LEED v4 for New Construction Gold Scorecard - Oakland A's Sample Project

Achievability								
high	med	low	NP		Certified 40 to 49 points Silver 50 to 59 points **Gold 60 to 79 points** Platinum 80 or more points			
					Achievability rating: **High** = 90%, **Med** = 60%, **Low** = 10%, **NP** = not possible.			
60	21	22	4					
					Campus Credits			
1	0	0	0		**Integrative Process**		**Standard**	**Comments**
1				IP	Credit 1	**Integrative Process**	Perform preliminary energy model and water budget before the completion of SD and document in OPR & BOD.	Energy and water modeling will be conducted as part of project development.
10	4	2	0		**Location & Transportation**		**Standard**	**Comments**
			16	LT	Credit 1	**LEED for Neighborhood Development Location**	Locate the project in within a development certified under LEED for Neighborhood Development.	N/A
1				LT	Credit 2	**Sensitive Land Protection**	Locate the development footprint on land that has been previously developed - OR - does not meet LEED criteria for sensitive land (prime farmland, floodplains, habitat for threatened species, near water bodies, in or near wetlands).	All of site is previously developed 'greyfield' along shoreline that will be designed to address sea level rise resilience.
2				LT	Credit 3	**High Priority Site**	Locate the project on an infill site in historic district (1pt) - OR - site with priority designation (1pt) - OR - brownfield site where contaminated soil/groundwater remediation is required (2pts).	Campus Credit. Some environmental remediation of site contamination will be necessary.
2	2	1		LT	Credit 4	**Surrounding Density and Diverse Uses**	Locate on a site with an existing density of 22,000sf/acre - 35,000 sf/acre and within 1/2 mile of 4-8 basic services.	Existing surrounding density and diverse uses of the current site is limited. Once full-build out of the masterplan is achieved additional points will be feasible. This credit is evaluated conservatively.
2	2	1		LT	Credit 5	**Access to Quality Transit (LEED v4.1)**	Locate project within 1/2 mile of a rail station or ferry terminal that meets min. daily transit service - OR - 1/4 mile of bus, streetcar or rideshare that meets min. daily transit service.	Existing transit accessibility is limited. Once full-build out of the masterplan is achieved additional points will be feasible. This credit is evaluated conservatively.
1				LT	Credit 6	**Bicycle Facilities (LEED v4.1)**	Provide short term (2.5% peak visitors) within 200 ft of main entrance and long term (5% all regular occupants) bike parking within 300 ft of main entrance, FTE showers, and access to bicycle network.	Campus Credit. Adequate bike facilities to meet the credit will be provided on-site.
1				LT	Credit 7	**Reduced Parking Footprint (LEED v4.1)**	Provide preferred parking for carpools for 5% of the total parking spaces and provide parking capacity below base ratios determined by ITE Planning Handbook.	Campus Credit. LEED parking criteria will be targeted in development of transportation demand management plan and implementation.
1				LT	Credit 8	**Green Vehicles (LEED v4.1 - Electric Vehicles)**	Provide electric vehicle charging for 2% of parking spaces or EV-Ready Infrastructure fo 6% of spaces.	Campus Credit. Adequate electric vehicle charging infrastructure to meet the credit will be provided on-site.
6	2	2	0		**Sustainable Sites**		**Standard**	**Comments**
Y				SS	Prereq 1	**Construction Activity Pollution Prevention**	Create and implement erosion control plan that meets the 2012 EPA Construction General Permit.	Campus Credit. Erosion control plan is required for the site and will meet the credit criteria.
1				SS	Credit 1	**Site Assessment**	Complete comprehensive site survey; topography, hydrology, climate, vegetation, soils, human use and human health effects.	Comprehensive site survey documentation will be compiled to meet the credit intent.
