CALIFORNIA EDUCATIONAL FACILITIES AUTHORITY (AUTHORITY) BOND FINANCING PROGRAM

STANFORD UNIVERSITY

First Amendment to and Reinstatement of Resolution No. 323

March 25, 2021

PRIOR AMOUNT APPROVED: \$600,000,000

NEW PROPOSED AMOUNT: \$816,830,000

PRIOR APPROVAL DATE: February 28, 2019

FINANCING TEAM: Please see Attachment 2 to identify possible

conflicts of interest

LOCATION: Stanford, CA, Santa Clara County

<u>PURPOSE OF THE FIRST AMENDMENT AND REINSTATEMENT</u>: Stanford University (Stanford) seeks to authorize a First Amendment to and Reinstatement of Resolution No. 323 (the Resolution) as follows:

- Reinstate the Resolution and extend the expiration date to March 25, 2023;
- Increase the prior authorized amount from \$600,000,000, to \$816,830,000; and
- Amend the authorized project list to include additional projects identified in Exhibit A (attached here to as Attachment 1).

BACKGROUND: In February 2019, the Authority approved the Resolution for the benefit of Stanford, authorizing the issuance of one or more series of revenue bonds to finance and refinance authorized projects, as identified in Exhibit A of the Resolution, that included the acquisition, construction, expansion, rehabilitation, remodeling, renovation and equipping of certain educational facilities, in an amount not to exceed \$600,000,000, with an expiration date of February 28, 2020. Under the Resolution, the Authority issued Stanford's Series V-1 bonds in April 2019 in the amount of \$441,830,000.

Stanford initially planned to utilize its commercial paper program as an interim financing vehicle until it accumulated a more significant balance before ultimately issuing a larger bond. As a result of currently favorable interest rates, Stanford decided to now move forward with issuing bonds to lock in low rates for financing new money construction projects and refinancing its Series U debt. In order to provide Stanford the wherewithal to issue additional bonds under the Series V designation, Stanford is now seeking a reinstatement of the Resolution. The reinstated Resolution will be amended to extend the expiration date for two additional years, to authorize the issuance of an additional \$375,000,000 in bonds for a total authorization of \$816,830,000, and to update the existing project list. Additional bonds issued under the V Series will be used to refund the CEFA Series U-5 and U-6 bonds; the projects that these bonds funded will be included in the updated project list.

FINANCIAL STATUS: Stanford's income statement displays strong operating results over the review period, posting operating surpluses of approximately \$41 million in FY 2020, \$161 million in FY 2019, and \$198 million in FY 2018. Although the COVID-19 pandemic had a significant impact on special program fees, student income, and other income in FY 2020, Stanford's management attributes the positive operating results to increased philanthropic support, steady performance of sponsored support and investment income distributed for operations and widespread cost saving measures.

Operating expenses grew over the review period from approximately \$5.7 billion in FY 2018 to approximately \$6.1 billion in FY 2020. Salaries and benefits, which equate to approximately 65% of Stanford's total operating expenses, increased from approximately \$3.5 billion in FY 2018 to just under \$4.0 billion in FY 2020. Stanford's management explains that the increase is a result of a combination of continued growth in staff and annual merit compensation increases, Stanford's commitment to pay continuation throughout the pandemic, and various COVID-19 expenses, such as purchasing personal protective equipment, cleaning and sanitation services, and COVID-19 testing for staff, faculty, and students.

Stanford's balance sheet appears to display a strong ability to service its debt, displaying a net debt service coverage ratio of 4.92x in FY 2020. With the proposed bond issuance, Stanford appears to remain in a strong position to repay its debt, displaying a pro-forma debt service coverage ratio from net assets of 4.64x. Stanford's pro-forma debt to expendable net assets ratio of 0.16x indicates its ability to comfortably acquire the new debt, with expendable net assets growing from approximately \$29.2 billion in FY 2018 to just over \$31.9 billion in FY 2020.

Stanford's indicators of financial liquidity and long-term investments appear to be strong, with cash and cash equivalents growing from approximately \$266 million to approximately \$1.2 billion over the review period. Stanford's management explains that the increase in cash and cash equivalents can be tied to approximately \$749 million in net taxable bond proceeds being issued during the review period, as well as its Expendable Funds Pool being \$68 million higher in FY 2020 than it was two years previously. Investments have also steadily grown from approximately \$34.5 billion in FY 2018 to approximately \$37.6 billion in FY 2020, an overall increase of 8.9%.

<u>DUE DILIGENCE:</u> Staff has received and reviewed the Eligibility, Legal Review, Religious Affiliation Due Diligence, CEQA documentation, and the certification for the Iran Contracting Act. All documentation satisfies the Authority's requirements.

RECOMMENDATION: Staff recommends that the Authority approve a First Amendment to and Reinstatement of Resolution No. 323 for Stanford University, subject to all prior provisions and conditions remaining unchanged and in full effect. TAP International, Inc., the Authority's financial analyst, and KNN Public Finance LLC, the Authority's municipal advisor, concur with the Authority's staff recommendation.

Stanford University Statement of Activities Unrestricted (\$000s)

Unrestricted (3	sooos)					
		As of August 31,				
		2020		2019		2018
Operating Revenues						
Student income	\$	610,172	\$	652,853	ş	635,020
Sponsored research support		1,621,880		1,682,920		1,655,527
Health care services		1,278,646		1,210,221		1,089,421
Current year gifts in support of operations		289,908		251,491		278,867
Net assets released from restrictions		243,923		212,090		190,596
Investment income distributed for operations		1,642,194		1,564,700		1,493,388
Special program fees and other income		420,363		554,777		524,675
Total Operating Revenues		6,107,086		6,129,052		5,867,494
Operating Expenses						
Salaries and benefits		3,962,140		3,768,195		3,495,306
Depreciation		437,194		398,054		380,142
Other operating expenses		1,666,591		1,801,818		1,794,501
Total Operating Expenses		6,065,925		5,968,067		5,669,949
Change in Net Assets from Operating Activities		41,161		160,985		197,545
Non-Operating Activities						
Increase in reinvested gains		516,024		1,040,312		951,197
Donor advised funds, net		61,723		8,518		(6,489)
Current year gifts not included in operations		2,026		3,251		3,064
Equity and fund transfers, net		135,339		151,774		126,000
Capital and other gifts released from restrictions		296,492		91,294		162,511
Pension and other postemployment benefit related changes						
other than net periodic benefit expense		96,287		(145,191)		69,570
Transfer to net assets with donor restrictions, net		(128,935)		(117,765)		(114,600)
Swap interest and change in value of swap agreements		(8,314)		(22,599)		8,168
Non-controlling interest attributable to SHC		20,847		16,509		18,093
Other		(411)	_	(11,438)		(11,721)
Net Change in Net Assets Without Donor Restrictions		1,032,239		1,175,650		1,403,338
Net Change in Net Assets With Donor Restrictions		772,504		441,551		788,881
Net Change in Total Net Assets		1,804,743		1,617,201		2,192,219
Total Net Assets, beginning of year		38,500,639		36,883,438		34,691,219
Total Net Assets, end of year	s	40,305,382	\$	38,500,639	s	36,883,438

Stanford University Statement of Financial Position (\$000s)

		As of August 31,					
			2020		2019		2018
Assets							
Cash and cash equivalents		S	1,153,303	\$	856,553	\$	265,795
Assets limited as to use			253,391		291,679		165,429
Accounts receivable, net			233,644		249,783		285,038
Receivables (payables) from Stanford Health Care and							
Lucile Salter Packard Children's Hospital at Stanford, net			12,282		98,832		114,219
Prepaid expenses and other assets			101,999		140,611		87,666
Pledges receivable, net			1,369,417		1,321,657		1,321,168
Student loans receivable, net			46,089		51,998		60,336
Faculty and staff mortgages and other loans receivable, net			829,262		797,088		712,161
Investments at fair value, including securities pledged or on	loan		37,574,583		35,291,628		34,517,436
Right-of-use assets			673,926		-		-
Plant facilities, net of accumulated depreciation			7,685,710		7,270,282		6,507,537
Total Assets		\$	49,933,606	\$	46,370,111	\$	44,036,785
Liabilities							
Accounts payable and accrued expenses		S	931,274	S	902,563	S	933,291
Accrued pension and postetirement benefit obligations			597,951		679,753		518,553
Liabilities associated with investments			1,002,896		758,161		708,629
Lease liabilities			683,234		-		-
Deferred income and other obligations			1,386,649		1,241,915		1,118,899
Notes and bonds payable			5,003,552		4,247,335		3,834,297
U.S. government refundable loan funds			22,668		39,745		39,678
Total Liabilities			9,628,224		7,869,472		7,153,347
Net Assets							
Without donor restrictions			22,685,294		21,653,055		20,475,957
With donor restrictions			17,620,088		16,847,584		16,407,481
Total Net Assets			40,305,382		38,500,639		36,883,438
Total Liabilities and Net Assets		s	49,933,606	s	46,370,111	s	44,036,785
	Proforma						
	FYE 8/31/2020 (a)		2020		2019		2018
Debt service coverage (x) - operations	1.80		1.91 1.19			2.13	
Debt service coverage (x) - net assets	4.64		4.92		2.93	5.66	
Debt to expendable net assets (x)	0.16		0.16		0.14		0.13
Expendable net assets to operations (x)			5.26		5.10		5.15
Margins			0.7%		2.6%		3.4%

 $^{^{\}mbox{\tiny (a)}}$ Recalculates FY 2020 results to include the impact of the proposed financing.

