Solana Beach School District

Long Range Facilities Master Plan

solana beach school district

Long Range Facilities Master Plan Overview

In July of 2011 Solana Beach School District (District) hired HMC Architects/School Advisors to assist the District in the development of a Long Range Facilities Master Plan. This was a proactive endeavor to better understand the conditions and potential of District facility assets and plan for continued maintenance and highest and best use of each of the District's sites in serving students, staff, and community. HMC Architects/School Advisors staff met with the District Facilities Core Team to discuss preliminary Master Plan goals and objectives to allow the scope of services to be tailored to address District needs.

The master plan is to provide a road map to serve the District for the next 5-10 years with the ability to be updated and provide options to address both short-term issues and long-term goals. This would allow for strategic planning of District resources and funds to be utilized effectively, hopefully avoiding spending resources in the near future on facilities that may be significantly altered or redeveloped in the future. The planning process included the development of Guiding Principles for the educational environments of Solana Beach which will provide the basis and filter for making decisions about facilities and District assets. Objectives identified for the master plan at the onset of the process include:

- Provide an opportunity to engage staff and community in discussion of needs, priorities, and awareness of current facility conditions. The master plan could provide a foundation for a General Obligation Bond at some point in the future.
- Survey and analyze each campus site. Investigate school site capacity and potential grade configurations with options to best utilize each site for the District enrollment.
- Provide a basic maintenance systems and materials list that would assist the District in planning for deferred and scheduled maintenance and repairs to avoid asset deterioration, impairment, or failure. This can provide information for the development of operating budgets. This would be completed by District Maintenance and Operations staff.
- Identify sustainability opportunities within the District that could be implemented both in the short and long term. Sustainable initiatives should be identified with stakeholders and should include behavioral, operational, and educational strategies that could be implemented with little or no cost.
- Investigate potential locations for a central preparation kitchen that will allow for a fresher and more varied lunch menu. Provide options for student dining facility improvements.
- Evaluate whether School 8 would be needed in the future.
- Develop a format that provides both general District information and perspective and site-specific planning information and options within a district-wide context. The master plan would not have detailed long-range site plans and designs but would identify potential conceptual opportunities on a site plan diagram for future development.
- Create an interactive collaborative process that involves stakeholders.

Acknowledgements

The development of the Solana Beach School District Long-Range Master Plan was a collaborative process involving many dedicated current and former staff and community members. The final document is the culmination of an 18 month planning process where the multiple perspectives, thoughtful discussions, and hard work of many individuals have made this plan reflective and supportive of the communities and children it serves.

Core Leadership Team

- Nancy Lynch, Superintendent
- Leslie Fausset, Former Superintendent
- Carlos Estrella, Assistant Superintendent
- William Banning, Former Assistant Superintendent
- Catherine McNamera, Assistant Superintendent,
- Caroline Brown, Director, Technology & New Facilities
- Terry Decker, Director, Instructional Services
- Sal Gumina, Director, Human Resources
- Mary Ellen Nest, Director, Pupil Services & Special Education
- Lisa Denham, Principal - Skyline
- Lisa Platt, Principal - Solana Vista
- Julie Norby, Principal- Solana Santa Fe
- Jerry Jones, Principal- Solana Highlands
- Terri Davis, Principal- Carmel Creek
- Brian McBride, Principal- Solana Pacific
- Tobie Pace, Principal- CDC
- Sandy Kate, HMC/School Advisors
- Ariane Lehew, HMC/School Advisors

Board of Education

Previous Board Members

- Jeff Busby
- Vicki King
- Richard H. Leib
- Arthur M. Palkowitz
- Debra H. Shade

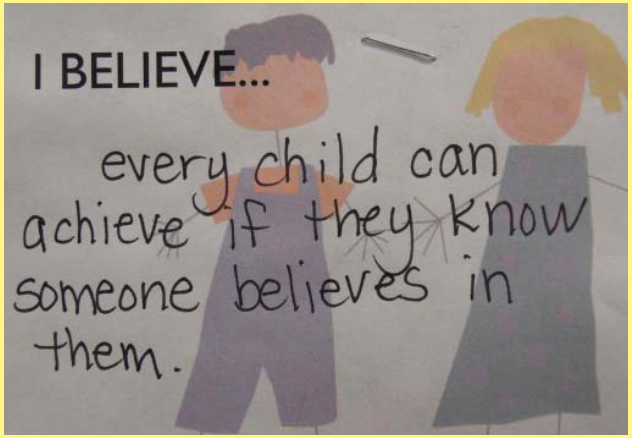
Current Board Members

- Jeff Busby
- Vicki King
- Richard H. Leib
- Debra H. Shade
- Julie Union

Facilities Master Planning Committee

- William Banning, SBSD
- Caroline Brown, SBSD
- Mario Borunda, SBSD
- Jeff Busby, SBSD
- Avlin Bridges, parent
- Terri Davis, SBSD
- Terry Decker, SBSD
- Lisa Denham, SBSD
- Debi Dunn, SBSD
- Carlos Estella, SBSD
- Leslie Fausset, SBSD
- Laura Fleming, parent
- Sal Gumina, SBSD
- Susan Jensen, SBSD
- Jerry Jones, SBSD
- Sandy Kate, HMC/School Advisors
- Stephanie Kowack, parent
- Joyce Krzmarzick, SBSD
- Ariane Lehew, HMC/School Advisors
- Nancy Lynch, SBSD
- Catherine McNamara, SBSD
- Brian McBride, SBSD
- Jeff Montag, SBSD
- Michelle Moraga, parent
- Mary Ellen Nest, SBSD
- Mike Nichols, City of Solana Beach
- Julie Norby, SBSD
- Tobie Pace, SBSD
- Lisa Platt, SBSD
- Debra Schade, SBSD
- Neal Taunt, SBSD
- Jeanne Vilsack, SBSD

Table of Contents


I BELIEVE...
every child can achieve if they know someone believes in them.

1: Background & Culture of the District

1: Background & Culture of the District

Beliefs

We believe:

- in public education
- everyone can learn and achieve
- each individual has intrinsic worth
- respect, honesty, self-discipline, and a sense of fair play are essential to the development of personal integrity
- in personal responsibility and accountability
- in striving to do one's best
- in the value of a supportive, nurturing family
- in the power of positive thinking
- in valuing and utilizing diversity, we can achieve common goals
- effective communication is essential
- a sense of humor contributes to a healthy, balanced way of life
- it is the responsibility of every individual to contribute to the betterment of a global society
- in the benefit of individual pursuits and the value of collaborative contributions
- successful change requires vision, personal action and a willingness to take risks
- no failure is fatal... no success is final
- learning is an essential life-long process

1: Background & Culture of the District

District Background & Culture

Solana Beach School District is located in northwest San Diego County. The first school in the District opened its doors in 1925 and the District has continued to grow and now serves families in the communities of the City of Solana Beach, Del Mar, Carmel Valley, Fairbanks Ranch, and Rancho Santa Fe. The District currently has approximately 3000 students attending grades K-6 in six schools and is in the process of developing a seventh school. The District also has a Child Development Center with programs for toddlers, preschool age children, and before and after school care services.

The District has a reputation of academic success with the schools consistently ranking at or near the top of the county in testing. The approach the District takes as a partner in educating each child is holistic and comprehensive, taking into consideration multiple factors that affect each child's development and success. Instruction is tailored to each child and each child's learning styles to maximize success for each student. Students participate in active, hands-on learning and are challenged to analyze information and apply their knowledge. In addition to the core curriculum, instruction in the arts and sciences is included as an integral part of each child's developmental journey to encourage creativity and critical thinking. As emphasized in the Guiding Principles, the District is committed to student-centered environments and a culture that will engage and support every single student in the District.

The District has a close relationship with parents and the neighborhood communities believing that the education and development of every child is a collaborative effort of the school, family, and community. The District seeks community input and support to create an open environment which encourages excellence and success for all children. Community members recognize that successful schools are a major component of a successful community and thus, both families with and without children, as well as local businesses support and are involved with these neighborhood schools. With the active involvement of the community, each of the schools is seen as an integral, valued part of the neighborhood fabric, a place for student-centered learning and development as well as community activities.

Despite campuses of varying age, each with specific attributes and challenges, the existing schools demonstrate the District's commitment to safe and nurturing environments. Embarking on a long-range facility master planning process is a testimony to the District's proactive and dedicated approach to ensuring it continues to provide a safe and supportive cultural and physical environment for all students.

1: Overview & Culture of the District

Guiding Principles

With these statements, the Solana Beach School District affirms our commitment to create and maintain:

- A student-centered, equitable environment that fosters learning, achievement, and inspires creativity for all children
- A strong focus on the diverse academic, social-emotional needs and learning styles of all children
- A safe environment with opportunities for enhanced student health, including appropriate areas for a variety of physical activities and increased availability of nutritionally sound, freshly prepared, school meals
- Well-designed practices and facilities that shape, encourage, and foster environmental stewardship
- Emphasis on building awareness of, and responsibility for, global citizenship
- Adaptable learning facilities built on research-based best practice that are flexible and able to support future learning needs and demands in an ever-changing global community
- Environmental responsibility and sustainable practices in all facilities and operations
- Environment, culture, and facilities that are mutually supportive and meet the needs of the diverse constituency of school and community

1: Background & Culture of the District

The Integral Relationship Between Environment, Learning, & Culture

Although it is often said “A good teacher can teach and mentor anywhere,” today’s on-going research suggests a correlative relationship between the conditions and design of school facilities and behavior and learning. An individual’s relationship with spaces and their surroundings can not only improve the quality of the individual’s experience in that space but most behavioral scientists believe a physical environment can also effect, motivate, and support behavior.

Learning is a complex activity that tests students’ motivation, mental concentration, and physical condition. There have been many studies that point to better attendance, improved test scores, and reduced disciplinary problems as evidence that the physical environment of a school can make a difference in a student’s educational experience. As one looks at results of the research, findings link improved student achievement with building quality, good lighting, thermal comfort, acoustics, and indoor air quality. Studies also show a relationship between safe, secure, and well maintained schools and performance, attendance, and drop-out rate. The physical setting of a school can provide both students and staff with a sense of comfort and well-being creating a desire to want to be at that school.

The physical environment created for learning has a great opportunity to guide and encourage the type of transparent culture envisioned in the Design Guiding Principles. Elements of an environment can either support or hinder desired behavior creating patterns for the way we act as well as interact with others. For example, if we want to foster communication and interactive dialog we need to reinforce that with small areas for informal conversations and impromptu learning spaces both indoors and outside. If we want to encourage flexible group project work and teaming, the furniture, acoustics, and available space need to allow for a variety of group arrangements. Providing transparency through glass and more visible learning areas emphasizes the desire for transparency and open sharing among teachers, students, and administration on the campus. It also promotes sharing of work and accomplishments and allows for students learning from observing each other.

The flexibility of space and furnishings can encourage creative approaches to learning and team work rather than restricting process, thought, and project development. Students need to feel empowered to re-arrange and create a space to suit the needs of project development and learning styles.

Personalization of space also allows individuals to take ownership of that area which leads to both a sense of responsibility and pride. Research shows that when students participate in the creation of a space, students actively partake in maintaining their school. In addition, personalization of an environment can provide students with a sense of identity and belonging.

It may be as simple as a young child noting that he or she is part of the blue pod or is part of a theme classroom. Some say it is this personalization that will give a space a human scale rather than create an institutional feeling. Individuals feel at home in a personalized space and will relax and respond differently than when they feel they are in a more sterile or formal environment. Display, art, gardens, personalized signage and graphics, as well as color are all ways to include learner-focused identity and personalization.

The same type of space does not support all the types of activities that take place during a day of learning. While interaction and collaboration are often needed for group work, quieter places for individuals to focus on a complex task are just as important. Individuals have different learning styles and their special needs and modes of concentration vary. A school environment needs to be sensitive to the needs of all individuals to allow for every student to have the opportunity to realize their potential. Gathering areas for students to present their work to larger groups need to be available at all times to encourage presentations and open discussion. Storage space and locations for project storage will not only keep spaces neater and safer for circulation but will help both students and staff remain organized as they approach their work.

Location is a component of the physical environment that impacts human behavior and interactive patterns. Providing adjacencies and proximity for those that should collaborate and team is important to encourage the desired interaction. A defined smaller area where the same group of people gather and work allows for increased interaction with the same people promoting familiarity and comfort just as with a smaller neighborhood. Proximity to destinations also mitigates wasted time in travel.

A physical environment can also symbolize certain qualities, values, and personal experiences. A learning facility has the opportunity to symbolize hope, opportunity, or stability for students or create negative feelings as well. Perhaps one of the biggest impacts of safe, comfortable, and inspiring schools is that they communicate a message to students that they are respected and special individuals and that their personal success is important to their community.

2: Educational Vision & Programs

2: Educational Vision & Programs

2: Educational Vision & Programs

Overview

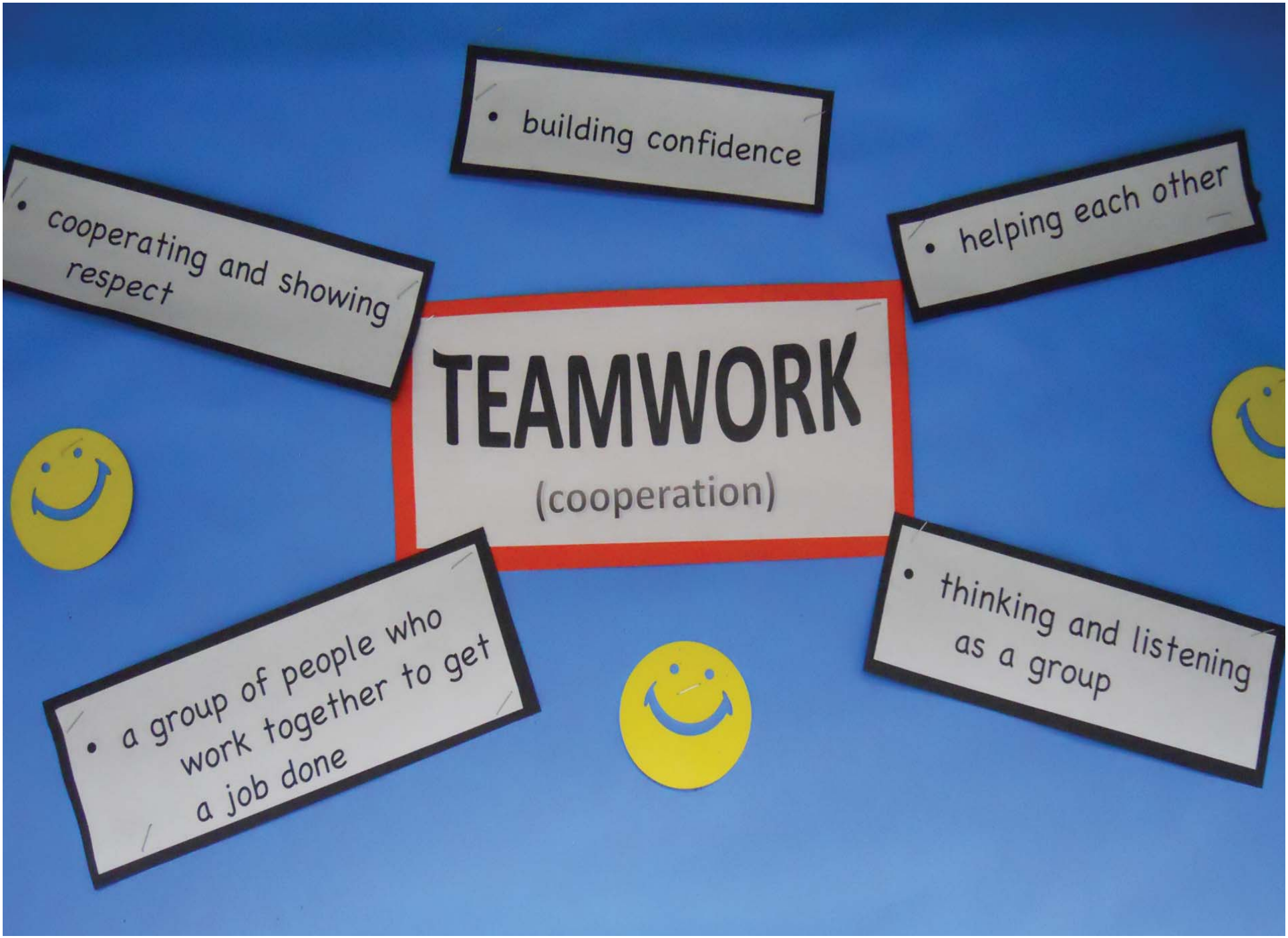
The Solana Beach School District is focused on providing a 21st century learning experience for all students at all schools. 21st century learning refers to the skills, knowledge, and literacy students will need to succeed in work and in life in an ever-changing global society. To meet these challenges classroom instruction will focus on developing learning and innovation skills including critical thinking, creativity, communication, and collaboration.

The District is implementing the Common Core State Standards, which were adopted by California in 2010. These standards provide a consistent, clear understanding of what students are expected to learn in language arts and mathematics. The standards are designed to be robust and relevant so that students are adept at applying their learning to real world situations and college and career ready. To support the implementation of the Common Core Standards the District is providing staff members with professional development in curriculum, instructional practices, and technology integration.

The Common Core State Standards and 21st century learning objectives encourage project-based learning and the use of technology to support instructional goals. Currently the District is using iPads in many classrooms and the use of such mobile devices will expand as access to technology becomes increasingly available. As these initiatives move forward learning environments that provide flexibility will be needed. Spaces that can adapt to allow for direct presentations with a large group, collaborative group work, project space, and quiet areas for independent work will be essential to student success.

Each year the District holds strategic planning sessions, which include District leaders, school site staff, and parents representing all schools. The strategic planning process guides the work of the district in achieving the District Vision and Mission. This data-driven process examines and affirms priorities and goals and identifies new goals when needed. School strategic plans have elements that align with the district plan along with site-specific initiatives. The inclusion of parents and community stakeholders in this process illustrates the District's commitment to involve the community in the education of its youth. Parent involvement in the schools is encouraged and parent support at all schools is strong.

2: Educational Vision & Programs



2: Educational Vision & Programs

Instructional Technology

The Solana Beach School District is committed to providing students with access to current technology. As new technology tools become available their uses are researched and piloted to determine effectiveness and impact on student learning. The district's vision for instructional technology includes the use of mobile devices to expand student learning opportunities. All school classrooms include wireless access and all schools have access to computer labs. Training is provided to staff members on an ongoing basis as new technology tools are introduced.

Special Education Services

The District provides Special Education services Pre-kindergarten through 6th grade for students in the Solana Beach School District, as well as neighboring districts in the North Coastal Consortium for Special Education (NCCSE). The District is committed to providing 21st century learning opportunities to all students including those with special needs. The District provides a continuum of special education services and all students have access to the general education curriculum. The majority of students are able to receive special education services at their neighborhood school. Program supports and services include, but are not limited to, specialized academic instruction, speech and language, occupational therapy, counseling and adaptive physical education as authorized by the Individualized Education Program. For those students with identified severe disabilities, two schools have been identified in the District to provide services to meet their educational needs, one primary and one upper grade.

Preschool and Toddler Program

The District, in partnership with the Solana Beach Child Development Center, provides a quality toddler and preschool program for children ages 18 months to 5 years. The Child Development Center is licensed through the state of California Community Care licensing. The program is aligned with the SBSD kindergarten curriculum and development of expected skills. The program provides children with opportunities for child-initiated, child-directed play as well as teacher facilitated learning. The Child Development Center is a tuition-based program currently offering class from 7:00 am to 6:00 pm. Parents have options to select days and times for their child. The program is open to all communities, however, most students are from SBSD or neighboring districts. The program currently has limited capacity due to site restraints and has a waiting list of perspective clients.

The District also provides special education services for preschool students in coordination with the special education department. All services including specialized academic instruction, speech and language, and occupational therapy are available as outlined in the student's Individualized Education Program.

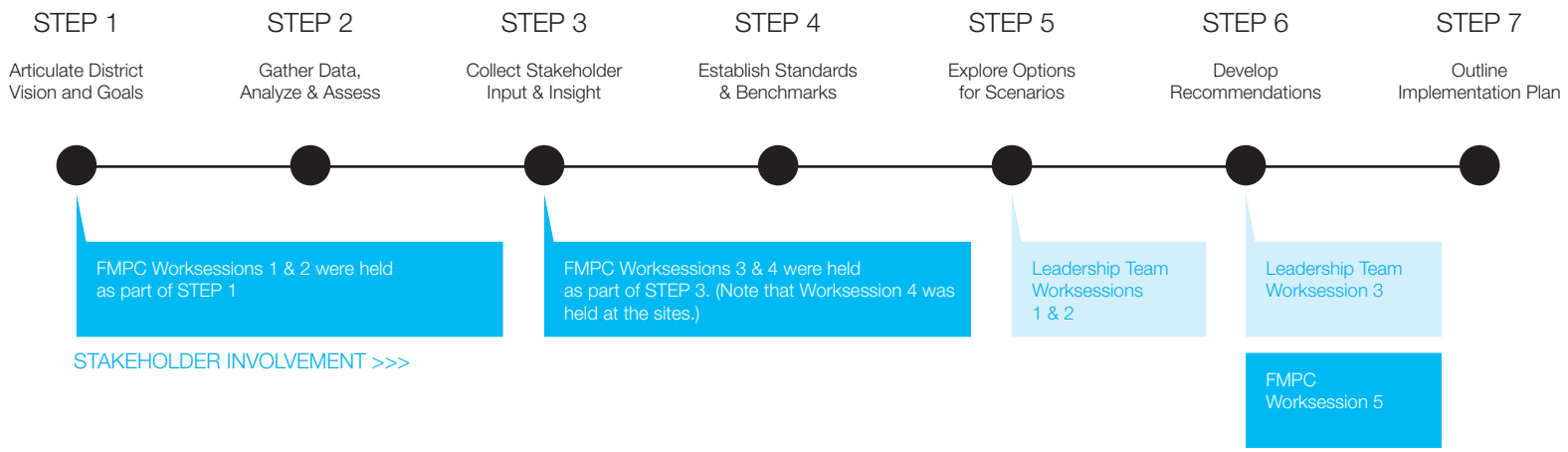
Child Care and Enrichment Programs

The Solana Beach Child Development Center provides both before and after school childcare and an After-School Enrichment Program on most school sites to all students enrolled in the Solana Beach School District. Enrichment classes are offered in the fall, winter, and spring in eight week sessions with a variety of class choices such as art, language, science, sports, chess, and technology. Both the before and after-school childcare and the enrichment program are tuition-based using classrooms and spaces throughout the school sites on a rental basis. The enrichment programs are successful and most likely could be expanded in the future. The Center is in the process of analyzing and developing a growth plan that will meet the increasing needs of the communities which it supports.

3: Process for Long Range Facilities Master Plan Development

3: Process for Long Range Facilities Master Plan Development

LRFMP DEVELOPMENT PROCESS



3: Process for Long Range Facilities Master Plan Development

The Purpose of a Master Plan

Planning for the future is committing to reflecting on where we are today and focusing valuable time and effort to explore, envision, and then set a proactive path for tomorrow. It is proof of the innate human belief in our individual and collective ability to make a positive and lasting impact for others.

The main purpose of a master plan is to provide a road map for holistic planning for the best use and continued alignment of facilities and district resources with a district's Mission and educational programs and goals. The master planning process is an investment of time, effort, and resources that pulls together a large quantity of data and diverse considerations into a long term vision for facilities. The most viable facilities master plans reflect engagement and the perspective of multiple stakeholders from both the district and the community.

The compilation of information, programs, policies, facility data, and stakeholder input can be utilized for better understanding the conditions of all facilities assets and identifying short and long-term site needs. The plan should assist in analyzing and prioritizing alternatives in allocating facility resources and should provide a direction for maintaining safe, secure, equitable, and inspiring educational environments.

Facilities master plan overview

- Plans for thoughtful and proactive care of all assets
- Compiles, analyzes, and applies data to guide effective decisions for educational environments that will best serve students and community
- Aligns facilities and expenditures with district & community values
- Helps to eliminate reactive decisions and personal agendas on facility development
- Assists in anticipating future maintenance and facility needs
- Considers flexibility for future trends and demographic changes
- Recognizes that the physical and cultural environment are an integral part of the educational and developmental journey for a child

Since a school district and its facilities are an integral component of a city or community, a district master plan should be integrated or at least coordinated with the larger community planning process and include community and demographic data as well. A collaborative planning effort can help provide schools that fit into the comprehensive growth and zoning plans for the city and relate to other projects in specific neighborhoods. In addition, cooperative community planning can help create school facilities as a resource for the neighborhood and encourage long term community support for a school district.

Development Process for the LRFMP

The process for developing the SBSD long-range facilities master plan was designed to be a collaborative, integrated process between District staff, community members, and professional consultants. The process focused on specific District long and short term goals including identifying opportunities to enhance the District's environments that support student learning and development, reach for new heights in environmental stewardship, and strengthen the financial/operational solvency.

The process can roughly be broken down into seven steps which often overlapped. These steps are outlined in the diagram on the adjacent page. The first step of the process focused on identifying the objectives for this facilities master plan. These objectives help tailor this process to the needs and culture of this District. One of the first tasks was to develop a committee of stakeholders which was called the Facilities Master Plan Committee (FMPC). This group of District administrative staff, Board members, site staff, parents, and community members selected by the District provided great individual and collaborative input and feedback at worksessions.

Some of the tasks and research in these 7 steps are outlined below.

STEP 1: Articulate District vision and goals
- Work with stakeholders to articulate a set of Guiding Principles or Core Values for the District. These principles will be used to guide the decision-making process throughout the planning and ensure the prioritization and decisions are based on common values.
- Articulate educational programs and objectives to evaluate existing facilities as to how they do or do not support existing and potential future educational programs and objectives.
- Identify District and site sustainability initiatives
- FMPC meetings

STEP 2: Gather data - analyze and assess
- Review of existing facility plans/data
- Site and facility assessments
- Site visits for site analysis of each site in operation
- Review of enrollment projections and demographics
- Public/private asset redevelopment potential of DO/CDC site
- Research into future city/neighborhood development plans
- Analysis of environmental conditions
- Analysis of energy use and operational efficiencies
- Gather input from stakeholders

STEP 3: Collect stakeholder insight and input
- Site visit and discussions with staff
- FMPC meetings
- Discussions with City of Solana Beach

STEP 4: Establish Space Standards and benchmarks
- Discussions of types of spaces required to align schools with District Guiding Principals
- Exploratory discussions/investigations for food services options
- Establishment of District Space Standards
- Identification of major building systems for maintenance tracking

STEP 5: Explore options for District site use scenarios
- Review data and District and site issues to be addressed in master plan
- 2 Leadership worksessions to discuss potential District scenarios for site uses and program locations
- Site conceptual diagrams to assist in exploring options
- Broad scope cost estimates of options

STEP 6: Develop recommendations
- 3rd worksession with leadership to articulate and vet recommendations
- Updating of broad scope estimate for final recommendations
- 5th FMPC meeting to present and vet recommendations

STEP 7: Outline Implementation strategies
- Investigation of potential bonding capacity
- Investigation of state funding potential based on existing state program
- Discussion and identification of critical projects and priorities
- Identification of project time line requirements
- Identification of logistical requirements for project implementation
- Identification of project sequencing - required predecessors and followers

4: Demographics

4: Demographics

SKYLINE

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K	26	29	27	26	28	27	28	30	30	30	29	29	29	29
1	29	28	26	27	28	27	28	28	31	30	30	30	30	29
2	27	28	27	27	27	27	27	28	28	31	30	30	30	30
3	28	27	28	28	29	28	28	29	28	29	31	31	31	31
4	128	119	113	135	140	140	169	132	122	120	122	133	132	131
5	123	135	128	114	139	144	146	175	135	125	123	125	137	136
6	119	124	131	129	115	136	145	148	174	134	124	122	124	136
SUBTOTALS	480	490	480	486	506	529	571	570	548	499	489	500	513	522
SDC	9	8	17	13	14	14	15	15	15	13	13	13	14	14
TOTALS	**489**	**498**	**497**	**499**	**520**	**543**	**586**	**585**	**563**	**512**	**502**	**513**	**527**	**536**

SOLANA VISTA

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K	95	103	124	102	92	93	94	103	102	101	100	99	99	98
1	88	102	105	127	97	89	90	91	99	98	97	96	96	95
2	83	86	103	101	126	96	88	89	90	99	98	97	96	96
3	88	85	100	106	107	133	102	92	91	93	102	101	100	99
SUBTOTALS	354	376	432	436	422	411	374	375	382	391	397	393	391	388
SDC	7	10	5	1	1	1	1	1	1	1	1	1	1	1
TOTALS	**361**	**386**	**437**	**437**	**423**	**412**	**375**	**376**	**383**	**392**	**398**	**394**	**392**	**389**

SOLANA SANTA FE

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K	45	60	54	42	43	44	45	49	49	48	48	47	47	47
1	49	49	57	50	41	42	43	43	48	47	47	46	46	45
2	69	50	53	61	54	45	45	46	45	49	48	48	48	47
3	54	71	49	50	63	56	46	46	47	45	49	49	48	48
4	42	52	75	48	50	60	55	46	46	46	45	49	48	48
5	60	47	51	72	50	50	62	57	47	47	47	45	49	49
6	58	63	53	55	76	53	53	65	58	48	48	47	46	50
SUBTOTALS	377	392	392	378	377	350	349	352	340	330	332	331	332	334
SDC	12	14	17	13	13	12	12	12	11	11	11	11	11	11
TOTALS	**389**	**406**	**409**	**391**	**390**	**362**	**361**	**364**	**351**	**341**	**343**	**342**	**343**	**345**

4: Demographics

SOLANA HIGHLANDS

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K	95	109	110	104	103	75	74	80	79	79	78	77	76	76
1	101	95	111	111	108	75	74	73	79	78	77	77	76	75
2	98	106	93	118	115	78	75	74	73	79	78	78	77	76
3	94	119	111	104	128	98	83	80	76	75	82	81	80	79
4	125	96	117	115	110									
SUBTOTALS	513	525	542	552	564	326	306	307	307	311	315	313	309	306
SDC	6	11	9	6	6	4	4	4	4	4	4	4	4	4
TOTALS	**519**	**536**	**551**	**558**	**570**	**330**	**310**	**311**	**311**	**315**	**319**	**317**	**313**	**310**

CARMEL CREEK

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K	98	106	94	96	92	82	83	91	90	89	88	87	87	86
1	114	96	107	115	116	97	99	100	110	109	108	107	106	105
2	96	114	98	106	119	102	96	98	100	110	109	108	107	105
3	93	99	113	108	116	100	109	102	101	103	113	112	111	110
4	116	108	95	115	110									
SUBTOTALS	517	523	507	540	553	381	387	391	401	411	418	414	411	406
SDC	7	7	2	1	1	1	1	1	1	1	1	1	1	1
TOTALS	**524**	**530**	**509**	**541**	**554**	**382**	**388**	**392**	**402**	**412**	**419**	**415**	**412**	**407**

SOLANA PACIFIC

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
4	0	0	0	0	0	182	198	195	185	180	181	198	196	195
5	226	261	203	230	245	189	187	205	198	188	183	184	201	200
6	253	227	266	220	242	200	195	192	209	203	192	187	189	206
SUBTOTALS	479	488	469	450	487	571	580	592	592	571	556	569	586	601
SDC	12	10	6	4	4	3	3	4	4	3	3	3	3	4
TOTALS	**491**	**498**	**475**	**454**	**491**	**574**	**583**	**596**	**596**	**574**	**559**	**572**	**589**	**605**

SCHOOL #7

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K	0	0	0	0	0	45	50	58	61	63	65	68	71	74
1	0	0	0	0	0	48	53	58	65	68	69	72	75	78
2	0	0	0	0	0	53	56	61	63	71	72	75	78	81
3	0	0	0	0	0	56	62	64	67	68	75	78	81	84
4	0	0	0	0	0	78	65	71	70	72	73	81	84	87
5	0	0	0	0	0	47	89	74	77	75	77	79	87	90
6	0	0	0	0	0	64	54	99	79	82	79	82	84	93
SUBTOTALS	0	0	0	0	0	391	429	485	482	499	510	535	560	587
SDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**391**	**429**	**485**	**482**	**499**	**510**	**535**	**560**	**587**

TOTALS

GRADE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
K	359	407	409	370	358	366	374	411	411	410	408	407	409	410
1	381	370	406	430	390	378	387	393	432	430	428	428	429	427
2	373	384	374	413	441	401	387	396	399	439	435	436	436	435
3	357	401	401	396	443	471	430	413	410	413	452	452	451	451
4	411	375	400	413	410	460	487	444	423	418	421	461	460	461
5	409	443	382	416	434	430	484	511	457	435	430	433	474	475
6	430	414	450	404	433	453	447	504	520	467	443	438	443	485
SUBTOTALS	2720	2794	2822	2842	2909	2959	2996	3072	3052	3012	3017	3055	3102	3144
SDC*	53	60	56	38	39	35	36	37	36	33	33	33	34	35
TOTALS	**2773**	**2854**	**2878**	**2880**	**2948**	**2994**	**3032**	**3109**	**3088**	**3045**	**3050**	**3088**	**3136**	**3179**

*Does not include the SH Preschool program

Enrollment Projections Overview

Enrollment projections for this master planning process were provided by DecisionInsite, a consultant to the District. Enrollment projections used were based on October 2011 CBEDS and reported based on current school attendance boundaries and grade configurations. Projections were provided and reviewed for a future 10 year period until 2021.

The enrollment projections were used in this master plan to provide data on enrollment increases and decreases for each school with the inclusion of the new school (School 7). This data was used to compare capacity to current and projected enrollment at each school site and in the three different areas of the District. These projections were used to inform decisions for recommended use of each site and recommended modifications to each site. Different site options, including various grade configurations, were analyzed within the context of the enrollment projections to identify positive and negative alignment options.

From these projected enrollment numbers, it appears that there is a slight enrollment bubble in the next several years in the City of Solana Beach which impacts both Skyline and Solana Vista. Ultimately, the enrollment starts to decrease at the schools and stabilize. The increase that Solana Vista is experiencing currently will start effecting Skyline in 2014 as the bubble moves through the higher grades. The schools in Carmel Valley will experience a decline in enrollment as students are moved to the new school in Pacific Highlands Ranch. School 7 enrollment is projected to increase each year after it opens and will reach capacity in 2021. Solana Santa Fe is projected to slowly decrease in enrollment in the next several years and then stabilizes in 2017 – 2021 with approximately 331-332 students.

Demographics Overview

Solana Beach School District's student population is diverse and comprised of children from the following ethnicities: White/Non-Hispanic (70%), Asian (20%), Hispanic (7)%, and other (3%). The District socio-economic levels range from low-income to upper-middle income homes. Approximately eight percent of the District students are enrolled in Free and Reduced Meal Program. More than forty languages other than English are represented in the District's enrollment. Six of the most significant first languages other than English (73%) include the following: Chinese (5.2%), Indian (.8%), Korean (3.7%), Russian (1.1%) Spanish (8.5%) and Farsi (1.3%).

5: District Space Standards & Capacity

5: District Space Standards & Capacity

School Sites Compared to a SBSD Guideline for Space Standards for a 650 Student Elementary School

	Space Guidelines for School				SKYLINE			SOLANA VISTA			SOLANA SANTA FE			CARMEL CREEK			SOLANA HIGHLANDS			SOLANA PACIFIC			SCHOOL 7 (not built)		
SPACE	Optimum Quantity	Optimum sq. ft.	Area	Optimum Loading	Qty	SF	Area	Qty	SF	Area	Qty	SF	Area	Qty	SF	Area	Qty	SF	Area	Qty	SF	Area	Qty	SF	Area
Pre-k Classroom - not at all sites	2		0	aver 20	0		0	0		0	0		0	0		0	0		0	0		0	2	1045	2090
Kindergarten Classroom - potential	4	1100	4400	aver 20	1	1168	1168	5	1036	5180	4	1097	4388	4	1120	4480	4	1097	4388	4	1221	4884	6	1045	6270
Kinder storage/workroom	2	200	400		1	111	111	2	200	400	2	190	380	2	113	226	2	190	380	2	208	416	0		0
Classrooms	22	995	21890	aver 25	20	951	19020	18	928	16704	17	975	16575	23	1041	23943	25	1021	25525	23	1245	28635	23	995	22885
SGI flex space for small group work	flexible	1800*	1800*		2	350	700	14	115	1610	1	600	600	0		0	0		0	13	189	2457	6	300	1800
Special Needs learning center(SDC)	2	995	1990	aver 13	3	951	2853	1	960	960	2	965	1930	2	1031	2062	2	1038	2076	2	1068	2136	2	995	1990
Art/project lab	1	995	995		1	965	965	1	960	960	1	965	965	1	1034	1034	1	1045	1045	1	1244	1244	1	995	995
Music/Drama	1	995	995		0		0	1	960	960	1	960	960	1	1034	1034	1	976	976	1	1232	1232	1	995	995
Science	1	995	995		1	955	955	1	960	960	1	773	773	1	1044	1044	1	1045	1045	1	1244	1244	1	995	995
Technology Lab	1	995	995		1	975	975	1	960	960	1	1036	1036	1	1003	1003	1	944	944	1	1301	1301	1	995	995
Instructional/Tech. Storage	1	500	500		1	325	325	0		0	0		0	0		0	2	varies	262	5	varies	854	0		0
CDC classroom lab	1	995	995		0	****		1	892	892	0		0	1	960	960	1	976	976	0		0	0		0
Specialty SGI/intervention**	5	250	1250		1	995	995	4	264	1056	0		0	4	196	784	2	319	638	4	varies	1297	4	150	600
Shared Psych/OT/PT office	1	150	150		1	150	150	1	229	229	0		0	0		0	2	119	238	1	170	170	1	150	150
Special Ed. conference room	1	240	240		0		0	0		0	0		0	0		0	0		0	1	309	309	0		0
Media Center	1	2040	2040		1	2786	2786	1	1749	1749	1	2849	2849	1	2244	2244	1	2428	2428	1	2843	2843	1	2400	2400
Library Office	1	150	150		0		0	0		0	1	133	133	1	128	128	1	133	133	1	144	144	0		0
Library tech + production lab	1	350	350		0		0	0		0	1	561	561	1	288	288	1	299	299	2	varies	463	2	125	250
student kitchen-close to CDC	1	200	200		0		0	0		0	1	124	124	1	131	131	1	129	129	1	180	180	1	120	120
multi-purpose/indoor dining	1	3100	3100		1	3299	3299	1	2729	2729	1	2087	2087	1	2208	2208	1	1960	1960	1	4245	4245	1	3000	3000
stage	1	900	900		1	748	748	1	890	890	1	837	837	1	633	633	1	968	968	1	1405	1405	in s.f.	above	0
DSA approved lunch shelter	1	5000	5000		1		0	1		0			0	1		0	1		0	1	5033	5033	1	5000	5000
table/chair storage	1	200	200		1	369	369	0		0	0		0	1	124	124	1	108	108	1	334	334	1	300	300
Food Service kitchen	1	800***	800		1	271	271	1	513	513	1	187	187	1	364	364	1	356	356	1	706	706	1	800	800
Food Service Storage	1	200	200		1	32	32	1	93	93	1	74	74	1	97	97	3	varies	226	1	90	90	0		0
PE office and storage	1	400	400		0		0	0		0	1	143	143	1	112	112	1	338	338	0		0	1	150	150
PE/recess outside access storage	1	300	300		1	157	157	1	157	157	0		0			0	1	237	237	1	236	236	0		0
Admin. Reception	1	350	350		1	300	300	1	151	151	1	351	351	1	214	214	1	351	351	1	490	490	in s.f.	below	0
Admin. work area	1	450	450		1	434	434	1	440	440	1	326	326	1	401	401	1	558	558	1	859	859	1	500	500
Staff workroom	1	550	550		1	533	533	1	1166	1166	1	866	866	1	848	848	1	867	867	1	833	833	1	500	500
Principal's Office	1	210	210		1	332	332	1	242	242	1	361	361	1	213	213	1	194	194	1	233	233	1	170	170
Privacy room/flex office	1	150	150		0		0	0		0	0		0	0		0	0		0	1	166	166	2	100	200
Conference room for 14-16	1	300-400	400		0	0	0	0		0	0		0	1	145	145	1	194	194	1	331	331	1	275	275
Health room	1	200	200		1	209	209	1	205	205	1	169	169	1	151	151	1	169	169	1	180	180	1	150	150
Nurse's office	1	120	120		0		0	0		0	0		0	0		0	0		0	1	145	145	1	100	100
Student shower/changing/storage	1	120	120		0		0	0		0	0		0	0		0	1	70	70	1	83	83	0		0
Faculty Lounge(includes privacy rm.)	1	730	730		1	621	621	1	644	644	1	521	521	1	690	690	1	402	402	1	985	985	1	650	650
MDF	1	300	300		1	133	133	0		0	0		0	1	318	318	1	137	137	1	210	210	1	300	300
IDF-separate from electrical	2	120	240		0		0	0		0	0		0	0		0	0		0	1	88	88	2	120	240
Receiving/Storage/PF office	1	400	400		1	248	248	1	125	125	1	217	217	1	246	246	1	326	326	2	varies	565	1	200	200
Custodial rooms	2	80	160		2	79	158	4	61	244	1	74	74	2	80	160	2	81	162	2	65	130	2	80	160
Storage-outdoor access	1	400	400		1	1088	1088	2	157	314	1	439	439	1	500	500	1	700	700	0		0	0		0
Storage-pre-k + kinder	1	240	240		1	100	100	2	120	240	1	83	83	0		0			0	2	103	206	2	300	600
student restroom fixtures-b,g	b30, g26				b25	g22	22			30	b25	g21	20	b32	g27	20	b34	g29	24	b22	g23	25			0
staff restroom fixtures -m,w	m4, w3				m4	w3	11			6	m4	w3	6	m4	w3	4	m4	w3	5	m4	w3	10			0
Total standard program space			54,455				40,035			40,773			38,009			46,785			49,805			67,362			55,830
																							based on program s.f.		
School Design Capacity			654				556			562			529			679			729			679			679

*can be broken up in various ways
**speech, guidance, reading
*** only a site prep kitchen
**** uses art or music classroom

Additional Notes:
1. Classroom Sq. Ft. reflects an average of all classroom sizes
2. some flex space is also circulation
3. Total program space reflects averages- not true program space
4. Capacity is based on the following loading: Kindergarten -20, Grade 1-6 classroom -25, SDC -12

core spaces
under min. sq.ft. guideline
over sq. ft. guideline
space does not exist

5: District Space Standards & Capacity

Space Standards Overview

District Space Standards or Guidelines are used as a facility management and assessment tool in a variety of ways including providing a benchmark to create equity among facilities throughout a district. Space Standards are also used as a guide to ensure that all facilities are developed or redeveloped to support a district's current educational goals and programs, thus the standards or guidelines are developed based on both current and future programs and curriculum, instructional and learning methodologies, activities that take place in the facility, and community needs and shared assets. Square footage also needs to be considered for the functioning of a school and maintenance of a facility.

Standards or guidelines can be established for every space or for just major spaces in a facility depending on the intended purpose of the standards. They can also include a variety of details such as equipment, finishes, architectural features, and environmental requirements, or may include square footage requirements and space quantities as a starting point for establishing a baseline for evaluation. Existing sites can then be compared to district square footage standards to see where sites fall short or have excess space for what is required for program delivery. District Standards can be used to help determine which campuses have the greatest need for space as well as help plan and budget for future additions for sites with shortages. This comparison can further aide in the evaluation of sites for improved space utilization as there may be extra space in some spaces that could be re-purposed for other uses where square footage falls short of the standard. The comparison provides information to help maximize space efficiency and determine if extra space, such as portable structures which are costly to maintain, can be removed. Standards can also assist in determining a more objective site capacity.

For this master planning process, Solana Beach School District brought the leadership team together to develop space standards for which to assess and compare existing facilities. Standards were developed for an ideal quantity of each space and the square footage of that space for a K-6 school with the capacity of approximately 650 students. In the review and development process, a targeted standard was identified, recognizing there will need to be flexibility to provide this exact target at all sites. The final outline of standards are based on District goals for classroom loading which is being utilized today, as well as providing specific instructional space for art, music/drama, science, and technology. The standards also include space to support small group and individual project work and tutoring which is a critical component in the way the District provides quality learning and instruction for their students. Two classrooms for special education are also included as part of the school standard space. The District also provides a before and after-school enrichment and child care program which needs a dedicated classroom which is included in the standards for each school.

Sites Compared to Standards

Each of the District's six existing elementary schools as well as School 7, which is not yet built, was compared to the District Space Standards that were developed. The site comparison is illustrated on the chart on the adjacent page. Spaces at sites are color-coded if there is a difference in square footage or quantity of more than 10% from the standard and the color denotes whether the space is more or less than the standard. The chart denotes if a standards space does not exist at the school site. Although grade configurations for existing schools vary, the schools were compared to the standards for spaces included in a K-6 school for a consistent comparison, however the main difference the grade configuration influences is the classroom quantity since classroom loading is higher in the upper grades. Kindergarten spaces are also not always included in all schools. For this reason, a different comparison chart, included on the following page, was used to compare school sites and required classroom spaces for the existing grade configurations. This allows the opportunity to look at each site in a variety of ways and provides insight on how the existing facility can best be utilized for programs and configurations.

Comparison Observations

As sites are compared to the standards several things are revealed.

Observations:

- The lack of classrooms space meeting the standard is the greatest at Skyline and Solana Vista, the two oldest schools
- Skyline and Solana Santa Fe have a deficiency in small group/flex square footage compared to the standards
- All schools have undersized food service preparation areas
- Existing schools have a deficiency in student outdoor dining space except Solana Pacific
- Most existing sites are in need of a school conference room
- Some staff workrooms are over the space standard and this space could be better utilized for other required missing administrative spaces in the standards, especially since more work in the classroom will be electronic and the District is striving to be more frugal with the use of paper
- Storage space, especially for PE, is needed at most sites
- Solana Santa Fe is short on student support space
- Solana Vista is short on media center space
- Some sites are short on restrooms (student & staff)

5: District Space Standards & Capacity

School Site Capacity Calculator - using sites as K-6 configuration school and based on District standards

	Space Guidelines for School				SKYLINE			SOLANA VISTA			SOLANA SANTA FE			CARMEL CREEK			SOLANA HIGHLANDS			SOLANA PACIFIC			SCHOOL 7 (not built)			TOTALS
SPACE	Optimum Quantity for 650 capacity	Optimum sq. ft.	Capacity	Optimum Loading 2012	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	
Pre-k Classroom	2		40	20	0	0		0	0		0	0		0	0		0	0		0	0		2	40		40
Kindergarten Classroom	4	1100	80	20	1	20		5	100		4	80		4	80		4	80		4	80		4	80		520
Kinder storage/workroom	2	200			1			2			2			2			2			2			0			
1-6 Classrooms	22	995	550	25	20	500		18	450		17	425		23	575		25	625		23	575		23	575		3725
SGI flex space	flexible	1800*			2			14			1			0						13			6			
Special Needs center(SDC)	2	995	24	12	3	36		1	12		2	24		2	24		2	24		2	24		2	24		168
K-6 Capacty			654			556			562			529			679			729			679			679		4413
Pre-K -6 Capacity			694	77		556			562			529			679			729			679			719		4453
Projected Enrollment 2016							563			383			351			505			393			411			482	3085

School Site Capacity Calculator - using all sites in current grade configurations

	Space Guidelines for School				SKYLINE = 4-6+GE			SOLANA VISTA - K-3			SOLANA SANTA FE -K-6			CARMEL CREEK-K-4			SOLANA HIGHLANDS-K-4			SOLANA PACIFIC-5/6			SCHOOL 7 - PK-6			TOTALS
SPACE	Optimum Quantity for 650 capacity	Optimum sq. ft.	Capacity	Optimum Loading 2012	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	
Pre-k Classroom	2		40	20	0	0		0	0		0	0		0	0		0	0		0	0		2	40		40
Kindergarten Classroom	4	1100	80	20	1	20		5	100		4	80		4	80		4	80		4	0		4	80		440
Kinder storage/workroom	2	200			1			2			2			2			2			2			0			
Classrooms	22	995		varies	21	525		18	360		17	374		23	483		25	525		23	598		23	529		3394
SGI flex space	flexible	1800*			2			14			1			0						13			6			
Special Needs center(SDC)	2	995	24	12	3	36		1	12		2	24		2	24		2	24		2	24		2	24		168
Capacity			104			581			472			478			587			629			622			633		4002
Capacity w/ P-K			144	52		581			472			478			587			629			622			673		4042
CEBEDS 2011/2012							499			437			390			542			558			453				
Projected Enrollment 2013							543			412			362			466			428			392			391	2994
projected Enrollment 2014							586			375			361			488			408			385			567	3170
Projected Enrollment 2016							563			383			351			505			393			411			482	3085

School Site Capacity Calculator - using all sites in current grade configuration and eliminating existing portable structures on sites

	Space Guidelines for School				SKYLINE = 4-6+GE			SOLANA VISTA - K-3			SOLANA SANTA FE -K-6			CARMEL CREEK-K-4			SOLANA HIGHLANDS-K-4			SOLANA PACIFIC-5/6			SCHOOL 7 - PK-6			TOTALS
SPACE	Optimum Quantity for 650 capacity	Optimum sq. ft.	Capacity	Optimum Loading 2012	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	Qty	Capacity	Notes	
Pre-k Classroom	2		40	20	0	0		0	0		0	0		0	0		0	0		0	0		2	40		40
Kindergarten Classroom	4	1100	80	20	1	20		5	100		4	80		4	80		4	80		4	0		4	80		440
Kinder storage/workroom	2	200			1			2			2			2			2			2			0			
Classrooms	22	995		varies	19	475		12	240		12	264		22	462		23	483		23	598		23	529		3051
Portables- Remove from site					2			6			4			1			2			0						
SGI flex space	flexible	1800*			2			14			1			0						13			6			
Special Needs center(SDC)	2	995	24	12	3	36		1	12		2	24		2	24		2	24		2	24		2	24		168
Capacity			104			531			352			368			566			587			622			633		3659
Capacity w/ P-K				52																						0
CEBEDS 2011/2012							499			437			390			542			558			453				
Projected Enrollment 2013							543			412			355			466			428			392			391	2987
projected Enrollment 2014							586			375			362			488			408			385			567	3171
Projected Enrollment 2016							563			383			351			505			393			411			482	3085

5: District Space Standards & Capacity

Determining School Capacity

Determining school site capacity is a critical step in analyzing how a district's school facilities can accommodate the current and projected student enrollment. Understanding each school site's capacity is part of a master plan and can guide a district in decisions to build new facilities, add to or modify an existing site for more or less capacity, or evaluate attendance boundaries. School capacity is used as a tool for state programs to determine funding potential.

Several ways exist to view and calculate school capacity to understand the potential for housing students at a site. Physical building capacity, program capacity, and functional capacity are different ways of looking at capacity for a school. Building capacity looks at the physical space and variables on a site focusing on classroom quantities but also looking at core spaces such as food service, library, and administration. This approach typically identifies classroom quantities and multiplies the desired average student loading for each classroom to derive the capacity. Other physical variables considered include site acreage, infrastructure, restrooms, and building life-safety codes.

It is also important to look at program capacity which includes recognizing the special spaces including classrooms that are needed to provide the educational programs delivered to achieve a district's educational goals and vision. This is why it is beneficial to use District Space Standards which are based on the district's programs and educational philosophy to determine site capacity. Special types of spaces and classrooms used for community programs, after school programs, the arts, sciences, and technology are included in this program capacity analysis.

Functional capacity looks at how a specific school site might operate and considers the desired level of scheduling, staff contracts, and particularly loading flexibly. For example, standard classrooms may be kept "open" at a site to allow for more flexible scheduling or breakdown of smaller classrooms than the district standards outline. Some districts may wish to maintain extremely tight loading maximums for each classroom. When enrollment goes over this threshold in an enrollment bubble, the district wants the flexibly to have a classroom available to accommodate these extra students.

It should be noted that functional capacity can allow flexibility at a site; however it does have a cost which impacts both the facility square footage and the operational cost. Most state funded programs do not look at this but some districts want to retain this optimum flexibility. It should also be noted that a site with excess capacity can be approached by a charter school for facility use in California under Proposition 39.

SBSD Building and Program Capacity

Capacity for each of the six Solana Beach School District's existing elementary sites as well as capacity at School 7 (not yet built) was charted based on the District Space Standards to determine the District's total building and program capacity. For this analysis each school site had five special program classrooms removed from the total quantity of general classroom spaces counted at each site. These classrooms would be used for art, music, science, technology, and CDC programs as outlined as part of the District Standards. In addition, two standard classrooms at each site were allocated for delivery of special education programs.

Site capacity was looked at three different ways for all sites which is shown on the adjacent chart. The first analysis calculates the capacity of each site as if it were to function as a K-6 school. The second analysis calculates the capacity with each school operating in its current grade configuration. The third analysis looks at the site capacity operating in the current grade configuration consisting of permanent structures only. In this scenario the portable classrooms would be removed from the sites. These site capacities were used to inform the approach and long-term recommendations for each site. As uses and grade configurations were identified for each site, site capacities continued to be re-examined for specific recommendations and are referenced in the recommendations section.

Functional Capacity

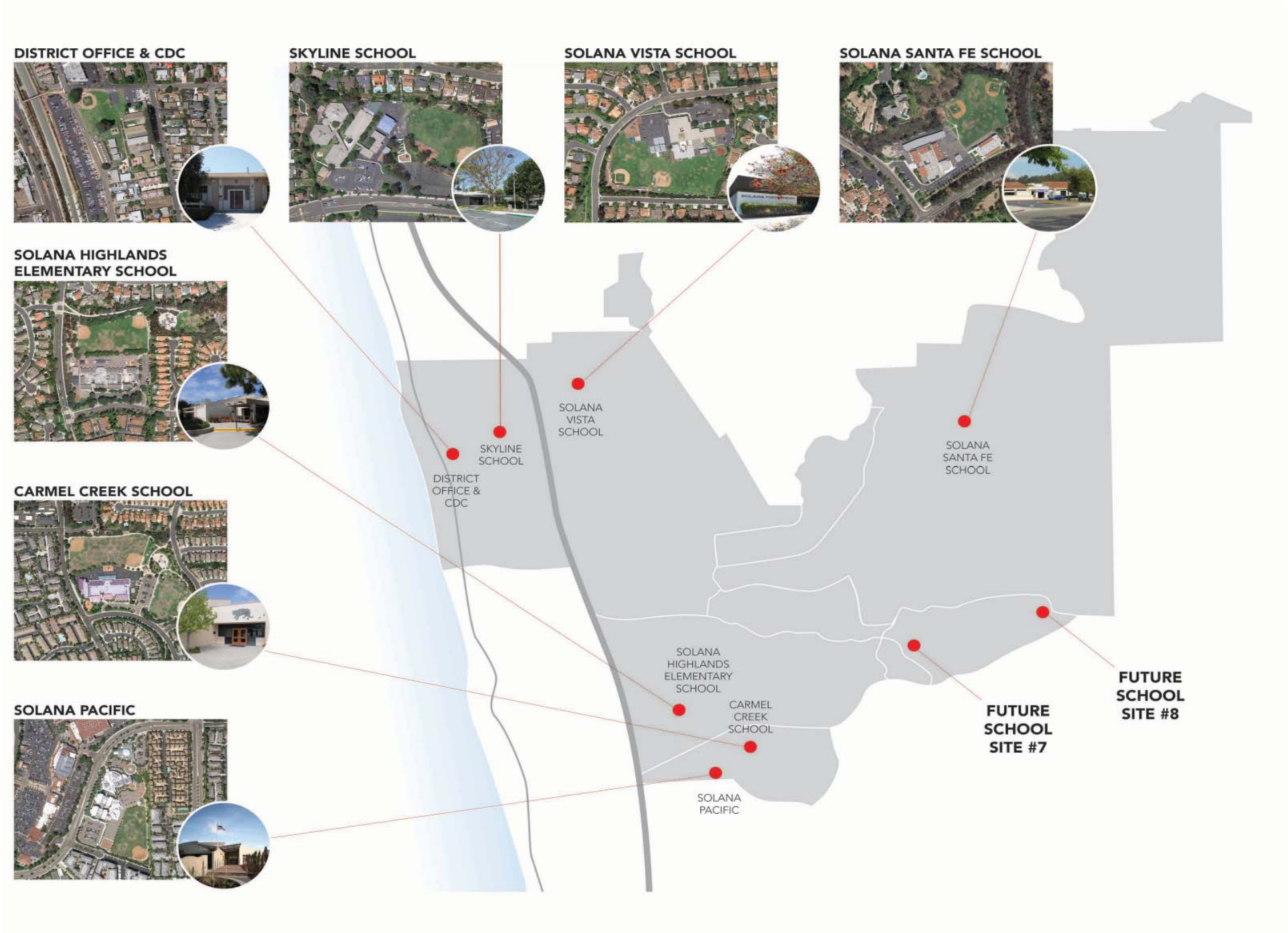
The District has completed functional capacity studies in the past where detailed operational subtleties have been considered for each site. Staffing, flexibility, and other optional uses may be reflected in these numbers. Therefore, capacity numbers outlined here in this document may vary from other numbers reported by District staff.

Capacity Summary

Using this approach for determining building and program capacity, the total District Pre-K-6 capacity with the new school ranges from about 4000 with the sites in the current grade configuration to about 3650 with the removal of the portable classrooms at all sites. Enrollment projections for 2015 as reported by Decision-Insight is 3088. While the site capacity is very close if not under the enrollment at the schools in the City of Solana Beach, there is some excess capacity in Carmel Valley. It should be noted that the three acre site size for both Solana Highlands and Carmel Creek should be taken into consideration for site capacity for these two sites. While they have the advantage of using adjacent city park area for play space, additional school-built program space, parking, drop-off/pick-up space, and outdoor dining space is limited. Although the standard classroom space shows a certain capacity, the limited site acreage should also be considered in the capacity analysis and recommended use of these sites.

6: Overview of District Sites & Assessment

6: Overview of District Sites & Assessment



6: Overview of District Sites & Assessment

District Overview & Geography

Solana Beach School District has 6 elementary school sites distributed over an attendance area of approximately 22 square miles in northwest San Diego County. The District serves communities in the City of Solana Beach, Carmel Valley, Del Mar, Fairbanks Ranch, and Rancho Santa Fe. As this master plan was being developed, the District has been in the process of finalizing plans and construction of a seventh school serving students in pre-kindergarten through sixth grade in the Pacific Ranch Highlands community, which is east of the Carmel Valley schools. The new school is projected to open for the 2014-15 school year. The District also has a Child Development Center adjacent to the District Office in the City of Solana Beach on North Rios Avenue.

The two elementary schools in the City of Solana Beach are Skyline Elementary and Solana Vista Elementary Schools. Although they are on different sides of Interstate 5 freeway, they are less than a mile apart and have easy access to each other. The three existing schools in Carmel Valley are about 3 ½ miles south of Skyline and Solana Vista and include Solana Highlands Elementary, Carmel Creek Elementary, and Solana Pacific Elementary. These three schools are about ½ a mile from each other with walking pathways and sidewalks connecting them. Solana Santa Fe is about 3.9 miles east of the other schools.

The new school is over 2 miles from the three elementary schools in Carmel Valley. A potential site has been identified for a future 8th school in the southeast corner of the District about .7 miles from School 7 if it is needed for future growth. District connections and travel time for services to all sites is fairly easy other than peak travel times in the morning and 4-6 pm in the evenings where traffic delays occur on Interstate 5 and along Del Mar Heights Road and Lomas Santa Fe Drive.

Facilities Development Timeline

The District was founded in 1925 with the first school on the 309 North Rios Ave. site in Solana Beach. This facility is currently being used to serve as the District Office and the Child Development Center. Additional schools were built as the population increased in the area and the size of the District grew. Skyline was built in 1955 with an addition in in 1961 and modernization of most structures in 2000. Solana Vista was the 3rd school to be constructed in 1971 with the original building providing 9 classrooms. Additional portable classrooms have been added over the years to accommodate growth and class size reduction. Solana Vista had modernization projects completed in 2000.

Carmel Valley is a master planned community established in 1975 and construction starting in the early 1980s. Pardee Homes started building homes in 1984 bringing families and children to the area. Solana Highlands was built in 1986 and Carmel Creek was added to the area in 1995. Between the construction of these two schools, Solana Santa Fe was built in the Rancho Santa Fe area opening for classes in 1993.

All three schools share similarities in classroom design and approach to the school layout. Two-story additions were added to Solana Highlands in 1999 and to Carmel Creek to accommodate classroom size reduction and the population growth in Carmel Valley. The newest existing school is Solana Pacific which was built in 2004 in Carmel Valley.

