## **CAMERON SPECIAL EDUCATION CENTER**

## FACILITY ASSESSMENT REPORT

Prepared by:

HAMILTON + AITKEN ARCHITECTS

525 Brannan Street Suite 400 San Francisco, CA 94107



Prepared for:

WEST CONTRA COSTA UNIFIED SCHOOL DISTRICT 1108 Bissel Avenue

Richmond, CA 94801



12/27/2014



# TABLE OF CONTENTS

**ACKNOWLEDGMENTS** 

REPORT AUTHORS

**EXECUTIVE SUMMARY** 

## PART I BUILDING ASSESSMENT

- Functional Evaluation of Existing Space
- Accessibility Evaluation
- Physical Evaluation of Existing Space
- Structural Evaluation of Existing Space
- Summary Comparison of Existing Building with Projected Need

## PART II PROGRAMMING

- Space Standard Diagrams
- Room Data Sheets
- General Design Guidelines
- Architectural Design Criteria
- Site Design Criteria

## PART III CONCEPTUAL DESIGN OPTIONS

- Alternate 1: Reuse existing Facility—Site Plan and 1st + 2nd Floor Plans
- Alternate 2: Replacement Facility—Site Plan and 1st + 2nd Floor Plans

## **APPENDIX**

Structural Tier 1 Report

## **ACKNOWLEDGMENTS**

Hamilton+ Aitken Architects acknowledges the following individuals for their input and guidance:

## WEST CONTRA COSTA UNIFIED SCHOOL DISTRICT

- Steve Collins
- Juan Garrahan
- Keith Holtslander
- Andrew Mixer

### SGI CONSTRUCTION MANAGEMENT

- Kent Brown
- Terese Sladowska

## **CAMERON SPECIAL EDUCATION CENTER**

- Darlene Almeida
- Lilia Arroyo
- Roni Bramwell
- Leslie Capinpin
- Keith Ferguson
- Melissa Gaynor
- Cayce Hamerschlag
- Elise McGuiness
- Amma Oduro
- Ken Sirchuk

## **EXECUTIVE SUMMARY**

## INTRODUCTION

The Cameron School was built in 1950 as the Christina B Cameron School, for children with disabilities including hearing loss and mobility impairments. The current Cameron Special Education Center serves over 500 special-needs preschool children (on campus and off site) in the Cameron School Early Intervention Program of the West Contra Costa Unified School District.

The program is divided into two parts. Provided free of charge, the infant/toddler component is for children up to age 3 and includes home visits, classes at the center for those 18 months to 3 years of age, hearing services, vision services, and a "Play Pal" program that invites typically developing children to play with Cameron children. The preschool component addresses special needs of children aged 3-5, including autism, deafness, blindness, emotional disturbance and other types of physical or mental impairments. The school also offers parent education programs and a bus service for the children.

The site is officially open during regular school hours, however use often extends into the evening. Parent support groups meet after hours and use the staff break room for peer support and training programs. The building is closed weekends and a few days a year for floor maintenance. The toddler play yard is open on weekends for community use as a condition set by the play yard founder.

West Contra Costa Unified School District engaged the services of Hamilton + Aitken Architects for The Facilities Assessment Report which outlines the improvements necessary for providing the ideal space for the Early Intervention Program of West Contra Costa County. H+A recognized the challenges of this expanding program on the existing site and identified major concerns such as significant site issues, inefficient and lack of program space, and circulation conflicts. This report seeks to accomplish three objectives:

- Assess the existing building for physical and functional condition and use of space
- Identity the space needs and layouts required to support the program with the vision of future expansion
- Design two alternate concepts for the campus:
  - One concept is to maintain the existing building on site to function as the core program, and design a separate office building on site.
  - The second concept is to replace the existing building with a new facility to be used for both therapy and office.

### STUDY METHODOLOGY

This study identifies future and current program growth needs, architectural and engineering needs, and estimate cost based on functional, technical, and security requirements for the design of new or renovated facility in the city of El Cerrito. The report documents needs developed through the following process:

- Meetings with the WCCUSD and Cameron staff to identify how the existing facility supports the current program and how it is expected to grow in the future.
- Understanding the future needs of the program from discussion with site staff
- Aligning the ideal program with the existing facility on the site to identify shortfalls

## FUNCTIONAL EVALUATION OF EXISTING SPACE

## **Building Features**

Construction is slab—on—grade foundation with steel columns and wood framed enclosing walls. The roof is low pitch and framed with steel bar joists. The exterior finishes include a brick veneer wainscot and cement plaster (stucco) walls above. Many of the original interior finishes are still intact, with very minor alterations. The heating system is a radiant floor system, which appears to be in working condition.