	2			SS	Credit 2	**Site Development:** Protect or Restore Habitat	Protect 40% of greenfield area, restore soils, and restore 30% of previously developed site with native/adapted plants (2pts) - OR - provide $0.40/sf to accredited land trust (1pt).	This scope of soil and landscape restoration required by this credit may not be feasible for current site condition, but will be studied further.
1				SS	Credit 3	**Open Space**	Provide outdoor space greater than or equal to 30% of the total site area (including building footprint), with min. 25% vegetated.	Campus Credit. Adequate public open space to meet the intent of this credit will be provided in the masterplan design.
1		2		SS	Credit 4	**Rainwater Management (v4.1 criteria)**	Manage runoff for the 80th percentile (1pt), 85th percentile (1pt), or 90th percentile (+1pt) using low-impact development (LID) and green infrastructure.	Campus Credit. Infiltration opportunities will be limited due to site location on bayshore. On-site management of the 80th percentile rainfall event through mechanical means/reuse will be targeted to achieve 1 point.
2				SS	Credit 5	**Heat Island Reduction**	Meet high albedo requirements for roof and site (2pts) - OR - place a minimum of 75% parking under cover (1pt).	Campus Credit. Heat island reduction measures will be integrated into hardscape and roofscape design across masterplan.
1				SS	Credit 6	**Light Pollution Reduction**	Meet uplight and light trespass requirements, and do not exceed exterior signage luminance requirements.	Campus Credit. Light pollution reduction criteria required by CALGreen will be implemented and align with LEED requirements.
6	4	0	0		**Water Efficiency**		**Standard**	**Comments**
Y				WE	Prereq 1	**Outdoor Water Use Reduction:** 30%	Reduce outdoor water use by 30% over the baseline specified in LEED.	Campus Credit. MWELO (Model Water Efficient Landscape Ordinance) required by CALGreen will be implemented and aligns with LEED requirements.
Y				WE	Prereq 2	**Indoor Water Use Reduction:** 20%	Reduce indoor water use by 20% over the baseline specified in LEED, use fixtures with WaterSense label, and meet requirements for process water use.	CALGreen maximum water fixture flow rates will be sufficient to achieve LEED pre-requisite.
Y				WE	Prereq 3	**Building-Level Water Metering**	Install permanent water meters for building and grounds, and commit to share data with USGBC for 5 years.	Water meters to measure project consumption will be included in design.
1				WE	Credit 1	**Outdoor Water Use Reduction:** 50% Reduction / No Potable Water Use	Reduce potable water used for irrigation by 50% (1pt) - AND - use no potable water for irrigation (1pt).	Campus Credit. MWELO (Model Water Efficient Landscape Ordinance) required by CALGreen will be implemented and aligns with LEED requirements.
3	3			WE	Credit 2	**Indoor Water Use Reduction:** 25% / 30% / 35% / 40% / 45% / 50%	Reduce building water use over LEED baseline.	A robust water conservation strategy will provide 35% water savings.
1	1			WE	Credit 3	**Cooling Tower Water Use**	Conduct a water analysis to optimize cooling tower cycles. Maximizing cycles (1pt), >10 cycled or 20% non-potable water use (2pts).	While mechanical system selection is still to be determined, cooling tower cycle efficiency and potential non-potable water reuse will be considered.
1				WE	Credit 4	**Water Metering**	Install permanent water meters for two or more water subsystems.	Sufficient water submeters to measure major project end uses are recommended.
14	6	9	4		**Energy & Atmosphere**		**Standard**	**Comments**
Y				EA	Prereq 1	**Fundamental Commissioning and Verification**	Engage commissioning agent by end of DD, develop and execute a commissioning plan, and prepare O&M plan for current facilities.	Commissioning prerequisite will be achieved by project; requirements align closely with Title 24 - Energy Code/CALGreen.
