STATE OF MICHIGAN
CENTRAL PROCUREMENT SERVICES
Department of Technology, Management, and Budget

525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **3**

to

Contract Number **071B6600129**

CONTRACTOR	
	Kunz, Leigh & Associates, Inc.
	28081 Southfield Road
	Lathrup Village, MI 48076
	John Leigh
	248-559-7910
	j.leigh@kunzleigh.com
	CV0036059

STATE			
	Program Manager	Jeremy Newman	DNR
		517-335-3260	
		newmanj2@Michigan.gov	
	Contract Administrator	Jennifer Bronz	DTMB
		(517) 249-0493	
		bronzj@michigan.gov	

CONTRACT SUMMARY			
LAND OWNERSHIP TRACKING SYSTEM			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE
August 30, 2016	August 29, 2019	1 - 1 Year	August 29, 2019

PAYMENT TERMS	DELIVERY TIMEFRAME

ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING	
☐ P-Card	☐ Direct Voucher (DV)	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS

DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		August 29, 2019

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$6,081,535.00	$47,270.00	$6,128,805.00

DESCRIPTION

Effective 9/5/2018 The contract has been updated to reflect a change in scope per LOTS Solution Change Control# 3 & 4 below and to add funds in the amount of $47,270.00 to the DNR Ownership Tracking System. $39,730.00 for Change Control 3 and $7,540.00 for Change Control 4. All other terms, conditions, specifications, and pricing remain the same. Per DTMB Procurement Services, Agency and contractor approval.

State of Michigan
LOTS Solution
Change Control #3
LOTS Solution - Treasury PILT Enhancements

General Information

System or Project ID/Acronym:	LOTSSOL	**Creation Date:**	6/20/2018
Client Agency:	DNR/DTMB	**Modification Date:**	
Author(s):	Dave Desrochers	**DTMB Authorized by:**	James Hogan

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This document may contain information of a sensitive nature. This information should not be given to persons other than those who are involved with this system/project or who will become involved during its lifecycle.

Change Control

Revision Date	Author	Section(s)	Summary
6/20/2018	Dave Desrochers	All	Initial Creation

Table of Contents

1. Overview

These requested changes are to streamline processes and provide efficiencies to Treasury, specifically in the annual preparation, generation, and printing of tax payments, as well as providing faster and more accurate uploading of payment information into the SIGMA system.

The specifics of each enhancement are listed in its own sub-section of section 2, along with the corresponding requirements captured and approved by Treasury staff. The column definitions for the new requirements are defined below.

New Requirements by Functional Area:

Column	Description
Type	This field defines the type of requirement captured and approved: • Business • Functional • Technical
Requirement	A short description of the necessary business, functional, or technical requirement
Notes	Further detail that helps with the understanding of the requirement

2. New Requirements by Functional Area

Tax Payment Preparation and Integration with DTMB Print Center

High level overview of requested functionality: This functionality would allow Treasury users of the PILT module in LOTS Solution to generate, preview, and batch transmit the annual tax payment records to the DTMB Print Center for printing and mailing. This would save approximately 2 full weeks of 2 resources' time on an annual basis.

Type	Requirement	Notes
Business	The system must provide an interface with the Print Center for handling PILT Print Center reports.	
Technical	An ftp folder must be configured and setup to accept Print Center reports for PILT.	
Technical	Server will need to be configured to allow access between the LOTS server and the Print Center server.	
Functional	The system must provide an authorized user with the ability to generate a header report for the Print Center.	This header report will be used by the Print Center as the address page. It will need to be compatible with the Print Center two window envelopes and include Treasury's return address.
Functional	The existing Local Unit Packet must include the Print Center report header report as the first report in the packet.	
Functional	The system must include a unique identifier on each report in the Local Unit Packet for the Print Center.	The unique identifier will be included in the upper right-hand corner and used by the Print Center to keep the reports together for a single recipient.
Functional	The system must allow an authorized user the ability to preview the report(s) prior to sending to the Print Center.	
Technical	The unique identifier in the report will be used to keep a recipient's information together.	
Technical	The same unique identifier on a subsequent page indicates additional information for the same recipient to be included in the same envelope.	
Technical	The size of the envelope used for PILT Print Center reports must be within the cost constraints indicated by Treasury.	
Functional	The system must set a date on the Process Tax Payment records after successfully sending to the Print Center.	

Payment Creation Records Export for SIGMA

High level overview of requested functionality: This functionality would allow Treasury users of the PILT module in LOTS Solution to mark process tax payment records as posted, and then export them in a format that is compatible with SIGMA. This will help ensure data integrity as it will reduce re-keying efforts by Treasury staff.

Type	Requirement	Notes
Business	The system must provide a User Interface to manage posted Process Tax Payment records for export.	
Functional	The system must allow an authorized user to mark process tax payment records as posted.	This would be an additional step in the Process Tax Payments process to mark records ready for payment processing.
Functional	The system must provide an authorized user with the ability to find Process Tax Payments that are ready for exporting.	Search fields would include fields such as Tax Year, Season, County (multi-select), Jurisdiction(multi-select), Is Posted, and Export Date (range)
Functional	The system must provide an authorized user with the ability to find Process Tax Payment records that have been exported.	This would provide the ability to find prior records utilizing the new functionality.
Functional	The system must provide an authorized user with the ability to generate a report of the posted Process Tax Payment information for export.	Reports in LOTS can be exported as csv (comma separated format) which is compatible with Excel. It will include fields such as: Vendor/Customer, Address code, Total Dollar per accounting template, Accounting Template(s), Location code, Tax Year.
Functional	The system should warn the user if the set of posted Process Tax Payment records for export have already been exported.	
Functional	The system should allow an authorized user to set an export date on a set of posted Process Tax Payment records.	
Functional	The system should allow an authorized user to clear the export date on a set of posted Process Tax Payment records.	

3. Impact to LOTS Solution Schedule

These enhancements are being considered outside of the currently planned release schedule for the LOTS Solution. Tentative scheduling discussions were assuming design and construction occurring late summer 2018, testing to occur in the fall of 2018, with implementation in November/December of 2018 for initial use in early calendar year 2019.

These timelines fall within the currently planned KL&A-led warranty period, and KL&A will work with DTMB and Treasury to align maintenance release windows to facilitate the release of this new functionality.

4. Impact to LOTS Solution Warranty Period

There is no extension of warranty implied by this change order. The existing warranty period ending on 2/28/2019 still applies. Once released, this new functionality will be covered under the duration of any remaining time of the existing LOTS Solution warranty period.

5. Cost

New Requirements by Functional Area	Cost
Tax Payment Preparation and Integration with DTMB Print Center	$25,225
Payment Creation Records Export for SIGMA	$14,505
Total	**$39,730**

6. Approval Information – LOTS Solution - Treasury PILT Enhancements

Approval Signatures

Role	Name/Title	Signature	Date
DNR Project Sponsor	Sharon Schafer Chief of DNR Finance & Operations Division	Sharon M Schafer	7/10/18
DTMB Project Sponsor	James Hogan DTMB General Manager supporting DEQ, DNR, and MDARD		7/10/18
DNR Product Owner	Michael Michalek Resource Analyst, Real Estate Division DNR	Mike Michalek	7/10/18
DTMB Project Owner	Michael Cooley Manager, Customer Service & Support Team (DEQ, DNR, MDARD)		7/10/18
DTMB Project Manager	Robin Krzciok Project Manager Enterprise Portfolio Office		7/11/18
Treasury Approving Manager	Alan Glanton Accountant Manager Treasury		7/10/18
KL&A Project Manager	Dave Desrochers KL&A Director, Service and Delivery		7/11/18
KL&A Contract Owner	John Leigh KL&A Partner		7/11/18

State of Michigan
LOTS Solution
Change Control #4
LOTS Solution – Reports Enhancements

General Information

System or Project ID/Acronym:	LOTSSOL	**Creation Date:**	8/13/2018
Client Agency:	DNR/DTMB	**Modification Date:**	
Author(s):	Dave Desrochers	**DTMB Authorized by:**	James Hogan

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Change Control

Revision Date	Author	Section(s)	Summary
8/13/2018	Dave Desrochers	All	Initial Creation

Table of Contents

1. Overview

These requested changes are to enhance currently developed reports for the new LOTS Solution to allow for altered data feeds from the RBDMS source system, as well as allowing for increased user reporting functionality by the DNR staff.

The specifics of each enhancement are listed in section 2, along with the corresponding requirements captured and approved by DNR staff. The column definitions for the new requirements are defined below.

New Requirements:

Column	Description
Type	This field defines the type of requirement captured and approved: • Business • Functional • Technical
Requirement	A short description of the necessary business, functional, or technical requirement
Notes	Further detail that helps with the understanding of the requirement

2. New Reporting Requirements

Type	Requirement	Notes
Functional	Append the well number to the well name on the following reports to remedy the change in the data feed from the RBDMS system: • All Statewide Wells for Operator & Lease • All Statewide Wells for Operator • All Statewide Wells not in UA by Lease • All Statewide Wells in UA by Lease • All Statewide Wells by Lease • All Statewide Wells in UA • All Statewide Wells not in UA • All Statewide Wells • Revenue Reporting Unit Detail Report	The RBDMS system used to send both the well name and well number in the well name field. Recent changes to the RBDMS field changed this functionality, and reports are no longer displaying information as needed by Minerals section users.
Functional	Allow for LOTS Solution users to generate multiple Lease Detail Reports at one time from a Lease Search results list.	Users would like the ability to search for a set of Leases, and then generate multiple Lease Detail Reports from one action instead of generating each one separately. Functionality will mimic Generate Parcel Detail Report.
Functional	Update the sort order for the Remittance Detail Report to use the Process Date.	
Functional	Add all the Maintain Flag reports to the Action Menu.	

3. Impact to LOTS Solution Schedule

These enhancements are being considered outside of the currently planned final release for the LOTS Solution. Tentative scheduling of these enhancements will be during the maintenance release windows scheduled for September or October 2018.

4. Impact to LOTS Solution Warranty Period

There is no extension of warranty implied by this change order. The existing warranty period ending on 2/28/2019 still applies. Once released, this new functionality will be covered under the duration of any remaining time of the existing LOTS Solution warranty period.

5. Cost

New Requirements	Cost
New Reporting Requirements	$7,540
Total	**$7,540**

6. Approval Information – LOTS Solution – Reports Enhancements

Approval Signatures

Role	Name/Title	Signature	Date
DNR Project Sponsor	Erik Eklund Chief Budget Officer DNR	Erik Eklund	8/13/18
DTMB Project Sponsor	James Hogan DTMB General Manager supporting DEQ, DNR, and MDARD		8/13/18
DNR Product Owner	Meghan Stevens Acting LOTS Product Owner Real Estate Division DNR		8/13/18
DTMB Project Owner	Michael Cooley Manager, Customer Service & Support Team (DEQ, DNR, MDARD)		8/13/18
DTMB Project Manager	Robin Krzciok Project Manager Enterprise Portfolio Office	Nicole Willard for Robin Krzciok	8-16-18
KL&A Project Manager	Dave Desrochers KL&A Director, Service and Delivery		8/13/2018
KL&A Contract Owner	John Leigh KL&A Partner		8/13/2018

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **2**
to
Contract Number **071B6600129**

CONTRACTOR	
	Kunz, Leigh & Associates, Inc.
	28081 Southfield Road
	Lathrup Village, MI 48076
	John Leigh
	248-559-7910
	j.leigh@kunzleigh.com
	CV0036059

STATE			
Program Manager	Jeremy Newman	DNR
	517-335-3260	
	newmanj2@Michigan.gov	
Contract Administrator	Jennifer Bronz	DTMB
	(517) 249-0493	
	bronzj@michigan.gov	

CONTRACT SUMMARY			
LAND OWNERSHIP TRACKING SYSTEM - DNR			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
August 30, 2016	August 29, 2019	1 - 1 Year	August 29, 2019
PAYMENT TERMS		DELIVERY TIMEFRAME	
ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING
☐ P-Card	☐ Direct Voucher (DV)	☐ Other	☐ Yes ☒ No
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	LENGTH OF OPTION	EXTENSION	LENGTH OF EXTENSION	REVISED EXP. DATE
☐		☐		August 29, 2019
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
$5,899,863.00	$181,672.00	$6,081,535.00		

DESCRIPTION

Effective 6/25/2018 This contract is hereby increased by $181,672.00 per the attached documentation. Three additional sprints are added to the overall contruction schedule. Full-system go-live will move to 8/21/2018. with the warranty period now ending on 12/19/2018. Extension of the warranty period now covers the period from 12/20/2018 through 2/28/2019. Revised payment schedule (see attached) is incorporated in to this change notice. All other terms, conditions, specifications, and pricing remain the same. Per DTM Procurement Services, Agency and contractor approval.

State of Michigan
LOTS Solution
Change Control #2

General Information

System or Project ID/Acronym:	LOTSSOL	**Creation Date:**	4/25/2018
Client Agency:	DNR/DTMB	**Modification Date:**	
Author(s):	Dave Desrochers	**DTMB Authorized by:**	James Hogan

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Change Control

Revision Date	Author	Section(s)	Summary
4/25/2018	Dave Desrochers	All	Initial Creation
5/1/2018	Dave Desrochers	Section 2: Exhibits 6 & 18 Section 5 Section 7	Addition of 6 new requirements per CCB discussion on 4/26
5/3/2018	Dave Desrochers	Section 2: Exhibit 20	Addition of 2 new requirements per Land Disposal discussion on 5/2/2018

Table of Contents

1. Overview

These changes to requirements were captured by KL&A during discovery, functional and technical JAD sessions. Details regarding business need and the existence of corresponding functionality in the legacy system were provided by DNR and DTMB stakeholders and DNR functional area Subject Matter Experts (SMEs). Once captured by the KL&A BAs, these new and removed requirements were recorded in Jama, and then began the review process by the LOTS Change Control Board (CCB). The list of new and removed requirements contained in this document have been reviewed numerous times by both LOTS Project Leadership and DNR/DTMB stakeholders and SMEs.

New Requirements by Functional Area:

Column	Description
ID	The KL&A requirement number. This number will be used throughout the life of the project, providing a completely unique identifier for each requirement, regardless of the exhibit with which the requirement is associated.
Name	A short name created by KL&A to help quickly identify the purpose of the requirement.
Description	This is the detailed requirement description captured from DNR/DTMB SMEs during JAD sessions that compose the newly requested functionality and is used as a foundation for Epic and User Story generation.

Removal of Requirements by Functional Area:

These are all requirements that have been determined to not be needed by DNR and DTMB SMEs.

Column	Description
ID	The KL&A requirement number. This number will be used throughout the life of the project, providing a completely unique identifier for each requirement, regardless of the exhibit with which the requirement is associated.
RFP #	The original requirement number from the RFP. This number, along with the Exhibit #, can be used to locate the requirement in the RFP.
Name	A short name created by KL&A to help quickly identify the purpose of the requirement.
Description	This is the requirement description from the Detailed Requirements Specification that accompanied the original RFP.

2. New Requirements by Functional Area

Exhibit 1: Maintain Parcel

Exhibit 1: Maintain Parcel ID	 Name	 Description
LOTS-LOTSREQ-2327	Parcel Status Should be System-Generated	The system must generate the appropriate parcel status when a parcel is created.
LOTS-LOTSREQ-2354	View Cases Associated with Parcel through All Documents.	The system must allow an authorized user to view a list of cases that are associated with a Parcel through any document. This should be done using the Case Search Results tool.
LOTS-LOTSREQ-2401	Display Message when Subdivision Required	The system must display a message on Parcels that are Platted and do not contain an associated Subdivision.
LOTS-LOTSREQ-2402	Display Message when Jurisdiction Required	The system must display a message on All Parcels that do not contain one or more associated Jurisdictions.
LOTS-LOTSREQ-2408	Require Parcel relation to Acquisition Document during Create and Move functions	The system must only allow a user to create a Parcel or Case Parcel related to a Document or Case Document that is an Acquisition Type Document. The system must also only allow the Parcel or Case Parcel to be moved between acquisition type documents. The system should enforce the following business rules: The system must only allow a user to create a Parcel that is related to an acquisition type Document. The system must only allow a user to create a Case Parcel that is related to an acquisition type Case Document. The system must only allow a user to move a Case Parcel to an acquisition type Case Document. The system must only allow a user to move a Parcel that is related to an posted acquisition type Document to another acquisition type Document. TECHNICAL NOTE: The following functions are not covered by this requirements business rules and may allow the user to circumvent these business rules: The Remove Parcel from Document does not require that the Parcel remains related to an acquisition type Document. A user can remove a parcel from an acquisition Document and leave it only associated with an disposal type Document. A user can also change the Document Type of an acquisition type Document to be a disposal type, even if it has parcels related to it.

Exhibit 3: System Reference Tables Part 1

Exhibit 3: System Reference Tables Part 1 ID	 Name	 Description

LOTS-LOTSREQ-2285	Add a Location to a Subdivision	When users choose to enter a Location for a Subdivision, allow adding Location to a Subdivision where;
		
		if a location is added with a private claim number:
		no other fields are required
		
		if a location is added without a private claim number:
		the minimum set of required fields is town, range, section, & quarter

Exhibit 4: GIS Interface

Exhibit 4: GIS Interface ID	 Name	 Description
LOTS-LOTSREQ-2422	Display Individual Parcel Without GIS Shape Via PLSS Data	The system should display the GIS location of a Parcels PLSS Locations in the GIS interface if a parcel does not have a GIS shape. The system should display the GIS location of a Parcel's Subdivision in the GIS interface if a parcel does not have a GIS shape or one or more PLSS Location.
LOTS-LOTSREQ-2441	Change and Choose Default Map Format	The system must allow a user to choose from available map formats (real estate, minerals) and store the user's preference.
LOTS-LOTSREQ-2442	Allow Measuring/Exporting in GIS Map	The system must allow a user to measure length, area, and latitude/longitude in GIS Maps for viewing parcel data and allow a user to Export the map as a PDF.
LOTS-LOTSREQ-2443	Allow User to View Current Location in GIS Map	The system must allow a user to go to the location of their device as determined by the best available location data in GIS Maps for viewing and searching for parcel data.

Exhibit 5: Link/Split Parcel, Build Deeds and Create Documents

Exhibit 5: Link/Split Parcel, Build Deeds and Create Documents ID	 Name	 Description
LOTS-LOTSREQ-2384	Filter deed templates	The system must filter the available deed templates based on the documents.
LOTS-LOTSREQ-2386	Build Bottomlands Deed Template	The system must allow authorized users to build a Bottomlands deed template.
LOTS-LOTSREQ-2387	Build Granted Easement deed template	The system must allow authorized users to build a Granted Easement deed template.
LOTS-LOTSREQ-2388	Build Release of Reverter deed template	The system must allow authorized users to build a Release of Reverter deed template.
LOTS-LOTSREQ-2389	Build Release of Reservation deed template	The system must allow authorized users to build a Release of Reservation deed template.

Exhibit 6: Mineral Auction, Nomination, and Parcel Classification

Exhibit 6: Mineral Auction, Nomination, and Parcel Classification ID	 Name	 Description
LOTS-LOTSREQ-2320	Refine search for parcel classifications	The system must provide a user with the ability to refine a search for parcel classifications.
LOTS-LOTSREQ-2321	Refine Mineral Auction Search Criteria	The system must allow authorized user the ability to return to their search criteria and refine it.
LOTS-LOTSREQ-2322	View, Add, Edit and Remove Rental Rate	The system must enable user to view Rental Rate information for a Lease Term and allow authorized users to add, edit and remove Rental Rate information.
LOTS-LOTSREQ-2323	View, Add, Edit and Remove Royalty Rate	The system must enable user to view Royalty Rate information for a Lease Term and allow authorized users to add, edit and remove Royalty Rate information.
LOTS-LOTSREQ-2324	Delete a Lease Term	The system must allow authorized user to delete a lease term record that is not associated to a lease.

Exhibit 6: Mineral Auction, Nomination, and Parcel Classification		
ID	**Name**	**Description**
LOTS-LOTSREQ-2325	Loose Search on Vendor Address	The system must allow a loose search on certain vendor address fields including city.
LOTS-LOTSREQ-2335	Bonded Status on Vendor	The system should set the bonded status on a vendor based on refund date.
LOTS-LOTSREQ-2336	Mineral & Surface Parcel Fund Percents Greater Than Zero	The system should require mineral & surface parcel fund percents to be greater than zero
LOTS-LOTSREQ-2337	Search Lease by Project Drop-Down	The system should limit the project type-ahead drop-down search to project name on the lease search screen
LOTS-LOTSREQ-2341	Create parcel classification for multiple parcels with warnings	The system should provide a warning when some of the parcels selected for a parcel classification cannot be updated and update the ones that can be updated
LOTS-LOTSREQ-2344	Manage Locations for Lease Extension	The system must allow users to view, add, edit and delete locations on Lease Extension.
LOTS-LOTSREQ-2365	View All Fields on Mineral Auction Screen	The system must display all fields on the Mineral Auction screen, including those with no data.
LOTS-LOTSREQ-2375	Build one or more lease documents	The system must allow the user to build one or more lease documents.
LOTS-LOTSREQ-2376	Build Oil & Gas lease template	The system must allow an authorized user to build an Oil & Gas lease document.
LOTS-LOTSREQ-2377	Build Gas Storage lease template	The system must allow an authorized user to build a Gas Storage lease document.
LOTS-LOTSREQ-2457	Leases for Mineral Auction should number by Offering Number only	When creating (bulk) leases for Mineral Auction, the leases should be numbered by Offering Number only. NOTE: Parcel Classification is not relevant when assigning lease number for Mineral Auction leases.
LOTS-LOTSREQ-2471	Validate State Oil & Gas Ownership when Adding Parcel to Nomination	The system must display a warning message and add the selected parcel to a nomination if the State Oil & Gas Ownership indicator is = "No" for a parcel. If the State Oil & Gas Ownership indicator is "Yes", "Not Applicable", or not set then a warning message should not be shown and the parcel may be added as Active it if passes the additional validation.
LOTS-LOTSREQ-2474	Flags on Mineral Auction Parcels should check Nomination dates	When creating leases for Mineral Auction, auction parcels with a nomination type of Mineral Lease Auction with nomination dates that match the Auction ID nomination dates for the leases you are creating should not produce a warning.
LOTS-LOTSREQ-2475	Vendor Search screen should allow ‘contains’ when searching by Bond Number	When searching for LOTS vendors on the Vendor Search screen, Bond Number should allow ability to use wildcards (%) in addition to entering the exact number.
LOTS-LOTSREQ-2476	Check for Parcel’s Release Status when Creating Mineral Auction Leases	When creating mineral auction leases, in addition to existing validations the create leases procedure should check for End Date (LEASE_PAR.RELEASE_DATE) on each auction parcel. If the End Date is not null (present), then a lease should be created for an auction parcel if all other requirements are satisfied.

Exhibit 6: Mineral Auction, Nomination, and Parcel Classification ID	Name	Description
LOTS-LOTSREQ-2476	Check for Parcel's Released Status when Creating Mineral Auction leases	When creating mineral auction leases, in addition to existing validations the create leases procedure should check for End Date (LEASE_PAR.RELEASE_DATE) on each auction parcel. If the End Date is not null (present), then a lease should be created for an auction parcel if all other requirements are satisfied.
LOTS-LOTSREQ-2479	Remove Offered and Nominated for Mineral Lease from Auction Parcels Not Bid	When creating leases for Mineral Auction, the Offered for Mineral Lease and Nominated for Mineral Lease flags should be removed from all auction parcels (that have Auction Status of Active) regardless of whether they have a bid or not. This requirement will need a new business rule validation as follows: Need to add a new business rule - that indicates; - Remove both of the Flags from all parcels that were Active on the Auction. - Remove the Nominated Flag from all Parcel that had any other status.
LOTS-LOTSREQ-2480	Update Parcel's Nomination Status to Inactive when leased	When adding a parcel to a direct oil and gas lease, the Nomination Status on the parcel(s) should be updated to "Inactive" (from Active) in addition to removing the Nominated for Mineral Lease flag from the parcels added to the direct oil and gas lease.
LOTS-LOTSREQ-2481	Abated Acres on Lease Details should calculate to match Total Abated Acres displayed under Lease Parcels section	Calculated Abated Acres on Lease Details screen in Solution should match Total Abated Acres displayed within the Parcels section, on the Lease screen.

Exhibit 8: Mineral System Reference Tables (Part 2 & 3)

Exhibit 8: Mineral System Reference Tables ID	Name	Description
LOTS-LOTSREQ-2345	Production deduction abbreviation codes should be unique	The system should prevent a user from adding or editing a production deduction with the same abbreviation code. Production deduction abbreviation codes should be unique.
LOTS-LOTSREQ-2346	Revenue codes should be unique	The system should prevent a user from adding or editing a revenue code record with the same revenue code. Revenue codes should be unique.
LOTS-LOTSREQ-2347	Unit measure abbreviation codes should be unique	The system should prevent a user from adding or editing a unit measure with the same abbreviation code. Unit measure abbreviation codes should be unique.
LOTS-LOTSREQ-2363	Display All Account Fields & Prevent Editing of non-Sigma fields on Sigma Accounts	The system must display all fields in the Account screen, including those with no data, and prevent the non-Sigma fields (Index, PCA and Agency Object) from being displayed or edited on Sigma accounts.

Exhibit 12: Mineral Production

Exhibit 12: Mineral Production ID	Name	Description
LOTS-LOTSREQ-2050	No Total Pit/Mining Unit State Acres on Pit/Mining Unit section of RRU	The Maintain RRU user interface details must allow a user to add and edit an operator decimal interest field. NOTE: This field will only display when the user is adding or editing the RRU screen's details section. This field is displayed in addition to the existing Decimal Interest field.
LOTS-LOTSREQ-2117	Add parcels to Mineral Production screens	The Decimal Interest History user interface window must provide a user with the ability to edit a decimal interest history record. The following field in the screen would be editable: Notes
LOTS-LOTSREQ-2299	View all Mineral Production screen's fields	Add a loose search (contains) functionality to the following screen/field combinations: Unitized Area - Name (Bug-444) Unitized Area by Drilling Unit - Well Name (Bug-481) Uniform Spacing Plan by Drilling Unit - Well Name (Bug-492) Revenue Reporting Unit - Drilling Unit Well Name (Bug-614) Uniform Spacing Plan - Name (Bug-619) Unitized Area - Unitized Area Name (Bug-621) Pit/Mining Unit - Pit/Mining Unit Name (Bug-684, Bug-411)
LOTS-LOTSREQ-2326	View all PRU Numbers for a well	The system must allow a search for leases on active RRUs.
LOTS-LOTSREQ-2331	Add Leases with status of Released to Mineral Production Screens	The system should sort the royalty remitters related to a revenue reporting unit such that active show before terminated and within terminated the most recently terminated should display on top. There should be a toggle to show only active, or all RRUs. Toggle should default to "Show only active".
LOTS-LOTSREQ-2332	Provide Pit/Mining Unit detail report	The system should arrange the royalty remitters on a revenue reporting unit so that the actives show first.
LOTS-LOTSREQ-2333	Attach/Detach File in Unitized Area	The system should show all of the revenue reporting units related to a drilling unit.
LOTS-LOTSREQ-2340	Display drilling unit Name and Number	The system should provide a drop-down selection for Well Type and Well Status Search and a type-ahead selection for Well Operator in the drilling unit search
LOTS-LOTSREQ-2342	No Total Pit/Mining Unit State Acres on Pit/Mining Unit section of RRU	The system should not list Total Pit/Mining Unit State Acres in the Pit/Mining Unit section of the RRU details
LOTS-LOTSREQ-2343	Add parcels to Mineral Production screens	The system should allow parcels to be added without requiring an active lease on the parcel to the Mineral Production Drilling Unit, USP, Unitized Area, and Pit/Mining Unit screens. NOTE: This includes the ability to add a parcel without a lease or with a lease in any status.
LOTS-LOTSREQ-2361	View all Mineral Production screen's fields	The system must display all fields in all Mineral Production screens, including those with no data. The From Date field in the Unitized Area screen's Operator History section will no longer be displayed.

Exhibit 12: Mineral Production ID	 Name	 Description
LOTS-LOTSREQ-2362	View all PRU Numbers for a well	The system must display all PRU Numbers associated with a well. Fields to display: PRU Number Start Date End Date
LOTS-LOTSREQ-2366	Add Leases with status of Released to Mineral Production Screens	The system must allow users to add leases in Released status to the Uniform Spacing Plan, Unitized Area, Drilling Unit, and Pit/Mining Unit Screens
LOTS-LOTSREQ-2379	Provide Pit/Mining Unit detail report	The Maintain Pit/Mining Unit window must provide following canned reports - Pit/Mining Unit details And allow an authorized user to download the Pit/Mining Unit details report in pdf format.
LOTS-LOTSREQ-2397	Attach/Detach File in Unitized Area	The system must allow the user to attach, view, download, and delete a file in the Unitized Area screen. NOTE: These will exist in a new section of the Unitized Area screen called Unitized Area Files (just like lease is set up.
LOTS-LOTSREQ-2461	Display drilling unit Name and Number	The system must display the Well Name and Well Number for the drilling unit. The Well Name and Well Number display must be updated in the following screens and fields: - Drilling Unit Search Results - Well Name/Number - Maintain Lease - Mineral Production section - Drilling Unit sub-section - Well Name/Number - Maintain Parcel - Mineral Production section - Drilling Unit sub-section - Well Name/Number

Exhibit 13: Mineral Revenue RPS

Exhibit 13: Mineral Revenue RPS ID	 Name	 Description
LOTS-LOTSREQ-2364	Display All Fields on Remittances	The system must display all fields on the Remittance screen.
LOTS-LOTSREQ-2409	Default Sort on Maintain Accounts should by Active Date and Account ID	Change the default sort on the list of accounts under Maintain Accounts to Active Date and Account ID.
LOTS-LOTSREQ-2473	Re-name Re to LOTS Vendor	On the Remittance screen, under the Refunds/Returns section re-name the Refund Address field to be called LOTS Vendor.

Exhibit 14: MAIN Exception Reporting

Exhibit 14: MAIN Exception Reporting ID	 Name	 Description
LOTS-LOTSREQ-2382	Provide deposit report	The system must allow an authorized user the ability to create a summary deposit report. The report should require a date range and optionally allow the users to filter by account information. The report will include the following fields: Process Date, Control Number, Deposit Account, Deposit Amount, Remitter, and Remit Amount.

Exhibit 14: MAIN Exception Reporting ID	 Name	 Description
LOTS-LOTSREQ-2405	Provide Correction Reports	The system must allow an authorized user the ability to create the MAIN Remittance Summary Report and the MAIN JV/ACCT Change Report. These reports are used when corrections are done.

