 12,779		
Division 02	Existing Conditions		\$ 2.14/SF	\$ 12,779		
Division 03	Concrete		\$ 0/SF	\$ -		
Division 04	Masonry		\$ 0/SF	\$ -		
Division 05	Metals		\$ 0/SF	\$ -		
Division 06	Wood, Plastics and Composites		\$ 0/SF	\$ -		
Division 07	Thermal and Moisture Protection		\$ 0/SF	\$ -		
Division 08	Openings		\$ 0/SF	\$ -		
Division 09	Finishes		\$ 0/SF	\$ -		
Division 10	Specialties		\$ 0/SF	\$ -		
Division 11	Equipment		\$ 0/SF	\$ -		
Division 12	Furnishings		\$ 0/SF	\$ -		
Division 13	Special Construction		\$ 0/SF	\$ -		
Division 14	Conveying Equipment		\$ 0/SF	\$ -		
Facility Services				\$ -		
Division 21	Fire Suppression		\$ 0/SF	\$ -		
Division 22	Plumbing		\$ 0/SF	\$ -		
Division 23	Heating, Ventilating, and Air Conditioning		\$ 0/SF	\$ -		
Division 25	Integrated Automation		\$ 0/SF	\$ -		
Division 26	Electrical		\$ 0/SF	\$ -		
Division 27	Communications		\$ 0/SF	\$ -		
Division 28	Electronic Safety and Security		\$ 0/SF	\$ -		
Site and Infrastructure				\$ 342,250		
Division 31	Earthwork		\$ 14.44/SF	\$ 86,181		
Division 32	Exterior Improvements		\$ 31.88/SF	\$ 190,270		
Division 33	Utilities		\$ 11.03/SF	\$ 65,800		
Division 34	Transportation		\$ 0/SF	\$ -		
Division 35	Waterway and Marine Construction		\$ 0/SF	\$ -		
Process Equipment				\$ -		
Division 40	Process Integration		\$ 0/SF	\$ -		
Division 41	Material Processing and Handling Equipment		\$ 0/SF	\$ -		
Division 42	Process Heating, Cooling, and Drying Equipment		\$ 0/SF	\$ -		
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment		\$ 0/SF	\$ -		
Division 44	Pollution Control Equipment		\$ 0/SF	\$ -		
Division 45	Industry-Specific Manufacturing Equipment		\$ 0/SF	\$ -		
Division 48	Electrical Power Generation		\$ 0/SF	\$ -		
Sales Tax	8.00 %	\$	164,723	\$ 13,178		
Subcontractor Mark-up	15 %	\$	405,498	\$ 60,825		
Subtotal Net Direct Building Cost			\$ 78.14/SF	\$ 466,323		
Prime Contractor General Conditions, Home Office Overhead, 12 Months	18 %	\$		\$ 83,938		
Prime Contractor Profit	10 %	\$		\$ 55,026		
Bonds and Insurance	3.0 %	\$		\$ 18,159		
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %	\$		\$ 18,584		
Design Contingency	15 %	\$		\$ 96,304		
Phasing Factor, Excluded	0 %	\$		\$ -		
Total Projected Construction Cost		<i>Project Square Footage</i>	5,968 SF	<i>Cost Per Square Foot</i>	\$ 124 /SF	\$ 738,333
			2,607 HRS			



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 738,333
Plaza Option 3
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements										\$ 6.25/SF	\$37,290
01.00.00	General Requirements		\$ 6.25/SF									
Division 02	Existing Conditions										\$ 2.14/SF	\$12,779
02.00.00	Existing Conditions		\$ 2.14/SF									
Division 03	Concrete										\$ 0/SF	\$0
Division 04	Masonry										\$ 0/SF	\$0
Division 05	Metals										\$ 0/SF	\$0
Division 06	Wood, Plastics and Composites										\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection										\$ 0/SF	\$0
Division 08	Openings										\$ 0/SF	\$0
Division 09	Finishes										\$ 0/SF	\$0
Division 10	Specialties										\$ 0/SF	\$0
Division 11	Equipment										\$ 0/SF	\$0
Division 12	Furnishings										\$ 0/SF	\$0
Division 13	Special Construction										\$ 0/SF	\$0
Division 14	Conveying Equipment										\$ 0/SF	\$0
Division 21	Fire Suppression										\$ 0/SF	\$0
Division 22	Plumbing										\$ 0/SF	\$0
Division 23	Heating, Ventilating, and Air Conditioning										\$ 0/SF	\$0
Division 25	Integrated Automation										\$ 0/SF	\$0
Division 26	Electrical										\$ 0/SF	\$0
Division 27	Communications										\$ 0/SF	\$0
Division 28	Electronic Safety and Security										\$ 0/SF	\$0
Division 31	Earthwork										\$ 14.44/SF	\$86,181
31.00.00	Earthwork		\$ 12.43/SF									\$74,203
31.10.00	Site Clearing		\$ 2.01/SF									\$11,977
Division 32	Exterior Improvements										\$ 31.88/SF	\$190,270
32.00.00	Exterior Improvements		\$ 14.35/SF									\$85,616
32.30.00	Site Improvements		\$ 17.54/SF									\$104,653
Division 33	Utilities										\$ 11.03/SF	\$65,800
33.00.00	Utilities		\$ 11.03/SF									\$65,800
Division 34	Transportation										\$ 0/SF	\$0
Division 35	Waterway and Marine Construction										\$ 0/SF	\$0
Division 40	Process Integration										\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment										\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment										\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment										\$ 0/SF	\$0
Division 44	Pollution Control Equipment										\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment										\$ 0/SF	\$0
Division 48	Electrical Power Generation										\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 738,333
Plaza Option 3
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

General Requirements **\$37,290**

Division 01 General Requirements **\$37,290**

01.00.00	General Requirements										
Administration Building											
Shoring ALLOWANCE	1	LS	6,000.00	80.000	1.00	58.18	4,654.40	0.00	80.00	10,654.40	\$10,654
Classroom Building											
Shoring ALLOWANCE	1	LS	15,000.00	200.000	1.00	58.18	11,636.00	0.00	200.00	26,636.00	\$26,636

Subtotal General Requirements			21,000				16,290	-	280		\$37,290
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Facility Construction **\$12,779**

Division 02 Existing Conditions **\$12,779**

02.00.00	Existing Conditions										
Classroom Building											
Demolish complete building	905	SF				56.84	0.00	0.00	-	10.00	\$9,050
Alternate: Remove wall finish		SF	0.00	0.008	1.00	56.84	0.45	0.00	-	0.45	\$0
Alternate: Add layer of 1/2" plywood sheathing		SF	1.19	0.011	1.00	58.18	0.64	0.00	-	1.83	\$0
Haul and dispose of spoils	79	TONS	0.00	0.100	1.00	57.07	5.71	6.50	7.90	12.21	\$964
Tipping fees	79	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	35.00	\$2,765

Subtotal Existing Conditions			5,135				451	514	8		\$12,779
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Site and Infrastructure **\$342,250**

Division 31 Earthwork **\$86,181**

31.00.00	Earthwork										
Excavate plaza area	1,485	CY	0.00	0.291	1.00	75.91	22.09	0.00	432.14	22.09	\$32,803
Export soil	2,406	TONS	0.00	0.100	1.00	57.07	5.71	6.50	240.60	12.21	\$29,370
Tipping fee, broker mitigated	2,406	TONS	5.00	0.000	0.00	57.07	0.00	0.00	-	5.00	\$12,030

Subtotal Earthwork			12,030				46,534	15,639	673		\$74,203
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31.10.00	Site Clearing										
Site Demolition											
Demolish concrete paving	1,167	SF	0.26	0.019	1.00	56.84	1.08	0.36	22.17	1.70	\$1,984
Demolish concrete steps	77	LF	0.00	0.200	1.00	56.84	11.37	0.00	15.40	11.37	\$875
Demolish guardrail	55	LF	0.00	0.250	1.00	56.84	14.21	0.00	13.75	14.21	\$782
Demolish retaining wall, complete	228	LF	0.00	0.500	1.00	56.84	28.42	0.00	114.00	28.42	\$6,480
Haul and dispose of spoils	108	TONS	0.00	0.100	1.00	57.07	5.71	6.50	10.79	12.21	\$1,317



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 738,333
Plaza Option 3
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			
Tipping Fee, broker mitigated	108	TONS	65.00	0.000	0.00	57.07	0.00	0.00	-	5.00	\$540
Subtotal Site Clearing			7,318				10,013	1,122	176		\$11,977
Division 32 Exterior Improvements \$190,270											
32.00.00 Exterior Improvements											
Retaining wall	1,436	SF	6.95	0.215	1.00	59.35	12.76	1.30	308.74	21.01	\$30,171
Subdrainage ALLOWANCE	1,436	SF	6.50	0.050	1.00	56.84	2.84	0.00	71.80	9.34	\$13,415
Retaining wall, footings	451	LF	37.53	0.714	1.00	56.84	40.58	15.08	322.01	93.19	\$42,030
Subtotal Exterior Improvements			36,240				40,708	8,668	703		\$85,616
32.30.00 Site Improvements											
Concrete walkways											
Concrete scoring	436	LF	0.00	0.010	1.00	56.84	0.57	0.00	4.36	0.57	\$248
Concrete landing	35	SF	3.24	0.052	1.00	56.84	2.96	0.07	1.82	6.27	\$219
Concrete ramp	438	SF	4.05	0.065	1.00	56.84	3.69	0.07	28.47	7.81	\$3,423
Concrete steps	756	LF	25.00	0.500	1.00	56.84	28.42	0.00	378.00	53.42	\$40,386
Guardrails	266	LF	55.00	0.250	1.00	77.76	19.44	0.00	66.50	74.44	\$19,801
Plaza											
Plaza landscaping and irrigation	853	SF				56.84	0.00	0.00	-	3.00	\$2,559
Plaza paving	4,642	SF	3.24	0.052	1.00	56.84	2.96	0.07	241.38	6.27	\$29,085
Plaza paving, concrete banding	355	LF	4.05	0.065	1.00	56.84	3.69	0.07	23.08	7.81	\$2,774
Plaza trees	5	EA	475.00	3.000	1.00	56.84	170.52	0.00	15.00	645.52	\$3,228
Plaza shrubs	37	EA	65.00	0.250	1.00	56.84	14.21	0.00	9.25	79.21	\$2,931
Subtotal Site Improvements			56,675				45,036	383	768		\$104,653
Division 33 Utilities \$65,800											
33.00.00 Utilities											
Site Utilities											
Domestic water, ALLOWANCE		LS				58.18	0.00		-	5,000.00	\$0
Sanitary sewer, ALLOWANCE		LS				58.18	0.00		-	5,000.00	\$0
Storm drainage, ALLOWANCE	1	LS				58.18	0.00		-	29,900.00	\$29,900
Site electrical, ALLOWANCE	1	LS				58.18	0.00		-	35,900.00	\$35,900
Communication utilities, ALLOWANCE		LS				58.18	0.00		-	2,500.00	\$0
Utility relocation ALLOWANCE		LS				58.18	0.00		-	100,000.00	\$0
Subtotal Utilities			-				-	-	-		\$65,800



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ (51,066)
Ded Alt 1: Option 3 - No Moment Frame
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary		\$/EA	Total
General Requirements			\$ -
Division 01	General Requirements	\$ 0/SF	\$ -
Facility Construction			\$ (26,638)
Division 02	Existing Conditions	\$ -0.04/SF	\$ (222)
Division 03	Concrete	\$ -2.43/SF	\$ (14,127)
Division 04	Masonry	\$ 0/SF	\$ -
Division 05	Metals	\$ -2.11/SF	\$ (12,289)
Division 06	Wood, Plastics and Composites	\$ 0/SF	\$ -
Division 07	Thermal and Moisture Protection	\$ 0/SF	\$ -
Division 08	Openings	\$ 0/SF	\$ -
Division 09	Finishes	\$ 0/SF	\$ -
Division 10	Specialties	\$ 0/SF	\$ -
Division 11	Equipment	\$ 0/SF	\$ -
Division 12	Furnishings	\$ 0/SF	\$ -
Division 13	Special Construction	\$ 0/SF	\$ -
Division 14	Conveying Equipment	\$ 0/SF	\$ -
Facility Services			\$ -
Division 21	Fire Suppression	\$ 0/SF	\$ -
Division 22	Plumbing	\$ 0/SF	\$ -
Division 23	Heating, Ventilating, and Air Conditioning	\$ 0/SF	\$ -
Division 25	Integrated Automation	\$ 0/SF	\$ -
Division 26	Electrical	\$ 0/SF	\$ -
Division 27	Communications	\$ 0/SF	\$ -
Division 28	Electronic Safety and Security	\$ 0/SF	\$ -
Site and Infrastructure			\$ -
Division 31	Earthwork	\$ 0/SF	\$ -
Division 32	Exterior Improvements	\$ 0/SF	\$ -
Division 33	Utilities	\$ 0/SF	\$ -
Division 34	Transportation	\$ 0/SF	\$ -
Division 35	Waterway and Marine Construction	\$ 0/SF	\$ -
Process Equipment			\$ -
Division 40	Process Integration	\$ 0/SF	\$ -
Division 41	Material Processing and Handling Equipment	\$ 0/SF	\$ -
Division 42	Process Heating, Cooling, and Drying Equipment	\$ 0/SF	\$ -
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment	\$ 0/SF	\$ -
Division 44	Pollution Control Equipment	\$ 0/SF	\$ -
Division 45	Industry-Specific Manufacturing Equipment	\$ 0/SF	\$ -
Division 48	Electrical Power Generation	\$ 0/SF	\$ -
Sales Tax	8.00 %	\$ (17,599)	\$ (1,408)
Subcontractor Mark-up	15 %	\$ (28,046)	\$ (4,207)
Subtotal Net Direct Building Cost		\$ -5.54/SF	\$ (32,253)
Prime Contractor General Conditions, Home Office Overhead, 12 Months	18 %		\$ (5,805)
Prime Contractor Profit	10 %		\$ (3,806)
Bonds and Insurance	3.0 %		\$ (1,256)
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %		\$ (1,285)
Design Contingency	15 %		\$ (6,661)
Phasing Factor, Excluded	0 %		\$ -
Total Projected Construction Cost		\$ (9) /SF	\$ (51,066)
	<i>Project Square Footage</i>	5,817 SF	
		<i>Cost Per Square Foot</i>	\$ (9) /SF
		(148) HRS	



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ (51,066)
Ded Alt 1: Option 3 - No Moment Frame
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements									\$ 0/SF	\$0
Division 02	Existing Conditions									\$ -0.04/SF	-\$222
02.00.00	Existing Conditions										
										\$ -0.04/SF	-\$222
Division 03	Concrete									\$ -2.43/SF	-\$14,127
03.00.00	Concrete										
										\$ -2.43/SF	-\$14,127
Division 04	Masonry									\$ 0/SF	\$0
Division 05	Metals									\$ -2.11/SF	-\$12,289
05.00.00	Metals										
										\$ -2.11/SF	-\$12,289
Division 06	Wood, Plastics and Composites									\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection									\$ 0/SF	\$0
Division 08	Openings									\$ 0/SF	\$0
Division 09	Finishes									\$ 0/SF	\$0
Division 10	Specialties									\$ 0/SF	\$0
Division 11	Equipment									\$ 0/SF	\$0
Division 12	Furnishings									\$ 0/SF	\$0
Division 13	Special Construction									\$ 0/SF	\$0
Division 14	Conveying Equipment									\$ 0/SF	\$0
Division 21	Fire Suppression									\$ 0/SF	\$0
Division 22	Plumbing									\$ 0/SF	\$0
Division 23	Heating, Ventilating, and Air Conditioning									\$ 0/SF	\$0
Division 25	Integrated Automation									\$ 0/SF	\$0
Division 26	Electrical									\$ 0/SF	\$0
Division 27	Communications									\$ 0/SF	\$0
Division 28	Electronic Safety and Security									\$ 0/SF	\$0
Division 31	Earthwork									\$ 0/SF	\$0
Division 32	Exterior Improvements									\$ 0/SF	\$0
Division 33	Utilities									\$ 0/SF	\$0
Division 34	Transportation									\$ 0/SF	\$0
Division 35	Waterway and Marine Construction									\$ 0/SF	\$0
Division 40	Process Integration									\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment									\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment									\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment									\$ 0/SF	\$0
Division 44	Pollution Control Equipment									\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment									\$ 0/SF	\$0
Division 48	Electrical Power Generation									\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ (51,066)
Ded Alt 1: Option 3 - No Moment Frame
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

Facility Construction										-\$26,638
<i>Division 02 Existing Conditions</i>										<i>-\$222</i>

02.00.00 Existing Conditions											
Classroom Building											
Demolish slab for structural work, ALLOWANCE	(200)	SF	0.46	0.047	1.00	56.84	2.67	0.92	(9.40)	4.05	-\$810
Alternate: Remove wall finish	528	SF	0.00	0.008	1.00	56.84	0.45	0.00	4.22	0.45	\$240
Alternate: Add layer of 1/2" plywood sheathing	528	SF	1.19	0.011	1.00	58.18	0.64	0.00	5.81	1.83	\$966
Haul and dispose of spoils	(8)	TONS	0.00	0.100	1.00	57.07	5.71	6.50	(0.80)	12.21	-\$98
Tipping fees	(8)	TONS	65.00	0.000	0.00	56.84	0.00	0.00	-	65.00	-\$520

Subtotal Existing Conditions			16				(2)	(236)	(0)		-\$222
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<i>Division 03 Concrete</i>										<i>-\$14,127</i>
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03.00.00 Concrete											
Classroom Building											
Base: Braced frame, spread footing, 7"x7"x2'?	(4)	EA	1,052.16	19.880	1.00	56.84	1,129.98	323.10	(79.52)	2,505.24	-\$10,021
Base: Patch concrete slab	(200)	SF	9.56	0.190	1.00	56.84	10.80	0.17	(38.00)	20.53	-\$4,106

Subtotal Concrete			(6,121)				(6,680)	(1,326)	(118)		-\$14,127
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<i>Division 05 Metals</i>										<i>-\$12,289</i>
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05.00.00 Metals											
Classroom Building											
Base: Braced frame, beam	(60)	LF	93.14	0.148	1.00	77.76	11.48	3.90	(8.86)	108.52	-\$6,511
Base: Braced frame, column	(4)	EA	465.69	1.738	1.00	77.76	135.15	46.80	(6.95)	647.64	-\$2,591
Base: Braced frame, moment frame	(4)	EA	450.00	4.000	1.00	77.76	311.04	100.00	(16.00)	861.04	-\$3,444
Alternate: Hold downs	4	EA	35.00	0.500	1.00	58.18	29.09	0.00	2.00	64.09	\$256

Subtotal Metals			(9,111)				(2,357)	(821)	(30)		-\$12,289
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15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 290,901
Ded Alt 2: Canopy
 VER: 1.0
 7 August 2015

Hard Costs: Section Summary				\$/EA	Total
General Requirements				\$	-
Division 01	General Requirements			\$ 0/SF	-
Facility Construction				\$	110,744
Division 02	Existing Conditions			\$ 0/SF	-
Division 03	Concrete			\$ 0/SF	-
Division 04	Masonry			\$ 0/SF	-
Division 05	Metals			\$ 20.55/SF	97,307
Division 06	Wood, Plastics and Composites			\$ 0/SF	-
Division 07	Thermal and Moisture Protection			\$ 2.84/SF	13,437
Division 08	Openings			\$ 0/SF	-
Division 09	Finishes			\$ 0/SF	-
Division 10	Specialties			\$ 0/SF	-
Division 11	Equipment			\$ 0/SF	-
Division 12	Furnishings			\$ 0/SF	-
Division 13	Special Construction			\$ 0/SF	-
Division 14	Conveying Equipment			\$ 0/SF	-
Facility Services				\$	40,334
Division 21	Fire Suppression			\$ 3.58/SF	16,958
Division 22	Plumbing			\$ 0/SF	-
Division 23	Heating, Ventilating, and Air Conditioning			\$ 0/SF	-
Division 25	Integrated Automation			\$ 0/SF	-
Division 26	Electrical			\$ 4.94/SF	23,376
Division 27	Communications			\$ 0/SF	-
Division 28	Electronic Safety and Security			\$ 0/SF	-
Site and Infrastructure				\$	-
Division 31	Earthwork			\$ 0/SF	-
Division 32	Exterior Improvements			\$ 0/SF	-
Division 33	Utilities			\$ 0/SF	-
Division 34	Transportation			\$ 0/SF	-
Division 35	Waterway and Marine Construction			\$ 0/SF	-
Process Equipment				\$	-
Division 40	Process Integration			\$ 0/SF	-
Division 41	Material Processing and Handling Equipment			\$ 0/SF	-
Division 42	Process Heating, Cooling, and Drying Equipment			\$ 0/SF	-
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment			\$ 0/SF	-
Division 44	Pollution Control Equipment			\$ 0/SF	-
Division 45	Industry-Specific Manufacturing Equipment			\$ 0/SF	-
Division 48	Electrical Power Generation			\$ 0/SF	-
Sales Tax	8.00 %		\$	108,587	8,687
Subcontractor Mark-up	15 %		\$	159,765	23,965
Subtotal Net Direct Building Cost				\$ 38.81/SF	\$ 183,729
Prime Contractor General Conditions, Home Office Overhead, 12 Months	18 %			\$	33,071
Prime Contractor Profit	10 %			\$	21,680
Bonds and Insurance	3.0 %			\$	7,154
Escalation to Midpoint of Construction, 01/2017 (5044/4898)	2.98 %			\$	7,322
Design Contingency	15 %			\$	37,944
Phasing Factor, Excluded	0 %			\$	-
Total Projected Construction Cost				\$	290,901
	<i>Project Square Footage</i>	4,734 SF	<i>Cost Per Square Foot</i>	\$ 61 /SF	
		629 HRS			



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 290,901
Ded Alt 2: Canopy
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 1 Summary

Division 01	General Requirements								\$ 0/SF	\$0
Division 02	Existing Conditions								\$ 0/SF	\$0
Division 03	Concrete								\$ 0/SF	\$0
Division 04	Masonry								\$ 0/SF	\$0
Division 05	Metals								\$ 20.55/SF	\$97,307
05.00.00	Metals									
Division 06	Wood, Plastics and Composites								\$ 0/SF	\$0
Division 07	Thermal and Moisture Protection								\$ 2.84/SF	\$13,437
07.50.00	Membrane Roofing									
Division 08	Openings								\$ 0/SF	\$0
Division 09	Finishes								\$ 0/SF	\$0
Division 10	Specialties								\$ 0/SF	\$0
Division 11	Equipment								\$ 0/SF	\$0
Division 12	Furnishings								\$ 0/SF	\$0
Division 13	Special Construction								\$ 0/SF	\$0
Division 14	Conveying Equipment								\$ 0/SF	\$0
Division 21	Fire Suppression								\$ 3.58/SF	\$16,958
21.00.00	Fire Suppression									
Division 22	Plumbing								\$ 0/SF	\$0
Division 23	Heating, Ventilating, and Air Conditioning								\$ 0/SF	\$0
Division 25	Integrated Automation								\$ 0/SF	\$0
Division 26	Electrical								\$ 4.94/SF	\$23,376
26.00.00	Electrical									
Division 27	Communications								\$ 0/SF	\$0
Division 28	Electronic Safety and Security								\$ 0/SF	\$0
Division 31	Earthwork								\$ 0/SF	\$0
Division 32	Exterior Improvements								\$ 0/SF	\$0
Division 33	Utilities								\$ 0/SF	\$0
Division 34	Transportation								\$ 0/SF	\$0
Division 35	Waterway and Marine Construction								\$ 0/SF	\$0
Division 40	Process Integration								\$ 0/SF	\$0
Division 41	Material Processing and Handling Equipment								\$ 0/SF	\$0
Division 42	Process Heating, Cooling, and Drying Equipment								\$ 0/SF	\$0
Division 43	Process Gas and Liquid Handling, Purification, and Storage Equipment								\$ 0/SF	\$0
Division 44	Pollution Control Equipment								\$ 0/SF	\$0
Division 45	Industry-Specific Manufacturing Equipment								\$ 0/SF	\$0
Division 48	Electrical Power Generation								\$ 0/SF	\$0



15.020 Pacific View Elementary School Rehabilitation and Re-Use Study
 City of Encinitas
 Rough Order of Magnitude Cost Estimate

\$ 290,901
Ded Alt 2: Canopy
 VER: 1.0
 7 August 2015

Description	Qty	Unit	Per Unit of Measure						Labor Hours	Unit Cost	Total
			Material	ManHour	P.F.	Labor Rate	Labor	Equipment			

Level 2 Summary: Detail Line Items

Facility Construction	\$110,744
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<i>Division 05 Metals</i>	<i>\$97,307</i>
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05.00.00 Metals											
Canopy											
Canopy framing complete	4,734	SF	13.38	0.036	1.00	77.76	2.83	1.20	172.32	17.41	\$82,432
Canopy metal decking	4,734	SF	2.50	0.008	1.00	77.76	0.62	0.02	37.87	3.14	\$14,875

Subtotal Metals			75,178			16,344	5,785	210			\$97,307
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<i>Division 07 Thermal and Moisture Protection</i>	<i>\$13,437</i>
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07.50.00 Membrane Roofing											
Canopy											
Single ply membrane roofing, fiberglass 48	4,734	SF	2.05	0.015	1.00	46.71	0.72	0.07	72.81	2.84	\$13,437

Subtotal Membrane Roofing			9,705			3,401	331	73			\$13,437
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Facility Services	\$40,334
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<i>Division 21 Fire Suppression</i>	<i>\$16,958</i>
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21.00.00 Fire Suppression											
Canopy											
Fire sprinkler system	4,734	SF	1.58	0.027	1.00	74.96	2.00	0.00	126.24	3.58	\$16,958

Subtotal Fire Suppression			7,496			9,463	-	126			\$16,958
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<i>Division 26 Electrical</i>	<i>\$23,376</i>
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26.00.00 Electrical											
Canopy											
Lights, wiring and controls	4,734	SF	2.00	0.044	1.00	60.47	2.66	0.00	208.30	4.66	\$22,064
Miscellaneous test and comission, seismic protection, fire stops, grounding, lightning protection, etc	4,734	SF	0.13	0.002	1.00	60.47	0.15	0.00	11.36	0.28	\$1,312

Subtotal Electrical			10,093			13,283	-	220			\$23,376
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APPENDIX G

Hazardous Material Reports

ASBESTOS INSPECTION REPORT

Pacific View Elementary School
608 3rd Street
Classrooms Building
Encinitas, California 92024-3512
Inspection Date: November 24, 2014

PREPARED FOR:

Greg Shields, P.E.
Deputy City Engineer
City of Encinitas
505 South Vulcan Avenue
Encinitas, California 92024-3633

PREPARED BY:

ECS Environmental, Inc.
4876 Santa Monica Avenue #172
San Diego, California 92107-2811

Report Date: December 4, 2014



December 4, 2014

Greg Shields, P.E.
Deputy City Engineer
City of Encinitas
505 South Vulcan Avenue
Encinitas, California 92024-3633

**RE: Asbestos Inspection – Pacific View Elementary School
608 3rd Street, Encinitas, California 92024-3512
Classrooms Building**

Dear Mr. Shields;

In accordance with your request and authorization dated November 18, 2014, ECS Environmental, Inc. has prepared the attached asbestos inspection report. Bond L. McCowan, Sr. a California Certified Asbestos Consultant, conducted the inspection on November 24, 2014.

Should you have any questions after reviewing the conclusions and recommendations contained within this report, please do not hesitate to contact the undersigned at (800) 511-6364. ECS Environmental, Inc. remains available to assist you in any way possible.

Sincerely,
ECS Environmental, Inc.

A handwritten signature in black ink, appearing to read 'Bond L. McCowan, Sr.', is written over a light blue horizontal line.

Bond L. McCowan, Sr.
California Certified Asbestos Consultant

4876 SANTA MONICA AVE, SUITE 172 ~ SAN DIEGO, CA 92107

(O) 1-800-511-6364 (F) 480-719-4465 WWW.ECS-ENVIRONMENTALSERVICES.COM

TABLE OF CONTENTS

1. Scope of Work.....	1
2. Building Description.....	1
3. Investigative Methods.....	1
3.1 Sampling Protocols.....	1
3.2 Laboratory Analytical Method.....	1
4. Results of Investigation.....	2
5. Recommendations.....	8
6. Limitations.....	8

LIST OF TABLES

1. Asbestos Survey Results.....	3 - 6
2. Asbestos Containing Materials.....	7

LIST OF APPENDICES

Appendix A - Laboratory Analytical Report & Chain of Custody
Appendix B - Site Maps
Appendix C - Inspector Asbestos Certification

1. Scope of Work

ECS Environmental, Inc. was retained to conduct asbestos testing for the subject site located at 608 3rd Street in Encinitas, California (per information provided). The testing was conducted on November 24, 2014.