Facilities Assessment

Assessing facility sites provide background information for developing a long range facility master plan. Site assessments and analysis can:

- Identify issues and facility deficiencies
- Assist in maintaining safe and healthy environments
- Maximize the effectiveness of educational facilities for student learning and development
- Increase the environmental sustainability and improve operational costs of facilities
- Increase the involvement, understanding, and support of parents, teachers, and community members regarding needed capital improvements for providing appropriate educational environments for our children

Assessments can be comprehensive in scope and detail or limited in scope, but it is important to determine what indicators of quality should be assessed. Often times assessments only look at the condition of building systems and materials such as roofing, carpet, plumbing, and mechanical systems, etc. for current wear and condition. This type of assessment can be complex and time consuming and although beneficial because it can help prevent premature deterioration of a building, it does not measure other important performance aspects of the facility of which the most important is function and support of student learning and development. How well the facility supports the current and future instructional programs and methodologies, provides safe and secure environments, functions for efficiency for all users, and allows for interaction with parents and community are also important criteria to assess and analyze.

Without a clear set of school facility measures and a clear understanding of all facility issues and needs as well as potential of a school site, the likelihood that capital improvements will occur in a haphazard manner is high. It is also easy to invest funds which may solve some issues in the near future but are not long term solutions and therefore not good investments. Developing both standards and identifying indicators of quality to assess facilities should be tied to a district vision and set of guiding principles for school environments. This will allow the assessment to be consistent at all sites and establish parody among all sites despite the age of the facility.

6: Overview of District Sites & Assessment

6: Overview of District Sites & Assessment

Process and Criteria for Assessment

At the onset of the master plan process the scope and level of assessment was outlined and balanced with the amount of funds the District wished to allocate to the process. District staff, including maintenance staff, would assist in the assessment to be more efficient and prudent with District funds. The assessment process included site “walk-throughs” with maintenance and administrative staff at every site during the summer while the sites were not in use for observations and discussion of issues. There were also all-day site analysis visits which observed the site in use from the time of students arriving before school to after school departure and operation of the after school CDC program. A third site visit focused on identifying options for sustainable strategies and operational efficiencies. Additional site visits were made on an as needed basis to confirm building and site details and conditions, and meet with staff and stakeholders. An extensive photo study was completed at every site and reviewed several times to identify additional issues. In addition, facilities were compared to District Space Standards and discrepancies noted.

The seven existing sites were reviewed and analyzed looking at how the facilities relate and support the Guiding Principles for design developed by the Facilities Master Plan Committee. Specific areas of review included:

- Age of facility including additions
- Quantity and age of portable classrooms and other units
- Size and quality of the classrooms including lighting and acoustics
- Sufficient heating and cooling
- Compliance with District Space Standards
- Quality and function of the food service area
- Accessibility of site and building spaces
- Other code compliance issues
- Site drainage and overview of storm water management
- Safety issues
- Sight lines for supervision and other security issues
- Drop-off/pick-up safety and efficiency
- Identification of any water issues or other notable leaks
- Condition of asphalt, turf, and play areas
- Observation of material and systems condition and wear
- Environmental conditions including path of sun and prevailing winds
- Opportunities for sustainable initiatives and operational cost savings

The site analysis for each existing District site follows in Section 7. The site analysis is divided into 5 areas of review:

- Context of the site
- Physical features of the site
- Vehicular and pedestrian circulation
- Activity zones and function
- Potential considerations for the site

To better understand some of the standards used for reviewing different indicators of quality, the following criteria was considered.

- A condition, system, or material was rated good, fair, or poor based on whether it might need to be replaced as follows:
  - good - does not need replacement for 8-10 years
  - fair - may need to be replaced in 4-5 years
  - poor - should be replaced in the next 1-2 years
- Slope of a site was noted as out of compliance, challenging, or extreme if the slope is as follows:
  - out of compliance - exceeds 1” in 12” (code)
  - challenging - exceeds the maximum slope by 20%
  - extreme - exceeds the maximum slope by 50%

Additional detailed information from the assessment, and information on building systems and materials is placed in the Appendix.

7: School Site Analysis and Data


SKYLINE
SCHOOL
606 Lomas Santa Fe Dr.
SOLANA BEACH, CA 92075
A
Skyline Elementary School

7: School Site Analysis and Data - Skyline School

Campus Overview

Skyline School is located in the City of Solana Beach, on approximately 10 acres, off of the main access artery Lomas Santa Fe. Interchanges to I5 are about 750 feet from the school entrance. Commercial development spans along Lomas Santa Fe, with a shopping center and church located across the street from the school and the San Dieguito Boys and Girls Club located about 1 ½ blocks west of the school, on the opposite side of the street. Earl Warren Middle School is located across the street. Single family homes surround the campus to the north and west of the property and a multi-family complex resides to the east. Pedestrian right-of-way access from the school to Dell Street runs between two private properties to the north.

Skyline school is the second oldest school facility in the District after the original school facility on Rios Ave., which now serves as the District office and CDC. The original Skyline buildings were constructed between 1955 and 1961. Portables and the multi-purpose building were added to the site as space was needed. Although classrooms and the main administration were modernized in 2000, the classrooms are smaller than the District standard and other classrooms in other schools, except for Solana Vista. Generally, classrooms at Skyline do not have as much extended learning areas as the newer District schools.

Currently, the grade configuration of Skyline School is 4th-6th with most students attending Solana Vista prior to entering Skyline. The K-6 Global Education Program, as well as services for severe special needs students, are also housed on campus. An after school CDC program is established on the site as well, located in a portable classroom close to the parking lot.

The school facility has the capacity for about 550 students, based on the District Space Standards. This capacity reflects both the existing grade configuration with the Global Education Program, or if the school was a traditional K-6 configuration. The school location supports a K-6 configuration, which may allow older students to walk or ride their bikes. Existing topography and discontiguous building configuration proves to be challenging for younger students to navigate.

Skyline Site Data	
Current Grade Configuration:	4-6, Global K-6
Site Acreage:	About 10 Acres
Year Built:	1955
Permanent Classrooms:	20
Portable Classrooms:	8
Total Classrooms:	29
Average Classroom Size:	951 sf
Capacity Based on Standards:	556/556*
2011/2012 Enrollment:	520
2015 Projected Enrollment:	592**

**Capacity shown for both K-6 and current grade configuration*

***Based on the addition of School 7 configuration*

7: School Site Analysis and Data - Skyline School

7: School Site Analysis and Data - Skyline School

Physical Features of the Site

Located less than a mile from the beach in climate zone 7, the school site generally experiences tempered weather conditions and cooling ocean breezes. The site has large shade trees, except on the play field, and open hardscape play courts. Most walkways are covered for sun and rain protection. The campus includes a large turf play field and hardscape playground space, which is open to the community for use after school and on the weekends. Parking is located off of Lomas Santa Fe, adjacent to the school's administration office and in the same area as the student drop-off area, with additional parking on the lower southeast corner of the site. Currently, the majority of the permanent buildings are located on the west side of the campus with a student garden located on the upper northwest corner of the site.

A challenge for the campus is the 5'-8' elevation changes throughout the site. The site can be broken down into 4 elevation levels with the lowest starting at the southeast corner of the site and gaining in elevation as one moves northwest on the property. Even within these elevation levels there are slope changes, creating sloped walkways or requiring stairs. The field is relatively flat. Residential properties surrounding the north and west sides of the site are elevated above the property, with a considerable slope and drainage running into the site. There are exposed storm water troughs on site and could be a tripping hazard. There is no drain in the outdoor dining area. Planting areas have an irrigation system.

Substantial elevation changes on the site impact both vehicular and pedestrian circulation, making compliant accessibility for the site challenging. The access entrance to the site off of Lomas Santa Fe has a slope gain from the road of approximately 5-9 feet, sloping upward upon approach from the road. Vision, therefore, is limited for drivers and those walking in the area. Elevation changes on site are addressed by both stairs and sloped asphalt. A new playground that was recently added on level 0 has a compliant ramp and railings to reach it from level 1. Some of the most difficult slopes to navigate are on the north side of the site, traveling from level 3 classrooms to level 2. Level 2 houses the lunch shelter, labs, broadcast studio, and speech areas. Level 1 provides access to the play field.

Tree roots, cracks, and bumps in the asphalt on the north side of the site add to challenges for pedestrian circulation, including tripping hazards. The District has recently replaced bushes with new fencing and drought-tolerant landscaping along Lomas Santa Fe. Some areas remain on the site with landscape turf that is not used for student play or gathering.

7: School Site Analysis and Data - Skyline School

7: School Site Analysis and Data - Skyline School

Site Circulation and Access

Parking: The school has approximately 56 parking spaces located on level 1 in the middle of the student drop-off area and 25 parking spaces located in the southeast corner of the site, next to the lower playground area. Parking spaces on the lower level are used by the community when using the play area, staff, or by parents who park and take their students up the hill to the main entrance. Despite having adequate parking, the lot location presents challenges since it is located in the same area as the drop-off zone and slopes in multiple directions.

Vehicular Circulation: Vehicular access is limited to an entrance and exit off Lomas Santa Fe. School staff have worked hard to develop an organized drop-off procedure, with staff directing cars. The process for drop-off/pick-up has vehicles entering at the east entrance and driving up the hill, letting students out along the sidewalk. Traffic backs up along Lomas Santa Fe during the peak drop-off time, but the bigger challenge is retaining a single loop and keeping parents from cutting around cars along the curb or cutting through the middle of the parking lot to let students out. Students must then walk between parked and moving cars. A second student drop-off/pick-up area is located on Dell St. behind the school. Generally parents park their cars on both sides of the street and wait for students to climb the stairs along the school's pedestrian walkway, between two residences. Some parents go down the stairs to meet their children. This area on Dell St. becomes congested during peak pick-up times and requires coordination with residences on the street.

Service Access: Emergency vehicle access is obtained from the lot's drop-off zone and runs between the portable classrooms. Due to existing building locations and site topography, this emergency vehicle lane provides access to the lower part of the site. Existing site layout precludes convenient food service delivery to the kitchen. Currently, delivery trucks park along the drop-off zone and push carts up the hill to the kitchen. The trash and recycling containers are placed by the site exit in the parking lot near Lomas Santa Fe Dr. Trash pickup is usually done before school starts, where trucks block the exit as they pick up the trash.

Pedestrian Circulation: Before school students gather on the playgrounds on the east side of the site on levels 0 and 1 and then move to their respective classrooms via sidewalks and large sloped areas of asphalt. The Global Education Program is located in the hexagonal classroom buildings and Unit G portable unit for the kindergarten class. Parents pick up kindergarten students directly in front of the kindergarten classroom so most parents park and walk to the entrance. Pedestrian circulation at lunch goes in multiple directions with heavy traffic on the sidewalks on both sides of Building B and down the path from classroom Buildings C and D. Some students walk to school or ride bicycles. The school has posted staff to assist crossing at the I5 interchange and on Dell St. The stairs, which span about a 20' elevation change from Dell St. to the campus, become crowded with parents, students, strollers, dogs, etc. before and after school.

7: School Site Analysis and Data - Skyline School

LEGEND

- ACADEMIC SPACES
- ADMINISTRATIVE SPACES
- OUTDOOR SPACES
- PARKING AND VEHICULAR CIRCULATION
- DROP OFF ZONE
- FOOD SERVICE & SUPPORT SPACES
- PERFORMANCE SPACE

7: School Site Analysis and Data - Skyline School

Activity Zones and Site Utilization

Skyline campus is organized with play areas on one half of the site and buildings located on the other half. The play area is open for community use during non-school hours. The play area is, for the most part, located on the lowest part of the site with ramps and sloped hardscape making the transition from the higher elevations. Site access and parking are located directly off of Lomas Santa Fe Dr. in the same area as the student pick-up/drop-off. The administration is located adjacent to the student pick-up/drop-off zone, adjacent to parking, which works well for visitors. The media center is located in this building with several student support services, which is somewhat removed from all of the classrooms, requiring students to traverse sloped areas to reach the media center complex.

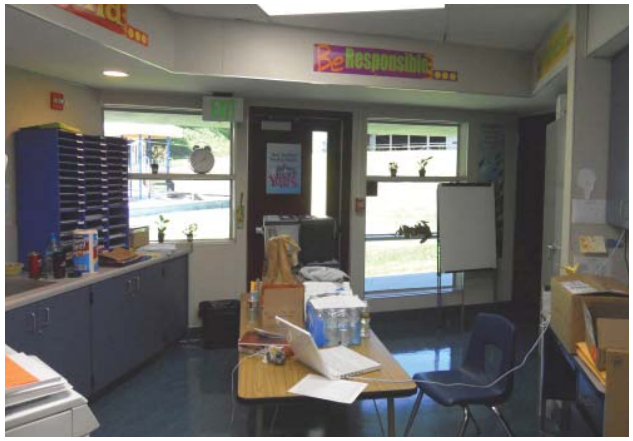
The Global Education Program is housed together in the hexagonal buildings (Units C and D) at the highest level on the site with an adjacent portable classroom for Global Kindergarten. Special needs classes and intervention are located in one half of Unit D. The science classroom is located in this area as well. A service building with restrooms is located between the two buildings. Grades 4-6 classrooms are located in portables on level 1 and in permanent Building B on level 2. Student restrooms are located in Building B, requiring students in the portable classrooms to climb stairs or a sloped bank to reach them. Staff restrooms are in Unit A on level 2. The garden and outdoor learning area is remote from all classrooms other than the Global Program and science. Currently, the multi-purpose building is used for music and performances. Art is located in a portable classroom donated by Lomas Santa Fe Reality in 1970. This portable classrooms is shared with the CDC program on level 1, close to the parking lot.

Food service and student dining is located on the north side of the site tucked between classrooms in Building B and the hill, rising up to the surrounding residential homes. Both the small service kitchen and the outdoor covered dining area are tight to service the two lunch periods. Tables are overcrowded at lunch. Food service is in a confined area. The kitchen and service area are located close to the multi-purpose building which could allow this space to be used for student lunches in inclement weather as an alternative to eating in a classroom. The lunch area also is located with easy access to the play area for before lunch outdoor activities but not directly adjacent, which helps control noise and play in the dining area.

Although the site is adequate in acreage for a 650 student elementary school, much of it is used for pedestrian circulation to activities distributed on multiple topographic levels. Efficiency of space is lost due to the multiple buildings dispersed over half the site, rather than utilizing a single structure that consolidates activity areas and provides accessibility to multiple topographic levels. Opportunities could be created for more open space for food service, student dining, and parking.

7: School Site Analysis and Data - Skyline School

7: School Site Analysis and Data - Skyline School



Considerations and Opportunities

Overview: The Skyline campus is probably one of the most challenged sites in the District from an age and topographical standpoint, but the 10 acre site itself has potential to allow for future opportunities to address concerns and issues both for the school campus and for the District. If the topography was utilized in conjunction with a new consolidated facility, better utilization of the site could be realized, allowing for separation between student drop-off/pick-up and parking, a larger outdoor dining area, and efficient student circulation.

Issues and Needs:

- Topographic elevation change
- Site circulation needs to better comply with accessibility regulations
- Tree roots and slope conditions break up asphalt
- Smaller classrooms than District standard
- No separation between parking area and drop-off/pick-up
- Student outdoor dining is crowded and unpleasant
- Food service kitchen is small
- More student/staff restrooms needed with easy access
- Need library office and guidance office
- Need more small meeting spaces/conference rooms
- Need more general storage
- Low roofs allow students to climb on them
- Underground storm and sanitary sewers need upgrading
- Challenges with HVAC system design – split system
- Blocked site lines for site supervision by buildings
- Proximity to Lomas Santa Fe Drive
- Gates need to be upgraded to comply with code

Site Assets:

- Easy access to I5 and locations in Solana Beach
- Adequate site size for elementary school
- Large play field
- Mature shade trees
- Close to ocean for optimal weather conditions
- Proximity to the freeway, shopping, and center of town


SOLANA
VISTA
SCHOOL
780 Santa Victoria
SOLANA BEACH, CA 92075

7: School Site Analysis and Data - Solana Vista School

Campus Overview

The Solana Vista Elementary site is located on approximately 10 acres, just east of I5 freeway in a hilly, low-medium density residential neighborhood in the City of Solana Beach. The main campus entrance is off of Santa Victoria, which runs along the north side of the site. San Patricio Dr. borders the south side of the site, with no vehicular access and single family residences abutting the east side of the site. The school is about a 10-20 minute drive from the Skyline site on Lomas Santa Fe and approximately a mile from the coast. The neighborhood is quiet, with minimal street parking for the school, except during drop-off and pick-up hours.

Solana Vista School was initially built in 1971 with modernization projects completed in 2000-2001 and portable classrooms added to the campus as enrollment grew. Over half of the classrooms are in portable facilities. The school has been well maintained but, due to its age, will need mechanical system upgrades or replacement soon. The site also needs upgrades to comply with current accessibility requirements. The addition of the 8 portable classrooms on the west side of the main campus has limited some of the outdoor play court space, although the campus seems to function adequately with the amount of hardscape available. In general, the classroom and teaching stations are in good condition and have been updated with technology; however some of the portable classrooms do not provide the same square footage, storage, small group space, or daylighting as the other classrooms on the site or the District Space Standards.

The school is currently serving K-3 students in the City of Solana Beach area, with most students moving to Skyline after 3rd grade to complete elementary school. The site location, single-story facility, and relatively flat topography supports the lower grade levels. The residential neighborhood, which has sidewalks on all streets, could support a “walk friendly” environment to encourage even more families to walk to this school with young children. The site capacity is about 472 for the current grade configuration, based on District Space Standards. The site size could support a larger enrollment if needed, if the office and support space were expanded or reconfigured, and if classrooms were added in a consolidated addition.

Solana Vista Site Data	
Current Grade Configuration:	K-3
Site Acreage:	10
Year Built:	1971
Permanent Classrooms:	11
Portable Classrooms:	18
Total Classrooms:	29
Average Classroom Size:	928 sf
Capacity Based on Standards:	562/472*
2011/2012 Enrollment:	423
2015 Projected Enrollment:	376**

Capacity shown for both K-6 and current grade configuration

7: School Site Analysis and Data - Solana Vista School

7: School Site Analysis and Data - Solana Vista School

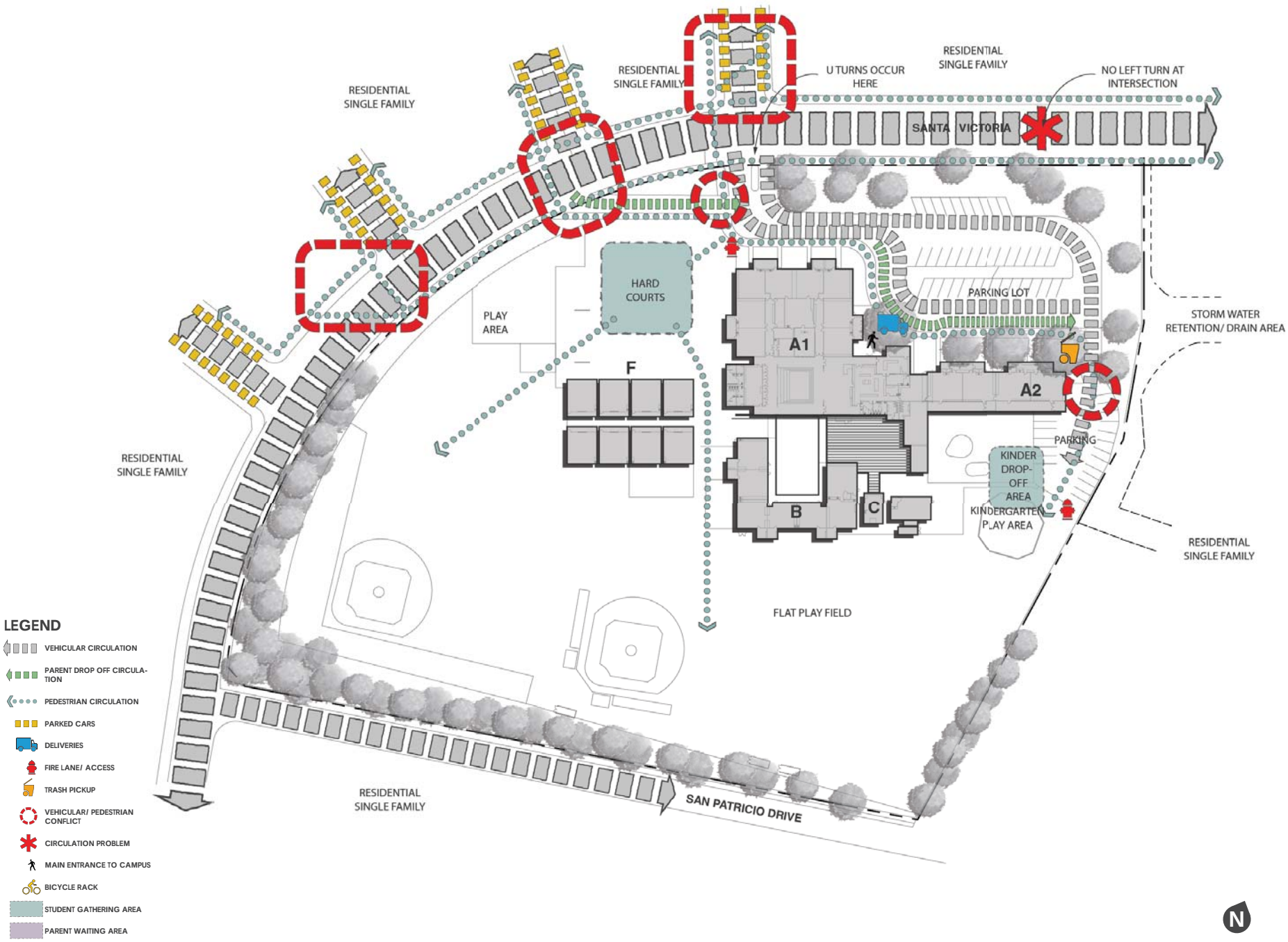
Physical Features of the Site

The school is located approximately a mile from the coast, in Climate Zone 7, and generally has mild temperatures and cooling breezes. The site is surrounded by residential streets, providing a quiet area for the school. About one half of the site is covered with turf and used by the community when school is not in session. The community has access to the site during non-school hours. Large shade trees are in front of the site and the perimeter around the play field, but most of the play area is exposed to the sun, except for a small shade shelter close to the play structure.

The site is relatively flat with little elevation change on the site; however the surrounding streets and the school access drive climb up to the site entrance. Many of the surrounding neighborhood homes and streets are either at a lower or higher elevation than the site. The field is flat and, if not overwatered, drains well. The residences on the east of the site are below the school parking lot and adjacent to the landscaped perimeter so storm water runoff flows toward the lower residences. A surface storm water trough has been placed on the side of the site to catch runoff.

Existing large pines and other heavy shrubbery around the perimeter, especially on the south and west sides of the field, provide a sound barrier to surrounding residences, but also limit sight lines for good site observation and security. Other planting areas include two student gardens located close to the portable classrooms and a drought-tolerant plant garden in the courtyard by Unit B. A time-regulated irrigation system is on site.

7: School Site Analysis and Data - Solana Vista School



7: School Site Analysis and Data - Solana Vista School

Site Circulation and Access

Parking: The school has 38 spaces in the main front lot with 18 additional spaces located next to the kindergarten play area. At times it seems like this is not enough since cars are parked in non-designated areas. The main lot is shared with the pick-up zone for the younger students. Parking by the kindergarten area is gated and seems well controlled. Visitor parking is in the main lot.

Vehicular Circulation: Vehicular access is currently only off of Santa Victoria, although there is the potential for access off of San Patricio Dr. if a curb cut is added. This could be a potential location for emergency vehicle access, which is currently limited on the site. Since the parking area is limited to the northeast corner of the site, vehicular traffic on the site is limited. An access ramp has been added to the site from Santa Victoria, west of the site entrance/exit, to better facilitate student drop-off/pick-up. This assists in the drop-off/pick-up process, however traffic does back up all the way to Santa Rufina Dr. during the peak drop-off period. Some parents park on Santa Victoria or the adjacent radiating streets and cross the street at various points between the cars in the line up on Santa Victoria. School staff assists at the main entrance crossing, providing assistance for parents and students who walk to the crossing point. The pick-up point for younger students has been designated in the parking lot in front of the kindergarten classrooms. All cars exit from a single point onto Santa Victoria and are only allowed, per signage, to turn right.

Service Access: Emergency vehicle access is somewhat limited to the front and side of the buildings. Trash is at the corner of the parking lot and out of the way of traffic flow. Deliveries tend to come either to the front of the building or use the kindergarten parking area for access to food service.

Pedestrian Circulation: Some students walk to school. Students and parents cross at multiple points on Santa Victoria, even though there is only one designated crossing point with staff assistance. Both parents and students gather in the hardscape play area before and after school. Circulation paths on campus are, for the most part, accessible and navigation is easy for young students. Gates need modification for current code compliance. A pedestrian gated access to the school field on San Patricio Drive seems to be underutilized, and could assist with the heavy traffic that occurs at the front of the school. It does not appear that many students currently bike to school.

7: School Site Analysis and Data - Solana Vista School

7: School Site Analysis and Data - Solana Vista School

Activity Zones and Site Utilization

Activity zones for the site seem to work well except for a crowded food service and dining area confined between the kitchen and the original building. The dining area is located away from the play area which helps in controlling activity in the dining area, but the area is dark, noisy and overcrowded.

Some of the hardscape play area has been used to house the portable classrooms. The location expands the academic classroom zones and circulation between classes as well as creates additional barriers to open sight lines for site monitoring and supervision. Parking and the student drop-off/pick-up zone overlap, which can provide challenges with individuals walking through parked cars. Ideally these areas would be separated. The additional parking in the more remote area of the kindergarten location helps minimize the impact on the dual use of this area.

The field is used for school PE and recess, although it seems like the bulk of the heavy use is by the Little League teams and community. Two baseball diamonds are on the site and one field is used primarily by the Solana Beach Little League. A batting cage, several storage cargo containers in fair to poor condition, a concessions structure, and storage boxes are located along the southwest corner of the site. Condition of the storage units, miscellaneous materials, and bleachers, etc. should be monitored for safety in this area.

Kindergarten is located with its own play area with easy proximity to food service. Kindergarten students eat in their own area outside their classrooms. Internal core areas in the main building are generally central to all classrooms but some facilities are undersized. All classrooms, except those in the portable units, have access to outdoor extended learning areas and internal small group rooms. Storage is limited in small sheds and mechanical/electrical spaces.

Some of the play area seems underutilized by the school and might be able to support parking or other uses.

7: School Site Analysis and Data - Solana Vista School

7: School Site Analysis and Data - Solana Vista School

Considerations and Opportunities

Overview: Although the site is well maintained, the school is over 40 years old and many of the building systems are at the end of their useful life, so replacement should be planned. Additional classroom space has been added to the site to accommodate increased enrollment, but the core facilities have not been expanded. Codes have also changed to accommodate accessibility and safety. The classrooms have been updated with technology and required infrastructure, but fire alarm strobes and compliant accessibility need to be added to the permanent classrooms and restrooms. Both pedestrian and vehicular gates should be replaced with code-compliant controlled access for safety on the site. A vehicular gate could easily be added at the parking level or on San Patricio Dr. to allow better emergency vehicle access to the back side of the site.

The school lacks support space that could be gained with minor reconfiguration of internal space around the administration and library. The workroom space is large and may be underutlized in the future, considering schools are becoming paperless from a technology and green standpoint. The workroom is over twice the square footage recommended by the District Space Standard. The multi-purpose room should be modified to fill in the pit and be updated for current code requirements. When modifications are made to the site, permanent storage areas to accommodate large items should be considered and included in upgrades.

There may be potential to separate staff parking from the drop-off zone by minor reconfiguration of the site which could improve drop-off traffic congestion. The dining area should be redeveloped to allow for more space for serving as well as dining. If the mechanical system were replaced, the boiler room and storage area could be reconfigured to allow more space and the CDC portable classroom could be relocated or removed, which would open the area. The leased portable classrooms may be able to be replaced by a permanent classroom addition that would provide classroom space meeting District Space Standards.

Issues and Needs:

- Multi-purpose recessed pit has water infiltration from below the slab and limits accessibility
- No library office and media center is undersized
- Lack of storage on site
- No guidance office and limited support space
- Student dining is cramped and dark
- MDF in workroom needs a controlled environment
- Building facia is in need of repair or replacement
- Site access gates are not code compliant
- Gates need to be upgraded to comply with code

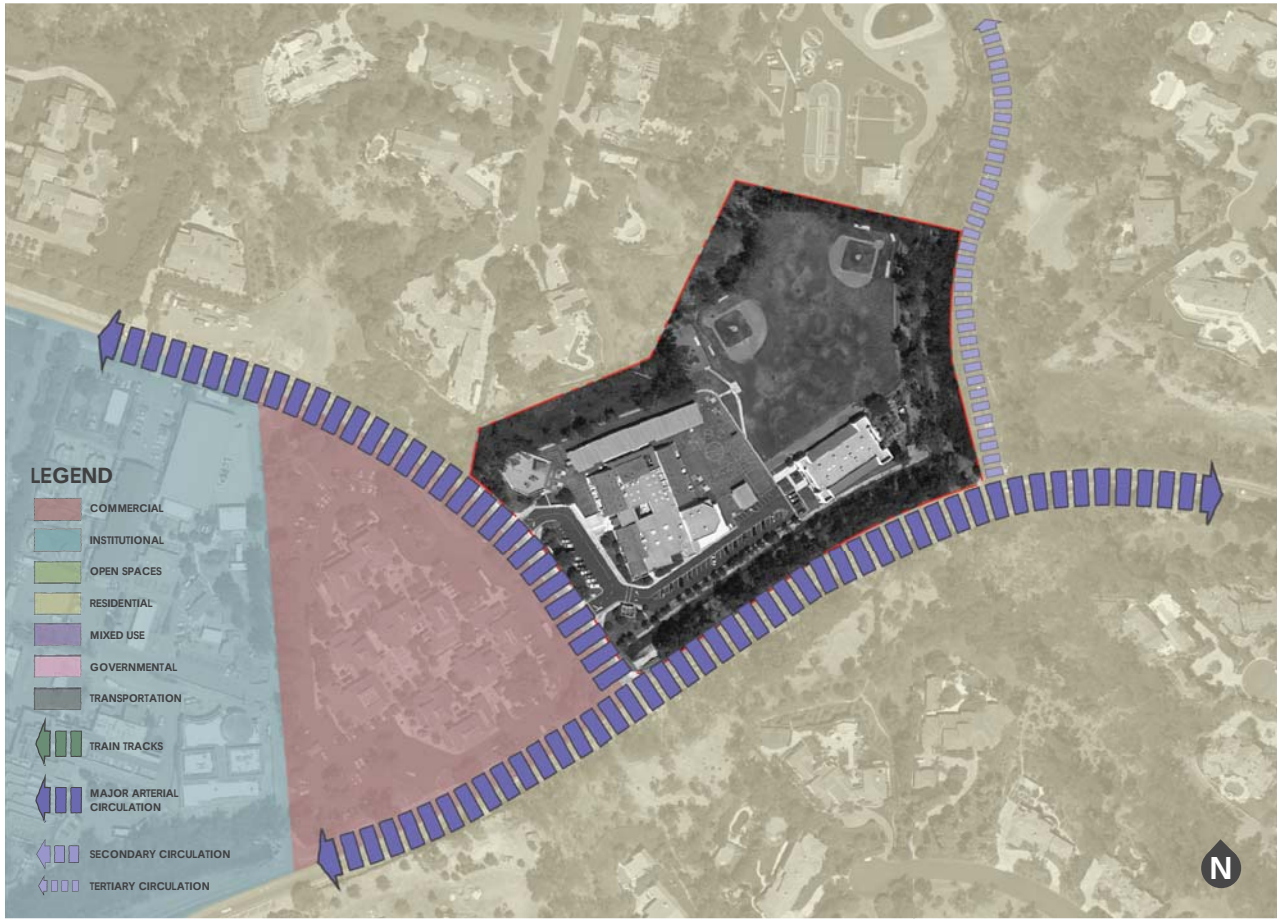
Site Assets

- Adequate site size for elementary school with large play field
- Close to ocean for optimal weather conditions
- Quiet, residential neighborhood

SOLANA SANTA FE ELEMENTARY

6570 El APAJO
RANCHO SANTA FE, CA 92067

7: School Site Analysis and Data - Solana Santa Fe Elementary



Solana Santa Fe Site Data	
Current Grade Configuration:	K-6
Site Acreage:	5
Year Built:	1993
Permanent Classrooms:	18
Portable Classrooms:	9
Total Classrooms:	27
Average Classroom Size:	975 sf
Capacity Based on Standards:	529/478*
2011/2012 Enrollment:	390
2015 Projected Enrollment:	379**

Campus Overview

Solana Santa Fe Elementary School is located on a 5 acre site in Rancho Santa Fe in an unincorporated area of northern San Diego County. The population of the area in the 2010 census was 3,117. The school is located near the gated community of Fairbanks Ranch on the busy intersection of a main artery of San Dieguito Road and El Apajo, directly across from a shopping center. Residential homes in the area are on large lots in a low density area.

The original school building was constructed in 1993. A classroom building and 8 portable classrooms have been added during the 1990s. The school is well maintained and in good condition. Several upgrades have been made in the facility within the last several years, including a replacement of a few mechanical units and carpet. With the school almost 20 years old, many of the building systems, such as the roof and other mechanical units, are approaching the end of their useful life and will need replacement in the next five to ten years.

The classrooms in the original building are large and filled with daylight, meeting the District Space Standards and provide an appropritate environment for learning. The portable classrooms do not have much daylight or storage and are not in as good condition as the permanent classrooms in the main building. They also do not have adjacent Kiva space or small group rooms. The classrooms in the classroom building last added on campus are also under the District Space Standard square footage. These rooms use the internal corridor for extended learning areas.

The school serves grades K-6. The school is more remote from the other schools in the District and has a more limited enrollment base, so the comprehensive K-6 school serves the community and the facilities are able to support all grade levels. The school, as it exists currently on the site, has the facility capacity based on District Space Standards for a 450-475 student K-6 elementary school. Projected 2015 enrollment is 367. Currently the site does not have a before/after school CDC program as the area does not require the program. Other programs could be added to the site, such as special needs programs that the site could physically accommodate to maximize the site capacity. Since the site is remote from the other schools in the District, modifying attendance boundaries to redistribute students to this school could be challenging.

**Capacity shown for both K-6 and current grade configuration*
***Based on the addition of School 7 configuration*

7: School Site Analysis and Data - Solana Santa Fe Elementary

7: School Site Analysis and Data - Solana Santa Fe Elementary

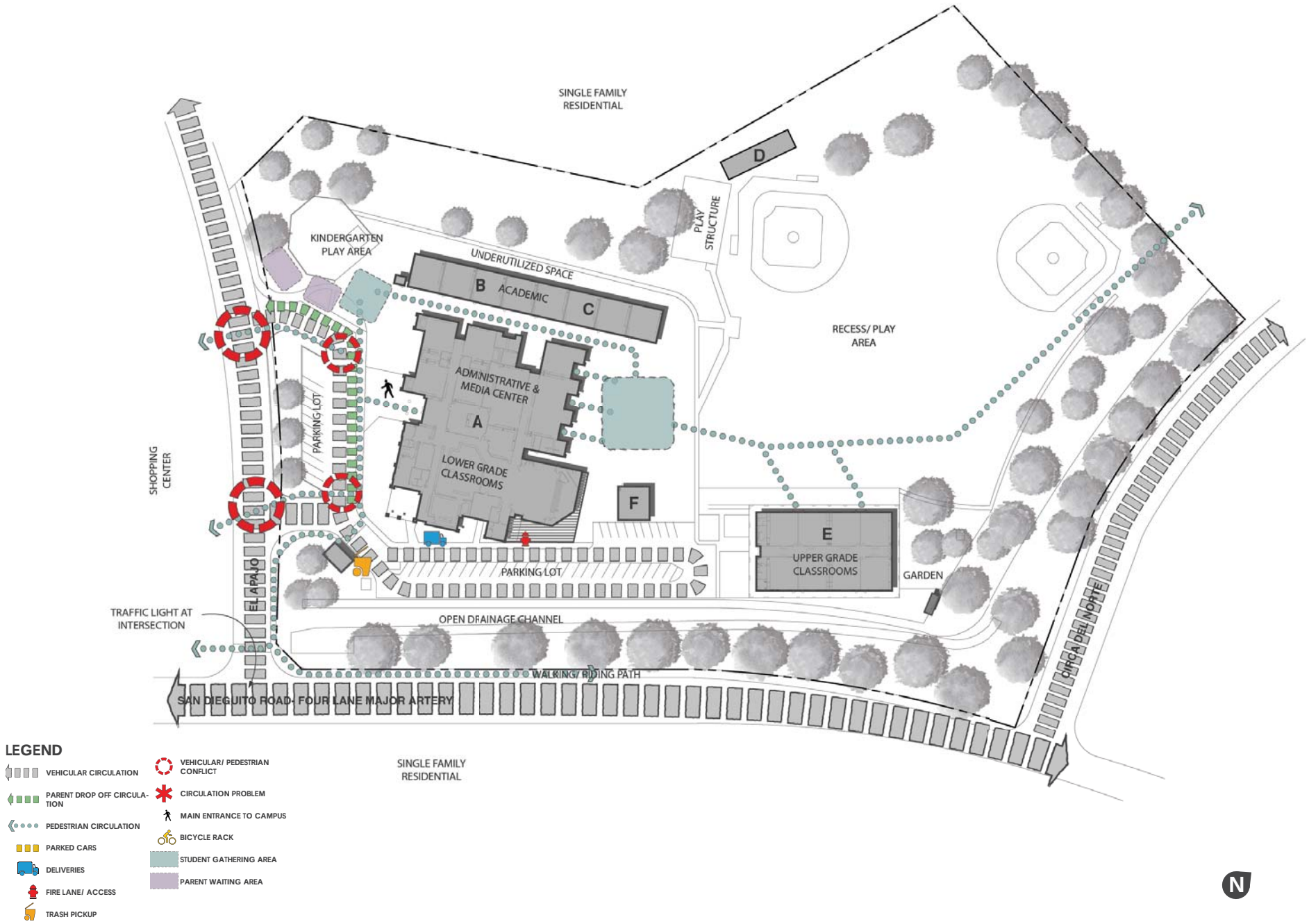
Physical Features of the Site

Solana Santa Fe Elementary School is much farther east than the other schools in the District, and although located in Climate Zone 7, it has slightly different climate considerations than the other 6 school sites. This area of the county is slightly warmer in the summer and early fall by about 4-5 degrees and cooler in the winter months by about 5 degrees. This makes shaded areas critical for afternoon dining, recess and student pick-up areas, especially for the first part of the school year. Some shade is provided in parts of the kindergarten area and in front of the school, but many areas receive strong direct sun.

The school is bordered by two busy roads on the south and east sides of the site, with a few large residential homes up the hill on the west side of the site. A sewage treatment facility under the jurisdiction of the Community Service District is located off of Circa Del Norte on the north side of the site. A storm water open drainage channel runs along San Dieguito Rd., close to the parking lot and classroom Building E. All storm water from the site runs directly into this open channel. The site is fenced along the field and along the channel, with one pedestrian gate at the rear of the site. Open access to the site is only gained from El Apajo at the front of the site.

The site topography is, for the most part, flat on the site with a steep elevation change occurring on the west and north edge of the site. A slight slope exists from the hardscape playground up to the field so both the field and the hardscape drain to an open storm water trench that separates the field and hardscape. During rainy days, this open trench causes continuous water puddles to be crossed and interferes with student circulation during student outdoor play. Water used to wash down the student dining area is pushed towards this open trench since no drain in the dining area exists. This water and associated debris from dining runs into the open storm water channel adjacent to the site when the dining area is washed down after lunch. About one half of the site is covered with turf and used by the community when school is not in session.

7: School Site Analysis and Data - Solana Santa Fe Elementary



7: School Site Analysis and Data - Solana Santa Fe Elementary

Site Circulation and Access

Parking: The school has about 55 parking spaces between the side and front parking lots which adequately accommodate visitors and staff. The parking lot was recently reconfigured to better accommodate the drop-off/pick-up procedure that wraps through the parking lot. Some parents use the parking lot across the street or park on the street in front of the school. The church further west on El Apajo allows parents to park for larger events.

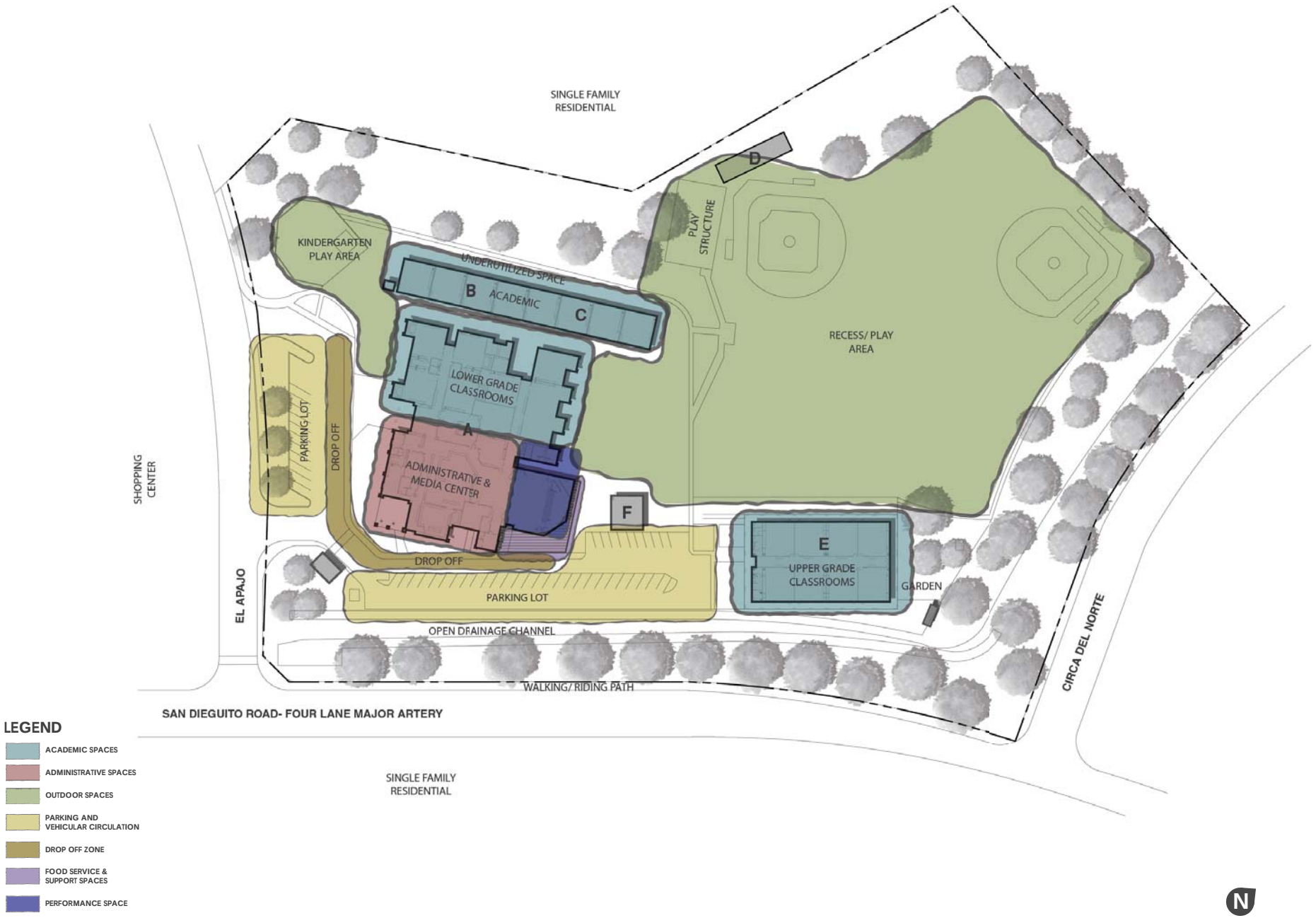
Vehicular Circulation: One entrance and one exit provide access to the campus off El Apajo. It is directly across the street from the entrance to the shopping center. The entrance drive to the school is about 175 feet from the major intersection and light at El Apajo and San Dieguito Road. The entrance and the exits to the site have about 200 feet between them.

While most schools face challenges with student drop-off/pick-up, it is a particularly big challenge at this site due to this limited access to the site, the busy location of the site at this intersection, and that most students are driven to school due to the low density of the area, and a lack of easy walking access to the school. The school has developed an organized procedure where cars enter the site and wrap around the east parking lot and then around to the front of the site with drop-off/pick-up directly in front of the school entry. Staff assists with both unloading and loading of students. The process moves quickly, however traffic backs up for a quarter of a mile on San Dieguito Rd. at peak times. To avoid this, many parents park in the shopping center lot across the street and take their students across, often not using the cross walk and running between the traffic on El Apajo. Some parents park in the east parking lot to bring their students in to the school.

Service Access: Trash pick-up is at the front of the site so the entrance is blocked during trash pick-up, however this isn't usually during peak traffic hours. Food service deliveries occur adjacent to the kitchen in the emergency vehicle zone. During these times the passage lane is temporarily blocked. Other deliveries, including smaller food deliveries from the District warehouse, enter through the front door by the office.

Pedestrian Circulation: Limited pedestrian traffic exists around the school site, although a bike, walking, and horse trail are along San Dieguito Rd. Most students enter the site via a vehicle or walk from a parked car in the shopping center parking lot across the street or a vehicle parked near the school on San Dieguito or El Apajo. As students come on site they gather in the hardscape playground behind the school. Students then move directly into classrooms usually via exterior doors. Constant student circulation flows between the portable classrooms on the west side of the site or the remote classroom building for interface with core areas and special classes. Most areas of the site are accessible and travel between areas seems easy and quiet. Internal corridors, however, are used for multiple functions, including offices that are blocking exit ways.

7: School Site Analysis and Data - Solana Santa Fe Elementary



7: School Site Analysis and Data - Solana Santa Fe Elementary

Activity Zones and Site Utilization

Most activity on the site occurs on the west side of the campus. Due to the way classroom space was added (basically where space was available), the academic zone is spread out in separate areas. Since the site is small, circulation and interface between areas is fairly easy. Upper grades are located in classroom Building E with kindergarten towards the front of the school and close to the lower grade levels, including 1st and 3rd grades which are located in the portable classrooms. Some special classes are located in the portables. Music is located in the portable classroom in the middle of the play area.

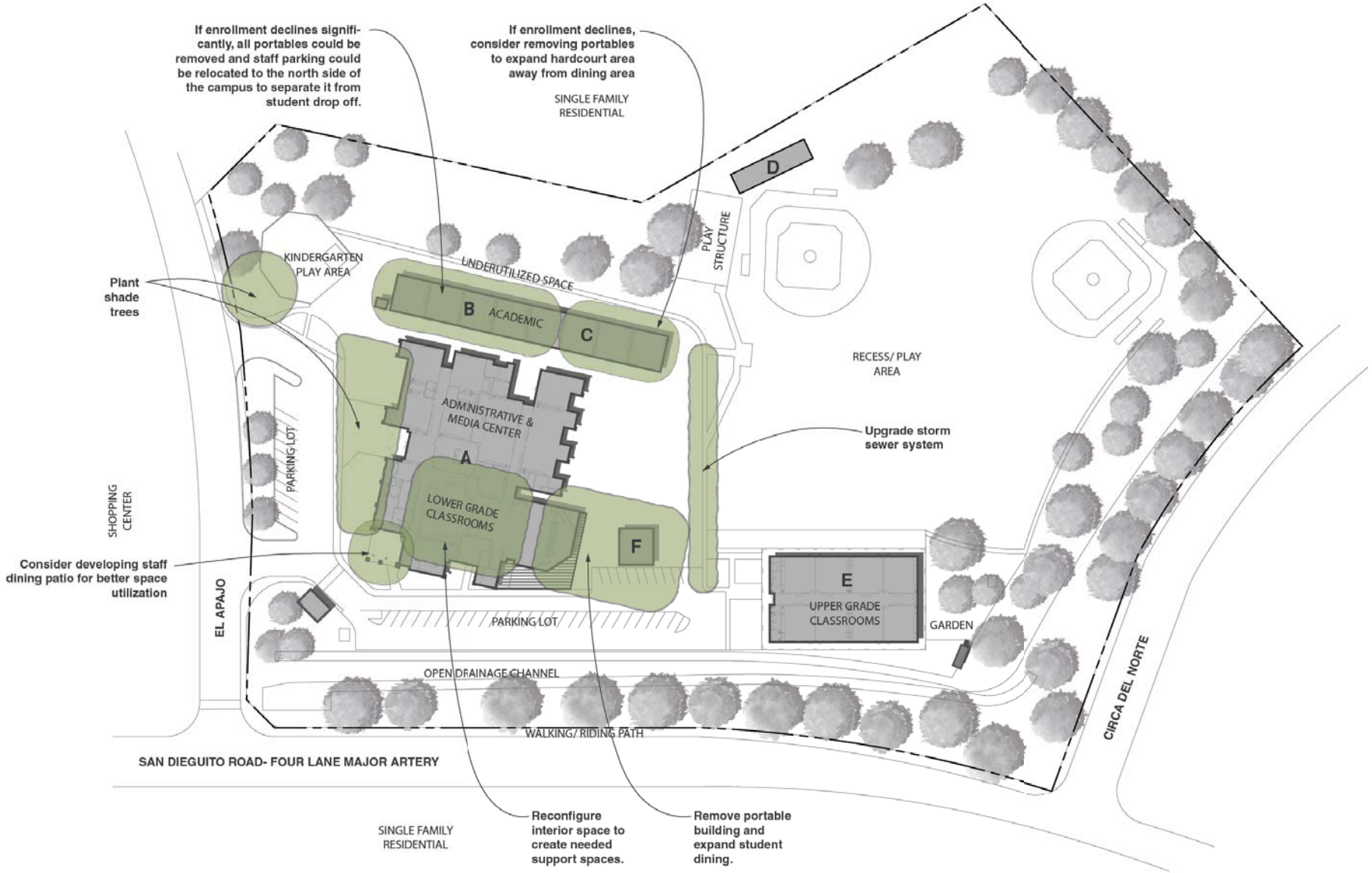
The student dining area is located adjacent to building A, crammed in between the fine arts building and the parking lot. Although it is beneficial to have the dining space away from the play area, the area is too small to accommodate the number of students and is too close to parked cars without any visual barrier. If the music portable classroom was removed, more space could be gained to expand the area.

The playground hardscape and field are located at the rear of the site. Even though they have public access after school hours, the play areas are not used as much by the community as at other District school sites. The hardscape area is limited, but seems to function well at this school for both PE and recess.

Some support spaces in the District Space Standards are missing from the site, including office/student meeting space for the psychologist. Storage is limited. These functions have expanded into internal circulation zones. Student storage, such as large roller bags and backpacks are stored in circulation space, both internally and in exterior circulation space by classroom Building E. A few other oversized spaces in the school could be repurposed. Reallocation of space may help with the creation of additional support and storage space. Minimizing excess “stuff” in the classrooms could help provide more student storage closer to the students.

The area around the portable classrooms on the west side of the site seems underutilized. An emergency vehicle access lane runs behind the portable classrooms which creates a secluded zone of space between these classrooms and a sloping bank a little further west. This space is totally blocked from observation sight lines and could present safety and security concerns. This area could be redeveloped to better use the entire space if the portable classrooms were eliminated and other functions were designed for the space. This is the only additional area of the site that has potential to have street access.

7: School Site Analysis and Data - Solana Santa Fe Elementary



7: School Site Analysis and Data - Solana Santa Fe Elementary

Considerations and Opportunities

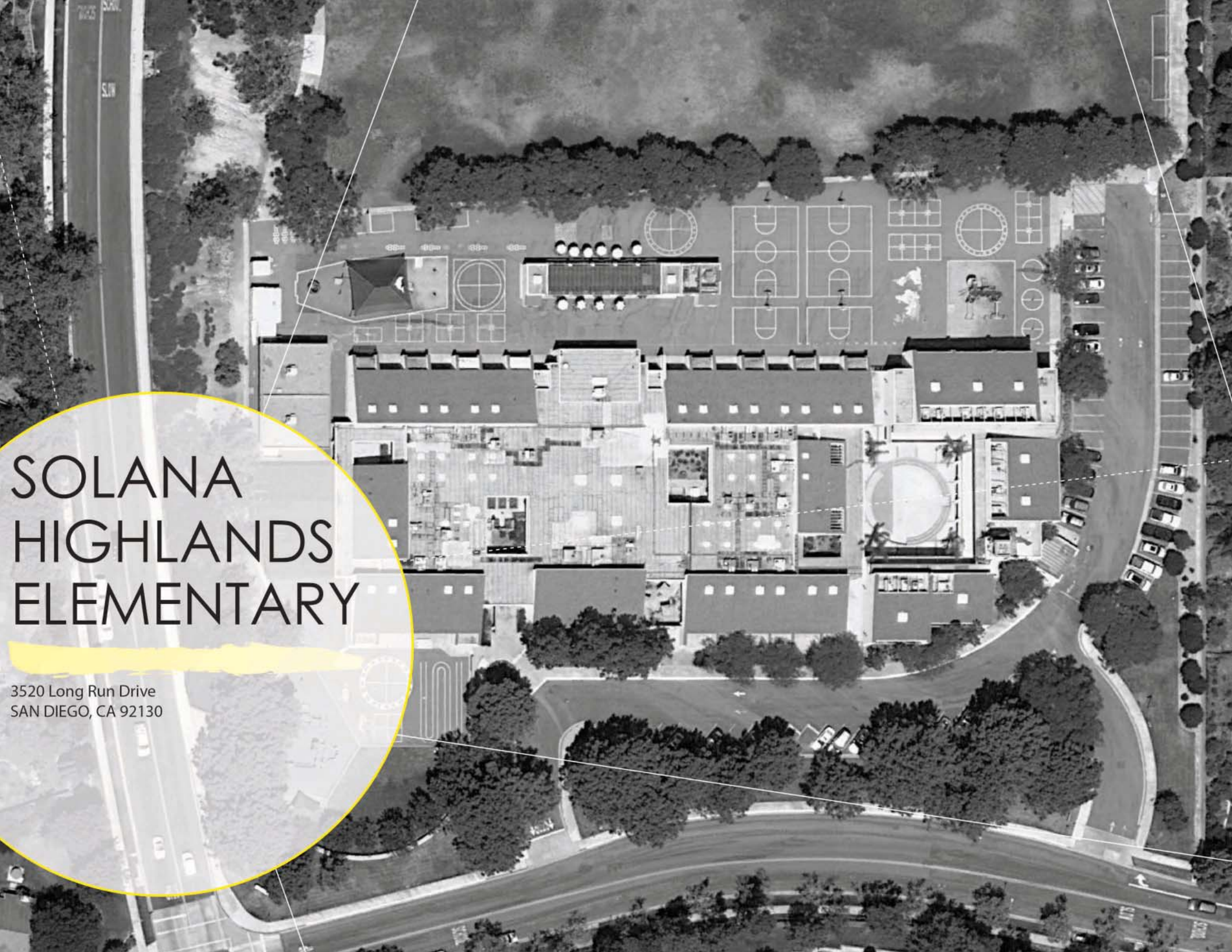
Overview: The Solana Santa Fe facility is in good condition. Although the site has challenges in its physical location in the neighborhood, being located on the corner of two busy roads with the majority of students arriving and departing from the school in vehicles, the school has managed to develop an efficient drop-off/pick-up procedure that works relatively well. If enrollment continues to decline, there may be an opportunity to eliminate portable units and gain additional space on the site to address an improved student dining area, additional outdoor learning areas, and improved vehicular circulation.

Issues and Needs:

- The school has a small site
- Security and school site access should be studied
- No separation between parking area and drop-off
- The drop-off and pick-up process is challenging
- Student outdoor dining space is too small and is directly adjacent to parking with no visual barrier
- Food service kitchen is too small
- Lack of student serving/dining options in inclement weather
- No drain in food service area
- More student restrooms are needed to comply with code
- Need more small group rooms and a large conference room
- Need student support spaces
- Gates need upgrading to comply with current codes

Site Assets:

- Tight site, but space is well-utilized
- Permanent buildings are in good condition



SOLANA HIGHLANDS ELEMENTARY

3520 Long Run Drive
SAN DIEGO, CA 92130

7: School Site Analysis and Data - Solana Highlands School

Campus Overview

Solana Highlands is located on a 3 acre site in a residential neighborhood in Carmel Valley, east of interstate 5 in the City of San Diego. The school is adjacent to a city park which the school uses for PE and outdoor play with a joint-use agreement with the City of San Diego. The school is north of Del Mar Heights Road and is about a 5-10 minute drive from Carmel Creek Elementary and Solana Pacific School.

Solana Highlands was the fourth school built in the District. The original building was constructed in 1986 with a two story classroom wing added in 1999 for increased enrollment. The facility has been well maintained and is in good condition for being 25 years old. The layout of the facility and the classrooms in the original building support the educational programs and District standards. Classrooms in the 2-story addition are smaller than in the original building and smaller than District standards, but overall, teaching stations and most areas of the school work well to create a warm and comfortable educational environment. Although outdoor space is limited due to the small site, the facility has a nice performance courtyard and internal gardens.

Currently the school serves grades K-4, with most students continuing on to Solana Pacific for 5th and 6th grade. The school offers a before and after school CDC program on site, located in two older portable classrooms on the west side of the campus. The school, in its current design and grade configuration, has a capacity to support an enrollment of about 625-630 students based on District Space Standards, however the food service/ dining area and restrooms should be expanded to serve this many students. The school is well suited to serve lower grade configurations with a designated kindergarten area. The lower grade outdoor functions may not be as impacted by the small site and limited court space as the upper grades would be. The school could also serve as a K-6 school with a capacity of about 700, but additional restrooms and reconfiguration and expansion of the student dining area would be recommended. Upper grades could be placed in unit E and the outdoor courtyard learning area could be used more extensively as support space.

The challenge of increasing the enrollment at the school would be the additional burden of traffic in the neighborhood during drop-off/pick-up times. If more students walked or rode bikes, traffic back up on the residential streets could be minimized. The school is surrounded by direct paths to the school through the adjacent park and sidewalks, creating a walking neighborhood.

Solana Highlands Site Data	
Current Grade Configuration:	K-4
Site Acreage:	3 + 8
Year Built:	1986
Permanent Classrooms:	34
Portable Classrooms:	2
Total Classrooms:	36
Average Classroom Size:	1021 sf
Capacity Based on Standards:	729/629*
2011/2012 Enrollment:	570
2015 Projected Enrollment:	396**

*Capacity shown for both K-6 and current grade configuration
**Based on the addition of School 7 configuration

7: School Site Analysis and Data - Solana Highlands School

7: School Site Analysis and Data - Solana Highlands School

Physical Features of the Site

Solana Highlands is located in Climate Zone 7, a coastal climate that provides mild temperatures and cooling breezes all year long. The surrounding residential neighborhood has mature trees and most of the site, except for a small area of the hardscape, is well shaded. Large pine trees are located in front of the school with turf underneath. This landscaping of trees and turf wrap the corner and transition to large bushes and pines along High Bluff Drive as the slope rises above the school, continuing north along the west side of the site.

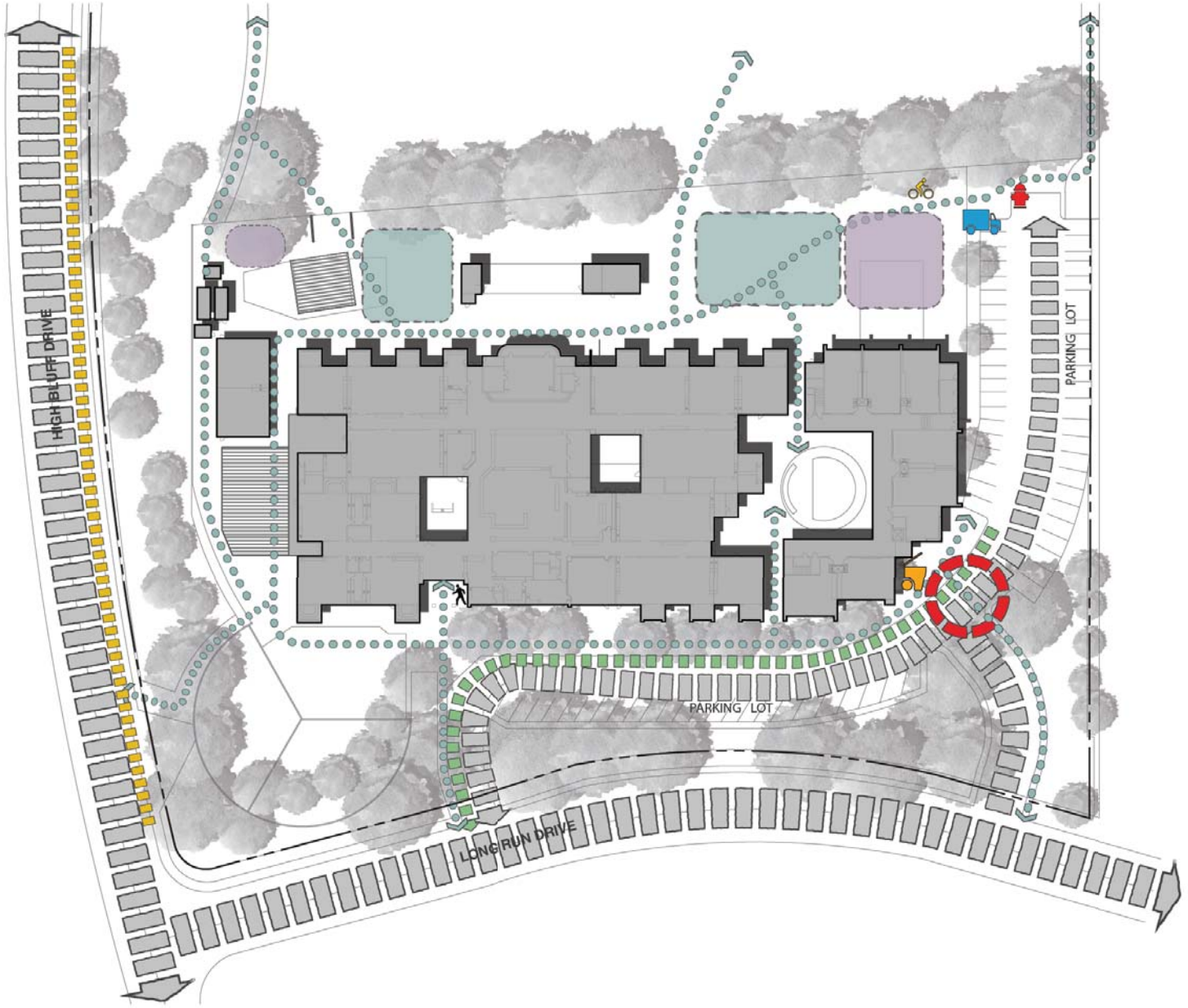
The main entrance and exit to the campus is off of Long Run Drive. The school abuts single family homes on the east side, separated by a masonry wall and an exposed drainage trench along the east parking lot. The city park provides a flat field for the school to use directly behind the school building. The park extends northeast of the playfield with additional play areas, trails, and parking. The topography of the area rises sharply, just north of the play field, about 20-30 feet, with residences overlooking the play field and school.

The drive into the site off of Long Run Dr. slopes up as it curves around in either parking area. This makes sight lines to the drive or the exit challenging, especially if pine trees have low, over-hanging branches. Varying elevation changes exist in the front drive and parking lot to the building, and many of the entrances along the front of the school have steps. Only the main front school entrance has an accessible path of travel, with accessible parking spaces located across the drop-off zone in front of the school. The west side of the site slopes up steeply along High Bluff Dr., with storm drainage running down to the site hardscape and an exposed storm water trench running along the west side of the site by the kindergarten dining area and the play area.

The play field, the hardscape play area, and the east parking lot are relatively flat with a few areas to be addressed for accessibility compliance and safe access. The hardscape in both the kindergarten dining area and along the playground by the field is in poor condition, with large cracks and upheaval caused by tree roots. This creates trip hazards in the heavy traffic areas of both the playground and kindergarten dining area.

A few areas of ponding water on the site are visable, mostly where the roof discharges out directly on the sidewalk in front of doorways. The student dining area also does not always drain quickly, depending on weather conditions. This area lacks an appropriate drain and sewer for cleaning the dining area.

7: School Site Analysis and Data - Solana Highlands School



7: School Site Analysis and Data - Solana Highlands School

Site Circulation and Access

Parking: The school has about 62 parking spaces provided in the 2 parking areas. Some parking spaces are located in front of the school with a designated crossing area for accessible parking. This area is used for the student drop-off/pick-up area and is monitored by staff during those times. The east parking lot is used by the community for the park, but not during school hours. Adequate parking for staff and visitors is available. Parents park on the adjacent residential streets and walk to the site.

Vehicular Circulation: The drop-off/pick-up procedure is a challenge, but generally this is the only time of heavy traffic in the area during the day. The drop-off/pick-up procedure has vehicles entering the site at the east entrance off Long Run Dr. and dropping students off directly in front of the school. Cars do not go into the east parking lot. Staff assists with loading/unloading and the process generally runs smoothly, though traffic does back up for several blocks on Long Run Dr. Some parents park on side streets and walk with students from various points in the area so traffic interfaces with pedestrians on most of the streets. Site access is limited to one entrance in and one entrance out, with the drive in front of the school running in one direction, which seems to work well. Access to the east staff parking lot is monitored during drop-off/pick-up to minimize conflict with pedestrian flow and congestion. Congestion and back-up along the front drive might be improved if cars were only allowed to make a right turn to avoid cars waiting to make a left turn when traffic is heavy on Long Run Dr. during school start up.

Service Access: Trash pick-up is at the front east corner of the school building usually before 7:00 am and blocks access to the east parking lot briefly during collection. Food service deliveries are a challenge. Trucks park in the east parking lot and bring supplies on dollies across the playground to the kitchen storage room and freezer, which are located in two separate areas. Emergency vehicle access is limited to the front and side of the school unless bollards are removed to allow playground access.

Pedestrian Circulation: Some students walk to school (or at least part way) entering the school site from Long Run Dr. or from the paths in the park. Students and parents gather on the back playground before and after school, creating multiple social gathering areas. A few students ride their bikes and park them at the bike path entrance to the parking lot from the park. A trail wraps around the park field and continues up a steep set of stairs to High Bluff Dr. Some students and parents use this to access the school. Although the park has open access at all times, the park and pathways have restricted use during school hours, though joggers and dog walkers are sometimes seen throughout the day on the paths. A direct sidewalk from High Bluffs Dr. to the kindergarten area provides access for drop-off/pick-up. Parents also gather in this area before and after school. Student flow through the campus during the day is seamless and quiet in both the internal corridors and exterior building access paths. Most areas are accessible, with the need to modify only a few areas.

7: School Site Analysis and Data - Solana Highlands School

7: School Site Analysis and Data - Solana Highlands School

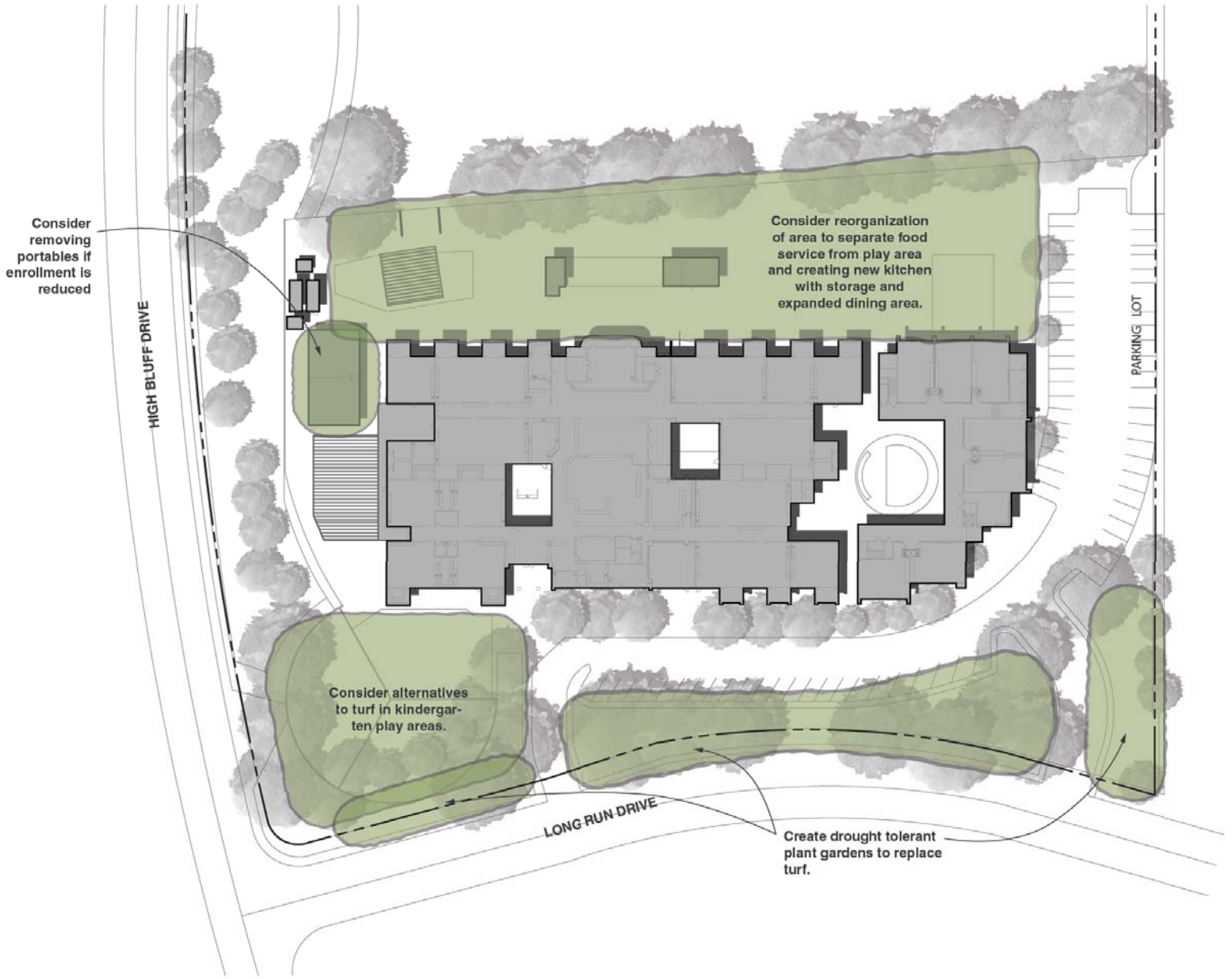
Activity Zones and Site Utilization

The physical school buildings occupy the majority of the small site area. Core and support areas are well located between the academic classrooms. Kindergarten is located in a separate area with easy direct access for parent drop-off/pick-up. The administration is close to visitor parking and is ideally located at the front of the school, central to all areas. The CDC area in the two portable classrooms is remote and buried in the campus from easy before and after school drop-off and pick-up and easy supervision, although close to exterior restrooms. The CDC is adjacent to cargo storage containers which block sight lines and is around the corner from the playground.

For the most part, the drop-off zone is separated from the main parking lot. Both parking areas have easy access to the building. The main conflict in activity zones and site use is the location of student dining in the middle of the playground and both activities are occurring at the same time. Balls and running children are directly adjacent to students who are dining, which creates more noise and elevated excitement during dining time. The dining area is also undersized for the amount of students in each lunch period. The food service is located far away from a delivery point and the kitchen has small pockets of storage in multiple locations. Food service lines are located in the middle of the play area and are remote from the kindergarten dining area, requiring small children to carry their lunches the furthest. The site lacks good options for student dining in inclement weather.

Storage is also limited on site so mechanical and electrical rooms are used to store large items. The cargo containers placed on the west side of the site along the playgrounds seem to take up more space than the amount of items they actually store. If any area of the site could be better utilized, it is probably the western side of the site, which backs up to rising topography. Although there are a few small spaces (compared to District Space Standards), other than food service, storage, and dining, the school has adequate space and is well organized for such a small site.

7: School Site Analysis and Data - Solana Highlands School



7: School Site Analysis and Data - Solana Highlands School

Considerations and Opportunities

Overview: The Solana Highlands facility is, for the most part, in good condition, with appropriate classroom space and internal circulation within the building. The school does need some minor upgrades for accessibility and new gates to comply with current codes and provide safe exiting. The student dining area and food service is the area most in need, especially to service the school capacity. Consideration should be given to the potential for rezoning and layout of the hardscape area behind and to the south of the building. If the portable buildings, which are only in fair condition, were removed, the area could be used to develop a food service and dining area that would be both close to the kindergarten area and could be separated from the play area. Permanent storage and additional restrooms should be considered in any redevelopment plan.

The hardscape in both the kindergarten dining area and the playground is in need of repair. Upgraded surfaces, such as concrete, and the removal of tree roots, as well as required infrastructure for the sewer will be required. An analysis of site landscaping could allow for the creation of drought-tolerant plant gardens to replace turf and planned maintenance of large pine trees to provide good sight lines for safety and security in all areas.

Issues and Needs:

- Security and school site access should be addressed
- Student outdoor dining too small and directly adjacent to play area
- Food service kitchen is too small
- Dining shade structure is in poor condition
- Food delivery is far from kitchen
- Freezer is remote from kitchen
- Lack of student serving/dining options in inclement weather
- Need storm sewer upgrades
- Hardscape is damaged from trees creating trip hazard
- Portable classroom is not accessible
- Need more restrooms
- Gates need to be upgraded to comply with code
- Accessibility upgrades needed
- Storage is needed for large items
- Roof drain outlets creating ponding at exterior doors
- Hard to maintain turf in kindergarten area

Site Assets:

- Access to park and walking paths to school
- Permanent buildings in good condition
- Learning spaces support District educational approach
- Outdoor learning and performance courtyard

.

CARMEL CREEK SCHOOL

4210 Carmel Center Road
SAN DIEGO, CA 92130

7: School Site Analysis and Data - Carmel Creek School

Campus Overview

Carmel Creek School is located on approximately 3 acres in Carmel Valley near the Del Mar Heights interchange off the I5 freeway in the City of San Diego. The site is adjacent to a city park which the school uses with a joint-use agreement with the City of San Diego for PE and outdoor play during school hours. The school is immediately surrounded by residential housing, with a church on the northwest corner of the park. The campus is about 3-4 blocks from Solana Pacific.

The original building at Carmel Creek was built in 1995 with a two-story classroom wing added in 1997. The school is in good condition and has large District-standard classrooms that support the educational and social programs and goals of the District. The school is well maintained and creates a welcoming environment for students. A few core and support spaces are either missing from the school or undersized based on District Space Standards. The only portable unit on the site is used for a before and after school CDC program. The physical building and parking area occupy most of the 3 acres, so the school relies on the city park to the north for outdoor play space. Minor upgrades are needed to comply with current accessibility regulations. Security and public zoning would be improved with some additional gates and fencing.

Currently, the school serves grades K-4 on campus, with most students continuing to 5th and 6th grade at Solana Pacific, which is close by. The school serves a multicultural population with over thirty-two languages spoken by students as a first language. The support for these English language learners requires several small group instruction rooms.

The site and building are well suited to support a lower grade configuration and the residential neighborhood sidewalks could support students walking to school in a low traffic area. The school building could also support a K-6 configuration, but court spaces for PE and dining facilities would be limited for older students. The school facility, based on District Space Standards, has a K-4 capacity of 587 students and a K-6 capacity of 679 students, but additional restrooms, dining, and support spaces would be required to support the larger K-6 capacity.

Carmel Creek Site Data	
Current Grade Configuration:	K-4
Site Acreage:	3 + 8 (park)
Year Built:	1995
Permanent Classrooms:	33
Portable Classrooms:	1
Total Classrooms:	34
Average Classroom Size:	1041 sf
Capacity Based on Standards:	679/587*
2011/2012 Enrollment:	554
2015 Projected Enrollment:	502**

**Capacity shown for both K-6 and current grade configuration*
***Based on the addition of School 7 configuration*

7: School Site Analysis and Data - Carmel Creek School

7: School Site Analysis and Data - Carmel Creek School

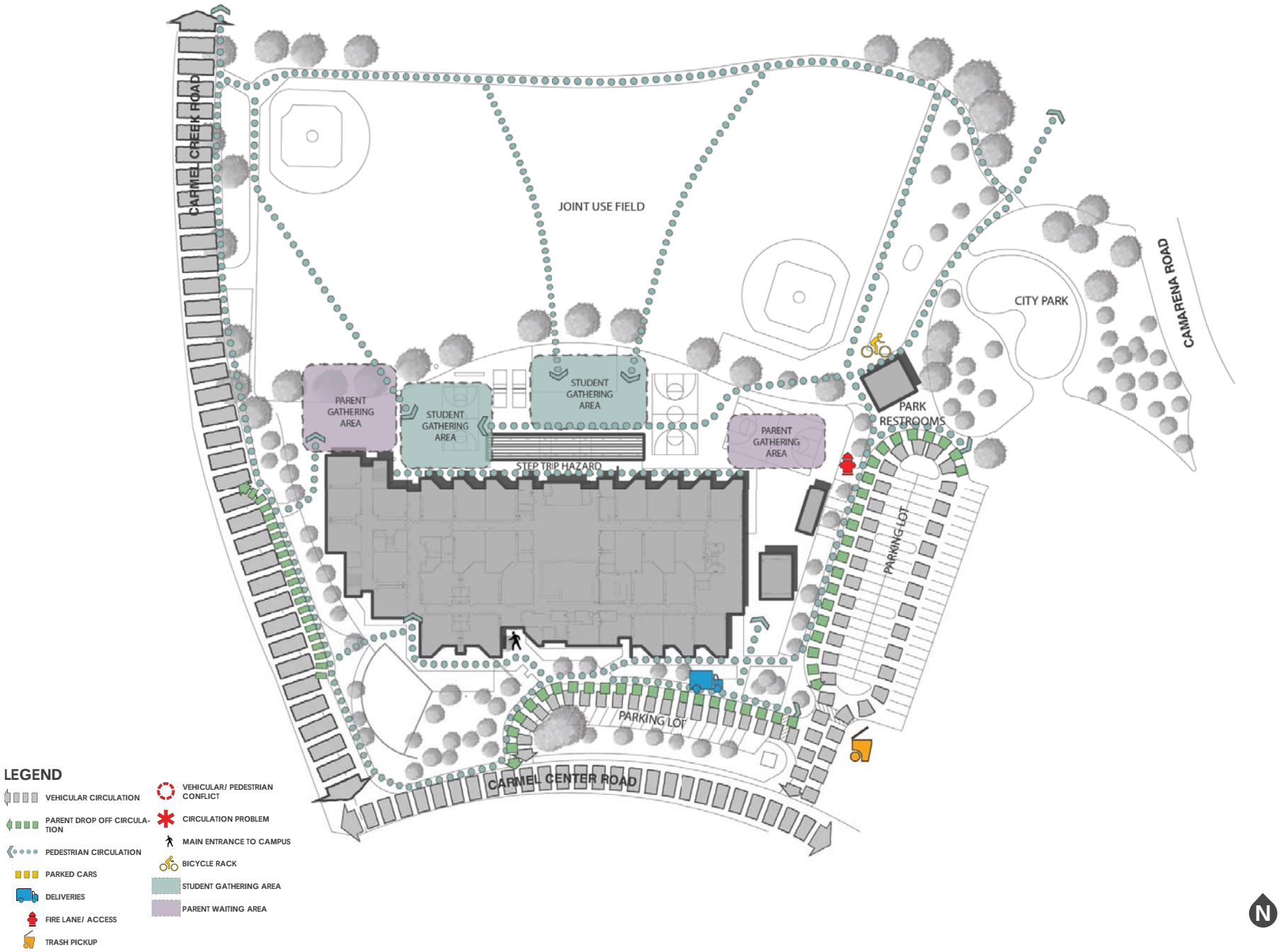
Physical Features of the Site

The school is located in climate zone 7 with mild temperatures and the benefit of coastal breezes. The site is in a mature residential neighborhood and has shade trees on most areas of the site, except the park field. Most areas of the site are protected from severe sun. The school entrance is off of Carmel Center Road which has minimal traffic, except at school drop-off/pick-up time. The entrance also serves as the main vehicular access to the park. Single and multi-family residences surround the school and the city park borders the north and east sides.

The site is relatively flat with little elevation gain except at the perimeter of the park and along Carmel Creek Road. Houses on the north side of the park are on a hill 15'-20' above the site and look down over the school. A slight grade change occurs on the back entrance of the building, with a continuous step running along the dining area, creating a tripping area in a high traffic location. A slight incline exists at the driveway in front of the school, which impacts the accessibility of that area.

A small turf area with an irrigation system is located in front of the school. Due to the tight site size, the school only has a small courtyard garden compared to other District schools which have student gardens for outdoor learning space. The kindergarten grass area struggles to stay green and suffers from wear. Although the hardscape is limited in space, it is generally in good condition. This area is used as part of the park after school hours. Site drainage seems to function without issue, although no drain is located close to the dining area. An open storm water trench runs along the west side of the site.

7: School Site Analysis and Data - Carmel Creek School



7: School Site Analysis and Data - Carmel Creek School

Site Circulation and Access

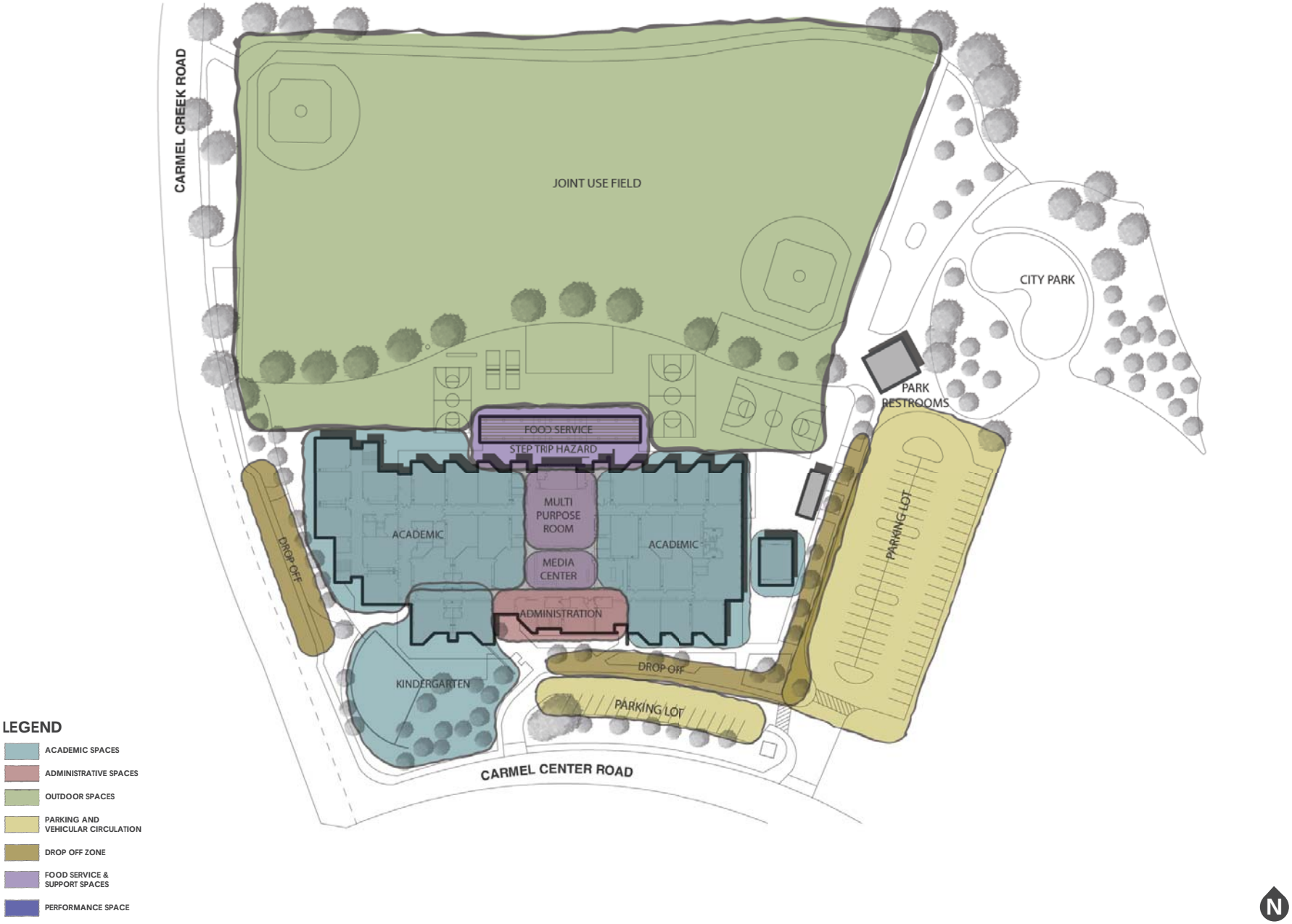
Parking: The school has 65 spaces in the east parking lot, which it shares with the city park, and about 16 spaces in front of the school. Adequate parking is available in these lots. Parents park on the surrounding streets during drop-off/pick-up but usually the streets are clear of parked cars during the day. Both parking lots are also used for one of the drop-off/pick-up zones, occasionally creating challenges with students getting out of cars in the parking lot and crossing between moving cars.

Vehicular Circulation: One of the school's main physical challenges is student drop-off and pick-up which take place in two areas. Students are dropped off/picked up in the driveway in front of the school, with cars wrapping around the parking lot. Cars back up along Carmel Center Rd. where they enter the parking lot. The second drop-off zone is along Carmel Creek Rd., which is busy in the morning and backs up several blocks past the school in both directions. This road is a main connector from the neighborhood to McGuire Rd. and then to Carmel County Rd. and to Del Mar Heights Rd. A curb cutaway is along the side of the school, however, cars pull around cars unloading or loading students, creating a second loading lane which allows students to cross through adjacent vehicles. Staff works closely with parents and students on the drop-off/pick-up process, with individual staff members stationed at multiple points in front of the school and on Carmel Creek Rd.

Service Access: Trash pick-up is at the entrance to the parking lot, which blocks lot access for the short time trash is collected. Usually trash is picked up before 7:00 am. Emergency vehicles can gain access to the back of the school on the hardscape area from the parking lot. Most deliveries are made through the office area or from the parking lot.

Pedestrian Circulation: Many students walk to school (or at least part way) accompanied by parents. Pedestrian flow on Carmel Creek Rd. is heavy in the morning as older students are turning down McGuire Rd. to go to Solana Pacific or cutting through the church parking lot adjacent to the park to go to Torrey Pines High School. Students and parents gather on the hardscape play area both before and after school, creating a social visiting spot for everyone. A pedestrian path runs along the entire back side of the park as well as paths to Camarena Rd. These paths allow for development of walking potential to the school. Most circulation on site is accessible except in a few locations.

7: School Site Analysis and Data - Carmel Creek School



7: School Site Analysis and Data - Carmel Creek School

Activity Zones and Site Utilization

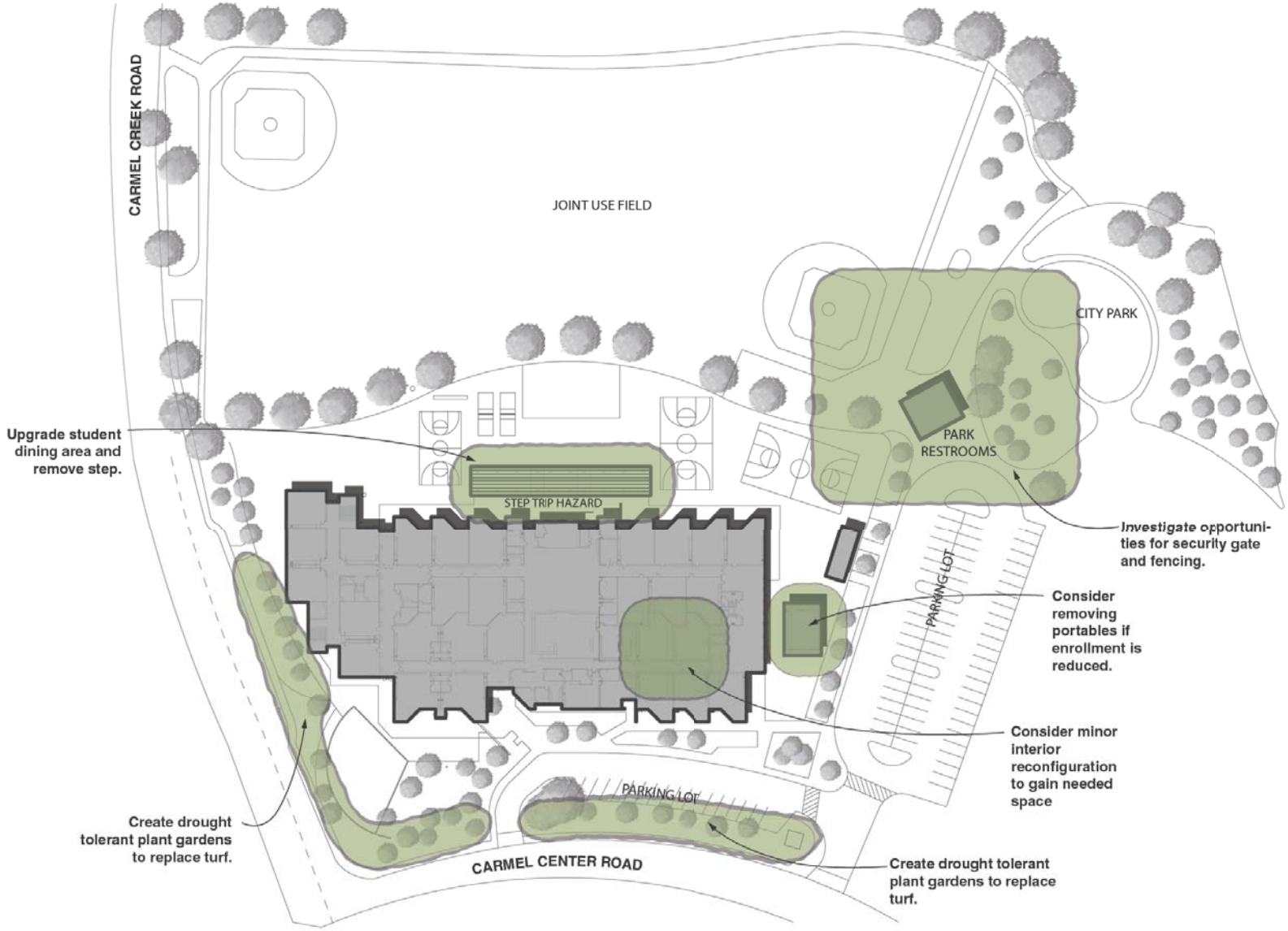
The main building occupies the majority of the 3 acre school site with most activities taking place inside the building at the front of the site. Shared core facilities are ideally located between academic classrooms, with administration close to kindergarten at the front of the site. PE and recess take place on the north half of the site.

Two student drop-off and loading zones are distributed on different areas of the site, which helps with the congestion but does not solve all the challenges with traffic. Visitor parking is located close to the administration and school entrance. Staff parking is separated from the visitor parking and supports the park as well. The CDC classroom is also located close to the parking lot for easy pick-up in the evenings and is adjacent to an outdoor support area. Storage is placed in this same area and needs more consideration to support the site.

One of the biggest challenges on this tight site is the proximity of the student dining to the outdoor play area, since both activities take place at the same time. Balls and running students are in contact with students trying to eat and relax and the action of both groups together increases the noise level and can inhibit flow. The student dining shelter is too small to accommodate all the students in one lunch period under it and space available for the salad bar carts is too limited to allow for serving lines to flow efficiently.

Although the park is not to be used during school hours by the public, some walkers and joggers use the path throughout the day. Because park facilities, including restrooms, are located directly adjacent to the school site, additional fencing could help control public access in the area closest to the school play area.

7: School Site Analysis and Data - Carmel Creek School



7: School Site Analysis and Data - Carmel Creek School

Considerations and Opportunities

Overview: The Carmel Creek School is in good condition, with only minor issues to be addressed. Two areas that challenge the physical campus are the limited food service and student dining area located in the center of the play area, and the drop-off/pick-up traffic congestion. Due to the small site size and limited direct access to streets, creating new, larger drop-off areas that are separated from parking would require major site reconfiguration and thus the problem may need to be improved with behavior modifications and process.

Minor modifications to the campus could provide improvement to the food service and dining process for both students and staff. The hardscape area around the site should be studied for modified layout and reorganization of zones. If the portable classroom were not required for capacity, consider removal, allowing for better use of this space. Internal modifications could be made to some of the administration, teacher's lounge and workspace to allow for the addition of a larger conference room and additional support space.

Issues and Needs:

- The school is on a small site
- No separation between park and school access
- Security and school site access should be studied
- No separation between parking area and drop-off
- The drop-off/pick-up process is challenging
- Student outdoor dining space is too small and directly adjacent to the play area
- Food service kitchen is too small
- Lack of student serving/dining options in inclement weather
- Drainage issues in the dining area
- Stepped performance area is right in the middle of the serving area, trip hazard
- Additional student restrooms are needed to comply with code
- Need more small group rooms and a large conference room
- Need student support spaces
- Too many unrestricted access points to the site
- Gates need upgrading to comply with current codes

Site Assets:

- Tight site, but is utilized well
- Access to park
- Permanent buildings are in good condition
- Learning spaces support District educational approach

SOLANA PACIFIC SCHOOL

3901 Townsgate
SAN DIEGO, CA 92130

7: School Site Analysis and Data - Solana Pacific School

Campus Overview

The Solana Pacific School is located on a 9.6 acre site in the Carmel Valley area of the City of San Diego, about a 3-4 minute drive from the Del Mar Heights interchange off interstate 5 and just a few blocks from Carmel Creek Elementary School. Multi-family residential units are located around the school to the east and south, with a public library to the north. A shopping center is directly across the street and the Carmel Valley Recreation and Community Center is down the street on Townsgate Dr. Carmel Valley Middle School, in the San Dieguito Union High School District, is less than a block away from Solana Pacific and could easily be connected to the site via an existing pedestrian pathway that runs behind the adjacent multi-family housing development that separates the two sites.

Solana Pacific is the District's newest school, opening in 2004. The school was designed for a K-6 grade configuration, with 4 kindergarten classrooms, but currently serves grades 5 and 6. Students attending the school transfer from either Solana Highlands or Carmel Creek, which serve grades K-4. The school is well suited for the higher elementary school grade levels as the site is on a busy street, making independent walking for younger children more challenging. The school has good facilities to support the arts, sciences, and technology, including a performance area that could also support community and District use. The school's proximity to the middle school and the public library assist in the older students' transition to middle school. Students use the public library after school for continued reading and study.

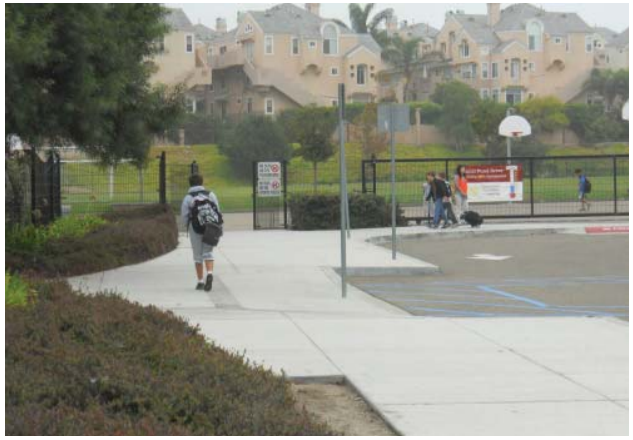
Based on the District Space Standards, the physical facility has the capacity for about 650-670 students for a K-6 school. In its current use, serving grades 5 and 6, the school has a capacity for about 620 students, using the kindergarten classrooms for before/after school CDC and training rooms. The school has a professional environment and adequate parking, allowing it to be used for a variety of District functions. Being the newest school, the classrooms and support spaces meet the District Space Standards, have lots of natural light, and meet current code requirements. The outdoor learning spaces and play fields allow for expanded educational opportunities.

Solana Pacific Site Data	
Current Grade Configuration:	5-6
Site Acreage:	9
Year Built:	2004
Permanent Classrooms:	33
Portable Classrooms:	0
Total Classrooms:	33
Average Classroom Size:	1245 sf
Capacity Based on Standards:	679/622*
2011/2012 Enrollment:	491
2015 Projected Enrollment:	401**

*Capacity shown for both K-6 and current grade configuration
**Based on the addition of School 7 configuration

7: School Site Analysis and Data - Solana Pacific School

7: School Site Analysis and Data - Solana Pacific School



Physical Features of the Site

The school site is located in Climate Zone 7, as are the other two school sites in Carmel Valley and close to the coast with mild temperatures and cooling breezes. The field is somewhat protected from winter winds by the hill rising above the back of the site about 7-9 feet, with 3-story residences separated by a high fence above. The site has shade trees located throughout the playground as well as in the front of the school and parking lot.

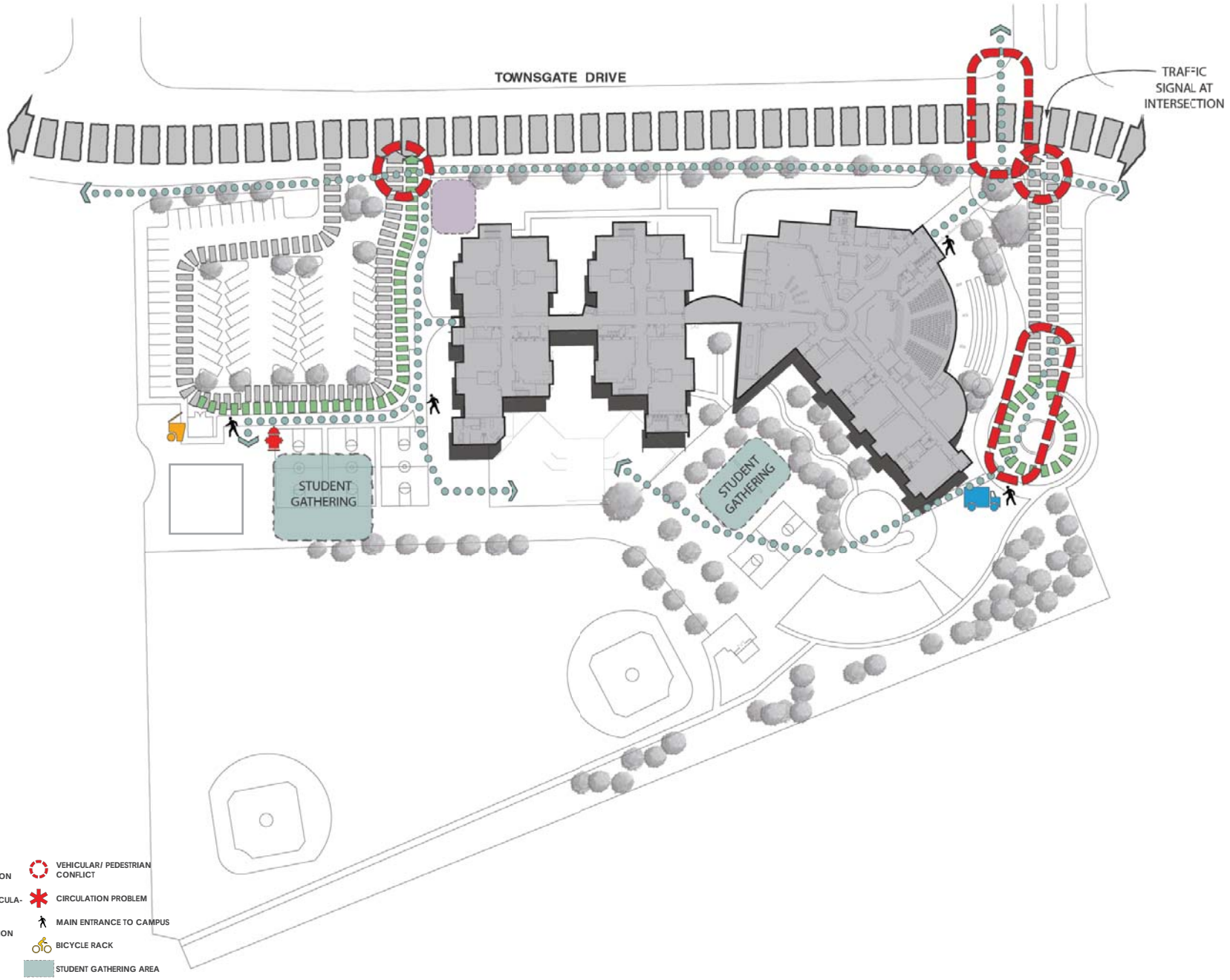
The school's main entrance is off of Townsgate Dr., which is a main access road to the shopping center across the street and other commercial and institutional developments further south. Most of the immediate surrounding residences are medium density multifamily units. The site is fairly secure, with most sides having fencing to control access, but not completely closed off to community access to the site. The south parking lot is not fenced in and a pathway has been made through the landscaping to the access road to the adjacent housing development south of the site. Some parents park on this access road to pick up students and continual student traffic has created this path over the divider. A retaining wall and a fence separates the north parking lot and turnaround from the library site.

The site is basically flat with little topographic elevation change on the field, hardscape playground or on the south parking lot, other than minimal grading to allow for storm water drainage. A gentle slope exists from the street level and sidewalk toward the front of the building structure. All areas of the site are accessible, including playground structure areas. Dining areas and most circulation paths are concrete for long-term durability.

The site has shaded outdoor tables for learning and small group work. Many of these areas include drought tolerant landscaping, with the only area of turf, other than the field, along Townsgate in front of the school. A tiered outdoor teaching area is located towards the back of the site by the student garden. A permanent storage building with water is placed adjacent to this to support the area. The turf play area includes 4 soccer fields and a ball diamond. Three full basketball courts are in a designated area, away from other types of play courts and ball walls.

About one half of the site is covered with turf and used by the community when school is not in session.

7: School Site Analysis and Data - Solana Pacific School



7: School Site Analysis and Data - Solana Pacific School

Site Circulation and Access

Parking: The school site has two separated parking areas. The parking lot on the north side of the site consists of 13 spaces and provides easy access to the main office for visitors or parents needing to access the administration office to meet with staff or pick up a child. It also provides accessible parking for performances in the multi-purpose room adjacent to the lot. The main staff parking lot south of the site has 67 spaces. Adequate parking is provided for staff and other training events that take place at the site. A 3 minute parking/loading zone is located in front of the school for student drop-off/pick-up.

Vehicular Circulation: The school has two separated points of access off of Townsgate Dr., which is beneficial. The main entrance to the school is located at a traffic light directly across from the shopping center entrance. This is primarily used for visitors or parents who are going to the administration area and accessible parking. The drive (which has a convenient turn around at the end) is a dedicated street, but has limited use other than to serve the school. The drive could also be used for easy kindergarten drop-off. The second site access is at the other side of the site and feeds into the main parking lot. This entrance can only be accessed from the east side of Townsgate when driving north, with a median divider and fence controlling both vehicular and pedestrian passage from the southbound side of the street. A separated entrance and exit provide access to the parking lot. This area is used for student drop-off/pick-up. The lot is large enough that the process seems to work well, with students being dropped off from cars on the sidewalk right by the playground entrance. Cars do back up along Townsgate during peak times, but generally traffic moves smoothly.

Service Access: Trash is collected in a corner of the parking lot, away from the entrance and only blocks traffic flow in the corner for the short time the trash is being collected. Food service deliveries are made from the south parking lot, which has a recessed area for trucks, close to the entrance to the kitchen. Other supplies are delivered either here or through the front office, depending on the type of delivery truck used. Some deliveries can also be made from the north parking lot through the gate to the kindergarten area.

Pedestrian Circulation: Many students walk to school with most coming along Townsgate. Staff is located at the main crosswalks to assist crossing. A pedestrian path is available at the southwest corner of the site that runs to the edge of the site and could allow easy access to the site if opened up with a controlled gate and staff supervision. Students gather in the playground or dining area before school. Since the students are older, fewer parents are on the site than at other schools. Flow into the school generally occurs at either the doors adjacent to the dining area or the connection corridor between the media center and the classrooms. Internal circulation flows easy with wide, naturally lit corridors and staircases.

7: School Site Analysis and Data - Solana Pacific School

7: School Site Analysis and Data - Solana Pacific School

Activity Zones and Site Utilization

The school has been zoned to provide areas of public use and more secure access with the multi-purpose/performance area, administration, and library on one side of the site, close to a parking area and academic spaces on the other side of the facility, close to staff parking. The outdoor play area is divided to allow for different types of play and activities, including areas for those students seeking quieter zones. Several types of ball games can occur at the same time since the types of courts are separated. Different types of play structures are also spread out across the site.

The dining area at the school seems to be the most successful of all the sites. Distributed shade structures allow for both light and breezes to enter the space. Round tables, rather than long tables with benches, provide for smaller groups and quieter dining. The kitchen is larger and the area for serving is open, preventing crowding and allowing easier flow. The area is also larger, with more space between tables, and is close to, but not in the flow of, outdoor play which occurs simultaneously. The school is serving a smaller population than capacity so this aids in the flow and ease of the serving and dining activities.

Some of the kindergarten rooms are used for an after school CDC program which flows both in the classrooms and the adjacent outdoor space. A small kitchen supports snacks and the CDC program. The large open windows work well for sight lines and supervision of students playing outside. The adjacent north drive and parking lot also assist in picking up students after school hours.

A pair of classrooms shares a small group room that provides computers for student use. All classrooms have alcoves for reading areas and classroom libraries. Special classrooms, such as art and science, are located within the academic classroom areas with easy access. The computer/technology lab is adjacent to the media center and close to the classrooms. A TV studio/production lab is provided by the media center. The music room is located in the public wing, adjacent to the multi-purpose building to support performances.

7: School Site Analysis and Data - Solana Pacific School

7: School Site Analysis and Data - Solana Pacific School

Considerations and Opportunities

Overview: Since the site is 7 years old, the school is in good condition. Spaces are accessible and code compliant. The school provides spacious and welcoming learning environments, both indoors and outside. Although the school is currently serving grades 5 and 6, it was designed and could serve a full K-6 or other grade configuration. Currently the enrollment is under the site capacity. The school does have a professional environment and could provide office and training space for District administrative staff, perhaps on the second floor, but it may be a missed opportunity to use prime learning environments that were specifically designed to support teaching and learning for reconfiguration into office space.

Issues and Needs:

- Water infiltration from the underground utility vaults into the electrical rooms
- Underutilized classroom space
- Access to roof
- Proximity to the Towncenter shopping center

Site Assets

- Adequate site size for elementary school
- Large play field with multiple fields for community use
- Special area classrooms (art, music, science, technology) designed specifically to support these areas of study
- Large performance venue to allow for student performances as well as staff training and community use
- Outdoor teaching area
- Larger kitchen and student dining area
- Larger administration with conference and support space
- Close to public library and Carmel Valley Recreation Center
- Close to middle school to facilitate student transition

.

DISTRICT OFFICE & CHILD DEVELOPMENT CENTER

309 N. Rios
Solana Beach, CA 92075

7: School Site Analysis and Data - District Office and CDC

Campus Overview

The District Office and the Child Development Center are located on the original school site for the District, just a few blocks from the coast, in the heart of downtown City of Solana Beach. Most historic records note that the original school was built in the 1920s and the District main office is housed in the original building. Buildings A, B, C, and D, which house both CDC and District functions, were built between the 1920s and 1950s. Other structures have been added on the 4.8 acre site, as needs have arisen. Currently, 13 permanent and portable structures are on the site, with additional small storage sheds and containers scattered around. The site includes a play field that is mostly used by the community and is the only public field in the downtown area.

All District offices are housed on this site, along with the school board meeting room, the central maintenance office and storage and food service, which has a limited central storage area. Functions are spread out on the site with most business offices located in Building E. Recently, a data center was added to the site to support District technology, along with an electrical infrastructure upgrade.

The CDC has 12 classrooms for a Pre-K child development center serving about 150 students between the ages of 18 months and 5 years of age. An infant program has been discussed for the site, but not added at this point. The program currently allows parents maximum flexibility in determining the days and hours their children attend. The administration offices for the program are housed in Building A.

Although the site is well maintained, the facility is challenged by its age, underground infrastructure, and extreme topography elevation changes that make accessibility and safe circulation, especially for young children, difficult. The site is located on valuable property, directly across from the train station parking lot and adjacent to an upscale housing development and a restaurant. Discussions in the city continue around developing the area along North Cedros. A variety of plans have been explored. Most recently, plans are being discussed that would create additional dining and shopping venues, as well as potential housing and parking in the area along Cedros, adjacent to the District property. This may give the District potential to use this site asset for an alternative use, other than its current functions, that could generate a revenue stream in the future.

DO & CDC Site Data	
Current Grade Configuration:	18 mo. - 5 yrs.
Site Acreage:	4.8
Year Built:	1925
Permanent Classrooms:	7
Portable Classrooms:	4 + 1 support
Total Classrooms:	11 + 1 support
Average Classroom Size:	960 sf
Capacity Based on Standards:	171*
2011/2012 Enrollment:	150
2015 Projected Enrollment:	N/A**

**Capacity shown for both K-6 and current grade configuration*
***Based on the addition of School 7 configuration*

7: School Site Analysis and Data - District Office and CDC

7: School Site Analysis and Data - District Office and CDC

Physical Features of the Site

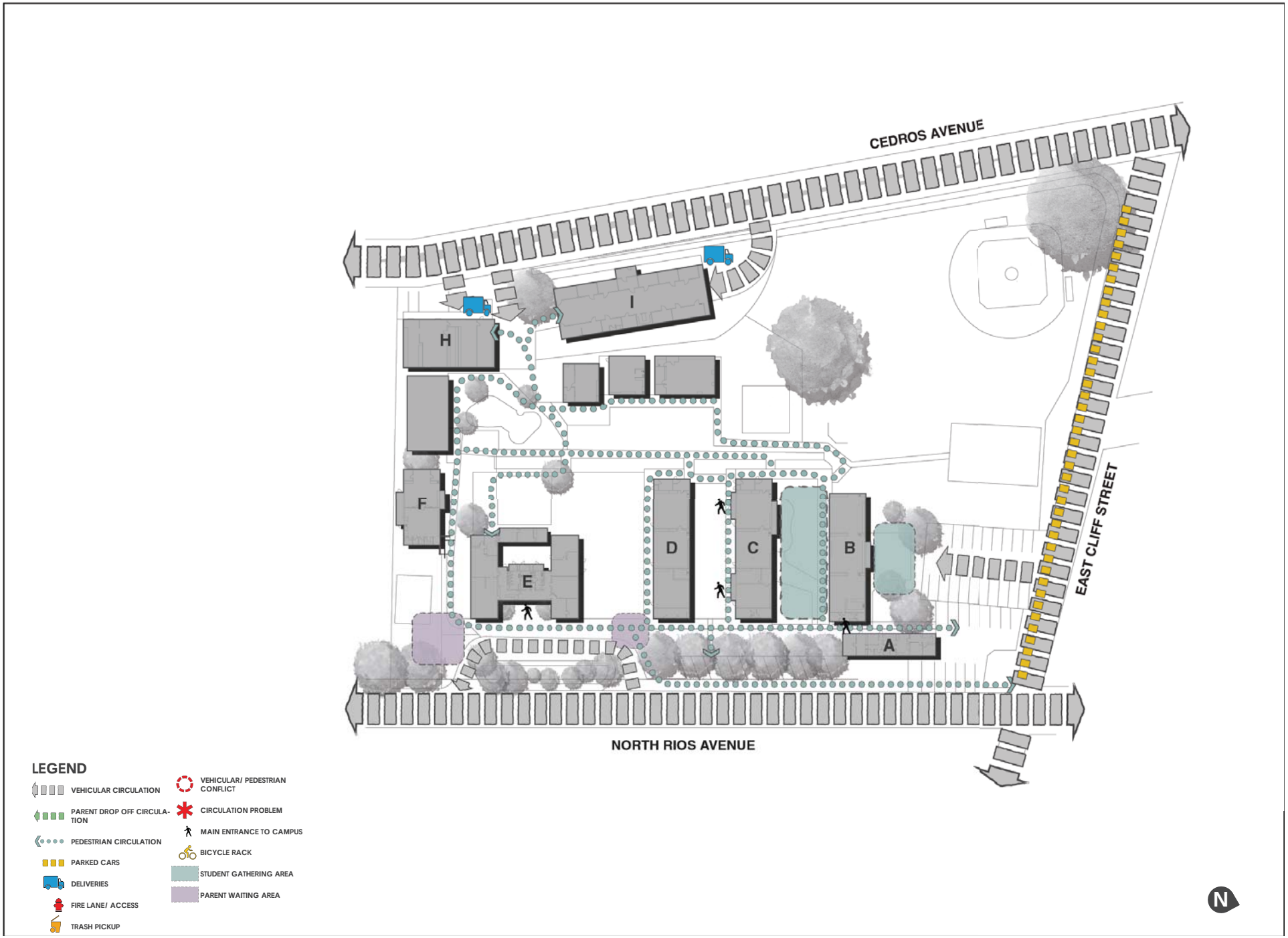
The site is in Climate Zone 7. With its proximity to the coast, the site has a temperate climate, with cooling breezes and moderate heat. Natural cooling and ventilation should be easy, except that the train station is close and has loud horn exposure at certain times. Large torrey pines are on the east side of the site by the parking area on North Rios Ave. A few other shade trees are on the lower portion of the site. The District has recently replaced the ice plant on all the slopes with drought tolerant plants to eliminate problems with rodents and reduce water usage.

The site faces single family residences across the street on Rios and East Cliff. A gallery is located on the corner of Rios and N. Cedros, directly adjacent to the ball diamond. A multi-family condominium complex is located directly to the south of the site, with Claire's restaurant next to the storage building on N. Cedros. North Rios Ave. is a quiet street with little traffic and no curbs or gutters. Head-in parking is located on the street adjacent to the school.

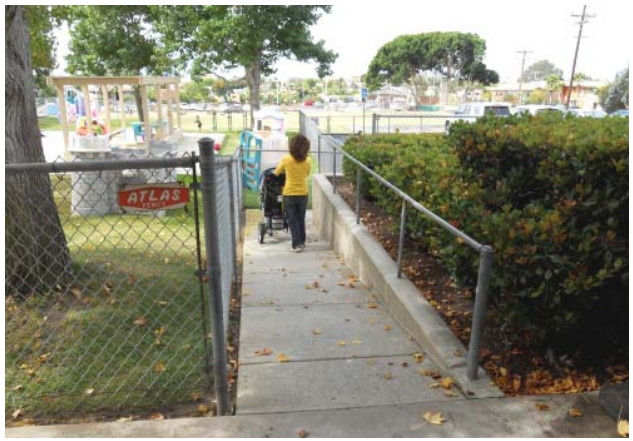
The site is challenged by extreme elevation change in the topography. Two separate levels are on the site, with the west side of the site being about 12-15 feet lower than the east side of the site. These two areas are shown as level 0 and level 1 on the site plan. The street level of Rios is also about 4-6 feet higher than the level of the buildings along that street, depending on the exact location of the site. This is referenced as level 2 on the site plan. Smaller elevation changes exist within each level. All of these elevation changes have a steep set of stairs or extensive ramping to circulate between levels, making the site non-compliant with accessibility requirements and challenging for site circulation.

Site drainage generally runs from the higher level to the lower. An exposed storm water trench runs between the stairs and the lower play area that must be crossed to access the lower classrooms or play areas. Water ponding also occurs on some of the preschool play areas between the buildings on level 1.

7: School Site Analysis and Data - District Office and CDC



7: School Site Analysis and Data - District Office and CDC



Site Circulation and Access

Parking: The site has about 26 parking spaces in the on-site lots, with about 12-13 head in spaces on the street. About 5 parallel parking spaces are along the access drive in front of the main District office. A few reserved spots are in front of the storage building and adjacent to the maintenance barn for the maintenance staff. The need for parking at the site varies depending on District functions throughout the day. Often times, when there are District meetings with staff from the sites, there is a lack of parking, with little options other than parking in the train station parking lot. Some people also park along East Cliff St.

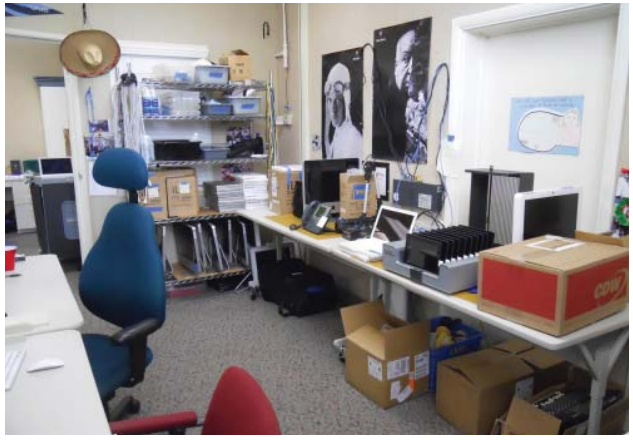
Vehicular Circulation: Relatively little vehicular traffic is on the site except for pulling in the 200 ft one-way drive in front of the District office, which loops slightly down to the original building for access. The parking lots on the north side of the site are relatively small with in-and-out access on East Clift St. Most parents park their car in the head-in parking on North Rios Ave. or along the front driveway loop to bring children to the classrooms. Since there are multiple classroom locations and parking areas, and particularly since all children are not being dropped off at the same time, the drop-off and pick-up process is not too bad at this site except at 9:00 am, despite the limited parking space.

Service Access: Trash and delivery access, including food products, is off of N. Cedros since the buildings are located close to the road. Emergency access is more limited due to the elevation level changes and limited access to the center of the site. A fire lane runs along the main drive in front of the District main office. Access could be provided to the field and closer to the CDC classrooms in the center of the site if vehicular access gates were added to the asphalt area off of East Cliff St.

Pedestrian Circulation: Pedestrian circulation is challenging throughout the site due to both the elevation changes and the locked gates in all areas, requiring time consuming manipulation to both unlock and relock the access. While the intent of controlling children's access and range is important, the gates are not code compliant and could present an issue in case of the need for emergency exiting. A direct sidewalk runs from the north parking lot to both the CDC office and the District main office, with minimal slope changes, but it does not meet accessibility regulations nor does the path go down to the lower classrooms from the parking lot. Most circulation on site requires the navigation of steps, sloped grass, or ramps.

7: School Site Analysis and Data - District Office and CDC

7: School Site Analysis and Data - District Office and CDC



Activity Zones and Site Utilization

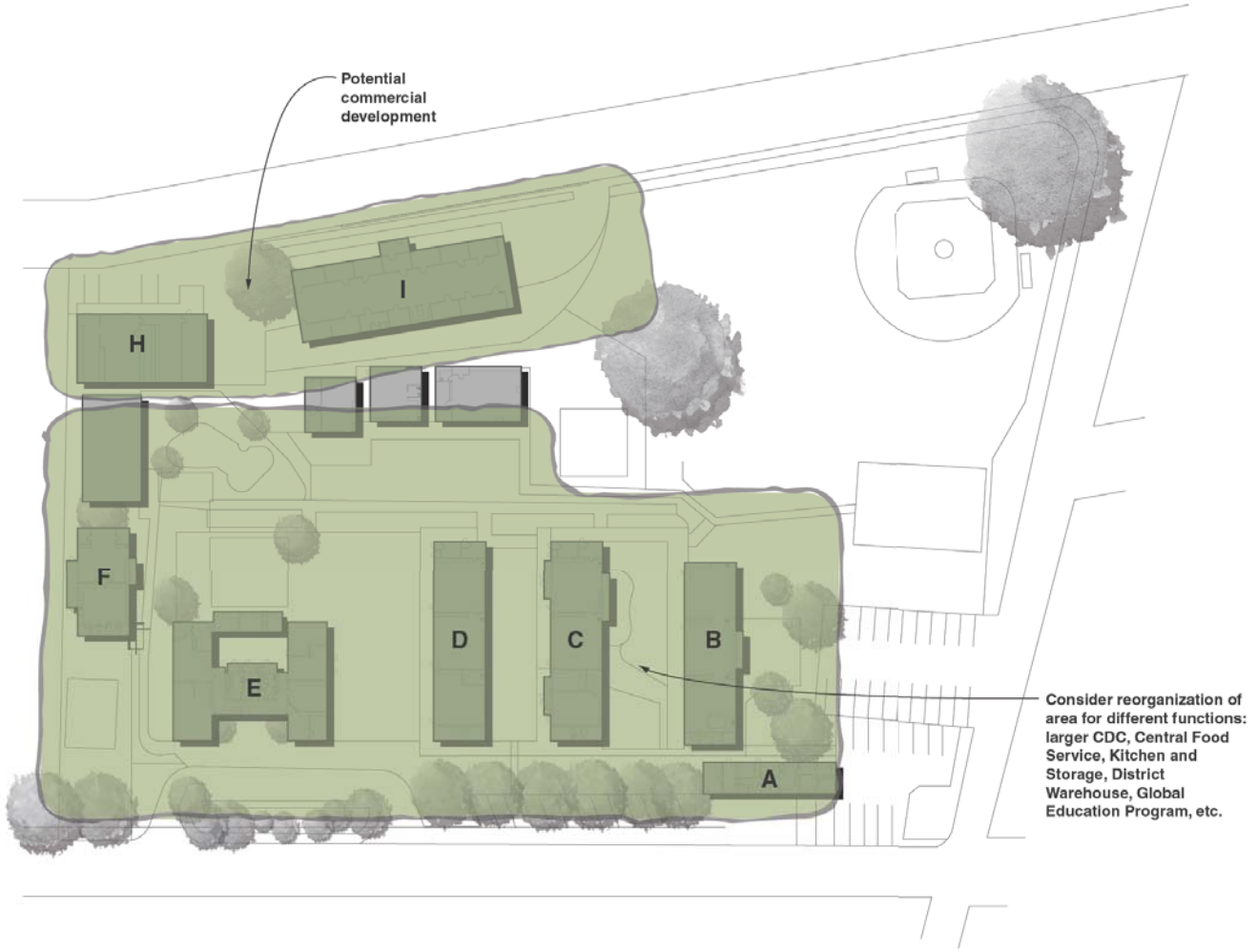
The District Office functions are distributed between the main office buildings, support offices, and the board meeting room located in CDC classroom buildings C and D. Circulation between these spaces is fairly easy, however, adult restrooms are not easily accessed during Board meetings or evening events.