The adjacent site also contains- a fenced and roofed toddlers play yard, and parking for 25 autos in the vicinity of the school. The site has about a 15-foot elevation change from east to west. To the east a driveway leads from



Lawrence Street to a 2200 square foot four-door garage in current use as District-wide storage for low-incidence equipment for disabled students. The Lawrence Street driveway has parking for 8 vehicles. (33 total for the site.) A 5-foot high shed for earthquake supplies is built along the eastern retaining wall and contains plastic containers with earthquake supplies

## Program

The original building was built with six classrooms, a small administrative office area, and support spaces such as kitchen, storage, toilets rooms and rest (nap) rooms. The current program uses two of the original classrooms for toddlers and infants, including motor skills development activities. The remaining four rooms have been converted to staff and teacher offices and a break room. The original storage areas and nap rooms have been converted to nine small therapy or assessment rooms. The original toilet rooms remain and are being used for storage as well as toilet rooms. The kitchen, janitor's room and mechanical room remain in their original function.

The programs serve over 500 students, on this campus and off-site at other schools or the children's homes. Students visit Cameron School for assessments, testing, therapy sessions, and classes and spend about one to one and a half hours on campus each visit. Staff visits children up to 18 months of age in their homes to provide assessment and services. From 18 months to 3 years of age, children visit the campus accompanied by a parent or caregiver. From ages 3 to 5 years they may arrive from other pre-

school programs by school bus, and are met at the bus by the therapist or teacher. Cameron supports about 90 staff members altogether, including staff that work primarily off site. At any given time there may be about 45 staff on site, and all 90 staff members attend regular weekly meetings. Currently those meetings are held in the main corridor for lack of a meeting room large enough for all.

## Classroom Space and Therapy Rooms

There are not enough classrooms because of the demand for office space. In addition the existing classroom sizes are not necessarily the right size per program.

#### Parent Resource Center

The parents wait in the corridor, and the resource center is currently held in book shelves at the restroom corridor. Consequently the parents take phone calls or have conversations in the hallway which disrupts classroom activities.



## Office Space

Cameron School has over 90 employees including full time on-site staff and part-time or off-site staff who use this facility for limited times each week. There are offices jammed into every available space. Clearly the requirement for office space is the largest impact on the building. The staff also needs a large size workroom, a break room, large collating copiers and a meeting area sized to accommodate all staff at one time.

## Storage

Although there is storage built into the existing building, there is still an obvious need for more. Freestanding metal cabinets are located in hallways, between desks, in every restroom and within therapy rooms. Any room with children would be better served with the addition of built-in casework that is adequately secured.

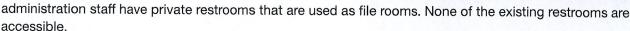
## Low Incidence Equipment

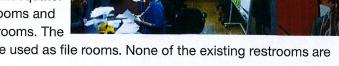
The Cameron program needs to store some specialized equipment that has a low incidence of use, including equipment that is used only once or a few times per year. The equipment is currently stored in the garage, exposed to damp and potentially to vermin. It is an inefficient use of such a large space, and it is not visible from the main office.

#### **GENERAL BUILDING SUPPORT**

#### Restrooms

The current restroom space for public/visitors is inadequate. Restrooms for children is being used as storage rooms and is not immediately accessible from class/therapy rooms. The





## Circulation

The current circulation is about 14% of the total existing square footage which is ideal in design standards. However, there is lack of circulation control between public/visitors and the core program users. There is a primary need for point of control to provide security and boundary between different user groups.

#### **EXISTING SITE**

#### Site circulation conflicts

The entry approach is along a curved driveway with a covered drop-off area large enough to allow a van or small bus to drive to the front door for access.



One of the most dangerous conditions of the current site is the intersection of different circulation paths: the buses cross in front of pedestrian access and the only auto entry or exit. Autos loop around the outdoor toddler play space. A complete study of the site and the possibilities of better separation of pedestrian and child play areas from parking and bus routes will benefit the safety of the program participants.

## **Additional Parking**

The site is significantly short of parking, which shifts parking load to the surrounding neighborhood. Access

to parking on site will help staff meet their appointment schedules, which require frequent visits to other locations. Convenient parking would allow a higher utilization of staff time because by providing immediate, reliable parking access. The current site holds 25 cars near the school and an additional 8 spaces in the lot beyond the garage. That lot is mostly unused because of the steep, overgrown and hidden connection to the rest of the site.

### **Bus Zones**

Finally, the number of buses waiting for students far exceeds the capacity of the site and the driveway to accommodate them. The neighboring streets take a load and occasionally the driveway is blocked as well.



## ACCESSIBILITY EVALUATION OF EXISTING SPACE

#### Site

A more significant accessibility requirement involves the path of travel across the site. There is a 15-foot elevation change from east to west that is currently not accessible. The path of travel from the garage elevation to the school is uneven, steep and overgrown in places. Although accessible parking is provided, it lacks the required signs, van parking dimensions and pavement markings. There are no accessible curb cuts or warning truncated domes along the sidewalk.