Exhibit 18: Case Processing

Exhibit 18: Case Processing ID	 Name	 Description
LOTS-LOTSREQ-1187	Add Contact to/from Case	[EDITED FROM ORIGINAL] The system must allow an authorized user to add a contact to the Escrow Closing Service record.
LOTS-LOTSREQ-1212	Provide GEM functionality	[EDITED FROM ORIGINAL] The Case Processing area of the new LOTS Solution will provide the following GEM functionality: Auto-numbering of L#s (Document Number) for Granted Easement documents will be assigned at the posting step The ability to capture and edit three new fields: Easement fee, Timber fee, # of pipelines
LOTS-LOTSREQ-2286	Case Advanced Search By Parcel	The system must allow an authorized user to search for Cases with Parcels or Case Parcels based on Parcel criteria.
LOTS-LOTSREQ-2287	Case Advanced Search By Document	The system must allow an authorized user to search for Cases with Documents or Case Documents based on Document criteria.
LOTS-LOTSREQ-2288	Case Advanced Search By Party	The system must allow an authorized user to search for Cases with Parties associated with Documents or Case Documents based on Party criteria.
LOTS-LOTSREQ-2289	Case Advanced Search By Parcel Lease	The system must allow an authorized user to search for Cases with Leases associated with Parcels based on Leases criteria.
LOTS-LOTSREQ-2290	Case Advanced Search By Closing	The system must allow an authorized user to search for Cases with Closing Details based on Closing Detail criteria. The system must search the following criteria: Title Commit Number Attorney General Request Number Escrow Closing Service Summer/Winter Taxes
LOTS-LOTSREQ-2291	Case Advanced Search By Parcel Flags	The system must allow an authorized user to search for Cases with Flags associated with Parcels based on Flag criteria.
LOTS-LOTSREQ-2292	Case Advanced Search By Parcel Current Rights	The system must allow an authorized user to search for Cases with Currents Rights associated with Parcels based on Currents Rights criteria.
LOTS-LOTSREQ-2294	Case Advanced Search by Parcel Project	The system must allow an authorized user to search for Cases with Parcels or Case Parcels based on Project criteria.
LOTS-LOTSREQ-2296	Clone Case	The system must provide a user with the ability to clone a case, and create copies of related data to allow a user to quickly create a case based on an existing case.
LOTS-LOTSREQ-2297	Display List of Cases	The system must display the Maintain Cases Window with a list of cases(s).
LOTS-LOTSREQ-2300	Refine Case Search	The system must provide a user with the ability to refine a search for cases.
LOTS-LOTSREQ-2301	Remove County from Case	The system must allow an authorized user to remove a County from a Case.
LOTS-LOTSREQ-2304	Remove Case Manager from Case	The system must allow an authorized user to remove a Case Manager from a Case.
LOTS-LOTSREQ-2305	View List of Files on Case	The system must allow an authorized user to view a list of the Files on a Case.
LOTS-LOTSREQ-2307	Remove File from Case	The system must allow an authorized user to remove a File from a Case.
LOTS-LOTSREQ-2310	View List of Title Companies (Escrow Closing Agents)	Maintain Escrow Closing Agent records (maintenance screen with a list of closing agents)

Exhibit 18: Case Processing ID	Name	Description
LOTS-LOTSREQ-2311	View Escrow Closing Agent Details	The system must allow an authorized user to view the details for an Escrow Closing service record.
LOTS-LOTSREQ-2312	Edit Escrow Closing Agent Details	The system must allow an authorized user to edit the details for an Escrow Closing service record.
LOTS-LOTSREQ-2313	View Escrow Closing Agent Contacts	The system must allow an authorized user to view the contacts associated with an Escrow Closing service record.
LOTS-LOTSREQ-2316	Move Case Document to Another Case	The system must allow an authorized user to move a document (Case Document or LOTS Document) to another case.
LOTS-LOTSREQ-2317	Remove Process Stage	The system must allow an authorized user to remove a process stage from a case.
LOTS-LOTSREQ-2355	Edit Closing Status	The system must allow an authorized user to edit status date and comment as the Case moves through the case stages.
LOTS-LOTSREQ-2360	View List of Documents on Case	The system must allow an authorized user to view the documents related to a Case.
LOTS-LOTSREQ-2369	Automatically Add/Remove "Attached to Case" Flag	The system must add or increment the "Attached to Case" flag to a LOTS Parcel when the LOTS Parcel is added to a unposted Case Document. If the LOTS Parcel is removed from the Case Document, then the flag should be removed or decremented. When a Case Document is posted as a LOTS Document, then the posting process should remove/ Decrement the "Attached to Case" Flag for all LOTS Parcels related to the Case Document being posted.
LOTS-LOTSREQ-2370	Apply Deeded Rights to All Parcels on a Case Document	The system must allow an authorized user to apply Rights to all Case and LOTS Parcels on a Case Document by providing an option by choosing a parcel's deeded rights and copying them to all parcels.
LOTS-LOTSREQ-2371	View, Add, Edit, & Remove Acquired Easement on Case Document	The system must allow an authorized user to View, Add, Edit and Remove an Acquired Easement on a Case Document.
LOTS-LOTSREQ-2372	View, Add, Edit, & Remove Granted Easement on Case Document	The system must allow an authorized user to View, Add, Edit and Remove an Granted Easement on a Case Document.
LOTS-LOTSREQ-2373	View Easements on a Case Parcel	The system must display the Granted Easement and Acquired Easements associated with a Case Document on a Case Parcel.
LOTS-LOTSREQ-2374	View, Add, Edit, & Remove Comment on Case Parcel	[EDITED FROM ORIGINAL] The system must allow an authorized user to Add/Update/Delete a Comment with an appropriate date/time stamp value.
LOTS-LOTSREQ-2398	Generate Case Document Detail Report	The system must allow an authorized user to generate the "Case Document Detail" report for a Case Document.
LOTS-LOTSREQ-2419	Move One or Multiple Case Parcels	The system must allow an authorized user to move one or multiple case parcels from one case document to another case document.
LOTS-LOTSREQ-2477	Exclude Duplicate Case Stage "Deed Sent to Vendor"	The system must exclude the duplicate Case Stage ID 37, "Deed Sent to Vendor" from the List of Case Stage on a Case and prevent a user from adding it or searching by the duplicate option.
LOTS-LOTSREQ-2478	Auto Generate Document Numbers for all Acquisition Documents	The system must use auto-generated Document Numbers for the following Document Types: "Acquired Easement", "Exchange Acq", and "Reacquire (Quit Claim)".

Exhibit 20: Land Disposal

Exhibit 20: Land Disposal ID	Name	Description
LOTS-LOTSREQ-2411	Delete Property Information Conditions	The system will allow an authorized user to delete the following property information conditions: Reservation Disclaimer Restriction Disclosure Deed conditions
LOTS-LOTSREQ-2418	Allow editing comments of photos/files	The system must allow authorized user to edit file comments.
LOTS-LOTSREQ-2421	When Reservations "Minerals" is selected auto populate Disclosure	When "Mineral" option is selected as Reservation, Disclosures sub-section, under Conditions section should be auto populated to display "Minerals Reserved".
LOTS-LOTSREQ-2482	Enhance LAND SALE PARCEL database to store Property ID for associated properties	Modify LOTS.LANDSALE_PAR to add a SALEINFO_ID column to store and track the Property ID for the properties that are associated to a land sale. This enhancement requires a complete review of the SSIS package that pulls and publishes land sale information to DNR land sale public facing web page. This enhancement may potentially require modification to the SSIS package.
LOTS-LOTSREQ-2483	Properties on Land Sale should reference SALEINFO_ID stored within the LANDSALE_PAR data table	When viewing, adding and removing properties from a land sale record, the application should now use the SALEINFO_ID stored within the LOTS.LANDSALE_PAR table. This enhancement will impact: - potentially 4 Land Disposal reports - Land Sale Search - Land Sale Search Results - Land Sale > View Properties - Land Sale > Add Properties - Land Sale > Remove Properties

Exhibit 23: PILT, PTA, and Swamp Tax Records

Exhibit 23: PILT, PTA, and Swamp Tax ID	Name	Description
LOTS-LOTSREQ-2416	Display current tax year	The system must display the user's current tax year while accessing PILT/PTA functionality.
LOTS-LOTSREQ-2425	Auto-generate tax payment records based on billed	If tax payment records do not exist for a particular search for tax payments to generate, then the system must allow the user to auto-generate tax payments based on billed information.
LOTS-LOTSREQ-2446	Parcel Bill Receipt Functionality	The system must provide a user interface to search for and update parcel bill receipts.
LOTS-LOTSREQ-2449	Millage Loader Functionality	The system must provide a user interface to load millage rates.
LOTS-LOTSREQ-2450	Search for parcel bill receipts	The system must provide a search function to find parcel bill receipts.
LOTS-LOTSREQ-2451	Display parcel bill receipts	The system must display parcel bill receipts based on a search for parcel bill receipts.

Exhibit 23: PILT, PTA, and Swamp Tax		
ID	**Name**	**Description**
LOTS-LOTSREQ-2453	Provide ability to update received date for villages and non-villages	The system must provide functionality to clear/update the received date on one or more parcel bill receipts for both villages and non-villages.

Reporting

Reporting		
ID	**Name**	**Description**
LOTS-LOTSREQ-2338	Generate multiple Detail Reports for Parcels	The system should produce the parcel detail report for multiple parcels at one time.

3. Removal of Requirements by Functional Area

Exhibit 1: Maintain Parcel

Exhibit 1: Maintain Parcel			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-69	23	View the Timber Sale information on a Parcel using the RMB option	The system must allow an authorized user to View Timber Sale information on a Parcel if a Parcel is involved in an active Timber Sale Activity by providing a RMB option.
LOTS-LOTSREQ-76	29	Create draft polygon for parcels to indicate geographical boundaries	The system must provide an interactive map viewer interface to allow an authorized user to create a draft version of a polygon for a newly created parcel geographically.
LOTS-LOTSREQ-77	29.1	Split draft version of the polygon	The system must allow an authorized user to split draft version of the polygon manually into 2 separate parcels by editing the parcel boundaries and allowing copy/paste feature to move real parcel data into the draft version in case the parcel is split through tabular data.
LOTS-LOTSREQ-78	29.2	Edit parcel data to create draft version of the polygon	The system must allow an authorized user to edit all relevant data pertaining to a parcel in order to create a draft version of the polygon.

Exhibit 3: System Reference Tables Part 1

Exhibit 3: System Reference Tables Part 1			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-181	3.4	Merge duplicate or related project records	The user interface must give an authorized user the ability to merge records when user needs to merge duplicate or related records.
LOTS-LOTSREQ-191	4.3	Merge duplicate or related project use type records	The user interface must give an authorized user the ability to merge records when user needs to merge duplicate or related records.
LOTS-LOTSREQ-236	9	Assign a Role to Notary, Signer or Witness record	The system must provide a user interface to assign a Role to a Notary, Signer, or Witness record.
LOTS-LOTSREQ-237	9.1	Display a list existing Roles	The system must display all existing roles with following information: · Role Name · Role ID

Exhibit 3: System Reference Tables Part 1			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-238	9.2	Edit a Role	The system must allow an authorized user to EDIT a role record.
LOTS-LOTSREQ-239	9.3	Assign a Role	The user interface must allow an authorized user assign a role.
LOTS-LOTSREQ-240	9.3.1	Assign a Unique ID (Role ID) to a Role	The system must assign a unique ID (Role ID) for each newly created role record.
LOTS-LOTSREQ-241	9.4	Save changes to the database	The system must allow an authorized user to save any changes made to the database.
LOTS-LOTSREQ-280	13	Maintain Transaction Document Group Records	The system must provide a user interface to maintain Transaction Document Group records.
LOTS-LOTSREQ-281	13.1	Display a list existing Transaction Document Group records	The system must display a list of all existing Transaction Document group records with following information: · Transaction Group Code · Transaction Group Name · Generation Type
LOTS-LOTSREQ-282	13.2	Add and Update a Transaction Document Group record	The user interface must allow an authorized user to Add/Update a Transaction Document Group record.
LOTS-LOTSREQ-283	13.3	Select a Transaction Document Group record to view details	The user interface must allow an authorized user to select and display the following Transaction Document Group Details: · Transaction Group Code · Transaction Group Name · Generation Type · Next Document Number · Date/Time stamp value
LOTS-LOTSREQ-284	13.3.1	Edit a Transaction Document Group record	The user interface must allow an authorized user to EDIT following fields: · Transaction Group Code · Transaction Group Name · Generation Type · Next Document Number
LOTS-LOTSREQ-285	13.4	Save changes to the database	The user interface must allow an authorized user to save any changes made to the Database.
LOTS-LOTSREQ-286	13.5	Provide canned reports for Transaction Document Group records	The user interface must provide canned reports for Transaction Document Group records.

Exhibit 6: Mineral Auction, Nomination, Parcel Classification and Lease

Exhibit 6: Mineral Auction, Nomination, Parcel Classification and Lease			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-455	7	Send email notification	The system must send an Email notification to minerals section when a parcel with active nomination(s) is split.
LOTS-LOTSREQ-501	1.5	Delete lease with no parcel	The system must allow the user to delete a Lease provided that there are no Parcels, Assignments and Extensions associated with the Lease.
LOTS-LOTSREQ-531	1.5	Nonmetallic display to/from date	For Nonmetallic Lease, The maintain Lease user interface must display "From Date" and "Thru date" for the Royalty Rate description under Terms details

Exhibit 7: Technical Requirements

Exhibit 7: Technical Requirements			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-691	20	Latitude and Longitude hierarchy requirements	Latitude/Longitude data must use the following hierarchy for latitude/longitude, if a discrepancy exists: GPS Map Interpolation Address match www.michigan.gov/landforsale

Exhibit 8: Mineral Reference Tables (Part 2 & 3)

Exhibit 8: Mineral Reference Tables (Part 2 & 3)			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-567	1	Maintain lease type records	The system must provide a user interface for Lease Type system reference table maintenance.
LOTS-LOTSREQ-568	2	View lease type details	The user interface must allow user to view Lease Type record details.
LOTS-LOTSREQ-569	3	Create lease type record	The user interface must allow an authorized user to create a unique, new Lease Type record.
LOTS-LOTSREQ-570	3.1	Create as active lease type	The user interface must assign an "active" status to the new Lease type record.
LOTS-LOTSREQ-571	3.2	Update lease type active/inactive date	The user interface must consider that the status of the Lease type is determined by manually updating the Active/Inactive dates.
LOTS-LOTSREQ-572	4	Edit lease type record	The user interface must allow an authorized user to edit a Lease Type record.
LOTS-LOTSREQ-573	5	Inactivate lease type record	The user interface must NOT allow an authorized user to delete a Lease Type record but must allow an authorized user to Inactivate the record.
LOTS-LOTSREQ-574	6	Save lease type record	The user interface must allow an authorized user to save changes made to Lease Type record.
LOTS-LOTSREQ-575	7	Add lease type description	The user interface must add a description field in Maintain Lease Type table and allow user to view and edit and save the field value.

Exhibit 12: Mineral Production

Exhibit 12: Mineral Production			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-741	1.2	Create drilling unit record	The Maintain Drilling Unit window must allow an authorized user to create a new Drilling Unit record.
LOTS-LOTSREQ-742	1.2.1	Assign unique drilling unit ID	The system must assign a unique ID for each newly created Drilling Unit record.
LOTS-LOTSREQ-789	2.4.1.1	Maintain audit trail for unit area note(s)	The Maintain Unit Area window must allow the user to add/update one or more notes and the system must allow an user to view each note with · Created by · Updated by · Date/time stamp value.

Exhibit 12: Mineral Production			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-807	2.6	Provide spatial/tabular search	The system must provide a spatial/tabular search interface that would retrieve data from DEQ databases to provide downloadable and printable spreadsheet of any mineral lease nominated parcels that intersect the area of any contamination sites or environmentally sensitive areas including, but not limited to active landfills, Inactive landfills, Kermit areas, Underground storage tanks, and Part 201 areas.
LOTS-LOTSREQ-912	5.4.2.6	Edit State mineral/royalty for pit/mining unit	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value. When User changes Mineral/Royalty Acres on a Parcel the system must recalculate the Total State Mineral Acres Pit/Mining unit.
LOTS-LOTSREQ-927	6	Maintain gas storage records	The system must provide a Maintain Gas Storage Field Window.
LOTS-LOTSREQ-928	6.1	Search for gas storage records	The Maintain Gas Storage Field user interface must provide the user with the ability to find a Gas Storage Field based on the search criteria entered by user.
LOTS-LOTSREQ-929	6.1.1	Search for gas storage records by specific fields	The user must be able to search for Gas Storage Fields by: Gas Storage Field details Parcels Leases
LOTS-LOTSREQ-930	6.1.2	Validate gas storage search criteria	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Gas Storage Field not found.
LOTS-LOTSREQ-931	6.1.3	Allow null gas storage search criteria	The system must provide the search criteria to find all Gas Storage Area records that have null values in a particular field.
LOTS-LOTSREQ-932	6.1.4	Search gas storage as single condition	The system must consider the entire find Gas Storage Field criteria entered by user as a single condition rather than a nested condition for search.
LOTS-LOTSREQ-933	6.2	Create new gas storage record	Maintain Gas Storage Field user interface must allow an authorized user to create a new Gas Storage Field record.
LOTS-LOTSREQ-934	6.2.1	Assign unique gas storage ID	The system must assign a unique ID for each new Gas Storage Field record.
LOTS-LOTSREQ-935	6.3	Display gas storage details	The Maintain Gas Storage Field window must display Gas Storage Field record details.
LOTS-LOTSREQ-936	6.3.1	Display gas storage location and grid	The Maintain Gas Storage Field window must display Gas Storage Field record details as follows- · Storage area location description · Grid Information with Gas Storage Field legend.
LOTS-LOTSREQ-937	6.3.2	Display parcel list associated with gas storage	The Maintain Gas Storage Field window must display a list of Parcels associated with the selected Gas Storage Field.
LOTS-LOTSREQ-938	6.3.3	Display vendor history for gas storage	The Maintain Gas Storage Field window must display Vendor History details.
LOTS-LOTSREQ-939	6.3.4	Display list of associated wells	The Maintain Gas Storage Field window must display list of all gas storage and oil/gas drilling units associated with the Parcels in a Gas Storage Field.
LOTS-LOTSREQ-940	6.3.5	Display associated gas storage field lease information	The Maintain Gas Storage Field screen must display a list of list of all gas storage and oil/gas leases associated with the selected Gas Storage Field.
LOTS-LOTSREQ-941	6.3.5.1	Find leases for gas storage	The system must allow user to find Leases to be able to add them to Gas Storage Field.

Exhibit 12: Mineral Production ID	RFP#	Name	Description
LOTS-LOTSREQ-942	6.3.6	Load/Add/Edit/Delete a drilling unit associated to gas storage	The Maintain Gas Storage Field screen must allow an authorized user to load, add, edit, and delete a drilling unit associated to the gas storage field.
LOTS-LOTSREQ-943	6.4	Edit gas storage details	The Maintain Gas Storage Field screen must allow an authorized user to Edit gas storage field details.
LOTS-LOTSREQ-944	6.4.1	Provide unlimited note for gas storage	The Maintain Gas Storage Field screen must provide the Note field with unlimited number of characters.
LOTS-LOTSREQ-945	6.4.1.1	Append new/updated note for gas storage	The Maintain Gas Storage Field screen must allow the user to add/update the Note field.
LOTS-LOTSREQ-946	6.4.2	Add/delete gas storage field location records	The Maintain Gas Storage Field screen must allow an authorized user to Add/Delete Gas Storage Field Location records for the Gas Storage field by: Clicking/unclicking on the grid (or) Selecting add /delete location option
LOTS-LOTSREQ-947	6.4.2.1	Allow copy of gas storage field location description	The Maintain Gas Storage Field screen must allow user to copy Gas Storage Field Location Description to Windows Clip Board.
LOTS-LOTSREQ-948	6.4.2.2	Load parcels for gas storage	The Maintain Gas Storage Field screen must allow an authorized user to load all the parcels associated to all locations that are associated to a Gas Storage Field. The system matches Parcel records in LOTS to Gas Storage Field Locations and Gas Storage Field IDs.
LOTS-LOTSREQ-949	6.4.2.3	Populate active parcels for gas storage	The Maintain Gas Storage Area window must load all the parcels for the Gas Storage Field.
LOTS-LOTSREQ-950	6.4.2.4	Add parcels to gas storage	The Maintain Gas Storage Field screen must provide an authorized user with "Add Parcels" function in addition to Load Parcel(s) to a Gas Storage Field.
LOTS-LOTSREQ-951	6.4.2.5	Find parcels for gas storage	The system must allow user to find Parcels to be able to add them to Gas Storage Field.
LOTS-LOTSREQ-952	6.4.2.6	Edit State mineral/royalty for gas storage field	The system must allow user to edit State Rental Acres field, the user must be able to enter more than 40 acres and must be able to save the same value. When User changes Lease/Storage Acres on a Parcel the system must recalculate the Total State Mineral Acres In Gas Storage Field.
LOTS-LOTSREQ-953	6.4.2.7	Delete parcels from gas storage	The Maintain Gas Storage Field screen must provide an authorized user with "Delete Parcels" function in case erroneous data is entered. This will delete the parcel from the list not from the database.
LOTS-LOTSREQ-954	6.4.2.8	End-date gas storage parcel association	The Maintain Gas Storage Field screen must provide an authorized user with "End Parcel Association" function. This function must allow user to input a date to end the association. This will end the Parcel's association with the Gas Storage Field effective the date entered by user.
LOTS-LOTSREQ-955	6.4.2.9	Display parcel details for gas storage	The Maintain Unit Field screen must provide an authorized user with "Display Parcel Details" function.
LOTS-LOTSREQ-956	6.4.2.10	Allow copy of gas storage unit legal description	The Maintain Gas Storage Field screen must allow an authorized user to copy full Legal Description of a Parcel Record to Windows clip board.
LOTS-LOTSREQ-957	6.4.3	Load leases for parcel of gas storage	The Maintain Gas Storage Field screen must allow an authorized user to load Leases (with lease type of gas storage) associated to Parcels in a Gas Storage Field.

Exhibit 12: Mineral Production			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-958	6.4.3.1	Add leases to gas storage	The Maintain Gas Storage Field screen must allow an authorized user to add Leases (with lease type of gas storage and lease type of oil and gas) associated to Parcels in a Gas Storage Field, in addition to Load Parcels.
LOTS-LOTSREQ-959	6.4.3.2	Delete leases associated with gas storage	The Maintain Gas Storage Field screen must allow an authorized user to delete Leases associated to Parcels in a Gas Storage Field.
LOTS-LOTSREQ-960	6.4.3.3	End lease association to gas storage	The Maintain Gas Storage Field screen must allow an authorized user to end Lease association in a Gas Storage Field.
LOTS-LOTSREQ-961	6.4.3.4	View lease details for gas storage	The Maintain Gas Storage Field screen must allow an authorized user to view Lease details.
LOTS-LOTSREQ-962	6.5	Save gas storage record	The Maintain Gas Storage Field screen must allow an authorized user to Save any changes made to the Gas Storage Field record.

Exhibit 13: Mineral Production RPS

Exhibit 13: Mineral Production RPS			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1448	7.8	Include Excluded Remittance	The system must allow an authorized user to Include Excluded Remittance.
LOTS-LOTSREQ-1516	6.2.1	Display a warning message when re-creating Main JV report	The system must display a warning message that "it would clear all values of control number on an instance in Main JV report and should only be done when erroneous information is entered and Main JV report needs to be re-created."
LOTS-LOTSREQ-1518	7	Update All Main Accounts once the revenue is distributed	The system must allow an authorized user to Update All Main Accounts once the revenue is distributed.

Exhibit 14: MAIN Exception Reporting

Exhibit 14: MAIN Exception Reporting			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1001	4.4	Change deposit account	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to Change Deposit Accounts.
LOTS-LOTSREQ-1002	4.4.1	Enter change deposit account information	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must open a new window allowing user to input- · Active From Deposit Accounts · To Deposit Accounts · From Deposit account (This is a display only field with "From Deposit Account" field value from transaction) And allow user to select save/cancel.
LOTS-LOTSREQ-1003	4.4.2	Process or cancel change deposit amount	The system must then process the Change Deposit amounts and save the same to database or cancel the transaction, based on user selection.
LOTS-LOTSREQ-972	1	Generate report of revenue for distribution	The System must provide a user interface to Generate a report of fund/account balances and the amount of revenue to be "journal vouchered" in Main/SIGMA.

LOTS-LOTSREQ-973	1.1	Update revenue for distribution	Once the Revenue is distributed into the Target Accounts from the Source Accounts for Production, Lease and/or All Remittances, the data must be updated on the Main/SIGMA Report.
LOTS-LOTSREQ-974	1.2	Maintain revenue audit trail	The system must create a time stamp entry for each Revenue transaction.
LOTS-LOTSREQ-975	1.2.1	Provide report of revenue already distributed	The system must not allow an authorized user to create a Main/SIGMA Report if the Revenue is already distributed.
LOTS-LOTSREQ-976	1.3	Select remittance type	The Main/SIGMA Report user interface must allow an user to select Remittance type: · Production · Lease · All And · Allow selecting a Process date for that Remittance type

Exhibit 15: Security Administration (PFC)

Exhibit 15: Security Administration (PFC)			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1849	3.1	Add Entries	The security/authorization role based administration user interface window must allow an authorized user to add entries in following fields- • Object Name (e.g. Application Window) • Security Object Level • User ID (LOTS user's ID) • Members (LOTS User's Name)

Exhibit 16: Land Transaction Accounting

Exhibit 16: Land Transaction Accounting ID	 RFP#	 Name	 Description
LOTS-LOTSREQ-1015	1	Provide payment voucher functionality	The system must provide a Payment Voucher tab in Maintain Case user interface with following fields- · Date · Vendor ID # (SIGMA) · Payee Name · Payee Address · Total amount of Payment Voucher (total is not needed if addition can take place for each individual amount-see below) · Due Date · LOTS # and Project Name · Comment field (Sufficient Characters) · Fund Source/TF# (this field is to put what funding source is being used for the entire payment voucher). There should be two fields, one for the Fund (TF and P code) and the second for the Source (1, 2, 4, 6, Grant #) · Purchase price/commodity/amount/accounting information · Title insurance/commodity/amount/accounting information · Pro-rated taxes/commodity/amount/accounting information · Property transfer tax/commodity/amount/accounting information · Recording Fees/commodity/amount/accounting information · Closing Costs/commodity/amount/accounting information · Miscellaneous/commodity/amount/accounting information · Field name: purchase price · Commodity: to be entered · Amount: to be entered · Accounting information from SIGMA: (BFY, Unit, Department Object, Function, Location, Activity, Fund, Sub Fund, Appropriation, Program) · Field name: title insurance · Commodity: to be entered · Amount: to be entered Accounting information from SIGMA: (BFY, Unit, Department Object, Function, Location, Activity, Fund, Sub Fund, Appropriation, Program)
LOTS-LOTSREQ-1016	1.1	Generate payment voucher	The Payment Voucher tab must allow an authorized user to generate a Downloadable, Editable MS word document for each newly created Voucher.
LOTS-LOTSREQ-1017	2	Create one or more payment vouchers per case	The system on Payment Voucher Tab, must allow an authorized user to create one or multiple Payment Vouchers under each Case. (One at a time)
LOTS-LOTSREQ-1018	2.1	Assign unique payment voucher ID	The system must assign a unique ID for every new Payment Voucher record created under a Case and populate Payment Voucher Number field (display only) on the tab with the same unique number.
LOTS-LOTSREQ-1019	3	View payment voucher	The Payment Voucher Tab must allow an authorized user to view voucher and related Accounting information.
LOTS-LOTSREQ-1020	4	Edit payment voucher	The Payment Voucher Tab must allow an authorized user to edit voucher information.
LOTS-LOTSREQ-1021	5	Save payment voucher	The Payment Voucher Tab must allow an authorized user to save voucher information in database.
LOTS-LOTSREQ-1023	1.1	Populate payment voucher information from SIGMA	The system must provide an interface to bring in Payment Voucher's post processing accounting information from SIGMA or the Data Warehouse from SIGMA.

Exhibit 16: Land Transaction Accounting			
ID	RFP#	Name	Description
LOTS-LOTSREQ-1024	1.2	Display payment voucher information from SIGMA	The system must display (only) Land Purchase transaction Accounting System Information (captured above) in LOTS Case Processing Window's Payment Voucher Tab with following fields- · SIGMA Payment # · SIGMA EFT/Warrant #
LOTS-LOTSREQ-1025	1.3	Save payment voucher record	The system must save all the records on the database.

Exhibit 18: Case Processing

Exhibit 18: Case Processing			
ID	RFP#	Name	Description
LOTS-LOTSREQ-1145	1	Build Case Processing Document	The system must provide a Global document Reader functionality to allow an authorized user to build a document by importing the case processing information from internal (within the system) and external (from web, Review system) sources for each of the Land transaction type.
LOTS-LOTSREQ-1146	1.1	Edit/Print/Download Case processing document	The document(s) created by the above process must be Editable, Printable and downloadable into MS Word.
LOTS-LOTSREQ-1147	1.2	Build appraisal review form	The system must allow an Appraisal Reviewer to build an appraisal review form having information been populated with Parcel details from Case Parcel(s) or Case Parcel(s) records.
LOTS-LOTSREQ-1148	1.3	Export Status Reports	The system must provide a functionality to export the Status Reports on cases to the web page for the general public to download.
LOTS-LOTSREQ-1171	7.2.2	Provide complete process	When a particular process stage is Complete, the system must provide a user with the ability to check "Complete" check box to indicate/Enable the status field to input any of the above values.
LOTS-LOTSREQ-1174	7.4	Provide lock functionality	The system must provide an authorized user with the ability to check/uncheck a "Lock" box to Enable/Disable process stage, status, status date, comment, process stage date fields to prevent loss of data.
LOTS-LOTSREQ-1175	7.5	Attach files from status area	The system must provide an ability to attach supporting documents/files to the Status Tab and if the document is saved here then it must be automatically saved in case files tab.
LOTS-LOTSREQ-1190	11.1.6	Create letter of engagement	The system must allow an authorized user to Create a "Letter of Engagement" by populating the closing information on the case and an appropriate date.
LOTS-LOTSREQ-1191	11.1.7	Create closing confirmation letter	The system must allow an authorized user to Create a "Closing confirmation Letter" by populating the closing information on the case and an appropriate date.
LOTS-LOTSREQ-1192	12	View MLMS reviews	The system must allow an authorized user to View MLMS reviews imported from the Field Review System with following details: · Commented by · Review Date · Estimated Value per Acre · Comment
LOTS-LOTSREQ-1217	1.3	Trigger request field review	The system must consider the Case Review start date as a trigger for "Request Field Review" stage in LOTS.