The purpose of the testing was to ascertain the presence of ACM for renovation and or demolition purposes. Material not sampled should be considered suspect until proven otherwise by proper sampling techniques.

2. Building Description

The property tested is a single-story school building. The exterior consists of the original stucco walls; wood doors with wood door frames; slider windows with metal window frames. The interior consists of the original plaster and drywall walls; tiled ceilings; wood doors with wood door frames; carpet, tile, and concrete flooring; and wood cabinetry.

3. Investigative Methods

A total of thirty four (34) samples were collected throughout the structure. A unique number was assigned to each sample for identification. A total of fifty six (56) samples were analyzed (including all layers); results are reported and can be found in Appendix A.

3.1 Sampling Protocol

As a result of the visual inspection suspect materials were categorized as Friable or Non-Friable Surfacing, TSI or Miscellaneous Materials.

3.2 Laboratory Analytical Method

The bulk samples were submitted to EMLab P & K in San Diego, California, to be analyzed for asbestos content by Polarized Light Microscopy as described on the “Interim Method of Determination of Asbestos in Bulk Insulation Samples” (40 CFR Ch. 1 Pr.763, appendix A to sub-part F; July 1, 1987). EMLab P & K is an independent National Voluntary Laboratory Accreditation Program (NVLAP) certified laboratory.

To ensure valid and reliable results, and to monitor samples during the collection, shipment, testing, and subsequent disposal phase of potentially asbestos-containing materials, ECS Environmental, Inc. has established a quality assurance program for the collection and submittal of bulk samples. This program consists of:

- Creation of a chain-of-custody form to keep track of the samples always by assigning responsibility for each phase of the data collection and analysis process to a specific person.

- Use of EPA-accredited laboratories that participate in the National Voluntary Laboratory Accreditation Program (NVLAP) sponsored by the National Institute of Standards and Technology for asbestos testing.

4. Results of Investigation

In accordance with the Environmental Protection Agency (EPA), any construction material containing more than one percent asbestos by weight is considered an Asbestos Containing Material (ACM). In addition, according to policies developed for schools, by the EPA, a homogeneous material is considered to contain asbestos, when asbestos is detected in one or more samples of the subject material.

Table 1 summarizes the homogeneous areas inspected and sampled and presents the laboratory results.

Table 2 presents only the identified Asbestos Containing Material types, locations, and the approximate quantities along with recommendations.

TABLE 1
Asbestos Results
608 3rd Street
Encinitas, California 92024-3512
November 24, 2014
Classrooms Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Interior	Floor Tile and Mastic	001	02 Kindergarden Classroom		Mastic (Brown)	Good	ND	0%
					Floor Tile (Tan)		CH	3%
					Mastic (Black)		CH	2%
Interior	Floor Tile and Mastic	002	05 Classroom 1		Mastic (Yellow)	Good	ND	0%
					Floor Tile (Gray)		CH	4%
					Mastic (Black)		A/P	--
Interior	Floor Tile and Mastic	003	09 Classroom 3	2,268 Sq. Ft.	Floor Tile (Gray)	Good	CH	4%
					Mastic (Black)		CH	2%
Interior	Floor Tile and Mastic	004	10 Classroom 4		Mastic (Yellow)	Good	ND	0%
					Floor Tile (Gray)		CH	4%
					Mastic (Black)		A/P	--
Interior	Floor Tile and Mastic	005	11 Classroom 5		Mastic (Yellow)	Good	ND	0%
					Floor Tile (Gray)		CH	4%
		006	14 Storage 2	242 Sq. Ft.	Mastic (Cream)	Good	ND	0%
Interior	Sheet Vinyl Glue							
Interior	Carpet Glue	007	04 Office 2	2,780 Sq. Ft.		Good	ND	0%
					Glue (Brown)		ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolite A=Amosite N/A=Not Analyzed A/P=Assume Positive
*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1
Asbestos Results
608 3rd Street
Encinitas, California 92024-3512
November 24, 2014
Classrooms Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Interior	Cove Mastic	008	08 Classroom 2	1,595 Ln. Ft.	Mastic (Cream)	Good	ND	0%
Interior	Cove Mastic	009	09 Classroom 3		Mastic (Cream)	Good	ND	0%
Interior	Cove Mastic	010	11 Classroom 5		Mastic (Cream)	Good	ND	0%
Interior	Plaster	011	02 Kindergarten Classroom	4,595 Sq. Ft.	Plaster (Gray) Skim Coat (Pink)	Good	ND ND	0% 0%
Interior	Plaster	012	08 Classroom 2		Plaster (Gray) Skim Coat (Pink)	Good	ND ND	0% 0%
Interior	Plaster	013	09 Classroom 3		Plaster (Off White) Drywall (Pink)	Good	ND ND	0% 0%
Interior	Plaster	014	11 Classroom 5		Plaster (Off White) Drywall (Pink)	Good	ND ND	0% 0%
Interior	Plaster	015	12 Classroom 6		Plaster (Off White) Drywall (Pink)	Good	ND ND	0% 0%
Interior	Drywall and Joint Compound	016	03 Office 1		Drywall (White) Joint Compound (White)	Good	ND ND	0% 0%
Interior	Drywall and Joint Compound	017	07 Office 4	1,250 Sq. Ft.	Drywall (White) Joint Compound (White)	Good	ND ND	0% 0%
Interior	Drywall and Joint Compound	018	16 Faculty Restroom		Drywall (White) Joint Compound (White)	Good	ND ND	0% 0%

ND = None Detected CH=Chrysotile CR=Crocidolit A=Amosite N/A=Not Analyzed A/P=Assume Positive
*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Classrooms Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Interior	Transite Pipe	019	02 Kindergarten Classroom	1 Each	Transite (Gray)	Good	CH	10%
Interior	Ceiling Tile	020	05 Classroom 1	2,268 Sq. Ft.	Ceiling Tile (Brown) w/Surface (White)	Good	ND	0%
Interior	Ceiling Tile	021	09 Classroom 3		Ceiling Tile (Brown) w/Surface (White)	Good	ND	0%
Interior	Ceiling Tile	022	11 Classroom 5		Ceiling Tile (Brown) w/Surface (White)	Good	ND	0%
Exterior	Window Putty	023	05 Classroom 1	3,250 Ln. Ft.	Window Putty (Off White)	Good	ND	0%
Exterior	Window Putty	024	11 Classroom 5		Window Putty (Off White)	Good	ND	0%
Exterior	Window Putty	025	09 Classroom 3		Window Putty (Off White)	Good	ND	0%
Exterior	Stucco	026	Breezeway	1,190 Sq. Ft.	Stucco (Gray)	Good	ND	0%
Exterior	Stucco	027	Breezeway		Skim Coat (White)	Good	ND	0%
Exterior	Stucco				Stucco (Gray)	Good	ND	0%
Exterior	Stucco				Skim Coat (White)	Good	ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolite A=Amosite N/A=Not Analyzed A/P=Assume Positive

*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Classrooms Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Exterior	Stucco	028	South West Corner	4,895 Sq. Ft.	Stucco (Gray)	Good	ND	0%
Exterior	Stucco	029	North West Corner		Stucco (Gray) Stucco (Dark Gray)	Good	ND ND	0% 0%
Exterior	Stucco	030	South East Corner		Stucco (Gray) Skim Coat (White)	Good	ND ND	0% 0%
Exterior	Roofing	031	Roof	2,737 Sq. Ft.	Roofing Material (Black)	Good	ND	0%
Exterior	Penetration Mastic	032	Roof	270 Ln. Ft.	Roofing Mastic (Black) Roofing Mastic (White)	Good	ND ND	0% 0%
Exterior	Roofing	033	Breezeway Roof	1,190 Sq. Ft.	Roofing Material (Black)	Good	ND	0%
Interior	Chalkboard Mastic	034	11 Classroom 5	375 Sq. Ft.	Mastic (Black)	Good	ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolit A=Amosite N/A=Not Analyzed A/P=Assume Positive

*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 2
Asbestos Containing Material
 608 3rd Street
 Encinitas, California 92024-3512
 November 24, 2014
Classrooms Building

Area	Material	Quantity	Material Location	Recommendations	Classifications
Interior	Floor Tile (Tan, Gray) <small>(under 2 layers of carpet)</small>	Throughout	Throughout Classrooms Building	Footnote 2 & 4	Category 1
	Mastic (Black) <small>(under 2 layers of carpet)</small>			Footnote 2 & 4	Category 2
Interior	Transite (Gray)	1 Each	02 Kindergarten Classroom	Footnote 2 & 4	Category 2

Footnote 1: No action needed.

Footnote 2: Non-Friable asbestos; do not cut, sand, drill, polish, or damage the material; Operations and Maintenance Program is suggested.

Footnote 3: Friable asbestos

Footnote 4: Remove affected asbestos containing materials prior to demolition/renovation.

RACM: Regulated Asbestos Containing Material, Friable Asbestos Containing Materials or Category I Non-Friable that has become friable or will be the subject of mechanical removal process.

Category 1: Non-Friable Asbestos Containing Materials, packing, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos.

Category 2: Non-Friable Asbestos Containing Material other than Category I Non-Friable materials that when dry cannot be crumbled, pulverized or reduced to powder by hand pressure.

*** Contractor shall verify all quantities

*** Contractor shall follow all OSHA regulations with samples less <1%

5. Recommendations

Based on the above conclusions, ECS Environmental, Inc. recommends the following:

Prior to renovation and or demolition remove all affected Asbestos Containing Materials.

6. Limitations

The conclusions, and recommendations presented above are based on, agreed upon scope of work outlined in the above report. The services performed on the subject property, included destructive sampling and excluded sampling of hidden materials, or sampling from inaccessible areas such as locked rooms, tight piped chases, walled cavities, concealed surfaces, electric wiring, fire doors, hard segmentation materials, etc. It should be further understood that this report might not be a definitive study of the presence of Asbestos Containing Material in the facility, due to the nature of manufacturing, application, and location of ACM. The consultant makes no warranties or guarantees as to the accuracy, or completeness of information obtained, or information provided or compiled by others. It is possible that information exists beyond the scope of this investigation. Also, changes in site use may have occurred sometime in the past due to variations in rainfall, temperature, water usage, economic, agricultural or other factors. Additional information that was not found, or available to a consultant at the time of the writing of this report, may result in a modification of the conclusions, and recommendations presented. This report is not a legal opinion. The services performed by the consultant have been conducted in a manner consistent with care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

Respectfully submitted,



Bond L. McCowan, Sr.
California Certified Asbestos Consultant

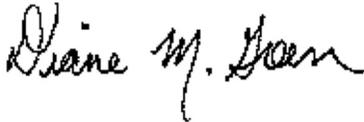
Appendix A
Laboratory Analytical Report
&
Chain of Custody

Report for:

Bond McCowan
ECS Environmental, Inc.: CA
4876 Santa Monica Ave #172
San Diego, CA 92107-2811

Regarding: Project: 608 3rd St Classrm Bldg; Encinitas, CA.
EML ID: 1296025

Approved by:



Approved Signatory
Diane Green

Dates of Analysis:

Asbestos PLM: 11-26-2014 and 11-28-2014

Service SOPs: Asbestos PLM (EPA Methods 600/R-93/116 & 600/M4-82-020, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: ECS Environmental, Inc.: CA
 C/O: Bond McCowan
 Re: 608 3rd St Classrm Bldg; Encinitas, CA.

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted: 34
Total Samples Analysed: 34
Total Samples with Layer Asbestos Content > 1%: 6

Location: 001, Floor tile/mastic

Lab ID-Version‡: 5903731-1

Sample Layers	Asbestos Content
Brown Mastic	ND
Tan Floor Tile	3% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity: Good	

Location: 002, Floor tile/mastic

Lab ID-Version‡: 5903732-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Gray Floor Tile	4% Chrysotile
Black Mastic	ND
Sample Composite Homogeneity: Good	

Location: 003, Floor tile/mastic

Lab ID-Version‡: 5903733-1

Sample Layers	Asbestos Content
Gray Floor Tile	4% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity: Good	

Location: 004, Floor tile/mastic

Lab ID-Version‡: 5903734-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Gray Floor Tile	4% Chrysotile
Black Mastic	ND
Sample Composite Homogeneity: Good	

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‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: ECS Environmental, Inc.: CA
 C/O: Bond McCowan
 Re: 608 3rd St Classrm Bldg; Encinitas, CA.

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 005, Floor tile/mastic

Lab ID-Version‡: 5903735-1

Sample Layers	Asbestos Content
Yellow Mastic	ND
Gray Floor Tile	4% Chrysotile
Black Mastic	2% Chrysotile
Sample Composite Homogeneity: Good	

Location: 006, Sheet vinyl/glue

Lab ID-Version‡: 5903736-1

Sample Layers	Asbestos Content
Cream Mastic	ND
Sample Composite Homogeneity: Good	

Location: 007, Carpet glue

Lab ID-Version‡: 5903737-1

Sample Layers	Asbestos Content
Brown Glue	ND
Sample Composite Homogeneity: Good	

Location: 008, Cove mastic

Lab ID-Version‡: 5903738-1

Sample Layers	Asbestos Content
Cream Mastic	ND
Sample Composite Homogeneity: Good	

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 C/O: Bond McCowan
 Re: 608 3rd St Classrm Bldg; Encinitas, CA.

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 009, Cove mastic

Lab ID-Version‡: 5903739-1

Sample Layers	Asbestos Content
Cream Mastic	ND
Sample Composite Homogeneity: Good	

Location: 010, Cove mastic

Lab ID-Version‡: 5903740-1

Sample Layers	Asbestos Content
Cream Mastic	ND
Sample Composite Homogeneity: Good	

Location: 011, Plaster

Lab ID-Version‡: 5903741-1

Sample Layers	Asbestos Content
Gray Plaster	ND
Pink Skim Coat	ND
Sample Composite Homogeneity: Good	

Location: 012, Plaster

Lab ID-Version‡: 5903742-1

Sample Layers	Asbestos Content
Gray Plaster	ND
Pink Skim Coat	ND
Sample Composite Homogeneity: Good	

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Client: ECS Environmental, Inc.: CA
 C/O: Bond McCowan
 Re: 608 3rd St Classrm Bldg; Encinitas, CA.

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 013, Plaster

Lab ID-Version‡: 5903743-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Pink Drywall	ND
Composite Non-Asbestos Content:	3% Cellulose
Sample Composite Homogeneity:	Good

Location: 014, Plaster

Lab ID-Version‡: 5903744-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Pink Drywall	ND
Composite Non-Asbestos Content:	3% Cellulose
Sample Composite Homogeneity:	Good

Location: 015, Plaster

Lab ID-Version‡: 5903745-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Pink Drywall	ND
Composite Non-Asbestos Content:	3% Cellulose
Sample Composite Homogeneity:	Good

Location: 016, Drywall/joint

Lab ID-Version‡: 5903746-1

Sample Layers	Asbestos Content
White Drywall	ND
White Joint Compound	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

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Client: ECS Environmental, Inc.: CA
 C/O: Bond McCowan
 Re: 608 3rd St Classrm Bldg; Encinitas, CA.

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 017, Drywall/joint

Lab ID-Version‡: 5903747-1

Sample Layers	Asbestos Content
White Drywall	ND
White Joint Compound	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: 018, Drywall/joint

Lab ID-Version‡: 5903748-1

Sample Layers	Asbestos Content
White Drywall	ND
White Joint Compound	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: 019, Transite pipe

Lab ID-Version‡: 5903749-1

Sample Layers	Asbestos Content
Gray Transite	10% Chrysotile
Sample Composite Homogeneity:	Good

Location: 020, Ceiling tile

Lab ID-Version‡: 5903750-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

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 Re: 608 3rd St Classrm Bldg; Encinitas, CA.

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 021, Ceiling tile

Lab ID-Version‡: 5903751-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	45% Cellulose
Sample Composite Homogeneity:	Good

Location: 022, Ceiling tile

Lab ID-Version‡: 5903752-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: 023, Window putty

Lab ID-Version‡: 5903753-1

Sample Layers	Asbestos Content
Off-White Window Putty	ND
Sample Composite Homogeneity:	Good

Location: 024, Window putty

Lab ID-Version‡: 5903754-1

Sample Layers	Asbestos Content
Off-White Window Putty	ND
Sample Composite Homogeneity:	Good

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 C/O: Bond McCowan
 Re: 608 3rd St Classrm Bldg; Encinitas, CA.

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 025, Window putty

Lab ID-Version‡: 5903755-1

Sample Layers	Asbestos Content
Off-White Window Putty	ND
Sample Composite Homogeneity: Good	

Location: 026, Stucco

Lab ID-Version‡: 5903756-1

Sample Layers	Asbestos Content
Gray Stucco	ND
White Skim Coat	ND
Sample Composite Homogeneity: Good	

Location: 027, Stucco

Lab ID-Version‡: 5903757-1

Sample Layers	Asbestos Content
Gray Stucco	ND
White Skim Coat	ND
Sample Composite Homogeneity: Good	

Location: 028, Stucco

Lab ID-Version‡: 5903758-1

Sample Layers	Asbestos Content
Gray Stucco	ND
Sample Composite Homogeneity: Good	

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 029, Stucco

Lab ID-Version‡: 5903759-1

Sample Layers	Asbestos Content
Gray Stucco	ND
Dark Gray Stucco	ND
Sample Composite Homogeneity: Good	

Location: 030, Stucco

Lab ID-Version‡: 5903760-1

Sample Layers	Asbestos Content
Gray Stucco	ND
White Skim Coat	ND
Sample Composite Homogeneity: Good	

Location: 031, Roofing

Lab ID-Version‡: 5903761-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Composite Non-Asbestos Content: 45% Synthetic Fibers	
Sample Composite Homogeneity: Good	

Location: 032, Pene/patch mastic

Lab ID-Version‡: 5903762-1

Sample Layers	Asbestos Content
Black Roofing Mastic	ND
White Roofing Mastic	ND
Sample Composite Homogeneity: Good	

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: 033, Roofing

Lab ID-Version‡: 5903763-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Composite Non-Asbestos Content:	45% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: 034, Chalkboard mastic

Lab ID-Version‡: 5903764-1

Sample Layers	Asbestos Content
Black Mastic	ND
Sample Composite Homogeneity:	Good

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Cherry Hill, NJ: 1936 Olney Avenue, Cherry Hill, NJ 08003 • (856) 874-1984
Phoenix, AZ: 4531 West Kruidsen Ave, Phoenix, AZ 85027 • (602) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94068 • (650) 388-6633

Weather	Fog	Rain	Snow	Wind	Clear
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Light	<input type="checkbox"/>				
Moderate	<input type="checkbox"/>				
Heavy	<input type="checkbox"/>				

1296025

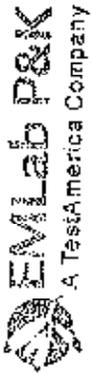
Barcode
Water, Bulk, Dist, Soil, Contact Plates

CONTACT INFORMATION		PROJECT INFORMATION		TURN AROUND TIME CODES (TAT)	
Company:	ELS Env. Sol	Address:	4876 Santa Monica Ave	STD - Standard (DEFAULT)	Rushes received after 2pm or on weekends, will be considered received the next business day. Please alert us in advance of treatment analysis needs.
Contact:	Bond	Special Instructions:	San Diego, CA	ND - Next Business Day	
Phone:	800-511-6364			SD - Same Business Day Rush	
Project ID:	6083rd St Bldg	Sampling Date & Time:	11/24/14	WH - Weekend / Holiday	
Project Description:	Environ. Ca			TAT (Above)	ND
Project Zip Code:	Pacific View Ele.			Total Volume / Area (as applicable)	N/A
PO Number:					
Sample ID	Description	Sample Type (Below)			
001	Floor tile/mastic	S			
002					
003					
004					
005					
006	sheet vinyl glue				
007	carpet of tile				
008	core mastic				
009					
010					
011	plaster				

Sample Type	Fungus - Spore Trap Analysis	Spore Trap Analysis - Other particles	Direct Microscopic Exam (Qualitative)	Quantitative Spore Count Direct Exam	1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Gram Stain & Count (Culturable Air & Surface Bacteria)	Legionella culture	Total Coliform, E. coli (Presence/Absence)	Membrane Filtration (Specify organism)	MFN Bacteria (Specify organism)	Caustic Tray - Sewage Screen	Asbestos Analysis - PCM (EPA method 8082-93-116)	Asbestos Analysis - PCM Alternative Fiber Count (NIOSH 7400)	PCR (Specify test)	Specify Service
Non-Culturable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spore Trap	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tape Swab	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bulk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAMPLE TYPE CODES		RELINQUISHED BY		DATE & TIME	
EC - BioCassette™	ST - Spore Trap, Zefon	<i>[Signature]</i>	11/25/14	<i>[Signature]</i>	11/26/14
ALS - Anderson	D - Dust				
SAS - Surface Air Sampler	SW - Swab SO - Sol				
CP - Contact Plate	S - Bulk O - Other				

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/main/services/terms.html>



Cherry Hill, NJ: 1936 Olney Avenue, Cherry Hill, NJ 08003 * (856) 671-1584
Phoenix, AZ: 1561 West Knudsen drive, Phoenix, AZ 85027 * (602) 651-4802
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (650) 888-6653

Weather	Fog	Rain	Snow	Wind	Clear
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Light	<input type="checkbox"/>				
Moderate	<input type="checkbox"/>				
Heavy	<input type="checkbox"/>				

Company: <u>ELS Env. Inc</u>		Address: <u>4876 Santa Monica Ave</u>	
Contact: <u>Bond</u>		Special Instructions: <u>San Diego Ca</u>	
Phone: <u>800-511-6364</u>			
PROJECT INFORMATION		TURN AROUND TIME CODES (TAT)	
Project ID:		STD - Standard (DEFAULT)	
Project Description:	<u>609 3rd St, classrm Bldg</u>	ND - Next Business Day	
Project Zip Code:	<u>Encinitas, Ca</u>	SD - Same Business Day Rush	
PD Number:	<u>11/24/14</u>	WH - Weekend / Holiday	
Sample ID	Description	Sample Type (Below)	TAT (above)
012	plaster	B	ND NSA
013			
014			
015			
016	drywall joint		
017			
018			
019	transite pipe		
020	ceiling tile		
021			
022			

SAMPLE TYPE CODES		RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
BC - BioCassette	ST - Score Trap: Zefon, Allergenco, Burkard ...	<i>[Signature]</i>	<u>11/25/14</u>	<i>[Signature]</i>	<u>11/26/14</u>
ATB - Anderson	SW - Swab				
SAS - Surface Air Sampler	SO - Soil				
CP - Contact Plate	P - Potable Water				
	R - Bulk				
	NP - Non-Potable Water				
	O - Other				

RE: 01296025

Non-Culturable
Tape Swab Bulk

BioCassette™ Andersen, 5000, 6000, 7000, 8000, 9000, 10000, 11000, 12000, 13000, 14000, 15000, 16000, 17000, 18000, 19000, 20000, 21000, 22000, 23000, 24000, 25000, 26000, 27000, 28000, 29000, 30000, 31000, 32000, 33000, 34000, 35000, 36000, 37000, 38000, 39000, 40000, 41000, 42000, 43000, 44000, 45000, 46000, 47000, 48000, 49000, 50000, 51000, 52000, 53000, 54000, 55000, 56000, 57000, 58000, 59000, 60000, 61000, 62000, 63000, 64000, 65000, 66000, 67000, 68000, 69000, 70000, 71000, 72000, 73000, 74000, 75000, 76000, 77000, 78000, 79000, 80000, 81000, 82000, 83000, 84000, 85000, 86000, 87000, 88000, 89000, 90000, 91000, 92000, 93000, 94000, 95000, 96000, 97000, 98000, 99000, 100000

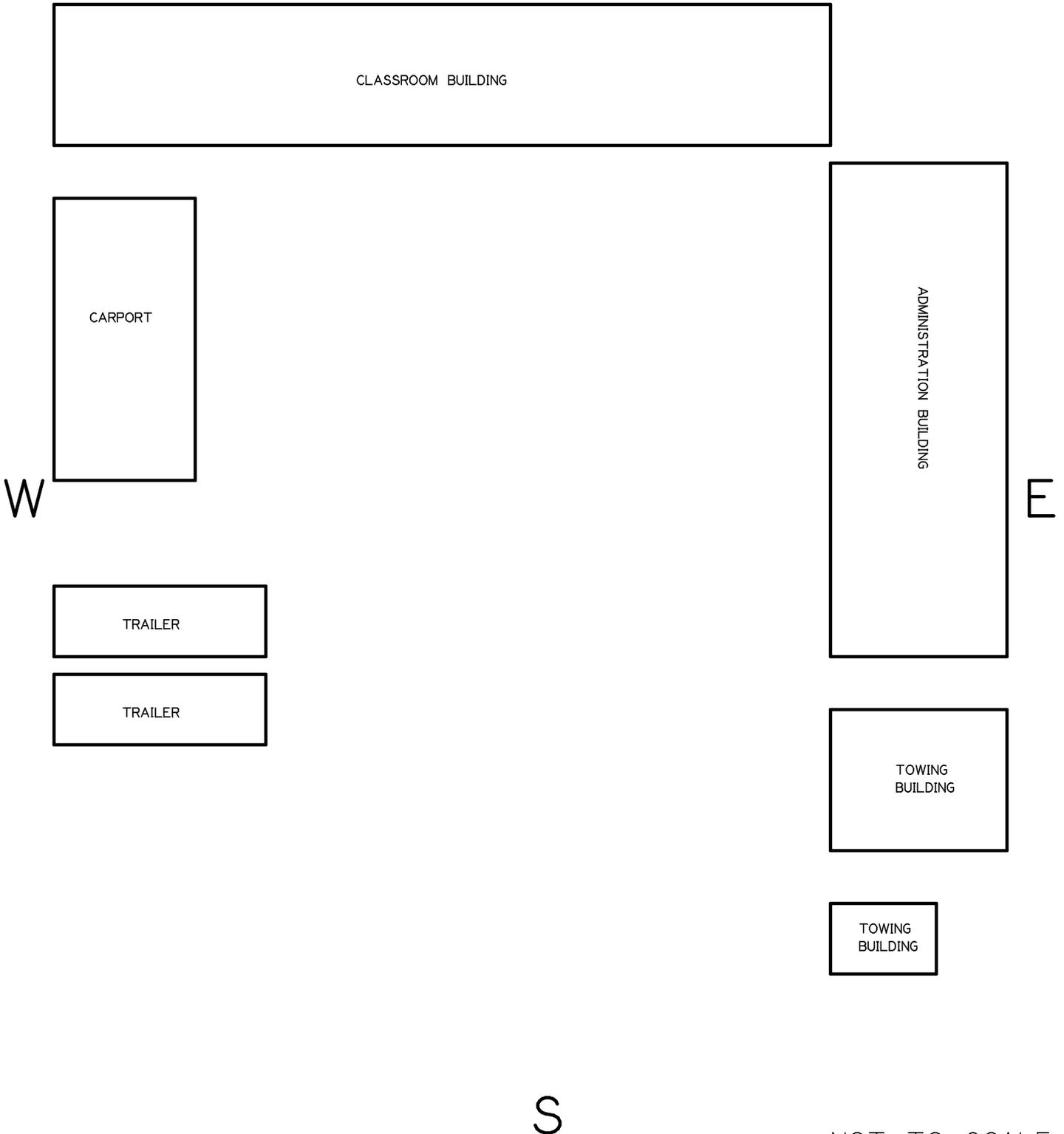
Fungal - Spore Trap Analysis	Spore Trap Analysis - Other particles	Direct Microscopic Exam (Qualitative)	Quantitative Spore Count Direct Exam	1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culture Air Fungi (Genus ID + Asp. spp.)	Cream Stain & Counts (Culturable Air & Surface Bacteria)	Logarithmic culture	Total Coliform, E. coli (Presence/Absence)	Membrane Filtration (specify organism)	MFN Bacteria (specify organism)	QuantTray - Sewage Screen	Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Analysis - PLM (EPA method 600/4-93-140)	PCR (specify test)	Specify Service
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/chainofcustodyterms.html>

Appendix B
Site Maps

OVERVIEW

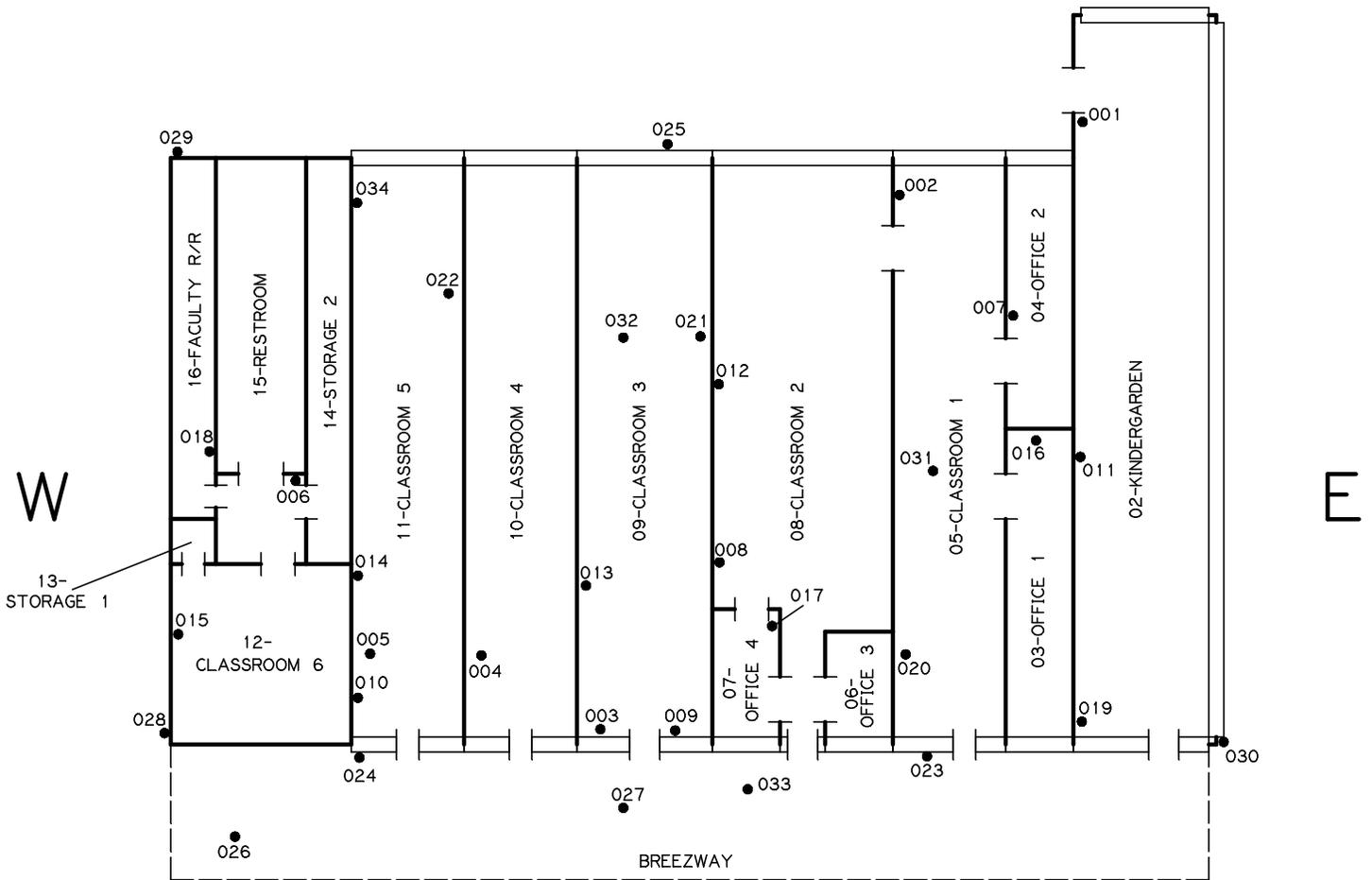
N



NOT TO SCALE

N

CLASSROOM BUILDING



S

NOT TO SCALE

Appendix C
Certification

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Bond L McCowan



Name

Certification No. 12-4865

Expires on 03/21/15

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



December 10, 2014

Greg Shields, P.E.
Deputy City Engineer
City of Encinitas
505 South Vulcan Avenue
Encinitas, California 92024-3633

**RE: Hazardous Waste Characterization Testing for Lead (TTLC Sampling)
Pacific View Elementary School – Classrooms Building
608 3rd Street, Encinitas, California 92024-3512**

Dear Mr. Shields;

This report documents the findings from the TTLC sample that was collected from the Classrooms Building located at Pacific View Elementary School. The sample was collected by Environmental Consultant, Bond L. McCowan, Sr. on November 25, 2014. The sample was processed by LA Testing located at 11625 Knott Street, Unit F5 in Garden Grove, California on November 26, 2014, using Atomic Absorption method.

The following is a list of components collected in sample TTLC-002:

**Interior: Plaster and Drywall Walls, Wood Ceiling Tiles, Wood Cabinets, Wood Doors, Wood Door Casings, Wood Benches, Tiled Flooring, Wood Vents
Exterior: Metal Columns, Metal Door Casing, Stucco Walls**

Laboratory analytical results of the sample TTLC-002 determined the Lead Concentration to be 400ppm.

California Title 22 TTLC standard is 1,000ppm for lead waste characterization. Laboratory results indicate the components listed above were determined not to be hazardous waste by TTLC. Nor does it require further analysis via STLC or TCLP prior to disposal.

Should you have any questions after reviewing the conclusions contained within this report, please do not hesitate to contact ECS Environmental, Inc. ECS remains available to assist you in any way possible.

Sincerely,
ECS Environmental, Inc.

Bond L. McCowan, Sr.
Environmental Consultant

Attachments: Laboratory Analytical Results and Chain of Custody
Inspector Certification

4876 SANTA MONICA AVE, SUITE 172 ~ SAN DIEGO, CA 92107

(O) 1-800-511-6364 (F) 480-719-4465 WWW.ECS-ENVIRONMENTALSERVICES.COM



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com>

gardengrovelab@latesting.com

LA Testing Order: 331421118

CustomerID: EVCS34

CustomerPO:

ProjectID:

Attn: **Bond McCowan**
ECS Environmental, Inc.
4876 Santa Monica Ave
#172
San Diego, CA 92107

Phone: (623) 824-6722

Fax:

Received: 11/26/14 9:45 AM

Collected:

Project: **City of Encinitas 608 3rd St Classroom Bldg**

Test Report: Total Threshold Limit Concentration

<i>Client SampleDescription</i>	<i>Collected</i>	<i>Analyzed</i>	<i>RDL</i>	<i>Lead Concentration</i>
TTL-02 331421118-0001		11/26/2014	80 mg/Kg	400 mg/Kg

Michael Chapman, Laboratory Manager
or other approved signatory

This report relates only to those items tested. Sample received in acceptable condition unless otherwise noted.
Samples analyzed by LA Testing Garden Grove, CA

Initial report from 11/26/2014 17:08:51

TLC using atomic absorption

-331421118

ECS Environmental, Inc.
4876 Santa Monica Avenue #172
San Diego, California 92107
Phone: (800) 511-6364 Fax: (480) 719-4465

Field Sampling Form for Paint

Date: 11/25/14

Inspector: Bond Certification #: 3650

Property Owner/Client: City of Encinitas

Property Address: 608 3rd St

Classroom Bldg

Table with 5 columns: Sample Number, Room, Building Component, Lab Result (ppm), Comments. Contains handwritten entries for various building materials like drywall, plaster, wood, metal, stucco, ceiling tile, benches, cabinets, floor tile, and vents.

PPM - Parts Per Million
Mg/cm² -- Milligrams per Centimeter Squared

Total number of samples on this page: 1

Turn Around: Same Day [X] 24 Hour 48 Hour Other

Collected By: Bond McLowan Date: 11/25/14

Relinquished By: Date:

Received By: [Signature] Date: 11/26/14 9:45

Delivered To: LA Testing Date: 11/25/14

Fed Ex: Date:

ASBESTOS INSPECTION REPORT

Pacific View Elementary School
608 3rd Street
Administration Building
Encinitas, California 92024-3512
Testing Date: November 24, 2014

PREPARED FOR:

Greg Shields, P.E.
Deputy City Engineer
City of Encinitas
505 South Vulcan Avenue
Encinitas, California 92024-3633

PREPARED BY:

ECS Environmental, Inc.
4876 Santa Monica Avenue #172
San Diego, California 92107-2811

Report Date: December 4, 2014



December 4, 2014

Greg Shields, P.E.
Deputy City Engineer
City of Encinitas
505 South Vulcan Avenue
Encinitas, California 92024-3633

**RE: Asbestos Inspection – Pacific View Elementary School
608 3rd Street, Encinitas, California 92024-3512
Administration Building**

Dear Mr. Shields;

In accordance with your request and authorization dated November 18, 2014, ECS Environmental, Inc. has prepared the attached asbestos inspection report. Bond L. McCowan, Sr. a California Certified Asbestos Consultant, conducted the inspection on November 24, 2014.

Should you have any questions after reviewing the conclusions and recommendations contained within this report, please do not hesitate to contact the undersigned at (800) 511-6364. ECS Environmental, Inc. remains available to assist you in any way possible.

Sincerely,
ECS Environmental, Inc.

A handwritten signature in black ink, appearing to read 'Bond L. McCowan, Sr.', is positioned above the printed name and title.

Bond L. McCowan, Sr.
California Certified Asbestos Consultant

4876 SANTA MONICA AVE, SUITE 172 ~ SAN DIEGO, CA 92107

(O) 1-800-511-6364 (F) 480-719-4465 WWW.ECS-ENVIRONMENTALSERVICES.COM

TABLE OF CONTENTS

1. Scope of Work.....	1
2. Building Description.....	1
3. Investigative Methods.....	1
3.1 Sampling Protocols.....	1
3.2 Laboratory Analytical Method.....	1
4. Results of Investigation.....	2
5. Recommendations.....	12
6. Limitations.....	12

LIST OF TABLES

1. Asbestos Survey Results.....	3 - 8
2. Asbestos Containing Materials.....	9 - 10
3. Asbestos Materials (Less Than <1%).....	11

LIST OF APPENDICES

Appendix A - Laboratory Analytical Report & Chain of Custody
Appendix B - Site Maps
Appendix C - Inspector Asbestos Certification

1. Scope of Work

ECS Environmental, Inc. was retained to conduct asbestos testing for the subject site located at 608 3rd Street in Encinitas, California (per information provided). The testing was conducted on November 24, 2014.

The purpose of the testing was to ascertain the presence of ACM for renovation and or demolition purposes. Material not sampled should be considered suspect until proven otherwise by proper sampling techniques.

2. Building Description

The property tested is a single-story school administration building. The exterior consists of the original stucco walls; wood doors with wood door frames; and slider windows with metal window frames. The interior consists of the original plaster and drywall walls; plaster and tiled ceilings; wood doors with wood door frames; carpet, tile, and concrete flooring; and wood cabinetry.

3. Investigative Methods

A total of thirty six (36) samples were collected throughout the structure. A unique number was assigned to each sample for identification. A total of seventy two (72) samples were analyzed (including all layers); results are reported and can be found in Appendix A.

3.1 Sampling Protocol

As a result of the visual inspection suspect materials were categorized as Friable or Non-Friable Surfacing, TSI or Miscellaneous Materials.

3.2 Laboratory Analytical Method

The bulk samples were submitted to EMLab P & K in San Diego, California, to be analyzed for asbestos content by Polarized Light Microscopy as described on the “Interim Method of Determination of Asbestos in Bulk Insulation Samples” (40 CFR Ch. 1 Pr.763, appendix A to sub-part F; July 1, 1987). EMLab P & K is an independent National Voluntary Laboratory Accreditation Program (NVLAP) certified laboratory.

To ensure valid and reliable results, and to monitor samples during the collection, shipment, testing, and subsequent disposal phase of potentially asbestos-containing materials, ECS Environmental, Inc. has established a quality assurance program for the collection and submittal of bulk samples. This program consists of:

- Creation of a chain-of-custody form to keep track of the samples always by assigning responsibility for each phase of the data collection and analysis process to a specific person.

- Use of EPA-accredited laboratories that participate in the National Voluntary Laboratory Accreditation Program (NVLAP) sponsored by the National Institute of Standards and Technology for asbestos testing.

4. Results of Investigation

In accordance with the Environmental Protection Agency (EPA), any construction material containing more than one percent asbestos by weight is considered an Asbestos Containing Material (ACM). In addition, according to policies developed for schools, by the EPA, a homogeneous material is considered to contain asbestos, when asbestos is detected in one or more samples of the subject material.

Table 1 summarizes the homogeneous areas inspected and sampled and presents the laboratory results.

Table 2 presents only the identified Asbestos Containing Material types, locations, and the approximate quantities along with recommendations.

Table 3 Presents materials containing *less than* 1% of Asbestos.