Y				EA	Prereq 2	**Minimum Energy Performance**	Reduce energy cost by 5%, compared to ASHRAE 90.1-2010, Appendix G; meet mandatory provisions of ASHRAE 90.1-2010. -OR Comply with HVAC and service water heating requirements for the climate zone in ASHRAE 50% Advanced Energy Design Guide, and meet ASHRAE 90.1-2010 mandatory and prescriptive provisions.	Minimum energy performance will be achieved by the project.
Y				EA	Prereq 3	**Building-Level Energy Metering**	Install meters to provide data on total energy consumption, and commit to share data with USGBC for 5 years.	Energy metering will be included in the project.
Y				EA	Prereq 4	**Fundamental Refrigerant Management**	Eliminate CFCs in building HVAC&R, and complete CFC phase-out conversion before project completion for any CFC equipment to remain.	CFC refrigerants will be not included in project mechanical or refrigeration systems.
3	1	2		EA	Credit 1	**Enhanced Commissioning**	Complete CD review, post occupancy review, and recommissioning manual (3pts), and develop monitoring procedures (+1pt) - AND/OR - complete envelope Cx (+2pts)	LEED enhanced commissioning criteria align closely with Title 24 - Energy Code/CALGreen. Design phase commissioning review is required.
6				EA	Credit 2	**Optimize Energy Performance:** 6% / 8% / 10% / 12% / 14% / 16%	Reduce building energy cost by 6% / 8% / 10% compared to ASHRAE 90.1-2010, Appendix G.	A minimum 24% energy cost reduction from ASHRAE 90.1 - 2010 Baseline will be achieved by the project --- additional performance will be targeted.
4	2			EA	Credit 2	**Optimize Energy Performance:** 18% / 20% / 22% / 24% / 26% / 29%	Reduce building energy cost by 18%/ 20%/ 22% compared to ASHRAE 90.1-2010, Appendix G.	
		3	3	EA	Credit 2	**Optimize Energy Performance:** 32% / 35% / 38% / 42% / 46% / 50%	Reduce building energy cost by 32%/ 35%/ 38% compared to ASHRAE 90.1-2010, Appendix G.	
		1		EA	Credit 3	**Advanced Energy Metering**	Install energy metering for whole building energy and individual energy end uses representing 10% of more of total consumption.	Advanced energy metering could be onerous for a project of this scale.
1	1			EA	Credit 4	**Demand Response**	Design building and equipment for participation in demand response programs through load shedding or shifting (2pts) - OR - if DR program not available, provide infrastructure for future (1pt).	Demand response/load-shifting measures are recommended for the project but LEED criteria is challenging and feasibility is to be determined.
	1	1	1	EA	Credit 5	**Renewable Energy Production:** 1% / 5% / 10%	Produce renewable energy on-site for 1% / 5% / 10% of building energy consumption, calculated by cost.	Some on-site renewable energy may be included in the project.
	1			EA	Credit 6	**Enhanced Refrigerant Management**	Select refrigerants with low global warming potential and ozone depletion potential.	Refrigerant charge minimizattion will be key criteria for mechanical system selection and design.
		2		EA	Credit 7	**Green Power and Carbon Offsets**	Engage a 5 year contract for at least 50% or 100% of the project's energy from green power, carbon offsets, or RECs.	Green Power will not be pursued, but held in reserve should the project be short of its LEED goal.

8	0	3	0			Materials & Resources	Standard	Comments
Y				MR	Prereq 1	**Storage & Collection of Recyclables**	Provide space for the collection and storage of paper, cardboard, glass, plastic, metals, and at least two of the following: batteries, mercury-containing lamps, and electronic waste.	Waste sorting facilities will be included in project design.
Y				MR	Prereq 2	**Construction and Demolition Waste Management Planning**	Develop and implement a construction and demolition waste management plan.	CWM plan required by CALGreen.
3				MR	Credit 1	**Building Life-Cycle Impact Reduction**	Conduct a life-cycle assessment that demonstrates a minimum of 10% reduction in at least three of the six impact measures (3pts). - OR - Maintain existing building structure, envelope, and interior nonstructural elements of a historic building (5pts).- OR - Reuse or salvage building materials from off site or on site as percentage (25%/50%/75%) of surface area (2-4pts).	Building life-cycle analysis and optimization is strongly recommended as a key sustainable design measure for the project.