Exhibit 19: VMS Interface

Exhibit 19: VMS Interface ID	RFP#	Name	Description
LOTS-LOTSREQ-1914	2.2.2	Enter details on the Activities on the Parcel(s)	The system must allow an authorized VMS user to populate the following details on the Activities on the Parcel(s) for Display Purposes: • Offered for Timber Sale • Auction Date • Bid Open Date • DNR Contact Person (Unit Manager) • Phone Number (Unit Manager) • Par ID(s) • Active Timber Sale • Contract Issue Date • Contract Expiration Date • DNR Contact Person (Unit Manager) • Phone Number (Unit Manager) • Par ID(s) • Sale Number • Sale Name

Exhibit 20: Land Disposal

Exhibit 20: Land Disposal ID	RFP#	Name	Description
LOTS-LOTSREQ-1227	6	Enter review stage	The system must allow an authorized user to enter the following Review stage for Parcels reviews: · DNR-Record Review · Phase II Review · Local Record Review · Minerals Review · Offered · Appraisal Requested · Value Certified · Review Info · Selection for Auction · Listed for Auction · Listed for Direct Sale · In Closing · Sold
LOTS-LOTSREQ-1228	6.1	Update review stage details	The system must allow an authorized user to insert multiple Review Stages and allow for both manual and automated updates to the Stage date, comment with appropriate date/time stamp value for each stage.
LOTS-LOTSREQ-1229	7	Enter review comments	The system must allow an authorized user to input Review comments on the comments tab.
LOTS-LOTSREQ-1231	9	Enter latitude/longitude for parcel	The system must allow an authorized user to populate the Latitude/Longitude data on the parcel.
LOTS-LOTSREQ-1232	9.1	Calculate centroid	The system must provide a functionality to automatically calculate the Centroid of the Latitude/Longitude data on a Parcel.
LOTS-LOTSREQ-1235	1	Maintain land offer records	The system must allow an authorized user to maintain Land offer records on the parcel(s).
LOTS-LOTSREQ-1236	2	Create land offer	The system must allow an authorized user to create a Land offer record.

Exhibit 20: Land Disposal ID	RFP#	Name	Description
LOTS-LOTSREQ-1237	2.1	Assign unique land offer ID	The system must assign a unique ID for each newly created Land offer record.
LOTS-LOTSREQ-1238	3	Search for land offer records	The system must provide user with the ability to search for Land Offer(s) based on the following criteria: · Land Offer ID · Offer Start Date · Offer End Date · County · Parcel ID's (one or multiple parcels)
LOTS-LOTSREQ-1239	3.1	Validate land offer search criteria	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Land Offer(s) not found.
LOTS-LOTSREQ-1240	3.2	Allow null land offer search criteria	The system must provide the search criteria to find all Land Offer(s) records that have null values in a particular field.
LOTS-LOTSREQ-1241	3.3	Ensure land offer search is quick	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.
LOTS-LOTSREQ-1242	3.4	Display list of land offers	The system must display a list of Land Offers as a result of the search criteria entered.
LOTS-LOTSREQ-1243	4	Display land offer details	The system must display following details on a land offer record: · Offer ID · Start Date · Thru Date · Note · Date/Time stamp value
LOTS-LOTSREQ-1244	4.1	Set land offer start date	The system must automatically input the Start date as the Current date on a newly created Land Offer record.
LOTS-LOTSREQ-1245	4.1.1	Update land offer start date	The system must allow an authorized user to manually update the Start Date.
LOTS-LOTSREQ-1246	5	Attach parcels to land offer	The system must allow an authorized user to attach parcel(s) to a Land Offer record.
LOTS-LOTSREQ-1247	6	Delete parcel from land offer	The system must allow an authorized user to delete a parcel from the Land Offer record.
LOTS-LOTSREQ-1248	7	Set parcel status	The system must allow an authorized user to set a parcel status to: · Active · Withdrawn · Disposed
LOTS-LOTSREQ-1249	7.1	Generate attached activity on add	In case a parcel with an offer status of Active is added to the parcel list, the system must generate an "Attached to Land Offer" activity on the parcel.
LOTS-LOTSREQ-1250	7.2	Remove attached activity on delete	In case a parcel with an offer status of Active is deleted from the parcel list, the system must remove "Attached to Land Offer" activity from the parcel.
LOTS-LOTSREQ-1251	7.3	Remove attached activity on change	The system must remove "Attached to Land Offer" activity from the parcel; In case an authorized user changes the Land Offer status on a Parcel from "Active" to any other Status like Withdrawn or Disposed.
LOTS-LOTSREQ-1252	7.4	Generate attached activity on change	The system must generate a "Attached to Land Offer" activity added to the parcel; In case an authorized user changes the Land Offer status on a Parcel from Withdrawn, Disposed to an "Active Status".
LOTS-LOTSREQ-1253	7.5	Add/update land offer note	The system must allow an authorized user to use "Add/Update Parcel Notes" pop up menu option in case a Parcel is "Withdrawn" from a Land Offer.

Exhibit 20: Land Disposal			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1254	7.5.1	Verify note added	The system must throw an error message in case the user does not add/update notes.
LOTS-LOTSREQ-1255	7.6	Check validation rules for land offer	The system must check · The Land Consolidation status of the parcel · Surface Rights · Mineral Reviews In order to allow a parcel to be added to the Land Offer.
LOTS-LOTSREQ-1256	7.7	Set to pending	The system must allow an authorized user to set the status of the parcel to "Pending" in case any of the above criteria is not satisfied.
LOTS-LOTSREQ-1257	7.8	Check parcel not already offered	The system must not allow an authorized user to attach parcel(s) to a Land offer that are already attached to another Land offer.
LOTS-LOTSREQ-1258	7.9	Prevent parcel if attached	The system must not allow an authorized user to attach parcel(s) that are already attached to a Land sale record.
LOTS-LOTSREQ-1259	7.1	Quick display links	The system must provide a · Quick link to Display Parcel/Document Details · Quick link to Display Parcel Reviews
LOTS-LOTSREQ-1260	8	Save land offer record	The system must save any changes made to the database.
LOTS-LOTSREQ-1282	1.1	Generate ad-hoc land offer reports	The system must allow an authorized user to generate Ad-hoc Query based disposal Reports for: Land Offer Status Report (In Print menu) Land Auction Parcel Report (In Print menu) Land Auction Sales Report (drawing Sales info from RPS/MICARS interface)
LOTS-LOTSREQ-1285	3	Generate lat/long report	The system must allow an authorized user to generate Parcel Latitude/Longitude reports either through LOTS or GIS.
LOTS-LOTSREQ-1286	4	Generate pre-defined audit reports	The system must allow an authorized user to generate Audit Pre-defined report for: Land Consolidation Summary report From Date To Date
LOTS-LOTSREQ-1302	9.1	Change land sale status	The system must change the offer status of parcel from "Active" to "public Sale" and remove "Attached to Land offer" activity if any.

Exhibit 21: Land Transaction Reporting

Exhibit 21: Land Transaction Reporting			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1922	1.1	Ad-hoc auction disposal reports	The system must allow an authorized user to generate Ad-hoc Query based disposal Reports for: · Land Offer Status Report (In Print menu) · Land Auction Parcel Report (In Print menu) · Land Auction Sales Report (drawing Sales info from RPS/MICARS interface)
LOTS-LOTSREQ-1925	3	Generate lat/long reports	The system must allow an authorized user to generate Parcel Latitude/Longitude reports either through LOTS or GIS.
LOTS-LOTSREQ-1926	4	Generate audit report	The system must allow an authorized user to generate Audit Pre-defined report for: · Land Consolidation Summary report - From Date - To Date

Exhibit 21: Land Transaction Reporting			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1933	1	Generate PA240 total amount reports	In accordance with part 503 of PA240 subsection (3) and (4), The system must allow an authorized user to generate reports to maintain total amount of land after acquisition/sale/transfer to reflect the surface rights and to split reporting based on a defined North/South line.
LOTS-LOTSREQ-1934	2	Generate PA240 surface rights reports	In accordance with part 503 of PA240 subsection (5), The system must allow an authorized user to generate reports on surface rights that does not include subsection (5) (a) to (c) and to split reporting based on a defined North/South line.
LOTS-LOTSREQ-1935	3	Generate PA240 location reports	In accordance with part 503 of PA240 subsection (5) (a) to (c), The system must allow an authorized user to generate reports with following details: · Location · Acreage · Date of Acquisition · Use of Land and to split reporting based on a defined North/South line.
LOTS-LOTSREQ-1936	3.1	Generate and publish PA240 reports	In accordance with the above Act, the system must allow an authorized user to Generate and publish reports on Web with following information: A. The number of acres of land, including land as described in subsection (5), in which the department owns surface rights 1. North of the Mason-Arenac line, 2. South of the Mason-Arenac line 3. In total for this state, and by program. B. The number of acres of land, excluding land as described in subsection (5), in which the department owns surface rights 1. North of the Mason-Arenac line 2. South of the Mason-Arenac line 3. In total for this state, and by Program. C. Allow publication of custom query within a standard format.
LOTS-LOTSREQ-1937	4	Generate PA240 region reports	In accordance with part 503 of PA240 subsection (8), The system must allow an authorized user to generate reports that specify and update Regions with multiple counties.
LOTS-LOTSREQ-1940	2	Generate land transaction reports	The system must allow an authorized user to generate Land Transaction Status Report with following details: · Case # · Case Date · Case Name · Case Status · Case Admin Division · Case Project · Location (County, Jurisdiction, TRS) · Transaction type · Current Stage · Case Manager The arguments are as follows: · Case Date range · Case Admin Division(Optional)

Exhibit 21: Land Transaction Reporting			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1941	3	Generate division land transaction reports	The system must allow an authorized user to generate Division Land Transaction Report with following details: · Case # · Case Date · Case Name · Case Admin Division · Case Project · Current Stage · Case Manager The arguments are as follows: · Case Date Range(required) · Case Admin Division
LOTS-LOTSREQ-1948	5	Allow ad-hoc query functionality	For all Ad-hoc query based reports, The system must allow an authorized user to make columns invisible, sort by columns, and export or print the result.
LOTS-LOTSREQ-1950	1	Generate appraisal reviewer case parcel detail report	The system must allow an Appraisal Reviewer to generate a report with Parcel details from Case Parcel or Case Case Parcel records.

Exhibit 23: PILT, PTA, and Swamp Tax Payments

Exhibit 23: PILT, PTA, and Swamp Tax Payments			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1522	1	Maintain tax authority type records	The system must provide a user interface to maintain Tax Authority type records.
LOTS-LOTSREQ-1523	1.1	Add/delete tax authority tax record	The system must allow an authorized user to add/delete a Tax Authority type record. Note: Currently, there are 8 Tax Authorities listed as follows: · County · Township · Village · City · School · Community College · Library ISD And for each Tax Authority, there are respective tabs on Edit Parcel Screen.
LOTS-LOTSREQ-1524	1.1.1	Assign unique tax authority type ID	The system must assign a unique ID for each newly created Tax Authority type record.
LOTS-LOTSREQ-1525	1.1.2	Display tax authorities on parcel	The system must enable a tab on Edit Parcel screen for each newly created Tax Authority record.
LOTS-LOTSREQ-1526	1.1.3	Display tax authority in Tax Authority module	The system must display the newly created Tax Authority type in the Tax Authority module.
LOTS-LOTSREQ-1527	1.2	Display tax authority type fields	By default, the system must display following Tax Authority types: · County · Township · Village · City · School · Community College · Library · ISD

Exhibit 23: PILT, PTA, and Swamp Tax Payments			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1528	1.2.1	Select categorization(s) for tax authority type	The system must allow an authorized user to select one or multiple categorization of each Tax Authority type from a drop-down menu: · School District(Yes/No) · Vendor(Yes/No) · Education(Yes/No) · Village(Yes/No)
LOTS-LOTSREQ-1529	1.3	Save tax authority type record	The system must allow an authorized user to save any changes made to the database.
LOTS-LOTSREQ-1530	1.4	Export tax authority type records	The system must allow an authorized user to Export the Tax Authority types into an Excel sheet and/or PDF.
LOTS-LOTSREQ-1706	6.3.1.1	Assign millage rates in jurisdiction/village	The system must provide a function to Assign the Millage rates on multiple parcels in all the respective tax authorities in a jurisdiction/village.
LOTS-LOTSREQ-1727	6	Close tax year	The system must provide a function to Close a tax year to prevent future editing.
LOTS-LOTSREQ-1728	6.1	Enter closing information	The system must allow an authorized user to enter the closing tax year and must make all the information related to the closed tax year Read-only (Locked).
LOTS-LOTSREQ-1729	7	Unlock closed year	The system must provide a function to unlock the closed tax year record for editing.
LOTS-LOTSREQ-1730	7.1	Allow editing for unlocked	The system must allow an authorized user to enter the closed tax year and must make all the information related to the closed tax year updatable.
LOTS-LOTSREQ-1731	7.2	Relock closed year	The system must lock the closed tax year information making it Read-Only once the authorized user Logs out of the system.
LOTS-LOTSREQ-1765	6	Import MAIN data	The system must provide a "Main Loader" function to import following details from the Main accounting system for a particular tax year and season: · Agency · Current Doc · Current Doc PCA Index suffix · Fund ID · Agency Object · Amount · Vendor Number · Vendor Name · Pay Date · Create ID · Create Timestamp · Tax Authority ID · Comment · MAIN Warrant Number
LOTS-LOTSREQ-1790	9	Display/edit special millages	The system must provide a function to display and edit Special Assessments millage and amount on appropriate parcel(s) in the list.
LOTS-LOTSREQ-1796	1	Provide payment processing functionality	The system must provide a Payment Processing user interface to process and maintain all the tax payment records.
LOTS-LOTSREQ-1798	2	Track manual updates	The system must keep track of all the manual updates made in this user interface by maintaining a Manual Entry Flag and group all payments according to this flag.
LOTS-LOTSREQ-1799	3	Allow for partial payments	The system must provide a function to make "Partial Payments" to tax authorities by allowing an authorized user to split the funds by departments.

Exhibit 23: PILT, PTA, and Swamp Tax Payments			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1800	3.1	Track actual paid amount	The system must provide a separate "Actual Paid Amount" field in addition to the TO Be Paid field to keep record of all the adjusted paid amounts.
LOTS-LOTSREQ-1801	4	Provide payment detail report for actual	The system must allow an authorized user to generate "Payment Detail report' with actual payment details presenting summary by millages and adjustments by each parcel and individual millage breakdown by taxing authorities.
LOTS-LOTSREQ-1802	4.1	Provide payment detail report by millage	The system must allow an authorized user to generate "Payment Details report" by Millages in tax authorities also.
LOTS-LOTSREQ-1803	5	Generate payment voucher	The system must allow an authorized user to generate "Payment Voucher" to present funds/account structure breakdown by departments for a particular tax year, season, county/jurisdiction and vendor.
LOTS-LOTSREQ-1804	5.1	Allow for rounding	Since parcels can have more than one acquisition fund link, the system must provide a capability to consider rounding and adjustments in the amounts on the Payment Voucher.
LOTS-LOTSREQ-1806	7	View/print historic payments	The system must provide a function to View and Print all historic PILT payments made to the tax authorities.
LOTS-LOTSREQ-1807	8	Export payment records	The system must allow an authorized user to export all Tax payments records and reports on to Excel and or PDF.
LOTS-LOTSREQ-1808	9	Save payment records	The system must allow an authorized user to save any changes made to the database.
LOTS-LOTSREQ-1827	11	Provide MAIN payment report	The system must provide "MAIN payment report" by county or state to display the following information: · Tax year · Season · Agency · Current doc · Vendor name · Vendor No. · MAIN warrant Number · Pay Date · Amount · Tax authority ID · County-Jurisdiction · Document Suffix · PCA Index
LOTS-LOTSREQ-1829	1	Maintain swamp tax records	In accordance with the Act 451, P.A. 1994 – Part 21, Subpart 13, and the system must provide a user interface to maintain Swamp Tax records to manage Swamp land payments for Tax reverted and or gift parcel records.
LOTS-LOTSREQ-1830	2	View/add/edit/delete swamp parcels	The system must allow an authorized user to View/Add/Update/Delete following details on the swamp parcels: · Town/Range/Section · Jurisdiction · Acres · Total Acreage by Township · Legal Description of parcels

Exhibit 23: PILT, PTA, and Swamp Tax Payments			
ID	**RFP#**	**Name**	**Description**
LOTS-LOTSREQ-1831	3	Generate annual swampland payments report	The system must allow an authorized user to generate an "Annual Swampland Payments" report with following information: · County · Acres Price per acres · Payment amount · Prorated Price per acre · Prorated payment amount
LOTS-LOTSREQ-1832	4	Create payment voucher for county	The system must allow an authorized user to create "Payment Voucher" for each county with following information: · County Treasurer · Vendor Number · Invoice Number · Invoice description · Index · Agency Object · Total Amount · Voucher Number · Comments
LOTS-LOTSREQ-1833	5	Generate treasurer templates	The system must allow an authorized user to generate templates to be sent to county treasurer along with the payment voucher.
LOTS-LOTSREQ-1836	2	Match based on platted parcel information	The system must match the platted parcel information on LOTS parcels with PILT parcels.
LOTS-LOTSREQ-1837	3	Match based on subdivision	The system must match the subdivision ID number and Lot number of LOTS parcels to that of PILT parcels.
LOTS-LOTSREQ-1838	4	Match based on block and lot fraction	In case PILT parcel has Block and Lot fraction field that is NULL, the system must match it with the Block and Lot fraction field on LOTS parcels.
LOTS-LOTSREQ-1839	5	Match based on acreage	The system must match the Acreage information on LOTS parcel to that of PILT parcel.
LOTS-LOTSREQ-1841	6.1	Match based on Q, QQ	In case the PILT parcel has Quarter or Quarter Quarter information, the system must match it with that of LOTS parcel.
LOTS-LOTSREQ-1845	10	PILT vs Swamp indicator	The system must provide an indicator on LOTS parcel whether it's a PILT parcel or a Swamp parcel.

4. Impact to LOTS Solution Description

In the RFP and Project Charter, the description of the to-be-developed LOTS Solution was *the consolidation of LOTS, PILT, and Swamp Tax into one elegantly designed solution*.

As defined by the inclusion of Swamp Tax requirements (LOTS-LOTSREQ-1829, LOTS-LOTSREQ-1830, LOTS-LOTSREQ-1831, LOTS-LOTSREQ-1832, and LOTS-LOTSREQ-1833) in Exhibit 23 of the Removal of Requirements by Functional Area section of this change control document, Swamp Tax is no longer a component of the new LOTS Solution.

5. Impact to LOTS Solution Schedule

To accommodate these requirement changes, the LOTS Solution project will need to add 3 addition sprints to the overall construction schedule for release 3. These sprint additions will result in the modification of R3 UAT, Training, Go-Live, and Warranty milestones. Expected full-system go-live will move to 8/21/2018, with the existing contractual warranty period (go live + 120 calendar days) now ending on 12/19/2018.

6. Extension of Warranty Period

In addition to the 3 additional construction sprints and subsequent shifting of project delivery dates, this change control also contains an extension of the warranty period. The extension of the warranty period covers the period from 12/20/2018 through 2/28/2019 to allow for normal PILT processing timelines, which occur after the currently defined warranty period end date of 12/19/2018.

7. Impact to LOTS Solution Budget

Requirement Changes by Functional Area	New	Removed	Impact (new-removed)
Exhibit 1: Maintain Parcel	$7,920	($14,473)	($6,553)
Exhibit 3: System Reference Tables Part 1	$3,800	($6,473)	($2,673)
Exhibit 4: GIS Interface	$12,430		$12,430
Exhibit 5: Link/Split Parcel, Build Deeds and Create Documents	$29,160		$29,160
Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	$47,080	($1,841)	$45,239
Exhibit 7: Technical Requirements		($368)	($368)
Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	$3,200	($1,656)	$1,544
Exhibit 12: Mineral Production	$28,140	($28,110)	$30
Exhibit 13: Mineral Revenue RPS	$3,715	($1,751)	$1,964
Exhibit 14: MAIN Exception Reporting	$4,340	($4,607)	($267)
Exhibit 15: Security Administration (PFC)		($279)	($279)
Exhibit 16: Land Transaction Accounting		($9,270)	($9,270)
Exhibit 18: Case Processing	$74,250	($12,337)	$61,913
Exhibit 19: VMS Interface		($736)	($736)
Exhibit 20: Land Disposal	$11,710	($19,187)	($7,477)
Exhibit 21: Land Transaction Reporting		($6,105)	($6,105)
Exhibit 23: PILT, PTA, and Swamp Tax Records	$30,350	($32,280)	($1,930)
Reporting	$8,880		$8,880
TOTALS	$264,975	($139,473)	
		A: Total Requirements	**$125,502**

Extension of Warranty Period	Total
Extended Warranty, 12/20/2018 – 2/28/2019	$25,000
B: Warranty Period	**$25,000**

Additional Escalated Defects	Total
Extended Warranty, 12/20/2018 – 2/28/2019	$31,170
C: Escalated Defects	**$31,170**

Total Impact to LOTS Budget	Total
A: Total Requirements	$125,502
B: Warranty Period	$25,000
C: Escalated Defects	$31,170
TOTAL	**$181,672**

8. Approval Information – LOTS Solution Change Control #2

Approval Signatures

Role	Name/Title	Signature	Date
DNR Project Sponsor	Sharon Schafer Chief of DNR Finance & Operations Division		5/31/2018
DTMB Project Sponsor	James Hogan DTMB General Manager supporting DEQ, DNR, and MDARD		5/31/2018
DNR Product Owner	Patricia Harlow DNR Land Records, Sales, and LOTS Specialist		5/31/2018
DTMB Project Owner	Michael Cooley Manager, Customer Service & Support Team (DEQ, DNR, MDARD)		5/31/2018
DTMB Project Manager	Robin Krzciok Project Manager Enterprise Portfolio Office		5/31/2018
KL&A Project Manager	Dave Desrochers KL&A Director, Service and Delivery		5/31/2018
KL&A Contract Owner	John Leigh KL&A Partner		5/31/2018

9. Additional Escalated Defects

ID	Name	Description
LOTS-LOTSREQ-2495	Build Main Deed Template from Case Document	The system must allow an authorized user to build the Main deed template from a Case Document.
LOTS-LOTSREQ-2493	View List of Related Parcels in Search Result Tool from Auction	The system must allow a user to view the parcels associated with an auction in the parcel search results screen to allow additional filtering and use of work list features.
LOTS-LOTSREQ-2494	View List of Related Parcels in Search Result Tool from Nomination	The system must allow a user to view the parcels associated with a nomination in the search results screen to allow additional filtering and use of work list features.
LOTS-LOTSREQ-2489	Allow to Bulk Append Notes to Leases	The system must allow authorized users to bulk append a note to selected Leases from the Lease Search Results tool.
LOTS-LOTSREQ-2484	Allow Parcels with "End-Date" having Active Lease to be Added to another Lease	When adding a parcel to a Lease, for Oil & Gas, Gas Storage, Metallic Minerals or Nonmetallic Minerals Lease Types, in addition to checking if the selected parcel has another lease with "Active" status the system should also check if the parcel has been end-dated on that lease. (LEASE_PAR.RELEASE_DATE.) If the End Date is not null (present), then the selected parcel should be added to the lease if all other requirements are satisfied. If the End Date is null (not present), then the selected parcel should not be added to the lease and display an error. (This is an existing validation.) NOTE: BR-116 needs to be modified for this change, if change approved by CCB.
LOTS-LOTSREQ-2486	Allow Bulk End-Date Leases on Unitized Area	The Maintain Unit Area window must provide an authorized user with the ability to bulk edit lease details. This function must allow user to: • Select one or more leases on a Unitized Area. • Allow the user to set an End Date for all selected leases.

ID	Name	Description
LOTS-LOTSREQ-2485	Allow to Bulk End-Date Parcels on an Unitized Area	The Maintain Unit Area window must provide an authorized user with the ability to bulk edit parcel details. This function must allow user to: • Select one or more parcels on a Unitized Area. • Allow the user to set an End Date for all selected parcels.
LOTS-LOTSREQ-2492	View List of Related Leases in Search Result Tool from Drilling Unit	The system must allow a user to view the leases associated with a drilling unit in the lease search results screen to allow additional filtering and use of work list features.
LOTS-LOTSREQ-2496	Navigate Between Drilling Units as Worklist	The system must allow an authorized user to navigate from a drilling unit to the next drilling unit or previous drilling unit in the stored work list.
LOTS-LOTSREQ-2497	Store Drilling Unit Search as Worklist	The system must store the ordered list of items returned from the Drilling Unit Search.
LOTS-LOTSREQ-2491	View List of Related LOTS Parcels in Search Result Tool from Case Document	The system must allow a user to view the posted LOTS parcels associated with a case document in the parcel search results screen to allow additional filtering and use of work list features.
LOTS-LOTSREQ-2498	Lease Acres should Recalculate when Lease Parcels are Added, Removed or End-Dated	Lease Acres under the Acreage sub-group, on the Lease Detail, should consider original lease acres and recalculate based on parcels being added to or removed from the lease or moved from one lease to another related lease.

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT
Department of Technology, Management, and Budget
525 W. ALLEGAN ST., LANSING, MICHIGAN 48913
P.O. BOX 30026 LANSING, MICHIGAN 48909

CONTRACT CHANGE NOTICE

Change Notice Number **1**
to
Contract Number **071B6600129**

CONTRACTOR	
	Kunz, Leigh & Associates, Inc.
	28081 Southfield Road
	Lathrup Village, MI 48076
	John Leigh
	248-559-7910
	j.leigh@kunzleigh.com
	*******1652

STATE			
	Program Manager	Jeremy Newman	DNR
		517-335-3260	
		newmanj2@Michigan.gov	
	Contract Administrator	Kim Harris	DTMB
		(517) 284-7016	
		harrisk16@michigan.gov	

CONTRACT SUMMARY			
LAND OWNERSHIP TRACKING SYSTEM - DNR			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW**
August 30, 2016	August 29, 2019	1 - 1 Year	August 29, 2019
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
ALTERNATE PAYMENT OPTIONS			**EXTENDED PURCHASING**
☐ P-Card	☐ Direct Voucher (DV)	☐ Other	☐ Yes ☒ No
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☐		☐		August 29, 2019
CURRENT VALUE	**VALUE OF CHANGE NOTICE**	**ESTIMATED AGGREGATE CONTRACT VALUE**		
$5,799,793.00	$100,070.00	$5,899,863.00		

DESCRIPTION

Effective 09-21-2017, this contract is hereby increased by $100,070.00 per the attached documentation. Two additional sprints are added to the overall construction schedule. Full-system go-live will move to 07/10/2018, with the warranty period now ending on 11/08/2018. Revised payment schedule (see attached) is incorporated in to this change notice. All other terms, conditions, specifications, and pricing remain the same. Per DTMB, agency and contractor approval.

State of Michigan

LOTS Solution

New + Removed Requirements

Change Control Approval

General Information

System or Project ID/Acronym:	LOTSSOL	**Creation Date:**	6/20/2017
Client Agency:	DNR/DTMB	**Modification Date:**	
Author(s):	Dave Desrochers	**DTMB Authorized by:**	James Hogan

Privacy Information

This document may contain information of a sensitive nature. This information should not be given to persons other than those who are involved with this system/project or who will become involved during its lifecycle.

Change Control

Revision Date	Author	Section(s)	Summary
6/20/2017	Dave Desrochers	All	Initial Creation
6/27/2017	Dave Desrochers	2,4,5	Updates per discussions with DNR/DTMB

Table of Contents

1. Overview

These requirements were captured by KL&A during discovery, functional and technical JAD sessions. Details regarding business need and the existence of corresponding functionality in the legacy system were provided by DNR and DTMB stakeholders and DNR functional area Subject Matter Experts (SMEs). Once captured by the KL&A BAs, these new requirements were entered into Jama, and then began the review process by the LOTS Change Control Board (CCB). The list of new and removed requirements contained in this document have been reviewed numerous times by both LOTS Project Leadership and DNR/DTMB stakeholders and SMEs.

Column	Description
ID	This is the new KL&A requirement numbering. This number will be used throughout the life of the project, providing a completely unique identifier for each requirement, regardless of the exhibit with which the requirement is associated. NOTE: In Jama, there is an additional prefix of LOTS-LOTS in front of the REQ (i.e. LOTS-LOTSREQ-1).
Name	A short name created by KL&A to help quickly identify the purpose of the requirement.
LOTS Exhibit	The functional area that the new or removed requirement corresponds to
Description	This is the Detailed Requirement Description from the Detailed Requirements Specification that accompanied the original RFP. This is the requirement content for which KL&A is determining scope.
Comments	These are comments and details captured in JAD and discovery session

2. New Requirements by Functional Area

Exhibit 1: Maintain Parcel

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-1996	Store Parcel Search as Work List	Exhibit 1: Maintain Parcel	The system must store the ordered list of items returned from the Parcel Search.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting.
LOTS-LOTSREQ-2001	Navigate Between Parcels as Work List	Exhibit 1: Maintain Parcel	The system must allow an authorized user to navigate from a parcel to the next parcel or previous parcel in the stored work list.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting.
LOTS-LOTSREQ-2016	View List of Related Documents in Search Results Tool	Exhibit 1: Maintain Parcel	System must allow a user to view the documents related to a parcel in the search results screen to allow additional filtering.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting.
LOTS-LOTSREQ-2017	View List of Related Parcels in Search Result Tool	Exhibit 1: Maintain Parcel	System must allow a user to view the parcels associated with a document in the search results screen to allow additional filtering.	Missing requirement identified and added
LOTS-LOTSREQ-2030	Edit File Comment	Exhibit 1: Maintain Parcel	The system must provide an interface for a user to edit existing file comments in the new LOTS Solution.	This requirement was identified during the 12/7/2016 Parcel Detail final JAD Session. Walter Linn confirmed that this functionality exists in the legacy LOTS system.
LOTS-LOTSREQ-2036	Remove mis-Matched Jurisdictions	Exhibit 1: Maintain Parcel	The system must remove any mismatched jurisdictions associated with a parcel when the parcel county is modified and notify the user that mismatched jurisdictions were removed. Notes: The user interface for the Jurisdiction Section should refresh to show the updated list. The list of available Jurisdictions should be reloaded based on the newly selected county on the Parcel.	Discovered during the 12/7 Parcel Detail JAD. A new business rule was added that requires additional development and testing.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2049	Calculate whole lots and fraction lots	Exhibit 1: Maintain Parcel	The system must calculate the whole lots and fraction lots when subdivision blocks are added or removed.	
LOTS-LOTSREQ-2052	Remove Mis-Matched Subdivision	Exhibit 1: Maintain Parcel	The system must remove any mismatched subdivisions associated with a parcel when the parcel jurisdictions are modified and notify the user that mismatched subdivisions were removed. Notes: The user interface for the Subdivision Section should refresh to show the updated list. The list of available Subdivisions should reloaded based on the newly selected county on the Parcel.	Added per discussion on 01/23/2017 during sprint planning. Adding new requirement to replicate the functionality of changing a county, and removing mis-matched jurisdictions. This could cause a cascading removal of a subdivision based on the removal of a jurisdiction.
LOTS-LOTSREQ-2127	Move parcels from parent to child	Exhibit 1: Maintain Parcel	The system must allow users to move one or more parcels from the parent lease to child lease by; allowing user to choose the child lease(s) end date a parcel on the parent lease pull over parcel extension information from the parent lease. Additional functional requirement TBD	02/28/2017 This is a missed requirement. Jennifer to investigate which data attributes of parcels can be moved to child from the parent.