The school was originally designed for wheelchair use, to its advantage in meeting today's accessibility requirements. All classroom doors and exit doors are 40" wide, and most entries need only minor modification of thresholds and exterior landings to comply with path of travel requirements.

## Building

On the other hand, toilet rooms require a complete renovation in order to provide accessible stalls, fixtures and hardware, but the rooms themselves are reasonably sized and may not require reconfiguration of the enclosing walls.

Other required accessibility upgrades will include:

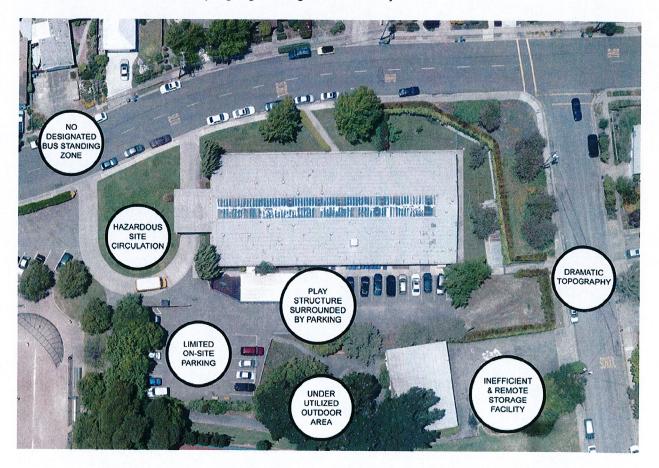
Adjustments to countertop heights and knee clearance

Accessible hardware

Strike side clearance at some doors

Accessible kitchen sink

Tactile room and exit way signage throughout the facility



## PHYSICAL EVALUATION OF EXISTING SPACE

## Roof

There is evidence of roof leaks throughout the building and the roof is tarped along the eastern eave. No ongoing work was observed on two visits over 8 weeks apart. There are many roof penetrations, including some ventilators that do not appear to have dampers. We were unable to observe the condition of the roofing or the skylights to determine the condition. It appears that the roof should be replaced.

## **Skylights**

The skylight is a wonderful feature and asset to the site, providing natural light on even the cloudiest days. The skylight does not appear to leak, and should be retained.

#### Windows

The original windows appear to be in good shape with hardware and glazing intact. Most of the existing windows are operable, although the upper and lower vents operate independently, requiring more effort. A few windows, possibly 4 windows, are missing latches. Since the

existing windows are single glazed, it may be desirable to replace the windows to improve comfort, energy, and acoustic performance to reduce outside noise.



#### Window treatments

Window coverings are new Mechoshade blinds, which are excellent for reducing glare and should be retained.

#### **Exterior Walls**

There are currently sandbags at northwest side of the building, which indicates drainage problems due to rain. There is evidence of water leakage at the north side retaining wall as well. The original brick wainscot and cement plaster exterior appears to be in good condition. The building should be repainted, to improve its appearance.

#### Interior Walls

The lower portions of the corridor walls have a washable wall covering that is intact but in worn condition. The original building drawings indicate a plastic wainscot, which should be replaced with a new wainscot. The upper walls and most sloped ceilings are the original acoustic plaster, which are likely to contain hazardous materials. These wall and ceiling surfaces should be replaced, and new acoustic ceilings installed.

### Interior transom window systems

Staff indicates that the interior windows allow too much noise from the corridor to the offices and the classrooms. These are operated by a pole-mounted operator, but we were not able to verify whether they were easily operated. Some of the windows seemed to be sitting slightly open, as though they are unable to be closed. Refurbishing the working components, replacing the seals and reglazing the transoms with laminated glass would improve acoustic privacy.

#### **Floors**

1950's era asphalt tile is in evidence in every room. In many areas of the classrooms it is covered by carpet. It appears to be intact, but should be investigated for hazardous material and examined for damage. It would be appropriate to remove the existing asphalt tile and replace it with new floor coverings.

The kitchens and bathrooms have the original mosaic ceramic tile, which appears to be in excellent condition. However, renovation of these rooms will require replacement rather than patching of the finishes.

Carpet is required for many of the spaces used for small children. Most of the carpet is stained or beyond its useful life and ready for replacement. The existing carpet and pad insulates the rooms from the radiant

floor heating and circumvents this feature. Use of carpet pad also renders the floor surface non-accessible. New carpet should be modular carpet tile for ease of maintenance and accessibility.

## Casework and Storage

The original plywood cabinets are intact and well used. With refurbishing hardware and refinishing the wood, they could remain useful for the next sixty years. The storage needs are tremendous, and the built-in casework alone is inadequate to meet current needs. Even the staff toilet rooms are being used for storage.