1		1		MR	Credit 2	**Building Product Disclosure & Optimization:** Environmental Product Declarations	Use 20 products sourced from five different manufacturers that meet disclosure criteria (1pt) - AND/OR - use products that exhibit optimized performance, 50% by cost (1 pt).	Specification and procurement of material products to meet the 'Disclosure' requirement for this LEED credit is recommended for the project.
1		1		MR	Credit 3	**Building Product Disclosure & Optimization:** Sourcing of Raw Materials	Use 20 products sourced from five different manufacturers that have publicly released a report from their raw material suppliers (1pt) - AND/OR - products that meet responsible extraction criteria, 25% material cost (1pt).	Specification and procurement of material products to meet the 'Disclosure' requirement for this LEED credit is recommended for the project.
1		1		MR	Credit4	**Building Product Disclosure & Optimization:** Material Ingredients	Use 20 products sourced from five different manufacturers that demonstrate the chemical inventory of the products (1pt) - AND/OR - use products that document their material ingredient optimization, 25% material cost (1pt).	Specification and procurement of material products to meet the 'Disclosure' requirement for this LEED credit is recommended for the project.
2				MR	Credit 5	**Construction & Demolition Waste Management:** 50% / 75%	Divert 50%, three material streams (1pt) - OR - 75%, four material streams (2pts), - OR - generate less than 2.5 lbs waste/sf (2pts)	A 75% construction waste diversion target is recommended for the project and highly feasible in the Bay Area.
7	3	6	0			Indoor Environmental Quality	Standard	Comments
Y				EQ	Prereq 1	**Minimum IAQ Performance**	For mechanically ventilated spaces: Meet minimum outdoor air intake flow requirements determined by ASHRAE 62.1-2010 ventilation rate procedure, meet sections 4 through 7 of ASHRAE 62.1-2010, and monitor outdoor air intake flows. For naturally ventilated spaces: Meet minimum outdoor air opening and space configuration requirements determined by ASHRAE 62.1-2010 natural ventilation procedure; confirm natural ventilation is effective per CIBSE Applications Manual AM10, March 2005 Fig. 2.8.; and meet one of the following: measure exhaust airflow; provide automatic indication devices on natural ventilation openings; or monitor CO2 concentrations.	Minimum IAQ criteria will be achieved by project design.
Y				EQ	Prereq 2	**Environmental Tobacco Smoke** (ETS) **Control**	Prohibit smoking inside building, locate exterior smoking areas at least 25 feet away from building, and post no-smoking signage within 10 ft of all building entrances.	Tobacco smoke control will be achieved by project design and operational management.
2				EQ	Credit 1	**Enhanced Air Quality Strategies**	Provide entryway systems, prevent interior cross-contamination, and specify MERV 13 filters (1pt) - AND/OR - prevent exterior contamination or increase ventilation or monitor CO2 (1pt).	Indoor pollutant protection measures and enhanced ventilation mechanical controls are recommended for the project.
2		1		EQ	Credit 2	**Low-Emitting Materials:** 2 / 4 / 5 categories	Achieve the threshold level of compliance with VOC emissions and content standards for 2, 4 or 5 product categories.	Specification and procurement of material products that meet the VOC criteria for this credit will be achieved by the project; 2 point achievement threshold aligns closely with CALGreen compliance.
1				EQ	Credit 3	**Construction IAQ Management Plan**	Develop an IAQ plan for construction and preoccupancy phases that meets SMACNA IAQ Guidelines for Occupied Buildings Under Construction.	Construction IAQ management plan will be required for project.
1		1		EQ	Credit 4	**Indoor Air Quality Assessment**	Perform pre-occupancy building flush out (1pt) or air quality testing (2pts).	Building flush-out is recommended as part of the construction schedule before occupancy.