Exhibit 2: Maintain Document

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-1997	Store Document Search as Work List	Exhibit 2: Maintain Document	The system must store the ordered list of items returned from the Document Search.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2002	Navigate Between Documents as Work List	Exhibit 2: Maintain Document	The system must allow an authorized user to navigate from a document to the next document or previous document in the stored work list.	New requirement to facilitate the new work-list concept
LOTS-LOTSREQ-2009	Display document's acquired easement information	Exhibit 2: Maintain Document	The system must display a document's acquired easement information.	1/27/2017: Here are the fields identified during the JAD: Easement Use Easement Type Length Width Tax Rent Term Rent Amount Renew Date Expire Date Tickler Date Missing requirement identified and added
LOTS-LOTSREQ-2010	Display document's granted easement information	Exhibit 2: Maintain Document	The system must display a document's granted easement information.	1/27/2017 fields removed from requirement above: Easement Use Length Width Temporary Consideration Missing requirement identified and added
LOTS-LOTSREQ-2011	Update fund percentages	Exhibit 2: Maintain Document	The system must calculate a parcel's fund percentages to ensure they total to 100%.	Missing requirement identified and added

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2015	System calculate Doc Seq	Exhibit 2: Maintain Document	The system must calculate/determine the doc seq when adding parcels to documents.	1/27/2016: This is not a duplicate of 2028. This is the requirement for the system to calculate whereas the other is to allow the user to manually edit it. This requirement was determined to have been missed during the 11/22 Document Search and Detail JAD session. Walter believes the system is currently assigning the doc_seq based on document date. But he researched it and believes it is simply getting the next seq available. This means they will be sorted based on when the parcel is added (created date). Then Doc Seq will become an editable field on Parcel to allow the order of a parcel's documents to be reordered.
LOTS-LOTSREQ-2018	Delete a Deeded Right	Exhibit 2: Maintain Document	The system must allow an authorized user to delete a deeded right record applied to a document.	Missing requirement identified and added
LOTS-LOTSREQ-2020	Apply Funds to all parcels on a document	Exhibit 2: Maintain Document	The system must allow an authorized user to apply funds to all parcels on a document.	Missing requirement identified and added
LOTS-LOTSREQ-2024	Create replacement document	Exhibit 2: Maintain Document	The system must provide the user with the ability to create a replacement document.	12/1/2016: Agreed in the final Document Detail JAD that this requirement was missing
LOTS-LOTSREQ-2025	Create corrective document	Exhibit 2: Maintain Document	The system must provide the user with the ability to create a corrective document.	12/1/2016: Agreed in the final Document Detail JAD that this requirement was missing
LOTS-LOTSREQ-2028	Search for Document by Easement Fields	Exhibit 2: Maintain Document	The system must allow an authorized user to search Documents by Easement fields.	1/27/2017: Here are the fields originally identified during the JAD: Easement Use Easement Type Renew Date Expire Date Tickler Date 12/6/2016: Added requirement per email from Pat. See action item 88

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2038	System calculate document number	Exhibit 2: Maintain Document	The system must calculate/determine the document number when documents are created.	This requirement was determined to have been missed based on review the database structure. Pat provided us the logic in an email from Parik on 12/21: Here is the logic: If TRANS_GRP_CODE is ACQA or DISPA then the NEXT_DOC_NUM in the table is used in the new record in LOTS.DOC table and the LOTS.TRANS_GRP table is updated NEXT_DOC_NUM + 1. Else, it is manually assigned
LOTS-LOTSREQ-2246	Edit Related Party to Add Additional Details	Exhibit 2: Maintain Document	The system must allow an authorized user to add/edit additional information relevant only to the document-party association for each party record that is associated to the document. The system must allow users to edit following party details on a document: Party Relation (Drop-down) Marital Status (Drop-down) H/W Indicator (Drop-down) H/W Number Grantor Type (Drop-down) Sort Order	4/11/2017: Due to the need for this existing functionality that was missied in the original requirements, the stories related to this functionality have been developed and sent out for review (prior to CCB review).
LOTS-LOTSREQ-1980	Document Reports	Exhibit 2: Maintain Document	The system must provide the following document reports: Document List Report Document Detail Report Document Rights Report Document Funds by Fund Report Document Funds by Parcel Report	During a reports discussion with Pat, it was discovered that these document reports were not documented in any requirement

Exhibit 3: System Reference Tables Part 1

ID	Name	LOTS Exhibit	Description	Comments

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2012	View Jurisdiction Record Details	Exhibit 3: System Reference Tables Part 1	The user interface must allow user to view Jurisdiction record details.	1/27/2017: Here are the fields we believe should be included: Jurisdiction ID Jurisdiction Name Jurisdiction Type County Created By Created On Modified By Modified On Missing requirement identified and added
LOTS-LOTSREQ-2013	Update Subdivision record	Exhibit 3: System Reference Tables Part 1	The user interface must allow an authorized user to update an existing Subdivision record.	11/21/2016: Requirement to be able to edit/update an existing Subdivision record was missing in the original requirements. This was discussed during System Maintenance Framework JAD, 11/15/2016 and DNR users confirmed that a New requirement needs to be added to capture edit subdivision record. Accordingly, this new requirement has been added.

Exhibit 6: Mineral Auction, Nomination, and Parcel Classification

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-1999	Store Lease Search as Work List	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must store the ordered list of items returned from the Lease Search.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting.
LOTS-LOTSREQ-2005	Navigate Between Leases as Work List	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to navigate from a lease to the next lease or previous lease in the stored work list.	New requirement related to work list functionality
LOTS-LOTSREQ-2045	Display parcels associated with a nomination	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must display a list of parcels associated with a mineral nomination.	This requirement is missing from exhibit 6, based on BA research prior to the 01/18/2016 functional JAD and based on documentation of legacy features provided by Parik.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2114	Display list of mineral parcel funds	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must display a list of parcels returned based on user search criteria.	Added based on user discussion with users in JAD on 02/01/2017 - CLH
LOTS-LOTSREQ-2118	Load mineral parcel fund associations	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a functionality to load mineral parcel fund data to one or multiple parcels based on derived data in LOTS.	This is an existing process that is available in the Legacy LOTS application called "Load Min Par Fund Associations" that is available in the Right Click Menu in the Maintain Min Par Fund screen. Users require this function to be ported into the new LOTS Solution as determined in the 02/01/2017 Functional JAD for Min&Sur Par Fund Association. This was called out as a missed requirement by users.
LOTS-LOTSREQ-2119	Load surface parcel fund associations	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a functionality to load surface parcel fund data to one or multiple parcels based on derived data in LOTS.	This is an existing process that is available in the Legacy LOTS application called "Load Min Par Fund Associations" that is available in the Right Click Menu in the Maintain Min Par Fund screen. Users require this function to be ported into the new LOTS Solution as determined in the 02/01/2017 Functional JAD for Min&Sur Par Fund Association. This was called out as a missed requirement by users.
LOTS-LOTSREQ-2120	View Vendor History Information	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow users to view Vendor History.	This is a missed requirement.
LOTS-LOTSREQ-2121	Edit Vendor History Information	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized users to edit Vendor History record.	This is a missed requirement.
LOTS-LOTSREQ-2122	Delete Vendor History Information	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized users to delete Vendor History record.	This is a missed requirement.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2129	Refine search for nominations	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to refine a search for nomination(s).	02/21/2017 New requirement added based on user request during JAD. Users requested that all search forms allow for refining.
LOTS-LOTSREQ-2131	Display a list of mineral nominations	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must display a list of nominations that match a user's search criteria.	Added based on discussion with user in the Function JAD for Mineral Nomination/Parcel Classification on 02/21/2017
LOTS-LOTSREQ-2132	Display validations associated with a nomination	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow user to view a list of validations on a nomination.	This requirement was added based on discussion with users in the Mineral Nomination JAD on 02/21/2017. This requirement is for viewing a subsection of the mineral nomination page that exists in the legacy application and was identified as required by users.
LOTS-LOTSREQ-2134	Remove validation from nomination	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow a user to remove a validation from a nomination.	This requirement was added based on discussion with users in the Mineral Nomination JAD on 02/21/2017. This requirement is for viewing a subsection of the mineral nomination page that exists in the legacy application and was identified as required by users.
LOTS-LOTSREQ-2135	Add validation to nomination	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow a user to add a validation to a nomination.	This requirement was added based on discussion with users in the Mineral Nomination JAD on 02/21/2017. This requirement is for viewing a subsection of the mineral nomination page that exists in the legacy application and was identified as required by users.
LOTS-LOTSREQ-2136	Update validation on nomination	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow a user to edit a validation on a nomination.	This requirement was added based on discussion with users in the Mineral Nomination JAD on 02/21/2017. This requirement is for viewing a subsection of the mineral nomination page that exists in the legacy application and was identified as required by users.
LOTS-LOTSREQ-2137	Refine search for mineral parcel funds	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to refine a search for mineral parcel funds.	Added based on discussion with users in Mineral/Surface Parcel Fund Functional JAD. This feature exists in the legacy application.
LOTS-LOTSREQ-2138	Refine search for surface parcel funds	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to refine a search for mineral parcel funds.	Added based on discussion with users in Mineral/Surface Parcel Fund Functional JAD. This feature exists in the legacy application.
LOTS-LOTSREQ-2143	Display parcel notes associated with nomination	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow a user to view the notes of a parcel on a nomination.	Added based on user request in 01/17/2017 JAD - Users are able to edit a note, but the users asked for just a view version that exists in legacy.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2151	Add Bond Information for Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to add bond information for a vendor.	This is a missed requirement.
LOTS-LOTSREQ-2152	Edit Bond Information for Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to update bond information for a vendor.	This requirement is split from the original requirement to capture increased scope
LOTS-LOTSREQ-2153	View Bond Information on a Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to view bond information for a vendor.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2154	Delete Bond Information from Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to delete bond information for a vendor.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2155	Add Insurance Information for Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to add insurance information for a vendor.	This is a missed requirement.
LOTS-LOTSREQ-2156	Edit Insurance Information for Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to update insurance information for a vendor.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2157	View Insurance Information on a Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to view Insurance information for a vendor.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2158	Delete Insurance Information from Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to delete bond information for a vendor.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2159	Allow user to Inactivate Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must an authorized user to enter an Inactive Date on a vendor record to inactivate it.	This is missed requirement.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2160	Add Contact to Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized user to add Contact to a vendor record.	This is a missed requirement.
LOTS-LOTSREQ-2161	Edit Contact Information on Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	Edit Contact Information on Vendor The system must allow authorized user to update Contact information on a vendor record.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2162	Delete Contact from Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized user to delete Contact from a vendor record.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2163	View Contact Information on Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized user to view Contact information on a vendor record.	This requirement is split from the original requirement to capture increased scope.
LOTS-LOTSREQ-2168	View Vendor Type on Vendor	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized user to view vendor type information on a vendor record.	This is a missed requirement.
LOTS-LOTSREQ-2169	Refine Vendor Search Criteria	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized user the ability to return to their search criteria and refine it.	This is a missed requirement.
LOTS-LOTSREQ-2234	Add Vendor History Information	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to add vendor history name information.	
LOTS-LOTSREQ-2237	Refine Lease Search Criteria	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow authorized user the ability to return to their search criteria and refine it.	This is a missed requirement.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2248	Navigate Between Parcel Classifications as Worklist	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must allow an authorized user to navigate from a parcel classification to the next parcel or previous parcel classification in the stored work list.	
LOTS-LOTSREQ-2250	Store Parcel Classifications Search as Worklist	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must store the ordered list of items returned from the Parcel Classification Search.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting. Requirement requested by Jennifer H. and other Minerals users during relevant Parcel Classification Function and Technical JADs and via email from January 6, 2017.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2251	Display parcel classification details	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide the ability to view a parcel classification.	These fields should be included: Details (Section) Classification ID Classification Date Lease Class Respondent Notes Parcel Details (Section) Parcel ID (Link to Parcel screen) Location (string) Legal Description County Total Acres Stipulations (Section) Stipulation ID (Link to Stipulation detail screen) Stipulation Name Created By Created On Reasons (Section) Reason ID (Link to Reason detail screen) Reason Name Created By Created On 02/21/2017 New requirement added based on Functional JAD for Parcel Classification - Users confirmed the need for this functionality. This would typically be split into three requirements if these were not being combined into the details section.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2252	Display extensions on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view Extensions of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2253	Display current distribution of lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Current Distribution of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2254	Display lessee history on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Lessee History of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016. The following fields are included in the UI in Legacy: GRID Lessee (Vendor ID - Vendor Name) Thru Date FORM Lessee (Required)(with Ellipse for searching) (Use Vendor Typeahead Select in LOTS Solution) Thru Date (Rename to Through Date) (Required) Created By (Recommend moving to the Grid) Created On (Recommend moving to the Grid)
LOTS-LOTSREQ-2255	Display drilling units on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Drilling Units of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2256	Display unitized areas of lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Unitized Areas of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2257	Display pit/mining units on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Pit/Mining Units of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2258	Display revenue reporting units on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Revenue Reporting Units (RRU) of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2260	Add lessee history on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to add a Lessee History record on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2261	Edit lessee history on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to edit a Lessee History record on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2262	Edit lease extension on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to edit an Extension record on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2263	Delete lessee history on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to delete a Lessee History from a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2265	Delete lease extension from lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to delete an Extension record from a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2266	Display rental rates on lease term	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Rental Rates of a Lease Term on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016. Fields in the legacy application GRID/FORM From Date (Required) (Date) Thru Date (Required) (Date) - Rename to "Through Date" Rnt Per Acre (Required) (Currency Masked) - Rename to "Rent Per Acre"
LOTS-LOTSREQ-2267	Display royalty rates on lease term	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Royalty Rates of a Lease Term on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016. NOTE: This section is only shown when the lease type of a lease is Metallic Minerals. Fields in the legacy application, Unable to tell if this is an edit form GRID Prod Type Code (Recommend rename to "Production Type") Rate Unit Measure % Of Sale Price - (Recommend rename to "Percent of Sale Price")

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2268	Display funds on a lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Funds associated with Parcels on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2273	Add current distribution on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to add a Current Distribution to a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2274	Delete current distribution from lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to remove a Current Distribution from a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2275	Display lease documents	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Documents on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016. The following fields are included in the UI in Legacy: GRID Lessee (Vendor ID - Vendor Name) Thru Date FORM Lessee (Required)(with Ellipse for searching) (Use Vendor Typeahead Select in LOTS Solution) Thru Date (Rename to Through Date) (Required) Created By (Recommend moving to the Grid) Created On (Recommend moving to the Grid)

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2277	Edit current distributions on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to edit a Current Distribution record on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2278	Download lease documents	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to download the Documents on a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2279	Display formations on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Formations of a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2280	Add formation on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to add a Formation to a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2282	Delete formation from lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to remove a Formation from a Lease.	This is a new requirement for existing functionality. User confirmed the need for this section during the Lease Function JAD. Users also confirmed the addition of approximately 32 new requirements during the Parcel Classifications Technical JAD on 03/30/2016.
LOTS-LOTSREQ-2283	Display related leases on lease	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	The system must provide a user with the ability to view the Leases related to a Lease.	

Exhibit 8: Mineral System Reference Tables (Part 2 & 3)

ID	Name	LOTS Exhibit	Description	Comments

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2214	Maintain product type records	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The system must provide a user interface for the Product Type maintenance reference table.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2215	View product types	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to view a list of existing product type.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2216	Filter product types	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to filter the product types.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2217	View product type details	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to view individual product type details.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2218	Create new product type	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to create a new product type.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2219	Assign unique product ID	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must assign a unique Product Code to each newly created product type.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2220	Edit existing product type	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to edit an existing product type details.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2221	Associate/Disassociate unit measure to product type	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to associate/disassociate unit measures to a product type.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2222	View product type's revenue distribution records	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to view a product type's associated production revenue distribution records.	3/17/2017: Identified missing maintenance table in Mineral Production JADs
LOTS-LOTSREQ-2223	Add/Edit/Delete revenue distribution records for product type	Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	The user interface must allow an authorized user to add/edit/delete production revenue distribution records from a product type.	3/17/2017: Identified missing maintenance table in Mineral Production JADs

Exhibit 12: Mineral Production

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2042	Single Record Search Results	Exhibit 12: Mineral Production	The system must navigate the user to the individual detail record when searched results returned a single record .	1/27/2017: This requirement has been taken over for system wide (not just minerals) This was added based of the Mineral Production Revenue Reporting Unit JAD session. The Mineral Production business owners would prefer it if the new LOTS Solution would route the user directly to the record details when they search on a single specific record. Dave has suggested implementing this functionality system wide in the new LOTS Solution.
LOTS-LOTSREQ-2096	Clear RRU search criteria	Exhibit 12: Mineral Production	The system must provide the user with the ability to clear their search criteria.	Adding clear search screen requirements across Mineral Production screens.
LOTS-LOTSREQ-2104	Load parcels to unit area	Exhibit 12: Mineral Production	The Maintain Unit Area window must allow an authorized user to load all the parcels associated to all locations that are associated to a Unit Area. (The system matches Parcel records in LOTS to Unit Area Locations and Unit Area IDs). NOTE: This requirement is for selecting and deselecting unit area locations via the GIS grid.	4/20/2017: We have been told that this is no longer considered GIS. This will be implemented as a "clickable" color-coded grid. The GIS functionality will not be implemented until Release 4.
LOTS-LOTSREQ-2105	Populate active oil and gas leases for unit area	Exhibit 12: Mineral Production	The Maintain Unit Area window must load all the parcels for the Unit Area and populate all Active Oil and Gas leases associated with Parcels simultaneously while loading Parcels for a Unit Area.	This functionality should exist for loading parcels identified from selected or deselected unit area locations via the GIS grid. The GIS functionality will not be implemented until Release 4.
LOTS-LOTSREQ-2116	Add/Remove a mine associated to an RRU	Exhibit 12: Mineral Production	The Maintain RRU user interface must allow an authorized user to add or remove the mine associated to an RRU.	Per the business owners, a user can add or remove the mine associated to an RRU.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTS-REQ-2123	Edit unit area records for RRU	Exhibit 12: Mineral Production	The Maintain RRU USER INTERFACE Window must allow an authorized user to edit Unit Area records associated to an RRU.	Per the Mineral Production business owners, the user must be able to remove or change the unit area associated to an RRU. This requirement needs to be added.
LOTS-LOTSREQ-2128	Refine Drilling Unit search criteria	Exhibit 12: Mineral Production	The system must provide the user with the ability to return to the Drilling Unit Search screen to refine their original search criteria.	Adding refine search screen requirements across Mineral Production screens. Per the business owners, this functionality currently exists. This requirement was not identified for the Mineral Production screens in the new LOTS Solution. 4/20/2017: Users continue to mention how important this is
LOTS-LOTSREQ-2140	Display product type details for pit/mining unit	Exhibit 12: Mineral Production	The Maintain Pit/Mining Unit window must display Product Type details.	Requirement added. Does not exist in new LOTS Solution for the Mineral Production Pit/Mining Unit screen.
LOTS-LOTSREQ-2184	Delete pit/mining vendor details	Exhibit 12: Mineral Production	The Maintain Pit/Mining Unit window must allow an authorized user to delete pit/mining vendor records.	Existing functionality in the current LOTS system.
LOTS-LOTSREQ-2185	Add pit/mining vendor details	Exhibit 12: Mineral Production	The Maintain Pit/Mining Unit window must allow an authorized user to add a vendor to a pit/mining unit.	Existing functionality in the current LOTS system.
LOTS-LOTSREQ-2227	Add drilling unit(s) to a unit area	Exhibit 12: Mineral Production	The Maintain Unit area window must allow an authorized user to add drilling units to a Unit Area.	3/22/2017: This requirement is existing LOTS functionality.
LOTS-LOTSREQ-2228	Delete drilling units on a unit area	Exhibit 12: Mineral Production	The Maintain Unit Area window must allow an authorized user to delete drilling unit on a Unit Area.	3/22/2017: This requirement is existing LOTS functionality.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2229	End a drilling unit associated to a unit area	Exhibit 12: Mineral Production	The Maintain Unit Area window must allow an authorized user to end a drilling unit's association to a Unit Area. A user is able to edit the following drilling unit field: End Date	3/22/2017: This requirement is existing LOTS functionality.
LOTS-LOTSREQ-2230	Add an operator to a unit area	Exhibit 12: Mineral Production	The Maintain Unit area window must allow an authorized user to add an operator to a Unit Area.	3/22/2017: This requirement is existing LOTS functionality.
LOTS-LOTSREQ-2231	Delete an operator from a unit area	Exhibit 12: Mineral Production	The Maintain Unit Area window must allow an authorized user to delete an operator from a Unit Area.	3/22/2017: This requirement is existing LOTS functionality.
LOTS-LOTSREQ-2232	Edit the operator history for a unit area	Exhibit 12: Mineral Production	The Maintain Unit Area window must allow an authorized user to edit the operator history for a Unit Area.	3/22/2017: This requirement is existing LOTS functionality.
LOTS-LOTSREQ-2240	Display uniform spacing plan location and grid	Exhibit 12: Mineral Production	The Maintain USP user interface must display · USP Location Description · USP Locations Grid Information with Legend.	3/28/2017: Update this requirement as follows to split the USP Location grid functionality from the USP Location table data: The Maintain USP user interface must display USP Location Description USP Locations Grid Information with Legend "Formation" information associated to the USP Location selected in the grid. 3/16/2017: Additional formations in the Town and Range as the selected well are shown in red in an "additional formations" section of the section/tab.
LOTS-LOTSREQ-2284	Find drilling units to add to Unitized Area	Exhibit 12: Mineral Production	The system must allow user to find Drilling Units to be able to add them to a Unitized Area.	4/17/2017: Existing functionality to find a drilling unit via the drilling unit search screen. Included in USP but not Unitized Area.

Exhibit 13: Mineral Revenue RPS

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2040	Display total receipt amount for search results	Exhibit 13: Mineral Revenue RPS	The system must provide the user with the total of the receipts returned by their search criteria.	
LOTS-LOTSREQ-2041	Display transaction total for a remittance	Exhibit 13: Mineral Revenue RPS	The system must display the total of the transaction amounts for a remittance.	The legacy application has several total fields to aid in allocating the full remittance - this may be implemented different in the new design
LOTS-LOTSREQ-2043	Display related transactions for remittances in search	Exhibit 13: Mineral Revenue RPS	The system must display the related transactions in remittance search results	
LOTS-LOTSREQ-2044	Remove transaction from remittance	Exhibit 13: Mineral Revenue RPS	The system must allow an authorized user to remove Production (including deduction records), Lease and Shut-In Royalty transactions from a remittance.	1/13/2017: Discovered/confirmed during JADs
LOTS-LOTSREQ-2144	Upload Oil & Gas Production Transactions	Exhibit 13: Mineral Revenue RPS	The system must allow an authorized user to upload Oil & Gas production transactions from an Excel spreadsheet	Replacement of requirement 1427 3/9/2017: This is the spreadsheet we want to address first. Basic flow, she will go onto the remittance screen for the remittance that corresponds to the spreadsheet. Then she will enter the vendor ID (type-ahead), then press upload. The system will verify the prop pymt # matches the vendor for an active RRU. The system will need to process the file and either kick the whole file or process part (TBD) and need to display errors.
LOTS-LOTSREQ-2146	Upload Oil & Gas Rental (Lease) Transactions	Exhibit 13: Mineral Revenue RPS	The system must allow an authorized user to upload Oil & Gas lease transactions from an Excel spreadsheet	Replacement of requirement 1427

Exhibit 17: System Reference Tables Part 4

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2023	Associate Contact to Party Record	Exhibit 17: System Reference Tables Part 4	The Maintain Party user interface must allow an authorized user to associate a Contact to a Party record by searching for an existing party in LOTS and associating it to parent Party record, or creating a new party as a contact.	12/01/2016 This requirement was added after confirming with Pat.
LOTS-LOTSREQ-2027	Refine party search criteria	Exhibit 17: System Reference Tables Part 4	The system must provide the user with the ability to return to their search criteria and refine it.	Missing requirement identified and added
LOTS-LOTSREQ-2113	Display list of parties associated by address	Exhibit 17: System Reference Tables Part 4	The system must display list of all parties that share a related address.	

Exhibit 18: Case Processing

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-1998	Store Case Search as Work List	Exhibit 18: Case Processing	The system must store the ordered list of items returned from the Case Search.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting.
LOTS-LOTSREQ-2003	Navigate Between Cases as Work List	Exhibit 18: Case Processing	The system must allow an authorized user to navigate from a case to the next case or previous case in the stored work list.	New requirement was created based on information from the 2016-11-14 Multiple Window Discussion meeting.

Reports

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2054	Maintain Reports	Reports	The system must provide user interface to maintain reports.	Determined in early JADs that Maintain Reports (entire functional area) was missing. Do we need requirements for deleting/inactivating reports? Existing legacy report table has active/inactive date fields.

ID	Name	LOTS Exhibit	Description	Comments
LOTS-LOTSREQ-2055	Display list of reports	Reports	The system must display a list of reports.	Determined in early JADs that Maintain Reports (entire functional area) was missing
LOTS-LOTSREQ-2056	Add a new report	Reports	The user interface must allow an authorized user to add a new report record and must assign a unique Report ID	Determined in early JADs that Maintain Reports (entire functional area) was missing. NOTE: This will most likely not be part of Release 1. Adding a new report will allow a user to create a new report record and "hook" it to a report created in SSRS.
LOTS-LOTSREQ-2057	Edit a report record	Reports	The user interface must allow an authorized user to edit the details on a report record.	Determined in early JADs that Maintain Reports (entire functional area) was missing. NOTE: This will most likely not be part of Release 1. Editing a new report will allow a user to modify report information within LOTS including "hooking" it to a possibly altered report in SSRS.
LOTS-LOTSREQ-2058	Save changes	Reports	The user interface must allow an authorized user to save changes made to the database.	Determined in early JADs that Maintain Reports (entire functional area) was missing. NOTE: This will most likely not be part of Release 1 since adding/editing will be in a later release.
LOTS-LOTSREQ-2059	Generate a report	Reports	The user interface must allow an authorized user to generate a report based on entered parameters.	Determined in early JADs that Maintain Reports (entire functional area) was missing.
LOTS-LOTSREQ-2061	Filter reports	Reports	The system must allow the user to filter the list of reports.	Determined in early JADs that Maintain Reports (entire functional area) was missing

3. Removal of Requirements

Exhibit 22: LEX, TRAUC and Land Examiner SRT

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1322	Import land exam (LEX) data	Exhibit 22	1	The system must provide a maintenance user interface to enable an inbound Land Exam interface to import the following information from LEX: · Land Exam ID · LEX Par ID · Examiner · Possible contamination (Yes/No) · Recommendation (Sell/Hold/Public Use) · Special Assessment · Completion Date · Minimum Bid · Property type (Vacant Land/Occupied structure/Unoccupied abandoned structure) · Occupied served (Able to serve/unable to serve) · DNR Comment · Suggested Division use (FMFM/Parks/Wildlife/Fish)
LOTS-LOTSREQ-1323	Display examiner ID	Exhibit 22	1.1	The system must also display the "Examiner ID" in the Land Exam interface.
LOTS-LOTSREQ-1324	Attach photos to land exam	Exhibit 22	1.2	The system must allow an authorized user to attach photos of properties to the Land Exam interface.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1325	Display parcel attached to land exam	Exhibit 22	2	The system must display the Parcel record attached to the Land Exam with following information: · Local Parcel Number · Location Description · Surface Rights % · Mineral Rights % · Other Rights · Size · Type · Comments · Status · Admin Agency · Parcel ID · Activities · Disclosure
LOTS-LOTSREQ-1326	Display documents attached to land exam	Exhibit 22	3	The system must display the documents attached to the parcel associated with the Land Exam with following information: · Document Sequence Number · Document Number · Document Date · Transaction · Inventory Action · Document Type · Surface rights % · Mineral rights % · Other Rights · Party · Rev. Deed · Comments · Document ID · Case Number · Case Date · Document Image