#### **Doors and Hardware**

Existing wood doors are in excellent condition throughout the building, with pivot hinges that appear to work well. Some doors will require new latches, and replacing all latch hardware is recommended to match the school to current District standards. The low vision windows at the classroom doors are desirable to stay because of their benefit to visual



attention of the students. There is a permanently locked door between two restroom/storage rooms, which indicates there is no more use for it at the north side of the building.

## **Acoustic Materials**

Some rooms have been finished with ceiling and wall material that are used for acoustic enhancement. The high activity classrooms have high noise levels. There are different qualities of materials and we recommend investing in high quality material given the focus of this school on deaf and hard of hearing students.

Another source of noise comes from the corridor. For example, visitors and parents make cell phone calls in the corridors, which is occasionally disruptive to the offices and therapy rooms. There is currently no dedicated waiting room or place for parents to make a private call.

## **BUILDING SYSTEMS**

#### **HVAC**

The main building is primarily a naturally ventilated building with mechanical heating only provided by a 27 zone in-slab radiant heating system fed by 2 boilers located within the combined M/E/P room on the South side of the building. Ventilation is provided by operable windows throughout the building. There was no mechanical cooling noted during the site walk but this is likely not needed with the still functioning operable windows and mild of El Cerrito, CA. Nearly all of the equipment observed appeared to be original and is well past its typical service life. The radiant floors of this generation ('50s) have a typical life of approximately 30-50 years and boilers have a typical service life of 20-30 years.

There did not appear to be any digital controls. Zone valves and boilers plant are controlled by a combination of analog and mechanical controls including an outside air reset, much of which appear to be original to the building.

### **Electrical Power and Data**

The main building is served by an underground 400Amp120/240V service that originates from a utility pole on Lawrence Street and comes up in a riser within the combined M/E/P room on the South side of the building. There are two panels within the room, one lighting panel L-1 is a 200A panel that has all circuit banks filled and the other panel P-1 served power throughout the building. Both panel circuit banks are nearly full and do not appear to have much expansion capabilities. Based on the current uses, the loads are likely more than sufficient capacity but this is a 1950s electrical system and will likely not have the capacity to add



service to a new support building on either existing panel. A new larger service should be brought in from the street with capacity to serve whatever support building needs develop during the conceptual design process.

## Lighting

The lighting for most classrooms appears to have been upgraded recently with new T-8 fixtures and to be in good shape. These likely can be retained for some time providing the programming and/architectural upgrades allow them to remain in place while work is completed around them. If new service is brought in as recommended we will discuss options for upgrading the controls for the lighting including possible daylighting controls in spaces where appropriate. We will also discuss lighting controls students with special needs such as sensitivity to normal lighting levels.

The corridor currently has a series of linear skylights that do a fairly good job of bringing natural daylight into the space but lighting controls do not have the capability to dim or turn off when natural daylight is sufficient by itself. We will investigate simple and straightforward daylighting solutions for this space to improve the overall light levels and save the school money in operating costs.

## **Plumbing**

All of the plumbing for this building appear to be original piping but the hot water heater appears to have been replaced at some time which is expected for a system of this age. Domestic hot water is provided by a 30-40 gallon gravity ventilated storage tank heater located in the combined M/E/P room on the South side of the building. The domestic hot water is near the end of its useful service life and we recommend replacing both the cold and hot water. The cast iron sewer should be tested for wall thickness and/or video scoped to verify wall thickness and slope to remain in place for another 30+ years. Fixture replacement will be required for ADA upgrades. There are no complaints about water pressure. We were told that the sewer has had backups in past years although not recently. We recommend an investigation of the sewer laterals if that has not been performed recently.



## Fire Alarm

Horn strobes appear to be recent, but any renovation, including partition relocations will require an

evaluation of the system for current code and modification of areas of remodel. It isn't apparent whether the system is fully automatic, but this should be reviewed.

## Security

The administrative office staff is unable to monitor the approach and entry of people into the building. We recommend the relocation or removal of the cabinet outside the office door and lowering the sill of the interior windows to the corridor for better sight lines. Potentially an interior gate would improve control at this location; first to make sure that anyone entering is compelled to stop where they can be seen before they access the corridor, and second to prevent the inadvertent exit of a child.

The introduction of a parent waiting room near the entry will further limit non-staff from wandering the corridor.

The back of the site is unobserved, blocked by the midsite planting and the garage building. Staff does not use the parking up here because it feels disconnected from the school. It is not fenced and is not secure.

## Fire Protection Sprinklers

No fire protection sprinkler system was apparent. It is unlikely that fire protection sprinklers are required for the building.