ATTACHMENT 1

Projects

CEFA Series V Projects

<u>List A – New Money Projects</u>

100 (Giga	bytes	Border	Routers	Up	grade

1050 Arastradero Behavioral and Functional Neuroscience Laboratory Renovation

1070 Arastradero Renovation

1070 Arastradero Tenant Improvements

1100 Welch Road Apartments

1215 Welch Road: New Building, Fit up, Tunnel & Utilities

1651 Page Mill Road Gray Lab

1701 Page Mill South Renovation

3145 Porter Drive Renovation

3172 Porter Drive Renovation

3180 Porter Drive Renovation

3180 Porter Tenant Improvements

680 Lomita - Wood Deck Rebuild

680 Lomita Balcony Rebuilds

Academic Equipment

Access Ramps

Accessible Parking

Accessible Pathways

Accessible Restrooms

Administrative Systems Infrastructure

All Gender Restroom Conversion

All Gender Restroom Conversion Lake House

Americans with Disabilities Act (ADA) compliance at various locations

Anne T. and Robert M. Bass Biology Research Building

(formerly New Biology Research Building)

Auxiliary Equipment

Backup/Storage Improvements

Barriers Removal

Belden Apartments Renewals in Monterey, CA

Bicycle and Pedestrian Paths & Lighting

Biomedical Innovation Building 1

Biomedical Innovation Building Fit-up Post Project Scope

Blackwelder - Exterior Renewal

Boiler Feed Water Piping Systems

Bonair Replacement Building

Bridge Complex for the Digital Future

Buckeye Lane shared service area

Building Access Door Refresh

Building Energy Retrofit Program

Building Expansions

Building Renovations

Cabrillo-Dolores Faculty Homes

Campus Central Management & Control System Upgrade

Campus Drive East Lake Water Line Replacement

Campus Drive West Domestic Water Replacement

Campus Energy Management Control System (EMCS) Upgrade

Campus Transit Improvements

Capital Utilities Program

Capital Utilities Program (CUP)

Capitalized Operational Improvements

Casper Quad Renovation

Center for Academic Medicine 1 Fitup Project

Center for Academic Medicine 1_Fitup DPM Cafe

Center for Academic Medicine (CAM) (formerly known as Clinical Excellence Center (CEC))

Central Energy Facility Chiller Plant Expansion

Central Energy Facility Cooling Tower Basin

Central Energy Facility Low Temperature Hot Water System Improvements

Central Energy Facility Substation Supervisory Control and Data Acquisition Upgrades ChEM-H_Gray Laboratory

Childcare Center (Stock Farm Replacement)

Chilled Water Extensions

Chilled Water Heat Exchangers

Chilled Water Metering

Clark Center Whole Building Energy Retrofit Program

Client/Server Hardware

Cluster I Sewer Laterals Replacement

Communications & Networking Systems

Connectivity to Corporation for Education Network Initiatives in California Refresh

Copper Cable

COVID-19- Dining Hall Doors-Capitalized

Cowell-HighVolt Vault Relocation

CUP - All Other

CUP - Chilled Water

CUP - Creek/Pump Stations

CUP - Department Firewalls

CUP - Domestic Water

CUP - Fish Ladders

CUP - Hot Water

CUP - Information Technology (IT) & Communication Systems (CS)

CUP - Lake Water

CUP - Reservoirs

CUP - Sewer

CUP - Steam

CUP - Storm Drains

CUP utility system expansion and replacement

Data Center Firewall Refresh

Data Center Power and Cooling Improvements

Data Center Power and Cooling Upgrade/Improvements

Data Center Power Improvements

DC Plant Capacitor Refresh at Northwest Data Center and Communications Hub & Redwood City Electronic Communication Hub

Direct Current Power Infrastructure Upgrade

Deferred Maintenance Backlog

Deferred/Planned Maintenance

Departmental Firewall Refresh

Detector Microfabrication Facility at Stanford Linear Accelerator Center

Distributed Digital Control (DDC) Retrofit

Domestic Water (DW) Facilities

Domestic Water Facilities

Domestic Water Interiors/ Plumbing -Tie Upgrade

Domestic Water Inter-Tie Upgrade

Domestic Water Supervisory Control and Data Acquisition

Domestic Water Supervisory Control and Data Acquisition Improvements

Domestic Water Transmission

Drainage

Drainage System Upgrades

East Campus Infrastructure

East Campus Networking & Communication Redevelopment

El Camino Swale Rehabilitation

Electric Metering

Electric Motor Replacement

Electrical Upgrade Backlog Scope & Design

Electricity Metering Projects

Electronic Communications Hub (ECH)/Enterprise Data Center Cable & Conduit

Elevator Upgrade

Elevators

Emergency Generators and Fueling Project

Emergency Management & Control Systems (EMCS)

Emergency Operations Center and Electric Communication Hub Building

Emergency Support-Create Areas of Respite

Energy Management and Control System Capital Utilities Project

Energy Retrofit Program

Energy Retrofit Program - Arrillaga Family Sports Center Heating, Ventilation and Air Conditioning Upgrades

Enterprise Data Center Cable & Conduit (IT/AS)

Escondido Village Graduate Residences (EVGR) and Parking Garages

Escondido Village High-Rise Sprinklers Installation

Escondido Village Low-Rise Fire Alarm

Escondido Village Low-Rise Sewer Infrastructure Upgrade

Escondido Village Lowrises Sewer Line replacements

Escondido Village Midrises Equipment and Tank Renewal

Escondido Village Midrises Hot Water Tank Renewals

Escondido Village Studios Card Access

Escondido Village Thoburn Court Apartment Backlog

Exterior Backlog Scope & Design

Felt Lake Water Replacement

Fiber Cables

Fire Alarms

Forsythe - PDU -12 & PDU-13 Refresh

Forsythe - Power Distribution Units Refresh

Forsythe Controls Optimization

Forsythe Uninterruptable Power Supply Wet Cell Batteries Refresh

Furniture Fixture & Equipment (FF&E) & Vehicles

Furniture, Fixtures & Equipment (FF&E)

Meters and Backflows

Energy Management & Control System Capital Utilities Program

Galvez Street Strom Drain Upgrade

Gates Building Renovation

General Use Permit (GUP) Mitigation Projects

George P. Shultz Building

Governor's Corner EPC/Suites/Cottages Renovations

Governor's Corner Murray Backlog Renewals

Graduate Resiliency Initiative

Graduate School of Business Bio-Retention Renewal

Graduate School of Education Renovation & New Buildings- North & South

Green Earth Sciences Whole Building Energy Replacement Program Project

Heating, Ventilation, and Air Conditioning (HVAC)

Helium Recovery & Liquefaction

Hewlett Teaching Center (RTF/Quad) - Uninterruptable Power Supply Refresh

High Performance Computing Cluster Uplift

High Voltage Fault Indicators

High Voltage Infrastructure Upgrade

High Voltage Projects

High Voltage Replacements

High Voltage Supervisory Control and Data Acquisition (SCADA) Upgrades

Huang Engineering Center Distributed Digital Controls Upgrade

Information Technology & Communication Systems

Information Technology and Communication System Fiber: Coaches Corner

Information Technology and Communication System Fiber: Document Google Fiber

Information Technology and Communication System Fiber: Escondido Village Graduate Housing-Voice Gateways

Information Technology and Communication System Fiber: Escondido Village Graduate Residences - Building D

Information Technology and Communication System Fiber: Escondido Village Graduate Residences Pavilion

Information Technology and Communication System Fiber: Jasper Ridge

Information Technology and Communication System Fiber: Northwest Data Center and Communications Hub 1.2 to 1.3,1.5

Information Technology and Communication System Fiber: Northwest Data Center and Communications Hub to West Electronic Communications Hub

Information Technology and Communication System Fiber: Palo Alto VA Fiber

Information Technology and Communication System Fiber: Quad Electronic Communication Hub to Forsythe

Information Technology and Communication System Fiber: Roth Garage Single Mode

Information Technology and Communication System Fiber: Stanford West Single Mode

Information Technology and Communication Systems Conduit: Electioneer Road

Information Technology and Communication Systems Conduit: Jasper Ridge

Information Technology Services FF&E

Information Technology System (ITS) Communications Cable

Information Technology System (ITS) Communications Conduit

Information Technology System (ITS) Improvements

Information Technology System (ITS) Networking Systems Cable

Infrastructure Improvements

Infrastructure Upgrade

Integrated Cancer Center (ICC)

Interiors Backlog Scope & Design

Junipero Serra Blvd. Lake Water Line Replacement

Knob, Tube & Misc Scope and Design Projects

Lagunita Dining - Kitchen & Servery CIP

Lagunita Lakeside Refrigeration

Lagunita Stucco Restoration

Lagunita Wiremold Renewal

Lagunita Wiremold Replacement

Lake Houses Sewer Main Rehabilitation

Lake Water Filtration

Lake Water Heat Exchange

Lake Water Supervisory Control and Data Acquisition

Lasuen Domestic Water Replacement

Lasuen Escondido Main Quad Domestic Water

Lasuen Knob & Tube and Miscellaneous Upgrades

Lasuen Lake Water Replacement

Lasuen Mall Domestic Water Replacement

Lasuen Mall Lake Water Replacement

Lasuen Mall Sewer

Lasuen Mall Sewer Replacement

Lasuen Mall Storm Drain Upgrade

Li Ka Shing Center Renovation

Life Safety and Code Compliance - Fire Sprinklers

Life Safety and Code Compliance and Miscellaneous Upgrades

Life Safety and Code Compliance Backlog

Life Safety and Code Compliance Backlog Stern Elevator

Life Safety and Code Compliance Fire Alarms

Living/Learning Upgrades

Loading Docks

Lokey CZ Biohub Laboratory Renovation

Lokey Whole Building Energy Retrofit Program Project

Main Quad Domestic Water Replacement

Main Quad Sanitary Sewer Replacement

Main Quad Storm Drains Replacement

McCullough Distributed Digital Control Upgrade

Mechanical, electrical, and plumbing (MEP), Sewer & Exterior Infrastructure

Meters & Backflow Preventer

Meters & Backflows

Middle Plaza at 500 El Camino – Residential (formerly known as 500 El Camino Real)

Mirrielees A-Wing Asset Renewals

Munger Market Remote Refrigeration

Network Refresh (Managed Machine Room) at Livermore, West Electronic Communications Hub, East Electronic Communications Hub

Network Refresh (Managed Machine Room): West Electronic Communications Hub, East Electronic Communications Hub

Network Special

Network Taps

Network Taps Refresh

Network-Backbone

Networking Load Balancer Refresh

Networking Load Balancer System

Neuro/ChEM-H Fitup

New Buildings

New Dining & Kitchens and Renovations

New Wells & Rehabilitations

Newark Hub

On Campus Photovoltaics

Photovoltaics Power Generation

Physics-Astrophysics Heating, Ventilation & Air Conditioning Upgrades

Plug-in Vehicle Infrastructure

Process Steam Submetering

Pump Stations

Quad 14 Exterior LED Lights

Quad 2 Exterior LED Lights

Rains Renovation

Recycled Water System

Refrigerant Leak Alarm System

Renovation/Construction/Relocation of administrative Office Space (R&DE)

Renovations and Seismic Projects

Replace Beckman Transformer

Replace Cable 12F8 Feeder

Replace Heating, Ventilation, and Air Conditioning System 401 Quarry

Replacement Boiler Plant

Replacement Central Energy Facility Site Camera and Card Reader Addition

Reservoir 1 Pump Station Piping

Reservoir 2 Improvements

Reservoir 2 Pump Station Replacement

Residential & Dining Enterprises (R&DE) Capitalized Operational Improvements

Residential & Dining Enterprises (R&DE) Deferred Maintenance Backlog projects

Residential & Dining Enterprises (R&DE) Major Renovation Plan (formally Capital Project Program (CPP) and Capital Improvement Program (CIP))

Residential & Dining Enterprises (R&DE) Major Renovation Plan Projects Program (formally Capital Project Program (CPP) and Capital Improvement Program (CIP))

Residential & Dining Enterprises Maintenance Center and Annex Renovation

Residential Computing Wireless

Roads

Roof Replacement

Roofs and Maintenance Equipment Backlog Scope & Design

San Juan Hill Sewer Replacement

Sanitary Sewer Instrumentation

Sanitary Sewer Lift Station Replacement

Sanitary Sewer Rehabilitation

Santa Teresa Domestic Water

Service Center Equipment

Sewer and Domestic Water Line Replacement

Site Improvements

Slab Heating Replacement

Slavianskii Dom Heating System Renewal

Software Systems

Solar Photovoltaic Modules

School of Medicine Small & Strategic Projects

Special Fast Track Cable

Spilker Distributed Digital Controls Upgrade

Stanford ChEM-H and Stanford Neuro Sciences Building

(aka ChEM-H / Neuro research complex)

Stanford Guest House Room Refurbishment

Stanford in Redwood City

Stanford Infrastructure Program (SIP)

Stanford Research Computing Facility - Backbone & Firewall Refresh

Stanford Research Computing Facility - Server & Storage Refresh

Stanford Research Computing Facility Module 2 (SRCF M2)

Steam Metering

Storm Drainage Capital Improvements Program

Storm Runoff Intercept Facilities Implementation Plan

Student Computing Infrastructure (Farmshare)

Telco Battery Refresh at Stanford in Redwood City

Telco Battery Refresh Bonair Escondido Communications Hub

Telco Battery Refresh Jenkins Escondido Communications Hub

Telco Battery Refresh Medical Electronic Communications Hub

Telco Battery Refresh Northwest Data Center & Communication Hub

Terman Whole Building Energy Retrofit Program Project

Theta Delta Chi Wood Deck Rebuild

Theta Delta Chi-Wood Stair Replacement

Under Graduate Resiliency Initiatives

Uninterruptable Power Supply at Press Electronic Communications Hub (UPS-1,2)

Uninterruptable Power Supply Battery Refresh: Forsythe, Northwest Data Center and Communications Hub, Stanford in Redwood City

Uninterruptable Power Supply Capacitor Refresh

Uninterruptable Power Supply Refresh at Quad & Puichon

Uninterruptable Power Supply Refresh near East Electronic Communications Hub

Uninterruptable Power Supply Refresh West Electronic Communications Hub

Uninterrupted Power Supply Refresh- at Puichon Hall

Uninterruptible Power Supply Refresh at Quad/ Regional Teaching Facility Electronic Communications Hub

University Information Technology Communications Copper Cable

University Information Technology Communications Services Conduit

University Information Technology Network Systems Network Backbone Refresh

University Information Technology Networking Systems Fiber Cable

Via Ortega Sewer Replacement

Via Ortega Storm Drain Replace

Via Ortega/Pueblo Domestic Water Replace

Well Chlorination

Wells to Campus Domestic Water Replacement

Wells to Campus Lake Water Replace

West Campus Detention Facilities

West Campus Drive Domestic Water

Wi-Fi Implementation in Parking Structures

Wi-Fi Network Redesign - Lyman & Munger

Wireless Infrastructure Upgrade

Wiremold Replacement

Zone 2 Domestic Water Main Replacement

<u>List B - CEFAU5/6 Refunding of Projects (Previously T-4 Projects)</u>

340 Bonair Renovation/Seismic

Abrams Phase II Seismic/CIP

Added Capacity SEQ Cable

Agassiz Lab - Replace Windows

Allen-Replace DI Water System

Alumni/Mechanical Engineering Electric Communication Hub

Americans with Disabilities Act ("ADA") Durand Building

Americans with Disabilities Act ("ADA") - Fire & Police Facility

Americans with Disabilities Act ("ADA") Green East

Americans with Disabilities Act ("ADA") Keck-Special Need Access

Americans with Disabilities Act ("ADA") - Mariposa House

Americans with Disabilities Act ("ADA") - Hoover Memorial Building

Art Building/Hoover Chilled Water Upgrade

Art Gallery Seismic Upgrade

Barnes Elevator Upgrade

Bechtel Americans with Disabilities Act ("ADA") Barrier Removal

Bing-Regrade Storm Drains

Bolivar House - Americans with Disabilities Act ("ADA") Barrier Removal Program

Branner Renovation: re-Formulation

Building 160-Seismic Rehabilitation

Building 250 Seismic Strengthening

Building 360/ West Portals Seismic

Building 500 Area High Voltage Upgrade

Center Clinical Science & Research

CERAS-Americans with Disabilities Act ("ADA") Retrofit

Children's Center of the Stanford Community Cable

Children's Center of the Stanford Community Conduit

Clubhouse Windows

Cluster II, Lake Houses

Cowell Cluster

Cowell Cluster Closeout

Crothers Capital Projects

Crothers Hall/Memorial Rewiring

Crown Quad Americans with Disabilities Barrier Removal

Durand-Biomechanical Renovation

East Campus EHC Conduit Phase II

Education-Americans with Disabilities Act ("ADA") Access

Encina Commons to Quad 06

Encina East

Encina East High Volt Upgrade

Encina Hall Conduit

Encina South Seismic

Encina to Green West

Escondido Road Conduit

Escondido Village Domestic Water Replacement

Escondido Village Graduate Student Housing-PI Sites

Escondido Village Infill Recommission-Sites 1&2

Escondido Village Lowrise Renovations Year 8

ESF Building A-Replace DX Coils

Foothill Reservoir #2

Forst-Replace Restrooms

Galvez Street Conduit Phases I/II

Gilbert-Emergency Generator

Green East-Emergency Generator

Green Library East-North Ramp

Green Library West Earthquake Repair

Green Library West to Green Library East

Green Library-Connectivity Project

Green West Library Cable

Green West Library Conduit

Green West to Sweet

Harmony House Americans with Disabilities Act ("ADA") Retrofit

Hoover Memorial Chilled Water Lines

Hoover Tower Americans with Disabilities Act ("ADA") Barrier Removal

Hoover Tower Elevator Upgrade

Hoover-Replace Hot Water Piping

Housing & Dining Services Information Services Space Renovation

Hulme-Elevator Upgrade

Jordan Americans with Disabilities Act ("ADA") Barrier Removal

Jordan Hall-MEP System

Jordan-Chilled Water Infrastructure Repairs

Jordan-Electric Infrastructure Repairs

Keck-Fume Hood Exh Fans

Keck-Replace East side Exhaust Fans

Kimball-Elevator Addition

Lagunita - DM & Locks

Lagunita Added Cap Costs

Lagunita Capital Additions

Lagunita Seismic Upgrade

Lagunita-Communication Wiring

Lagunita-High Voltage Service

Lane History Corner-Americans with Disabilities Act ("ADA") Barrier Removal Program

Maples Americans with Disabilities Act ("ADA") Upgrade

Maples Americans with Disabilities Act ("ADA") Upgrade Phase 2

Margaret Jacks Hall Renovation

McClatchy Hall Americans with Disabilities Act ("ADA") Retrofit

McCullough Renovation

Memorial Auditorium to Ford/Burnham

Mitchell Seismic Strengthening

Mitchell-Replace HHW Mains

Museum Cable

Museum SUNet

Oak Road Conduit

Packard Building Energy and Environment Café

Pine Hall Conduit

Police & Emergency Services Cable

Quad 01-001 to Green West

Regional Teaching Facility Capacity MDF

Regional Teaching Facility to CIS

Regional Teaching Facility to Electrical Engineering

Regional Teaching Facility to Forsythe

Regional Teaching Facility to Keck

Regional Teaching Facility to McCullough

Regional Teaching Facility to Pine Hall

Regional Teaching Facility to Sweet Hall

Regional Teaching Facility to Varian

Ricker Kitchen Servery

Roble Dining Conversion

Row Houses-Port Per Pillow

San Francisquito Creek Pump Station

School of Education Renovation

Science and Engineering Quad Electrical Engineering Cable

Science and Engineering Quad -Regional Teaching Facility

SEQ-Electrical Engineering

SEQ-McCullough Annex

SEQ-Sequoia Hall

Sloan Math Center Americans with Disabilities Act ("ADA") Barrier Removal Project

Sloan-Fire Alarm Upgrade

SoM Emergency Generators1

Stanford West Cable Phase 1

Stanford West Conduit

Stauffer I Replace Alternative Power

Stern Electrical Relocation

Stern Hall-Manhole 14A & B Upgrade

Stern Kitchen Consolidation

Student Observatory Renov

Sweet Hall Reinforcement

Toyon Hall Upgrades

Toyon Port-per-Pillow III

Toyon Storage

Undergraduate Housing Lock Conversion

West Encina Manhole 11A & 12A Modification

<u>List C - CEFAU5/6 Refunding of Projects (Previously New Money Projects)</u>

2015 Supervisory Control and Data Acquisition System Upgrade

2016 Meters and Backflows

2017 Campus Drainage Improvements

30 inch Chilled Water Welch (Campus-Pasteur)

408 Panama Building

Add Chilled Water Heat Exchanger to Highland Hall

All-Gender Restroom Conversion

Barnes Living/Learning and Security Upgrades

Beckman Building Energy Retrofit

Biology Chemistry Quad Utilities

C.J. Huang Building

Campus Drive 24 inch Chilled Water - Roth/Quarry

Campus Drive at Bowdoin Domestic Water

Campus Drive at Galvez Domestic Water

Campus Energy Management Control System Upgrade

Campus Energy Management Control System Upgrade- FY13

Campus Hot Water-Galvez to Arguello

Central Energy Facility Eyewash Showers

Central Loading Dock and Stauffer III Demolition

formerly Biology/Chemistry/Computer Science

Chi Theta Chi Row House Renovation

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Chilled Water Heat Exchangers

CJ Huang Tenant Improvement Build-out

Clark Center Whole Building Energy Retrofit Program

Columbae Life Safety and Code Compliance and Miscellaneous Upgrades

Comstock Region Hot Water Extension

Conduit-Welch Road Reinforcement

Crothers Way 12-Inch Domestic Waterline Replacement

Dolores Knob, Tube & Miscellaneous Scope and Design

Domestic Water Supervisory Control and Data Acquisition

Domestic Water System Bowdoin Pressure Reducing Valve Stations

Domestic Water Transmission

Durand Knob, Tube & Miscellaneous Scope and Design

Edwards Seismic Retrofit

Escondido Road Lake Water

Escondido South Hot Water Line

Escondido South Interiors Reno

Escondido Village Barnes Sprinkler Roof & Miscellaneous

Escondido Village Hulme Midrise Renovation

Escondido Village Playground Structure Renewals

Escondido Village Slab Heat Renovation

Escondido Village Slab Heat Renovation

Escondido Village Slab Heat Renovation

Exterior Backlog Stern Windows

Fire Sprinkler for Campus Parking Structure Five

Freidenrich Center for Translation Research

Fremont Road Longitudinal Welded Pipe Upgrade

French Knob, Tube & Miscellaneous Scope and Design

FY 2014 Meters and Backflows

FY 2015 Meters and Backflows

FY14 Drainage System Upgrades

FY14 High Voltage Infrastructure Upgrade

FY14 High Voltage Supervisory Control and Data Acquisition Upgrades

FY14 Sanitary Sewer Rehabilitation

FY15 Sanitary Sewer Rehab

FY2015 High Volt Cable Replacement

Galvez Mall Sanitary Sewer Improvement

Galvez Street Storm Drain Upgrade

Garbage Disposal Code Upgrades and Grease Containment

Governors Corner Area Lake Water

Governors Corner Schiff Resident Fellow Apartment Renovation

High Voltage Infrastructure Upgrade

High Voltage Replacements

Hoskins Sprinkler, Living/Learning, Security Upgrade

Hot Water Pipe Via Ortega, Via Pueblo

Hot Water to Panama Office Building Mechanical Engineering

Information Technology System (ITS) Conduit - Conduit to Scientific Research Computing Facility

Information Technology System (ITS) Conduit for New Northwest Data Center and Communications Hub

Information Technology System (ITS) Conduit: New Windhover Building

Information Technology System (ITS) Conduit:Lagunita New Wings

Information Technology System (ITS) Copper: ATT MPOE Copper

Information Technology System (ITS) Copper: NDCCH/MedECH-VG P2

Information Technology System (ITS) Copper: North Data Center Communication Hub

Information Technology System (ITS) Fiber for New Northwest Data Center and Communications Hub

Information Technology System (ITS) Fiber Multiple Electronic Communications Hub Audit

Information Technology System (ITS) Fiber Northwest Data Center and Comm. Hub to AT&T Ring

Information Technology System (ITS) Fiber: Central Energy Facility

Information Technology System (ITS) Fiber: Medical Electronic Communications Hub to Beckman

Information Technology System (ITS) Fiber: West Electronic Communications Hub to Medical Electronic Communications Hub

Information Technology System (ITS) Fiber: East ECH-Jenkins ECH

Information Technology System (ITS) Fiber: Haas 0.1 to Mayfield

Information Technology System (ITS) Fiber: Knoll to Lake Houses

Information Technology System (ITS) Fiber:NDCCH ECH to Beckman

Infrastructure Improvements: Wilbur

Infrastructure Upgrade Lagunita

Irrigation System Upgrade

Junipero Serra Blvd Lake Water Lake Lagunita to Campus East

Junipero Serra Blvd. Lake Water Line Replacement

Junipero Serra Boulevard Lake Water Replacment Fremont to Lake Lagunita

Kairos Knob, Tube & Miscellaneous Scope and Design

Kingscote/Denning Hot Water/Chilled Water

Lagunita Bathrooms Upgrade

Lagunita Bathrooms Upgrade Phase 2

Lane B Domestic Water Pipe Replacement

Life Safety and Code Compliance - Fire Sprinkler Sigma Alpha Epsilon

Life Safety and Code Compliance Backlog Haus Mitteleuropa

Life Safety and Code Compliance Backlog Synergy

Living/Learning Upgrades

Lomita and Campus Drive Chilled Water

Manzanita Park Refurbishment formerly Manzanita Refurbishment

Manzanita, Graduate School of Business Housing, Schwab Hot Water

Mars Knob, Tube & Miscellaneous Scope and Design

MERL WBERP Project

Meters & Backflows

Midrise Sprinkler/Roof Phase 2

Mirada Domestic Water Upgrade

Miranda Ave Domestic Water System Reconfiguration

Muwekma Life Safety and Code Compliance and Miscellaneous Upgrades

New Manzanita Undergraduate Dormitory

New Residences at Lagunita Court formerly Lagunita Court Addition

Northwest Data Center and Communication Hub

Northwest Data Center and Communications Hub

Outdoor Lighting LED Retrofit

Panama Mall Lake Water Replacement

Panama Street Utility Relocation

Paul Allen Building Annex Distributed Digital Control

Paul Allen Building Distributed Digital Control Upgrade

Phi Psi Knob, Tube & Miscellaneous Scope and Design

Process Steam Submetering

Rains Houses Renovation

Rains Housing Area Lake Water Expansion

RCEF Site Camera and CR Additi

Replacement Central Energy Facility Electric Vehicle Charging Stations

Research Animal Facility 1 and Research Animal Facility 2 Rehabilitation & Retrofit

Roofs and Maintenance Equipment Backlog Construction Sigma Alpha Epsilon

Roofs and Maintenance Equipment Backlog Synergy

Roth Knob, Tube & Miscellaneous Scope and Design

Row Kitchen Renovations

Row Kitchens Renovation Phase VI

Salvatierra Street Domestic Water Replacement

San Juan Reservoir Rehabilitation

Sanitary Sewer Rehabilitation

Santa Teresa Sewer Replacement

Sewer Replacement - Galvez

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Sigma Nu Knob, Tube & Miscellaneous Scope and Design

Slavianski Dom Life Safety and Code Compliance and Miscellaneous Upgrade

Stanford Energy System Innovation & High Voltage Substation

Stanford Energy System Innovation Piping & Building Conversion

Stanford in Redwood City

Stanford Research Computing Facility at Stanford Linear Accelerator Center

Stern Burbank Resident Fellow Apartment Renovation

Stern Hall Window Replacement Phase 1 & 2

Stern Larkin Resident Fellow Apartment Expansion/Reconfiguration/Renovation

Stern-Twain Resident Fellow Apartment Expansion and Renovation

Teaching Labs & Learning Center

Varian Whole Building Energy Retrofit Project

Well 3R Electrical Upgrade

West Campus Detention Facilities

Wilbur Renovation Phase IV

Wilbur Renovation:Otero & Rinconada

Wilbur Trancos Resident Fellow Apartment Renovation

Wireless Access Points for Central Energy Facility and Substation

Wireless Infrastructure Upgrade

Wiremold Replacement

ATTACHMENT 2

Financing Team

Stanford University

Borrower: The Board of Trustees of the Leland

Stanford Junior University

Agent for Sale: California State Treasurer

Issuer's Counsel: Office of the Attorney General

Issuer's Municipal Advisor: KNN Public Finance, LLC

Issuer's Financial Analyst: TAP International, Inc.