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1327	Add/update land exam information	Exhibit 22	4	The system must allow an authorized user to add/update the following information on Land Exam interface: · Examiner · Possible contamination (Yes/No) · Recommendation (Sell/Hold/Public Use) · Special Assessment · Completion Date · Minimum Bid · Property type (Vacant Land/Occupied structure/Unoccupied abandoned structure) · Occupied served (Able to serve/unable to serve) · DNR Comment · Suggested Division use (FMFM/Parks/Wildlife/Fish)
LOTS-LOTSREQ-1328	Allow multiple entries	Exhibit 22	5	The system must allow multiple entries of Land Exams on a Parcel.
LOTS-LOTSREQ-1329	No delete of land exam	Exhibit 22	6	The system must not allow Deletion of a Land Exam.
LOTS-LOTSREQ-1330	Generate land exam report	Exhibit 22	7	The system must allow an authorized user to generate a report on Parcel Land Exam by considering all the information provided by LEX.
LOTS-LOTSREQ-1331	Save land exam record	Exhibit 22	8	The system must allow saving any necessary changes made to the database.
LOTS-LOTSREQ-1334	Create land examiner record	Exhibit 22	2	The system must allow an authorized user to create Land Examiner record.
LOTS-LOTSREQ-1335	Assign unique land examiner ID	Exhibit 22	2.1	The system must assign a unique ID for each newly created Land Examiner record.
LOTS-LOTSREQ-1336	List land examiner records	Exhibit 22	3	The system must provide a list of all the Land Examiner records.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1337	Display land examiner record	Exhibit 22	4	The system must display following information on a Land Examiner record: · Name · Active Date · Department · Inactive Date · Status · Land Examiner ID · Date/Time stamp
LOTS-LOTSREQ-1338	Add/update land examiner information	Exhibit 22	5	The system must allow an authorized user to add/update following information on a Land Examiner record: · Name · Active date · Inactive date · Department
LOTS-LOTSREQ-1339	Inactivate land examiner record	Exhibit 22	6	The system must allow an authorized user to Logically Delete a Land Examiner record by entering the Inactive Date.
LOTS-LOTSREQ-1340	Set inactive status	Exhibit 22	6.1	The system must change the status to Inactive if the Inactive Date is less than/equal to the current date.
LOTS-LOTSREQ-1341	Save land examiner record	Exhibit 22	7	The system must allow an authorized user to save all the changes made to the database.
LOTS-LOTSREQ-1344	Add LEX local par num	Exhibit 22	2	The system must add the LEX Local Parcel Number to the LOTS Local Parcel Number On a land exam record for each parcel that already exist in the system.
LOTS-LOTSREQ-1345	Assign unique parcel ID to LEX data	Exhibit 22	3	The system must enable importing new Parcel record from LEX and assign a unique Parcel ID along with the Land Exam information for Parcels that does not exist in the system.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1346	Enter LEX data to import data	Exhibit 22	4	The system must allow an authorized user to enter the following information on LEX upload interface to import data from LEX: · Parcels ready to process (#) Document Template information · Transaction Type · Act Name · Earliest Upload date · Transaction Act Indicator · Act Number (display only) · Act Year(display only) · Act Part Act Sub-Part(display only)
LOTS-LOTSREQ-1347	Verify LEX data	Exhibit 22	4.1	The system must verify if: · County and Jurisdiction of LEX parcel agrees with County and Jurisdiction of existing LOTS parcel. · LEX platted parcel information agrees with LOTS platted parcel information. · The LEX parcel has LOTS Subdivision ID number and Lot Number. · The LEX parcel that has Block and/or Lot Fraction agrees with the LOTS Block and/or Lot Fraction. · LEX acreage parcel information agrees with LOTS acreage parcel information. · The LEX parcel has Town, Range, and Section. · The LEX parcel that has Quarters or Quarter Quarters agrees with LOTS.
LOTS-LOTSREQ-1348	Update legal description	Exhibit 22	4.2	The system must allow LEX to over write Legal Description on LEX parcels with the Legal Description on LOTS parcels for those Parcels that already exists in the system.
LOTS-LOTSREQ-1349	LEX to LOTS cross-reference	Exhibit 22	4.3	The system must provide a LEX Parcel ID to LOTS Parcel ID to LEX Land Exam ID cross-reference so LEX identifies the Parcel ID assigned by LOTS for each parcel imported.
LOTS-LOTSREQ-1350	Validate judgement date and court case	Exhibit 22	4.4	The system must ensure that each imported LEX parcel has a Judgement date and Court case number.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1351	Validate data against rules	Exhibit 22	4.5	The system must verify all the parcel data and Land exam data coming from LEX before importing. In other words, the system must conduct validation of business and data integrity rules.
LOTS-LOTSREQ-1352	Display validation results	Exhibit 22	4.6	For Parcels that does not pass validation, The system must displaya message indicating the number of parcels that passed validation and a count of parcels that did not pass validation.
LOTS-LOTSREQ-1353	Generate LEX county reports	Exhibit 22	5	The system must allow an authorized user to generate LEX upload reports based on counties
LOTS-LOTSREQ-1354	Generate LEX county summary reports	Exhibit 22	5.1	The system must allow an authorized user to generate LEX upload summary reports based on Counties
LOTS-LOTSREQ-1355	Generate LEX verification reports	Exhibit 22	5.2	The system must allow an authorized user to generate LEX upload verification reports based on counties.
LOTS-LOTSREQ-1356	Generate LEX error reports	Exhibit 22	5.3	The system must allow an authorized user to generate LEX upload error reports based on counties.
LOTS-LOTSREQ-1357	Save LEX data changes	Exhibit 22	6	The system must allow an authorized user to save all changes made to the database.
LOTS-LOTSREQ-1359	Mark/unmark for tax reversion auction	Exhibit 22	1	The system must provide a user interface to allow an authorized user to Mark/Unmark parcels for Public Land Auction.
LOTS-LOTSREQ-1360	Search parcels for tax reversion auction	Exhibit 22	2	The system must provide user with the ability to search for Parcels based on the search criteria entered.
LOTS-LOTSREQ-1361	Validate tax reversion auction search criteria	Exhibit 22	2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Parcel(s) not found.
LOTS-LOTSREQ-1362	Allow null tax reversion auction search criteria	Exhibit 22	2.2	The system must provide the search criteria to find all Parcel(s) records that have null values in a particular field.
LOTS-LOTSREQ-1363	Ensure tax reversion auction search is quick	Exhibit 22	2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1364	Select parcel(s) for tax reversion auction	Exhibit 22	3	The system must allow an authorized user to select one or multiple parcels and Mark/Unmark them for Public Land Auction in case they pass the validation test.
LOTS-LOTSREQ-1365	Flag parcel(s) for TRAUC	Exhibit 22	3.1	The system must flag the Marked parcel(s) for download on to the TRAUC system.
LOTS-LOTSREQ-1366	Limit parcel(s) for TRAUC	Exhibit 22	3.2	The system must not allow the selected Parcel(s) to be Marked for Auction in case it has following criteria: · Parcel status is not Active · Incomplete Land Exam on Parcel(s) · Incompatible Activities on Parcel(s) · Current Surface Ownership of less than 100%
LOTS-LOTSREQ-1367	Display error message for selected parcel(s)	Exhibit 22	3.2.1	The system must throw an Error message in case the parcel(s) has one or all the above criteria.
LOTS-LOTSREQ-1368	Set auction date	Exhibit 22	3.3	The system must assign current date for all the Parcels Marked for Auction.
LOTS-LOTSREQ-1369	Prevent unmark if downloaded	Exhibit 22	3.4	The system must not allow the parcel(s) to be Unmarked in case the Parcel(s) are already downloaded for TR Auction (TRAUC).
LOTS-LOTSREQ-1370	Assign marked for auction activity	Exhibit 22	3.5	The system must assign an activity of "Initiated for Public Land Auction" for all the parcels Marked for Auction.
LOTS-LOTSREQ-1371	Generate marked for auction report	Exhibit 22	4	The system must allow an authorized user to generate "Parcels Marked for Auction Report".
LOTS-LOTSREQ-1372	Save tax reversion auction record	Exhibit 22	5	The system must allow an authorized user to save any changes made to the database.
LOTS-LOTSREQ-1375	Search parcels for disclosure	Exhibit 22	2	The system must provide a user with the ability to search for Parcels based on the search criteria entered.
LOTS-LOTSREQ-1376	Validate disclosure search criteria	Exhibit 22	2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Parcel(s) not found.
LOTS-LOTSREQ-1377	Allow null disclosure search criteria	Exhibit 22	2.2	The system must provide the search criteria to find all Parcel(s) records that have null values in a particular field.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1378	Ensure disclosure search is quick	Exhibit 22	2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.
LOTS-LOTSREQ-1379	Assign/unassign disclosure	Exhibit 22	3	The system must allow an authorized user to assign/un-assign one or multiple disclosures to a Parcel.
LOTS-LOTSREQ-1380	Generate disclosure reports	Exhibit 22	4	The system must allow an authorized user to generate Parcel Disclosure reports.
LOTS-LOTSREQ-1381	Save disclosure records	Exhibit 22	4	The system must allow an authorized user to save all the changes made to the database.
LOTS-LOTSREQ-1384	Identify marked parcels	Exhibit 22	2	The system must identify the parcels Marked for Public Land Auction.
LOTS-LOTSREQ-1385	Search parcel(s) for export	Exhibit 22	3	The system must provide user with the ability to search for Parcels based on the search criteria entered.
LOTS-LOTSREQ-1386	Validate export parcel search criteria	Exhibit 22	3.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Parcel(s) not found.
LOTS-LOTSREQ-1387	Allow null export parcel search criteria	Exhibit 22	3.2	The system must provide the search criteria to find all Parcel(s) records that have null values in a particular field.
LOTS-LOTSREQ-1388	Ensure export parcel search is quick	Exhibit 22	3.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.
LOTS-LOTSREQ-1389	Prevent download	Exhibit 22	4	The system must not allow the Parcel(s) to be downloaded to TR auction in case: · The Parcel(s) status is not Active · The Parcel does not have an activity of "Initiated for Public Land Auction" · Parcel(s) has any incompatible activities
LOTS-LOTSREQ-1390	Display download error messages	Exhibit 22	4.1	The system must throw appropriate error messages in case the parcels selected for download to the TRAUC system do not pass the validation test.
LOTS-LOTSREQ-1391	Update parcel download activity	Exhibit 22	5	The system post "Downloaded for TR Auction" activity on the parcels exported to TRAUC system in addition to the "Initiated for Public Land Auction" activity.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1392	Save download parcel changes	Exhibit 22	6	The system must allow an authorized user to save all changes made to the database.
LOTS-LOTSREQ-1395	Export sale information from TRAUC	Exhibit 22	2	The system must export following information from TRAUC system: · Type of Certificate · Transaction type · Parcel Price information · Grantee information · Changes in disclosures of parcel
LOTS-LOTSREQ-1396	Create sold document	Exhibit 22	3	The system must allow an authorized user to create a document for each certificate type for Parcels sold to State, County, Local units of Government, Minimum Bid and No Minimum Bid Certificate types.
LOTS-LOTSREQ-1397	Populate sold information on document	Exhibit 22	3.1	The system must populate all sold parcel certificates information on documents.
LOTS-LOTSREQ-1398	Create deeded rights for sold	Exhibit 22	3.2	The system must create deeded rights for all the parcels on the document.
LOTS-LOTSREQ-1399	Adjust current rights for sold	Exhibit 22	3.3	The system must adjust the current rights for all the parcels on the document.
LOTS-LOTSREQ-1400	Update disclosure information for sold	Exhibit 22	3.4	The system must update the disclosures information on parcels by populating it from the TRAUC system, if necessary.
LOTS-LOTSREQ-1401	Update status to sold	Exhibit 22	3.5	The system must remove the "Initiated for Public Land Auction" and "Downloaded for TR auction" activities from the parcels and update the status on the parcel as "Sold".
LOTS-LOTSREQ-1402	Populate judgement date and case number from TRAUC	Exhibit 22	3.6	The system must utilize the "judgement date" as the document date and "court case number" as the document number, both of which are populated from TRAUC system.
LOTS-LOTSREQ-1403	Create return document	Exhibit 22	4	The system must allow an authorized user to create a document for parcels that are Returned to the Local Unit Of Government (LUG) with the information been populated from TRAUC with a Certificate type "Return".

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1404	Create return document	Exhibit 22	4.1	The system must allow an authorized user to create document for parcels with Minerals reserved for disclosures and the information been populated from the certificate type "Return-R" from TRAUC.
LOTS-LOTSREQ-1405	Create party and address	Exhibit 22	4.2	The system must populate the Grantee name and Address on the document from the TRAUC system and the system must create a new Party and Address record.
LOTS-LOTSREQ-1406	Create deeded rights for return	Exhibit 22	4.3	The system must create deeded rights for all the parcels on the document.
LOTS-LOTSREQ-1407	Adjust current rights for return	Exhibit 22	4.4	The system must adjust the current rights for all the parcels on the document.
LOTS-LOTSREQ-1408	Remove parcel activities on return	Exhibit 22	4.5	The system must remove the "Initiated for Public Land Auction" and "Downloaded for TR auction" activities from the parcels.
LOTS-LOTSREQ-1409	Populate info from TRAUC for return	Exhibit 22	4.6	The system must utilize the "judgement date" as the document date and "court case number" as the document number, both of which are populated from TRAUC system.
LOTS-LOTSREQ-1410	Create unsold document	Exhibit 22	5	The system must allow an authorized user to create a document for all Unsold parcel information populated from TRAUC system.
LOTS-LOTSREQ-1411	Use info from TRAUC for unsold	Exhibit 22	5.1	The system must utilize the "judgement date" as the document date and "court case number" as the document number, both of which are populated from TRAUC system.
LOTS-LOTSREQ-1412	Create cancel document	Exhibit 22	6	The system must allow an authorized user to create a documentfor each Parcels that are cancelled using the Transaction Type and Public Act associated with the "CANCEL" certificate type.
LOTS-LOTSREQ-1413	Create deeded rights for cancel	Exhibit 22	6.1	The system must create deeded rights of 100% SUR and 100% MIN for all the parcels on the document.
LOTS-LOTSREQ-1414	Adjust current rights for cancel	Exhibit 22	6.2	The system must adjust the current rights for all the parcels on the document.
LOTS-LOTSREQ-1415	Copy reason on cancel	Exhibit 22	6.3	The system must copy the reason for a parcel been cancelled as a comment on the parcel.

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1416	Use info from TRAUC for cancel	Exhibit 22	6.4	The system must utilize the "judgement date" as the document date and "court case number" as the document number, both of which are populated from TRAUC system.
LOTS-LOTSREQ-1417	Enter information for upload	Exhibit 22	7	The system must allow an authorized user to enter following information on the TR Auction Upload interface: · Certificates Ready To Process · Return Parcels Ready To Process · Cancelled Parcels Ready To Process · Unsold Parcels Ready To Process · Certificate Type/Transaction Type/Act (Selection option)
LOTS-LOTSREQ-1418	Copy certificates to TRAUC	Exhibit 22	8	The system must update a copy to TRAUC with the processed date, document date and document number for each Certificate processed.
LOTS-LOTSREQ-1419	Save TRAUC changes	Exhibit 22	9	The system must allow an authorized user to save all changes made to the database.
LOTS-LOTSREQ-1421	Provide LEX reports	Exhibit 22	1	The system must provide following LEX reports: · LEX Upload report - Forfeit Year - County Code · Lex Upload report – All Counties - Forfeit Year · LEX Upload Summary report - Forfeit Year - County Code · LEX Upload Summary report – All Counties - Forfeit Year · LEX Upload Verification report – All Counties · LEX Error report – County · LEX Error report – All Counties · LEX Upload exception report - Forfeit Year - County Code · LEX upload exception report – All Counties

ID	Name	LOTS Exhibit	Lots Req #	Description
LOTS-LOTSREQ-1423	Provide tax reversion reports	Exhibit 22	1	The system must provide following Tax reversion reports: · Parcels Marked for Auction - Start Date - Through Date · Tax Reversion Upload error report - Start Date - Through Date

Other Removals

ID	Name	LOTS Exhibit	Lots Req #	Description	Comments
LOTS-LOTSREQ-55	Update the Land Exam information on a parcel	Exhibit 1: Maintain Parcel	16.1	The system must allow an authorized user to Add/Update Land Exam information on a parcel.	Proposed for removal per Pat 02/14/2017 Discussed during Change Control meeting - Land Exam information will be view only in new LOTS Solution. Any updates to the existing historical records will have to be made via the back-end scripts (production data change request). Pat H has confirmed okay to remove.
LOTS-LOTSREQ-547	Combine vendor and party maintenance	Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	2	The system must combine Vendor and Party maintenance user interfaces	KL&A needs to understand how compatible vendor and party records are. 01/23/2017: According to Dave's comment in Jira, dated 12/08/2016, it has been determined Party and Vendor will not be merging. So, tagging requirement as "removal". 2/14/2017 Approved for Removal by CCB

ID	Name	LOTS Exhibit	Lots Req #	Description	Comments
LOTS-LOTSREQ-1892	Combine Vendor and Party maintenance user interfaces	Exhibit 17: System Reference Tables Part 4	9	The system must combine Vendor and Party maintenance user interfaces.	Need a better understanding of the effort involved in combining. How similar/different are the fields. Will the table be combining? 12/12/2016: According to Dave's comment in Jira, dated 12/08/2016, it has been determined Party and Vendor will not be merging. So, tagging requirement as "removal". 2/14/2017 Approved for Removal by CCB
LOTS-LOTSREQ-248	Assign and remove a transaction	Exhibit 3: System Reference Tables Part 1	10.4.1	The user interface must allow an authorized user to display/assign/remove a transaction to the Fund from available transactions under a separate Inactive process tab.	Per Pat Harlow, this requirement can be removed. The "Inactive Process" tab/section of the current Fund screen in LOTS is not used. Making a Fund inactive is done through the Inactive Date in the Details section of the Fund screen. 2/14/2017 Approved for Removal by CCB

4. Impact to LOTS Schedule

To accommodate these changes, the LOTS project will need to add 2 addition sprints to the overall construction schedule. Specifics of what release these sprints are added to will be presented in a subsequent change control. At a minimum, these sprint additions will result in the modification of R4 UAT, Training, Go-Live, and Warranty milestones. Expected full-system go-live will move to 7/10/18, with the warranty period now ending on 11/8/18.

5. Impact to LOTS Budget

Functional Area	Cost
Exhibit 1: Maintain Parcel	$26,050
Exhibit 2: Maintain Document	$39,990
Exhibit 3: System Reference Tables Part 1	$2,170
Exhibit 6: Mineral Auction, Nomination, and Parcel Classification	$100,480
Exhibit 8: Mineral System Reference Tables (Part 2 & 3)	$19,360
Exhibit 12: Mineral Production	$25,860
Exhibit 13: Mineral Revenue RPS	$36,780
Exhibit 17: System Reference Tables Part 4	$9,800
Exhibit 18: Case Processing	$7,600
Reports	$6,340
A: TOTAL New Requirements	**$274,430**
REMOVAL: Exhibit 22: LEX, TRAUC and Land Examiner SRT	$172,000
REMOVAL: Others	$2,360
B: TOTAL Removals	**$174,360**
TOTAL IMPACT TO BUDGET (A – B)	**$100,070**

6. Approval Information

Approval Signatures

Role	Name/Title	Signature	Date
DNR Project Sponsor	Sharon Schafer Chief of DNR Finance & Operations Division		
DTMB Project Sponsor	James Hogan DTMB General Manager supporting DEQ, DNR, and MDARD		
DNR Product Owner	Patricia Harlow DNR Land Records, Sales, and LOTS Specialist		
DTMB Project Owner	Michael Cooley Manager, Customer Service & Support Team (DEQ, DNR, MDARD)		
DTMB Project Manager	Robin Krzciok Project Manager Enterprise Portfolio Office		
KL&A Project Manager	Dave Desrochers KL&A Director, Service and Delivery		10/4/2017
KL&A Contract Owner	John Leigh KL&A Partner		10/4/2017

LOTS PROPOSED 3 RELEASE - PAYMENT SCHEDULE

Task #	Project Milestone	Start	Finish	Task Cost	Total Cost	Running Total	Invoice
2.0.03	Scope validation	9/21/2016	10/13/2016	$98,597			81758
2.0.01	Attend and present at Kick-off Meeting	10/7/2016	10/18/2016	$49,298			81758
2.0.15	Enterprise Architecture Solution Assessment	10/17/2016	10/26/2016	$49,298			81758
2.0.06	Detailed Project Schedule	9/9/2016	10/28/2016	$49,298			81758
2.0.05	Project Management Plan (PMM-0102)	9/7/2016	10/31/2016	$98,597			81758
P1	Payment: September and October 2016 LOTS Solution Deliverables		11/1/2016		$345,088	$345,088	81758
2.0.09	Product Backlog	10/17/2016	11/8/2016	$49,298			81759
2.0.12	Test Plan (SEM-0602)	10/17/2016	11/8/2016	$49,298			81759
2.0.13	Data Migration / Conversion Plan (SEM-0601)	10/17/2016	11/8/2016	$49,298			81759
2.0.04	Facilitate and attend Workgroup Meetings	10/17/2016	11/30/2016	$98,597			81759
P2	Payment: November 2016 LOTS Solution Deliverables		12/1/2016		$246,491	$591,579	81759
2.0.10	Functional Design (SEM-0501)	10/17/2016	12/16/2016	$49,298			81778
2.0.11	System Design (SEM-0604)	10/17/2016	12/16/2016	$49,298			81778
	Release 1, Sprint 1 (R1S1)	12/16/2016	12/16/2016	$86,273			81778
2.0.07	Requirements Specification (SEM-0402)	10/17/2016	12/27/2016	$49,298			81778
2.0.08	Requirements Traceability matrix (SEM-0401)	10/17/2016	12/27/2016	$49,298			81778
P3	Payment: December 2016 LOTS Solution Deliverables		1/1/2017		$283,465	$875,044	81778
	Release 1, Sprint 2 (R1S2)	12/19/2016	1/5/2017	$86,273			81789
	Release 1, Sprint 3 (R1S3)	1/6/2017	1/20/2017	$86,273			81789
P4	Payment: January 2017 LOTS Solution Deliverables		2/1/2017		$172,546	$1,047,590	81789
2.0.02	Requirements Analysis & Validation	10/17/2016	2/3/2017	$98,597			81798
	Release 1, Sprint 4 (R1S4)	1/23/2017	2/3/2017	$86,273			81798
2.0.14	eMichigan Review	2/6/2017	2/17/2017	$49,298			81798
	Release 1, Sprint 5 (R1S5)	2/6/2017	2/17/2017	$86,273			81798
P5	Payment: February 2017 LOTS Solution Deliverables		3/1/2017		$320,441	$1,368,031	81798
	Release 1, Sprint 6 (R1S6)	2/21/2017	3/6/2017	$86,273			81809
	Release 1, Sprint 7 (R1S7)	3/7/2017	3/20/2017	$86,272			81809

P6	Payment: March 2017 LOTS Solution Deliverables		4/1/2017		$172,545	$1,540,576	81809
	Release 1, Sprint 8 (R1S8)	3/21/2017	4/3/2017	$86,272			81810
	Release 1, Sprint 9 (R1S9)	4/4/2017	4/17/2017	$86,273			81810
P7	Payment: April 2017 LOTS Solution Deliverables		5/1/2017		$172,545	$1,713,121	81810
	Release 1, Sprint 10 (R1S10)	4/18/2017	5/1/2017	$86,272			81820
	Release 1, Sprint 11 (R1S11)	5/2/2017	5/15/2017	$86,272			81820
	Release 1, Sprint 12 (R1S12)	5/16/2017	5/30/2017	$86,273			81820
P8	Payment: May 2017 LOTS Solution Deliverables		6/1/2017		$258,817	$1,971,938	81820
	Release 2, Sprint 1 (R2S1)	6/7/2017	6/20/2017	$86,273			81844
3.0.15	R1 Implementation - UAT Defect tracking	6/7/2017	6/27/2017	$29,579			81844
3.0.25	R1 Implementation - User Acceptance Testing (UAT)	6/7/2017	6/27/2017	$39,439			81844
P9	Payment: June 2017 LOTS Solution Deliverables		7/1/2017		$155,291	$2,127,229	81844
	Release 2, Sprint 2 (R2S2)	6/21/2017	7/5/2017	$86,273			81858
3.0.16	R1 Implementation - UAT approval sign-off	6/28/2017	7/5/2017	$9,860			81858
3.0.20	R1 Implementation - Operational Readiness report	7/6/2017	7/12/2017	$29,579			81858
3.0.24	R1 Implementation - Implementation testing Approval sign-off	7/6/2017	7/12/2017	$29,579			81858
3.0.22	R1 Implementation - Local and Enterprise Change Control Board Approval	7/6/2017	7/12/2017	$29,579			81858
	Release 2, Sprint 3 (R2S3)	7/6/2017	7/19/2017	$86,272			81858
3.0.23	R1 Implementation - Install and configure Sprint software in State's "PROD"	7/13/2017	7/19/2017	$39,439			81858
3.0.21	R1 Implementation - Installation Plan (SEM-0702)	7/20/2017	7/28/2017	$39,439			81858
3.0.39	R1 Implementation - Warranty Defect tracking	7/31/2017	1/4/2018	$29,579			81858
3.0.40	R1 Implementation - Warranty Software patches / updates	7/31/2017	1/4/2018	$19,711			81858
P10	Payment: July 2017 LOTS Solution Deliverables		8/1/2017		$399,310	$2,526,539	81858
	Release 2, Sprint 4 (R2S4)	7/20/2017	8/2/2017	$86,272			81860
	Release 2, Sprint 5 (S2S5)	8/3/2017	8/16/2017	$86,273			81860
	Release 2, Sprint 6 (R2S6)	8/17/2017	8/30/2017	$86,273			81860
P11	Payment: August 2017 LOTS Solution Deliverables		9/1/2017		$258,818	$2,785,357	81860

	Release 2, Sprint 7 (R2S7)	8/31/2017	9/14/2017	$86,273			81861
	Release 2, Sprint 8 (R2S8)	9/15/2017	9/28/2017	$86,273			81861
P12	Payment: September 2017 LOTS Solution Deliverables		10/1/2017		$172,546	$2,957,903	81861
	Release 2, Sprint 9 (R2S9)	9/29/2017	10/12/2017	$86,273			
	Release 2, Sprint 10 (R2S10)	10/13/2017	10/26/2017	$86,273			
P13	Payment: October 2017 LOTS Solution Deliverables		11/1/2017		$172,546	$3,130,449	
	Release 2 Sprint 11 (R2S11)	10/27/2017	11/9/2017	$86,273			
	Release 2, Sprint 12 (R2S12)	11/13/2017	11/28/2017	$86,272			
P14	Payment: November 2017 LOTS Solution Deliverables		12/1/2017		$172,545	$3,302,994	
	Release 2, Sprint 13 (R2S13)	11/29/2017	12/12/2017	$86,273			
	Release 2, Sprint 14 (R2S14)	12/13/2017	12/28/2017	$86,273			
P15	Payment: December 2017 LOTS Solution Deliverables		1/1/2018		$172,546	$3,475,540	
	Release 3, Sprint 1 (R3S1)	1/9/2018	1/23/2018	$86,273			
P16	Payment: January 2018 LOTS Solution Deliverables		2/1/2018		$86,273	$3,561,813	
2.0.16	Security Assessment (DTMB 170)	10/1/2016	2/1/2018	$49,299			
4.0.15	R2 Implementation - UAT Defect tracking	1/9/2018	2/6/2018	$44,368			
4.0.25	R2 Implementation - User Acceptance Testing (UAT)	1/9/2018	2/6/2018	$59,159			
	Release 3, Sprint 2 (R3S2)	1/24/2018	2/6/2018	$86,273			
4.0.16	R2 Implementation - UAT approval sign-off	2/7/2018	2/13/2018	$14,790			
	Release 3, Sprint 3 (R4S3)	2/7/2018	2/21/2018	$86,273			
4.0.20	R2 Implementation - Operational Readiness report	2/14/2018	2/21/2018	$44,369			
4.0.22	R2 Implementation - Local and Enterprise Change Control Board Approval	2/14/2018	2/21/2018	$44,368			
4.0.24	R2 Implementation - Implementation testing Approval sign-off	2/14/2018	2/21/2018	$44,369			
4.0.23	R2 Implementation - Install and configure Sprint software in State's "PROD"	2/22/2018	2/28/2018	$59,159			
P17	Payment: February 2018 LOTS Solution Deliverables		3/1/2018		$532,427	$4,094,240	
	Release 3, Sprint 4 (R3S4)	2/22/2018	3/7/2018	$86,273			
4.0.21	R2 Implementation - Installation Plan (SEM-0702)	3/1/2018	3/9/2018	$59,158			

	Release 3, Sprint 5 (R3S5)	3/8/2018	3/21/2018	$86,273		
5.0.01	R2 Documentation Release - Project Management Plan (PMM-0102)	2/14/2018	3/26/2018	$13,050		
5.0.02	R2 Documentation Release - Detailed Project Schedule	2/14/2018	3/26/2018	$13,050		
5.0.03	R2 Documentation Release - Requirements Specification (SEM-0402)	2/14/2018	3/26/2018	$13,050		
5.0.04	R2 Documentation Release - Requirements Traceability matrix (SEM-0401)	2/14/2018	3/26/2018	$13,050		
5.0.05	R2 Documentation Release - Product Backlog	2/14/2018	3/26/2018	$13,050		
5.0.06	R2 Documentation Release - Functional Design (SEM-0501)	2/14/2018	3/26/2018	$13,050		
5.0.07	R2 Documentation Release - System Design (SEM-0604)	2/14/2018	3/26/2018	$17,399		
5.0.08	R2 Documentation Release - Test Plan (SEM-0602)	2/14/2018	3/26/2018	$13,050		
5.0.09	R2 Documentation Release - Data Migration / Conversion Plan (SEM-0601)	2/14/2018	3/26/2018	$13,050		
5.0.10	R2 Documentation Release - eMichigan Review	2/14/2018	3/26/2018	$13,050		
5.0.11	R2 Documentation Release - Enterprise Architecture Solution Assessment	2/14/2018	3/26/2018	$21,749		
5.0.12	R2 Documentation Release - Security Assessment (DTMB 170)	2/14/2018	3/26/2018	$21,749		
5.0.13	R2 Documentation Release - Data Migration / Conversion Plan (SEM-0601)	2/14/2018	3/26/2018	$13,050		
5.0.14	R2 Documentation Release - Test Plan (SEM-0602)	2/14/2018	3/26/2018	$17,399		
5.0.15	R2 Documentation Release - Requirements Traceability matrix (SEM-0401)	2/14/2018	3/26/2018	$13,050		
5.0.16	R2 Documentation Release - Software configuration Plan (SEM-0302)	2/14/2018	3/26/2018	$13,050		
5.0.17	R2 Documentation Release - Transition Plan (SEM-0701)	2/14/2018	3/26/2018	$13,050		
5.0.18	R2 Documentation Release - Maintenance Plan (SEM-0301)	2/14/2018	3/26/2018	$13,050		
5.0.19	R2 Documentation Release - Implementation Plan	2/14/2018	3/26/2018	$13,050		
5.0.20	R2 Documentation Release - Installation Plan (SEM-0702)	2/14/2018	3/26/2018	$17,399		
5.0.21	R2 Documentation Release - User Acceptance Testing (UAT)	2/14/2018	3/26/2018	$13,050		
5.0.22	R2 Documentation Release - Test Cases (SEM-0606)	2/14/2018	3/26/2018	$13,050		
5.0.23	R2 Documentation Release - Training Plan (SEM-0703)	2/14/2018	3/26/2018	$13,050		
5.0.24	R2 Documentation Release - End User Documentation	2/14/2018	3/26/2018	$17,399		
5.0.25	R2 Documentation Release - System Administrator Documentation	2/14/2018	3/26/2018	$17,399		
5.0.26	R2 Documentation Release - Technical Documentation	2/14/2018	3/26/2018	$17,399		
5.0.27	R2 Documentation Release - Data dictionary	2/14/2018	3/26/2018	$13,050		
5.0.28	R2 Documentation Release - Installation procedure documentation	2/14/2018	3/26/2018	$13,050		
5.0.29	R2 Documentation Release - Module configuration documentation	2/14/2018	3/26/2018	$13,050		
5.0.30	R2 Documentation Release - Testing scripts	2/14/2018	3/26/2018	$13,042		
P18	Payment: March 2018 LOTS Solution Deliverables		4/1/2018		$666,688	$4,760,928
	Release 3, Sprint 6 (R3S6)	3/22/2018	4/4/2018	$86,272		