#### Site Conditions

Asphalt areas on the site are past their useful life, and exhibit deterioration, alligatoring, and potholes. Any paved areas to remain will require repaving.

## Grading

The existing Cameron Elementary was originally carved-out of the existing hillside at the southeast corner of Lawrence Avenue and Gladys Street in El Cerrito. The immediate area surrounding the main building is generally flat. The site generally slopes from the northeast to the southwest with approximately 20 feet of vertical elevation difference.

The existing parking lot along the south and southeast side of the building is generally flat and the slope steepens at the far southeastern edge of the parking lot. The existing west parking lot is steeply graded from the main building entrance along the west side to the end of the parking lot. The existing ADA parking lot at the west end of the west parking lot does not appear to be ADA compliant.

Regrading along the north edge of the building will improve the drainage in this area and provide positive drainage away from the doorways.

### Storm Drainage

Because of how the site was originally graded, the north and east edges of the site drain toward the building. A couple of areas along the north and east sides were identified with poor drainage. Sand bags near an existing doorway was observed which confirmed poor drainage away from the building along the north side.

Several catch basins in the parking areas were observed, but appeared to be clogged or filled with debris. The size, direction, capacity, and condition of the existing storm drain pipes cannot be determined without cleaning of the catch basins and pipes.

#### Water

One water service was identified for the building along Lawrence Avenue. The water service appears to be

approximately 2 inches in size and provides domestic and fire service for the building. If there is a separate fire service from the street, it wasn't located during the site visit. The existing water service did not appear to have updated backflow prevention per EBMUD requirements. Modifications to the existing building and site may require upgrades to the water service connection to meet current EBMUD requirements

## Sanitary Sewer

A sanitary sewer cleanout was observed in the driveway near the northwest corner of the building during the site visit. This is assumed to be the sanitary sewer service for the building.

## LANDSCAPE

The outdoor spaces are under utilized, not clearly defined and do not meet the needs of the staff, students or parents; however, there is plenty of space which can be developed into useful, well-designed and distinct spaces for the particular needs of each user group.

## Play Area

Currently, there is only one defined play space. The shade structure does not meet DSA standards for a shade structure, but it seems to be in good condition. The play elements are a mix of moveable elements

and a few built-in items. Proper safety zone clearances appear to be just barely met for each of the play elements; however, given the flexibility of the elements, safety zones can easily be limited and cause potential harm to students if elements are placed too close to one another.



## Vegetable Garden

The staff is currently maintaining a successful vegetable garden along the building edge in the existing atgrade planters. A vegetable garden is a wonderful teaching opportunity for young children. It appears that the irrigation is managed by hand watering. It is recommended that new raised planters be provided for better control of plants, more accessibility for all ages and abilities.

## **Planting**

Most of the planting around the site is old, outdated, and is a mix of medium and high water use plants. There is a vast amount of lawn which requires lots of fertilizer, water, and personnel time to maintain





properly. There are several Liquidambar styraciflua trees around the property which produce seed pods which can be quite hazardous. It is recommended that the planting and irrigation be updated to a newer palette that is climate appropriate, low water use, and low maintenance. Lawn should only be used in select locations where classes will gather for group activities.

## Retaining Wall

The existing retaining wall running along Gladys Avenue and Lawrence Street appears to be in good condition and a huge asset to the site in that it allows for a private and protected outdoor space abutting the building. There is a fair amount of planting along the top of the wall which serves as a good screen and buffer; however, there is an abundant amount of very aggressive ivy which should be removed.

## **Upper Courtyard**

The upper courtyard is under utilized and could easily be used as a staff retreat or lunch area. It is in need of new paving and furnishings. Access to the space is not amenable to all abilities as it is distinctly separate from the rest of the site. If it is to be used for a retreat for staff, better planting, screening and buffering would be needed to help create a sense of separation.

## **Exterior Access Stairs from Lawrence Street**

The stairs are in decent condition, but the handrails no longer meet code. As well, there is no alternate accessible entrance from Lawrence Street. The view corridor for the stairs is limited causing concern if the stairs are to be used as a main entry point. It is recommended that the view corridor be opened up by trimming the surrounding planting. As well, the adjacent slope is under utilized as it is too steep for playing, is planted with wild grasses and is unmaintained. This slope could easily be transformed into an amphitheater or seating area for group activities or waiting parents and siblings.



## SUMMARY OF FINDINGS

In order to delineate the total need for each program, the team held several meetings with the current staff under supervision of West Contra Costa. Data gathering from staff and site exhibit a broad range of functional and technical inadequacies including but not limited to: space shortfalls, lack of code compliance, building system repair and renewal requirements, interior alterations and space planning, and other deficiencies.