Bond Counsel: Orrick, Herrington & Sutcliffe LLP

Underwriters: BofA Securities, Inc.

Wells Fargo Bank, N.A. Morgan Stanley & Co., LLC

Siebert Williams Shank & Co., LLC

Underwriter's Counsel: Hawkins Delafield & Wood LLP

Borrower's Counsel: Ropes and Gray, LLP

Trustee: The Bank of New York Mellon

Trust Company, N.A.

Trustee's Counsel: The Law Office of Samuel D. Waldman

Rating Agencies: Moody's Investors Service, Inc.

Standard & Poor's Financial Services, LLC

Fitch Ratings, Inc.

Auditor: PricewaterhouseCoopers LLP

FIRST AMENDMENT TO AND REINSTATEMENT OF RESOLUTION NO. 323

RESOLUTION OF THE CALIFORNIA EDUCATIONAL FACILITIES AUTHORITY AUTHORIZING THE ISSUANCE OF REVENUE BONDS TO FINANCE AND/OR REFINANCE EDUCATIONAL FACILITIES FOR THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

March 25, 2021

WHEREAS, the California Educational Facilities Authority (the "Authority"), a public instrumentality of the State of California, is authorized and empowered by the provisions of the California Educational Facilities Authority Act (the "Act") to issue revenue bonds and to loan the proceeds thereof to a participating private college or a participating nonprofit entity (both as defined in the Act) for the acquisition or construction of projects (as defined in the Act), to refund existing bonds, mortgages, or advances or other obligations incurred, given, or made by a participating private college for the acquisition or construction of any projects, to loan the proceeds thereof to a participating private college for the purpose of refinancing projects not originally funded pursuant to the Act (including repayment of costs, as defined in the Act), and to refund existing bonds or notes of the Authority;

WHEREAS, The Board of Trustees of the Leland Stanford Junior University (the "Borrower") is a trust with corporate powers existing under the laws of the State of California;

WHEREAS, the Borrower applied to the Authority for the issuance of one or more series of its revenue bonds in an aggregate principal amount not to exceed \$600,000,000 (the "Bonds"), to be issued from time to time on behalf of the Borrower to provide financial assistance to the Borrower to finance and/or refinance the acquisition, construction, expansion, rehabilitation, remodeling, renovation and equipping of certain educational facilities of the Borrower, such facilities being more fully described in Exhibit A attached to the Bond Resolution (as defined below) (the "2019 Project");

WHEREAS, pursuant to Resolution No. 323 adopted on February 28, 2019 (the "Bond Resolution"), the Authority authorized the issuance of the Bonds for the 2019 Project;

WHEREAS, the Authority has issued a series of such Bonds, designated as its California Educational Facilities Authority Revenue Bonds (Stanford University) Series V-1 in the aggregate principal amount of \$441,830,000 and expects to issue additional Bonds pursuant to the Bond Resolution;

WHEREAS, the Borrower subsequently applied to the Authority for the issuance of additional Bonds, in one or more series, from time to time on behalf of the Borrower to provide financial assistance to the Borrower to (i) refund all or a portion of the Authority's Revenue Bonds (Stanford University) Series U-5 (the "Series U-5 Bonds"), which financed and/or refinanced certain additional educational facilities of the Borrower, and (ii) finance and/or refinance the acquisition, construction, expansion, rehabilitation, remodeling, renovation and equipping of certain additional educational facilities of the Borrower (collectively, the "2021 Project"), such 2021 Project being more fully described in Exhibit A attached hereto and incorporated herein;

WHEREAS, to the extent required by subdivision (b) of Section 94212 of the Education Code, the Borrower has provided documentation to the Authority demonstrating, to the extent applicable, that the Project has complied with Division 13 (commencing with Section 21000) of the Public Resources Code or is not a "project" under such division; and

WHEREAS, the Bond Resolution required that the Bonds be sold not later than February 28, 2020; and

WHEREAS, the Borrower has requested that the Authority reinstate the Bond Resolution, increase the authorized amount under the Bond Resolution to \$816,830,000 and extend the date for sale of the Bonds to be within two years of the date of adoption of this First Amendment to and Reinstatement of Resolution No. 323;

NOW, THEREFORE, BE IT RESOLVED by the California Educational Facilities Authority as follows:

- **Section 1**. The Borrower's application for additional financial assistance filed with the Authority is hereby approved.
- **Section 2.** The Bond Resolution is hereby reinstated and is hereby supplemented and amended as follows:
- (a) The definition of Project, appearing in the third WHEREAS clause of the Bond Resolution and Exhibit A attached to the Bond Resolution, which refers to the 2019 Project, is amended to include the 2021 Project, as described in Exhibit A of this First Amendment to and Reinstatement of Resolution No. 323, attached hereto and incorporated herein.
- (b) The amount of \$600,000,000 appearing in the third WHEREAS clause and Section 1 of the Bond Resolution is replaced in its entirety with \$816,830,000.
- (c) The designation "California Educational Facilities Authority Revenue Bonds (Stanford University), Series V-1" appearing in Section 1 of the Bond Resolution is replaced in its entirety with "California Educational Facilities Authority Revenue Bonds (Stanford University), Series V".
- (d) Section 2 of the Bond Resolution is amended to authorize an extension of time for the Treasurer to enter into agreements to sell the Bonds at any time within two years of the date of adoption of this First Amendment to and Reinstatement of Resolution No. 323.
- (e) The phrase "Goldman Sachs & Co. LLC (the "Representative") as representative of itself, J.P. Morgan Securities LLC, and Merrill Lynch, Pierce, Fenner & Smith Incorporated (the "Underwriters")" appearing in Section 3 of the Bond Resolution is replaced in its entirety with "(1) with respect to the Series V-1 Bonds, Goldman Sachs & Co. LLC, as representative of itself, J.P. Morgan Securities LLC, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as underwriters for the Series V-1 Bonds, (2) with respect to the Series V-2 Bonds, BofA Securities, as representative of itself, Wells Fargo Bank, National Association,

Morgan Stanley & Co. LLC and Siebert Williams Shank & Co. LLC, as underwriters for the Series V-2 Bonds, and (3) with respect to additional series of Bonds issued pursuant to this Resolution and the Indenture, such other underwriter or underwriters as shall be determined by the Borrower and listed in the Treasurer's eligible list of underwriters (each such underwriter for the Bonds collectively referred to in this Resolution as the "Underwriters")".

(f) A new Section 11 is hereby added to the Bond Resolution as follows:

"Section 11. The aggregate principal amount of California Educational Facilities Authority Revenue Bonds (Stanford University) Series V-2 originally issued shall not exceed \$375,000,000; provided that such Bonds may also be originally issued and designated in two series as the California Educational Facilities Authority Revenue Bonds (Stanford University) Series V-2 and California Educational Facilities Authority Revenue Bonds (Stanford University) Series V-3 so long as the aggregate principal amount shall not exceed \$375,000,000."

(g) A new Section 12 is hereby added to the Bond Resolution as follows:

"Section 12. The Authority hereby approves the execution and delivery of all agreements, documents, certificates and instruments referred to herein with electronic signatures as may be permitted under the Uniform Electronic Transactions Act (Civil Code Section 1633.1 et seq.) and digital signatures as may be permitted under Section 16.5 of the Government Code."

Section 3. The provisions of the Authority's Resolution No. 2020-01 apply to the documents and actions approved in the Bond Resolution, as amended and reinstated by this First Amendment to and Reinstatement of Resolution No. 323.

Section 4. Except as herein amended and supplemented, all of the findings, terms and provisions of the Bond Resolution are hereby ratified, confirmed and approved.

Section 5. This First Amendment to and Reinstatement of Resolution No. 323 shall take effect from and after the date of adoption.

EXHIBIT A

Project

"Project" means, collectively, all of the projects listed in Exhibit A to the Bond Resolution, which are incorporated herein by reference, in addition to the 2021 Project.

2021 Project means the projects listed below but only to the extent that the cost thereof has been financed or refinanced from proceeds of the Bonds.