	Release 3, Sprint 7 (R3S7)	4/5/2018	4/18/2018	$50,035		
P19	Payment: April 2018 LOTS Solution Deliverables		5/1/2018		$136,307	$4,897,235
	Release 3, Sprint 8 (R3S8)	4/19/2018	5/2/2018	$50,035		
P20	Payment: May 2018 LOTS Solution Deliverables		6/1/2018		$50,035	$4,947,270
6.0.15	R3 Implementation - UAT Defect tracking	5/10/2018	6/7/2018	$44,369		
6.0.25	R3 Implementation - User Acceptance Testing (UAT)	5/10/2018	6/7/2018	$59,158		
6.0.16	R3 Implementation - UAT approval sign-off	6/8/2018	6/14/2018	$14,790		
6.0.20	R3 Implementation - Operational Readiness report	6/15/2018	6/21/2018	$44,368		
6.0.22	R3 Implementation - Local and Enterprise Change Control Board Approval	6/15/2018	6/21/2018	$44,369		
6.0.24	R3 Implementation - Implementation testing Approval sign-off	6/15/2018	6/21/2018	$44,368		
6.0.23	R3 Implementation - Install and configure Sprint software in State's "PROD"	6/22/2018	6/28/2018	$59,158		
P21	Payment: June 2018 LOTS Solution Deliverables		7/1/2018		$310,580	$5,257,850
4.0.39	R2 Implementation - Warranty Defect tracking	3/12/2018	7/10/2018	$44,369		
4.0.40	R2 Implementation - Warranty Software patches / updates	3/12/2018	7/10/2018	$29,567		
6.0.21	R3 Implementation - Installation Plan (SEM-0702)	6/29/2018	7/10/2018	$59,159		
8.0.01	R3 Documentation Release - Project Management Plan (PMM-0102)	6/15/2018	7/27/2018	$13,050		
8.0.02	R3 Documentation Release - Detailed Project Schedule	6/15/2018	7/27/2018	$13,050		
8.0.03	R3 Documentation Release - Requirements Specification (SEM-0402)	6/15/2018	7/27/2018	$13,050		
8.0.04	R3 Documentation Release - Requirements Traceability matrix (SEM-0401)	6/15/2018	7/27/2018	$13,050		
8.0.05	R3 Documentation Release - Product Backlog	6/15/2018	7/27/2018	$13,050		
8.0.06	R3 Documentation Release - Functional Design (SEM-0501)	6/15/2018	7/27/2018	$13,050		
8.0.07	R3 Documentation Release - System Design (SEM-0604)	6/15/2018	7/27/2018	$17,399		
8.0.08	R3 Documentation Release - Test Plan (SEM-0602)	6/15/2018	7/27/2018	$13,050		
8.0.09	R3 Documentation Release - Data Migration / Conversion Plan (SEM-0601)	6/15/2018	7/27/2018	$13,050		
8.0.10	R3 Documentation Release - eMichigan Review	6/15/2018	7/27/2018	$13,050		
8.0.11	R3 Documentation Release - Enterprise Architecture Solution Assessment	6/15/2018	7/27/2018	$21,749		
8.0.12	R3 Documentation Release - Security Assessment (DTMB 170)	6/15/2018	7/27/2018	$21,749		
8.0.13	R3 Documentation Release - Data Migration / Conversion Plan (SEM-0601)	6/15/2018	7/27/2018	$13,050		
8.0.14	R3 Documentation Release - Test Plan (SEM-0602)	6/15/2018	7/27/2018	$17,399		
8.0.15	R3 Documentation Release - Requirements Traceability matrix (SEM-0401)	6/15/2018	7/27/2018	$13,050		
8.0.16	R3 Documentation Release - Software configuration Plan (SEM-0302)	6/15/2018	7/27/2018	$13,050		

8.0.17	R3 Documentation Release - Transition Plan (SEM-0701)	6/15/2018	7/27/2018	$13,050		
8.0.18	R3 Documentation Release - Maintenance Plan (SEM-0301)	6/15/2018	7/27/2018	$13,050		
8.0.19	R3 Documentation Release - Implementation Plan	6/15/2018	7/27/2018	$13,050		
8.0.20	R3 Documentation Release - Installation Plan (SEM-0702)	6/15/2018	7/27/2018	$17,399		
8.0.21	R3 Documentation Release - User Acceptance Testing (UAT)	6/15/2018	7/27/2018	$13,050		
8.0.22	R3 Documentation Release - Test Cases (SEM-0606)	6/15/2018	7/27/2018	$13,050		
8.0.23	R3 Documentation Release - Training Plan (SEM-0703)	6/15/2018	7/27/2018	$13,050		
8.0.24	R3 Documentation Release - End User Documentation	6/15/2018	7/27/2018	$17,399		
8.0.25	R3 Documentation Release - System Administrator Documentation	6/15/2018	7/27/2018	$17,399		
8.0.26	R3 Documentation Release - Technical Documentation	6/15/2018	7/27/2018	$17,399		
8.0.27	R3 Documentation Release - Data dictionary	6/15/2018	7/27/2018	$13,050		
8.0.28	R3 Documentation Release - Installation procedure documentation	6/15/2018	7/27/2018	$13,050		
8.0.29	R3 Documentation Release - Module configuration documentation	6/15/2018	7/27/2018	$13,050		
8.0.30	R3 Documentation Release - Testing scripts	6/15/2018	7/27/2018	$13,042		
6.0.39	R3 Implementation - Warranty Defect tracking	7/11/2018	11/7/2018	$44,368		
6.0.40	R3 Implementation - Warranty Software patches / updates	7/11/2018	11/7/2018	$29,566		
P22	Payment: July 2018 LOTS Solution Deliverables		7/1/2018		$642,013	$5,899,863
				Payments	$5,899,863	
				Contract	$5,799,793	
				CC 1	$100,070	
				Total	$5,899,863	$0

Total of all payments

STATE OF MICHIGAN
ENTERPRISE PROCUREMENT

Department of Technology, Management, and Budget
525 W. Allegan, Lansing MI 48913
P.O. Box 30026, Lansing, MI 48909

NOTICE OF CONTRACT

CONTRACT NO. 071B6600129
between
THE STATE OF MICHIGAN
and

CONTRACTOR	
	Kunz, Leigh & Associates, Inc.
	28081 Southfield Road
	Lathrup Village, MI 48076
	John Leigh
	248-559-7910
	j.leigh@kunzleigh.com
	1652

STATE			
	Program Manager	Jeremy Newman	DTMB
		517-335-3260	
		newmanj2@michigan.gov	
	Contract Administrator	Jarrod Barron	DTMB
		517-284-7045	
		barronj1@michigan.gov	

CONTRACT SUMMARY			
DESCRIPTION: Land Ownership Tracking System - DNR			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW**
8/30/2016	8/29/2019	One 1-year	8/29/2019
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
NA		NA	
ALTERNATE PAYMENT OPTIONS			**EXTENDED PURCHASING**
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☐ Yes ☒ No
MINIMUM DELIVERY REQUIREMENTS			
NA			
MISCELLANEOUS INFORMATION			
NA			
ESTIMATED CONTRACT VALUE AT TIME OF EXECUTION			$5,799,793.00

FOR THE CONTRACTOR:

____
Company Name

____
Authorized Agent Signature

____
Authorized Agent **(Print or Type)**

____
Date

FOR THE STATE:

____
Signature

William Pemble, IT Division Director
Name & Title

DTMB - Procurement
Agency

____
Date

CONTRACT TERMS - CUSTOM SOFTWARE DEVELOPMENT

This CUSTOM SOFTWARE DEVELOPMENT CONTRACT (this “**Contract**”) is agreed to between the State of Michigan (the “**State**”) and Kunz, Leigh & Associates, Inc. (“**Contractor**”), a Michigan corporation. This Contract is effective on August 30, 2016 (“**Effective Date**”), and unless earlier terminated, will expire three (3) years later on August 29, 2019 (the “**Term**”).

This Contract may be renewed for one (1) additional year. Renewal must be by written agreement of the parties, and will automatically extend the Term of this Contract.

This contract may be leveraged by any State agency.

The parties agree as follows:

1. Definitions. For purposes of this Contract, the following terms have the following meanings:

“**Acceptance**” has the meaning set forth in **Section 9.5**.

“**Acceptance Tests**” means such tests as may be conducted in accordance with **Section 9** and the Statement of Work to determine whether any Software Deliverable meets the requirements of this Contract and the Specifications and Documentation.

“**Affiliate**” means any entity which directly or indirectly controls, is controlled by or is under common control of Contractor. The term “control” means the possession of the power to direct or cause the direction of the management and the policies of an entity, whether through the ownership of a majority of the outstanding voting rights or by contract or otherwise.

“**Aggregate Software**” means the Software, as a whole, to be developed or otherwise provided under the Statement of Work. For avoidance of doubt, if the Statement of Work provides for a single Software Deliverable, such Software Deliverable also constitutes Aggregate Software.

“**Allegedly Infringing Materials**” has the meaning set forth in **Section 18.3(b)(ii)**.

“**Approved Open-Source Components**” means Open-Source Components that the State has approved to be included in or used in connection with any Software developed or provided under this Contract, and are specifically identified in the Statement of Work.

“**Approved Third-Party Materials**” means Third-Party Materials that the State has approved to be included in or for use in connection with any Software developed or provided under this Contract, and are specifically identified in the Statement of Work.

“**Background Technology**” means all Software, data, know-how, ideas, methodologies, specifications, and other technology in which Contractor owns such Intellectual Property Rights as are necessary for Contractor to grant the rights and licenses set forth in **Section 14.1**, and for the State (including its licensees, successors and assigns) to exercise such rights and licenses, without violating any right of any Third Party or any Law or incurring any payment obligation to any Third Party. Background Technology must: (a) be identified as Background Technology in the Statement of Work; and (b) have been developed or otherwise acquired by Contractor prior to the date of the RFP.

"**Business Day**" means a day other than a Saturday, Sunday or State holiday.

"Business Owner" is the individual appointed by the end-user agency procuring the software to (a) act as such agency's representative in all matters relating to the Contract, and (b) co-sign off on the State's notice of Acceptance for all Software Deliverables and Aggregate Software. The Business Owner will be identified in the Statement of Work**.**

"**Business Requirements Specification**" means the initial specification setting forth the State's business requirements regarding the features and functionality of the Software, as set forth in the Statement of Work.

"**Change**" has the meaning set forth in **Section 2.2**.

"**Change Notice**" has the meaning set forth in **Section 2.4(b)**.

"**Change Proposal**" has the meaning set forth in **Section 2.4(a)**.

"**Change Request**" has the meaning set forth in **Section 2.2**.

"**Confidential Information**" has the meaning set forth in **Section 22.1**.

"**Contract**" has the meaning set forth in the preamble.

"**Contract Administrator**" is the individual appointed by each party to (a) administer the terms of this Contract, and (b) approve and execute any Change Notices under this Contract. Each party's Contract Administrator will be identified in the Statement of Work.

"**Contractor**" has the meaning set forth in the preamble.

"**Contractor's Bid Response**" means the Contractor's proposal submitted in response to the RFP.

"**Contractor Personnel**" means all employees of Contractor or any Permitted Subcontractors involved in the performance of Services or providing Work Product under this Contract.

"**Deliverables**" means all Software Deliverables and all other documents, Work Product, and other materials that Contractor is required to or otherwise does provide to the State under this Contract and otherwise in connection with any Services, including all items specifically identified as Deliverables in the Statement of Work.

“**Derivative Work**” means any modification, addition, upgrade, update, or improvement of the Software and any other work constituting a derivative work under the United States Copyright Act, 17 U.S.C. Section 101, *et seq.*

“**Dispute Resolution Procedure**” means the procedure for resolving disputes under this Contract as set forth in **Section 26**.

“**Documentation**” means all user manuals, operating manuals, technical manuals and any other instructions, specifications, documents and materials, in any form or media, that describe the functionality, installation, testing, operation, use, maintenance, support and technical and other components, features and requirements of any Software.

“**DTMB**” means the Michigan Department of Technology, Management and Budget.

“**Effective Date**” has the meaning set forth in the preamble.

“**Fees**” has the meaning set forth in **Section 11.1**

“Financial Audit Period” has the meaning set forth in **Section 24.1**.

“**Force Majeure**” has the meaning set forth in **Section 27.8**.

“**Harmful Code**” means any: (a) virus, trojan horse, worm, backdoor or other software or hardware devices the effect of which is to permit unauthorized access to, or to disable, erase, or otherwise harm, any computer, systems or software; or (b) time bomb, drop dead device, or other software or hardware device designed to disable a computer program automatically with the passage of time or under the positive control of any Person, or otherwise deprive the State of its lawful right to use such Software.

“**HIPAA**” has the meaning set forth in **Section 21.1**.

“**Implementation Plan**” means the schedule included in the Statement of Work setting forth the sequence of events for the performance of Services under the Statement of Work, including the Milestones and Milestone Dates.

"**Initial Statement of Work**" means the Statement of Work for the initial Software development and related Services, attached as **Schedule A** to this Contract.

“**Intellectual Property Rights**” means all or any of the following: (a) patents, patent disclosures, and inventions (whether patentable or not); (b) trademarks, service marks, trade dress, trade names, logos, corporate names, and domain names, together with all of the associated goodwill; (c) copyrights and copyrightable works (including computer programs), mask works and rights in data and databases; (d) trade secrets, know-how and other confidential information; and (e) all other intellectual property rights, in each case whether registered or unregistered and including all applications for, and renewals or extensions of, such rights, and all similar or equivalent rights or forms of protection provided by applicable Law in any jurisdiction throughout the world.

“**Intended Users**” means the users that are intended to use Software or particular features or functions of the Software, as described in the Specifications for such Software.

“**Key Personnel**” means any Contractor Personnel identified as key personnel in the Statement of Work.

“**Law**” means any statute, law, ordinance, regulation, rule, code, order, constitution, treaty, common law, judgment, decree, other requirement or rule of law of any federal, state, local or foreign government or political subdivision thereof, or any arbitrator, court, or tribunal of competent jurisdiction.

“**Maintenance and Support Schedule**” means the schedule attached as **Schedule C**, setting forth the Maintenance and Support Services, the Support Fees, and the parties’ additional rights and obligations with respect to such services.

“**Maintenance and Support Services**” means the Software maintenance and support services the Contractor is required to or otherwise does provide under this Contract as set forth in the Maintenance and Support Schedule.

“**Milestone**” means an event or task described in the Implementation Plan under the Statement of Work that must be completed by the corresponding Milestone Date.

“**Milestone Date**” means the date by which a particular Milestone must be completed as set forth in the Implementation Plan under the Statement of Work.

“**Non-Conformity**” means any failure of any: (a) Software or Documentation to conform to the requirements of this Contract (including the Statement of Work) or (b) Software to conform to the requirements of this Contract or the Specifications or Documentation.

“**Object Code**” means computer programs assembled or compiled in magnetic or electronic binary form on software media, which are readable and useable by machines, but not generally readable by humans without reverse assembly, reverse compiling, or reverse engineering.

“**Open-Source Components**” means any software component that is subject to any open-source copyright license contract, including any GNU General Public License or GNU Library or Lesser Public License, or other license contract that substantially conforms to the Open Source Initiative’s definition of “open source” or otherwise may require disclosure or licensing to any third party of any source code with which such software component is used or compiled.

“**Open-Source License**” has the meaning set forth in **Section 3.3**.

“**Operating Environment**” means, collectively, the State platform and environment on, in, or under which Software is intended to be installed and operate, as set forth in the Statement of Work, including such structural, functional and other features, conditions and components as hardware, operating software and system architecture and configuration.

“**Permitted Subcontractor**” has the meaning set forth in **Section 5.5**.

“**Person**” means an individual, corporation, partnership, joint venture, limited liability entity, governmental authority, unincorporated organization, trust, association, or other entity.

“**Project Manager**” is the individual appointed by each party to (a) monitor and coordinate the day-to-day activities of this Contract, and (b) in the case of the State, co-sign off on its notice of Acceptance for all Software Deliverables and Aggregate Software. Each party’s Project Manager will be identified in the Statement of Work.

“**Representatives**” means a party’s employees, officers, directors, consultants, legal advisors, and Permitted Subcontractors.

“**RFP**” means the State’s request for proposal designed to solicit responses for Services under this Contract.

“**Services**” means any of the services Contractor is required to or otherwise does provide under this Contract or the Statement of Work, as more fully described in this Contract or the Statement of Work.

“**Site**” means the physical location designated by the State in, or in accordance with, this Contract or the Statement of Work for delivery and installation of any Software.

“**Software**” means the computer program(s), including programming tools, scripts and routines, the Contractor is required to or otherwise does develop or otherwise provide under this Contract, as described more fully in the Statement of Work, including all updates, upgrades, new versions, new releases, enhancements, improvements, and other modifications made or provided under the Maintenance and Support Services. As context dictates, Software may refer to one or more Software Deliverables or Aggregate Software.

“**Software Deliverable**” means any Software, together with its Documentation, required to be delivered as a Milestone as set forth in the Implementation Plan for such Software.

“**Source Code**” means the human readable source code of the Software to which it relates, in the programming language in which such Software was written, together with all related flow charts and technical documentation, including a description of the procedure for generating object code, all of a level sufficient to enable a programmer reasonably fluent in such programming language to understand, operate, support, maintain and develop modifications, upgrades, updates, enhancements, improvements and new versions of, and to develop computer programs compatible with, such Software.

"**Specifications**" means, for any Software, the specifications collectively set forth in the Business Requirements Specification and Technical Specification, together with any other specifications set forth in the RFP or Contractor's Bid Response, if any, for such Software, or elsewhere in the Statement of Work.

"**State**" means the State of Michigan.

"**State Data**" has the meaning set forth in **Section 21.1**.

"**State Materials**" means all materials and information, including documents, data, know-how, ideas, methodologies, specifications, software, content and technology, in any form or media, directly or indirectly provided or made available to Contractor by or on behalf of the State in connection with this Contract, whether or not the same: (a) are owned by the State, a Third Party or in the public domain; or (b) qualify for or are protected by any Intellectual Property Rights.

"**State Resources**" has the meaning set forth in **Section 6.1**.

"**Statement of Work**" means any statement of work entered into by the parties and attached as a schedule to this Contract. The Initial Statement of Work is attached as **Schedule A**, and subsequent Statements of Work shall be sequentially identified and attached as Schedules A-1, A-2, A-3, etc.

"**Stop Work Order"** has the meaning set forth in **Section 16**.

"**Support Fees**" means the fees, if any, payable by the State for Maintenance and Support Services as set forth in the Maintenance and Support Schedule.

"**Support Commencement Date**" means, with respect to any Software, the date on which the Warranty Period for such Software expires or such other date as may be set forth in the Maintenance and Support Schedule.

"**Technical Specification**" means, with respect to any Software, the document setting forth the technical specifications for such Software and included in the Statement of Work.

"**Term**" has the meaning set forth in the preamble**.**

"**Testing Period**" has the meaning set forth in **Section 9.1**.

"**Third Party**" means any Person other than the State or Contractor.

"**Third-Party Materials**" means any materials and information, including documents, data, know-how, ideas, methodologies, specifications, software, content, and technology, in any form or media, in which any Person other than the State or Contractor owns any Intellectual Property Right, but excluding Open-Source Components.

"**Transition Period**" has the meaning set forth in **Section 15.3**.

“**Transition Responsibilities**” has the meaning set forth in **Section 15.3**.

“**Unauthorized Removal**” has the meaning set forth in **Section 5.4(b)**.

“**Unauthorized Removal Credit**” has the meaning set forth in **Section 5.4(c)**.

“**Warranty Period**” means, for any Software, the one hundred twenty (120) calendar-day period commencing (a) in the case of Aggregate Software, upon the State’s Acceptance; and (b) in the case of any updates, upgrades, new versions, new releases, enhancements and other modifications to previously-Accepted Aggregate Software, upon the State’s receipt of such modification. Notwithstanding anything herein to the contrary, Warranty Period for Software related to Mineral Auction Specifications shall also include the period commencing thirty (30) days prior through thirty (30) days after the first mineral auction conducted after State’s Acceptance of same.

“**Work Product**” means all Software, Documentation, Specifications, and other documents, work product and related materials, that Contractor is required to, or otherwise does, provide to the State under this Contract, together with all ideas, concepts, processes, and methodologies developed in connection with this Contract whether or not embodied in this Contract.

2. Statements of Work. Contractor shall provide Services and Deliverables pursuant to Statements of Work entered into under this Contract. No Statement of Work shall be effective unless signed by each party’s Contract Administrator. The term of each Statement of Work shall commence on the parties' full execution of the Statement of Work and terminate when the parties have fully performed their obligations. The terms and conditions of this Contract will apply at all times to any Statements of Work entered into by the parties and attached as a schedule to this Contract. The State shall have the right to terminate such Statement of Work as set forth in **Section 15**. Contractor acknowledges that time is of the essence with respect to Contractor’s obligations under each Statement of Work and agrees that prompt and timely performance of all such obligations in accordance with this Contract and the Statements of Work (including the Implementation Plan and all Milestone Dates) is strictly required.

2.1 Statement of Work Requirements. Each Statement of Work will include the following:

(a) names and contact information for Contractor’s Contract Administrator, Project Manager and Key Personnel;

(b) names and contact information for the State’s Contract Administrator, Project Manager and Business Owner;

(c) a detailed description of the Services to be provided under this Contract, including any training obligations of Contractor;

(d) a detailed description of the Software and other Work Product to be developed or otherwise provided under this Contract, including the:

(i) Business Requirements Specification;

(ii) Technical Specification; and

(iii) a description of the Documentation to be provided;

(e) an Implementation Plan, including all Milestones, the corresponding Milestone Dates and the parties' respective responsibilities under the Implementation Plan;

(f) Fees payable under this Contract, the manner in which such Fees will be calculated, the due dates for payment and any invoicing requirements, including any Milestones on which any such Fees are conditioned, and such other information as the parties deem necessary;

(g) disclosure of all Background Technology, Approved Third-Party Materials, Approved Open-Source Components (each identified on a separate exhibit to the Statement of Work), in each case accompanied by such related documents as may be required by this Contract;

(h) description of all liquidated damages associated with this Contract; and

(i) a detailed description of all State Resources required to complete the Implementation Plan.

2.2 Initial Statement of Work. The Initial Statement of Work is attached as **Schedule A** to this Contract. Commencing on the Effective Date, Contractor shall perform the Services set forth in **Schedule A** for purposes of creating and providing to the State Contractor's proposal for developing Software that meets all criteria set forth in the Business Requirements Specification.

2.3 Additional Statements of Work. Promptly following receipt of the State's request for additional Software development or other Services, Contractor shall provide the State with a proposal containing all information specified in **Section 2.1**. Upon the parties' agreement with respect to the terms of such proposal, all such terms shall be incorporated in a Statement of Work and each party shall cause the same to be signed by its Contract Administrator. Each fully executed Statement of Work shall be attached as a Schedule to, and by this reference incorporated in and made a part of, this Contract.

2.4 Change Control Process. The State may at any time request in writing (each, a "**Change Request**") changes to the Statement of Work, including changes to the Services, Work Product, Implementation Plan, or any Specifications (each, a "**Change**"). Upon the State's submission of a Change Request, the parties will evaluate and implement all Changes in accordance with this **Section 2.2**.

(a) As soon as reasonably practicable, and in any case within twenty (20) Business Days following receipt of a Change Request, Contractor will provide the State with a written proposal for implementing the requested Change ("**Change Proposal**"), setting forth:

(i) a written description of the proposed Changes to any Services, Work Product, or Deliverables;

(ii) an amended Implementation Plan reflecting: (A) the schedule for commencing and completing any additional or modified Services, Work Product, or Deliverables; and (B) the effect of such Changes, if any, on completing any other Services or Work Product under the Statement of Work;

(iii) any additional Third-Party Materials, Open-Source Components, and State Resources Contractor deems necessary to carry out such Changes; and

(iv) any increase or decrease in Fees resulting from the proposed Changes, which increase or decrease will reflect only the increase or decrease in time and expenses Contractor requires to carry out the Change.

(b) Within thirty (30) Business Days following the State's receipt of a Change Proposal, the State will by written notice to Contractor, approve, reject, or propose modifications to such Change Proposal. If the State proposes modifications, Contractor must modify and re-deliver the Change Proposal reflecting such modifications, or notify the State of any disagreement, in which event the parties will negotiate in good faith to resolve their disagreement. Upon the State's approval of the Change Proposal or the parties' agreement on all proposed modifications, as the case may be, the parties will execute a written agreement to the Change Proposal ("**Change Notice**"), which Change Notice will be signed by the State's Contract Administrator and will constitute an amendment to the Statement of Work to which it relates; and

(c) If the parties fail to enter into a Change Notice within fifteen (15) Business Days following the State's response to a Change Proposal, the State may, in its discretion:

(i) require Contractor to perform the Services under the Statement of Work without the Change;

(ii) require Contractor to continue to negotiate a Change Notice;

(iii) initiate a Dispute Resolution Procedure; or

(iv) notwithstanding any provision to the contrary in the Statement of Work, terminate this Contract for cause under **Section 15.1**.

(d) No Change will be effective until the parties have executed a Change Notice. Except as the State may request in its Change Request or otherwise in writing, Contractor must continue to perform its obligations in accordance with the Statement of Work pending negotiation and execution of a Change Notice. Contractor will use its best efforts to limit any delays or Fee increases from any Change to those necessary to perform the Change in accordance with the applicable Change Notice. Each party is responsible for its own costs and expenses of preparing, evaluating, negotiating, and otherwise processing any Change Request, Change Proposal, and Change Notice.

(e) The performance of any functions, activities, tasks, obligations, roles and responsibilities comprising the Services as described in this Contract are considered part of the Services and, thus, will not be considered a Change. This includes the delivery of all Deliverables in accordance with their respective Specifications, and the diagnosis and correction of Non-Conformities discovered in Deliverables prior to their Acceptance by the State or, subsequent to their Acceptance by the State, as necessary for Contractor to fulfill its associated warranty requirements and its Maintenance and Support Services under this Contract.

(f) Contractor may, on its own initiative and at its own expense, prepare and submit its own Change Request to the State. However, the State will be under no obligation to approve or otherwise respond to a Change Request initiated by Contractor.

3. Software. Contractor will design, develop, create, test, deliver, install, configure, integrate, customize and otherwise provide and make fully operational Software as described in the Statement of Work on a timely and professional basis in accordance with all terms, conditions, and Specifications set forth in this Contract and the Statement of Work.

3.1 Software Specifications. Contractor will ensure all Software complies with the Specifications. Contractor will provide all Software to the State in both Object Code and Source Code form.

3.2 Third-Party Materials.

(a) Contractor will not include in any Software, and operation of all Software in accordance with its Specifications and Documentation will not require, any Third-Party Materials, other than Approved Third-Party Materials, which must be specifically approved by the State and identified and described in the Statement of Work, and will be licensed to the State in accordance with **Section 14.3**.

(b) Contractor must secure, at its sole cost and expense, all necessary rights, licenses, consents, approvals, and authorizations necessary for the State to use, perpetually and throughout the universe, all Approved Third-Party Materials as incorporated in or otherwise used in conjunction with Software as specified in the Statement of Work or elsewhere in this Contract.

3.3 Open-Source Components. Contractor will not include in any Software, and operation of all Software in accordance with its Specifications and Documentation will not require the use of, any Open-Source Components, other than Approved Open-Source Components, which must be specifically approved by the State and identified and described in the Statement of Work, and for which the relevant open-source license(s) (each, an "**Open-Source License**") are attached as exhibits to the Statement of Work. Contractor will provide the State with the Source Code for Approved Open-Source Components in accordance with the terms of the Open-Source License(s) at no cost to the State.

4. Documentation. Prior to or concurrently with the delivery of any Software, or by such earlier date as may be specified in the Implementation Plan for such Software, Contractor will provide the State with complete and accurate Documentation for such Software. Where the Statement of Work requires or permits delivery of Software in two or more phases, Contractor will also provide the State with integrated Documentation for the Aggregate Software upon its delivery.

4.1 Adequacy of Documentation. All Documentation must include all such information as may be reasonably necessary for the effective installation, testing, use, support, and maintenance of the applicable Software by the Intended User, including the effective configuration, integration, and systems administration of the Software and performance of all other functions set forth in the Specifications.

4.2 Documentation Specifications. Contractor will provide all Documentation in both hard copy and electronic form, in such formats and media as are set forth in the Statement of Work, or as the State may otherwise reasonably request in writing.

4.3 Third-Party Documentation. Other than Documentation for Approved Third-Party Materials and Approved Open-Source Components, no Documentation will consist of or include Third-Party Materials. To the extent Documentation consists of or includes Third-Party Materials, Contractor must secure, at its sole cost and expense, all rights, licenses, consents, approvals and authorizations specified in **Section 14.3** with respect to Approved Third-Party Materials.

5. Performance of Services. Contractor will provide all Services and Work Product in a timely, professional and workmanlike manner and in accordance with the terms, conditions, and Specifications set forth in this Contract and the Statement of Work.

5.1 State Standards.

(a) The Contractor must adhere to all existing standards as described within the comprehensive listing of the State's existing technology standards at http://www.michigan.gov/dmb/0,4568,7-150-56355-108233--,00.html

(b) To the extent that Contractor has access to the State's computer system, Contractor must comply with the State's Acceptable Use Policy, see http://michigan.gov/cybersecurity/0,1607,7-217-34395_34476---,00.html. All Contractor Personnel will be required, in writing, to agree to the State's Acceptable Use Policy before accessing the State's system. The State reserves the right to terminate Contractor's access to the State's system if a violation occurs.

(c) Contractor is not authorized to make changes to any State systems without prior written authorization from the State's Project Manager. Any changes Contractor makes to any State systems with the State's approval must be done according to applicable State procedures, including security, access, and configuration standards.

5.2 Contractor Personnel.

(a) Contractor is solely responsible for all Contractor Personnel and for the payment of their compensation, including, if applicable, withholding of income taxes, and the payment and withholding of social security and other payroll taxes, unemployment insurance, workers' compensation insurance payments and disability benefits.

(b) Prior to any Contractor Personnel performing any Services, Contractor will:

(i) ensure that such Contractor Personnel have the legal right to work in the United States;

(ii) require such Contractor Personnel to execute written agreements, in form and substance acceptable to the State, that bind such Contractor Personnel to confidentiality provisions that are at least as protective of the State's information (including all Confidential Information) as those contained in this Contract and Intellectual Property Rights provisions that grant the State rights in the Work Product consistent with the provisions of **Section 13.1** and, upon the State's request, provide the State with a copy of each such executed Contract; and

(iii) if requested by the State, and at Contractor's sole cost and expense, conduct background checks on such Contractor Personnel, which background checks must comprise, at a minimum, a review of credit history, references and criminal record, in accordance with applicable Law.

(c) Contractor and all Contractor Personnel will comply with all rules, regulations, and policies of the State that are communicated to Contractor in writing, including security procedures concerning systems and data and remote access, building security procedures, including the restriction of access by the State to certain areas of its premises or systems, and general health and safety practices and procedures.

(d) The State reserves the right to require the removal of any Contractor Personnel found, in the judgment of the State, to be unacceptable. The State's request must be written with reasonable detail outlining the reasons for the removal request. Replacement personnel for the removed person must be fully qualified for the position. If the State exercises this right, and Contractor cannot immediately replace the removed personnel, the State agrees to negotiate an equitable adjustment in schedule or other terms that may be affected by the State's required removal.