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Administration Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Interior	Sheet Vinyl and Glue	B 001	10 Storage	80 Sq. Ft.	Sheet Flooring (Tan) w/Fibrous Backing Mastic (Yellow)	Good	ND ND	0% 0%
Interior	Floor Tile and Mastic	B 002	11 Administration Office	759 Sq. Ft.	Floor Tile (Gray)	Good	CH	3%
					Mastic (Black)		A/P	--
Interior	Floor Tile and Mastic	B 003	12 Kitchen	759 Sq. Ft.	Mastic (Yellow)	Good	ND	0%
					Mastic (Black)		A/P	--
Interior	Floor Tile and Mastic	B 004	14 Filing Room	759 Sq. Ft.	Floor Tile (Gray)	Good	CH	3%
					Mastic (Yellow)		ND	0%
Interior	Floor Tile and Mastic	B 005	17 Copy Room	759 Sq. Ft.	Mastic (Black)	Good	A/P	--
					Floor Tile (Gray)		CH	3%
Interior	Carpet Glue	B 006	12 Kitchen	1,285 Sq. Ft.	Mastic (Yellow)	Good	ND	0%
					Glue (Yellow)		ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolite A=Amosite N/A=Not Analyzed A/P=Assume Positive

*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Administration Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Interior	Cove Mastic	B 007	12 Kitchen		Mastic (Cream)	Good	ND	0%
Interior	Cove Mastic	B 008	17 Copy Room	995 Ln. Ft.	Mastic (Cream)	Good	ND	0%
Interior	Cove Mastic	B 009	02 Maintenance		Mastic (Cream)	Good	ND	0%
Interior	Sheet Vinyl and Glue	B 010	08 Faculty Restroom	365 Sq. Ft.	Sheet Flooring (Gray) w/Fibrous Backing Mastic (Yellow)	Good	ND ND	0% 0%
Interior	Floor Tile and Mastic	B 011	02 Maintenance	437 Sq. Ft.	Mastic (Black)	Good	A/P	--
					Floor Tile (Gray)		CH	4%
					Mastic (Yellow)		ND	0%
Interior	Sheet Vinyl, Tile, and Mastic	B 012	15 Restroom	90 Sq. Ft.	Floor Tile (Green)	Good	CH	2%
					Mastic (Black)		CH	2%
					Floor Tile (Gray)		CH	3%
					Mastic (Yellow)		ND	0%
					Sheet Flooring (Blue) w/Fibrous Backing		ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolite A=Amosite N/A=Not Analyzed A/P=Assume Positive

*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Administration Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Interior	Floor Tile and Mastic	B 013	05 Office	90 Sq. Ft.	Mastic (Black) Floor Tile (Gray) Mastic (Yellow) Floor Tile (Green)	Good	A/P CH ND CH	-- 4% 0% 2%
Interior	Plaster	B 014	13 Back Office	2,950 Sq. Ft.	Plaster (Off White) Skim Coat (Green)	Good	ND ND	0% 0%
Interior	Plaster	B 015	09 Boy's Restroom		Plaster (Off White) Skim Coat (Green)	Good	ND ND	0% 0%
Interior	Plaster	B 016	17 Copy Room		Plaster (Off White) Skim Coat (Green)	Good	ND ND	0% 0%
Interior	Plaster	B 017	06 Girl's Restroom		Plaster (Off White) Skim Coat (Green)	Good	ND ND	0% 0%
Interior	Plaster	B 018	02 Maintenance		Plaster (Off White) Skim Coat (Green)	Good	ND ND	0% 0%

ND = None Detected CH=Chrysotile CR=Crocidolite A=Amosite N/A=Not Analyzed A/P=Assume Positive

***Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Administration Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Interior	Drywall and Joint Compound	B 019	12 Kitchen	1,175 Sq. Ft.	Drywall (White) Joint Compound (White) Tape (White) Compound (White)	Good	ND ND ND ND	0% 0% 0% 0%
Interior	Drywall and Joint Compound	B 020	10 Storage		Drywall (White) Joint Compound (White) Tape (White) Compound (Beige)	Good	ND ND ND CH	0% 0% 0% <1%
Interior	Drywall and Joint Compound	B 021	Administration		Drywall (White) Joint Compound (White)	Good	ND ND	0% 0%
Interior	Ceiling Tile	B 022	14 Filing Room		Ceiling Tile (Brown) w/Surface (White)	Good	ND	0%
Interior	Ceiling Tile	B 023	16 Back Entry	750 Sq. Ft.	Ceiling Tile (Brown) w/Surface (White)	Good	ND	0%
Interior	Ceiling Tile	B 024	17 Copy Room		Ceiling Tile (Brown) w/Surface (White)	Good	ND	0%
Interior	Vapor Barrier	B 025	07 SDGE Room		Vapor Barrier (Black)	Good	ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolite A=Amosite N/A=Not Analyzed A/P=Assume Positive

***Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Administration Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Exterior	Window Putty	B 026	South Side	1,750 Ln. Ft.	Window Putty (Off White)	Good	ND	0%
Exterior	Window Putty	B 027	East Side		Window Putty (Off White)	Good	ND	0%
Exterior	Window Putty	B 028	East Side		Window Putty (Beige)	Good	CH	2%
Exterior	Roofing	B 029	Roof	2,079 Sq. Ft.	Roofing Material (Black)	Good	ND	0%
Exterior	Patch/Penetration Mastic	B 030	Roof	257 Ln. Ft.	Roofing Mastic (Gray)	Good	ND	0%
Exterior	Penetration Mastic	B 031	Roof	222 Ln. Ft.	Roofing Mastic (White) Roofing Mastic (Black)	Good	ND ND	0% 0%
Exterior	Stucco	B 032	West Side	2,975 Sq. Ft.	Stucco (Gray) Skim Coat (Pink)	Good	ND ND	0% 0%
Exterior	Stucco	B 033	Southwest Corner		Stucco (Gray)	Good	ND	0%
Exterior	Stucco	B 034	Southeast Corner		Stucco (Gray)	Good	ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolit A=Amosite N/A=Not Analyzed A/P=Assume Positive

***Contractor shall follow all OSHA regulations with samples less <1%

TABLE 1

Asbestos Results

608 3rd Street

Encinitas, California 92024-3512

November 24, 2014

Administration Building

Area Tested	Type of Material	Sample Number (s)	Sample Locations	Quantity	Sample Description	Condition	PLM Results	Percent
Exterior	Stucco	B 035	Breezeway	580 Sq. Ft.	Stucco (Gray)	Good	ND	0%
					Skim Coat (Pink)			ND
Exterior	Stucco	B 036	Breezeway		Skim Coat (White)	Good	ND	0%
					Stucco (Gray)			ND
					Skim Coat (White)		ND	0%

ND = None Detected CH=Chrysotile CR=Crocidolite A=Amosite N/A=Not Analyzed A/P=Assume Positive

***Contractor shall follow all OSHA regulations with samples less <1%

TABLE 2
Asbestos Containing Material
 608 3rd Street
 Encinitas, California 92024-3512
 November 24, 2014
Administration Building

Area	Material	Quantity	Material Location	Recommendations	Classifications
Interior	Floor Tile (Gray) (Under Carpet)	759 Sq. Ft.	11 Administration Office, 12 Kitchen, 13 Back Office, 14 Filing Room, 16 Back Entry, and 17 Copy Room	Footnote 2 & 4	Category 1
	Mastic (Black) (Under Carpet)				
Interior	Floor Tile (Gray, Green) (2 Layers - Under Carpet)	437 Sq. Ft.	Maintenance	Footnote 2 & 4	Category 1
	Mastic (Black) (2 Layers - Under Carpet)				

Footnote 1: No action needed.

Footnote 2: Non-Friable asbestos; do not cut, sand, drill, polish, or damage the material; Operations and Maintenance Program is suggested.

Footnote 3: Friable asbestos

Footnote 4: Remove affected asbestos containing materials prior to demolition/renovation.

RACM: Regulated Asbestos Containing Material, Friable Asbestos Containing Materials or Category I Non-Friable that has become friable or will be the subject of mechanical removal process.

Category 1: Non-Friable Asbestos Containing Materials, packing, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos.

Category 2: Non-Friable Asbestos Containing Material other than Category I Non-Friable materials that when dry cannot be crumbled, pulverized or reduced to powder by hand pressure.

*** Contractor shall verify all quantities

*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 2
Asbestos Containing Material
 608 3rd Street
 Encinitas, California 92024-3512
 November 24, 2014
Administration Building

Area	Material	Quantity	Material Location	Recommendations	Classifications
Interior	Mastic (Black) (2 Layers)	90 Sq. Ft.	Restroom	Footnote 2 & 4	Category 2
	Floor Tile (Gray) (2 Layers)				Category 1
Interior	Floor Tile (Gray, Green) (2 Layers)	90 Sq. Ft.	Office	Footnote 2 & 4	Category 1
	Mastic (Black) (2 Layers)				Category 2

Footnote 1: No action needed.

Footnote 2: Non-Friable asbestos; do not cut, sand, drill, polish, or damage the material; Operations and Maintenance Program is suggested.

Footnote 3: Friable asbestos

Footnote 4: Remove affected asbestos containing materials prior to demolition/renovation.

RACM: Regulated Asbestos Containing Material, Friable Asbestos Containing Materials or Category I Non-Friable that has become friable or will be the subject of mechanical removal process.

Category 1: Non-Friable Asbestos Containing Materials, packing, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos.

Category 2: Non-Friable Asbestos Containing Material other than Category I Non-Friable materials that when dry cannot be crumbled, pulverized or reduced to powder by hand pressure.

*** Contractor shall verify all quantities

*** Contractor shall follow all OSHA regulations with samples less <1%

TABLE 3
Asbestos Materials (Less than 1 %)
 608 3rd Street
 Encinitas, California 92024-3512
 November 24, 2014
Administration Building

Area	Material	Quantity	Material Location
Interior	Compound (Beige)	1,175 Sq. Ft.	11 Administration Office, 10 Storage, and 12 Kitchen

Samples Contain Less Than 1%. If disturbed, follow all State and Federal Regulations, including OSHA.

*** Contractor shall verify all quantities

*** Contractor shall follow all OSHA regulations with samples less <1%

5. Recommendations

Based on the above conclusions, ECS Environmental, Inc. recommends the following:

Prior to renovation and or demolition remove all affected Asbestos Containing Materials.

6. Limitations

The conclusions, and recommendations presented above are based on, agreed upon scope of work outlined in the above report. The services performed on the subject property, included destructive sampling and excluded sampling of hidden materials, or sampling from inaccessible areas such as locked rooms, tight piped chases, walled cavities, concealed surfaces, electric wiring, fire doors, hard segmentation materials, etc. It should be further understood that this report might not be a definitive study of the presence of Asbestos Containing Material in the facility, due to the nature of manufacturing, application, and location of ACM. The consultant makes no warranties or guarantees as to the accuracy, or completeness of information obtained, or information provided or compiled by others. It is possible that information exists beyond the scope of this investigation. Also, changes in site use may have occurred sometime in the past due to variations in rainfall, temperature, water usage, economic, agricultural or other factors. Additional information that was not found, or available to a consultant at the time of the writing of this report, may result in a modification of the conclusions, and recommendations presented. This report is not a legal opinion. The services performed by the consultant have been conducted in a manner consistent with care ordinarily exercised by members of our profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.

Respectfully submitted,



Bond L. McCowan, Sr.
California Certified Asbestos Consultant

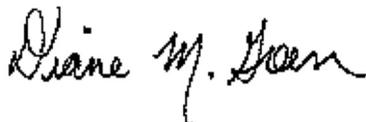
Appendix A
Laboratory Analytical Report
&
Chain of Custody

Report for:

Bond McCowan
ECS Environmental, Inc.: CA
4876 Santa Monica Ave #172
San Diego, CA 92107-2811

Regarding: Project: 608 3rd St. Admin Bldg, Encinitas, CA
EML ID: 1296024

Approved by:



Approved Signatory
Diane Green

Dates of Analysis:
Asbestos PLM: 11-28-2014

Service SOPs: Asbestos PLM (EPA Methods 600/R-93/116 & 600/M4-82-020, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

Client: ECS Environmental, Inc.: CA
 C/O: Bond McCowan
 Re: 608 3rd St. Admin Bldg, Encinitas, CA

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Total Samples Submitted: 36
Total Samples Analysed: 36
Total Samples with Layer Asbestos Content > 1%: 8

Location: B001, Sheet vinyl/glue

Lab ID-Version‡: 5903688-1

Sample Layers	Asbestos Content
Tan Sheet Flooring with Fibrous Backing	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	30% Cellulose
Sample Composite Homogeneity:	Good

Location: B002, Floor tile/mastic

Lab ID-Version‡: 5903689-1

Sample Layers	Asbestos Content
Gray Floor Tile	3% Chrysotile
Black Mastic	ND
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: B003, Floor tile/mastic

Lab ID-Version‡: 5903690-1

Sample Layers	Asbestos Content
Black Mastic	ND
Gray Floor Tile	3% Chrysotile
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

Location: B004, Floor tile/mastic

Lab ID-Version‡: 5903691-1

Sample Layers	Asbestos Content
Black Mastic	ND
Gray Floor Tile	3% Chrysotile
Yellow Mastic	ND
Sample Composite Homogeneity:	Good

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‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Client: ECS Environmental, Inc.: CA
 C/O: Bond McCowan
 Re: 608 3rd St. Admin Bldg, Encinitas, CA

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: B005, Floor tile/mastic

Lab ID-Version‡: 5903692-1

Sample Layers	Asbestos Content
Black Mastic	ND
Gray Floor Tile	3% Chrysotile
Yellow Mastic	ND
Sample Composite Homogeneity: Good	

Location: B006, Carpet glue

Lab ID-Version‡: 5903693-1

Sample Layers	Asbestos Content
Yellow Glue	ND
Sample Composite Homogeneity: Good	

Location: B007, Cove mastic

Lab ID-Version‡: 5903694-1

Sample Layers	Asbestos Content
Cream Mastic	ND
Sample Composite Homogeneity: Good	

Location: B008, Cove mastic

Lab ID-Version‡: 5903695-1

Sample Layers	Asbestos Content
Cream Mastic	ND
Sample Composite Homogeneity: Good	

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Client: ECS Environmental, Inc.: CA
C/O: Bond McCowan
Re: 608 3rd St. Admin Bldg, Encinitas, CADate of Sampling: 11-24-2014
Date of Receipt: 11-26-2014
Date of Report: 11-28-2014**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116****Location: B009, Cove mastic**

Lab ID-Version‡: 5903696-1

Sample Layers	Asbestos Content
Cream Mastic	ND
Sample Composite Homogeneity: Good	

Location: B010, Sheet vinyl/glue

Lab ID-Version‡: 5903697-1

Sample Layers	Asbestos Content
Gray Sheet Flooring with Fibrous Backing	ND
Yellow Mastic	ND
Composite Non-Asbestos Content:	25% Cellulose
Sample Composite Homogeneity: Good	

Location: B011, Floor tile/mastic

Lab ID-Version‡: 5903698-1

Sample Layers	Asbestos Content
Black Mastic	ND
Gray Floor Tile	4% Chrysotile
Yellow Mastic	ND
Green Floor Tile	2% Chrysotile
Sample Composite Homogeneity: Good	

Location: B012, Sheet vinyl/tile/mastic

Lab ID-Version‡: 5903699-1

Sample Layers	Asbestos Content
Black Mastic	2% Chrysotile
Gray Floor Tile	3% Chrysotile
Yellow Mastic	ND
Blue Sheet Flooring with Fibrous Backing	ND
Composite Non-Asbestos Content:	10% Glass Fibers
Sample Composite Homogeneity: Good	

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Client: ECS Environmental, Inc.: CA
C/O: Bond McCowan
Re: 608 3rd St. Admin Bldg, Encinitas, CADate of Sampling: 11-24-2014
Date of Receipt: 11-26-2014
Date of Report: 11-28-2014**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116****Location: B013, Floor tile/mastic**

Lab ID-Version‡: 5903700-1

Sample Layers	Asbestos Content
Black Mastic	ND
Gray Floor Tile	4% Chrysotile
Yellow Mastic	ND
Green Floor Tile	2% Chrysotile
Sample Composite Homogeneity:	Good

Location: B014, Plaster

Lab ID-Version‡: 5903701-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Green Skim Coat	ND
Sample Composite Homogeneity:	Good

Location: B015, Plaster

Lab ID-Version‡: 5903702-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Green Skim Coat	ND
Sample Composite Homogeneity:	Good

Location: B016, Plaster

Lab ID-Version‡: 5903703-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Green Skim Coat	ND
Sample Composite Homogeneity:	Good

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 Re: 608 3rd St. Admin Bldg, Encinitas, CA

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: B017, Plaster

Lab ID-Version‡: 5903704-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Green Skim Coat	ND
Sample Composite Homogeneity:	Good

Location: B018, Plaster

Lab ID-Version‡: 5903705-1

Sample Layers	Asbestos Content
Off-White Plaster	ND
Green Skim Coat	ND
Sample Composite Homogeneity:	Good

Location: B019, Drywall/joint

Lab ID-Version‡: 5903706-1

Sample Layers	Asbestos Content
White Drywall	ND
White Joint Compound	ND
White Tape	ND
White Compound	ND
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

Location: B020, Drywall/joint

Lab ID-Version‡: 5903707-1

Sample Layers	Asbestos Content
White Drywall	ND
White Joint Compound	ND
White Tape	ND
Beige Compound	< 1% Chrysotile
Composite Non-Asbestos Content:	10% Cellulose
Sample Composite Homogeneity:	Good

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 C/O: Bond McCowan
 Re: 608 3rd St. Admin Bldg, Encinitas, CA

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: B021, Drywall/joint

Lab ID-Version‡: 5903708-1

Sample Layers	Asbestos Content
White Drywall	ND
White Joint Compound	ND
Composite Non-Asbestos Content:	5% Cellulose
Sample Composite Homogeneity:	Good

Location: B022, Ceiling tile

Lab ID-Version‡: 5903709-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: B023, Ceiling tile

Lab ID-Version‡: 5903710-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: B024, Ceiling tile

Lab ID-Version‡: 5903711-1

Sample Layers	Asbestos Content
Brown Ceiling Tile with White Surface	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

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 C/O: Bond McCowan
 Re: 608 3rd St. Admin Bldg, Encinitas, CA

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: B025, Vapor barrier

Lab ID-Version‡: 5903712-1

Sample Layers	Asbestos Content
Black Vapor Barrier	ND
Composite Non-Asbestos Content:	95% Cellulose
Sample Composite Homogeneity:	Good

Location: B026, Window putty

Lab ID-Version‡: 5903713-1

Sample Layers	Asbestos Content
Off-White Window Putty	ND
Sample Composite Homogeneity:	Good

Location: B027, Window putty

Lab ID-Version‡: 5903714-1

Sample Layers	Asbestos Content
Off-White Window Putty	ND
Sample Composite Homogeneity:	Good

Location: B028, Window putty

Lab ID-Version‡: 5903715-1

Sample Layers	Asbestos Content
Beige Window Putty	2% Chrysotile
Sample Composite Homogeneity:	Good

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 C/O: Bond McCowan
 Re: 608 3rd St. Admin Bldg, Encinitas, CA

Date of Sampling: 11-24-2014
 Date of Receipt: 11-26-2014
 Date of Report: 11-28-2014

ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: B029, Roofing

Lab ID-Version‡: 5903716-1

Sample Layers	Asbestos Content
Black Roofing Material	ND
Composite Non-Asbestos Content:	45% Glass Fibers
Sample Composite Homogeneity:	Good

Location: B030, Panel patch mastic

Lab ID-Version‡: 5903717-1

Sample Layers	Asbestos Content
Gray Roofing Mastic	ND
Composite Non-Asbestos Content:	55% Synthetic Fibers
Sample Composite Homogeneity:	Good

Location: B031, Panel patch mastic

Lab ID-Version‡: 5903718-1

Sample Layers	Asbestos Content
White Roofing Mastic	ND
Black Roofing Mastic	ND
Sample Composite Homogeneity:	Good

Location: B032, Stucco

Lab ID-Version‡: 5903719-1

Sample Layers	Asbestos Content
Gray Stucco	ND
Pink Skim Coat	ND
Sample Composite Homogeneity:	Good

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ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

Location: B033, Stucco

Lab ID-Version‡: 5903720-1

Sample Layers	Asbestos Content
Gray Stucco	ND
Sample Composite Homogeneity: Good	

Location: B034, Stucco

Lab ID-Version‡: 5903721-1

Sample Layers	Asbestos Content
Gray Stucco	ND
Sample Composite Homogeneity: Good	

Location: B035, Stucco

Lab ID-Version‡: 5903722-1

Sample Layers	Asbestos Content
Gray Stucco	ND
Pink Skim Coat	ND
White Skim Coat	ND
Sample Composite Homogeneity: Good	

Location: B036

Lab ID-Version‡: 5907869-1

Sample Layers	Asbestos Content
Gray Stucco	ND
White Skim Coat	ND
Sample Composite Homogeneity: Good	

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Phoenix, AZ: 1591 West Knudsen Drive, Phoenix, AZ 85027 * (602) 551-4002
San Bruno, CA: 1160 Bayhill Drive, #103, San Bruno, CA 94066 * (650) 868-6655

Weather	Fog	Rain	Snow	Wind	Clear
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Light	<input type="checkbox"/>				
Moderate	<input type="checkbox"/>				
Heavy	<input type="checkbox"/>				

1296024

REQUIREMENTS (Use)

Non-Culturable
Tape Swab Bulk
BioCassette
Water, Bulk, Dust, Soil, Contact Plates

PROJECT INFORMATION		CONTACT INFORMATION	
Project ID:	608 3rd St, Admin Bldg	Company:	EC5 Env. Inc.
Project Description:	Encinitas, Ca	Contact:	Bond
Project Zip Code:	92024	Phone:	800-511-6364
PO Number:	Pacific View Etc.	Address:	4876 Jarda Monica Ave
Sample ID:	Description	Special Instructions:	Jard Diego, Ca
0001	Sheet vinyl glue		
0002	Floor tile adhesive		
0003			
0004			
0005			
0006	carpet glue		
0007	ceve plastic		
0008			
0009			
0010	sheet vinyl glue		
0011	floor tile adhesive		

Fungi - Spore Trap Analysis	Spore Trap Analysis - Other particles	Direct Microscopic Exam (Qualitative)	Quantitative Spore Count Direct Exam	1-Media Surface Fungi (Genus ID + Asp. spp.)	2-Media Surface Fungi (Genus ID + Asp. spp.)	3-Media Surface Fungi (Genus ID + Asp. spp.)	Culturable Air Fungi (Genus ID + Asp. spp.)	Cream Stain & Counts (Culturable Air & Surface Bacteria)	Legionella culture	Total Coliform, E. coli (Presumptive/Positive)	Membrane Filtration (specify organism)	MPN Bacteria (specify organism)	Quant. Tray - Sewage Screen	Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 7400)	Asbestos Analysis - PCM (EPA method 600/3-176)	PCR (specify test)	Specify Service
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAMPLE TYPE CODES		DELIVERED BY		DATE & TIME	
BC - BioCassette™	ST - Spore Trap, Zefiro, Allergeno, Burkard	<i>[Signature]</i>	<i>[Signature]</i>	11/25/14	11/26/14
AIS - Anderson	T - Tape				
SAS - Surface Air Sampler	SW - Swab				
CP - Contact Plate	P - Potable Water				
	B - Bulk				
	MP - Non-Potable Water				
	O - Other:				

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Phoenix, AZ: 1901 West Knudsen drive, Phoenix, AZ 85027 * (602) 851-4902
San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (650) 898-6633

CONTACT INFORMATION

Company: *ELS Gov. Inc*
 Address: *4876 Santa Monica Ave*
 Contact: *Bond*
 Phone: *800-560-6364*
 Special Instructions: *San Diego, Ca*

PROJECT INFORMATION

Project ID: *609 3rd St Admin Bldg*
 Project Description: *Encinitas, Ca*
 Project Zip Code: *92024*
 PO Number: *Pacific Views Etc.*
 Sampling Date & Time: *11/24/14*

Sample ID	Description	Sample Type (Below)	TAT (Above)	Total Volume / Area (as applicable)	Notes (Time of day, Temp, RH, etc.)	TURN AROUND TIME CODES (TAT)	
						STD - Standard (DEFAULT)	ND - Next Business Day
B012	sheet vinyl tile plaster	ND	N/A				
B013	Floor tile/plaster						
B014	plaster						
B015							
B016							
B017							
B018							
B019	drywall joint						
B020							
B021							
B022	ceiling tile						

Weather

Fog	Rain	Snow	Wind	Clear
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
None				
Light				
Moderate				
Heavy				

Non-Culturable

Spore Trap

Quantitative Spore Count Direct Exam

Direct Microscopic Exam (Qualitative)

1 Media Surface Fungi (Genus ID + Asp. spp.)

2 Media Surface Fungi (Genus ID + Asp. spp.)

3 Media Surface Fungi (Genus ID + Asp. spp.)

Culturable Air Fungi (Genus ID + Asp. spp.)

Cream Stain & Counts (Culturable Air & Surface Bacteria)

LogKofe culture

Total Coliform, E. coli (Presence/Absence)

Membrane Filtration (Specify organism)

MPN Bacteria (Specify organism)

Quant. Tray - Sewage Screen

Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 7400)

Asbestos Analysis - PCM (EPA Method 600/4-93-116)

PCR (Specify test)

Specify Service

REG (US)

1296024

Box/Cassette

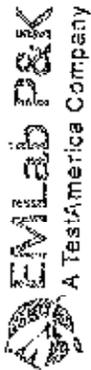
Wet/Dry, Bulk

SAMPLE TYPE CODES				RELINQUISHED BY	DATE & TIME	RECEIVED BY	DATE & TIME
ST - Spore Trap: Zetar, Allergenco, Burkard ...	T - Tape	D - Dust		<i>[Signature]</i>	11/25/14	<i>[Signature]</i>	11/26/8
AMS - Anderson	SW - Swab	SD - Soil					
SAS - Surface Air Sampler	P - Potable Water	B - Bulk					
CP - Contact Plate	NP - Non-Potable Water	O - Other					

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 Phoenix, AZ: 1501 West Kauffman drive, Phoenix, AZ 85027 * (602) 651-4302
 San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94068 * (650) 338-6553

Weather		Fog	Sun	Snow	Wind	Clear
None	<input type="checkbox"/>					
Light	<input type="checkbox"/>					
Moderate	<input type="checkbox"/>					
Heavy	<input type="checkbox"/>	<input checked="" type="checkbox"/>				

CONTACT INFORMATION

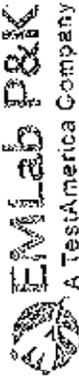
Company: EC5 Env. Inc
 Address: 4576 Santa Monica Ave
 Contact: Bond
 Special Instructions: San Diego, Ca
 Phone: 850-511-6364

PROJECT INFORMATION		TURN AROUND TIME CODES (TAT)	
Project ID:	Description	STD - Standard (DEFAULT)	Notes
6083rd St, Adeline Bldg		ND - Next Business Day	Rushes received after 2 pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
Encinitas, Ca		SD - Same Business Day Rush	
11/24/14		WH - Weekend / Holiday	
Pacific View Etc.		TAT (Above)	Total Volume / Area (as applicable)
		NSD	NSA
Sample ID	Description	Sample Type (Below)	Notes
6023	ceiling tile	B	
6024			
6025	vapor barrier		
6026	window putty		
6027			
6028			
6029	roofing		
6030	panel patch mortar		
6031			
6032	stucco		
6033			

SAMPLE TYPE CODES		RELINQUISHED BY		DATE & TIME	
BC - BioCassette™	ST - Spore Trap Zefon	<i>[Signature]</i>	<i>[Signature]</i>	11/25/14	11/26/14
A15 - Anderson	AL - Tape Zefon				
SA5 - Surface Air Sampler	AW - Swab Allegonco, Burkard ...				
CP - Contact Plate	P - Potable Water				
	B - Bulk				
	NP - Non-Potable Water				
	O - Other				
	SW - Swab				
	SO - Sol				

Asbestos Analysis - PCM Airborne Fiber Count (NIOSH 7400)	<input type="checkbox"/>	Asbestos Analysis - PCM (EPA method 8000-R-93-116)	<input checked="" type="checkbox"/>	PCR (specify test)	<input type="checkbox"/>	Specify Service	<input type="checkbox"/>
Curtain Tray - Sewage Screen	<input type="checkbox"/>	MFN Bacteria (specify organism)	<input type="checkbox"/>	Methylene Filtration (specify organism)	<input type="checkbox"/>	Total Coliform, E. coli (Presence/Absence)	<input type="checkbox"/>
Leptospira culture	<input type="checkbox"/>	Stain Slain & Counts (Culturable Air & Surface Bacteria)	<input type="checkbox"/>	Culturable Air Fungi (Genus ID + Asp. spp.)	<input type="checkbox"/>	2-Media Surface Fungi (Genus ID + Asp. spp.)	<input type="checkbox"/>
1-Media Surface Fungi (Genus ID + Asp. spp.)	<input type="checkbox"/>	2-Media Surface Fungi (Genus ID + Asp. spp.)	<input type="checkbox"/>	3-Media Surface Fungi (Genus ID + Asp. spp.)	<input type="checkbox"/>	Culturable Air Fungi (Genus ID + Asp. spp.)	<input type="checkbox"/>
Quantitative Spore Count Direct Exam	<input type="checkbox"/>	Direct Microscopic Exam (Qualitative)	<input type="checkbox"/>	Spore Trap Analysis - Other particles	<input type="checkbox"/>	Spore Trap Analysis	<input type="checkbox"/>

CHAIN OF CUSTODY
www.EMLabPK.com



Cherry Hill, NJ: 1935 Olney Avenue, Cherry Hill, NJ 08003 * (866) 871-1984
 Phoenix, AZ: 1501 West Kowdson drive, Phoenix, AZ 85027 * (800) 851-4802
 San Bruno, CA: 1150 Bayhill Drive, #100, San Bruno, CA 94066 * (866) 868-8653

Weather	Fog	Rain	Scat	Wind	Clear
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Light	<input type="checkbox"/>				
Moderate	<input type="checkbox"/>				
Heavy	<input type="checkbox"/>				

REQUIRE
(Use of)