<u>List A - New Money Projects</u>

100 Giga bytes Border Routers Upgrade

1050 Arastradero Behavioral and Functional Neuroscience Laboratory Renovation

1070 Arastradero Renovation

1070 Arastradero Tenant Improvements

1100 Welch Road Apartments

1215 Welch Road: New Building, Fit up, Tunnel & Utilities

1651 Page Mill Road Gray Lab

1701 Page Mill South Renovation

3145 Porter Drive Renovation

3172 Porter Drive Renovation

3180 Porter Drive Renovation

3180 Porter Tenant Improvements

680 Lomita - Wood Deck Rebuild

680 Lomita Balcony Rebuilds

Academic Equipment

Access Ramps

Accessible Parking

Accessible Pathways

Accessible Restrooms

Administrative Systems Infrastructure

All Gender Restroom Conversion

All Gender Restroom Conversion Lake House

Americans with Disabilities Act (ADA) compliance at various locations

Anne T. and Robert M. Bass Biology Research Building

(formerly New Biology Research Building)

Auxiliary Equipment

Backup/Storage Improvements

Barriers Removal

Belden Apartments Renewals in Monterey, CA

Bicycle and Pedestrian Paths & Lighting

Biomedical Innovation Building 1

Biomedical Innovation Building Fit-up Post Project Scope

Blackwelder - Exterior Renewal

Boiler Feed Water Piping Systems

Bonair Replacement Building

Bridge Complex for the Digital Future

Buckeye Lane shared service area

Building Access Door Refresh

Building Energy Retrofit Program

Building Expansions

Building Renovations

Cabrillo-Dolores Faculty Homes

Campus Central Management & Control System Upgrade

Campus Drive East Lake Water Line Replacement

Campus Drive West Domestic Water Replacement

Campus Energy Management Control System (EMCS) Upgrade

Campus Transit Improvements

Capital Utilities Program

Capital Utilities Program (CUP)

Capitalized Operational Improvements

Casper Quad Renovation

Center for Academic Medicine 1 Fitup Project

Center for Academic Medicine 1_Fitup DPM Cafe

Center for Academic Medicine (CAM) (formerly known as Clinical Excellence Center (CEC))

Central Energy Facility Chiller Plant Expansion

Central Energy Facility Cooling Tower Basin

Central Energy Facility Low Temperature Hot Water System Improvements

Central Energy Facility Substation Supervisory Control and Data Acquisition Upgrades

ChEM-H_Gray Laboratory

Childcare Center (Stock Farm Replacement)

Chilled Water Extensions

Chilled Water Heat Exchangers

Chilled Water Metering

Clark Center Whole Building Energy Retrofit Program

Client/Server Hardware

Cluster I Sewer Laterals Replacement

Communications & Networking Systems

Connectivity to Corporation for Education Network Initiatives in California Refresh

Copper Cable

COVID-19- Dining Hall Doors-Capitalized

Cowell-HighVolt Vault Relocation

CUP - All Other

CUP - Chilled Water

CUP - Creek/Pump Stations

CUP - Department Firewalls

CUP - Domestic Water

CUP - Fish Ladders

CUP - Hot Water

CUP - Information Technology (IT) & Communication Systems (CS)

CUP - Lake Water

CUP - Reservoirs

CUP - Sewer

CUP - Steam

CUP - Storm Drains

CUP utility system expansion and replacement

Data Center Firewall Refresh

Data Center Power and Cooling Improvements

Data Center Power and Cooling Upgrade/Improvements

Data Center Power Improvements

DC Plant Capacitor Refresh at Northwest Data Center and Communications Hub & Redwood City Electronic Communication Hub

Direct Current Power Infrastructure Upgrade

Deferred Maintenance Backlog

Deferred/Planned Maintenance

Departmental Firewall Refresh

Detector Microfabrication Facility at Stanford Linear Accelerator Center

Distributed Digital Control (DDC) Retrofit

Domestic Water (DW) Facilities

Domestic Water Facilities

Domestic Water Interiors/ Plumbing -Tie Upgrade

Domestic Water Inter-Tie Upgrade

Domestic Water Supervisory Control and Data Acquisition

Domestic Water Supervisory Control and Data Acquisition Improvements

Domestic Water Transmission

Drainage

Drainage System Upgrades

East Campus Infrastructure

East Campus Networking & Communication Redevelopment

El Camino Swale Rehabilitation

Electric Metering

Electric Motor Replacement

Electrical Upgrade Backlog Scope & Design

Electricity Metering Projects

Electronic Communications Hub (ECH)/Enterprise Data Center Cable & Conduit

Elevator Upgrade

Elevators

Emergency Generators and Fueling Project

Emergency Management & Control Systems (EMCS)

Emergency Operations Center and Electric Communication Hub Building

Emergency Support-Create Areas of Respite

Energy Management and Control System Capital Utilities Project

Energy Retrofit Program

Energy Retrofit Program - Arrillaga Family Sports Center Heating, Ventilation and Air Conditioning Upgrades

Enterprise Data Center Cable & Conduit (IT/AS)

Escondido Village Graduate Residences (EVGR) and Parking Garages

Escondido Village High-Rise Sprinklers Installation

Escondido Village Low-Rise Fire Alarm

Escondido Village Low-Rise Sewer Infrastructure Upgrade

Escondido Village Lowrises Sewer Line replacements

Escondido Village Midrises Equipment and Tank Renewal

Escondido Village Midrises Hot Water Tank Renewals

Escondido Village Studios Card Access

Escondido Village Thoburn Court Apartment Backlog

Exterior Backlog Scope & Design

Felt Lake Water Replacement

Fiber Cables

Fire Alarms

Forsythe - PDU -12 & PDU-13 Refresh

Forsythe - Power Distribution Units Refresh

Forsythe Controls Optimization

Forsythe Uninterruptable Power Supply Wet Cell Batteries Refresh

Furniture Fixture & Equipment (FF&E) & Vehicles

Furniture, Fixtures & Equipment (FF&E)

Meters and Backflows

Energy Management & Control System Capital Utilities Program

Galvez Street Strom Drain Upgrade

Gates Building Renovation

General Use Permit (GUP) Mitigation Projects

George P. Shultz Building

Governor's Corner EPC/Suites/Cottages Renovations

Governor's Corner Murray Backlog Renewals

Graduate Resiliency Initiative

Graduate School of Business Bio-Retention Renewal

Graduate School of Education Renovation & New Buildings- North & South

Green Earth Sciences Whole Building Energy Replacement Program Project

Heating, Ventilation, and Air Conditioning (HVAC)

Helium Recovery & Liquefaction

Hewlett Teaching Center (RTF/Quad) - Uninterruptable Power Supply Refresh

High Performance Computing Cluster Uplift

High Voltage Fault Indicators

High Voltage Infrastructure Upgrade

High Voltage Projects

High Voltage Replacements

High Voltage Supervisory Control and Data Acquisition (SCADA) Upgrades

Huang Engineering Center Distributed Digital Controls Upgrade

Information Technology & Communication Systems

Information Technology and Communication System Fiber: Coaches Corner

Information Technology and Communication System Fiber: Document Google Fiber

Information Technology and Communication System Fiber: Escondido Village Graduate Housing- Voice Gateways

Information Technology and Communication System Fiber: Escondido Village Graduate Residences - Building D

Information Technology and Communication System Fiber: Escondido Village Graduate Residences Pavilion

Information Technology and Communication System Fiber: Jasper Ridge

Information Technology and Communication System Fiber: Northwest Data Center and Communications Hub 1.2 to 1.3,1.5

Information Technology and Communication System Fiber: Northwest Data Center and Communications Hub to West Electronic Communications Hub

Information Technology and Communication System Fiber: Palo Alto VA Fiber

Information Technology and Communication System Fiber: Quad Electronic Communication Hub to Forsythe

Information Technology and Communication System Fiber: Roth Garage Single Mode

Information Technology and Communication System Fiber: Stanford West Single Mode

Information Technology and Communication Systems Conduit: Electioneer Road

Information Technology and Communication Systems Conduit: Jasper Ridge

Information Technology Services FF&E

Information Technology System (ITS) Communications Cable

Information Technology System (ITS) Communications Conduit

Information Technology System (ITS) Improvements

Information Technology System (ITS) Networking Systems Cable

Infrastructure Improvements

Infrastructure Upgrade

Integrated Cancer Center (ICC)

Interiors Backlog Scope & Design

Junipero Serra Blvd. Lake Water Line Replacement

Knob, Tube & Misc Scope and Design Projects

Lagunita Dining - Kitchen & Servery CIP

Lagunita Lakeside Refrigeration

Lagunita Stucco Restoration

Lagunita Wiremold Renewal

Lagunita Wiremold Replacement

Lake Houses Sewer Main Rehabilitation

Lake Water Filtration

Lake Water Heat Exchange

Lake Water Supervisory Control and Data Acquisition

Lasuen Domestic Water Replacement

Lasuen Escondido Main Quad Domestic Water

Lasuen Knob & Tube and Miscellaneous Upgrades

Lasuen Lake Water Replacement

Lasuen Mall Domestic Water Replacement

Lasuen Mall Lake Water Replacement

Lasuen Mall Sewer

Lasuen Mall Sewer Replacement

Lasuen Mall Storm Drain Upgrade

Li Ka Shing Center Renovation

Life Safety and Code Compliance - Fire Sprinklers

Life Safety and Code Compliance and Miscellaneous Upgrades

Life Safety and Code Compliance Backlog

Life Safety and Code Compliance Backlog Stern Elevator

Life Safety and Code Compliance Fire Alarms

Living/Learning Upgrades

Loading Docks

Lokey CZ Biohub Laboratory Renovation

Lokey Whole Building Energy Retrofit Program Project

Main Quad Domestic Water Replacement

Main Quad Sanitary Sewer Replacement

Main Quad Storm Drains Replacement

McCullough Distributed Digital Control Upgrade

Mechanical, electrical, and plumbing (MEP), Sewer & Exterior Infrastructure

Meters & Backflow Preventer

Meters & Backflows

Middle Plaza at 500 El Camino – Residential (formerly known as 500 El Camino Real)