5.3 Contractor's Project Manager. Throughout the Term of this Contract, Contractor must maintain a Contractor employee acceptable to the State to serve as Contractor's Project Manager. Contractor's Project Manager will be identified in the Statement of Work.

(a) Contractor's Project Manager must:

(i) have the requisite authority, and necessary skill, experience, and qualifications, to perform in such capacity;

(ii) be responsible for overall management and supervision of Contractor's performance under this Contract; and

(iii) be the State's primary point of contact for communications with respect to this Contract, including with respect to giving and receiving all day-to-day approvals and consents.

(b) Contractor's Project Manager must attend all regularly scheduled meetings as set forth in the Implementation Plan, and will otherwise be available as set forth in the Statement of Work.

(c) Contractor will maintain the same Project Manager throughout the Term of this Contract, unless:

(i) the State requests in writing the removal of Contractor's Project Manager;

(ii) the State consents in writing to any removal requested by Contractor in writing;

(iii) Contractor's Project Manager ceases to be employed by Contractor, whether by resignation, involuntary termination or otherwise.

(d) Contractor will promptly replace its Project Manager on the occurrence of any event set forth in **Section 5.3(c)**. Such replacement will be subject to the State's prior written approval.

5.4 Contractor's Key Personnel.

(a) The State has the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor will notify the State of the proposed assignment, introduce the individual to the State's Project Manager, and provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection.

(b) Contractor will not remove any Key Personnel from their assigned roles on this Contract without the prior written consent of the State. The Contractor's removal of Key Personnel without the prior written consent of the State is an unauthorized removal ("**Unauthorized Removal**"). An Unauthorized Removal does not include replacing Key Personnel for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances, resignation, or for cause termination of the Key Personnel's employment. Any Unauthorized Removal may be considered by the State to be a material breach of this Contract, in respect of which the State may elect to terminate this Contract for cause under **Section 15.1**.

(c) It is further acknowledged that an Unauthorized Removal will interfere with the timely and proper completion of this Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any Unauthorized Removal. Therefore, Contractor and the State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under **Section 15.1**, Contractor will issue to the State the corresponding credits set forth below (each, an "**Unauthorized Removal Credit**"):

(i) For the Unauthorized Removal of any Key Personnel designated in the applicable Statement of Work, the credit amount will be $180,000.00 per individual if Contractor identifies a replacement approved by the State and assigns the replacement to shadow the Key Personnel who is leaving for a period of at least 30 calendar days before the Key Personnel's removal.

(ii) If Contractor fails to assign a replacement to shadow the removed Key Personnel for at least 30 calendar days, in addition to the $180,000.00 credit specified above, Contractor will credit the State $6000.00 per calendar day for each day of the 30 calendar-day shadow period that the replacement Key Personnel does not shadow the removed Key Personnel, up to $180,000.00 maximum per individual. The total Unauthorized Removal Credits that may be assessed per Unauthorized Removal and failure to provide 30 calendar days of shadowing will not exceed $360,000.00 per individual.

(d) Contractor acknowledges and agrees that each of the Unauthorized Removal Credits assessed under **Subsection (c)** above: (i) is a reasonable estimate of and compensation for the anticipated or actual harm to the State that may arise from the Unauthorized Removal, which would be impossible or very difficult to accurately estimate; and (ii) may, at the State's option, be credited or set off against any Fees or other charges payable to Contractor under this Contract.

5.5 Subcontractors. Contractor will not, without the prior written approval of the State, which consent may be given or withheld in the State's sole discretion, engage any Third Party to perform Services (including to create any Work Product). The State's approval of any such Third Party (each approved Third Party, a "**Permitted Subcontractor**") does not relieve Contractor of its representations, warranties or obligations under this Contract. Without limiting the foregoing, Contractor will:

(a) be responsible and liable for the acts and omissions of each such Permitted Subcontractor (including such Permitted Subcontractor's employees who, to the extent providing Services or creating Work Product, shall be deemed Contractor Personnel) to the same extent as if such acts or omissions were by Contractor or its employees;

(b) name the State a third party beneficiary under Contractor's Contract with each Permitted Subcontractor with respect to the Services and Work Product;

(c) be responsible for all fees and expenses payable to, by or on behalf of each Permitted Subcontractor in connection with this Contract, including, if applicable, withholding of income taxes, and the payment and withholding of social security and other payroll taxes, unemployment insurance, workers' compensation insurance payments and disability benefits; and

(d) prior to the provision of Services or creation of Work Product by any Permitted Subcontractor:

(i) obtain from such Permitted Subcontractor confidentiality, work-for-hire and intellectual property rights assignment agreements, in form and substance acceptable by the State, giving the State rights consistent with those set forth in **Section 13.1** and **Section 21** and, upon request, provide the State with a fully-executed copy of each such contract; and

(ii) with respect to all Permitted Subcontractor employees providing Services or Work Product, comply with its obligations under **Section 5.2(b)**.

6. State Obligations.

6.1 State Resources and Access. The State is responsible for:

(a) providing the State Materials and such other resources as may be specified in the Statement of Work (collectively, "**State Resources**"); and

(b) providing Contractor Personnel with such access to the Site(s) and Operating Environment as is necessary for Contractor to perform its obligations on a timely basis as set forth in the Statement of Work.

6.2 State Project Manager. Throughout the Term of this Contract, the State will maintain a State employee to serve as the State's Project Manager under this Contract. The State's Project Manager will be identified in the Statement of Work. The State's Project Manager or designee will attend regularly scheduled meetings as set forth in the Implementation Plan and will otherwise be available as set forth in the Statement of Work.

7. Pre-Delivery Testing.

7.1 Testing By Contractor. Before delivering and installing any Software Deliverable, Contractor must:

(a) test the Software component of such Software Deliverable to confirm that it is fully operable, meets all applicable Specifications and will function in accordance with the Specifications and Documentation when properly installed in the Operating Environment;

(b) scan such Software Deliverable using the most up-to-date scanning software and definitions to confirm it is free of Harmful Code;

(c) remedy any Non-Conformity or Harmful Code identified and retest and rescan the Software Deliverable; and

(d) prepare, test and, as necessary, revise the Documentation component of the Software Deliverable to confirm it is complete and accurate and conforms to all requirements of this Contract.

7.2 State Participation. The State has the right to be present for all pre-installation testing. Contractor must give the State at least fifteen (15) calendar days' prior notice of all such testing.

8. Delivery and Installation.

8.1 Delivery. Contractor will deliver each Deliverable, and install all Software, on or prior to the applicable Milestone Date in accordance with the delivery criteria set forth in the Statement of Work. Contractor will deliver each Software Deliverable, including complete Documentation in compliance with **Section 4**, and the applicable Source Code. No Software Deliverable will be deemed to have been delivered or installed unless it complies with the preceding sentence.

8.2 Site Preparation. As specified in the Statement of Work, the State or Contractor is responsible for ensuring the relevant Operating Environment is set up and in working order to allow Contractor to deliver and install each Software Deliverable on or prior to the applicable Milestone Date. Contractor will provide the State with such notice as is specified in the Statement of Work, prior to delivery of each such Software Deliverable to give the State sufficient time to prepare for Contractor's delivery and installation of the Software Deliverable. If the State is responsible for Site preparation, Contractor will provide such assistance as the State requests to complete such preparation on a timely basis.

9. Acceptance Testing; Acceptance.

9.1 Acceptance Testing.

(a) Upon installation of each Software Deliverable, Acceptance Tests will be conducted as set forth in this **Section 9.1** to ensure the Software Deliverable, including all

Software and Documentation, conforms to the requirements of this Contract, including the applicable Specifications and, in the case of the Software, the Documentation.

(b) All Acceptance Tests will take place at the designated Site(s) in the Operating Environment described in the Statement of Work for the Software Deliverable, commence on the Business Day following installation of such Software Deliverable and be conducted diligently for up to thirty (30) Business Days, or such other period as may be set forth in the Statement of Work (the "**Testing Period**"). Acceptance Tests will be conducted by the party responsible as set forth in the Statement of Work or, if the Statement of Work does not specify, the State, provided that:

(i) for Acceptance Tests conducted by the State, if requested by the State, Contractor will make suitable Contractor Personnel available to observe or participate in such Acceptance Tests; and

(ii) for Acceptance Tests conducted by Contractor, the State has the right to observe or participate in all or any part of such Acceptance Tests.

Contractor is solely responsible for all costs and expenses related to Contractor's performance of, participation in, and observation of Acceptance Testing.

(c) Upon delivery and installation of the Aggregate Software under the Statement of Work, additional Acceptance Tests will be performed on the Aggregate Software as a whole to ensure full operability, integration, and compatibility among all elements of the Aggregate Software ("**Integration Testing**"). Integration Testing is subject to all procedural and other terms and conditions set forth in **Section 9.1**, **Section 9.3**, and **Section 9.4**.

(d) The State may suspend Acceptance Tests and the corresponding Testing Period by written notice to Contractor if the State discovers a material Non-Conformity in the tested Software Deliverable or part or feature of such Software Deliverable. In such event, Contractor will immediately, and in any case within ten (10) Business Days, correct such Non-Conformity, whereupon the Acceptance Tests and Testing Period will resume for the balance of the Testing Period.

9.2 <u>Notices of Completion, Non-Conformities, and Acceptance</u>. Within fifteen (15) Business Days following the completion of any Acceptance Tests, including any Integration Testing, the party responsible for conducting the tests will prepare and provide to the other party written notice of the completion of the tests. Such notice must include a report describing in reasonable detail the tests conducted and the results of such tests, including any uncorrected Non-Conformity in the tested Software Deliverables.

(a) If such notice is provided by either party and identifies any Non-Conformities, the parties' rights, remedies, and obligations will be as set forth in **Section 9.3** and **Section 9.4**.

(b) If such notice is provided by the State, is signed by the State's Business Owner and Project Manager, and identifies no Non-Conformities, such notice constitutes the State's Acceptance of such Software Deliverable or Aggregate Software.

(c) If such notice is provided by Contractor and identifies no Non-Conformities, the State will have thirty (30) Business Days to use such Software Deliverable in the Operating Environment and determine, in the exercise of its sole discretion, whether it is satisfied that such Software Deliverable or Aggregate Software contains no Non-Conformities, on the completion of which the State will, as appropriate:

(i) notify Contractor in writing of Non-Conformities the State has observed in the Software Deliverable or, in the case of Integration Testing, Aggregate Software, and of the State's non-acceptance thereof, whereupon the parties' rights, remedies and obligations will be as set forth in **Section 9.3** and **Section 9.4**; or

(ii) provide Contractor with a written notice of its Acceptance of such Software Deliverable or Aggregate Software, which must be signed by the State's Business Owner and Project Manager.

9.3 Failure of Acceptance Tests. If Acceptance Tests identify any Non-Conformities, Contractor, at Contractor's sole cost and expense, will remedy all such Non-Conformities and re-deliver the Software Deliverables, in accordance with the requirements set forth in the Statement of Work. Redelivery will occur as promptly as commercially possible and, in any case, within thirty (30) Business Days following, as applicable, Contractor's:

(a) completion of such Acceptance Tests, in the case of Acceptance Tests conducted by Contractor; or

(b) receipt of the State's notice under **Section 9.1(a)** or **Section 9.2(c)(i)**, identifying any Non-Conformities.

9.4 Repeated Failure of Acceptance Tests. If Acceptance Tests identify any Non-Conformity in any Software Deliverable after a second or subsequent delivery of such Software Deliverable, or Contractor fails to re-deliver the Software Deliverable on a timely basis, the State may, in its sole discretion, by written notice to Contractor:

(a) continue the process set forth in this **Section 9**;

(b) accept the Software Deliverable as a nonconforming deliverable, in which case the Fees Such Software Deliverable will be reduced equitably to reflect the value of the Software Deliverable as received relative to the value of the Software Deliverable had it conformed; or

(c) deem the failure to be a non-curable material breach of this Contract and the Statement of Work and terminate this Contract for cause in accordance with **Section 15.1**.

9.5 Acceptance. Acceptance ("**Acceptance**") of each Software Deliverable (subject, where applicable, to the State's right to Integration Testing) and Aggregate Software will occur on the date that is the earliest of the State's delivery of a notice accepting such Software Deliverable under **Section 9.2(b)**, or **Section 9.2(c)(ii)**.

10. Training; Maintenance and Support.

10.1 Training. With respect to all Software, Contractor will provide the State with training as set forth in the Statement of Work. All training set forth in the Statement of Work will be provided at no additional charge to the State, it being acknowledged and agreed that the development and other Fees include full consideration for such services. The State may request, and if so requested, Contractor must provide on a timely basis, additional training at the rates specified in the Pricing Schedule set forth in **Schedule B**.

10.2 Maintenance and Support. With respect to all Software, Contractor will provide the State with the Maintenance and Support Services set forth in **Schedule C**. Such Maintenance and Support Services will be provided:

(a) free of charge, during the Warranty Period, it being acknowledged and agreed by the parties that the development and other Fees include full consideration for such Services during such period; and

(b) thereafter, for so long as the State elects to receive Support and Maintenance Services for such Software, in consideration of the State's payment of the Support Fees as determined in accordance with the rates set forth in the Maintenance and Support Schedule.

11. Fees.

11.1 Fees. Subject to all terms and conditions set forth in this **Section 11** and Contractor's performance of Services to the State's satisfaction and the State's Acceptance of the applicable Deliverables, the State will pay the fees set forth in the Statement of Work ("**Fees**"). All such Fees will be determined in accordance with the fees, billing rates, and discounts ("**Pricing**") set forth in **Schedule B** (the "**Pricing Schedule**").

11.2 Firm Pricing. The Pricing set forth in the Pricing Schedule is firm and may not be modified during the Term.

11.3 Administrative Fee And Reporting.

(a) The Contractor must remit an administrative fee of 1% on all payments remitted to Contractor under the Contract including transactions with the State (including its departments, divisions, agencies, offices, and commissions). Contractor must submit an itemized purchasing activity report, which includes at a minimum, the name of the purchasing entity and the total dollar volume in sales.

(b) Itemized purchasing activity reports should be mailed to DTMB-Procurement and the administrative fee payments shall be made by check payable to the State of Michigan and mailed to:

The Department of Technology, Management and Budget
Cashiering
P.O. Box 30681
Lansing, MI 48909

The administrative fee and purchasing activity report are due within 30 calendar days from the last day of each quarter.

12. Invoices and Payment.

12.1 Invoices. Contractor will invoice the State for Fees in accordance with the requirements set forth in the Statement of Work, including any requirements that condition the rendering of invoices and the payment of Fees upon the successful completion of Milestones. Contractor must submit each invoice in both hard copy and electronic format, via such delivery means and to such address as are specified by the State in the Statement of Work. Each separate invoice must:

(a) clearly identify the Contract to which it relates, in such manner as is required by the State;

(b) list each Fee item separately;

(c) include sufficient detail for each line item to enable the State to satisfy its accounting and charge-back requirements;

(d) for Fees determined on a time and materials basis, report details regarding the number of hours performed during the billing period, the skill or labor category for such Contractor Personnel and the applicable hourly billing rates; and

(e) include such other information as may be required by the State as set forth in the Statement of Work.

12.2 Payment. Invoices are due and payable by the State, in accordance with the State's standard payment procedures as specified in 1984 Public Act no. 279, MCL 17.51, *et seq*., within forty-five (45) calendar days after receipt, provided the State determines that the invoice was properly rendered. The State will only disburse payments under this Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at http://www.michigan.gov/cpexpress to receive electronic fund transfer payments. If Contractor does not register, the State is not liable for failure to provide payment.

12.3 Taxes. The State is exempt from State sales tax for direct purchases and may be exempt from federal excise tax, if Services or Deliverables purchased under this Contract are for the State's exclusive use. Notwithstanding the foregoing, all Fees are inclusive of taxes, and Contractor is responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state, or local governmental entity on any amounts payable by the State under this Contract.

12.4 Withhold Remedy. In addition and cumulative to all other remedies in law, at equity and under this Contract, if Contractor is in material default of its performance or other obligations under this Contract and fails to cure the default within fifteen (15) calendar days after receipt of the State's written notice of default, the State may, without waiving any other rights under this Contract, elect to withhold from the payments due to Contractor under this Contract during the period beginning with the sixteenth (16th) calendar day after Contractor's receipt of such notice of default, and ending on the date that the default has been cured to the reasonable satisfaction of the State, an amount that, in the State's reasonable judgment, is in proportion to the magnitude of the default or the Services that Contractor is not providing. Upon Contractor's cure of the default, the State will cause the withheld payments to be paid to Contractor, without interest.

12.5 Right of Set Off. Without prejudice to any other right or remedy it may have, the State reserves the right to set off at any time any amount owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

12.6 Payment Does Not Imply Acceptance. The making of any payment by the State, or Contractor's receipt of payment, will in no way affect the responsibility of Contractor to perform the Services in accordance with this Contract, and will not imply the State's acceptance of any Services or Deliverables or the waiver of any warranties or requirements of this Contract.

12.7 Support Not to be Withheld or Delayed. Contractor will not withhold, delay, or fail to perform any Services or obligations under this Contract by reason of the State's good faith withholding of any payment or amount in accordance with this **Section 12**.

13. Intellectual Property Rights.

13.1 State Ownership of Work Product. Except as set forth in **Section 13.3**, the State is and will be the sole and exclusive owner of all right, title, and interest in and to all Work Product, including all Intellectual Property Rights. In furtherance of the foregoing, subject to **Section 13.3**:

(a) Contractor will create all Work Product as work made for hire as defined in Section 101 of the Copyright Act of 1976; and

(b) to the extent any Work Product or Intellectual Property Rights do not qualify as, or otherwise fails to be, work made for hire, Contractor hereby:

(i) assigns, transfers, and otherwise conveys to the State, irrevocably and in perpetuity, throughout the universe, all right, title, and interest in and to such Work Product, including all Intellectual Property Rights; and

(ii) irrevocably waives any and all claims Contractor may now or hereafter have in any jurisdiction to so-called "moral rights" or rights of *droit moral* with respect to the Work Product.

13.2 Further Actions. Contractor will, and will cause the Contractor Personnel to, take all appropriate action and execute and deliver all documents, necessary or reasonably requested by the State to effectuate any of the provisions or purposes of **Section 13.1**, or otherwise as may be necessary or useful for the State to prosecute, register, perfect, record, or enforce its rights in or to any Work Product or any Intellectual Property Right therein. Contractor hereby appoints the State as Contractor's attorney-in-fact with full irrevocable power and authority to take any such actions and execute any such documents if Contractor refuses, or within a period deemed reasonable by the State otherwise fails, to do so.

13.3 Background Technology, Approved Third-Party Materials, and Open-Source Components.

(a) Contractor is and will remain the sole and exclusive owner of all right, title, and interest in and to the Background Technology, including all Intellectual Property Rights therein, subject to the license granted in **Section 14.1**.

(b) Ownership of all Approved Third-Party Materials, and all Intellectual Property Rights therein, is and will remain with its respective owners, subject to any express licenses or sublicenses granted to the State under this Contract.

(c) Ownership of all Open-Source Components, and all Intellectual Property Rights therein, is and will remain with its respective owners, subject to the State's rights under the applicable Open-Source Licenses.

13.4 State Materials. The State will remain the sole and exclusive owners of all right, title, and interest in and to State Materials, including all Intellectual Property Rights therein. Contractor will have no right or license to, and will not, use any State Materials except solely during the Term of this Contract for which they are provided to the extent necessary to perform the Services and provide the Work Product to the State. All other rights in and to the State Materials are expressly reserved by the State.

14. Licenses.

14.1 Background Technology License. Contractor hereby grants to the State such rights and licenses with respect to the Background Technology that will allow the State to use and otherwise exploit perpetually throughout the universe for all or any purposes whatsoever the Work Product, to the same extent as if the State owned the Background Technology, without incurring any fees or costs to Contractor (other than the Fees set forth under this Contract) or any other Person in respect of the Background Technology. In furtherance of the foregoing, such rights and licenses will:

(a) be irrevocable, perpetual, fully paid-up and royalty-free;

(b) include the rights to use, reproduce, perform (publicly or otherwise), display (publicly or otherwise), modify, improve, create Derivative Works of, distribute, import, make, have made, sell and offer to sell the Background Technology, including all such modifications, improvements and Derivative Works thereof, solely as part of, or as necessary to use and exploit, the Work Product; and

(c) be freely assignable and sublicensable, in each case solely in connection with the assignment or licensing of the Work Product or any portion, modification, or Derivative Work thereof, and only to the extent necessary to allow the assignee or sublicensee, as the case may be, to use and exploit the Work Product or portion, modification, improvement, or Derivative Work thereof.

14.2 State Materials. The State hereby grants to Contractor the limited, royalty-free, non-exclusive right and license to State Materials solely as necessary to incorporate such State Materials into, or otherwise use such State Materials in connection with creating, the Work Product. The term of such license will commence upon the State's delivery of the State Materials to Contractor, and will terminate upon the State's acceptance or rejection of the Work Product to which the State Materials relate. Subject to the foregoing license, the State reserves all rights in the State Materials. All State Materials are considered Confidential Information of the State.

14.3 Approved Third-Party Materials.

(a) Prior to the delivery date for any Deliverables under the Statement of Work, Contractor will secure for the State, at Contractor's sole cost and expense, such rights, licenses, consents and approvals for any Approved Third-Party Materials, that will allow the State to use and otherwise exploit perpetually throughout the universe for all or any purposes whatsoever the Work Product, to the same extent as if the State owned the Approved Third-Party Materials, without incurring any fees or costs to any Third-Party (other than the Fees set forth under this Contract) in respect of the Approved Third-Party Materials.

(b) All royalties, license fees, or other consideration payable in respect of such licenses are included in the Fees specified in the Statement of Work. Any additional amounts will be the sole responsibility of Contractor.

(c) Contractor acknowledges that the State cannot indemnify any third parties, including but not limited to any third-party software providers that provide Third-Party Materials, and that notwithstanding anything to the contrary contained in any third-party software license agreement or end user license agreement, the State will not indemnify any third-party software provider for any reason whatsoever.

14.4 Open-Source Components. Any use of the Open-Source Components by the State will be governed by, and subject to, the terms and conditions of the applicable Open-Source Licenses.

15. Termination, Expiration, Transition. The State may terminate this Contract, the Maintenance and Support Services for all or any Software, or any Statement of Work, in accordance with the following:

15.1 Termination for Cause.

(a) The State may terminate this Contract for cause, in whole or in part, if Contractor, as determined by the State: (i) endangers the value, integrity, or security of any State system, data, facility or personnel; (ii) becomes insolvent, petitions for bankruptcy court proceedings, or has an involuntary bankruptcy proceeding filed against it by any creditor; (iii) engages in any conduct that may expose the State to liability; or (iv) breaches any of its material duties or obligations under this Contract. Any reference to specific breaches being material breaches within this Contract will not be construed to mean that other breaches are not material.

(b) If the State terminates this Contract under this **Section 15.1**, the State will issue a termination notice specifying whether Contractor must: (a) cease performance immediately, or (b) continue to perform for a specified period. If it is later determined that Contractor was not in breach of this Contract, the termination will be deemed to have been a termination for convenience, effective as of the same date, and the rights and obligations of the parties will be limited to those provided in **Section 15.2**.

(c) The State will only pay for amounts due to Contractor for Services and Deliverables accepted by the State on or before the date of termination, subject to the State's right to set off any amounts owed by the Contractor for the State's reasonable costs in terminating this Contract. The Contractor must pay all reasonable costs incurred by the State in terminating this Contract for cause, including administrative costs, attorneys' fees, court costs, transition costs, and any costs the State incurs to procure the Services from other sources.

15.2 Termination for Convenience. The State may immediately terminate this Contract in whole or in part, without penalty and for any reason, including but not limited to, appropriation or budget shortfalls. The termination notice will specify whether Contractor must: (a) cease performance immediately, or (b) continue to perform in accordance with **Section 15.3**. If the State terminates this Contract for convenience, the State will pay all reasonable costs, as determined by the State, for State approved Transition Responsibilities.

15.3 Transition Responsibilities. Upon termination or expiration of this Contract for any reason, Contractor must, for a period of time specified by the State (not to exceed 90 calendar days, unless otherwise agreed to by the parties)(the "**Transition Period**"), provide all reasonable transition assistance requested by the State, to allow for the expired or terminated portion of the Contract to continue without interruption or adverse effect, and to facilitate the orderly transfer of the Services to the State or its designees. Such transition assistance may include but is not limited to: (a) continuing to perform the Services at the established Contract rates; (b) taking all reasonable and necessary measures to transition performance of the work, including all applicable Services and Deliverables to the State or the State's designee; (c) taking all necessary and appropriate steps, or such other action as the State may direct, to preserve, maintain, protect, or return to the State all State Materials and State Data; (d) transferring title in and delivering to the State, at the State's discretion, all completed or partially completed Deliverables prepared under this Contract as of the Contract termination or expiration date; and (e) preparing an accurate accounting from which the State and Contractor may reconcile all outstanding accounts (collectively, the "**Transition Responsibilities**"). This Contract is automatically extended through the end of the Transition Period.

15.4 Effect of Expiration or Termination.

(a) Upon termination or expiration of this Contract for any reason:

(i) Contractor will be obligated to perform all Transition Responsibilities specified in **Section 15.3**.

(ii) All licenses granted to Contractor in the State Materials and State Data will immediately and automatically also terminate. Contractor must promptly return to the State all State Materials and State Data not required by Contractor for its Transition Responsibilities, if any.

(iii) Contractor will (A) return to the State all documents and tangible materials (and any copies) containing, reflecting, incorporating, or based on the State's Confidential Information, (B) permanently erase the State's Confidential Information from its computer systems and (C) certify in writing to the State that it has complied with the requirements of this **Section 15.4(a)(iii)**, in each case to the extent such materials are not required by Contractor for Transition Responsibilities, if any.

(b) No expiration or termination of this Contract will affect the State's rights in any of the Deliverables that have already been paid for by the State.

15.5 Survival. This **Section 15** survives termination or expiration of this Contract.

16. Stop Work Order. The State may, at any time, order the Services of Contractor fully or partially stopped for its own convenience for up to ninety (90) calendar days at no additional cost to the State. The State will provide Contractor a written notice detailing such suspension (a "**Stop Work Order**"). Contractor must comply with the Stop Work Order upon receipt. Within 90 days, or any longer period agreed to by Contractor, the State will either: (a) issue a notice authorizing Contractor to resume work, or (b) terminate this Contract. The State will not pay for any Services, Contractor's lost profits, or any additional compensation during a stop work period.

17. Contractor Representations and Warranties.

17.1 Authority. Contractor represents and warrants to the State that:

(a) It is duly organized, validly existing, and in good standing as a corporation or other entity as represented under this Contract under the laws and regulations of its jurisdiction of incorporation, organization, or chartering;

(b) It has the full right, power, and authority to enter into this Contract, to grant the rights and licenses granted under this Contract, and to perform its contractual obligations;

(c) The execution of this Contract by its Representative has been duly authorized by all necessary organizational action; and

(d) When executed and delivered by Contractor, this Contract will constitute the legal, valid, and binding obligation of Contractor, enforceable against Contractor in accordance with its terms.

17.2 Bid Response. Contractor represents and warrants to the State that:

(a) The prices proposed by Contractor were arrived at independently, without consultation, communication, or agreement with any other bidder for the purpose of restricting competition; the prices quoted were not knowingly disclosed by Contractor to any other bidder to the RFP; and no attempt was made by Contractor to induce any other Person to submit or not submit a proposal for the purpose of restricting competition;

(b) All written information furnished to the State by or for Contractor in connection with this Contract, including Contractor's Bid Response, is true, accurate, and complete, and contains no untrue statement of material fact or omits any material fact necessary to make the information not misleading;

(c) Contractor is not in material default or breach of any other contract or agreement that it may have with the State or any of its departments, commissions, boards, or agencies. Contractor further represents and warrants that it has not been a party to any contract with the State or any of its departments that was terminated by the State within the previous five (5) years for the reason that Contractor failed to perform or otherwise breached an obligation of the contract; and

(d) If any of the certifications, representations, or disclosures made in Contractor's Bid Response change after contract award, the Contractor is required to report those changes immediately to the Contract Administrator.

17.3 Software and Service. Contractor represents and warrants to the State that:

(a) It will perform all Services in a professional and workmanlike manner in accordance with best industry standards and practices for similar services, using personnel with the requisite skill, experience and qualifications, and will devote adequate resources to meet its obligations under this Contract;

(b) It is in compliance with, and will perform all Services in compliance with, all applicable Law;

(c) The State will receive good and valid title to the Software, free and clear of all encumbrances and liens of any kind;

(d) When delivered and installed by Contractor, the Software will not contain any Harmful Code;

(e) The Software will not contain, or operate in such a way that it is compiled with or linked to, any Open-Source Components other than Approved Open-Source Components;

(f) The Software will not contain, or operate in such a way that it is compiled with or linked to, any Third-Party Materials other than Approved Third-Party Materials;

(g) The Software, including all updates, upgrades, new versions, new releases, enhancements, improvements and other modifications thereof, but excluding components comprising State Materials, Approved Third-Party Materials, and Open-Source Components, is or will be the original creation of Contractor;

(h) As delivered, installed, specified, or approved by Contractor and used by the State or any Third Party authorized by the State, the Software: (i) will not infringe, misappropriate, or otherwise violate any Intellectual Property Right or other right of any third party; and (ii) will comply with all applicable Laws; and

(i) No expiration or loss of any patent or application for patent rights in the Software is pending, or, to Contractor's knowledge after reasonable inquiry, threatened or reasonably foreseeable, and Contractor has no reason to believe that any claims of any such patent or patent application are or will be invalid, unenforceable, fail to issue, or be materially limited or restricted beyond the current claims, except for patent rights expiring at the end of their statutory term.

17.4 Performance Warranty and Limited Remedy.

(a) Contractor warrants that during the Warranty Period:

(i) all Software will be, and as installed in the Operating Environment (or any successor thereto) and used in accordance with the Documentation will function in all respects, in conformity with this Contract and the Specifications and Documentation; and

(ii) any media on which any Software Deliverable is delivered will be free of damage or defect in design, material, and workmanship, and will remain so under ordinary use as contemplated by this Contract and the Specifications and, with respect to the Software component, the Documentation.

(b) If the Contractor breaches any of the warranties set forth in **Section 17.4(a)** Contractor will, upon written notice from the State and at Contractor’s sole cost and expense, remedy such breach in accordance with the Maintenance and Support Schedule, including the time periods set forth in such schedule. In the event Contractor fails to remedy such breach on a timely basis, the State will be entitled to such remedies as are specified in the Maintenance and Support Schedule or as may otherwise be available under this Contract, at law or in equity for breach of its Maintenance and Support obligations. Nothing in this **Section 17.4(b)** limits the State’s right to indemnification under **Section 18.1**.