One of the primary facility needs is addition of adequate office and storage area for sensitive office files. The office spaces have been inadequately housed in existing classrooms and other reassigned functional area in the existing building. Consequently there is need for additional classroom and therapy rooms.

The team assessed the functional adequacy of the existing building and made recommendations by providing two options for the facilities upgrade:

- One concept is to maintain the existing building on site, change the interior functionality to solely
  dedicate the building spaces to therapy and assessment activities, and design a separate office
  building on site dedicate to the 75 members of the staff.
- Second Concept is to demolish the existing building, and build a two-story building to be used for both therapy and office. Lower story to be dedicated to main administration staff and class/therapy rooms, and upper story for office use only.

## PROGRAM SUMMARY AND RECOMMENDATIONS

The following table indicates the existing building area provided for each program studied and compares the existing building area to the projected space need. The Recommended Approach column indicates the Planning Team's recommended facility improvement approach for each program.

## DESIGN GUIDELINES

## GENERAL DESIGN GUIDELINES

The following general design guidelines apply to the design of new or renovated Special Education Center on the Cameron Elementary site for West Contra Costa Unified School District.

## REUSE OF EXISTING FACILITIES

The existing facility is a long established school community asset in West Contra Costa County. It serves the families of infants through pre-school age who have been diagnosed with a special need. Early intervention and planning is provided by this facility to give these children a chance to adapt to their environment and be integrated into the educational system.

## CODES AND STANDARDS

Comply with all applicable codes and standards including:

- 2013 California Building Code (CBC)
- 2013 California Existing Building Code
- 2013 California Electrical Code
- 2013 California Mechanical Code
- 2013 California Plumbing Code
- 2013 California Energy Code
- 2013 California Fire Code
- 2013 California Elevator Standard Construction Code
- 2013 California Green Building Standards Code
- 2013 California Building Code
- 2013 California Building Code
- 2013 California Building Code
- 2010 ADA Standards for Accessible Design
- Public Safety, State Fire Marshal Regulations
- West Contra Costa Unified School District Technical Standards
- Dept of Social Services (SELPA?? Special Education Local Plan Area)

## DIVISION OF THE STATE ARCHITECT REQUIREMENTS

The design of the facilities shall comply with DSA codes and regulations.

## **FLEXIBILITY**

Cameron has experienced significant growth in demand for its services over the past 10 years. To the extent feasible the facility needs to be planned for flexibility to accommodate growth and changing program demands. Given the fact that this facility serves the children of the entire county of West Contra Costa, one major segment of growth with significant impact is the number of staff requiring office space. Building structure, column spacing, and infrastructure should allow for office space expansion.

## PUBLIC/PRIVATE SPACE SEPARATION

Provide clear and identifiable points of entry, observation, and control to manage public access and maintain the necessary privacy of treatment and therapy areas. Individualized Education Plan (IEP) meetings hold private and sensitive materials and conversations. Provide IEP and Assessment rooms that qualify this security demand.

## SUSTAINABLE DESIGN

Provide proven design approaches and building elements that improve the facility for occupants and provide cost effective energy strategies.

## PHYSICAL DURABILITY AND FUNCTIONAL USEFULNESS

New or renovated facilities shall be designed to provide long-term value by balancing construction costs with projected life cycle operational costs. To maximize value and limit ownership costs, design building components and assemblies that function effectively for the long-term use.

## **STORAGE**

The facility maintains, and catalogs an extensive collection of low incidence equipment for assisting children with disabilities. The equipment is loaned out to schools and individuals during the school year, and serves equipment needs of other facilities of West Contra Costa as well. The program expects additional equipment from different facilities every year, so storage should be designed to be accepting of future additional building space.

## ARCHITECTURAL DESIGN CRITERIA

The staff members at Cameron have been able to make exceptional use of the existing space considering the limited amount of resources and inadequate space. They have had to convert some classrooms into office spaces in order to fit the 75 current staff members and all the therapy and assessments rooms in the existing overall area. The evaluation and programming effort established value judgment about how to design in order to meet both the needs of children's therapy and assessment as well as staff's workspace while providing a welcoming, supporting, and sustainable environment. The architectural criteria provide performance standards for selected architectural components, building assemblies, and finishes:

#### WCCUSD STANDARDS

All designed spaces to conform with West Contra Costa Unified School District's Master Education Specifications, which include general requirements, philosophy, and adjacency considerations

## **BUILDING ENVELOPE**

Design the exterior building envelope, including roofs, exterior walls, foundations, retaining walls, and door and window assemblies, to be weatherproof. Design to exclude leaks and other defects for all moisture protection systems, including: exterior sealants, vapor barriers, under slab moisture barrier systems, exterior cladding systems, roofing, and waterproofing. All window design must anticipate water infiltration and condensation, and provide means to direct water to the exterior.