District storage, including records, textbooks, and food service, is located below on level 1, off of N. Cedros and is adjacent to the maintenance building, which is a re-erected barn received by a donation. These two buildings are a little difficult to access from the main office and direct interaction of staff in this area is limited. A portable structure behind the main District office building is used for copying, employee photo badges, and staff lunch room. This entire area seems underutilized.

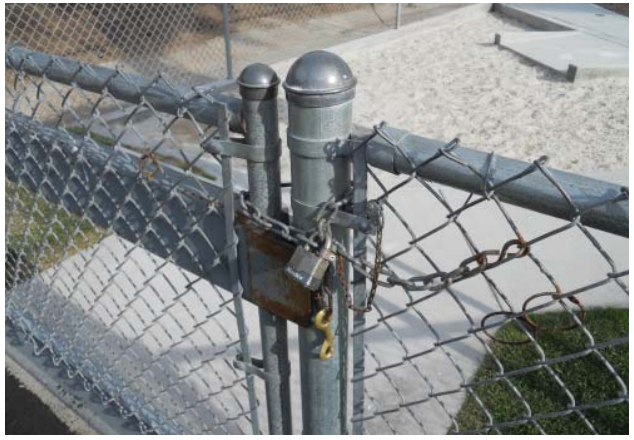
The CDC, however, has functions spread out over a large area for the enrollment of 150 students. Walking between the classrooms or providing consolidated services to each of the classrooms is not easy. In addition, not all classrooms have direct access to a main classroom entrance or a restroom, requiring passage though some of the other classrooms or through a restroom for exiting. Age-appropriate play areas and storage units have been created close to all classrooms for ease of use, except for navigation to the larger play field. The CDC office is in a fairly convenient location for parent or visitor access but is remote from many of the classrooms on the lower level of the site.

While both the CDC and the District office seem to function well on the same site, the potential of the site, with direct access to three streets and a central location in the community, may not be currently maximized due to the elevation changes and the age, location, and structure of the original buildings. Although the site is too small for a K-6 school, the frontage on North Rios Ave. and access on East Cliff could allow for other options if facilities were redeveloped and consolidated, working with the elevation grades in the design to provide more accessibility.

7: School Site Analysis and Data - District Office and CDC



7: School Site Analysis and Data - District Office and CDC



Considerations and Opportunities

Overview: As the oldest site in the District and with extreme topographic elevation changes, the District Office and CDC site on North Rios Ave. has the greatest need of updating the campus facility. The site also has great potential for redevelopment for other uses which could provide a future revenue stream. Initial analysis of the site, by Civic Enterprises, outlined a variety of potential uses. The most realistic option was using about an acre of the site along Cedros Ave. where the maintenance barn and storage building are currently located for a long-term ground lease for commercial use. This would most likely be supported by the City of Solana Beach and could work in conjunction with existing plans to develop that area along North Cedros Ave.

This site, while too small to support a full 500-600 student elementary school, could continue to provide facilities for some or perhaps all of the following District functions: District offices, a central prep kitchen and food storage facility to support the campuses, maintenance storage and operations, a board office, a Pre-K child development center with an expanded capacity, the Global Education Program, or other specialty programs on the east side of the site. The site could still retain the play field and a 1 acre area on North Cedros to lease for commercial development.

Issues and Needs:

- Topographic elevation change
- Site circulation does not comply with accessibility regulations
- Safe circulation and gates should be addressed
- Tree roots and slope conditions, damaged asphalt
- Infrastructure needs updating
- Classrooms and restrooms need modernization
- Need for a central preparation kitchen/storage
- CDC is distributed over two different levels
- DO functions are distributed across multiple buildings
- Site could provide better square footage usage than current layout

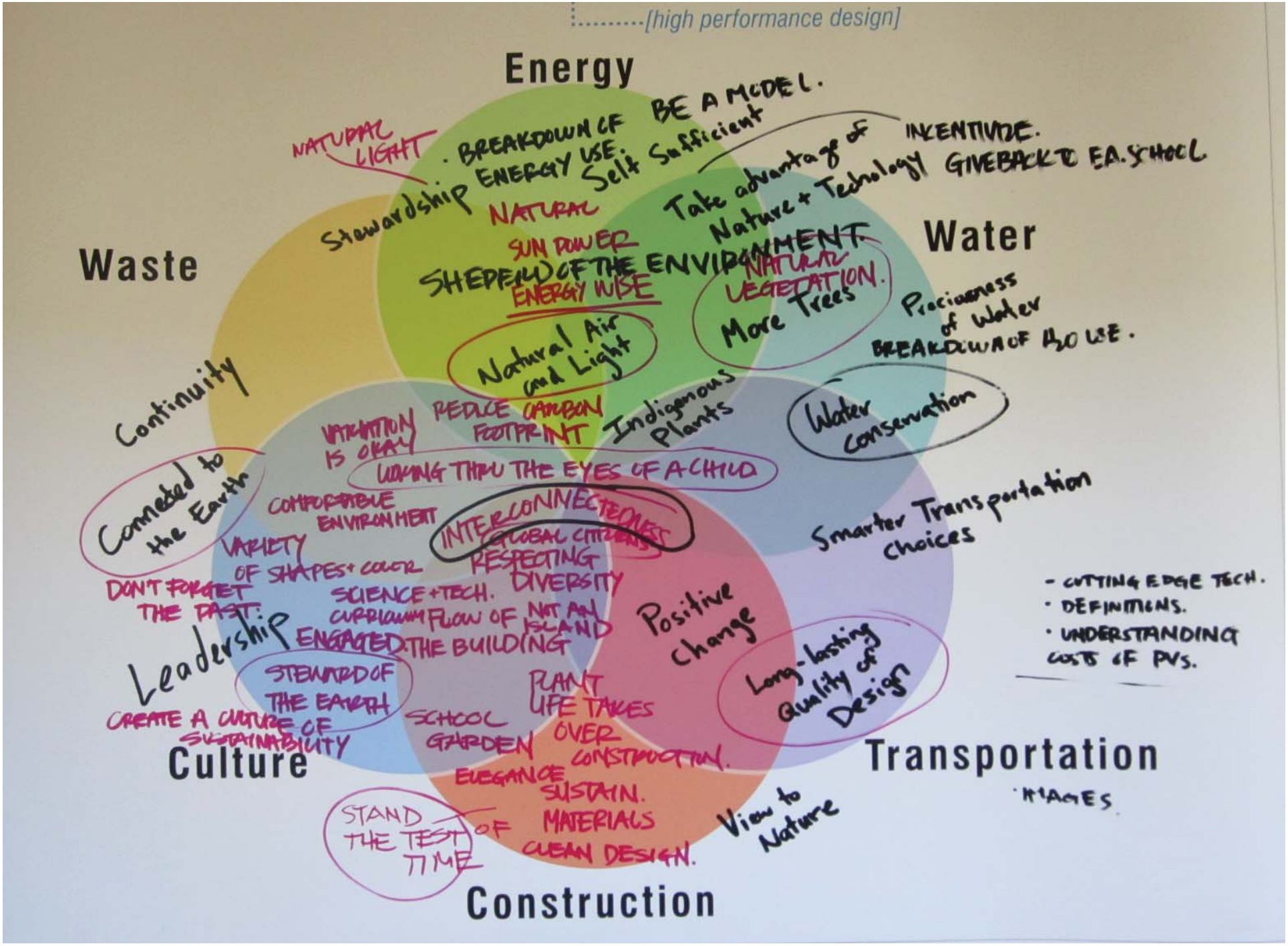
Site Assets:

- Prime location downtown
- Access to 3 streets
- Play field
- Close to ocean for optimal weather conditions


ZONE

8: Sustainability Opportunities

8: Sustainability Opportunities



8: Sustainability Opportunities

Commitment to Sustainability

From the outset of the master planning process, the District's intent is to develop a comprehensive master plan which reflects the District's goal to address sustainability at all levels. This intent is reflected in many of the District's Guiding Principles. While the District may not have initial funds to make facility modifications right away, District leadership did recognize that there are probably multiple opportunities for behavioral, operational, and programmatic modifications that could be made to current practices that could lead to a reduced carbon footprint as well as potential operational cost savings. The District also wants to be a participatory partner with their communities in the dedicated local efforts to maintain a sustainable and positive environment for the region. This section of the master plan identifies a variety of opportunities that can be implemented immediately, as well as strategies that can be incorporated into school sites over the next 5-10 years. The intent of the sustainable conversations and identified sustainability opportunities and strategies is to set the stage to develop definitive initiatives that will promote a culture of sustainability among everyone and allow the District to become a leader in responsible stewardship of all resources.

Process for Identifying Sustainability Opportunities

To launch the sustainability planning process, the second Facility Master Plan Committee (FMPC) worksession was dedicated to the topic of sustainability. This worksession was designed to provide a forum for committee members to voice their vision and goals for sustainability, and to work collaboratively to develop potential opportunities and strategies to serve as a starting point to guide the integration of green practices into District environments, operations, and culture. As a foundation for the workshop, HMC Architects/School Advisors collected existing conditions data on each of the District's sites to review with worksession participants for a common environmental context and to use as a reference to analyze potential sustainable strategies for each site.

The worksession was divided into three parts. In part 1, participants visually and verbally described their personal ideas for a sustainable and greener world and discussed what the vision for the District might be. Committee members were asked to share their sustainable aspirations for the Solana Beach School District community through inspirational imagery. These images were collected in advance, and provided for viewing at the worksession. As images appeared on the screen, participants were asked to share their thoughts, reactions, and vision for sustainability, both on a personal level and on a District level. The ideas were dynamically recorded on a series of graphs and bubble diagrams for later reference in the workshop. The following pages are examples of the images shared by participants.

Part 2 of the worksession consisted of an overview of the existing environmental conditions and an initial analysis of past energy use for the last 3 years on each of the District sites. An overview of various different sustainability strategies in the areas of energy, water, and waste savings were presented. In part 3, the committee worked in smaller groups to develop both sustainability goals for the District and potential strategies in six different areas (Energy, Water, Waste, Transportation, Culture and Construction) to reach those goals. These goals and strategies were then shared with the entire group and culminated in identifying a list of goals and strategies for the District.

Based on the sustainability goals and strategies developed by the committee, HMC/School Advisors and consultants analyzed general District strategies along with existing site conditions and identified specific sustainable opportunities for each site.

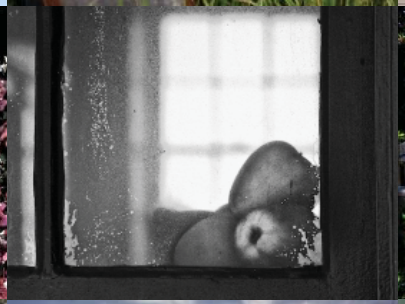
In the third FMPC worksession, lists of these specific site opportunities, as well as the District-wide goals identified in the first worksession, were shared with the committee. Groups divided by sites and identified some of the low-costs strategies that each site would like to start implementing as part of the following years site-strategic plan. Site teams were then charged with outlining a detailed plan to implement these initiatives. Many of the opportunities identified related to ways to change or improve behavior or operational functions such as strongly encouraging carpooling or "walking school bus" options and to further develop procedures for recycling on site.

8: Sustainability Opportunities



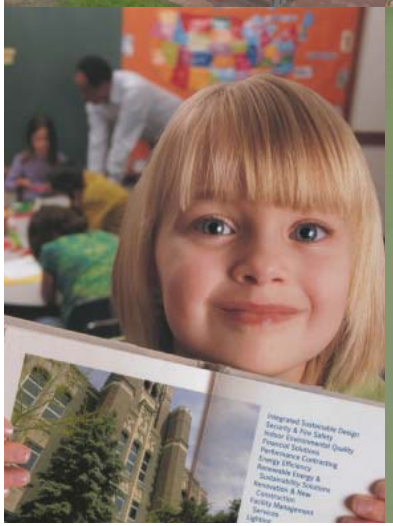

















8: Sustainability Opportunities



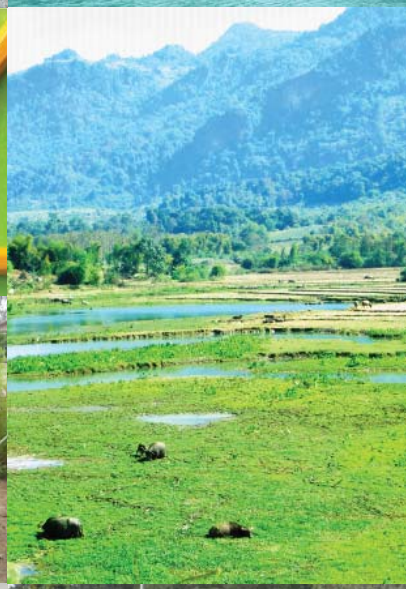
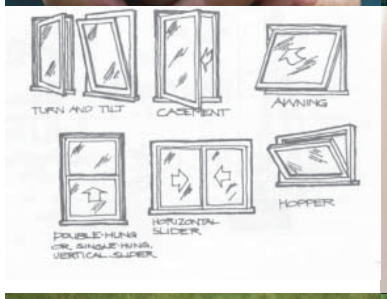








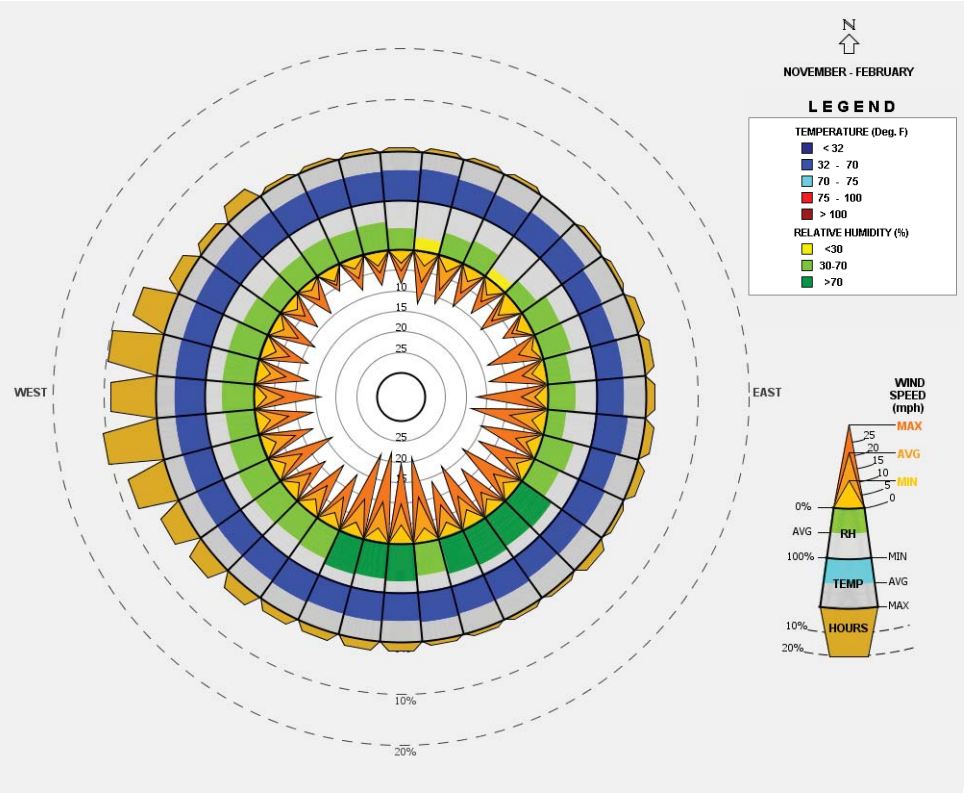


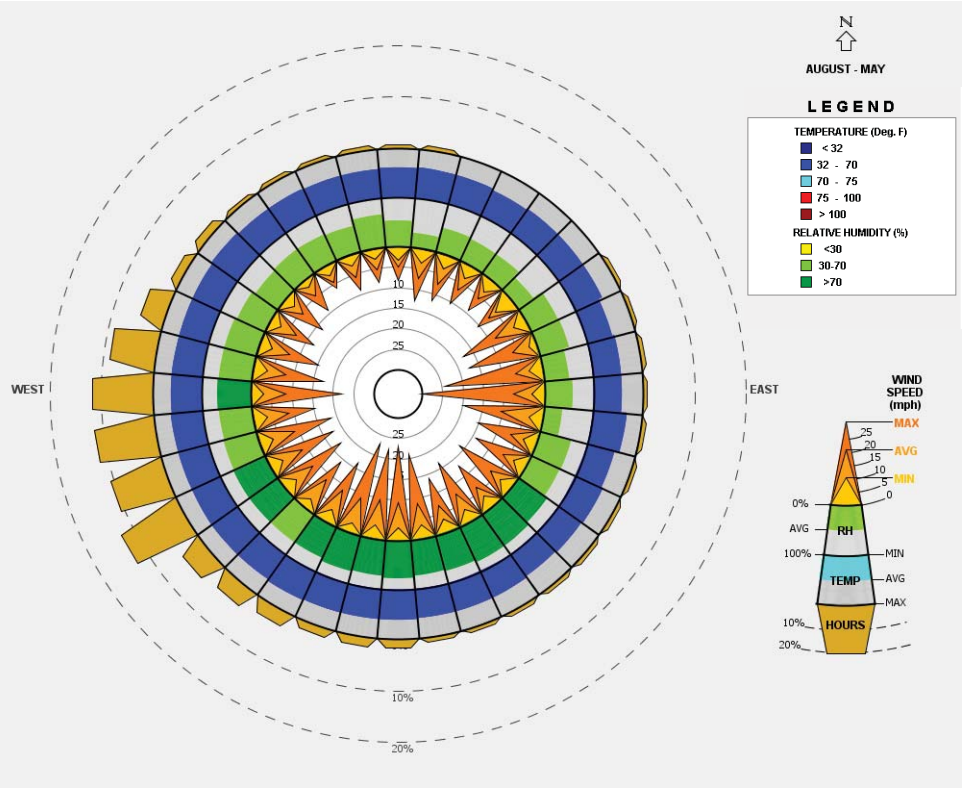





8: Sustainability Opportunities



Group 1: Winter Wind Chart



Group 2: Summer Wind Chart

8: Sustainability Opportunities

Existing Environmental Conditions

Solana Beach School District's schools are all located in Climate Zone 7. Climate Zone 7 is the southernmost coastal region of California. The warm ocean water and latitude make this climate mild. The temperature of the ocean water affects the air temperature over it, and this in turn moderates temperatures over the coastal strip. The weather in the summer is warm and comfortable, and hot enough that mechanical cooling is necessary on some days. However, daily high fogs naturally cool the area at night. The winters are cool and heating is necessary.

Although all of the District sites and campuses are located in Climate Zone 7, there are two distinct areas in this zone. Group 1 consists of Carmel Creek, Skyline, Solana Highlands, Solana Pacific, Solana Vista, the District Office, the Maintenance and Operations Building and the Child Development Center. The weather data for Group 1 was derived from the Carlsbad-Palomar weather station which is climatically and geographically the most similar. Group 2 is located further inland and consists of Solana Santa Fe. The weather data for Group 2 was derived from the Miramar weather station.

Weather data was imported into Climate Consultant v5.2 software and was graphed within a series of climatic charts.

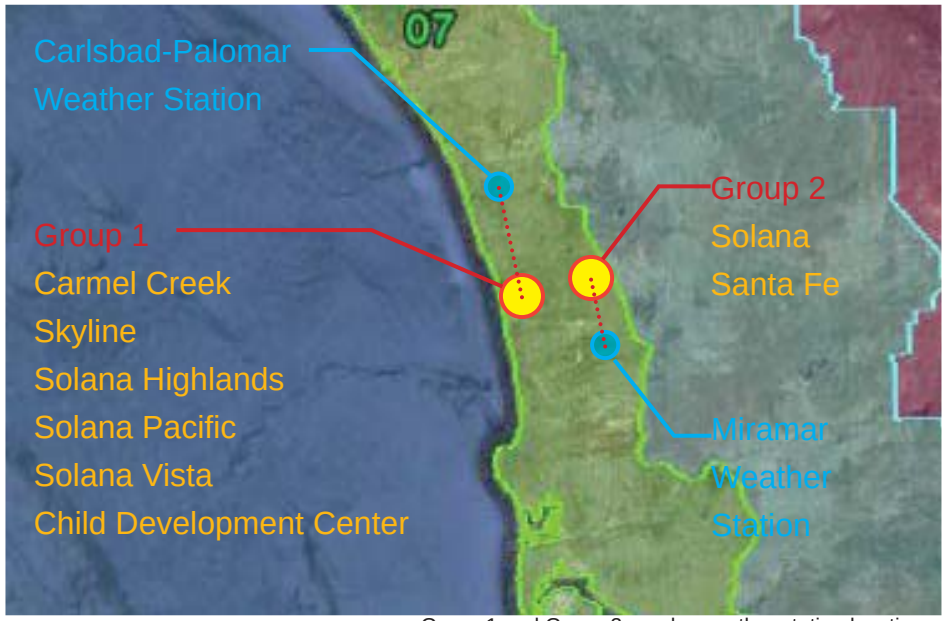
16 California Climate Zones

Environmental Analysis: Group 1 School Sites

Wind Rose Charts

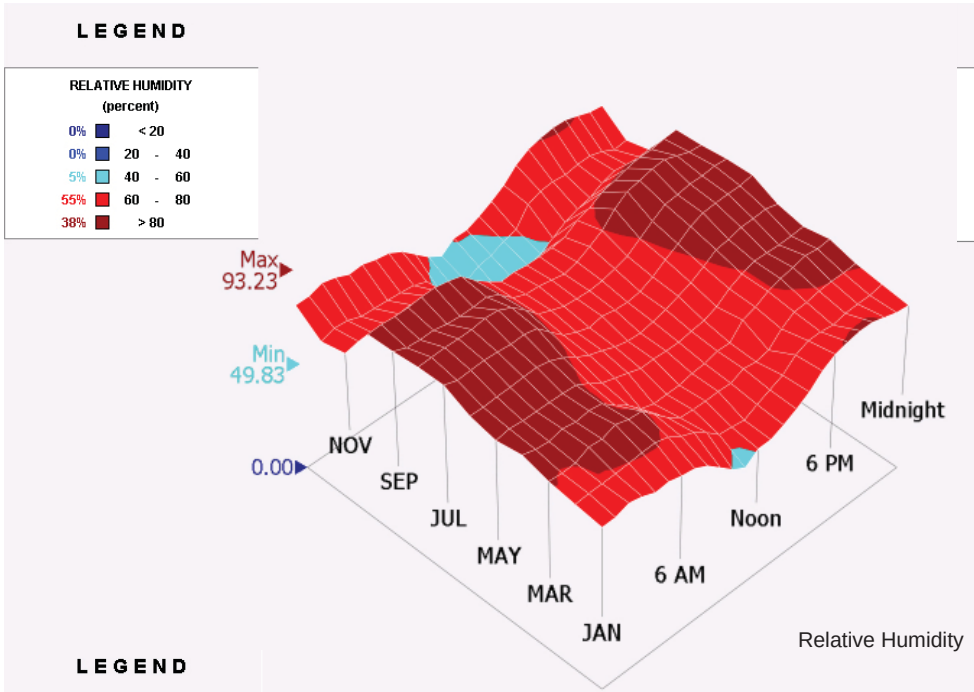
The wind rose charts illustrate wind frequency, temperature, humidity, and direction for the summer and winter months. During the summer, winds primarily come from the west and southwest, across the ocean, within a range of 5-10 miles per hour, with gusts that increase as high as 20 miles per hour. These winds are within a range of 30-70% relative humidity and are between 32-70 degrees Fahrenheit.

During the Fall, Santa Ana winds from the east can create gusts of wind as high as 25 miles per hour. During the winter, winds primarily come from the west within a range of 5-7 miles per hour with wind gusts as high as 20 miles per hour, however, these are less frequent. The relative humidity is between 30-70% and the average temperature of these winds is between 32-70 degrees Fahrenheit.

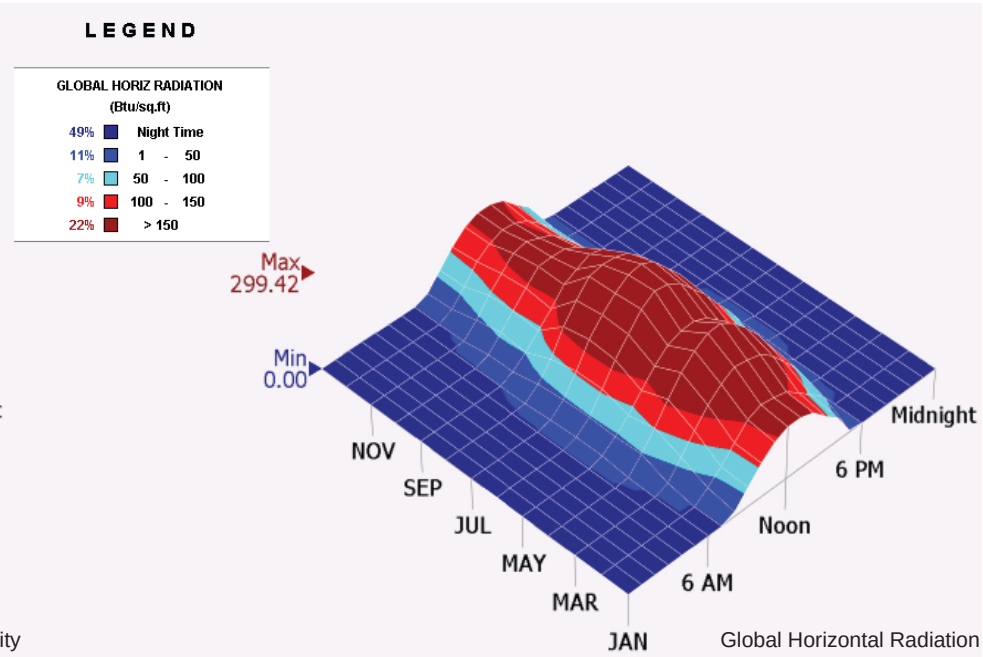


Group 1 and Group 2 nearby weather station locations

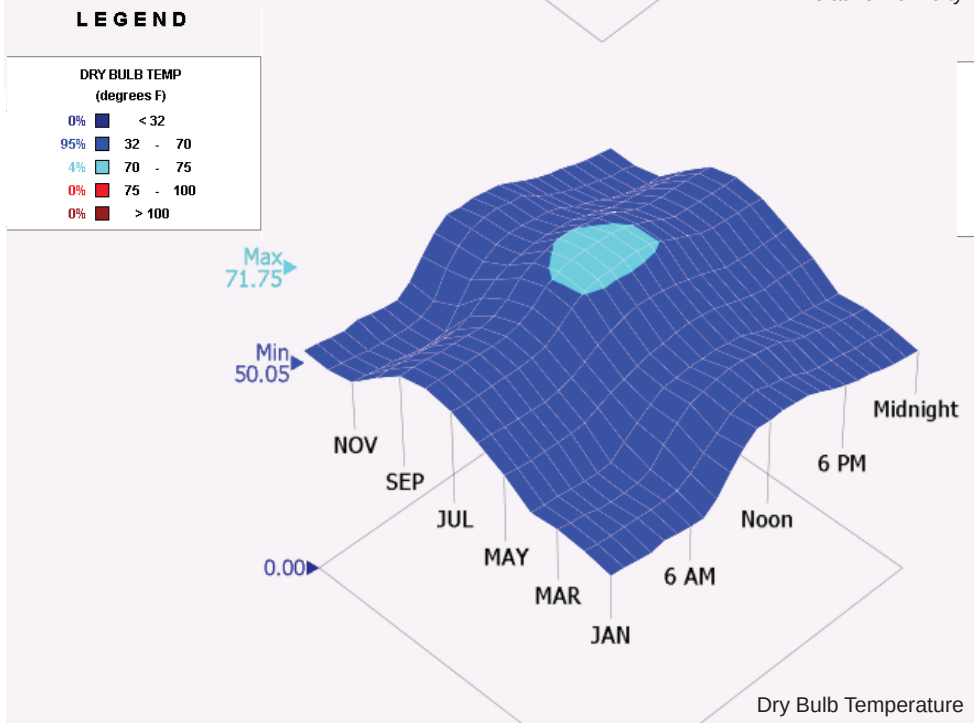
8: Sustainability Opportunities



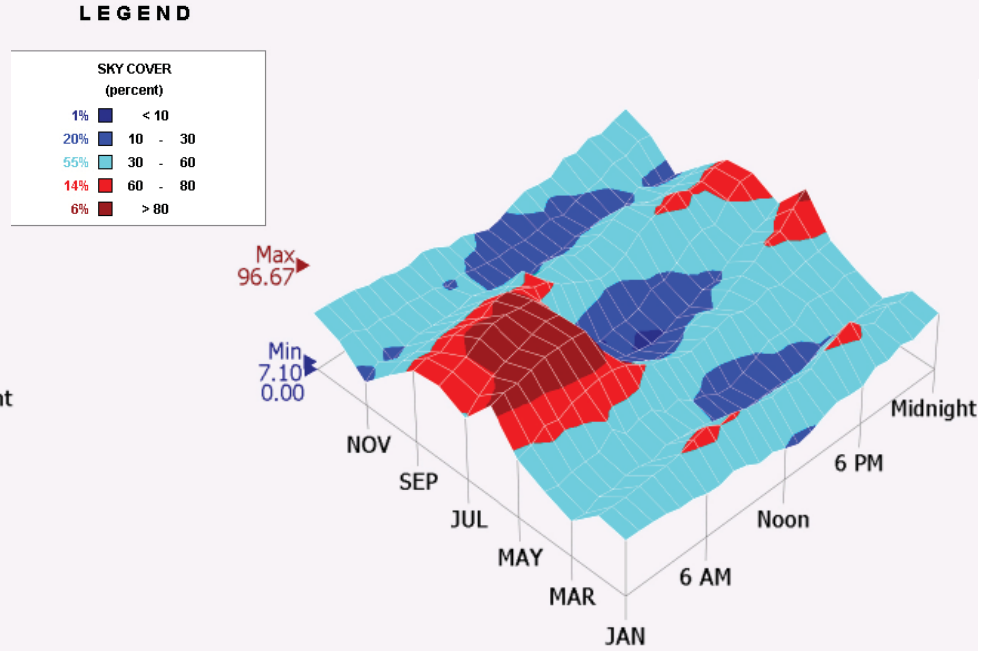
Relative Humidity



Global Horizontal Radiation



Dry Bulb Temperature



Sky Cover

8: Sustainability Opportunities

Relative Humidity

Group 1 school sites are in close proximity to the ocean and therefore are characterized by high moisture levels in the air. About 55% of the year, there is a 60-80% relative humidity level. An additional 38% of the year, the humidity levels are 80% or higher. A drier period occurs in September to November, when the relative humidity percentage drops to about 50%. The morning hours between November and March experience humidity levels greater than 60%. This humidity level decreases to 30-60% during the noon to afternoon hours and then increases again during the evening hours. The most arid time of year occurs in November and December when humidity levels are between 40-60% during the noon hour. These overall high humidity levels indicate that corrosion of metal materials should be considered when specified for any of the schools' mechanical equipment or exterior materials.

Global Horizon Radiation

Global Horizontal Radiation is the sum of direct, diffuse, and ground-reflected radiation on a horizontal plane. Often GHR is identified with total solar radiation. The amount of solar radiation affecting the ground surface peaks at 299.42 near the noon hour. This number is fairly consistent with most of southern California. About 22% of the year, the global radiation level is greater than 150 kBtu/sf. This data aids in identifying what times of day are the most impacted by solar exposure, and how the built environment may respond. For example, on colder days when solar radiation is available (generally between 10 am and 2 pm), it should be optimized so that the energy from the sun is invited into spaces to light and warm them passively. This would, in effect, reduce the need to mechanically heat spaces, and thus would reduce energy use and associated costs. Solar radiation could also be used to optimize renewable systems such as photovoltaics. The global radiation diagram also indicates that the greatest potential to produce solar energy through a renewable system such as photovoltaics would be between January and September from 10 am to 2 pm.

Sky Cover

Sky cover occurs for most of the year, within the 30-60% range for most of the day, with a break near the noon hour. During the morning hours of the summer and early fall months, sky cover increases to about 96%.

Dry Bulb Temperature

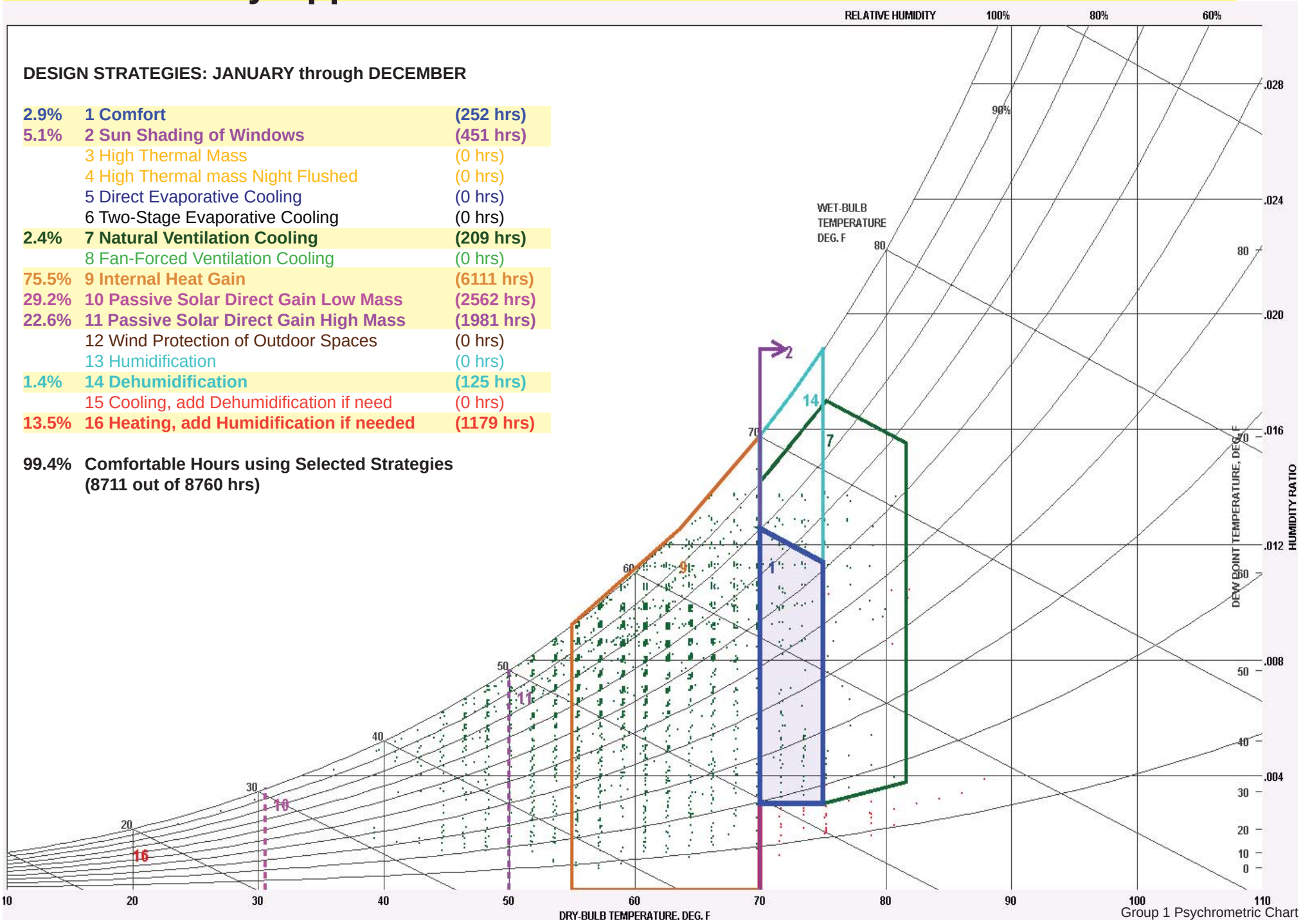
For 95% of the year, the dry bulb temperature is between 50- 70 degrees Fahrenheit. The temperature is above 70 degrees only 5% of the year. This data validates the greater need for heating in this region. This is explained further on the following pages.

8: Sustainability Opportunities

DESIGN STRATEGIES: JANUARY through DECEMBER

2.9%	1 Comfort	(252 hrs)
5.1%	2 Sun Shading of Windows	(451 hrs)
	3 High Thermal Mass	(0 hrs)
	4 High Thermal mass Night Flushed	(0 hrs)
	5 Direct Evaporative Cooling	(0 hrs)
	6 Two-Stage Evaporative Cooling	(0 hrs)
2.4%	7 Natural Ventilation Cooling	(209 hrs)
	8 Fan-Forced Ventilation Cooling	(0 hrs)
75.5%	9 Internal Heat Gain	(6111 hrs)
29.2%	10 Passive Solar Direct Gain Low Mass	(2562 hrs)
22.6%	11 Passive Solar Direct Gain High Mass	(1981 hrs)
	12 Wind Protection of Outdoor Spaces	(0 hrs)
	13 Humidification	(0 hrs)
1.4%	14 Dehumidification	(125 hrs)
	15 Cooling, add Dehumidification if need	(0 hrs)
13.5%	16 Heating, add Humidification if needed	(1179 hrs)

99.4% Comfortable Hours using Selected Strategies (8711 out of 8760 hrs)

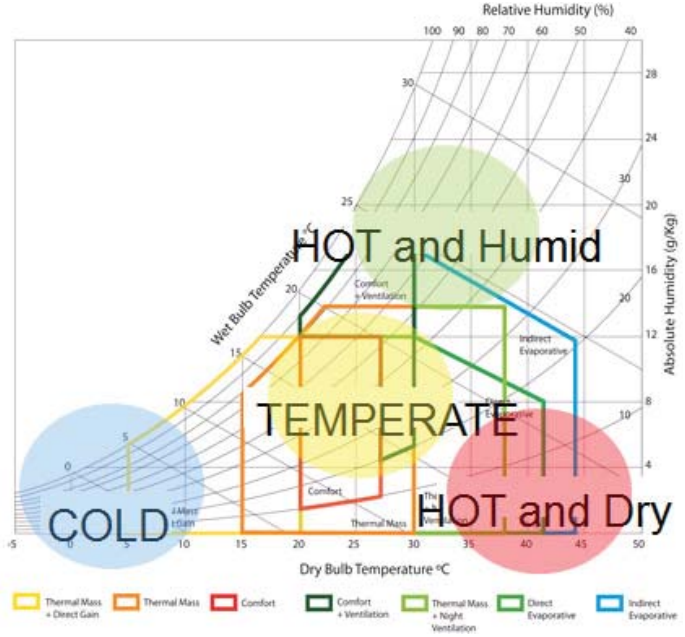


Group 1 Psychrometric Chart

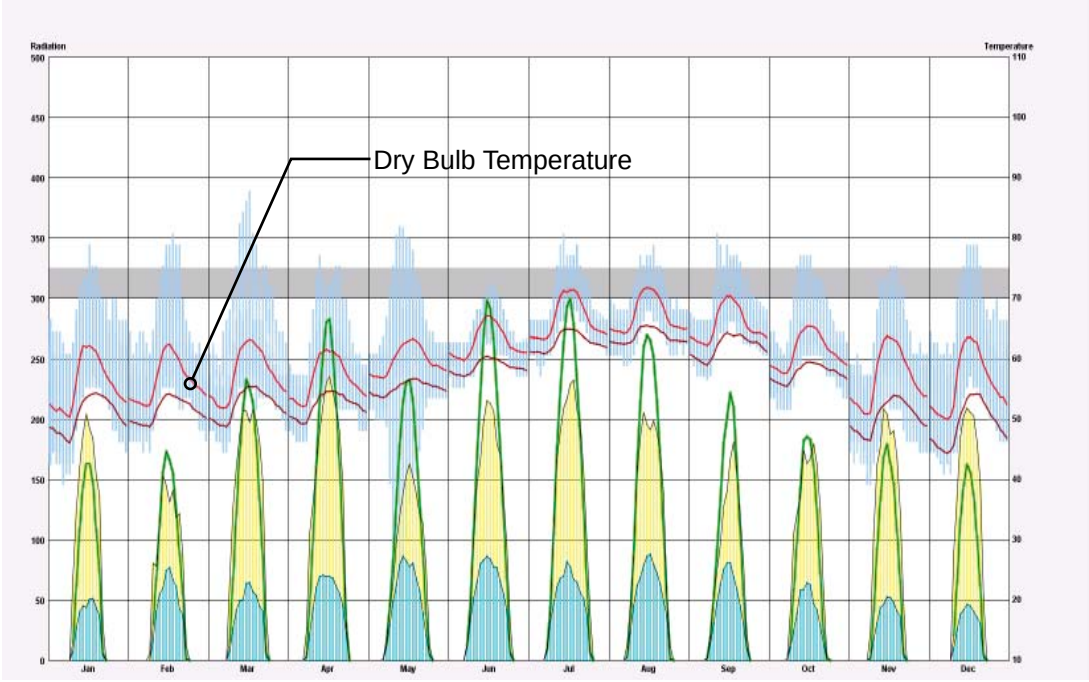
8: Sustainability Opportunities

Thermal comfort is a result of the combined effects of solar radiation, temperature, air movement, and relative humidity. The comfort zone indicates that most of the year (95% of the time), the temperature is below the comfort zone which is shown on the Comfort Zone Chart Diagram by the grey bar. During the summer months, temperatures are approximately 5-10 degrees lower than the comfort zone, and would be best mitigated by passive cooling strategies to achieve thermal comfort. Similarly, during the winter, temperatures are approximately 10-15 degrees lower than the comfort zone and would be best mitigated by employing passive heating strategies which are supplemented by mechanical heating. The high average temperature recorded for this area is 71-75 degrees which is near noon and the low temperature is 50 degrees which is during the evening hours.

Group 1 weather data was also graphed within a psychrometric chart. The chart lists effective potential design strategies specific to the project site climate conditions. Results of this analysis indicate that there is a higher demand for heating than cooling. All hours in an average year are represented by the green points within the psychrometric chart. The majority of these points are located in the moderate temperature zone. In order to capture as many green points as possible, it is necessary to identify passive solar and active systems strategies which have the most effect. The psychrometric chart reveals that the passive cooling strategies, such as natural ventilation and sun shading, would prove to be the most effective in order to mitigate heat gain during the summer months. Thermal mass and direct solar gain would aid to warm the buildings during the cooler times of the year. By preventing heat loss through the use of a tighter building envelope with good insulation and low E glass will also prove effective during the winter months. Mechanical heating, however, will still be required during some times of the year in order to provide thermal comfort.

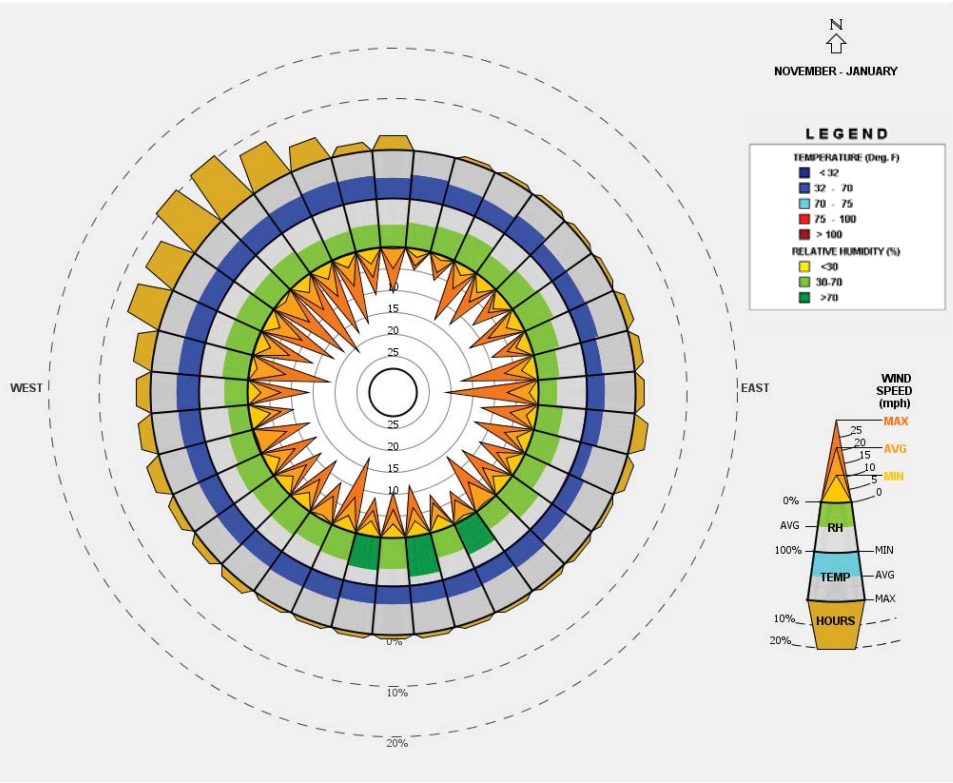


Pychrometric Chart legend

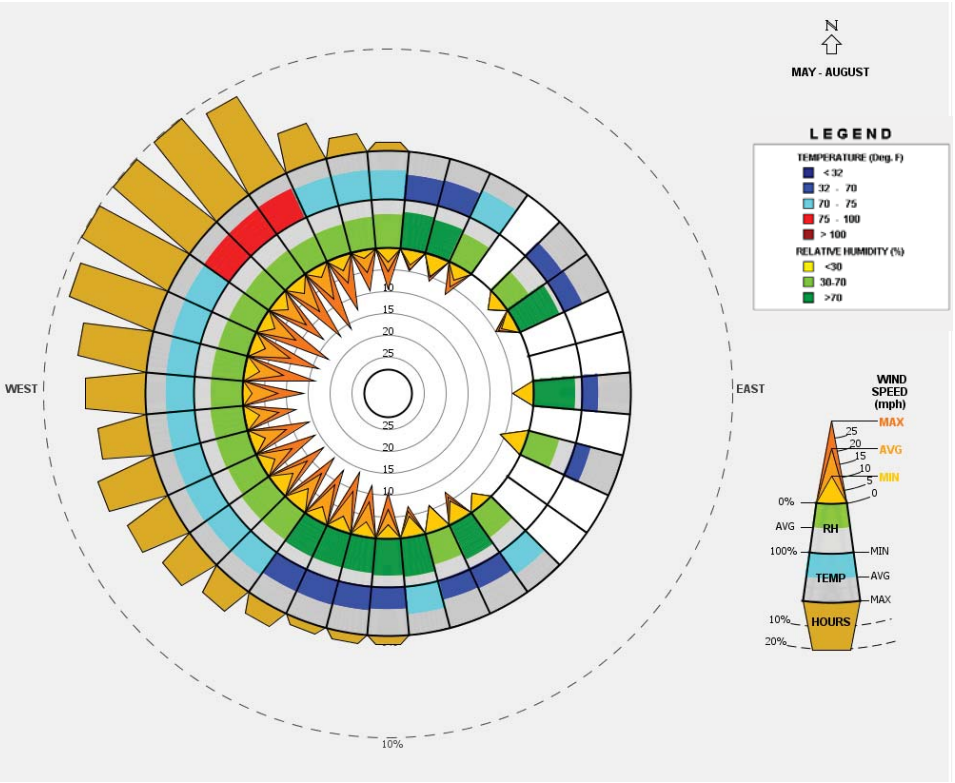


Group 1 Comfort Zone Chart

8: Sustainability Opportunities



Group 2: Winter Wind Chart



Group 2: Summer Wind Chart

8: Sustainability Opportunities

Environmental Analysis: Group 2 -Solana Santa Fe

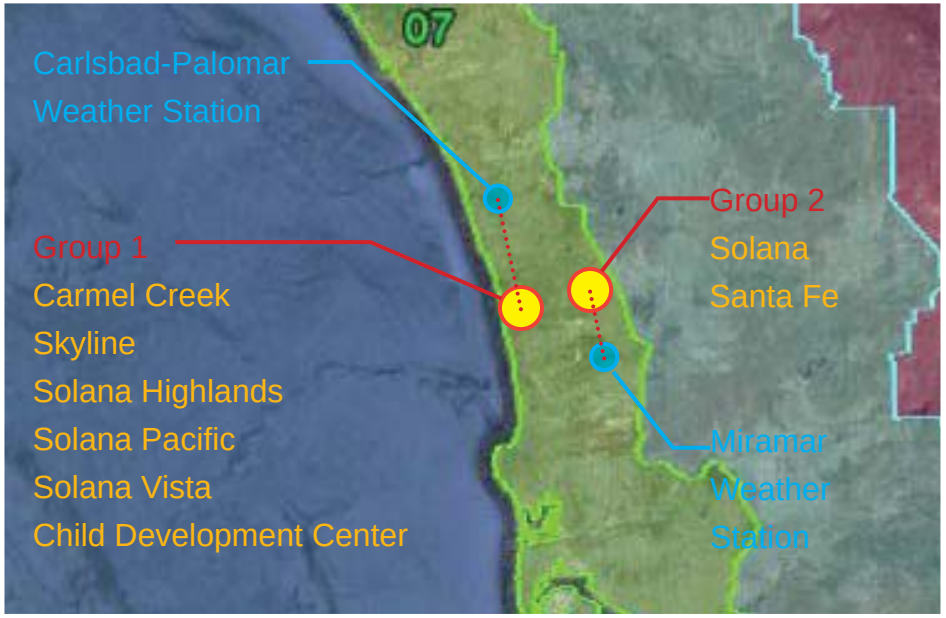
The climate of Rancho Santa Fe is, for the most part, typical of the San Diego metropolitan area, though its higher elevation and inland location lends itself to larger temperature variations. The temperature swing over the year is more extreme, with hotter summers and colder winters than the coastal climates west of the site.

Wind Rose Charts

During the summer, winds primarily come from the west and northwest within a range of 5-15 miles per hour, with gusts as high as 20 miles per hour. The relative humidity of these winds is between 30-70%, but tend to be warmer and within a range of 70-75 degrees Fahrenheit. During the Fall, this area experiences much drier, warmer, and stronger winds from the north. These winds are approximately 82 degrees Fahrenheit.

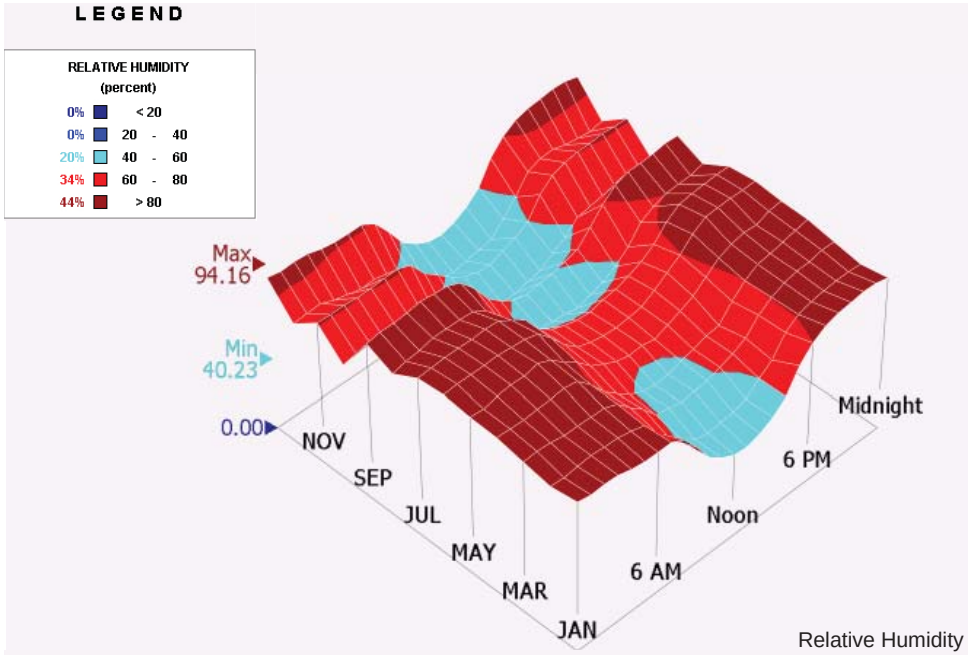
During the winter, winds primarily come from the northwest and east within a range of 5-10 miles per hour, with gusts up to about 20-25 miles per hour. These winds are much cooler at about 30-72 degrees Fahrenheit.

16 California Climate Zones

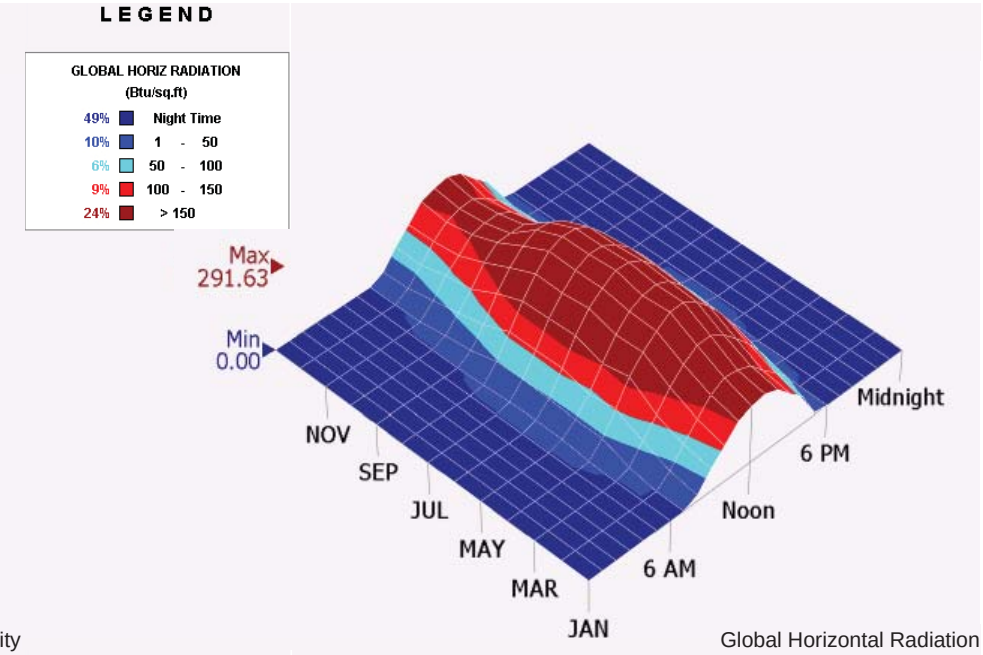


Group 1 and Group 2 nearby weather station locations

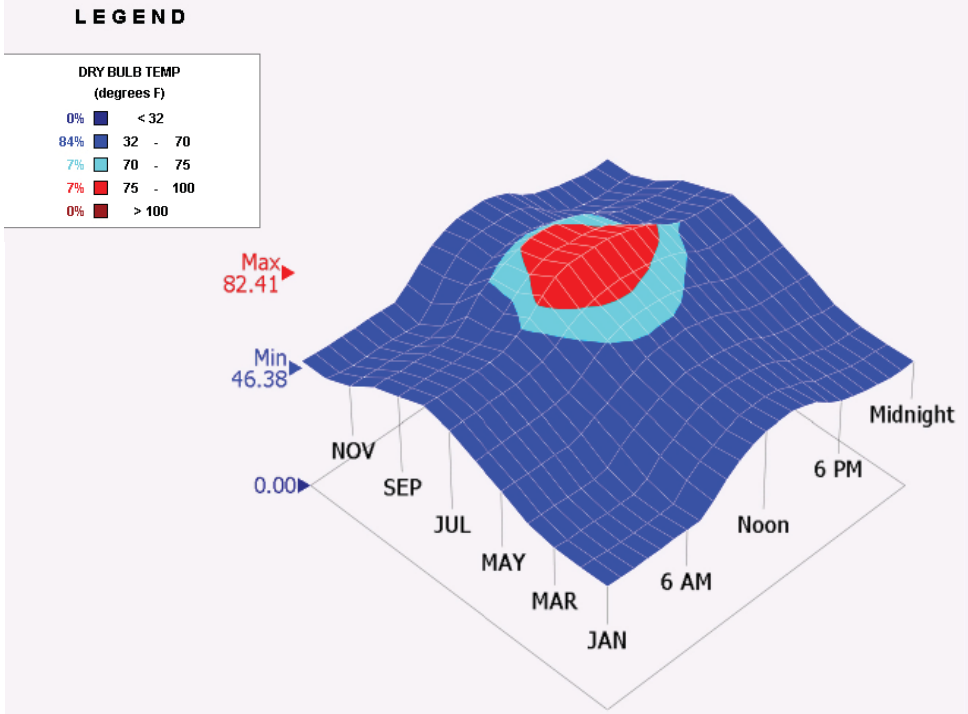
8: Sustainability Opportunities

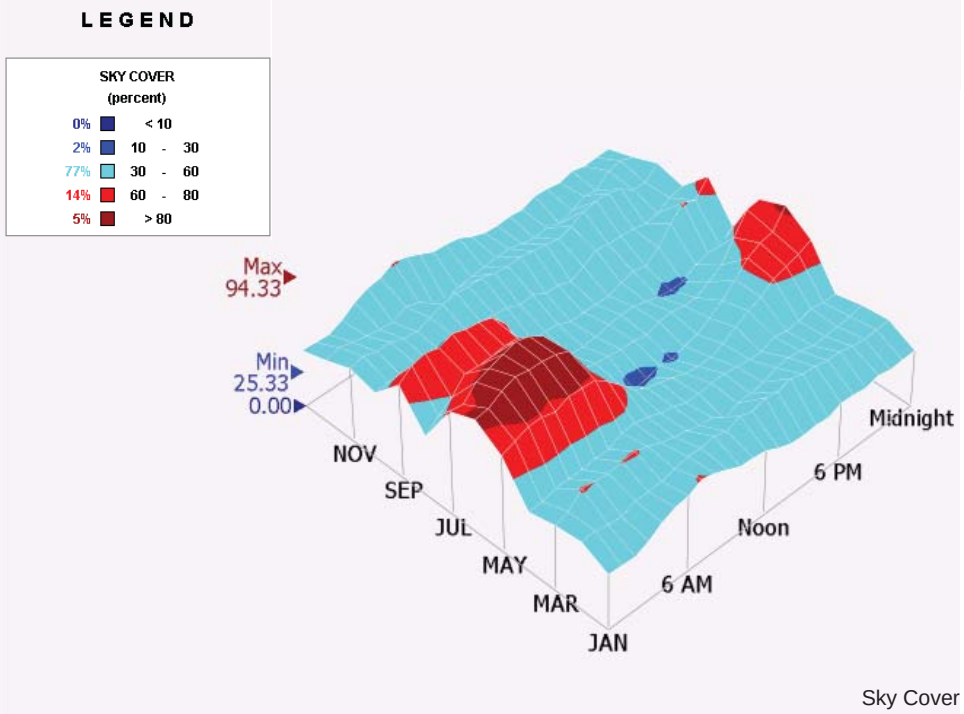


Relative Humidity



Global Horizontal Radiation





Sky Cover

8: Sustainability Opportunities

Relative Humidity

Most of the year, this area is characterized by a 60-80% relative humidity level, with a drier period occurring during the summer and winter months, when the relative humidity percentage drops to about 40% during the noon hour.

Global Horizontal Radiation

Global Horizontal Radiation is the sum of direct, diffuse, and ground-reflected radiation on horizontal plane. Often GHR is identified with total solar radiation. The amount of solar radiation affecting the ground surface peaks at 291.63 near the noon hour. This number is fairly consistent with most of southern California. This data aids in identifying what times of day are the most impacted by solar exposure, and how the built environment may respond. For example, during the noon hour on a warm day, shade systems could provide relief. On cooler days, solar exposure could be used to warm south facing classrooms. Solar radiation could also be used to optimize renewable systems such as photovoltaics. The global radiation diagram also indicates that the greatest potential to produce solar energy through a renewable system such as photovoltaics would be between January and July from 10 am to 2 pm.

Sky Cover

Sky cover occurs for most of the year, within the 30-60% range for most of the day. During the morning hours of the summer and early fall months, sky cover increases to about 94%.

Dry Bulb Temperature

On average, the maximum temperature recorded for this area is 82.41 degrees Fahrenheit (near the noon hour), and the minimum is 46 degrees Fahrenheit (during evening hours). Compared to Group 1, Group 2 is approximately 10 degrees warmer during the summer months.

8: Sustainability Opportunities

PSYCHROMETRIC CHART
California Energy Code

LOCATION: San Diego Miramar Nas, CA, USA
Latitude/Longitude: 32.87° North, 117.13° West, Time Zone from Greenwich -8
Data Source: TMY3 722930 WMO Station Number, Elevation 459 ft

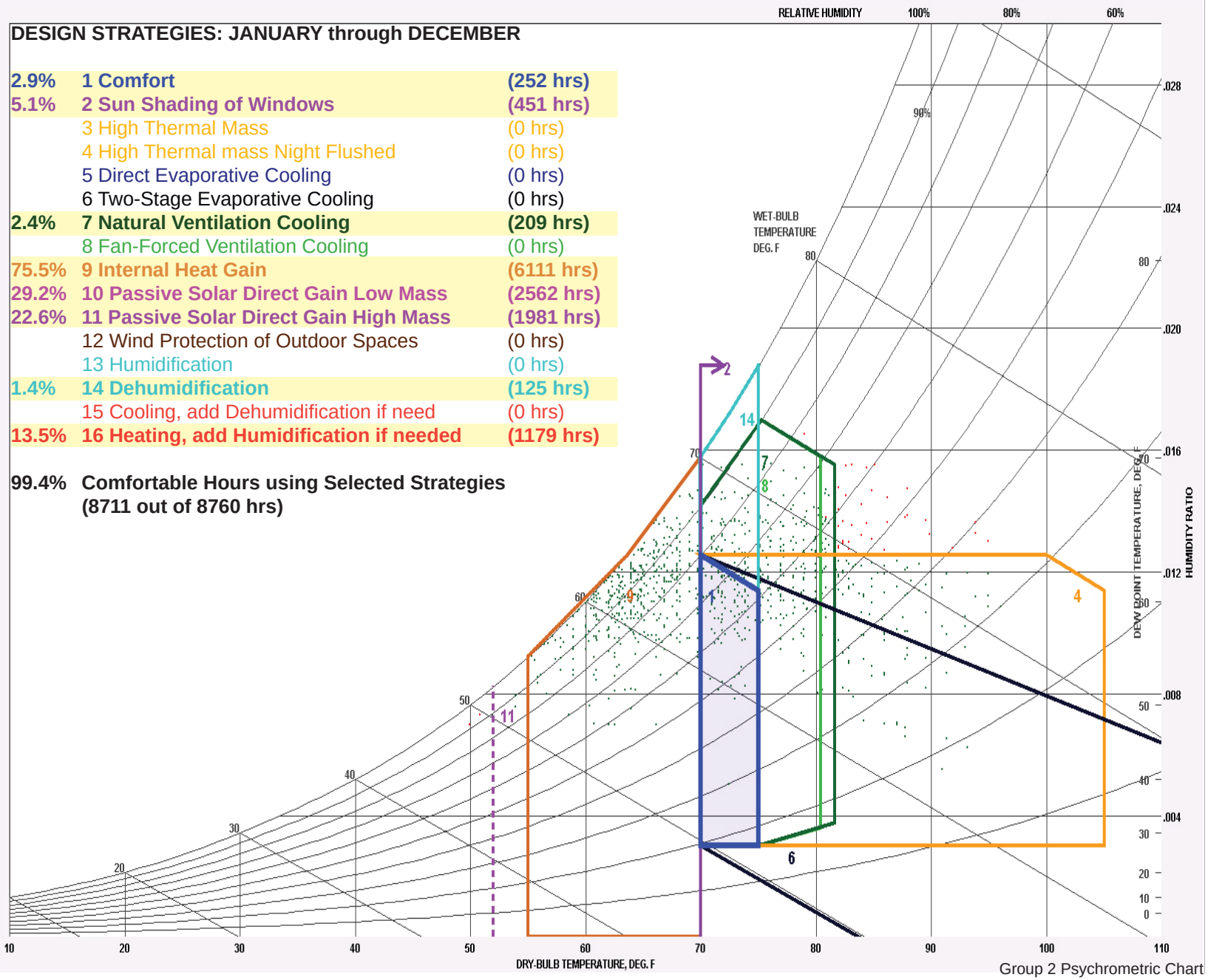
LEGEND

COMFORT
98% COMFORTABLE
2% NOT COMFORTABLE

DESIGN STRATEGIES: JANUARY through DECEMBER

2.9%	1 Comfort	(252 hrs)
5.1%	2 Sun Shading of Windows	(451 hrs)
	3 High Thermal Mass	(0 hrs)
	4 High Thermal mass Night Flushed	(0 hrs)
	5 Direct Evaporative Cooling	(0 hrs)
	6 Two-Stage Evaporative Cooling	(0 hrs)
2.4%	7 Natural Ventilation Cooling	(209 hrs)
	8 Fan-Forced Ventilation Cooling	(0 hrs)
75.5%	9 Internal Heat Gain	(6111 hrs)
29.2%	10 Passive Solar Direct Gain Low Mass	(2562 hrs)
22.6%	11 Passive Solar Direct Gain High Mass	(1981 hrs)
	12 Wind Protection of Outdoor Spaces	(0 hrs)
	13 Humidification	(0 hrs)
1.4%	14 Dehumidification	(125 hrs)
	15 Cooling, add Dehumidification if need	(0 hrs)
13.5%	16 Heating, add Humidification if needed	(1179 hrs)

99.4% Comfortable Hours using Selected Strategies (8711 out of 8760 hrs)



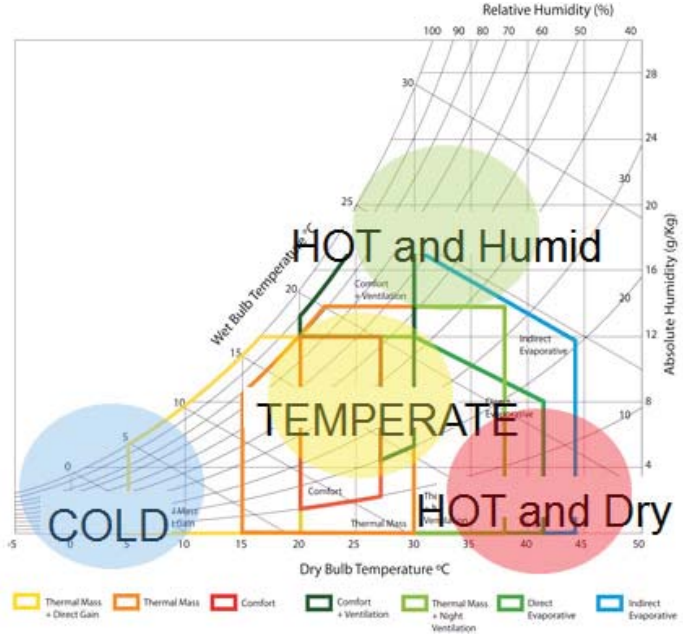
PLOT: COMFORT
Hourly / Daily Min/Max
All Hours / Selected Hours
1 a.m. through midnight
All Months / Selected Months
JUL through SEP
One Month JAN Next Month
One Day 1 Next Day
TEMPERATURE RANGE:
10 to 110 °F / Fit to Data
Display Design Strategies

Group 2 Psychrometric Chart

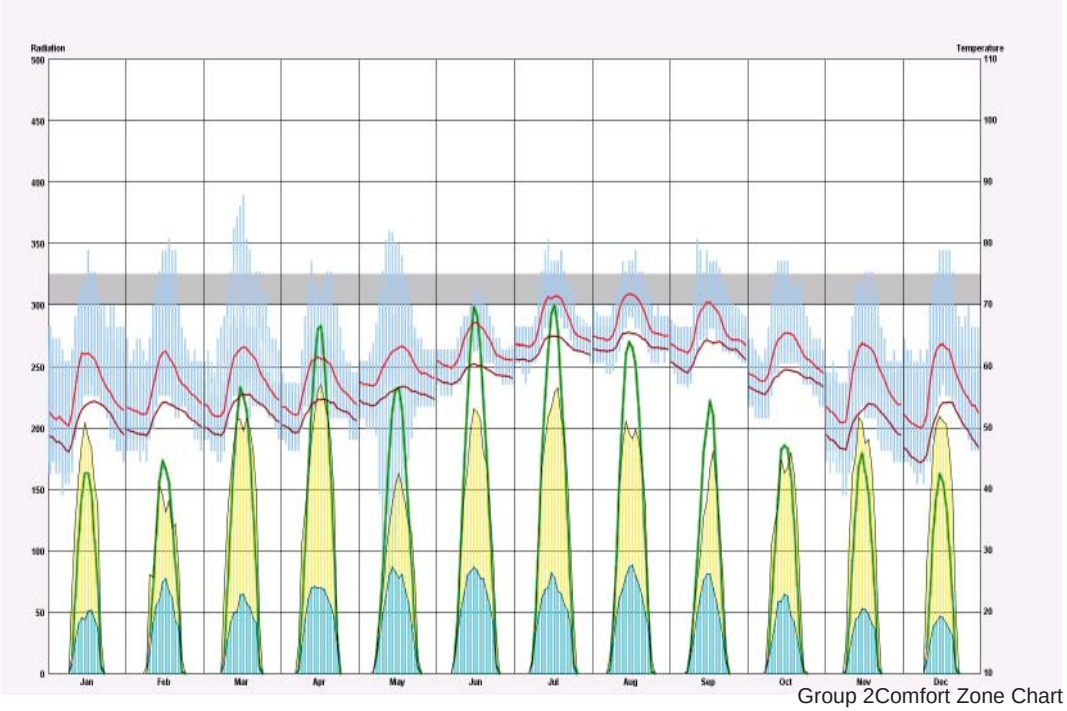
8: Sustainability Opportunities

The diurnal chart (opposite page) diagrams bioclimatic needs and indicates that most of the time dry bulb temperatures are within or below the thermal comfort zone. The temperature fluctuation over the year is more extreme, with hotter summers and colder winters than the coastal climates west of the site. During the summer months, temperatures may peak at about 3-5 degrees higher than the comfort zone, and would be best mitigated by passive cooling strategies to achieve thermal comfort. Similarly, during the winter, temperatures are approximately 10 degrees lower than the comfort zone, and would be best mitigated by employing passive heating strategies.

Group 2 weather data was also graphed within a psychrometric chart. The chart lists effective, potential design strategies specific to the project site climatic conditions. Results of this analysis indicate that there is a higher demand for heating than cooling. All hours in an average year are represented by the green points within the psychrometric chart. The majority of these points are located in the moderate-hot/dry thermal zone for this school. In order to capture as many green points in the chart as possible, it is necessary to identify passive solar and active systems strategies which have the most effect. The psychrometric chart reveals that passive cooling strategies such as natural ventilation and sun shading would prove to be the most effective in order to mitigate heat gains during the warmer months. Controlling internal heat gains by monitoring the use of equipment and lighting will prevent buildings from overheating. Thermal mass and direct solar gain would best aid to passively warm the building during cooler times of the year.

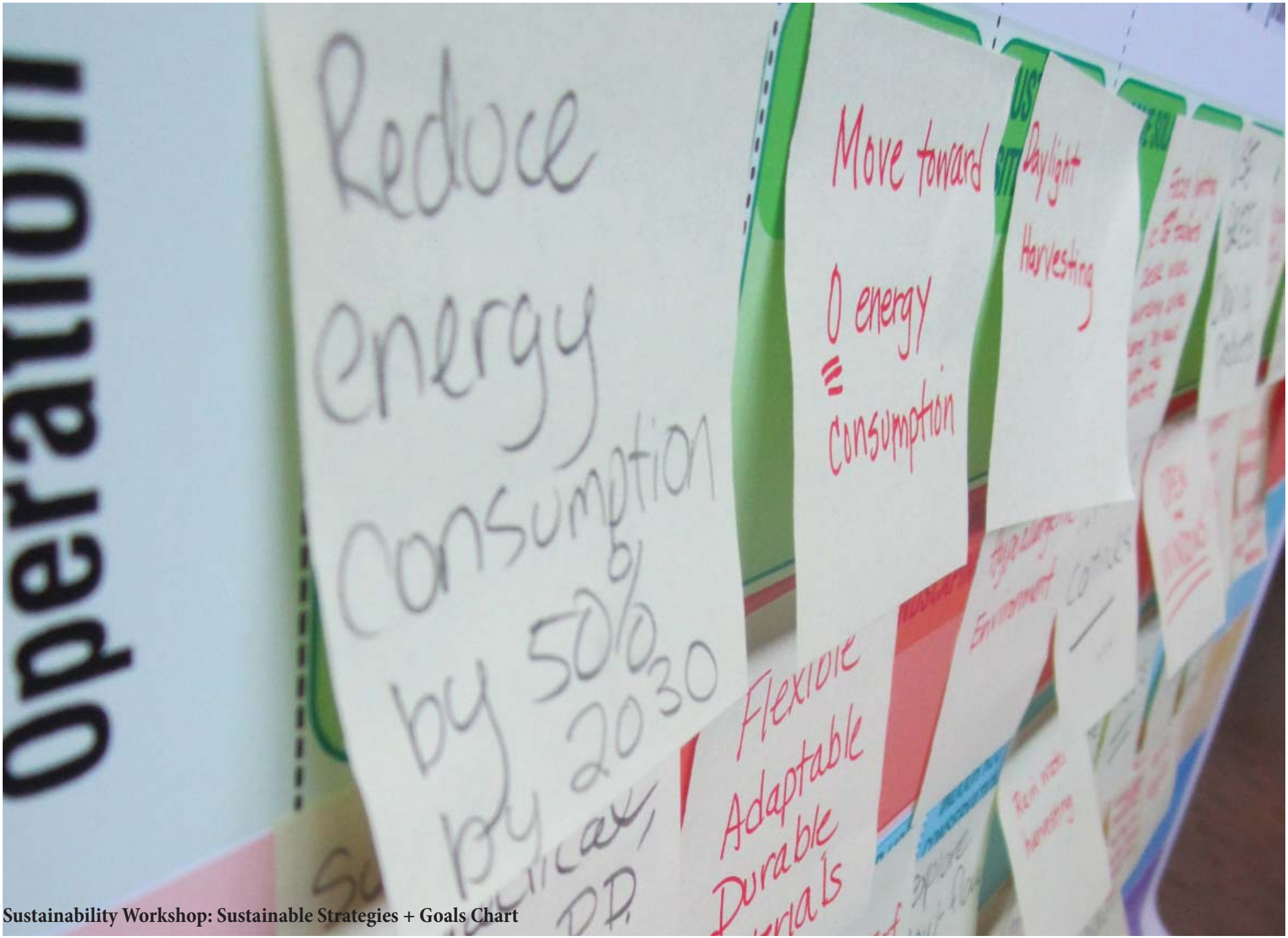


Pychrometric Chart legend



Group 2Comfort Zone Chart

8: Sustainability Opportunities



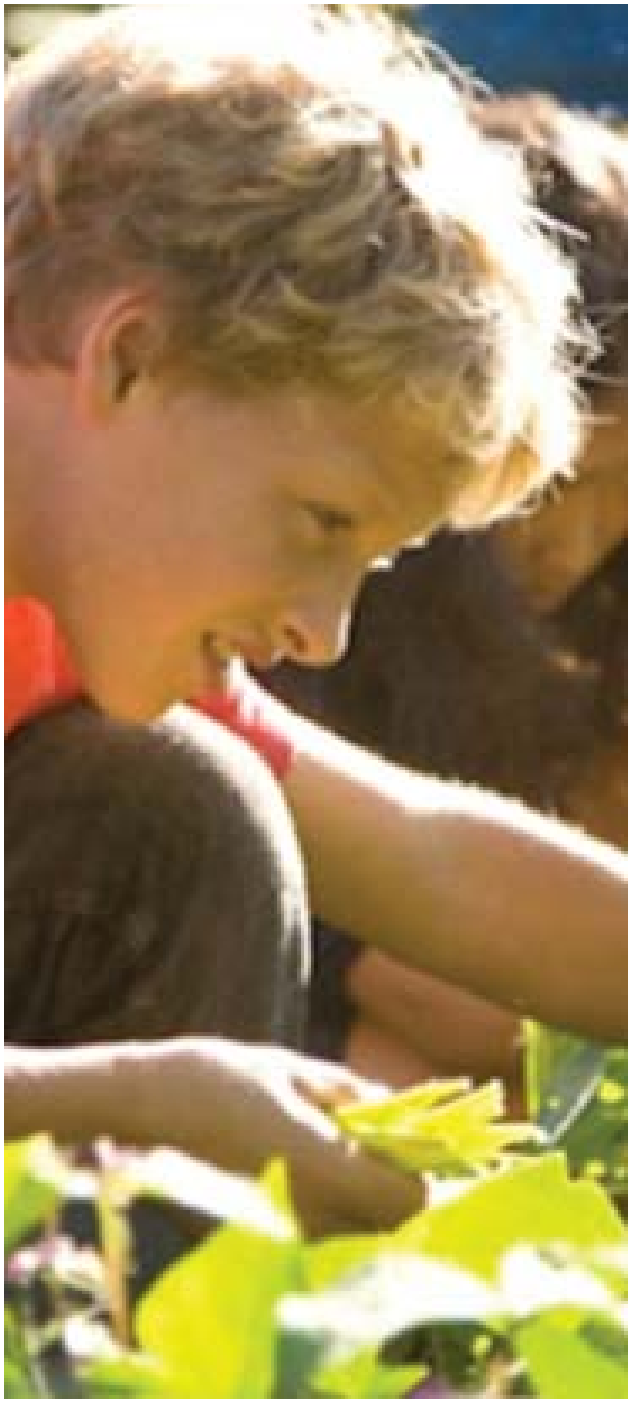
Sustainability Workshop: Sustainable Strategies + Goals Chart

8: Sustainability Opportunities

Identified District Sustainbility Initatives

During the first FMPC Sustainbility Worksession, an in-depth discussion occurred to determine potential strategies and initiatives which would achieve the aspirations voiced in the beginning of the worksession and support the District's commitment to environmental stewardship. A high performance design chart was developed to graphically organize and record the committees goals along with the strategies to achieve those goals. The chart can be used to track the sustainability goals through the course of the planning process, and to ultimately help the District arrive at an outcome which has a reduced environmental impact.

These sustainability initiatives were then prioritized according to their effectiveness and ease of implementation. "Low hanging fruit", or initiatives which could be implemented immediately, and which would have the most positive effect, were targeted as strategies to implement first. The following list of opportunities and initiatives for each of the six categories (Culture, Energy, Building Materials,Water, Waste, and Transportation) itemizes the strategies which were considered the most pertinent to the District as a whole.



8: Sustainability Opportunities

8: Sustainability Opportunities

Culture: (Behavior, Education, Policy and Programs)

Changes in daily routines and upgrades to existing facilities will extend the life of the District's stock of buildings, while improving occupant comfort and productivity.

Goals:

- Teach students, staff, parents and community to be environmental stewards
- Encourage global awareness of sustainability
- Consciousness of the impact of our behavior

Strategies:

Behavior
- Dressing in layers
- Turn off lights in classrooms, portables, storage rooms, janitor rooms, closets, outdoors
- Use natural lighting, curtains, or blinds
- Turn off the lights next to the windows on bright days (this requires recircuiting the fixtures)
- Turn off lights during recess and after school/consider occupancy sensors
- Clear obstructions in front of ventilation units.
- Close windows and doors when heating or cooling equipment is operating
- Turn down heat in hallways (if applicable)
- Put computers/copiers on sleep mode
- Turn off all printers and copiers at night/when not in use
- Use plug load meters to monitor loads
- Report/fix leaking faucets and other water-related systems

Education
- School garden expansion combined with food service component
- Expand sustainability in school curriculum
- Sustainability workshops
- Implement conservation awareness programs for faculty and staff
- Education for building users—how to use the system; provide a building use orientation and manual
- Draw students outside for lessons

Policy and Programs
- Keep thermostat set at constant temperature (68° in winter and 76° in summer)
- Teacher energy report cards-students grade their teachers on energy behavior
- HPIG/CHPS rating systems
- Incentive programs through energy provider
- Incentives for water savings through water utility provider
- Consider energy use of potential future kitchen facility
- Energy competitions between schools and between classrooms
- Student ambassadors or student monitors
- Use student news to advertise and promote awareness of environmental strategies
- Focus of student council shifts to environmental awareness and goals
- Consider financial incentives for schools who improve their carbon footprint

8: Sustainability Opportunities

Energy

Efficient energy resource management can be achieved through simple yet effective upgrades or modifications to buildings. The District has outlined several energy initiatives for school sites, existing buildings, and new buildings which aim to meet the goals defined below.

Goals:

- Reduce energy consumption by 50% by 2030
- Move toward 0 energy consumption

Strategies:

Site

- LED street light replacement

It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures. Installing these new fixtures will eliminate the annual power usage of the site lighting.

- Mitigate Heat Island Effect: Non-Roof Surfaces and Roof Surfaces

The term “heat island” describes built up areas that are hotter than nearby rural areas. The annual mean air temperature of a city with 1 million people or more can be 1.8–5.4°F (1–3°C) warmer than its surroundings. In the evening, the difference can be as high as 22°F (12°C). Heat islands can affect school campuses by increasing peak energy demand, air conditioning costs, air pollution and greenhouse gas emissions, heat-related illness, and water quality. Providing shade trees can mitigate heat island effect on existing campuses, by reducing the amount of solar exposure a paved surface receives.

Existing Buildings

- Temperature setpoints

Temperature setpoints throughout campus are currently set at 72 degrees for cooling and 68 degrees for heating. It is recommended that the setpoints be changed to 76 degrees for cooling and the heating setpoint kept at 68 degrees. Changing the cooling setpoint will still maintain a high level of comfort in the buildings while saving approximately $75 per classroom per year in utility costs. The only costs associated with this strategy is the personnel required to manually change the thermostat setpoints throughout the campus. With the centralized control system in place in the District, this measure will take minutes to make.

- Upgrade Heating, Ventilation, and Air Conditioning

Most of the current HVAC equipment is beyond its service life. Typical rooftop packaged HVAC units last approximately 15 years and many of the rooftop units are 15-20 years old. It is recommended that high efficiency 17 EER rooftop units be installed when the current equipment is replaced. Some mechanical units in the District were installed 15-20 years ago and others were installed 8-10 years ago. Using the efficiency of these units as a baseline, new equipment is available that is nearly twice as efficient. Paying a 20% premium on high efficient equipment would cut the electric bills associated with the HVAC equipment by almost half when compared to the existing equipment.

Most of the campuses in the District have a combination of rooftop packaged gas/electric units on some buildings and sidewall packaged equipment for the portable buildings. New buildings should be equipped with high efficiency rooftop packaged gas/electric units with economizers and demand control ventilation capabilities for each classroom.

- Cool Roof Installation

It appears that some of the campuses will require new roofing material in the next 5-10 years. When a roof is replaced, it is recommended that all flat roof areas have highly reflective “cool roof” coatings spray-applied. This will allow heat from the sun to be reflected back to the atmosphere rather than be absorbed by the building. Applying this coating to the applicable roof surfaces will save approximately $70 per year per 1,200 sf classroom. This amounts to a 27% improvement on the amount of heat entering the building through the roof.

- Natural Ventilation

The local Solana Beach climate is ideal for using natural ventilation instead of traditional mechanical HVAC systems. Classroom instructors have realized this and open doors and windows can be seen throughout a campus on all buildings. This is done even while the HVAC system is operating. All HVAC systems throughout campus that are in an area capable of having doors or windows propped open should have interlocks installed to shut down the equipment when a space in being naturally ventilated by the open doors or windows. At an up front cost of roughly $50 per classroom, savings per year will pay back in approximately eight months while saving around $690 per classroom, a savings of 36%.

- Lighting

We recommend that occupancy sensors be retrofitted for all lights. There is no reason for the lights to be on if there is nobody in the room. Having the lights controlled by occupancy sensors will prevent lights in unoccupied rooms from staying on. Assuming all rooms throughout campus are occupied for two-thirds of the time the campus is operational and vacant the other one-third allowing the lights to be off, this will save approximately $140 per year per classroom while saving 48% of the energy. The up-front installed costs associated with this change will be approximately $750 per classroom. Payback will occur in approximately five and a half years. This is assuming approximately 2,000 watts worth of

8: Sustainability Opportunities

lighting in each of the classrooms.

- Photosensors – step dimming for hallways and dimming for classrooms

All lights near windows or skylights should be retrofitted to be controlled by continuous dimming daylight controls. Using continuously dimming daylight controls rather than stepped dimming allows for greater occupant comfort and satisfaction. With as many windows and skylights throughout all of the campuses, it would seem to be a technology to consider. It is estimated that a 36% lighting energy savings would be realized and a dollar savings of $260 per year per classroom will occur after the implementation of daylighting controls. This will cost approximately $2,500 per classroom and will have a simple payback of approximately 10 years. This is again assuming approximately 2,000 watts of lighting per classroom and about 80% of those lights in a zone where daylighting controls would be effective. With the majority of the campuses operating between 8:00 am to 3:00 pm, sufficient light is available a majority of the time. An assumption has been made that 80% of the time buildings are occupied, there will be sufficient daylight to dim the lights.

- Personal Computer Power Management

School computers on the campuses use a great deal of power and are therefore currently set to sleep mode during the day. It is recommended that all computers, including personal laptops, have their computer settings set to go into “sleep mode” when not in use

- Remove shades on skylights when projector is not in use.

Each campus utilizes ceiling mounted projectors for instruction. However, due to the necessity for dark conditions, the shades are consistently drawn closed, even when the projector is not in use. This results in a lack of natural daylighting within the classrooms, the use of electrical lighting, and subsequent overheating. This could be prevented by interlocking the projector switch with the motorized window shades to close the shades when the projector is turned on and to open the shades when the projector is turned off.

New Buildings

- Overall Building Performance

It is recommended that new buildings be designed to operate at 35% better than Title-24 minimum baseline at the time of design. This will be achieved by using the strategies above as well as using premium efficiency HVAC equipment, superior envelope properties, shading devices, and other efficiency strategies that make sense for the building under design.

- Lighting

All new buildings will exceed the baseline Title-24 lighting power density requirements by 40% at the time of building design.

Additional strategies to consider site by site:

- Add natural lighting (daylight harvesting via solatubes, additional windows, skylights). Skylights, Solatubes, and similar products should be used in spaces with no exterior windows to provide a level of natural daylighting. Solatubes and similar products have a wall mounted switch to close the light orifice so that it functions like a light and can be darkened if needed.
- Cut down AC in summer
- Modify with existing daylight harvesting devices with daylight sensors
- Motorized operable walls at teachers rooms which open out to private courtyards
- Submetering
- Electrical switching of lighting (reconfiguration)
- Plug load management
- Focus lighting (i.e. independent light at teacher’s desk when working solo)
- Operable shading devices
- Plan on replacing the chiller in 5-10 years
- Upgrade the chilled and hot water systems and pumps with variable frequency drives
- Retrofit the pneumatic controls to DDC controls to allow for the removal of the air compressor

8: Sustainability Opportunities

Water

Water-related uses account for 19% of California's electricity, 30% of its natural gas, and 88 billion gallons of diesel fuel every year. Water consumption also generates GHG emissions during the pumping and treatment from the source. Furthermore, the waste water from buildings must also be treated to remove physical, chemical, and biological contaminants, which requires additional energy and water to process.

Water-efficiency measures can reduce water and sewer costs by up to 30%. Significant savings in energy, chemical, and maintenance expenses often follow. Water consumption at school campuses can be greatly reduced through behavioral changes, upgrades to existing plumbing fixtures, and the establishment of native and adaptive plant species. By doing this, water will be preserved, and energy will also be saved.

Goals:

- Reduce irrigation water consumption by 25%
- Reduce building water consumption by 50%

Strategies:

Site:

- Turf reduction/drought tolerant landscaping

Limit unused turf areas by redesigning spaces to be student centered. Furthermore, preserving open space and promoting the growth of native species can reduce the maintenance costs of campuses, reduce water consumption, support native wildlife, and provide a beautiful outdoor environment. Many of the sites have begun to implement native vegetation. While turf grass is important for playfields, it is recommended that native vegetation is considered for other areas of the campuses.

Using adaptive and native vegetation greatly reduces the amount of water required to irrigate the schools grounds. Native and adaptive vegetation use approximately 13.6 gallons of water per square foot, versus 41 gallons of water per square foot of turf (grass). In terms of water savings, turf grass can cost approximately $0.18 per square foot, as compared to about $0.06 per square foot of native adaptive vegetation. When applied across the entire District, this can lead to 30% savings annually.

- Site Stormwater

The school sites' proximity to the coast warrants a sensitivity to stormwater runoff, capture and treatment. This can be achieved through a variety of methods. Using pervious surfaces such as native or adaptive vegetation and permeable paving are some suggested means of naturally capturing and allowing stormwater to filter down to surrounding soils. Additional measures, where necessary, may include catchment basin inlet filters to treat stormwater runoff, and underground water storage tanks, to contain water runoff for future use. In addition, the District could expand awareness about stormwater quality and quantity by adopting a program in which students participate in painting city storm drains with stencil "no dumping" icons.

- Explore purple pipe and greywater opportunities

Currently, none of the school sites receive recycled water to irrigate planted areas. Opportunities to access to municipally supplied treated irrigation water, known as 'purple pipe' should be explored in order to reduced water consumption. Weather and time sensors should also be implemented at each site in order to ensure that over or under watering of vegetation does not occur.

Existing Buildings

- Plumbing fixtures

The existing plumbing fixtures installed throughout the district have relatively high water use rates. Existing fixtures have been observed to be: 1.6 gpf water closets, 1.0 gpf urinals, and 2.2 gpm lavatories. It is recommended that the following fixtures be installed throughout campus: 1.28 gpf water closets, 0.125 gpf urinals, and 0.5 gpm lavatories. The new fixtures are standard fixtures that the maintenance staff will be able to maintain similar to existing plumbing fixtures throughout the campus. These will not require additional maintenance like such water efficient fixtures as waterless urinals. This will save approximately 25,650 gallons of water per year per 20 student classroom. This is a 53% reduction in water use. Assuming every set of 20 students has 2 lavatories, 1 urinal, and 2 water closets, the cost for implementing these water saving features would be $7,500 per set of 20 students. Water is currently relatively inexpensive at a cost of approximately $0.03 per gallon. At these current rates, the payback would not occur for a lengthy period of time – approximately 100 years. The savings won't be so much a cost savings as it would be a savings of natural resources. At a minimum, sink faucets should be replaced.

New Buildings

New buildings should install water fixtures to allow the building to be, at a minimum, 40% below the Energy Policy Act water usage baseline at the time of construction. With the current baseline, a 40% reduction can be achieved with 1.28 gallon per flush (gpf) water closets, 0.125 gpf urinals, 0.5 gallon per minute (gpm) lavatories that operate on a 10 second metered cycle, 1.0 gpm sinks, and 1.5 gpm shower heads. These fixtures are standard fixtures that the maintenance staff will be able to maintain similar toexisting plumbing fixtures throughout the district.

8: Sustainability Opportunities

Strategies to be evaluated on a site by site basis

- Rainwater harvesting
- Motion sensors on plumbing fixtures
- Use time and weather sensors on irrigation system
- Rain gauge at all sensors

8: Sustainability Opportunities

Waste

Solid waste (not transported in water) resulting from everyday operations of schools, must be transported away from the campus and treated, generating emissions in this process. In addition to this, organic waste decomposing in the landfill will usually generate methane. If this methane is not harnessed as energy, it will escape to the atmosphere as a potent greenhouse gas. By holding true to the proverb: “reduce, reuse, recycle” and increase waste diversion from landfills, Solana Beach School District could realize a zero waste future.

Goals:

- Reduce non-recyclable waste by 50% District wide
- 100% recycling of recyclable materials District wide
- Zero waste campuses
- Reduce, reuse, recycle

Strategies:

- Expansion of school recycling programs
- 75-95% construction waste management in District specifications
- Food and green waste composting
- Limit/negate use of plastics/1 time use paper products at food services
- Composting at each site with pest deterrents
- Teach students and staff about recycling, composting
- Use Solana Center and other environmental agencies for workshops on recycling and composting
- Create classroom environments that are simplified
- Print less
- Trash sorting
- Reusable containers, or reuse of plastic bags
- Student recycling exercises: ask students to analyze lunch contents and propose ways they can be more environmentally responsible

8: Sustainability Opportunities

Building Materials and Products

The materials and products used within schools has a deep impact on the indoor environmental quality which students and staff are immersed within every school day. Given that student and teachers spend nearly 6 hours a day indoors, the quality of the air that they breath is very important. By using low or no VOC (volatile organic compound) building materials, indoor finishes, and cleaning products, the quality of indoor air can be greatly improved. Furthermore, by specifying products which are ecologically sensitive, such as high recycled content and regional or local materials, green house gases can be decreased. Emissions resulting from the fabrication of the materials used in the building, during the transportation of materials to the building, and during the construction of the building, can all be reduced.

Goals:

- More use of recyclable materials
- Sustainable and practical high performance buildings
- Flexible, adaptable, durable materials
- Hypo allergenic environment

Strategies:

- Use green cleaning products
- Sustainable furniture, floors and other building materials
- Operable windows for better indoor air quality
- Increase the HVAC filter efficiency. The new filters being used right now are 35% efficient. 85% efficient filters are available that would fit in the existing filter racks on the equipment.

8: Sustainability Opportunities

8: Sustainability Opportunities

Transportation

Providing students with alternatives to automobiles, such as walking or biking, can promote healthier lifestyle habits while also reducing carbon emissions caused by cars. Programs such as the "Walk to School Initiative", the walking school bus program currently practiced at Solana Beach School District, and provision of incentives for those who use the bus or LEV (low emission vehicles), ZEVs (zero emission vehicles) and/or carpooling should be considered further.

Goals:

- Increase bike use, walking, and carpooling
- Reduce CO2 emissions
- Encourage alternative use of transportation

Strategies:

- Provide charging stations for carpools, ZEVs,LEVs
- Provide charging stations for ZEVs + LEVs
- Improve connections to sidewalks
- Develop "walking school bus" programs
- Work with regional transportation authorities to provide bike lanes around the schools
- PTA supported carpools
- PTA supported "walk to school" days
- Signs at pick up zones saying "NO IDLING"
- Provide safe and secure area for bikes and helmets

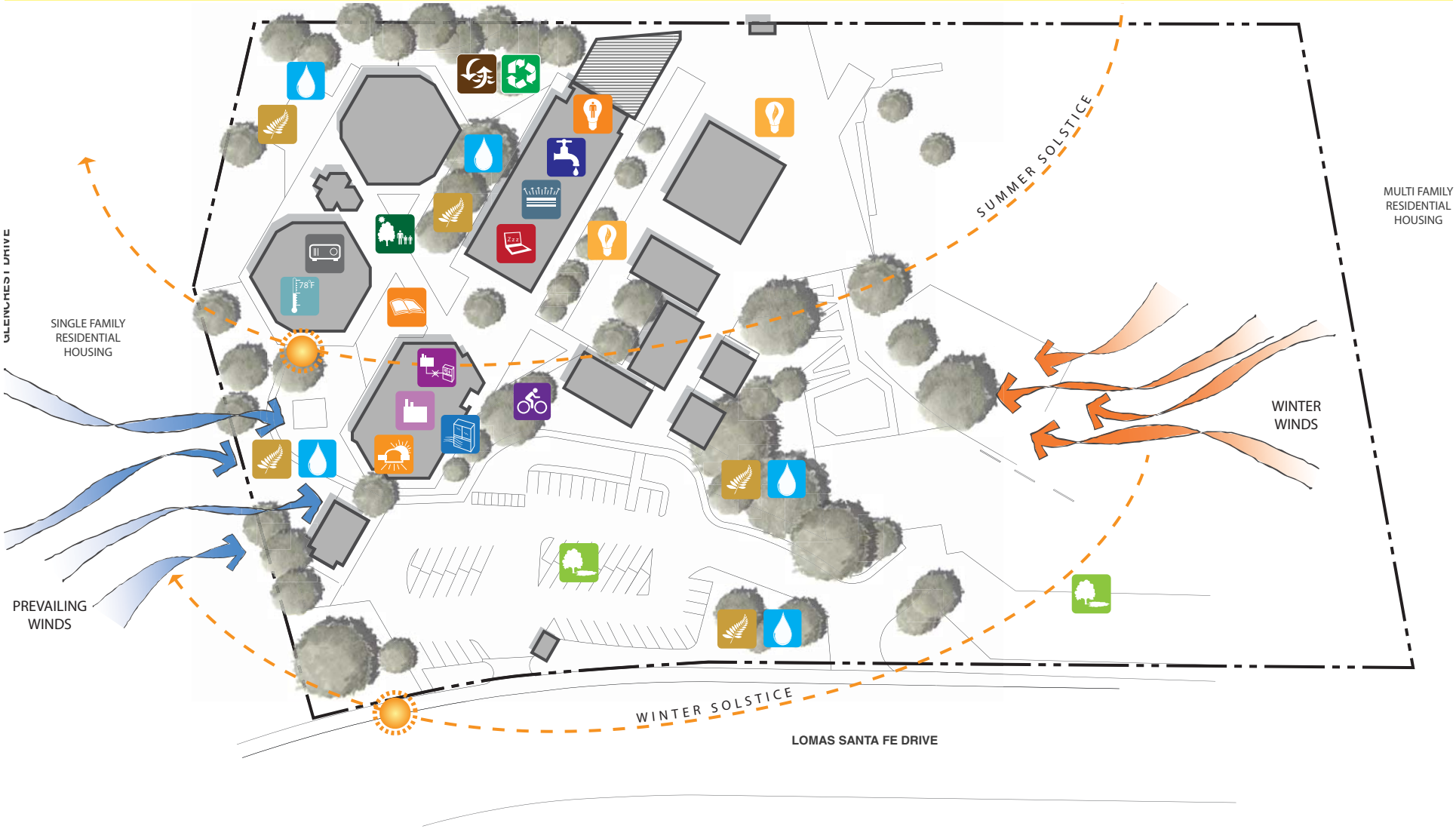
8: Sustainability Opportunities

8: Sustainability Opportunities

Sustainability Initiatives Site by Site

The sustainability initiatives list was developed for the Solana Beach School District as a whole. However, the unique conditions at each school site may be able to support a specific set of initiatives. Each site has been evaluated to determine which initiatives would be applicable to that site. This is detailed further on the following pages.

8: Sustainability Opportunities - Skyline Elementary



LEGEND

- OUTDOOR LEARNING
- SHADE TREES
- STORM WATER FILTER
- COOL ROOF
- HVAC IMPROVEMENTS
- HVAC INTERLOCKS
- RECYCLING CENTER
- COMPOSTING CENTER
- BIO SWALE
- SUN SHADING
- NATIVE PLANTING
- DRIP IRRIGATION
- NATURAL VENTILATION
- EFFICIENT BUILDING WATER
- TEMPERATURE SETPOINT
- DAYLIGHT HARVESTING
- DAYLIGHT OCCUPANCY SENSOR
- SITE LIGHTING
- UNDERGROUND WATER STORAGE
- SUSTAINABILITY EDUCATION
- PROJECTOR SENSOR
- COMPUTER MANAGEMENT
- ALTERNATIVE TRANSPORTATION

N

8: Sustainability Opportunities - Skyline

Potential Strategies for Skyline:

Skyline Elementary is characterized by steep topography. The site slopes from the north of campus down towards the southeast. The school is located very close to the coast, and receives prevailing coastal winds from the west and warmer inland winds from the east move across the site. Existing buildings predominantly have northwest facing orientation.

Culture:

An outdoor learning area located in the courtyard spaces between classroom buildings would be well suited for this school site. These areas would essentially become outdoor classrooms, allowing students and teachers to take advantage of the temperate climate, fresh air, and natural surroundings. Expansion of the school garden could be included.

Sustainable signage which highlights the sustainability attributes and efforts of the campus could be strategically placed in open landscaped areas, garden areas, or within core learning spaces where there may be frequent student traffic. This will allow the campus to essentially become a living laboratory for sustainability.

Energy:

Site Lighting
It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures.

Mechanical Systems
The average age of the existing equipment is around 14 years old. The zoning of the equipment should be adjusted when the equipment is eventually replaced.

Heat Island Effect
Additional shade trees in the parking lots areas and near play areas can reduce the effect of heat island effect greatly. Cool roof coatings applied whenever a new roof is replaced or constructed will also reduce heat island effect while keeping the interior of the building well insulated.

Natural Ventilation
As this school is located closest to the coast among all the schools in the District, solar passive strategies would easily be implemented here.

Operable windows which are able to receive wind currents on the windward side (southwest side of campus) and which then allow the wind current to cross ventilation toward the leeward side (northeast) will improve occupant comfort and air quality. This strategy should be combined with HVAC interlocks which switch off the mechanical system anytime a window or door is left open. Training and commitment to use this passive system would be important.

Water:

Building Water Fixtures
Upgrading or replacing existing building fixtures with high efficiency water fixtures throughout the campus will result in a 40% savings.

Irrigation Water
Establishing adaptive/native vegetation and replacing turf where possible will result in an environment which supports native wildlife and will also yield a 30% water savings.

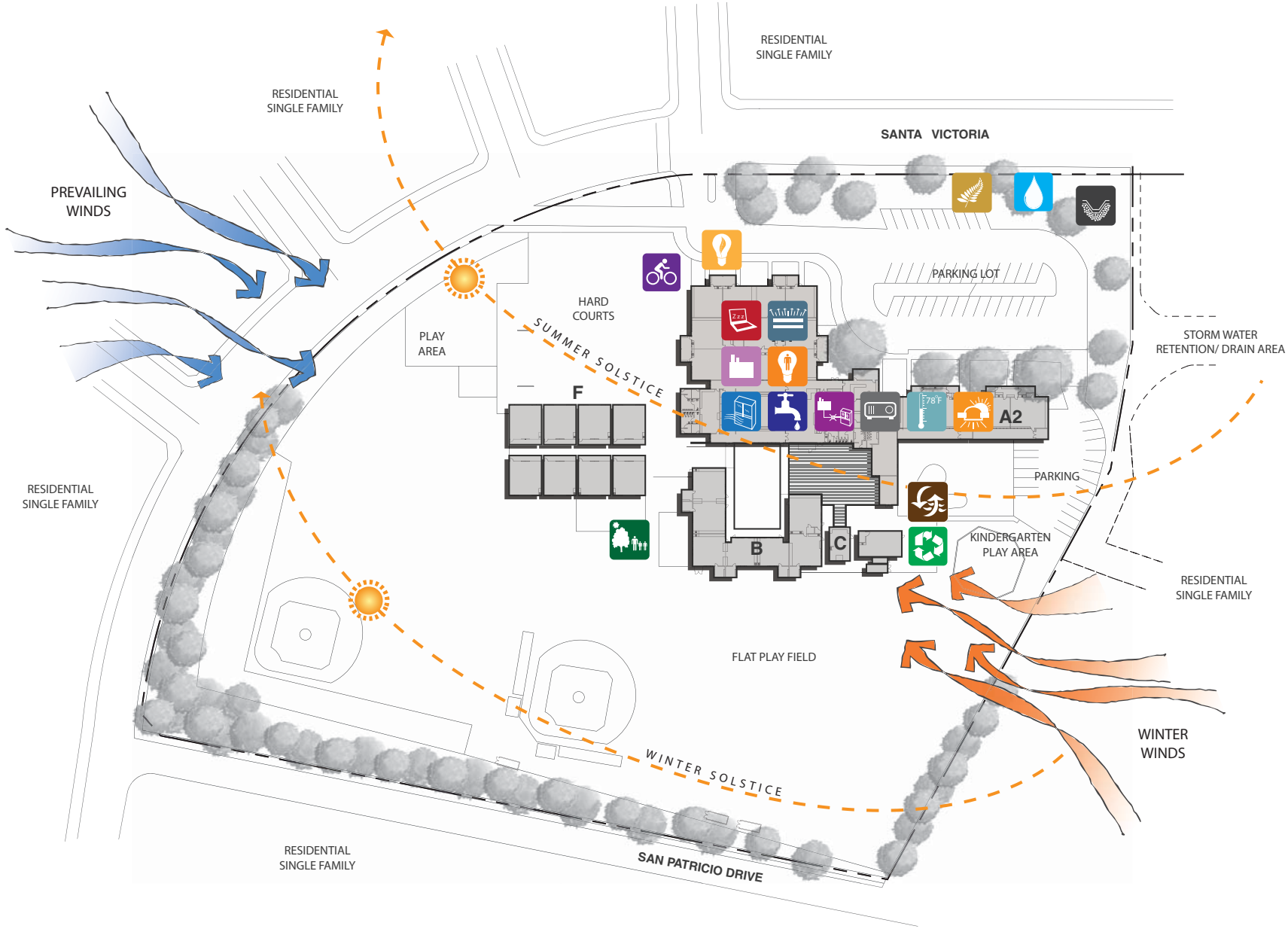
Waste:

Composting and Recycling
It is suggested that a recycling center and composting grounds be located at the northwest side of campus, adjacent to the food services area and close to maintenance areas, which would ease access to and from the centers and the buildings on campus.

Transportation:

Walking and a “walking school bus” program to this school site would be possible. Biking is not as plausible for this site due to the high traffic street to the south (Lomas Santa Fe Drive), and steep slope to the north.

8: Sustainability Opportunities - Solana Vista



LEGEND

OUTDOOR LEARNING
SHADE TREES
STORM WATER FILTER
COOL ROOF
HVAC IMPROVEMENTS
HVAC INTERLOCKS
RECYCLING CENTER
COMPOSTING CENTER
BIO SWALE
SUN SHADING
NATIVE PLANTING
DRIP IRRIGATION
NATURAL VENTILATION
EFFICIENT BUILDING WATER
TEMPERATURE SETPOINT
DAYLIGHT HARVESTING
DAYLIGHT OCCUPANCY SENSOR
SITE LIGHTING
UNDERGROUND WATER STORAGE
SUSTAINABILITY EDUCATION
PROJECTOR SENSOR
COMPUTER MANAGEMENT
ALTERNATIVE TRANSPORTATION

N

8: Sustainability Opportunities - Solana Vista

Potential Strategies for Solana Vista

Solana Vista is characterized by prevailing coastal winds from the northwest and warmer inland winds from the southeast. Existing buildings predominantly have north-south facing orientation which is ideal for maximizing daylighting. Stormwater flow from the north to the south side of the campus and along Santa Victoria.

Culture:

An outdoor learning area located near the playfields and adjacent to the classroom buildings would be well suited for this school site. These areas would essentially become outdoor classrooms, allowing students and teachers to take advantage of the temperate climate, fresh air and natural surroundings.

Sustainable signage which highlights the sustainability attributes and efforts of the campus could be strategically placed in open landscaped areas or within core learning spaces where there may be frequent student traffic. This will allow the campus to essentially become a living laboratory for sustainability.

Expansion of the school garden at this site is recommended, as it provides an opportunity to broaden students' understanding and appreciation of cultivation, respect for the environment and comprehension of the garden to table processes.

Energy:

Site Lighting
It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures.

Building Envelope
It is recommended that dual pane windows replace the existing windows in order to control heat loss and gain through the glazing. Low-e high performance systems are available with a solar heat gain coefficient of 0.27 and a visible transmittance of 64%.

Mechanical Systems
Solana Vista recently had a new cooling tower installed. The rest of the equipment includes a 42 year old chiller and other supplementary equipment which is 11 years old or less. It is recommended that the system is provided with a chiller replacement within the next 5-10 years, upgraded with VFDs, retrofitted pneumatic controls rather than DDC controls, and that the air is removed on the compressor.

Heat Island Effect
Additional shade trees in the parking lots and near play areas can reduce the effect of heat island effect greatly. Cool roof coatings applied whenever a new roof is replaced or constructed will also reduce heat island effect while keeping the interior of the building well insulated.

Natural Ventilation
Operable windows which are able to receive wind currents on the windward side (northwest side of campus) and which then allow the wind current to cross ventilation toward the leeward side (southeast) will improve occupant comfort and air quality. This strategy should be combined with HVAC interlocks which switch off the mechanical system anytime a window or door is left open.

Projector Interlocks
By interlocking the projector switch with the motorized window shades, the shades will close when the projector is turned on and will open the shades when the projector is turned off on skylights when projector is not in use

Water:

Building Water Fixtures
Upgrading or replacing existing building fixtures with high efficiency water fixtures throughout the campus will result in a 40% savings.

Irrigation Water
Establishing Adaptive/Native vegetation and replacing turf where possible will result in an environment which supports native wildlife and which will yield a 30% water savings.

Stormwater
To control the amount of stormwater runoff on campus, it is recommended that a bioswale is installed on the northeast side of the parking lot. This will allow for effective capture and filtration of stormwater from paved parking surfaces. In addition, an underground water storage tank is recommended. This will allow consistent capture of stormwater during high rainfall months, which could then be used to irrigate playfields and other vegetated areas. This will also prevent runoff from overburdening the stormdrains.

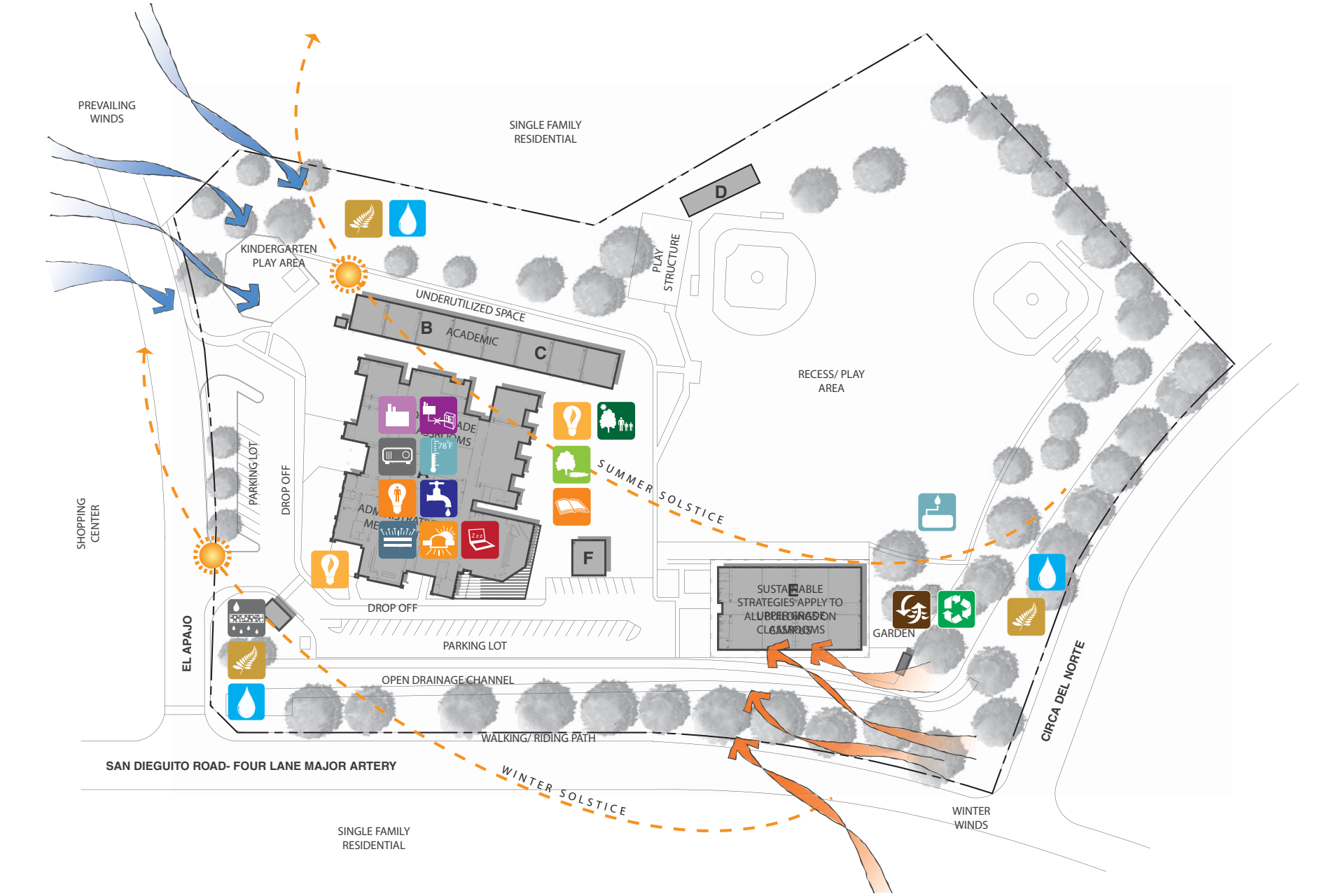
Waste:

Composting and Recycling
It is suggested that a recycling center and composting grounds be located at the southeast side of campus. The composting area would also be able to better serve the existing school garden and proposed expanded school garden with valuable soil amendments.

Transportation:

Walking and a "walking school bus" program at this school site would be possible, as many of the students live within a walkable distance.

8: Sustainability Opportunities - Solana Santa Fe



8: Sustainability Opportunities - Solana Santa Fe

Potential Strategies for Solana Santa Fe

Solana Santa Fe is characterized by a much warmer and arid climate than the other schools within the Solana Beach School District. Existing buildings predominantly have east-west facing orientation which receive significant solar exposure. Stormwater flows from the north to the south side within the playfield areas and flow to the east toward El Apajo from the parking area. There is a steep slope along the perimeter of the site.

Culture:

An outdoor learning area located near the playfields and adjacent to the classroom buildings would be well suited for this school site. These areas would essentially become outdoor classrooms, allowing students and teachers to take advantage of the temperate climate, fresh air and natural surroundings.

Sustainable signage which highlights the sustainability attributes and efforts of the campus could be strategically placed in open landscaped areas or within core learning spaces where there may be frequent student traffic. This will allow the campus to essentially become a living laboratory for sustainability.

Expansion of the school garden at this site is recommended, as it provides an opportunity to broaden students' understanding and respect for the environment and comprehension of the garden to table processes. It is also recommended that the garden be considered as a community garden, by actively inviting parents to participate in the cultivation effort.

Energy:

Site Lighting
It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures.

Mechanical Systems
Solana Santa Fe has 15-20 year old equipment, which should be replaced within the next few years, as typical life of HVAC systems is 15 years. It is recommended that high efficiency 17 EER rooftop units be installed when the current equipment is replaced. New equipment is available that is twice as efficient.

Heat Island Effect
Additional shade trees in the parking lot area, staff courtyard, and near play areas can reduce the effect of heat island effect greatly. Cool roof coatings applied whenever a new roof is replaced or constructed will also reduce heat island effect while keeping the interior of the building well insulated.

Projector Interlocks
By interlocking the projector switch with the motorized window shades, the shades will close when the projector is turned on and will open the shades when the projector is turned off.

Water:

Building Water Fixtures
Upgrading or replacing existing building fixtures with high efficiency water fixtures throughout the campus will result in a 40% savings.

Irrigation Water
Establishing Adaptive/Native vegetation and replacing turf where possible will result in an environment which supports native wildlife and which will yield a 30% water savings.

Stormwater
An open trench drain line runs along the perimeter of the buildings on campus. This creates safety hazards and also increases the potential of pollution within the drain system. To prevent this from occurring, it is recommended that a grate system be placed on top of the drain system so that students can safely pass over it. In addition, a stormwater catch basin inlet should be placed at the east side of campus near El Apajo which would be able to intercept debris and other pollutants before the stormwater is directed into the main open drainage channel to the south of the campus along San Dieguito Road.

Waste:

Composting and Recycling
It is suggested that a recycling center and composting grounds be located at the east side of campus near the school garden. This will allow student gardeners to make use of the compost more effectively.

Transportation:

As many of the students who attend Solana Santa Fe are dropped off by parents, it is highly recommended that a "No Idling" policy be established for this site. This would prevent dangerous tailpipe emissions from occurring on a daily basis.

8: Sustainability Opportunities - Solana Highlands

LEGEND

- OUTDOOR LEARNING
- SHADE TREES
- STORM WATER FILTER
- COOL ROOF
- HVAC IMPROVEMENTS
- HVAC INTERLOCKS
- RECYCLING CENTER
- COMPOSTING CENTER
- BIO SWALE
- SUN SHADING
- NATIVE PLANTING
- DRIP IRRIGATION
- NATURAL VENTILATION
- EFFICIENT BUILDING WATER
- TEMPERATURE SETPOINT
- DAYLIGHT HARVESTING
- DAYLIGHT OCCUPANCY SENSOR
- SITE LIGHTING
- UNDERGROUND WATER STORAGE
- SUSTAINABILITY EDUCATION
- PROJECTOR SENSOR
- COMPUTER MANAGEMENT
- ALTERNATIVE TRANSPORTATION

N

8: Sustainability Opportunities - Solana Highlands

Potential Strategies for Solana Highlands

Solana Highlands is characterized by prevailing coastal winds from the west and warmer inland winds from the east. Existing buildings predominantly have north-south facing orientation which is ideal for maximizing daylighting. Stormwater flows from the north to the south side of the campus. There is a steep slope on the perimeter of the site along High Bluff Dr.

Culture:

An outdoor learning area located within the courtyard space between classrooms buildings would be well suited for this school site. This area would essentially become an outdoor classroom, allowing students and teachers to take advantage of the temperate climate, fresh air and natural surroundings. Planted deciduous trees in the courtyard would provide shade for students and teachers during the cooler months. A garden area could be added to this space

Sustainable signage could be strategically placed in open landscaped areas or within core learning spaces where there may be frequent student traffic. This will allow the campus to essentially become a living laboratory for sustainability.

Energy:

Site Lighting
It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures.

Mechanical Systems
Solana Highlands has a mix of 13 year old equipment , which should be replaced within the next five years. Some supplementary equipment which is 8 -10 years old will not need to be replaced for several more years.

Heat Island Effect
Additional shade trees near play areas and in the courtyard can reduce the effect of heat island effect greatly.

Natural Ventilation
Operable windows which are able to receive wind currents on the windward side (west side of campus) and which then allow the wind current to cross ventilation toward the leeward side (east) will improve occupant comfort and air quality. This strategy should be combined with HVAC interlocks which switch off the mechanical system anytime a window or door is left open.

Daylight Harvesting
Currently, existing skylights at Solana Highlands are frequently covered up, and electrical lighting is being used unnecessarily. It is recommended that a mechanized shade is installed on the skylights which would allow the shades to open or close according to the current daylight levels.

Window Shades
Horizontal window shades on the north side of the campus buildings and adjacent to the hardcourt areas will prevent unnecessary glare and heat gains from occurring through the glazing.

Projector Interlocks
By interlocking the projector switch with the motorized window shades, the shades will close when the projector is turned on and will open the shades when the projector is turned off.

Water:

Building Water Fixtures
Upgrading existing building fixtures with high efficiency water fixtures throughout the campus will result in a 40% savings.

Irrigation Water
Establishing adaptive/native vegetation and replacing turf where possible will result in an environment which supports native wildlife and which will yield a 30% water savings.

Stormwater
To control the amount of stormwater runoff on campus, it is recommended that a bioswale is installed on the south of the campus by the parking lot. This will allow for effective capture and filtration of stormwater from paved parking surfaces.

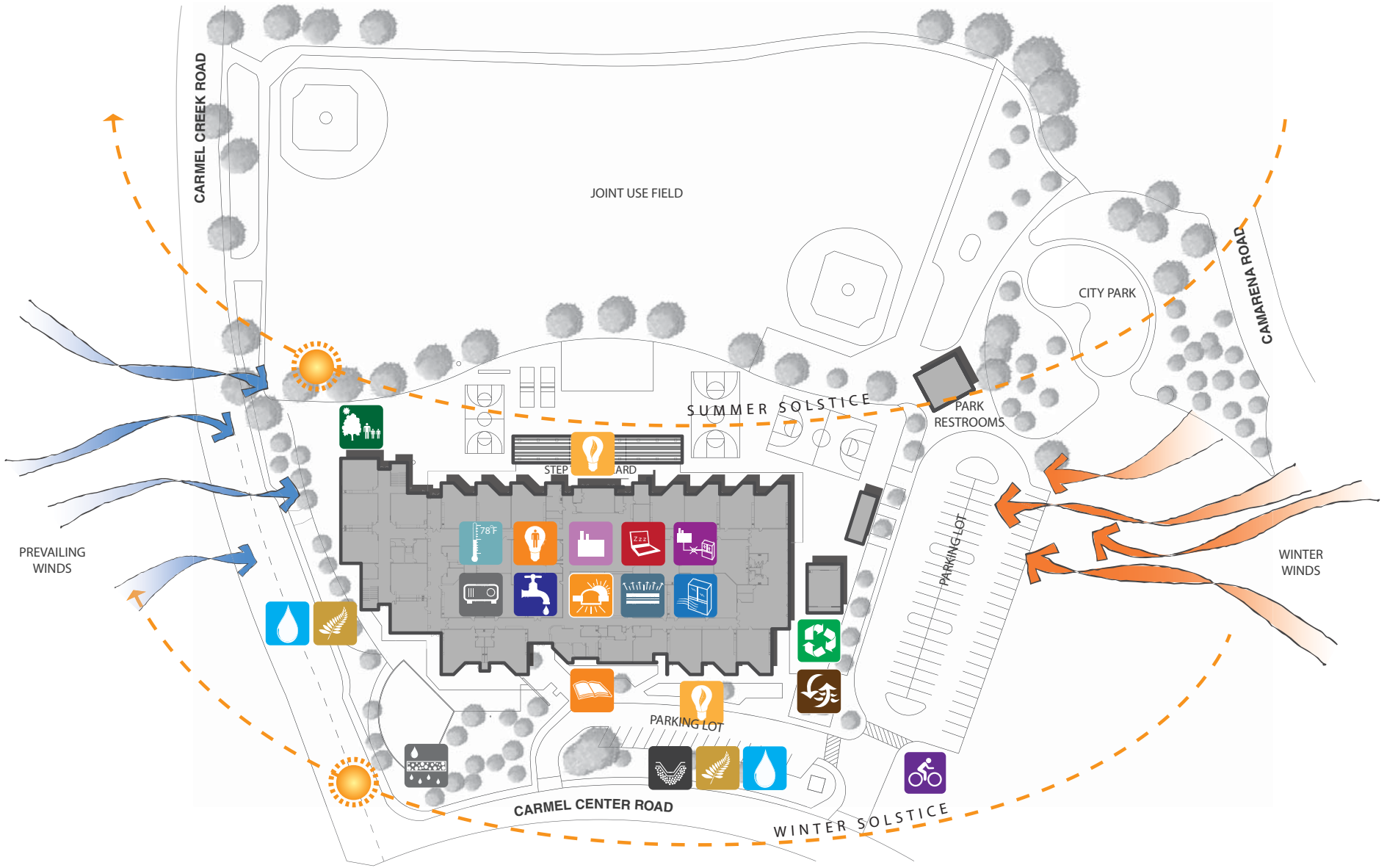
Waste:

Composting and Recycling
It is suggested that a recycling center and composting grounds be located at the west side of campus, near the existing dining area.

Transportation:

Walking and/biking paths to this school site would be possible, as a majority of the school population lives within a walkable distance.

8: Sustainability Opportunities - Carmel Creek



8: Sustainability Opportunities - Carmel Creek

Potential Strategies for Carmel Creek

Carmel Creek is characterized by prevailing coastal winds from the west and warmer inland winds from the east. Existing buildings predominantly have north-south facing orientation which is ideal for maximizing daylighting. Stormwater flows from the north to the south side of the campus.

Culture:

Sustainable signage could be strategically placed in open landscaped areas or within core learning spaces where there may be frequent student traffic. This will allow the campus to essentially become a living laboratory for sustainability. Although the site is limited in space, the interior courtyard can continue to be used for a garden. An areoponics educational garden could be developed in space.

Energy:

Site Lighting
It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures.

Mechanical Systems Upgrades:
Carmel Creek has 14 year old equipment which should be replaced within the next few years, as typical life of HVAC systems is 15 years. It is recommended that high efficiency 17 EER rooftop units be installed when the current equipment is replaced. New equipment is available that is nearly twice as efficient.

Reduce Heat Island Effect
Additional shade trees near play areas can reduce the effect of heat island effect greatly. Cool roof coatings applied whenever a new roof is replaced or constructed will also reduce heat island effect while keeping the interior of the building well insulated.

Natural Ventilation
Operable windows which are able to receive wind currents on the windward side (west side of campus) and which then allow the wind current to cross ventilation toward the leeward side (east) will improve occupant comfort and air quality. This strategy should be combined with HVAC interlocks which switch off the mechanical system anytime a window or door is left open.

Daylight Harvesting
Currently, existing skylights at Carmel Creek are frequently covered up, and electrical lighting is being used unnecessarily. It is recommended that a mechanized shade is installed on the skylights which would allow the shades to open or close according to the current daylight levels.

Projector Interlocks
By interlocking the projector switch with the motorized window shades, the shades will close when the projector is turned on and will open the shades when the projector is turned off.

Water:

Building Water Fixtures
Upgrading or replacing existing building fixtures with high efficiency water fixtures throughout the campus will result in a 40% savings.

Irrigation Water
Establishing adaptive/native vegetation and replacing turf where possible will result in an environment which supports native wildlife and which will yield a 30% water savings.

Stormwater
To control the amount of stormwater runoff on campus, it is recommended that a bioswale is installed on the south side of the parking lot. This will allow for effective capture and filtration of stormwater from paved parking surfaces.

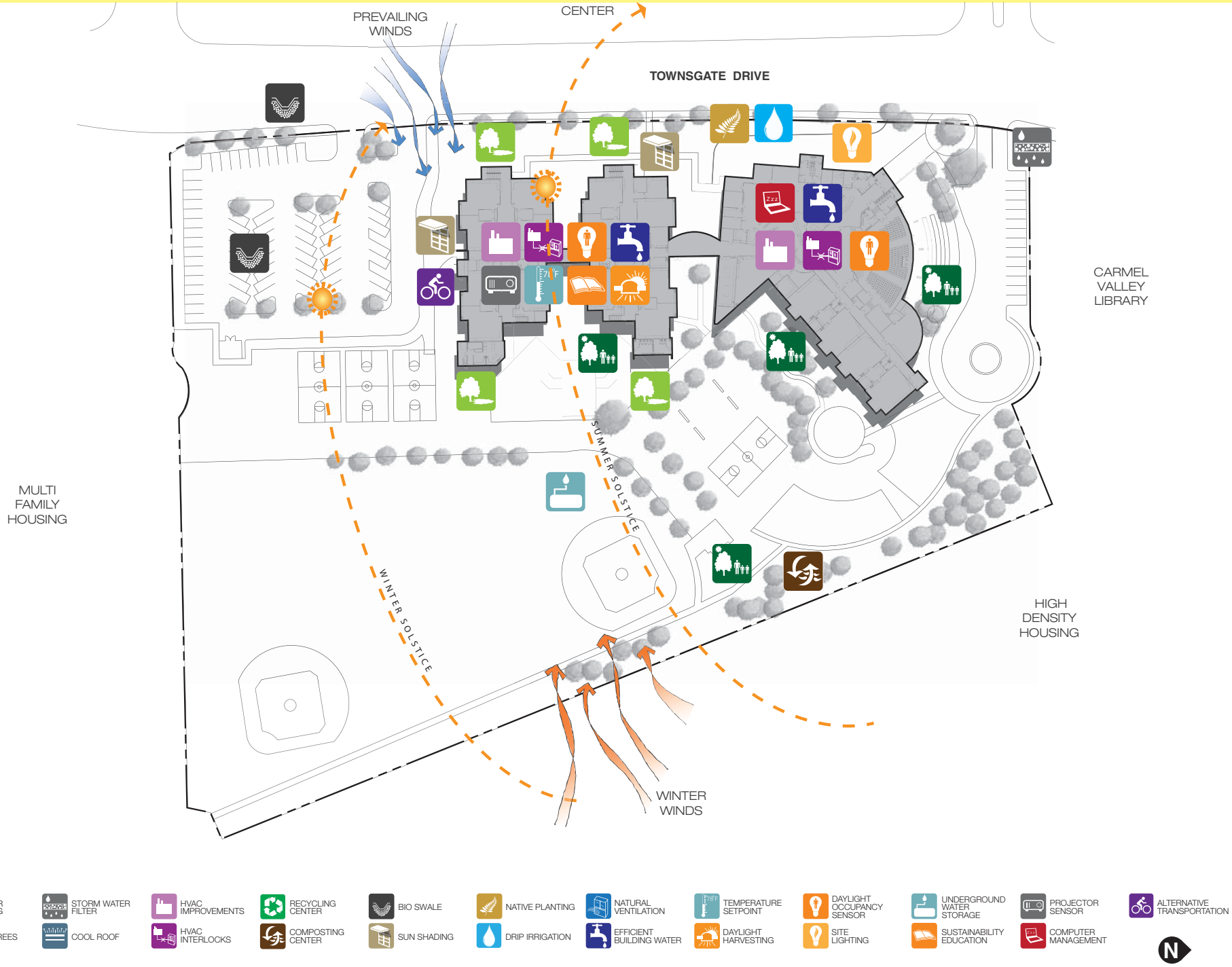
Waste:

Composting and Recycling
It is suggested that a recycling center and composting grounds be located at the east side of campus.

Transportation:

Walking and a walking school bus program at this school site would be possible, as a majority of the school population lives within a walkable distance.

8: Sustainability Opportunities - Solana Pacific



8: Sustainability Opportunities - Solana Pacific

Potential Strategies for Solana Pacific

Solana Pacific is characterized by coastal winds from the west and warmer inland winds from the east. Existing buildings predominantly have east-west facing orientation which receive significant solar exposure during the morning and afternoon hours. Stormwater flows from the south to north side of the campus.

Culture:

An outdoor learning area located on the south and east sides of campus would be well suited for this school site. These areas would essentially become outdoor classrooms, allowing students and teachers to take advantage of the temperate climate, fresh air and natural surroundings.

Sustainable signage could be strategically placed in open landscaped areas or within core learning spaces where there may be frequent student traffic. This will allow the campus to essentially become a living laboratory for sustainability.

Expansion of the school garden at this site is recommended, as it provides an opportunity to broaden students' understanding and respect for the food supply and comprehension of the garden to table processes.

Energy:

Site Lighting
It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures.

Mechanical Systems
Solana Pacific has fairly new equipment, (8 years old), which should have an extensive remaining life if maintained.

Heat Island Effect
Additional shade trees in the parking lot areas and near play areas can reduce the effect of heat island effect greatly.

Natural Ventilation
Operable windows which are able to receive wind currents on the windward side (west side of campus) and which then allow the wind current to cross ventilation toward the leeward side (east) will improve occupant comfort and air quality. This strategy should be combined with HVAC interlocks which switch off the mechanical system anytime a window or door is left open.

Window Treatment and Shading Devices
Horizontal window shades on the south side of the campus buildings and adjacent to the hardcourt areas will prevent unnecessary glare and heat gains from occurring through the glazing.

Projector Interlocks
By interlocking the projector switch with the motorized window shades, the shades will close when the projector is turned on and will open the shades when the projector is turned off.

Water:

Building Water Fixtures
Upgrading or replacing existing building fixtures with high efficiency water fixtures throughout the campus will result in a 40% savings.

Irrigation Water
Establishing adaptive/native vegetation and replacing turf in the front of the school and where else possible will result in an environment which supports native wildlife and which will yield a 30% water savings.

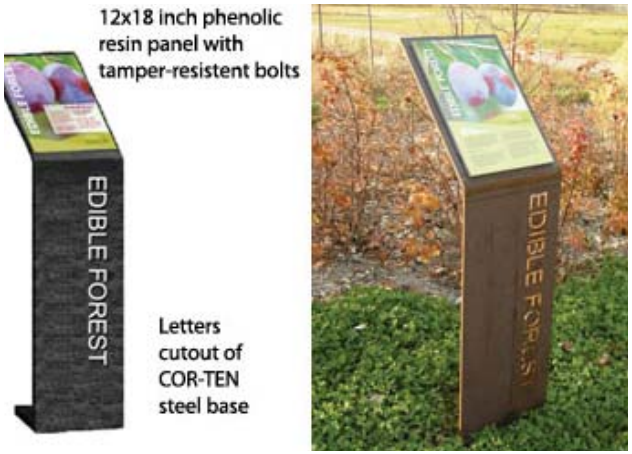
Stormwater
To control the amount of stormwater runoff on campus, it is recommended that a bioswale is installed on the west side of the campus by the parking lot. This will allow for effective capture and filtration of stormwater from paved parking surfaces. In addition, an underground water storage tank is recommended. This will allow consistent capture of stormwater during high rainfall months, which could then be used to irrigate playfields and other vegetated areas. This will also prevent runoff from overburdening the stormdrains.

Waste:

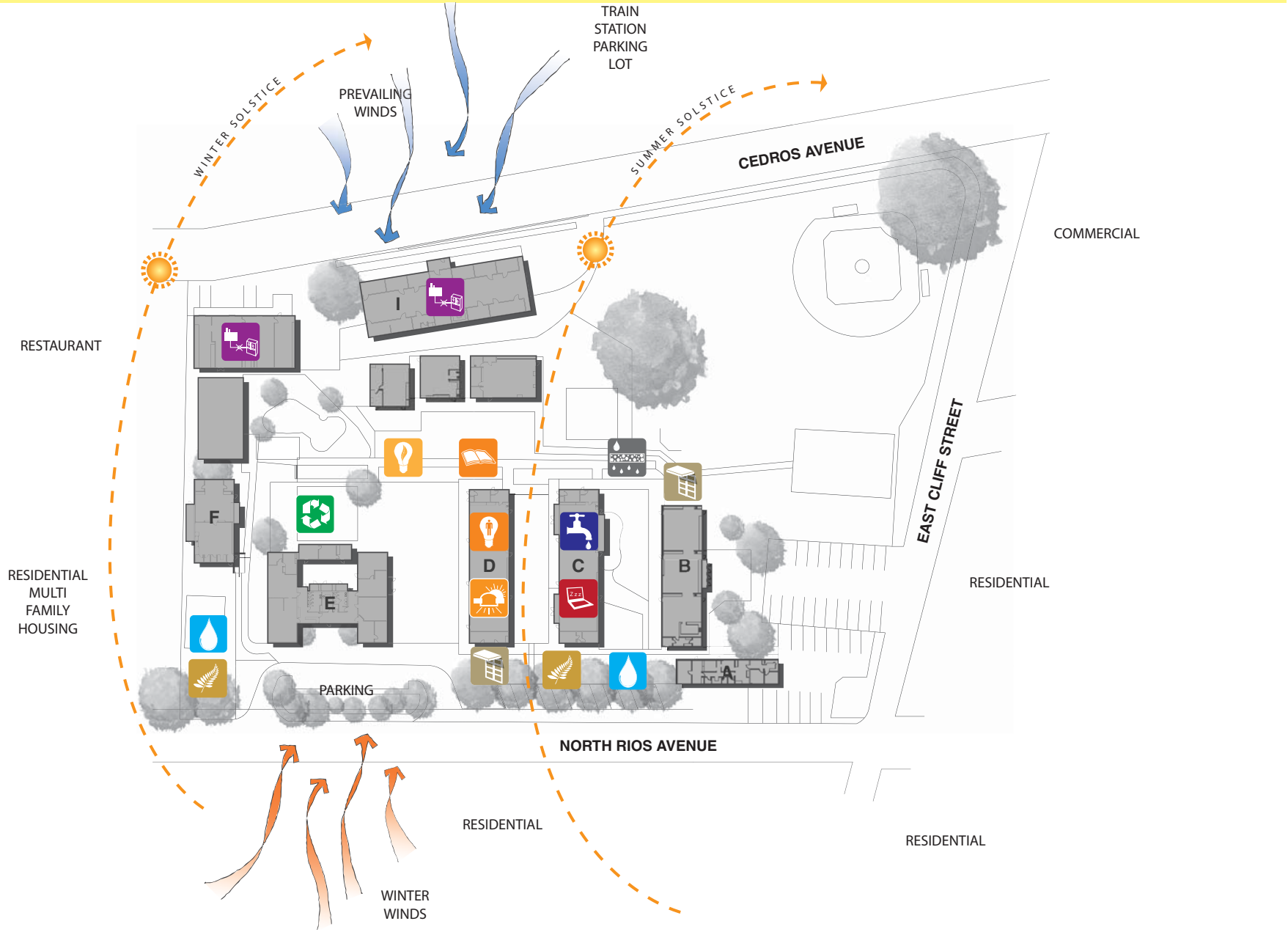
Composting and Recycling
It is suggested that a recycling center and composting grounds be located at the east side of campus near the school garden. This will allow student gardeners to make use of the compost more effectively.

Transportation:

Walking paths and a walking school bus program at this school site would be possible, as a majority of the school population lives within a walkable distance.



8: Sustainability Opportunities - District Office and CDC



8: Sustainability Opportunities - District Office and CDC

Potential Strategies for DO + CDC Site

District Office and CDC is characterized by coastal winds from the west and warmer inland winds from the east. Existing buildings predominantly have north-south facing orientation which is ideal or maximizing daylighting. Stormwater flows from the northeast to the southwest side of the campus.

Culture:

Sustainable pictogram signage could be strategically placed in open outdoor areas or within core learning spaces where there may be frequent children and parent traffic. This will allow the campus to essentially become a living laboratory for sustainability.

Energy:

Site Lighting
It is recommended that all street, parking, and walkway lighting be replaced with wind and solar powered LED lighting fixtures.

Mechanical Systems
The District Office and CDC site has 15-20 year old equipment, which should be replaced within the next few years, as typical life of HVAC systems is 15 years. It is recommended that high efficiency 17 EER rooftop units be installed when the current equipment is replaced if the facility remains on this site. New equipment is available that is nearly twice as efficient as the existing equipment.

Natural Ventilation
Operable windows which are able to receive wind currents on the windward side (west side of campus) and which then allow the wind current to cross ventilation toward the leeward side (east) will improve occupant comfort and air quality. This strategy should be combined with HVAC interlocks which switch off the mechanical system anytime a window or door is left open.

Projector Interlocks
By interlocking the projector switch with the motorized window shades, the shades will close when the projector is turned on and will open the shades when the projector is turned off.

Water:

Building Water Fixtures
Upgrading or replacing existing building fixtures with high efficiency water fixtures throughout the campus will result in a 40% savings.

Irrigation Water
Establishing adaptive/native vegetation and replacing turf where possible will result in an environment which supports native wildlife and which will yield a 30% water savings. Some outdoor turf will need to remain to support small children in their outdoor activities.

Stormwater
An open trench drain line runs through the middle of campus. This creates safety hazards and also increases the potential of pollution within the drain system. To prevent this from occurring, it is recommended that a grate system be placed on top of the drain system so that students can safely pass over it. In addition, a stormwater catch basin inlet should be placed at the east side of campus which would be able to intercept debris and other pollutants before the stormwater is directed into the main stormdrain.

Waste:

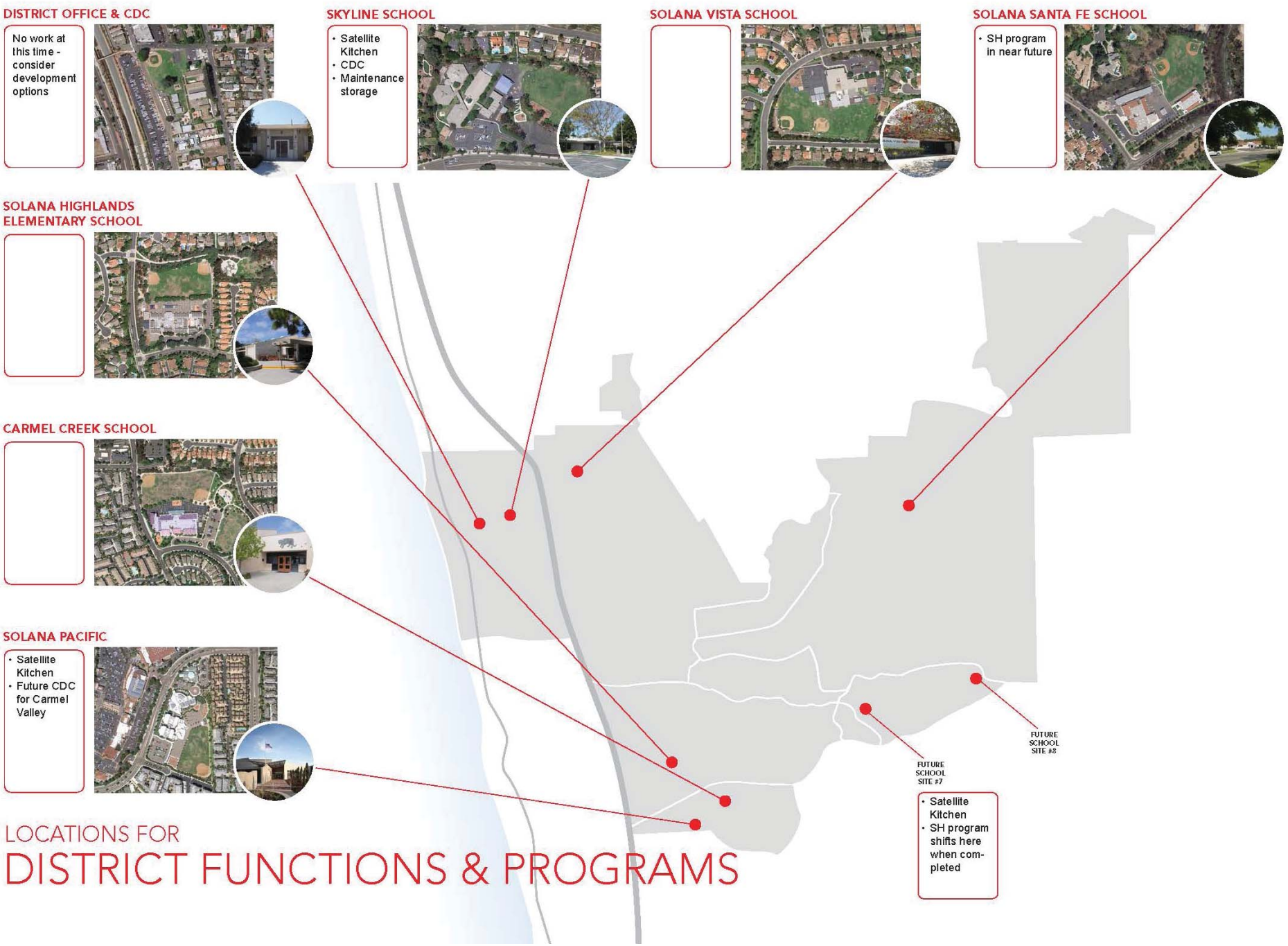
Recycling
It is suggested that a recycling center be located at the west side of campus. Consider using colorful bins and graphics to teach young children about the importance of recyling and create a training program.

Transportation:

Walking paths to this school site would be possible for families participating in the CDC program and living within a walkable distance.

9: Options and Recommendations

9: Options and Recommendations



9: Options and Recommendations

Process & Approach

Upon embarking on the master plan process, the District had noted that in the past, needs for facilities have been reviewed on a site by site basis. Schools and additions to schools have been added to the District as regional growth and enrollment increases occurred. One of the charges of this master plan is to consider how all sites function together in a holistic District approach and how best to provide services and utilized District resources prudently on a district-wide basis. There was recognition that, while all schools provide a similar high quality of educational delivery, there lacks parody among sites in terms of the age and condition of the facilities. Parody should be considered in the development of recommendations. Recommendations should be grounded in the Guiding Principles.

The intent of the master plan development has been a collaborative team process between the District and consultants and the process for identification of recommendations for the master plan aligns with that philosophy. The process for developing recommendations included 3 open dialog worksessions with the District Leadership Team. As the Leadership Team embarked on the task, the group recognized that up to this point many of the meetings and discussions had been more focused on current conditions and immediate needs for each specific site at a micro level. At this point, the Leadership Team explored the use of each site at a high level use to develop options for site asset utilization, with emphasis on district-wide context. Considerations explored included the location for the District Office, maintenance facilities and what those needs really are, CDC, excess capacity at some sites and crowded capacity at others, educational and social development advantages of different grade configurations, site assets and challenges, and locations for special programs such as severely handicapped services. Options must also consider how to develop a long-range master plan that will allow for sustainable operations for the District in both optimum economic conditions, as well as in less optimum economic times.

Worksessions were inclusive of all ideas for discussion and everyone was tasked to continue to contemplate and evaluate options in between worksessions and consider what potential consequences, both positive and negative, the implementation of any of the options might have. Concerns and consequences were always discussed at the subsequent worksession. The Leadership Team recognized that a process to develop thoughtful long-range recommendations does not happen in one quick meeting, but rather with multiple perspectives, continued review, and consideration of implementation over a period of time to allow everyone the opportunity to reflect upon discussions and analyze direction. The Leadership Team provided multiple perspectives for both site and District viewpoints and all individuals were dedicated to the commitment and process to develop and vet the recommendation options.

The first worksession focused on reviewing the data and input that had been gathered and applying this information in an exploration of different scenarios for each site use. Options were analyzed in the context of site capacity, enrollment projections, site and building conditions, and educational goals. The group identified 2 scenarios for HMC/School Advisors to further analyze, research, and develop for more discussion by the Leadership Team in worksession 2. The second worksession included a review of the two scenarios and vetted concerns and considerations that surfaced between the meetings. HMC outlined how each scenario and site use related to the site capacity and site conditions. The Leadership Team continued to focus in on an approach and fine-tune site options. These options were then further investigated by HMC/School Advisors and broad scope costs models were developed along with conceptual site diagrams to show the overall concept of the options. At the third worksession the Leadership Team was challenged to consider potential consequences of the recommendations and then finalize a proposed recommended scenario with specific site recommended use and potential facility improvements for consideration by the Board of Education. These recommendations were then presented and vetted with the Facilities Master Plan Committee.

District-wide Recommendations

The recommendation developed for each site use and location for District operations and functions is diagrammatically shown on the adjacent page. It should be noted that the grade configurations for sites are for the near future and may need to be altered later as changes in enrollment or educational needs occur. Therefore, it was determined that the plans for improvements for each site should allow for flexibility of grade configuration and facility use. It should also be noted that School 7 was in the planning process when this master plan began and was not part of the considerations of the plan other than the implications of District and site capacity.

In the development of the recommended scenario for site uses within a district-wide perspective, several District operational and program initiatives were discussed and have facility implications. The first includes the expansion of the early childhood CDC program both in the City of Solana Beach and in Carmel Valley. The North Rios site has no space to expand the CDC without demolition of existing structures and site re-configuration. Re-organization and development of cost effective operational strategies for maintenance were also recommended.

District-wide Recommendations:

- Bring all schools into compliance with accessibility requirements - the Board of Education is liable for compliance with this federal regulation and civil law
- Hire a civil engineering consultant to develop a plan for storm water management and compliance with San Diego County Water Board requirements at all sites
- Identify major repair/replacement costs for major building systems as outlined - maintenance staff to complete
- Identify which sustainability initiatives to implement at each site and District-wide
- Develop a detailed security plan with local law enforcement agencies and incorporate into site modifications
- Complete an in-depth investigation of asset potential and possible interest from developer partners for the North Rios site

Overview of Site Recommendations

School sites have varying degrees of recommended modifications to be made relating to the age of the facility and site conditions. Minor modifications are recommended to the Solana Highlands and Carmel Creek sites to address code and accessibility requirements, to improve space utilization and site zoning, improve safety and security, and align with District Space Standards. Solana Pacific, the District's newest school, would require only minor modifications if the District decides to locate a Preschool program at this site and minor modifications to develop a satellite kitchen to service the Carmel Valley schools. The addition of a preschool program in Carmel Valley would require an investment of funds regardless of where it would reside.

The Solana Santa Fe site has had portable classrooms on the site almost since the opening of the school and the units are almost at the end of useful life. Portable units require more maintenance than permanent facilities and generally do not provide the same quality of educational environment. Modifications to the Solana Santa Fe site are recommended to improve site utilization, activity zoning, and "right-size" the school for the identified enrollment projections. Solana Santa Fe will be close to 25 years old when School 7 opens.

The two oldest elementary school sites in the District; Skyline and Solana Vista have the greatest facility challenges and, therefore, have the largest amount of modifications recommended. The redevelopment of these sites, especially Skyline, allows for the opportunity to better utilize the site to address other District needs such as a storage and maintenance facility, a satellite kitchen to serve both Skyline and Solana Vista, and potentially the relocation of the CDC from North Rios which allows for flexibility of this site to be used for potential lease.

The District Office/CDC site would required substantial investment to address infrastructure, code, and maintenance needs for the CDC and District office due to age, current condition, and topography. A preliminary analysis for asset reuse for public-private potential of the site was completed as part of this master planning process. The initial analysis focused on a 1 acre portion of land along Cedros and a 1.7 acre portion of the site on Rios Ave. The conceptual analysis preliminarily concluded that a retail and residential development on the site could be worth up to approximately $6 million in present-value dollars. If that amount were paid out as a long-term lease, the value could be $400,000-$450,000 per year. Further research with potential development partners is recommended to determine full potential of the site.


SKYLINE
SCHOOL
606 Lomas Santa Fe Dr.
SOLANA BEACH, CA 92075
A
Skyline Elementary School

9: Options and Recommendations - Skyline

Recommendations for Skyline

Next to the original District school on North Rios Ave., Skyline is the oldest school in the District and faces challenges with meeting current code and accessibility requirements. Redevelopment of a school facility with a 2-story structure could maximize site utilization providing space for a satellite kitchen to serve the Solana Beach schools and a maintenance/supply storage area for the District freeing up space on the North Rios site. Redevelopment allows for the upgrade of infrastructure including storm water management. It was agreed by the Leadership Team that investing funds in the existing structures for upgrades is not a prudent use of funds as it would not solve the issues which challenge the site such as drop-off and pick-up, safety, topography elevation change, circulation, and instructional space that does not meet the District Space Standards.

Site Recommendations Summary:

- Replace existing structures with new 2 story facility that integrates with existing topography and maximizes site area
- Facility for grades 3-6 or 4-6 with flexibility to add kindergarten area and serve grades K-6 in future
- 18-22 standard classrooms & 6 classrooms for special subjects and special education and 1 classroom for CDC
- Include all spaces outlined in the District Space Standards
- Include a larger satellite prep and cooking kitchen to serve both Skyline and Solana Vista
- Include 5000 s. f. of covered outdoor dining space distributed over larger area to avoid crowding and noise
- Consider retaining existing multipurpose building only if practical in final solution - limits play area
- Create a separated drop-off and pick-up zone from parking
- Create maintenance storage area integrated into new structure with access and appropriate landscaping to conceal from Lomas Santa Fe

Additional Options and Considerations:

- Relocate existing CDC facility at the lower area of the Skyline site – potential to expand current size
  - CDC would have separate entrance and parking space
  - Coordinate shared use of play fields
- Implement options from sustainability recommendations

Considerations for Implementation:

- Interim housing would need to be provided during construction and re-grading of the west side of the site
- Could be beneficial to locate Global Program on different site during construction to minimize interim housing on site
- Would need to use field for interim housing
- Phasing: Construct new elementary school before CDC
- Consider redevelopment of site as high priority due to age and condition of existing facility


SOLANA
VISTA
SCHOOL
780 Santa Victoria
SOLANA BEACH, CA 92075

9: Options and Recommendations - Solana Vista

tion 2

Recommendations for Solana Vista

Solana Vista is the third oldest facility in the District originally built in the 1970s with the majority of the classrooms and instructional space provided in portable structures. This site, along with Sky-line, have a bubble in enrollment in the next 3-4 years making current capacity tight for projections. The Team recommended that the school function as a tk - 2 or tk-3 site for the near future while retaining flexibility allowing the site to also be a tk-6 site if ever needed. Three options with different levels of facility modification were considered which would allow the District to address the student population in this area. The options range in costs and a final option selection may be influenced by funds available.

The first 2 options for site redevelopment include additions to the existing permanent structure. The first option adds 2 kindergarten classrooms close to the existing kindergarten wing and replaces the leased portable structures that are west of the permanent building. The second option adds kindergarten classrooms and includes an addition that would replace all of the portable classrooms except the 2 kindergarten portable units added on to the kindergarten wing. Both scenarios include a new outdoor dining garden and food service area with adjacent delivery, and exterior facia replacement. The third option recognizes that the original permanent school facility only includes 9 classrooms of which 1 does not have any exterior windows and requires interior upgrades and modifications to bring the facility up to current code and accessibility requirements. The building also requires mechanical system replacement and other repairs. Ideally the structure would be replaced. Replacement of the entire school would allow for a 2-story facility to be best located on the site providing separated parking and drop-off/pick-up area and maximizing space on the site. Site diagrams and estimates are for a facility that could accommodate about 500 students but could be expanded in the future for a larger capacity.

There is some urgency in determining a direction for the Solana Vista site as the permanent building has the original central plant mechanical system which has lasted well over a typical life span and needs to be replaced soon. District maintenance staff have indicated that it would prefer to replace the central system with individual rooftop units, however, this will require interior modifications for ducting and structural requirements. It would be best to coordinate the HVAC replacement with the site redevelopment option selected as not to waste funds for a new system that may need to be eliminated or modified soon after installation.

Site Recommendations Summary:

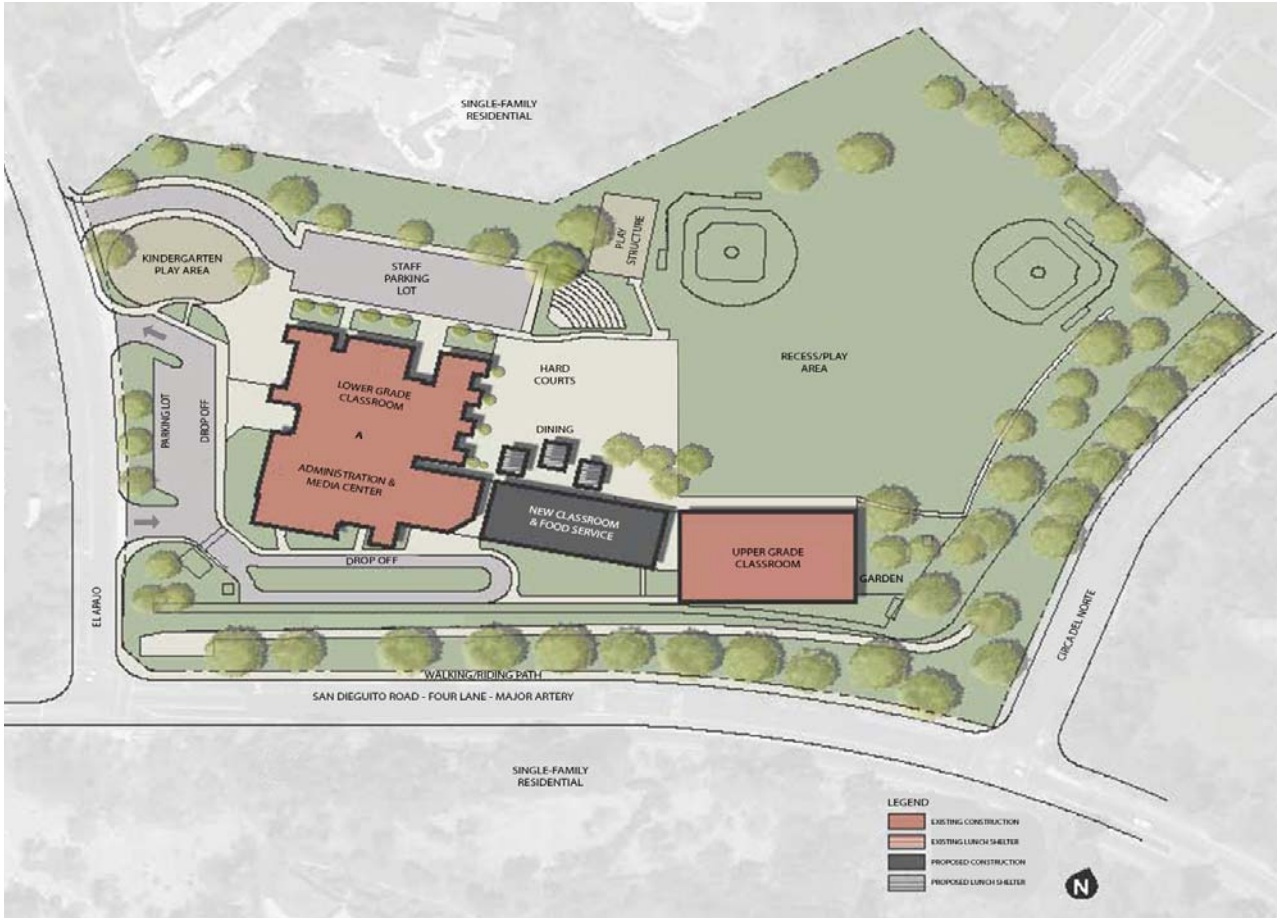
- Select 1 of the 3 proposed options
- Upgrade interior of existing permanent building to meet current code requirements and District Space Standards
- Update infrastructure to address storm water management

Considerations for Implementation:
- This school is a high priority since there will be a need to replace the mechanical system in the near future
- Interim housing will be needed for all options

SOLANA SANTA FE ELEMENTARY

6570 El APAJO
RANCHO SANTA FE, CA 92067

9: Options and Recommendations - Solana Santa Fe



Recommendations for Solana Santa Fe

It is recommended that Solana Santa Fe continue to serve grades K-6 in the near future. Since the site currently has open capacity, it is recommended that this site house the Severely Handicapped Special Needs program until School 7 is open and then the program could potentially move to the new school. Capacity for both sites should be re-assessed at that point. Since the site will have excess capacity, the Team recommended that the portable classrooms be removed to allow for better use of the site. This would provide space to develop a connecting structure between the original school and the upper grade level classrooms, an expanded dining area, and separate parking and drop-off/pick-up areas. The new structure would tie the school together and provide spaces needed to meet the District Space Standards. A new curb cut and access will be required for the new parking area and will require coordination with local authorities.

Site Recommendations Summary:

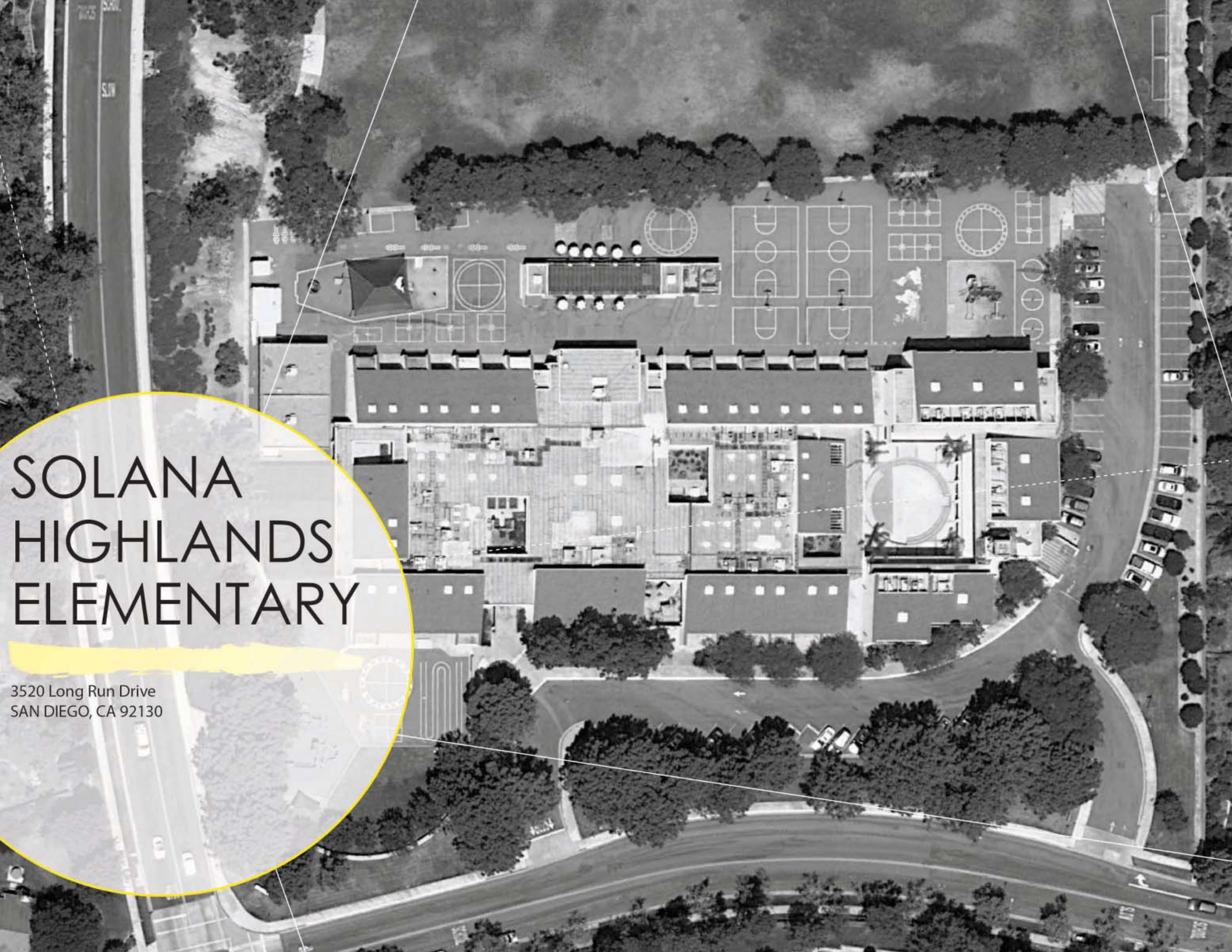
- Remove portable classrooms - could be phased
- Provide new parking area on north side of site where portable classrooms are currently located -new curb cut required as well as a retaining wall at slope
- Better utilize north sloped side of site by creating tiered outdoor learning area along slope
- Coordinate an emergency access with parking
- Redevelop drop-off pick up zone with no parking
- Create an addition which would connect the original school building with the upper grade classroom building on the east side of the site housing a serving kitchen, flexible space that could be used for dining in inclement weather, and instructional space to meet District Space Standards
- 24 classrooms are needed on site to accommodate standard classrooms and special area and special needs classrooms
- Include delivery area for food service close to access drive
- Expand hardcourt play area
- Update infrastructure to address storm water management

Additional Options and Considerations:

- Another option was reviewed which kept the parking and the drop-off/pick-up zone as it is and would be less costly. The area on the north side of the site would then be used for play area
- Implement options from sustainability recommendations

Considerations for Implementation:

- The existing portable classroom in the center of the hardscape could be eliminated now and provide more dining space in the immediate future
- After this portable is removed, new connection structure could be constructed without need for interim housing
- Coordinate fire lane access with in new parking area



SOLANA HIGHLANDS ELEMENTARY

3520 Long Run Drive
SAN DIEGO, CA 92130

9: Options and Recommendations - Solana Highlands

Recommendations for Highlands

The Solana Highlands facility is in good condition requiring minimal modifications for upgrades. After School 7 is opened, enrollment will be reduced to about 310 students at this site. It is recommended that the school serve grades TK-3 or K-4 in the near future which would require a total of 23-24 classrooms to meet the District Space Standards after School 7 is built. The facility would have a total of 34 classrooms available for use after the removal of the 2 portable classrooms on the west side of the site. It is also recommended that the existing kindergarten lunch structure, which is in poor condition, be removed. This will open up this side of the site for additional kindergarten play space and a potential outdoor garden and learning area for primary grades. A new outdoor dining area, surrounded by landscaping and trees, could be created on the east side of the site, taking it out of the center of the play area and improving the zoning of the campus.

The additional classroom space can provide an appropriate food service area close to a delivery zone and a multi-use indoor dining area which could also be used for after school programs. This space can provide much needed storage and allow the old cargo containers to be removed from the site.

Site Recommendations Summary:

- Removal of two portable classrooms and cargo containers
- Minor interior modifications and upgrades to meet current code and accessibility requirements and provide spaces aligned with the District Space Standards
- Convert 3 classrooms on first floor of the east classroom wing to a food service area, multipurpose space for indoor dining and CDC activities, and a storage area
- 1 classroom converted to a larger faculty lounge with existing small lounge converted to an administrative conference room
- 1 classroom could be converted to a TV studio
- Create a new 5,000 s.f. outdoor dining area distributed in multiple structures to avoid overcrowding, landscape area with trees and plants
- Dedicated food service delivery adjacent to service kitchen
- Redevelop primary play & learning area on west side of site
- Update infrastructure to address storm water management
- 23 classrooms are needed on site to accommodate standard classrooms, special area and special needs classrooms, and a CDC

Additional Options and Considerations:

- Implement options from sustainability recommendations

Considerations for Implementation:

- CDC portable classrooms could be removed after School 7 is completed
- It is beneficial to coordinate new outdoor dining area with development of satellite kitchen at Solana Pacific

CARMEL CREEK SCHOOL

4210 Carmel Center Road
SAN DIEGO, CA 92130

9: Options and Recommendations - Carmel Creek

Recommendations for Carmel Creek

The Carmel Creek Elementary facility is in good condition requiring minimal modifications for upgrades. It is recommended that the school serve lower grade levels using a total of 27 classrooms to meet the District Space Standards. This would provide interior expansion space for additional needed spaces for the school to meet District Standards for support spaces. The school is on an extremely tight site with much of the District-owned land used for the building footprint. Play area can be opened and appropriately zoned by creating a new, attractive outdoor dining area on the east side of the school with easy access for food service delivery. This would eliminate service trucks from crossing to the play area and facilitate an improved food service. This area should be landscaped to provide a visual barrier to the parking lot.

Site Recommendations Summary:

- Minor interior modifications including moving the staff dining area to a classroom and converting the existing small faculty dining to an administrative conference room
- Move the broadcasting studio to a classroom and convert studio to a much needed small group room/tutor space
- Minor interior updates for accessibility and code compliance
- Remove portable CDC classroom and cargo containers on east side of building
- Create a garden environment for outdoor dining just east of the school building with multiple shade structures and add a new food service structure close to delivery area
- Provide a landscaped separation with a fence between new dining area and parking lot
- Add fence barrier between site and park entrance adjacent to park restrooms to improve security
- 27 classrooms are needed on site to accommodate standard classrooms for projected enrollment, special area and special needs classrooms, and 1 CDC classroom
- There are 33 classrooms on the site after the removal of the portable CDC classroom providing space for the TV studio and faculty dining room
- Update infrastructure to address storm water management
- Remove existing dining shade structure to open play area

Additional Options and Considerations:

- Implement options from sustainability recommendations

Considerations for Implementation:

- CDC portable classroom could be removed after School 7 is completed
- Site security fencing could be added at any point but style should be coordinated with design for outdoor dining area
- It is beneficial to coordinate new outdoor dining area with development of satellite kitchen at Solana Pacific
- It will be most cost effective to complete all interior modifications simultaneously

SOLANA PACIFIC SCHOOL

3901 Townsgate
SAN DIEGO, CA 92130

9: Options and Recommendations - Solana Pacific

Recommendations for Solana Pacific

Although Solana Pacific is the newest facility in the District until School 7 is built with an up-to-date educational environment, the school seems underutilized with excess capacity. The school currently serves grades 5 and 6. The Team acknowledged the school could serve grades 4-6 in the near future while retaining the flexibility to serve grades K-6 since the school was originally designed for a K-6 grade configuration. This use works well with the quantity of classrooms and enrollment projections for those grades. This would utilize all the classrooms except 3 of the kindergarten classrooms. Little modification is needed at this school other than the expansion and modifications to the food service kitchen to develop it into a satellite prep and cooking kitchen which would service Carmel Creek and Solana Highlands in addition to Solana Pacific.

Since the District has identified an interest in having a CDC preschool in the Carmel Valley area, and the Carmel Creek and Solana Highlands campuses have tight sites to accommodate any additional parking and play area, Solana Pacific was identified as a potential location for a preschool which could be located in the area of the original kindergarten wing. This area has a small kitchenette adjacent to the kindergarten rooms. A separate entrance area located off of the Kelsford turn around could be used for access to a preschool. Parking would need to be added and capacity for this along Kelsford and adjacent to the turn-around on the site property would need to be investigated in detail with the city. Due to the limited parking, it would only be practical to locate 1-2 preschool classrooms at the site. Restrooms would need to be modified. One or two kindergarten classrooms could continue to be used for the after school CDC program which is very popular at this school.

Site Recommendations Summary:

- Enlarge the existing food service kitchen and expand equipment for a satellite prep and cooking kitchen
- 19-22 standard classrooms are needed to serve the enrollment projections for grades 4-6 with 6 additional classrooms for special area and special needs and 1 CDC classroom
- The school currently has 33 existing classrooms for use

Additional Options and Considerations:

- Consider locating 1-2 preschool classrooms at this site to provide for CDC preschool in Carmel Valley
- Make modifications for parking, site, and restrooms to accommodate preschool
- Implement options from sustainability recommendations

Considerations for Implementation:

- Food service modifications should be made at same time that Carmel Creek and Solana Highlands dining areas are developed - coordinate phasing of all 3 projects

DISTRICT OFFICE & CHILD DEVELOPMENT CENTER

309 N. Rios
Solana Beach, CA 92075

9: Options and Recommendations - District Office/CDC Site

Recommendations for the DO/CDC Site

The District office/CDC site on North Rios Ave. was the first school site in the District with the original structures being built in 1925. It is in a central area of the business district of the City of Solana Beach and across from the train station on Cedros Ave. The city has had a long-term interest and intent to develop the north section of Cedros Ave. similar to the retail and restaurant area on the south side of Cedros Ave. The 4 1/2 acre site is too small to become an elementary school site and would most likely not be approved by the Department of Education for an elementary school due to it's close proximity to train tracks. Thus the use of the site for District functions are limited to administrative offices and the CDC.

As options for a holistic District plan were considered, it was agreed that it would be financially prudent to limit funds spent on the North Rios Ave. site rather than spreading out District resources on all sites. Since this site could likely have potential for a future revenue stream if it were leased, and since site improvements would have a substantial cost due to the age of existing structures and site topography, the Team recommended that minimal investment be made at this site in the near future and potential options with developers for a long-term land lease be investigated.

Two options were discussed based on information provided by the private/public asset specialist who provided the initial overview investigation into the site asset potential. The first option proposes using the south 1 acre parcel on Cedros Ave. for a potential longer-term land lease for commercial use. The maintenance and use of the ball field should be part of the negotiations. The administration building could remain and the CDC could be consolidated into a new facility on the east side of the site. This would require an investment for maintenance and new construction. The second option, which was favored, proposes that the District does not build anything on the site and keeps options open for potential lease of the entire site for maximum revenue potential.

Site Recommendations Summary:

- Pursue an in-depth investigation of asset potential and possible interest from developer partners for site development
- Redefine the operational and physical needs of the maintenance department.
- Reduce supply and maintenance needs by reorganizing approach to maintenance- incorporate much of this reduced storage/workspace need in a new facility at the Skyline site
- Avoid investing resources at this site in the near future until a development plan has been explored with developers for long-term land lease

Considerations for Implementation:

- Hire a school asset specialist to go to the second phase of development investigation to finalize recommendation

10: Implementation

10: Implementation

10: Implementation

Implementation Approach

The general approach for implementation strategies for the site recommendations is to utilize funds efficiently, and maximize any potential state funding that may be available in the future. The Leadership Team discussed priorities for implementing the site recommendations. The Team recognized that dividing the recommendations on each site into small phased projects implemented over decades is not an efficient use of funds, nor is it feasible due to the triggering of code compliance once any work is started on a site. The greatest needs are at the older school sites of Skyline and Solana Vista and this is reflected in the recommendations and associated estimated costs. A strategic implementation plan will, however, try to address some of the issues at all sites to gain complete District support.

The topographic elevation grade changes and aged site infrastructure make it difficult to address the challenges facing the Skyline site by smaller renovation projects and additions due to the required site re-grading to meet accessibility requirements. Renovation to the existing buildings, additions to accommodate a satellite kitchen, new student dining, site work with compliant ramps, and new infrastructure would cost two thirds of the cost for a totally redeveloped school and not solve all the site issues. For this reason, reduced scope for the Skyline site recommendation, other than to remove the CDC project which could be completed separately, is not a prudent use of District and taxpayer dollars.

The aging mechanical system at Solana Vista will require replacement in the next 2-3 years, which requires a decision on one of the 3 options to be made in the near future to allow for efficient planned replacement of the mechanical system that will support a longer term plan. Some of the leased portable classrooms on the Solana Vista site will require a renewal of the lease in 2016. This is considered in several of the potential implementation scenarios and makes this school a high priority for implementation. Other priorities identified were addressing site security and food service including dining at all sites. Landscaping and outdoor projects, sustainability upgrades, and interior modifications scope may need to be completed at a later point.

Implementation of all the recommendations will most likely need to be completed over 15-20 years in at least 2 phases due to funds available to the District. This section identifies 3 potential implementation scenarios for the 1st phase of projects that could be completed based on funding potential as outlined by District consultants.

Potential Funding

Funding for school district capital improvement projects can come from a variety of sources, but generally a large portion of capital costs are paid through state and local General Obligation Bonds. School districts have had the authority to levy developer fees on residential and commercial construction or reconstruction.

Currently, Level 3 Developer Fees have been suspended by the state, however, a district is still able to levy Level 2 Developer Fees as long as the district can justify the need through a School Facilities Needs Analysis. School districts are also able to tax a portion of their district (often a new housing development) by establishing a Mello-Roos community Facility District or a School Facility Improvement District.

California's School Facility Program was created in 1998 as a funding partnership between the state and local education agencies. Under the current School Facilities Program, the state issues General Obligation Bonds to support capital improvement projects and local educational agencies match the state's portion through developer fees, Certificates of Participation, local General Obligation Bonds and/or parcel taxes. Currently, the California State School Facility Program has exhausted the existing bond authority. The program is being evaluated and changes are expected in the near future. Program changes will more than likely be tied to a potential 2014 state bond, which currently is showing strong support. Given that there will likely be a new program for entitlements, funding amounts may be different than they are today making it challenging to plan for specific dollar amounts based on current eligibility. For this reason, potential implementation scenarios for this master plan are focused on funds from local General Obligation Bonds. While the use of state grant funds are considered in the options for implementation, they are only considered as supplemental funds that could add some of the original scope of the site recommendations back into projects in phase 1 where the scope has been designated for phase 2 implementation.

Information for Solana Beach School District's bond potential for the near future was provided by the District's financial consultant, Capital Public Finance Group (CPFG). The District is able to seek General Obligation Bond voter authorization under either the traditional 2/3 approval method or the 55% approval method under Proposition 39. Under the 2/3 approval method the limitation on the amount of bonds that can be used is the District's legal bonding capacity. For 2012-2013, the District's legal bonding capacity is $168,221,997. This figure will change annually based on changes in the District's assessed value.

The 55% approval method has more restrictions than the 2/3 approval method but is often used by school districts given the lower voter approval requirement. The bond issuance for a school district is limited to $30 per $100,000 of assessed value based on reasonable projections for assessed value growth. Potential implementation scenarios included in this plan are based on using the more conservative approach of the 55% approval method. The bond structure and assumptions used when planning for a bond issuance will impact the amount of bonds that can ultimately be issued. Key bond structuring considerations include term of the bond, structure of the bonds, and the number of bond series.

CPFG provided a couple of options for issuing bonds under the Educational Code in their report. Due to the magnitude of need identified in this master plan, the implementation scenarios presented are based on the approach of using two issuances over 25 years which would allow the District to issue a total of approximately $75 million in bonds with $45 million in the first series and $30 million in the second series. These estimates are based on an assumed interest rate of 5.5% and a two year period in between issuances. The District could also issue the bonds in 3 series with each series issued 2 years apart, which could have the potential to yield more dollars, but a lower than expected assessed value growth or higher interest rates could also reduce the District's ability to issue bonds. The implementation scenarios outlined in this section could adapt to this approach which may allow more work to be completed. Specific alternative bond structures would have to be analyzed once a time frame for implementation has been determined by the Board of Education.

Modernization eligibility based on the current School Facility Program was provided by the District's state funding consultant, School Facility Consultant with updated analysis completed in late October 2012. The preliminary summary of the District's updated modernization eligibility is as follows.

Skyline: Total Project $204,000
- 60% State Match: $122,400
- 40% District Match: $81,600

Solana Vista: Total Project $366,000
- 60% State Match: $219,600
- 40% District Match: $146,400

Solana Highlands: Total Project $1,496,370
- 60% State Match: $897,822
- 40% District Match: $598,548

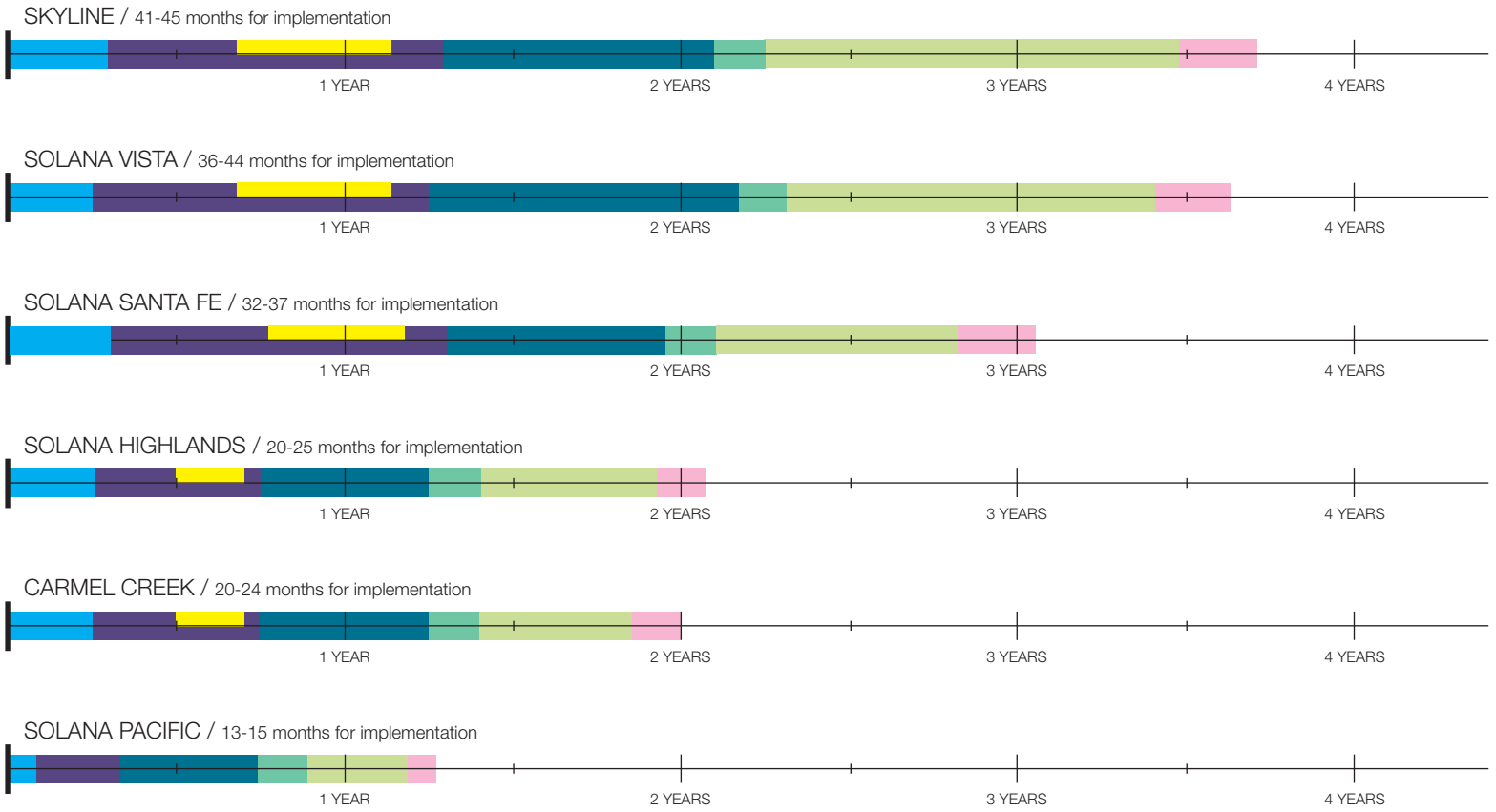
The 60% State match for all three schools is $1,239,822 and the District would need to provide a 40% match of the sum. The estimated grants summaries for these schools are based on the modernization base grant amounts of $3,600 per K-6 pupil, $7,674 per non-severe SDC pupil, and $11,470 per severe SDC pupil. These estimates do not include project specific augmentations, such as an increase in grants for 50 year old permanent structures, an increase of at least 3% for accessibility and fire code requirements, small size projects, etc.

Under the current School Facility Program, Solana Santa Fe may also be eligible for modernization state matching funds in 2016. This potential funding eligibility amount has not been provided at this point by School Facility Consultants, but the timing for the potential eligibility was considered as a possible factor in the time lines for project implementation in some of the potential implementation scenarios.

As previously stated, the availability of state funds is uncertain and therefore, not included as potential funding sources in the outlined implementation scenarios that follow. If these funds were obtained, they could be used to expand the project scope for projects in phase 1 for Skyline, Solana Vista, and Solana Highlands, and possibly even Solana Santa Fe.

10: Implementation

SCHOOL SITE PROJECT IMPLEMENTATION TIME LINES



KEY

- Predesign / Concept Articulation
- Design & Documentation
- CEQA (if needed) & CDE Review
- DSA
- Bid & Award
- Construction (includes phasing)
- Commissioning & Move-in

Project Implementation Timelines

Conceptual timelines for implementation of the proposed scope for phase 1 at each site are illustrated to assist in planning for a phase 1 implementation strategy for all site recommendations. As the timeline diagram illustrates, the larger projects at Skyline and Solana Vista could require almost 4 years for the planning, design, approval, and construction of the projects. Skyline will require interim housing which will need to be considered in a detailed phasing plan of the project. Option 1 for Solana Vista may not require extensive interim housing if phased appropriately. Solana Santa Fe will take about 3 years for the implementation process and may require minimal interim housing if the portable classrooms are retained on site until after the addition is constructed. The smaller projects at the schools in Carmel Valley focus on improving the food service area and could be implemented at the same time in 1 ½ -2 years. All projects could be implemented in a 7- 10 year period depending on the structure of the bond program.

10: Implementation

Conceptual Cost Estimates

Broad scope conceptual cost estimates were developed for the site recommendations. The site recommendations are very conceptual in scope and therefore the estimates are not based on detailed designed site plans. The intent of the estimates is to assist in developing potential implementation budgets and strategies. The estimates do not include any costs for storm water management upgrades for any sites since a detailed storm water infrastructure investigation has not been completed at this point and potential scope is unknown.

The estimates include 20% soft costs which assume that the District will implement the projects without a Construction Manger or Program Manager since the projects are small with limited scope. Estimates also assume the reuse of most existing furnishings which are currently in good condition. If the District would select a project delivery method with a Construction Manger or Program Manager, or decide to purchase new furnishings, additional funds will be required for project implementation. Since the time frame for implementing the recommendations currently is not known, the estimate includes 10% escalation in the costs for starting implementation in the next 2 years. If the projects are implemented after that, additional escalation costs should be evaluated and added to the project estimates once an implementation timeline is determined. Since there are unknowns for many of the variables in the implementation of the recommendations, the project scenarios have been developed to include an implementation contingency for either project costs or additional soft costs.

The estimate summary for the site recommendations is noted below. The total for all site recommendations ranges from $90,599,441 to $116,147,901, depending on which option is selected for Solana Vista. The actual details in the conceptual estimate relating to the complete project scope are included in the Appendix. The estimate does not include any site improvement costs for the District Office/CDC site on North Rios Ave. since the recommendation was to minimize any investment at this site.

Skyline with CDC:	$54,429,229
Solana Vista Option 1	$13,747,743
Solana Vista Option 2	$22,121,004
Solana Vista Option 3	$39,296,203
Solana Santa Fe	$10,226,121
Solana Highlands	$ 5,321,858
Carmel Creek	$ 3,634,126
Solana Pacific	$ 3,240,364

Skyline
$54,429,229

Solana Highlands
$ 5,321,858

Solana Vista
$13,747,743

Carmel Creek
$ 3,634,126

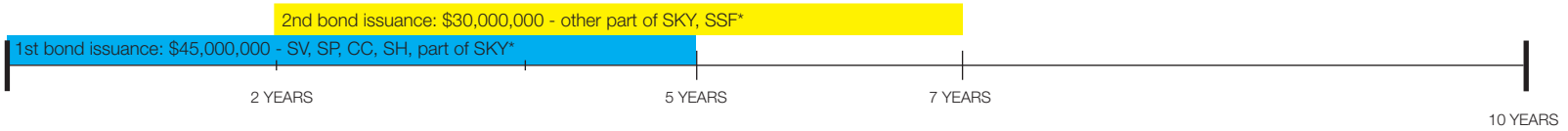
Solana Santa Fe
$10,226,121

Solana Pacific
$ 3,240,364

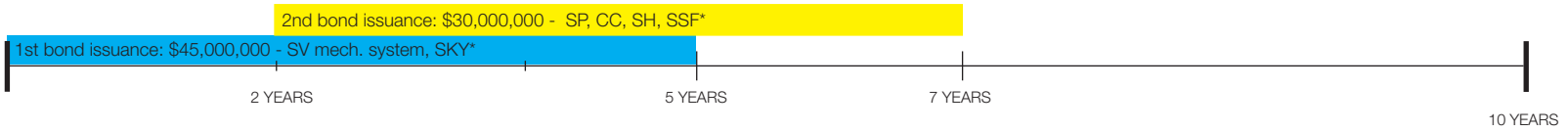
10: Implementation

POTENTIAL IMPLEMENTATION SCENARIOS

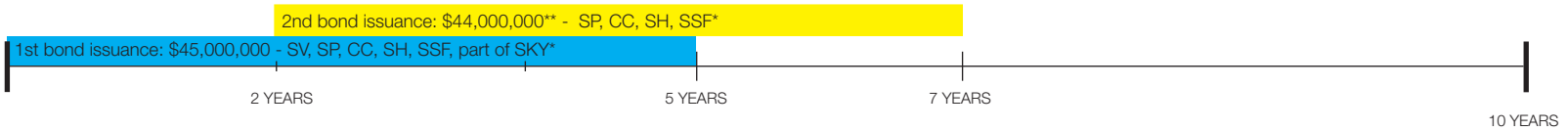
SCENARIO 1 / 7 years for implementation



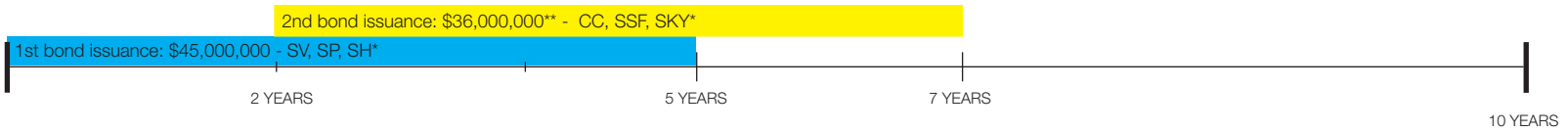
SCENARIO 2 / 7 years for implementation



SCENARIO 3- OPTION A / 7 years for implementation



SCENARIO 3- OPTION B / 7 years for implementation



*see written narrative for site project scope
**if 2nd bond issuance exceeds current predicted amount of $30,000,000

SKY - Skyline

SV -Solana Vista

SSF - Solana Santa Fe

SH - Solana Highlands

CC - Carmel Creek

SP - Solana Pacific

10: Implementation

Potential Implementation Scenarios

Three different scenarios were developed as potential approaches for a first phase of implementation for the site recommendations. All scenarios are based on using funds from a local General Obligation Bond that would be issued in 2 series for approximately $75 million in bonds. Some of the site recommendations would need to be completed in a 2nd phase of implementation.

Scenario #1 for Phase 1 Implementation
This approach starts with implementing Option 1 at Solana Vista with a reduced scope in landscaping. Phase 1 scope for Solana Pacific would only include the kitchen expansion into the adjacent classroom to create the satellite kitchen. The scope of Solana Highlands and Carmel Creek focuses on a new food service and dining area and provides additional fencing. Solana Highlands also includes expanding the primary grades play area on the west side of the campus. Interior modifications and upgrades in the recommendations for both these sites would be completed in a 2nd phase of implementation. The Skyline scope includes the redevelopment of the site with a new elementary school and site grading for the addition of the CDC in the future, but the construction of the CDC would be completed in a 2nd phase of implementation or with funds outside the bond program. Solana Santa Fe's project scope would have a reduced scope from original recommendations in landscaping and interior modifications. Projects 1- 4 and part of project 5 would be completed in the first bond issuance and the completion of 5 and project 6 would be completed in the 2nd issuance.

Project 1: Solana Vista Option 1 scope	$ 13,093,357
Project 2: Solana Pacific Kitchen expansion only	$ 967,633
Project 3: Carmel Creek Reduced scope of landscaping No modifications to existing building	$ 2,497,360
Project 4: Solana Highlands Reduced scope of landscaping and reduced interior renovation	$ 3,798,319
Project 5: Skyline Redeveloped school without CDC	$ 43,227,433
Project 6: Solana Santa Fe Reduced scope of landscaping Does not include outdoor tiered seating or modifications to existing buildings	$ 8,944,101
Implementation Contingency	$ 2,271,797
Total	**$ 75,000,000**

Scenario #2 for Phase 1 Implementation
This approach would include replacing the mechanical system at Solana Vista with a new system that will support an addition as soon as funds are available. The new mechanical system and the new school at Skyline could be implemented with the 1st issuance of the bond. The CDC at the Skyline site would be added in a later phase or with a different source of funds. The other 5 projects would be implemented after the 2nd bond issuance.

The scope for Solana Vista would be based on Option 1 of the recommendations. Some of the detailed landscaping and outdoor learning areas would need to be developed in a later phase. This scenario is similar in scope to Scenario 1 for the Carmel Valley schools with a reduced scope from the recommendations that just focuses on the redevelopment of a new food service and dining area at Carmel Creek and Solana Highlands, and a kitchen expansion at Solana Pacific.

The scope for phase 1 for Solana Santa Fe includes replacing all of the portable units with a permanent classroom addition and separating the drop-off/pick-up zone from parking. Phase 1 scope would not include the tiered outdoor learning area,enclosing the staff dining courtyard, interior modifications/upgrades to the existing buildings, or replacement of existing landscaping with drought tolerant landscaping.

Project 1: Solana Vista Mechanical system replacement sized for the school with addition	$ 805,000
Project 2: Skyline Redeveloped school without CDC	$ 43,227,433
Project 3: Solana Vista Option 1 scope	$ 12,942,743
Project 4: Solana Pacific Kitchen expansion only	$ 967,633
Project 5: Carmel Creek Reduced scope of landscaping No modifications to existing building	$ 2,497,360
Project 6: Solana Highlands Reduced scope of landscaping and reduced interior renovation	$ 3,798,319
Project 7: Solana Santa Fe Reduced scope of landscaping Does not include outdoor tiered seating or modifications to existing buildings	$ 8,944,101
Implementation Contingency	$ 2,271,797
Total	**$ 75,000,000**

Scenario #3 for Phase 1 Implementation
This approach considers the possibility of a higher total of available funds from either an increase in bond funds or the availability of state or other funding sources.

Option A	
Project 1: Solana Vista Option 1 scope	$ 13,093,357
Project 2: Solana Pacific Kitchen expansion only	$ 967,633
Project 3: Carmel Creek Reduced scope of landscaping No modifications to existing building	$ 2,497,360
Project 4: Solana Highlands Reduced scope of landscaping and reduced interior renovation	$ 3,798,319
Project 5: Solana Santa Fe Reduced scope of landscaping Does not include outdoor tiered seating or modifications to existing buildings	$ 8,944,101
Project 6: Skyline Redeveloped school with CDC	$ 54,429,229
Implementation Contingency	$ 5,000,000
Total	**$ 88,729,999**
Option B	
Project 1: Solana Vista Option 3- New school with satellite kitchen	$ 39,747,743
Project 2: Solana Pacific Scope as noted in Option A	$ 967,633
Project 3: Solana Highlands Reduced scope as noted in Option A	$ 3,798,319
Project 4: Carmel Creek Reduced scope as noted in Option A	$ 2,497,360
Project 5: Solana Santa Fe Reduced scope as noted in Option A	$ 8,944,101
Project 6: Skyline Design entire redevelopment but implement 1st phase of a phased plan to budget	$ 20,000,000
Implementation Contingency	$ 5,000,000
Total	**$ 80,855,156**

Appendix

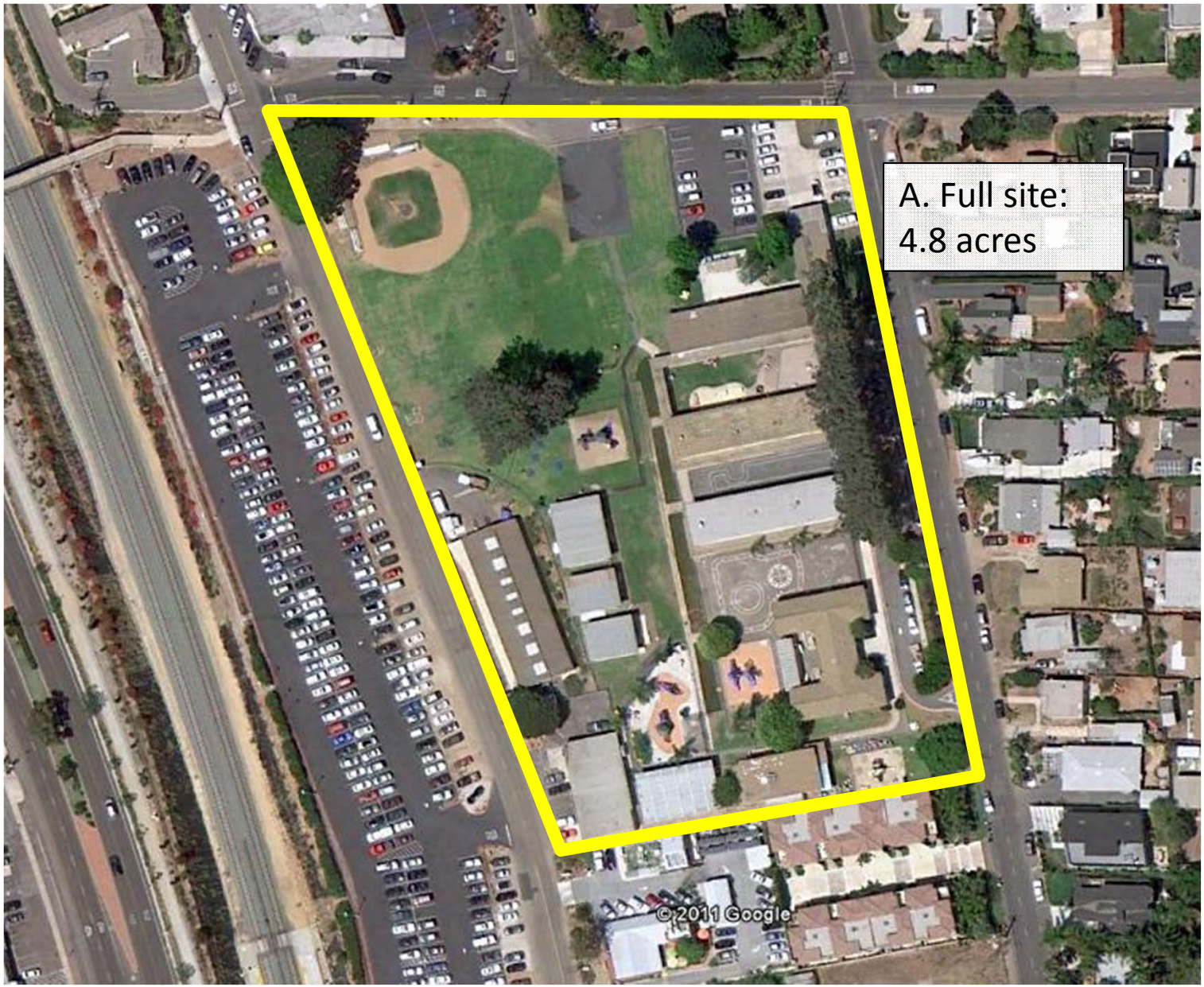
Solana Beach School District

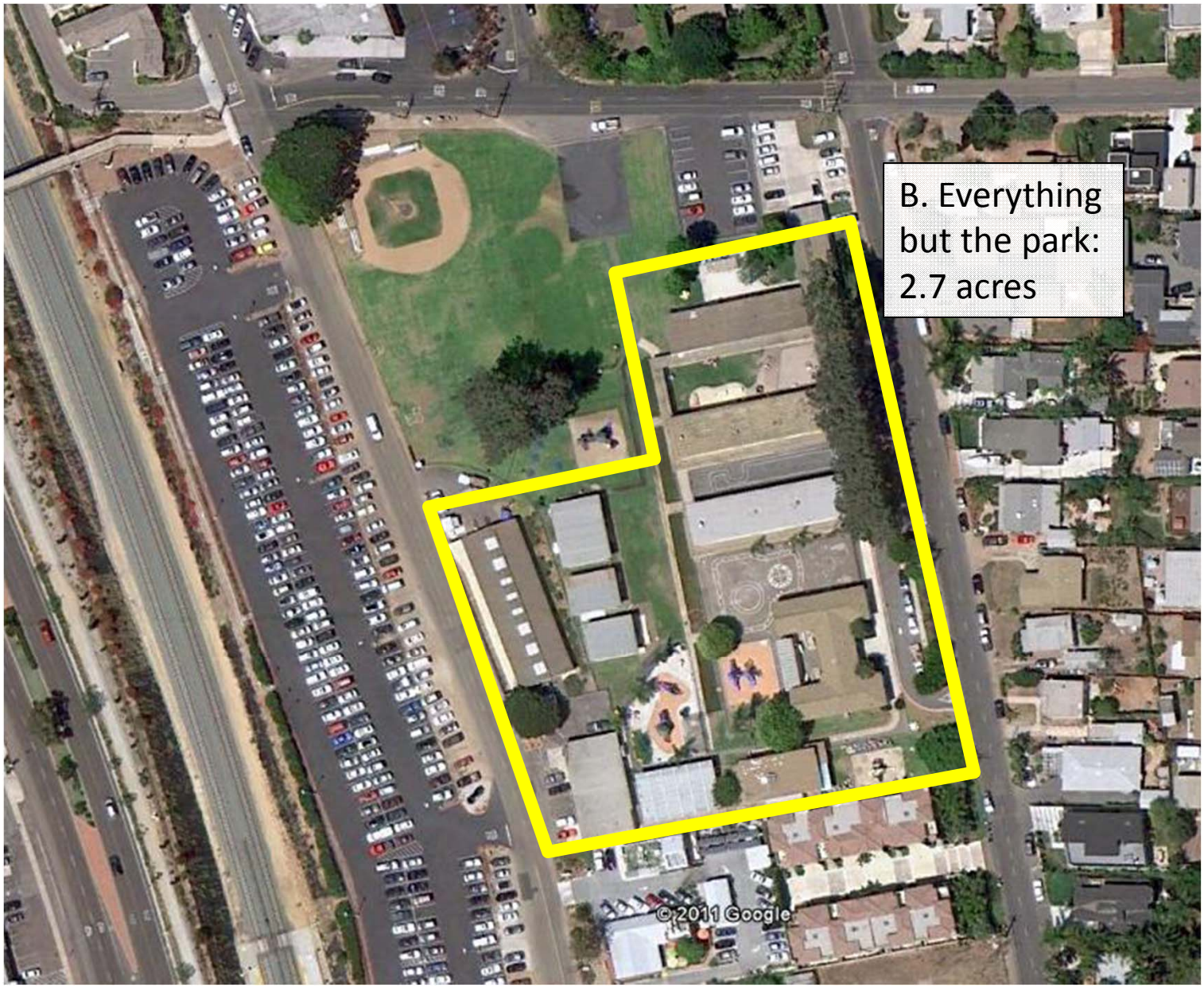
Headquarters Site Development Potential Analysis
First Report
November 10, 2011

Civic Enterprise Associates LLC

NOTE: Everything you are about to see consists of preliminary estimates. Building yields and land values are still conceptual. They can and should be refined through further analysis.

1. What could be redeveloped?


A. Full site:
4.8 acres
© 2011 Google


B. Everything but the park: 2.7 acres
© 2011 Google

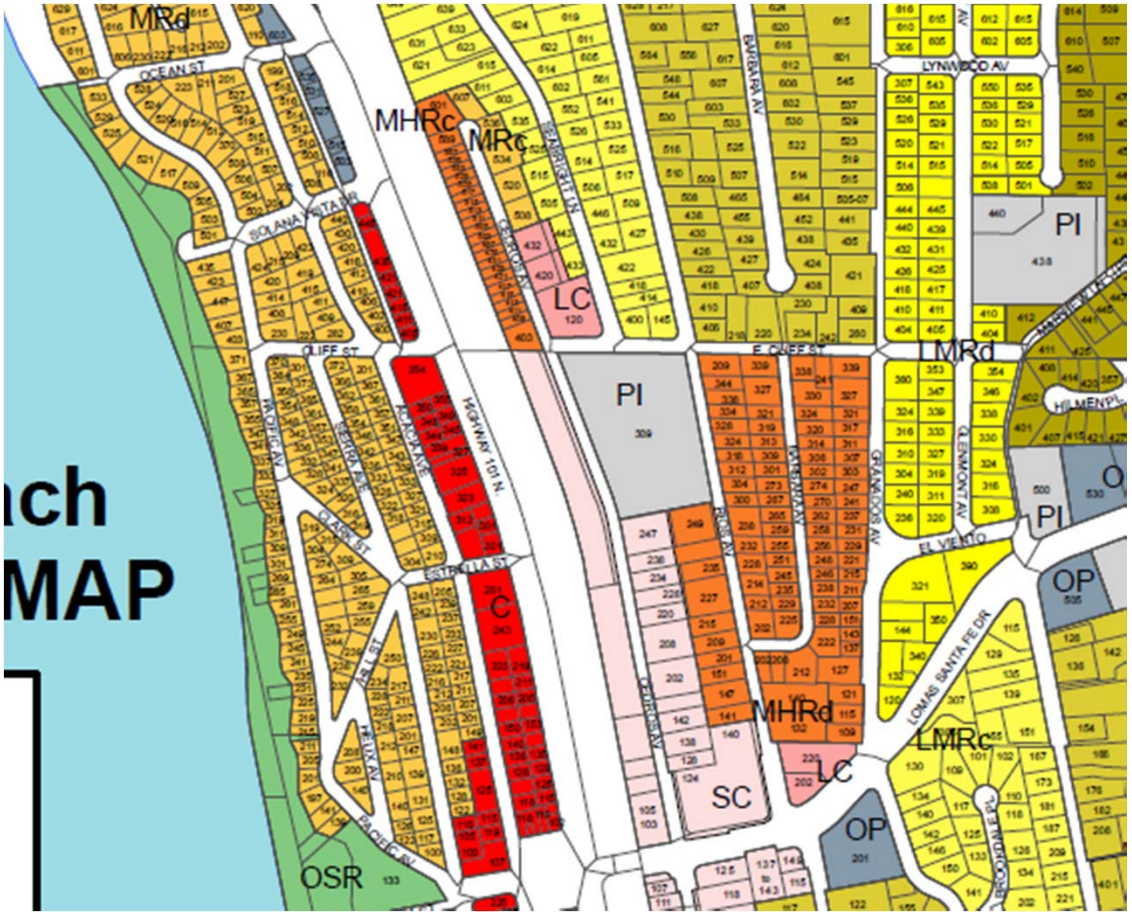

C. Just the Cedros frontage
1 acre
© 2011 Google

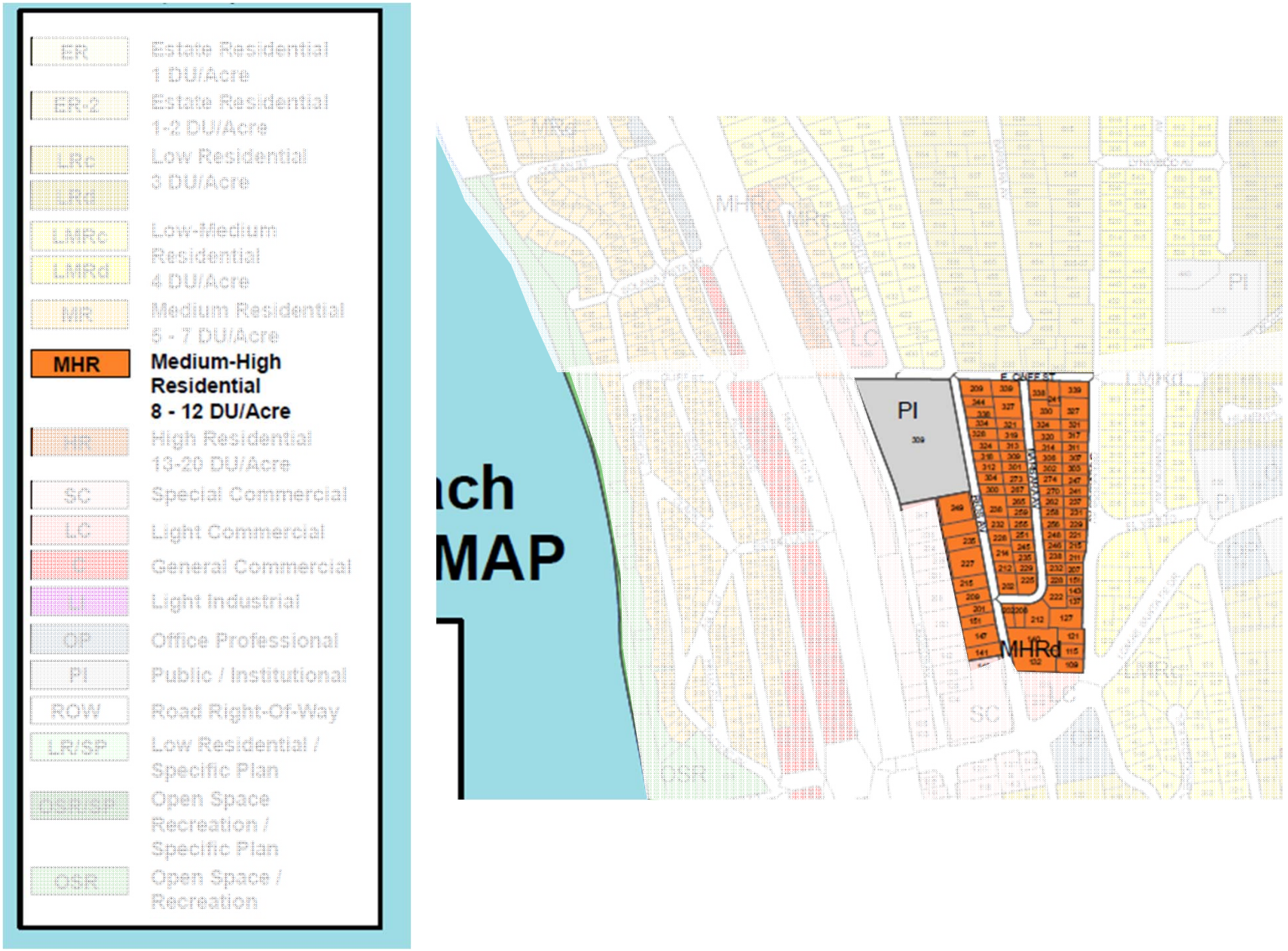
2. What is the zoning potential?
(What is the zoning *capacity*?)

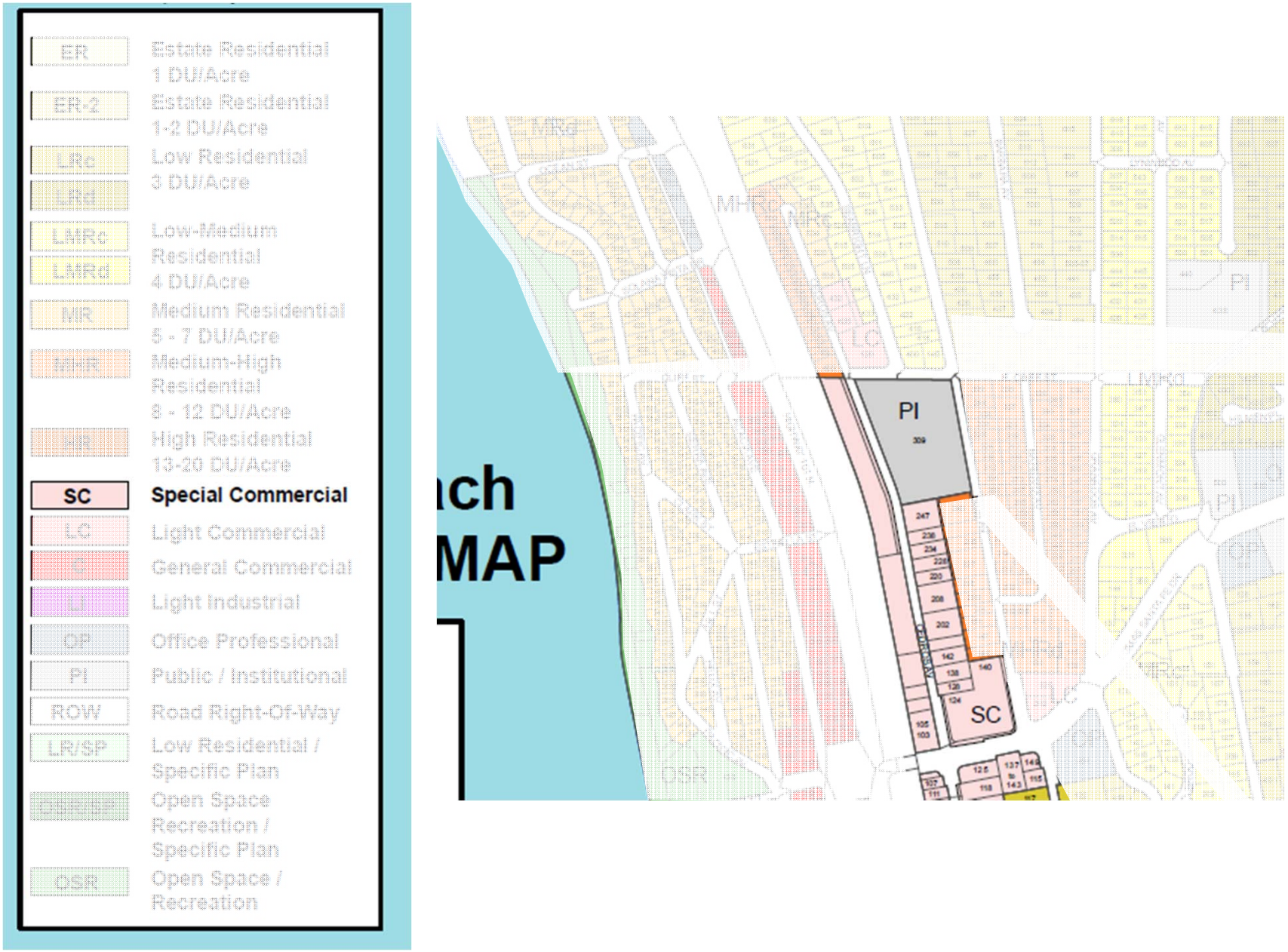
2. What is the zoning potential? (What is the zoning *capacity*?)

Assumption: New uses will likely conform to an <u>adjacent</u> zone

ER	Estate Residential 1 DU/Acre
ER-2	Estate Residential 1-2 DU/Acre
LRc	Low Residential 3 DU/Acre
LRd	
LMRc	Low-Medium Residential 4 DU/Acre
LMRd	
MR	Medium Residential 5 - 7 DU/Acre
MHR	Medium-High Residential 8 - 12 DU/Acre
HR	High Residential 13-20 DU/Acre
SC	Special Commercial
LC	Light Commercial
C	General Commercial
LI	Light Industrial
OP	Office Professional
PI	Public / Institutional
ROW	Road Right-Of-Way
LR/SP	Low Residential / Specific Plan
OSR/SP	Open Space Recreation / Specific Plan
OSR	Open Space / Recreation




ER
Estate Residential
1 DU/Acre
ER-2
Estate Residential
1-2 DU/Acre
LRc
LRd
Low Residential
3 DU/Acre
LMRc
LMRd
Low-Medium
Residential
4 DU/Acre
MR
Medium Residential
5 - 7 DU/Acre
MHR
Medium-High
Residential
8 - 12 DU/Acre
HR
High Residential
13-20 DU/Acre
SC
Special Commercial
LC
Light Commercial
GC
General Commercial
LI
Light Industrial
OP
Office Professional
PI
Public / Institutional
ROW
Road Right-Of-Way
LR/SP
Low Residential /
Specific Plan
OS/R/SP
Open Space
Recreation /
Specific Plan
OSR
Open Space /
Recreation
MAP
PI
MHRd
SC
OSR


ER
Estate Residential
1 DU/Acre
ER-2
Estate Residential
1-2 DU/Acre
LRc
Low Residential
3 DU/Acre
LRd
LMRc
Low-Medium
Residential
LMRd
4 DU/Acre
MR
Medium Residential
5 - 7 DU/Acre
MHR
Medium-High
Residential
8 - 12 DU/Acre
HR
High Residential
13-20 DU/Acre
SC
Special Commercial
LC
Light Commercial
GC
General Commercial
LI
Light Industrial
OP
Office Professional
PI
Public / Institutional
ROW
Road Right-Of-Way
LR/SP
Low Residential /
Specific Plan
OSR
Open Space /
Recreation
nch
MAP
MHR
LMRd
PI
SC
OSR


ER
Estate Residential
1 DU/Acre
ER-2
Estate Residential
1-2 DU/Acre
LRc
LRd
Low Residential
3 DU/Acre
LMRc
LMRd
Low-Medium
Residential
4 DU/Acre
MR
Medium Residential
5 - 7 DU/Acre
MHR
Medium-High
Residential
8 - 12 DU/Acre
HR
High Residential
13-20 DU/Acre
SC
Special Commercial
LC
Light Commercial
C
General Commercial
LI
Light Industrial
OP
Office Professional
PI
Public / Institutional
ROW
Road Right-Of-Way
LR/SP
Low Residential /
Specific Plan
OSR/SP
Open Space
Recreation /
Specific Plan
OSR
Open Space /
Recreation
ach
MAP
PI
C
SC
HIGHWAY 101 N.
MHRc
MRc
LC
LMRd
OSR

a. Retail capacity

Table 4-2
Commercial Development Standards

	Light Commercial	Special Commercial	General Commercial
Minimum Lot Area (a)	6,000 SF	6,000 SF	6,000 SF
Setbacks :			
Front	15’	10’(b)	0’(d)(f)
Side (Interior)	10’	0’(c)	0’(c)
Side (Street)	10’	10’	0’
Rear	15’	0’(c)	0’(c)
Maximum FAR	1.0:1	1.0:1 (g)	1.2:1
Height Limit**	25’/2 S	35’/2-3 S (e) (f) (j)	35’/2-3 S (e) (f)
Parking	Refer to Zoning Ordinance (h) (i)		
Landscaping	Refer to Zoning Ordinance (h)		

Table 4-2
Commercial Development Standards

	Light Commercial	Special Commercial	General Commercial
Minimum Lot Area (a)	6,000 SF	6,000 SF	6,000 SF
Setbacks :			
Front	15’	10’(b)	0’(d)(f)
Side (Interior)	10’	0’(c)	0’(c)
Side (Street)	10’	10’	0’
Rear	15’	0’(c)	0’(c)
Maximum FAR	1.0:1	1.0:1 (g)	1.2:1
Height Limit**	25’/2 S	35’/2-3 S (e) (f) (j)	35’/2-3 S (e) (f)
Parking	Refer to Zoning Ordinance (h) (i)		
Landscaping	Refer to Zoning Ordinance (h)		

SBMC 17.52.040
Parking Requirements

- Retail (<25,000 SF): **5 spaces/1,000 SF**
- Restaurant: **10 spaces/1,000 SF**

SBMC 17.52.040
Parking Requirements

- Residential: **2.25 spaces/unit** (less for <2BR)
- Retail (<25,000 SF): **5 spaces/1,000 SF**
- Restaurant: **10 spaces/1,000 SF**

SBMC 17.52.040
Parking Requirements

- Residential: **2.25 spaces/unit** (less for <2BR)

- Retail (<25,000 SF): **5 spaces/1,000 SF**

1 parking space = ~400 SF
Parking area : Building Area = 2:1

- Restaurant: **10 spaces/1,000 SF**

Typical Commercial Lot:

7,500 sq. ft.

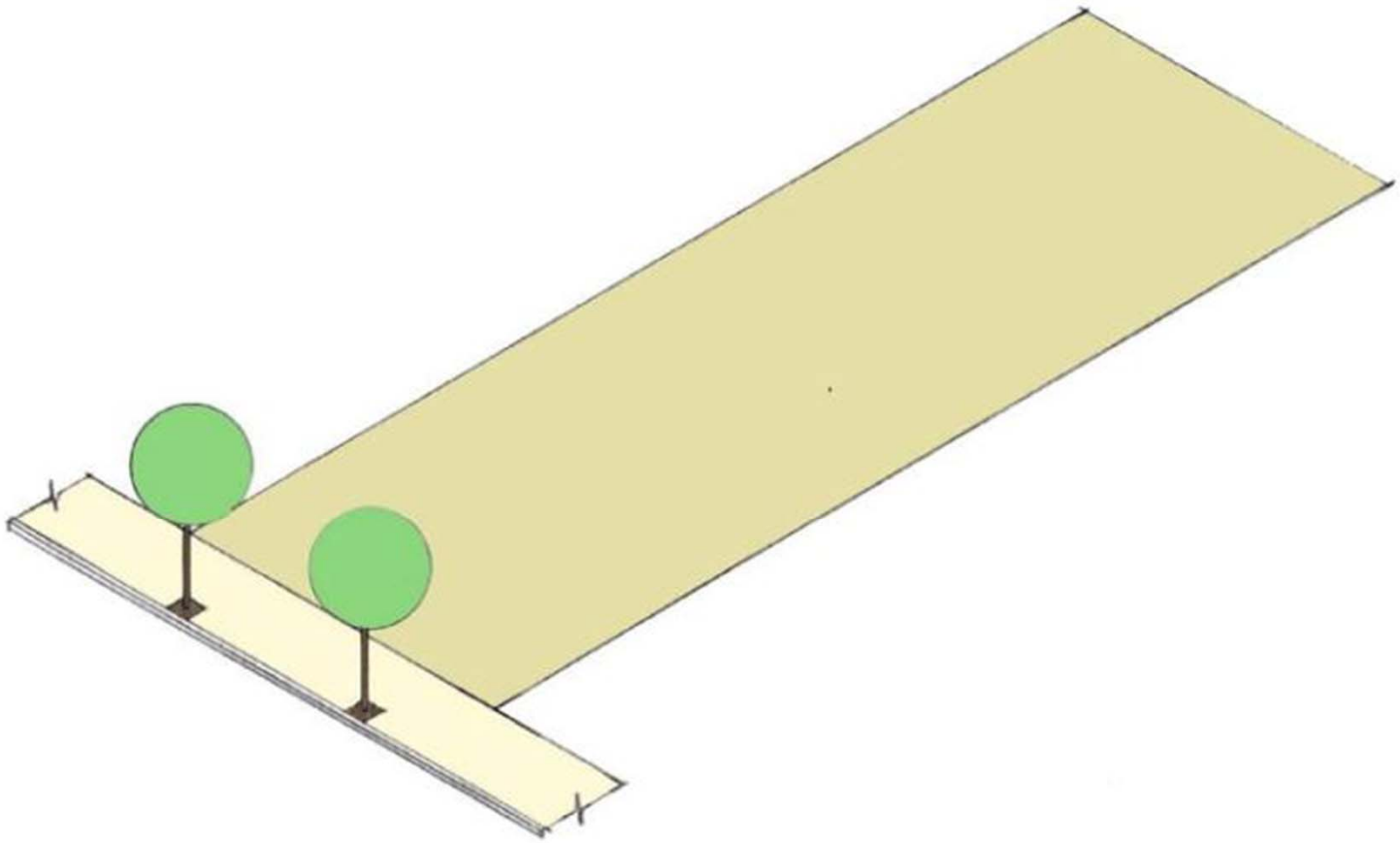


Illustration: MDA Johnson Favaro Architecture & Urban Design

SC Zone Max Build-out

1.0 FAR

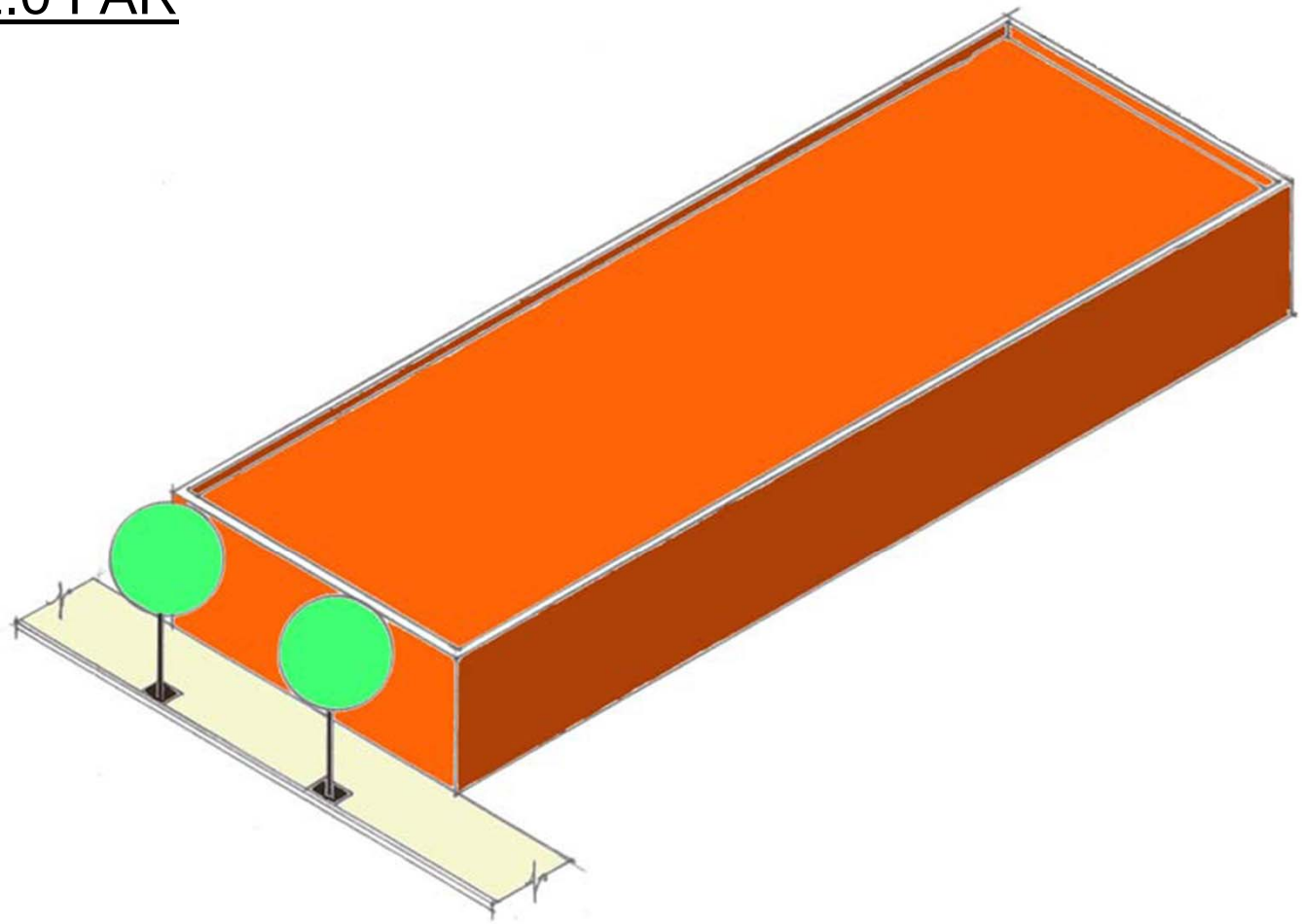


Illustration: MDA Johnson Favaro Architecture & Urban Design

SC Zone practical build out

(with onsite parking)

2,500 SF (improvements)

5,000 SF (parking; 13 stalls @

5 per 1,000 SF)

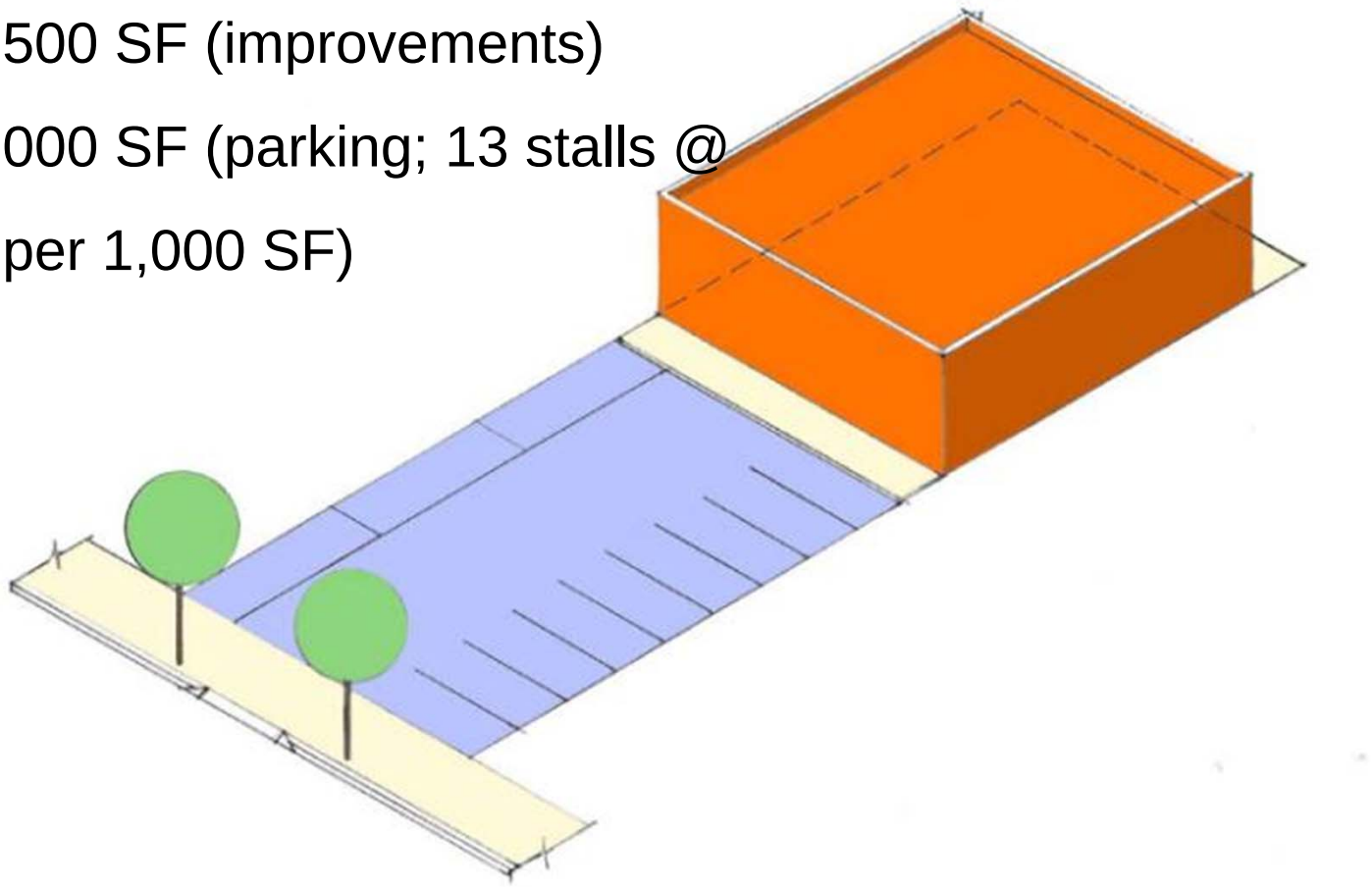


Illustration: MDA Johnson Favaro Architecture & Urban Design

Three basic options

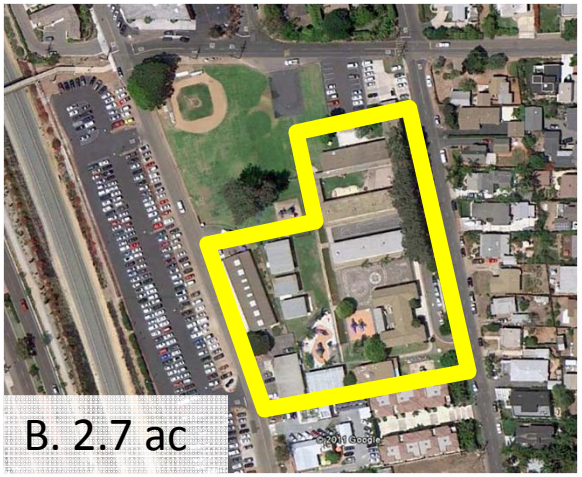


Table 1. Retail Yield Based on Zoning (no parking constraints)

Max FAR (per SC Zone) | 1.0 FAR

	Land Area	Max. Building Area
A. Whole site	4.80 ac	**209,088 SF**
B. Everything but the park	2.70 ac	**117,612 SF**
C. Just Cedros	1.00 ac	**43,560 SF**

Table 2. Retail Yield Based on Zoning (with surface parking)

Max FAR (per SC Zone)	1.0 FAR
Parking Required	5 /1,000 SF
Area per Parking Space	400 SF
Surface area needed for parking	67%

	Land Area	Max. Building Area
A. Whole site	4.80 ac	**69,696 SF**
B. Everything but the park	2.70 ac	**39,204 SF**
C. Just Cedros	1.00 ac	**14,520 SF**

b. Residential capacity

b. Residential capacity

MHR (Medium-High Residential)
8-12 du/ac


Verdi
247-307
N. RIOS AVENUE

Table 3. Residential Yield (based on MHR zone)

Max du/ac	12

	Land Area	Max # of Units
A. Whole site	4.80 ac	**57 units**
B. Everything but the park	2.70 ac	**32 units**
C. Just Cedros	1.00 ac	**12 units**

3. What are the market values?

Property For Lease
Mott Smith · (213) 403-0170 ext:1 · mott@civicenterprise.com

Solana Beach Corporate Center - 440 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	200	**Rental Rate:**	$37.20/SF/Year	http://listing.loopnet.com/17350893
Space Available:	4,595 SF	**Lease Type:**	Other	
Space Type:	Office Office Building	**LoopNet ID:**	17350893	
		Status:	Available	

Solana Beach Corporate Center - 420 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	310	**Rental Rate:**	$37.20/SF/Year	http://listing.loopnet.com/17350854
Space Available:	2,957 SF	**Lease Type:**	Other	
Maximum Contiguous:	7,378 SF	**Building Class:**	A	
Space Type:	Office Office Building	**LoopNet ID:**	17350854	
		Status:	Available	

Solana Beach Corporate Center - 420 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	320	**Rental Rate:**	$37.20/SF/Year	http://listing.loopnet.com/17350854
Space Available:	4,421 SF	**Lease Type:**	Other	
Maximum Contiguous:	7,378 SF	**Building Class:**	A	
Space Type:	Office Office Building	**LoopNet ID:**	17350854	
		Status:	Available	

Solana Beach Corporate Center - 380 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	211	**Rental Rate:**	$33.00/SF/Year	http://listing.loopnet.com/17350836
Space Available:	2,269 SF	**Lease Type:**	Other	
Space Type:	Office Office Building	**Building Class:**	B	
		LoopNet ID:	17350836	
		Status:	Available	

Closed transactions and current listings suggest **retail lease rates between $2.00 and $3.00** PSF NNN

Property For Lease
Mott Smith · (213) 403-0170 ext:1 · mott@civicenterprise.com

Solana Beach Corporate Center - 440 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	200	**Rental Rate:**	$37.20/SF/Year	http://listing.loopnet.com/17350893
Space Available:	4,595 SF	**Lease Type:**	Other	
Space Type:	Office Office Building	**LoopNet ID:**	17350893	
		Status:	Available	

Solana Beach Corporate Center - 420 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	310	**Rental Rate:**	$37.20/SF/Year	http://listing.loopnet.com/17350854
Space Available:	2,957 SF	**Lease Type:**	Other	
Maximum Contiguous:	7,378 SF	**Building Class:**	A	
Space Type:	Office Office Building	**LoopNet ID:**	17350854	
		Status:	Available	

Solana Beach Corporate Center - 420 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	320	**Rental Rate:**	$37.20/SF/Year	http://listing.loopnet.com/17350854
Space Available:	4,421 SF	**Lease Type:**	Other	
Maximum Contiguous:	7,378 SF	**Building Class:**	A	
Space Type:	Office Office Building	**LoopNet ID:**	17350854	
		Status:	Available	

Solana Beach Corporate Center - 380 Stevens Avenue, Solana Beach, CA 92075 - *Direct Lease*

Suite/Floor:	211	**Rental Rate:**	$33.00/SF/Year	http://listing.loopnet.com/17350836
Space Available:	2,269 SF	**Lease Type:**	Other	
Space Type:	Office Office Building	**Building Class:**	B	
		LoopNet ID:	17350836	
		Status:	Available	

Closed transactions and current listings suggest **retail lease rates between $2.00 and $3.00** PSF NNN

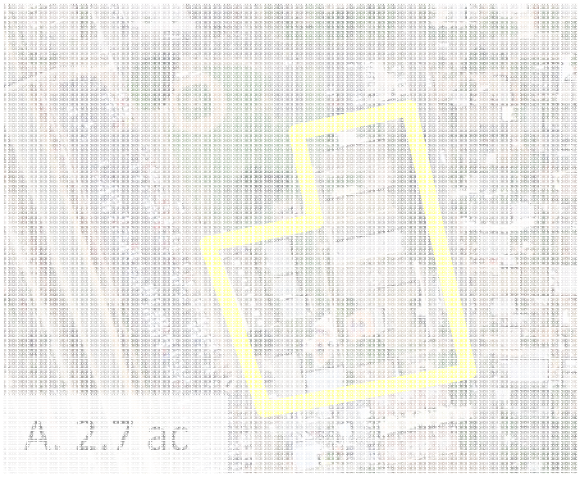
Higher values further south on Cedros (S. of Lomas Santa Fe)

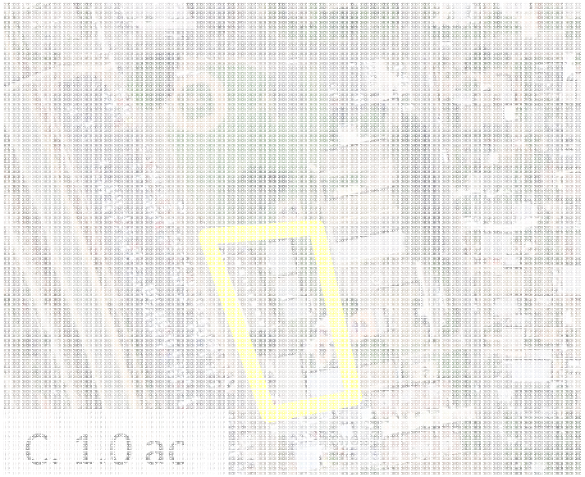
For-Sale Residential

- $640,000 – 800,000/door
- $350-400 PSF

4. Program scenarios

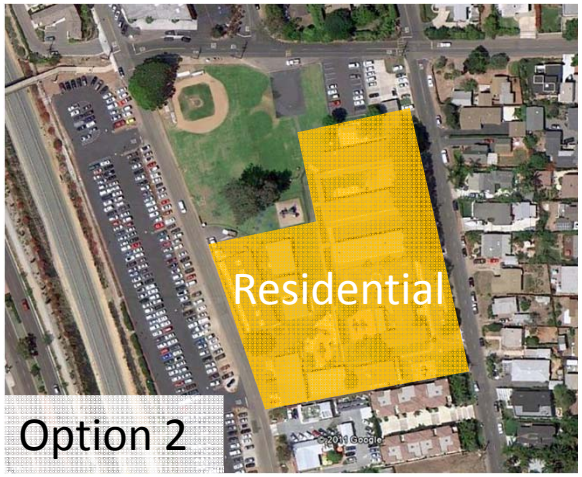
Assume park use will be retained.

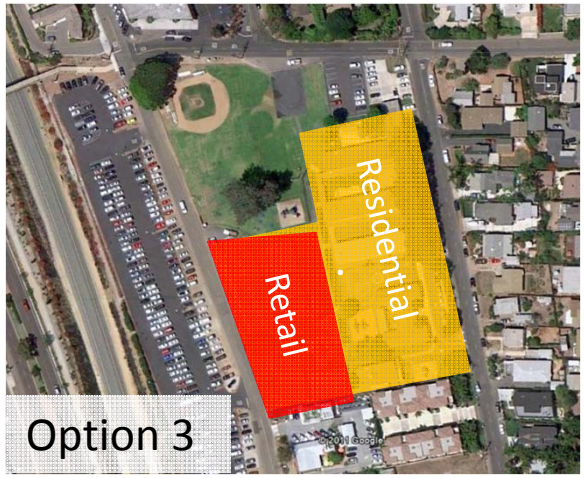




Three scenarios:

1. **100% retail on 1.0 ac**
2. **100% residential on 2.7 ac**
3. **Mixed-use**
   - 1.7 ac residential
   - 1.0 ac retail





Residual Land Value

- **Residual Land Value = the most a developer would pay for a property.**

Residual Land Value

- **Residual Land Value = the most a developer would pay for a property.**

- **RLV = Revenues – (Costs + Min. Profit)**

Residual Land Value

- **Residual Land Value = the most a developer would pay for a property.**

- **RLV = Revenues – (Costs + Min. Profit)**

- **Sometimes developers pay a *speculative premium* over and above RLV.**

Residual Land Value Example -- Single-family "Spec" House

Retail Value of New Home	$	800,000
Construction Costs (Hard & Soft)		(450,000)
Min. Profit (20% Net Margin)		(160,000)
RESIDUAL LAND VALUE	**$**	**190,000**

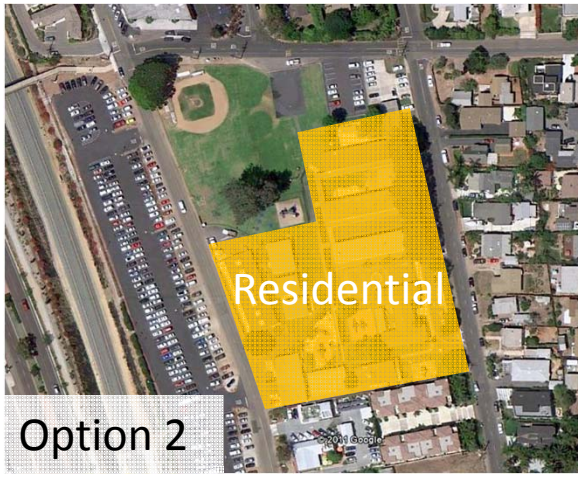
Residual Land Value Example -- Single-family "Spec" House

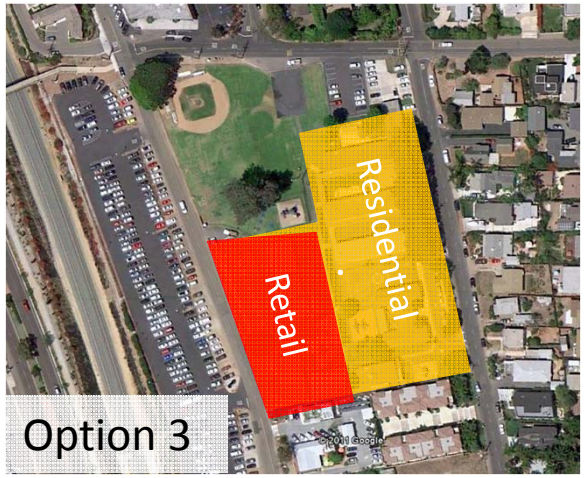
Retail Value of New Home	$	800,000
Construction Costs (Hard & Soft)		(450,000)
Min. Profit (20% Net Margin)		(160,000)
RESIDUAL LAND VALUE	**$**	**190,000**

The value of a land to a developer is driven mostly by the value of the finished product, the cost of making it, and the required profit.

