



SAN DIEGO STATE
UNIVERSITY

Georgia

SDSU-Georgia

5500 Campanile Drive
San Diego CA 92182-1324
619-594-6071
FAX: 619-594-8078

Magda Magradze
Chief Executive Officer
Millennium Challenge Account – Georgia
52 Uznadze Street
0102 Tbilisi, Georgia

10/15/2014

Dear Ms. Magradze,

Please find enclosed herewith the documents for the Quarter 1 Report for the Provision of Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics, as required per the contract dated July 28, 2014. The specific documents attached include:

- Report on Execution of Q1 Work Plan and Q2 Plan Updates (note, this merges two separate deliverables per the list in Agreement, for better narrative flow)
- Status Report on Enrollment in English/STEM Institute
- Gender/Socially Vulnerable Student Recruitment Plan
- Progress Report on Georgian Faculty Participation in Academic Workshops at SDSU
- Draft Environmental and Social Management Framework (ESMF) and Environmental and Social Management Plan (ESMP)
- Draft Terms of Reference for Renovation and Construction Design and Construction Supervision (note, this item also merges two separate deliverables)
- Report on Submission of Applications for Georgian Accreditation and for Western Association of Schools and Colleges (WASC) Accreditation
- Articulation Plan
- MOUs with Partner Universities
- Draft Key Performance Indicators
- Proposed Guidelines for the Utilization of GRDF Proceeds

Per the terms of the agreement, please provide review comments within 10 business days. An invoice for the associated payment amount is also included.

Please feel free to contact me if you have any questions. I am available at +995 558 174 414 or kwalsh@mail.sdsu.edu.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Kenneth D. Walsh". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kenneth D. Walsh
Dean

Annex 1 – Report on Execution of Quarter 1 Work Plan and Updated Quarter 2 Plans

The rest of this page is left intentionally blank.

Report on Execution of Quarter 1 Work Plan and Quarter 2 Plan Updates

To facilitate easy evaluation of progress and identification of potential risks to execution, this report addresses only those key sub-tasks proposed in the original 15-month Work Plan that have not been completed or started as planned. This exception report and the updated work plan spread sheet has been color-coded to indicate tasks completed, those initiated but not completed, and those tasks not initiated – the latter two categories necessitating rescheduling, or an explanation of reprogramming. *Tasks that either were executed on schedule, or were brought into schedule during the reporting quarter will not be addressed in this report.*

	Green – Task completed on schedule
	Yellow – Task initiated, but not completed during the proposed project period. Look for 1) Green indication in a subsequent period indicating completion; 2) Rescheduling later in the project period with clarification in the narrative; 3) Reprogramming with clarification indicating how the task will now be approached.
	Red – Task not initiated in the proposed program period. Look for 1) Improved color in a subsequent project period indicating progress; 2) Rescheduling later in the project period with clarification in the narrative; 3) Reprogramming with clarification indicating how the task will now be approached.

This document represents the revised work plan for the execution of the Scope of Services as defined in Appendix A to the Pre-Enrollment Contract and includes a detailed breakout of the key milestones, deliverables, reports, invoicing and associated schedules as specified in Appendix B. Both Appendices are attached to this document for ease of reference.

This Work Plan is a companion to and structured to align with the Pre-Enrollment Contract Work Plan Events Schedule. There are two major sections: 1) the Pre-enrollment Contract reporting requirements to include the startup inception report and five quarterly progress reports to include the periodic progress payments (invoices by task) per the approved budget and scope of services and 2) a more detailed breakout for each of the seven tasks into key subtask activities.

The following table provides a schedule for the Inception and Quarterly reports and a breakdown of the 6 invoices, the lump sum payment percentage applied on a Task basis, and the invoice total payment requested. *No revisions are proposed for the reporting or payment schedules.*

Key Event	Invoice No.	Invoice Date	Lump Sum % of Contract	Task 1 Budget	Task 2 Budget	Task 3 Budget	Task 4 Budget	Task 5 Budget	Task 6 Budget	Task 7 Budget	Totals by Invoice
Inception Report	INV 1	15-Aug-14	18%	\$ 588,108	\$ 19,741	\$ 56,937	\$ 160,088	\$ 73,954	\$ 139,349	\$ 578,924	\$1,617,101
Quarter 1 Progress Report	INV 2	15-Oct-14	17%	\$ 555,435	\$ 18,645	\$ 53,774	\$ 151,194	\$ 69,845	\$ 131,607	\$ 546,762	\$1,527,262
Quarter 2 Progress Report	INV 3	15-Jan-15	20%	\$ 653,453	\$ 21,935	\$ 63,263	\$ 177,876	\$ 82,171	\$ 154,832	\$ 643,249	\$1,796,779
Quarter 3 Progress Report	INV 4	15-Apr-15	20%	\$ 653,453	\$ 21,935	\$ 63,263	\$ 177,876	\$ 82,171	\$ 154,832	\$ 643,249	\$1,796,779
Quarter 4 Progress Report	INV 5	15-Jul-15	12.5%	\$ 408,408	\$ 13,709	\$ 39,540	\$ 111,172	\$ 51,357	\$ 96,770	\$ 402,031	\$1,122,987
Quarter 5 Progress Report	INV 6	15-Oct-15	12.5%	\$ 408,408	\$ 13,709	\$ 39,540	\$ 111,172	\$ 51,357	\$ 96,770	\$ 402,031	\$1,122,987
			Totals by Task	\$3,267,265	\$ 109,674	\$ 316,316	\$ 889,379	\$ 410,855	\$ 774,160	\$3,216,245	\$8,983,894

Task 1. Business Unit Organization, Startup, and Operations

The primary purpose of Task 1 is to establish and maintain the management team, program office, and administrative and operational programs and processes to achieve the objectives of the STEM Higher

Education Project in accordance with the Pre-Enrollment Contract. Beginning with the preparation and submission of the Inception Report, the remaining subtasks are focused primarily on the engagement of key personnel at SDSU, the SDSU-Georgia program office and Partner Institutions; securing professional consulting support services; overseeing the activities of Tasks 2 through 7 in collaboration with Partners; and administration of the program to include periodic assessments, reporting of metrics versus plans, and applying lessons learned. (Task and subtask status and comments on deficient subtasks follow.)

Tasks			Quarter 1			Quarter 2		
			Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
Task 1		Business Unit Organization						
	1.1	Inception Activities and Report		X				
	1.2	Staffing Plan						
		<i>Dean and startup</i>	H-4	X	X	X	X	X
		<i>Directors/Support Staff</i>		H-7	X	H-5	H-4	X
	1.3	Contract Signing and Kick-off Event	X					
	1.4	Consulting/Services Agreements						
		<i>Business/Human Resources Services</i>		C	X	X	X	X
		<i>Legal/Import-Export Services</i>		C	X	X	X	X
		<i>Design Services & Management</i>		C	X	RFP	C	X
	1.5	GE Staff Indoctrination and Training at SDSU			3		3	
	1.6	Form and Convene Advisory Board			X	C		
	1.7	Office Materials						
		<i>Purchase Office equipment</i>			X	X		
		<i>Purchase Communications equipment</i>			X	X		
	1.8	Quarterly Task 1 Performance Assessments			X			X
	1.9	Follow-on Contract 45-month Budget-Work Plan Development and Negotiation						

Task 1.2 – Staffing Plan

Although full staffing for the Dean and startup staff was achieved, hiring of appropriate directors and support staff has been delayed. Proposed hiring for Q1 has been rescheduled and distributed across Q2 and future execution periods. This delay was caused by unforeseen challenges in establishing hiring and contracting authority in Georgia. This risk has been mitigated by the engagement of Grant Thornton, an in-country management firm that will assist the program in future hiring, thereby mitigating delays. *We do not anticipate any impact to the overall accomplishment of the activities as planned for the Pre-Enrollment Contract period of performance.*

Task 1.4 – Consulting/Services Agreements

Design Services and Management contracting has been delayed, and is rescheduled, projected for mid-Q2. Engagement of the Design Services and Management consultants was delayed by unforeseen challenges in approval of SDSU selection and contracting processes, clarification of international standards for operations, and finalization of the review and approval process for Terms of Reference. Processes have been put in place to facilitate review and approval of TOR and appropriate selection of Design Services & Management consultant and performance has been rescheduled for Q2. *New processes should mitigate risks associated with this task.*

Task 1.5 – Georgia Staff Training at SDSU

Travel and training for Georgia-based support staff and directors experienced a trickle-down delay from Task 1.2. *The hiring process has been improved; training will take place as needed beginning in Q2.*

Task 1.7 – Office Materials

Prospective outfitting of the Dean’s office and other management spaces was delayed as final spaces were not identified and secured on schedule. In an effort to secure space with maximum cost-effectiveness, SDSU-Georgia will collaborate with MCA-Georgia to cooperatively renovate space to be

used for the central administrative offices of both organizations. This arrangement was in flux during Q1, but has since been resolved. The resolution of this co-location strategy should mitigate further delays, and expenses for appropriate office out-fitting could be incurred as appropriate during Q2.

Task 2. Accreditation – SDSU Degrees

Of key importance is to establish the degree programs as valid selections under the national university system. This will be done in 2 stages. Stage 1 will be in Quarter 1 for the Electrical Engineering, Computer Engineering, and Chemistry degree programs to be offered starting in October 2015. Phase 2 will be done in Quarter 5 for Computer Science, Civil Engineering, and Construction Engineering degree programs to be offered in October 2016. Upon award, SDSU-Georgia will leverage existing academic collaborators at the partner institutions, as well as the program design and accreditation as articulated in the proposal. After initial accreditation of SDSU-Georgia programs, SDSU will monitor and maintain institutional accreditation as required.

Concurrently, SDSU will obtain WASC accreditation for the delivery of its accredited degree programs off campus and submit the application for accreditation of its Computer Sciences Degree program. [Note: The Accrediting Commission for Schools, Western Association of Schools and Colleges (ACS WASC) is one of six regional accrediting associations in the United States.] Through the formal accreditation program, the public is assured that accredited institutions are evaluated extensively and conform to general expectations of performance and quality. Moreover, students can be assured that the institutions in which they seek to enroll have been reviewed and the educational programs that are offered have been evaluated for quality. Educational institutions benefit from the stimulus for self-study and self-improvement provided by the accreditation process. *Note: Accreditation submissions occurred as scheduled.*

Task 2		Accreditation - SDSU Degrees	Quarter 1			Quarter 2		
			Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
	2.1	Staffing Plan						
		<i>Engage SDSU Accreditation Team</i>	H-4	X	X			
		<i>Engage GE Partners Support Staff</i>	H-3	X	X			
	2.2	Assemble Degree Programs Materials	X	X				
	2.3	Consulting/Services Agreements (Partners)						
		<i>Accreditation Coordinator</i>		X	C			
		<i>Translation of Degree Programs mat'ls</i>		X	C			
	2.4	Applications Preparation and Submission						
		<i>Prepare and Submit Accreditation Packages</i>		X	C			
		<i>Process WASC Offcampus Accreditation</i>		X	C			
	2.5	<i>SDSU Computer Science Accreditation</i>					X	
	2.6	Quarterly Task 2 Performance Assessments			X			X

Task 3. Articulation – Partner Courses

A major approach for accelerating the ABET accreditation process for undergraduate degree programs offered at the Partner Institutions is to identify, modify (where needed), and accept for credit existing courses at these institutions that meet the ABET certification requirements of the SDSU-Georgia degree programs. An evaluation and articulation assessment program will be developed and supported directly at SDSU. The first three months will represent the Phase I of a multi-phase process to identify, evaluate and submit for approval appropriate partner institution courses. Phase I will target primarily courses for General Education requirements. Additional courses (2 per Partner per Quarter) will be identified and submitted to SDSU for assessment under this Articulation initiative. (Task and subtask status and comments on deficient subtasks only follow.)

Task 3		Articulation - Partner Courses	Quarter 1			Quarter 2		
			Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
	3.1	Staffing Plan						
		<i>Engage Articulation Team Members</i>		H-5	X		H-5	X
		<i>Engage GE Partners Support Staff</i>		H-5	X		H-5	X
	3.2	Develop and Execute Articulation Plan			X			
		<i>Implement Phase 1 Pilot (Partner GE Cses)</i>			X	X		X
		<i>Implement Phase 2 Sustained (2 Cses/Partner/Qtr)</i>				X	X	X
	3.3	Consulting/Services Agreements						
		<i>Translation Services (Partners)</i>		C	X			
		<i>Curriculum Development (SDSU)</i>						
		<i>ABET Accreditation of Articulated Courses</i>						
	3.4	Quarterly Task 3 Performance Assessments			X			X

Task 3.1 Staffing Plan

SDSU is in the process of modestly revising the proposed multi-stage articulation plan to identify appropriate on-campus and Partner Institution faculty to manage the process. Early in Q2 SDSU plans to have a revised plan in place ready for execution and to engage faculty through one of several proposed processes in the final phases of on-campus Plan approval. *Final approval of the on-campus process will mitigate further delays.*

Task 3.2 Develop and Execute Articulation Plan

As noted, the final form of the articulation plan is in an on-campus approval phase to identify the most effective and efficient way to engage campus faculty in the process. Once approved, execution of Phase I as proposed can proceed apace.

Task 3.3 Consulting/Services Agreements

As anticipated in the approved 15-month Work Plan, Partner Institutions have agreed to provide translated versions of syllabi deemed most likely to be approved for direct course credit. This anticipated operational implementation will improve the effectiveness of the translations, as subject-matter experts will be translating the material (which may be their own), and Partner Institution faculty will self-select the most applicable courses according to the established course map to be implemented as part of the program. *This process will improve effectiveness and efficiency, and will mitigate any further delays in implementation.*

Task 4. English/STEM Institute

Necessary to facilitate the objective of building opportunity for students from underrepresented groups, SDSU-Georgia collaborative will provide a multi-track, intensive English Language program designed to provide remediation, supplemental support, and general English Language education in preparation for enrollment in SDSU-Georgia degree programs. STEM courses in mathematics and sciences will be added as the need is verified through student assessment examinations. SDSU is perfectly positioned to rapidly launch the English program based on our extensive experience training non-native English speakers in our campus-based Language Acquisition Resource Center (LARC)/American Language Institute (ALI). (Task and subtask status and comments on deficient subtasks only follow.)

Task 4		English/STEM Institute	Quarter 1			Quarter 2		
			Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
	4.1	Staffing Plan						
		<i>Engage a Director</i>		H-1			H-1	
		<i>Engage Instructors</i>		H-1	H-3	X	X	X
		<i>Recruit GE Assistant Director</i>				H-1	X	H-2
		<i>Faculty (Oversight/QA)</i>		H-1		X	H-1	
	4.2	English/STEM Strategy and Execution Plan		X	X			
	4.3	Consulting/Services Agreements						
		<i>English/STEM Recruitment (G/SV 25%)</i>		C	X	X	X	X
		<i>Student Assessments and Testing</i>			C	X		X
	4.4	Student Recruitment, Assessment, and Enrollment		X	X	X	X	X
	4.5	English/STEM Training Program						
		<i>Quarter 2 10-week program - Target 75</i>				X	X	X
		<i>Quarter 3 10-week program - Target 75</i>						
		<i>Quarter 4 10 week Program - Target 75</i>						
	4.6	Degree Programs Readiness Assessment						
	4.7	Materials						
		<i>Purchase computers/printers for Staff</i>			X	X		
	4.8	Quarterly Task 4 Performance Assessments			X			X

Overall for Task 4 and to facilitate a more rapid, geographically diverse, and cost-effective start-up of the ELA in Year 1, SDSU is engaging a proven service provider in Georgia to initiate the program. In addition, SDSU will hire a director with management and language training experience to oversee the performance of the program and a qualified member of the SDSU faculty to perform periodic Quality Assurance reviews to ensure the highest-quality instruction. In September 2014, the ELA program started recruitment of the initial cohort of students, target 75. Students will be interviewed and tested to determine English skills. English Language courses will commence in October at no cost to help selected students improve their English Language skills to qualify for enrollment in a SDSU degree program in Fall 2015, and to improve their performance on the Georgian National Exam.

For Year 1, the Center for International Education (CIE), one of the premier sources of study abroad opportunities for prospective applicants from Georgia, will be engaged in a pilot program to run the English Language Academy in conjunction with existing English/ TOEFL Prep Center infrastructure in Tbilisi, Kutaisi, Batumi, Telavi and Akhaltsikhe, with other locations around Georgia to be added in the later phase of the project development. Utilizing its network of schools, community organizations, youth NGOs and women’s organizations, CIE will identify and recruit at least 100 students in Year 1, to provide free English proficiency evaluation and appropriate English-language TOEFL preparation programs, targeting academically eligible students including those with socially disadvantaged backgrounds and from underrepresented community groups, seeking admission to the San Diego State University’s Georgia undergraduate degree programs.

The lessons learned from this initial effort with CIE will be applied and the program evaluated for possible transition to a “hybrid” ELA program that leverages the resources and capabilities of CIE and those of the highly successful SDSU LARC and ALI programs. The primary objective is to operate a program that is cost effective and supports the enrollment of Georgian students with capabilities to successfully complete a STEM undergraduate degree program. As the English Language training in the Georgian K thru 12 program becomes more effective, the need for a comprehensive ELA will be re-evaluated and adjusted accordingly.

Task 4.1 – Staffing Plan

Based on the feedback from MCA-Georgia, CIE was selected as a strategic partner to facilitate rapid start-up of the ELA and student recruitment processes. This partnership eliminated the need to identify and hire instructors, and the selection and contracting process superseded the requirement to identify and hire a Director and Georgia-based Assistant Director. Now that an appropriate MOU has been executed with CIE and contracting is in process, appropriate staff will be identified and engaged in Q2.

Task 4.3 – Consulting Services/Agreements

Based on the feedback from MCA-Georgia, CIE was selected as a strategic partner to facilitate rapid start-up of the ELA and student recruitment processes. Selection of CIE as both the recruitment and instructional partner complicated the engagement process, which resulted in a delay for the implementation of recruitment, outreach, assessment, testing and placement. These services will be provided by CIE, under supervision from SDSU faculty and staff, via the proposed English/STEM Institute/English Language Academy plan. CIE is operating under an MOU while SDSU-Georgia finalizes authority to contract directly in Georgia to support the proposed activities. Although delayed, contracting of these services is projected for Q2. Identification of CIE as a strategic partner mitigates future risks associated with the completion of this task.

Task 4.7 – Materials

Prospective outfitting of the ELA office and staff equipment was delayed by the described pivot to CIE. As appropriate staff are hired, supplies will be procured and provided to ensure capacity for oversight and evaluation of the CIE pilot.

Task 5. Degree Programs Student Recruiting

The primary student recruitment strategy will be to leverage the existing national university system of the Government of Georgia. With successful completion of Task 2, a critical component of the start-up process, SDSU-Georgia degree programs will be accredited and certified at each partner institution. The programs will be listed along with the other national university selections available to students as choices pending their national examination results. However, listing the programs in the national system will not be sufficient to stimulate selection of SDSU-Georgia programs. To mitigate this concern and to extend the reach of the program to students from socially-disadvantaged groups, SDSU-Georgia will implement an outreach initiative directly to high school students starting their senior year in 2014 with a multi-faceted message concerning the SDSU-Georgia programs. Among the key messages will be:

- Description of the degree programs and qualification requirements
- Relationship between SDSU and the Partner Universities
- Value of an internationally-recognized degree
- Cost of the program and availability of scholarships and student aid

An important added component of this task will be the strategic partnership with CIE. CIE offers access to the audiences in Tbilisi and 7 regions with the capacity to outreach/recruit non-traditional students through its central office in Tbilisi and four regional offices. CIE will make its offices available as a base for the field operation. Located in the center of Tbilisi and public universities in the regions, CIE provides easy access to key institutions and target audiences. With the information campaign ongoing, CIE will offer one on one advising to individual prospective applicants and refers them to the Dean's office at SDSU-Georgia. CIE will use one or more social platform/ FB groups to make appointments, advise students and prepare them for enrollment. (Task and subtask status and comments on deficient subtasks only follow.)

Task 5		Degree Programs Student Recruiting	Quarter 1			Quarter 2		
			Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
	5.1	Staffing Plan						
		<i>Hire Asst Directors Student/Faculty Affairs</i>		H-1	X	H-2	H-1	X
		<i>Hire Assts Admissions</i>						
	5.2	Student Recruitment Strategy and Execution Plan		X	X	X		
	5.3	Consulting/Services Agreements						
		<i>Recruitment Campaign Materials (G/SV)</i>		C	X	X	X	X
		<i>Recruitment Consulting Services</i>			C	X	X	X
		<i>Student Assessment Services (testing)</i>						
	5.4	Recruitment/Enrollment Activities						
		<i>Marketing/Recruitment Plan Execution</i>				X	X	X
		<i>Student Assessment/Testing (500*)</i>						
		<i>Evaluation of Gender/Socially Vulnerable</i>						
		<i>Student Registration - Target 500 (25% G/SV)</i>						
	5.5	Quarterly Task 5 Performance Assessments			X			X

Task 5.1 – Staffing Plan

Based on the feedback from MCA-Georgia, CIE was selected as a strategic partner to facilitate rapid start-up of the ELA and student recruitment processes. The selection and contracting process of this partnership superseded the requirement to identify and hire a staff for this task. Now that an appropriate MOU has been executed with CIE and contracting is in process, appropriate staff will be identified and engaged in Q2.

Task 6. GE Faculty Recruiting/Training

Partner institution senior faculty will participate in orientation at SDSU prior to development of the teaching corps for the accredited collaborative courses. The SDSU orientation will be done over a summer session, and will be targeted at senior academic and administrative staff (department chair and above) to establish a secure contact point for future recruitment of teaching faculty, as required by the objectives of the program. [Note: SDSU-Georgia will pay for travel including per diem and a stipend; and the Partner Institution will cover their faculty’s salary during the orientation period. Orientation topics will follow the outline proposed, but may also include areas of particular interest to the Partner Institution leadership. Additional training sessions will be conducted each semester with target of training up to 30 faculty during the Pre-Enrollment Contract. (Task and subtask status and comments on deficient subtasks only follow.)

Task 6		GE Faculty Recruiting/Training	Quarter 1			Quarter 2		
			Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
	6.1	Staffing Plan						
		<i>Hire Asst Directors Student/Faculty Affairs</i>		H-1	X			
		<i>SDSU Faculty Trainers</i>		X	X	X	X	X
	6.2	GE Faculty Training						
		<i>Summer Program - Target 8</i>	X	X				
		<i>Fall Semester Program - Target 10</i>			X	X	X	X
		<i>Spring Semester 2015 Program - Target 10</i>						
		<i>Summer 2015 Program - Target 10</i>						
	6.3	Quarterly Task 6 Performance Assessments			X			X

Task 6.1 – Staffing Plan

To facilitate rapid start-up of Faculty Recruiting/Training, the immediate requirements for planning and oversight were fulfilled by informal contributions from the Dean of SDSU-Georgia, and the Rectors and their designees at Partner Institutions. This arrangement allowed for successful completion of the proposed training programs, and will be re-evaluated for efficiency over the next quarter. Hiring of dedicated staff has been postponed until at least Q3, pending evaluation of the existing processes.

Task 7. Facilities Development

SDSU, SDSU-Georgia, MCA-Georgia, and the Partner Institutions will collaborate on the development of facilities to support the delivery of courses and the overall administration of the program. For the Pre-Enrollment Contract, the plan is to renovate spaces to support the Dean and administrative staff, the English/STEM program, General Education classrooms, laboratories, and other facilities, and preparation of the construction bid package, including environmental and social impact documentation, for the new building at ISU to be started in October 2015. MCA-Georgia is responsible for all renovation and construction. SDSU is responsible for design, preparation of bid specifications, and for construction oversight, management, and endorsement of payment approvals. (Task and subtask status and comments on deficient subtasks follow.)

Task 7		Facilities Development	Quarter 1			Quarter 2		
			Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
	7.1	Staffing Plan						
		<i>Facilities Coordinators</i>		H-1	X	X	X	X
	7.2	Consulting/Services Agreements						
		<i>Design Services and Construction Management</i>		C	X	X	X	X
		<i>Architectural Firm</i>			C	X	X	X
	7.3	Renovations/Construction Planning						
		<i>Health & Safety & Social Impact Plans</i>						
		<i>TOR for Renovations Design and Bid Packages</i>		X	X	X		
		<i>TOR for Construction Design and Bid Packages</i>		X	X	X		
	7.4	Phase 1a Renovations - Offices (MCA Bldg)						
		<i>Plans (TOR, Bid Pkg, RFP)</i>			X	X		
		<i>Renovations</i>				X	X	X
		<i>Furnishings/Supplies/Equipment Procurement</i>				X	X	
		<i>Outfitting, Final Inspection/Acceptance</i>						X
	7.5	Phase 1b Renovations - English/STEM (TSU)						
		<i>Plans (TOR, Bid Pkg, RFP)</i>			X	X		
		<i>Renovations</i>				X	X	X
		<i>Furnishings/Supplies/Equipment Procurement</i>				X	X	
		<i>Outfitting, Final Inspection/Acceptance</i>						X
	7.6	Phase 2 Renovations - Classrooms/Labs (TSU)						
		<i>Plans (TOR, Bid Pkg, RFP)</i>					X	X
		<i>Renovations</i>						
		<i>Furnishings/Supplies/Equipment Procurement</i>						
		<i>Equipment Installation and Testing</i>						
		<i>Outfitting, Final Inspection/Acceptance</i>						
	7.7	Phase 3 Renovations - Classrooms/Labs (GTU)						
		<i>Plans (TOR, Bid Pkg, RFP)</i>						
		<i>Renovations</i>						
		<i>Furnishings/Supplies/Equipment Procurement</i>						
		<i>Equipment Installation and Testing</i>						
		<i>Outfitting, Final Inspection/Acceptance</i>						
	7.8	Phase 4 Construction Design and RFP (ISU)						
		<i>Plans (TOR, Bid Pkg, Environ/Social Impact, RFP)</i>			X	X	X	X
		<i>Contract Award</i>						
	7.9	Quarterly Task 7 Performance Assessments			X			X

Task 7.2 – Consulting/Services Agreements

Design Services and Management and architectural services contracting has been delayed, and is rescheduled, projected for mid-Q2. Engagement of the consultants was delayed by unforeseen challenges in approval of SDSU selection and contracting processes, clarification of international standards for operations, and finalization of the review and approval process for Terms of Reference. Processes have been put in place to facilitate review and approval of TOR and appropriate selection of

consultant and performance on this task has been rescheduled for Q2. New processes should mitigate risks associated with this task.

Task 7.3 – Renovations/Construction Planning

SDSU-Georgia and MCA-Georgia are finalizing the review and approval process for Terms of Reference. Processes have been put in place to facilitate review and approval of TOR and appropriate selection of consultant and performance on this task has been rescheduled for Q2. New processes should mitigate risks associated with this task.

Task 7.4 – Phase 1a Renovations – Offices (MCA Bldg)

In an effort to secure space with maximum cost-effectiveness, SDSU-Georgia will collaborate with MCA-Georgia to cooperatively renovate space to be used for the central administrative offices of both organizations. This arrangement was in flux during Q1, but has since been resolved. The resolution of this co-location strategy should mitigate further delays, and expenses for appropriate office out-fitting will be incurred as appropriate during Q2.

SDSU-Georgia and MCA-Georgia are finalizing the review and approval process for Terms of Reference. Processes have been put in place to facilitate review and approval of TOR and appropriate selection of consultant and performance on this task has been rescheduled for Q2. New processes should mitigate risks associated with this task.

Prospective outfitting of the Dean’s office and other management spaces was delayed as final spaces were not identified and secured on schedule.

Task 7.5 – Phase 1b Renovations – English/STEM (TSU)

Based on the feedback from MCA-Georgia, CIE was selected as a strategic partner to facilitate rapid start-up of the ELA and student recruitment processes. As part of this arrangement, CIE will make its offices available as a base for the field operation. Located in the center of Tbilisi and public universities in the regions, CIE provides easy access to key institutions and target audiences.

Initial space renovation, targeted for immediate use for the English Language Academy, and subsequent use for General Education requirements, has been rescheduled appropriate to the timing required for use during the upcoming academic year.

Task 7.8 – Phase 4 Construction Design and RFP (ISU)

Engagement of Construction Design and Management Services was delayed, and is rescheduled, projected for mid-Q2. Engagement of the consultants was delayed by unforeseen challenges in approval of SDSU selection and contracting processes, clarification of international standards for operations, and finalization of the review and approval process for Terms of Reference.

Phase 4 planning is indicated as initiated, but not completed. Had the construction management contract been in place, prospective work on the ISU site would have been initiated such as initial site surveys and proposed Environ/Social Impact mediation work. Processes have been put in place to facilitate review and approval of TOR and appropriate selection of consultant and performance on this task has been advanced to Q2.

Annex 2 – Status Report on Enrollment in English/STEM Institute

The rest of this page is left intentionally blank.

Introduction and Overview

One of the key components of the SDSU-Georgia proposal was to establish an English Language Institute (ELI) in Tbilisi to provide education and training for students to improve their competency with the English language. The goals of this initiative were to enable students to achieve sufficient proficiency in English (IBT TOEFL – 80, PBT TOEFL -50, IELTS 6.5) to be successful as students in the SDSU-Georgia bachelor degree programs that will be taught in English. Proficiency is required in such areas as reading, writing, speaking, grammar, presenting, etc. A special focus of the ELI is to recruit and serve women and socially disadvantaged individuals both in Tbilisi and across the country.

A primary component of the ELI initiative was to reach out to local experts to solicit information and potential collaborative opportunities that would enhance the services SDSU-Georgia could provide to all potential SDSU-Georgia students through the ELI. In the early stages of our outreach activities, we became aware of an existing service provider that could substantially enhance the services we are able to offer in Tbilisi and across the country.

As a result, we have engaged the services of the Center for International Education (CIE) in a one-year pilot study to assist us with recruiting students and providing English language proficiency education and training. As a local operation with regional, national, and international recognition and years of experience in delivering a country-wide TOEFL preparation and advising program serving students in Tbilisi, Batumi, Kutaisi and other key Georgia cities across the country, the CIE possesses a unique set of skills and experiences that match with the goals and values of the SDSU-Georgia programs.

In recognition of multiple CIE locations throughout Georgia, we have renamed this initiative as the English Language Academy (ELA). The use of ELA locations throughout the country provides very important enhancements to the English language initiative including, but not limited to:

1. Increasing awareness and recognition of the opportunity to earn regionally and professionally accredited US bachelor degrees supported by the Georgian Government, MCA, and MCC to potential students from diverse social, geographic, and areas in and beyond Tbilisi.
2. Directly connecting with and advising potential students from women and socially vulnerable populations in the areas where they live.
3. Providing local English language proficiency courses across the country.

SDSU-Georgia administrators in collaboration with the CIE and SDSU English language instructors and administrators have used the CIE's existing TOEFL preparation program as a foundation for the services to be provided through the ELA. The updated ELA program now provides three terms a year for students to begin their ELA studies and two levels of English competency instruction. In support of the ELA program, SDSU-Georgia is in the process of hiring an ELA program director to be resident in Georgia and an ELA Quality Assurance Director from SDSU in San Diego who will work closely with the ELA team in Georgia and who will visit Georgia at least twice a year.

Status of English Language Enrollment

English Language Academy

San Diego State University and SDSU-Georgia will launch in collaboration with the CIE the SDSU-Georgia English Language Academy (ELA). The goals of this collaboration are to increase enrollment of students, including those with diverse social backgrounds, as well as to provide education courses to help students meet the TOEFL language requirement for admission to the SDSU-Georgia programs.

The CIE in close collaboration with SDSU-Georgia will establish and deliver the SDSU-Georgia ELA with English/TOEFL Prep Centers in Tbilisi, Kutaisi, Batumi, Telavi and Akhaltsikhe. Other locations around Georgia will be added in the later phase of the project development and as per demand.

Utilizing its network of schools, community organizations, youth NGOs and women's organizations, the CIE will identify, recruit and offer TOEFL preparation programs to more than 100 students in the first year of the ELA's operation, including student women and those with socially and economically disadvantaged backgrounds as well as those from underrepresented community groups, seeking admission to the SDSU-Georgia undergraduate degree programs.

These programs will offer the opportunity for a Tuition Waiver for up to 100 qualified students per year including the categories named above as well as to other students preparing to seek admission to the SDSU-Georgia programs as a student's #1 priority on the NEAC form. For those students, who are not from the identified target groups and who have indicated SDSU-Georgia bachelor's degree programs as a top three priority, the classes will be available with a possible Tuition Waiver on a space available and funding available basis. The ELA reserves the right to offer students who do not receive a Tuition Waiver scheme the opportunity to enroll as a fee-paying student.

Location

The CIE's offices in the five cities of Georgia will host English Language Academy programs. The Centers are conveniently located at state university buildings in the respective cities that provide easy and convenient access for all applicants and their parents.

CIE Tbilisi, with its central location at the heart of the city, will function as a base for the SDSU-Georgia English Language Academy. The SDSU-Georgia ELA will also provide training to regional instructors to keep them up-to-date on the latest methods of instruction and will also design, develop and implement a student and program assessment process.

Status of English Language Enrollment

Programs and Cycle

The ELA will offer two levels of English/TOEFL Prep programs for applicants with:

1. Beginner to intermediate level – Group A
2. Upper intermediate to advanced level – Group B

Each level will consist of a total of 48 instructional hours to be taken over an 8-week term.

The chart below outlines the program opportunities for the first year of ELA program operations.

Term 1: October 20-December 20, 2014	Term 2: January 20-March 20, 2015	Term 3: April 1-June 1, 2015
Beginner/Intermediate	Beginner/Intermediate	-
Upper Intermediate/Advanced	Upper Intermediate/Advanced	Upper Intermediate/Advanced

Depending on the number of interested and qualified students in each area, these or similar start dates could be available to students taking ELA courses in other key Georgian cities

Targeted Recruitment

A preliminary recruitment plan has been developed to target specific groups integral to the SDSU-Georgia mission. Below is a draft of Outreach activities projected for fall 2014.

Status of English Language Enrollment

	Outreach period: 3 months	Outreach # by interest groups/communities Subject to change	Public School comm: Students Parents Teachers	Private School Comm : Students Parents Teachers	Educational Resource Center's/ Higher Ed Institutions Comm	Youth Orgs Women's NGOs, IDP Community groups,
1	Tbilisi	22	6	7	5	4
2	Kutaisi	11	4	2	2	3
3	Zugdidi	10	2	2	2	4
4	Ozurgeti	4	1	1	1	1
5	Batumi	16	5	4	4	3
6	Gori	6	2	1	1	2
7	Rustavi	8	2	2	2	2
8	Telavi	7	2	1	2	2
9	Akhaltsikhe	5	1	1	1	2
Total	Cities/Groups	89	25	21	20	23

Status of English Language Enrollment

Several recruitment-related activities have already taken place and more are schedule during this week.

1. On September 23, 2014, Dean Walsh and Dean Shapiro attended the EducationUSA Education Fair in Tbilisi. A total of a about 3000 visitors including students and parents and 40 exhibitors including colleges and universities attended the EducationUSA conference and fair. During the education fair 31 student completed a formal inquiry form about admission to the SDSU-Georgia program including several who inquired about the English Language Academy. The attendee list received on 11 October included additional names of roughly 200 – 250 additional secondary school students interested in US bachelor's degrees and/or English language instruction. We will be following up by contacting these students beginning this coming week.
2. The ELA is negotiating permission from the Ministry of Education and Science regarding the possibility to enter public school buildings to make periodic presentations and informational meetings there. This permission is needed according to Georgian regulations. The ELA already had a meeting with the Deputy Minister and agreed that the permission will follow shortly.
3. The ELA representative in Telavi had a meeting at the local Education Resource Center of the Ministry of Education and Science. This meeting was attended by the directors of all local public schools to inform them about SDSU-Georgia and the ELA. The school visits are scheduled to formally begin on Thursday Oct. 16.
4. Presentations have already been conducted at two local schools in Batumi for about 110 students. Additional visits are scheduled for this week.
5. Two school visits and presentations (one Georgian school and one Armenian school) were held in Akhaltsikhe. About 50 students attended and there already is a list of 10 potential applicants for ELA.
6. Planning for visits in Kutaisi is in its initial stages and is pending Ministry approval.
7. Visits to Tbilisi schools by SDSU-G personnel are being planned for starting Thursday October 16.

Closing

SDSU-Georgia and the English Language Academy are very excited and encouraged about the enhanced services and capabilities our collaboration provides to meeting the needs and the goals of the SDSU-Georgia initiative. Initial inquiries are encouraging, expanded locations promise to be very fruitful, and student interest is growing. Additional data and narrative

Status of English Language Enrollment

information will be available in the coming weeks and months.

Annex 3 – Gender/Socially Vulnerable Student Recruitment Plan

The rest of this page is left intentionally blank.

Gender/Socially Disadvantaged Recruitment Plan

Women and socially and economically disadvantaged student populations represent important resources for the development of innovative and creative-based economies. Diverse groups, in some cases, have been shown to out-perform groups made up of only the best experts, but with a uniform social and cultural background. The SDSU-Georgia partnership was conceived, in part, in recognition of the need to improve participation of women and socially and economically disadvantaged students, especially in STEM disciplines. To expand participation of these groups, we will use a series of targeted interventions and outreach programs with a target to increase the participation of women and disadvantaged students from its current proportion to levels representative of the population in general by CY7.

Underrepresentation in the Georgian STEM context is based on both gender and a portfolio of disadvantaged groups including:

- **Ethnic minorities** (Armenian living in Samtskhe-Javakheti, Azerbaijanian living in Kvemo-Kartli) **about 10-12% of population speak languages other than Georgian**
- **Low income** (Students from Families who were ranked below the 70,000 point mark by SSA) **25% of population defined as poor of which 64% live in rural communities**
- **High mountain areas** – **~7-8% of population live in high mountain area**
- **Others** (includes displaced families) **~20,000 internally displaced persons**

In the United States, issues of representation of women and underrepresented minorities (URM) in STEM have some commonalities, in general, the impacts of bias (both implicit and explicit), and injunctification (the tendency to favor the current state) tend to have greater impact on the opportunities for women, while both bias-related issues and the impacts of accumulated privilege (i.e., preparation) tend to impact underrepresented economic, ethnic, and racial groups.

However, based on prior research and reporting from Georgia¹, initial observations suggest that both women and Socially Disadvantaged Students (SDS) suffer from both categories of barriers – bias and accumulated privilege (also referred to as preparation).

Based on more than 60 years of recruiting experience for URM, with recent success indicators such as SDSU's recognized status as a Hispanic-Serving Institution, and resident experts, collaborations, and institutional initiatives for the recruitment and retention of diverse participants for both student and faculty populations, SDSU-Georgia will use a data-driven approach to design and implement the

¹ Gay, P., Korkotashvili, E., Javakhishvili, N., Shubitidze, G., 2014. Studies of Labor Demand, Barriers to Participation in STEM Education Programs and Occupations in Georgia. IPM Research Report to MCA-Georgia.

proposed program. Because SDSU-Georgia is a new opportunity, all recruitment and retention strategies will be considered “pilot” until data on effectiveness and lesson-learned can be analyzed and new approaches proposed, implemented and evaluated. Initially, proposed strategies will rely on the relative commonalities inhibiting the participation of women and the portfolio of ethnic, economic, and geographic groups in STEM education in Georgia. As SDSU-Georgia staff gains experience as practitioners in Georgia, new approaches may specifically target groups not participating to an acceptable level. SDSU-Georgia will seek to move beyond the enrollment of underrepresented groups to creating an environment where success is measured by student outcomes and evolution of the STEM workforce in Georgia.

SDSU-Georgia’s recruitment and retention strategy will implement 5 key components, developed and implemented with experienced local practitioners, and optimized for SDSU’s application requirements and deep experience with diversity initiatives in general:

1. Collaboration with K-12 groups
2. Student preparation at the secondary level;
3. Outreach
4. English/STEM Institute
5. Social/Parent Conditioning

1 Treatment of Women Students as Socially Disadvantaged

Georgian girls outperformed Georgian boys in the 2011 Trends in International Mathematics and Science Study (TIMSS) benchmarking in all subjects except for physics, and girls outperformed boys in the Computer Adaptive Test in all STEM subjects both in average scores and the percentage of test-takers scoring the highest passing grades.

These preliminary observations suggest that impacts of bias, and not preparation, are the predominant obstacle to increased participation from girls and women in STEM fields.

Additional qualitative evidence suggests that there may be a number of factors at work that impact girls’ participation in advance of the more detrimental and ingrained impacts of bias at the baccalaureate, graduate, and professional/post-graduate levels. These may include parental and wider societal influences, attitudes of teachers and the relative willingness of parents to invest for girls as opposed to for boys in enrichment teaching for girls or in the costs attached to study in post-secondary education away from home.

For the four categories of Socially Disadvantaged Students (SDS) (ethnic minorities, low income families under the poverty threshold, families from remote high mountain areas, internally displaced persons), the majority of teachers report no difference in the abilities or preparation of SDS as compared to non SDS?, although 76% report concerns about the willingness of parents to allow their children to pursue post-secondary education.

The parallelism of these observation suggest that, at least at the outset, key partnerships and interventions proposed as part of student preparation, in other words prior to application to the SDSU-Georgia program, can target both women and SDS as a common population with common needs for the

socialization of parents and wider social influences, and emphasize the value of the opportunities offered by the new program.

The earlier commissioned report identified a series of key recommendations both for women and SDS, and a series of those recommendations have been evaluated and are in preparation for piloting, evaluation, and widespread implementation through the proposed recruitment plan

2 Key recommendations and proposed components of the recruitment plan

- A school program directed at parents schools and school students discussing gender stereotyping and the negative impacts of gender bias
- An awareness program in schools demonstrating careers in STEM disciplines are not only acceptable but desirable for women
- Include gender awareness as part of ongoing teacher continuing professional development
- An industry participation campaign for employers regarding:
 - The benefits of increased female participation in their work force.
 - Clear information about what is needed to make firms friendly places for female workers
 - Demonstration of gender-bias barriers and how they can be overcome
- Distribute information about scholarships, particularly for girls and socially disadvantaged groups
- Target scholarships for all under-represented groups of interest
- Improve language training (both Georgian and English) for SDS possibly using special language 'enrichment' teachers at the K-12 level.
- Address cultural attitudes in socially disadvantaged communities about education and careers
- Improved career guidance
- Deploy a Corporate Social Responsibility program to encourage employers to recruit and retain socially disadvantaged workers
- Track enrollment and student success for women and SDS.

SDSU-Georgia will use a multi-pronged approach to reach and prepare disadvantaged and underrepresented populations for success in the program. SDSU has a long and successful history of enrolling under-represented students, and those best practices will be implemented including: Early identification (Junior-year in High School) of interested disadvantaged students; Provision of preparatory English and STEM training to improve competitiveness; Georgian National Examination preparatory training; Needs-based scholarships. Approaches and metrics for success will be based on SDSU's successful Compact for Success and other programs that support underrepresented students such as the National Institutes of Health (NIH) funded IMSD and MARC Programs. These approaches will be appropriately applied in the Georgian context by the partner institutions.

Once enrolled, SDSU offers several programs that support women and minority students. The College of Sciences houses the Center for Advancement of Students (CASA), which includes opportunities for participation in undergraduate research, faculty and peer advising and mentoring, workshops and

tutoring. The College of Sciences created this center in 1992 to coordinate and encourage collaboration among programs serving minority and academically and economically disadvantaged students.

We will use insights from our successful programs to recruit, integrate, and retain socially disadvantaged groups from the Republic of Georgia. Based upon our experience, multiple approaches are required to reach these disadvantaged student populations. Students from existing pipeline communities, as well as those from socially disadvantaged groups will be actively recruited via educational outreach coordinators in collaboration with Georgian national priorities and cultural norms. Relevant social media (Facebook, Twitter, YouTube, etc.) will be maintained as outreach venues for engagement of prospective students. Promotional material describing the SDSU-Georgia project will be distributed at education and career fairs in urban and rural settings. Presentations will be made to student and professional groups, and at relevant student orientations and conferences. Outreach will be coordinated with local schools and academic advisors and counselors throughout Georgia. We will collaborate with K-12 STEM education programs to distribute information about SDSU-Georgia to schools with rural and underrepresented students. In addition, we will consult with government, industry, and non-profit organizations to recognize groups with unmet educational needs that require focused recruitment efforts.

As part of the in-country planning process, SDSU has already met with industry collaborators like Delta Systems and BP to evaluate ongoing efforts to improve K-12 STEM education. In addition, SDSU-Georgia will actively seek to leverage the MCA primary education group once they are chosen.

The College of Sciences, College of Engineering, and other colleges at SDSU partner with the College of Extended Studies to offer a wide variety of programs to meet the educational needs of different constituents. The College of Extended Studies has extensive experience in designing and supporting recruitment and enrollment processes. As partners, these SDSU colleges will leverage their core capabilities to support outreach, training and recruitment in collaboration with participating Georgian partner institutions. Georgian partner institutions will have co-equal responsibility for recruiting and enrolling students according to their own programmatic requirements.

SDSU enjoys a national reputation in the US for the successful recruitment and retention of women and minorities. The fact that SDSU is a university with no majority student ethnic group is evidence of success in recruitment and admissions. But far more importantly is the success of all students, and SDSU is one of the very few research universities in the United States that has essentially eliminated the so-called achievement gap among ethnic groups. All students, including those from minority groups, graduate at approximately the same rate.

Part of our institutional success in this area is the effort to address the academic needs of students prior to their matriculation at the university. Specifically, all incoming students are required to take placement exams in English and mathematics. If students do not achieve the required scores to demonstrate, through these exams, their academic preparation to undertake university-level coursework in these areas, they are required to enroll in remedial courses during the summer preceding their fall matriculation at the university. This approach has greatly increased the number of minority students

who enter academically prepared. This approach also allows for acculturation to the campus environment and resources prior to actual enrollment.

One component of the pilot program will be the review of national examination scores that do not meet the minimum criteria for admission to the national university system. Although in some cases, these scores may simply be due to under-performing students, it is possible that the group of students not scoring well enough for automatic admission may be over-represented by socially disadvantaged students. By providing extra training to these students in particular, SDSU-Georgia will identify highly motivated students that may benefit from a bridging package including English language preparation, STEM preparation, and national examination preparation.

Annex 4 – Progress Report on Georgian Faculty Participation in Academic Workshops at SDSU

The rest of this page is left intentionally blank.

Georgian Faculty Participation in Academic Workshops at SDSU

Thus far, two cohorts of faculty from Georgia have visited SDSU for training. The Georgian visitors included faculty and administrators from Tbilisi State University, Ilia State University, and Georgian Technical University. The first group of 11 faculty visited for the 2014 Summer semester, and the second group of 9 faculty is presently at SDSU during the 2014 Fall semester. We are planning for a third cohort of Georgian faculty to come to SDSU in the upcoming Spring semester.

During their visits each of the Georgian faculty members is paired with a faculty member in their discipline who they work closely with on delivery of courses needed in the SDSU-Georgia program. The training is focused on approaches used for instruction at SDSU, including both academic content and pedagogy. The visitors observe instruction, required course materials (focused on expectations of accreditation agencies for syllabi, course schedules, program and course student learning outcomes, exams and homework, course and student assessment, advising, etc), and how SDSU professors interact with students. Training on accreditation-related assessment instruments (both direct and indirect) is also provided. The training also includes use of online tools, such as BlackBoard (course management system) and WEAVE (assessment archiving system), that will be used in the SDSU-Georgia program. Some professors have also gained experience with asynchronous videocasting approaches developed by Physics Professor Matt Anderson at SDSU.

Where appropriate (e.g. in Engineering disciplines), visiting faculty also receive training in ABET accreditation standards. Beginning in the Spring semester visiting Georgian Engineering faculty will gain experience in applying for ABET accreditation, and Chemistry faculty will gain experience in applying for ACS certification.

All visiting Georgian faculty also meet with SDSU Department Chairs and Deans. Georgian visitors with administrative appointments met with the SDSU Provost and other administrators at SDSU for discussions about administrative structure and shared governance involving administrators, faculty, staff, and students.

In addition to these training experiences, meetings with multiple SDSU researchers are arranged with visiting Georgian faculty to discuss potential for research collaborations.

A complete listing of the faculty cohorts is provided on the next page.

Summer Session 2014:

Georgia Technical University			
Last Name	First Name	Field of Study	SDSU Host
Kvartskhava	Giorgi	Chemistry	Bill Tong (Chair, Chemistry)
Meskhishvili	Dali	English Language	Eniko Csomay (Assoc. Dean, CAL)
Sanaia	Ekaterine	Physics	Matt Anderson (Prof., Physics)
Tsitsishvili	George	Physics	Matt Anderson (Prof., Physics)
Zedelashvili	Alexander	Entrepreneurship	Stanley Maloy (Dean, Sciences)

Ilia State University			
Last Name	First Name	Field of Study	SDSU Host
Dalakishvili	Giorgi	Physics	Matt Anderson (Prof., Physics)
Murtskhvaladze	Marine	Entrepreneurship	Stanley Maloy (Dean, Sciences)

Tbilisi State University			
Last Name	First Name	Field of Study	SDSU Host
Kokiashvili	Nino	Chemistry	Bill Tong (Chair, Chemistry)
Trapaidze	Lia	Entrepreneurship	Stanley Maloy (Dean, Sciences)
Jojua	Nino	English Language	Eniko Csomay (Assoc. Dean, CAL)
Nebieridze	Mariam	English Language	Eniko Csomay (Assoc. Dean, CAL)

FALL Semester 2014:

Georgia Technical University			
Last Name	First Name	Field of Study	SDSU Host
Gigilashvili	Giorgi	Computer Eng	Lal Tummala (Chair, Electrical & Computer Eng)
Goletiani	Ana	Chemistry	Bill Tong (Chair, Chemistry)
Matchavariani	Tamara	Business English	Eniko Csomay (Assoc. Dean, CAL)
Nemsadze	Simon	Electrical Eng	Lal Tummala (Chair, Electrical & Computer Eng)

Ilia State University			
Last Name	First Name	Field of Study	SDSU Host
Kvavadze	David	Electrical Eng	Lal Tummala (Chair, Electrical & Computer Eng)

Tbilisi State University			
Last Name	First Name	Field of Study	SDSU Host
Chelidze	George	Mathematics	Mike O'Sullivan (Chair, Mathematics)
Davitashvili	Tinatin	Computer Sci	Leland Beck (Chair, Computer Science)
Murtskhvaladze	Irakli	Economics	Jennifer Imazeki (Prof., Economics)
Odishelidze	Nana	Mathematics	Mike O'Sullivan (Chair, Mathematics)

Annex 5 – Draft Environmental and Social Management Framework (ESMF)
and Environmental and Social Management Plan (ESMP)

The rest of this page is left intentionally blank.



***SDSU Georgia Project: Construction
Renovation/rehabilitation of Universities facilities
(Ilia State University, Tbilisi State University and
Georgian Technical University)***

***Draft Environmental and Social Management
Framework (ESMF)***

October 2014

Prepared by:



Saunders Group Infrastructure Consultants, Georgia

Voyants Solutions Private Limited, India

Saunders Group Ltd. – D. Agmashenebeli Ave. 154 Floor 9, Tbilisi 0112 Georgia
 P. (+995 32) 218 2112 E.info@engsg.com www.engSG.com

Prepared For:

San Diego State University Research Foundation (SDSURF/foundation)

5250 Campanile Drive
 San Diego, California (USA) 92182-1941

Approvals

	Name	Signature	Date
Prepared	Alexandre Abzianidze		10 Oct 2014
Checked	Richard Saunders		15 Oct 2014
Checked	Dr. Ashish Rawat		15 Oct 2014
Approved	SDSU Dean Ken Walsh		15 Oct 2014

Document Control

Revision	Date	details	Prepared	Checked	Checked	Approved
70% DRAFT	15 Oct 2014	Draft Issued for comment	AA	RDS	AR	KW

Notes:

1. The signatures above certify that this document has been checked and approved for issue.
2. This document is protected by international copyright laws.
3. This document is based on information provided up until date of publishing. The Author reserves the right to make any changes as new information becomes apparent.
4. This report has been produced by Saunders Group Ltd and Voyants Soutions Pvt Ltd under instruction from our Client. It is solely for our Clients use for the purpose for which it was intended in accordance with the agreed scope of work. Data or opinions contained in it may not be used in other contexts or for any other purpose with our prior review and agreement.
5. If this report is to be referenced or copied in any way by any person, then it must be reproduced in total, such that no part of this report can be taken out of context. Any use or reference contrary to the above is at the persons own risk.

TABLE OF CONTENTS

1	ABBREVIATIONS AND ACRONYMS	6
2	SUMMARY	7
2.1	Program Description	7
2.2	Major Conclusions	8
3	BACKGROUND AND PURPOSE.....	10
3.1	Project Description	10
3.2	Objectives.....	10
3.3	Summary of EHSS Scoping Process	10
3.4	Counterpart Documents	10
4	STAKEHOLDER ENGAGEMENT.....	11
4.1	Introduction	11
4.2	Project Organization and Structure.....	11
4.3	Project Communication	11
4.4	Project Grievances	12
5	EHSS TRAINING	14
5.1	Introduction	14
5.2	Trainings Required.....	14
6	AFFECTED ENVIRONMENT	16
6.1	Socioeconomic Characteristics.....	16
6.2	Public Health Status	17
6.3	Geographic and Geologic Characteristics	18
6.4	Cultural and Historic Resources	18
6.5	Climate.....	19
7	GUIDELINES, POLICIES AND LEGISLATION	21
7.1	Introduction	21
7.2	Host Country Context	21
7.3	MCC Guidelines.....	21
7.4	IFC Performance guidelines.....	21
7.5	Environmental Policies and legislation	22
7.6	Relevant Policy, Legal, and Regulatory Requirements	22
8	ENVIRONMENTAL CONSEQUENCES	26
8.1	Environmental Impacts of the Proposed Action and Alternatives.....	26
8.2	Direct Effects and their Significance.....	26
8.3	Endangered, Threatened, or Protected Species and their Habitats	29
8.4	Wetland Impacts.....	29
8.5	Biodiversity Losses.....	29
8.6	Historic and Cultural Resources.....	29
9	MITIGATION AND MONITORING PLANS	30
9.1	Introduction	30
9.2	Environmental Mitigation Plans	30
9.3	Environmental Monitoring Plans	30
9.4	Health and Safety Specification	30

9.5	Health and Safety Monitoring Plans	30
9.6	Stakeholder Impact and Risk Monitoring Plans	31
10	LIST OF PREPARERS	45
11	APPENDICES	46
11.1	Appendix A - Potential Environmental Impacts for Universities Buildings.....	47
11.2	Appendix B - Universities Facilities - Environmental Site-Screening Analysis .	46
11.3	Appendix C - Inspection SiteVisit Report for Rehabilitation of Universities Facilities.....	53
11.4	Appendix D - Standards (disabled persons) Figure 1,2,3.....	71
11.5	Appendix E - Contact Table.....	78
11.6	Appendix F - Contractor Health and Safety Specification.....	75

List of Tables

Table 5-1: Workshop Training Matrix.....	15
Table 6-1: Distribution of gross value added by regions (at current prices, bill GEL)	16
Table 6-2: Recent Work Indicators for Georgia	17
Table 6-3: Labor force and employment status for Georgia (2014)	17
Table 6-4: Health Indicators	18
Table 6-5: Climate data for Tbilisi.....	19
Table 7-1: Local Permits Required for Universities facilities.....	21
Table 7-2: Principle Laws and Regulations relevant to the Proposed Project.....	22
Table 8-1: Potential Significant Impacts for Universities buildings.....	26
Table 9-1: Environmental Mitigation and Monitoring Plan for Universities	32
Table 9-2: Environmental Mitigation and Monitoring Plan for University Building Rehabilitation Involving Asbestos Remediation (Asbestos-Tiled Roofing, Asbestos Materials).....	37
Table 9-3: Environmental Mitigation and Monitoring Plan for Chance-Finds of chemical hazards during Rehabilitation of laboratories of Universities.	40
Table 9-4: Health and Safety Monitoring Plan (HSMP)	42
Table 9-5: Social Monitoring Plan.....	44
Table 11-1: Potential Environmental Impacts for Universities.....	41

List of Figures

Figure 4-1: Stakeholder framework for EHSS issues.	11
Figure 4-2: The project Cycle, showing the major phases of Construction Project.	11
Figure 4-3: Flow chart for grievance related to construction works.....	13
Figure 5-1: Process chart of educate, monitor and enforce.....	14
Figure 6-1: Map of Universities Locations	16
Figure 6-2: Network of Georgia’s Protected Areas	19
Figure 11-1: Extract of disables access standards. (1/3)	75
Figure 11-2: Extract of disables access standards. (2/3)	76
Figure 11-3: Extract of disables access standards. (3/3)	77

I ABBREVIATIONS AND ACRONYMS

AM	Asbestos Material
ESMF	Environmental and Social Management framework
EA	Environmental Assessment
EHSS	Environmental Health, Safety and Social
EIA	Environmental Impact Assessment
EMMP	Environmental Mitigation and Monitoring
GEL	Georgian Lari
IFC	International Finance Corporation
LPE	Licensed Professional Engineer
M&E	Monitoring and Evaluation
M&M	Mitigation and Monitoring
MCC	Millennium Challenge Corporation
MCA	Millennium Challenge Account-Georgia
NEO	New Economic Opportunities
NGO	Non-Government Organization
NTP	Notification to Proceed
Project ESS	Environmental Scoping Statement
PMC	Project Management Committee
PMP	Performance Monitoring Plan
STEM	Science, Technology, Engineering, and Mathematics
SS	Scoping Statement
SDSU	San Diego State University
SDSUP	San Diego state University Project
GoG	Government of Georgia

2 SUMMARY

The Millennium Challenge Corporation (MCC) and the Government of Georgia (the Government) have entered into a Millennium Challenge Compact for Millennium Challenge Account assistance to help facilitate poverty reduction through economic growth in Georgia.

The Government of Georgia has created Millennium Challenge Account-Georgia (MCA-Georgia) to implement the MCC's compacts. MCA-Georgia is a legal entity of public law accountable to the MCC and the Government of Georgia led by a Supervisory Board chaired by the Prime Minister of Georgia and comprising of the ministers of Education and Science, Finance, Foreign Affairs, and Justice.

MCA-Georgia and San Diego State University (SDSU) have entered into a contract to utilize SDSU's educational and instructional abilities for the purposes of developing a degree accreditation for Science, Technology, Engineering, and Mathematics (STEM) Higher Education Project of the second Millennium Challenge Corporation (MCC) Compact with Georgia. This effort focusses on building capacity within Georgian public universities to deliver high quality STEM education and bachelor degrees from accredited foreign institutions in Georgia.

2.1 Program Description

Tbilisi State University (TSU)

1. Phase 1 Rehabilitations, Tbilisi State and/or MCA Office Bldg. (TBD): Project is 23 spaces totaling approximately 818 m²
 - a. Dean's Office at 33 m²
 - b. Staff Offices (6 total) at 19 M² each for total of 112 m²
 - c. Admin work area with 6 workstations at 14 M² each for total of 84 m²
 - d. Conference/Meeting rooms (2 total) at 28 M² each for total of 56 m²
 - e. English/STEM offices (3 total) at 23 M² each for total of 70 m²
 - f. English/STEM Classrooms (5 total) at 93 M² each for total of 465 m²
2. Phase 2 Rehabilitations, Tbilisi State: Project is 11 spaces totaling approximately 1055 m²
 - a. GE Smart Classrooms (2 total) at 149 m² each for total of 297 m²
 - b. GE Lecture Hall-Media Center at 223 m²
 - c. Chemistry and Physics Labs (3 total) at 93 m² each for total of 279 m²
 - d. Program Offices (3 total) at 33 m² each for total of 99 m²
 - e. Laboratory Storerooms and Technician offices (2 total) at 79 m² each for total of 158 m²

Georgia Technical University (GTU)

3. Phase 3 Rehabilitations, Georgia Technical: Project is 8 spaces totaling approximately 836 m²
 - a. Engineering/Science Classrooms (2 total) at 148.5 m² each for total of 297 m²
 - b. Chemistry Environmental Lab at 93 m²
 - c. Program Offices (2 total) at 32.5 m² each for total of 65 m²
 - d. Laboratory Storerooms and Technician Offices (2 total) at 79 m² for total of 159 m²
 - e. GE Lecture Hall-Media Center at 223 m²

Ilia State University (ISU)

4. Phase 4 Construction Design, Ilia State: Project is 17 spaces totaling approximately 1785 m². This project is to develop plans and specifications for construction of a new building at a site provided by Ilia State University. The multi-story building is expected to be approximately 2000 m² (possibly 3 stories). Spaces include classrooms, lecture halls, laboratories, and communal areas (Halls, stairs, HVAC, storerooms, lavatories, etc.)

Phase 1 is the top priority with desired completion date of design and rehabilitations to be no later than early January 2015 to support outfitting of spaces in January 2015. Phases 2 and 3 will run concurrent to complete design, RFP and award, and completion of rehabilitations no later than August 2015, to allow for outfitting of all furnishings, installation and testing of IT systems and laboratory equipment. Phase 4 shall be processed in close collaboration with MCA Georgia so that the RFP and award is completed by October 2015 to support completion of construction and outfitting by September 2016.

2.2 Major Conclusions

The scoping process identified potentially significant social and environmental impacts to be analyzed in the ESMF. With additional information gathered during the ESMF process, the ESMF Team made a few revisions to the significant impacts; the following are the significant impacts that are analyzed in this ESMF for the different stages of the project:

2.2.1 Demolition

- Hazardous waste, mainly from removal of material containing asbestos, could affect human health and the environment.
- Demolition activities could temporarily affect the safety and quality of life of students, lecturers.

2.2.2 New Construction

- Several species of Trees which to be cut in the yard of Ilia State University.
- Waste generation from new construction can contaminate soil and water (construction waste, lubricants, fuel spills).
- Poorly planned, maintained potable water systems and unsound sanitation facilities can impact workers health.
- Noise pollution could affect the safety and quality of life of students, lecturers

2.2.3 Renovation/Rehabilitation

- Air pollution due to dust and emissions during renovation/rehabilitation phase could affect human health.
- Lack of a clear process and understanding of ownership could derail project support and affect maintenance of the upgraded infrastructure.
- Worker safety may be compromised if safeguards are not in place.
- Public safety may be compromised if safeguards are not in place.
- Poorly planned and implemented temporary relocation could derail project support (University facilities).
- Laboratory and laboratory wastes, including chance-finds of chemical, bio hazards/infectious agents, asbestos, mold, silver, lead, mercury, PCBs and radioactive wastes, could affect human health and the environment.

2.2.4 Operation

- Hazardous substances may be exposed to students and public. (chemical laboratories)
- Social isolation to disabled persons due to lack of disabled access to renovated facilities.

The ESMF Team developed mitigation measures (including best practices) to minimize the potential social and environmental impacts listed above. The mitigation measures are practical and feasible, and they are expected to adequately minimize potential impacts. The ESMF Team also developed Environmental Mitigation and Monitoring Plans (EMMPs), which are provided in Chapter 6 of the ESMF. EMMPs cover rehabilitation/construction and operation/maintenance and include the identified environmental impacts, individual mitigation measures, monitoring indicators, monitoring/reporting frequency and responsible party for oversight of EMMP implementation. Three sets of EMMPs were developed:

- Table 9-1 is the EMMP for University Buildings provides mitigation measures addressing the potential significant environmental impacts from building rehabilitation and operation.
- Table 9-2 is the EMMP for University Building Rehabilitation Involving Asbestos Remediation includes asbestos mitigations for asbestos-tiled roofing, asbestos corrugated sheets and other asbestos materials. Mitigations are provided for environmental impacts involving preparation for asbestos removal, asbestos contamination during removal, disposal, socioeconomic impacts and public health and safety impacts.
- Table 9-3 is the EMMP for Chance-Finds of chemical hazards during Rehabilitation of Laboratories. All mitigations in the EMMP for University building rehabilitation (Table 9-1) also apply to Universities and if asbestos is present, the EMMP for asbestos (Table 9-2) applies. Table 9-3: Environmental Mitigation and Monitoring Plan for Chance-Finds of chemical hazards during Rehabilitation of laboratories of Universities. includes mitigations for chemical hazards, infectious agents, asbestos, mold, silver, lead, mercury wastes.

3 BACKGROUND AND PURPOSE

3.1 Project Description

There are 4 phases of design and renovation/construction in the pre-enrollment contract. Phase 1A is the Dean's office which is being handled exclusively by MCA-Georgia (the design, specs and contract for renovations) and is not applicable to this RFP. Phase 1B and 2 are renovations to be designed by the Contractor for TSU. Phase 3 (pre-enrollment) is for renovations to be designed by the Contractor for GTU and phase 4 is the design work for the new construction at ISU. All of this is in the 15 month pre-enrollment contract period of performance.

An alternate add proposal shall be provided for the subsequent 45 month performance period: There are 6 phases. Phase 4 is the actual construction of the new building to be done after October 2015. Phases 5 thru 7 are for renovation at TSU to support EE/Comp E degree, Chemistry degree and other classrooms, offices and communal spaces, respectively. Phase 8 is for renovations at GTU for various degrees and includes labs, classrooms, offices etc. Phase 9 is additional spaces including communal spaces (rest rooms).

3.2 Objectives

The overall objectives of this ESMF are to:

- Provide the framework for compliance with the SDSUP EHSS objectives;
- Outline the specific roles and obligations of the Contractor's personnel regarding EHSS issues related to the Project activities;
- Explain the reporting and documentation procedures expected from the Contractor's EHSS and other personnel;
- Ensure that all activities fulfill the requirements of the Contract; and
- Implement EHSS management and the proper application of appropriate/required mitigation measures at its sites by establishing and encouraging safe and prudent work practices, which optimize the Project related activities.

3.3 Summary of EHSS Scoping Process

The Scoping Team consisted of LTD Saunders Group. Scoping process, the team identified, reviewed, and prioritized environmental issues. This was accomplished through the following three tasks:

- Identifying and reviewing existing environmental information and studies related to SDSUP.
- Carrying out site visit investigations to ascertain any additional environmental issues; and
- Obtaining stakeholder input in organized meetings to ensure that significant environmental and social issues for inclusion in the ESMF were identified.

The Scoping Team visited representative project sites and coordinated with other SDSUP staff who had visited and documented conditions at all sites. Through these site visits, the Team identified potential significant environmental and social issues for consideration in the ESMF, and eliminated issues considered not to be significant.

3.4 Counterpart Documents

The following is a list of some of the counterpart documents which should be considered in conjunction with this ESMF document:

- Designs produced by Designer and Architect
- Contractors HSE and EMP plans
- SDSUP operational HSE and EMP plans, Social policies etc.

4 STAKEHOLDER ENGAGEMENT

4.1 Introduction

As part of feasibility studies, SDSUP staff has visited all project sites, and have met with stakeholders. SDSUP has collaborated with stakeholders as part of the design process to ensure the design is socially and culturally acceptable.

4.2 Project Organization and Structure

Stakeholders should be engaged and consulted through all stages of the project and communicated openly the progress and issues should be addressed as soon as they arise. The basic organization structure related to environmental, health, safety and social issues (EHSS) are as follows.

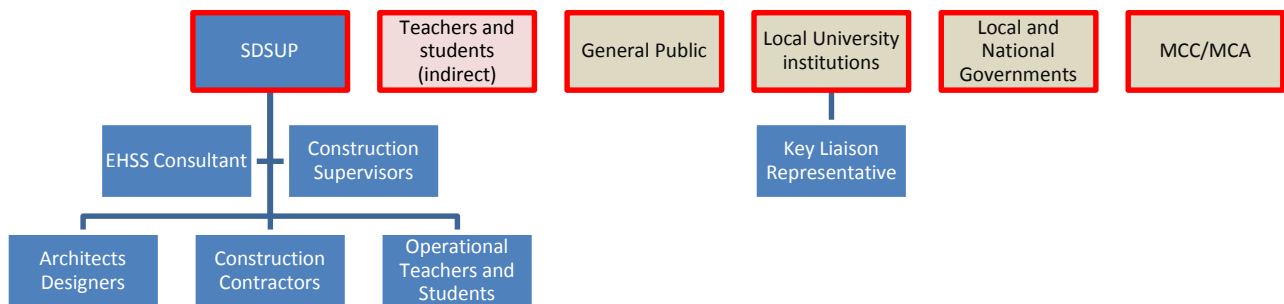


Figure 4-1: Stakeholder framework for EHSS issues.



Figure 4-2: The project Cycle, showing the major phases of Construction Project.

4.3 Project Communication

Communication is key in ensuring that all stakeholders have input to the project as required through the project cycle. The most appropriate forms of communication should be used for the situation.

4.3.1 Roles and Responsibilities

To be defined through the development of project

4.3.2 Meetings

Meetings should be organized with agenda, adequate notification and registered and minuted. The following meetings should be considered:

- Meetings including the SDSUP representatives, and local university institutions key representatives should be held at conceptual stage, during design, before construction, and weekly during construction.
- University indirectly affected persons consultation meetings including the SDSUP representatives, and local university institutions should be held before construction to inform of required works.

4.3.3 Key Liaison Person

A key liaison person should be identified and assigned at each local university department under rehabilitation. Any grievances or complaints from the university students and or staff should be directed through this person. The person should preferably be speaking both English and Georgian.

4.3.4 Contact Details

A table of key Contact details are included in Appendix E - Contact **Table**. This should be updated as the project develops.

4.4 Project Grievances

The grievances of the project shall be managed within the following framework to ensure that a mechanism is in place to receiving documenting and responding to grievances from all affected parties as a result of the project.

The Contractor shall establish their complaints procedure to capture and manage complaints related to their activities. The HSE manager is responsible for ensuring that all complaints are recorded, managed appropriately and responded to in reasonable time frames. HSE Manager is responsible to ensure that complaints closure process and outcome are in line with SDSUP principles and commitments, and that the process will stand up to the scrutiny of external auditors, NGOs, etc., particularly where complainants are unhappy with the resolution. HSE manager is also responsible for ensuring that any corrective actions taken are effective and address the complaint.

All complaints shall be reported to SDSUP Representatives upon their receipt for inclusion in 3rd party complaints log and further tracking purposes.

Grievances which cannot be resolved by SDSUP team shall be escalated and resolved through MCA Georgia grievance mechanisms

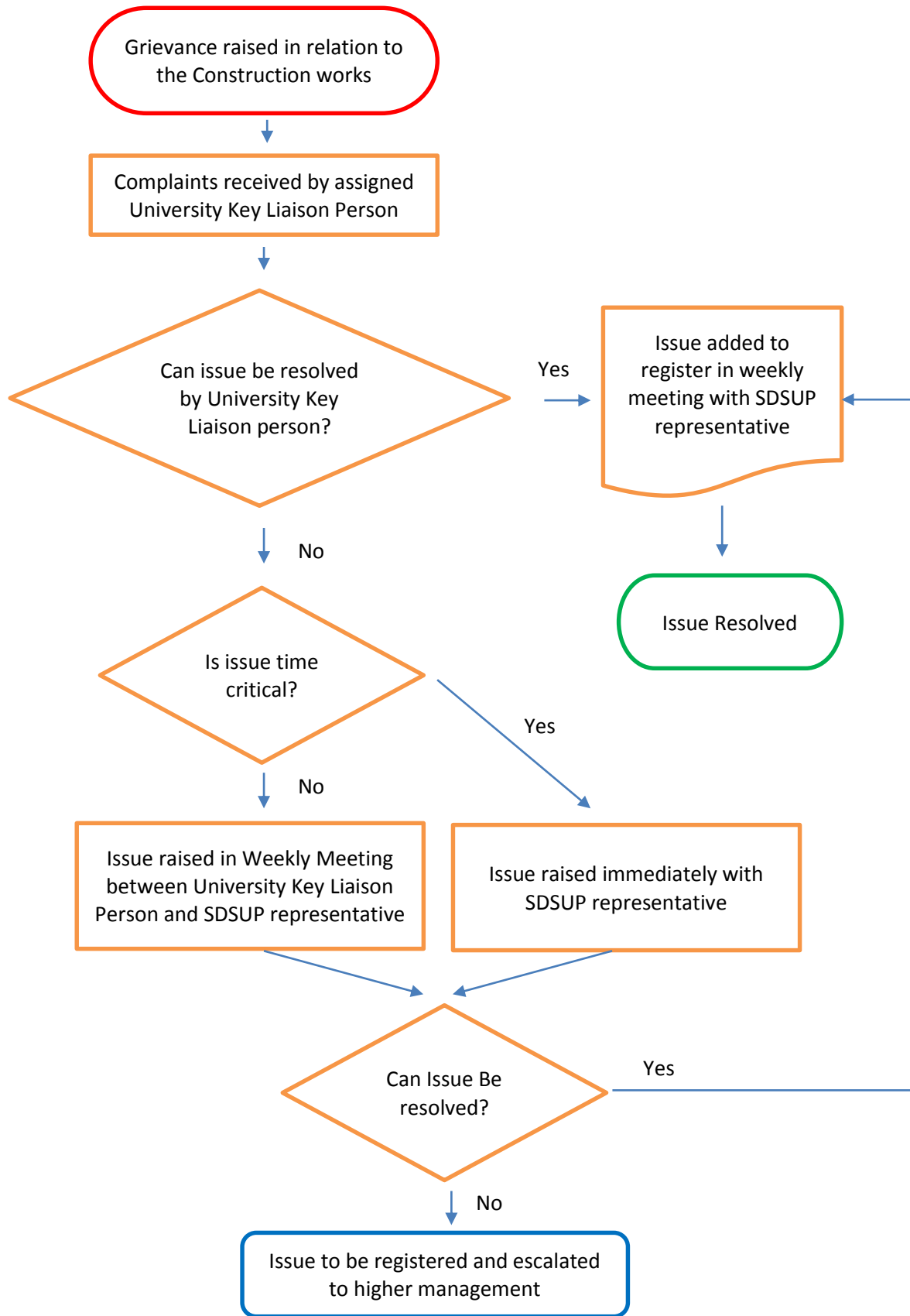


Figure 4-3: Flow chart for grievance related to construction works

5 EHSS TRAINING

5.1 Introduction

As part of the project training should be carried out to parties involved in the Construction who may not be familiar with the EHSS requirements and expectations of the Employer. The process of Education, monitoring and enforcement needs to be established to bring any change to the Contractors work habits.

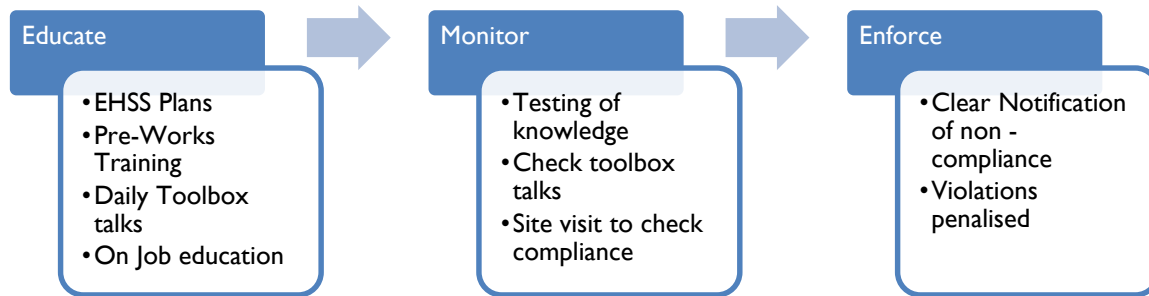


Figure 5-1: Process chart of educate, monitor and enforce.

5.2 Trainings Required

The trainings required are at the front end of project in the form of the workshops listed in the below table. These trainings should be carried out by EHSS consultants at a suitable venue. During the project implementation, onsite training and daily toolbox talks should be held to ensure that all persons working on the site are educated. The register sheet for toolbox talks, indicating the topics covered and signed register of persons present should be completed by Contractor.

The Training to all contractor Personnel shall be delivered by HSE Manager. To ensure the necessary level of training, is understood for the scope of work, a training needs analysis has been performed for this scope of work and the training program has been developed as a Matrix as per below table.

All personnel assigned to the positions identified in the Matrix shall have completed the training and/or provided sufficient demonstration that training has been undertaken, prior to mobilization for the works.

In addition to the training identified in the training Matrix all CONTRACTOR personnel shall attend the General HSE Induction provided by the CONTRACTOR's E&S Manager prior to the commencement of work. Additional training shall be held for supervisory level, where leadership issues and job safety analysis are highlighted.

CONTRACTOR recognizes that effective environmental, health, safety and social awareness training is a key requirement for successful ESMS implementation. All CONTRACTOR's employees are required to undergo environmental , health, safety and social awareness training as part of the induction process before commencement of works. All CONTRACTOR personnel shall be provided with a general environmental awareness induction.

In order to facilitate CONTRACTOR's compliance with the requirements of ESMF, the HSE Manager, with the help of his organization shall ensure that:

- All personnel are provided with basic induction information regarding the CONTRACTOR's environmental and social strategies, the requirements of this ESMF, the environmental and social aspects.

- All personnel are informed regarding their environmental compliance responsibilities; and
- Additional appropriate training is provided to those CONTRACTOR’s personnel whose activities require particular attention to specific environmental and social issues (e.g. operators of waste management, community liaison, truck drivers, etc.);
- Special Environmental toolbox talk sessions shall be conducted on weekly basis;
- Toolbox talk and Induction/Training topics shall be documented and reported to COMPANY in weekly and monthly reports;
- In addition CONTRACTOR shall provide task specific training as the need is identified. Employer/supervisor may assist with provision of training.

CONTRACTOR’s technical supervisors and working personal shall be provided with more in-depth information regarding the environmental and social requirements associated with Project. HSE Manager shall coordinate the provision of such information.

Additional briefings, daily toolbox sessions, and reviews focusing on environmental and social issues / topics shall occur at CONTRACTOR’s entire workforce on site.

Table 5-1: Workshop Training Matrix

Position	E&S AWARENESS /ORIENTATION				ENVIRONMENTAL TRAININGS							SOCIAL TRAIN.	HS	
	General E & Social Induction	E&S Induction for Supervisors	E&S Induction sites package	E&S Responsible Behaviour	Waste Management	Hazardous Waste Handling and Storage	Noise Management	Air Management	Pollution Prevention	Housekeeping	Accident/Incident Reporting	Community Relation Training	Site Specific Community Relation Issues	Health and Safety General Practices
SDSU Project Manager	X	X		X	X	X	X	X	X	X	X	X	X	X
Supervisors	X	X		X	X	X	X	X	X	X	X	X	X	X
Contractor HSE Mgr./E&SFO	X			X	X	X	X	X	X	X	X	X	X	X
Contractor HSE Officers	X	X		X	X	X	X	X	X	X	X	X	X	X
Workers	X		X	X	X	X			X	X	X	X	X	X
Drivers	X			X	X	X	X		X	X	X	X	X	X
Equipment Operators	X			X	X	X	X		X	X	X	X	X	X

6 AFFECTED ENVIRONMENT

This chapter provides a general description of the human and natural environment of the SDSUP implementation area. It describes, in general terms, the current conditions, including socio-economic, cultural, land uses, soils, geology, biodiversity, climate, air, and water.

For the Universities component the “affected environment” is spread throughout capital Tbilisi (Figure 3.1). Universities are located in Capital Tbilisi, Shida Kartli Region.

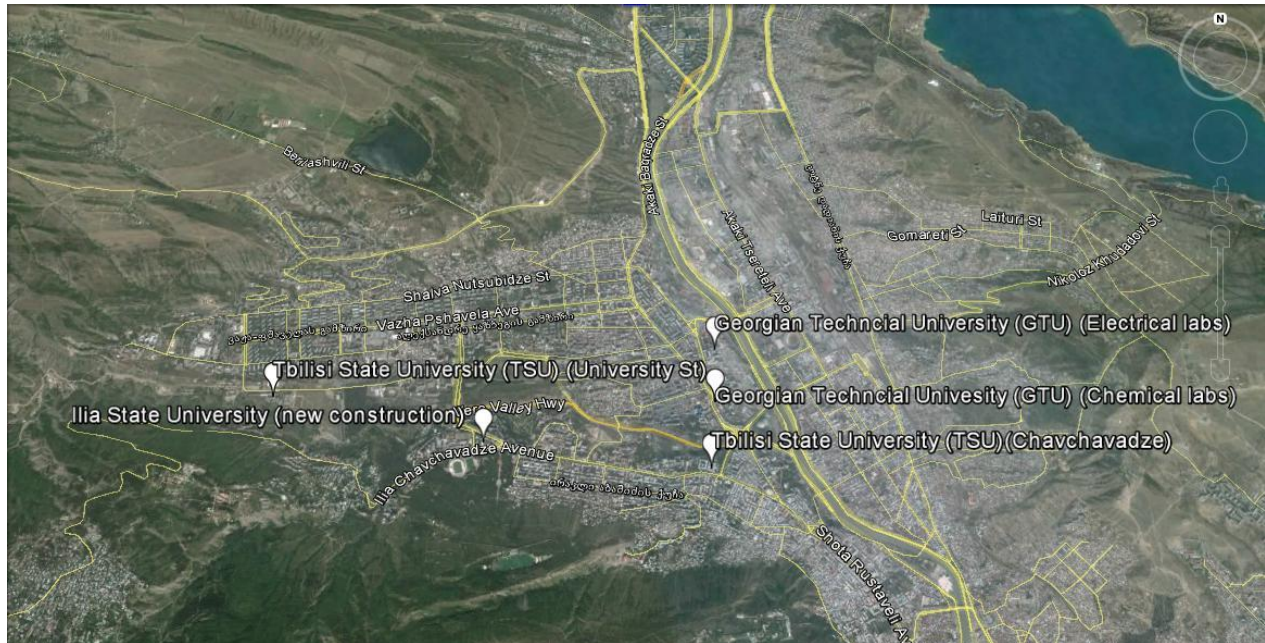


Figure 6-1: Map of Universities Locations

6.1 Socioeconomic Characteristics

From a countrywide perspective, economic development has been uneven for the last decade. From 2004 to 2007, the country underwent rapid economic growth ranging between 5.9-12.3% per year. Some factors such as armed conflicts and global economic crises severely influenced the country, and GDP fell to 2.3% in 2009, and further to -3.8% in 2014 Source: National Statistics Office, 2011

However, the data are not representative of the country as a whole. Most economic activity takes place in the capital city, Tbilisi. Rural areas have suffered more than Tbilisi in the global economic downturn.

Table 6-1 provides data on the distribution among regions of the gross value added for 2011-2014. As the data show, economic activity in the whole of Georgia has been steadily rising during the last four years despite a contraction of the national economy.

Table 6-1: Distribution of gross value added by regions (at current prices, bill GEL)

Regions	2011	2012	2013	2014
Tbilisi City	5.65	7.01	7.91	7.27
Shida Kartli	0.77	0.92	0.98	0.91
GDP at basic prices	12.05	14.61	16.52	15.55
GDP at market prices	13.79	16.99	19.07	17.99

Source: National Statistics Office of Georgia, 2013

In the project-affected regions, agriculture is one of the most important sectors, it determines the main

socioeconomic status, and it employs a majority of rural residents. About 93% of rural plots are smaller than two hectares. Such small land parcels are primarily suitable for subsistence farming, which represents 99.8% of the agricultural sector. 82% of farmers in Georgia produce crops, cattle, and poultry only for self-consumption. In Imereti and Samegrelo-Zemo Svaneti, subsistence farmers comprise 96% and 87% respectively (Agricultural Census of Georgia, 2004). Typically in project affected areas, lands owned by farmers are fragmented—they are located in different locations—this restricts development of the agriculture sector.

In general, the unemployment rate is high in rural areas as well as in cities, and as mentioned, in the villages, the population is mostly self-employed in agricultural activities. The employment rate in western Georgia is less than in the eastern part.

Perhaps of more concern than actual numbers of employed, is that according to UNDP (HDR, 2010), over 62% of employment countrywide is ranked as “vulnerable,” or as unpaid family workers or self-employed. 17.4% of employed live on less than 1.25 US\$/day

Table 6-2: Recent Work Indicators for Georgia

Employment to population ratio (% of population ages 15–64)	Formal employment (% of total employment)	Vulnerable epresenta (% of total employment)	Employed people living on less than US\$1.25 a day (% of total employment)	Unemployment rate by level of education (% of labor force with given level of attainment)		Child labor (% of children ages 5–14)
				Primary or less	Secondary or above	
2014	2006–2014 ^c	2006–2014 ^c	2006–2014 ^c	2006–2014	2006–	2005–2013 ^c
54.3	37.8	62.2	17.4	7.1	30.3	18

a. Percentage of employed people engaged as unpaid family workers and own-account workers.

c. Data refer to the most recent year available during the period specified.

Table 4-2 shows the employment status at a countrywide level showing approximately 19% unemployment.

Table 6-3: Labor force and employment status for Georgia (2014)

Description	Georgia	
	Thousand	%
Total labor force	1944.9	
Employed, including	1628.1	82%
Formally employed	618.6	38%
Self employed	1007.1	62%
Unclear	2.4	
Unemployed	316.9	19%

Income levels differ significantly between rural and urban areas. In urban areas, formal employment is the main source of income, while in rural areas income generation is mainly from sales of agricultural products, pensions, scholarships, and state financial assistance. Average monthly income for those employed in formal sectors was 557 GEL in 2014. However, average monthly income for those employed in the agricultural sector was estimated at 264 GEL in the same year (the exchange rate is approximately US\$1 to 1.70 GEL).

Besides employment, socioeconomic status is also based on the availability and quality of private and public facilities. All Universities in the project affected area have continuous power supplies. However, problems with the power systems are common, such as:

Power line poles are old and are knocked down during storms, causing power termination

6.2 Public Health Status

The public health system in Georgia is based on a centralized system. The main ambulances and hospitals are concentrated in large cities, and small outpatient clinics are available in most villages. Government is currently focusing on developing improved health care facilities in all regions.

The health system is based on direct payments for services; however there is a government-provided emergency service system available in municipal centers. These provide transportation services to area hospitals. Government-owned and private hospitals are obligated to provide free emergency care (paid by the central budget). There is also Government-supported insurance for people in need.

Several private, local, and international companies provide insurance services to the population. Most employed individuals have corporate insurance schemes, and have access to high quality health care services through insurance companies.

Table 6-4: Health Indicators

RESOURCES			RISK FACTORS					MORTALITY				
Expenditure on health	Physician	Hospital beds	Infants lacking immunization against		HIV prevalence			Infant	Under-five	Adult (per 1,000 people)		Age-standardized death rates from non-communicable diseases
			DTP	Measles	Youth (% ages 15-24)	Adult (% ages 15-49)	Female			Male		
Per capita (PPP US\$)	(per 10,000 people)		(% of one-year-olds)		Female	Male	Total	(per 1,000 live births)		Female	Male	(per 100,000)
2013	2003–2014 ^a		2014		2013			2014	2014	2014	2014	2008
384	45	33	8	4	0.1	0.1	0.1	26	30	85	232	5

6.3 Geographic and Geologic Characteristics

Tbilisi is located in the South Caucasus at 41° 43' North Latitude and 44° 47' East Longitude. The city lies in Eastern Georgia on both banks of the Mt'k'vari River. The elevation of the city ranges from 380–770 meters above sea level (1246–1968 ft) and has the shape of an amphitheatre surrounded by mountains on three sides. To the north, Tbilisi is bounded by the Saguramo Range, to the east and south-east by the Iori Plain, to the south and west by various endings (sub-ranges) of the Trialeti Range.

The relief of Tbilisi is complex. The part of the city which lies on the left bank of the Mt'k'vari (Kura) River extends for more than 30 km (19 mi) from the Avchala District to River Lochini. The part of the city which lies on the right side of the Mt'k'vari River on the other hand is built along the foothills of the Trialeti Range, the slopes of which in many cases descend all the way to the edges of the river Mt'k'vari. The mountains, therefore, are a significant barrier to urban development on the right bank of the Mt'k'vari River. This type of a geographic environment creates pockets of very densely developed areas while other parts of the city are left undeveloped due to the complex topographic relief. Earthquakes and landslides in mountainous areas present a significant threat to life and property. Among the most recent natural disasters were massive rock and mudslides in Tbilisi.

From a geomorphologic standpoint, the area belongs to the Shida Kartli Ravine located between greater and smaller Caucasus.

6.4 Cultural and Historic Resources

Historically, the human population in the SDSU-affected area was very dense. Thus, when an activity involves movement of soil, historical artifacts are often unearthed. However, during the scoping exercise, and based on a literature review and meetings with local people and authorities, no potential archaeological, historical,

or cultural sites in the vicinity of planned intervention areas were identified.

6.4.1 Protected Areas and National Parks near Tbilisi (marked green color)

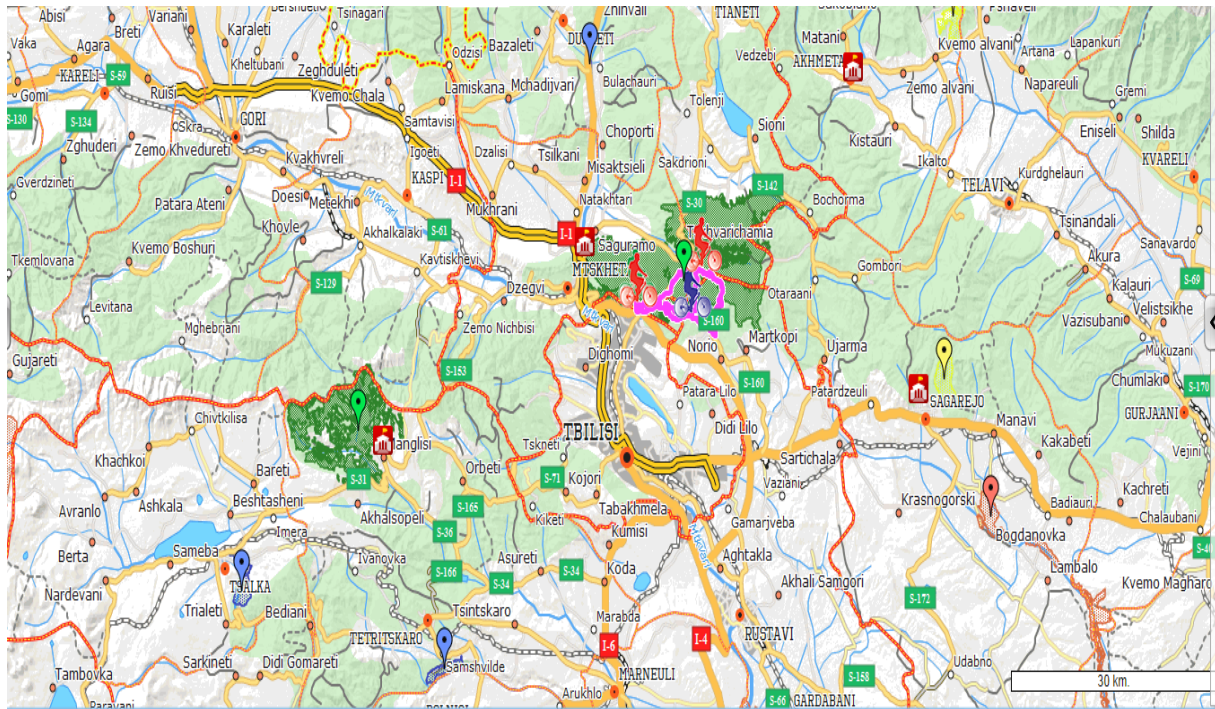


Figure 6-2: Network of Georgia’s Protected Areas

[Map:

http://mygeorgia.ge/Default.aspx?map=Apa_Geoland_Physical&target=44.773083|12|1846.41.78718953|2524.6&session=990fd28d-c443-465b-90b4-e6c3e791baff

The above map (Figure 3.6) shows the network of protected areas near City Tbilisi. No protected areas, including national parks and protected forests, are located at or in the vicinity of the project sites.

6.5 Climate

The city Tbilisi’s climate is influenced both by dry (Central Asian/Siberian) air masses from the east and humid subtropical (Atlantic/Black Sea) air masses from the west. Tbilisi experiences relatively cold winters and hot summers. Because the city is bounded on most sides by mountain ranges, the close proximity to large bodies of water (Black and Caspian Seas) and the fact that the Greater Caucasus Mountain Range (further to the north) blocks the intrusion of cold air masses from Russia, Tbilisi has a relatively mild micro-climate compared to other cities that possess a similar continental climate along the same latitudes.

The average annual temperature in Tbilisi is 12.7 °C (54.9 °F). January is the coldest month with an average temperature of 0.9 °C (33.6 °F). July is the hottest month with an average temperature of 24.4 °C (75.9 °F). The absolute minimum recorded temperature is – 23 °C (– 9 °F) and the absolute maximum is 40 °C (104 °F). Average annual precipitation is 568 mm (22.4 inches). May is the wettest month (90 mm) while January is the driest (20 mm). Snow falls on average 15–25 days per year. The surrounding mountains often trap the clouds within and around the city, mainly during the spring and Autumn months, resulting in prolonged rainy and/or cloudy weather. Northwesterly winds dominate in most parts of Tbilisi throughout the year. Southeasterly winds are common as well.

Table 6-5: Climate data for Tbilisi

Climate data for Tbilisi													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average high	5.9	7.1	12.2	19.3	23.1	27.5	31.0	30.2	26.1	19.4	12.7	7.8	18.6

°C (°F)	(42.6)	(44.8)	(54.0)	(66.7)	(73.6)	(81.5)	(87.8)	(86.4)	(79.0)	(66.9)	(54.9)	(46.0)	(65.5)
Daily mean °C (°F)	1.5 (34.7)	2.4 (36.3)	6.8 (44.2)	13.0 (55.4)	17.0 (62.6)	21.1 (70.0)	24.5 (76.1)	23.7 (74.7)	19.8 (67.6)	13.6 (56.5)	7.8 (46.0)	3.4 (38.1)	12.9 (55.2)
Average low °C (°F)	-1.5 (29.3)	-0.8 (30.6)	3.0 (37.4)	8.1 (46.6)	12.1 (53.8)	16.0 (60.8)	19.4 (66.9)	18.6 (65.5)	15.0 (59.0)	9.4 (48.9)	4.5 (40.1)	0.5 (32.9)	8.7 (47.7)
Precipitation mm (inches)	20 (0.79)	29 (1.14)	31 (1.22)	51 (2.01)	84 (3.31)	84 (3.31)	41 (1.61)	43 (1.69)	35 (1.38)	41 (1.61)	35 (1.38)	23 (0.91)	517 (20.35)
Avg. precipita tion days (≥ 1 mm)	4.0	4.6	5.9	7.6	9.7	8.7	5.7	5.7	5.0	5.6	4.4	4.0	70.9
Mean monthly sunshine hours	99.2	104.4	142.6	171.0	213.9	249.0	257.3	248.0	207.0	164.3	102.0	93.0	2,051.7

6.5.1 Air

In Tbilisi, there are special Hydrometeorology Department units for monitoring the environment, where observations of air quality are carried out on a regular basis (on general and specific pollutants). However, the existing air quality data are very limited in most of the project sites. In the City and urban project intervention areas, pollution levels are in acceptable limits.

6.5.2 Water Resources

Kura is a river, Starting in northeastern Turkey, it flows through Turkey to Georgia, then to Azerbaijan, where it receives the Aras River as a right tributary, and enters the Caspian Sea. The total length of the river is 1,515 kilometres (941 mi). People have inhabited the Caucasus region for thousands of years, and first established agriculture in the Kura Valley over 4,500 years ago. Large, complex civilizations eventually grew up on the river, but by 1200 CE, most were reduced to ruin by natural disasters and foreign invaders. The increasing human use, and eventual damage, of the watershed's forests and grasslands contributed to a rising intensity of floods through the 20th century. In the 1950s, the Soviet Union started building many dams and canals on the river. Previously navigable up to Tbilisi in Georgia, it is now much slower and shallower, as its power has been harnessed by hydroelectricity stations. The river is now moderately polluted by major industrial centers like Tbilisi and Rustavi in Georgia.

Two tributaries of the Kura River rise in Turkey: the Mtkvari, with an estimated inflow from Turkey of 0.91 km³/year, and the Potskhovi, with an estimated inflow from Turkey of 0.25 km³/year. The inflow of the Debet River, a southern tributary of the Kura River, is estimated at 0.89 km³/year from Armenia.

Coordinates: 39°19'32"N 49°20'07"E/ 39.32556°N 49.33528°E

7 GUIDELINES, POLICIES AND LEGISLATION

7.1 Introduction

Consideration should be made for both local and international best practices, financial donor guidelines and best practices and local policies and legislations.

7.2 Host Country Context

The projects covered by this ESMF, rehabilitation of University buildings, does not require an Environmental Impact Permit (EIP) or State Ecological Examination under Georgian legislation. Local permits are required, as shown in the table below.

Environmental impact assessment (EIA) should be prepared for the new construction as part of the permit application.

Table 7-1: Local Permits Required for Universities facilities

Activities	Permit required	Responsible
New Construction <ul style="list-style-type: none"> • Building Design drawings • EIA 	YES	Designer, Architect
Source Material Extraction	YES	Construction Contractor
General Waste Disposal	YES	Construction Contractor
Hazardous Waste Disposal	YES	Construction Contractor
Wastewater Discharge (operation)	YES	Designer, Architect
Wastewater Discharge (construction)	YES	Construction Contractor
Water Use (operation)	YES	Designer, Architect
Trees cutting	YES	Designer, Architect
Historical or Cultural Preservation	Unlikely	n/a
Wetlands or Water bodies	Unlikely	n/a
Threatened or Endangered Species	Unlikely	n/a
Rehabilitation of existing facilities	No	n/a

7.3 MCC Guidelines

The project is to comply with MCC guidelines. The proposed works are most probably classified as Category C, as the project is unlikely to have adverse environmental and social impacts. Relevant positive environmental and social impacts should be enhanced.

7.4 IFC Performance guidelines

The IFC Performance Standards.

- Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Performance Standard 2: Labor and Working Conditions
- Performance Standard 3: Resource Efficiency and Pollution Prevention
- Performance Standard 4: Community Health, Safety, and Security
- Performance Standard 5: Land Acquisition and Involuntary Resettlement
- Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- Performance Standard 7: Indigenous Peoples
- Performance Standard 8: Cultural Heritage

The proposed works will impact on 1-4 and 6 to some degree. The works have been assessed relative to these performance standards and this report should show how these performance standards are to be met to best avoid, mitigate, and manage risks and impacts and to run the project in a sustainable way and to benefit all the stakeholders.

7.5 Environmental Policies and legislation

While there is no separate policy document that directly spells out Georgian policy for protecting and managing water availability and quality, the Law on Water does outline a number of key principles that comprise a policy framework (UNECE, 2003). Some of these are:

Water protection is a major element of environmental protection for Georgian citizens, in view of both current and future needs;

Drinking water for the population is the highest priority of all uses;

Both groundwater and surface water are under state control;

Management of water varies according to hydrologic importance;

System of “user-polluter pays” is key;

Pollution is not allowed, although a definition of what constitutes pollution is lacking.

There are more than ten major laws in Georgia that influence the protection and management of water resources and associated environmental concerns. The most comprehensive is the above Law on Water, which has been in force since October 1997 and was last amended in June 2000. The 96 separate articles of this Law cover a very wide and comprehensive set of issues, such as pollution control policies, protection of drinking water sources, licensing of water use and discharge, categorization and protection of resources, particular measures for the Black Sea, flood control, and many others. All surface water, groundwater and near-coastal water are deemed to be under the control of the national government. Many of the provisions of the Law are supplemented by legislative orders and decrees, as well as by regulations of the Ministry of Environment Protection and Natural Resources, which specify necessary actions in greater detail. The Ministry holds overarching responsibility for implementing the Law on Water, although other ministries are key players on specific topics. The Law is implemented by personnel at the regional or municipal level. The Law on Water provides for the licensing of water use and the discharge of pollutants, an approach that has been in place since 1999.

Regardless that Georgia is a country with abundant fresh water resources, the current water supply situation is extremely complicated. This is largely due to anthropogenic contamination, a deficit of drinking water, and low sanitary standards of the water supply system. Because of the degradation of the water supply and sewerage infrastructure, the quality of drinking water often does not comply with human health and safety standards. Some 38% of the water pipeline system of the cities and regions belongs in the high-risk water pipeline category, in which the microbiological contamination index is high.

7.6 Relevant Policy, Legal, and Regulatory Requirements

A number of Georgian laws and regulations exist related to environment, social, labor, land, cultural heritage, and other technical issues, which are relevant to this ESMF.

The Constitution of Georgia sets general regulating principles of environment protection. Namely, Article 37, Clause 3 states that all citizens have the right to live in a healthy environment and use natural and cultural surroundings. In addition, citizens are obliged to protect the natural and cultural surroundings. Below is a list of the principle environmental, social, health care, cultural heritage, and technical laws and regulations.

Table 7-2: Principle Laws and Regulations relevant to the Proposed Project

Year	Law / Regulation
	Environment
1994	on Soil Protection
1996	on System of Protected Areas
1996	on Protection of Environment
1996	on Mineral Resources
1997	on Wildlife
1997	on Water
1998	on Hazardous Chemicals
1999	on Protection of Ambient Air
1999	Forestry Code of Georgia

1999	on Compensation of Damage from Hazardous Substances
2000	on Regulation and Engineering Protection of Coastline and River Banks of Georgia
2005	on Red List and Red Book of Georgia
2006	on Licenses and Permits
2007	on Status of Protected Areas
2007	on Ecological Examination
2007	on Service of Environmental Protection
2007	on Environmental Impact Permit
2002	Regulation on Environmental Impact Assessment (approved by the Order No. 59 of the Minister of Environment.
Cultural Heritage	
2007	Law on Cultural Heritage
Social, health and labor issues	
2007	Law on Public Health
1997	Law of Georgia on Health Care
2006	Labor Code of Georgia
1997	Law on Professional Unions
Land ownership and land take	

Year	Law / Regulation
1997	The Civil Code of Georgia
1997	The Civil Procedural Code of Georgia
1996	The Law of Georgia on Ownership of Agricultural Land
2010	Law on State Owned Property
2007	Law of Georgia on Entitlement of Ownership Rights to Lands Possessed (Employed) by Physical and Legal Persons of Private Law
1999	The Law on Rules for Expropriation of Ownership for Necessary Public Need
2007	Law on Replacement Cost Reimbursement and Compensation for the Use of Agricultural Land for Non-Agricultural Purposes
2007	Presidential Decree #525 on Rules for Entitlement of Ownership Rights to Lands Possessed (Employed) by Physical and Legal Persons of Private Law and Approval of Ownership Certificate Format

The environmental permitting system in Georgia is regulated by the Law on Environmental Impact Permit, Law on Licenses and Permits, Law on Ecological Assessment, and Law on Licenses and Permits. These laws are described in the section on Relevant and Applicable Permitting Requirements, below.

Law of Georgia on Protection of Environment

This law regulates the legal relationship between the bodies of the state authority and the physical/legal persons regarding environmental protection and use of natural resources on Georgian territory, and defines responsibilities of state institutions. The law gives major principles for environmental management, licensing, standards, EIA, and related issues and describes different aspects of the protection of ecosystems, protected areas, and biodiversity.

Law of Georgia on Natural Resources

The law defines the status of natural resources, describes their use, sets out the types of licenses and rights and obligations of the users. The law sets responsibilities to preserve lands from contamination and ensures conformity of agricultural activities with relevant legal requirements. It describes economic principles for consumption of natural resources.

Law of Georgia on Soil Protection

The law aims at ensuring preservation of soil integrity and improving its fertility. It defines obligations and responsibilities of land users and the state regarding provision of soil protection conditions and ecologically safe production. The law sets the maximum permissible concentrations of hazardous matter in soil. It also restricts the use of fertile soil for non-agricultural purposes; execution of any activity without stripping and preserving topsoil; open quarry processing without subsequent re-vegetation of the site; terracing without preliminary survey of the area and approved design; overgrazing; wood cutting; damage of soil protection facilities; any activity that would degrade soil quality (e.g., unauthorized chemicals/fertilizers, etc.).

Law of Georgia on Protection of Atmospheric Air

The law regulates protection of atmospheric air from adverse anthropogenic impact within the whole Georgian territory (Part I, Chapter I, Article I.1). Adverse anthropogenic impact is any human-caused effect on atmospheric air causing or capable of causing negative impacts on human health and the environment (Part II, Chapter IV, Article II.1).

Law of Georgia on System of Protected Areas

The law sets out the categories of protected areas (including national parks, state reserves, managed reserves, etc.) and defines activities allowed in their boundaries. Activities may be allowed based on purpose of the area, requirements set out in legislation and individual regulations, management plans of protected areas, as well as international agreements and conventions signed by Georgia. The law provides restrictions of the use of natural resources in national parks and other protected areas.

Law of Georgia on Water

The law regulates protection and consumption of surface and ground water, commercial water production, protection of aquatic life, fauna, flora, forest, land and other natural resources. Consistent with the legislation, water within the territory of Georgia is under state ownership.

Law on Rules for Expropriation of Ownership for Necessary Public Needs

The state has the constitutional power to seize any property by means of expropriation for projects of imminent public necessity. The expropriator has to make every reasonable effort to acquire property by negotiation and is required to value the property in accordance with the fair market value before negotiations.

Law on Replacement Cost Reimbursement and Compensation for the Use of Agricultural Land for Non-Agricultural Purposes

The law specifies requirements for a land replacement fee (based on location and quality of land) to compensate the government and private landowners/ land users for property loss, plus lost profits by the beneficiary as a result of allocation of agricultural land for nonagricultural purposes.

Labor Code of Georgia

The code regulates labor relations between all workers and employees in Georgia. It supports the realization of human rights and freedoms through fair reimbursement and the creation of safe and healthy working conditions.

Relevant and Applicable International Standards and Best Practices

International standards that may apply to the project include the Equator Principles (EP), requiring that the International Financial Corporation (IFC) ensures that projects financed by them are “developed in a manner that is socially responsible and reflect sound environmental management practices.” Other international requirements include environmental and social policies including the following:

The EBRD’s Environmental and Social Policy (2008) and its associated Performance Requirements
IFC Performance Standards (I-8)

World Bank Group Environmental, Health and Safety Guidelines
Other policies and guidelines of IFCs
The Project should also meet ILO core labor standards on:
Forced labor (C105)
Child Labor (C182)
Discrimination (C111)
Freedom of Association and the Right to Organize (C 87)
Equal Remuneration (C100)
Minimum Age (C138)

Georgia is a party to the following environmental conventions and treaties, not all of which will be relevant to the project. The main international convention of interest for this project is the Aarhus Convention:

Ramsar Convention on Wetlands of International Importance, especially as Waterfowl Habitat

UN Rio de Janeiro Convention on Biological Diversity, Convention on Migratory Species

Paris Convention on the Protection of World Culture and Natural Heritage

Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

EuroESMFn Archaeological Heritage Convention

EuroESMFn Convention on Protection of the Archaeological Heritage (Lavallette, 1992 – 01 – 16) – Georgia joined the convention on February 23, 2000, pursuant to Decree # 158; and

EuroESMFn Convention on Protection of the Archaeological Heritage (Granada, 1985-10-03) – Georgia joined the convention on February 23, 2000, pursuant to Decree # 157.

7.6.1 Relevant and Applicable Permitting Requirements

In Georgia, projects requiring ecological examination are mainly regulated by the following laws:

Law of Georgia on Environmental Impact Permit

The law gives a complete list of activities subject to ecological examination. The body authorized for execution of ecological examinations is the Ministry of Environment Protection (MOE), which issues the permit after review of the documents and application presented by a project owner. If an activity listed in the law requires a Construction Permit, the permitting administrative body (or the Ministry of Economy and Sustainable Development) ensures the involvement of the MOE in the process so that ecological expertise is included in the review.

Law of Georgia on Ecological Examination

This law makes ecological examination an obligatory step to issue the environmental impact permit or construction permit for certain types of activities. The objective of an ecological assessment is to preserve an ecological balance by considering environmental requirements, sound use of natural resources, and sustainable development principles. A positive conclusion of the ecological examination carried out by the experts committee created by the MOE is necessary to obtain an environmental or construction permit.

Law of Georgia on Licenses and Permits

The law regulates the issuance of licenses or permits, gives an exhaustive list of licenses and permits, and sets the rules for issuing, amending, and cancelling permits. The law defines three principles for issuance of the license:

“One-window” principle – meaning that a licensing administrative body shall ensure the approval of additional licensing conditions by the other administrative bodies.

“Silence gives consent” – licensing administrative body is obliged to make a decision in due course after the submission of the application. Otherwise, if a decision is not made in the determined time period the license is deemed issued.

8 ENVIRONMENTAL CONSEQUENCES

8.1 Environmental Impacts of the Proposed Action and Alternatives

Using environmental review forms that were included in the Scoping Statement, the Scoping Team identified the potential significant environmental impacts to be considered in the ESMF. Potential environmental, health, and socio-cultural impacts were identified for the construction/rehabilitation phase and the operation/maintenance phase for Universities rehabilitation projects. This chapter analyzes the significant issues identified by the Scoping Team, as revised by the ESMF Team during ESMF preparation.

8.2 Direct Effects and their Significance

Table 8-1 shows the potential significant impacts identified during the scoping process. Through additional consultations and site visits during ESMF preparation, the ESMF Team confirmed the potential significant impacts, as well as others (noted in the tables) for analysis in the ESMF.

For ease of evaluation, the potential significant impacts have been combined into “impact categories” as shown in the tables; the impact categories are the basis for the evaluation, presented below the tables.

Table 8-1: Potential Significant Impacts for Universities buildings

Activities or Endpoints	Significant Concerns Identified During Scoping; as Revised During the ESMF Process (ESMF Team added those with an asterisk)	Impact Category (ESMF Team eliminated those with asterisk from further study)
<u>Geology, Soils and Land Use</u>	1) Contamination of soil by accidental spills (fuels, oil, and other); by disposal of debris and generated wastes; and through storm water run-off 2) Contamination of soils by sewage due to poorly planned and maintained sewage treatment systems*	1) Waste generation during construction/rehabilitation and demobilization could contaminate soil and water. 2) Poorly planned and maintained sewage treatment systems contaminate soil and water and affect human health.
<u>Water resources</u>	9) Contamination of water by sewage due to poorly planned and maintained sewage treatment systems* 2) Groundwater infiltration/contamination due to disposal and/or accidental spill of oil and lubricants and other waste materials 3) Lack of on-site sanitary facilities for construction workers causing pollution to surface and groundwater	9) Poorly planned and maintained sewage treatment systems contaminate soil and water and affect human health. 2) Waste generation during construction/rehabilitation and demobilization could contaminate soil and water. 3) Lack of facilities or use of environmentally unsound sanitation facilities for construction workers could contaminate soil and water.

Activities or Endpoints	Significant Concerns Identified During Scoping; as Revised During the ESMF Process (ESMF Team added those with an asterisk)	Impact Category (ESMF Team eliminated those with asterisk from further study)
<p><u>Socioeconomic Issue</u></p>	<p>1) Disturbance of University people due to construction machinery, traffic and/or possible removal activities</p> <p>2) Employment opportunities in the construction/rehabilitation activities</p> <p>3) Improvement of livelihoods, including improved standards of living for affected people</p> <p>4) Ownership issues-transfer of ownership*</p>	<p>1) Construction labor issues could derail support for the project. Alcohol and other socially destructive substances introduced into community by construction crews.</p> <p>2) Construction activities could temporarily affect the quality of life of Universities.</p> <p>3) Construction labor issues could derail support for the project.</p> <p>4) Positive effect (see indirect impacts)</p> <p>5) Lack of a clear process and understanding of ownership could derail project support and affect</p>
<p><u>Public Health Issues</u></p>	<p>1) Human health impacts due to poor drinking water quantity or quality.*</p> <p>2) Human health impacts due to poorly planned and maintained sewage treatment systems.*</p> <p>3) Human health impacts due to flooding caused by poor drainage.*</p> <p>4) Potential worker safety impacts due to accidents.</p>	<p>1) Poorly planned and maintained sewage treatment systems contaminate soil and water and affect human health.</p> <p>2) Poorly planned and maintained drainage systems contaminate soil and water and cause flooding affecting public health.</p> <p>3) Worker safety may be compromised if safeguards are not in place.</p>

Activities or Endpoints	Significant Concerns Identified During Scoping; as Revised During the ESMF Process (ESMF Team added those with an asterisk)	Impact Category (ESMF Team eliminated those with asterisk from further study)
	<p>5) Potential for accidents to the public, including UNIVERSITIES, during construction*</p> <p>6) Occupational health and safety concerns due to improper handling and disposal of hazardous wastes at project site (e.g. asbestos)</p> <p>7) Health and sanitation problems due to inadequate housing and sanitation structures for laborers</p>	<p>5) Public safety may be compromised if safeguards are not in place.</p> <p>6) Further testing required to definitively determine asbestos class.</p>
<u>Air Quality</u>	<p>1) Generation of dust due to construction equipment; emissions from combustion of fossil fuels by construction equipment; and increase of vehicle traffic emissions during construction</p>	<p>1) Air pollution due to dust and emissions during construction phase</p>
<u>Noise</u>	<p>1) Generation of noise pollution due to, demolition works and construction equipment</p>	<p>1) Excessive noise impact on the health and wellbeing of workers and nearby persons.</p>
<u>Waste Generation</u>	<p>1) Excess soil from excavation and water from de-watering operations. Disposal of debris and construction wastes.</p> <p>2) Sanitation facilities at construction sites during construction phase</p> <p>3) Hazardous waste impact during rehabilitation activities (e.g. asbestos)</p> <p>4) Contamination from demolition, construction or site demobilization, and site cleanup</p>	<p>1) Waste generation during construction/rehabilitation and demobilization could contaminate soil and water.</p> <p>2) Lack of facilities or use of environmentally unsound sanitation facilities for construction workers could contaminate soil and water.</p> <p>3) Further testing required to definitively determine asbestos class.</p>

The following are the project phases and their potential environmental and social impacts; below this discussion, based on impact category (from Tables 6.1), an evaluation of environmental consequences is presented.

Many of these concerns are focused on worker exposure during Universities rehabilitation. There is considerable information on lead and mercury impacts, laboratory waste impacts and mitigation measures. Without safeguards, human health and environmental impacts would be expected; however, implementation of best practices will ensure that human health and the environment are not put at risk. The waste disposal location is also of concern, and wastes containing silver or mercury or other potentially hazardous materials need to be disposed in a secure location, protected from landfill scavengers.

Significance: Impacts to human health and the environment from rehabilitation of Universities buildings can be mitigated and adverse effects are not expected if best practices are followed. Mitigations include measures developed for university rehabilitation (Table 6.1 EMMP). If asbestos is present, mitigations in the Table 6.1 EMMP apply. One of the main constraints is that personal protective equipment must be present onsite, well maintained, and diligently used, and workers must be trained in how to use and maintain the equipment. Workers must be aware of the potential impacts to their health if they fail to implement the safeguards.

8.3 Endangered, Threatened, or Protected Species and their Habitats

As stated in the Scoping Statement, the existence of protected species at any of the sites—Universities buildings – are highly unlikely. There is no critical habitat, and no endangered, threatened, or otherwise protected species are expected to use any of these sites for feeding, nesting, resting, or any other purpose. No mitigation is necessary.

8.4 Wetland Impacts

Visits by the Scoping Team, the ESMF Team, and teams conducting feasibility studies have not indicated the presence of wetlands near University facilities.

8.5 Biodiversity Losses

As stated in the Scoping Statement and as described in Affected Environment, university buildings sites contain no biodiversity resources of regional or local significance. No mitigation is necessary.

Natural or Deplete able Resource Requirements

The construction/rehabilitation activities will not use natural or depletable resources to a significant degree. Construction material will be sourced locally, when practicable, and will be good quality, standard construction material. As above, recycled substances will be used when practicable.

8.6 Historic and Cultural Resources

As stated in the Scoping Statement, there appears to be no cultural or historical resources at the Universities building sites. No mitigation measures are necessary.

9 MITIGATION AND MONITORING PLANS

9.1 Introduction

This section covers the key activities, the identified risks and the mitigation measures. It also specifies the monitoring of these and the responsible persons. The aim of mitigation in order of preference is to eliminate, isolate and minimize the risk.

9.2 Environmental Mitigation Plans

This chapter includes EMMPs for Universities Building Rehabilitation. Two additional EMMPs also apply to building rehabilitation: EMMP for buildings with asbestos remediation including asbestos-tiled roofing and other asbestos materials. Environmental Mitigation and Monitoring Plans (EMMPs) include mitigation measures (including best practices) to minimize the potential social and environmental impacts. The mitigation measures are practical and feasible, and they are expected to adequately minimize potential impacts. EMMPs cover rehabilitation/construction and operation/maintenance and include the identified environmental impacts, individual mitigation measures, monitoring indicators, monitoring/reporting frequency and responsible party for oversight of EMMP implementation.

Table 9-1 includes the EMMP for Universities Building Rehabilitation and Table 9-2 is the EMMP for University buildings. In both EMMPs, the potential significant human health and environmental impacts are identified for each activity and mitigation measures are provided to minimize impacts. Both tables cover construction/rehabilitation activities and university building operations, including mitigations to correct construction problems and impacts during the “Defects Liability” period that extends for one year after construction.

Building mitigations during the defects liability period cover building integrity problems (roofing, outside, insulation, windows, doors, walls, ceilings, floors, electric boxes/outlets), delivery of electricity, gas and water plus sewer services including toilets and inside plumbing, lighting, exterior parking, access for disabled persons and other access roads.

Universities buildings renovation design will ensure accessibility by disabled people. Where Universities buildings contain one or more persons with disabilities; the design will ensure its accessibility and support its use by the individual(s) with disabilities, incorporating features such as low-level and accessible toilets and classrooms, wider doorways and ramps for wheelchair access etc.

If asbestos is present, Table 9-2 includes mitigations for environmental impacts involving preparation for asbestos removal, asbestos contamination during removal, disposal, socioeconomic impacts and public health and safety impacts. The EMMPs include monitoring indicators to determine the success of mitigation measures, and reporting requirements.

9.3 Environmental Monitoring Plans

Table 9-1, Table 9-2, Table 9-3 provide the monitoring indicator(s), monitoring and reporting frequency and SDSU party responsible for monitoring. Monitoring is provided to ensure the effectiveness of mitigation measures. Most mitigation and monitoring measures will be included in the SDSUP implementation. SDSU will monitor implementation of the mitigation measures to ensure they are effective for reducing or eliminating the environmental impacts.

9.4 Health and Safety Specification

The Health and safety specification indicates the requirements for industry best practices which the contractor must follow in order to reduce the risk of incidents on site. Included is a violations section to ensure there is a consequence for non-compliance with best practices. This document should be included and form part of the Contract for any construction workers.

9.5 Health and Safety Monitoring Plans

Table 9-4 identifies the key risks and provide the monitoring indicator(s), monitoring and reporting frequency and SDSU party responsible for monitoring. The works Contractors also play a key role in the safety and creating a total responsibility safety culture. Site specific safety plans are to be submitted by the Contractors prior to proceeding with any works.

Monitoring is provided to ensure the effectiveness of mitigation measures. Most mitigation and monitoring measures will be included in the SDSUP implementation. SDSU will monitor implementation of the mitigation measures to ensure they are effective for reducing or eliminating the environmental impacts.

9.6 Stakeholder Impact and Risk Monitoring Plans

Table 9-5 identifies the key risks and provide the monitoring indicator(s), monitoring and reporting frequency and SDSU party responsible for monitoring. The works Contractors also play a key role in the safety and creating a total responsibility safety culture. Site specific safety plans are to be submitted by the Contractors prior to proceeding with any works.

Monitoring is provided to ensure the effectiveness of mitigation measures. Most mitigation and monitoring measures will be included in the SDSUP implementation. SDSU will monitor implementation of the mitigation measures to ensure they are effective for reducing or eliminating the environmental impacts.

Table 9-1: Environmental Mitigation and Monitoring Plan for Universities

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
1) Universities facilities. New construction, Renovation/Rehabilitation, Demolition works	Waste Management from Construction Rehabilitation and Demobilization (Soil and Water Contamination)	Y	<p>Collect/segregate construction waste, reuse or recycle as possible: wood and metal, simple/complex compositions, copper wiring/piping, windows, doors, flooring, wallboard, ductwork, lighting, electrical and heating equipment, vents and fans</p> <p>Proper management of hazardous waste (solvents, adhesives, paint, PCBs, mercury lighting). Store safely (cover) until proper disposal. Prevent leaks, spills or local scavenging.</p> <p>If asbestos roofing or other asbestos material present, see Asbestos EMMP.</p>	<p>Types of waste and waste quantity (kg (m3))</p> <p>Number of Inspections</p> <p>Complaints from nearby residents</p>	Monthly during construction phase; once during demobilization	Requirements specified in contracts Inspections by SDSU or representative of SDSU

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
	Air Pollution Impacts Energy Efficiency	Y	<p>Use water sprays, covers and containment to control dust and air emissions during construction.</p> <p>Use low emissions and energy efficient windows and building materials, high efficiency lighting, low emission burners in boilers, exterior insulation with plaster topcoat.</p> <p>Prevent burning, minimize visible smoke/emissions</p> <p>Use environmentally acceptable fuels (natural gas if available) for heating equipment.</p>	<p>Concentration of relevant pollutants (mg/m³)</p> <p>Document using energy efficient products.</p> <p>Complaints from nearby residents</p>	Monthly during construction	Requirements specified in contracts Inspections by SDSU or representative of SDSU.
	Lack of environmentally sound facilities or poor sanitation at construction site	Y	Provide sound temporary sanitation facilities (e.g., dry toilets or pit latrines, cleanup of food services, trash/waste collection bins	<p>Camp inspections</p> <p>Complaints from nearby local residents, dwellers</p>	Monthly during construction	Requirements specified in contracts Inspections by SDSU or representative of SDSU.

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
	Noise, Odor and Visual Quality Impacts	Y	<p>Schedule trucks carrying waste/building materials at a time during the day that will minimize impacts to local communities.</p> <p>Minimize use of heavy equipment during early morning or nights</p> <p>Provide PPE (ear protection) for workers.</p> <p>Install visual barriers</p>	Visual Complaints from users and nearby residents.	Monthly during construction	Requirements specified in contracts inspections by SDSU or representative of SDSU.
	Socio-economic Impacts	Y	<p>Hire local workers, when possible</p> <p>Community public meetings to share mitigation information.</p>	<p>Number of local workers</p> <p>Number of public meetings.</p>	<p>One time during construction phase (local workers)</p> <p>When community meetings are held.</p>	Requirements specified in contracts

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
	Public Health and Safety Impacts	Y	<p>Written safety procedures.</p> <p>Provide workers with protective equipment (e.g., gloves, boots, eyewear).</p> <p>Adopt fire precautions Manage construction traffic to protect children and the community.</p> <p>Signs clearly displayed Protect public from stored waste/building materials or abandoned structures</p> <p>Provide training sessions for construction workers on HSE</p> <p>Develop monetary penalty system for non compliance</p>	<p>Number of Inspections</p> <p>Number of accidents and injuries.</p> <p>Complaints from nearby residents</p>	Monthly	Requirements specified in contracts Periodic inspections by SDSU or representative of SDSU.

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
2) Universities facilities After Rehabilitation (During 1 year of “Defects Liability”)	Impacts Include: Water and Soil Contamination, Air Pollution, Wastes Generation, Energy Inefficiency, Noise, Odor or Visual, Socioeconomic Impacts, Public Health and Safety	Y	Use “Defects Liability” to correct building integrity defects involving roofing outside topcoats, insulation, windows, inside/outside doors, walls, ceilings, floors, electric boxes/outlets, lighting Correct defects with delivery of electricity, gas and water plus sewer services including toilet and plumbing	Number of defects corrected Number of inspections Number of complaints	Quarterly for defects liability 1 year period	Requirements specified in contracts Inspections by SDSUP or representative of SDSU.

Table 9-2: Environmental Mitigation and Monitoring Plan for University Building Rehabilitation Involving Asbestos Remediation (Asbestos-Tiled Roofing, Asbestos Materials)

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
<p>Facilities Demolition involving Asbestos Materials (AM):</p> <p>1) Asbestos-tiled Roofing</p> <p>2) Asbestos Corrugated Sheets</p> <p>3) Other Asbestos Materials</p>	<p>Hazardous waste with AM could affect human health and environment</p> <p>Impact: Preparing for Asbestos Removal</p> <p>Asbestos Contamination</p>	Y	<p>Preparing for asbestos removal. Considerations: A) Spray amended water (1:200 soap-to-water) to keep asbestos containing material (AM) damp, but not saturated. B) Place AM in disposal bags, do not allow to accumulate on floor). C) Use HEPA vacuums and damp cloth wiping to stop fiber migration or fibers becoming airborne, do not use dry sweeping. D) Use 6 mil polyethylene sheeting as barriers for doors, windows, vents, AM breakage/cutting.</p>	<p>Number of Inspections</p> <p>Amounts of AM (kg)</p> <p>AM removal permit (if applicable).</p> <p>Complaints from nearby residents.</p>	Weekly	<p>Requirements specified in contracts</p> <p>Inspections by SDSU or representative of SDSU.</p>
	Asbestos Contamination During Removal	Y	<p>Asbestos removal procedures. A) Removal of AM panels intact, if possible. Place in disposal bags. B) Removal of AM screwed-in panels after wetting screw heads. Clean holes with damp (amended water) cloth.</p>	<p>Amount of AM (kg)</p> <p>Complaints from nearby residents.</p>	Weekly	<p>Requirements specified in contracts</p> <p>Inspections by SDSU or representative of SDSU.</p>

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
			<p>C) Removal of AM riveted panels. (Describe expected rivet removal steps). Minimize breakage, use amended water.</p> <p>Place AM and disposable overalls in 6-mil poly bags A) Tightly seal bag. B) Wipe outside bag with cloth (amended water). C) Remove bags, store in designated location. Label.</p>			
	Disposal of AM	Y	<p>Waste AM and bags of contaminated clothing transport to disposal site.</p> <p>A) Transport with covered truck. B) Excavate special place in landfill, Build wooded encasement structure. Bury 1 meter underground. C) Mark site with permanent warning sign.</p>	<p>Amount of AM (kg)</p> <p>Complaints from nearby residents.</p>	<p>Weekly</p> <p>Final AM removal and disposal report, Details of what was done, any problems or unexpected exposures, lessons learned</p>	<p>Requirements specified in contracts</p> <p>Inspections by SDSU or representative of SDSU.</p>
	Socio-economic Impacts with AM	Y	<p>Public meetings with community to share information on asbestos removal, handling and disposal.</p> <p>Hire local workers.</p> <p>Community public meetings to share mitigation information.</p>	Number of public meetings.	Weekly	<p>Requirements specified in contracts</p> <p>Periodic inspections by SDSU or representatives of SDSU.</p>

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
	Public Health and Safety with AM	Y	<p>Close access to facility during demolition, asbestos removal and transportation for disposal.</p> <p>Written asbestos safety procedures for workers and the public.</p> <p>Provide workers with protective equipment (e.g., Respirators (negative pressure, P100 equivalent particulate filter, half-face or full-face), gloves, disposable overalls).</p> <p>Decontamination washing facility to wash workers from head to toe.</p> <p>Signs clearly displayed'</p>	<p>Safety equipment is being properly used.</p> <p>Number of accidents and injuries.</p>	Weekly	<p>Requirements specified in contracts</p> <p>Inspections by SDSU or representative of SDSU.</p>

Table 9-3: Environmental Mitigation and Monitoring Plan for Chance-Finds of chemical hazards during Rehabilitation of laboratories of Universities.

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
Rehabilitation of laboratories for Universities (Table 6.1 EMMP for Universities facilities also applies to laboratories)	Chance-finds of chemical hazards from laboratory waste could affect human health and the environment. Possible concerns/impacts are: A) Silver and other heavy metals B) Waste containing infectious agents C) Contamination of waste with cleaning solutions/lab waste D) Lead paint removal	N	These additional mitigations (See below). A) Use company qualified in site remediation to inspect/cleanup. B) Site inspection by qualified company to identify presence/scope of existing waste piles, stored waste and wastes buried onsite, plus all chemical hazards in buildings or onsite. Use experts experienced with lead screens, infectious agents, heavy metals, mercury, lead paint, mold, PCBs,.	Number of Inspections by company qualified in site remediation of chemical hazards from University buildings. Number of workers trained Amounts of waste identified and removed (kg) Amounts of cleanup waste generated and removed (kg)	Inspection reports for each University building sites Reports monthly during construction	Requirements specified in contracts Inspections by SDSU or representative of SDSU.

Activity	Identified Environmental Impacts	Are Impacts Potentially Significant?	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
	G) Mold removal		<p>C) Prepare for cleanup and removal, identify chemical and biological agents in waste, select pretreatment needs to stabilize waste for removal/transport and find suitable waste disposal site Prepare written safety procedures for workers.</p> <p>D) Cleanup and removal by qualified company, provide worker protective equipment and training for pretreatment of waste and cleanup/removal, including volatiles/dust emissions, lead paint dust, biological agents, heavy metals, mercury and materials with mold. Provide protections for the public/children, students, lecturers near site and restrict access to rehabilitation site.</p>			
Operation of New Construction	Environmental Impact of new construction	Y	Building to be designed in way to enhance the sustainability and reduce environmental footprint	n/a	n/a	SDSUP Staff Designers/Architects
Operation of Chemical Laboratories	Disposal of chemical Wastes	Y	Plan for the safe disposal of chemical waste to be developed	n/a	n/a	SDSUP Staff

Table 9-4: Health and Safety Monitoring Plan (HSMP)

Activity	Identified HS Risk	Probability	Consequence	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
Demolition works at Ilia State University.	University in operation and teachers and students put at risk from machinery and demolition works.	Medium	High	<ul style="list-style-type: none"> Demolition Safety plan to be produced by Demolition Contractor. Affected Buildings evacuated during demolition. Physical barriers to be placed to provide separation Security and Flag men to be placed at key locations. Carry out works during university break. 	Persons not put in danger. Demolition Safety plan being followed	Continuously Before commencement and Daily	Demolition Contractor, Employers Representatives
	Demolition workers put at risk from machinery and demolition works.	Medium	High	<ul style="list-style-type: none"> Demolition Safety plan to be produced by Demolition Contractor. Appropriate PPE to be used by workers. Communication to be used to communicate with machinery. 	Persons not put in danger and wearing correct PPE. Demolition Safety plan being followed	Continuously Before commencement and Daily	Demolition Contractor, Employers Representatives
	Building services affected such as gas heater from boiler room and air handling unit in basement.	Medium	Low	<ul style="list-style-type: none"> All services to be disconnected and reinstated prior to demolition works. 	Check the operation of services after date.	Before Demolition	Demolition Contractor, Employers Representatives
	Exposure to hazardous Asbestos materials	Medium	Medium	<ul style="list-style-type: none"> Workers to follow correct specified procedures and wear appropriate PPE. Avoid breaking of asbestos tiles during demolition. 	Inspection of demolition works	Before and During Demolition	Demolition Contractor, Employers Representatives

Activity	Identified HS Risk	Probability	Consequence	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
Construction works at Ilia State University.	University in operation, and teachers and students put at risk from machinery and construction works.	Medium	Medium	<ul style="list-style-type: none"> Site specific Safety plan to be produced by Construction Contractor. Physical barriers to be placed to provide separation of works. Security and Flag men to be placed at key locations. Carry out works during university break, or after hours. 	Persons not put in danger. Site specific Safety plan being followed	Continuously Before commencement and Weekly	Construction Contractor, Employers Representatives
	Construction workers put at risk from machinery and construction works.	Medium	Medium	<ul style="list-style-type: none"> Site specific work Safety plan to be produced by construction Contractor. Training on Safe work practice to be provided Daily safety toolbox talk at beginning of day. Appropriate PPE to be used by workers. Violations of HS best practices to be punished. 	Persons not put in danger and wearing correct PPE. Site specific Safety plan being followed Safety specification being adhered to.	Continuously Before commencement and Weekly	Construction Contractor, Employers Representatives
Rehabilitation works at various universities.	University in operation, and teachers and students put at risk from machinery and construction works.	Medium	Medium	<ul style="list-style-type: none"> Site specific Safety plan to be produced by Construction Contractor. Physical barriers to be placed to provide separation of works. Security and Flag men to be placed at key locations. Carry out works during university break. 	Persons not put in danger. Site specific Safety plan being followed	Continuously Before commencement and Weekly	Construction Contractor, Employers Representatives
	Construction workers put at risk from machinery and construction works.	Medium	Medium	<ul style="list-style-type: none"> Site specific work Safety plan to be produced by construction Contractor. Training on Safe work practice to be provided Daily safety toolbox talk at beginning of day. Appropriate PPE to be used by workers. Violations of HS best practices to be punished. 	Persons not put in danger and wearing correct PPE. Site specific Safety plan being followed Safety specification being adhered to.	Continuously Before commencement and Weekly	Construction Contractor, Employers Representatives

Activity	Identified HS Risk	Probability	Consequence	Mitigation Measure(s)	Monitoring Indicator(s)	Monitoring and Reporting Frequency	Responsible Party(ies)
Operation of Chemical Laboratories	Exposure of Students and Lecturers to hazardous chemicals	Medium	Medium	<ul style="list-style-type: none"> Fume cupboards and AHU units to be incorporated into design. 	Hazardous gas alarms recommended	n/a	SDSUP Staff Designers Contractors

Table 9-5: Social Monitoring Plan

Activity	Impacts, Risks identified	Stakeholders Affected	Mitigation, Consultation and Engagement	Responsibility
Construction and Rehabilitation.	Reduced access or disturbance of University staff due to construction and rehabilitation activities.	Teachers and Students (indirect) Construction Contractors Local university institutions.	<ul style="list-style-type: none"> Notice boards erected prior to construction to warn of reduced access. Access plans to be considered in design and contractor to implement Meeting with teachers prior to construction to inform of project to then pass information on to students. Assign responsible person from university institution to manage project grievances. 	SDSUP and SDSUP representatives. Local university institutions. Architects designers Construction Contractors
	Impact on society of new foreign institution and new constructions	General Public	Public information and awareness campaigns. Collaboration with Local Media agencies.	SDSUP and SDSUP representatives.
	Impact of new constructions	Local and National Governments	Permit to be submitted to municipality. Meeting to explain purpose and benefits of new constructions is recommended at conceptual stage.	SDSUP and SDSUP representatives. Local university institutions.
Operation of rehabilitated spaces.	Lack of disabled access for rehabilitated facilities. Creating social isolation.	Operational Teachers and Students	Work with local university institutions to find spaces which can be provided with disabled access.	SDSUP and SDSUP representatives. Local university institutions.
Hiring of Staff	Improper or unfair employment procedures used for workers	Construction Contractors General Public	Employment hiring procedures specified in this document to be followed.	SDSUP and SDSUP representatives. Construction Contractors
Hiring of University Lecturers	Social segregation and grievances related to	Local university institutions. General Public	Employment strategy and plan requires development	SDSUP and SDSUP representatives. Local university institutions.

10 LIST OF PREPARERS

Baseline data collection, field studies, alternatives analyses, impact assessment and development of EMMPs and completion of this ESMF was conducted by a specialized team of scientists and engineers from SDSU Georgia and “Saunders Group” Ltd. Backgrounds of principal members of the ESMF Team are highlighted below:

Ken Walsh, Ph.D. Dean of San Diego State University Georgia

Richard Saunders Managing Director, Saunders Group Ltd.

Alexandre Abzianidze, Environmental Supervisor, Saunders Group Ltd Mr. Alexandre has almost 10 years relevant experience in project management, environmental and social impact assessment, recently as an environmental specialist on two Millennium Challenge Georgia (MCG) fund infrastructure programs. He also served as an Environmental Specialist for the Georgian Oil and Gas Corporation initiatives funded by the MCG. Mr. Abzianidze earned his Bachelor’s and Master’s Degrees in Public Administration from Georgian Technical University.

International EHS Expert Praveen Puri 20 years’ experience in the field of Environment Health and Safety. Expertise in preparation of EHS plans, procedures, EHS Audits, conducting EHS Trainings, preparation of EHS plans, implementation of EHS plans, reporting of EHS data to management, EHS leadership. Provide international expertise and backstop report to review and advice on documents quality assurance, capacity building and training.

International Social Expert Vineet Pandey 10 years’ experience in international sphere with social development and resettlement. Provide international expertise and backstop report to review and advice on documents quality assurance capacity building and training.

II APPENDICES

Appendix A - Potential Environmental Impacts for Universities **Buildings**

Appendix B - Universities Facilities - Environmental Site-Screening **Analysis**

Appendix C - Inspection Site Visit Report for Rehabilitation of Universities **Facilities**

Appendix D - Standards (disabled persons) Figure **1,2,3**

Appendix E - Contact **Table**

Appendix F - Contractor Health and Safety **Specification**

11.1 Appendix A - Potential Environmental Impacts for Universities Buildings

Table II-I: Potential Environmental Impacts for Universities

IMPACT (Description of effect) and occurrence (construction/operation)	Significance Determination Filter ¹				Are Consequences Significant? (Y) or (N)
	1 Subject of IFC Requirements ¹	2 Subject of Community Concern	3 Pollution Prevention Potential ²	4 High Environmental Risk ³	
Receptor: Soils, Geology and Landscape					
Construction/rehabilitation phase:					
Visual disturbance due to construction/rehabilitation activities					N
Contamination of soils due to accidental spill of fuel/oil and/or other technical liquids			X		Y
Contamination of soil due to uncontrolled disposal of construction waste	X				Y
Land clearance activities (e.g. trench excavation) could generate some amount of the topsoil to be stored					N

¹Place an “X” in the appropriate column 1, 2, 3, or 4. Starting with Column 1, and proceeding to Column 4. A single “X” (the first one determined) is all that is required for a determination of significance.

² Subject to IFC requirements or specifically relevant legislation, regulation, and/or permit requirements. This will likely include effects associated with activities if (1) environmental regulations specify controls and conditions, (2) information must be provided to authorities, and/or (3) there may be periodic inspections or enforcement actions taken by authorities.

³ Based on technical and business conditions, such as cost-effectiveness, has a high-potential for pollution prevention or resource-use reduction

⁴ Associated with potential impact to the environment from high environmental loading due to one or more of the following: scale, magnitude, probability, duration (see attached worksheet – definitions used in determining environmental risk).

IMPACT (Description of effect) and occurrence (construction/operation)	Significance Determination Filter ¹				Are Consequences Significant? (Y) or (N)
	1 Subject of IFC Requirements ¹	2 Subject of Community Concern	3 Pollution Prevention Potential ²	4 High Environmental Risk ³	
Properly, handled and reused.					
Operation/Maintenance Phase:					
Receptor: water resources (surface and ground water)					
Construction/rehabilitation phase:					
Contamination of groundwater due to accidental spill of fuel/oil and/or other technical liquids	X				Y
Lack of on-site sanitary facilities for construction workers causing pollution to surface and groundwater					Y
Dumping of demolition debris or excess soil from land-leveling into watercourses	X				Y
Operation/Maintenance Phase:					
Not proper maintenance of ground water wells	X		X		N
Receptor: Air Quality					
IMPACT (Description of effect) and occurrence (construction/operation)					
Emissions from construction machinery, construction waste disposal etc. may increase the level of emission in the air and dust, especially under windy conditions.	X				Y

IMPACT (Description of effect) and occurrence (construction/operation)	Significance Determination Filter ¹				Are Consequences Significant? (Y) or (N)
	1 Subject of IFC Requirements ¹	2 Subject of Community Concern	3 Pollution Prevention Potential ²	4 High Environmental Risk ³	
Operation/Maintenance Phase:					
No significant impact on air quality during operation/maintenance					N/A
Receptor: Biodiversity					
Construction/rehabilitation phase:					
Construction process may cause removal of vegetation cover, changes in land use pattern. Proposed sites have been previously disturbed and utilized for residential use and there are no unique and/or important farmlands and/or flora species.					N
Operation/Maintenance Phase:					
Community, Socio-Economic, and Public Health (including cultural and historical assets, population, public health, temporary resettlement etc.)					
Population					
Construction/rehabilitation phase:					
Disturbance of Universities due to construction machinery, traffic and/or possible removal activities			X		Y
Load on the existing roads will increase due to construction machinery; traffic delays could affect local population within the vicinity of project					N
Traffic increase will generate noise, air emissions, and vibration that might impact on community safety, and cause public nuisance;					Y

IMPACT (Description of effect) and occurrence (construction/operation)	Significance Determination Filter ¹				Are Consequences Significant? (Y) or (N)
	1 Subject of IFC Requirements ¹	2 Subject of Community Concern	3 Pollution Prevention Potential ²	4 High Environmental Risk ³	
Temporary employment opportunities in the construction activities (beneficial impact)			X		Y
Operation/Maintenance Phase:					
Public Health					
Construction/rehabilitation phase:					
Construction activities might cause health impact to the workers (e.g. construction related accidents). Also see Air Quality, Population Receptors	X				Y
Inadequate disposal of construction wastes	X				Y
inadequate management of temporary sanitation facilities for workers could cause negative impact on public, students health during construction phase			X		Y
Universities buildings may contain lead and/or asbestos containing material. Improper handling and disposal of hazardous wastes at project site (e.g. asbestos) might cause negative health impact	X				Y
Demolition rubble creating breeding grounds for rats, standing water creating breeding grounds for insect and water-borne diseases					N

11.2 **Appendix B - Universities Facilities - Environmental Site-Screening Analysis**

APPENDIX 9.3: Universities Facilities -- Environmental Site-Screening Analysis

General Information

Project Name	Rehabilitation of Universities Buildings
Type of project	Rehabilitation
Location (district / region)	Tbilisi, Georgia
Ownership (private/state)	State
Surrounding Present Land Use	<input type="checkbox"/> Agriculture <input type="checkbox"/> Residential <input type="checkbox"/> Tourism <input type="checkbox"/> Industrial <input type="checkbox"/> Forest Land <input type="checkbox"/> Institutional <input type="checkbox"/> Commercial <input type="checkbox"/> Open Spaces <input type="checkbox"/> Others, pls. Specify : Urban Environment

General Construction Activities

Is there and impact because / to	Construction	Operation and Maintenance
Construction / rehabilitation of structures and buildings?	Yes	No
Construction / rehabilitation of access roads?	Yes	YES
Temporary sites used for construction works or housing of construction workers?	Yes	No
Significant risk associated with waste transport?	Yes	No
Adequate waste disposal facilities?	No	No
Trenching or excavation?	No	No
Require offsite overburden / waste disposal or borrow pits >1.0 ton?	Yes	No

Is there and impact because / to	Construction	Operation and Maintenance
Require the use of dangerous / hazardous substances (e.g. paints, oil, lubricants, chemicals; pls. Specify)?	No	No
Require a collection and disposal system for hazardous waste?	Yes	No
Increase vehicle trips > 20% or cause substantial congestion?	Yes	No
Cause or contribute to safety hazards?	Yes	No
Inadequate access or emergency access for anticipated volume of people or traffic?	No	No
Involve actions that will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)?	No	No

Geology and Soils

Is there and impact because / to	Construction	Operation and Maintenance
Conducted near geologic hazards (faults, landslides, liquefaction, un-engineered fill, etc.)?	No	No
Cause subsidence, landslides or erosion?	No	No
Potential impact to soil – e.g., movement of soil, binding or bonding of soils, compressive strength of soils?	Yes	No
Management of excess soil or spoil material?	No	No
Physical degradation of the local environment (e.g., need for revegetation)?	No	No

Water Resources

Is there and impact because / to	Construction	Operation and Maintenance
Flooding or extreme or adverse climatic conditions that might cause a break or malfunction in the system?	No	No
River, stream or lake onsite or within 30 meters of construction?	No	No
Wetlands crossed or affected by the project?	No	No

Quality or quantity of groundwater (aquifers) or public water supplies (e.g., wells)?	Yes	No
---	-----	----

Is there and impact because / to	Construction	Operation and Maintenance
Quality or quantity of surface water?	Yes	No
Run-off as a result of the hardening of surfaces, or loss of the sponge effect of vegetation, that might affect sensitive areas?	No	No

Biological Resources

Is there and impact because / to	Construction	Operation and Maintenance
Important, high quality or scarce resources that could be affected by the project?	No	No
Located in a Protected Area or Wildlife Corridor?	No	No
Inundate or remove wetland habitats?	No	No
Diversity of plant communities?	No	No
Natural replenishment of existing species?	No	No
Overexploitation of biological resources?	No	No
Vegetation removal or construction in wetlands or riparian areas > 1.0 hectare?	No	No
Use of pesticides / rodenticides, insecticides, or herbicides > 1.0 hectare?	No	No

Socioeconomic Issues

Is there and impact because / to	Construction	Operation and Maintenance
Existing settlements in the vicinity of the proposed project?	Yes	No
Existing land uses on or around the project that could be affected by the project?	No	No
Areas on or around the location of the project that are already subject to pollution or environmental damage?	No	No
Permanent or temporary change in land use, land cover or topography including increases in intensity of land use?	Yes	No
Social infrastructures located in or near the project area (e.g.,	No	No

Is there and impact because / to	Construction	Operation and Maintenance
schools, health centers / clinics, places of worship, others?		
Social acceptability of the project (community, government, non-governmental organizations)?	No	No
Visual and odor effects of waste sites?	Yes	No
Risk to the community and the local environment should the facility break down?	No	No
Potential conflict with adjacent land uses?	No	No
Non-compliance with existing codes, plans, permits or design factors?	No	No
Construction in national park or designated recreational area?	No	No
Relocation of >10 individuals for +6 months?	Yes	No
Interrupt necessary utility or municipal service > 10 individuals for + 6 months?	No	No
Noise levels > 5 decibels for + 3 months?	Yes	No
Adverse visual impact when compared to the surrounding natural landscape?	Yes	No
Affect future land uses on or around the location?	No	No
Are there any areas on or around the location that are densely populated or built-up, which could be affected by the project?	No	No
Highly visible to many people?	No	No
Lead to pressure for consequential project that could have significant impact on the environment (e.g. more housing, new roads, new supporting industries or utilities, etc.)?	No	No
Cumulative effects due to proximity to other existing or planned projects with similar effects?	No	No
Social changes, for example, in demography, traditional lifestyles, and employment?	No	No

Cultural Issues

Is there and impact because / to	Construction	Operation and Maintenance
Prehistoric, historic, or paleontological resources within 30 meters of construction?	No	No
Unique cultural or ethnic values at the site?	No	No

Public Health issues

Will the project affect...	Construction	Operation and Maintenance
Human or community health or welfare?	Yes	Yes
The quality or toxicity of air, water, foodstuffs and other products consumed by humans?	Yes	No
Morbidity or mortality of individuals, communities or populations by exposure to pollution?	Yes	No
Occurrence or distribution of disease vectors including insects?	No	Yes
Vulnerability of individuals, communities or populations to disease?	No	No
Individuals' sense of personal security?	No	No
Community cohesion and identity?	No	No
Cultural identity and associations?	No	No
Minority rights?	No	No
Facilities conditions?	Yes	No
Employment and quality of employment?	Yes	No
Economic conditions?	No	No
Social institutions?	No	No
Cause accidents that could affect human health or the environment?	No	No
From explosions, spillages, fires etc.?	No	No
From storage, handling, use or production of hazardous or toxic substances?	Yes	No
Be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslip, etc.)?	No	No
Vulnerable groups of people who could be affected by the project	No	No

Air Quality

Is there and impact because / to	Construction	Operation and Maintenance
Onsite air pollutant emissions?	Yes	No
Violation of applicable air pollutant emissions or ambient concentration standards?	No	No
Vehicle traffic during construction or operation?	Yes	No
Demolition or blasting for construction?	No	No
Odor during construction or operation?	Yes	No
Release pollutants or any hazardous, toxic or noxious substances to air?	No	No
Emissions from combustion of fossil fuels from stationary or mobile sources?	Yes	No
Emissions from materials handling including storage or transport?	No	No
Emissions from construction activities including plant and equipment?	Yes	No
Dust or odors from handling of materials including construction materials, sewage and waste?	Yes	No
Emissions from burning of waste in open air (e.g. slash material, construction debris)?	Yes	No

Noise and Vibration

Is there and impact because / to	Construction	Operation and Maintenance
Noise and vibration or release of light, heat energy or electromagnetic radiation?	Yes	No
From operation of equipment (e.g. engines, ventilation plant, crushers)?	Yes	No
From construction or demolition?	Yes	No
From blasting or piling?	No	No
From construction or operational traffic?	Yes	No
From sources of electromagnetic radiation?	No	No

11.3 Appendix C - Inspection Site Visit Report for Rehabilitation of Universities Facilities

Subject:

SDSUP Universities facilities Environmental Inspection Report of Tbilisi State University, Library, Ilia State University Tbilisi, Georgia (October 02, 2014) and GTU Georgia Technical University (October 09, 2014)

Dates: October 02, 2014 and October 09, 2014

Objectives

Environmental inspection visits and staff interviews were conducted at three Universities facilities sites in Tbilisi, Georgia:

Site 1:

-- Ilia State University,

Site 2:

-- Tbilisi State University, Library

Site 3:

--Georgian Technical University (II and VIII facilities)

(I) Inspection visit of University facilities are selected for renovation/rehabilitation. Inspection considering the following environmental issues: on-site waste disposal facilities, lead paint, mercury waste, potential for radioactivity, mold in wet basements or in walls from leaking roofs, pollution at separate power supply facility and from boiler house/generator room/transformer storage sites.

Site Visit Results:

The site visit included discussions with management and site inspections. Site I Ilia State University the site is a large area (approx. hundred meters wide in both directions). There is staff at the faculty; Interviews were conducted with the logistic manager of ISU.

The following are responses and inspection results:

- No mold was seen and none is expected on walls or in the buildings. There was a concern with moisture from the leaking ceiling, but the roof was repaired. There is no moisture in the facility, even in the cellar. Groundwater is not a problem.
- There is the asbestos roofing on the Ilia State University Storage.
- There is the generator for electric power.(Ilia State University)
- Paint to be tested for lead contenting (Ilia State University, Tbilisi State University)

TRIP&INSPECTIONREPORT—October 02, 2014 and October 09,2014

Ken Walsh (SDASU Georgia),
Richard Saunders (Saunders Group),
Alexandre Abzianidze (Saunders Group)

OVERALLRESULTSOFINspeCTIONS

The table below presents the overall results of the sites inspections. One fact should be pointed out with respect to these particular units: They are all functioning and fully operable universities, with students, lecturers and administration.

Universities (facilities) FOR VISUAL INSPECTION

	Building	Appr. Size- m2	Year Of Cons.	Comments
1	<u>Ilia State University (ISU)</u> Address: Cholokashvili Street #3/5	2000 m2	1980?	<p>Several buildings require to be demolished. Included buildings:</p> <ul style="list-style-type: none"> • Eastern block end of building up to stairwell. Buiding contains air handling equipment in basement. Roof is steel. • West block storage area, wire fence walls and asbestos roof tiles. • West block boiler house. Gas boiler plant x2 flat butynol type roof. Some fibreglass insulation. <p>Several species of the tress are located on the yard, which to be cut. (Pine trees, mulberry tree, plane-trees.)</p> <p>Statue of Ilia requires relocation from current position.</p>
2	<u>Tbilisi State University (TSU)</u> Address: ilia Tchavtchavadze avenue #3 II campus (Classrooms, Lecture Hall, Chemistry and Physics Labs, Program offices, Laboratory Storerooms and Technical offices)	1000 m2	1950?	<p>University Building does not ensure the accessibility for disabled people.</p> <p>Painting in the labs to be tested for lead content.</p> <p>External chemical exhaust ducting requires replacement.</p> <p>Some water damage noted to ceiling in lower lab. Reported as water pipe leakage on upper floor.</p> <p>A Number of unidentified chemicals to be removed from laboratory units.</p>

	Building	Appr. Size- M²	Year Of Cons.	Comments
3	<u>Tbilisi State University (TSU)</u> Address: University street Testing facility Dean's office, Staff office, English/STEM offices, English/STEM classrooms,	800 m ²	1970?	One elevator operates, exact location of entry was unclear. Painting to be tested for lead content. Ceiling tiles to be checked for asbestos. (what type of materials are used), Possibility of mezzanine floor discussed.
	<u>Tbilisi State University (TSU)</u> Address: University street Main building (West side of road) Conference/Meeting rooms, Laboratories, Library, IT rooms	800 m ²	1970?	University Building does not ensure the accessibility for disabled people, Cracks and Moisture are present on the walls Fire fighting equipments are available. Painting to be tested for lead content. ,Turkish Style" toilet is arranged, bad odour present.
	<u>Georgia Technical University</u> Address: Kostava Street #77 VIII facility III floor The Department of Electrical Engineering and Electronics rooms 311,313,316, 317	500 m ² ?	1980?	University facilities does not ensure the accessibility for disabled people nowhere, Painting to be tested for lead content, Cracks and Moisture are available on the walls and behind the ceiling. , ,Turkish Style" toilet is arranged, bad odour present. Fire emergency exit plans available. Fire extinguishers are present but expired.

	Building	Appr. Size- M2	Year Of Cons.	Comments
	<p><u>Georgia Technical University</u> Address: Kostava No:? II facility 5 floor 2 Laboratories</p>	<p>200 m²</p>	<p>1950?</p>	<p>Some work benches have what appears to be lionel coverings.</p> <p>No disabled access. Very narrow elevator is operates inside facility. Very difficult and costly to achieve disabled access.</p> <p>Ducting for chemical hood in bad state. Floor access panel wa damped and open. (raised floor)</p>

ADDITIONAL INFORMATION AND PHOTOS OF EACH SITE

Ilia University Cholokashvili Street #3/5



Asbestos roofing of the storage



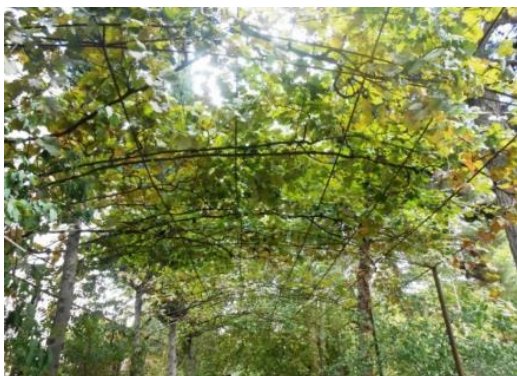
Asbestos roofing of the storage



Ilia University Yard - Parking Area



Ilia University Yard



Grape in the yard



Generator is just put in the yard



Pine trees



Pine trees (permission for cutting is required)



The Attic



Metal Roof



Stored the ceiling tiles in the attic



Staircases



The corridor



The basement



Gas boiler should be relocated



Gas boiler should be relocated

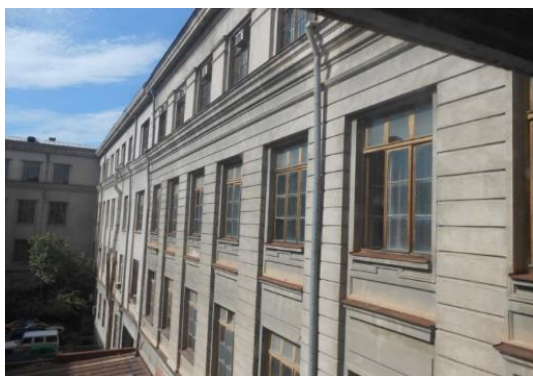


Ilia Tchavtchavadze Statuette should be relocated

GPS Coordinates (UTM/WGS84): X=479155.95 ;Y=4617876.81

Person Interviewed: Ilia University Logistic Manager

Tbilisi State University (TSU) Ilia Tchavtchavadze avenue #3



Façade



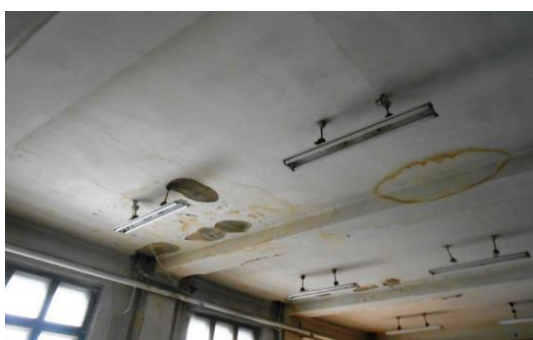
Back façade of Tbilisi State University



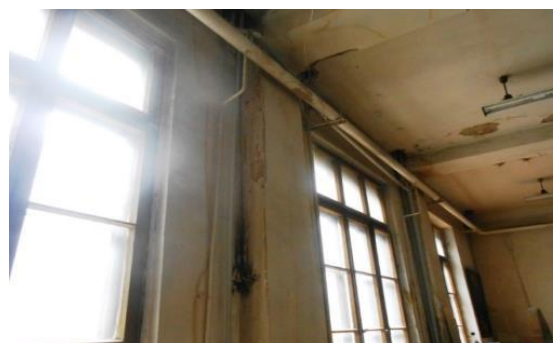
Organic Chemistry Laboratory



Organic Chemistry Laboratory Equipment



Leakage on the ceiling



Steel pipes for lab heating, leakage is occurred

Conclusion: Performance of renovation work is reasonable.

GPS Coordinates (UTM/WGS84): X=481515.95 ;Y=4617665.58

Person Interviewed: Tbilisi State University authorized person:

Tbilisi State University (TSU) (Library Territory)
University Street



The Hall



The elevator is abolished on 6th floor



Piece of Ceiling tile for testing



Ceiling tiles arrangement



Stairs, NO accessibility for disabled people



One elevator operates



Facade of Library building



Entrance, NO accessibility for disabled people



The corridor



Electric Power Distribution Box



The classroom



Cracks on the walls



Mold and Moisture on the wall



Stairs, NO accessibility for disabled people



Domestic animal (Cow) is available on the TSU Library territory

Conclusion: Building is structurally sound, performance of renovation work is reasonable.
GPS Coordinates (UTM/WGS84): X= 477069.45;Y= 4618365.00

Person Interviewed: Tbilisi State University authorized person

**Georgia Technical University (GTU) VIII facility (The Department of Electrical Engineering and Electronics)
Kostava Street #77**



Breaker Room



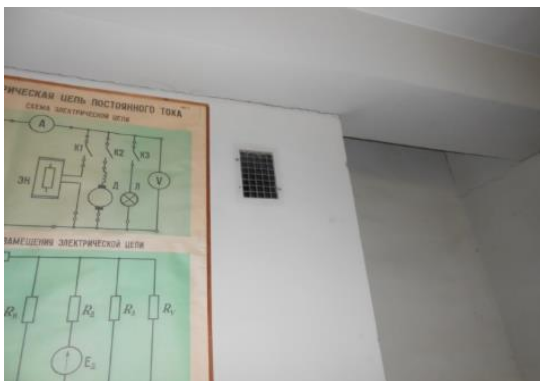
Laboratory



Laboratory Equipments



Laboratory Equipments



Ventilation shaft (not operating)



Main entrance, NO accessibility for disabled people



Elevators work



Inside Stairs, NO accessibility for disabled people



Fire extinguisher is available (expired)



„Turkish style” Toilet



Leakage on the wall and ceiling is occurred



Brick Partition Wall between the laboratories



Obstructions for disabled people



Obstructions for disabled people to get the washroom



Laboratory room



Leakage behind the ceiling

Georgia Technical University (GTU) II facility (Chemical Laboratories)
Kostava Street #74



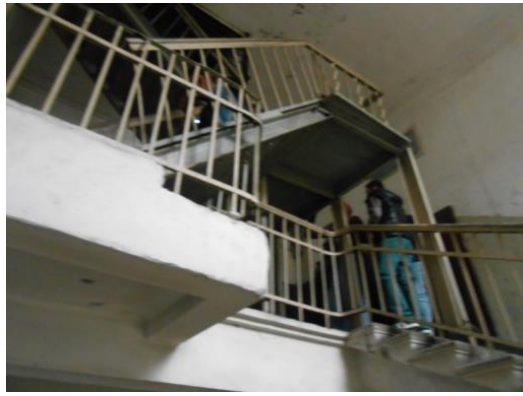
Main entrance, NO accessibility for disabled people



The Hall



Inside main Stairs, NO accessibility for disabled people



Inside stairs



Very Narrow Elevator



Obstruction for disabled people



Laboratory of Physical-Chemical Methods of Analysis



Illuminations in laboratory



Laboratory substances are stored in the cupboard



Corroded steel pipes in laboratory



Ventilation arranged in laboratory



Ventilation outside of facility



Covering of table with unknown material (it seems linoleum)



Tbilisi State University (TSU)
Ilia Tchavtchavadze avenue #3



Deans office

11.4 Appendix D - Standards (disabled persons)
Figure 1,2,3

BUILDING FOR DISABLED PEOPLE

An environment for disabled people needs to be designed to accommodate wheelchairs and allow sufficient space for moving around in safety (see ①-④ and ⑨-⑫ for dimensions and area requirements). Example door and corridor widths are given in ⑬-⑯. All switches, handles, window fittings, telephone points, paper roll or towel holders, lift controls, etc. must be within reach of an outstretched arm ⑨-⑫. The layout of the WC, in particular, requires careful planning: assess how many doors, light switches etc. are needed. Consider technical aids (e.g. magnetic catches on doors and remote controls).

Access paths to the building should be 1.20-2.00 m wide and be as short as possible. Ramps should ideally be straight, with a maximum incline of 5-7%, and should be no longer than 6 m ⑤. The ramp width between the handrails should be 1.20 m. Corridors should be at least 1.30 m (preferably 2.00 m) wide; clear opening of doors, 0.95 m; height of light switches and electrical sockets, 1.00-1.05 m (use switches and control devices which have large buttons or surfaces).

During urban planning, consideration should also be given to providing wheelchair users with easy access to general amenities such as supermarkets, restaurants, post offices, pharmacies, doctors' surgeries, car parks, public transport etc.

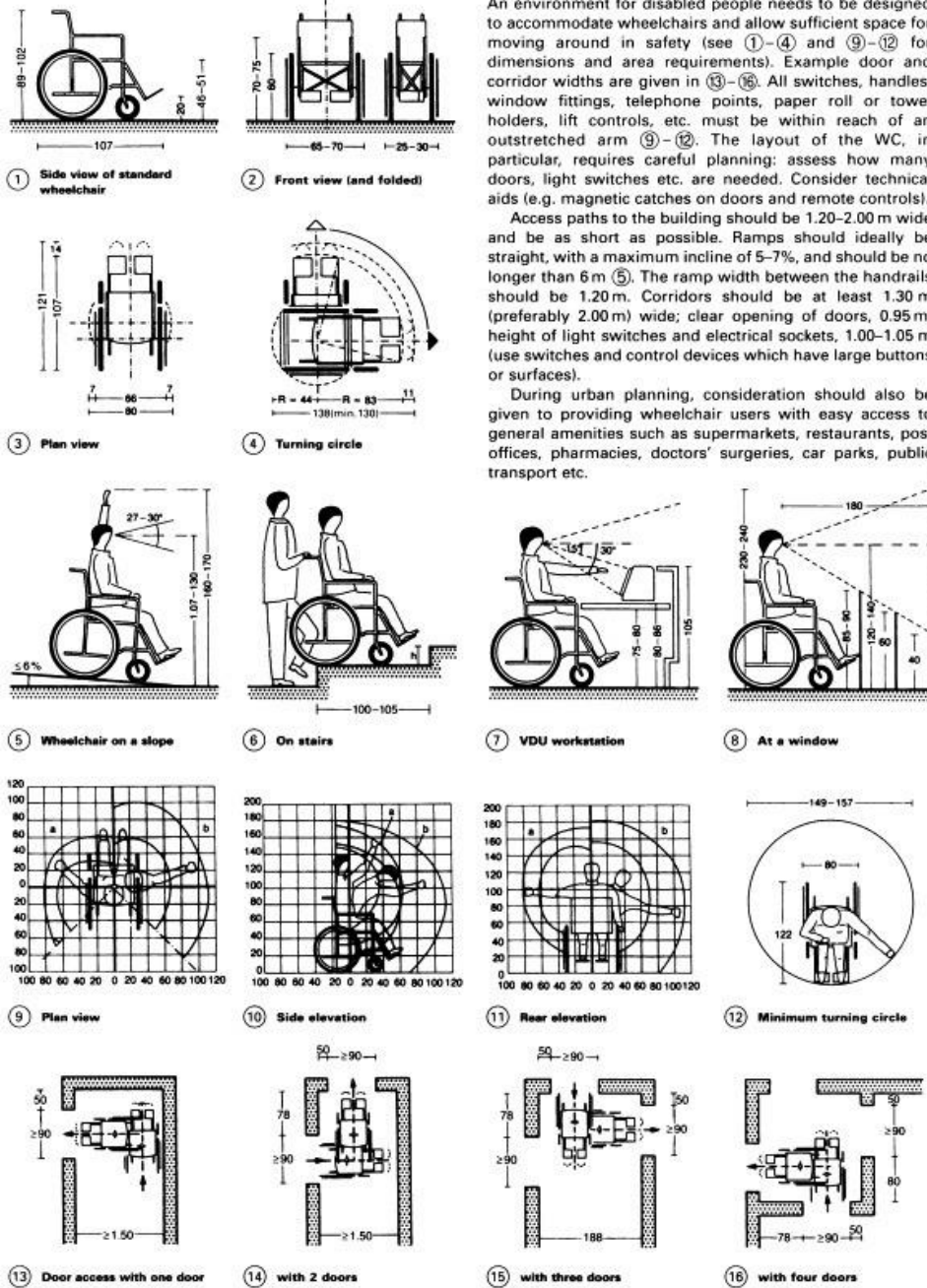
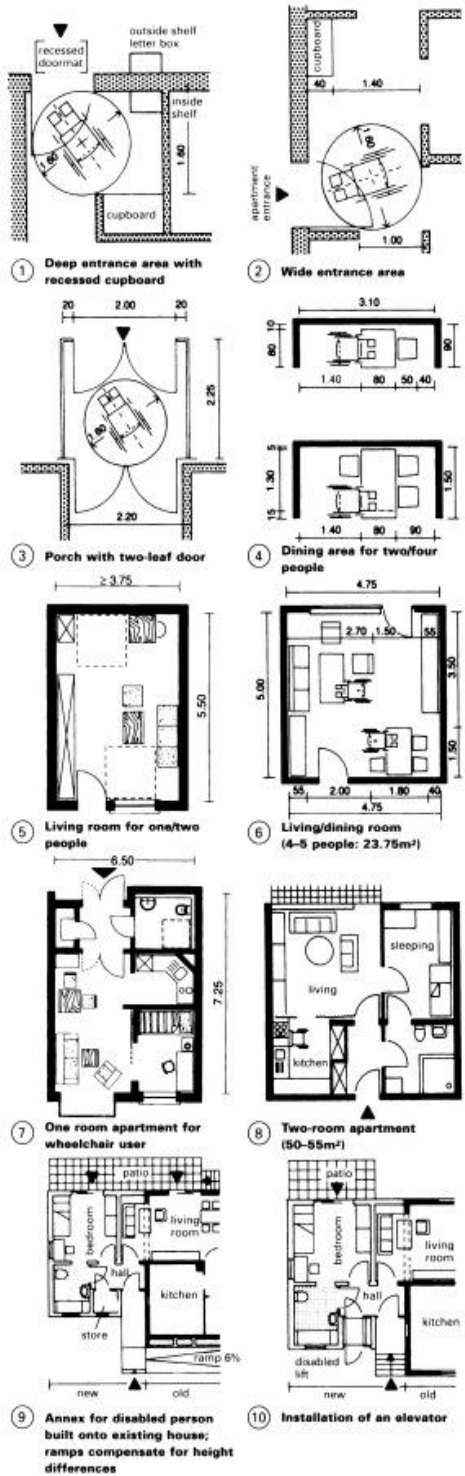


Figure 11-1: Extract of disabled access standards. (1/3)

BUILDING FOR DISABLED PEOPLE

Houses and Apartments

HOUSES AND RESIDENTIAL BUILDINGS



Accessibility: In the rented residential sector, access via corridors is the most common layout. This enables large numbers of angles and corners to be avoided; a straight main corridor is preferable. The entrance area should be of an appropriate size, with shelves and coat hooks planned in. The minimum area of entrance halls is 1.50 x 1.50 m, and 1.70 x 1.60 m for a porch with a single-leaf door. (It should be noted, however, that minimum recommended dimensions are often not very generous and in practice can prove to be too small.) For blind residents it is important to have an intercom system at the apartment door and the building's main entrance.

Living area: Living rooms should allow adequate free movement for wheelchair users and have sufficient space for two or three more visitors' wheelchairs. For blind people, additional space should be provided for their literature and tape equipment: Braille books and newspapers are roughly three times bulkier than their printed equivalents. Single disabled people need more space than those in shared households. In apartments, recommended minimum areas for living rooms with a dining area are: 22 m² for one person; 24 m² for two to four people; 26 m² for five; and 28 m² for six. The minimum room width is 3.75 m for a one- or two-person home → ⑤.

If an additional study area is to be incorporated, the floor area must be increased by at least 2 m².

Kitchen: Ergonomic planning is of great importance in the kitchen to allow disabled people to utilise their capabilities to the full. The arrangement of the storage, preparation, cooking and washing areas should be convenient and streamlined. The cooker, main work surface and taps should be placed as close together as possible. Storage spaces must be accessible to wheelchair users (i.e. no high cupboards). The reach of the arm is roughly 600 mm horizontally and between 400 and 1400 mm vertically. The optimal working height must be adapted to suit each disabled person, within the range 750-900 mm, so it is desirable to have a simple adjustment mechanism.

Single-family houses: The single-storey family house with garden is often the preferred form of residence for disabled people. Their requirements can be satisfied easily in this type of accommodation: i.e. no steps at the entrance and no difference in level between the individual rooms and the garden; rooms can be connected without doors and custom designed to best suit the residents. However, two-storey family houses can also be suitable, even for wheelchair users, if a suitable means of moving between floors (vertical elevator or stair lift) is incorporated.

Multi-apartment dwellings: The grouping of apartments in multiple occupancy dwellings is a housing solution that offers disabled people an environment which is both sociable and supportive. In economic terms, it is rarely possible to convert ordinary apartments into adequate homes for the severely disabled, so they need to be included at the preliminary planning stage. It is once again preferable to situate apartments for disabled people at ground-floor level to avoid the necessity of installing lifts/elevators.

Figure 11-2: Extract of disabled access standards. (2/3)

BUILDING FOR DISABLED PEOPLE

Conversions

The needs of disabled people are often not taken into account sufficiently in new building projects, so it is frequently necessary to convert existing residential units into appropriate apartments. Suitable buildings have a generous floor area and offer simple opportunities for alteration in accordance with the occupant's needs. The conversion measures required can include: alterations to the plan, including building work (which is limited by structural considerations, the type of construction and floor area); alterations to services, bathroom and kitchen fittings etc.; and supplementary measures, such as the installation of ramps, lifts and additional electrical equipment. Attention should also be paid to access from the street, any floor coverings which require changing and the creation of a car parking space with ample allowances for wheelchair users. The extent of the alterations depends on the degree of disability of the residents and the specific activity within the apartment. As a result, the conversion measures will often be specified in conjunction with the disabled person and tailored to his or her needs.

Prior to commencing conversion work, the plan and structure of the existing apartment should be examined carefully. Ground floor apartments of an adequate size are particularly suitable because additional services (passing through the basement) can be installed more cheaply and entrance modifications are easier.

Extent of the conversion work: Three groups of disabled people can be identified, each with corresponding requirements:

- Disabled members of a family (husbands, wives, children) who go to work or school outside the home. Alterations in such cases relate to access to the house/apartment, furnishings and provision of sufficient freedom of movement in the living and sleeping areas, and specially adapted facilities in the bathroom/WC.
- Disabled persons who carry out household tasks. Here, additional alterations must be made to the kitchen and elsewhere to simplify work in the home.
- Severely disabled persons who are only partially independent, if at all, and thus require permanent care. Extra space must be provided for manoeuvring wheelchairs and facilities to aid the work of carers should be added. Note that self-propelled wheelchairs require most space.

Comparison of sizes of living area: While apartments for the elderly are no larger in area than standard apartments (any changes consisting only of adjusting door widths and tailoring the functional areas), living areas for disabled people need to be increased appropriately, particularly for wheelchair users and the visually impaired. Regulations often require additional rooms in these apartments as well as a modified bathroom with WC for wheelchair users.

Recommended values for habitable areas are: 45–50 m² for a one-person household; 50–55 m² for two people.

apartment	for disabled (m ²)	standard (m ²)
1 person studio	49.99	40.46
2 person apartment	67.69	56.47
3 person apartment	94.80	79.74
4 person apartment	95.26	80.50
1 person apartment	53.70	43.93
3 person apartment	101.17	86.38
4 person apartment	103.23	88.33

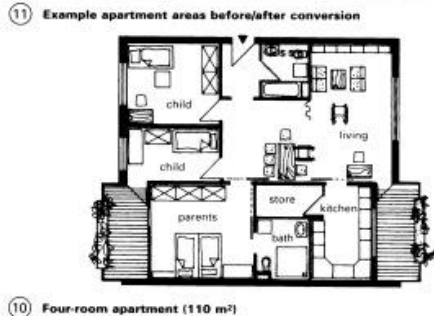
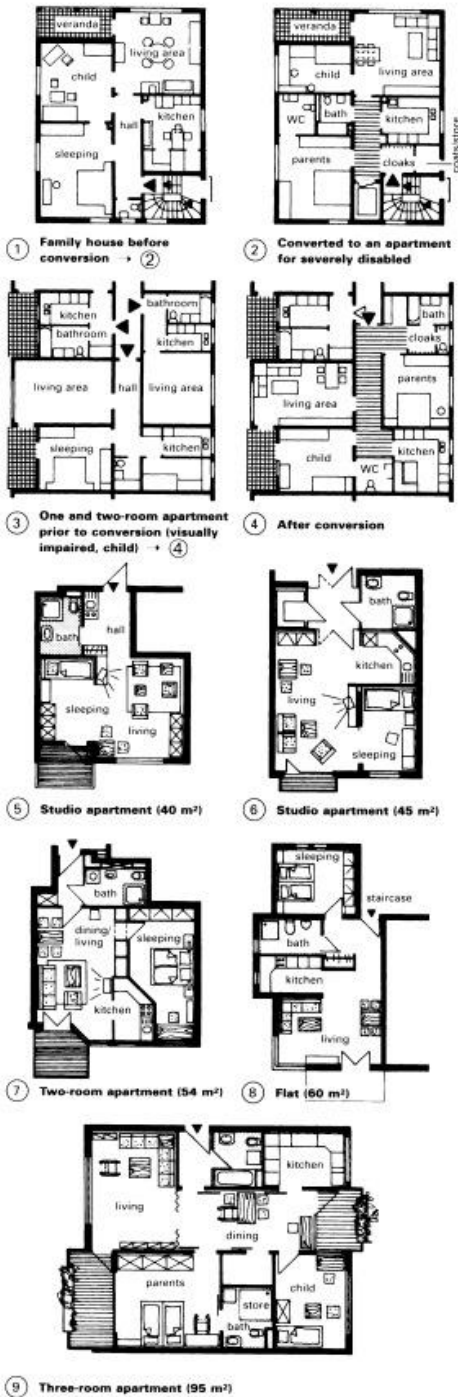


Figure I I-3: Extract of disabled access standards. (3/3)

11.5 Appendix E - Contact Table

SDSUP Environmental and Social Management Framework (ESMF)

Organization	Name	Designation	Email	Mobile
MCC/MCA				
SDSU	Ken Walsh	SDSUP Dean	kwalsh@mail.sdsu.edu	558174414
	T.B.A.	SDSUP Rehabilitation and Construction PM		
JV-SG-V (EHSS Consultant)	Richard Saunders	EHSS Project Coordinator	richard@engsg.com	591945959
	Alexandre Abzianidze	EHSS Specialist	alexandre@saundgroup.com	579060199
Ilia State University	Nino Dvalidze	Vice Rector	nino.dvalidze@iliauni.edu.ge	577233497
Tbilisi State University	Ramaz Botchorishvili	Dean, Faculty of Exact and Natural Sciences,	ramaz.botchorishvili@tsu.ge	577553372
Georgian Technical University	Otar Zumburidze	Head of International Affairs and Standards Office	o_zumburidze@gtu.ge	599301551
<i>Supervisor</i>				
<i>Designer / Architect</i>				
<i>Construction Contractor</i>				

11.6 **Appendix F - Contractor Health and Safety Specification**



***SDSU Georgia Project: Construction
Renovation/rehabilitation of Universities facilities
(Ilia State University, Tbilisi State University and
Georgian Technical University)***

Health and Safety Specification

October 2014

Prepared by:



Saunders Group Infrastructure Consultants, Georgia

Voyants Solutions Private Limited, India

Saunders Group Ltd. – D. Agmashenebeli Ave. 154 Floor 9, Tbilisi 0112 Georgia

P. (+995 32) 218 2112 E.info@engsg.com www.engSG.com

Prepared For:

San Diego State University Research Foundation (SDSURF/foundation)

5250 Campanile Drive

San Diego, California (USA) 92182-1941

Approvals

	Name	Signature	Date
Prepared	Alexandre Abzianidze		10 Oct 2014
Checked	Richard Saunders		13 Oct 2014
Checked	Dr. Ashish Rawat		13 Oct 2014
Approved	SDSU Dean Ken Walsh		13 Oct 2014

Document Control

Revision	Date	details	Prepared	Checked	Checked	Approved
70% DRAFT	10 Oct 2014	Draft Issued for comment	AA	RDS	AR	KW

Notes:

1. The signatures above certify that this document has been checked and approved for issue.
2. This document is protected by international copyright laws.
3. This document is based on information provided up until date of publishing. The Author reserves the right to make any changes as new information becomes apparent.
4. This report has been produced by Saunders Group Ltd and Voyants Soutions Pvt ltd under instruction from our Client. It is solely for our Clients use for the purpose for which it was intended in accordance with the agreed scope of work. Data or opinions contained in it may not be used in other contexts or for any other purpose with our prior review and agreement.
5. If this report is to be referenced or copied in any way by any person, then it must be reproduced in total, such that no part of this report can be taken out of context. Any use or reference contrary to the above is at the persons own risk.

TABLE OF CONTENTS

1	PURPOSE	5
2	REGULATIONS AND CODES OF PRACTICE.....	6
3	CONTRACTOR'S SAFETY POLICY	7
3.1	Responsibility	7
3.2	Contractor's Labor	7
3.3	Authority	7
3.4	Reporting.....	7
3.5	Safety Meeting.....	7
4	SITE RULES.....	8
4.1	Introduction	8
4.2	Personnel Control.....	8
4.3	Control of Construction Equipment	8
4.4	Contractor Area and Housekeeping.....	8
4.5	Smoking.....	9
4.6	Emergency Ambulance and First Aid	9
4.7	4.7. Environmental Protection Policy.....	9
4.8	General Rules	10
5	SAFETY RULES	11
5.1	Introduction	11
5.2	Rules of Conduct.....	11
5.3	Reporting.....	11
5.4	Housekeeping.....	11
5.5	Personal Protective Devices	12
5.6	Machinery and Tool Guards.....	12
5.7	Scaffolds	13
5.8	Ladders.....	13
5.9	Excavations and Trenches	13
5.10	Floor Openings, Holes and Edges.....	14
5.11	Wall Openings.....	14
5.12	Stairways	14
5.13	Hand Tools.....	15
5.14	5.14. Power Tools	15
5.15	Explosive-Actuated Tools.....	15
5.16	Electrical Extension Cords	15
5.17	Work on Electrical Installations	15
5.18	Welding.....	15
5.19	Compressed Gas Cylinders	16
5.20	Explosion and Gas Hazards.....	16
5.21	Fuelling Equipment.....	17
5.22	Vehicle Operation	17
5.23	Crane Operation	17
5.24	Man Baskets and Boatswain's Chairs.	18
5.25	Work with Ionizing Radiation.....	18
5.26	Work with Asbestos Materials.....	18
5.27	Work in Enclosed Areas.....	19
6	FIRE PREVENTION.....	20
6.1	Introduction	20
6.2	Objectives.....	20

6.3	Prevention of Fires	20
6.4	Early Fire Detection.....	20
6.5	Control of Fire Diffusion	20
6.6	Extinguish the Fire.....	20
6.7	Fire Reporting.....	20
6.8	Supervision of Fires	20
6.9	Fire Extinguishers.....	20
6.10	Flammable Liquid Storage.....	21
6.11	Heaters.....	22
7	HEALTHS, SAFETY & ENVIRONMENT FOR BLASTING, PAINTING AND COATING EQUIPMENT	23
7.1	General.....	23
7.2	Precautions for Blasting, Painting and Coating Equipment	23
7.3	Safety Precautions for Mixing, Handling and Storage.....	23
7.4	Health	24
7.5	7.5. Environmental Protection Blasting, Painting and Coating Equipment	24
8	SECURITY	25
8.1	Introduction	25
8.2	Identification.....	25
8.3	Visitors	25
8.4	Movement of Material	25
8.5	Fencing.....	25
8.6	Material Storage	25
8.7	Lost/Found Objects.....	25
8.8	Cameras	25
9	CONTRACTOR'S SELF APPRAISAL SYSTEM	26
10	VIOLATIONS.....	27

I PURPOSE

The purpose of this safety specification is to ensure that each person employed on the site, is aware of the site safety, security, health, welfare and environmental regulations, and shall make a positive contribution to keep the site safe, clean and healthy to the benefit of all.

2 REGULATIONS AND CODES OF PRACTICE

- 2.1.1 All Works shall be undertaken strictly in accordance with all legal and statutory requirements of the applicable country including safety regulations of any local government or public authority and those of Employer.
- 2.1.2 If local standard specifications exist, codes or regulations of a like authority, which cover any aspect of the execution of the Works, the Works shall, in the absence of any other provisions, be carried out in accordance therewith.
- 2.1.3 In the absence of such specifications or regulations the Works shall be carried out in accordance with good engineering practice and with due regard to safety.
- 2.1.4 Nothing in these instructions or practices absolves Contractor from full observance of all relevant statutory regulations. The legal responsibility for the health and safety of Contractor's employees and observance of all statutory regulations cannot be passed on to the Employer.

3 CONTRACTOR'S SAFETY POLICY

3.1 Responsibility

- 3.1.1 Contractor will appoint a competent person as Safety Supervisor, whose duty shall be to enforce Contractor and/or Employer's safety requirements in accordance with the Contract.
- 3.1.2 Contractor shall appoint and nominate a competent person as Site Safety Supervisor, whose full time (if more than 50 employees on site) duty shall be the prevention of accidents, and his name shall be displayed and submitted to Employer.
- 3.1.3 Safety personnel and/or supervision will coordinate employee and equipment safety to assure that all reasonable precautions are exercised to furnish a work place free of recognized hazards, and ensure full compliance of safety rules and regulations of the Contractor.
- 3.1.4 The Contractor is responsible for informing all Subcontractors of their responsibilities with regard to safety, health and environment.
- 3.1.5 The Contractor and Contractor's employees will confine themselves to the site of work only, and they will go to and from the job site by routes designated by Employer.
- 3.1.6 The Contractor shall prepare and shall furnish to all Contractor and Subcontractor personnel a safety pocket booklet outlining the safety requirements.
- 3.1.7 Contractor shall display all statutory notices and maintain on Site all registers applicable to his work. Contractor shall inform the local authorities when work starts on Site, when this is a legal requirement or custom.

3.2 Contractor's Labor

- 3.2.1 It is a requirement that safety requirements be communicated to Contractor's labour.
- 3.2.2 This must be done through an instruction program on or before arrival at Site, through regular tool box meetings, through safety booklets furnished to all personnel, and through daily communication between Contractor's supervision and all personnel on site.
- 3.2.3 The Contractor shall ensure that this communication is done in a language which is understandable for every employee working at Site.
- 3.2.4 Attendance to this program as well as the date and subject of the tool box meetings shall be recorded and maintained accessible for Employer audit.

3.3 Authority

- 3.3.1. Employer requires that the Contractor's line management will have full authority to correct any unsafe condition. Contractor's safety personnel shall have authority to stop work and direct remedial action relative to any unsafe condition.
- 3.3.2. Similarly, Employer's representative and safety personnel shall have authority to stop work and direct remedial action.

3.4 Reporting

Reporting shall be done by the Contractor in line with Employer's standard procedure for record keeping of occupational injuries and illnesses.

3.5 Safety Meeting

Contractor shall hold Safety meetings, at least once a month, to review all safety aspects of the Works. Records of attendance shall be kept for audit by Employer.

4 SITE RULES

4.1 Introduction

The rules included in this section shall be strictly followed by the Contractor.

4.2 Personnel Control

- 4.2.1 *Daily Labor Reports.* A complete list of all Contractors' personnel present on Site must be in Employer's possession by 09.00 hours each work day.
- 4.2.2 *Head Counts.* Employer may make head counts of the Contractor's labor force. The Contractor's Timekeeping Department shall cooperate with Employer in properly correlating head counts with the Contractor's daily labor force reports and time books.
- 4.2.3 *Discipline.* All personnel are expected to behave in an orderly fashion and observe all the rules stipulated herein or issued otherwise by Employer or other recognized authority. The Contractor shall properly discipline those persons who do not act accordingly.
- 4.2.4 *Restricted Areas.* Various areas of the Site may be designated from time to time as restricted for valid reason. Notices of these areas will be issued by Employer in writing. All Contractors' personnel are expected to observe the conditions defined in these notices.
- 4.2.5 *Work Permit.* In areas where a work permit is mandatory, no work may be done without an approved work permit.
- 4.2.6 Plant operating conditions may preclude the issue of a permit immediately upon application; therefore the Contractor shall give notice of his requirements by planning his permit activities on the 4 week look ahead schedule which is issued weekly.
- 4.2.7 *Contact Person outside Normal Working Hours.* The Contractor shall submit a list of names and telephone numbers of persons to be contacted in case of an incident or emergency outside normal working hours.

4.3 Control of Construction Equipment

- 4.3.1 On a weekly basis, the Contractor shall furnish to Employer a list showing number and type of all Construction Equipment utilized on the Site.
- 4.3.2 Rules applicable to equipment deployment and traffic control off-site will be coordinated by Contractor with Employer.
- 4.3.3 All equipment brought onto the site by Contractor must be certified and in safe operating condition. Contractor will supply Employer with copies of such certificates. Employer may at any time inspect Contractors equipment. Such inspections, or failure to inspect, shall not relieve Contractor of their responsibilities for safe operation of their equipment.
- 4.3.4 When it is necessary for Contractor to transport personnel in a vehicle from one location to another, temporary seats and/or hand holds will be provided. The truck shall not be overloaded.
- 4.3.5 "Hitch-hiking" on mobile equipment is not permitted.
- 4.3.6 4.3.5. Contractor shall take measures to prevent the use of mobile equipment by unauthorized personnel.

4.4 Contractor Area and Housekeeping

- 4.4.1 Contractor's Site facilities shall be in the area and layout as allocated by Employer. The Contractor shall provide a plan to Employer for approval showing how the area allocated for temporary facilities will be utilized, and Employer shall approve such lay-out.
- 4.4.2 The Contractor shall furnish adequate change room facilities for all personnel. Subject to Employer's approval, canteen facilities may also be provided. The Temporary Facilities shall be maintained in accordance with the highest standard of cleanliness and hygiene. The canteen facilities shall be open at times approved by Employer. All premises shall be inspected by the

Contractor before the Site is closed each night to see that no cigarette ends, etc., are left smoldering and a check shall be made that all Contractor's personnel have left the Site.

- 4.4.3 Lodging facilities are not permitted on the Site.
- 4.4.4 Parking areas will be designated by Employer. All personal cars must be parked in the construction parking lot. Contractor's personnel shall not drive their personal cars beyond the construction parking lot.
- 4.4.5 Waste and refuse shall be properly stored on Site and must be moved off Site by the Contractor at regular intervals so as not to create a nuisance. Trucks carrying such material are subject to the same regulations as other vehicles relative to permits for removing material from the Site.
- 4.4.6 Employer's staff will have free access at any time to any building or area of the Contractor at the Site.

4.5 Smoking

- 4.5.1 Contractor's personnel are prohibited from smoking anywhere on Site. Smoking maybe permitted inside specially designated areas subject to approval by Employer.
- 4.5.2 Smoking may be allowed within the temporary offices, change rooms, canteens or in special smoking areas.
- 4.5.3 Individual violators of the above smoking rules, as well as the responsible Subcontractor's company, after repeated violations, could be subject to immediate dismissal at the Employer's discretion. Contractor / Employer reserve the right to withdraw smoking privileges if abused.

4.6 Emergency Ambulance and First Aid

- 4.6.1 Contractor shall be responsible for its own first aid arrangements to comply with statutory regulations and those of Employer.
- 4.6.2 Contractor shall nominate a sufficient number of its personnel, trained in first aid; to be called for in an emergency and their names shall be displayed and submitted to Employer.
- 4.6.3 Contractor shall verbally inform Employer as soon as a safety hazard has been discovered or accident has occurred. On the day of the discovery or incident Contractor must submit a written report to Employer with the required back-up documentation to illustrate the safety hazard or extent of injury.
- 4.6.4 The Contractor will keep Employer informed of the status of all seriously injured personnel.
- 4.6.5 In the event of unusual happenings such as an explosion, serious fire, fatality, or serious incident, Contractor will immediately notify Employer.
- 4.6.6 A copy of Contractor's first aid and accident report shall be given to Employer. In case accidents or dangerous occurrences are reported to parties other than Employer, Employer shall be copied with the written reports of any investigations of such accidents and/or incidents.

4.7 Environmental Protection Policy

- 4.7.1 Contractor is required to follow environmental policies and rules while working on Employer's property.
- 4.7.2 The policy and rules for Contractor and his employees on the works are:
 - 1. The Contractor will not allow any oils, grease, fuels, lubricants, paints, solvents, acids or alkalis, chemicals, or contaminated waste waters to infiltrate the plant ditch system, or discharge any of this material on the ground.
 - 2. Spills of petroleum products, chemicals or other materials must be reported immediately to the Employer and immediate spill containment and cleanup actions will be taken. The expense of spill clean-up and disposal shall be at cost of the Contractor.
 - 3. Washing and maintenance of Contractor's vehicles may only be done in run-off contained areas specifically designated by the Employer.
 - 4. All tankage, storage and loading/unloading of chemicals, fuels and other bulk materials

- (except refueling of field equipment from fuel tanks) must be in curbed or diked areas. These areas must be approved by the Employer.
5. Contact cleaning, washings and hydro blasting of equipment which has been exposed to chemicals, oils, acids, bases or other contaminants must be performed in run-off contained areas which have drains to the plant waste water system.
 6. Sanitary facilities will require approval of the Employer.
 7. There will be no open burning of materials, brush, tires, construction materials, oils, etc. on the site.
 8. Contractor using hazardous or toxic materials or chemicals will do so under statutory and common safety practices.
 9. No asbestos materials are permitted on site.
 10. Wastes such as paint cans, office trash, and construction materials must be disposed of offsite. The Contractor shall make arrangements with a commercial disposal companies for offsite disposal.
 11. Scrap from Free-Issue materials shall be stored separately from all other waste/rubbish by category of material, e.g. carbon steel, stainless steel etc. Disposal will be as per Employer's instructions.
 12. Contractor is responsible to instruct each employee of the Environmental Policy. This topic shall be made part of the Contractor's safety meeting's agenda.
- 4.7.3 Failure to follow the rules and the spirit of the policies outlined in this document could result in termination of contract.

4.8 General Rules

- 4.8.1 Contractor is responsible for the conduct of their employees on Site. The following acts are of such serious nature so as to warrant immediate and permanent banning of an individual who commits such act on the Site:
- Carrying weapons.
 - Stealing or malicious mischief.
 - Obtaining material, tools or equipment on fraudulent orders or by Misrepresentation.
 - Falsification of records.
 - Fighting (aggressor or defender) or attempting bodily harm to another.
 - Being in a partially or completely intoxicated state, or dealing, introducing, possessing, or using intoxicating liquor or narcotics while in the plant.
 - Smoking in restricted areas (outside of the designated smoking areas).
- 4.8.2 The following irregularities are also considered serious and will result in immediate and permanent banning of an individual who commits them on the property, unless mitigating circumstances justify less drastic action:
- Sleeping or dozing.
 - Violation of any criminal law.
 - Gambling.
 - Harboring a disease which may endanger a fellow worker.
 - Negligence of duty in case or use of the property or endangering the life of another while on the property.
 - Horseplay or violation of any safety rule.
 - Borrowing or lending employee identification badges.
 - Intimidation or coercion of others.
 - Climbing the fence or attempting to enter or leave the property except through regularly designated passageways.
 - Repetition or accumulation of less serious irregularities.
 - Refusal to allow inspection by authorized representative of any packages or bundles while entering or leaving the property.
 - Tampering or falsifying time records.

5 SAFETY RULES

5.1 Introduction

The Safety Rules included herein have been established as the minimum rules applicable to the Works. The Contractor may have similar and/or additional rules for each specific trade. However, in case of conflict between these and the Employer's rules, the more stringent shall apply.

5.2 Rules of Conduct

5.2.1 All Contractors' personnel are required to conform to the following rules of conduct relating to safety while on Site. The minimum rules of conduct are as follows:

- a. All personnel shall wear clothing appropriate to their individual work assignments in accordance with a work dress standard. The work dress standard shall contain the following:
- b. Excessively loose, severely torn clothing and ties shall not be worn by personnel whose work exposes them to rotating or reciprocating equipment, such as pipe machines or mechanical hack saws, band saws, table saws, etc.
- c. Destroying or tampering with safety devices, signs and signals, or the willful and unnecessary discharging of fire extinguishers is prohibited.
- d. Unauthorized operation of powered construction equipment is prohibited. Vehicle drivers shall have a valid vehicle operator's permit. Equipment operators shall have successfully demonstrated that they are able to operate the equipment and carry a valid certificate.
- e. Insubordination toward any supervisor or management personnel in respect to the carrying out of properly issued instructions or orders for safety and health purposes shall be sufficient cause for initiating disciplinary action.

5.3 Reporting

5.3.1 Reporting Injuries and Accidents

- a. Each occupational injury and illness shall be reported promptly to the Employer in order to ensure that proper and adequate first aid or medical attention is obtained.
- b. Occupational injuries and illnesses, the first symptoms of which become evident after completion of the working day, shall be reported to the Employer at the start of the next working day.
- c. All accidents in which the Contractor's employees are involved or which result in injury or illness to one or more employees from Contractor or from subcontractors, or other persons, such as a private vehicle driver, passenger or pedestrian or a Site visitor, shall be reported promptly to the Employer.
- d. All accidents which result in damage to any constructed or partially constructed facility, or to construction equipment or private property, shall be reported promptly to the Employer.

5.3.2 Reporting Unsafe or Hazardous Conditions

5.3.3 Any unsafe or hazardous condition shall be promptly reported by the Contractor to the Employer, so that timely corrective action can be taken to prevent injuries or damage.

5.3.4 Reporting "Near-Miss" Situations

5.3.5 Any "near-miss" situation shall be promptly reported to the Employer, so that action can be taken to avoid such incidents in the future.

5.4 Housekeeping

5.4.1 All necessary steps shall be taken to ensure that the Site and the Temporary Facilities are maintained in a clean, healthy and sanitary condition. Rules of cleanliness and order shall be

enforced amongst all personnel working at the Site.

- 5.4.2 Waste materials shall be picked up immediately, and all trash shall be deposited in trash containers in areas designated for trash on a daily basis.
- 5.4.3 In lunch areas, all trash and scrap food shall be discarded daily in containers placed in the lunch area for that purpose. Beverages in glass bottles are prohibited. Only thermos, paper, metal or plastic containers, bottles and cups and the like may be used.
- 5.4.4 Roads and walkways shall be maintained clean and every effort shall be made to keep mud, slush and other slippery substances off roads and walkways.
- 5.4.5 Electrical welding cables, water and air hoses shall be placed where they cannot be damaged, and where they cannot cause damage or injury. If placed in roadways or pipe ways, the cables and hoses shall be placed in a protected trough or suspended above the road or pavement surface and conspicuously tagged and marked. Over roadways, the height shall be at least 6 meters; in pipe ways, 2 meters. Excess cables, hoses etc., are to be removed and cleared away each day.
- 5.4.6 Spilled oil, grease and other slippery substances shall be cleaned up immediately, temporarily isolated until cleaned up or sprinkled with enough dirt or sand to absorb the material and to eliminate slipperiness. All such spills must be reported immediately.
- 5.4.7 Materials and Construction Equipment not being used shall be stored safely in such a way that they will not obstruct other Site activities.
- 5.4.8 Good housekeeping shall apply to all sections of the Site including roads, walkways, temporary buildings and the work areas. The Employer reserves the right to perform the clean-up at Contractor's cost in case of non-compliance.
- 5.4.9 The storage of combustible materials under stairways or in attic crawl spaces is prohibited.
- 5.4.10 All combustible waste material shall be removed from building interiors at the end of each shift, and placed in waste receptacles located at least 2 meters away from any structure.
- 5.4.11 The accumulation of waste materials in out-of-the-way places, such as shelves, closets, bins, cabinets or other spaces, is prohibited.
- 5.4.12 The storage of any materials against the exterior of buildings is prohibited.
- 5.4.13 Waste material receptacles shall be placed 2 meters away from any structure.
- 5.4.14 Areas around and routes to fire doors, exits, stairways, fire hydrants, monitors or fire extinguishers shall be kept free and clear of obstruction at all times.
- 5.4.15 Clothing or rags spoiled with oil or paint, and mops treated with oil, shall be stored in metal lockers that do not contain other combustible materials.
- 5.4.16 Outside storage areas and grounds around structures shall be kept free and clear of debris accumulations.
- 5.4.17 Lint and dust accumulation in shops and similar locations shall be removed from all surfaces at least once each week.
- 5.4.18 Flammable liquid spills shall be immediately cleaned from floors, ground, equipment and drip pans.
- 5.4.19 All protruding nails shall be knocked down or removed.

5.5 Personal Protective Devices

Approved hard hats and safety shoes shall be provided for all personnel by the Contractor and shall be worn at all times, except in the offices, canteens and change rooms. Other protective equipment, such as safety glasses, gloves, goggles, face shields, ear protection, toe guards and safety belts, shall be issued by the Contractor and used where required. Additional works specific personal protection equipment maybe necessary in accordance with the statutory requirement and Employer's standards.

5.6 Machinery and Tool Guards

Machinery and tool guards shall be provided for protection against revolving or reciprocating parts. These

guards shall be in place before the machine or tool is used and shall not be removed or made inoperative.

5.7 Scaffolds

- 5.7.1 Scaffolds shall be made of materials and constructed, as approved by applicable authority.
- 5.7.2 Adequate means of access to the scaffold shall be maintained at all times. Climbing up or down a scaffold on braces or ledgers is forbidden. An easily accessible scaffold ladder shall always be provided for each scaffold.
- 5.7.3 Loose tools or materials on scaffold platforms shall be secured by wire or fiber rope or shall be placed in secured containers. Storage of materials on scaffolding floors shall be boxed and kept to a minimum and scaffolding floors shall be cleaned regularly.
- 5.7.4 Work from a scaffold by standing on railings is forbidden.
- 5.7.5 Personnel on suspended scaffolds, performing welding or flame cutting must be careful not to burn the cables. Personnel working on suspended scaffolds shall wear an approved safety harness attached by a lifeline to a permanent portion of the structure. They shall tie off before getting on the suspended scaffolds. Suspended scaffolds shall be carefully inspected, including the cables by which they are suspended.
- 5.7.6 Each scaffold shall be inspected before it is released for use. An inspection control tag shall be attached to the scaffold by the Contractor.
- 5.7.7 All areas under and around scaffolds within the possible reach of tools and other materials that may accidentally fall from them shall be protected.
- 5.7.8 Where Contractor is intending to use a scaffold or part of a scaffold, Contractor is responsible to ascertain that the register is properly kept, the scaffold is physically in good condition and in compliance with all rules and regulations, regardless of whether the scaffolding was erected by the Contractor or a third party.
- 5.7.9 Modifications to erected scaffolds shall only be executed by qualified personnel.

5.8 Ladders

- 5.8.1 Ladders shall be made of materials and constructed as approved by applicable authority. Use of wooden ladders must be specifically approved by the Employer. Portable straight or extension ladders shall be placed at a safe angle and shall be secured to prevent displacement; the top of each ladder, giving access to a work area or platform, shall extend at least 1 meter above that level.
 - a. Metal ladders shall not be used in proximity to non-insulated electrically energized lines or equipment.
 - b. Personnel shall have both hands free when climbing or descending a ladder. No tools, material, nor any other objects shall be hand-carried by the personnel while on the ladder.

5.9 Excavations and Trenches

- 5.9.1 No excavation or digging may be done without a written work permit while working on Site.
- 5.9.2 Where Contractor's personnel are working in a trench 1.5 meters deep or more, there shall be one or more ladders placed in the trench to provide routine and emergency exit from the bottom to the top edge of the trench. Ladders shall be placed minimum every 15 meters.
- 5.9.3 Excavations and trenches 1.5 meters or more in depth and located in unstable or soft ground, shall be shored or sloped in an approved manner.
- 5.9.4 Trenches in hard compact material shall be shored or otherwise protected when 2 meters or more deep and 3 meters or more long.
- 5.9.5 Sides of trenches may be sloped in lieu of shoring but the slope may not be steeper than one meter rise for each VA meter horizontal.

- 5.9.6 No material shall be stored closer than 1 meter from the edge of a trench or excavation; this includes the spoil bank, if any.
- 5.9.7 Barricades, handrails, signals or other appropriate warning devices to protect personnel from any hazardous operation or excavation shall be provided. Open trenches, excavations etc. shall be covered when handrails or barricades do not provide adequate protection.
- 5.9.8 Where persons could stumble into trenches or similar holes during the hours of darkness, these excavations shall be illuminated at night with approved amber lights.
- 5.9.9 Excavations and trenches shall be inspected daily by a competent person. If there is evidence of slides or cave-ins, all work in the exposed area shall cease until necessary precautions have been taken for the protection of personnel.
- 5.9.10 Exploratory holes shall be dug by hand in all areas where known or suspected underground cables or pipes are located. Machine excavation closer than 1 meter to any underground cable or pipe is forbidden.

5.10 Floor Openings, Holes and Edges

- 5.10.1 Floor openings or holes shall be protected by approved guard rails or covers. If covers are used, they shall be strong enough to support the loads to be imposed upon them and shall be secured to prevent accidental displacement.
- 5.10.2 The open edges of all floors shall be guarded by an approved barricade secured to prevent accidental displacement.
- 5.10.3 Ladder way floor openings or platforms shall be guarded by standard railings with toe boards on all exposed sides, except at entrance to opening where a gate should be provided or so arranged that a person cannot walk directly into the opening.
- 5.10.4 Hatchways and floor openings shall be guarded by railing and toe boards on exposed sides when the hole is open and a cover of standard strength used when the hole is not in use. If the openings are not used, they shall be covered with materials of adequate strength.
- 5.10.5 Where doors or gates open directly on to a stairway, a platform shall be provided and the swing of the door shall not reduce the effective width of the platform to less than 0.5 meter.
- 5.10.6 Contractor's employees who ignore these instructions are subject to disciplinary action and all costs of installing/restoring the safety provisions shall be back charged to Contractor.

5.11 Wall Openings

- 5.11.1 Wall openings, from which there is a drop of more than 1 meter, shall be protected as follows:
 - a. When the height and location of the opening in relation to the working surface is such that a standard rail and midrail will effectively reduce the danger of falling, both shall be provided.
 - b. The bottom of the wall opening shall be protected by a standard toe board or an enclosing screen.
- 5.11.2 An extension platform outside a wall opening, onto which materials can be hoisted for further handling, shall have side rails or equivalent guards. One side of the extension platform may have removable railings in order to facilitate handling materials.

5.12 Stairways

- 5.12.1 Each flight of stairs shall be equipped with handrails.
- 5.12.2 Stairways shall have stair railing on each side.
- 5.12.3 Stairways shall be free of hazardous projections, such as protruding nails. Debris and other loose material shall not be allowed on or under stairways. Slippery conditions on stairways shall be eliminated immediately after they occur.
- 5.12.4 Riser height and tread width shall be uniform throughout any flight of stairs, including any foundation structure used as one or more treads of the stairs.

- 5.12.5 Spiral stairways shall not be permitted except for special limited usage and secondary access situations where it is not practical to provide a conventional stairway.

5.13 Hand Tools

- 5.13.1 Torn or broken hand tools shall be turned in for repair or replacement. A dull or broken tool is unsafe.
- 5.13.2 Hand tools shall be used for their intended purpose only. The design capacity of hand tools shall not be exceeded by unauthorized attachments.
- 5.13.3 Hand tools shall be in perfect condition.

5.14 5.14. Power Tools

- 5.14.1 Electrically powered tools and equipment shall be of double insulated quality and shall conform to the applicable standards/norms with appropriate certificates available.
- 5.14.2 Air hose connections shall be secured to prevent whipping in the event of accidental separation.
- 5.14.3 Operating switches or levers requiring constant pressure for operation shall not be tampered with to make the tool operate without constant hand or finger pressure.
- 5.14.4 The maximum speed at which grinding wheels shall be used shall equal or be less than the manufacturer's rated maximum speed for the wheel.
- 5.14.5 Safety goggles shall be worn by the operator and shall be of an approved type.

5.15 Explosive-Actuated Tools

Only authorized and properly trained personnel may use explosive- actuated tools; all such tools shall be used in accordance with manufacturer's instructions and applicable regulations.

5.16 Electrical Extension Cords

Only approved types of electrical extension cords shall be used; they shall be properly grounded. Damaged or inoperative cords shall be immediately repaired or replaced.

5.17 Work on Electrical Installations

Work on electrical installations shall only be executed by qualified and authorized personnel. All electrical equipment shall be de-energized before the work may start. All temporary electric power lines shall be handled as if they are energized and conform to local rules and regulations.

When work is to be done on part of the main electrical distribution system which is energized, the Contractor shall not commence work until a written permit is received from Employer to the effect that it is safe to do so. When the work is completed, the Contractor shall sign the permit to that effect and return it to Employer. Contractor shall not on any account operate switchgear forming part of the main distribution system or otherwise interfere with operation.

No apparatus whatsoever shall be connected and made live without prior test and written notification to Employer.

5.18 Welding

Electrical Welding

- 5.18.1 Welding cable shall be connected in an approved manner. There shall be no exposed metal parts in any cable. Welding cable shall be inspected regularly. Splices shall be avoided.
- 5.18.2 The ground cable shall be attached as close as possible to the work piece by means of a clamp. The ground cable shall not be attached to equipment or existing installations or apparatus. Welding of the ground cable is forbidden. No concrete reinforcing shall be used for grounding purposes.
- 5.18.3 Welding equipment shall be installed so that it can be seen by the welder during welding activities.

Welding equipment may not be placed in the path of falling sparks.

- 5.18.4 Cables shall be kept clear from passage ways, ladders and stairs. When exposed to possible damage, cables shall be protected by suitable covers.
- 5.18.5 When not in use, diesel welding machines, generators and transformers shall be switched off. When in use, they shall be protected by suitable covers. Refueling operations shall be done with the machine turned off.
- 5.18.6 Hot electrode holders shall not be dipped in water. This may expose the welder to electrical shock.
- 5.18.7 Welding equipment shall be inspected regularly.

Gas Welding and Burning

- 5.18.8 Welding or cutting torches and hoses shall not be connected to cylinders when stored. Cylinders shall not be placed in containers or buildings. When work is stopped and equipment is unattended, all valves at the gas and oxygen cylinders shall be closed. The hoses shall be bled and a check shall be made five minutes later for possible pressure build-up. Torches shall be removed from the hoses prior to putting them into the tool box. Smoking will not be permitted during this stopping procedure.
- 5.18.9 Special care shall be taken during overhead cutting and welding operations to safe guard and prevent falling sparks from starting a fire. Warning signs shall be posted around and at each level below the area of each overhead welding or burning operation. Fire extinguishers shall be available and fire blankets shall be used for protection.
- 5.18.10 When welding or cutting, adequate ventilation must be furnished.
- 5.18.11 Hoses shall be kept clear from passage ways, ladders and stairs. When hoses are exposed to possible damage, they shall be properly protected.
- 5.18.12 Hoses shall be inspected regularly.
- 5.18.13 The use of full or empty cylinders as supporting elements for welding activities is forbidden.

5.19 Compressed Gas Cylinders

- 5.19.1 Compressed gas cylinders shall be upright when in use, secured to prevent falling, and protected from flame and extreme heat and from being struck by moving equipment and falling objects. Special wrenches must be in place.
- 5.19.2 If transported by crane, hoist or derrick, compressed gas cylinders shall be handled in a suitable cradle, net or skip box, never by wire or fiber rope, web or chain sling, nor by dragging. Regulators shall be removed and protective valve caps placed.
- 5.19.3 Oxygen cylinders may never be stored near highly combustible materials, especially oil and grease, or near compressed fuel gas cylinders. Oxygen and fuel gas cylinders in storage shall be separated by a distance of 6 meters or by a wall 2 meters high made of fire-resistant material.
- 5.19.4 Caps shall be replaced on cylinders that are empty, and such cylinders shall be stored separately in a section clearly designated for empty cylinders.
- 5.19.5 Gas and oxygen cylinders shall not be taken into confined spaces.
- 5.19.6 Gas and oxygen cylinders shall not be placed on scaffolding.
- 5.19.7 Check valves shall be used immediately behind the reducing vent on acetylene cylinders.
- 5.19.8 Gas and oxygen cylinders shall only be used when secured on a cylinder carrier.

5.20 Explosion and Gas Hazards

- 5.20.1 No work involving a source of ignition shall be attempted near any pit, manhole, open sewer, drain vent, pipe trench or any enclosed space where there is reason to believe that flammable vapors may be present, until tests have been made with an approved hydrocarbon vapor detector and oxygen detector. When said tests indicate the atmosphere is safe, work may proceed.

- 5.20.2 At locations similar to the ones above, where there is reason to believe that toxic gas may be present, similar tests with an approved toxic gas detector and oxygen detector shall be made. No work shall be performed in the location until said tests indicate toxic gas concentrations lower than the maximum permissible.

5.21 Fuelling Equipment

- 5.21.1 No gasoline or diesel engine shall be fuelled while it is running.
- 5.21.2 If fuel cans are used for refueling, they shall be approved metal safety fuel cans with a flash arresting screen, spring closing lid and spout cover that will safely relieve internal pressure if the can is exposed to fire.
- 5.21.3 There shall be no smoking or open flames within 8 meters of fuel storage tanks, fuel pumps or refueling operations.
- 5.21.4 All fuel storage tanks shall be properly grounded in an approved manner; such electrical grounds shall not be removed without authorization.
- 5.21.5 A suitable fire extinguisher shall be at hand during refueling operations.

5.22 Vehicle Operation

- 5.22.1 Each vehicle driver and operator of rubber-tired construction equipment shall comply with site speed limits and traffic control procedures. The speed limit will be established by the Contractor and will be set according to conditions prevailing on Site.
- 5.22.2 No vehicle with an obstructed view shall be reversed unless it is equipped with an operating reverse alarm signal that is audible above the surrounding noise or unless an observer signals that it is safe to do so.

5.23 Crane Operation

- 5.23.1 All cranes and lifting equipment shall have a valid crane certificate before entering the Site. The equipment shall be inspected as required by law and/or local authorities on a regular basis and a valid crane certificate shall be in the possession of the crane operator at all times the equipment is on the Site.
- 5.23.2 Outriggers shall be used at all times, except when the crane is traveling. If the crane is provided with a load, every reasonable effort shall be made to keep the outriggers extended as far as is practical.
- 5.23.3 Contractor shall provide a competent person to supervise and be responsible for all lifting operations, and shall erect and properly maintain at all times all necessary safeguards against hazards created by such operations.
- 5.23.4 Hand signals to crane and derrick operators shall be those prescribed by the applicable standards for the type of crane in use. The use of two way radio is recommended.
- 5.23.5 Overhead electrical lines within the work area shall be marked with warning signs, 1.5 to 2 meters above the ground.
- 5.23.6 Rigging and boom changes shall be made by a competent mechanic under the supervision of a qualified supervisor.
- 5.23.7 Loose material shall not be lifted other than in approved skip boxes.
- 5.23.8 All loads shall be verified as to the weight prior to being lifted. No load shall be lifted which exceeds the manufacturer's rated capacity of the crane. When one of the following conditions exists, the Contractor shall submit a lifting plan and calculations for the lift to Employer prior to starting the lift.
- a) The lift requires stopping operations within an area around the load and crane.
 - b) Two booms are required to make the lift.
 - c) Poles or derricks have been erected for the specific lift.
 - d) Heavy and/or critical lifts at Employer's discretion.

- 5.23.9 When mobile equipment is used near overhead power lines or bus bars, safe working distances shall be observed.
- 5.23.10 Electrical shielding of power lines shall be executed when minimum clearance distances cannot be maintained.
- 5.23.11 The Employer shall be informed before work is started near these lines. When work is to be performed on Site, Employer shall also be informed.
- 5.23.12 Adequate protection for underground cables and/or pipelines shall be provided. When crossing underground cables and/or pipelines with heavy equipment and/or loads, adequate mats or steel plates shall be used to prevent damage.
- 5.23.13 During hoisting operations, the load shall be controlled from the ground by means of one or more ropes, ("tag lines") to prevent the load from turning or swinging.
- 5.23.14 Operators of lifting equipment shall do the following at the end of the work day:
 - a. Put down the load.
 - b. Lift the hook (put down dragline bucket).
 - c. Switch off motors, disconnect tension.
 - d. Close cabins and make operating equipment inaccessible for unauthorized people.
 - e. Take all necessary measures to safeguard the engine and boom at the end of the shift.
 - f. Cranes shall be boom down, where possible or secure the load line at the end of the shift.
- 5.23.15 All slings and lifting cables shall be certified in accordance with legal regulations and inspected on a scheduled basis with faulty slings and cables being destroyed.

5.24 Man Baskets and Boatswain's Chairs.

The use of man baskets and boatswain's chairs shall only be permitted when all other avenues to safely perform the work (scaffolds, ladders) have been exhausted. The use of these devices shall be in strict accordance with all legal regulations. Personnel using these devices shall be protected by a safety harness and a lifeline.

5.25 Work with Ionizing Radiation

- 5.25.1 All work involving ionizing radiation shall be executed in strict accordance with all legal regulations and requirements regarding the use, storage and transport of radiation sources. Ionizing radiation work shall be coordinated with Employer when inside construction area and may only be executed when a valid work permit is available for works inside existing Plant facilities.
- 5.25.2 A minimum of 2 qualified persons is required for each activity involving ionizing radiation. Adequate warning signs shall be posted on barricades and the work area shall be marked off at a safe distance with plastic tape prior to starting work involving ionizing radiation.
- 5.25.3 No radioactive material shall be left unattended unless stored in the designated storage place. Personnel executing radiation activities shall carry radiation metering devices at all times. These devices shall be calibrated at regular intervals. While not in use radiation sources and their container shall be stored in a safe location.
- 5.25.4 Adequate warning signs shall be placed around the storage area.

5.26 Work with Asbestos Materials

- 5.26.1 Materials containing asbestos have been condemned worldwide. No materials containing asbestos fibers must be used. When working in or on existing installations there could still be some equipment or materials which contain asbestos fibers. When working on such equipment or material, utmost care must be taken to ensure that dust containing these fibers is kept localized and to a minimum. Local health regulations relative to asbestos must be adhered to.
- 5.26.2 guide to protect personnel executing work involving asbestos is given below.
 - 1. Provide changing facilities with showers in between a "clean" area and the work area. Each person must shower himself prior to entering the "clean" area.

2. Wear a minimum of clothing under disposable overalls.
3. Discard disposable overalls each time one leaves the contaminated area.
4. Wrist and ankle openings must be taped off around rubber boots and gloves.
5. Full face gas mask with appropriate filter must be worn over the overall hood.
6. When removal of contaminated material is complete, all dust must be sucked up with an industrial vacuum cleaner with inner bag. Waste material inclusive of overalls, gloves, boots and filter. Cartridges must be placed in plastic bags and clearly marked "asbestos waste".
7. Plastic bags are to be disposed of according to local regulations and requirements.

5.27 Work in Enclosed Areas

The following requirements must be adhered to when work has to be executed in an enclosed area.

- a) A valid entry permit is required.
- b) Sufficient temporary lighting shall be provided.
- c) All electrical supply shall be low voltage (42 VAC or 100 VDC).
- d) Safe access into and from the enclosed area shall be provided and shall be free of obstructions.
- e) An evacuation procedure shall be available.
- f) Hoses for welding and burning shall be tested for leakage before entering into an enclosed area.
 - g) A charged firewater hose or fire extinguisher shall be located at every hot work position within the space and on the outside access platform near the man way.
 - h) Adequate ventilation has to be provided and oxygen levels have to be checked at regular intervals.
- i) A manhole watch shall be on stand-by at the entrance (e.g. man way) during the whole period that activities in the enclosed area are executed.

6 FIRE PREVENTION

6.1 Introduction

This section provides the guidelines, instructions and requirements pertinent to fire hazard control. The Contractor is responsible for compliance with the fire prevention requirements in the respective areas and in operations by personnel under his supervision.

Contractor shall instruct its personnel on the use of the fire extinguishers.

6.2 Objectives

The fire prevention program is based upon five objectives:

- a. Prevention of fires
- b. Early fire detection
- c. Control of fire diffusion
- d. Prompt extinguishment
- e. Plan for prompt and orderly evacuation of personnel

6.3 Prevention of Fires

The following practices shall be followed:

- a. Regular clean-up of all debris.
- b. Regular thorough inspections of the work areas and buildings to detect and eliminate fire hazards or the potential sources of fire.
- c. Safe storage, handling and use of combustible materials.

6.4 Early Fire Detection

All personnel must be constantly alert in detecting fires.

6.5 Control of Fire Diffusion

- a. Enough fire extinguishers of the correct type and size shall be provided by Contractor.
- b. The fire extinguishers shall be strategically located.
- c. Fire extinguishers shall be clearly marked and made highly visible.
- d. All fire equipment shall be regularly inspected.

6.6 Extinguish the Fire

The extinguishment of fires often involves critical matters of judgment, which are best exercised by trained firefighting personnel. However, the Contractor has to ensure that his personnel is sufficiently trained if it will be necessary to control the fire until trained firefighting personnel decides on the correct method of extinguishment.

6.7 Fire Reporting

- a. The person discovering a fire shall alert all personnel in the immediate vicinity and shall immediately thereafter follow the published instructions relative to reporting fires.
- b. The emergency phone number for reporting fires is to be prominently displayed.

6.8 Supervision of Fires

When a fire occurs, the nearest supervisor shall be responsible for all immediate fire suppression or control work until relieved by appointed, authorized personnel.

6.9 Fire Extinguishers

- 6.9.1 The location of fire extinguishers shall be known to all personnel.
- 6.9.2 Tags shall be used to indicate condition and date of inspection of fire extinguishers. Damaged,

malfunctioning or empty fire extinguishers shall be repaired or refilled in a timely manner.

6.9.3 The location of temporary mounted fire extinguishers shall be clearly marked and free access maintained. They shall not be transferred from established locations. Fire extinguishers, suitable for the various classes of fire and with a content of at least 9 kg powder, shall be located by the Contractors as follows:

- a. Portable or permanently mounted fire extinguishers shall be available throughout the Site within 15 m of any on-going work involving welding, burning or use of open flames.
- b. At least one temporary mounted fire extinguisher shall be provided in each building, preferably near a door, and additional fire extinguishers mounted as required to have one within 30 m of any point inside the building.
- c. Each item of industrial mobile equipment, including all welding machines, having diesel or gasoline engines, shall have a permanently attached mounted extinguisher.
- d. At fuel or combustible material storage areas, extinguishers shall be located within 15 m of any point on the perimeter of the stored material. In addition, these areas are to be fenced in, identified with signs restricting and prohibiting vehicle access, fire ignition sources and smoking. Aisle fire breaks shall be provided whenever combustible materials are stored.
- e. A BCF fire extinguisher shall be mounted at each large electrical installation, such as a substation, transformer, generator or motor control center.
- f. Regardless of the minimum number of fire extinguishers deemed to be necessary, additional extinguishers shall be placed adjacent to scattered or widely separated hazards, welding shops, gasoline dispensing points, store rooms, fuel areas, and construction areas.
- g. All offices, mess rooms and cabins, and the like, shall have certified fire extinguishers installed. Offices, mess rooms, shops, etc., equipped with oil stoves shall have dry powder extinguishers.
- h. Offices, mess rooms, shops, etc., equipped with electrical heaters shall have foam, carbon dioxide or other suitable extinguishers.

6.9.4 Extinguishers shall be maintained fully charged and in operable condition, and kept in their designated places at all times when not in use.

6.10 Flammable Liquid Storage

6.10.1 Flammable liquids shall not be stored or dispensed in buildings or places of public assembly, general warehouses or in buildings containing sources of ignition, such as space heaters, cooking devices, open electric motors, motor vehicles or where welding or cutting or power generation operations are conducted.

6.10.2 Inside storage of flammable liquids shall be confined to isolated fire-resistant buildings, except that small quantities, in approved sealed containers, may be kept in medical facilities where they are required. These supplies will be stored in well-ventilated metal cabinets when not in use.

6.10.3 Gasoline, acetone, alcohol, naphtha and benzene shall not be used for kindling fires or as a solvent for cleaning clothes, tools, equipment or exterior of buildings. Only approved solvents shall be used for cleaning purposes.

6.10.4 Storage of paints or paint materials, other than in paint storage buildings, shall not exceed 100 liters capacity, and shall be in the original sealed containers and be stored in ventilated metal cabinets, isolated from other materials.

6.10.5 Flammable liquids stored in any building in addition to liquids in tanks or devices used for such purposes as cleaning parts shall not exceed 100 liters aggregate capacity.

6.10.6 In paint shops, flammable paint materials in containers in excess of 4 liters but not exceeding 100 liters must be stored in ventilated steel cabinets.

6.10.7 Fuel cans used for gasoline shall be approved safety cans and shall have the upper part and top painted red to identify them.

6.10.8 These cans shall only be used for gasoline, and gasoline shall not be placed in unmarked cans.

6.10.9 Drums, cans and other flammable liquid containers shall be tightly closed, except when being filled

or emptied.

- 6.10.10 Personnel coming into contact with flammable liquids in the course of their assigned duties shall be thoroughly trained in the hazards of these products.
- 6.10.11 Rubbish, brush, long grass or other combustible materials shall be removed from the immediate areas where flammable liquids are stored and handled.
- 6.10.12 "No Smoking" signs shall be placed conspicuously in and around storage locations, and carrying open lights, matches, lighters and the like shall be prohibited.

6.11 Heaters

- 6.11.1 All temporary gas heaters shall have a minimum clear space of 1 meter from the front and both sides. The back of the heater, if not provided with a shield, shall be at least 1 meter away from the wall. Gas lines on LPG (propane) gas heaters shall be equipped with an approved pressure regulator, and all gas lines inside the structure shall be protected from impact damage. The heater shall be anchored to the floor of the structure or immobilized in some other manner. All such heaters shall have an approved pilot valve, which cuts off the gas flow in the event of flame loss.
- 6.11.2 Gravity flow oil heaters shall be equipped with an automatic flow valve or an equivalent device that will stop the flow of oil in the event of flame loss.
- 6.11.3 Electric heating units in wooden buildings shall be provided with adequate guards and placed on a plate of fire-resistant material.
- 6.11.4 All fires and heaters shall be extinguished each night unless written permission is given to the contrary by Employer.

7 HEALTHS, SAFETY & ENVIRONMENT FOR BLASTING, PAINTING AND COATING EQUIPMENT

7.1 General

- 7.1.1 All blasting, painting and coating activities shall be carried out in accordance with Manufacturer's Material Safety Data Sheets (MSDS) and product data sheets.
- 7.1.2 Copies of MSDSs' and product data sheets shall be available at all locations where blasting and painting / coating activities are carried out.
- 7.1.3 Manufacturer's safety precautions for their products shall be considered part of this procedure. In case of conflict, the most stringent recommendations shall apply.
- 7.1.4 Where there is a risk of a flammable atmosphere being present in a particular work area, the relevant safety and applicable restrictions on methods of surface preparation shall be implemented. Flame heating equipment shall not be used in hazardous areas. Extreme precautions shall be used when working with paint / coating materials, cleaning fluids, etc. especially in close proximity to oxygen piping or oxygen equipment. Heavy concentrations of volatile or toxic fumes shall be avoided. When working in confined areas, blowers or exhaust fans shall be used.
- 7.1.5 Rags and other waste material soiled with paints, thinners or solvents shall be stored in metal containers. All dirt, debris, empty paint tins and drums etc., arising from the painting operations shall be removed from the work area at least daily

7.2 Precautions for Blasting, Painting and Coating Equipment

- 7.2.1 All air hoses, blast hoses, spray lines and any other hoses that are subjected to any internal pressure shall be used at a pressure not exceeding the safe working pressure.
- 7.2.2 Blast cleaning and spray guns shall be earthed (spark proofed) to prevent buildup of an electrostatic charge, especially when the application is in confined work places.
- 7.2.3 Painting Supervisors are responsible for checking all hoses and pressure items at least once weekly to establish wear and electrical conductivity. Any items showing signs of wear or a breakdown shall be replaced so as to prevent any possibility of bursts or static discharge etc. Hose couplings shall be wired together using a soft metal wire.
- 7.2.4 A Dead man's Handle shall be attached to the blast hose as close to the blast nozzle as practical and shall not, in any circumstances, be held in the "on" position by any means other than hand pressure.
- 7.2.5 Airless spray guns shall have a working efficient Manufacturer's trigger guard and trip guard fitted at all times.
- 7.2.6 Unauthorized entry into work areas shall be prevented by use of safety barriers and sign boards. Work areas shall be kept clean and tidy.

7.3 Safety Precautions for Mixing, Handling and Storage

- 7.3.1 All paint, coatings and solvents shall be mixed and handled in accordance with the Manufacturer's recommendations.
- 7.3.2 All paint, coating materials shall be stored in enclosed storage areas or structures that are well-ventilated and protected from temperatures exceeding Manufacturer's recommendations, open flames, electrical discharge and direct sunlight.
- 7.3.3 All paint, coatings, solvents, oil and equipment cleaners shall be stored in closed labeled original containers.
- 7.3.4 Paint / Coatings that have gelled or thickened to such an extent that they cannot be easily mixed or are contained in non-original containers or in containers without any seals, shall be rejected.

7.4 Health

- 7.4.1 Manufacturer's health/safety precautions and procedures for mixing, handling, storage and application of coating materials shall be strictly adhered to.
- 7.4.2 The blasting and painting / coating operator's air-fed mask shall be cleaned and disinfected daily.
- 7.4.3 All persons engaged in abrasive blasting shall wear air-fed hoods which shall be coupled to a lean air supply fed by an independent filtered source. The hood shall be ventilated by clean, cool air served through a regulator filter.
- 7.4.4 Where natural ventilation is insufficient in areas where paint / coating are mixed, thinned, or applied, for any reason, or positive ventilation cannot be provided, respirators of an approved type shall be used.
- 7.4.5 All persons engaged in the mixing and application of coatings shall wear appropriate protective clothing at all times. Nylon overalls are not permitted.

7.5 7.5. Environmental Protection Blasting, Painting and Coating Equipment

- 7.5.1 On completion of work, spillage collection and disposal of paint / coating materials, brushes, scaffolding, waste, equipment, etc. shall be removed safeguarding the surrounding environment.
- 7.5.2 The unwanted painting / coating materials shall be disposed of at approved disposal sites.
- 7.5.3 In areas where power tools are being used to remove coatings or rust, precautions shall be taken to eliminate contamination of adjacent areas, and injury to personnel in close proximity to the operation.

8 SECURITY

8.1 Introduction

The regulations included in this section shall be strictly followed by the Contractor on Site.

8.2 Identification

At all times, all personnel on Site must possess an identification card or badge in a form approved by Employer.

8.3 Visitors

Visitors are subject to all rules of identification, safety and discipline. Before entering the site, visitors shall receive a pass from the guard listing name, firm, person to be visited, date and time of entrance and other pertinent information. The person visited shall record time of departure on the pass and sign it. The visitor shall return the pass to the guard on departure. Guards can refuse entry to visitors who cannot provide positive proof of identification.

8.4 Movement of Material

All Materials, Construction Equipment and Temporary Facilities leaving the Site shall be accompanied by an Out shipment Report signed by the Employer for removal of items from existing Plant facilities.

8.5 Fencing

Site fencing, or the modification or removal thereof may only be executed with the written approval from Employer.

8.6 Material Storage

The Contractor shall provide adequate security fencing in his storage area to protect Materials which have to be stored outdoors. All other materials shall be stored in a locked warehouse.

8.7 Lost/Found Objects

When objects have been found or lost at Site this shall be immediately reported to Employer.

8.8 Cameras

Cameras are not permitted on Site, unless written approval is given by Employer.

9 CONTRACTOR'S SELF APPRAISAL SYSTEM

The objective of the Contractor's self-appraisal system will be to encourage Contractor's to improve and maintain the Safety, Health and Welfare at work with the aid of a comprehensive rating procedure. This procedure also covers the environmental conditions.

Employer will issue monthly to Contractor the "Safety Self-Appraisal Document. The self-appraisal document covers three (3) main categories, i.e.:

- Legal requirements
- Periodical actions
- Variable actions.
- The foregoing categories are systematically divided into various sections addressing the following topics:
 - Management Involvement
 - Safety Policy
 - Incident Reporting
 - Emergency Plan
 - Personnel Protection
 - Safety Training
 - Housekeeping
 - Safety Promotion
 - Company Safety Rules
 - Tools and Equipment

Contractors are required to self-appraise their company's project organization based on the aforementioned topics.

Rating of the Contractor's organization is from a maximum scope of 100 points. Contractors shall resubmit the duly completed appraisal document to the Employer.

Employer will then assess the submitted documentation taking into account the "Minimum Permissible Score" (established at the commencement of the project).

10 VIOLATIONS

Employer's procedure for dealing with Contractor's personnel who violate the Safety Rules and Regulations will be to:

- a. Issue one (1) verbal warning
- b. Issue one (1) written warning and in case of further offence
- c. Issue dismissal from site/ penalize as deduction the amount as per violation Category. The amounts are clearly marked as per below mention subject on the behalf of violation type.

It should be noted however, that certain serious violations may lead to instant fine and or immediate dismissal from site.

Violation	Fine (GEL)
Working at height on high risk	10-20
With lifting activities working without having TPC and including require documents	40-50
Found at site without induction	5
Poor housekeeping	20
Without PPE	10
Working under suspended load on high risk	10-20
On behalf of environmental issues	10-50
Project discipline	5-50
Insufficient welfare facility to the worker	10-40
Improper /substandard scaffolding and ladder	50
Damage hand tools	5-50
Improper/substandard electrical items/equipment	10-50
Working with machinery without having safety precaution	10-50
Carrying of deadly weapon that could harm the life individual	dismissal
If reports are not submitted on time	50
Improper fire-fighting/ substandard fire-fighting system	10-50
Driving without driving license/ Driving not under the speed limit	10
Smoking at site area	10-50
Fighting at site	dismissal
Poor office maintenance/ office environment within project area	100

The HSE teams are fully authorized to take legal/corrective action on the behalf of violation category during site inspection. Inspections will be carried out listed, explained clearly to the Contractor including when follow up visit will be scheduled.

When a follow-up safety inspection will be carried out by Employer or Employers Representatives will utilise the initial safety inspection list as a check, any outstanding items will be acted upon.

The HSE inspector will give the reward to persons seen observing the HSE policies with a good attitude.

All fines incurred will be returned to the Contractor in the form of Employee rewards or purchase of HSE equipment on the Contractors behalf.



***SDSU Georgia Project: Environmental Health and
Safety during Operation of University Laboratory
Facilities***

***Draft Environmental and Social Management
Framework (ESMF)***

October 2014

Once the programs are operational SDSU-Georgia will use the same safety standards as used for our facilities on the SDSU campus in San Diego. The Environmental Health and Safety Department (EHS) on the San Diego campus strives to ensure the health and safety of the San Diego State University campus by developing and implementing programs aimed at protecting the well being of the campus community, including faculty, staff, students, and visitors. EHS also provides guidance to the campus to achieve and maintain compliance with local, state and federal regulations governing health, safety, and environmental protection.

The safety guidelines and training materials are available on the SDSU website at <http://bfa.sdsu.edu/ehs/>, and key documents related to laboratory safety are provided as pdfs in appendices that are attached.

SDSU-Georgia will employ a Facilities Manager on-site to provide training in Environmental Health and Safety, to monitor compliance with Health and Safety policy and procedures, and to update procedures as needed. The Dean of SDSU-Georgia will provide oversight to this position.

Appendices – Laboratory Safety

1. Emergency Booklet
2. Emergency Procedures Chemistry
3. Environmental Health and Safety Questionnaire
4. Employee Accident Reports
5. Student Accident Reports
6. Biohazard Spills
7. Employee Safety – Right to Know
8. Good Safety Practices
9. Electrical Safety
10. Laboratory Safety
11. Occupational Exposure
12. Personal Protective Equipment (PPE) Training
13. Respirator Fit Training
14. Biological Waste
15. Hazardous Materials
16. Chemical Waste
17. Universal Waste
18. Sharps Injuries
19. Hearing Conservation
20. Self Audits

Annex 6 – Draft Terms of Reference for Renovation and Construction Design
and Construction Supervision

The rest of this page is left intentionally blank.

Terms of Reference for Design and Construction Supervision for the Renovation and Construction Activities

Draft Terms of Reference (TOR) were submitted for review by MCA-Georgian on September 18. Review comments were received on this document on October 7. The final draft version follows. The following table provides a summary of the responses to comments received.

(1) Category: Requested "CHANGE", "COMMENT" for consideration, "QUESTION" for required clarification

Summary Comments/Key Issues:

No.	Topic/Doc. Reference	Category ⁽¹⁾	Review Comment
1	Section 1.3	QUESTION/ COMMENT	<p>There is a reference to “design criteria and standards” as well as “all relevant codes and standards”. What are those? Is it the 2012 International Building Standards for the educational facilities briefly referenced under Section 1 (first paragraph)? Given our experience so far with the Gen Ed Rehab Project, we would strongly suggest that they explicitly define these. Also, if the selected design criteria, standards and/or codes are not currently used in Georgia, it would be good to know beforehand the timeline impact (if any) for getting these approved by the relevant GoG ministry.</p> <p><i>ADDED to Section 1.4: “With regard to applicable building codes and standards, the initial thought was that the International Building Code (IBC) would be best practice in Georgia; however, as SDSURF has learned, local designers and contractors are generally not familiar with IBC practices, and there appears to be no formal building code that currently exists in Georgia. As a result, for this project SDSURF proposes to use an international architect to create the design brief. A local architect will be used to design the works, create a specification and to reference the unique collection of industry best practice standards used in Georgia. The design shall then be reviewed by an international architect for its alignment with internationally accepted standards. SDSURF/Contractor can then provide close oversight to ensure the design is followed by the Contractor/renovation and construction contractor(s) during the construction phase.”</i></p>
2	Section 1.3	CHANGE	<p>There are no references to developing the designs in compliance with the IFC Performance Standards (or California standards) in the main part of the document. Suggest to include explicit references.</p> <p><i>Please see item #1 above regarding building codes. IFC Performance Standards for environmental and social management works are included in Appendix B.</i></p>

REVIEW COMMENTS (Continued)

Document: SDSU Deliverables:	Date: 10/2/2014
------------------------------	-----------------

No.	Topic/Doc. Reference	Category ⁽¹⁾	Review Comment
3	Section 1.2	QUESTION /COMMENT	<p>Shows that the Consultant will supervise and develop the ESMF and ESMP, but the organogram on page 6 shows that this work is being done by a separate consultant. Section 1.4 also refers to a separate ESMF/ESMP consultant. The project team structure organogram isn't clear. Is the ESMF/ESMP consultant anticipated to be subcontracted by the Design/Construction Supervision Consultant? If not, then what is the relationship between these two parties in terms of reporting, coordination and sharing information? Will the ESMF/ESMP Consultant be responsible for supervising implementation of the ESMP, or will that be the responsibility of the Design/Construction Supervision Consultant as referred to in Section 1.2? Depending on these arrangements and responsibilities, it would have implications for the staffing requirements for these separate parties.</p> <p><i>The ESMF/P consultant ("Consultant") will be under a separate contract from the Design/Construction Supervision Consultant ("Contractor"); however, they will report to the Contractor. We had to proceed with a separate contract for the ESMF due to the time schedule for the draft ESMF deliverable, even though both the Consultant and Contractor could potentially end up being the same firm.</i></p> <p><i>The Consultant will be responsible for the development, supervision and implementation of the ESMF/P, and reporting to the Contractor for coordination of work and incorporation of their data/documents into the project as a whole.</i></p> <p><i>The Contractor will be responsible for overseeing the work of the Consultant, as well as that of the General Contractor (renovation and construction contractors), ensuring all parties are performing cohesively.</i></p> <p><i>We have updated the terms to make this relationship more clear in the document and organogram, as well as added a Table of Contents to the document to better describe the appendices.</i></p>
4	Section 1.7:	COMMENT	<p>Suggest to discuss the work agenda with the MCA-G ESP Director, in addition to the MCA's Chief Infrastructure Engineer and the Tertiary Education Project Director.</p> <p><i>This language has been added to Section 1.8.</i></p>

REVIEW COMMENTS (Continued)

Document: SDSU Deliverables:	Date: 10/2/2014
------------------------------	-----------------

No.	Topic/Doc. Reference	Category ⁽¹⁾	Review Comment
5	Appendix B, Section 1.1	QUESTION/ CHANGE	<p>The first complete paragraph, following the bullet list, the text discusses the Consultant’s responsibilities to develop the ESMF/ESMP, but the following paragraph discusses SDSU’s responsibilities to identify and assess environmental and social risks associated with program activities. Does this mean that the Consultant is only responsible for issues related to construction works while SDSU is responsible for more general programmatic issues (i.e. laboratory H&S)? This section is unclear.</p> <p><i>This is correct; we included paragraph 2.8.5 from Appendix A of the final Contract in the ESMF/P RFP, to ensure the Consultant understands they are responsible for all ESMF/P work relative to construction/renovation, and SDSU is responsible for all ESMF/P aspects of the programmatic/operational side of the labs.</i></p>
6	Appendix B, Section 1.1, Performance Standard #4	CHANGE	<p>The grievances mechanism is only briefly mentioned here, however, it should be more explicit that the Consultant is responsible for preparing a grievance mechanism for the program, if that is indeed the case.</p> <p><i>Language has been added to this section accordingly, and per comment #8 below.</i></p>
7	Appendix B, Section 1.0:	QUESTION	<p>Under the proposed construction to be managed by the Consultant, it is not clear where 23 project spaces under Phase 1 at TSU come from. 8 project spaces are listed under Phase 1B. Are the rest under Phase 1A? Phase 1A doesn’t appear to be listed under the summary space renovations tables at the end of Appendix B.</p> <p><i>This can be a bit confusing. The spaces add up correctly, however the “tables” do not show the “Phase 1A” work, which includes 15 Dean/staff/administration spaces, to be provided by the MCA-G (rather than Contractor). These 15, added to the 8 from “Phase 1B”, total the 23. The tables represent the most recent scope of work information received, and have been updated for clarity as Appendix A, and within Appendix B.</i></p>

REVIEW COMMENTS (Continued)

Document: SDSU Deliverables:

Date: 10/2/2014

No.	Topic/Doc. Reference	Category ⁽¹⁾	Review Comment
8	General Comment	COMMENT	<p>Stakeholder Engagement and Grievance mechanism - There is already agreed language on grievances in the contract between the MCA G and SDSU, so we suggest reflecting that in this ToR. At the design phase of renovation and construction works the Consultant shall develop and implement Stakeholder Engagement and Grievance Mechanism/Plan. So, before the ESMP is finalized the plan should be outlined and major activities identified. The document will help identify and screen the key stakeholders, their roles and responsibilities and ensure to establish effective communication channels at the early stage of project development.</p> <p><i>ADDED to Appendix B, Section 1.1, Performance Standard 4 (which includes paragraph 2.8.5 from Appendix A of final Contract): “In collaboration with MCA-Georgia, SDSURF and Contractor, Consultant shall be responsible for developing a mechanism for receiving, documenting and responding to grievances from all affected parties as a result of the project. At the design phase of renovation and construction works the Consultant shall develop and implement a Stakeholder Engagement and Grievance Mechanism/Plan. This mechanism shall be outlined with major activities identified, prior to finalizing the ESMP, and shall be included in the tender document for construction works. The grievance mechanism will help identify and screen the key stakeholders, their roles and responsibilities, and shall be clearly communicated to stakeholders prior to the start of construction works and as part of the public consultation process. Consultant, Contractor and SDSURF shall be responsible for responding to grievances relevant to the conduct of the design and construction works supervision. Grievances that cannot be resolved shall be resolved in accordance with MCA-Georgia’s grievance mechanisms.”</i></p>
9	General Comment	COMMENT	<p>Training- the Contractor shall provide general training to the Contractor’s management staff and all other relevant involved parties, to make them familiar with ESMF/ESMP document, its specifications and requirements. Trainings should be conducted during/ before Contractor mobilization and during execution of the work.</p> <p><i>ADDED to Section 1.7: “Provide scheduled trainings to renovation and construction contractor’s management staff and all other relevant involved parties. Trainings shall include, but not be limited to the following topics: proper use of personal protective equipment (PPE), site access control/security, emergency preparedness, hazardous materials, general safety operations, as well as the ESMF/ESMP document to ensure all parties become familiar with its specifications and requirements. Contractor shall coordinate a curriculum and schedule with Consultant, and ensure trainings are conducted prior to renovation and construction contractor mobilization and throughout execution of the work.”</i></p>

REVIEW COMMENTS (Continued)

Document: SDSU Deliverables:

Date: 10/2/2014

No.	Topic/Doc. Reference	Category ⁽¹⁾	Review Comment
10	General Comment	COMMENT	<p>Waste Management- the ToR document says that coordination with the Ministry of Environment may be required under the proposed new Waste Law. It should be noted that Ministry of Infrastructure and Regional Development though Solid Waste Management Company also regulates waste management issues and it will be needed to consult with them and therefore the latter ministry should also be included in the stakeholders list for the project.</p> <p><i>This language has been added to Appendix B, Section 1.1, Performance Standard 3.</i></p>
11	General Comment	CHANGE	<p>Schedule of activities on page 23 needs to be updated accordingly with the new dates.</p> <p><i>Changed.</i></p>
12	Appendix B, Section 1.1, performance standard 2	CHANGE	<p>Please insert the following text, highlighted in yellow: Performance Standard 2: Labor and Working Conditions</p> <p>Consultant shall identify occupational health and safety risks and prepare guidelines, which comply with IFC Performance Standards on Labor and Working Conditions. These guidelines will cover, among other issues, management of environment, health and safety risks, including hazardous materials handling, storage and disposal (see following section on PS 3). Guidelines should also cover child and migrant workers, working environment (e.g. protection against sexual harassment and discrimination based on gender, ethnicity or other personal characteristics), Counter Trafficking in Persons, safe working conditions, including personal protective equipment, and provide for a grievance mechanism for workers. Health and safety issues should be integrated into the front-end risk assessment process. Health and safety should be integrated into the ESMP which will outline detailed health and safety requirements for works contractors and QA/QC procedures. Consultant shall prepare a Health and Safety checklist to be used during the construction supervision phase as a monitoring and tracking tool to ensure the contractor's compliance with MCC health and safety standards. Occupational Health and Safety (OHS) clauses should be developed to translate OHS requirements under the ESMP into contract language and integrated into tender documents.</p> <p><i>ADDED to Appendix B, Section 1.1, Performance Standard 2: "working environment (e.g. protection against sexual harassment and discrimination based on gender, ethnicity or other personal characteristics), Counter Trafficking in Persons,"</i></p>

REVIEW COMMENTS (Continued)

Document: SDSU Deliverables:

Date: 10/2/2014

Terms of Reference

STATEMENT OF WORK

**SDSURF/MCA Georgia
Design/Construction Supervision
for
Ivane Javakhishvili Tbilisi State University
Ilia State University
Georgia Technical University**

DRAFT

ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Materials
BOQs	Bills of quantities
CPI	Cost Performance Index
DLP	Defects Liability Period
EA	Environmental Assessment
EHS	Environmental, Health and Safety
EIF	Entry into Force
ERC	Education Resource Center
ESA	Environmental and Social Assessment
EMIS	Educational Management Information System
ESIDA	Education and Science Infrastructure Development Agency, Ministry of Education and Science
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
GIS	Geographic Information System
GOG	Government of Georgia
HA	Hectare
HSP	Health and Safety Plan
HWMP	Hazardous Waste Management Plan
IDIQ	Indefinite Delivery Indefinite Quantity
IE	Implementing Entity
IEA	Implementing Entity Agreement
IFB	Invitation for Bid
IFC	International Finance Corporation
LBP	Lead-Based Paint
LOE	Level of Effort
M&E	Monitoring and Evaluation
MCC	Millennium Challenge Corporation
MCA-G	Millennium Challenge Account, Georgia
MoES	Ministry of Education and Science
NIC	Not in Contract
OHSP	Occupational Health and Safety Plan
PPE	Personal Protective Equipment
PRSP	Poverty Reduction Strategy Paper
PS	Performance Standard
QAP	Quality Assurance Plan
QC	Quality Control
RAP	Resettlement Action Plan
RFI	Request for Information
ROW	Right-of-Way
SEMP	Site Specific Environmental Management Plan
STEM	Science, technology, engineering, and mathematics
SOW	Statement of Work
SDSU	San Diego State University
SDSURF	San Diego State University Research Foundation
SPI	Schedule Performance Index
TOR	Terms of Reference
TVET	Technical, vocational education training
US	United States
WHO	World Health Organization
WMP	Waste Management Plan
WWTP	Wastewater Treatment Plant

TABLE OF CONTENTS

1. OVERVIEW OF ASSIGNMENT	4
1.1 MCC in Georgia	5
1.2 Project Team Structure	6
1.3 General Project Tasks	6
1.4 Design of Renovation and Construction Works	7
1.5 Oversight of Environmental and Social Management Framework (ESMF) and Environmental and Social Management Plan (ESMP) According to IFC Performance Standards, CEQA, or combination thereof	8
1.6 Unforeseen Environmental Issues	8
1.7 Develop Renovation/Construction Bid Packages	9
1.8 Supervision of the Construction Contractor(s)	9
1.9 Post-Construction Services	13
1.10 Termination Clause	13
2. REPRESENT	13
APPENDICIES	
Appendix A – Space/Site Detail	14
Appendix B – Consultant RFP # SDSURF-09-02, Environmental and Social Management Framework, including Addendum 1 (Consultant Scope of Work)	18
Appendix C – San Diego State University Research Foundation Purchasing Manual	33
Appendix D – Additional General Provisions	54

**STATEMENT OF WORK
SDSURF/MCA-Georgia**

Design/Construction Supervision

1. OVERVIEW OF ASSIGNMENT

This consulting assignment, entitled Design/Construction Supervision Contractor (Contractor), is designed to provide, administer and oversee services for the improvements to existing higher education facilities, as well as the design and construction of a new facility, all within Tbilisi, Georgia. In this effort and within the first four phases of the 15-month Pre-Enrollment contract, SDSURF/MCA-Georgia will obtain proposals for the refurbishment works of approximately 2,425 m²; and new construction for approximately 2,000 m² of teaching space. The space quantities, dimensions and scope are approximate and subject to change. The proposed rehabilitation and construction works shall be designed and constructed in compliance with applicable codes and standards for educational facilities, and meet the Millennium Challenge Corporation (MCC) guidelines, as described herein.

The works are to be spread across the following three Universities:

Tbilisi State University (TSU)

16, Zandukeli St.

Tbilisi 0108, Georgia

Phase 1A: Rehabilitations: 15 spaces (NIC, to be provided by MCA-G)

Phase 1B: Rehabilitations: 8 spaces

Phase 2: Rehabilitations: 11 spaces

Georgian Technical University (GTU)

77a Kostava St.

Tbilisi 0171 Georgia

Phase 3: Rehabilitations: 8 spaces

Ilia State University (ISU)

Kabutsa Cholokashvili Ave. 3/5

Tbilisi 0162 Georgia

Phase 4A: New facility - design and planning

Phase 4B: New facility - construction

Reference is made to Appendix A – Space/Site Detail (3 pgs.)

Phase 1 is the top priority with desired completion date of design and rehabilitations to be no later than early January 2015 to support outfitting of spaces in January 2015. Phases 2 and 3 will run concurrent to complete design, RFP and award, and completion of rehabilitations no later than August 2015, to allow for outfitting of all furnishings, installation and testing of IT systems and laboratory equipment. Phases 4A and 4B shall be processed in close collaboration with MCA Georgia so that the RFP and award is completed by October 2015 to support completion of construction and outfitting by September 2016.

SDSURF reserves the right to modify or change this TOR pending final approval by MCA Georgia. When such modifications or changes increase the duties beyond those reasonably and customarily provided in Basic Services, the Design/Construction Supervision firm (Contractor) shall be compensated accordingly.

1.1 MCC in Georgia

The Millennium Challenge Corporation (MCC) and the Government of Georgia (the Government) have entered into a Millennium Challenge Compact for Millennium Challenge Account assistance to help facilitate poverty reduction through economic growth in Georgia on 26 July 2013 (the “Compact”) in the amount of \$140 million (“MCC Funding”).

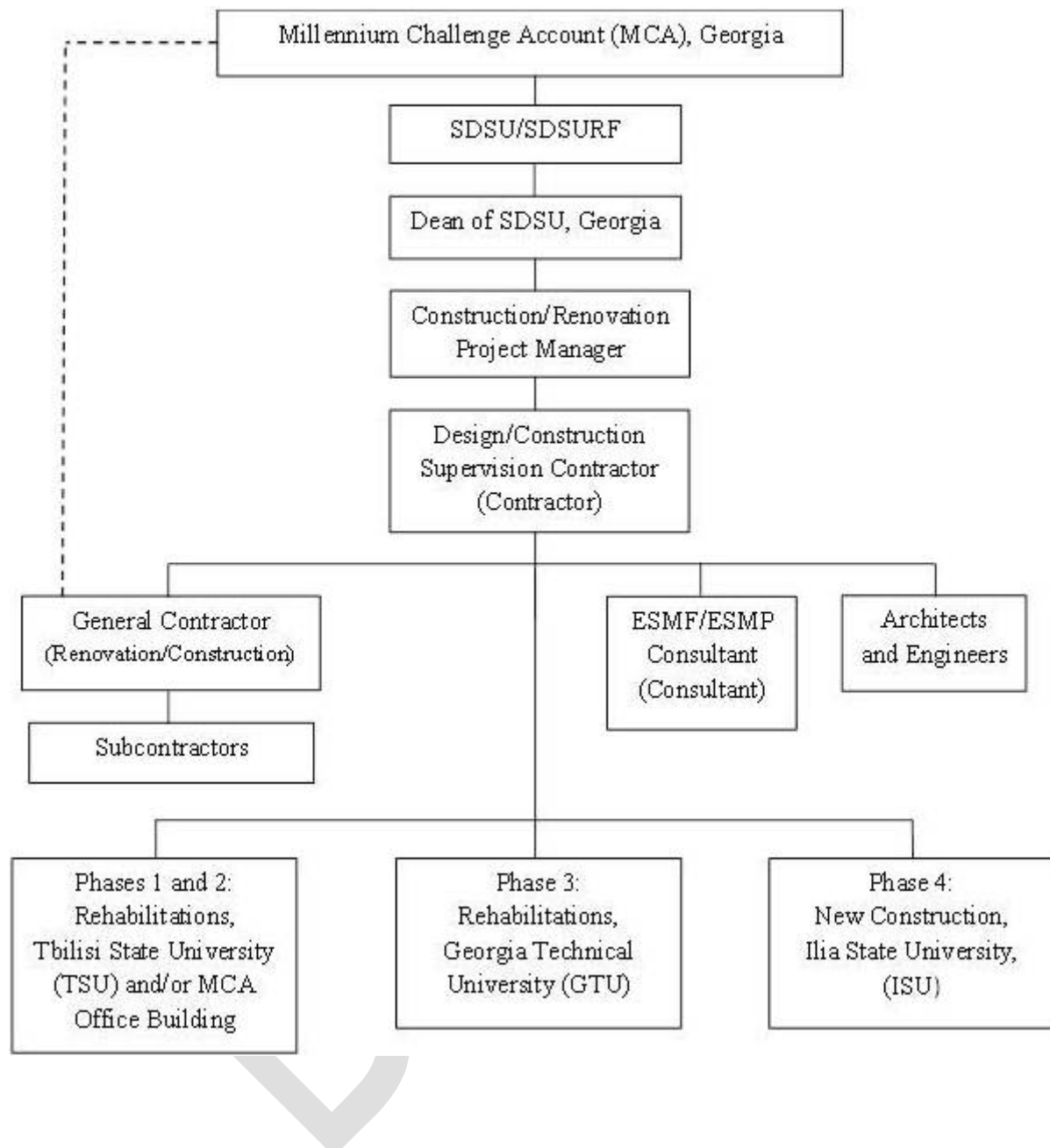
The Government of Georgia has created Millennium Challenge Account-Georgia (MCA-Georgia) to implement the MCC’s compacts. The MCA-Georgia is a legal entity of public law accountable to the MCC and the Government of Georgia led by a Supervisory Board chaired by the Prime Minister of Georgia and comprising of the Ministers of Education and Science, Finance, Foreign Affairs, and Justice.

The MCA-Georgia and San Diego State University (SDSU) have entered into a contract to utilize SDSU’s educational and instructional abilities for the purposes of developing a degree accreditation for Science, Technology, Engineering, and Mathematics (STEM) Higher Education Project of the second Millennium Challenge Corporation (MCC) Compact with Georgia. This effort focusses on building capacity within Georgian public universities to deliver high quality STEM education and bachelor degrees from accredited foreign institutions in Georgia.

San Diego State University (SDSU) designates and will sub-contract with the San Diego State University Research Foundation (SDSURF) to receive and apply exclusively the funds and properties coming into its possession toward furthering these purposes only for the benefit of San Diego State University.

Contractor shall demonstrate it has the required professional skills, personnel and technical resources to provide design/construction supervision services based upon the scope of work, terms and conditions detailed herein.

1.2 Project Team Structure



1.3 General Project Tasks

General tasks to be completed as part of design/construction supervision project management include, inter alia:

- Represent the interests of SDSURF/MCA-Georgia under the works contract(s), in any manner related to the works contract(s) and the proper execution therefore;
- Ensure the general coordination of the whole construction under this Project and its activities, including the necessary coordination and planning to manage multiple sites simultaneously, if necessary;
- Supervise environmental and social risks and develop environmental and social management framework and environmental and social management plans.

- Provision of analysis and advice on specific issues at the request of SDSURF/MCA-Georgia;
- Assurance that the execution of Project activities is carried out according to the guidelines established by SDSURF/MCA-Georgia;
- Monitor compliance with the deadlines in comparison with what is projected in the contracts;
- Draft all required reports such as described herein;
- Provide technical and administrative supervision of the work contract(s), coordination and oversee to ensure compliance with the Environmental and Social Management Plan, Waste Management Plan, and Occupational Health and Safety Guidelines and other relevant environmental and social performance requirements.;
- Liaise with the Government, SDSURF/MCA-Georgia and partner institutions as appropriate to gather and share information;
- Liaise with the Procurement Unit at the MCA-Georgia who will supervise all procurements under the MCC Compact and assist in the preparation of bid documents;
- Submit all deliverables to SDSURF/MCA-Georgia as described in the reporting requirements section; and
- Establish and maintain a Document Management System.

1.4 Design of Renovation and Construction Works

The design of renovation and construction works shall be based on all requirements of the Project, coordination with stakeholders, the existing conditions, and the end result expected by each part of the work. With regard to applicable building codes and standards, the initial thought was that the International Building Code (IBC) would be best practice in Georgia; however, as SDSURF has learned, local designers and contractors are generally not familiar with IBC practices, and there appears to be no formal building code that currently exists in Georgia. As a result, for this project SDSURF proposes to use an international architect to create the design brief. A local architect will be used to design the works, create a specification and to reference the unique collection of industry best practice standards used in Georgia. The design shall then be reviewed by an international architect for its alignment with internationally accepted standards. SDSURF/Contractor can then provide close oversight to ensure the design is followed by the Contractor/renovation and construction contractor(s) during the construction phase.

General tasks to be completed as part of the design activities include:

- Design criteria and standards to be applied;
- Layout of rooms and spaces, as appropriate;
- Plans of the existing buildings;
- Structural reviews of selected building(s) for renovation, as applicable, for new construction prior to preparation of design documentation;
- Recommendations of environmental and social measures to be integrated in the works implementation, as appropriate;
- Geotechnical Investigation and Reporting as appropriate to obtain information on the physical properties of soil and rock around a site to design earthworks and foundations for proposed structures and for repairs of distress to earthworks and structures caused by subsurface conditions.
- A site plan at 1/500 and layout plan at 1/200 (public spaces and buildings), with learning space design criteria considered in classrooms as well as public spaces;
- Design drawings using Autocad, superimposed on the “existing” layer, in a way to visualize by different colors the design to be brought (to create, to demolish, to build), in case of renovation, as appropriate;
- Details of plans for all elements of the work including mechanical, HVAC, electrical, plumbing, wastewater systems/drainage systems on a scale of 1/50 and 1/20, as appropriate;

- Review construction methods for feasibility and availability of materials and labor, time requirements for procurement, installation and construction;
- Design and related documentation must follow all relevant codes and standards for the proposed renovation and new construction works, as appropriate.
- Design details and specifications including provision for reduced mobility features, such as handicap access/egress for wheel chairs, following relevant codes for design of circulation, ramps, door opening and widths, as appropriate.
- Other details and standards that are part of the plans;
- A schedule for implementation of the works which must take into account the safeguard of the property as well as continuing operations of the educational facility during construction, as appropriate;
- A schedule of professional and working trades, materials, equipment and quantities of each required for the performance of works;
- The minutes of different consultation meetings held with the service authorities for the design concept, as appropriate;
- Detailed location and layout of all facilities, document land titling and ownership, and clarify permit requirements, such that the affected areas can be set and reviewed in the Environmental and Social Management Plan (ESMP);
- The technical specifications of works;
- Detailed description for all line items;
- Bill of Quantities;
- A confidential cost estimate;
- Notes on the calculation of works; and
- Laws, regulations and standards considered in design.
- Other work as deemed necessary to meet work objectives.

1.5 Oversight of Environmental and Social Management Framework (ESMF) and Environmental and Social Management Plan (ESMP) According to IFC Performance Standards, CEQA, or a combination thereof

The scope of work in this section shall be the responsibility of the ESMF Consultant (Consultant); reference is made to Appendix B RFP # SDSURF-09-02, Environmental and Social Management Framework. As shown in the Project Team Structure organizational chart in Section 1.2, the Consultant shall report to, and coordinate with, the Contractor to ensure all relative and critical information is included in contract documents and disseminated to all parties.

1.6 Unforeseen Environmental Issues

In addition to the previous environmental, social, health and hazardous material requirements, there remains a possibility that other unforeseen issues could be uncovered during Contractor's work on a particular site, including but not limited to the following:

- Presence of friable asbestos or ACM;
- Presence of laboratory waste and luminescent light bulbs in large quantity;
- Potential resettlement impacts or access issues.

Such site specific problems may go beyond the scope of the standard ESMP requirements and need to be highlighted, and may warrant specific additional site specific mitigation measures. If these issues are too serious to be addressed with additional mitigation, Contractor shall confer with SDSURF/MCA-Georgia.

1.7 Develop Renovation/Construction Bid Packages

Contractor will consult with partner institutions and community officials to prepare a site plan for the existing institution and property boundaries (from existing record, no new surveys), other existing structures and/or newly required features on the site plan (as outlined in the previous chapter). Contractor shall prepare site plans at 1/200 scale, and at 1/500 scale for the affected area plans, with details at 1/50 and 1/20.

Based on the work program for the Project, Contractor will prepare one set of design drawings for each site. These documents shall be used as a basis to establish the Bidding Documents for the renovation and new construction works. Contractor shall assist SDSURF/MCA-Georgia and the Procurement Unit at MCA-Georgia in the elaboration of documents pertaining to requests for proposals and shall also provide any other required information or documents. These documents shall contain references to the EMP, which shall be provided to the bidders. All plans, designs and documents that are provided must include one electronic copy in order to be reproduced.

The SDSURF Purchasing Policies (Appendix C) cover all aspects of the administrative requirements and tasks. The Technical Specifications shall include lists and descriptions of work (pay) items to be executed.

Contractor shall prepare Bills of Quantities (BOQ) based on the various items of work to be executed in accordance with the drawings and the technical specifications. The items in the BOQ shall correspond to the work (pay) items specified in the technical specifications.

Contractor shall develop a Confidential Cost Estimate, for each work item, work category and contract package as a whole. Unit prices shall be classified into direct costs (labor, materials and equipment), indirect costs (mobilization, on-site and general overheads, contractor's contingencies and profit) and taxes.

In preparing cost estimates Contractor shall take into account restrictions on the use of Compact funds. This includes the procurement of equipment, supplies, personnel or other inputs from any country that is subject to sanction or restriction by United States law or policy.

1.8 Supervision of the Construction Contractor(s)

Contractor shall provide full construction supervision/project management services, as commonly provided in the construction industry -whether noted below or not - as the Construction Engineering representatives of SDSURF/MCA-Georgia. The works will be executed under small works contracts with Contractor performing the Engineer's roles and responsibilities as defined therein – except where limited or noted below.

Activities include, but are not limited to: supervising the renovation and construction contractor(s), scheduling, managing, change order requests, the provision of supervision engineers, progress and scheduling, reviewing requests for payment, reviewing as-built drawings, and providing quality assurance. These services entail the responsibilities for the "Construction Engineer" except as limited by this scope of services.

Duties to be included in this portion of the assignment include but are not limited to:

- Preparing the agenda and leading the preconstruction meeting with the contractors of each different project and discussing the agenda with the MCA-Georgia's ESP Director, Chief Infrastructure Engineer and the Tertiary Education Project Director prior to the meetings.
- Reviewing and commenting on and approving programs of work submitted by the renovation and construction contractor(s);
- Reviewing and approving construction plans and methods proposed by the renovation and construction contractor(s);

- Visit the site on a daily basis to observe the progress and quality of the renovation and construction contractor's work, and maintain representatives at the site in such a manner that adequate supervision of the renovation and construction works is provided at all times the contractor is working;
- Monitoring and reporting on the physical and financial progress of the works undertaken by the renovation and construction contractor(s) and recommending action to be taken when progress is not in accordance with the agreed program;
- Verifying that the quality of the renovation and construction works are completed according to the design drawings and specifications, and providing quality assurance on quality control tests performed by contractor, as appropriate.
- Certifying that the monthly certificates for payment from the renovation and construction contractors accurately reflect the value of the works completed;
- Compiling information and evaluating information for accident reports as they occur;
- Preparing and issuing site instructions to the renovation and construction contractors, as necessary for Project implementation;
- Providing sufficient, qualified staff to carry out all required monitoring, supervision, inspection and management duties described herein;
- Coordinating and facilitating the RFI process between bidders and project designers;
- Approving construction shop drawings, product data, samples and other submittals, as appropriate;
- Reviewing and analyzing and recommending approval or rejection of renovation and construction contractors' proposed change (variation) orders to MCA-Georgia;
- Proposing change orders for the approval of SDSURF/MCA-Georgia; including the cost impact of such proposed changes. Contractor shall also be required to submit the various alternatives with cost benefit analysis for facilitating the decision by MCA-Georgia;
- Reviewing reports submitted by the renovation and construction contractor(s);
- Submit monthly progress reports to SDSURF/MCA-Georgia, which will include the following:
 - Report on percentage of work completion without defects, by site/project;
 - Report on application of the ESMP, WMP, OHSP and related documents;
 - Report on management of hazardous material, including materials not previously identified in the waste management plans, if applicable;
 - Report on any grievances received by affected parties;
 - Graphical representation of planned vs actual production, along with Earned Value metrics, including Schedule Performance Index (SPI), Cost Performance Index (CPI);
 - Detailed account to be paid related to the work completion;
 - Identified contractor's lack of performance and lack of compliance with the contracts; and
 - Quickly propose adequate measures to resolve these shortcomings
- Providing photographs of construction, documenting monthly progress and potential trouble areas;
- Check and establish that the renovation and construction contractor(s) mobilizes and supplies to the site all materials, equipment and machinery, including personal protective equipment

(PPE), that have been committed in its bid, and ensure that all such items remain on site until their release has been authorized. Ensure that the contractor(s) properly records all equipment, materials and labor which have been supplied under the Contract, and keep and regularly update lists of the contractor's equipment, including PPE (and its condition) and personnel on site;

- Assess the adequacy of all inputs, such as equipment, labor and materials provided by the renovation and construction contractor(s) and its methods of work in relation to the required rate of progress and, when required, take appropriate action in order to expedite progress;
- Inspect and evaluate all renovation and construction contractor's installations, shops and warehouses and other accommodation to ensure compliance with the terms and conditions of the Contract;
- Provide timely assistance and direction to the renovation and construction contractor(s) in all matters related to the interpretation or clarification of the works contract, ground survey controls, quality control testing and other matters related to works contract compliance and progress of the works; and ensure prompt responses when the renovation and construction contractor(s) calls for inspections and approvals;
- Issue instructions, in accordance with the authority specified in the Conditions of Contract, to contractors, such that works can proceed expeditiously;
- Review the renovation and construction contractor's work plan for completeness, reasonableness, as well as logic in sequencing of operations. Contractor shall work with the renovation and construction contractor until acceptable schedules are produced. Contractor shall monitor progress against the work program, instructing the renovation and construction contractor to revise its program as necessary in order to meet due completion dates;
- Ensure that the works are executed in accordance with the drawings and that the quality of workmanship and materials is in compliance with the technical specifications. Evaluate and determine acceptability of substitute or "equal" materials and equipment proposed by the contractor;
- Perform or oversee all laboratory and field testing of contractor's work, utilities, operational systems equipment, materials and products required to ensure that the quality as specified in the Contract is attained, as applicable. Review all certificates of inspections, tests and approvals;
- Provide scheduled trainings to renovation and construction contractor's management staff and all other relevant involved parties. Trainings shall include, but not be limited to the following topics: proper use of personal protective equipment (PPE), site access control/security, emergency preparedness, hazardous materials, general safety operations, as well as the ESMF/ESMP document to ensure all parties become familiar with its specifications and requirements. Contractor shall coordinate a curriculum and schedule with Consultant, and ensure trainings are conducted prior to renovation and construction contractor mobilization and throughout execution of the work.
- Ensure that the renovation and construction contractor(s) has taken suitable measures with regard to the safety and health of its workers (provision of PPE, potable water, lodging, first aid kits), site safety, and accident prevention measures. Inspect the security and safety aspects of construction, equipment and temporary works to ensure that every reasonable measure has been taken to protect life and property;
- Ensure that the renovation and construction contractor complies with its contractual obligations in respect of labor standards, mitigation of impacts on the environment, health and safety, by withholding payment against appropriate items in applications for interim payment, as applicable in accordance with the provisions of the works contract;

- Prepare and maintain inspection and engineering reports and records to adequately document the progress and performance of the works;
- Prepare incident reports, covering accidents, environmental and other incidents, and take appropriate follow on action;
- Perform all survey measurements of completed or partial works where required for the determination of quantities. Compute quantities of approved and accepted work and materials and check, certify and make recommendations to SDSURF/MCA-Georgia on the contractor's interim and final payment certificates. All payment certificates shall be checked and countersigned by Contractor;
- Review and comment on, or recommend approval of, contractor's proposals for variations;
- Propose and present for the approval of SDSURF/MCA-Georgia any variations in the Contract that may be deemed necessary for the completion of works, including information on any effect that the variations may have on the works contract amount and the time for completion of the works, and prepare all necessary variation orders, including alterations of plans, technical specifications, and other details for the approval of SDSURF/MCA-Georgia;
- Amend and reproduce design drawings and respective documentation, as deemed necessary during the implementation of the works;
- Review and comment on or approve as-built drawings prepared by the renovation and construction contractor(s);
- Inform SDSURF/MCA-Georgia about problems or potential problems, which may arise in connection with the works contract(s) and make recommendations to SDSURF/MCA-Georgia for possible and optimal solutions;
- Examine and make recommendations to SDSURF/MCA-Georgia on all claims from the Contractor for extension of time, additional compensation, extra work or expenses or other similar matters. Attend claims meetings between SDSURF/MCA-Georgia and contractor;
- Arrange and preside at periodic coordination and progress meetings on site, and prepare the minutes of meetings;
- Analyzing and determining claims submitted by the renovation and construction contractor(s) and SDSURF/MCA-Georgia;
- Organize and document meetings as required or requested by claimants;
- Communicating with businesses and communities effected by any of the works undertaken under the Project to keep them aware of the construction process and schedule;
- Reviewing (verifying accuracy of) and approving the as-built drawings prepared by renovation and construction contractors and keeping an up-to-date set and complete set of drawings for SDSURF/MCA-Georgia at all times;
- Performing pre-final and final inspections of projects and issuing a Certificate of Completion for the works. Normally, these inspections will generally be jointly carried out with the relevant partner institution(s);
- Preparing a final completion report for each of the works contracts punch list, including recommendation to SDSURF/MCA-Georgia for final acceptance of all the works included in the contract documents and amendments.
- Maintaining complete and orderly working files for correspondence, minutes of meetings and conferences, submittal data, submittal registers, inspection and monthly progress reports, contract construction compliance notices, punch lists and contract documents including amendments, notices to proceed, change orders and modifications, all in a system which is comparable with software used by SDSURF/MCA-Georgia; and

- Perform all other tasks, not specifically mentioned above, but which are necessary and essential to ensure the successful supervision and control of all the construction activities, in accordance with the terms of the works contract.

1.9 Post-Construction Services

During this phase Contractor tasks shall include the following:

- Inspect the works at appropriate intervals during the renovation and construction contractor's Defects Liability Period (12 months), and prior to expiration of the Defects Liability Period (DLP), prepare a final deficiency list, supervise remedial works and recommend to SDSURF/MCA-Georgia the date of the Final Inspection of the works;
- Carry out the Final Inspection of Works together with representatives of partner institutions, SDSURF/MCA-Georgia, and the Contractor;
- Prepare and issue the Final Acceptance Certificate in consultation with SDSURF/MCA-Georgia and the partner institution; and
- Prepare the Final Payment Certificate.
- Availability to assist with claims, disputes or other matters related to work.

1.10 Termination Clause

This agreement may be terminated by either party upon not less than 30 day's written notice of intent. Should the other party fails substantially to perform in accordance with the terms of the agreement through no fault of the party initiating the termination notice.

If the project is suspended by SDSURF for more than 90 consecutive days; the Contractor shall be compensated for services performed prior to notice of such suspension.

In the event the project is permanently abandoned or; the project is abandoned for more than ninety (90) consecutive days.

2. REPRESENT

This TOR represents the entire agreement between SDSURF/MCA Georgia and Contractor and supersedes all prior negotiations representations or agreements, either written or oral. This TOR may be amended only by written instrument signed by both SDSURF/MCA-Georgia.

Appendix A – Space/Site Detail

DRAFT

Tbilisi State University (TSU)

15 Month Pre-Enrollment Contract Space Renovations

Phase 1A - MCA Georgia Building (all works to be performed by MCA Georgia)				
Deans's Office	# spaces	Sq ft	m²	Total m²
Deans Office (350 sq ft)	1	350	33	33
Staff Offices (6 ea at 250 sq ft)	6	200	19	112
Admin Workstations (6 ea at 150 sq ft)	6	150	14	84
Conference/Meeting rooms (2 - 300 sq ft)	2	300	28	56
Total Renovations Phase 1A	15	1,000	93	283

Phase 1B - Tbilisi State University				
English/STEM Space Requirements	# spaces	Sq ft	m²	Total m²
English/STEM offices (3 - 250 sq ft)	3	250	23	70
English/STEM Classrooms (5 ea 1000 sq ft, 25 students)	5	1,000	93	465
Total Renovations Phase 1B	8	1,250	116	534
TOTAL RENOVATIONS PHASES 1A & 1B	23	2,250	209	818

Phase 2 - Tbilisi State University				
General Education Classroom and Laboratory Spaces	# spaces	Sq ft	m²	Total m²
GE Smart Classrooms - with 30 computers	2	1,600	149	297
GE Lecture Hall- Media Center with 100 seats	1	2,400	223	223
Chemistry & General Education	1	1,000	93	93
Chemistry Environmental Laboratories (duplicate at GTU)	1	1,000	93	93
Physics Laboratory	1	1,000	93	93
Program Offices (3 - 1GE, 1 Eng. 1 Sci.)	3	350	33	98
Laboratory Storerooms and Offices	2	850	79	158
Total Renovations Phase 2	11	8,200	762	1,055

45-Month Space Requirements

Electrical/Computer Engineering Laboratories and Support	# spaces	Sq ft	m²	Total m²
Laboratory 1 Courses EE210, 330L, 430L (duplicate at GTU)	1	800	74	74
Laboratory 3 Digital Communications	1	800	74	74
Laboratory Antenna Microwave	1	800	74	74
Laboratory 5 Senior Design (duplicates at GTU and ISU)	1	800	74	74
Engineering Computer Classroom - with 30 computers	1	1,600	149	149
Laboratory Storeroom	1	1,000	93	93
Laboratory Office	1	700	65	65
Library Digital Media Area	1	2,400	223	223
Total Renovations Phase 5	8	8,900	827	827

Chemistry Laboratories	# spaces	Sq ft	m²	Total m²
Chemistry 232, 432	1	1,000	93	93
Chemistry 417,427,457	1	1,000	93	93
Chemistry 457 Special	1	1,000	93	93
Chemistry 567 (duplicate at GTU)	1	1,000	93	93
Sciences Computer Classroom	1	1,600	149	149
Laboratory Storerooms	1	1,000	93	93
Laboratory Technician Offices	1	700	65	65
Library Digital Media Area	1	2,400	223	223
Total Renovations Phase 6	8	9,700	901	901

Additional Classrooms, Lecture Halls, Library	# spaces	Sq ft	m²	Total m²
GE Smart Classrooms - with 30 computers	1	1,600	149	149
GE Lecture Hall- Media Center with 100 seats	2	2,400	223	446
Sciences Computer Classroom	1	1,600	149	149
Program Office	1	350	33	33
General (Communal/toilet facilities)	2	900	84	167
Total Renovations Phase 7	7	6,850	637	943

Totals (TSU)	42	34,900	3,243	4,261
Totals (TSU & MCA)	57	35,900	3,336	4,545

Note: Space quantities and sizes shown above are approximate and subject to change.

Georgian Technical University (GTU)

15 and 45-Month Space Requirements (Phase 3 within 15-Month Pre-Enrollment Contract)

Electrical Engineering	# spaces	Sq ft	m²	Total m²	Phase
EE Lab EE210/330/430	1	800	74	74	Phase 8
EE Senior Design Lab	1	800	74	74	Phase 8
EE Power Electronics	1	800	74	74	Phase 8
Program Office (Pre-Enr Phase 3)	1	350	33	33	Phase 3
Laboratory Storerooms and Offices (Pre-Enr Phase 3)	1	850	79	79	Phase 3
Total	5	3,600	335	335	
Civil/Construction Engineering	# spaces	Sq ft	m²	Total m²	Phase
Hydraulics Lab	1	1,000	93	93	Phase 8
GeoTechnical Lab	1	1,000	93	93	Phase 8
Surveying Lab	1	200	19	19	Phase 8
Program Office	1	350	33	33	Phase 9
Laboratory Storerooms and Offices	1	850	79	79	Phase 8
Total	5	3,400	316	316	
Chemistry Laboratories	# spaces	Sq ft	m²	Total m²	Phase
Chemistry Environmental (Pre-Enr Phase 3)	1	1,000	93	93	Phase 3
Chemistry 567	1	1,000	93	93	Phase 8
Program Office (Pre-Enr Phase 3)	1	350	33	33	Phase 3
Laboratory Storerooms and Offices (Pre-Enr Phase 3)	1	850	79	79	Phase 3
Total	4	3,200	297	297	
Additional Classrooms, Lecture Halls, Library	# spaces	Sq ft	m²	Total m²	Phase
ENG Computer Classrooms (Pre-Enr)	2	1,600	149	297	Phase 3
Lecture Hall/Media Ctr (Pre-Enr Phase 3)	1	2,400	223	223	Phase 3
Library Digital Media Area	1	2,400	223	223	Phase 9
Total	4	6,400	595	743	
Additional Administrative Spaces	# spaces	Sq ft	m²	Total m²	Phase
General (Communal/toilet facilities)	2	900	84	167	Phase 9
Total	2	900	84	167	
Totals, Phase 3	8	7,400	688	836	
Totals, All Phases	20	17,500	1,626	1,859	

Note: Space quantities and sizes shown above are approximate and subject to change.

Ilia State University (ISU)

Proposed New Construction

Enrollment Construction Phases 4A/4B	# spaces	Sq ft	m²	Total m²
Laboratory 2 - Courses CompE 270, 375, 470L	1	800	74	74
Laboratory 5 - Senior Design	1	800	74	74
Laboratory - Hydraulics	1	1,000	93	93
Laboratory - Structural	1	1,000	186	186
Laboratory - Geotechnical	1	1,000	93	93
Surveying Laboratory	1	200	19	19
Computer Classroom - 2 with 30 computers	2	1,600	149	297
Lecture Hall- Media Center with 100 seats	1	2,400	223	223
Library Digital Media Area	1	2,400	223	223
Laboratory Storeroom (2)	2	500	46	93
Laboratory Technician Offices (2)	2	350	33	65
Programs Offices (2 Engineering)	2	350	33	65
Communal Areas (halls, stairs, HVAC plant, etc)	1	3,000	279	279
<i>Total Proposed Construction Phases 4A/4B</i>	17	15,400	1,524	1,785

Note:

Phase 4A includes design and planning only.

Phase 4B includes the actual construction after October 2015.

Space quantities and sizes shown above are approximate and subject to change.

Appendix B – Consultant RFP # SDSURF-09-02
Environmental and Social Management Framework

DRAFT

REQUEST FOR PROPOSAL
SDSURF/MCA-Georgia
Environmental and Social Management Framework
RFP # SDSURF-09-02

The SDSU Research Foundation (SDSURF), a California non-profit corporation, is requesting proposals from qualified firms for the development of an Environmental and Social Management Framework (ESMF) and Environmental and Social Management Plan (ESMP) associated with construction and rehabilitation projects at three universities within the country of Georgia. The Consultant shall develop an ESMF that will meet or exceed IFC Performance Standards, and may require the incorporation of relative CEQA standards and advise how these shall be incorporated into project implementation. The ESMF shall identify, screen and assess key risks; develop a framework for consultation and engagement with affected stakeholders; and propose an institutional framework that assigns responsibilities to manage risks, impacts and stakeholder consultation throughout the life of the project. The ESMF will be a flexible instrument with the ultimate purpose of avoiding, minimizing and mitigating environmental and social risks and impacts associated with the proposed construction projects, detailed below. The ESMF shall include an appropriate ESMP that details key actors responsible for its implementation.

The Consultant selected for this ESMF and ESMP work shall have the required professional skills, personnel and technical resources, as identified in their response to the Design/Construction Supervision RFQ # SDSURF-07-01 (see Appendix B), to perform the scope of work outlined below, per all standards and requirements mentioned herein.

This request for proposal outlines the scope of work, schedule of deliverables, general contract terms, submittal requirements and selection criteria.

1.0 Background

The Millennium Challenge Corporation (MCC) and the Government of Georgia (the Government) have entered into a Millennium Challenge Compact for Millennium Challenge Account assistance to help facilitate poverty reduction through economic growth in Georgia.

The Government of Georgia has created Millennium Challenge Account-Georgia (MCA-Georgia) to implement the MCC's compacts. MCA-Georgia is a legal entity of public law accountable to the MCC and the Government of Georgia led by a Supervisory Board chaired by the Prime Minister of Georgia and comprising of the ministers of Education and Science, Finance, Foreign Affairs, and Justice.

MCA-Georgia and San Diego State University (SDSU) have entered into a contract to utilize SDSU's educational and instructional abilities for the purposes of developing a degree accreditation for Science, Technology, Engineering, and Mathematics (STEM) Higher Education Project of the second Millennium Challenge Corporation (MCC) Compact with Georgia. This effort focusses on building capacity within Georgian public universities to deliver high quality STEM education and bachelor degrees from accredited foreign institutions in Georgia.

SDSU designates and will sub-contract with the San Diego State University Research Foundation (SDSURF) to receive and apply exclusively the funds and properties coming into its possession toward furthering these purposes only for the benefit of San Diego State University.

At implementation of planning, design and construction, Consultant shall coordinate directly with Design/Construction Supervision Contractor (Contractor). The proposed construction to be managed by the Contractor, and that is applicable to the ESMF/ESMP by the Consultant, is stated as follows:

Tbilisi State University (TSU)

1. Phase 1 Rehabilitations, Tbilisi State and/or MCA Office Bldg. (TBD): Project is 23 spaces totaling approximately 818 m²
 - a. Dean's Office at 33 m²
 - b. Staff Offices (6 total) at 19 M² each for total of 112 m²
 - c. Admin work area with 6 workstations at 14 M² each for total of 84 m²
 - d. Conference/Meeting rooms (2 total) at 28 M² each for total of 56 m²
 - e. English/STEM offices (3 total) at 23 M² each for total of 70 m²
 - f. English/STEM Classrooms (5 total) at 93 M² each for total of 465 m²
2. Phase 2 Rehabilitations, Tbilisi State: Project is 11 spaces totaling approximately 1055 m²
 - a. GE Smart Classrooms (2 total) at 149 m² each for total of 297 m²
 - b. GE Lecture Hall-Media Center at 223 m²
 - c. Chemistry and Physics Labs (3 total) at 93 m² each for total of 279 m²
 - d. Program Offices (3 total) at 33 m² each for total of 99 m²
 - e. Laboratory Storerooms and Technician offices (2 total) at 79 m² each for total of 158 m²

Georgian Technical University (GTU)

3. Phase 3 Rehabilitations, Georgia Technical: Project is 8 spaces totaling approximately 836 m²
 - a. Engineering/Science Classrooms (2 total) at 148.5 m² each for total of 297 m²
 - b. Chemistry Environmental Lab at 93 m²
 - c. Program Offices (2 total) at 32.5 m² each for total of 65 m²
 - d. Laboratory Storerooms and Technician Offices (2 total) at 79 m² for total of 159 m²
 - e. GE Lecture Hall-Media Center at 223 m²

Ilia State University (ISU)

4. Phase 4 Construction Design, Ilia State: Project is 17 spaces totaling approximately 1785 m². This project is to develop plans and specifications for construction of a new building at a site provided by Ilia State University. The multi-story building is expected to be approximately 2000 m² (possibly 3 stories). Spaces include classrooms, lecture halls, laboratories, and communal areas (Halls, stairs, HVAC, storerooms, lavatories, etc.)

Phase 1 is the top priority with desired completion date of design and rehabilitations to be no later than early January 2015 to support outfitting of spaces in January 2015. Phases 2 and 3 will run concurrent to complete design, RFP and award, and completion of rehabilitations no later than August 2015, to allow for outfitting of all furnishings, installation and testing of IT systems and laboratory equipment. Phases 4A and 4B shall be processed in close collaboration with MCA Georgia so that the RFP and award is completed by October 2015 to support completion of construction and outfitting by September 2016.

All space locations and dimensions are subject to change. More detailed information regarding these proposed projects will be provided as it becomes available.

1.1 Scope of Work - Develop an Environmental and Social Management Framework (ESMF) and Environmental and Social Management Plan (ESMP) According to IFC Performance Standards, CEQA (or a combination thereof)

The Consultant shall develop an Environmental and Social Management Framework (ESMF), in compliance with IFC Performance Standards, CEQA (or a combination thereof), on Assessment and Management of Environmental and Social Risks, that addresses the overall environmental and social issues associated with the Project. The ESMF identifies screens and assesses key risks; develops a

framework for consultation and engagement with affected stakeholders; and proposes an institutional framework that assigns responsibilities to manage risks, impacts and stakeholder consultation throughout the life of the project. An ESMF is a flexible instrument with the ultimate purpose of assisting in the design and implementation of programs and projects that help avoid, minimize and mitigate environmental and social risks and impacts, and includes an appropriate Environmental and Social Management Plan (ESMP) and details key actors and stakeholders responsible for its implementation, from the Ministry of Environment to the contractors responsible for the works to the educational facilities themselves.

The objectives of the ESMF are to:

- Ensure approved projects comply with Georgian environmental and social legislation and permitting requirements;
- Ensure projects comply with MCC Environmental Guidelines, MCC Gender Policy, MCC policy on trafficking in persons, and the IFC Performance Standards, CEQA (or combination thereof);
- Guide the scoping of environmental and social impact risks in relation to each of the Performance Standards, including those risks and impacts related to health and safety, hazardous materials, resettlement and land acquisition, amongst others;
- Ensure effective integration of environmental, social and gender criteria and processes into overall project implementation;
- Enhance positive and sustainable environmental and social outcomes associated with project implementation;
- Support the integration of environmental and social aspects of the project into the planning and decision making process;
- Provide for community consultation and engagement mechanisms throughout the life of the project as defined in IFC Performance Standards, CEQA (or a combination thereof);
- Avoid, minimize, mitigate and manage negative environmental and social impacts as a result of either individual construction actions or their cumulative effects;
- Avoid, minimize, mitigate and manage occupational, health and safety risks and impacts;
- Improve project design for sustainability characteristics;
- Develop an Environmental and Social Management Plan (ESMP) to guide project proponents in integration of significant environmental and social mitigations and monitoring, and integration of measures to promote equitable access to project benefits and opportunities into the rehabilitation projects. The ESMP would include a Waste and Hazardous Waste Management Plan, and Occupational Health and Safety Plan, Resettlement Action Plans, and other specific plans that may be required for the project;
- Identify vulnerability to natural disasters and accidents and develop an emergency preparedness and response plan;
- Develop environmental and social contract clauses that translate environmental and social requirements under the ESMP into contractual language, to be integrated into tender documents; and
- Provide for environmental and social monitoring and reporting against ESMP requirements during project implementation.

Consultant shall develop detailed information on permitting requirements that may apply to each of the project activities and sites, and the procedures and responsibilities for obtaining the permits. Consultant will prepare standard environmental and social clauses for inclusion in construction tender documents and ensure that the full ESMP is part of the contracts.

During project implementation, Consultant will specify procedures for compliance monitoring with

the ESMP. This might include an Environmental and Social Audit template and photo/video requirements for site inspections to ensure effective implementation of ESMPs during the Construction Phase. The ESMF should also include a standardized reporting format to track implementation against ESMP requirements and to alert MCA-Georgia to new environmental and social issues identified during implementation.

The ESMF and ESMP will contain general guidance on compliance with the IFC Performance Standards, CEQA (or a combination thereof) that are relevant to the project. Specific tasks related to the compliance of the Performance Standards are detailed below; however, Consultant should refer to the original standards for guidance on what risks to assess and mitigate for on the project. This guidance should be applied to all activities related to the project.

Aside from services performed by Consultant relative to design, planning and construction, SDSU shall identify and assess environmental and social risks associated with programmatic activities and adopt environmental and social management plans, satisfactory to MCA-Georgia and MCC and in compliance with IFC Performance Standards, CEQA (or a combination thereof), that include but are not limited to: lab operations and safety manuals; emergency preparedness and response plans; facilities waste management plans; resource efficiency plans that identify opportunities to enhance efficiency in use of energy, water and other resources; and human resources policies to protect workers and promote safe working conditions. It is expected that in their programs in Georgia, SDSU will use their current practices and policies, and where necessary adapt such practices and policies to the local context, and to comply with the IFC Performance Standards.

Performance Standard 2: Labor and Working Conditions

Consultant shall identify occupational health and safety risks and prepare guidelines, which comply with IFC Performance Standards on Labor and Working Conditions. These guidelines will cover, among other issues, management of environment, health and safety risks, including hazardous materials handling, storage and disposal (see following section on PS 3). Guidelines should also cover child and migrant workers, working environment (e.g. protection against sexual harassment and discrimination based on gender, ethnicity or other personal characteristics), Counter Trafficking in Persons, safe working conditions, including personal protective equipment, and provide for a grievance mechanism for workers. Health and safety issues should be integrated into the front-end risk assessment process. Health and safety should be integrated into the ESMP which will outline detailed health and safety requirements for works contractors and QA/QC procedures. Consultant shall prepare a Health and Safety checklist to be used during the construction supervision phase as a monitoring and tracking tool to ensure the contractor's compliance with MCC health and safety standards. Occupational Health and Safety (OHS) clauses should be developed to translate OHS requirements under the ESMP into contract language and integrated into tender documents.

Performance Standard 3: Resource Efficiency and Pollution Prevention

Consultant shall prepare guidelines for the Contractor's equipment and construction activities to comply with air, water, noise and vibration standards based on national and international (WHO) standards; especially giving consideration to local communities and stakeholders who may be affected by construction activities.

Consultant will also consider cost effective measures for improving efficiency in the consumption of energy, water, as well as other resources and material inputs should be identified, including use of high efficiency lighting, energy efficient boilers and insulation, including additives to paints that increase energy efficiency, recycling, and automation (e.g. programmable thermostats, etc.). Consultant will look to successful examples of energy and water efficiency in schools and universities in Georgia, including recent projects undertaken by USAID and Winrock International.

Hazardous Materials and Waste Management Plans

As described in PS 3, the IFC General Environmental, Health and Safety Guidelines on occupational health and safety, and MCC guidance on hazardous materials management, special care must be taken if hazardous materials are encountered during rehabilitation work. There is a potential of encountering

hazardous materials such as asbestos containing materials (ACM) in existing schools in Georgia, especially in roofing materials. There is a possibility of encountering friable asbestos, which would pose a greater management problem. In instances, where friable ACM, or material that is non-friable in its present condition but is likely to become friable during construction or removal, is identified, then Consultant shall immediately notify the Contractor in writing of the situation and a path forward would be agreed upon.

Sampling and testing with proper PPE would be required to fully identify asbestos and friable asbestos. However, sampling and testing for asbestos is costly and time consuming and if some materials are well documented to contain non-friable asbestos (such as certain types of roof tiles), it may be more practical to assume that they contain ACM and manage them accordingly rather than testing them. If the likelihood of the presence of non-friable ACM is fairly definitive, Consultant can recommend whether testing is necessary to verify such findings, or whether the material can simply be treated as hazardous material without the need for testing and laboratory verification.

Besides ACM, there is a potential for lead hazards: lead based paint (LBP), lead pipes, and lead deposited in outdoor soil, which is a risk especially to small children in situ and for workers during rehabilitation programs. Consultant shall test any painted surfaces with field test kits to determine if lead is present in levels higher than accepted both nationally and internationally. Sites located near industrial sites or sites with a history of nearby industrial activity may require additional soil testing on a case by case basis. Where lead is found, Consultant will prepare plans to protect students and other stakeholders through encapsulation methods if the building system remains, or to protect workers if the building systems are being replaced. Building systems that are removed which contain LBP will be wrapped and handled as hazardous waste per MCC Guidance.

For remediation of sites that have identified potential ACM or high lead levels, Consultant shall prepare a Hazardous Waste Management Plan (HWMP) to include removal, handling and wrapping of the contaminated building systems using proper personal protective equipment (PPE) and training requirements. The HWMP will cover the safe handling, transport and disposal of the non-friable ACM and lead contaminated building materials. The HWMP will cover general aspects common to all sites with hazardous substances, including hazardous substances generated in construction sites (not only ACM and lead), such as mercury vapor electrical systems, among others, as well as a section for information regarding the location of on-site waste storage, transportation methods, and final disposal sites and methods.

Consultant shall identify risks related to normal waste (non-hazardous) from construction activities and will prepare a management and disposal plan that includes coordination with local authorities' waste facilities and other relevant organizations as needed. Coordination with the Ministry of Environment may be required under the proposed new Waste Law, as well as consultation with other stakeholders who regulate waste management issues such as the Ministry of Infrastructure and Regional Development through Solid Waste Management Company.

Performance Standard 4: Community, Health, Safety and Security

Consultant shall assess potential risks to the community and other stakeholders, including risks from interactions between community members and contractors, and develop specific mitigation measures to address those risks. Consultant will prepare guidance for contractors and others on how to identify and engage/consult with relevant stakeholders on issues such as noise, vibrations and air emissions from construction activities, the management of waste and hazardous waste, and other project activities.

In collaboration with MCA-Georgia, SDSURF and Contractor, Consultant shall be responsible for developing a mechanism for receiving, documenting and responding to grievances from all affected parties as a result of the project. At the design phase of renovation and construction works the Consultant shall develop and implement a Stakeholder Engagement and Grievance Mechanism/Plan. This mechanism shall be outlined with major activities identified, prior to finalizing the ESMP, and

shall be included in the tender documents for construction works. The grievance mechanism will help identify and screen the key stakeholders, their roles and responsibilities, and shall be clearly communicated to stakeholders prior to the start of construction works and as part of the public consultation process. Consultant, Contractor and SDSURF shall be responsible for responding to grievances relevant to the conduct of the design and construction works supervision. Grievances that cannot be resolved shall be resolved in accordance with MCA-Georgia's grievance mechanisms.

Performance Standard 5: Land Acquisition and Involuntary Resettlement

Consultant must identify any possible cases of land acquisition, involuntary resettlement and economic displacement, both permanent and temporary. In the case that land acquisition or resettlement may take place, Consultant shall prepare and implement a Resettlement Action Plan in compliance with PS 5 and MCC Environmental Guidelines.

Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Consultant shall assess and mitigate for project risks to protected areas, protected species, natural and critical habitats. Consultant will prepare guidance on avoiding the removal of vegetation, and compensation for vegetation loss when it is unavoidable. Consultant will prepare guidance and mitigation measures on impacts to fauna, including contractor interaction with local fauna and a zero tolerance for hunting.

Performance Standard 7: NOT APPLICABLE

Performance Standard 8: Cultural Heritage

Consultant shall identify any potential cultural heritage that may be affected by the project. Consultant will prepare a basic chance finds procedure for the contractor with information on whom to contact and what actions to take in case any cultural heritage is encountered or disturbed. Cultural heritage includes religious sites, cemeteries, human remains, and artifacts, among others.

1.2 ESMP Supervision and Coordination of the Work

The Consultant shall develop the draft ESMF in coordination with SDSURF, SDSU and MCA-Georgia, and include an ESMP that details key actors responsible for its implementation. MCA-Georgia will provide a template screening tool and condition assessment form to SDSURF for use in assessment of sites where construction and renovation activities will occur (see Appendix B).

During project implementation (planning, design and throughout construction), Consultant shall coordinate directly with Design/Construction Supervision Consultant (Contractor) and specify procedures for compliance monitoring with the ESMP, to include requirements for site inspections to ensure effective implementation of the ESMP during renovation and construction. The ESMF shall include reporting procedures to track implementation against ESMP requirements and to alert MCA-Georgia to new environmental and social issues identified during implementation.

Consultant shall prepare environmental and social clauses for Contractor's inclusion in construction tender documents and furnish the full ESMP to be part of the contracts. Consultant shall be responsible for ESMP monitoring and mitigation. The Contractor's responsibility will be to monitor the implementation of the environmental, social, health and safety mitigation and monitoring measures as defined and specified in the construction/renovation project contracts in order to ascertain that the mitigation measures are implemented as required. Any deficiencies shall be reported to MCA-Georgia for appropriate remedial action by the Contractor.

SDSURF and the Contractor shall confer with MCA-Georgia on resolving any unforeseen issues that are uncovered during works on a particular site that are too serious to be addressed with additional mitigation.

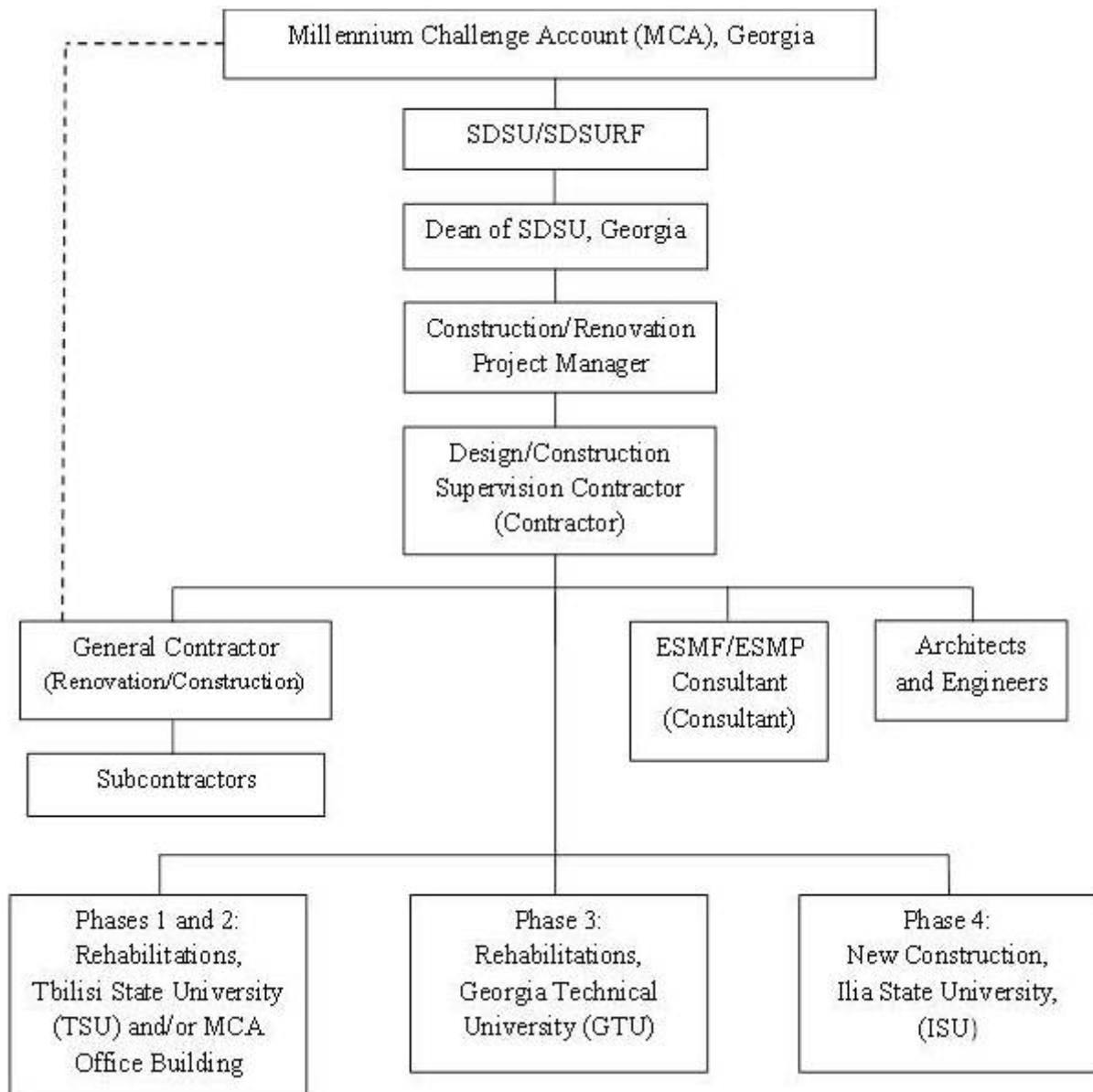
Draft ESMF and ESMP documents shall be initially provided for SDSURF review and submittal to

MCA-Georgia as part of the SDSU Progress Report.

All proposed work shall be conducted in compliance with IFC standards, Georgian Legislation, MCC requirements, and SDSU requirements, whichever is the strictest.

The prospective consultant shall identify proposed team members associated with the ESMF/ESMP work and include their associated contact information.

For reference, the general project team structure is as follows:



1.3 Unforeseen Environmental Issues

In addition to the previous environmental, social, health and hazardous material requirements, there remains a possibility that other unforeseen issues could be uncovered during Contractor's work on a particular site, including but not limited to the following:

- Presence of friable asbestos as noted above;
- Presence of laboratory waste and luminescent light bulbs in large quantity;
- Potential resettlement impacts or access issues.

Such site specific problems may go beyond the scope of the standard ESMP requirements and need to be highlighted, and may warrant specific additional site specific mitigation measures. If these issues are too serious to be addressed with additional mitigation, Consultant will confer with SDSURF/MCA-Georgia.

2.0 Schedule:

- Request for Proposal Issuance: 09/05/14
- Proposals Due: 09/15/14, 12:00 PDT
- Notice to Proceed (anticipated): 09/19/14
- Draft ESMF and ESMP: 10/14/14
- ESMF Implementation and Coordination: Continued through Project

2.1 Selection Criteria:

Firms will be evaluated based upon the following factors:

- Completeness of proposal
- Relevant experience and qualifications, especially with IFC Performance Standards and CEQA (as provided in response to Design/Construction Supervision RFQ # SDSURF-07-01)
- Resources and relevant licensing to do business in Georgia
- Proposed schedule and availability of consultant to perform services in a timely manner
- Itemized cost proposal
- Sample ESMF/ESMP document prepared by prospective consultant

2.2 Project Proposal:

Proposal shall include a detailed itemized cost for all labor and materials required to perform the scope of work included in this RFP, hourly fee schedule, reimbursable rates, and general conditions; any exclusions shall be clearly defined. The proposal package shall be submitted on company letterhead by the date and time specified above to:

Denise Carroll dcarroll@foundation.sdsu.edu

All requests for information shall be sent in writing to the email address shown above. Any requests for information received after Thursday, 09/11/14, at 12:00 PDT, may not be answered.

3.0 Termination Clause

This agreement may be terminated by either party upon not less than 30 day's written notice of intent. Should the other party fails substantially to perform in accordance with the terms of the agreement through no fault of the party initiating the termination notice.

If the project is suspended by SDSURF for more than 90 consecutive days; the Consultant shall be compensated for services performed prior to notice of such suspension.

In the event the project is permanently abandoned or; the project is abandoned for more than ninety (90) consecutive days.

4.0 Insurance

SDSURF is involved in numerous activities and business ventures with various contractors, subcontractors and business entities. Therefore it is necessary to insure that SDSURF is adequately protected against losses or claims arising out of the activities of contractors, subcontractors and business entities. Therefore, if SDSURF determines that an activity warrants additional protection against certain risks, it may be requested that the organization it is conducting business with provide a certificate of insurance. This certificate should have an attached "additional insured endorsement" stipulating that "San Diego State University Research Foundation" is an additional insured under the contractors, subcontractors or vendors insurance policy.

The Consultant shall obtain insurance, performance bonds, guarantees or other protections appropriate to cover against risks or liabilities associated with performance of the Contract. The SDSURF shall be named as payee on any such insurance and the beneficiary of any such performance bonds and guarantees.

4.1 Indemnification

The Consultant shall hold harmless, defend and indemnify SDSU Research Foundation, San Diego State University, The California State University and its Board of Trustees and the State of California, its officers, employees, representatives and agents from and against all claims, damages and losses arising out of, resulting from, or related to (1) the failure of the Consultant to perform its obligations under the contract or the performance of its obligations in a willful or negligent manner; (2) the inaccuracy of any representation or warranty by the Consultant given in accordance with or contained in the contract documents; and (3) any claim of damage or loss by any subcontractor, or supplier, or laborer against SDSU Research Foundation arising out of any alleged act or omission of the Consultant or any other subcontractor, or anyone directly or indirectly employed by the Consultant or any subcontractor.

In claims against any person or entity indemnified under this clause made by an employee of the Consultant or a subcontractor, or indirectly employed by either of them, or anyone for whose acts either may be liable, the indemnification obligation under this clause shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Consultant or a subcontractor under workers compensation laws, disability benefit laws or other laws providing employee benefits.

The indemnification obligation under this clause shall not be limited by assertion or finding that the person or entity indemnified is liable by reason of a non-delegable duty.

All binding agreements whether in contract, purchase agreement or other forms, for all work, shall include language as stated in this Statement of Work for insurance, conflict of interest, and indemnification.

5.0 Conflict of Interest

The Consultant shall ensure that no officer, director, employee, affiliate, contractor, subcontractor, agent, advisor, or representative of the Consultant participates in the selection, award, administration or oversight of a contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with the Contract, in which (i) the entity, the person, members of the person's immediate family or household or his or her business partners, or organizations controlled by or substantially involving such person or entity, has or have a financial or other interest or (ii) the person or entity is negotiating or has any arrangement concerning prospective employment, unless such person or entity has first disclosed in writing to the parties under the Contract and MCC the conflict of interest and, following such disclosure, the parties to the Contract agree in writing to proceed notwithstanding such conflict. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, subcontractors, agents, advisors, or representatives involved in the selection, award, administration, oversight or implementation of any contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with the Contract shall solicit or accept from or offer to a third party or seek or be promised (directly or indirectly) for itself or for another person or entity any gift, gratuity, favor or benefit, other than items of de minimis value and otherwise consistent with such guidance as MCC may provide from time to time. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, subcontractors, agents, advisors or representatives engage in any activity which is, or gives the appearance of being, a conflict of interest in connection with the Contract. Without limiting the foregoing, the Consultant shall comply, and ensure compliance, with the applicable conflicts of interest and ethics policies of the Client as provided by the Client to the Consultant.

6.0 Additional General Provisions - Refer to Appendix D

DRAFT

REQUEST FOR PROPOSAL
ADDENDUM 1
SDSURF/MCA-Georgia
Environmental and Social Management Framework
RFP # SDSURF-09-02
September 12, 2014

The following clarifications and corrections are made as follows:

1.0 Background

There are 4 phases of Design and renovation/construction (by Contractor) in the Pre-Enrollment contract. Phase 1A is the Dean's office which is being handled exclusively by MCA-Georgia (both the design, specs, and contract for renovations) and is not applicable to this RFP. Phases 1B and 2 are renovations to be designed by the Contractor for TSU. Phase 3 (Pre-Enrollment) is for renovations to be designed by the Contractor for GTU and Phase 4 is the design work for the new construction at ISU. All of this is in the 15-month Pre-Enrollment contract period of performance.

An alternate add proposal shall be provided for the subsequent 45-month performance period:

There are 6 phases. Phase 4 is the actual construction of the new building to be done after October 2015. Phases 5 thru 7 are for renovations at TSU to support EE/Comp E degree, Chemistry degree, and other classrooms, offices, and communal spaces, respectively. Phase 8 is for renovations at GTU for various degrees and includes labs, classrooms, offices, etc. Phase 9 is additional spaces including communal spaces (rest rooms).

Reference is made to Appendix A (attached)

2.0 Schedule:

- Request for Proposal Issuance: 09/05/14
- Proposals Due: 09/18/14, 12:00 PDT
- Notice to Proceed (anticipated): 09/22/14
- Draft ESMF and ESMP: 10/14/14
- ESMF Implementation and Coordination: Continued through Project

2.2 Project Proposal:

Proposal shall include a not to exceed cost, detailed itemized cost for all labor and materials required to perform the scope of work included in this RFP, hourly fee schedule, reimbursable rates, and general conditions; any exclusions shall be clearly defined. The proposal package shall be submitted on company letterhead by the date and time specified above to:

Denise Carroll
dcarroll@foundation.sdsu.edu

All requests for information shall be sent in writing to the email address shown above. Any requests for information received after Wednesday, 09/17/14, at 12:00 PDT, may not be answered.

The balance of the terms and conditions are unchanged.

Tbilisi State University (TSU)

15 Month Pre-Enrollment Contract Space Renovations

Phase 1A - MCA Georgia Building (all works to be performed by MCA Georgia)

Deans's Office	# spaces	Sq ft	m²	Total m²
Deans Office (350 sq ft)	1	350	33	33
Staff Offices (6 ea at 250 sq ft)	6	200	19	112
Admin Workstations (6 ea at 150 sq ft)	6	150	14	84
Conference/Meeting rooms (2 - 300 sq ft)	2	300	28	56
Total Renovations Phase 1A	15	1,000	93	283

Phase 1B - Tbilisi State University

English/STEM Space Requirements	# spaces	Sq ft	m²	Total m²
English/STEM offices (3 - 250 sq ft)	3	250	23	70
English/STEM Classrooms (5 ea 1000 sq ft, 25 students)	5	1,000	93	465
Total Renovations Phase 1B	8	1,250	116	534
TOTAL RENOVATIONS PHASES 1A & 1B	23	2,250	209	818

Phase 2 - Tbilisi State University

General Education Classroom and Laboratory Spaces	# spaces	Sq ft	m²	Total m²
GE Smart Classrooms - with 30 computers	2	1,600	149	297
GE Lecture Hall- Media Center with 100 seats	1	2,400	223	223
Chemistry & General Education	1	1,000	93	93
Chemistry Environmental Laboratories (duplicate at GTU)	1	1,000	93	93
Physics Laboratory	1	1,000	93	93
Program Offices (3 - 1GE, 1 Eng. 1 Sci.)	3	350	33	98
Laboratory Storerooms and Offices	2	850	79	158
Total Renovations Phase 2	11	8,200	762	1,055

45-Month Space Requirements

Electrical/Computer Engineering Laboratories and Support	# spaces	Sq ft	m²	Total m²
Laboratory 1 Courses EE210, 330L, 430L (duplicate at GTU)	1	800	74	74
Laboratory 3 Digital Communications	1	800	74	74
Laboratory Antenna Microwave	1	800	74	74
Laboratory 5 Senior Design (duplicates at GTU and ISU)	1	800	74	74
Engineering Computer Classroom - with 30 computers	1	1,600	149	149
Laboratory Storeroom	1	1,000	93	93
Laboratory Office	1	700	65	65
Library Digital Media Area	1	2,400	223	223
Total Renovations Phase 5	8	8,900	827	827

Chemistry Laboratories	# spaces	Sq ft	m²	Total m²
Chemistry 232, 432	1	1,000	93	93
Chemistry 417,427,457	1	1,000	93	93
Chemistry 457 Special	1	1,000	93	93
Chemistry 567 (duplicate at GTU)	1	1,000	93	93
Sciences Computer Classroom	1	1,600	149	149
Laboratory Storerooms	1	1,000	93	93
Laboratory Technician Offices	1	700	65	65
Library Digital Media Area	1	2,400	223	223
Total Renovations Phase 6	8	9,700	901	901

Additional Classrooms, Lecture Halls, Library	# spaces	Sq ft	m²	Total m²
GE Smart Classrooms - with 30 computers	1	1,600	149	149
GE Lecture Hall- Media Center with 100 seats	2	2,400	223	446
Sciences Computer Classroom	1	1,600	149	149
Program Office	1	350	33	33
General (Communal/toilet facilities)	2	900	84	167
Total Renovations Phase 7	7	6,850	637	943

Totals (TSU)	42	34,900	3,243	4,261
Totals (TSU & MCA)	57	35,900	3,336	4,545

Note: Space quantities and sizes shown above are approximate and subject to change.

Georgian Technical University (GTU)

15 and 45-Month Space Requirements (Phase 3 within 15-Month Pre-Enrollment Contract)

Electrical Engineering	# spaces	Sq ft	m²	Total m²	Phase
EE Lab EE210/330/430	1	800	74	74	Phase 8
EE Senior Design Lab	1	800	74	74	Phase 8
EE Power Electronics	1	800	74	74	Phase 8
Program Office (Pre-Enr Phase 3)	1	350	33	33	Phase 3
Laboratory Storerooms and Offices (Pre-Enr Phase 3)	1	850	79	79	Phase 3
Total	5	3,600	335	335	
Civil/Construction Engineering	# spaces	Sq ft	m²	Total m²	Phase
Hydraulics Lab	1	1,000	93	93	Phase 8
GeoTechnical Lab	1	1,000	93	93	Phase 8
Surveying Lab	1	200	19	19	Phase 8
Program Office	1	350	33	33	Phase 9
Laboratory Storerooms and Offices	1	850	79	79	Phase 8
Total	5	3,400	316	316	
Chemistry Laboratories	# spaces	Sq ft	m²	Total m²	Phase
Chemistry Environmental (Pre-Enr Phase 3)	1	1,000	93	93	Phase 3
Chemistry 567	1	1,000	93	93	Phase 8
Program Office (Pre-Enr Phase 3)	1	350	33	33	Phase 3
Laboratory Storerooms and Offices (Pre-Enr Phase 3)	1	850	79	79	Phase 3
Total	4	3,200	297	297	
Additional Classrooms, Lecture Halls, Library	# spaces	Sq ft	m²	Total m²	Phase
ENG Computer Classrooms (Pre-Enr)	2	1,600	149	297	Phase 3
Lecture Hall/Media Ctr (Pre-Enr Phase 3)	1	2,400	223	223	Phase 3
Library Digital Media Area	1	2,400	223	223	Phase 9
Total	4	6,400	595	743	
Additional Administrative Spaces	# spaces	Sq ft	m²	Total m²	Phase
General (Communal/toilet facilities)	2	900	84	167	Phase 9
Total	2	900	84	167	
Totals, Phase 3	8	7,400	688	836	
Totals, All Phases	20	17,500	1,626	1,859	

Note: Space quantities and sizes shown above are approximate and subject to change.

Ilia State University (ISU)

Proposed New Construction

Enrollment Construction Phases 4A/4B	# spaces	Sq ft	m²	Total m²
Laboratory 2 - Courses CompE 270, 375, 470L	1	800	74	74
Laboratory 5 - Senior Design	1	800	74	74
Laboratory - Hydraulics	1	1,000	93	93
Laboratory - Structural	1	1,000	186	186
Laboratory - Geotechnical	1	1,000	93	93
Surveying Laboratory	1	200	19	19
Computer Classroom - 2 with 30 computers	2	1,600	149	297
Lecture Hall- Media Center with 100 seats	1	2,400	223	223
Library Digital Media Area	1	2,400	223	223
Laboratory Storeroom (2)	2	500	46	93
Laboratory Technician Offices (2)	2	350	33	65
Programs Offices (2 Engineering)	2	350	33	65
Communal Areas (halls, stairs, HVAC plant, etc)	1	3,000	279	279
<i>Total Proposed Construction Phases 4A/4B</i>	17	15,400	1,524	1,785

Note:

Phase 4A includes design and planning only.

Phase 4B includes the actual construction after October 2015.

Space quantities and sizes shown above are approximate and subject to change.

**San Diego State University Research
Foundation
Purchasing Manual**

DRAFT

PURCHASING.....	22
A. Policies and Objectives	22
B. Organizational Structure and Signature Requirements	22
C. Standards of Conduct	23
D. Employee/Vendor Relationship Policy	24
E. Small Business Subcontracting Program	24
1. Business Categories	25
2. Responsibilities of Small Business Liaison Officer.....	26
3. Subcontracting Plans.....	26
4. EPA Grant/Cooperative Agreement Requirements	27
F. Purchase Requisition	28
G. Responsibility of the Requestor	28
H. Responsibility of the Purchasing Department	30
I. Purchasing Levels	30
1. Purchases of \$4,999 and under	30
2. Purchases over \$5,000 and up to \$9,999.....	30
3. Purchases \$10,000 and Over.....	30
J. Purchase Orders/Purchase Types	30
1. Purchase Order	30
2. Change Order	30
3. Open Purchase Order	31
4. Emergency Purchase.....	31
5. Used, Refurbished, Reconditioned, and Remanufactured Equipment.....	32
6. Leased, Rented, Loaned or Borrowed Equipment and Vehicles	32
7. Wireless Communication Tool Purchases	32
8. High Speed Cable/DSL Internet Service	33
9. Campus Services/Purchase Order Required	33
10. Campus Services/No Purchase Order Required	34
K. Return of Materials	35
L. Radiological/Hazardous Safety	35
M. Drug Enforcement Agency (DEA) Controlled Substances	35
N. Animals	36
O. Sales and Use Tax	36
P. Selection of Suppliers	36
Q. Sole Source/Brand Name Justification	37
R. Prohibited Purchases/Purchasing Practices	38
1. Political Contributions	38
2. Conflict of Interest	38
3. Personal Purchases.....	38
S. Competitive Bidding	38
T. Purchase Order Review	38
U. Vendor Master File Maintenance	39

FOREWORD

The Purchasing Manual is the official policies and procedures manual for SDSU Research Foundation. The purpose of this manual is to provide detailed information on the acquisition process. In addition, this manual should guide employees of SDSU Research Foundation in the application of various compliance issues, federal and state laws and regulations applicable.

SDSU Research Foundation reserves the right to change any of the policies or procedures in the manual at any time. The manual is not intended to create, nor is it to be construed to constitute, a contract between SDSU Research Foundation and any of its employees, principal investigators or other project staff. Future SDSU Research Foundation policies and procedures, including changes in those presented here, will be made available as updates occur.

Comments and questions concerning the manual are always welcome and may be directed to Purchasing at spurchasing@foundation.sdsu.edu or by calling 594-6891.

PURCHASING

The function of the purchasing department is to organize and administer the procurement of equipment, materials, supplies and services for all projects and departments of SDSU Research Foundation in accordance with responsibility and authority delegated by SDSU Research Foundation's chief financial officer.

The policies and procedures have been made as simple as possible while still meeting the requirements of the state of California laws, general SDSU Research Foundation guidelines, good business practice, and special requirements adopted from time to time by various agencies and private donors from which SDSU Research Foundation secures funds for special programs. These procedures are meant to cover most cases involving procurement for SDSU Research Foundation, and are generally consistent with those of similar institutions.

A. Policies and Objectives

SDSU Research Foundation procures only those items that are required to perform the mission and/or fill a bona fide need. Procurements are made with impartiality based strictly on the merits of supplier proposals and applicable related considerations such as delivery, quantity, etc. All SDSU Research Foundation staff with designated purchasing authority adheres to the following objectives:

- Assist faculty and staff in acquiring supplies, equipment and services, and obtain the maximum value of each dollar of expenditure
- Obtain quality supplies/services needed for delivery at the time and place required
- Buy from responsible sources of supply
- Obtain maximum value for all expenditures
- Deal fairly and impartially with all suppliers
- Maintain dependable sources of supply
- Grant all competitive bidders equal consideration, regard each transaction on its own merits; and promote fair, ethical, and legal trade practices
- Document each transaction as required by SDSU Research Foundation and funding agency requirements
- Be above suspicion of unethical behavior at all times; avoid any conflict of interest in all SDSU Research Foundation/supplier relationships.

B. Organizational Structure and Signature Requirements

Responsibility and authority to contract for authorized supplies and services is primarily vested in the chief financial officer of SDSU Research Foundation. The chief financial officer has delegated this responsibility and authority as follows:

Department	Level of Authority	Approval Limit
Business Services	-Payment Services Manager	Unlimited
	-Purchasing Manager	Unlimited
	-Technical Buyer	\$100,000
	-Senior Buyer	\$ 50,000
	-Buyer, Special Functions/Events	\$ 25,000
	-Buyer	\$ 10,000
	-Buyer Trainee	\$ 5,000

The business services' purchasing department is primarily responsible for the purchasing of goods and services for projects and SDSU Research Foundation departments.

Department	Level of Authority	Approval Limit
Facilities Management	- Director of Facilities Planning & Management	Unlimited

The facilities management department is primarily responsible for the acquisition of new properties and the purchase of goods and services for SDSU Research Foundation owned and leased facilities.

Division	Level of Authority	Approval Limit
Sponsored Research Services	- Assoc. Executive Director, Sponsored Research Services	Unlimited
	- Director of Sponsored Research Administration	Unlimited
	- Director of Sponsored Research Development	Unlimited
	- Co-Director of Sponsored Research Contracting and Compliance	Unlimited

Sponsored research services are primarily responsible for accepting and administering grants and contracts, including sub-agreements, on behalf of San Diego State University.

The chief financial officer has delegated purchasing responsibility to the departments of business services and facilities management. All departments are authorized to obtain quotations. It is the responsibility of the assigned buyer to follow up on all requirements as defined in the terms and conditions to include, but not limited to bonds, certificates of insurance, etc. The purchasing department issues purchase orders based on quotations obtained by the departments of sponsored research administration and facilities management. For simple acquisitions, backup documentation may be attached to the purchase requisition, or for more complicated acquisitions such as construction contracts, etc., backup documentation may be maintained in the respective department.

C. Standards of Conduct

- Business must be conducted ethically, in a manner above reproach, and except as authorized by statute or regulation, with impartiality.
- As a government grantee, all transactions relating to the expenditure of public funds require the highest degree of public trust, confidence and impeccable standards of conduct.
- Buyers and other SDSU Research Foundation employees may not accept anything from suppliers more than a token gift, and may not accept a privilege (e.g., a purchase

discount) that is not available to the general public or to that client's other customers or suppliers. The acceptance of such items leaves recipients open to suggestion that they have been placed under a sense of obligation and that in consequence their objectivity may be impaired. However, exchanging such courtesies such as modest gifts, meals, and entertainment is a common business practice designed to create goodwill and establish trust. When executed with good judgment and moderation, the occasional exchange of entertainment and gifts is appropriate. Since we must be sensitive to the potential for creating any perception that impartiality has been impaired, the exchange should be such that a reasonable and objective person would not perceive it as being intended to influence our objectivity.

- SDSU Research Foundation employees must avoid any action or circumstances such as a gratuity (a payment or gift to obtain favorable treatment or influence an award), family relationship, or financial interest that might conflict with the proper performance of their duties or compromise SDSU Research Foundation's acquisition process and must assure that their conduct at all times is in a manner that maintains trust and confidence in the integrity of the procurement process.
- Maintaining the integrity of the procurement process is of paramount importance; therefore, any person disseminating procurement information to persons who do not have a bona fide need to know are in violation of this trust and may be subject to potential dismissal.
- SDSU Research Foundation employees must apply sound business principles and procedures to all procurement actions and assure that their business methods are above reproach.

D. Employee/Vendor Relationship Policy

Purchasing goods or services from near relatives of SDSURF employees is generally allowable if and only if the employee has not participated in any way in the selection, review, and payment of her/his near relative. This includes all aspects of the bidding process, analysis and award of the contract, review of work progress, signature approval for payments, determination of independent contractor status, etc.

Near relative: husband, wife, mother, father, daughter, son, sister, brother, and step-relatives and in-laws in the same relationships to SDSURF employee.

E. Small Business Subcontracting Program

As a recipient of research dollars from state and federal funding agencies, SDSU Research Foundation is responsible for compliance with the terms and conditions of the award. All state and federal agencies are required to comply with the requirements established by the Small Business Administration (SBA). These same requirements must flow down and become part of the proposal requirement and any subsequent award. The PI, project staff, SRD and the purchasing department must all be committed to achieving the requirements as set forth in the proposal and award documents. The goals apply to subcontracted dollars only, i.e. product and/or services purchased from businesses. Consulting dollars spent with individuals are not included.

There are a number of codes, laws and regulations that provide lengthy explanations as to why the requirements are imposed on awardees of state and federal funds. Some of the more

common ones include but are not limited to Public Contract Code Section 10111, 10115 et seq.; CCR Title 5 Section 43870 et seq., Military and Veterans Code, Sections 999.2, 999.5, 999.7, 999.11 and 999.12, Government Code Section 14838.5, Federal Law 95-07, Federal Acquisition Regulation and Office of Management and Budget.

1. Business Categories

In most cases, the award will define the minimum goal requirements. However, when it is not specific SDSU Research Foundation is required to meet an overall standard. Targets as defined by the SBA are as follows:

Business Category	Minimum Goal
• Disabled Veteran Business Enterprise (DVBE)	3 %
• Veteran Business Enterprise (VBE)	3 %
• Small Business Enterprise (SBE)	23 %
• Small Woman-Owned Business Enterprise (WBE)	5 %
• Small Disadvantaged-Owned Business Enterprise (DBE)	5 %
• HUBZone Empowering Contracting Program (HUBZone)	3 %
• Historically Black College/Universities and Minority Institution (HBCU)	3 %

In order for a business to qualify and be certified in a particular category, it must meet specific criteria as defined in the web site locations listed below:

- Small Business Administration: www.sba.gov/
- Department of Veteran Affairs: <http://www.va.gov/osdbu>
- California State University: www.calstate.edu/Csp/document/policy04-28-08.doc
- SBA HUBZone Program: <http://map.sba.gov/hubzone/init.asp>
- Department of Education: <http://www.ed.gov/about/offices/list/ocr/edlite-minorityinst-list-tab.html>

SBE may self-certify provided they meet the criteria as defined in the SBA Table of Standards. The table may be viewed at the following site:
http://www.sba.gov/mostrequesteditems/CON_FAQ9.html

WBE, DBE, DVBE and VBE must be certified by the SBA and present a current certificate.

HBCU must be listed on the Department of Education web site.

HUBZone business must be located within a specific geographic grid area. This can be determined by entering the physical address of the business in the SBA HUBZone Program site.

2. Responsibilities of Small Business Liaison Officer

SDSU Research Foundation's purchasing manager is also the small business liaison officer (SBLO). The SBLO is the point of contact for small businesses and projects and will:

- Make information regarding pending solicitation available to, and consider offers from, small business suppliers capable of meeting SDSU Research Foundation business needs.
- Ensure prompt payment to small businesses.
- Identify and implement innovative acquisition processes to further small business participation.
- Give special consideration to small businesses and micro businesses by reducing experience requirements and level inventory normally required.
- Maintain a directory of potential suppliers.
- Provide one on one instruction as needed to support the program and goals.
- Monitor project goals to insure compliance and redirect goals as may be needed to deal with programmatic issues.
- Review reports prior to submission to the funding agencies.
- Assist the PI with submission of Subcontracting Plans on all awards exceeding \$650,000.
- In accordance with the requirement of the award, request submission of Subcontracting Plans from subcontractors with an anticipated award in excess of \$650,000.

3. Subcontracting Plans

a. The Subcontracting Plan

The Federal Acquisition Regulation (52.219-9) requires a Subcontracting Plan <http://www.foundation.sdsu.edu/forms/index.html#purchasing> for Small and Small Disadvantaged Businesses for each contract \$650,000 and over. Prime contractors, such as SDSU Research Foundation, must agree to purchase a percentage of the supplies and services required for the performance of the contract from small and disadvantaged businesses. Some federal agencies set specific goals. Most rely on the prime contractor to make a "good faith effort." The documentation of this effort is outlined in the DBE/WBE/VBE Good Faith Effort – Six Steps Documentation form <http://www.foundation.sdsu.edu/forms/index.html#purchasing>. The Subcontracting Plan specifies:

- which items/commodities will be purchased from small and disadvantaged businesses,
- the total dollars to be spent with small and disadvantaged businesses in each category, and
- the percentage of total dollars budgeted for supplies and services that these purchases represent.

The Subcontracting Plan is submitted to SRD by the SBLO for submission along with the research proposal and budget. Once the award has been made, the Subcontracting Plan becomes part of the contract and the PI is expected to meet the goals set in the Plan.

b. Preparing a Subcontracting Plan

SRD notifies the PI and SBLO when a plan is required and whether or not the contracting agency has set specific goals. In either case, the plan must set separate goals for small and small disadvantaged businesses. The SBLO will assist the PI with the identification of vendors that meet specific disadvantaged, women owned, small business or other requirements. The PI is expected to make every effort to meet these goals. It is imperative to keep these goals in mind as funds are expended as it is impossible to meet the goals at the end of a project when the money has already been spent. Once the SBLO identifies subcontracting opportunities, dollars and percentage goals calculated, the information is entered on a Subcontracting Plan form. Some contracting agencies provide these forms. The National Institutes of Health (NIH), for instance, will not accept a subcontracting plan that is not on an NIH form. However, most agencies are flexible as long as the required information is included. The completed Subcontracting Plan is signed by the SBLO and sent to SRD to forward to the contracting agency for approval.

c. Subcontracting Plan Reporting

SDSU Research Foundation is required to submit semi-annual and annual reports charting the progress in meeting subcontracting goals. Subcontract Reporting for Individual Contracts – SF 294 and/or Summary Subcontract Report - SF 295 are a contract requirement. Failure to file an SF-294 or SF-295 or to meet the utilization goals as defined in the Plan could be considered evidence of a lack of a "good faith effort" to comply with contract requirements and could result in liquidated damages or other penalties, including material breach of contract and termination for default.

4. EPA Grant/Cooperative Agreement Requirements

PIs involved with EPA grants and cooperative agreements are required to set a Fair Share goal. SDSU Research Foundation must report the progress annually to the EPA on Form 5700-52A. Regardless of the dollar value of a grant, the Federal State Revolving Fund (FSRF) Grant Program requires that any prime contracts or subcontracts for services, construction, goods, or equipment procured by a grantee to implement the project funded from the grant must contain the applicable Federal Fair Share Disadvantaged and Women-Owned Business Enterprises (DWBE) Utilization Goals.

The Federal Fair Share D/WBE Utilization Goals are as follows:

Category	DBE	WBE
Construction	8.25%	2.09%
Services	11%	5%
Goods	2%	1%
Equipment	5%	2%

The applicable D/WBE goals depend on the predominate character of the specific grant/contract. For example:

- If the single grant/contract is solely for services (e.g., design or monitoring), then apply the D/WBE goals for services (11%/DBE; 5%/WBE).
- If the single grant/contract is solely for furnishing equipment, apply the D/WBE goals for equipment (5%/DBE; 2%/WBE).
- If the single grant/contract is for both services and equipment, use the D/WBE Goals applicable to the predominate character (as evidenced by the project or scope of services and/or the dollar amounts) of that single grant/contract. Thus, if the single grant/contract is primarily for monitoring services with the incidental purchase of monitoring equipment, apply the D/WBE goals for service.

F. Purchase Requisition

Requests for products and/or a service are initiated by completing a SDSU Research Foundation purchase requisition form. Forms may be accessed on SDSU Research Foundation's web site at <http://www.foundation.sdsu.edu/forms/index.html#purchasing>. It is extremely critical that purchasing requirements are as detailed as possible to ensure that the desired products and/or service results are received. The purchasing staff is available to assist with completing the required forms.

G. Responsibility of the Requestor

All projects and departments can expedite the procurement process by becoming familiar with SDSU Research Foundation procurement policies and forms. It is often helpful to designate someone within the unit to become skilled in working with the purchasing department. The purchase requisition form is a tool for users to provide the buyer with sufficient details necessary for the acquisition and required approvals. The purchasing department requires the following from the requestor:

- **Submission:** Consideration should be given to the approval process. Requisitions should be submitted far enough in advance to ensure that the buyer has adequate time to process the request. It is important to understand that the purchasing department receives numerous requests daily and the turnaround time is based on the volume at the time of receipt.
- **Descriptions:** Detail requirements are as follows:

Supplies are defined as standard off-the-shelf products and the description should include (but may not be limited to) the following:

1. Description of the item
2. Product/catalog number
3. Manufacturer
4. Size, dimensions, weight, color etc.

Services are defined as repairs; maintenance, tenant improvements, productions, consulting etc. and the descriptions should include (but not be limited to) the following:

1. Type of service
2. Type of equipment being repaired (include: manufacture, model, serial no.) and the nature of the work to be performed
3. Some services may require a statement of work which details the expect results, it includes what the seller can expect from us and what we expect of the seller.
4. Identify specific timelines for start and completion dates.

This is the most important information on the requisition, so it is imperative that as much detail as possible is provide regardless of what is being purchased.

- **Requestor information:** This is the individual who can be contacted in the event of any questions related to the request. He/she should have the authority to clarify any issues related to the request and should include her/his telephone, fax, e-mail address and department/project name.
- **Delivery/Service location:** This is the location where products are to be delivered or where actual services will be performed; regardless of whether it is on or off campus. If the recipient is other than the requestor, it is important that contact information be provided for an individual on-site.
- **Deliver by (Date):** This is a very important date for two reasons – 1) it tells the buyer when you need the products or services to be performed and 2) helps the buyer to prioritize daily processing. The buyer will make every effort to coordinate this date with the company and will notify you if this date is not possible. RUSH or ASAP are inadequate timeline indicators. Being specific will ensure your needs are met. Keep end mind that the companies’ availability also impacts the delivery date.
- **Shipping Method:** There are two shipping options – standard or express. Standard shipping is generally ground shipping (truck or rail). Depending on shipping point it could take approximately two to ten business days from the loading date. Express shipping is expedited service shipped via air. Depending on shipping point it could take approximately two to three business days from the loading date. Keep in mind that express shipping is generally at a premium price. Other factors that should be considered are the size and weight. Also additional fees may be imposed on international shipments.
- **Funding:** It is the responsibility of the requestor/PI/department director or designee to provide accurate accounting information. All requests must include a dollar threshold. This provides the buyer with an allowable amount to spend.
- **Vendor:** The requestor has the option of providing vendor information or requesting that the buyer make that determination based on the data provided. If you provide the vendor and contact information, you will need to comply with the requirements as described in paragraph I – Purchasing Levels.
- **Approvals:** The signature authority requirements are detailed Section III, Part P, paragraph 9. It is the responsibility of the requestor to obtain the appropriate signatures prior to submission.

NOTE: it is not acceptable to divide/split a purchase into more than one purchase requisition in order to avoid the competitive bidding process.

H. Responsibility of the Purchasing Department

Upon receipt of an approved purchase requisition form, a buyer is assigned to complete the procurement task. The buyer reviews the purchase requisition for completeness and compliance with SDSU Research Foundation policy. Purchase requisitions that do not contain sufficient information to permit initiation of procurement action may be returned to the requestor for additional documentation. Minor deficiencies may be corrected by telephone or email and annotated on the purchase requisition or supporting documentation. After securing all necessary information, documentation and competitive bids/quotations, if necessary, the buyer will evaluate the selected company terms and conditions, contracts and/or agreements to ensure the language included is clear and presents no risk of loss to the foundation project or department. Any modifications to the documents will be coordinated with all parties until a mutual agreement is achieved. Once this occurs, the buyer will prepare the purchase order and submit it to the vendor. Additional copies will also be sent to the requestor.

I. Purchasing Levels

1. Purchases of \$4,999 and under

The acquisition of supplies and/or services under \$5,000 does not require competitive bids. Periodically the buyer will test the market to insure pricing is fair and reasonable.

2. Purchases over \$5,000 and up to \$9,999

To ensure compliance with federal, state and local laws, rules and regulations, SDSU Research Foundation is required to obtain informal quotes from two or more suppliers to insure pricing is fair and reasonable. Informal quotes can be obtained verbally, catalog and/or internet pricing, published advertisement or written quote from supplier.

3. Purchases \$10,000 and Over

Purchases in excess of \$10,000 must be well documented in order to provide a clear and concise audit trail and ensure full compliance with federal, state and granting agency, rules and regulations. A more formal quotation/proposal is required from two or more suppliers.

J. Purchase Orders/Purchase Types

1. Purchase Order

SDSU Research Foundation purchasing department issues purchase orders to specific supplier(s) as an authorization for purchase and commitment of future payment. No purchase order will be issued without receipt of a fully completed and approved purchase requisition form.

2. Change Order

After a purchase order has been issued to a vendor, adjustments may be made to the order upon notification of the cognizant buyer. Changes that do not affect the dollar commitments (i.e., delivery, account code, etc.) may be authorized by memorandum

and/or e-mail to sdsurfpurch@foundation.sdsu.edu. Any change requesting upward adjustment in the pricing must be processed on a new purchase requisition form with the appropriate authorized signatures. The original purchase order number must be referenced on the new requisition form. Change Orders are called into the vendor and written copies of the Change Order are mailed/faxed by the buyer to ensure that the required change has been transmitted and accepted by the vendor.

3. Open Purchase Order

When a vendor, either on or off campus, is used for repetitive low value purchases over a specified period of time, the end-user may generate a purchase requisition and request the buyer establish an open purchase order. This allows an individual and/or project to purchase specified items up to the authorized funding limit on the purchase requisition. Modifications to the funding level are requested on a purchase requisition (please make reference to the original purchase order number), signed by the department director/PI or designee, and forwarded to the SR administrator for approval. Capital equipment may not be purchased against an open purchase order.

4. Emergency Purchase

If emergency needs cannot be met through the regular purchasing process, one of the following procedures may be used:

a. **Critical/Rush Order**

Critical and/or rush purchase requisitions (fully completed and approved by the department director or SR administrator) may be mailed or hand-carried to the purchasing department for order processing and placement. Buyers review all incoming requisitions and determine the appropriate action necessary to complete the processing of the request. Critical/rush orders receive high priority, but due to the volume of requisitions including the large number of "Critical" and "Rush" orders normally received each workday, SDSU Research Foundation cannot guarantee that the order will be called in or faxed on the day it arrives in the purchasing department.

b. **Will-Call/Pick-Up**

Upon receipt of a properly authorized requisition, buyers may arrange for pick-up of merchandise by the requisitioning department's personnel. Special conditions like "will-call" must be noted on the purchase requisition and/or verbally requested by the end-user. Every effort will be made to meet the requestor's requirements under these conditions, but under no circumstances will the purchasing department take responsibility for receipt of the items purchased.

c. **Check Request**

Emergency expenditures that are made by project personnel may be reimbursed for any reasonable dollar amount (generally not to exceed \$1,000 total) once the requestor has completed a Check Request form identifying the correct expense codes, has obtained the required signatures, and attached the original itemized receipt(s). Accounts payable honors the reimbursement request within the normal processing cycle for non-emergency check requests. Every effort to avoid purchasing goods and/or services with one's personal money or credit should be taken, as reimbursement is contingent upon availability of funds from the project/department incurring the expense. Please note that reimbursement requests for business use of personal credit cards must be made directly to the cardholder and not the credit card company.

5. Used, Refurbished, Reconditioned, and Remanufactured Equipment

Projects and departments may find opportunities to purchase used and/or refurbished, reconditioned, and remanufactured equipment at a substantial cost savings in comparison to other alternatives for acquisition of similar equipment. It is advised that you do not let cost savings be the sole factor used to justify the purchase. When you think you've found a great deal, contact the purchasing department immediately. A buyer will contact the seller to validate such things as serviceability, warranty, and terms and conditions of sale, as well as perform a cost analysis to validate price vs. equipment age and current model pricing. These actions by the buyer will help to determine if your good deal is really as good as it appears to be.

6. Leased, Rented, Loaned or Borrowed Equipment and Vehicles

SDSU Research Foundation may be required to provide proof of insurance when leasing, renting, or borrowing equipment. Refer to section III. T for details.

7. Wireless Communication Tool Purchases

An employee who requires a wireless communications tool to conduct project business may select from the following two options:

a. **Purchases Initiated by SDSU Research Foundation**

SDSU Research Foundation buyers purchase cellular phones, PDAs and other wireless accessories based on a pre-negotiated contract with a supplier. The employee may contact SDSU Research Foundation's purchasing department at (619) 594-6891 for complete details related to available plans and other communication tools.

When purchasing any communication tool the employee completes a purchase requisition, attaches the signed Wireless Communications Tools Request form, and forwards to the SR administrator for processing. The Wireless Communications Tools Request form may be accessed at <http://www.foundation.sdsu.edu/forms/index.html#sra>. The purchase requisition form may be accessed at <http://www.foundation.sdsu.edu/forms/index.html#purchasing>.

The following applies to the purchase of a cellular phone:

- The buyer handles all service/billing issues related to a cellular phone.
- All monthly fees and usage charges are forwarded to the SR administrator for review against the appropriate fund.
- The cellular phone models and plan options are limited to those choices made available under the pre-negotiated contract with SDSU Research Foundation and the supplier.

b. **Personal Purchases Initiated by Employee**

Employees may purchase wireless tools at her/his own discretion and obtain reimbursement for business-related calls. The employee is required to complete a Check Request form and attach a copy of the billing statement with business related calls identified.

The following applies to the personal purchase of wireless communication tools:

- The employee purchases the phone with her/his personal funds and is solely responsible to the vendor for all service/financial issues related to the cellular

phone. SDSU Research Foundation considers the wireless phone and accessories to be the personal property of the employee. Payment of the instrument fee is not the responsibility of SDSU Research Foundation project/department funds.

- The employee must attach a copy of the detailed billing records to the Check Request form. Business-related calls must be specifically identified from personal calls to identify those costs related to the purpose of the project. Package deals and free minutes of airtime will be prorated to the business vs. personal call ratio.
- The account holder must sign the Check Request to certify that the reimbursement requested is the actual percentage of business related costs.
- The employee will **not** be reimbursed for the cost of the phone, accessories or the monthly services charges.
- The employee is **not** limited when selecting the style of the wireless phone and associated services.
- SDSU Research Foundation does **not** issue payment directly to the wireless service provider.

When purchasing any communication tool, other than a cellular phone and accessories, the employee submits a Check Request and Wireless Communication Tools Request for reimbursement to her/his SR administrator. The approved forms are forwarded to accounts payable for processing.

8. High Speed Cable/DSL Internet Service

Upon approval by the principal investigator and SR administrator, reimbursement may be made to an employee for work-related high-speed cable or DSL Internet access at home. A *Check Request* for reimbursement along with a copy of the *Application for High-Speed Internet Access* form may be submitted for the amount that corresponds to the professional use of this service. Note that employees pay for the installation and monthly billing charges but may be reimbursed the amount that corresponds to the percentage of their professional use for that billing period.

9. Campus Services/Purchase Order Required

All campus service providers require a minimum of two (2) working days' notice prior to service need date. Requisitions must be completed, approved and submitted to purchasing five (5) working days prior to your need date to insure a purchase order can be processed and be submitted to the service provider.

a. **Associated Students/The Daily Aztec**

On occasion, projects may use the on-campus news media for recruiting, advertising, or a similar function. A fully completed and approved *purchase requisition*, copy of the ad, and the run date must be submitted to SDSU Research Foundation's purchasing department prior to publication.

b. **Associated Students/Room Rentals**

The Aztec Center has meeting rooms with audio-visual capabilities to accommodate groups from 12 to 12,000. Reservations are made through the Aztec Center's office. A completed and approved *purchase requisition* and a reservation ID number must be submitted to SDSU Research Foundation's purchasing department prior to the date of the scheduled event.

c. **Aztec Shops, Ltd.**

Supplies and instructional materials may be purchased from Aztec Shops through the use of an AZTECREDIT card. The card may be obtained by submitting an *AZTECREDIT Application* form and a fully completed and approved *purchase requisition* to SDSU Research Foundation's purchasing department. All lost or stolen cards must be immediately reported to SDSU Research Foundation's purchasing department at (619) 594-6891. In lieu of a credit card, a one-time purchase for a specific item(s) may be requested by completing a *purchase requisition* and forwarding it to the SR administrator for approval and further processing. No telephone orders are permitted by Aztec Shops.

d. **Instructional Technology Services (ITS)**

ITS provides support to faculty and project staff in the areas of design, selection, production, and distribution of instructional media. They are also able to assist in the areas of instructional design, visual design, course management, technology integration, student assessment, and course evaluation. A fully completed and approved purchase requisition and appropriate ITS form(s) must be forwarded to the purchasing department for processing.

e. **Aztec Shops Catering**

After confirming reservations and other "special arrangements" with food services personnel, a fully completed and approved *purchase requisition* and a copy of the event confirmation must be submitted to the purchasing department for processing prior to the date of the scheduled event.

f. **Faculty Staff Centre**

The Faculty Staff Centre offers the use of its dining facilities with a credit card. The card may be obtained by submitting a *Faculty Staff Centre Credit Card Application* form and a fully completed and approved *purchase requisition* to the purchasing department for processing.

g. **Plant Operations**

Materials or services such as the assistance of carpenters, plumbers, painters, and related draftspersons may be provided to project personnel. A *University Plant Operations Work Order* form, a cost quotation, and a fully completed and approved *purchase requisition* must be submitted to the purchasing department for processing. Both SDSU Research Foundation's SR administrator and SDSU Research Foundation's facilities management department must approve the requisition before the requested work can begin.

h. **Reprographics**

A variety of word processing services may be obtained from Reprographics. A fully completed and approved *purchase requisition* and *Reprographics Work Order* form must be submitted to the purchasing department for processing.

10. Campus Services/No Purchase Order Required

a. **Mail Services**

In an effort to minimize postage errors that result in inaccurate billings, SDSU Mail services now requires that all outgoing US mail contain a bar-coded account number for charge-back purposes. The barcode number must appear as a barcode on the backside of envelopes and other mail pieces. The bar-coded number can be imprinted directly on the mail piece or printed onto a self-adhesive label affixed to

the mail piece(s). It is not necessary to affix a barcode label on each individual piece of mail when sending out multiple pieces of mail that are bundled together and charged to the same account. A barcode label affixed to the first mail piece for each separate bundle will suffice. The barcode number consists of your six-digit fund code and five-digit organization code. Please check with your SR administrator to confirm this 11-digit sequence. Reprographics is available to pre-print envelopes and/or create labels with your 11-digit barcode number.

b. Telephones

Most SDSU Research Foundation projects use the university's Ericsson telephone system. The university invoices SDSU Research Foundation for installation and monthly usage charges on a single invoice. SDSU Research Foundation separates the monthly expenses by project and charges the appropriate funds on a monthly basis. To request telephone installation, a project representative contacts the telephone coordinator in SDSU Research Foundation's facilities management department. The coordinator works with the project to determine exact needs, obtains approval from the SR administrator, and submits the Phone/Voicemail Service Request form on behalf of the project to the SDSU telecommunications & network services office (TNS). TNS will review the approved request and the project will be contacted should additional information be required.

K. Return of Materials

When materials purchased on an SDSU Research Foundation purchase order need to be returned to a vendor for credit, exchange or repair, SDSU Research Foundation's purchasing department must be notified prior to project/department personnel returning the material. Purchasing department personnel obtain a Return Material Authorization number (RMA) from the vendor in order to ensure that the project/department fund is properly credited. The buyer provides instructions to the project regarding packing and scheduled pick up of materials.

L. Radiological/Hazardous Safety

SDSU is licensed by the U.S. Nuclear Regulatory Commission and the state of California to use a wide range of radioactive materials and radiation-producing machines for research and instructional purposes. The authority to approve use of radioactive materials on campus is vested in the SDSU Radiation Safety Committee. Questions regarding the acquisition and use of radioactive materials can be addressed to the radiation safety officer within the Department of Environmental Health and Safety at extension 4-6879. The radiation safety office can provide information regarding approved users and materials to SDSU Research Foundation upon request. SDSU radiation safety program information and forms may be accessed at <http://bfa.sdsu.edu/ehs/radiationpg.htm>.

M. Drug Enforcement Agency (DEA) Controlled Substances

All purchases of controlled substances through SDSU Research Foundation must be in accordance with SDSU office of Environmental Health and Safety and DEA controlled substance order procedures. These procedures may be accessed at

<http://bfa.sdsu.edu/ehs/dea.htm> or by calling the SDSU Environmental Hygienist at (619) 594-2865. Procedures for the purchase of controlled substances with SDSU Research Foundation funds are as follows:

1. Project must complete an SDSU Research Foundation purchase requisition form and an [SDSU EHS Controlled Substance Purchase Request](#) form. Send both completed forms to the SDSU Environmental Hygienist at mail code 1243, CSL-106.
2. The SDSU Environmental Hygienist prepares necessary DEA forms and forwards along with the purchase requisition to the SR administrator.
3. SR administrator forwards the approved purchase requisition to the transactions team for data entry and subsequent delivery to the purchasing department.
4. Buyer completes the order and express ships all paperwork to vendor. All controlled substances are shipped to the following address:
San Diego State University
EHS c/o Student Health Services
5500 Campanile Drive
San Diego, CA 92182-4701
5. When an order is received, the SDSU Environmental Hygienist contacts the project and makes arrangements to personally deliver the order or have it picked up from the EHS main office at CSL-106.

N. Animals

All purchases of live animals through SDSU Research Foundation must be in accordance with SDSU Office of Laboratory Control (OLAC) procedures. Project staff must contact the OLAC representative at (619) 594-5421 and obtain a protocol number. This protocol number must be clearly stated on the SDSU Research Foundation purchase requisition form prior to forwarding to the SR administrator for approvals. SDSU Research Foundation cannot process an order without this protocol number.

O. Sales and Use Tax

SDSU Research Foundation is subject to sales and use taxes imposed by the state of California for the privilege of consuming tangible personal property in California. Therefore, the appropriate sales and use tax amount must either be paid or accrued, based on information contained in the purchase order or invoice. For more information on the application of California sales and use tax regulations refer to SDSU Research Foundation Sales and Use Tax Guide: http://www.foundation.sdsu.edu/PDF/sales_use_tax_guide.pdf.

P. Selection of Suppliers

All project/SDSU Research Foundation department personnel and buyers involved in the purchase of goods and services must ensure that purchases are made from responsive, reputable, and financially stable suppliers that will meet their delivery requirements. Other considerations should include price, terms and conditions, product quality, compatibility, etc. Because of the wide variety of materials, equipment, and services purchased, there are no standards by which all suppliers can be judged. There are, however, several major

considerations and sources of information that buyers and other designated personnel may use to locate main sources and guide them in the selection of suppliers:

- SDSU Research Foundation procurement history file
- Technical and business reputation of a company
- Past performance of a company, if previously used by SDSU Research Foundation
- Recommendations from other sources, i.e. funding agencies
- Input from faculty, staff and technical personnel
- Information obtained from trade fairs, catalogs, trade journals, sales literature and other publications
- Published registers, such as The Thomas Register
- Classified sections of telephone directories
- Buyer's knowledge and experience
- Professional associations
- Contacts with salespersons and supplier representatives

In addition, SDSU Research Foundation purchasing department is continually seeking out qualified small, disadvantaged, woman-owned, and disabled veteran businesses in compliance with Federal Law 950-507. Whenever possible, these suppliers are recommended to SDSU Research Foundation projects and departments. Every effort is made to assist specific projects in meeting their purchasing goals.

Q. Sole Source/Brand Name Justification

When it appears impractical to obtain competitive bids or when it appears certain that substitutes are not acceptable, a full explanation from the requestor covering the reason, or reasons, for such restrictions is required. Such explanations may include, but are not necessarily limited to:

- Item is manufactured by a single company
- Repair or replacement parts
- As supplementary components of the same manufacturer
- As necessary to meet physical design or quality requirements
- As embodying specific characteristics essential to the proposed application not found in items of other manufacture.

When a project or SDSU Research Foundation department wishes to designate "sole source" or select a "brand" name, the single/sole source justification portion of the *Abstract of Quotations* form or a letter of justification must be completed and signed off by the PI, division associate executive director, and department director, or designee. This form or letter must describe in detail the advantages of the preferred item over an alternate item. The project attaches the form or letter to a fully completed and approved purchase requisition and forwards to the SR administrator and ultimately to the SDSURF purchasing department for processing. If the required "sole source" or "brand" name justification is not sent with the purchase requisition, or the justification is not sufficient to warrant approval, the buyer may perform a search for the product and provide additional justification or competitive

quotations. If the search provides a better option, the project or SDSU Research Foundation department is informed and options discussed and documented prior to finalizing the purchase. NOTE: SDSU Research Foundation may be required to submit the proposed procurement to the awarding agency for pre-award review on proposed sole source contracts expected to exceed \$5,000.

R. Prohibited Purchases/Purchasing Practices

1. Political Contributions

No funds or assets of SDSU Research Foundation may be contributed to any political party or organization or to any individual who either holds public office or is a candidate for public office. See Section II.B.3.

2. Conflict of Interest

All individuals involved in the procurement process are expected to avoid any activity that may interfere or have the appearance of interfering with the performance of this responsibility. See Section II.C.

3. Personal Purchases

SDSU Research Foundation will not purchase supplies or equipment for personal use nor will arrangements be made by the purchasing department to create any buyer/seller arrangements between project or SDSU Research Foundation department staff and SDSU Research Foundation suppliers. The attractiveness of SDSU Research Foundation's buying power may motivate some individuals to take advantage of the requisition system for personal purposes. Even though the individual involved may fully reimburse his project or SDSU Research Foundation department fund/organization, this procedure is in violation of SDSU Research Foundation policy.

S. Competitive Bidding

All procurement transactions are conducted in a manner to provide, to the maximum extent practical, open and free competition. SDSU Research Foundation shall be alert to organizational conflicts of interest as well as noncompetitive practices among contractors that may restrict or eliminate competition or otherwise restrain trade. Such contractors shall be excluded from competing for the identified procurements. Awards are made to the bidder whose bid or offer is responsive to the solicitation and is most advantageous to SDSU Research Foundation with price, quality and other factors considered. Solicitations must clearly set forth all requirements that the bidder must fulfill in order for the bid or offer to be evaluated. Any and all bids or offers may be rejected when it is in the best interest of SDSU Research Foundation to do so.

T. Purchase Order Review

Buyers review, on at least a semi-annual basis, all outstanding purchase orders where delivery date has passed by six or more months. Efforts are directed toward the oldest purchase orders first. Projects/departments and vendors are contacted to discuss status of order. Appropriate action is taken to either process a change order to update the transaction

or process a close out of the purchase order.

U. Vendor Master File Maintenance

Vendor master file maintenance is performed on an on-going basis. New vendors are added and old vendors are updated with new addresses, vendor contacts, telephone numbers, etc. Vendors are not deleted from the vendor file as they have history associated with them. Instead, vendors are terminated and cannot be used again unless reinstated. If a vendor is terminated due to lack of performance, invalid taxpayer identification number, etc., this information is entered in FOATEXT. FOATEXT is reviewed and the issues resolved prior to reinstatement. A report of all active vendors is produced on at least an annual basis and reviewed for possible duplicate vendors and corrections made when needed.

DRAFT

Appendix D – Additional General Provisions

DRAFT

Additional General Provisions

Capitalized terms that are used but not defined in this Appendix shall have the meaning given to them in the agreement to which this Appendix is attached and that certain Millennium Challenge Compact by and between the United States of America, acting through MCC, and the Government, signed in [City] on [Date], as may be amended from time to time.

MCA-Georgia (the “Client” for the purposes of this appendix) is responsible for the oversight and management of the implementation of the Compact on behalf of the Government and intends to apply a portion of the proceeds of the Compact to eligible payments under the Contract, provided that (a) such payments will only be made at the request of and on behalf of the Client and as authorized by the Fiscal Agent, (b) MCC shall have no obligations to the Consultant under the Compact or the Contract, (c) such payments will be subject, in all respects, to the terms and conditions of the Compact, and (d) no party other than the Government and the Client shall derive any rights from the Compact or have any claim to MCC Funding.

A. MCC Status; Reserved Rights; Third-Party Beneficiary

1. MCC Status. MCC is a United States Government corporation acting on behalf of the United States Government in the implementation of the Compact. As such, MCC has no liability under the Contract and is immune from any action or proceeding arising under or relating to the Contract. In matters arising under or relating to the Contract, MCC is not subject to the jurisdiction of the courts or any other juridical or other body of any jurisdiction.

2. MCC Reserved Rights.

(a) Certain rights are expressly reserved to MCC under the Contract, the Compact and other related Compact documents, including the right to approve the terms and conditions of the Contract, as well as any amendments or modifications hereto, and the right to suspend or terminate the Contract.

(b) MCC, in reserving such rights under the Contract, the Compact or other related Compact documents, has acted solely as a funding entity to assure the proper use of United States Government funds, and any decision by MCC to exercise or refrain from exercising these rights shall be made as a funding entity in the course of funding the activity and shall not be construed as making MCC a party to the Contract.

(c) MCC may, from time to time, exercise its rights, or discuss matters related to the Contract with the Parties or the Government, as appropriate, jointly or separately, without thereby incurring any responsibility or liability to any party.

(d) Any approval (or failure to approve) or exercise of (or failure to exercise) any rights by MCC shall not bar the Government, the Client, MCC or any other person or entity from asserting any right against the Consultant, or relieve the Consultant of any liability which the Consultant might otherwise have to the Government, the Client, MCC, or any other person or entity. For the purposes of this clause (d), MCC shall be deemed to include any MCC officer, director, employee, affiliate, contractor, agent or representative.

3. Third-Party Beneficiary. MCC shall be deemed to be a third-party beneficiary under the Contract.

B. Limitations on the Use or Treatment of MCC Funding

The use and treatment of MCC Funding in connection with the Contract does not, and shall not, violate any limitations or requirements specified in the Compact or any other relevant agreement or Implementation Letter or applicable Laws or United States Government policy. No MCC Funding shall be used for military purposes, for any activity likely to cause a substantial loss of United States jobs or a substantial displacement of United States production, to support any activity likely to cause a significant environmental, health or safety hazard, or to fund abortions or involuntary sterilizations as a method of family planning. MCC Funding shall be free from the payment or imposition of all Taxes as set forth in the Compact.

C. Procurement

The Consultant shall ensure that all procurements of goods, works or services under, related to or in furtherance of the Contract, for which Consultant is responsible, shall be consistent with the general principles set forth in the Compact and applicable Guidelines from time to time in effect as posted on the Clients website at www.foundation.sdsu.edu. The Consultant shall comply with the eligibility requirements related to prohibited source or restricted party provisions in accordance with U.S. Laws, regulations and policy, applicable World Bank policies or guidelines and in accordance with other eligibility requirements as may be specified by the Client. It has been determined that SDSURF Policies are consistent with the Compact and can be located in Appendix “C”

D. Reports and Information; Access; Audits; Reviews

Reports and Information. The Consultant shall maintain such books and records and provide such reports, documents, data or other information to the Client in the manner and to the extent required by the Compact or related documents, and as may be reasonably requested by the Client from time to time in order to comply with its reporting requirements arising under the Compact or related documents. MCC may freely use any information it receives in any report or document provided to it in any way that MCC sees fit. The provisions of the Compact and related documents that are applicable to the Government in this regard shall apply, *mutatis mutandis*, to the Consultant as if the Consultant were the Government under the Compact.

Access; Audits and Reviews. Upon Client’s request, the Consultant shall permit authorized representatives of MCC, an authorized Inspector General of MCC, the United States Government Accountability Office, any auditor responsible for an audit contemplated by the Compact or conducted in furtherance of the Compact, and any agents or representatives engaged by MCC or the Government to conduct any assessment, review or evaluation of the Program, the opportunity to audit, review, evaluate or inspect activities funded by MCC Funding. The provisions of the Compact and related documents that are applicable to the Government in this regard shall apply, *mutatis mutandis*, to the Consultant as if the Consultant were the Government under the Compact.

Application to Providers. The Consultant shall ensure the inclusion of the applicable audit, access and reporting requirements from the Compact in its contracts or agreements with other providers in connection with the Contract.

E. Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes, and Other Restrictions

1. The Consultant shall ensure that no payments have been or will be made by the Consultant to any official of the Government, the Client, or any third party (including any other government official) in connection with the Contract in violation of the United States Foreign Corrupt Practices Act of 1977, as amended (15 U.S.C. 78a et seq.) (the “FCPA”) or that would otherwise be in violation of the FCPA if the party making such payment were deemed to be a United States person or entity

subject to the FCPA, or similar statute applicable to the Contract, including any local Laws. The Consultant affirms that no payments have been or will be received by any official, employee, agent or representative of the Consultant in connection with the Contract in violation of the FCPA or that would otherwise be in violation of the FCPA if the party making such payment were deemed to be a United States person or entity subject to the FCPA, or similar statute applicable to the Contract, including any local Laws.

2. The Consultant shall not provide material support or resources directly or indirectly to, or knowingly permit MCC Funding to be transferred to, any individual, corporation or other entity that the Consultant knows, or has reason to know, commits, attempts to commit, advocates, facilitates, or participates in any terrorist activity, or has committed, attempted to commit, advocated, facilitated or participated in any terrorist activity, including, but not limited to, the individuals and entities (i) on the master list of Specially Designated Nationals and Blocked Persons maintained by the U.S. Department of Treasury's Office of Foreign Assets Control, which list is available at www.treas.gov/offices/enforcement/ofac, (ii) on the consolidated list of individuals and entities maintained by the "1267 Committee" of the United Nations Security Council, (iii) on the list maintained on www.sam.gov, or (iv) on such other list as the Client may request from time to time. For purposes of this provision, "material support and resources" includes currency, monetary instruments or other financial securities, financial services, lodging, training, expert advice or assistance, safe houses, false documentation or identification, communications equipment, facilities, weapons, lethal substances, explosives, personnel, transportation, and other physical assets, except medicine or religious materials.

3. The Consultant shall ensure that its activities under the Contract comply with all applicable U.S. Laws, regulations, executive orders, and policies regarding money laundering, terrorist financing, trafficking in persons, U.S. sanctions Laws, restrictive trade practices, boycotts, and all other economic sanctions promulgated from time to time by means of statute, executive order, regulation or as administered by the Office of Foreign Assets Control of the United States Treasury Department or any successor governmental authority, including, 18 U.S.C. § 1956, 18 U.S.C. § 1957, 18 U.S.C. § 2339A, 18 U.S.C. § 2339B, 18 U.S.C. § 2339C, 18 U.S.C. § 981, 18 U.S.C. § 982, Executive Order 13224, 15 C.F.R. Part 760, and those economic sanctions programs enumerated at 31 C.F.R. Parts 500 through 598 and shall ensure that its activities under the Contract comply with any policies and procedures for monitoring operations to ensure compliance, as may be established from time to time by MCC, the Client, the Fiscal Agent, or the Bank, as may be applicable. The Consultant shall verify, or cause to be verified, appropriately any individual, corporation or other entity with access to or recipient of funds, which verification shall be conducted in accordance with the procedures set out in Part 10 of the MCC Program Procurement Guidelines (Eligibility Verification Procedures) that can be found on MCC's website at www.mcc.gov. The Consultant shall (A) conduct the monitoring referred to in this paragraph on at least a quarterly basis, or such other reasonable period as the Client or MCC may request from time to time and (B) deliver a report of such periodic monitoring to the Client with a copy to MCC.

4. Other restrictions on the Consultant shall apply as set forth in the Compact or related documents with respect to any activities in violation of other applicable United States Laws, regulations, executive orders, or policies, any misconduct injurious to MCC or the Client, any activity contrary to the national security interests of the United States or any other activity that materially and adversely affects the ability of the Government or any other party to effectively implement, or ensure the effective implementation of, the Program or any Project or to otherwise carry out its responsibilities or obligations under or in furtherance of the Compact or any related document or that materially and adversely affects the Program assets or any Permitted Account.

F. Publicity, Information, and Marking

1. The Consultant shall cooperate with the Client and the Government to provide the appropriate publicity to the goods, works and services provided under the Contract, including identifying Program activity sites and marking Program assets as goods, works and services funded by the United States Government, acting through MCC, all in accordance with the MCC Standards for Global Marking available on the MCC website at <http://www.mcc.gov>; provided, however, that any press release or announcement regarding MCC or the fact that MCC is funding the Program or any other publicity materials referencing MCC, shall be subject to MCC's prior written approval and must be consistent with any instructions provided by MCC from time to time in relevant Implementation Letters.
2. Upon the termination or expiration of the Compact, the Consultant shall, upon MCC's request, cause the removal of any such markings and any references to MCC in any publicity materials.

G. Insurance

SDSURF is involved in numerous activities and business ventures with various contractors, subcontractors and business entities. Therefore it is necessary to insure that SDSURF is adequately protected against losses or claims arising out of the activities of contractors, subcontractors and business entities. Therefore, if SDSURF determines that an activity warrants additional protection against certain risks, it may be requested that the organization it is conducting business with provide a certificate of insurance. This certificate should have an attached "additional insured endorsement" stipulating that "San Diego State University Research Foundation" is an additional insured under the contractors, subcontractors or vendors insurance policy.

The Consultant shall obtain insurance, performance bonds, guarantees or other protections appropriate to cover against risks or liabilities associated with performance of the Contract. The SDSURF shall be named as payee on any such insurance and the beneficiary of any such performance bonds and guarantees.

H. Conflict of Interest

The Consultant shall ensure that no officer, director, employee, affiliate, contractor, subcontractor, agent, advisor, or representative of the Consultant participates in the selection, award, administration or oversight of a contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with the Contract, in which (i) the entity, the person, members of the person's immediate family or household or his or her business partners, or organizations controlled by or substantially involving such person or entity, has or have a financial or other interest or (ii) the person or entity is negotiating or has any arrangement concerning prospective employment, unless such person or entity has first disclosed in writing to the parties under the Contract and MCC the conflict of interest and, following such disclosure, the parties to the Contract agree in writing to proceed notwithstanding such conflict. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, subcontractors, agents, advisors, or representatives involved in the selection, award, administration, oversight or implementation of any contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with the Contract shall solicit or accept from or offer to a third party or seek or be promised (directly or indirectly) for itself or for another person or entity any gift, gratuity, favor or benefit, other than items of *de minimis* value and otherwise consistent with such guidance as MCC may provide from time to time. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, subcontractors, agents, advisors or representatives engage in any activity which is, or gives the appearance of being, a conflict of interest in connection with the Contract. Without limiting the foregoing, the Consultant shall comply, and ensure compliance, with the applicable conflicts of interest and ethics policies of the Client as provided by the Client to the

Consultant.

I. Indemnification

The Contractor shall hold harmless, defend and indemnify SDSU Research Foundation, San Diego State University, The California State University and its Board of Trustees and the State of California, its officers, employees, representatives and agents from and against all claims, damages and losses arising out of, resulting from, or related to (1) the failure of the contractor to perform its obligations under the contract or the performance of its obligations in a willful or negligent manner; (2) the inaccuracy of any representation or warranty by the contractor given in accordance with or contained in the contract documents; and (3) any claim of damage or loss by any subcontractor, or supplier, or laborer against SDSU Research Foundation arising out of any alleged act or omission of the Contractor or any other subcontractor, or anyone directly or indirectly employed by the Contractor or any subcontractor.

In claims against any person or entity indemnified under this clause made by an employee of the Contractor or a subcontractor, or indirectly employed by either of them, or anyone for whose acts either may be liable, the indemnification obligation under this clause shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a subcontractor under workers compensation laws, disability benefit laws or other laws providing employee benefits.

The indemnification obligation under this clause shall not be limited by assertion or finding that the person or entity indemnified is liable by reason of a non-delegable duty.

All binding agreements whether in contract, purchase agreement or other forms, for all work, shall include language as stated in this Statement of Work for insurance, conflict of interest, and indemnification.

J. Inconsistencies

In the event of any conflict between the Contract and the Compact and/or the Program Implementation Agreement, as applicable, the term(s) of the Compact and/or the Program Implementation Agreement, as applicable, shall prevail.

K. Other Provisions

The Consultant shall abide by such other terms or conditions as may be specified by the Client or MCC in connection with the Contract.

L. Flow-Through Provisions

In any subcontract or sub-award entered into by the Consultant, as permitted by the Contract, the Consultant shall ensure the inclusion of all the provisions contained in paragraphs (A) through (K) above.

Annex 7 – Report on Submission of Applications for Georgian Accreditation
and for Western Association of Schools and Colleges (WASC) Accreditation

The rest of this page is left intentionally blank.

Report on Submission of Applications for Georgian Accreditation and for Western Association of Schools and Colleges (WASC) Accreditation

Georgian Accreditation:

On September 30, 2014, self-study documents were submitted by the partner institutions for the SDSU-Georgia degree programs. These included BS Degrees in Electrical Engineering and Computer Engineering for Ilia State University, BS Degrees in in Electrical Engineering and Computer Engineering and Chemistry for Ivane Javakhishvili Tbilisi State University, and BS Degrees in in Electrical Engineering and Computer Engineering and Chemistry for Technical University.

WASC:

Substantive Change proposals are needed for SDSU to maintain WASC accreditation to offer its existing degree programs at a distance greater than 25 miles from our main campus. The substantive change proposal was submitted to WASC on October 7, 2014. The degree programs were approved by the Chancellor's Office of the California State University as a part of this process.

Annex 8 – Articulation Plan

The rest of this page is left intentionally blank.

Draft Articulation Plan

Articulation refers to the evaluation of courses at the partner institutions that could be accepted for credit by SDSU toward SDSU degrees. There are two key ways in which articulation will be needed:

1. To evaluate for acceptance the work by a student who has completed some portion of their studies at another institution, and wishes to transfer in to SDSU-Georgia.
2. To evaluate for acceptance General Education courses that might be offered at the partner institutions toward credit within the General Education (GE) program of SDSU.

The principal difference between these two cases is the time at which the student enrolls in SDSU-Georgia. In the first case, they have already taken courses while enrolled in another institution. In the second case, they are already enrolled in SDSU-Georgia, and the objective is to expand the options available within the GE program. The two cases will be addressed separately.

The evaluation and assessment required for these articulation decisions is a key part of the accreditation process. Both WASC and the professional program accreditors require that SDSU make an evaluation towards acceptance of the work of students who transfer into our programs. Further, both WASC and the professional program accreditors require that SDSU make assessments of students' levels of outcome achievement once the student has enrolled in SDSU degree programs. The first requirement places a responsibility on SDSU to have an objective method for evaluating transfer student transcripts. The second places a responsibility on SDSU to make sure that any courses added into the GE program have assessment systems that support and complement the overall assessment programs used in the SDSU degree programs.

Case 1: Transfer Student Evaluation

It is in the interest of Georgia and of SDSU to allow students to transfer into our programs from other institutions. It will take time for word of and confidence in the SDSU-Georgia program to develop. Many capable students may enroll in other institutions during this period, and later become aware of or decide to enroll in an SDSU-Georgia program. Such students would build workforce and can replace students who do not move on from the first year cohort.

Evaluation of student work completed at other institutions is a common activity at SDSU. Commonly, for international students this assessment is facilitated by curriculum assessment contractors (which are accredited by the professional program accreditors). They produce recommendations for the proper mapping of a student's transfer work to the SDSU curriculum in the student's major. This process will continue as it is currently conducted for our main campus for students transferring from Georgian universities.

However, in order to facilitate transfers from within the partner institutions, we have asked that they propose courses for articulation by SDSU directly. This

process is analogous to the process we use with community colleges in California, who can ask that their courses be articulated for equivalency with the most relevant SDSU courses. We have prepared a form for use by the partner universities for this type of articulation (attached), which is referred to on the form as a “Type I” request.

Case II: General Education Evaluation

The GE program at SDSU provides a large variety of courses intended to provide the breadth of knowledge needed for meaningful work, life-long learning, socially responsible citizenship, and intellectual development. This program is a critical feature of the SDSU degree, and is a key part of the SDSU-Georgia proposal and the agreement. The program (described in detail at http://arweb.sdsu.edu/es/catalog/2014-15/GeneralCatalog/026_GraduationRequirements-86.pdf) as instantiated at the main campus provides a very large number of choices for a student to follow their interests within different categories of general education, including Communication and Critical Thinking, Natural Sciences and Quantitative Reasoning, Social and Behavioral Sciences, and Humanities.

As a practical matter, it is not possible to offer the same level of variety and choice to students at SDSU-Georgia that are made available to students at the main campus. In fact, a reduced set of GE courses was identified for delivery in Georgia as a part of the SDSU-Georgia proposal. However, it is desirable to allow students to follow their interest within these categories, and to have them following subjects that resonate in a Georgian context. Among the courses taught by the partner universities are classes within these categories, which could be articulated to SDSU and increase the range of choices available to SDSU-Georgia students.

To that end, we have invited the partner institutions to propose GE courses from within their current offerings that could be articulated into our GE program. This type of request is referred to as a “Type II request” on the attached form.

Because of the need for SDSU to evaluate and monitor the assessment of student outcomes within the accreditation processes, as a general rule courses for articulation within the GE program for students already enrolled at SDSU will be taught in English.

Articulation Process

As the articulation of courses is related to the accreditation of our programs, the decision and authority about the acceptance of courses for articulation must reside solely within the SDSU faculty. To that end, a committee of SDSU faculty is being compiled. This committee will review articulation requests from the partner institutions.

The Dean will work with the partner institutions to encourage their participation and provide advice on the proper preparation of the forms. The Dean will also provide guidance on the GE program requirements, because the program is somewhat complicated and unfamiliar to the partners. To date, the partner

institutions have submitted a number of courses, with evaluation of those courses for articulation underway.

Courses Submitted to Date:

Course Title	Partner
Precalculus	ISU
Calculus I	
Calculus II	
Calculus III	
Signals and Systems	GTU
Telecommunications Theory	
Electromagnetics	
Wave Propagation and Antenna Theory	
Microwave and Satellite Transmission Systems	
Optical Fiber Telecommunications	
Introduction to Computer Programming	
Digital Systems	
Computer and Data Networks	
Computer Organization	
Data Structures and Object-Oriented Programming	
Microprocessors	
Windows Database and Web Programming	
Embedded Operating Systems	
Bioinformatics	
Digital Signal Processing	
Electronics for Scientists	
Human Physiology	
Introduction to Mathematical Modeling	

It is clear from review of this list that the majority of the submissions to date are related to Case 1 evaluations, with very few submitted so far for Case 2 evaluations. Further, so far Tbilisi State has not made submissions, because they are still working within their academic structures to determine the best courses to submit. Further, their faculty visitors to SDSU during the Fall cohort will participate in our own

The response received during Quarter 1 made it clear that there is a need to work closely with partners to identify courses, and so the emphasis has shifted to this role and away from completing the actual articulation assessments. We anticipate that in Quarter 2 we can complete the required committee structures at SDSU. This will allow the evaluation of courses submitted to be advanced, so that the goal stated in the Agreement of 24 courses per year can be met. It is clear that there is strong interest from the partner institutions in participating in this process, so identification of sufficient numbers of courses will be very possible.

PARTNER ARTICULATION REQUEST

Date: «date» **Please return by:** «September 25, 2014»

To: Dr. Ken Walsh, Dean, SDSU-Georgia (kwalsh@mail.sdsu.edu, +995 558 174 414)

From: Initiator: «name»
Title: «title»
Email: «email address» Telephone: «phone number»

Outcome of Articulation Request: (SDSU USE ONLY) ___ APPROVED ___ DENIED

«Parther name» has requested an articulation agreement covering the course(s) listed below.

Please review the course(s) proposed for articulation and indicate whether approved or denied. Course outlines/descriptions are attached. Please retain a copy of this form and the course information for your records.

Note we are asking for submission of two different types. Submit one completed version of this form for each course submitted. Please CHOOSE ONE to indicate which is intended:

TYPE 1: Equivalent Partner Course – this selection should be used when the partner believes that a course they offer is equivalent to an existing SDSU course in the matrix of courses for the degree programs offered via SDSU-Georgia. Additional information about the SDSU courses can be found at <http://arweb.sdsu.edu/es/catalog/curriculumIndex.html>. For this type of request, please complete the table below:

SDSU COURSE BELIEVED TO BE EQUIVALENT TO THE PARTNER COURSE.	SDSU CREDIT HOURS	PARTNER COURSE(S) BELIEVED TO BE EQUIVALENT TO THE SDSU COURSE	ECTS
«SDSU_ COURSE BY DEPARTMENT AND NUMBER»	«#»	«PARTNER COURSE BY DEPARTMENT AND NUMBER»	«#»

Course Description: «Provide catalog description for the course, in English»

Attach a course syllabus in English that includes, as a minimum, student learning outcomes, topics to be covered and approximate schedule, grading criteria and assignment list, a list of prerequisite courses, and any text or other media used in the class.

TYPE 2: Unique General Education Partner Course – this selection should be used when the partner believes that a course they offer is appropriate in the General Education program for the degree, but does not match to a course that currently exists at SDSU. Such courses should be intended to be considered in Foundations of Learning (that is, lower division) or Explorations of Human Experience (that is, upper division) in the Social and Behavioral Sciences or in the Humanities. Please refer to http://arweb.sdsu.edu/es/catalog/2014-15/GeneralCatalog/026_GraduationRequirements-86.pdf, pages 90-97 for lists of courses currently offered at our San Diego campus that satisfy these requirements. This list may serve as examples of the types of courses that could be considered.

Table below is only to be completed for Type 2 request

COURSE LEVEL	CATEGORY	FOR HUMANITIES, AREA	CULTURAL DIVERSITY?
choose one from: Foundations of Learning or Explorations of Human Experience	choose one from: Humanities or Social and Behavioral Sciences	choose one from: 1. Literature 2. Art, Classics, Dance Drama, Humanities, and Music; 3. History; 4. Philosophy and Religious Studies; or 5. Foreign Language (Georgian may not be taken by SDSU-Georgia Students for Foreign Language Credit)	Yes, No, or N/A

Course Description: «Provide catalog description for the course, in English»

Attach a course syllabus in English that includes, as a minimum, learning outcomes, topics to be covered and approximate schedule, grading criteria and assignment list, a list of prerequisite courses, and any text or other media used in the class.

The following definitions are provided for clarification:

APPROVED: Transfer courses approved for articulation must be clearly equivalent in scope and content to SDSU courses. A student will receive SDSU credit for the articulated course toward an SDSU degree.

DENIED: Transfer course is *not* approved for articulation. A student will *not* receive SDSU credit for the proposed course toward an SDSU degree.

CULTURAL DIVERSITY: Partner requests that the proposed upper division Humanities course be considered toward the cultural diversity requirement. Cultural diversity courses expose students to perspectives different than their own. In order to be considered, the request should include a separate sheet with an answer to the question: How does the course address and emphasize perspectives, cultures, views, and traditions that are non-dominant in Georgia or the broader region?

SDSU CREDIT HOURS: SDSU uses credit hours rather than ECTS to indicate the level of effort in each course. ECTS can be converted to credit hours using the equation Credit Hours = ½ ECTS. In general, courses can only be accepted for credit if the number of ECTS for the proposed partner course is twice the number of the potentially equivalent SDSU course.

STUDENT LEARNING OUTCOMES: Student learning outcome statements succinctly describe student capacities – observable and measurable manifestations of knowledge, skills, and attitudes—attained as a result of some learning process or educational experience. The simplest format for outcome statements consists of an action verb and a noun phrase. Additional information can be found at <http://www-rohan.sdsu.edu/~acserv/CG2014/037-Student%20Learning%20Outcomes.pdf>.

SDSU RESPONSE ONLY: When result is DENIED, please use space below to indicate reason for denial. If request is approved, please use space if you would like to make any comments.

Annex 9 – MOUs with Partner Universities

The rest of this page is left intentionally blank.

MOUs with Partner Universities

Draft Memoranda of Understanding (MOUs) for the partner institutions were submitted with the Inception Report. Several comments were returned in response, including some relating to the content of the MOUs *per se*, and some pointing out the necessity for additional subcontracts beyond the MOUs to describe some aspects of the relationships. The MOU template was modified to reference these subcontracts, and then provided to the partner institutions.

Once the partner institutions received the MOU documents, they had questions and concerns about certain aspects of the document. As a result, modified versions of the documents were produced for each partner institution. The final versions of these follow, presented in a bilingual format, one for each institution. Note that there are minor differences between these documents, relating to the context and specific concerns of each partner, but the basic framework of the three MOUs is the same. We are in the process of obtaining signatures on these documents over the next few days, and can provide copies of the signed versions in a separate submission (anticipated by October 22).

In addition, the process of negotiating the subcontracts is ongoing. An English language version of the subcontract template is provided for reference. The negotiation process for the subcontracts is beginning, and we expect to be able to provide signed versions with the Quarter 2 report, if requested.

Article I. FRAMEWORK

- a) SDSU-ის პროპოზიციის მიხედვით, მას დაეკავშირება MCA-Georgia-ს კონტრაქტი "Georgia-SDSU: Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics"-ის შესახებ. კონტრაქტი მოიცავს პერიოდს 2014 წლის ივლისის 28-დან 2015 წლის ოქტომბრის 27-მდე. კონტრაქტის ვადის პირველი 15 თვეს "Pre-Enrollment" პერიოდს უწოდებენ. კონტრაქტის ვადის დარჩენილი 45 თვეს "Enrollment Period"-ს უწოდებენ.
- b) SDSU კონტრაქტის მიხედვით, მას დაეკავშირება MCA-Georgia-ს კონტრაქტი "Georgia-SDSU: Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics"-ის შესახებ. კონტრაქტი მოიცავს პერიოდს 2014 წლის ივლისის 28-დან 2015 წლის ოქტომბრის 27-მდე. კონტრაქტის ვადის პირველი 15 თვეს "Pre-Enrollment" პერიოდს უწოდებენ. კონტრაქტის ვადის დარჩენილი 45 თვეს "Enrollment Period"-ს უწოდებენ.
- c) SDSU ერთ-ერთი უნივერსიტეტია 23 უნივერსიტეტის სისტემის კალთაში. მას დაეკავშირება MCA-Georgia-ს კონტრაქტი "Georgia-SDSU: Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics"-ის შესახებ. კონტრაქტი მოიცავს პერიოდს 2014 წლის ივლისის 28-დან 2015 წლის ოქტომბრის 27-მდე. კონტრაქტის ვადის პირველი 15 თვეს "Pre-Enrollment" პერიოდს უწოდებენ. კონტრაქტის ვადის დარჩენილი 45 თვეს "Enrollment Period"-ს უწოდებენ.
- d) SDSURF-ს დაეკავშირება MCA-Georgia-ს კონტრაქტი "Georgia-SDSU: Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics"-ის შესახებ. კონტრაქტი მოიცავს პერიოდს 2014 წლის ივლისის 28-დან 2015 წლის ოქტომბრის 27-მდე. კონტრაქტის ვადის პირველი 15 თვეს "Pre-Enrollment" პერიოდს უწოდებენ. კონტრაქტის ვადის დარჩენილი 45 თვეს "Enrollment Period"-ს უწოდებენ.

Article I. FRAMEWORK

- a) SDSU submitted a proposal and has been awarded a contract from MCA-Georgia for "Georgia-SDSU: Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics". The contract provides for performance of the initial 15 month period of the proposal from July 28, 2014 through October 27, 2015. This 15 month period shall be referred to as the "Pre-Enrollment" Period. Prior to the expiration of the contract, the SDSU and MCA-Georgia intend to enter into a contract addressing the performance for the remaining 45 month period. This subsequent 45 month period shall be referred to as the "Enrollment Period;" and
- b) SDSU is an accredited campus of the California State University; the California State University being the State of California acting in its higher education capacity; and
- c) SDSU is one of the 23 universities of the California State University System. Operating under the authority of Title 5 of the California Administrative Code. The President of the campus may initiate agreements with foreign institutions of higher education to further the university's missions of education, research and service to the global community.
- d) SDSURF has been vested with authority to

perform the functions specified in 42500, Title 5, California Code of Regulations, including assisting faculty and staff in developing and administering third-party-funded sponsored programs, subject to the concurrence of SDSU that the activity is supportive of and consistent with the academic mission and conducted solely for the benefit of the University; and

e) SDSU designates and will sub-contract with SDSURF to receive and apply the funds and properties coming into its possession toward furthering these purposes only for the benefit of SDSU; and

f) TSU is empowered by its bylaws to enter into cooperative agreements of this nature with other universities in regard to the subject related to the achievement of its goals and objectives as stated in its bylaws, in order to further contribute to the achievement of such goals and objectives

TSU represents and warrants that it is an educational entity in good standing in the country of Georgia; has the legal authority to enter into this MOU; and has obtained all necessary approvals and rights required by applicable laws, rules and regulations necessary to enter into, and perform under, this MOU.

Article II. PURPOSE AND SCOPE

Article II. PURPOSE AND SCOPE

SDSU, SDSURF and TSU commit to cooperatively develop programs that will provide US-accredited higher education focused on the needs of Georgia in the STEM, and other related disciplines.

SDSU, SDSURF and TSU commit to cooperatively develop programs that will provide US-accredited higher education focused on the needs of Georgia in the STEM, and other related disciplines.

It is recognized that the ability of SDSU, SDSURF and TSU to perform any cooperative obligations requires that the participating parties budget, monitor and control their own expenditures.

It is recognized that the ability of SDSU, SDSURF and TSU to perform any cooperative obligations requires that the participating parties budget, monitor and control their own expenditures.

Article III. RESPONSIBILITIES

Article III. RESPONSIBILITIES

The parties' responsibilities under this MOU are in furtherance of and based upon the framework set forth in the July 28, 2014 agreement between SDSU and MCA-Georgia.

The parties' responsibilities under this MOU are in furtherance of and based upon the framework set forth in the July 28, 2014 agreement between SDSU and MCA-Georgia.

The responsibilities described below are illustrative. It is anticipated that the parties will enter into a separate subcontract agreement setting forth the parties' obligations in greater detail, including space sharing, tuition distribution and other compensation details.

The responsibilities described below are illustrative. It is anticipated that the parties will enter into a separate subcontract agreement setting forth the parties' obligations in greater detail, including space sharing, tuition distribution and other compensation details.

Section 3.01 SPACE

Section 3.01 SPACE

SDSU and/or SDSURF will provide administrative support for the program, to be housed at a location yet to be finalized at TSU. In addition, SDSU and/or SDSURF will hire appropriate personnel as determined by SDSU, to assist in representing the program at TSU.

SDSU and/or SDSURF will provide administrative support for the program, to be housed at a location yet to be finalized at TSU. In addition, SDSU and/or SDSURF will hire appropriate personnel as determined by SDSU, to assist in representing the program at TSU.

□□□□□□□□-□□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□
□□□□□□□□ □□□□□□□□ □□□□□□ □□
□□□□□ □□□□□□ □□□□□□□□□□□□□□□□.
SDSU-□ □□□□ □□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□ □□□□□□,
□□□□□□□□ □□ □□□□□□□□□□□□,
□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□
□□□□□□□□, □□□□□□□□□□ □□□□□□□□□□-
□□□□□□□□□□□ □□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□ □□ □□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□ □□□□□□□□□□□□
□□□□□□□□□□-□□□□□□□□□□ □□ TSU-□
□□□□□□□□□□□ □□□□□□□□□□□□.

SDSU □□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□ □□ □□□□□□□□
□□□□□□□□□□□ □□□□ □□□□□□□□□□□ □□/□□
□□□□□□□□ □□□□□□□□□□ □□□□□□□□. □□
□□□□□□□□□□ □□□□□□□□□□ □□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□ □□□□□□□□□□ □□ □□□□□□□□□□□□□□
□□□□□□□□□□□ □□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□, □□□□□□□□ □□
□□□□□□□ □□□□□□□□ (ESMP-□□□□). TSU
□□□□□□□□□□□□□□ □□□□□□□□□□ □□
□□□□□□□□□□ □□□□□□□□□□□□□□□□□□
□□□□□□□□ □□□□□□□□ □□□□□□□□□□□□
□□□□□□□□ □□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□□ □□ □□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□. SDSU □□ TSU
□□□□□□□□□□□□□□□□□□□□□□□□ □□/□□
□□□□□□□□□ □□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□, □□□□□□□□□□□□□□□□□□
□□ □□□□□□□□, □□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

□□□□□□ □□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□ □□
□□□□□□□□□□□ □□□□□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□ SDSU-□□ □□ TSU-□
□□□□□□. □□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□, □□□□□□□□ □□□□□□□□□□□□□□
□□□□□□□□ □□□□□□□□□□, □□□□□□□□□□□□□□
□□ □□□□□□□□, □□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

SDSU will have priority for scheduling of the laboratory spaces once the renovations and/or construction are complete. Use of these spaces will be pursuant to the objectives of the program and in compliance with Environmental, Social, and Management Plans (ESMPs) developed for the renovation and operation phases. TSU will cooperate in obtaining samples or data as needed for the completion of ESMP documents for the renovation and construction phases. SDSU and TSU will collaborate on scheduling of the classroom spaces that are renovated and/or constructed to the benefit of both institutions.

A separate subcontract agreement will be negotiated and will specify the facilities sharing arrangements between SDSU and TSU. The agreement will stipulate details associated with the size, number and types of rooms, sharing arrangements, access policies, remuneration for students taking courses across institutions and guidance on environmental and social issues.

2015-2016 ოცნებები ოცნებები
ოცნებები ოცნებები SDSU ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები. SDSU ოცნებები
ოცნებები ოცნებები, ოცნებები
ოცნებები ოცნებები, ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
word-ოცნებები ოცნებები ოცნებები.
ოცნებები ოცნებები TSU
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები. SDSU ოცნებები
TSU ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები SDSU-ოცნებები TSU-ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები, ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები. TSU ოცნებები
ოცნებები ოცნებები TSU-ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები.

ოცნებები-ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები. TSU ოცნებები
ოცნებები ოცნებები ოცნებები
ოცნებები, ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები. SDSU
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები ოცნებები ოცნებები-ოცნებები
ოცნებები ოცნებები. SDSU ოცნებები
ოცნებები ოცნებები ოცნებები TSU-ოცნებები STEM-
ოცნებები ოცნებები ოცნებები ოცნებები
ოცნებები-ოცნებები ოცნებები ოცნებები
ოცნებები.

ოცნებები 3.03 ოცნებები
ოცნებები ოცნებები TSU-ოცნებები ოცნებები

CV's, and descriptions of the programs, in Word format in English. TSU will assist with translation of these documents into Georgian, if required, and compiling the accreditation documents for submission. TSU will submit the final documents for accreditation of the programs to be conducted at TSU.

US-based accreditation process will be initiated once the programs have started. SDSU and TSU will collaborate to develop capacity and transfer responsibility for conducting, archiving and maintaining assessments related to accreditation from SDSU to TSU. TSU will provide documents as needed for such courses, facilities, and faculty as are needed for the programs, and will provide access and support for accreditation teams during site visits. SDSU will compile and submit all documents needed for the US-based accreditation. SDSU will provide support and assistance at an appropriate time to TSU to pursue U.S. based accreditation for the corresponding Georgian STEM bachelor degree program.

Section 3.03 ARTICULATION
Articulation consists of the evaluation of

courses offered at TSU for possible acceptance toward SDSU degree requirements for students who successfully complete the courses. SDSU and TSU will work together to identify courses offered to students at TSU for students to complete the requirements of the SDSU-Georgia degree programs. TSU will provide syllabi and quality assessment documentation for such courses to SDSU. SDSU will perform articulation analyses for such courses as are submitted for evaluation, and will provide documentation of its articulation decisions in writing.

courses offered at TSU for possible acceptance toward SDSU degree requirements for students who successfully complete the courses. SDSU and TSU will work together to identify courses offered to students at TSU for students to complete the requirements of the SDSU-Georgia degree programs. TSU will provide syllabi and quality assessment documentation for such courses to SDSU. SDSU will perform articulation analyses for such courses as are submitted for evaluation, and will provide documentation of its articulation decisions in writing.

3.04 STUDENT RECRUITING
 TSU will assist with recruiting students to the SDSU-Georgia program. SDSU will create marketing materials for the programs, with input from TSU. TSU will provide SDSU with a schedule of recruiting events and activities they expect to participate in over the course of the academic year, and assist SDSU in participating in such events. Particular efforts will be extended to identify opportunities that could provide outreach to socially vulnerable populations.

Section 3.04 STUDENT RECRUITING
 TSU will assist with recruiting students to the SDSU-Georgia program. SDSU will create marketing materials for the programs, with input from TSU. TSU will provide SDSU with a schedule of recruiting events and activities they expect to participate in over the course of the academic year, and assist SDSU in participating in such events. Particular efforts will be extended to identify opportunities that could provide outreach to socially vulnerable populations.

3.05 FACULTY
 TSU will support efforts to develop its faculty members to deliver and assess courses to the standards required by the relevant accrediting

Section 3.05 FACULTY
 TSU will support efforts to develop its faculty members to deliver and assess courses to the standards required by the relevant accrediting

000000 0000000000 00
 0000000000 0000000000 00000000
 00 000000000000 00000000 00000000
 0000000000 00000000. SDSU
 0000000000 0000000000 000000
 000000000000000000 00000000,
 000000000000 00 000000000000
 0000000000000000000000;
 00 000000000000 0000000000 00000000
 TSU-00 00 SDSU-0 0000000000 0000000000
 0000000000 0000 000000000000000000
 000000000000000000000000000000.

00000000 3.06 000000000000 000000000000
 TSU 0000000000 00 000000000000, 0000 00
 000000:

- 0. 0000000000000000 000000 0000 SDSU 00
 SDSURF 0000000000, 00000000 00
 0000000000000000000000 000000;
- 0. 000000000000 0000000000 000000000000
 00 000000000000, 000 000 0000000000
 000000000000 0000000000 0000000000
 0000000000 000000000000 000000
 0000000000 00000000, 00000000 000
 000000000000 000000000000000000;
- 0. 0000000000000000 000000 00
 000000000000 0000000000 000000000000
 (00 000000000000 000000000000) SDSU-
 00 00 000000000000 0000
 00000000000000000000 00000000000000
 000000;
- 0. 0000000000000000 000000000000, 000
 SDSU 00 SDSURF 0000 00 00 0000
 0000000000000000 000000
 000000000000000000
 00000000000000000000;
- 0. 0000 00000000 000000000000
 00000000 000000000000, 0000000000 00
 0000000000000000 00 00
 0000000000000000 SDSU 00000000
 000000000000;
- 0. 000000000000 000000000000 00000000
 000000000000 00 000000000000
 00000000000000000000 00000000, 000000
 00000000 0000000000 00 000 000000

specific course learning outcomes.
 SDSU will assign faculty to provide
 advice, assistance, and mentorship to
 such faculty.

In recognition of their contributions, TSU and
 SDSU may appoint faculty from the other
 institution to adjunct positions.

Section 3.06 RESTRICTED ACTIONS

TSU recognizes and acknowledges that it shall
 not:

- a. Represent itself as an SDSU or SDSURF
 entity, agent or representative.
- b. Suggest to prospective students or students
 that they can come to the United States on a
 student visa with a primary purpose other
 than full-time study.
- c. Make any false or misleading comparisons
 (or claims of association) between SDSU
 and any other educational institution.
- d. Make any representation that SDSU or
 SDSURF is or is not associated with any
 other educational institution.
- e. Facilitate applications for prospective
 students who do not satisfy or comply with
 SDSU admission requirements.
- f. Offer any guarantees to prospective students
 or students about uncertainties such as
 whether they will be granted a student visa;
 whether they will be admitted to the

_____; _____

 _____;

g. _____, _____

 _____, _____

 _____ SDSU- _____;

h. _____ SDSU _____

 _____;

i. _____
 _____ (_____

 _____) SDSU- _____
 _____ SDSU- _____
 _____;

j. _____

 _____ SDSU- _____

 „_____
 _____, _____
 _____, _____
 _____, _____

 _____ SDSU- _____/_____

 _____ 89005.5-_____

- Program; or the likelihood of obtaining financial aid or scholarships.
- g. Give to any third parties, including but not limited to students or prospective students, any promotional or other Program-related materials that has not been pre-approved in writing by SDSU.
 - h. Commit SDSU to accept any prospective student or student into the Program.
 - i. Undertake any advertising or promotional activity (including distributing or otherwise publishing any materials) about SDSU or the Program without SDSU's prior written consent.
 - j. Use any registered or unregistered California State University or SDSU Marks without prior written authorization from SDSU. "Marks" means logos, trademarks, service marks, designs, and other intellectual property that belong to, are owned by, are licensed to, or carry the name of SDSU and/or the California State University, or any other name protected by California Education Code section 89005.5, whether registered or not registered.

Nothing contained in this Agreement shall be

TSU- SDSU- TSU- TSU-

V.

TSU

VI.

5 5 20

Article V. ADVISORY BOARD PARTICIPATION

Of critical importance is the establishment and recognition of the Board of Advisors – a collaborative advisory group with representation from the major partners and important industry and research stakeholders in Georgia. The Board of Advisors will guide the long-term strategic development of the program and will form the cornerstone of a collaborative process to negotiate resolutions that meet the needs and objectives of all the partner institutions. TSU will make available the Rector, or such individual as the Rector may designate, to serve on the Board of Advisors.

Article VI. COMMENCEMENT AND DURATION

This MOU shall commence on the date of its signature and shall remain in force for 5 years, subject to renewal at intervals of no more than 5 years, and up to 20 years total.

IN WITNESS WHEREOF the undersigned, being duly authorized to do so, have signed

□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□.

this Memorandum of Understanding.

FOR SAN DIEGO STATE UNIVERSITY

**FOR LEPL IVANE JAVAKHISHVILI
TBILISI STATE UNIVERSITY**

**FOR SAN DIEGO STATE UNIVERSITY
RESEARCH FOUNDATION**

□□□-□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□

□□□□ □□□□□ □□□□□□□□□□□□
□□□□□□□□ □□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□□□
□□□□□□□□

□□□-□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□□□
□□□□□□□□ □□□□□□ □□□□□□□□

□□□□□□□□□□□□□□ □□ □□□□□□□□
□□□□□□.

□□□□□□□□□□ □□□□□□□□□□-
□□□□□□□□□□ □□□□ □□□□□□□□□□□□
□□□□□□□□□□ SDSU-□□□□ 2014 □□□□ 28
□□□□□□ □□□□□□□□□□□□ SDSU-□ □□□□
□□□□□□□□ □□□□□□□□□□□□ □□
□□□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□,
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

2014 □□□□ □□□□ 28 □□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□□□□□ SDSU-□, SDSURF-□□ □□
GTU-□ □□□□ □□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□ □□ □□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□,
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□□□□□□□□□□□
(SDSU-□□□□□□□□□□□□) □□□□□□□□□□□□ (DAISI).
SDSU, SDSURF □□ GTU □□□□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□ □□□□□□□□□□□□□□□□□□ □□ □□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□,
□□□□□□□□□ □□□□□□ □□ □□□□□□□□□□□□
(STEM) □□□□□□□□□□ □□□□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□□□□□□□ □□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□ □□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

□□□□□ I. □□□□□□□□□□

□) SDSU-□ □□□□□□□□□□ □□□□□□□□□□ □□
□□□□ □□□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
“□□□□□□□□□□-SDSU“: □□□□□□□□□□
□□□□□□□□□□□□ □□ □□□□□□□□□□□□□□□□

MCA-Georgia concluded an agreement of cooperation with SDSU on July 28, 2014 for the provision of Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering and Mathematics by SDSU in Georgia with initial, five year funding.

In furtherance of the July 28, 2014 agreement of cooperation, SDSU, SDSURF and GTU wish to collaborate in the Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering and Mathematics (SDSU-Georgia) Program (DAISI). SDSU, SDSURF and GTU declare readiness to partner for strengthening the quality of higher education in Georgia and to establish and develop U.S. Science, Technology, Engineering and Math (STEM) bachelor degree programs in recognition of the importance of quality of higher education to ensure further economic growth of Georgia.

Article I. **FRAMEWORK**

a) SDSU submitted a proposal and has been awarded a contract from MCA-Georgia for “Georgia-SDSU: Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics”. The

contract provides for performance of the initial 15 month period of the proposal from July 28, 2014 through October 27, 2015. This 15 month period shall be referred to as the "Pre-Enrollment" Period. Prior to the expiration of the contract, the SDSU and MCA-Georgia intend to enter into a contract addressing the performance for the remaining 45 month period. This subsequent 45 month period shall be referred to as the "Enrollment Period;" and

b) SDSU is an accredited campus of the California State University; the California State University being the State of California acting in its higher education capacity; and

c) SDSU is one of the 23 universities of the California State University System. Operating under the authority of Title 5 of the California Administrative Code. The President of the campus may initiate agreements with foreign institutions of higher education to further the university's missions of education, research and service to the global community.

d) SDSURF has been vested with authority to perform the functions specified in 42500, Title 5, California Code of Regulations, including assisting faculty and staff in developing and administering third-party-funded sponsored programs, subject to the concurrence of SDSU that the activity is supportive of and consistent with the academic mission and conducted solely for the benefit of the University; and

contract provides for performance of the initial 15 month period of the proposal from July 28, 2014 through October 27, 2015. This 15 month period shall be referred to as the "Pre-Enrollment" Period. Prior to the expiration of the contract, the SDSU and MCA-Georgia intend to enter into a contract addressing the performance for the remaining 45 month period. This subsequent 45 month period shall be referred to as the "Enrollment Period;" and

b) SDSU is an accredited campus of the California State University; the California State University being the State of California acting in its higher education capacity; and

c) SDSU is one of the 23 universities of the California State University System. Operating under the authority of Title 5 of the California Administrative Code. The President of the campus may initiate agreements with foreign institutions of higher education to further the university's missions of education, research and service to the global community.

d) SDSURF has been vested with authority to perform the functions specified in 42500, Title 5, California Code of Regulations, including assisting faculty and staff in developing and administering third-party-funded sponsored programs, subject to the concurrence of SDSU that the activity is supportive of and consistent with the academic mission and conducted solely for the benefit of the University; and

GTU SDSU- SDSURF-

GTU SDSU- STEM

GTU SDSU- GTU- SDSU- GTU- MCC SDSU- GTU- SDSU-

GTU will also provide space for lecture halls, laboratories, smart computer classrooms, and such other space as is needed to administer and provide the STEM programs.

GTU will authorize SDSU to plan, renovate, and operate the program at GTU. Spaces are to be made available for renovation to SDSU on a priority/exclusive basis. Any renovations shall be constructed in conformity with schematic plans provided by SDSU and approved by GTU, and in conformity with MCA-Georgia Environmental Regulations, IFC Performance Standards, MCC Environmental Guidelines and Georgian Legislation. GTU acknowledges the value the project offers to GTU. GTU and SDSU will work proactively with the Environmental and Social Performance team at MCA-Georgia to develop a stakeholder engagement plan and timeline. SDSU shall arrange for the design, renovation, and construction necessary for the program, including all attendant facilities, in substantial accordance with the environmental and social guidance approved by MCA-Georgia and consistent with the requirements of MCA-Georgia and GTU.

GTU- SDSU- GTU SDSU- SDSU

schedule of recruiting events and activities they expect to participate in over the course of the academic year, and assist SDSU in participating in such events. Particular efforts will be extended to identify opportunities that could provide outreach to socially vulnerable populations.

Section 3.05 FACULTY
 GTU SDSU- SDSU

Section 3.05 FACULTY
 GTU will support efforts to develop its faculty members to deliver and assess courses to the standards required by the relevant accrediting bodies. Such support will include:

- SDSU- GTU SDSU- SDSU- GTU SDSU

- Faculty participation in sessions at SDSU. GTU will nominate faculty for participation in sessions hosted at SDSU during summer, fall, or spring semesters. GTU will verify that any nominated faculty are eligible for US visas and provide release time during the relevant period. GTU will make its faculty aware of such opportunities, and provide materials for the faculty to be evaluated. SDSU will select faculty for participation through evaluation of their CV's and interviews with the SDSU-Georgia Dean.

□□□□□□□□ □□□□□□□□
□□□□□□□□□□□□□□ □□□□□□.
„□□□□□□“ □□□□□□ □□□□□□,
□□□□□□ □□□□□□, □□□□□□□□□□□□
□□□□□□, □□□□□□□□ □□ □□□□
□□□□□□□□□□□□ □□□□□□□□□□,
□□□□□□ □□□□□□□□□□□□,
□□□□□□□□□□ □□ □□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□ □□
□□□□□□ □□□□□□ □□/□□ □□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□□□ □□ □□□□□□□□□□ □□□□
□□□□□□□□□□□□ □□□□□□□□ □□□□□□
□□□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□ □□□□□□ □□□□□□.5-□□,
□□□□□□□□□□ □□□□□□ □□□□□□
□□□□□□□□□□□□□□□□□□□□□□ □□
□□□□□□□□□□□□□□□□□□□□□□ □□.

designs, and other intellectual property that belong to, are owned by, are licensed to, or carry the name of SDSU and/or the California State University, or any other name protected by California Education Code section 89005.5, whether registered or not registered.

□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□
□□□□□□□□ □□ □□□□□□ □□□□□□ □□□□□□
□□□□□□□□□□ □□□□□□ □□ □□□□□□□□
□□□□□□□□□□ □□□□□ □□□□□□□□□□ □□
□□□□□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□ □□□□□ □□□□□□□□□□ □□
□□□□□□□□□□□□ □□□□□□□□□□□□□□□□,
□□□□□□□□□□ □□ □□□□□□□□□□□□
□□□□□□□□ □□□□□□ □□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□
□□□□□ □□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□ □□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□□□ □□□□
□□□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□ □□□□□□□□□□□□□□□□ □□□□
□□□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□□□□□□□.

Nothing contained in this Agreement shall be construed as conferring on GTU, any right to use SDSU or SDSURF’s name as an endorsement of any product or service or to advertise, promote or otherwise market any product or service without the prior written consent of SDSU. Furthermore, nothing in this Agreement shall be construed as an endorsement of any commercial product or service by SDSU, SDSURF, its officers, employees or agents.

□□□□□ IV. □□□□□□□□□□ □□□□□□□□

Article IV. STUDENT STATUS

SDSU-□□□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□
SDSU-□ □□□□□□□□□□ □□
□□□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□ □□□□□□ □□□□□□ □□□□□□□□□□
□□□□□□□□□□ □□□□□□□□ □□□□□□□□□□

Students enrolled in the SDSU-Georgia program will be SDSU students and, as such, any disciplinary procedures will fall under the SDSU Student Conduct Code as described in Section 41301 of Title 5, California Code of Regulations. SDSU is committed to maintaining a safe and healthy learning environment for students, faculty,

□□□□□□□□□□□□ □□□□□□□□□□

□□□-□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□

□□□-□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□
□□□□□□□□

□□□□□□□□□□, □□□-□□□□□□

□□

□□□□ □□□□□ □□□□□□□□□□
□□□□□□□□□□□□

□□□□□□

□□□□□□□□□□, □□□□□□□□

□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□ (MOU) □□□□□ □□ □□□□□□
□□□□□□ 2014 □□□□ □□□□□□□□□□□□ □□□-
□□□□□□ □□□□□□□□□□ □□□□□□□□□□□□
(SDSU) □□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□ □□□□□□
□□□□□□□□, □□□-□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□ □□□□□□
(SDSURF) □□ □□□□ □□□□□ □□□□□□□□□□
□□□□□□□□□□□□ (ISU) □□□□□□.

□□□□ □□□□□□□□□□□□□□□□, □□□□
□□□□□□□□□□□□ □□□□□□□□□□ (,,□□□□□□□□□□“)
□□ □□□□□□□□ □□□□□□□□□□ □□□□□□□□□□,
□□□□□□□ □□□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□ □□□□□□□□□□ (“MCC”) 2013
□□□□ 26 □□□□□□ □□□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□□□ 140,000,000 □□□ □□□□□□□□□□
□□□□□□□□ □□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□□ □□□□□
□□□□□□□□□□□□ □□ □□□□□□□□□□
□□□□□□□□□□□□□□□□ (,,□□□□□□□□□□“).
□□□□□□□□□ □□□□□□□□□ □□□□□
□□□□□□□□□□ □□□□□□□□□□-□□□□□□□□□□
(MCA-Georgia) □□□□□□ □□□□□□□□□□ □□□□□
□□□□□□ □□□□□□□□□□□□□□□□□□□□□□,

MEMORANDUM OF UNDERSTANDING

BY AND BETWEEN

SAN DIEGO STATE UNIVERSITY

**SAN DIEGO STATE UNIVERSITY
RESEARCH FOUNDATION**

San Diego, CALIFORNIA

AND

LEPL ILIA STATE UNIVERSITY

Tbilisi, GEORGIA

This Memorandum of Understanding (MOU) is entered into and effective this ___ day of _____, 2014 between San Diego State University (SDSU) on behalf of the Board of Trustees of the California State University, San Diego State University Research Foundation (SDSURF), and LEPL Ilia State University (ISU).

Considering That:

The Government of Georgia (the “Government”) and the United States of America, acting through the Millennium Challenge Corporation (“MCC”) entered into a five year Millennium Challenge Compact on July 26, 2013, providing for a grant of up to \$140,000,000USD to advance economic growth and reduce poverty in Georgia (the “Compact”). The Government has established LEPL MCA-Georgia (MCA-Georgia) to act as its designee to oversee and manage the implementation of the Compact in Georgia.

“Institutional Support Initiative for Science, Technology, Engineering, and Mathematics” SDSU: 15 month period of the proposal from July 28, 2014 through October 27, 2015. This 15 month period shall be referred to as the “Pre-Enrollment” Period. Prior to the expiration of the contract, the SDSU and MCA-Georgia intend to enter into a contract addressing the performance for the remaining 45 month period. This subsequent 45 month period shall be referred to as the “Enrollment Period;” and

b) SDSU is an accredited campus of the California State University; the California State University being the State of California acting in its higher education capacity; and

c) SDSU is one of the 23 universities of the California State University System. Operating under the authority of Title 5 of the California Administrative Code. The President of the campus may initiate agreements with foreign institutions of higher education to further the university’s missions of education, research and service to the global community.

d) SDSURF has been vested with authority to perform the functions specified in 42500, Title 5, California Code of Regulations, including assisting faculty and staff in developing and administering third-party-funded sponsored programs, subject to the concurrence of SDSU that the activity is supportive of and consistent with the academic

Institutional Support Initiative for Science, Technology, Engineering, and Mathematics”. The contract provides for performance of the initial 15 month period of the proposal from July 28, 2014 through October 27, 2015. This 15 month period shall be referred to as the “Pre-Enrollment” Period. Prior to the expiration of the contract, the SDSU and MCA-Georgia intend to enter into a contract addressing the performance for the remaining 45 month period. This subsequent 45 month period shall be referred to as the “Enrollment Period;” and

b) SDSU is an accredited campus of the California State University; the California State University being the State of California acting in its higher education capacity; and

c) SDSU is one of the 23 universities of the California State University System. Operating under the authority of Title 5 of the California Administrative Code. The President of the campus may initiate agreements with foreign institutions of higher education to further the university’s missions of education, research and service to the global community.

d) SDSURF has been vested with authority to perform the functions specified in 42500, Title 5, California Code of Regulations, including assisting faculty and staff in developing and administering third-party-funded sponsored programs, subject to the concurrence of SDSU that the activity is supportive of and consistent with the academic

mission and conducted solely for the benefit of the University; and

e) SDSU designates and will sub-contract with SDSURF to receive and apply the funds and properties coming into its possession toward furthering these purposes only for the benefit of SDSU; and

f) ISU is empowered by its bylaws to enter into cooperative agreements of this nature with other universities in regard to the subject related to the achievement of its goals and objectives as stated in its bylaws, in order to further contribute to the achievement of such goals and objectives

ISU represents and warrants that it is an educational entity in good standing in the country of Georgia; has the legal authority to enter into this MOU; and has obtained all necessary approvals and rights required by applicable laws, rules and regulations necessary to enter into, and perform under, this MOU.

Article II. PURPOSE AND SCOPE

SDSU, SDSURF and ISU commit to cooperatively develop programs that will provide US-accredited higher education focused on the needs of Georgia in the STEM, and other related disciplines.

□□ □□□□ □□□□□□□□□□□□
□□□□□□□□□□□□.

□□□□□□□□□□, □□□ SDSU-□, SDSURF-□□ □□
ISU-□ □□□□ □□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□ □□□□□□□□ □□□□□□□□
□□□□□□□□ □□□□ □□□□□□□□ □□□□□□□□
□□□□□□□□ □□□□□□□□□□□□□□, □□
□□□□□□□□□□ □□ □□ □□□□□□□□.
□□□□□□□□□□ □□□□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□.

□□□□□ III. □□□□□□□□□□□□□□□□□□□□□□

□□□□□□□□□□ □□□□□□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□□□□□ □□□□ □□□□□□ □□
□□□□□□□□□□ □□□□□□ SDSU-□□ □□
□□□□□□□□□□ □□□□□□□□□□□□-
□□□□□□□□□□ □□□□□ 2014 □□□□□ 28
□□□□□□ □□□□□□ □□□□□□□□□□□□
□□□□□□□ □□□□□□□□□□□□.

□□□□□ □□□□□□ □□□□□□□□□□□□□□□□
□□□□□□ □□□□□□□□□□□□ □□□□□□□□.
□□□□□□□□□□□□, □□□ □□□□□□□□□□
□□□□□□ □□□□□ □□□□□□□□□□□□□□□
□□□□□□□□□□, □□□□□□□ □□□□
□□□□□□□□ □□□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□□□.

□□□□□□ 3.01 □□□□□□

SDSU □□/□□ SDSURF □□□□□□□□□□□□□□□□
□□□□□□□□ □□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□, □□□□□□ □□□□□□□□□□□□
□□□□□□ □□□□□□ ISU (□□□□
□□□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□□□). □□□□□□□□□□, SDSU □□/□□
SDSURF □□□□□□□□□□□□ SDSU-□ □□□□
□□□□□□□□□□□□ □□□□□□□□ □□□□□□□□
ISU-□□ □□□□□□□□ □□□□□□□□
□□□□□□□□□□□□. ISU □□□□□□□□□□
□□□□□□ □□□□□ □□□□□□□□□□□□

It is recognized that the ability of SDSU, SDSURF and ISU to perform any cooperative obligations requires that the participating parties budget, monitor and control their own expenditures. Each signatory to this MOU is responsible for its own work and expenses.

Article III. **RESPONSIBILITIES**

The parties' responsibilities under this MOU are in furtherance of and based upon the framework set forth in the July 28, 2014 agreement between SDSU and MCA-Georgia.

The responsibilities described below are illustrative. It is anticipated that the parties will enter into a separate contractual agreement setting forth the parties' obligations in greater detail.

Section 3.01 SPACE

SDSU and/or SDSURF will provide administrative support for the program, to be housed at a location yet to be finalized at ISU. In addition, SDSU and/or SDSURF will hire appropriate personnel as determined by SDSU, to assist in representing the program at ISU. ISU will assist with advertising the availability of such positions within its human resources channels. ISU will provide space for SDSU's and SDSURF's administrative units for such time period as is needed.

□□□□□□□□□□ □□□□□ □□□□□,
□□□□□□□□ □□ □□□□□□□□□□,
□□□□□□□□ □□□□□□□□ □□□□□□□□
□□□□□□, □□□□□□□□□□ □□□□□□□□-
□□□□□□□□□□ □□□□ □□□□□□□□□□□□□□
□□□□□□□□□□□□□□ □□ □□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□□□ □□ □□□□□□□□□□
□□□□□□□□□□-□□□□□□□□□□ □□ ISU-□
□□□□□□□□□□ □□□□□□□□□□.

SDSU □□□□□ □□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□ □□ □□□□□□□□
□□□□□□□□□□ □□□□ □□□□□□□□□□ □□/□□
□□□□□□□□ □□□□□□□□□□ □□□□□□□□. □□
□□□□□□□□□□ □□□□□□□□□□□□□□□□ □□□□
□□□□ SDSU-□ □□□□□□□□□□ □□□□
□□□□□□□□ □□□□□□□□ □□□□□□□□□□□□ □□
□□□□□□□□□□□□□□, □□□□□□□□□□ □□
□□□□□□□ □□□□□□□□ (ESMP-□□□□)
□□□□□□□□□□ □□□□□□□□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□□□□□□□
□□□□□□□□□□□□. ISU □□□□□□□□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□□□□□
□□□□□□□□□□□□, □□□□□□□□ □□□□□□
ESMP □□□□□□□□□□□□ □□□□□□□□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□□□□□
□□□□□□□□□□□□. SDSU □□ ISU
□□□□□□□□□□□□□□□□ □□□□□□□□□□ □□/□□
□□□□□□□□ □□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□□□□□
□□□□□□□□□□□□ □□□□□□□□□□□□□□.

□□□□□ □□□□□□□□□□□□□□□□□□□
□□□□□□□□□□ □□□□□□□□ □□
□□□□□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□ □□□□□□ SDSU-□□ □□ ISU-□
□□□□□□. □□□□□□□□□□ □□□□□□□□□□□□□□
□□□□□□□□, □□□□□□□□ □□□□□□□□□□□□
□□□□□□□□ □□□□□□□□, □□□□□□□□□□□□
□□ □□□□□□□□, □□□□□□□□□□
□□□□□□□□□□□□□□□□, □□□□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□ □□□□□□ □□
□□□□□□□□□□ □□□□□□□□□□□□ □□
□□□□□□□□ □□□□□□□□□□□□.

SDSU will have priority for scheduling of the laboratory spaces once the renovations and/or construction are complete. Access to these spaces will be under the control of SDSU pursuant to the objectives of the program and in compliance with Environmental, Social, and Management Plans (ESMPs) developed for the renovation and operation phases. ISU will cooperate in obtaining samples or data as needed for the completion of ESMP documents for the renovation and construction phases. SDSU and ISU will collaborate on scheduling of the classroom spaces that are renovated and/or constructed to the benefit of both institutions.

A separate subcontract agreement will be negotiated and will specify the facilities sharing arrangements between SDSU and ISU. The agreement will stipulate details associated with the size, number and types of rooms, sharing arrangements, remuneration for students taking courses across institutions and guidance on environmental and social issues.

responsibility for conducting, archiving and maintaining assessments related to accreditation from SDSU to ISU. ISU will provide documents as needed for such courses, facilities, and faculty approved by SDSU. ISU will also provide access and support for accreditation teams during site visits. SDSU will compile and submit all documents needed for the US-based accreditation.

responsibility for conducting, archiving and maintaining assessments related to accreditation from SDSU to ISU. ISU will provide documents as needed for such courses, facilities, and faculty approved by SDSU. ISU will also provide access and support for accreditation teams during site visits. SDSU will compile and submit all documents needed for the US-based accreditation.

Section 3.03 ARTICULATION
Articulation consists of the evaluation of courses offered at ISU for possible acceptance toward SDSU degree requirements for students who successfully complete the courses. SDSU and ISU will work together to identify courses offered to students at ISU for students to complete the requirements of the SDSU-Georgia degree programs. ISU will provide syllabi and quality assessment documentation for such courses to SDSU. SDSU will perform articulation analyses for such courses as are submitted for evaluation, and will provide documentation of its articulation decisions in writing.

Section 3.03 ARTICULATION
Articulation consists of the evaluation of courses offered at ISU for possible acceptance toward SDSU degree requirements for students who successfully complete the courses. SDSU and ISU will work together to identify courses offered to students at ISU for students to complete the requirements of the SDSU-Georgia degree programs. ISU will provide syllabi and quality assessment documentation for such courses to SDSU. SDSU will perform articulation analyses for such courses as are submitted for evaluation, and will provide documentation of its articulation decisions in writing.

_____; _____

 _____;

g. _____, _____

 _____, _____

 _____ SDSU- _____;

h. _____ SDSU _____

 _____;

i. _____
 _____ (_____

 _____) SDSU- _____
 _____ SDSU- _____
 _____;

j. _____

 _____ SDSU- _____

 „_____" _____,
 _____, _____
 _____, _____
 _____,

 _____ SDSU- _____/_____

 _____ 89005.5-_____,

- Program; or the likelihood of obtaining financial aid or scholarships.
- g. Give to any third parties, including but not limited to students or prospective students, any promotional or other Program-related materials that has not been pre-approved in writing by SDSU.
 - h. Commit SDSU to accept any prospective student or student into the Program.
 - i. Undertake any advertising or promotional activity (including distributing or otherwise publishing any materials) about SDSU or the Program without SDSU's prior written consent.
 - j. Use any registered or unregistered California State University or SDSU Marks without prior written authorization from SDSU. "Marks" means logos, trademarks, service marks, designs, and other intellectual property that belong to, are owned by, are licensed to, or carry the name of SDSU and/or the California State University, or any other name protected by California Education Code section 89005.5, whether registered or not registered.

Nothing contained in this Agreement shall be

□□□□□□□□□□ □□□□□□□□□□
□□□□□□□□ □□□□□□□□□□. ISU-□□ SDSU-
□□ □□□□□□□□ □□□□□□□□
□□□□□□□□□□ □□□□ □□□□ ISU-□□
□□□□□□□□□□ □□ □□□□□ □□□□ □□□□□□□□
ISU-□□ □□□□□□ □□□□□□□□ □□ □□□□□□□□.

□□□□ V. □□□□□□□□□□□□□□ □□□□□□
□□□□□□□□□□

□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□
□□□□□□□□□□□□ □□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□
□□□□□□□□ - □□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□ □□□□□□□□
□□ □□□□□□□□ □□□□□□ □□□□□□□□□□
□□□□□□□□□□. □□□□□□□□□□□□
□□□□□□ □□□□□□ □□□□□□□□
□□□□□□□□□□ □□□□□□□□□□ □□
□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□ □□□□□ □□□□ □□□□
□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□ □□ □□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□□□
□□□□□□. ISU □□□□□□□□ □□□□□□ □□
□□□□□□□□ □□□□ □□□□□□ □□□□□□□□□□,
□□□□□□ □□□□□□□□ □□□□□□□□□□□□
□□□□□□□ □□□□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□□□□□□□□□□□.

□□□□ VI. □□□□□□ □□□□□□ □□
□□□□□□□□□□

□□□□□□□□□□ □□□□□□□□□□□□
□□□□□□□□□□ □□□□□□ □□□□□ □□□□
□□□□□□□□□□ □□□□□□ □□ □□□□□□□□□ 5
□□□□ □□□□□□□□□□□□, □□□□□□□□□□ 5
□□□□ □□□□□□□□□□ □□□□□□□□□□
□□□□□□□□, □□□□□□ □□□□□□ 20 □□□□□□.

□□□□ □□□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□□□ □□□□

Article V. ADVISORY BOARD PARTICIPATION

Of critical importance is the establishment and recognition of the Board of Advisors – a collaborative advisory group with representation from the major partners and important industry and research stakeholders in Georgia. The Board of Advisors will guide the long-term strategic development of the program and will form the cornerstone of a collaborative process to negotiate resolutions that meet the needs and objectives of all the partner institutions. ISU will make available the Rector, or such individual as the Rector may designate, to serve on the Board of Advisors.

Article VI. COMMENCEMENT AND DURATION

This MOU shall commence on the date of its signature and shall remain in force for 5 years, subject to renewal at intervals of no more than 5 years, and up to 20 years total.

IN WITNESS WHEREOF the undersigned, being duly authorized to do so, have signed

□□□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□□□ □□□□□□□□□□.

this Memorandum of Understanding.

FOR SAN DIEGO STATE UNIVERSITY

FOR LEPL ILIA STATE UNIVERSITY

**FOR SAN DIEGO STATE UNIVERSITY
RESEARCH FOUNDATION**

□□□-□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□

□□□□ □□□□ □□□□□□□□□□
□□□□□□□□□□□□ □□□□□□□□

□□□-□□□□□□ □□□□□□□□□□
□□□□□□□□□□□□
□□□□□□□□ □□□□□□ □□□□□□□□

DRAFT SUBCONTRACT AGREEMENT

BY AND BETWEEN

SAN DIEGO STATE UNIVERSITY

SAN DIEGO STATE UNIVERSITY RESEARCH FOUNDATION

San Diego, CALIFORNIA

AND

IVANE JAVAKHISHVILI TBILISI STATE UNIVERSITY

(AS EXAMPLE, APPROPRIATE PARTNER NAME AND DETAILS WILL GO HERE, AND AT OTHER LOCATIONS WITHIN THE DOCUMENT)

Tbilisi, GEORGIA

This Subcontract Agreement (Agreement) is entered into and effective this ___ day of _____, 2014 between San Diego State University (SDSU) on behalf of the Board of Trustees of the California State University, San Diego State University Research Foundation (SDSURF), and Ivane Javakhishvili Tbilisi State University (TSU).

Considering That:

The Government of Georgia (the “Government”) and the United States of America, acting through the Millennium Challenge Corporation (“MCC”) entered into a five year Millennium Challenge Compact on July 26, 2013, providing for a grant of up to \$140,000,000USD to advance economic growth and reduce poverty in Georgia (the “Compact”). The Government has established LEPL MCA-Georgia (MCA-Georgia) to act as a permitted designee on its behalf to oversee and manage the implementation of the Program in Georgia as contemplated by the Compact.

MCA-Georgia concluded an agreement of cooperation with SDSU on July 28, 2014 for the provision of Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering and Mathematics by SDSU in Georgia with initial, five year funding.

SDSU and TSU declare readiness to partner for strengthening of the quality of higher education in Georgia and to make the appropriate contributions towards the establishment and development of the U.S. Science, Technology, Engineering and Math (STEM) bachelor degree programs in Georgia thus recognizing the importance of quality of higher education for the development of human capital ensuring further economic growth of Georgia.

Article I. OBJECTIVE

This Agreement serves to signify the above mentioned Parties' wish to form a collaborative relationship to implement the Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering and Mathematics (SDSU-Georgia) Program (DAISI).

Article II. LEGAL FRAMEWORK

- a) SDSU submitted a proposal and has been awarded a contract from MCA-Georgia for "Georgia-SDSU: Degree Accreditation and Institutional Support Initiative for Science, Technology, Engineering, and Mathematics". The contract provides for performance of the initial 15 month period of the proposal from July 28, 2014 through October 27, 2015. This 15 month period shall be referred to as the "Pre-Enrollment" Period. Prior to the expiration of the contract, SDSU and MCA-Georgia intend to enter into a contract addressing the performance for the remaining 45 month period. This subsequent 45 month period shall be referred to as the "Enrollment Period;" and
- b) SDSU is an accredited campus of the California State University; the California State University being the State of California acting in its higher education capacity; and
- c) SDSU is one of the 23 universities of the California State University System. Operating under the authority of Title 5 of the California Administrative Code. The President of the campus may initiate agreements with foreign institutions of higher education to further the university's missions of education, research and service to the global community.
- d) SDSURF has been vested with authority to perform the functions specified in 42500, Title 5, California Code of Regulations, including assisting faculty and staff in developing and administering third-party-funded sponsored programs, subject to the concurrence of SDSU that the activity is supportive of and consistent with the academic mission and conducted solely for the benefit of the University; and
- e) SDSU designates and will sub-contract with the SDSURF to receive and apply exclusively the funds and properties coming into its possession toward furthering these purposes only for the benefit of SDSU; and
- f) TSU is empowered by its bylaws to enter into cooperative agreements of this nature with other universities in regard to the subject related to the achievement of its goals and objectives as stated in its bylaws, in order to further contribute to the achievement of such goals and objectives
- g) TSU represents and warrants that it is an educational entity in good standing in the country of Georgia; has the legal authority to enter into this Agreement; and has obtained all necessary approvals and rights required by applicable laws, rules and regulations necessary to enter into, and perform under, this Agreement.

Article III. PURPOSE AND SCOPE

SDSU, SDSURF and TSU hereby commit, through issuance of this Agreement, to cooperatively develop programs that will provide SDSU, US-accredited higher education focused on the needs of Georgia in science, technology, engineering, and mathematics (STEM), and other relevant disciplines.

Section 3.01 It is recognized that the ability of SDSU, SDSURF and TSU to perform any cooperative obligations requires that the participating parties budget, monitor and control their own expenditures. Each signatory to this Agreement is responsible for its own work and expenses.

Article IV. RESPONSIBILITIES

SDSU, SDSURF and TSU agree that Georgia has recognized a critical shortage of qualified STEM professionals graduating from current institutions of higher education. The medium and long-term objectives of this program are to remedy this shortage by (1) providing qualitative and quantifiable improvement of human capital in the Georgian STEM labor workforce, including the recruitment, education and training of traditionally under-represented student groups, (2) developing a robust STEM workforce to supply high quality technicians and professionals for companies operating in Georgia, (3) enhancing economic growth in Georgia, (4) increasing employment in companies requiring market-driven technical skills, (5) establishing appropriate private-public-academic sector relationships to ensure long-term sustainability of the program.

Article 4.01 through 4.10 delineate specific partnership actions for each organization

Section 4.01 BUSINESS UNIT

TSU will provide space for the business unit for such time period as is needed. Specific space needs are described under 4.07. SDSU will provide an administrative structure for the SDSU-Georgia program, to be housed at a location yet to be finalized at TSU. In addition, SDSU will hire appropriate personnel as determined by SDSU and/or SDSURF, to assist in representing the program at TSU. TSU will assist with advertising the availability of such positions within its human resources channels.

Section 4.02 ACCREDITATION SUPPORT

The accreditation processes in Georgia and with US-based accreditors are critical to the goals of this project. Georgian accreditation of the programs is necessary to allow students to enroll in those programs, and necessary documents must be submitted in the Fall of 2014. SDSU will provide needed documents, including course syllabi, CV's, and descriptions of the programs, in Word format in English. TSU will assist with translation of these documents into Georgian, if required, and compiling the accreditation documents for submission. TSU will submit the final documents for accreditation of the programs to be conducted at TSU. US-based accreditation will occur once the programs have graduates. TSU will provide documents as needed for such courses, facilities, and faculty as are needed for the programs, and will provide access and support for the accreditation teams during site visits. SDSU will compile and submit all documents needed for the US-based accreditation.

Section 4.03 ARTICULATION

Articulation consists of the evaluation of courses offered at TSU for possible acceptance toward SDSU degree requirements for students who successfully complete the courses. SDSU and TSU will work together to identify courses offered to students at TSU that would support students in completing the requirements of the SDSU-Georgia degree programs. TSU will provide syllabi and quality assessment documentation for such courses to SDSU. SDSU will perform articulation analyses for such courses as are submitted for evaluation, and will provide documentation of its articulation decisions in writing.

Section 4.04 STUDENT RECRUITING

TSU will assist with recruiting students to the SDSU-Georgia program. SDSU will create marketing materials for the programs, with input from TSU. TSU will provide SDSU with a schedule of recruiting events and activities they expect to participate in over the course of the academic year, and assist SDSU in participating in such events. Particular efforts will be extended to identify opportunities that could provide outreach to socially vulnerable populations.

Section 4.05 FACULTY

TSU will support efforts to develop capacity within its faculty members for delivery and assessment of courses to the standards needed to support US-based accreditation from the relevant accrediting bodies. Such support will include:

- Faculty participation in sessions at SDSU. TSU will nominate faculty for participation in sessions hosted at SDSU during summer, fall, or spring semesters. TSU will verify that each nominated faculty is eligible for US visas and could be provided release time during the relevant period. TSU will assist in broadly making faculty aware of such opportunities, and in providing materials for the faculty to be evaluated. SDSU will select faculty for participation through evaluation of their CV's and interviews with the SDSU-Georgia Dean. Selection for the program will be made by SDSU on the basis of factors including English competency, relevance of teaching and research portfolio to the disciplines offered through SDSU-Georgia, teaching ability, research activity, and commitment to the SDSU-Georgia project and their home institution.
- Faculty participation in delivery of courses – TSU will assign faculty, preferably faculty who have participated in sessions at SDSU to STEM courses for which a synchronous online or hybrid delivery modality is identified. These faculty will participate during synchronous online sessions to address questions raised by students in the Georgian classroom, and will provide office hours for SDSU-Georgia students.
- Faculty delivery of courses – TSU will assign faculty to teach in the SDSU Georgia program once they have sufficient understanding of the delivery and assessment methods, and the specific course learning outcomes. SDSU will assign faculty to provide advice, assistance, and mentorship to such faculty.

In recognition of their contributions, TSU and SDSU may appoint faculty from the other institution to adjunct positions.

Section 4.06 SPACE

The proposed rehabilitation works at TSU are for approximately 24,900 sq.ft. of teaching and laboratory spaces and involve Chemistry, Physics, Computer Science, and Electrical and Computer Engineering laboratories. There is also a requirement for administrative space, lecture halls and smart computer classrooms. All space provided in support of this agreement must include Ethernet service.

Spaces are to be made available for renovation to SDSU on a priority/exclusive basis in the size, number and type stipulated in the table included as Attachment A.

SDSU and SDSURF are required under the terms of the agreement with MCA-Georgia to comply with the General Tasks Template for Design and Renovation/Construction Works Supervision, included as Attachment B, for all renovation and/or construction works undertaken as a part of the agreement. TSU

will support and comply with any applicable provisions as relates to the renovation of TSU space referenced in Attachment A.

SDSU will have priority for scheduling of the spaces once the renovations are complete. Access to these spaces will be under the control of SDSU pursuant to the objectives of the program and in compliance with Environmental, Social, and Management Plans (ESMPs) developed for the renovation and operation phases. TSU will cooperate in obtaining samples or data as needed for the completion of ESMP documents for the renovation and construction phases.

TSU will develop a list of individuals who require access to inspect, visit or use the facilities, and submit the list to SDSU for approval. Additions to the list will be made by the same process. Approval of additions to the list will not be unreasonably withheld and will be consistent with requirements to ensure compliance with applicable law (such as code enforcers) or as to emergency responders in the case of an emergency (such as police or firefighters). Individuals on the list can be re-evaluated at the request of SDSU. The TSU Campus Coordinator is pre-approved and will have a key and access to sites at all times. SDSU will have the right to provide training to all faculty and students who use the spaces and the equipment therein, and to deny entry to those who have not completed such training. The responsibility for repair of equipment that is damaged or removed when used by TSU faculty or students will be borne by TSU. Any consumables needed to support the equipment (such as gases for laboratory equipment, for example) must be provided by SDSU for use by SDSU faculty and SDSU-Georgia students, and by TSU for use by TSU faculty and students.

Section 4.07 UTILITIES AND MAINTENANCE

TSU agrees that any facilities provided within the scope of this cooperative agreement will be fully maintained and furnished with all utilities and operational services necessary for occupancy and computer operations, including Ethernet service, insurance, building maintenance, security, janitorial, administrative, and legal and accounting expenses related to property management. The cost of these services will be borne by TSU.

Section 4.08 CONSIDERATION

TSU will authorize SDSU to plan, renovate, and operate the program at TSU. Any renovations shall be constructed in conformity with schematic plans provided by SDSU and approved by TSU, and in conformity with MCA-Georgia Environmental Regulations. TSU acknowledges the value the project offers to TSU. SDSU shall arrange for the design, renovation, and construction necessary for the program, including all attendant facilities, in substantial accordance with the contract documentation approved (or to be approved) by MCA-Georgia and consistent with the requirements of MCA-Georgia and TSU.

Section 4.10 – Restricted Actions

At no time shall TSU:

- a. Represent itself as an SDSU entity, agent or representative.
- b. Suggest to prospective students or students that they can come to the United States on a student visa with a primary purpose other than full-time study.
- c. Make any false or misleading comparisons (or claims of association) between SDSU and any other educational institution.

- d. Make any representation that SDSU is or is not associated with any other educational institution.
- e. Facilitate applications for prospective students who do not satisfy or comply with SDSU admission requirements.
- f. Offer any guarantees to prospective students or students about uncertainties such as whether they will be granted a student visa; whether they will be admitted to the Program; or the likelihood of obtaining financial aid or scholarships.
- g. Give to any third parties, including but not limited to students or prospective students, any promotional or other Program-related information that has not been pre-approved in writing by SDSU.
- h. Commit SDSU to accept any prospective student or student into the Program.
- i. Undertake any advertising or promotional activity (including distributing or otherwise publishing any materials) about SDSU or the Program without SDSU's prior written consent.
- j. Use any registered or unregistered California State University or SDSU Marks without prior written authorization from SDSU. "Marks" means logos, trademarks, service marks, designs, and other intellectual property that belong to, are owned by, are licensed to, or carry the name of SDSU and/or the California State University, or any other name protected by California Education Code section 89005.5, whether registered or not registered.
- k. Nothing contained in this Agreement shall be construed as conferring on TSU, any right to use SDSU's name as an endorsement of any product or service or to advertise, promote or otherwise market any product or service without the prior written consent of SDSU. Furthermore, nothing in this Agreement shall be construed as an endorsement of any commercial product or service by SDSU, its officers, employees or agents.

Article V. STUDENT STATUS

Students enrolled in the SDSU-Georgia program are, SDSU students and, as such, any disciplinary procedures will fall under the SDSU Student Conduct Code as described in Section 41301 of Title 5, California Code of Regulations. SDSU is committed to maintaining a safe and healthy learning environment for students, faculty, and staff. Each member of the campus community should choose behaviors that reflect these standards. Students are expected to be good citizens and to engage in responsible behaviors that reflect well upon their university, to be civil to one another and to others in the campus community, and contribute positively to student and university life. Disciplinary procedures will be conducted in compliance with California State University Executive Order 1074, or any updated authorizing system-wide policy.

Article VI. PAYMENTS TO TSU

The SDSU-Georgia program incorporates students at all three partner institutions: Ilia State University, Georgian Technical University (GTU) and TSU. Students at the other partners may enroll in courses at TSU in order to satisfy the needs of their degree programs. By leveraging the flexibility of the MCA-Georgia award, SDSU will support TSU in hosting students from the other partner institutions by providing available funding proportionate to the number of students enrolled in the SDSU degree programs but enrolled at the other partner institutions when hosted by TSU.

In addition to any payments from the Government of Georgia for student support for the students enrolled in programs at TSU, TSU will receive \$50 per student per semester from the partner institutions that are

enrolled in a course at TSU. Payments will be used to support the program activities as detailed in this agreement.

Article VII. ADVISORY BOARD PARTICIPATION

Of critical importance is the establishment and recognition of the Board of Advisors – a collaborative advisory group with representation from the major partners and important industry and research stakeholders in Georgia. The Board of Advisors will guide the long-term strategic development of the program and will form the cornerstone of a collaborative process to negotiate resolutions that meet the needs and objectives of all the partner institutions.

TSU will make available the Rector, or such individual as the Rector may designate, to serve on the Board of Advisors.

ARTICLE VIII. COMPACT CONDITIONALITIES

The Parties agree and understand that the general provisions set forth in Attachment C reflect certain obligations of the Government of Georgia and the MCA-Georgia under the terms of the Compact with the MCC. As a condition of the agreement with MCA-Georgia, SDSU is required to pass on to any consultants, subcontractors or associates who partake in procurements or contracts in which MCC funding is involved. These terms and conditions referenced as Attachment C are binding under this Agreement.

Article IX. DISPUTE RESOLUTION

The Parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of this Agreement and the success of the program. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Agreement or its interpretation. Any disputes arising under this Agreement which cannot be settled amicably within 30 days after the receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the following provision: All disputes or claims arising out of or in connection with this Agreement including disputes relating to its validity, breach, termination or nullity shall be finally settled under the Rules of Arbitration of the International Arbitral Centre of the Austrian Federal Economic Chamber in Vienna (Vienna Rules) by one or three arbitrators appointed in accordance with the said Rules.

Costs. Upon the occurrence of a dispute, the Parties shall agree on the allocation of the costs associated with any settlement efforts before arbitration or associated with arbitration. Where the Parties fail to agree on the allocation, the allocation shall be determined by the arbitrator.

Pending the resolution of any dispute or claim pursuant to this Article, the Parties agree that performance of all obligations shall be pursued diligently.

Miscellaneous. In any arbitration proceeding under this Agreement:

- (a) The Seat of Arbitration shall be Tbilisi, Georgia;
- (b) The substantive law of Georgia shall be applicable;

(c) English language shall be the official language for all purposes; and

(d) The decision of the sole arbitrator or of a majority of the arbitrators shall be final and binding and shall be enforceable in any court of competent jurisdiction, and the Parties hereby waive any objections to or claims of immunity in respect of such enforcement.

Article X. . INDEMNIFICATION

SDSU and SDSURF shall defend, indemnify and hold harmless TSU, its officers, employees and agents from and against any and all liability, loss, expense, attorney's fees, or claims for injury or damages arising out of the performance of this Agreement but only in proportion to and to the extent such liability, loss, expense, attorney's fees or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of the SDSU and SDSURF, its officers, agents or employees.

TSU shall defend, indemnify and hold harmless SDSU, SDSURF, Trustees of the CSU, the State of California, its officers, employees and agents from and against any and all liability, loss, expense, attorney's fees, or claims for injury or damages arising out of the performance of this Agreement, but only in proportion to and to the extent such liability, loss, expense, attorney's fees or claims for injury or damages are caused by or result from the negligent or intentional acts or omissions of TSU, its officers, agents or employees.

Article XI. Insurance

TSU shall, at its sole cost and expense, procure and maintain throughout the term of this Agreement, the following insurance coverage, or equivalent ability and authorization to self insure and fund these liability losses, or this Agreement:

- A. General Liability insurance providing coverage against claims arising out of Consultants operations within and outside the United States for Bodily Injury or Death, Personal injury and Property Damage. Such insurance shall provide protection to the limit of not less than \$1,000,000 combined single limit for Bodily Injury, Personal Injury, and Property Damage.
- B. Workers' Compensation insurance statutory coverage which complies with Consultant's statutory requirements of the California Labor Code, including Employers Liability with limits of not less than \$1,000,000.
- C. Automobile Liability with limits not less than \$300,000 each occurrence, combined single limit for Bodily Injury and Property Damage, including coverage for owned, non-owned and hired vehicles.
- D. Third Party liability insurance with limits of not less than \$1,000,000.

Insurance policies required by this Agreement in categories A, C, and D above shall name the State of California, the Trustees of the California State University System, and San Diego State University Research Foundation as "additional insured with respect to work being performed." TSU agrees to provide all required certificates of insurance and additional insured endorsements to SDSU prior to the commencement of work under this agreement. Provision of the required certificates of insurance and additional insured endorsements shall be a condition precedent to TSU's rendering of services. TSU shall

obtain written agreement on the part of each insurance company to notify SDSU at least thirty (30) days prior to cancellation or non-renewal of any such insurance.

SDSU, SDSURF and TSU agree that compliance with the required specified coverage or limits of insurance in no way limits the liability of TSU to SDSU or SDSU Research Foundation. Failure to comply with insurance requirements set forth above will be considered a material breach of contract and grounds for termination of the Agreement. Failure of SDSU or SDSURF to make a request for proof of insurance shall not operate as a waiver of this requirement.

Article XII. Termination

8.1 SDSU may immediately, upon written notice to TSU, terminate this Agreement in whole or in part, and any obligation related thereto, if SDSU determines that any circumstance identified by SDSU, as a basis for suspension or termination as notified in writing to TSU has occurred, which circumstances include but are not limited to the following:

- (i) if TSU fails to comply with its obligations under this Agreement;
- (ii) an event or series of events has occurred that makes it probable that the Project Objective will not be achieved.
- (iii) a use of Compact funding or continued implementation of this agreement or the Program violates applicable law or Government policy, whether now or hereafter in effect;
- (vi) TSU, in the judgment of SDSU, has engaged in coercive, collusive, corrupt, prohibited, obstructive, or fraudulent practices in the performance of this Agreement.
- (vi) TSU or another person or entity receiving funding under this Agreement or using program assets is found to have been convicted of a narcotics offense or to have been engaged in drug or human trafficking.
- (vii) SDSU may terminate this Agreement in the event SDSU terminates the agreement with MCA-Georgia and/or the MOU with the Government of Georgia.
- (viii) Agreement may be terminated by either party in the event of force majeure. Force majeure is defined as an event or condition that (a) is not reasonably foreseeable and is beyond the reasonable control of a Party, and is not the result of any acts, omissions or delays of the party relying such event of force majeure (or of any third party over whom such Party has control, including any sub-contractors), (b) is not an act, event, or condition the risks or consequences of which such Party has expressly agreed to assume under this Agreement, (c) could not have been prevented, remedied or cured by such Party's reasonable due diligence, and (d) makes such Party's performance of its obligations under this Agreement impossible or so impractical as to be considered impossible under the circumstances.

8.2 Any termination, whether by SDSU or TSU will apply only to the commencement of future cohorts or students not yet enrolled in the programs under this Agreement, and both Parties agree that any existing cohorts or students shall have an opportunity to complete the full program and receive the relevant diploma from San Diego State University subject to the general academic requirements for the completion of the program.

Article XIII. Modifications or Variation

Any modification or variation of this Agreement may only be made by written agreement between the Parties.

Article XIV. Commencement and Duration

This Agreement shall commence on the date of its signature and shall continue through October 27, 2015. The Agreement may be renewed for an additional 45 months contingent upon the successful negotiation of the 45 month Enrollment Period contract between SDSU and MCA-Georgia.

Article XV. Assignment.

TSU shall not assign this Agreement or any right or duty under this Agreement without the prior written consent of SDSU, which can be withheld at its discretion. Any request for such consent shall be accompanied by the proposed written assignment.

Article XVI. Subcontracting.

TSU shall not subcontract to any other person, entity or agency the performance of any of its obligations under this Agreement without the prior written consent of SDSU, which may be withheld at its discretion. Any request for such consent shall be accompanied by the proposed written agreement between TSU and the third party in question.

Article XVII. No Third-Party Beneficiaries.

Nothing in this Agreement shall be construed to create a legal right in any Program participant or other third party to enforce its terms or to subject either Party to liability to any participant or other third party for any failure to comply with its terms.

Article XVIII. Authoritative Version.

The English version of this Agreement shall be the authoritative version of the Agreement for all purposes. In the event of a conflict between the English version and any translation of this Agreement, the English version shall control.

Article XIX. Entire Agreement.

This Agreement sets forth the entire agreement between the Parties with respect to the subject matter herein. No modification or amendment to this Agreement shall be binding upon the Parties unless made in writing and duly executed by authorized representatives of both Parties.

Article XX. Non-Exclusive Agreement.

This is a non-exclusive Agreement, and either Party may contract with third parties to provide other similar programs.

Article XXI. NOTICES

All notices under this Agreement must be in writing and sent by prepaid airmail and electronic mail as follows:

To TSU: [Name; Title]

[Address]

[Phone]

[e-mail]

To SDSU:

Tom McCarron
Vice President, Business and Financial
Affairs San Diego State University
5500 Campanile Drive
Mail Code – 1620
San Diego, CA 92182-
1620 619.594.6017]tmccarron@mail.sdsu.edu

To SDSURF:

Michele G. Goetz
Associate Executive Director,
Sponsored Research Services

SDSU Research Foundation
5250 Campanile Drive
Mail Code – 1934
San Diego, CA 92182-1934
USA

619.594.1862

mgoetz@foundation.sdsu.edu

IN WITNESS WHEREOF the undersigned, being duly authorized to do so, have signed this Agreement.

FOR SAN DIEGO STATE UNIVERSITY

FOR **IVANE JAVAKHISHVILI TBILISI
STATE UNIVERSITY**

FOR SAN DIEGO STATE UNIVERSITY
RESEARCH FOUNDATION

DRAFT

Attachment A
Space Requirements

A detailed listing of the spaces proposed for different uses will be provided for each partner. Only the spaces relevant to each partner will be noted (so, for example, only TSU spaces will be listed in the Agreement with TSU).

DRAFT

Attachment B

General Tasks Template for Design and Renovation/Construction Works Supervision

List of General Tasks

General tasks to be completed as part of project management include, inter alia:

- Represent the interests of MCA-Georgia under the works contract(s), in any manner related to the works contract(s) and the proper execution therefore;
- Ensure the general coordination of the whole construction under this Project and its activities, including the necessary coordination and planning to manage multiple sites simultaneously, if necessary;
- Assess environmental and social risks and develop environmental and social management framework and environmental and social management plans.
- Provision of analysis and advice on specific issues at the request of MCA-Georgia;
- Assurance that the execution of Project activities is carried out according to the guidelines established by MCC and the Government;
- Monitor compliance with the deadlines in comparison with what is projected in the contracts;
- Draft all required reports such as described herein;
- Provide technical and administrative supervision of the work contract(s), and ensure compliance with the Environmental and Social Management Plan, Waste Management Plan, and Occupational Health and Safety Guidelines and other relevant environmental and social performance requirements.;
- Liaise with the Government, MCA-Georgia and partner institutions as appropriate to gather and share information;
- Liaise with the Procurement Unit at the MCA-Georgia who will supervise all procurements under the MCC Compact and assist in the preparation of bid documents;
- Submit all deliverables to MCA-Georgia as described in the reporting requirements section; and
- Establish and maintain a Document Management System.

Design of Renovation and Construction Works

Based on the requirements of the Project, the description, clearly spelling out the performance requirements, the existing conditions, and the end result expected by each part of the work, based on the design requirements should be prepared.

General tasks to be completed as part of these activities include:

- Design criteria and standards to be applied;
- Layout of rooms and spaces, as appropriate;
- Plans of the existing buildings;
- Structural reviews of selected building(s) for renovation, as applicable, for new construction prior to preparation of design documentation;

- Recommendations of environmental and social measures to be integrated in the works implementation, as appropriate;
- A site plan at 1/500 and layout plan at 1/200 (public spaces and buildings), with learning space design criteria considered in classrooms as well as public spaces;
- Design drawings superimposed on the “existing” layer, in a way to visualize by different colors the design to be brought (to create, to demolish, to build), in case of renovation, as appropriate;
- Details of plans for all elements of the work including heating, HVAC, electrical, wastewater systems/drainage systems on a scale of 1/50 and 1/20, as appropriate;
- Design and related documentation must follow all relevant codes and standards for the proposed renovation and new construction works, as appropriate.
- Design details and specifications including provision for reduced mobility features, such as handicap access for wheel chairs, following relevant codes for design of circulation, ramps, door opening and widths, as appropriate.
- Other details and standards that are part of the plans;
- A schedule for implementation of the works which must take into account the safeguard of the property as well as continuing operations of the educational facility during construction, as appropriate;
- A schedule of professional and working trades, materials, equipment and quantities of each required for the performance of works;
- The minutes of different consultation meetings held with the service authorities for the design concept, as appropriate;
- Detailed location and layout of all facilities, document land titling and ownership, and clarify permit requirements, such that the affected areas can be set and reviewed in the Environmental and Social Management Plan (ESMP);
- The technical specifications of works;
- Detailed description for all line items;
- Bill of Quantities;
- A confidential cost estimate;
- Notes on the calculation of works; and
- Laws, regulations and standards considered in design.

Develop an Environmental and Social Management Framework (ESMF) and Environmental and Social Management Plan (ESMP) According to IFC Performance Standards

Project Manager will develop an Environmental and Social Management Framework (ESMF), in compliance with IFC Performance Standard 1 on Assessment and Management of Environmental and Social Risks, that addresses the overall environmental and social issues associated with the program. The ESMF identifies screens and assesses key risks; develops a framework for consultation and engagement with affected stakeholders; and proposes an institutional framework that assigns responsibilities to manage risks, impacts and stakeholder consultation throughout the life of the project. An ESMF is a flexible instrument with the ultimate purpose of assisting in the design and implementation of programs and projects that help avoid, minimize and mitigate environmental and social risks and impacts, and includes an appropriate Environmental and Social Management Plan

(ESMP) and details key actors responsible for its implementation, from the Ministry of Environment and Natural Resources Protection to the contractors responsible for the works to the educational facilities themselves.

The objectives of the ESMF are to:

- Ensure approved projects comply with Georgian environmental and social legislation and permitting requirements;
- Ensure projects comply with MCC Environmental Guidelines, MCC Gender Policy, MCC policy on trafficking in persons, and the IFC Performance Standards;
- Guide the scoping of environmental and social impact risks in relation to each of the Performance Standards, including those risks and impacts related to health and safety, hazardous materials, resettlement and land acquisition, amongst others;
- Ensure effective integration of environmental, social and gender criteria and processes into overall project implementation;
- Enhance positive and sustainable environmental and social outcomes associated with project implementation;
- Support the integration of environmental and social aspects of the project into the planning and decision making process;
- Provide for community consultation and engagement mechanisms throughout the life of the project;
- Avoid, minimize, mitigate and manage negative environmental and social impacts as a result of either individual construction actions or their cumulative effects;
- Avoid, minimize, mitigate and manage occupational, health and safety risks and impacts;
- Improve project design for sustainability characteristics;
- Develop an Environmental and Social Management Plan (ESMP) to guide project proponents in integration of significant environmental and social mitigations and monitoring, and integration of measures to promote equitable access to project benefits and opportunities into the rehabilitation projects. The ESMP would include a Waste and Hazardous Waste Management Plan, and Occupational Health and Safety Plan, Resettlement Action Plans, and other specific plans that may be required for the project;
- Identify vulnerability to natural disasters and accidents and develop an emergency preparedness and response plan;
- Develop environmental and social contract clauses that translate environmental and social requirements under the ESMP into contractual language and integrated into tender documents; and
- Provide for environmental and social monitoring and reporting against ESMP requirements during project implementation.

Project Manager will develop detailed information on permitting requirements that may apply to each of the project activities and sites, and the procedures and responsibilities for obtaining the permits. Project Manager will prepare standard environmental and social clauses for inclusion in construction tender documents and ensure that the full ESMP is part of the contracts.

During project implementation, Project Manager will specify procedures for compliance monitoring with the ESMP. This might include an Environmental and Social Audit template and photo/video

requirements for site inspections to ensure effective implementation of ESMPs during the Construction Phase. The ESMF should also include a standardized reporting format to track implementation against ESMP requirements and to alert MCA-Georgia to new environmental and social issues identified during implementation.

The ESMF and ESMP will contain general guidance on compliance with the IFC Performance Standards that are relevant to the project. Specific tasks related to the compliance of the Performance Standards are detailed below; however Project Manager should refer to the original standards for guidance on what risks to assess and mitigate for on the project. This guidance should be applied to all activities related to the project.

Performance Standard 2: Labor and Working Conditions

PROJECT MANAGER will identify occupational health and safety risks and prepare guidelines, which comply with IFC Performance Standard 2 on Labor and Working Conditions. These guidelines will cover, among other issues, management of environment, health and safety risks, including hazardous materials handling, storage and disposal (see following section on PS 3). Guidelines should also cover child and migrant workers, safe working conditions, including personal protective equipment, and provide for a grievance mechanism for workers. Health and safety issues should be integrated into the front-end risk assessment process. Health and safety should be integrated into the ESMP which will outline detailed health and safety requirements for works contractors and QA/QC procedures. PROJECT MANAGER will prepare a Health and Safety checklist to be used during the construction supervision phase as a monitoring and tracking tool to ensure the Contractor's compliance with MCC health and safety standards. Occupational Health and Safety (OHS) clauses should be developed to translate OHS requirements under the ESMP into contract language and integrated into tender documents.

Performance Standard 3: Resource Efficiency and Pollution Prevention

Project Manager will prepare guidelines for the contractor's equipment and construction activities to comply with air, water, noise and vibration standards based on national and international (WHO) standards, especially giving consideration to local communities and stakeholders who may be affected by construction activities.

Project Manager will also consider cost effective measures for improving efficiency in the consumption of energy, water, as well as other resources and material inputs should be identified, including use of high efficiency lighting, energy efficient boilers and insulation, including additives to paints that increase energy efficiency, recycling, and automation (e.g. programmable thermostats, etc.). Project Manager will look to successful examples of energy and water efficiency in schools and universities in Georgia, including recent projects undertaken by USAID and Winrock International.

Hazardous Materials and Waste Management Plans

As described in PS 3, the IFC General Environmental, Health and Safety Guidelines on occupational health and safety, and MCC guidance on hazardous materials management, special care must be taken if hazardous materials are encountered during rehabilitation work. There is a potential of encountering hazardous materials such as asbestos containing materials (ACM) in existing schools in Georgia, especially in roofing materials. There is a possibility of encountering

friable asbestos, which would pose a greater management problem. In instances, where friable ACM, or material that is non-friable in its present condition but is likely to become friable during construction or removal, is identified, then Project Manager will immediately notify MCA-Georgia of the situation and a path forward would be agreed upon.

Sampling and testing with proper PPE would be required to fully identify asbestos and friable asbestos. However, sampling and testing for asbestos is costly and time consuming and if some materials are well documented to contain non-friable asbestos (such as certain types of roof tiles), it may be more practical to assume that they contain ACM and manage them accordingly rather than testing them. If the likelihood of the presence of non-friable ACM is fairly definitive, Project Manager can recommend whether testing is necessary to verify such findings, or whether the material can simply be treated as hazardous material without the need for testing and laboratory verification.

Besides ACM, there is a potential for lead hazards: lead based paint (LBP), lead pipes, and lead deposited in outdoor soil, which is a risk especially to small children in situ and for workers during rehabilitation programs. Project Manager will test any painted surfaces with field test kits to determine if lead is present in levels higher than accepted both nationally and internationally. Sites located near industrial sites or sites with a history of nearby industrial activity may require additional soil testing on a case by case basis. Where lead is found, Project Manager will prepare plans to protect students and other stakeholders through encapsulation methods if the building system remains, or to protect workers if the building systems are being replaced. Building systems that are removed which contain LBP will be wrapped and handled as hazardous waste per MCC Guidance.

For remediation of sites that have identified potential ACM or high lead levels, Project Manager will prepare a Hazardous Waste Management Plan (HWMP) to include removal, handling and wrapping of the contaminated building systems using proper personal protective equipment (PPE) and training requirements. The HWMP will cover the safe handling, transport and disposal of the non-friable ACM and lead contaminated building materials. The HWMP will cover general aspects common to all sites with hazardous substances, including hazardous substances generated in construction sites (not only ACM and lead), such as mercury vapor electrical systems, among others, as well as a section for information regarding the location of on-site waste storage, transportation methods, and final disposal sites and methods.

Project Manager will identify risks related to normal waste (non-hazardous) from construction activities and will prepare a management and disposal plan that includes coordination with local authorities' waste facilities and other relevant organizations as needed. Coordination with the Ministry of Environment and Natural Resources Protection may be required under the proposed new Waste Law.

Performance Standard 4: Community, Health, Safety and Security

Project Manager will assess potential risks to the community and other stakeholders, including risks from interactions between community members and contractors, and develop specific mitigation measures to address those risks. Project Manager will prepare guidance for contractors and others on how to identify

and engage/consult with relevant stakeholders on issues such as noise, vibrations and air emissions from construction activities, the management of waste and hazardous waste, and other project activities. PROJECT MANAGER will develop guidance on how to receive, manage and respond to community grievances.

Performance Standard 5: Land Acquisition and Involuntary Resettlement

Project Manager must identify any possible cases of land acquisition, involuntary resettlement and economic displacement, both permanent and temporary. In the case that land acquisition or resettlement may take place, Project Manager will prepare and implement a Resettlement Action Plan in compliance with PS 5 and MCC Environmental Guidelines.

Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Project Manager will assess and mitigate for project risks to protected areas, protected species, natural and critical habitats. Project Manager will prepare guidance on avoiding the removal of vegetation, and compensation for vegetation loss when it is unavoidable. Project Manager will prepare guidance and mitigation measures on impacts to fauna, including contractor interaction with local fauna and a zero tolerance for hunting.

Performance Standard 8: Cultural Heritage

Project Manager will identify any potential cultural heritage that may be affected by the project. Project Manager will prepare a basic chance finds procedure for the Contractor with information on who to contact and what actions to take in case any cultural heritage is encountered or disturbed. Cultural heritage includes religious sites, cemeteries, human remains, and artifacts, among others.

Unforeseen Environmental Issues

In addition to the previous environmental, social, health and hazardous material requirements, there remains a possibility that other unforeseen issues could be uncovered during Project Manager's work on a particular site, including but not limited to the following:

- Presence of friable asbestos as noted above;
- Presence of laboratory waste and luminescent light bulbs in large quantity;
- Potential resettlement impacts or access issues.

Such site specific problems may go beyond the scope of the standard ESMP requirements and need to be highlighted, and may warrant specific additional site specific mitigation measures. If these issues are too serious to be addressed with additional mitigation, Project Manager will confer with MCA-Georgia.

Develop Renovation/Construction Bid Packages

Project Manager will consult with partner institutions and community officials to prepare a site plan for the existing institution and property boundaries (from existing record, no new surveys), other existing structures and/or newly required features on the site plan (as outlined in the previous chapter). Project

Manager shall prepare site plans at 1/200 scale, and at 1/500 scale for the affected area plans, with details at 1/50 and 1/20.

Based on the work program for the Project, PROJECT MANAGER will prepare one set of design drawings for each site based on a single set of architectural drawings for all buildings, which will also include the proposed site specific designs.

These documents shall be used as a basis to establish the Bidding Documents for the renovation and new construction works. Project Manager shall assist MCA-Georgia and the Procurement Unit at MCA-Georgia in the elaboration of documents pertaining to requests for proposals and shall also provide any other required information or documents. These documents shall contain references to the EMP, which shall be provided to the bidders. All plans, designs and documents that are provided must include one electronic copy in order to be reproduced.

The MCC Document “Standard Bidding Documents: Procurement of Small Works” covers all aspects of the administrative requirements and tasks. The Technical Specifications shall include lists and descriptions of work (pay) items to be executed.

PROJECT MANAGER shall prepare Bills of Quantities (BOQ) based on the various items of work to be executed in accordance with the drawings and the technical specifications. The items in the BOQ shall correspond to the work (pay) items specified in the technical specifications.

PROJECT MANAGER shall develop a Confidential Cost Estimate, for each work item, work category and contract package as a whole. Unit prices shall be classified into direct costs (labor, materials and equipment), indirect costs (mobilization, on-site and general overheads, contractor’s contingencies and profit) and taxes.

In preparing cost estimates Project Manager shall take into account restrictions on the use of Compact funds. This includes the procurement of equipment, supplies, personnel or other inputs from any country that is subject to sanction or restriction by United States law or policy.

3. Supervision of the Construction Contractor(s)

Project Manager shall provide full construction supervision services, as commonly provided in the construction industry -whether noted below or not - as the Engineering representatives of MCA-Georgia. The works will be executed under small works contracts with Project Manager performing the Engineer’s roles and responsibilities as defined therein – except where limited or noted below.

Activities include, but are not limited to, supervising the renovation and construction contractor(s), scheduling, managing, change order requests, the provision of supervision engineers, progress and scheduling, reviewing requests for payment, reviewing as-built drawings, and providing quality assurance. These services entail the responsibilities for the “Engineer” except as limited by this scope of services.

Duties to be included in this portion of the assignment include but are not limited to:

- Preparing the agenda and leading the preconstruction meeting with the contractors of each different project and discussing the agenda with MCA-Georgia's Chief Infrastructure Engineer and Tertiary Education Project Director prior to the meetings.
- Reviewing and commenting on and approving programs of work submitted by the renovation and construction contractor(s);
- Reviewing and approving construction plans and methods proposed by the renovation and construction contractor(s);
- Visit the site on a daily basis to observe the progress and quality of the contractor's work, and maintain representatives at the site in such a manner that adequate supervision of the renovation and construction works is provided at all times the contractor is working;
- Monitoring and reporting on the physical and financial progress of the works undertaken by the renovation and construction contractor(s) and recommending action to be taken when progress is not in accordance with the agreed program;
- Verifying that the quality of the renovation and construction works are completed according to the design drawings and specifications, and providing quality assurance on quality control tests performed by contractor, as appropriate.
- Certifying that the monthly certificates for payment from the renovation and construction contractors accurately reflect the value of the works completed;
- Compiling information and evaluating information for accident reports as they occur;
- Preparing and issuing site instructions to the renovation and construction contractors, as necessary for Project implementation;
- Providing sufficient, qualified staff to carry out all required monitoring, supervision, inspection and management duties described herein;
- Coordinating and facilitating the RFI process between bidders and project designers;
- Approving construction shop drawings, as appropriate;
- Reviewing and analyzing and recommending approval or rejection of renovation and construction contractors' proposed change (variation) orders to MCA-Georgia;
- Proposing change orders for the approval of MCA-Georgia; including the cost impact of such proposed changes. Project Manager shall also be required to submit the various alternatives with cost benefit analysis for facilitating the decision by MCA-Georgia;
- Reviewing reports submitted by the renovation and construction contractor(s);
- Submit monthly progress reports to MCA-Georgia, which will include the following:
 - Report on percentage of work completion without defects, by site/project;
 - Report on application of the ESMP, WMP, OHSP and related documents;
 - Report on management of hazardous material, including materials not previously identified in the waste management plans, if applicable;
 - Report on any grievances received by affected parties;

- Graphical representation of planned vs actual production, along with Earned Value metrics, including Schedule Performance Index (SPI), Cost Performance Index (CPI);
 - Detailed account to be paid related to the work completion;
 - Identified contractor's lack of performance and lack of compliance with the contracts; and
 - Quickly propose adequate measures to resolve these shortcomings
- Providing photographs of construction, documenting monthly progress and potential trouble areas;
 - Check and establish that the contractor(s) mobilizes and supplies to the site all materials, equipment and machinery, including personal protective equipment (PPE), that have been committed in its bid, and ensure that all such items remain on site until their release has been authorized. Ensure that the contractor(s) properly records all equipment, materials and labor which have been supplied under the Contract, and keep and regularly update lists of the contractor's equipment, including PPE (and its condition) and personnel on site;
 - Assess the adequacy of all inputs, such as equipment, labor and materials provided by the renovation and construction contractor(s) and its methods of work in relation to the required rate of progress and, when required, take appropriate action in order to expedite progress;
 - Inspect and evaluate all contractor's installations, shops and warehouses and other accommodation to ensure compliance with the terms and conditions of the Contract;
 - Provide timely assistance and direction to the renovation and construction contractor(s) in all matters related to the interpretation or clarification of the works contract, ground survey controls, quality control testing and other matters related to works contract compliance and progress of the works; and ensure prompt responses when the renovation and construction contractor(s) calls for inspections and approvals;
 - Issue instructions, in accordance with the authority specified in the Conditions of Contract, to contractors, such that works can proceed expeditiously;
 - Review the contractor's work plan for completeness, reasonableness, as well as logic in sequencing of operations. Project Manager shall work with the contractor until acceptable schedules are produced. Project Manager shall monitor progress against the work program, instructing the contractor to revise its program as necessary in order to meet due completion dates;
 - Ensure that the works are executed in accordance with the drawings and that the quality of workmanship and materials is in compliance with the technical specifications. Evaluate and determine acceptability of substitute or "equal" materials and equipment proposed by the contractor;
 - Perform or oversee all laboratory and field testing of contractor's work, materials and products required to ensure that the quality as specified in the Contract is attained, as applicable. Review all certificates of inspections, tests and approvals;

- Ensure that the renovation and construction contractor(s) has taken suitable measures with regard to the safety and health of its workers (provision of PPE, potable water, lodging, and first aid kits), site safety, and accident prevention measures. Inspect the security and safety aspects of construction, equipment and temporary works to ensure that every reasonable measure has been taken to protect life and property;
- Ensure that the contractor complies with its contractual obligations in respect of labor standards, mitigation of impacts on the environment, health and safety, by withholding payment against appropriate items in applications for interim payment, as applicable in accordance with the provisions of the works contract;
- Prepare and maintain inspection and engineering reports and records to adequately document the progress and performance of the works;
- Prepare incident reports, covering accidents, environmental and other incidents, and take appropriate follow on action;
- Perform all survey measurements of completed or partial works where required for the determination of quantities. Compute quantities of approved and accepted work and materials and check, certify and make recommendations to MCA-Georgia on the contractor's interim and final payment certificates. All payment certificates shall be checked and countersigned by Project Manager;
- Review and comment on, or recommend approval of, contractor's proposals for variations;
- Propose and present for the approval of MCA-Georgia any variations in the Contract that may be deemed necessary for the completion of works, including information on any effect that the variations may have on the works contract amount and the time for completion of the works, and prepare all necessary variation orders, including alterations of plans, technical specifications, and other details for the approval of MCA-Georgia;
- Amend and reproduce design drawings and respective documentation, as deemed necessary during the implementation of the works;
- Review and comment on or approve as-built drawings prepared by the contractor;
- Inform MCA-Georgia about problems or potential problems, which may arise in connection with the works contract(s) and make recommendations to MCA-Georgia for possible and optimal solutions;
- Examine and make recommendations to MCA-Georgia on all claims from the Contractor for extension of time, additional compensation, extra work or expenses or other similar matters. Attend claims meetings between MCA-Georgia and contractor;
- Arrange and preside at periodic coordination and progress meetings on site, and prepare the minutes of meetings;
- Analyzing and determining claims submitted by the renovation and construction contractor(s) and MCA-Georgia;
- Organize and document meetings as required or requested by claimants;

- Communicating with businesses and communities effected by any of the works undertaken under the Project to keep them aware of the construction process and schedule;
- Reviewing (verifying accuracy of) and approving the as-built drawings prepared by construction contractors and keeping an up-to-date set and complete set of drawings for MCA-Georgia at all times;
- Performing pre-final and final inspections of projects and issuing a Certificate of Completion for the works. Normally, these inspections will generally be jointly carried out with the relevant partner institution(s);
- Preparing a final completion report for each of the works contracts, including recommendation to MCA-Georgia for final acceptance of all the works included in the contract documents and amendments.
- Maintaining complete and orderly working files for correspondence, minutes of meetings and conferences, submittal data, submittal registers, inspection and monthly progress reports, contract construction compliance notices, punch lists and contract documents including amendments, notices to proceed, change orders and modifications, all in a system which is comparable with software used by MCA-Georgia; and
- Perform all other tasks, not specifically mentioned above, but which are necessary and essential to ensure the successful supervision and control of all the construction activities, in accordance with the terms of the works contract.

Post-Construction Services

During this phase Project Manager tasks shall include the following:

- Inspect the works at appropriate intervals during the contractor's Defects Liability Period (12 months), and prior to expiration of the Defects Liability Period (DLP), prepare a final deficiency list, supervise remedial works and recommend to MCA-Georgia the date of the Final Inspection of the works;
- Carry out the Final Inspection of Works together with representatives of partner institutions, MCA-Georgia, and the Contractor;
- Prepare and issue the Final Acceptance Certificate in consultation with MCA-Georgia and the partner institution; and
- Prepare the Final Payment Certificate.

Attachment C
Additional Provisions

General Provisions

Capitalized terms that are used but not defined in this Appendix shall have the meaning given to them in the agreement to which this Annex is attached and that certain Millennium Challenge Compact (MCC) by and between the United States of America, acting through MCC, and the Government, signed in [City] on [Date], as may be amended from time to time.

MCA-Georgia (the “Client” for the purposes of this appendix) is responsible for the oversight and management of the implementation of the Compact on behalf of the Government and intends to apply a portion of the proceeds of the Compact to eligible payments under the Contract, provided that (a) such payments will only be made at the request of and on behalf of the Client and as authorized by the Fiscal Agent, (b) MCC shall have no obligations to the Consultant under the Compact or the Contract, (c) such payments will be subject, in all respects, to the terms and conditions of the Compact, and (d) no party other than the Government and the Client shall derive any rights from the Compact or have any claim to MCC Funding.

A. MCC Status; Reserved Rights; Third-Party Beneficiary

1. MCC Status. MCC is a United States Government corporation acting on behalf of the United States Government in the implementation of the Compact. As such, MCC has no liability under the Contract and is immune from any action or proceeding arising under or relating to the Contract. In matters arising under or relating to the Contract, MCC is not subject to the jurisdiction of the courts or any other juridical or other body of any jurisdiction.

2. MCC Reserved Rights.

(a) Certain rights are expressly reserved to MCC under the Contract, the Compact and other related Compact documents, including the right to approve the terms and conditions of the Contract, as well as any amendments or modifications hereto, and the right to suspend or terminate the Contract.

(b) MCC, in reserving such rights under the Contract, the Compact or other related Compact documents, has acted solely as a funding entity to assure the proper use of United States Government funds, and any decision by MCC to exercise or refrain from exercising these rights shall be made as a funding entity in the course of funding the activity and shall not be construed as making MCC a party to the Contract.

(c) MCC may, from time to time, exercise its rights, or discuss matters related to the Contract with the Parties or the Government, as appropriate, jointly or separately, without thereby incurring any responsibility or liability to any party.

(d) Any approval (or failure to approve) or exercise of (or failure to exercise) any rights by MCC shall not bar the Government, the Client, MCC or any other person or entity from asserting any right against the Consultant, or relieve the Consultant of any liability which the Consultant might otherwise have to the Government, the Client, MCC, or any other person or entity. For the purposes of

this clause (d), MCC shall be deemed to include any MCC officer, director, employee, affiliate, contractor, agent or representative.

3. Third-Party Beneficiary. MCC shall be deemed to be a third-party beneficiary under the Contract.

B. Limitations on the Use or Treatment of MCC Funding

The use and treatment of MCC Funding in connection with the Contract does not, and shall not, violate any limitations or requirements specified in the Compact or any other relevant agreement or Implementation Letter or applicable Laws or United States Government policy. No MCC Funding shall be used for military purposes, for any activity likely to cause a substantial loss of United States jobs or a substantial displacement of United States production, to support any activity likely to cause a significant environmental, health or safety hazard, or to fund abortions or involuntary sterilizations as a method of family planning. MCC Funding shall be free from the payment or imposition of all Taxes as set forth in the Compact.

C. Procurement

The Consultant shall ensure that all procurements of goods, works or services under, related to or in furtherance of the Contract, for which Consultant is responsible, shall be consistent with the general principles set forth in the Compact and applicable Guidelines from time to time in effect as posted on the MCC website at www.mcc.gov. The Consultant shall comply with the eligibility requirements related to prohibited source or restricted party provisions in accordance with U.S. Laws, regulations and policy, applicable World Bank policies or guidelines and in accordance with other eligibility requirements as may be specified by MCC or the Client.

D. Reports and Information; Access; Audits; Reviews

Reports and Information. The Consultant shall maintain such books and records and provide such reports, documents, data or other information to the Client in the manner and to the extent required by the Compact or related documents, and as may be reasonably requested by the Client from time to time in order to comply with its reporting requirements arising under the Compact or related documents. MCC may freely use any information it receives in any report or document provided to it in any way that MCC sees fit. The provisions of the Compact and related documents that are applicable to the Government in this regard shall apply, *mutatis mutandis*, to the Consultant as if the Consultant were the Government under the Compact.

Access; Audits and Reviews. Upon MCC's request, the Consultant shall permit authorized representatives of MCC, an authorized Inspector General of MCC, the United States Government Accountability Office, any auditor responsible for an audit contemplated by the Compact or conducted in furtherance of the Compact, and any agents or representatives engaged by MCC or the Government to conduct any assessment, review or evaluation of the Program, the opportunity to audit, review, evaluate or inspect activities funded by MCC Funding. The provisions of the Compact and related documents that are applicable to the Government in this regard shall apply, *mutatis mutandis*, to the Consultant as if the Consultant were the Government under the Compact.

Application to Providers. The Consultant shall ensure the inclusion of the applicable audit, access and reporting requirements from the Compact in its contracts or agreements with other providers in connection with the Contract.

E. Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes, and Other Restrictions

1. The Consultant shall ensure that no payments have been or will be made by the Consultant to any official of the Government, the Client, or any third party (including any other government official) in connection with the Contract in violation of the United States Foreign Corrupt Practices Act of 1977, as amended (15 U.S.C. 78a et seq.) (the “FCPA”) or that would otherwise be in violation of the FCPA if the party making such payment were deemed to be a United States person or entity subject to the FCPA, or similar statute applicable to the Contract, including any local Laws. The Consultant affirms that no payments have been or will be received by any official, employee, agent or representative of the Consultant in connection with the Contract in violation of the FCPA or that would otherwise be in violation of the FCPA if the party making such payment were deemed to be a United States person or entity subject to the FCPA, or similar statute applicable to the Contract, including any local Laws.

2. The Consultant shall not provide material support or resources directly or indirectly to, or knowingly permit MCC Funding to be transferred to, any individual, corporation or other entity that the Consultant knows, or has reason to know, commits, attempts to commit, advocates, facilitates, or participates in any terrorist activity, or has committed, attempted to commit, advocated, facilitated or participated in any terrorist activity, including, but not limited to, the individuals and entities (i) on the master list of Specially Designated Nationals and Blocked Persons maintained by the U.S. Department of Treasury’s Office of Foreign Assets Control, which list is available at www.treas.gov/offices/enforcement/ofac, (ii) on the consolidated list of individuals and entities maintained by the “1267 Committee” of the United Nations Security Council, (iii) on the list maintained on www.sam.gov, or (iv) on such other list as the Client may request from time to time. For purposes of this provision, “material support and resources” includes currency, monetary instruments or other financial securities, financial services, lodging, training, expert advice or assistance, safe houses, false documentation or identification, communications equipment, facilities, weapons, lethal substances, explosives, personnel, transportation, and other physical assets, except medicine or religious materials.

3. The Consultant shall ensure that its activities under the Contract comply with all applicable U.S. Laws, regulations, executive orders, and policies regarding money laundering, terrorist financing, trafficking in persons, U.S. sanctions Laws, restrictive trade practices, boycotts, and all other economic sanctions promulgated from time to time by means of statute, executive order, regulation or as administered by the Office of Foreign Assets Control of the United States Treasury Department or any successor governmental authority, including, 18 U.S.C. § 1956, 18 U.S.C. § 1957, 18 U.S.C. § 2339A, 18 U.S.C. § 2339B, 18 U.S.C. § 2339C, 18 U.S.C. § 981, 18 U.S.C. § 982, Executive Order 13224, 15 C.F.R. Part 760, and those economic sanctions programs enumerated at 31 C.F.R. Parts 500 through 598 and shall ensure that its activities under the Contract comply with any policies and procedures for monitoring operations to ensure compliance, as may be established from time to time by MCC, the Client, the Fiscal Agent, or the Bank, as may be applicable. The Consultant shall verify, or cause to be verified, appropriately any individual, corporation or other entity with access to or recipient of funds, which

verification shall be conducted in accordance with the procedures set out in Part 10 of the MCC Program Procurement Guidelines (Eligibility Verification Procedures) that can be found on MCC's website at www.mcc.gov. The Consultant shall (A) conduct the monitoring referred to in this paragraph on at least a quarterly basis, or such other reasonable period as the Client or MCC may request from time to time and (B) deliver a report of such periodic monitoring to the Client with a copy to MCC.

4. Other restrictions on the Consultant shall apply as set forth in the Compact or related documents with respect to any activities in violation of other applicable United States Laws, regulations, executive orders, or policies, any misconduct injurious to MCC or the Client, any activity contrary to the national security interests of the United States or any other activity that materially and adversely affects the ability of the Government or any other party to effectively implement, or ensure the effective implementation of, the Program or any Project or to otherwise carry out its responsibilities or obligations under or in furtherance of the Compact or any related document or that materially and adversely affects the Program assets or any Permitted Account.

F. Publicity, Information, and Marking

1. The Consultant shall cooperate with the Client and the Government to provide the appropriate publicity to the goods, works and services provided under the Contract, including identifying Program activity sites and marking Program assets as goods, works and services funded by the United States Government, acting through MCC, all in accordance with the MCC Standards for Global Marking available on the MCC website at <http://www.mcc.gov>; provided, however, that any press release or announcement regarding MCC or the fact that MCC is funding the Program or any other publicity materials referencing MCC, shall be subject to MCC's prior written approval and must be consistent with any instructions provided by MCC from time to time in relevant Implementation Letters.

2. Upon the termination or expiration of the Compact, the Consultant shall, upon MCC's request, cause the removal of any such markings and any references to MCC in any publicity materials.

G. Insurance

The Consultant shall obtain insurance, performance bonds, guarantees or other protections appropriate to cover against risks or liabilities associated with performance of the Contract. The Consultant shall be named as payee on any such insurance and the beneficiary of any such performance bonds and guarantees. The Client, and at MCC's request MCC, shall be named as additional insureds on any such insurance or other guarantee, to the extent permissible under applicable Laws. The Consultant shall ensure that any proceeds from claims paid under such insurance or any other form of guarantee shall be used to replace or repair any loss or to pursue the procurement of the covered goods, works and services; provided, however, that, at MCC's election, such proceeds shall be deposited in an account as designated by the Client and acceptable to MCC or as otherwise directed by MCC.

H. Conflict of Interest

The Consultant shall ensure that no officer, director, employee, affiliate, contractor, subcontractor, agent, advisor, or representative of the Consultant participates in the selection, award, administration or oversight of a contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with the Contract, in which (i) the entity, the person, members

of the person's immediate family or household or his or her business partners, or organizations controlled by or substantially involving such person or entity, has or have a financial or other interest or (ii) the person or entity is negotiating or has any arrangement concerning prospective employment, unless such person or entity has first disclosed in writing to the parties under the Contract and MCC the conflict of interest and, following such disclosure, the parties to the Contract agree in writing to proceed notwithstanding such conflict. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, subcontractors, agents, advisors, or representatives involved in the selection, award, administration, oversight or implementation of any contract, grant or other benefit or transaction funded in whole or in part (directly or indirectly) by MCC Funding in connection with the Contract shall solicit or accept from or offer to a third party or seek or be promised (directly or indirectly) for itself or for another person or entity any gift, gratuity, favor or benefit, other than items of *de minimis* value and otherwise consistent with such guidance as MCC may provide from time to time. The Consultant shall ensure that none of its officers, directors, employees, affiliates, contractors, subcontractors, agents, advisors or representatives engage in any activity which is, or gives the appearance of being, a conflict of interest in connection with the Contract. Without limiting the foregoing, the Consultant shall comply, and ensure compliance, with the applicable conflicts of interest and ethics policies of the Client as provided by the Client to the Consultant.

I. Inconsistencies

In the event of any conflict between the Contract and the Compact and/or the Program Implementation Agreement, as applicable, the term(s) of the Compact and/or the Program Implementation Agreement, as applicable, shall prevail.

J. Other Provisions

The Consultant shall abide by such other terms or conditions as may be specified by the Client or MCC in connection with the Contract.

K. Flow-Through Provisions

In any subcontract or sub-award entered into by the Consultant, as permitted by the Contract, the Consultant shall ensure the inclusion of all the provisions contained in paragraphs (A) through (J) above.

Annex 10 – Draft Key Performance Indicators

The rest of this page is left intentionally blank.

Key Performance Indicators

As required in contract clause 2.8.6, SDSU will develop and report on Key Performance Indicators (KPI) as part of the Monitoring and Evaluation Plan. KPI are required for the proposed English/STEM Institute (Task 4), and for targets and performance on student recruitment (Task 5).

Task 4. English/STEM Institute

A key objective of SDSU-Georgia is providing opportunity for students from underrepresented groups to enroll in and successfully earn an undergraduate STEM degree. To this end, an intensive English Language Academy (ELA) will be established to provide remediation, supplemental support, and general English education in preparation for enrollment in a SDSU degree program. In addition, a STEM Preparatory Institute (SPI) will be implemented in mid 2015 to include assessments in mathematics and selected sciences to determine need for remedial education in preparation for enrollment in a STEM degree program. Appropriate courses will be tailored to meet student needs and qualified instructors will be engaged to provide preparatory STEM courses.

SDSU is eminently qualified to implement the ELA program based on our extensive experience training non-native English speakers in our Linguistics programs at our campus-based Language Acquisition Resource Center (LARC) American Language Institute (ALI).

To facilitate a more rapid, geographically diverse, and cost-effective start-up of the ELA in Year 1, SDSU will engage a proven service provider in Georgia to initiate the program. In addition, SDSU will hire a director with management and language training experience to oversee the performance of the program and a qualified member of the SDSU faculty to perform periodic Quality Assurance reviews to ensure the highest-quality instruction. Starting in September 2014, the ELA program will recruit at least 100 students, conduct English skills testing and assessments, and offer English Language courses at no cost to help them qualify for enrollment in a SDSU degree program in Fall 2015, and to improve their performance on the Georgian National Exam. [Note: This initial effort is funded under the Pre-Enrollment Contract using MCC funding.]

For the English/STEM Academy, the following 3-dimensional matrix of KPI will be collected and reported. Details of the reporting strategy are outlined below.

Groups Category	Number of outreach sessions total	Number of outreach sessions in Tbilisi	Number of outreach sessions in Regions
Number of targeted outreach sessions	Number of general STEM students	Number of socially vulnerable students	Number of women
Number of potential student inquiries	Number of general STEM students	Number of socially vulnerable students	Number of women
Number of potential students applying	Number of general STEM students	Number of socially vulnerable students	Number of Women

Number of students who started the course	Number of General STEM students	Number of Socially vulnerable students	Number of women
Number of complete the level course (student retention)	Number of general STEM students	Number of Socially vulnerable students	Number of women
Number of students advance to the next level course (progress)	Number of general STEM students	Number of Socially vulnerable students	Number of women
Number of students achieving the target score	Number of general STEM students	Number of Socially vulnerable students	Number of women

X-Dimension – Geography

A key indicator of social and economic vulnerability in Georgian education is geography. Because of that factor, all KPI will be reported based on the location of outreach, services, and pre-student demographics. SDSU’s ELA partner – CIE – offers access to pre-student populations in Tbilisi and 7 regions with the capacity to outreach /recruit non-traditional students through its central office in Tbilisi and four regional offices.

Therefore, reporting metrics will be characterized as: 1) Total Activities; 2) Activity in Tbilisi; 3) Activity outside of Tbilisi.

Y-Dimension – Student Progress

Key to understanding programmatic success is a reporting process that captures the full spectrum of recruitment, application, and student success. To that end, the proposed KPI for Student Progress include following and reporting traditional outreach and recruitment activities such as seminars and workshops, tracking application processes such as inquiries and applications, and tracking student matriculation, retention, progression, and the achievement of the proposed target score.

Z-Dimension – Student Demographics

The composition of the proposed ELA student population is a critical element of the long-term success and impact of the program. Functional diversity as a representation of diversity in a group of people refers to differences in their demographic characteristics, cultural identities and ethnicity, and training and expertise. Advocates of diversity in problem-solving groups claim a linkage among these sorts of diversity and differences in how people represent problems and how they go about solving them. Because of their greater functional diversity, identity-diverse groups can outperform homogeneous groups, and this factor is a key component to building lasting innovation-driven economic growth in the Republic of Georgia.

Student demographics will initially be divided by socially vulnerable, and non-socially vulnerable, and by gender. Therefore socially vulnerable women will be accounted for both in the target enrollment figures for socially-vulnerable and gender-diverse students.

Social vulnerability will be further tracked according to the Republic of Georgia definition and be subdivided into: 1) Ethnic minorities (e.g., Armenian living in Samtskhe-Javakheti, Azerbaijanian living in Kvemo-Kartli); 2) Low Income (Students from families who were ranked below 70,000 points by Georgia Social Services Agency); 3) High mountain areas; 4) Internally Displaced Persons.

Task 5. Degree Programs Student Recruiting

The primary student recruitment strategy will be to leverage the existing national university system of the Government of Georgia. To extend the reach of the program to students from socially-disadvantaged groups, SDSU-Georgia will implement an outreach initiative directly to high school students starting their senior year in 2014 with a multi-faceted message concerning the SDSU-Georgia programs. Among the key messages will be:

- Description of the degree programs and qualification requirements
- Relationship between SDSU and the Partner Universities
- Value of an internationally-recognized degree
- Cost of the program and availability of scholarships and student aid

KPI for student recruitment will mirror KPI for the ELA, with a focus on Geography, Student Success, and Demographics as described above, understanding that within Student Success only inquiries, applications, and matriculation will be reported during most of the performance period of the contract.

Annex 12 – Proposed Guidelines for the Utilization of GRDF Proceeds

The rest of this page is left intentionally blank.

GRDF Investment Strategy and Plan

Introduction: The Georgian Regional Development Fund has invested more than \$32 million in Georgian small and medium enterprises as part of the government’s strategy to nurture private entrepreneurship and innovation. Clearly, an educated and internationally recognized workforce is a critical element to continue progress toward the goals of creating opportunities for inclusive growth. As part of the original MCC and GOG request for respondents, the sponsors considered investing proceeds from the GRDF to support financial aid programs for students. In particular, the SDSU-Georgia proposed investment plan focuses on strategic investment of an initial GRDF allocation of \$2.6 million beginning in the Compact Year 1 to support the first year of student enrollment (Compact Year 2), AY 2015/2016. Additional GRDF funds as with the initial allocation, if provided, will be used as outlined later in this plan.

Background: There are considerable data indicating the impact of academically-related student life activities in the retention and success of students in demanding fields like the proposed STEM curricula. These activities offer networking opportunities that enable employers to see the high quality of the program and students, which will also enhance industry-university connections and lead to increased access to high quality careers after graduation. Based upon the Georgia 2020: Creating opportunities for inclusive growth report from MCA Georgia, it is clear that such opportunities are currently very rare.

In a detailed survey of support and persistence for undergraduates in engineering disciplines, internships, scholarships, and peer support have been recognized as incredibly important for student success¹, which SDSU takes most seriously.

Table 1. Importance ratings by ethnicity. Adapted from Haden 2007.

FACTORS	Minority		Non-Minority	
	Mean	StdDev	Mean	StdDev
Internships	4.26	1.07	4.04	1.16
Scholarships	4.51	1.04	3.81	1.39
Faculty member support	3.63	0.97	4.03	0.94
Family emotional support	3.89	1.32	3.87	1.10
Peer social interactions	3.34	1.33	3.73	1.02
Family financial support	3.49	1.44	3.58	1.40
Peer study groups	3.43	1.22	3.44	1.19
Career Counseling	3.65	1.25	3.13	1.29
Tutoring	3.54	1.31	3.01	1.44
Student Loans	3.26	1.56	3.02	1.62
Clubs/Organizations	3.20	1.08	2.96	1.22
Engineering Staff	3.00	1.08	1.91	1.01
Engineering tutoring	2.97	1.22	1.92	1.08

¹ Haden, C. (2007) AC 2007-2282: Evaluating Support for Underrepresented Students in Engineering Degree Programs. American Council for Engineering Education, Proceedings, Annual Conference and Exposition. Download from: <http://soa.asee.org/paper/conference/paper-view.cfm?id=5544>.

GRDF Strategy: The SDSU proposal included plans for pre-university preparatory/bridge courses in math, science, English language and other subjects as necessary. In addition, it recognized that recruitment and retention of women, minorities, and socially vulnerable students will require different approaches to include specific mechanisms to be used for recruiting and retaining women, minorities and the socially vulnerable. The proposed GRDF Investment strategy focuses on providing opportunities and services most highly valued by students in general, with special attention to providing opportunities that are specially valued by these underrepresented or disadvantaged groups.

In particular, the core investment strategy for GRDF funds will be to deploy the funds in a flexible and strategic fashion to directly improve student outcomes. Investments will be made in three core areas, elaborated below and based on the immediate and on-the-ground needs of students:

1. English Language Academy and STEM Academy
2. Student aid, including such potential items as scholarships, loans and grants for tuition and living expenses;
3. Student life activities.

1 English Language Academy and STEM Academy

A key objective of SDSU-Georgia is providing opportunity for students from underrepresented groups to enroll in and successfully earn an undergraduate STEM degree. To this end, an intensive English Language Academy (ELA) will be established to provide remediation, supplemental support, and general English education in preparation for enrollment in a SDSU degree program. In addition, a STEM Academy will be implemented in mid 2015 to include assessments in mathematics and selected sciences to determine need for remedial education in preparation for enrollment in a STEM degree program. Appropriate courses will be tailored to meet student needs and qualified instructors will be engaged to provide preparatory STEM courses.

1.1 English Language Academy (ELA)

SDSU is eminently qualified to implement the ELA program based on our extensive experience training non-native English speakers in our Linguistics programs at our campus-based Language Acquisition Resource Center (LARC) American Language Institute (ALI).

To facilitate a more rapid, geographically diverse, and cost-effective start-up of the ELA in Year 1, SDSU will engage a proven service provider in Georgia to initiate the program. In addition, SDSU will hire a director with management and language training experience to oversee the performance of the program and a qualified member of the SDSU faculty to perform periodic Quality Assurance reviews to ensure the highest-quality instruction. Starting in September 2014, the ELA program will recruit at least 100 students, conduct English skills testing and assessments, and offer English Language courses at no cost to help them qualify for enrollment in a SDSU degree program in Fall 2015, and to improve their performance on the Georgian National Exam. [Note: This initial effort is funded under the Pre-Enrollment Contract using MCC funding.]

The Center for International Education (CIE) is one of the premier sources of study abroad opportunities for prospective applicants from Georgia. As an official representative of EducationUSA supported by the U.S. Department of State, one of its largest operations is to support student mobility from Georgia to USA. In order to ensure admission of the best and the brightest students from Georgia to American colleges or universities, CIE has established a record of providing TOEFL and SAT prep courses to students to help them achieve English fluency and obtain high scores on standardized tests. CIE's TOEFL Preparation programs have helped hundreds of applicants to meet the challenges of admission to US

colleges and universities through a rigorous curriculum specifically designed to give students a critical advantage in taking the most commonly accepted exams at American institutions. CIE’s popular TOEFL prep program includes a total of 48 hours of instruction in a two month period (one term), devoted to specific TOEFL strategies, language practice in reading, writing, listening and speaking. Placement and practice tests allow instructors to analyze students’ abilities and familiarize students with the test format and strategies.

For Year 1, CIE will be engaged in a pilot program to run the English Language Academy in conjunction with existing English/ TOEFL Prep Center infrastructure in Tbilisi, Kutaisi, Batumi, Telavi and Akhaltsikhe, with other locations around Georgia to be added in the later phase of the project development. Utilizing its network of schools, community organizations, youth NGOs and women’s organizations, CIE will identify and recruit at least 100 students in Year 1, to provide free English proficiency evaluation and appropriate English-language TOEFL preparation programs, targeting academically eligible students including those with socially disadvantaged backgrounds and from underrepresented community groups, seeking admission to the San Diego State University’s Georgia undergraduate degree programs.

The lessons learned from this initial effort with CIE will be applied and the program evaluated for possible transition to a “hybrid” ELA program that leverages the resources and capabilities of CIE and those of the highly successful SDSU LARC and ALI programs. The primary objective is to operate a program that is cost effective and supports the enrollment of Georgian students with capabilities to successfully complete a STEM undergraduate degree program. As the English Language training in the Georgian K thru 12 program becomes more effective, the need for a comprehensive ELA will be re-evaluated and adjusted accordingly.

1.1.1 Location

CIE’s offices in the five cities of Georgia will host English Language Academy programs. The Centers are conveniently located at state university buildings in the respective cities that provide easy and convenient access for all applicants and their parents. In particular, CIE Tbilisi with its central location at the heart of the city will function as a base for the English Language Academy, and will also provide training for regional instructors to keep them up-to-date on the latest methods of instruction. CIE Tbilisi will be the host organization for SDSU staff that will oversee program delivery as well as conduct of the periodic program evaluation and improvement processes.

1.1.2 Programs and Cycle

CIE will offer two levels of English Language instruction for applicants:

1. Beginner to intermediate level
2. Upper intermediate to advanced level

Each level will include a total of 48 instructional hours to be taken over a two-month period.

Term 1: October 20-December 20, 2014	Term 2: January 20-March 20, 2015	Term 3: April 1-June 1, 2015
Beginner/Intermediate	Beginner/Intermediate	-
Upper Intermediate/Advanced	Upper Intermediate/Advanced	Upper Intermediate/Advanced

Students will be required to take a placement test to be assigned to the particular level according to their English Language Proficiency. Assignment/progression to the appropriate level is based on test results

and instructor evaluations of student proficiency. A student may take from one to maximum of three terms per academic year upon recommendation/nomination by the instructor.

The ultimate goal of the courses is to enable students to achieve the English language proficiency (Ibt TOEFL 80, IELTS 6.5 or the equivalent) required for admission to SDSU Georgia programs.

1.1.3 English Language Academy Features

- Small class sizes of 15 or less facilitating more individualized attention from the instructor.
- Curriculum emphasizing the four key language skills: speaking, listening, reading and writing.
- 6 hours per week (48 hours per term) of TOEFL preparation devoted to TOEFL strategies, skills and practice.
- Weekly English tests and individualized progress reports every four weeks.
- Access to computer facilities, textbooks, study materials and online library resources
- Certificate of Completion upon successful graduation from each term.
- Personalized counseling and academic assistance.

1.1.4 Application Requirements

CIE will require students who enroll in the program to document their academic standing in one of the following ways:

1. An applicant may submit a copy of her/his high school transcripts for the past two years, demonstrating higher than average academic standing.
2. Applicants will report their high school grades in STEM subjects and English on the application form and provide contacts of respective subject teachers or a headmaster to enable information verification.
3. If an applicant is unable to provide the documentation from number 1 and/or number 2 above, the student must pass a STEM Assessment Test. Before enrolling, the student must inform CIE that s/he is not able to provide the documentation in number 1 or 2.

1.1.5 Commitment to SDSU-Georgia

The current organization of the National Unified Examination registry does not guarantee the “fixed” choice of universities by prospective applicants, which enables them to alter the choices up until the stage of passing all the exams. This makes it a challenging task to ensure that SDSU remains among the top three choices of a student, especially those who have undertaken free language classes. In view of these regulations, CIE will initiate several measures to register student’s intent and, as best as possible, ensure commitment to SDSU-Georgia.

1. In the application form students must state and sign their intention to apply to one of the SDSU-Georgia’s undergraduate programs in the Fall of 2015.
2. Students shall submit a copy of their registration at the National Examination Center with the list of universities they choose to apply, with SDSU-Georgia listed among top three choices.
3. If a student is unable to provide the documentation from number 1 or number 2 above, CIE reserves the right to limit access to the English Language Program, in consultation with SDSU staff.

1.1.6 Actual TOEFL Test (optional)

One institutional (PBT) or IBT TOEFL is given to all CIE students graduating from the advanced level. The cost of this examination is included in the program and is free for students.

1.1.7 Informal Assessments of Students

Informal assessments will allow instructors to regularly and frequently track the ongoing progress of their students. While standardized tests measure students at a particular point in the term, ongoing assessments provide continual snapshots of the student's learning. CIE instructors will employ performance-based and portfolio assessment methods, agreed upon and monitored by SDSU supervisory staff.

Both methods utilize typical classroom activities to measure progress toward curricular goals and objectives. Performance-based assessments are based on classroom instruction and everyday tasks, while portfolios are practical ways of assessing student work throughout the entire term. A formal grading system will be used. The grade of NP is given to students who have not improved/progressed enough to go on to the next level of study. Student attendance and grades will be documented and available on file.

1.1.8 Required Forms

The following forms will be developed and will require a student and/or parent signature. The forms must be printed, completed, signed, and submitted to the CIE via mail, fax, or email or hand-delivered to the nearest CIE center.

- Application and course registration form/student
- Consent and media release form/parent
- Policies and procedures/parent and student
- Computer usage consent form/parent and student
- Emergency Contact Form

1.2 STEM Academy

Similar to the ELA, a STEM Academy will be established to recruit students interested in earning a STEM undergraduate degree, assessing their proficiency in mathematics and the sciences, and providing remedial courses to address deficiencies that would impede their ability to earn the degree.

The STEM Academy will be based upon lessons learned from our prior experience at SDSU. We offer several successful transitional programs for students interested in STEM disciplines. For example, the LSAMP (Louis Stokes Alliance for Minority Participation Summer Pathways Thru Calculus) Program funded by the National Science Foundation is a 5-week summer bridge program for STEM majors. The goal of the summer program is to strengthen the student's knowledge of mathematics to better prepare them for success in calculus and subsequent science and engineering courses. Students who had either precalculus or calculus high school courses have participated in the program and, based on pre- and post-program tests, these students showed large improvements in understanding and final grade. Furthermore, 14 of the 16 participants (2012) and 15 of 16 participants (2013) successfully proceeded directly into basic or advanced calculus in the Fall semester. The EOP Summer Bridge is a campus wide system of summer programs that provide 5 week residential and non-residential bridge programs for first time freshman students that help them transition into the university. Students participate in five weeks of intensive academic studies designed to develop needed writing, math, and study skills focused toward meeting SDSU's writing and math competency requirements. During the 5-week program, EOP Summer Bridge students take two morning courses, lunch together in residence halls, and return for afternoon course or lab activities, based on their educational track. Required tutoring sessions specific to the courses in which students are in enrolled continue until 4:30 PM. There are several tracks in the

EOP Bridge program into which an EOP eligible student might be assigned, including the LSAMP program, and some are designed to offer remediation. The EOP Bridge program is highly structured and provides an environment and support structure that prepares students socially and academically for a smooth transition into the first year of their university experience.

Based upon these experiences we will offer an intensive summer STEM Academy for students who need help in math or science prior to entering SDSU-Georgia. The STEM Academy will provide three weeks of intensive academic studies designed to improve writing, math, basic science, and study skills focused toward meeting writing and math competency requirements, and success in the SDSU-Georgia program.

STEM Summer Academy

Drawing from the successful EOP Summer Bridge model, the STEM Summer Academy will be an intensive 3-week summer workshop for incoming students who need additional preparation for success in a STEM discipline. The goals of the STEM Academy are to build a strong foundation of learning success by providing students with an early introduction to the program, and to improve academic self-efficacy by providing students with an academic experience that allows them to practice the application STEM skills toward the resolution of real-world problems.

The STEM Academy will use a problem-based approach to accomplish a core set of learning objectives. At the end of this program, students will be able to:

1. Apply the use of algebra and/or calculus to a lab assignment/problem.
2. Apply statistical reasoning to a lab assignment/problem.
3. Apply principles of physics to a lab assignment/problem.
4. Apply principles of stoichiometry/chemistry to solve a lab assignment/problem
5. Develop a proposal for an evidence-based problem solving approach to a lab assignment/problem and present it orally to an audience of their peers.

The learning outcomes will be achieved through by integrating these topics into five modules that are organized around a specific “problem”, coupled with 1 capstone that is integrative and interdisciplinary, and exposes students to how the learning outcomes apply to real problems. The five different modules are:

1. Math
2. Statistics
3. Physics
4. Chemistry
5. Applications

We will select illustrative, real-world examples in order to demonstrate the application of principles of mathematics, statistics, science, and engineering. Although we will use examples that closely relate to experiences of students from Georgia, we have used problems associated with climate change as an example of application to real-world problems that we have used in San Diego. Extreme events, such as the New Orleans Hurricane Katrina massive flood, can be used to demonstrate the application of major principles in physical science and quantitative reasoning to problems related to the flooding. For example, the superposition principle can be applied to waves traveling in the same or opposite directions in the Mississippi River channel and flood control canals) and calculations of lake retention

time can be used to examine water retention in Lake Pontchartrain and the Mississippi River channel and its use in flood mitigation. In this example students would also learn about 1) human reliance on the levee system around New Orleans and three main sources of flood hazard in that area; 2) the role of levees in general, why they fail, what floods they are designed for; whether they can fully eliminate risk of flooding; 3) changes in duration, intensity and frequency of floods due to global warming 4) the effects of flooding on water pH, etc.

Students will meet with instructors for 3 hours on the first four modules each morning, then after lunch work with instructors on solving the applied problems, individually and in groups. In each one-week module, the instructor(s) will present students with a real-world problem, which typically will be linked to an overarching thematic issue that requires the utilization of that week's focal topic to address. In the final week, students will work in small groups and integrate concepts across disciplines to examine a problem of their choice related to the thematic issue and make predictions or draw conclusions by developing a hypothesis, then applying mathematics and statistics, biochemistry and chemistry, and physics and/or engineering to the problems caused by flooding by hurricane Katrina and future extreme climate events. These student groups will be asked to present their work in the form of a "PechaKucha" (i.e., rapid and exciting; 20 slides at 20 seconds each) power-point presentations to their classmates at the conclusion of the program.

In addition to the course content, we will use portions of afternoon work time to present students with extra curricular content aimed at facilitating professional development and general academic readiness. Periodically over the course of the 3 week program scientists and engineers from academia and industry will visit and engage students in discussions of real life applications of integrated science, math, and engineering concepts; of the value of strong study habits; about careers in STEM disciplines; and their own experiences during their careers.

We recognize that developing the abilities to identify and achieve personal academic goals are critical to academic success yet are sometimes difficult for first-time freshmen to accomplish quickly in the transition from high school to college, so the STEM Academy will also integrate curriculum that fosters those capacities. We will draw from "Foundations for Learning" training adopted from our MESA program (originally created by Downing in 2011). The Foundation for Learning training focuses on awareness of what is needed for college readiness and success; use of successful approaches, strategies, plans, and personal strengths to achieve their learning goals; and support and tools for success, including learning styles, lecture videos, and online resources.

While the STEM-Start Summer Program is structured to be open to a wide array of students, it is designed to target and support socially vulnerable students who are often overlooked. The program is designed for fully "college-ready" students, who need only to acquire basic knowledge or (re)introduction to STEM skills to be more successful in their first year, and aims to increase retention and graduation rates of STEM majors by preparing them for the challenges of college life and constructing integrative knowledge they can use for higher order reasoning and problem solving as life-long learners. Thus, the proposed STEM Academy will facilitate a sense of shared community and identity among the participating students while providing continued academic support to help them excel in their first year.

The STEM Academy will also offer Mathematics and Chemistry Placement Examinations to determine student qualification for enrollment in STEM degree programs. The results of the examinations will be used to define the remedial course materials, course structure, duration, schedule, etc. For example,

students with Chemistry deficiencies will be invited to participate in a STEM Academy that could include a modified Chemistry 100 curriculum. [Chemistry 100 is an introduction to general chemistry.] By the end of this course a successful student would be able to:

1. Execute basic chemistry calculations such as unit conversions and stoichiometry;
2. Explain the basic principles of atomic theory and chemical bonding;
3. Quantitatively and qualitatively describe physical and chemical properties of matter;
4. Illustrate the concept of dynamic equilibrium with acid-base chemistry;
5. Analyze a problem and decide the best method to solve;
6. Understand how the material relates to examples drawn from news and life;

1.2.1 Location

It is intended that the STEM Academy will initially be administered by faculty from the main SDSU campus using facilities at TSU. However, we will subsequently expand the STEM Academy to be taught by faculty from Georgia to enhance access to this program. Offering the STEM Academy at CIE facilities may allow cost-effective access for Socially Vulnerable students from outside of Tbilisi. Finally, students from socially-disadvantaged groups that show either aptitude or willingness to participate, but may have difficulty with the Georgian National Examination may be offered targeted National Examination preparatory courses in addition to the English Academy or STEM Academy courses.

(Note: several of the classrooms and facilities being renovated under the MCC funded program may serve the needs of the STEM Academy, especially during the summer months when “short, intense” remedial programs may be offered prior to commencement of degree program classes in the Fall of 2015.)

1.2.2 Programs and Cycle

(TBD)

1.2.3 STEM Academy Features

- Class sizes of up to 30 students or less to allow for limited individualized attention from the instructor and Teaching Assistant (TA).
- Customized curricula addressing key deficiencies in mathematics and/or sciences based on the results of the assessment exams.
- Intensive summer program devoted to advancement of mathematics and/or sciences proficiency to allow for successful performance in subsequent testing, qualification for enrollment, and performance in degreed program courses.
- Access to computer facilities, textbooks, study materials and online library resources
- Certificate of Completion upon successful completion of the course(s).
- Personalized counseling and academic assistance.

1.2.4 Application Requirements

Application to STEM Academy will follow the same procedures as outlined in the ELA program, refer to section 1.1.4, above.

1.2.5 Commitment to SDSU-Georgia

Procedures as defined in section 1.1.5, above, will be applied to the STEM Academy as well.

1.2.6 Informal Assessment of Students

Procedures as defined in section 1.1.7, above, will be applied to the STEM Academy as well.

1.2.7 Required Forms

Procedures as defined in section 1.1.8, above, will be applied to the STEM Academy as well with modifications to the CIE forms as may be required.

2 Student Aid Programs, Including Loans and Grants

In addition to the ELA and STEM Academy programs, the second core area for the use of GRDF funding to support student enrollment and retention is through financial aid programs including scholarships to subsidize the cost of tuition and grants to assist with living expenses, particularly for those students from outlying areas of Georgia. The financial aid will include both merit and needs based grant awards with particular focus on assisting eligible students from the under-represented and disadvantaged groups.

2.1 Scholarships and Aid Grants

Student scholarships and financial aid grants are a critical component of the SDSU-Georgia tuition-based STEM undergraduate degree program. SDSU recognizes that the government of Georgia finances higher education and its public institutions (e.g., TSU, ISU, GTU, and others). While some Georgian students seek higher education at foreign institutions and pay a premium in tuition and other costs, many families have limited resources to support the high cost of foreign education, which includes significant costs in housing, subsistence, and other expenses. Accordingly, SDSU-Georgia includes scholarships and financial aid grants to make the cost of higher education in an accredited STEM degree program available to a larger population of Georgian students.

The Student Aid Program is budgeted to support up to 25% of the student body in any given enrollment year with an average merit or needs-based scholarship of approximately \$4,000 and/or a student aid grant of up to \$1000 to be used for living and other expenses. The living expenses grant is viewed as an innovative and culturally appropriate approach to facilitating the participation of rural and socially-disadvantaged students that may encounter greater logistical obstacles with attending the university in Tbilisi. Funding for this Program is primarily from the initial allocation of GRDF funds with Government of Georgia “lump-sum” and tuition-based revenue supplementing the program beginning in AY16/17 as the student population increases to 1000 students. The actual allocation of scholarships and grants will depend on student enrollment and financial need; costs of the ELA, STEM ACADEMY, and student life Activities; and availability of additional GRDF allocations in subsequent years.

Scholarships and Aid grants will be based on student merit and/or the demonstration of financial need. For merit scholarships, we propose to use a combination of one or more of the following: 1) Results of the National Examination, 2) high school transcripts, and/or 3) placement examinations. One key factor in the needs-based determination is whether or not the prospective student’s family is eligible for pecuniary social assistance from the Government of Georgia Social Services Agency. Individual students may be designated as eligible for more or less than the \$4,000 average award. Similarly, national examination and other merit criteria combined with the demonstrated need of students may allow for greater than 25% of the enrolling student body to receive some level of aid (although at a total average level that would be, by necessity, lower than the projected \$4,000/student). A key aspect of the budget is that it should allow for maximum flexibility, with determinations to be made during the enrollment period based on the merit and needs-based criteria and composition of the incoming and returning cohorts of students.

3 Student Life Activities

Academic support, particularly student academic advisors, mentors and tutors, have all been specifically contemplated in the project plan and budget to include both group and one-on-one student services. These programs are common and popular with students at SDSU, and will be implemented with shared governance between SDSU-Georgia, Partner Institutions, and the SDSU-Georgia student body.

3.1 Student Advisors

SDSU-Georgia plans to recruit qualified student advisors such as mentors, tutors, and other staff who would work directly with students having difficulties with academic course work. In addition, teaching assistants would be engaged as needed to supplement the teaching staff, in particular but not exclusively, for higher level courses and laboratories. The assistants would be employed at a modest level of compensation (e.g., 10 GEL/hour) for up to 20 hours per week (this is the level-of-effort cap for student employment at SDSU on research projects and other institutional programs).

3.2 Student Internships

One of the more successful student programs is internships with industries in the STEM degree area of study. SDSU-Georgia as part of its outreach efforts will seek to establish internships for upper classmen (Juniors/Seniors). GRDF funds could be used to either provide paid internships during semester and summer breaks or to subsidize paid internships. For example, an internship with a local company in the computer engineering business operations area may be established for a Computer Engineering degree junior to work for a 2-3 month period during the summer break. The compensation could be paid using the company's funds, GRDF funds, or a combination. The objective would be to provide the student with industry experience, expose the company to high caliber Georgian students, and facilitate job placement upon graduation – all of these benefits are currently being realized through ongoing SDSU internship programs in San Diego. A goal would be to competitively select, based on academic performance and interest, qualified students interested in the program. Compensation could be in the order of 10-15 GEL per hour.

3.3 Student Clubs

Student clubs focused on particular disciplines and career opportunities will be supported with GRDF Investment. Activities will include those shown to improve recruitment, retention and student success at all levels of baccalaureate education, and for multiple underrepresented or disadvantaged student groups. For example, activities may include student invited speakers who will discuss different careers, new advances in sciences and engineering, issues related to STEM ethics and policy, and other areas of student interest. Additionally, field trips to local industries, environmentally relevant sites, and arts and culture events could be funded to provide students with more diverse, real-world experiences. Peer-to-peer tutoring opportunities that help students with learning and teaching skills; meetings with SDSU-Georgia faculty members to discuss a wide range of topics related to STEM and higher education; and other functions to promote student interactions outside of the classroom are all important components of an active and fulfilling university environment.

3.4 Student Communities

In addition to these aforementioned academically related student clubs and engagement opportunities, we plan to implement other programs that build a sense of culture among the students participating in the joint program. For example, SDSU basketball games are extremely popular with our students, providing both a social outlet and instilling a sense of pride in the university. Using GRDF Investment support, we could stream the games to a lecture room in Georgia to enable SDSU-Georgia faculty and students to experience a popular component of student life in San Diego. The timing of many of these

games would allow real-time video streaming. Other potential connections to San Diego based student live activities could also be explored.

3.5 Student Services

Library and virtual resources will be provided via partial GRDF Investment. Advanced financial (Bloomberg Terminal) computers, as well as access to SDSU's Infodome periodical subscriptions will be accessed via SDSU-Georgia students' RED Identification Number (RED ID). The RED ID serves as the key to SDSU's complete suite of virtual student services, and will be issued as a matter of course during the admission process. These services will be made available through the SDSU campus Library. Subscription fees will be paid using the GRDF funding.

4 Budget

The GRDF investment funds are heavily leveraged in CY2 and CY3 to support the start-up costs of the English/STEM programs, scholarship and student aid, and other student services initiatives in advance of receiving revenues from other sources (i.e., GoG lump sum and Tuition).

Of the initial \$2.6 million dollars of GRDF funds to be provided, we propose to allocate approximately \$500,000 per year for CY2 (AY15/AY16) and CY3 (AY16/AY17) to support the ELA and STEM ACADEMY programs. Depending on the number of students enrolled in the programs, additional funds may be allocated to cover operational costs for instructors, student assessments, recruitment and course materials, and other related costs. Of the \$500,000, we have allocated approximately \$200,000 for the ELA services provided to up to 200 students a year. For the STEM ACADEMY, the staffing and operational activities are estimated at a cost of \$400/student, in addition to instructor salaries for a total of about \$200,000 for up to 200 students a year. An additional \$100,000 is allocated for ELA and STEM ACADEMY administration and other direct costs. These efforts and expenditures are exclusively dedicated to identifying and preparing students, with particular focus on underrepresented and disadvantaged students, for matriculation into a STEM degree program in CY2 and CY3.

Because scholarship aid is designed to be part of the long-term sustainability of the program, substantial scholarship aid is supported by the revenue model of the program. In particular, we are proposing an allocation of GRDF funding of \$625,000 in scholarships and aid for CY2 and CY3. For example, in the first enrollment year (AY 2015/2016), if SDSU-Georgia meets the target enrollment of 500 students approximately 25% (125 students) would receive on average a \$4000 scholarship and a \$1000 financial aid grant for a total funding requirement of approximately \$625,00. In AY 2016/2017, the funding requirement would double if we met the target enrollment of 1000 students (500 new freshmen and 500 continuing sophomores). The additional funding would come primarily from the Government of Georgia "lump sum" allocation of 2250 GELS per student enrolled in a degree program.

Depending on the success of the initial program, student enrollment, and overall needs of the student population, we propose to allocate \$100,000 for CY2 and CY3 of the initial GRDF funding to progressively establish and fund student life activities, beginning with such initiatives as student advisors/mentors (3.1) and student services (3.5). Other potential activities including internships (3.2) and international programs (3.6) would be phased in as our student cohorts enter their junior and senior year and are taking upper division courses. Additional activities such as student clubs (3.3) and student communities (3.4) are lower cost items that would be established as the student population increases and the students become acclimated to the academic environment.

As additional proceeds from GRDF become available, these funds will supplement operational funds to support the kinds of activities noted above. New scholarship and student aid strategies using additional GRDF proceeds will be appropriately reviewed and approved by the Advisory Board.