Mirrielees A-Wing Asset Renewals

Munger Market Remote Refrigeration

Network Refresh (Managed Machine Room) at Livermore, West Electronic Communications Hub, East Electronic Communications Hub Network Refresh (Managed Machine Room): West Electronic Communications Hub, East Electronic Communications Hub

Network Special

Network Taps

Network Taps Refresh

Network-Backbone

Networking Load Balancer Refresh

Networking Load Balancer System

Neuro/ChEM-H Fitup

New Buildings

New Dining & Kitchens and Renovations

New Wells & Rehabilitations

Newark Hub

On Campus Photovoltaics

Photovoltaics Power Generation

Physics-Astrophysics Heating, Ventilation & Air Conditioning Upgrades

Plug-in Vehicle Infrastructure

Process Steam Submetering

Pump Stations

Quad 14 Exterior LED Lights

Quad 2 Exterior LED Lights

Rains Renovation

Recycled Water System

Refrigerant Leak Alarm System

Renovation/Construction/Relocation of administrative Office Space (R&DE)

Renovations and Seismic Projects

Replace Beckman Transformer

Replace Cable 12F8 Feeder

Replace Heating, Ventilation, and Air Conditioning System 401 Quarry

Replacement Boiler Plant

Replacement Central Energy Facility Site Camera and Card Reader Addition

Reservoir 1 Pump Station Piping

Reservoir 2 Improvements

Reservoir 2 Pump Station Replacement

Residential & Dining Enterprises (R&DE) Capitalized Operational Improvements

Residential & Dining Enterprises (R&DE) Deferred Maintenance Backlog projects

Residential & Dining Enterprises (R&DE) Major Renovation Plan (formally Capital Project Program (CPP) and Capital Improvement Program (CIP))

Residential & Dining Enterprises (R&DE) Major Renovation Plan Projects Program (formally Capital Project Program (CPP) and Capital Improvement Program (CIP))

Residential & Dining Enterprises Maintenance Center and Annex Renovation

Residential Computing Wireless

Roads

Roof Replacement

Roofs and Maintenance Equipment Backlog Scope & Design

San Juan Hill Sewer Replacement

Sanitary Sewer Instrumentation

Sanitary Sewer Lift Station Replacement

Sanitary Sewer Rehabilitation

Santa Teresa Domestic Water

Service Center Equipment

Sewer and Domestic Water Line Replacement

Site Improvements

Slab Heating Replacement

Slavianskii Dom Heating System Renewal

Software Systems

Solar Photovoltaic Modules

School of Medicine Small & Strategic Projects

Special Fast Track Cable

Spilker Distributed Digital Controls Upgrade

Stanford ChEM-H and Stanford Neuro Sciences Building

(aka ChEM-H / Neuro research complex)

Stanford Guest House Room Refurbishment

Stanford in Redwood City

Stanford Infrastructure Program (SIP)

Stanford Research Computing Facility - Backbone & Firewall Refresh

Stanford Research Computing Facility - Server & Storage Refresh

Stanford Research Computing Facility Module 2 (SRCF M2)

Steam Metering

Storm Drainage Capital Improvements Program

Storm Runoff Intercept Facilities Implementation Plan

Student Computing Infrastructure (Farmshare)

Telco Battery Refresh at Stanford in Redwood City

Telco Battery Refresh Bonair Escondido Communications Hub

Telco Battery Refresh Jenkins Escondido Communications Hub

Telco Battery Refresh Medical Electronic Communications Hub

Telco Battery Refresh Northwest Data Center & Communication Hub

Terman Whole Building Energy Retrofit Program Project

Theta Delta Chi Wood Deck Rebuild

Theta Delta Chi-Wood Stair Replacement

Under Graduate Resiliency Initiatives

Uninterruptable Power Supply at Press Electronic Communications Hub (UPS-1,2)

Uninterruptable Power Supply Battery Refresh: Forsythe, Northwest Data Center and Communications Hub, Stanford in Redwood City

Uninterruptable Power Supply Capacitor Refresh

Uninterruptable Power Supply Refresh at Quad & Puichon

Uninterruptable Power Supply Refresh near East Electronic Communications Hub

Uninterruptable Power Supply Refresh West Electronic Communications Hub

Uninterrupted Power Supply Refresh- at Puichon Hall

Uninterruptible Power Supply Refresh at Quad/ Regional Teaching Facility Electronic Communications Hub

University Information Technology Communications Copper Cable

University Information Technology Communications Services Conduit

University Information Technology Network Systems Network Backbone Refresh

University Information Technology Networking Systems Fiber Cable

Via Ortega Sewer Replacement

Via Ortega Storm Drain Replace

Via Ortega/Pueblo Domestic Water Replace

Well Chlorination

Wells to Campus Domestic Water Replacement

Wells to Campus Lake Water Replace

West Campus Detention Facilities

West Campus Drive Domestic Water

Wi-Fi Implementation in Parking Structures

Wi-Fi Network Redesign - Lyman & Munger

Wireless Infrastructure Upgrade

Wiremold Replacement

Zone 2 Domestic Water Main Replacement

<u>List B – CEFAU5/6 Refunding of Projects (Previously T-4 Projects)</u>

340 Bonair Renovation/Seismic

Abrams Phase II Seismic/CIP

Added Capacity SEQ Cable

Agassiz Lab - Replace Windows

Allen-Replace DI Water System

Alumni/Mechanical Engineering Electric Communication Hub

Americans with Disabilities Act ("ADA") Durand Building

Americans with Disabilities Act ("ADA") - Fire & Police Facility

Americans with Disabilities Act ("ADA") Green East

Americans with Disabilities Act ("ADA") Keck-Special Need Access

Americans with Disabilities Act ("ADA") - Mariposa House

Americans with Disabilities Act ("ADA") - Hoover Memorial Building

Art Building/Hoover Chilled Water Upgrade

Art Gallery Seismic Upgrade

Barnes Elevator Upgrade

Bechtel Americans with Disabilities Act ("ADA") Barrier Removal

Bing-Regrade Storm Drains

Bolivar House - Americans with Disabilities Act ("ADA") Barrier Removal Program

Branner Renovation :re-Formulation

Building 160-Seismic Rehabilitation

Building 250 Seismic Strengthening

Building 360/ West Portals Seismic

Building 500 Area High Voltage Upgrade

Center Clinical Science & Research

CERAS-Americans with Disabilities Act ("ADA") Retrofit

Children's Center of the Stanford Community Cable

Children's Center of the Stanford Community Conduit

Clubhouse Windows

Cluster II, Lake Houses

Cowell Cluster

Cowell Cluster Closeout

Crothers Capital Projects

Crothers Hall/Memorial Rewiring

Crown Quad Americans with Disabilities Barrier Removal

Durand-Biomechanical Renovation

East Campus EHC Conduit Phase II

Education-Americans with Disabilities Act ("ADA") Access

Encina Commons to Quad 06

Encina East

Encina East High Volt Upgrade

Encina Hall Conduit

Encina South Seismic

Encina to Green West

Escondido Road Conduit

Escondido Village Domestic Water Replacement

Escondido Village Graduate Student Housing-PI Sites

Escondido Village Infill Recommission-Sites 1&2

Escondido Village Lowrise Renovations Year 8

ESF Building A-Replace DX Coils

Foothill Reservoir #2

Forst-Replace Restrooms

Galvez Street Conduit Phases I/II

Gilbert-Emergency Generator

Green East-Emergency Generator

Green Library East-North Ramp

Green Library West Earthquake Repair

Green Library West to Green Library East

Green Library-Connectivity Project

Green West Library Cable

Green West Library Conduit

Green West to Sweet

Harmony House Americans with Disabilities Act ("ADA") Retrofit

Hoover Memorial Chilled Water Lines

Hoover Tower Americans with Disabilities Act ("ADA") Barrier Removal

Hoover Tower Elevator Upgrade

Hoover-Replace Hot Water Piping

Housing & Dining Services Information Services Space Renovation

Hulme-Elevator Upgrade

Jordan Americans with Disabilities Act ("ADA") Barrier Removal

Jordan Hall-MEP System

Jordan-Chilled Water Infrastructure Repairs

Jordan-Electric Infrastructure Repairs

Keck-Fume Hood Exh Fans

Keck-Replace East side Exhaust Fans

Kimball-Elevator Addition

Lagunita - DM & Locks

Lagunita Added Cap Costs

Lagunita Capital Additions

Lagunita Seismic Upgrade

Lagunita-Communication Wiring

Lagunita-High Voltage Service

Lane History Corner-Americans with Disabilities Act ("ADA") Barrier Removal Program