Three scenarios:

1. **100% retail on 1.0 ac**
2. **100% residential on 2.7 ac**
3. **Mixed-use**
   - 1.7 ac residential
   - 1.0 ac retail





PROGRAM -- OPTION 1 (RETAIL ONLY)								
Site			43,560 SF					
Retail GBA			14,593 SF	(90*264)		73 parking spaces		
SOURCE & USES								
Sources						**TOTAL**	$ PSF land	$ PSF GLA
Debt	70%	LTC				2,744,943	63.02	188.10
Equity	30%					1,176,404	27.01	80.61
					$	**3,921,348**	90.02	268.71
Uses								
Acquisition					$	1,793,682	41.18	122.91
Direct Hard Costs	$ 100.00	PSF				1,459,300	33.50	100.00
Soft Costs	30%	of hard costs				437,790	10.05	30.00
Financing Costs	7.00% rate	60% avg bal	24 months			230,575	5.29	15.80
					$	**3,921,348**	90.02	268.71
REVENUES & PROFIT								
Rental Income								
PGI (modified gross)	$ 2.75	PSF/month		14,593 SF	$	40,131	0.92	2.75
Less: Vacancy	10%					(4,013)	(0.09)	(0.28)
Less: Mgmt & Op Exp.	15%					(6,020)	(0.14)	(0.41)
Total NOI per month						30,098	0.69	2.06
Total NOI per year	Used only to calaculate value at sale.				$	361,177	8.29	24.75
Sales Revenues								
Value at Sale	7%	cap				5,159,668	118.45	353.57
Commission & Sales Costs	5%					(257,983)	(5.92)	(17.68)
Net Sales Proceeds					$	4,901,684	112.53	335.89
TOTAL REVENUES	Presumes sales at stablization with no lease-up period.				**$**	**4,901,684**	112.53	335.89
Minimum Profit	**20%**	**net margin**			**$**	**980,337**	22.51	67.18
RLV = Revenues - (Costs + Profit)					**$**	**1,793,682**	**41.18**	122.91

PROGRAM -- OPTION 1 (RETAIL ONLY)								
Site				43,560 SF				
Retail GBA				14,593 SF			73 parking spaces	
SOURCE & USES								
Sources						**TOTAL**	$ PSF land	$ PSF GLA
Debt	70%	LTC				2,744,943	63.02	188.10
Equity	30%					1,176,404	27.01	80.61
					$	**3,921,348**	90.02	268.71
Uses								
Acquisition					$	1,793,682	41.18	122.91
Direct Hard Costs	$ 100.00	PSF				1,459,300	33.50	100.00
Soft Costs	30%	of hard costs				437,790	10.05	30.00
Financing Costs	7.00% rate	60% avg bal	24 months			230,575	5.29	15.80
					$	**3,921,348**	90.02	268.71
REVENUES & PROFIT								
Rental Income								
PGI (modified gross)	$ 2.75	PSF/month		14,593 SF	$	40,131	0.92	2.75
Less: Vacancy	10%					(4,013)	(0.09)	(0.28)
Less: Mgmt & Op Exp.	15%					(6,020)	(0.14)	(0.41)
Total NOI per month						30,098	0.69	2.06
Total NOI per year	Used only to calaculate value at sale.				$	361,177	8.29	24.75
Sales Revenues								
Value at Sale	7%	cap				5,159,668	118.45	353.57
Commission & Sales Costs	5%					(257,983)	(5.92)	(17.68)
Net Sales Proceeds					$	4,901,684	112.53	335.89
TOTAL REVENUES	Presumes sales at stablization with no lease-up period.				**$**	**4,901,684**	112.53	335.89
Minimum Profit	**20%**	**net margin**			**$**	**980,337**	22.51	67.18
RLV = Revenues - (Costs + Profit)					**$**	**1,793,682**	**41.18**	122.91

PROGRAM -- OPTION 2 (RESIDENTIAL ONLY)								
Site			117,636 SF					
Townhouses	32 units	1,800 SF/door	57,600 SF	GBA				
Density	**12 du/ac**							
SOURCE & USES								
Sources					**TOTAL**	$ PSF land	$ PSF GBA	$ per door
Debt	70%	LTV			11,491,200	98	200	359,100
Equity	30%				4,924,800	42	86	153,900
				$	**16,416,000**	140	285	513,000
Uses								
Acquisition				$	6,090,739	52	106	190,336
Hard Costs	$ 130.00	PSF			7,488,000	64	130	234,000
Soft Costs	25%	of hard costs			1,872,000	16	33	58,500
Financing Costs	7%	60.00% avg blnc	24 months		965,261	8	17	30,164
				$	**16,416,000**	140	285	513,000
REVENUES & PROFIT								
Sales Revenues								
Value at Sale	$ 675,000	per door			21,600,000	184	375	675,000
Commission & Sales Costs	5%				(1,080,000)	(9)	(19)	(33,750)
Net Sales Proceeds				$	20,520,000	174	356	641,250
TOTAL REVENUES				**$**	**20,520,000**	174	356	641,250
Minimum Profit	**20%**	**net margin**		**$**	**4,104,000**	35	71	128,250
RLV = Revenues - (Costs + Profit)			**$**		**6,090,739**	52	106	190,336

PROGRAM -- OPTION 2 (RESIDENTIAL ONLY)								
Site			117,636 SF					
Townhouses	32 units	1,800 SF/door	57,600 SF	GBA				
Density	12 du/ac							
SOURCE & USES								
Sources					**TOTAL**	$ PSF land	$ PSF GBA	$ per door
Debt	70%	LTV			11,491,200	98	200	359,100
Equity	30%				4,924,800	42	86	153,900
				$	**16,416,000**	140	285	513,000
Uses								
Acquisition				$	6,090,739	52	106	190,336
Hard Costs	$ 130.00	PSF			7,488,000	64	130	234,000
Soft Costs	25%	of hard costs			1,872,000	16	33	58,500
Financing Costs	7%	60.00% avg blnc	24 months		965,261	8	17	30,164
				$	**16,416,000**	140	285	513,000
REVENUES & PROFIT								
Sales Revenues								
Value at Sale	$ 675,000	per door			21,600,000	184	375	675,000
Commission & Sales Costs	5%				(1,080,000)	(9)	(19)	(33,750)
Net Sales Proceeds				$	20,520,000	174	356	641,250
TOTAL REVENUES				**$**	**20,520,000**	174	356	641,250
Minimum Profit	**20%**	**net margin**		**$**	**4,104,000**	35	71	128,250
RLV = Revenues - (Costs + Profit)				**$**	**6,090,739**	52	106	190,336

PROGRAM -- Option 3 (Mixed-Use)				
Site				117,612 SF
Retail GBA				14,593 SF
Residential Units	20 units		1,800 SF/door	36,000 SF

Revenues					
Retail				$	4,901,684
Residential					12,825,000
				$	**17,726,684**
Costs					
Retail	$	146	PSF	$	2,127,665
Residential		179	PSF		6,453,288
TOTAL				**$**	**8,580,953**
Minimum Profit	**20%**		**net margin**	**$**	**3,545,337**
RLV = Revenues - (Costs + Profit)				**$**	**5,600,394**

$48 PSF land

Sumary Conceptual RLVs						**TOTAL**
1. Retail Only	1.0 ac	$	41	PSF	$	1,793,682
2. Residential Only	2.7 ac	$	51	PSF	$	6,044,705
3. Mixed Use	2.7 ac	$	48	PSF	$	5,600,394

PROGRAM -- OPTION 4 (Reduced Parking)

Site	43,560 SF				
Retail GBA	23,760 SF	90' x 264'	50 spaces	2 /1,000 SF	

SOURCE & USES

Sources					**TOTAL**	$ PSF land	$ PSF GLA
Debt	70%	LTC			4,469,256	102.60	188.10
Equity	30%				1,915,395	43.97	80.61
				$	**6,384,651**	146.57	268.71
Uses							
Acquisition				$	2,920,434	67.04	122.91
Direct Hard Costs	$ 100.00	PSF			2,376,000	54.55	100.00
Soft Costs	30%	of hard costs			712,800	16.36	30.00
Financing Costs	7.00% rate	60% avg bal	24 months		375,418	8.62	15.80
				$	**6,384,651**	146.57	268.71

REVENUES & PROFIT

Rental Income							
PGI (modified gross)	$ 2.75	PSF/month	23,760 SF	$	65,340	1.50	2.75
Less: Vacancy	10%				(6,534)	(0.15)	(0.28)
Less: Mgmt & Op Exp.	15%				(9,801)	(0.23)	(0.41)
Total NOI per month					49,005	1.13	2.06
Total NOI per year	Used only to calaculate value at sale.			$	588,060	13.50	24.75
Sales Revenues							
Value at Sale	7%	cap			8,400,857	192.86	353.57
Commission & Sales Costs	5%				(420,043)	(9.64)	(17.68)
Net Sales Proceeds				$	7,980,814	183.21	335.89
TOTAL REVENUES	Presumes sales at stablization with no lease-up period.			**$**	**7,980,814**	183.21	335.89
Minimum Profit	**20%**	**net margin**		**$**	**1,596,163**	36.64	67.18
RLV = Revenues - (Costs + Profit)				**$**	**2,920,434**	**67.04**	122.91

PROGRAM -- OPTION 4 (Reduced Parking)								
Site				43,560 SF				
Retail GBA				23,760 SF			50 spaces	2 /1,000 SF
SOURCE & USES								
Sources						**TOTAL**	$ PSF land	$ PSF GLA
Debt	70%	LTC				4,469,256	102.60	188.10
Equity	30%					1,915,395	43.97	80.61
					$	**6,384,651**	146.57	268.71
Uses								
Acquisition					$	2,920,434	67.04	122.91
Direct Hard Costs	$ 100.00	PSF				2,376,000	54.55	100.00
Soft Costs	30%	of hard costs				712,800	16.36	30.00
Financing Costs	7.00% rate	60% avg bal	24 months			375,418	8.62	15.80
					$	**6,384,651**	146.57	268.71
REVENUES & PROFIT								
Rental Income								
PGI (modified gross)	$ 2.75	PSF/month		23,760 SF	$	65,340	1.50	2.75
Less: Vacancy	10%					(6,534)	(0.15)	(0.28)
Less: Mgmt & Op Exp.	15%					(9,801)	(0.23)	(0.41)
Total NOI per month						49,005	1.13	2.06
Total NOI per year	Used only to calaculate value at sale.				$	588,060	13.50	24.75
Sales Revenues								
Value at Sale	7%	cap				8,400,857	192.86	353.57
Commission & Sales Costs	5%					(420,043)	(9.64)	(17.68)
Net Sales Proceeds					$	7,980,814	183.21	335.89
TOTAL REVENUES	Presumes sales at stablization with no lease-up period.				**$**	**7,980,814**	183.21	335.89
Minimum Profit	**20%**	**net margin**			**$**	**1,596,163**	36.64	67.18
RLV = Revenues - (Costs + Profit)					**$**	**2,920,434**	**67.04**	122.91

PROGRAM -- Option 5 (Mixed-Use)					
Site				117,612 SF	
Retail GBA				23,760 SF	
Residential Units	20 units		1,800 SF/door	36,000 SF	
Revenues					
Retail				$ 7,980,814	
Residential				12,825,000	
				$ 20,805,814	
Costs					
Retail	$ 146	PSF		$ 3,464,218	
Residential	179	PSF		6,453,288	
TOTAL				**$ 9,917,506**	
Minimum Profit	**20%**	**net margin**		**$ 4,161,163**	
RLV = Revenues - (Costs + Profit)				**$ 6,727,146**	**$57 PSF land**

PROGRAM -- Option 5 (Mixed-Use)					
Site				117,612 SF	
Retail GBA				14,593 SF	
Residential Units	20 units		1,800 SF/door	36,000 SF	
Revenues					
Retail				$ 7,980,814	
Residential				12,825,000	
				$ 20,805,814	
Costs					
Retail	$ 146	PSF		$ 3,464,218	
Residential	179	PSF		6,453,288	
TOTAL				**$ 9,917,506**	
Minimum Profit	**20%**	**net margin**		**$ 4,161,163**	
RLV = Revenues - (Costs + Profit)				**$ 6,727,146**	**$57 PSF land**

Sumary Conceptual RLVs						**TOTAL**
1. Retail Only	1.0 ac	$	41	PSF	$	1,793,682
2. Residential Only	2.7 ac	$	51	PSF	$	6,044,705
3. Mixed Use	2.7 ac	$	48	PSF	$	5,600,394
4. Retail (reduced parking)	2.7 ac	$	67	PSF	$	7,885,172
5. Mixed Use (Red. Parking)	2.7 ac	$	57	PSF	$	6,727,146

RLV as an annuity

Rate		6.50%
Term		30 years
Present Value	$	6,000,000
Annual Payment	**$**	**455,089**

Summary Conclusions

- Opportunity cost of eliminating District use Rios site may outweigh the economic value of development

- That said, developing retail along Cedros—especially if parking can be shared in the new train station development—could provide substantial economic benefits with minimal disruption to the District's existing and/or planned uses elsewhere on the site.

Suggested Next Steps

- **Further analysis of alternatives (including architectural analysis)**

Suggested Next Steps

- Further analysis of alternatives (including architectural analysis)

- **Explore other product types (affordable/senior housing)**

Suggested Next Steps

- Further analysis of alternatives (including architectural analysis)
- Explore other product types (affordable/senior housing)
- **Explore potential partnership and disposition options**

DECISIONINSITE

Enrollment Impact Specialists

Annual Enrollment Projection Report

Strategic Decision Support for School Districts

Student Enrollment Projections | Community Demographic Data | Consulting

ANALYSIS OF ENROLLMENT PROJECTIONS

Fall 2013

Prepared for:

Solana Beach School District

Prepared by:

DECISION INSITE
Enrollment Impact Specialists

7700 Irvine Center Drive, Suite 800
Irvine, CA

Submitted: December 30, 2012

Table of Contents

Solana Beach School District

Executive Summary

Enrollment Projections - Fall 2013

DecisionInsite is pleased to present this report of findings to the Board of Education and Executive Staff of Solana Beach School District

Both a Moderate and a Conservative projection have been generated for the district. Assuming district revenue is generated on a per pupil basis, the Conservative projections are more suitable for budget planning purposes; the Moderate projections more suitable for facilities planning purposes.

Kindergarten Enrollment

In general, Kindergarten enrollment over the past three years has been somewhat erratic. The data also show that the difference between the graduating cohort and the incoming cohort has been somewhat erratic.

Note that both studies project an increase at the Kindergarten level in the ten year future.

Cohort Patterns

A typical student cohort ages from grade to grade relatively unchanged from the previous year. Historically, 2 cohorts show more than a 5% annual change.

New Housing Development

Approximately 700 new residential units are projected to be occupied over the next 10 years.

Over the period of years during which these units will be occupied, the annual impact in any given year, based on the Moderate Study, is estimated in peak years to be 50 students.

District-wide Enrollment Projection

Both projections forecast a relatively stable trend across the 10 year period based upon the historical enrollment trends and projected new residential development.

More Information

A richer and more comprehensive review of these two studies is contained in the Final Report accompanying this Executive Summary. A wealth of more detailed information and analysis regarding these two studies is quickly and easily accessible online.

Respectfully Prepared and Submitted by:
The DecisionInsite Team
December 30, 2012

Solana Beach School District

District Enrollment Projections

Recent Changes in Enrollment

Familiarity with recent historical enrollment patterns and trends establishes the foundation for understanding projected enrollment.

Percentages in the table below compare the current year enrollment to that of three years ago.

4 Year History Change	
Kindergarten	99%
Gr K-6	105%
District	104%

[Kindergarten calculation based on a 12 month cohort equivalent.]

Figure: 1

Kindergarten Impact

Kindergarten enrollment is often the most significant driver of overall future district-wide enrollment. A trend at Kindergarten from year to year, or a trend in the difference between the district's graduating cohort in a given year and the Kindergarten cohort the subsequent year, will eventually be reflected in the total district enrollment count. These projections reflect changes in age eligibility for California Kindergarten. The result is a diminished Kindergarten cohort in years 2012-2014, with similar reductions in other grade levels as those cohorts age through the system.

In general, Kindergarten enrollment over the past three years has been somewhat erratic. The data in the table below also show that the difference between the graduating cohort and the incoming cohort has been somewhat erratic.

[More details: Reports > History > District-wide > History Years Enrollment]

Percent Change of Previous Year			
	2010	2011	2012
Kindergarten	100%	90%	109%
Grade 6 to K'tn	99%	82%	100%
Total K-6	101%	100%	103%

[Kindergarten calculations in first two rows based on a 12 month cohort equivalent.]

Figure: 2

Transition K enrollment is forecast as a separate grade level. Transition K is projected to be as much as three times the enrollment of the first year of the program, but never to exceed 25% of the projected Kindergarten enrollment.

[All data in this report excludes Transition K unless specifically noted. More details: Reports > Projections > District-wide > Transition Kindergarten]

Live Birth Trends

Live birth trends have an impact in large geographies, and on long range projections. However, in smaller areas of study, such as a school district, population mobility is often a mitigating if not an overriding factor, thereby reducing the effectiveness of live births as a predictor of enrollment.

In projecting Kindergarten enrollment, live births are allowed to have a positive impact on the early projected years if there is an increasing trend in live births over several recent years. The average percent change in live births over the last five years in zip codes served by the district is 1.0%.

The chart below displays in the years shown, cumulative live births in zip codes served by the district. (Note that zip codes are not typically coterminous with district boundaries.) The Kindergarten bar on the graph shows the number of Kindergarten students enrolled 5 years later.

[More details: Reports > History > District-wide]

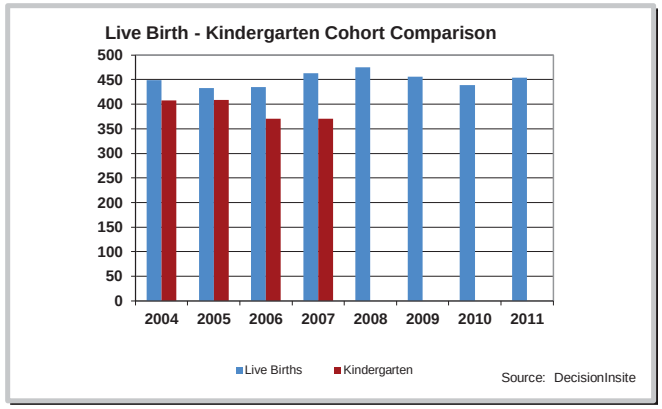


Figure: 3

The Live Birth Enrollment Rate is the percentage of live births in zip codes served by the district that enroll as Kindergarten students five years later. The district's average Live Birth Enrollment Rate for the last 5 years is 88%.

Cohort Impact

A typical student cohort ages from grade to grade relatively unchanged from the previous year. By contrast, the cohort matriculating from Kindergarten to Grade 1 is a common example of a cohort increase, typically attributable to students returning from a private school Kindergarten.

In the following table, cohort changes with more than a 2% variance from static are marked accordingly. Those with more than a 5% changed are marked as 'Significant'.

Average Cohort Change Past Three Years			
Cohort	**Percent**	**+/-**	**Significant**
K > 1	104%	++++	
1 > 2	102%	++++	
2 > 3	106%	++++	SSSS
3 > 4	102%		
4 > 5	103%	++++	
5 > 6	106%	++++	SSSS

Figure: 4

Incoming Out-of-District Transfer Impact

The number of students served from outside the district boundaries can impact enrollment. It is a factor over which the district may have some control. For the past two years, the number of out-of-district students served annually has been approximately 50, and has been increasing.

[More details: Reports > History > District-wide > Out of District]

Key Variables in Projecting District Enrollment

Both a Moderate and a Conservative projection have been generated for the district. The Conservative projections are more suitable for budget planning purposes; the Moderate projections more suitable for facilities planning purposes.

As a matter of standard practice, DecisionInsite does not typically include in the Enrollment Projections specialized schools or programs such as Home and Hospital Programs, Community Day Schools or Independent Study Programs. Our work is focused on projecting grade level enrollment for typical schools that are reported to the state.

The major variables that distinguish the Conservative projection from the Moderate are described in the table below.

Key Variables Controlling the Projection Algorithm	
Kindergarten Enrollment Change	Applies the lesser or greater of 3-4 year history trend in each studyblock to the appropriate study.
Cohort Change	Applies the lesser or greater of 3-4 year history trend in each studyblock to the appropriate study.
K Enrollment Change Cap	Restricts the effect of anomalous spikes in Kindergarten history.
K Enrollment Change Floor	Restricts the effect of anomalous dips in Kindergarten history.
Incoming Out-of-District Transfers	For each grade level span, applies the lesser or greater of 1-2 year history to the lograde; ages through existing students.
Dwelling Units	Moderate study assumes developer's phasing calendar. Conservative study shifts the developer's calendar toward the out-years.
Student Generation Rates	Typical of recent history by product type.

Figure: 5

Impact of Projected New Dwelling Units

Projected Occupancy

Approximately 700 new residential units are projected to be occupied over the next 10 years. The tables below show the mix of proposed units across the three dwelling unit types. The Moderate table summarizes the plans described by developers. The most recent residential research was completed in October 2012 by Caroline Brown for the District. The Conservative table estimates a more likely scenario based on anticipated market conditions.

[More details: Residential > Reports > Proposed Dwelling Units]

New Dwelling Units Projected to be Occupied by Year (Moderate)										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Multi-family			15	15						
Attached										
Detached	96	94	67	61	53	40	63	64	68	55
Totals:	**96**	**94**	**82**	**76**	**53**	**40**	**63**	**64**	**68**	**55**

Figure: 6

New Dwelling Units Projected to be Occupied by Year (Conservative)										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Multi-family			10	13	8					
Attached										
Detached	68	81	66	56	54	56	57	52	61	43
Totals:	**68**	**81**	**76**	**69**	**62**	**56**	**57**	**52**	**61**	**43**

Figure: 7

The graph below depicts visually the differences between the phasing projected in the Moderate and Conservative studies.

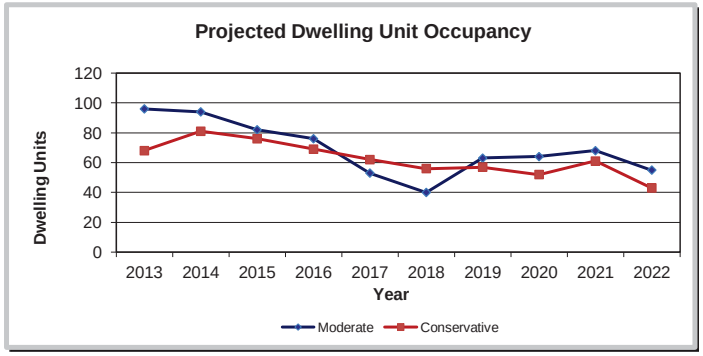


Figure: 8

Students Generated

Over the period of years during which these units will be occupied, the impact, based on the Moderate Study, is shown in the table below. The "Annual" row projects the number of students new to the district from these units, in a given year. The "Aggregate" row projects the accumulated increase in students served by the district through the year indicated. The table in Figure 10 reflects the students generated using the Conservative estimate of projected Dwelling Units.

Students Generated by Residential Development (Moderate)										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Aggregate	0	73	100	124	143	159	181	205	230	251
Annual	35	42	36	37	36	36	45	50	54	54

Figure: 9

Conservative Students Generated as a Percent of Moderate										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Aggregate	74%	78%	83%	84%	87%	92%	92%	90%	90%	88%

Figure: 10

Student Generation Rates

Moderate student generation rates are typical of students enrolled from existing developments of similar product type. Conservative student generation rates, if different, are designed to anticipate a diminution in family size.

[More details: Residential > Reports > Student Generation Rates]

A complete set of reports regarding new residential development is available online in the DI System under the 'Residential' menu. The Reports sub-menu includes Proposed Dwelling Units, Students Generated by new development and by studyblock, Student Generation Rates, and reports comparing the Conservative and Moderate versions. Specialized users have access to view the district map displaying polygons that represent each of the dwelling unit projects, and the key data related to each project.

All projections are based on assumptions, and when read or shared are best prefaced with the phrase, "Based on these assumptions….", or "Based on these historical trends…." Particularly for projections more than 5 years out, "Enrollment Trend" is a far more accurate descriptor.

Projected Enrollment Changes by Level

The tables below display the five year district-wide projections by grade level, and allow a comparison to enrollment in the current year.

Conservative 5 Year District-wide Projection by Grade Level

Grade	2012	2013	2014	2015	2016	2017
TK	17	31	46	46	46	46
K	370	354	348	376	376	372
1	399	391	375	369	397	397
2	446	407	399	382	374	402
3	440	465	424	415	396	383
4	404	448	475	432	421	401
5	426	414	459	485	441	427
6	455	439	427	472	499	448
Subtotals:	**2957**	**2949**	**2953**	**2977**	**2950**	**2876**
Pct Chg:	**4.0%**	**-0.3%**	**0.1%**	**0.8%**	**-0.9%**	**-2.5%**

Figure: 11

Moderate 5 Year District-wide Projection by Grade Level

Grade	2012	2013	2014	2015	2016	2017
TK	17	31	46	46	46	46
K	370	375	384	425	430	424
1	399	396	401	409	452	456
2	446	412	408	411	418	458
3	440	473	436	429	432	430
4	404	450	484	444	436	437
5	426	417	463	496	455	443
6	455	449	440	486	520	467
Subtotals:	**2957**	**3009**	**3074**	**3159**	**3203**	**3174**
Pct Chg:	**4.0%**	**1.8%**	**2.2%**	**2.8%**	**1.4%**	**-0.9%**

Figure: 12

As the following graph illustrates, both projections forecast a relatively stable trend across the 10 year period based upon the historical enrollment trends and projected new residential development.

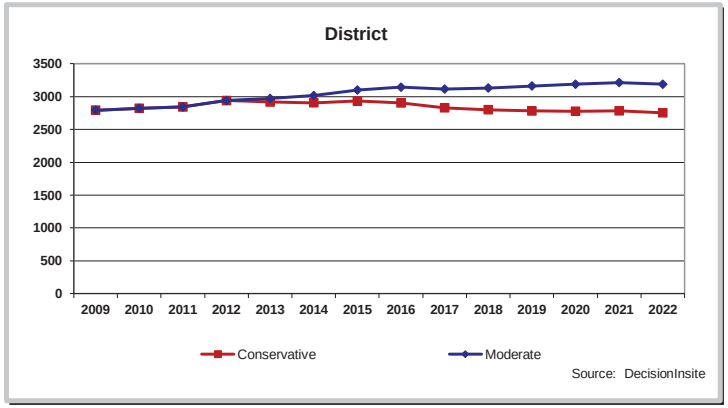


Figure: 13

The tables below compare the Conservative and Moderate enrollment projections by key grade level groupings.

Projected changes in enrollment at Kindergarten or lower grade level groupings will eventually impact total district enrollment.

5 Year Enrollment Trends: Moderate and Conservative Compared

Change by Level	Conservative	Moderate
Kindergarten Only	372	424
Change	101%	115%
District	2859	3147
Change	96%	106%

Figure: 14

Note that considered together; both studies project an increase at the Kindergarten level.

The table below compares the ten year projections. In the ten year future at Kindergarten, both studies, viewed together, project a slight increase.

10 Year Enrollment Trends: Moderate and Conservative Compared

Change by Level	Conservative	Moderate
Kindergarten Only	353	402
Change	95%	109%
District	2780	3220
Change	93%	108%

Figure: 15

Summary of District Projections by Year

The complete district-wide projection table for each study is available online. Click on the Client Login tab at: http://www.decisioninsite.com. Each district-wide projection has its corresponding set of individual School Projections.

The tables below present a more detailed annual view of projected changes by grade level clusters for both the Moderate and Conservative Projections.

The “Pct Previous Year” row represents the percent of the previous year’s enrollment in each grade cluster that is projected in the subsequent year.

The “Five Year Change” row represents the percent change projected over the enrollment five years prior.

Conservative Projection

Change by Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kindergarten Only	370	354	348	376	376	372	368	364	361	357	353
Pct Previous Year	100%	96%	98%	108%	100%	99%	99%	99%	99%	99%	99%
Five Year Change						101%					95%
District	2976	2953.5	2940.9	2964.5	2936	2859.1	2828.2	2808.1	2802.7	2809.9	2779.6
Pct Previous Year	103%	99%	100%	101%	99%	97%	99%	99%	100%	100%	99%
Five Year Change						96%					97%

NOTE: Gray column most recent history year.

Figure: 16

Moderate Projection

Change by Level	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kindergarten Only	370	375	384	425	430	424	419	414	410	407	402
Pct Previous Year	100%	101%	102%	111%	101%	99%	99%	99%	99%	99%	99%
Five Year Change						115%					95%
District	2976	3008.2	3051.1	3135.3	3177.4	3147.1	3162	3192.8	3219.1	3245.7	3219.6
Pct Previous Year	103%	101%	101%	103%	101%	99%	100%	101%	101%	101%	99%
Five Year Change						106%					102%

NOTE: Gray column most recent history year.

Figure: 17

Grade Level Profile Comparison

Another view of grade level enrollment can be seen in the chart below. The current grade level enrollment profile is compared with the projected grade level profile in the five and ten year future.

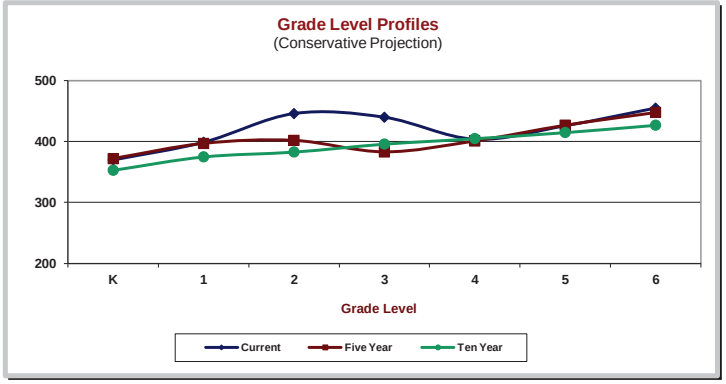


Figure: 18

Projecting School Enrollment

School projections are primarily a function of the proportion of district students who enroll at a given school, modified by intra-district transfers within a given school level that may occur subsequent to initial enrollment, and augmented by inter-district transfer students.

School Draw Impact

A draw rate is the percentage of students who enroll at a particular grade level in a given school from a specified geographic area. Open enrollment among district schools is projected using this concept. Except for changes in school boundaries or other changes in policy, historical draw rates from a given geographic area to a specific school (including out-of-district students) are assumed in the projections.

Intra-district Transfers

Transfers within the district are incorporated into the projections in order to anticipate the movement of students from one district school to another within the same level, e.g., transfer from a neighborhood school to a special school. Recent historical transfer patterns are typically assumed in the projections.

[More details: Reports > History > All Schools > Open Enrollment]

Inter-district Transfers

Transfers into the district by out-of-district students, sometimes referred to as ‘permit students’, are an integral part of the district and school projections. Recent historical transfer patterns are typically assumed in the projections.

[More details: Reports > History > District-wide > Out of District]

Individual School Projection Tables

The complete set of individual school projection tables for each study is available on line.

[More details: Reports > Projections > All Schools > Projections]

MySchoolLocator

MySchoolLocator is a web-based service accessible to DecisionInsite clients. This service allows Internet users to enter a residential address, and find out which district schools are assigned to serve them. Access is by the District's web site.

The URL for integration into your district's website can be found by selecting the appropriate Locator study. Once open, select Locator from the District Admin menu. Locator will open, and the link can be copied from the browser.

Specialized district users have access to customize the messages seen by those accessing the MySchoolLocator.

NOTE: All projections are based on assumptions, and when read or shared are best prefaced with the phrase, “Based on these assumptions….”, or “Based on these historical trends….” Particularly for projections more than 5 years out, “Enrollment Trend” is a far more accurate descriptor.

Impact of the Projections on School Capacity

Facility challenges, if any, may manifest differently in the Moderate or Conservative projections. The Moderate projection shows 4 schools with a potential capacity challenge.

[More details: Reports > Projections > All Schools > Over Capacity]

The table below lists up to five schools that are projected to experience the most change in enrollment in the 5 year future based on the Conservative projection.

[More details: Reports > Projections > All Schools >Ten Percent Change]

School	Five Year Percent Change	Ten Year Percent Change
Solana Vista	-30%	-36%
Solana Santa Fe	-27%	-37%
Solana Pacific	-25%	-23%
Solana Highlands	-23%	-26%
Carmel Creek	-16%	-19%

Figure: 19

Impact of SDC Students on Capacity

Relative to the impact of SDC students on school capacity, note that SDC students are not included in the grade level counts, but are included in the capacity calculation as taking up one seat each.

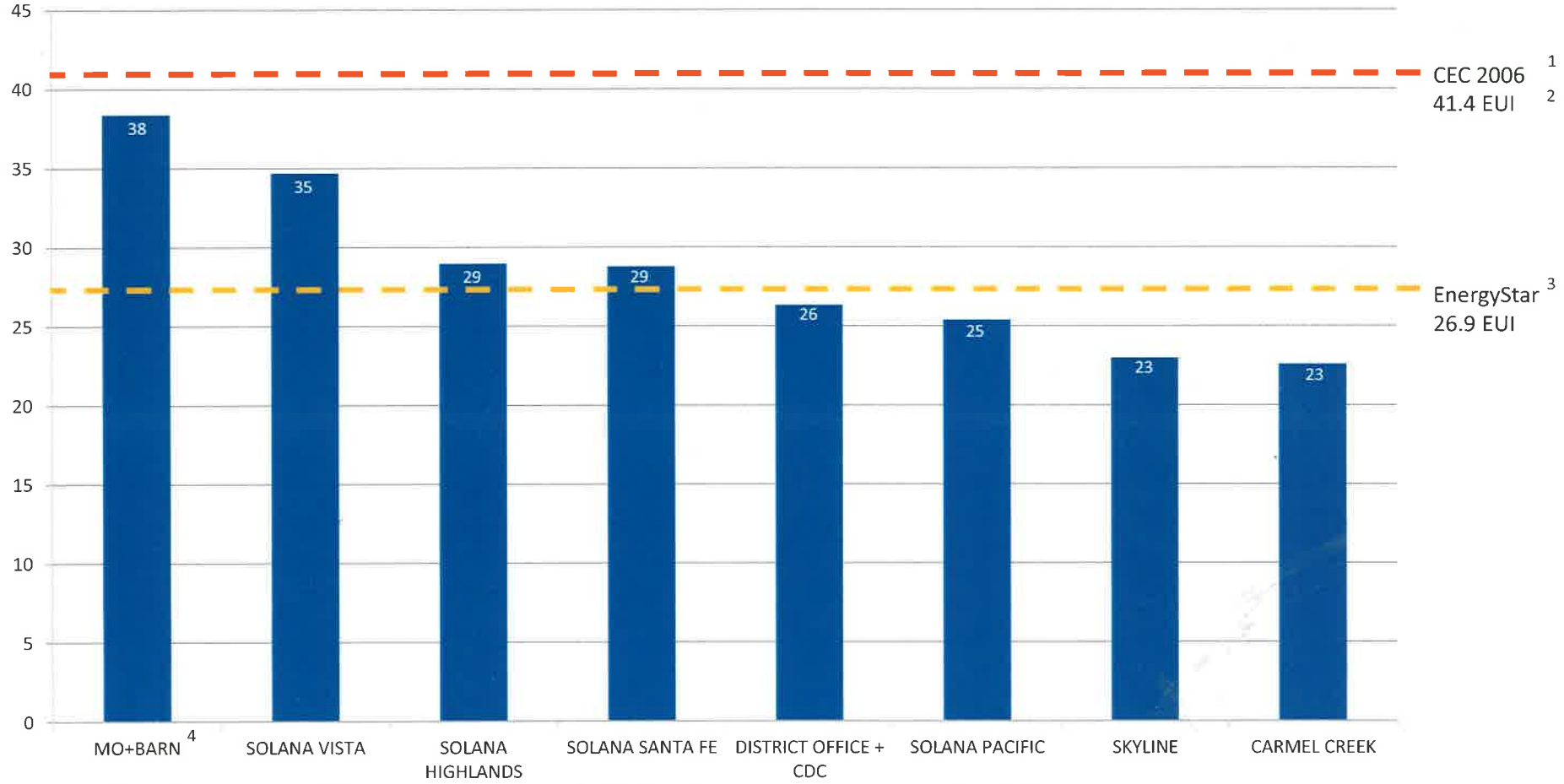
Analyzing/Studying/Reviewing the Enrollment Projections

The projections of district and school enrollment are based on a complex mix of historical data, the projection of recent trends, and specific assumptions regarding the future. At DecisionInsite, we strongly encourage our clients to actively engage with the data with the aim of better understanding, further refining, and using the results to inform decisions about to be made. We believe increased effectiveness for both the district and DecisionInsite comes with increased and welcome dialogue.

Graphs or tables may be copied from the PDF version of this document using the Snapshot Tool inside PDF Reader. Please do not hesitate to contact DecisionInsite regarding any questions or suggestions that may arise regarding these studies.

Respectfully Prepared and Submitted by:
The DecisionInsite Team
December 30, 2012

WORKSESSION #2
/EXISTING ENERGY USE ANALYSIS 2010 CYCLE



1 California Energy Commission 2006 commercial end-use survey . 41.4 kBTU/sf is the average school energy use intensity in California.
2 Energy Use Intensity is a unit of measurement that describes a building's energy use. EUI represents the energy consumed by a building relative to its size.
3 ENERGY STAR buildings use an average of 35% less energy than typical buildings.
4 Fuel (gas) and electricity were factored into the EUI for each site, with exception to the MO+Barn Facility, which receives only electricity, but no gas.

Capitol | PFG
Crafting Optimal Financial Solutions

MEMORANDUM

TO: CARLOS ESTRELLA
FROM: CATHY DOMINICO AND JEFF SMALL
SUBJECT: BONDING CAPACITY AND ISSUANCE SCENARIOS
DATE: OCTOBER 17, 2012

Carlos,

In order to determine a district's bonding capacity with regards to issuing general obligation bonds ("GO Bonds"), we must consider the type of bond measure the District will utilize for authorization as well as the bond issuance structure and assumptions. This memorandum will summarize these items and provide you with preliminary bonding capacity estimates and bond structure scenarios.

Type of Bond Measure

School districts are able to seek GO Bond voter authorization under either the traditional 2/3 approval method or the 55% approval method authorized under Proposition 39.

Under the 2/3 method, the limitation on the amount of bonds that can be issued is simply the District's legal bonding capacity. A union school district's legal bonding capacity is equal to 1.25% of assessed value in any given year. A district may not issue GO Bonds if the outstanding principal will exceed this limitation. For 2012-13, the District's legal bonding capacity is $168,221,997. This figure will change annually based on changes in the District's assessed value.

Proposition 39 further limits the amount of bonds a school district can issue. For a union school district, if pursuing a 55% voter approval bond measure, the bond issuance cannot result in tax rates that will exceed $30 per $100,000 of assessed value based on reasonable projections for assessed value growth. For the District, the $30 per $100,000 of assessed value tax rate limitation will cap the amount of bonds that can be issued.

Given the lower voter approval threshold, most district utilize the 55% voter approval method unless their tax base is simply too small to obtain enough bond authorization to complete their necessary projects. So, when considering the District's bonding capacity, the $30 per $100,000 of assessed value tax rate limitation will likely be the limiting factor.

Bond Issuance Assumptions

The bond structure and assumptions used when planning for a bond issuance will impact the amount of bonds that ultimately can be issued. Key bond structuring considerations include:

- Term of the bonds
- Structure of the bonds (current interest vs. capital appreciation)
- Number of bond series

Furthermore, since many of the bond terms will not be finalized until bonds are actually issued, we must make planning assumptions to estimate the ultimate amount of bonds. Such assumptions include:

- Bond interest rate
- Assessed value growth rates

GO Bonds can be issued for a term up to 40 years under provisions of the Government Code. However, such bonds are limited to a term of 25 years under the Education Code. A school district can select either the Government Code or Education Code to issue its bonds. For the purpose of this preliminary bonding capacity estimate, we have assumed 25 year bonds.

Bonds can be issued in series over time, enabling a district to take advantage of growth in the tax base to issue additional bonds while maintaining tax rates under the Proposition 39 limit.

If the District were to issue only one series of bonds – meaning all bonds are issued at one time – the District could issue approximately $65 million of bonds. This assumes 25 year bonds, with average interest rates of 5.5%, using only current interest bonds (where interest is paid throughout the life of the bonds). It further assumes the following conservative assessed value growth assumptions:

Bond Plan Assumptions
1.00% - Annual Increase in Net Local Secured A.V. from 2011-12 through 2014-15
2.00% - Annual Increase in Net Local Secured A.V. after 2014-15
0.00% - Annual Increase in All Other A.V.
0.00% - Assumed Deliquency Rate on Secured Property
5.00% - Assumed Deliquency Rate on Unsecured Property
Notes
(1) Assessed Value is actual through 2011-12 and projected thereafter.

Using the same assumptions described above, but issuing bonds in two series, two years apart, the District would be able to issue a total of approximately $75 million in bonds, with $45 million in the first series and $30 million in the second series.

Bond Issuance Scenario	Proposition 39 Bonding Capacity
1 Series of Bonds	$65,000,000
2 Series of Bonds	$75,000,000

Assumptions
Average Interest Rate: 5.50%
Term of Bonds: 25 Years
Tax Rate Limitation: $30/$100,000 of a.v.

If the District is in need of additional bond proceeds, alternative bond structures can be evaluated. For example, the District could extend the term of the bonds to 30 or even 40 years. As another example, the District could issue the bonds in three series, with each bond series issued 2 years apart. Further, the interest rate environment at the time bonds are issued as well as actual growth in assessed value within the District's boundaries will impact the amount of bonds that can be issued. Larger than expected assessed value growth coupled with lower interest rates would result in the ability to issue additional bonds. Conversely, lower than expected assessed value growth coupled with higher interest rates would reduce the District's ability to issue bonds.

Carlos, based on the capital funding needs determined in the District's facilities master plan, we can create alternative bond scenarios to specifically address the District's capital needs.

CD:JS/cd

SCHOOL FACILITY CONSULTANTS

1303 J Street, Suite 500
Sacramento, CA 95818
Phone: (916) 441-5063
Facsimile: (916) 441-2848
www.s-f-c.org

October 29, 2012

Caroline Brown
Director of Technology and New Facilities
Solana Beach School District
309 North Rios Avenue
Solana Beach, CA 92075
SUBJECT: 2011/12 Modernization Eligibility Update and Analysis

Dear Caroline,

School Facility Consultants (SFC) has completed the review of the Solana Beach School District's 2011/12 modernization eligibility within the School Facility Program. The review consisted of updating school sites for increases in enrollment, when applicable, and for turnover of facilities into the program, due to age. We also explored different available methodologies to calculate eligibility at each site; however, switching Options within the eligibility determination forms did not prove to be beneficial for any District sites this year.

The table below represents a preliminary summary of the District's draft updated modernization eligibility by site:

Site	60% State Match	40% District Match	Total Project
Skyline Elementary	$122,400	$81,600	$204,000
Solana Highlands	$897,822	$598,548	$1,496,370
Solana Vista Elementary	$219,600	$146,400	$366,000
Total	**$1,239,822**	**$826,548**	**$2,066,370**

The estimated grants in the summaries above are based on the modernization base grant amounts of $3,600 per K-6 pupil, $7,674 per non-severe SDC pupil, and $11,470 per severe SDC pupil.

Please note that the estimates do not include project-specific augmentations, such as an increase in grants for 50 year old permanent buildings, an at least 3% increase for accessibility and fire code requirements, small size project, etc.

These modernization eligibility update estimates represent an increase of approximately $923,000 in potential 60 percent State share modernization funding over that which is currently approved and on file with the Office of Public School Construction (OPSC).

The following sites have been updated for 2011/12 enrollment and/or facility turnover:

Solana Beach School District
2011/12 DRAFT Modernization Eligibility*

Update for Enrollment

Skyline Elementary School	K-6	NS-SDC	S-SDC	Totals
2011/12 DRAFT Adjusted Eligibility	484	8	7	497
1998/99 Eligibility w/SDC Break Out	(450)	(12)	(11)	(473)
Remaining Estimated Eligibility	**34**	--	--	**31**
Estimated State Funding (60%)	$122,400	$0	$0	$122,400
Estimated District Match (40%)	$81,600	$0	$0	$81,600
Total Estimated Funding (100%)	**$204,000**	**$0**	**$0**	**$204,000**

Establish Baseline Eligibility

Solana Highlands Elementary School	K-6	NS-SDC	S-SDC	Totals
2011/12 DRAFT Baseline Eligibility	243	3	0	246
Remaining Estimated Eligibility	**243**	**3**	--	**246**
Estimated State Funding (60%)	$874,800	$23,022	$0	$897,822
Estimated District Match (40%)	$583,200	$15,348	$0	$598,548
Total Estimated Funding (100%)	**$1,458,000**	**$38,370**	**$0**	**$1,496,370**

Update for Enrollment

Solana Vista Elementary School	K-6	NS-SDC	Totals
2011/12 DRAFT Adjusted Eligibility	436	1	438
1998/99 Eligibility w/SDC Break Out	(375)	(4)	(379)
Remaining Estimated Eligibility	**61**	--	**61**
Estimated State Funding (60%)	$219,600	$0	$219,600
Estimated District Match (40%)	$146,400	$0	$146,400
Total Estimated Funding (100%)	**$366,000**	**$0**	**$366,000**

*These estimates are based on the State modernization grant amounts of $3,600 per K-6 pupil, $7,674 per Non-Severe SDC pupil, and $11,470 per Severe SDC pupil. These estimates do not include any potential augmentations that a modernization project may qualify for, including, but not limited to, additional funding for ADA compliance, 50-Year Old Building, fire alarm/detection, sprinklers, project assistance, or elevators.

HMC Architects

Conceptual Master Plan

Broad Scope Conceptual Estimate for Recommendations
Solana Beach School District - Master Plan
Solana Beach School District
Solana Beach, CA.

September 21, 2012
Job #: 3297005-000

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan **September 21, 2012**
Solana Beach School District **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Project Group Summary	***Total $***
Skyline	$54,429,229
Solana Vista - Option #1	$13,747,743
Solana Highlands	$5,321,858
Carmel Creek	$3,634,126
Solana Santa Fe	$10,226,121
Solana Pacific	$3,240,364
Option #1 Total	**$90,599,441**
Skyline	$54,429,229
Solana Vista - Option #2	$22,121,004
Solana Highlands	$5,321,858
Carmel Creek	$3,634,126
Solana Santa Fe	$10,226,121
Solana Pacific	$3,240,364
Option #2 Total	**$98,972,702**
Skyline	$54,429,229
Solana Vista - Option #3	$39,296,203
Solana Highlands	$5,321,858
Carmel Creek	$3,634,126
Solana Santa Fe	$10,226,121
Solana Pacific	$3,240,364
Option #3 Total	**$116,147,901**

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Carmel Creek					**$3,634,126**
Add to base bid					2,325,521
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	1	ea	25,000.00	25,000	
Remove existing storage units, incl. demo of foundations and make safe of existing utility connections	1	ea	12,500.00	12,500	
New food service drive, recylcling center, and compost center	1	ls	391,250.00	391,250	
New drought tolerant landscaping	1	allow	478,680.85	478,681	
Hardcourt resurfacing	1	allow	239,340.45	239,340	
New decorative iron fencing, between park and school dining/play areas	1	allow	150,000.00	150,000	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New food kiosk	700	sf	525.00	367,500	
Modernization/Remodel of Interiors	1,500	sf	105.00	157,500	
*				0	
Mark-Ups					1,308,605
Gen Conditions		10.0%		232,552	
Gen Contractor OH&P		5.0%		127,904	
Bonds and Insurance		2.5%		67,149	
Design Contingency		20.0%		550,625	
Escalation		10.0%		330,375	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Highlands					**$5,321,858**
Add to base bid					3,405,521
Remove existing portables, incl. demo of foundations and make safe of existing utility connections	2	ea	25,000.00	50,000	
Remove existing storage units, incl. demo of foundations and make safe of existing utility connections	1	ea	12,500.00	12,500	
Redevelopement of kinder play area, includes hardscape, turf, regrading, retaining, wall, playground equipment, and fencing.	1	allow	590,000.00	590,000	
New food service drive, recylcling center, and compost center	1	ls	391,250.00	391,250	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New drought tolerant landscaping	1	allow	478,680.85	478,681	
Hardcourt resurfacing	1	allow	239,340.45	239,340	
Renovate classrooms to prep kitchen, servery, and dining room	3,000	sf	275.00	825,000	
Modernization/Remodel of Interiors	3,000	sf	105.00	315,000	
*				0	
Mark-Ups					1,916,337
Gen Conditions		10.0%		340,552	
Gen Contractor OH&P		5.0%		187,304	
Bonds and Insurance		2.5%		98,334	
Design Contingency		20.0%		806,342	
Escalation		10.0%		483,805	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Vista - Option #1					**$13,747,743**
Add to base bid					8,797,345
Demolition of existing structures	1	allow	225,000.00	225,000	
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	8	ea	25,000.00	200,000	
Landscape outdoor learning center	1	allow	22,500.00	22,500	
New service drive, include new curb cut	1	ls	306,250.00	306,250	
New emergency service drive, include new curb cut	1	ls	396,250.00	396,250	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
Kindergarten addition	2,800	sf	315.00	882,000	
Modernization/Remodel of Interiors	5,000	sf	105.00	525,000	
New mechanical system	1	allow	805,000.00	805,000	
Removal and replacement of exterior wood fascia	1	allow	92,250.00	92,250	
New school building	15,363	sf	315.00	4,839,345	
*				0	
Mark-Ups					4,950,398
Gen Conditions		10.0%		879,735	
Gen Contractor OH&P		5.0%		483,854	
Bonds and Insurance		2.5%		254,023	
Design Contingency		20.0%		2,082,991	
Escalation		10.0%		1,249,795	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Vista - Option #2					**$22,121,004**
Add to base bid					14,155,495
Demolition of existing structures	1	allow	225,000.00	225,000	
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	16	ea	25,000.00	400,000	
Regrade site, new infrastructure, and utilities	1	allow	1,122,000.00	1,122,000	
New service drive, include new curb cut	1	ls	306,250.00	306,250	
New emergency service drive, include new curb cut	1	ls	396,250.00	396,250	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
Landscape outdoor learning courtyard and reading garden	1	allow	50,625.00	50,625	
Minor modification of kindergarten play area	1	allow	100,750.00	100,750	
Minor modification of fields	1	allow	352,430.00	352,430	
Kindergarten addition	2,800	sf	295.00	826,000	
Modernization/Remodel of Interiors	5,000	sf	105.00	525,000	
New mechanical system	1	allow	805,000.00	805,000	
Removal and replacement of exterior wood fascia	1	allow	92,250.00	92,250	
New school building	26,826	sf	315.00	8,450,190	
*				0	
Mark-Ups					7,965,509
Gen Conditions		10.0%		1,415,550	
Gen Contractor OH&P		5.0%		778,552	
Bonds and Insurance		2.5%		408,740	
Design Contingency		20.0%		3,351,667	
Escalation		10.0%		2,011,000	

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Vista - Option #3					**$39,296,203**
Add to base bid					25,146,110
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	18	ea	25,000.00	450,000	
Regrade site, new infrastructure, and utilities	1	allow	1,868,000.00	1,868,000	
Redevelopement of fields	1	allow	650,640.00	650,640	
Redevelope parking lot w/ 60 spaces and student drop off area	1	allow	345,000.00	345,000	
Redevelope parking lot w/ 16 spaces and student drop off area	1	allow	114,750.00	114,750	
New service drive, include new curb cut	1	ls	306,250.00	306,250	
New emergency service drive, include new curb cut	1	ls	396,250.00	396,250	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
Delivery shelter and can wash structure	200	sf	175.00	35,000	
New school building	63,338	sf	315.00	19,951,470	
Demolition of existing structures	1	allow	525,000.00	525,000	
*				0	
Mark-Ups					14,150,093
Gen Conditions		10.0%		2,514,611	
Gen Contractor OH&P		5.0%		1,383,036	
Bonds and Insurance		2.5%		726,094	
Design Contingency		20.0%		5,953,970	
Escalation		10.0%		3,572,382	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Santa Fe					**$10,226,121**
Add to base bid					6,543,817
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	9	ea	25,000.00	225,000	
Modified student drop off zone, relocate parking to north side, new curb cut, regrading of north slope, retaining wall, and modified kindergarten play area	1	allow	557,186.90	557,187	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New food service drive, recylcling center, and compost center	1	ls	391,250.00	391,250	
New drought tolerant landscaping	1	allow	539,055.00	539,055	
Tiered seating	1	allow	219,375.00	219,375	
Enclose teacher's dining patio	1	allow	20,700.00	20,700	
Modernization/Remodel of Interiors	3,000	sf	105.00	315,000	
New food service and classroom building	11,500	sf	315.00	3,622,500	
Demolition of existing structures	1	allow	150,000.00	150,000	
*				0	
Mark-Ups					3,682,304
Gen Conditions		10.0%		654,382	
Gen Contractor OH&P		5.0%		359,910	
Bonds and Insurance		2.5%		188,953	
Design Contingency		20.0%		1,549,412	
Escalation		10.0%		929,647	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Skyline					**$54,429,229**
Add to base bid					34,829,914
Regrade site, new infrastructure, utilities, and reconfigured parking	1	allow	2,797,650.00	2,797,650	
Demolition of existing structures	1	allow	525,000.00	525,000	
Outdoor fountain and landscaping, includes low decorative fencing	1	allow	210,250.00	210,250	
Re-grading and reconfiguration of existing playfield	1	allow	206,910.00	206,910	
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	8	ea	25,000.00	200,000	
Redevelope parking lot w/ 55 spaces and student drop off area	1	allow	333,750.00	333,750	
Redevelope parking lot w/ 18 spaces and student drop off area	1	allow	119,250.00	119,250	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New school building	66,745	sf	341.80	22,813,441	
New childcare center building	20,426	sf	325.50	6,648,663	
New service drive	1	ls	281,250.00	281,250	
Play structures and hardscape play area/patio	1	allow	190,000.00	190,000	
*				0	
Mark-Ups					19,599,315
Gen Conditions		10.0%		3,482,991	
Gen Contractor OH&P		5.0%		1,915,645	
Bonds and Insurance		2.5%		1,005,714	
Design Contingency		20.0%		8,246,853	
Escalation		10.0%		4,948,112	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Pacific					**$3,240,364**
Add to base bid					2,073,547
Regrade site, new infrastructure, utilities, and reconfigured parking	1	allow	322,635.00	322,635	
Modify preschool play area, includes play structures, rock wall court resurfacing and fencing	1	allow	263,750.00	263,750	
New food service drive, includes pick up area, transport/loading pad, and service gate	1	ls	289,250.00	289,250	
Modernization/Remodel of R.R.'s and workroom	200	sf	250.00	50,000	
Modernization/Remodel of Interiors	2,340	sf	105.00	245,700	
Expand existing kitchen, includes all new equipment	1,732	sf	391.00	677,212	
Demolition of existing structures	1	allow	225,000.00	225,000	
*				0	
Mark-Ups					1,166,817
Gen Conditions		10.0%		207,355	
Gen Contractor OH&P		5.0%		114,045	
Bonds and Insurance		2.5%		59,874	
Design Contingency		20.0%		490,964	
Escalation		10.0%		294,579	

HMC Architects

Conceptual Master Plan

Broad Scope Conceptual Estimate for Phase 1 of Recommendations
Solana Beach School District - Master Plan
Solana Beach School District
Solana Beach, CA.

April 1, 2013
Job #: 3297005-000

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Carmel Creek					**$2,497,360**
Add to base bid					1,598,090
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	1	ea	25,000.00	25,000	
Remove existing storage units, incl. demo of foundations and make safe of existing utility connections	1	ea	12,500.00	12,500	
New food service drive, recylcling center, and compost center	1	ls	300,000.00	300,000	
New drought tolerant landscaping for site	0	allow	478,680.85	0	
Hardcourt resurfacing	1	allow	239,340.45	239,340	
New decorative iron fencing, between park and school dining/play areas	1	allow	150,000.00	150,000	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New food kiosk	700	sf	525.00	367,500	
Modernization/Remodel of Interiors	0	sf	105.00	0	
*				0	
Mark-Ups					899,270
Gen Conditions		10.0%		159,809	
Gen Contractor OH&P		5.0%		87,895	
Bonds and Insurance		2.5%		46,145	
Soft Costs/Contingency		20.0%		378,388	
Escalation		10.0%		227,033	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Highlands					**$3,798,319**
Add to base bid					2,430,590
Remove existing portables, incl. demo of foundations and make safe of existing utility connections	2	ea	25,000.00	50,000	
Remove existing storage units, incl. demo of foundations and make safe of existing utility connections	1	ea	12,500.00	12,500	
Redevelopement of kinder play area, includes hardscape, turf, regrading, retaining, wall, and fencing.	1	allow	450,000.00	450,000	
New food service drive, recylcling center, and compost center	1	ls	350,000.00	350,000	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New drought tolerant landscaping	0	allow	478,680.85	0	
Hardcourt resurfacing	1	allow	239,340.45	239,340	
Renovate classrooms to prep kitchen, servery, and dining room	3,000	sf	275.00	825,000	
Modernization/Remodel of Interiors	0	sf	105.00	0	
*				0	
Mark-Ups					1,367,729
Gen Conditions		10.0%		243,059	
Gen Contractor OH&P		5.0%		133,682	
Bonds and Insurance		2.5%		70,183	
Soft Costs/Contingency		20.0%		575,503	
Escalation		10.0%		345,302	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Vista - Option #1					**$13,093,357**
Add to base bid					8,378,595
Demolition of existing structures	1	allow	225,000.00	225,000	
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	8	ea	25,000.00	200,000	
Landscape outdoor learning center	0	allow	22,500.00	0	
New service drive, include new curb cut	1	ls	306,250.00	306,250	
New emergency service drive, include new curb cut	0	ls	396,250.00	0	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
Kindergarten addition	2,800	sf	315.00	882,000	
Modernization/Remodel of Interiors	5,000	sf	105.00	525,000	
New mechanical system	1	allow	805,000.00	805,000	
Removal and replacement of exterior wood fascia	1	allow	92,250.00	92,250	
New school building addition	15,363	sf	315.00	4,839,345	
*				0	
Mark-Ups					4,714,762
Gen Conditions		10.0%		837,860	
Gen Contractor OH&P		5.0%		460,823	
Bonds and Insurance		2.5%		241,932	
Soft Costs/Contingency		20.0%		1,983,842	
Escalation		10.0%		1,190,305	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Vista - Option #2					**$22,121,004**
Add to base bid					14,155,495
Demolition of existing structures	1	allow	225,000.00	225,000	
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	16	ea	25,000.00	400,000	
Regrade site, new infrastructure, and utilities	1	allow	1,122,000.00	1,122,000	
New service drive, include new curb cut	1	ls	306,250.00	306,250	
New emergency service drive, include new curb cut	1	ls	396,250.00	396,250	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
Landscape outdoor learning courtyard and reading garden	1	allow	50,625.00	50,625	
Minor modification of kindergarten play area	1	allow	100,750.00	100,750	
Minor modification of fields	1	allow	352,430.00	352,430	
Kindergarten addition	2,800	sf	295.00	826,000	
Modernization/Remodel of Interiors	5,000	sf	105.00	525,000	
New mechanical system	1	allow	805,000.00	805,000	
Removal and replacement of exterior wood fascia	1	allow	92,250.00	92,250	
New school building	26,826	sf	315.00	8,450,190	
*				0	
Mark-Ups					7,965,509
Gen Conditions		10.0%		1,415,550	
Gen Contractor OH&P		5.0%		778,552	
Bonds and Insurance		2.5%		408,740	
Soft Costs/Contingency		20.0%		3,351,667	
Escalation		10.0%		2,011,000	

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Vista - Option #3					**$39,296,203**
Add to base bid					25,146,110
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	18	ea	25,000.00	450,000	
Regrade site, new infrastructure, and utilities	1	allow	1,868,000.00	1,868,000	
Redevelopement of fields	1	allow	650,640.00	650,640	
Redevelope parking lot w/ 60 spaces and student drop off area	1	allow	345,000.00	345,000	
Redevelope parking lot w/ 16 spaces and student drop off area	1	allow	114,750.00	114,750	
New service drive, include new curb cut	1	ls	306,250.00	306,250	
New emergency service drive, include new curb cut	1	ls	396,250.00	396,250	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
Delivery shelter and can wash structure	200	sf	175.00	35,000	
New school building	63,338	sf	315.00	19,951,470	
Demolition of existing structures	1	allow	525,000.00	525,000	
*				0	
Mark-Ups					14,150,093
Gen Conditions		10.0%		2,514,611	
Gen Contractor OH&P		5.0%		1,383,036	
Bonds and Insurance		2.5%		726,094	
Soft Costs/Contingency		20.0%		5,953,970	
Escalation		10.0%		3,572,382	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Santa Fe					**$8,944,101**
Add to base bid					5,723,437
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	9	ea	25,000.00	225,000	
Modified student drop off zone, relocate parking to north side, new curb cut, regrading of north slope, retaining wall, and modified kindergarten play area	1	allow	557,186.90	557,187	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New food service drive, recylcling center, and compost center	1	ls	350,000.00	350,000	
New drought tolerant landscaping	0	allow	539,055.00	0	
Tiered seating	0	allow	219,375.00	0	
Enclose teacher's dining patio	0	allow	20,700.00	0	
Modernization/Remodel of Interiors	3,000	sf	105.00	315,000	
New food service and classroom building	11,500	sf	315.00	3,622,500	
Extension of hardscape	1	allow	150,000.00	150,000	
*				0	
Mark-Ups					3,220,664
Gen Conditions		10.0%		572,344	
Gen Contractor OH&P		5.0%		314,789	
Bonds and Insurance		2.5%		165,264	
Soft Costs/Contingency		20.0%		1,355,167	
Escalation		10.0%		813,100	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Skyline					**$43,227,433**
Add to base bid					27,661,751
Regrade site, new infrastructure, utilities, and reconfigured parking	1	allow	2,797,650.00	2,797,650	
Demolition of existing structures	1	allow	525,000.00	525,000	
Outdoor fountain and landscaping, includes low decorative fencing	0	allow	210,250.00	0	
Re-grading and reconfiguration of existing playfield	1	allow	206,910.00	206,910	
Remove existing portables and storage units, incl. demo of foundations and make safe of existing utility connections	8	ea	25,000.00	200,000	
Redevelope parking lot w/ 55 spaces and student drop off area	1	allow	333,750.00	333,750	
Redevelope parking lot w/ 18 spaces and student drop off area	0	allow	119,250.00	0	
New lunch shelters	3,500	sf	115.00	402,500	
Development of dining garden space	5,000	sf	20.25	101,250	
New school building	66,745	sf	341.80	22,813,441	
New childcare center building	0	sf	325.50	0	
New service drive	1	ls	281,250.00	281,250	
Play structures and hardscape play area/patio	0	allow	190,000.00	0	
*				0	
Mark-Ups					15,565,682
Gen Conditions		10.0%		2,766,175	
Gen Contractor OH&P		5.0%		1,521,396	
Bonds and Insurance		2.5%		798,733	
Soft Costs/Contingency		20.0%		6,549,611	
Escalation		10.0%		3,929,767	

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*

HMC Architects

Conceptual Master Plan

Solana Beach School District - Master Plan — **September 21, 2012**
Solana Beach School District — **HMC Job No. 3297005-000**
Solana Beach, CA.

Addition, Modernization, and Renovation

Component Detail	*Quantity*	*Unit*	*Rate*	*Subtotal $*	*Total $*
Solana Pacific					**$967,633**
Add to base bid					619,200
Regrade site, new infrastructure, utilities, and reconfigured parking	0	allow	322,635.00	0	
Modify preschool play area, includes play structures, rock wall court resurfacing and fencing	0	allow	263,750.00	0	
New food service drive, includes pick up area, transport/loading pad, and service gate	1	ls	150,000.00	150,000	
Modernization/Remodel of R.R.'s and workroom	0	sf	250.00	0	
Modernization/Remodel of Interiors	0	sf	105.00	0	
Expand existing kitchen, includes all new equipment	1,200	sf	391.00	469,200	
Demolition of existing structures	0	allow	225,000.00	0	
*				0	
Mark-Ups					348,433
Gen Conditions		10.0%		61,920	
Gen Contractor OH&P		5.0%		34,056	
Bonds and Insurance		2.5%		17,879	
Soft Costs/Contingency		20.0%		146,611	
Escalation		10.0%		87,967	