1296024

BioCassette™
Water, Bulk, Dust, Soil, Contact Plates

CONTACT INFORMATION		PROJECT INFORMATION		TURN AROUND TIME CODES (TAT)	
Company:	<i>EC5 Env. Inc</i>	Address:	<i>4876 Santa Monica Ave</i>	STD - Standard (DEFAULT)	Rushes received after 2 pm or on weekends, will be considered received the next business day. Please alert us in advance of weekend analysis needs.
Contact:	<i>Bond</i>	Special Instructions:	<i>San Diego, Ca</i>	ND - Next Business Day	
Phone:	<i>300-511-6364</i>			SD - Same Business Day Rush	
				WH - Weekend / Holiday	
Project ID:	<i>608 3rd St, Admin Bldg</i>	Sampling Date & Time:	<i>11/24/14</i>	TAT (above)	Notes (Time of day, Temp, RH, etc.)
Project Description:	<i>Encinitas, Ca</i>			Total Volume / Area (as applicable)	
Project Zip Code:	<i>Pacific View Etc.</i>			Sample Type (Below)	
PO Number:				<i>B</i>	
Sample ID	<i>34220</i>			<i>ND</i>	
	<i>2095</i>			<i>PLA</i>	

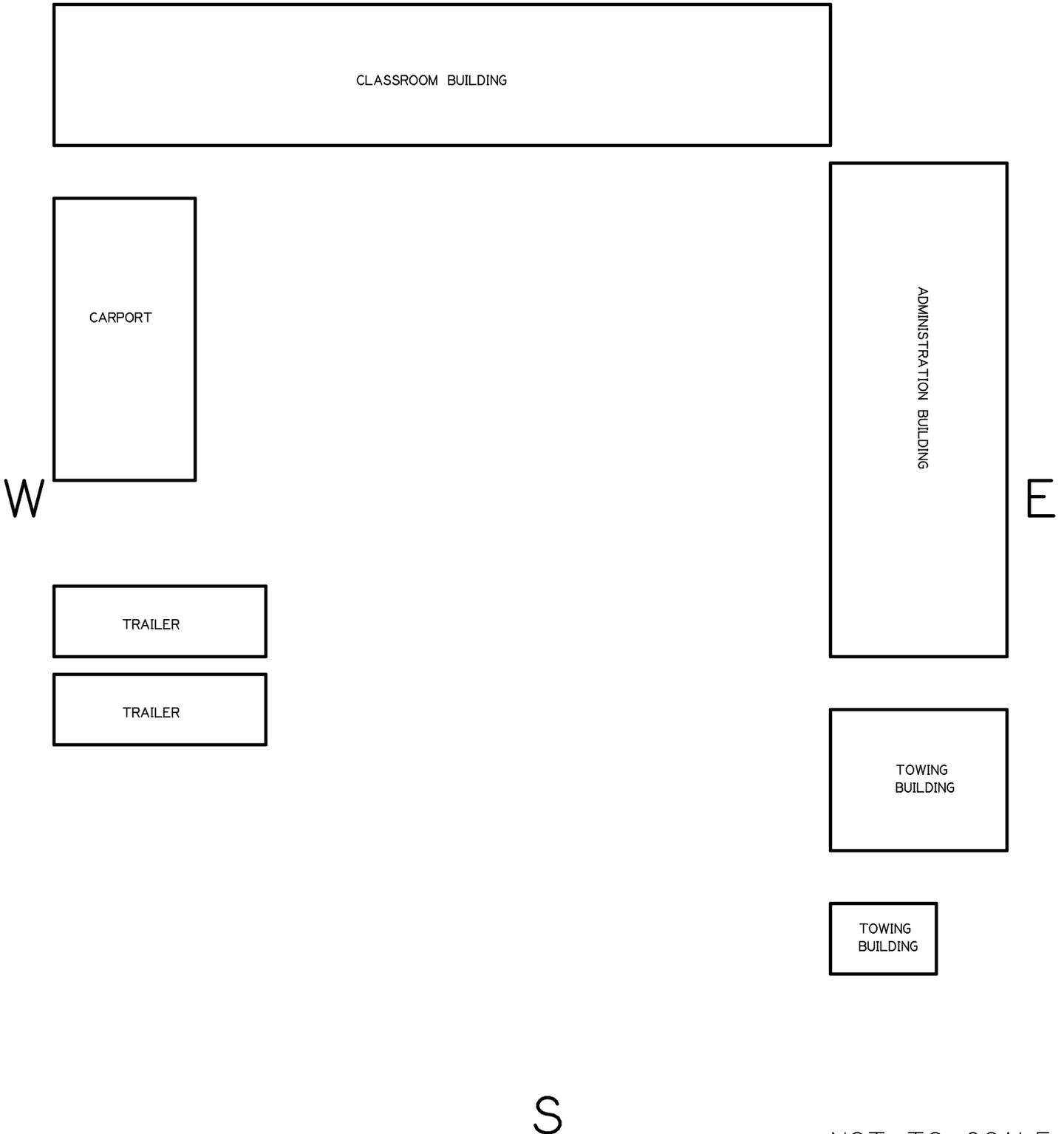
DATE & TIME	RECEIVED BY	DATE & TIME	RELINQUISHED BY
11/25/14	<i>[Signature]</i>	11/25/14	<i>[Signature]</i>
11/26/14	<i>[Signature]</i>		

By submitting this Chain of Custody, you agree to be bound by the terms and conditions set forth at <http://www.emlab.com/chainofcustodyterms.html>

Appendix B
Site Maps

OVERVIEW

N



NOT TO SCALE

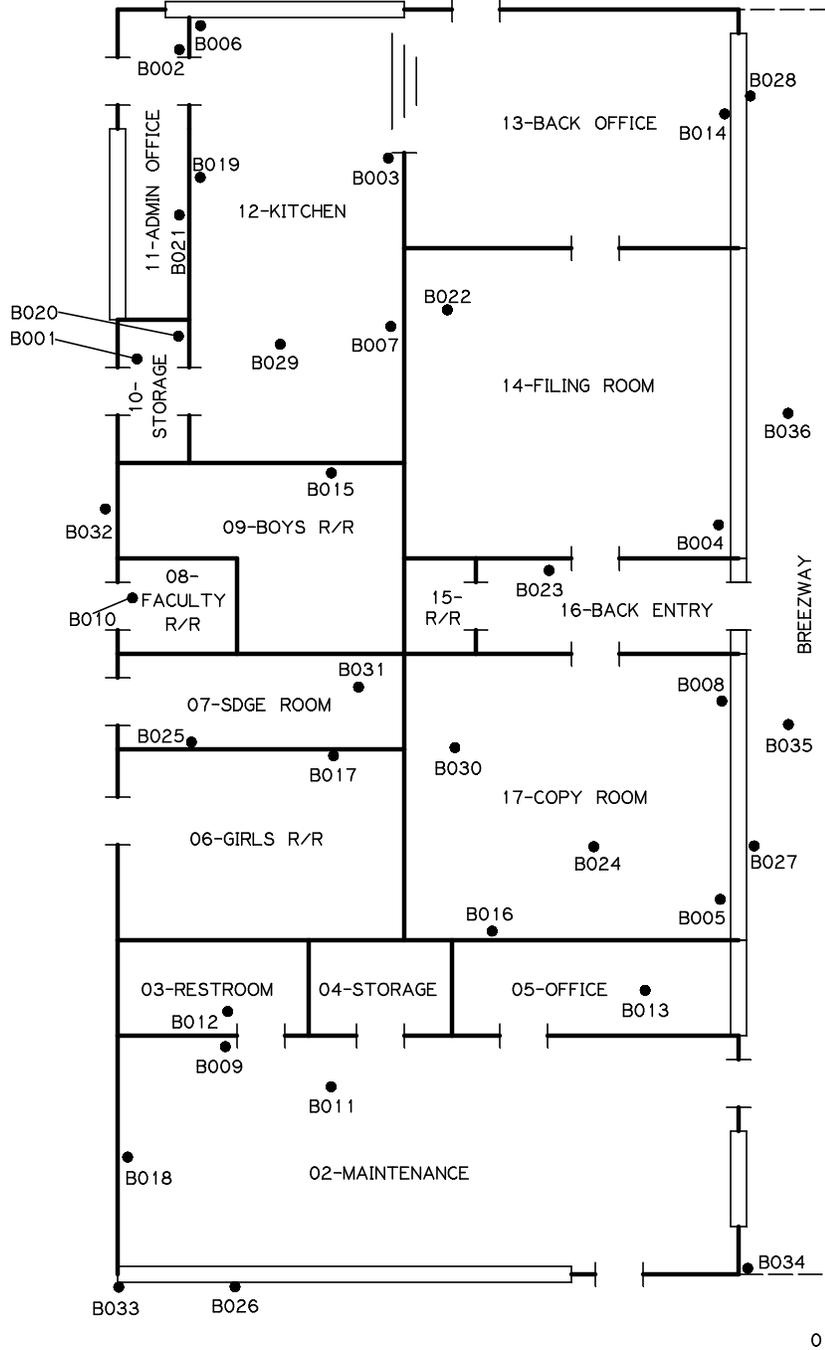
608 3RD STREET
ENCINITAS, CALIFORNIA 92024-3512

N

ADMINISTRATION BUILDING

W

E



S

NOT TO SCALE

Appendix C
Certification

State of California
Division of Occupational Safety and Health
Certified Asbestos Consultant

Bond L McCowan



Name

Certification No. 12-4865

Expires on 03/21/15

This certification was issued by the Division of Occupational Safety and Health as authorized by Sections 7180 et seq. of the Business and Professions Code.



December 10, 2014

Greg Shields, P.E.
Deputy City Engineer
City of Encinitas
505 South Vulcan Avenue
Encinitas, California 92024-3633

**RE: Hazardous Waste Characterization Testing for Lead (TTLC Sampling)
Pacific View Elementary School - Administration Building
608 3rd Street, Encinitas, California 92024-3512**

Dear Mr. Shields;

This report documents the findings from the TTLC sample that was collected from the Administration Building located at Pacific View Elementary School. The sample was collected by Environmental Consultant, Bond L. McCowan, Sr. on November 25, 2014. The sample was processed by LA Testing located at 11625 Knott Street, Unit F5 in Garden Grove, California on November 26, 2014, using Atomic Absorption method.

The following is a list of components collected in sample TTLC-003:

**Interior: Drywall and Plaster Walls, Wood Doors, Wood Door Casings, Wood Ceiling Tiles, Wood Cabinets, Wood Vents, Tiled Floor
Exterior: Stucco Walls, Painted Asphalt, Metal Columns, Metal Door Casings**

Laboratory analytical results of the sample TTLC-003 determined the Lead Concentration to be <40ppm.

California Title 22 TTLC standard is 1,000ppm for lead waste characterization. Laboratory results indicate the components listed above were determined not to be hazardous waste by TTLC. Nor does it require further analysis via STLC or TCLP prior to disposal.

Should you have any questions after reviewing the conclusions contained within this report, please do not hesitate to contact ECS Environmental, Inc. ECS remains available to assist you in any way possible.

Sincerely,
ECS Environmental, Inc.

A handwritten signature in black ink, appearing to read 'Bond L. McCowan, Sr.', is positioned above the printed name.

Bond L. McCowan, Sr.
Environmental Consultant

Attachments: Laboratory Analytical Results and Chain of Custody
Inspector Certification

4876 SANTA MONICA AVE, SUITE 172 ~ SAN DIEGO, CA 92107

(O) 1-800-511-6364 (F) 480-719-4465 WWW.ECS-ENVIRONMENTALSERVICES.COM



LA Testing

11652 Knott Street Unit F5, Garden Grove, CA 92841

Phone/Fax: (714) 828-4999 / (714) 828-4944

<http://www.LATesting.com>

gardengrovelab@latesting.com

LA Testing Order: 331421113

CustomerID: EVCS34

CustomerPO:

ProjectID:

Attn: **Bond McCowan**
ECS Environmental, Inc.
4876 Santa Monica Ave
#172
San Diego, CA 92107

Phone: (623) 824-6722

Fax:

Received: 11/26/14 9:45 AM

Collected:

Project: **City of Encinitas 608 3rd St Admin Bldg**

Test Report: Total Threshold Limit Concentration

<i>Client SampleDescription</i>	<i>Collected</i>	<i>Analyzed</i>	<i>RDL</i>	<i>Lead Concentration</i>
TTL-03 331421113-0001		11/26/2014	40 mg/Kg	<40 mg/Kg

Michael Chapman, Laboratory Manager
or other approved signatory

This report relates only to those items tested. Sample received in acceptable condition unless otherwise noted.
Samples analyzed by LA Testing Garden Grove, CA

Initial report from 11/26/2014 17:06:12

LLC using atomic absorption

-331421113

ECS Environmental, Inc.

4876 Santa Monica Avenue #172

San Diego, California 92107

Phone: (800) 511-6364 Fax: (480) 719-4465

Field Sampling Form for Paint

Date: 11/25/14

~~Client~~ Inspector: Bond Certification #: 3650

Property Owner/Client: City of Encinitas

Property Address: 608 3rd St
Admin Bldg

Sample Number	Room	Building Component	Lab Result (ppm)	Comments
ITLC-03	drywall	wall		
	plaster	wall		
	wood	doors/casings		
	metal	columns		
		door casings		
	stucco	wall		
	wood	ceiling tile		
	wood	cabinets		
	floor tile	floor		
	wood	vents		
	paint	asphalt		

PPM - Parts Per Million

Mg/cm² -- Milligrams per Centimeter Squared

Total number of samples on this page: _____

Turn Around: Same Day X 24 Hour 48 Hour Other

Collected By: Bond McEwan Date: 11/25/14

Relinquished By: _____ Date: _____

Received By: WJ (Evols) Date: 11/26/14 9:46

Delivered To: LA Testing Date: 11/25/14

Fed Ex: _____ Date: _____

APPENDIX H
Project Team

PROJECT TEAM

Architect: **Westberg + White, Inc.**
1775 Hancock St., Ste. 120
San Diego, CA 92110
Frisco White, AIA, Principal
David Tarpley, Project Architect

Civil Engineer: **Latitude 33**
9938 Hibert Street 2nd Floor
San Diego, CA 92123
Bryan Bostenero, PE

Structural Engineer: **KPFF**
3131 Camino Del Rio North, Suite 1080
San Diego, CA 92108
Seth Goodnight

Mechanical Engineer: **MA Engineers**
5160 Carroll Canyon Rd. Ste. 200
San Diego, CA 92121
Sam Corrao, PE

Electrical Engineer: **Johnson Consulting Engineers, Inc.**
12875 Bookprinter Place, Suite 300
John Frisbie, Vice President

Cost Consultant: **Waller Consulting**
2111 West California Street
San Diego, CA 92110
Don Waller