#### EXTERIOR BUILDING WALLS

The exterior wall shall present a consistent image that would be in harmony with the existing building. Control joints, scoring, and other wall plane relief shall be considered and incorporated into design. Textures and colors suitable to children's activities shall be provided near the outdoor therapy areas

### WINDOWS AND DOORS

Provide operable windows for certain areas to support the sustainable design objective. All glazing shall be double glazed for thermal and acoustic reasons. Interior doors and windows at therapy rooms should have sufficient acoustic property to satisfy Speech and Language Therapy as well as Deaf and Hard of Hearing Therapy sessions. Occupational Therapy classrooms may have low vision windows, similar to the existing doors, for children's observation and interaction.

## SHADING & GLARE CONTROL

Control glare and heat gain at all program and public areas. All office spaces shall have window shades (Mechoshade), and shade canopy shall be provided to control sunlight.

### PROTECTION OF BUILDING ENTRANCES

Protect building entries from exposure to weather via orientation, overhang, or similar. Walk off mats are required to improve indoor air quality through reduction of dirt and dust tracked into the building. Provide a system of exterior and interior walk off mats flush with the floor surface directly in front of the main entry doors and after entering the main corridor.

### DAYLIGHTING

Balance the needs for security with openness, transparency, and natural light. Natural light should be provided to all primary program areas such as therapy rooms and parent resource rooms as well as all office spaces. There should be a precise control for natural light in therapy rooms specifically in one where vision tests are to be performed.

## WORKPLACE ENVIRONMENT

Provide a quality work environment that is suitable for Cameron Staff's office space. Office space groups shall not exceed 8 persons in order to minimize noise and create a comfortable environment to perform office tasks. Lighting, acoustics, HVAC, and air conditioning shall enhance the work environment

## **ACOUSTICS**

Provide sound isolation with high STC rating for Therapy Rooms, Assessment Rooms, and meeting rooms. Provide sound isolation for offices in order to create a suitable work environment.

## **FLOORING**

Provide flooring to comply with District Standards, and is appropriate for the activity at each designed space; carpet for areas with gross motor activities and offices, and linoleum for snack/eating areas.

## WALL SURFACES + CORNER GUARDS

Interior classroom and therapy room partitions to have plenty of tackable surfaces for therapy activities. Provide acoustic panels for higher parts of the wall surfaces. Provide corner guards in classrooms, specifically at gross motor areas.

### **TOILET ROOMS**

Provide dedicated restrooms for public, private (staff/Admin), and children. Children restrooms can be located in between classrooms for easy access and shared space flexibility. All restroom materials to be durable and easily maintained. Provide ceramic tile wainscot, quality ADA-compliant toilet fixtures, and accessories which meet WCCUSD standards.

## **DISPLAY SURFACES**

Provide display cases along the corridor for visual entertainment of visitors and children using the facility, and at surfaces in the classrooms. Some preferred material are Veltext commonly used at Cameron. Must not rely on tacks for attachment for children's safety.

## **FURNITURE AND FIXTURES**

Select, integrate, and coordinate the size, style, and finishes of movable and flexible furniture with the other interior elements.

Provide modular furniture and workstations for office spaces, which consists of freestanding partition panels, worktops, files, components, and integrated circuitry, and access raceways for electrical power, voice, and data.

## TECHNOLOGY AND DATA SYSTEMS

The electrical data systems should have the capacity to ensure quality usage for the 75 (and growing) staff members at Cameron. Data room, wireless internet, Voice Over Internet Protocol (VOIP), and charging ports to be provided at all office stations as well as admin and conference areas.

## SITE DESIGN CRITERIA

## SITE SELECTION CRITERIA

Vehicular and bus drop off zones are a major concern at Cameron's site, and must be considered during site design.

- The site must have secure and protected drop off and pick up zones for the children entering and exiting the facility.
- Outdoor area configuration should allow for ease of entering and exiting the classrooms and protect the students from any vehicular travel.
- Coordinate with West Contra Costa to establish acceptable setbacks and property lines.
- Provide a safe accessible environment

## **BUS PARKING**

The number of buses waiting for students far exceeds the capacity of the site and the driveway to accommodate them. The neighboring streets take a load and occasionally the driveway is blocked as well.

The site needs to provide some bus standing area on site that does not block driveway access

## STAFF PARKING

The site is significantly short of parking, which shifts parking load to the surrounding neighborhood.

Access to parking onsite will help staff meet their appointment schedules, which require frequent
visits to other locations. Convenient parking would allow a higher utilization of staff time because by
providing immediate, reliable parking access.