		1		EQ	Credit 5	**Thermal Comfort**	Meet ASHRAE 55-2010, Thermal Comfort Conditions for Human Occupancy, provide individual thermal comfort controls for at least 50% of individual occupant spaces, and provide group controls for all shared multioccupant spaces.	Achievement of ASHRAE 55-2010 Thermal Comfort Conditions and provision of sufficient comfort controls for occupant is recommended for the project.
	1	1		EQ	Credit 6	**Interior Lighting**	Provide lighting controls for 90% of individuals and 100% of shared multi-occupant spaces (1pt) - AND/OR - meet four of LEED's lighting quality requirements (1pt).	Sufficient occupant electric lighting controls are recommended for the project.
1	1	1		EQ	Credit 7	**Daylight:** 40% /55% / 75% **(LEED v4.1)**	Meet spatial daylight autonomy and annual sunlight exposure requirements for percentage (55%/75%) of regularly occupied floor area through simulation (2-3pts) - OR - meet illuminance level requirements for percentage (75%/90%) of regularly occupied floor area through simulation (1-2pts) or measurement (2-3pts).	A minimum daylight autonomy threshold of 40% of the regularly occupied project floor area will be targeted in the project design.
	1			EQ	Credit 8	**Quality Views**	Provide direct views to the outside that meet 2 out of 4 LEED view criteria in 75% of regularly occupied spaces.	Achieving this level of outdoor view access will be challenging for the project but will be studied in detail.
		1		EQ	Credit 9	**Acoustic Performance**	Meet requirements for HVAC background noise, sound isolation, reverberation time, & sound reinforcement for all occupied spaces.	Achieving the level of acoustic performance required be LEED will be challenging for the project.
6	0	0	0			Innovation	Standard	Comments
1				IN	Credit 1.1	**Innovation,** Mercury Free Lighting	Pending GBCI review and comment.	An LED-only lighting design is recommended for the project.
1				IN	Credit 1.2	**Innovation,** TBD	Pending GBCI review and comment.	An appropriate Innovation or Pilot credit will be pursued by the project.
1				IN	Credit 1.3	**Innovation,** TBD	Pending GBCI review and comment.	An appropriate Innovation or Pilot credit will be pursued by the project.
1				IN	Credit 1.4	**Innovation,** TBD	Pending GBCI review and comment.	An appropriate Innovation or Pilot credit will be pursued by the project.
1				IN	Credit 1.5	**Innovation,** TBD	Pending GBCI review and comment.	An appropriate Innovation or Pilot credit will be pursued by the project.
1				IN	Credit 2	**LEED™ Accredited Professional**	LEED Accredited Professional on design team.	This credit will be achieved by the project.
2	2	0	0			Regional Priority	Standard	Comments
	1			RP	Credit 1.1	**Regional Priority**, Indoor Water Use Reduction	Achieve 40% threshold for Indoor Water Use Reduction	A robust water conservation and reuse strategy is recommended for the project to provide over 50% reduction in indoor water use, achieving a regional priority credit.
	1			RP	Credit 1.2	**Regional Priority**, Renewable Energy Production	Achieve 5% threshold for Renewable Energy Production	Achievement of this credit is dependent on the scale of on-site renewable energy deployment. The threshold for achieving regional priority is 5% of energy cost.
1				RP	Credit 1.3	**Regional Priority**, Optimize Energy Performance	Achieve 24% threshold for Optimize Energy Performance	Achievement of this credit is dependent on the scale of energy efficiency. The threshold for achieving regional priority is 24% energy cost reduction.
1				RP	Credit 1.4	**Regional Priority**, Green Vehicles **(LEED v4.1 Electric Vehicles)**	Achieve Green Vehicles Credit	Campus Credit. Adequate electric vehicle charging infrastructure to meet the credit will be provided on-site.