Maples Americans with Disabilities Act ("ADA") Upgrade

Maples Americans with Disabilities Act ("ADA") Upgrade Phase 2

Margaret Jacks Hall Renovation

McClatchy Hall Americans with Disabilities Act ("ADA") Retrofit

McCullough Renovation

Memorial Auditorium to Ford/Burnham

Mitchell Seismic Strengthening

Mitchell-Replace HHW Mains

Museum Cable

Museum SUNet

Oak Road Conduit

Packard Building Energy and Environment Café

Pine Hall Conduit

Police & Emergency Services Cable

Quad 01-001 to Green West

Regional Teaching Facility Capacity MDF

Regional Teaching Facility to CIS

Regional Teaching Facility to Electrical Engineering

Regional Teaching Facility to Forsythe

Regional Teaching Facility to Keck

Regional Teaching Facility to McCullough

Regional Teaching Facility to Pine Hall

Regional Teaching Facility to Sweet Hall

Regional Teaching Facility to Varian

Ricker Kitchen Servery

Roble Dining Conversion

Row Houses-Port Per Pillow

San Francisquito Creek Pump Station

School of Education Renovation

Science and Engineering Quad Electrical Engineering Cable

Science and Engineering Quad -Regional Teaching Facility

SEQ-Electrical Engineering

SEQ-McCullough Annex

SEQ-Sequoia Hall

Sloan Math Center Americans with Disabilities Act ("ADA") Barrier Removal Project

Sloan-Fire Alarm Upgrade

SoM Emergency Generators1

Stanford West Cable Phase 1

Stanford West Conduit

Stauffer I Replace Alternative Power

Stern Electrical Relocation

Stern Hall-Manhole 14A & B Upgrade

Stern Kitchen Consolidation

Student Observatory Renov

Sweet Hall Reinforcement

Toyon Hall Upgrades

Toyon Port-per-Pillow III

Toyon Storage

Undergraduate Housing Lock Conversion

West Encina Manhole 11A & 12A Modification

List C - CEFAU5/6 Refunding of Projects (Previously New Money Projects)

2015 Supervisory Control and Data Acquisition System Upgrade

2016 Meters and Backflows

2017 Campus Drainage Improvements

30 inch Chilled Water Welch (Campus-Pasteur)

408 Panama Building

Add Chilled Water Heat Exchanger to Highland Hall

All-Gender Restroom Conversion

Barnes Living/Learning and Security Upgrades

Beckman Building Energy Retrofit

Biology Chemistry Quad Utilities

C.J. Huang Building

Campus Drive 24 inch Chilled Water - Roth/Quarry

Campus Drive at Bowdoin Domestic Water

Campus Drive at Galvez Domestic Water

Campus Energy Management Control System Upgrade

Campus Energy Management Control System Upgrade- FY13

Campus Hot Water-Galvez to Arguello

Central Energy Facility Eyewash Showers

Central Loading Dock and Stauffer III Demolition

formerly Biology/Chemistry/Computer Science

Chi Theta Chi Row House Renovation

Chilled Water Heat Exchangers

CJ Huang Tenant Improvement Build-out

Clark Center Whole Building Energy Retrofit Program

Columbae Life Safety and Code Compliance and Miscellaneous Upgrades

Comstock Region Hot Water Extension

Conduit-Welch Road Reinforcement

Crothers Way 12-Inch Domestic Waterline Replacement

Dolores Knob, Tube & Miscellaneous Scope and Design

Domestic Water Supervisory Control and Data Acquisition

Domestic Water System Bowdoin Pressure Reducing Valve Stations

Domestic Water Transmission

Durand Knob, Tube & Miscellaneous Scope and Design

Edwards Seismic Retrofit

Escondido Road Lake Water

Escondido South Hot Water Line

Escondido South Interiors Reno

Escondido Village Barnes Sprinkler Roof & Miscellaneous

Escondido Village Hulme Midrise Renovation

Escondido Village Playground Structure Renewals

Escondido Village Slab Heat Renovation

Escondido Village Slab Heat Renovation

Escondido Village Slab Heat Renovation

Exterior Backlog Stern Windows

Fire Sprinkler for Campus Parking Structure Five

Freidenrich Center for Translation Research

Fremont Road Longitudinal Welded Pipe Upgrade

French Knob, Tube & Miscellaneous Scope and Design

FY 2014 Meters and Backflows

FY 2015 Meters and Backflows

FY14 Drainage System Upgrades

FY14 High Voltage Infrastructure Upgrade

FY14 High Voltage Supervisory Control and Data Acquisition Upgrades

FY14 Sanitary Sewer Rehabilitation

FY15 Sanitary Sewer Rehab

FY2015 High Volt Cable Replacement

Galvez Mall Sanitary Sewer Improvement

Galvez Street Storm Drain Upgrade

Garbage Disposal Code Upgrades and Grease Containment

Governors Corner Area Lake Water

Governors Corner Schiff Resident Fellow Apartment Renovation

High Voltage Infrastructure Upgrade

High Voltage Replacements

Hoskins Sprinkler, Living/Learning, Security Upgrade

Hot Water Pipe Via Ortega, Via Pueblo

Hot Water to Panama Office Building Mechanical Engineering

Information Technology System (ITS) Conduit - Conduit to Scientific Research Computing Facility

Information Technology System (ITS) Conduit for New Northwest Data Center and Communications Hub

Information Technology System (ITS) Conduit: New Windhover Building

Information Technology System (ITS) Conduit:Lagunita New Wings

Information Technology System (ITS) Copper: ATT MPOE Copper

Information Technology System (ITS) Copper: NDCCH/MedECH-VG P2

Information Technology System (ITS) Copper: North Data Center Communication Hub

Information Technology System (ITS) Fiber for New Northwest Data Center and Communications Hub

Information Technology System (ITS) Fiber Multiple Electronic Communications Hub Audit

Information Technology System (ITS) Fiber Northwest Data Center and Comm. Hub to AT&T Ring

Information Technology System (ITS) Fiber: Central Energy Facility

Information Technology System (ITS) Fiber: Medical Electronic Communications Hub to Beckman

Information Technology System (ITS) Fiber: West Electronic Communications Hub to Medical Electronic Communications Hub

Information Technology System (ITS) Fiber: East ECH-Jenkins ECH

Information Technology System (ITS) Fiber: Haas 0.1 to Mayfield

Information Technology System (ITS) Fiber: Knoll to Lake Houses

Information Technology System (ITS) Fiber:NDCCH ECH to Beckman

Infrastructure Improvements: Wilbur

Infrastructure Upgrade Lagunita

Irrigation System Upgrade

Junipero Serra Blvd Lake Water Lake Lagunita to Campus East

Junipero Serra Blvd. Lake Water Line Replacement

Junipero Serra Boulevard Lake Water Replacment Fremont to Lake Lagunita

Kairos Knob, Tube & Miscellaneous Scope and Design

Kingscote/Denning Hot Water/Chilled Water

Lagunita Bathrooms Upgrade

Lagunita Bathrooms Upgrade Phase 2

Lane B Domestic Water Pipe Replacement

Life Safety and Code Compliance - Fire Sprinkler Sigma Alpha Epsilon

Life Safety and Code Compliance Backlog Haus Mitteleuropa

Life Safety and Code Compliance Backlog Synergy

Living/Learning Upgrades

Lomita and Campus Drive Chilled Water

Manzanita Park Refurbishment formerly Manzanita Refurbishment

Manzanita, Graduate School of Business Housing, Schwab Hot Water

Mars Knob, Tube & Miscellaneous Scope and Design

MERL WBERP Project

Meters & Backflows

Midrise Sprinkler/Roof Phase 2

Mirada Domestic Water Upgrade

Miranda Ave Domestic Water System Reconfiguration

Muwekma Life Safety and Code Compliance and Miscellaneous Upgrades

New Manzanita Undergraduate Dormitory

New Residences at Lagunita Court formerly Lagunita Court Addition

Northwest Data Center and Communication Hub

Northwest Data Center and Communications Hub

Outdoor Lighting LED Retrofit

Panama Mall Lake Water Replacement

Panama Street Utility Relocation

Paul Allen Building Annex Distributed Digital Control

Paul Allen Building Distributed Digital Control Upgrade

Phi Psi Knob, Tube & Miscellaneous Scope and Design

Process Steam Submetering

Rains Houses Renovation

Rains Housing Area Lake Water Expansion

RCEF Site Camera and CR Additi

Replacement Central Energy Facility Electric Vehicle Charging Stations

Research Animal Facility 1 and Research Animal Facility 2 Rehabilitation & Retrofit

Roofs and Maintenance Equipment Backlog Construction Sigma Alpha Epsilon

Roofs and Maintenance Equipment Backlog Synergy

Roth Knob, Tube & Miscellaneous Scope and Design

Row Kitchen Renovations

Row Kitchens Renovation Phase VI

Salvatierra Street Domestic Water Replacement

San Juan Reservoir Rehabilitation

Sanitary Sewer Rehabilitation

Santa Teresa Sewer Replacement

Sewer Replacement - Galvez

Sigma Nu Knob, Tube & Miscellaneous Scope and Design

Slavianski Dom Life Safety and Code Compliance and Miscellaneous Upgrade

Stanford Energy System Innovation & High Voltage Substation

Stanford Energy System Innovation Piping & Building Conversion

Stanford in Redwood City

Stanford Research Computing Facility at Stanford Linear Accelerator Center

Stern Burbank Resident Fellow Apartment Renovation

Stern Hall Window Replacement Phase 1 & 2

Stern Larkin Resident Fellow Apartment Expansion/Reconfiguration/Renovation

Stern-Twain Resident Fellow Apartment Expansion and Renovation

Teaching Labs & Learning Center

Varian Whole Building Energy Retrofit Project

Well 3R Electrical Upgrade

West Campus Detention Facilities

Wilbur Renovation Phase IV

Wilbur Renovation:Otero & Rinconada

Wilbur Trancos Resident Fellow Apartment Renovation

Wireless Access Points for Central Energy Facility and Substation

Wireless Infrastructure Upgrade

Wiremold Replacement