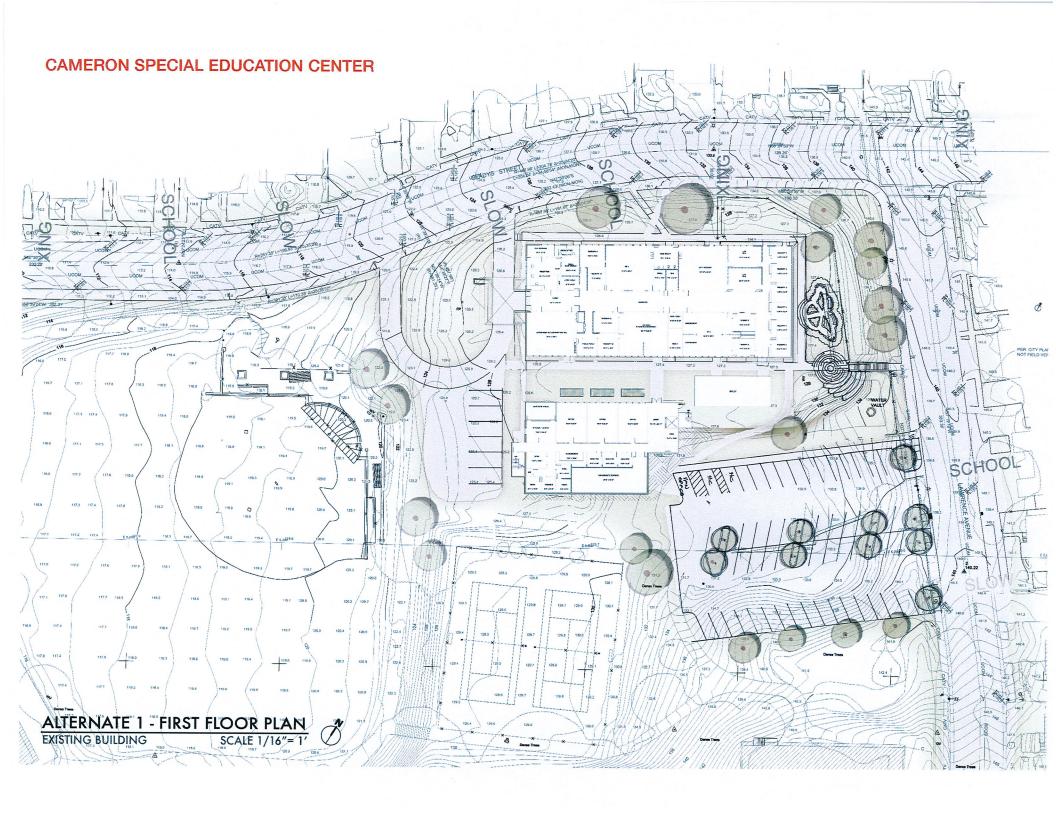
## PEDESTRIAN ACCESS

Provide safe pedestrian path to drop off zones and street walkways. Provide covered pedestrian waiting zone at drop off zone and building entrances. Where children cross the pedestrian walkway, access for vehicles should not be provided.

#### SECURITY SYSTEMS

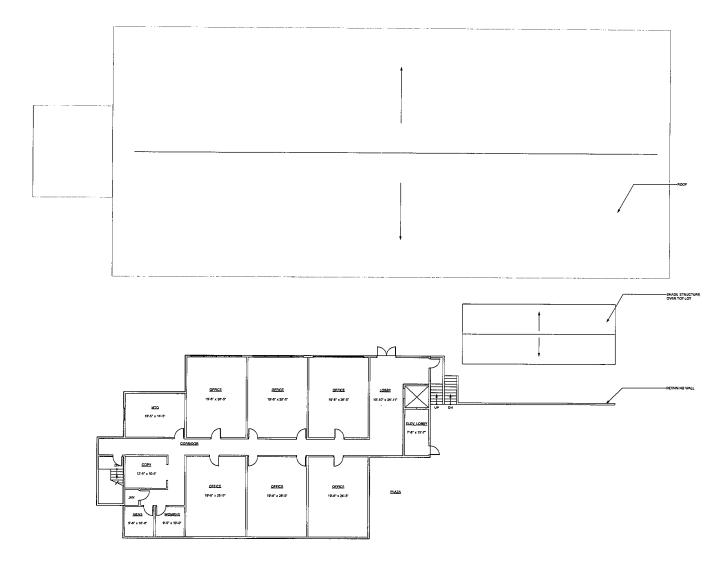
There should be visual access from the administration area to all incoming public access.

All designed spaces to confirm with West Contra Costa Unified School District's Master Education Specifications, which include general requirements, philosophy, and adjacency considerations











**CAMERON SPECIAL EDUCATION CENTER** 

ALTERNATE 1 - OFFICE ADDITION 2ND FLOOR PLAN

7140 GLADYS AVE EL CERRITO, CA 94530

DATE: DECEMBER 16, 2014
SCALE: SCALE:

