

WORK ORDER

This Work Order, made and effective as of the latest date beneath each party's signature below (the "Effective Date") is issued pursuant to the 2010 Master Software License, Services and Maintenance Agreement (as thereafter amended) between **Texas A&M University Corpus Christi** ("TAMU-CC"), an institution of higher education for the State of Texas, for and on behalf of the Texas Connection Consortium ("TCC") and the TCC Members and Ellucian Company L.P. (successor by assignment to SunGard Higher Education Inc. and hereinafter referred to as "Service Provider"). All terms and conditions in the 2010 Master Agreement, as amended, are applicable to this Work Order. In addition, and notwithstanding anything to the contrary in the 2010 Master Agreement, the payment terms governing this Work Order shall be as specified herein.

Both the transaction provided for in, and the fees due under, this Work Order are non-cancelable, and the amounts paid under this Work Order are nonrefundable, except as expressly provided for in this Work Order. By the execution of this Work Order, each party represents and warrants that it is bound by the signature of its respective signatory.

1. PROFESSIONAL SERVICES, GENERALLY

As requested by **Collin College**, Service Provider will provide the Professional Services outlined in attached Exhibit 1.

2. CERTAIN TCC MEMBER RESPONSIBILITIES

TCC Member's obligations will include, without limitation, the following:

- Providing a single point of contact with adequate decision-making authority to address all task activities defined with the Scope of Services;
- Providing on-going communications to Service Provider in understanding changing TCC Member priorities and scheduling requirements;
- Assisting in the development and refinement of TCC Member operating procedures to facilitate the delivery of all Service Provider service deliverables defined in the Scope of Services;
- Providing access to assigned facilities, software directories and environments as required to the assigned Service Provider staff; and
- Providing written notice to Service Provider forty-five (45) days prior to the Project Implementation Commencement Date.
- Providing written notice to Service Provider at least thirty (30) days in advance of cancellation or rescheduling of scheduled services, otherwise TCC Member will remain obligated to pay for such scheduled services.

3. FEES

The fees and terms of payment for the Professional Services specified in this Work Order are specified in attached Exhibit 1. TCC Member shall pay each invoice under this Work Order as otherwise provided for in the 2010 Master Agreement.

4. INTEGRATION PROVISION

The TCC Member will be invoiced directly for all Professional Services directly from Service Provider as otherwise provided for in the 2010 Master Agreement. Both the transaction provided for in and the fees due under this Work Order are non-cancelable, and the amounts paid under this Work Order are nonrefundable, except as expressly provided for in this Work Order. By the execution of this Work Order, each party represents and warrants that it is bound by the signature of its respective signatory.

Pursuant to Section 10(g) (Extended Obligations) of the 2010 Master Agreement, this Work Order is not required to be co-terminus with the 2010 Master Agreement, and may extend beyond the Term of the 2010 Master Agreement. In such instances, the terms and conditions of the 2010 Master Agreement shall be incorporated within and continue to apply through the expiration of the period of time as agreed upon within this Work Order, and the terms and conditions of the 2010 Master Agreement will be deemed continuing and in full force and effect.

This Work Order, together with the 2010 Master Agreement, constitutes the entire understanding of Service Provider and TCC Member regarding the subject matter of this Work Order.

Agreed to in accordance with the 2010 Master Agreement:

Collin College ("TCC Member")

Service Provider

By: _____

By: _____

Printed Name: Ralph G. Hall

Printed Name: _____

Title: Vice President of Administration and CFO

Title: _____

Date: _____

Date: _____

EXHIBIT 1

TABLE 1 – PROFESSIONAL SERVICES:

Description ⁴	Service Amount	Hourly Rate ¹	Estimated Fee ^{2,3}
Phase I: Organizational and Readiness Review, Project Planning	48 person hours	\$187	\$8,976
Phase II: Installation, Configuration, Verification, and Training	160 person hours	\$187	\$29,920
Phase III: Deployment	84 person hours	\$187	\$15,708
Project Management	30 person hours	\$187	\$5,610
Load Testing Software Rental Fee	0 – 4,999 Virtual Users	Fixed Fee	\$10,000
On-Demand Subscription Library - Knowledge Pack Pro	5 users	One Year Subscription	\$6,250
TOTAL			\$76,464

Notes:

¹ Where a specific number of person-hours is quoted for a particular functional category in the above Table 1, unused hours from such functional category may be moved to another functional category listed within the applicable table or may be used for the performance of other Professional Services agreed to by Service Provider and TCC Member Project Managers, provided that all such Professional Services must relate to the implementation project described in the project plan to be agreed upon by the parties.

² The actual fee for Professional Services will vary, depending upon the quantity of Professional Services provided, and the date upon which such Professional Services are rendered. The rate for hourly Professional Services will be as follows: \$187 per person-hour for each person-hour rendered between the Work Order and ending one (1) year thereafter.

³ Travel and living expenses are additional and will be billed monthly as incurred.

⁴ See Statement of Work in Attachment A.

PAYMENT OF SERVICES AND CHARGES: Service Provider will invoice TCC Member directly for all services and applicable charges on a monthly basis in arrears and payments shall be due thirty (30) days from the date of invoice.

For the Professional Services provided for in this Work Order: (a) Service Provider will invoice TCC Member for all hourly Professional Services identified in Table 1 on a monthly basis, as such Professional Services are rendered; (b) For the Fixed Fee Professional Services provided for in this Table 1: TCC Member will pay Service Provider the fixed services fee of \$16,250 as follows: \$10,000 (Load Test Fee) payable on Execution Date of this Work Order; an additional \$6,250 payable on completion of the education services. (c) The On Demand Subscription Library identified in Table 1 sets forth Licensee's yearly subscription fees for the defined Subscription Term. Subscription Fees are due and payable annually, in advance, by the first day of the Subscription Year for which such Subscription Fees are being remitted. Late fees, calculated as otherwise provided for in the Agreement, will accrue on past-due Subscription Fee amounts. (d) Service Provider will invoice TCC Member for all other applicable charges (such as travel and living expenses) on a monthly basis, as TCC Member incurs the charges. Invoices shall be paid in accordance with Chapter 2251, Texas Government Code, as set forth in the 2010 Master Agreement.

Statement of Work – Luminis Platform 4 to 5 Migration Services Starter

Luminis Platform 4 to 5 Migration and Implementation Services Starter

Elucian Company L.P. (hereinafter referred to as "Service Provider") will provide Collin College ("Licensee") with the following installation, configuration, and consulting services in support of Licensee's migration from Luminis Platform 4 to the Baseline Luminis Platform 5 ("LP5") Component System ("Luminis" or "Luminis Platform").

Service Provider will provide Licensee with technical and functional consulting, installation, training, and support in connection with Licensee's migration from Luminis Platform 4 to Luminis Platform 5. This includes installation and configuration of Luminis in a test environment, in a standard two or more server architecture in accordance with the *Luminis Platform Hardware Recommendations* (available in the customer support center: lp50003recmd.pdf), with up to 2 web tiers. Data integration with Banner, Single Sign-On integration with Internet Native Banner ("INB") and Banner Self-Service ("SSB"), implementation of Banner portlets for Luminis, and load testing of the Licensee installed production ready Luminis environment are also included.

The Luminis services will consist of the following phases:

Phase 1: Organizational and Readiness Review, Project Planning

- Pre-initiation planning
- Technical Planning Workshop

Phase 2: Installation, Configuration, Verification, and Training

- Luminis Installation
- Banner Event Publisher and Banner Enterprise Identity Services Implementation
- Content Administration Training

Phase 3: Deployment

- Load Testing

Specific Exclusions:

- eLearning integration in support of learning management systems is not covered as part of the migration services, and is available as an optional service.
- Any existing Single Sign On (SSO) connectors are not migrated as part of the migration services. Optional services are available for this effort
- Migration of internal Sun One email and calendaring data is not included as part the migration services.
- Implementing Luminis in a cluster configuration is outside the scope of this service
- Integration with other third-party systems is outside the scope of this service Implementing Luminis using Multi-Entity Processing ("MEP") is outside the scope of this service
- The services do not include the installation of the production-ready Luminis environment

Phase 1: Organizational and Readiness Review, Project Planning

Pre-Initiation Planning

Service Provider consultants will work with Licensee to plan for both the technical and organizational activities required to install, configure, and deploy the Luminis Platform. To prepare for the Luminis Platform installation, a Service Provider technical consultant will conduct a Technical Assessment call with Licensee's technical personnel to review and recommend hardware requirements, seek to understand Licensee's information technology infrastructure, and address initial questions regarding the technical configuration. A Service Provider portal consultant will also conduct preparatory calls with the Licensee to help establish

baseline project expectations, scope, and project-team membership. After the initial assessment call, Service Provider consultants will conduct a formal project initiation and a technical planning workshop, and will complete information gathering and planning to develop and deploy content using the Luminis Platform.

Certain Service Provider Responsibilities

- Conduct technical assessment calls
- Analyze and recommend hardware requirements for all test and production environments

Certain Licensee Responsibilities

- Identify the necessary participants based on recommendations from Service Provider
- Procure and configure required hardware for all test and production environments

Technical Planning Workshop

Service Provider technical consultants will conduct a Technology Planning Workshop that is designed to frame the prioritized technical requirements and plans against existing information technology systems, technical goals, and priorities. This workshop covers topics such as the Luminis architecture, security, user authentication, user account management, and integration with Banner. This information can then be used by Licensee information technology leaders to build a framework for planning the implementation. The data gathered in this workshop will be analyzed by Service Provider consultants to define viable implementation options for the installation and configuration of the Luminis Platform. This is delivered and reviewed with Licensee project team in the Technical Approach Document.

Certain Service Provider Responsibilities

- Identify the required types of participants and skill sets
- Conduct Technical Planning Workshop
- Develop the Technical Approach Document

Certain Licensee Responsibilities

- Identify the necessary participants based on Service Provider recommendations
- Make available and provide access to identified participants

Phase 2: Installation, Configuration, Verification, and Training

Luminis Platform 5 Installation and Banner Integration

Service Provider technical consultants will install the Luminis and integrate it with the Baseline Banner Component Systems operated by Licensee in a test environment only. The integration will be comprised of the data integration between Banner and Luminis, implementation of SSO for INB and SSB, based on CAS, and the Banner portlets for Luminis. Banner Event Publisher ("BEP") and Banner Enterprise Identity Services (BEIS) is a required component for facilitating SSO between Luminis and Banner INB / SSB. Service Provider technical consultants will install BEIS configured with Luminis internal CAS.

Because a Luminis Platform implementation requires a rigorous installation process involving a number of complex software components, Service Provider consultants will perform the test installation, validate its core components, and certify it for the testing phase. At a later time, Licensee will install and configure the "production ready" system and migrate test data into the "production ready" system to prepare Licensee for a production go live. Licensee is responsible for the actual data cleansing and migration and promoting the Luminis production ready instance into the live production environment.

Upon completion of the installation a Service Provider technical consultant will review the installation and configuration with Licensee's information technology staff. If the Luminis Platform is installed prior to Banner, then the related installation and configuration activities that depend on Banner will be scheduled for a later

date in the project. A Service Provider technical consultant will provide a remote installation and configuration of the Luminis Platform in a test environment as described below.

- Conduct a pre-installation review and test connectivity to Licensee systems
- Install Luminis and associated components
- Integrate Luminis with supported e-mail and calendaring systems (Optional)
- Verify and test Luminis Platform installation integrity
- Demonstrate backup scripts and review customization options with Licensee
- Configure automatic startup/shutdown scripts
- Install, configure, and test integration between Banner and Luminis
- Install, configure, and test BEP and BEIS
- Install and configure a single CAS instance as part of Luminis (Internal CAS)
- Configure SSO to SSB and INB, utilizing the SSO Manager
- Install, configure, and test Luminis Portlets for Banner
- Develop the Installation and Configuration Completion Reports, detailing the tasks performed during the installation and configuration activities and also including
 - Final review and verification of the installation and configuration checklists
 - Documentation of outstanding issues and ownership of the issues for resolution
 - Recommendations in specific areas, as needed and Service Provider support guidelines
- Review the Completion Reports with Licensee.
- Review options and procedures for migrating data from test to production environments.
- Install, configure, and test baseline supported email integration (Gmail)
- Register Blackboard Learn in the CAS service management page.

Deliverables

- Understanding Identity Integration with Banner General Presentation – Delivery of electronic copy for distribution to all participants in the workshop. Knowledge of the structure and function of BEIS features;
- Trip Report – Summary of activities during workshop including accomplishments, attendance and resulting action items, including an installation checklist.

Certain Service Provider Responsibilities

- Luminis – Install Luminis Platform in a test environment, with up to two (2) web tiers.
- Baseline Identity Components – Installation and configuration of BEIS components in a test environment
- Verification of the installation and configuration of the Identity components;
- Validate Luminis Platform functionality and integration with Baseline Banner Component Systems

Certain Licensee Responsibilities

- Download LP5.1 or above, and associated patches, from the Customer Support site
- Download BEP and BEIS 8.2 or above, from the Customer Support site
- Have the necessary hardware, hardware-related software, and operating systems installed and functional prior to installation
- Have the appropriate versions of Service Provider Banner General, Banner Intcomp, Oracle Database and Oracle WebLogic / OFM installed in a test environment in accordance with the software compatibility matrix available in the Service Provider's custom support center.
- Provide a contact person who will be responsible for helping Service Provider with logistics
- Provide access to appropriate technical staff
- Provide access to necessary hardware and software
- Provide access to Licensee documentation and information technology areas
- Provide remote access capability for all required remote activities.
- Perform data cleansing and migration
- Install and promote Luminis into live production environment

- Provide computer internet, systems that support WebEx screen sharing and audio (telephone) access for participants as well as appropriate work space and projection equipment if the training is to be in a group environment.
- A full BEP / BEIS implementation is included. In case Licensee chooses to only have the SSO Manager installed by Service Provider, Licensee will ensure the GUID used to facilitate SSO is stored in the Banner GOBUMAP table. If Licensee opts for optional BEIS provisioning services to provide a full installation of BEIS, this can be facilitated through BEIS.
- Configure Blackboard Learn for CAS support.

Certain exclusions

- The services do not include Luminis Platform point upgrades as new releases become available during the execution of the Luminis Platform implementation services.
- The Services do not include installing an external CAS server. The Services includes installing and configuring internal CAS, or configuring Luminis with a pre-existing enterprise CAS server.
- The installation and configuration services do not provide support hours for an Enterprise Identity Management Implementation.
- Services do not include data integration in support of Banner to BB Learn eLearning integration

Phase 3: Deployment

Load Testing

Once Licensee has the production ready environment established, Service Provider technical consultants will perform up six (6) Load Tests, each test not to exceed two (2) hours over the course of a maximum of two weeks within a 30 day calendar period.

Load tests of the Luminis production environment are designed to validate expected performance prior to deploying the portal. **Note, included services only include load testing of the Luminis portal, load testing of Single Sign On connectors to external systems or SSO into Banner SSB are out of scope.**

The load tests will use test software to provide a simulation of how the Luminis Platform system will perform in terms of login response time and system stability under a pre-determined concurrent user load. They will also provide information on the response time of the various Luminis Platform system perform components during the test. The tests will be scripted based on the end user behaviors that Licensee expects during normal and peak usage periods. Service Provider technical consultants will work with Licensee to create up to six (6) custom scripted end user behaviors with sustained concurrent load levels Licensee expects during normal and peak usage periods up to a maximum of 4,999 virtual users. The results of the tests and recommendations will be review with Licensee's project team.

Certain Service Provider Responsibilities

- Generate load testing scripts
- Load testing of the Luminis Portal Only
- Develop the Load Testing Report

Certain Licensee Responsibilities

- Licensee will identify a single point of contact responsible for communication with Service Provider, including the review and approval of project deliverables.
- Licensee will work with Service Provider consultants to create a list of user behaviors for student, faculty, and employee user roles to be used as a basis for creating test scripts. The list of user behaviors is not to exceed two (2) per user role for testing for a total of six (6) user behaviors. User behavior is defined as a specific test case, test scenario or use case. Only portal behaviors will be permissible. Examples of user behaviors include:
 - Log into the Luminis Portal
 - Navigate to certain tabs
 - Perform actions within Luminis Platform
 - Logout

- Licensee has licensed, installed, configured, and performed basic functionality tests of the required software infrastructure for the test environment.
- Licensee will load test accounts into the Portal System for Load Testing purposes.
- Licensee will configure the network in to allow the Load Testing Service to connect remotely to the test environment to conduct the tests.
- Licensee will modify network settings as needed so that large numbers of connections to Application from a single source are not delayed or restricted. This is to include any firewall settings, packet shaping software, and load balancers.
- Licensee will be able to set aside designated time(s) for Load Testing and will notify its constituents of possible service disruptions during normal weekday business hours.
- Licensee will provide a technical contact responsible for monitoring the servers under load as load is applied and working to resolve issues that may impede the Load Test. Additional support from the Licensee networking, systems, or DBA staff should be available to resolve problems.
- Licensee will remove any applied modifications for Load Testing once the tests are complete.
- Licensee will provide all necessary remote network access and credential details for the Application environment to Service Provider.
- Licensee will make all necessary arrangements to allow for Service Provider to deliver the Load Testing service with load generators outside of Licensee's defined environment.

Exclusions

- Services do not include load testing of Banner Self Service (navigation)
- Services do not include load testing of SSO connectors to external systems (including SSO into SSB or INB)

Education and Training

- Content Administration Training - a computer based training course to support the Service Provider onsite Content Administration Training
- Luminis Platform System Administration - Service Provider will provide training on managing the Luminis system and components including user groups, email, calendar, Group Studio, and Course Studio. Topics include Luminis Platform server and database management, system administration, backup and restore procedures, user account and role management, integration capabilities, and basic troubleshooting. This training is provided onsite.
- Luminis Platform Training for End Users - This training will prepare an institution's trainers, technology-support personnel, and end users to take full advantage of the feature set that the Luminis portal offers. Topics include navigating and personalizing portal views and best uses of home, public, and private pages. In addition, learners will gain an understanding of the relationships between tabs, pages, and portlets enabling them to create their own personal layouts. Demonstrations and interactive simulations provide participants with an opportunity to perform related tasks in a simulated environment. This web-based training session will be delivered via Service Provider's On-Demand Subscription Library.
- Luminis Platform Training for Content Administrators - The purpose of this training is to provide content administrators with the requisite knowledge and skills to manage portal content. The training will address all elements of portal content development including building page layouts using a variety of page types, creating portlets, as well as managing and creating Communities for communication and collaboration. Additional topics include delegating permissions and branding. Demonstrations and interactive simulations provide participants with an opportunity to perform related tasks in a simulated environment. This web-based training session will be delivered via Service Provider's On-Demand Subscription Library.

Certain Service Provider Responsibilities

- Deliver training described above
- Provide associated training materials and workbooks

Certain Licensee Responsibilities

- Provide access to appropriate staff
- Provide access to necessary hardware and software
- Provide remote access capability for any required remote activities
- Provide suitable training space for training sessions

Breakdown of Service Hours

Luminis Platform 4 to Luminis Platform 5 Migration Services Starter			
Activity	Hours	Notes	Resources / Additional comments
Phase I: Organizational and Readiness Review, Project Planning	0		
Pre-Initiation Planning	8	Remote	4 Technical / 4 Functional
Tech Planning Workshop/Review	40	Onsite	Technical
Phase II: Installation, Configuration, Verification, and Training	0		
Luminis Installation (TEST)	0		
System Verification Luminis	4	Remote	Technical
Install (Luminis Platform, Glassfish, Banner Portlets, CAS) and Knowledge Transfer	40	Remote.	Technical Installation provides up to 2 web tiers.
System Verification BEIS / BEP	4	Remote	Technical
Banner Event Publisher	16	Remote	Technical
Banner Enterprise Identity Manager (Install, setup INB / SSB SSO) and Knowledge Transfer	40	Remote	Technical
Blackboard Learn LP5 CAS configuration	8	Remote	Technical
Gmail Integration Configuration	8	Remote	Technical
Training	0		
Content Admin Training	40	Onsite	Functional
Phase III: Deployment	0		
Load Testing	40	Remote	Technical; Covers portal only!
Project Management and administration	30	Remote	Project Management
Luminis Platform System Administration Training	44		Onsite
Total Hours	322		
Fixed fee Items			
Load Testing Software rental fee 0 – 4,999 Virtual Users	\$10,000		Typically Tier 1 through 4
On-Demand Subscription Library (Knowledge Pack Pro)	\$6,250	5 Users	One Year Subscription