18. Indemnification.

18.1 General Indemnification. Contractor must defend, indemnify and hold the State, its departments, divisions, agencies, offices, commissions, officers, and employees harmless, without limitation, from and against any and all actions, claims, losses, liabilities, damages, costs, attorney fees, and expenses (including those required to establish the right to indemnification), arising out of or relating to: (a) any breach by Contractor (or any of Contractor’s employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable) of any of the promises, agreements, representations, warranties, or insurance requirements contained in this Contract; (b) any infringement, misappropriation, or other violation of any Intellectual Property Right or other right of any Third Party; and (c) any bodily injury, death, or damage to real or tangible personal property occurring wholly or in part due to action or inaction by Contractor (or any of Contractor’s employees, agents, subcontractors, or by anyone else for whose acts any of them may be liable).

18.2 Indemnification Procedure. The State will notify Contractor in writing if indemnification is sought; however, failure to do so will not relieve Contractor, except to the extent that Contractor is materially prejudiced. Contractor must, to the satisfaction of the State, demonstrate its financial ability to carry out these obligations. The State is entitled to: (i) regular updates on proceeding status; (ii) participate in the defense of the proceeding; (iii) employ its own counsel; and to (iv) retain control of the defense, at its own cost and expense, if the State deems necessary. Contractor will not, without the State’s prior written consent (not to be unreasonably withheld), settle, compromise, or consent to the entry of any judgment in or otherwise seek to terminate any claim, action, or proceeding. Any litigation activity on behalf of the State or any of its subdivisions, under this **Section 18**, must be coordinated with the Department of Attorney General. An attorney designated to represent the State may not do so until approved by the Michigan Attorney General and appointed as a Special Assistant Attorney General.

18.3 Infringement Remedies.

(a) The remedies set forth in this **Section 18.3** are in addition to, and not in lieu of, all other remedies that may be available to the State under this Contract or otherwise, including the State's right to be indemnified for such actions.

(b) If any Software or any component thereof, other than State Materials, is found to be infringing or if any use of any Software or any component thereof is enjoined, threatened to be enjoined or otherwise the subject of an infringement claim, Contractor must, at Contractor's sole cost and expense:

(i) procure for the State the right to continue to use such Software or component thereof to the full extent contemplated by this Contract; or

(ii) modify or replace the materials that infringe or are alleged to infringe ("**Allegedly Infringing Materials**") to make the Software and all of its components non-infringing while providing fully equivalent features and functionality.

(c) If neither of the foregoing is possible notwithstanding Contractor's best efforts, then Contractor may direct the State to cease any use of any materials that have been enjoined or finally adjudicated as infringing, provided that Contractor will:

(i) refund to the State all amounts paid by the State in respect of such Allegedly Infringing Materials and any other aspects of the Aggregate Software provided under the Statement of Work for the Allegedly Infringing Materials that the State cannot reasonably use as intended under this Contract; and

(ii) in any case, at its sole cost and expense, secure the right for the State to continue using the Allegedly Infringing Materials for a transition period of up to six (6) months to allow the State to replace the affected features of the Software without disruption.

(d) If Contractor directs the State to cease using any Software under **Section 18.3(c)**, the State may terminate this Contract for cause under **Section 15.1**.

(e) Contractor will have no liability for any claim of infringement arising solely from:

(i) Contractor's compliance with any designs, specifications, or instructions of the State; or

(ii) Modification of the Software by the State without the prior knowledge and approval of Contractor;

unless the claim arose against the Software independently of any of the above specified actions.

19. Liquidated Damages

(a) The parties agree that any delay or failure by Contractor to timely perform its obligations in accordance with the Implementation Plan and Milestone Dates agreed to by the parties will interfere with the proper and timely implementation of the Software, to the loss and damage of the State. Further, the State will incur major costs to perform the obligations that would have otherwise been performed by Contractor. The parties understand and agree that any liquidated damages Contractor must pay to the State as a result of such nonperformance are described in the Statement of Work, and that these amounts are reasonable estimates of the State's damages in accordance with applicable Law.

(b) The parties acknowledge and agree that Contractor could incur liquidated damages for more than one event if Contractor fails to timely perform its obligations by each Milestone Date.

(c) The assessment of liquidated damages will not constitute a waiver or release of any other remedy the State may have under this Contract for Contractor's breach of this Contract, including without limitation, the State's right to terminate this Contract for cause under **Section 15.1**, and the State will be entitled in its discretion to recover actual damages caused by Contractor's failure to perform its obligations under this Contract. However, the State will reduce such actual damages by the amounts of liquidated damages received for the same events causing the actual damages.

(d) Amounts due the State as liquidated damages may be set off against any Fees payable to Contractor under this Contract, or the State may bill Contractor as a separate item and Contractor will promptly make payments on such bills.

20. Damages Disclaimers and Limitations.

(a) The State's Disclaimer of Damages. THE STATE WILL NOT BE LIABLE, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR BY STATUTE OR OTHERWISE, FOR ANY CLAIM RELATED TO OR ARISING UNDER THIS CONTRACT FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT, OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS AND LOST BUSINESS OPPORTUNITIES.

(b) The State's Limitation of Liability. IN NO EVENT WILL THE STATE'S AGGREGATE LIABILITY TO CONTRACTOR UNDER THIS CONTRACT, REGARDLESS OF THE FORM OF ACTION, WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY OR BY STATUTE OR OTHERWISE, FOR ANY CLAIM RELATED TO OR ARISING UNDER

THIS CONTRACT, EXCEED THE MAXIMUM AMOUNT OF FEES SPECIFIED IN THE STATEMENT OF WORK.

21. State Data.

21.1 Ownership. The State's data ("**State Data**," which will be treated by Contractor as Confidential Information) includes the State's data collected, used, processed, stored, or generated as the result of the Services, including but not limited to (a) personally identifiable information ("**PII**") collected, used, processed, stored, or generated as the result of the Services, including, without limitation, any information that identifies an individual, such as an individual's social security number or other government-issued identification number, date of birth, address, telephone number, biometric data, mother's maiden name, email address, credit card information, or an individual's name in combination with any other of the elements here listed; and, (b) personal health information ("**PHI**") collected, used, processed, stored, or generated as the result of the Services, which is defined under the Health Insurance Portability and Accountability Act ("**HIPAA**") and its related rules and regulations. State Data is and will remain the sole and exclusive property of the State and all right, title, and interest in the same is reserved by the State. This **Section 21.1** survives termination or expiration of this Contract.

21.2 Contractor Use of State Data. Contractor is provided a limited license to State Data for the sole and exclusive purpose of providing the Services, including a license to collect, process, store, generate, and display State Data only to the extent necessary in the provision of the Services. Contractor must: (a) keep and maintain State Data in strict confidence, using such degree of care as is appropriate and consistent with its obligations as further described in this Contract and applicable law to avoid unauthorized access, use, disclosure, or loss; (b) use and disclose State Data solely and exclusively for the purpose of providing the Services, such use and disclosure being in accordance with this Contract, any applicable Statement of Work, and applicable law; and (c) not use, sell, rent, transfer, distribute, or otherwise disclose or make available State Data for Contractor's own purposes or for the benefit of anyone other than the State without the State's prior written consent. This **Section 21.2** survives termination or expiration of this Contract.

21.3 Extraction of State Data. Contractor must, within three (3) Business Days of the State's request, provide the State, without charge and without any conditions or contingencies whatsoever (including but not limited to the payment of any fees due to Contractor), an extract of State Data in the format specified by the State.

21.4 Backup and Recovery of State Data. Unless otherwise specified in the Statement of Work, Contractor is responsible for maintaining a backup of State Data and providing for an orderly and timely recovery of such data. Unless otherwise described in the Statement of Work, Contractor must maintain a contemporaneous backup of State Data that can be recovered within two (2) hours at any point in time.

21.5 Loss of Data. In the event of any act, error or omission, negligence, misconduct, or breach that compromises or is suspected to compromise the security, confidentiality, or integrity of State Data or the physical, technical, administrative, or organizational safeguards put in place by Contractor that relate to the protection of the security, confidentiality, or integrity of State Data, Contractor must, as applicable: (a) notify the State as soon as practicable but no later than twenty-four (24) hours of becoming aware of such occurrence; (b) cooperate with the State in investigating the occurrence, including making available all relevant records, logs, files, data reporting, and other materials required to comply with applicable law or as otherwise required by the State; (c) in the case of PII or PHI, at the State's sole election, (i) notify the affected individuals who comprise the PII or PHI as soon as practicable but no later than is required to comply with applicable law, or, in the absence of any legally required notification period, within five (5) calendar days of the occurrence; or (ii) reimburse the State for any costs in notifying the affected individuals; (d) in the case of PII, provide third-party credit and identity monitoring services to each of the affected individuals who comprise the PII for the period required to comply with applicable law, or, in the absence of any legally required monitoring services, for no less than twenty-four (24) months following the date of notification to such individuals; (e) perform or take any other actions required to comply with applicable law as a result of the occurrence; (f) without limiting Contractor's obligations of indemnification as further described in this Contract, indemnify, defend, and hold harmless the State for any and all claims, including reasonable attorneys' fees, costs, and incidental expenses, which may be suffered by, accrued against, charged to, or recoverable from the State in connection with the occurrence; (g) be responsible for recreating lost State Data in the manner and on the schedule set by the State without charge to the State; and (h) provide to the State a detailed plan within ten (10) calendar days of the occurrence describing the measures Contractor will undertake to prevent a future occurrence. Notification to affected individuals, as described above, must comply with applicable law, be written in plain language, and contain, at a minimum: name and contact information of Contractor's representative; a description of the nature of the loss; a list of the types of data involved; the known or approximate date of the loss; how such loss may affect the affected individual; what steps Contractor has taken to protect the affected individual; what steps the affected individual can take to protect himself or herself; contact information for major credit card reporting agencies; and, information regarding the credit and identity monitoring services to be provided by Contractor. The State will have the option to review and approve any notification sent to affected individuals prior to its delivery. This **Section 21.5** survives termination or expiration of this Contract.

22. Confidential Information. Each party acknowledges that it may be exposed to or acquire communication or data of the other party that is confidential in nature and is not intended to be disclosed to third parties. This **Section 22** survives termination or expiration of this Contract.

22.1 Meaning of Confidential Information. The term "**Confidential Information**" means all information and documentation of a party that: (a) has been marked "confidential" or with words of similar meaning, at the time of disclosure by such party; (b) if disclosed orally or not marked “confidential” or with words of similar meaning, was subsequently summarized in writing by the disclosing party and marked “confidential” or with words of similar meaning; and, (c) should reasonably be recognized as confidential information of the disclosing party. The term “Confidential Information” does not include any information or documentation that was or is: (a)subject to disclosure under the Michigan Freedom of Information Act (FOIA); (b) already in the possession of the receiving party without an obligation of confidentiality; (c) developed independently by the receiving party, as demonstrated by the receiving party, without violating the disclosing party’s proprietary rights; (d) obtained from a source other than the disclosing party without an obligation of confidentiality; or, (e) publicly available when received, or thereafter became publicly available (other than through any unauthorized disclosure by, through, or on behalf of, the receiving party). Notwithstanding the above, in all cases and for all matters, State Data is deemed to be Confidential Information.

22.2 Obligation of Confidentiality. The parties agree to hold all Confidential Information in strict confidence and not to copy, reproduce, sell, transfer, or otherwise dispose of, give or disclose such Confidential Information to third parties other than employees, agents, or subcontractors of a party who have a need to know in connection with this Contract or to use such Confidential Information for any purposes whatsoever other than the performance of this Contract. The parties agree to advise and require their respective employees, agents, and subcontractors of their obligations to keep all Confidential Information confidential. Disclosure to the Contractor’s subcontractor is permissible where: (a) the subcontractor is a Permitted Subcontractor; (b) the disclosure is necessary or otherwise naturally occurs in connection with work that is within the Permitted Subcontractor's responsibilities; and (c) Contractor obligates the Permitted Subcontractor in a written contract to maintain the State's Confidential Information in confidence. At the State’s request, any of the Contractor’s Representatives may be required to execute a separate agreement to be bound by the provisions of this **Section 22.2**.

22.3 Cooperation to Prevent Disclosure of Confidential Information. Each party must use its best efforts to assist the other party in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limiting the foregoing, each party must advise the other party immediately in the event either party learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Contract. Each party will cooperate with the other party in seeking injunctive or other equitable relief against any such person.

22.4 Remedies for Breach of Obligation of Confidentiality. Each party acknowledges that breach of its obligation of confidentiality may give rise to irreparable injury to the other party, which damage may be inadequately compensable in the form of monetary damages. Accordingly, a party may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies which may be available, to include, in the case of the State, at the sole election of the State, the immediate termination, without liability to the State, of this Contract or any Statement of Work corresponding to the breach or threatened breach.

22.5 Surrender of Confidential Information upon Termination. Upon termination or expiration of this Contract or a Statement of Work, in whole or in part, each party must, within five (5) calendar days from the date of termination, return to the other party any and all Confidential Information received from the other party, or created or received by a party on behalf of the other party, which are in such party's possession, custody, or control. If Contractor or the State determine that the return of any Confidential Information is not feasible, such party must destroy the Confidential Information and certify the same in writing within five (5) calendar days from the date of termination to the other party.

23. Data Privacy and Information Security.

23.1 Undertaking by Contractor. Without limiting Contractor's obligation of confidentiality as further described, Contractor is responsible for establishing and maintaining a data privacy and information security program, including physical, technical, administrative, and organizational safeguards, that is designed to: (a) ensure the security and confidentiality of the State Data; (b) protect against any anticipated threats or hazards to the security or integrity of the State Data; (c) protect against unauthorized disclosure, access to, or use of the State Data; (d) ensure the proper disposal of State Data; and (e) ensure that all Contractor Representatives comply with all of the foregoing. In no case will the safeguards of Contractor's data privacy and information security program be less stringent than the safeguards used by the State, and Contractor must at all times comply with all applicable State IT policies and standards, which are available at http://www.michigan.gov/dtmb/0,4568,7-150-56355_56579_56755---,00.html.

23.2 Right of Audit by the State. Without limiting any other audit rights of the State, the State has the right to review Contractor's data privacy and information security program prior to the commencement of Services and from time to time during the term of this Contract. During the providing of Services, on an ongoing basis from time to time and without notice, the State, at its own expense, is entitled to perform, or to have performed, an on-site audit of Contractor's data privacy and information security program. In lieu of an on-site audit, upon request by the State, Contractor agrees to complete, within forty-five (45) calendar days of receipt, an audit questionnaire provided by the State regarding Contractor's data privacy and information security program.

23.3 Audit Findings. With respect to State Data, Contractor must implement any required safeguards as identified by the State or by any audit of Contractor's data privacy and information security program.

23.4 State's Right to Termination for Deficiencies. The State reserves the right, at its sole election, to immediately terminate this Contract or the Statement of Work without limitation and without liability if the State determines that Contractor fails or has failed to meet its obligations under this **Section 23**.

24. Records Maintenance, Inspection, Examination, and Audit.

24.1 Right of Audit. The State or its designee may audit Contractor to verify compliance with this Contract. Contractor must retain, and provide to the State or its designee and the auditor general upon request, all financial and accounting records related to this Contract through the Term of this Contract and for four (4) years after the latter of termination, expiration, or final payment under this Contract or any extension ("**Financial Audit Period**"). If an audit, litigation, or other action involving the records is initiated before the end of the Financial Audit Period, Contractor must retain the records until all issues are resolved.

24.2 Right of Inspection. Within ten (10) calendar days of providing notice, the State and its authorized representatives or designees have the right to enter and inspect Contractor's premises or any other places where Services are being performed, and examine, copy, and audit all records related to this Contract. Contractor must cooperate and provide reasonable assistance. If financial errors are revealed, the amount in error must be reflected as a credit or debit on subsequent invoices until the amount is paid or refunded. Any remaining balance at the end of this Contract must be paid or refunded within forty-five (45) calendar days.

24.3 Application. This **Section 24** applies to Contractor, any Affiliate, and any Permitted Subcontractor that performs Services in connection with this Contract.

25. Insurance Requirements.

25.1 Contractor must maintain the insurances identified below and is responsible for all deductibles. All required insurance must: (a) protect the State from claims that may arise out of, are alleged to arise out of, or result from Contractor's or a Permitted Subcontractor's performance; (b) be primary and non-contributing to any comparable liability insurance (including self-insurance) carried by the State; and (c) be provided by a company with an A.M. Best rating of "A" or better and a financial size of VII or better.

Required Limits	**Additional Requirements**
Commercial General Liability Insurance	
Minimal Limits: $1,000,000 Each Occurrence Limit $1,000,000 Personal & Advertising Injury Limit $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations Deductible Maximum: $50,000 Each Occurrence	Contractor must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 2010 07 04 and CG 2037 07 0.

Umbrella or Excess Liability Insurance	
Minimal Limits: $5,000,000 General Aggregate	Contractor must have their policy endorsed to add “the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents” as additional insureds.
Automobile Liability Insurance	
Minimal Limits: $1,000,000 Per Occurrence	Contractor must have their policy: (1) endorsed to add “the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents” as additional insureds; and (2) include Hired and Non-Owned Automobile coverage.
Workers' Compensation Insurance	
Minimal Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Employers Liability Insurance	
Minimal Limits: $500,000 Each Accident $500,000 Each Employee by Disease $500,000 Aggregate Disease.	
Privacy and Security Liability (Cyber Liability) Insurance	
Minimal Limits: $1,000,000 Each Occurrence $1,000,000 Annual Aggregate	Contractor must have their policy: (1) endorsed to add “the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents” as additional insureds; and (2) cover information security and privacy liability, privacy notification costs, regulatory defense and penalties, and website media content liability.

Professional Liability (Errors and Omissions) Insurance	
Minimal Limits: $3,000,000 Each Occurrence $3,000,000 Annual Aggregate Deductible Maximum: $50,000 Per Loss	

25.2 If Contractor's policy contains limits higher than the minimum limits, the State is entitled to coverage to the extent of the higher limits. The minimum limits are not intended, and may not be construed to limit any liability or indemnity of Contractor to any indemnified party or other persons.

25.3 If any of the required policies provide claims-made coverage, the Contractor must: (a) provide coverage with a Retroactive Date before the effective date of the contract or the beginning of contract work; (b) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the contract of work; and (c) if coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, the Contractor must purchase extended reporting coverage for a minimum of three (3) years after completion of work.

25.4 Contractor must: (a) provide insurance certificates to the State's Contract Administrator, containing the Contract number, at Contract formation and within twenty (20) calendar days of the expiration date of the applicable policies; (b) require that Permitted Subcontractors maintain the required insurances contained in this Section; (c) notify the State's Contract Administrator within five (5) Business Days if any insurance is cancelled; and (d) waive all rights against the State for damages covered by insurance. Failure to maintain the required insurance does not limit this waiver.

26. Dispute Resolution.

26.1 Unless otherwise specified in the Statement of Work, the parties will endeavor to resolve any Contract dispute in accordance with **Section 26**. The initiating party will reduce its description of the dispute to writing (including all supporting documentation) and deliver it to the responding party's Project Manager. The responding party's Project Manager must respond in writing within five (5) Business Days. The initiating party has five (5) Business Days to review the response. If after such review resolution cannot be reached, both parties will have an additional five (5) Business Days to negotiate in good faith to resolve the dispute. If the dispute cannot be resolved within a total of fifteen (15) Business Days, the parties must submit the dispute to the parties' Contract Administrators. The parties will continue performing while a dispute is being resolved, unless the dispute precludes performance. A dispute involving payment does not preclude performance.

26.2 Litigation to resolve the dispute will not be instituted until after the dispute has been elevated to the parties' Contract Administrators, and either Contract Administrator concludes that resolution is unlikely, or fails to respond within fifteen (15) Business Days. The parties are not prohibited from instituting formal proceedings: (a) to avoid the expiration of statute of limitations period; (b) to preserve a superior position with respect to creditors; or (c) where a party makes a determination that a temporary restraining order or other injunctive relief is the only adequate remedy. This **Section 26** does not limit the State's right to terminate this Contract.

27. Miscellaneous.

27.1 Effect of Contractor Bankruptcy. All rights and licenses granted by Contractor under this Contract are and will be deemed to be rights and licenses to "intellectual property," and all Work Product is and will be deemed to be "embodiments" of "intellectual property," for purposes of, and as such terms are used in and interpreted under, Section 365(n) of the United States Bankruptcy Code (the "**Code**"). If Contractor or its estate becomes subject to any bankruptcy or similar proceeding, the State retains and has the right to fully exercise all rights, licenses, elections, and protections under this Contract, the Code and all other applicable bankruptcy, insolvency, and similar Laws with respect to all Software and other Work Product. Without limiting the generality of the foregoing, Contractor acknowledges and agrees that, if Contractor or its estate shall become subject to any bankruptcy or similar proceeding:

(a) all rights and licenses granted to the State under this Contract will continue subject to the terms and conditions of this Contract, and will not be affected, even by Contractor's rejection of this Contract; and

(b) the State will be entitled to a complete duplicate of (or complete access to, as appropriate) all such intellectual property and embodiments of intellectual property comprising or relating to any Software or other Work Product, and the same, if not already in the State's possession, will be promptly delivered to the State, unless Contractor elects to and does in fact continue to perform all of its obligations under this Contract.

27.2 Conflicts and Ethics. Contractor will uphold high ethical standards and is prohibited from: (a) holding or acquiring an interest that would conflict with this Contract; (b) doing anything that creates an appearance of impropriety with respect to the award or performance of the Contract; (c) attempting to influence or appearing to influence any State employee by the direct or indirect offer of anything of value; or (d) paying or agreeing to pay any person, other than employees and consultants working for Contractor, any consideration contingent upon the award of the Contract. Contractor must immediately notify the State of any violation or potential violation of these standards. This **Section 27.2** applies to Contractor, any Affiliate, and any Permitted Subcontractor that Performs Services in connection with this Contract.

27.3 Compliance with Laws. Contractor and its Representatives must comply with all Laws in connection with this Contract.

27.4 Nondiscrimination. Under the Elliott-Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, et seq., and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, et seq., Contractor and its Permitted Subcontractors agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or mental or physical disability. Breach of this covenant is a material breach of this Contract.

27.5 Unfair Labor Practice. Under MCL 423.324, the State may void any Contract with a Contractor or Permitted Subcontractor who appears on the Unfair Labor Practice register compiled under MCL 423.322.

27.6 Governing Law. This Contract is governed, construed, and enforced in accordance with Michigan law, excluding choice-of-law principles, and all claims relating to or arising out of this Contract are governed by Michigan law, excluding choice-of-law principles. Any dispute arising from this Contract must be resolved in the Michigan Court of Claims. Complaints against the State must be initiated in Ingham County, Michigan. Contractor waives any objections, such as lack of personal jurisdiction or forum non conveniens. Contractor must appoint agents in Michigan to receive service of process.

27.7 Non-Exclusivity. Nothing contained in this Contract is intended nor is to be construed as creating any requirements contract with Contractor. This Contract does not restrict the State or its agencies from acquiring similar, equal, or like Services from other sources.

27.8 Force Majeure. Neither party will be liable or responsible to the other party, nor will be deemed to have defaulted under or breached this Contract, for any failure or delay in fulfilling or performing any term of this Contract, when and to the extent such failure or delay is caused by:

(a) acts of God;

(b) flood, fire or explosion;

(c) war, terrorism, invasion, riot, or other civil unrest;

(d) embargoes or blockades in effect on or after the date of this Contract;

(e) national or regional emergency; or

(f) any passage of law or governmental order, rule, regulation or direction, or any action taken by a governmental or public authority, including imposing an embargo, export or import restriction, quota or other restriction or prohibition.

(each of the foregoing, a “**Force Majeure**”), in each case, provided that: (i) such event is outside the reasonable control of the affected party; (ii) the affected party provides prompt notice to the other party, stating the period of time the occurrence is expected to continue; and (iii) the affected party uses diligent efforts to end the failure or delay and minimize the effects of such Force Majeure event.

27.9 Relationship of the Parties. The relationship between the parties is that of independent contractors. Nothing contained in this Contract is to be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the parties, and neither party shall have authority to contract for or bind the other party in any manner whatsoever.

27.10 Media Releases. News releases (including promotional literature and commercial advertisements) pertaining to this Contract or project to which it relates must not be made without the prior written approval of the State, and then only in accordance with the explicit written instructions of the State.

27.11 Website Incorporation. The State is not bound by any content on Contractor's website unless expressly incorporated directly into this Contract.

27.12 Notices. All notices, requests, consents, claims, demands, waivers and other communications under this Contract must be in writing and addressed to the parties as follows (or as otherwise specified by a party in a notice given in accordance with this **Section 27.12**):

If to Contractor:
Kunz, Leigh & Associates, Inc.
Attention: John K. Leigh, Partner
28081 Southfield Road
Lathrup Village, MI 48076
j.leigh@kunzleigh.com

If to State:
State of Michigan
DTMB-Procurement
Attention: Jarrod Barron, IT Buyer
PO Box 30026
Lansing, MI 48909-7526
Barronj1@michigan.gov

Notices sent in accordance with this **Section 27.12** will be deemed effectively given: (a) when received, if delivered by hand (with written confirmation of receipt); (b) when received, if sent by a nationally recognized overnight courier (receipt requested); (c) on the date sent by email (with confirmation of transmission), if sent during normal business hours of the recipient, and on the next Business Day, if sent after normal business hours of the recipient; or (d) on the fifth (5^{th}) calendar day after the date mailed, by certified or registered mail, return receipt requested, postage prepaid.

27.13 Headings. The headings in this Contract are for reference only and will not affect the interpretation of this Contract.

27.14 Entire Contract. This Contract, together with all Schedules, Exhibits, and the Statement of Work constitutes the sole and entire agreement of the parties to this Contract with respect to the subject matter of this Contract and supersedes all prior and contemporaneous understandings, agreements, representations and warranties, both written and oral, with respect to such subject matter. In the event of any inconsistency between the statements made in the body of this Contract, the Schedules, Exhibits, and the Statement of Work, the following order of precedence governs: (a) first, this Contract, excluding its Exhibits, Schedules, and the Statement of Work; (b) second, the Statement of Work as of the Effective Date; and (c) third, the Exhibits and Schedules to this Contract as of the Effective Date.

27.15 Assignment. Contractor may not assign or otherwise transfer any of its rights, or delegate or otherwise transfer any of its obligations or performance, under this Contract, in each case whether voluntarily, involuntarily, by operation of law or otherwise, without the State's prior written consent. For purposes of the preceding sentence, and without limiting its generality, any merger, consolidation or reorganization involving Contractor (regardless of whether Contractor is a surviving or disappearing entity) will be deemed to be a transfer of rights, obligations, or performance under this Contract for which the State's prior written consent is required. No delegation or other transfer will relieve Contractor of any of its obligations or performance under this Contract. Any purported assignment, delegation, or transfer in violation of this **Section 27.15** is void.

27.16 No Third-Party Beneficiaries. This Contract is for the sole benefit of the parties and their respective successors and permitted assigns. Nothing in this Contract, express or implied, is intended to or will confer on any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Contract.

27.17 Amendment and Modification; Waiver. No amendment to or modification of this Contract is effective unless it is in writing, identified as an amendment to this Contract and signed by both parties' Contract Administrator. Further, certain amendments to this Contract may require State Administrative Board Approval. No waiver by any party of any of the provisions of this Contract will be effective unless explicitly set forth in writing and signed by the party so waiving. Except as otherwise set forth in this Contract, no failure to exercise, or delay in exercising, any right, remedy, power, or privilege arising from this Contract will operate or be construed as a waiver. Nor will any single or partial exercise of any right, remedy, power or privilege under this Contract preclude the exercise of any other right, remedy, power or privilege.

27.18 Severability. If any term or provision of this Contract is invalid, illegal, or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other term or provision of this Contract or invalidate or render unenforceable such term or provision in any other jurisdiction. Upon such determination that any term or other provision is invalid, illegal, or unenforceable, the parties must negotiate in good faith to modify this Contract so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions be consummated as originally contemplated to the greatest extent possible.

27.19 Equitable Relief. Each party acknowledges that a breach by a party of **Section 13** (Intellectual Property Rights; Ownership), **Section 21** (State Data), or **Section 22** (Confidential Information) may cause the non-breaching party immediate and irreparable harm, for which an award of damages would not be adequate compensation. Each party agrees that, in the event of such breach or threatened breach, the non-breaching party will be entitled to equitable relief, including in the form of orders for preliminary or permanent injunction, specific performance, and any other relief that may be available from any court. Such remedies will not be deemed to be exclusive but will be in addition to all other remedies available under this Contract, at law or in equity, subject to any express exclusions or limitations in this Contract to the contrary.

27.20 Counterparts. This Contract may be executed in counterparts, each of which will be deemed an original, but all of which together will be deemed to be one and the same Contract. A signed copy of this Contract delivered by email or other means of electronic transmission (to which a signed PDF copy is attached) will be deemed to have the same legal effect as delivery of an original signed copy of this Contract.

Schedule A – Statement of Work (SOW)

1.000 Project Identification

1.001 Project Overview

Contractor shall build a new software application, consolidating and replacing three systems, in whole or in part: the Land Ownership Tracking System (LOTS), the Payment In Lieu of Taxes System (PILT), and the Swamp Tax system. Together, these three systems will be referred to as the "**Current Application**". The Current Application is utilized by the Department of Natural Resources (DNR).

The new Land Ownership Tracking System, with its interfaces and integrations, will be collectively referred to as the "**LOTS Solution**".

The Current Application framework (Sybase PowerBuilder) is outdated and is no longer supported by the vendor or DTMB. The LOTS Solution must conform to the State's Next Generation Digital Infrastructure (NGDI). Custom code for the LOTS Solution should conform to the Microsoft .NET framework.

Contractor shall develop a replacement system and run it in parallel with the Current Application. The LOTS Solution, as well as the Current Application, will share data dynamically to facilitate a modular approach. The modules of the Current Application will be disabled as the LOTS Solution modules are accepted by DNR.

1.100 Scope of Work and Deliverables

1.101 In Scope

This project consists of the following scope:

Business Requirements

- Analysis, Validation, and Verification of Exhibits 1-23 Detailed Requirements
- Facilitated sessions
- Requirements Specification
- Project Management Plan

Design

- Functional Design
  - Application
  - Database
  - Interface(s)
  - Integration(s)

    - Data dictionary
- System Design
    - Application
    - Database
    - Interface(s)
    - Integration(s)
    - Architectural Assessment (EASA collaboration and documentation)
    - Security Assessment (DTMB 0710 collaboration and documentation)
- Requirements Traceability Matrix
- Test Plan

<u>Development</u>

- LOTS Solution Application
- LOTS Solution Databases
- LOTS Solution Interfaces
- LOTS Solution Integrations
- Agile User Stories
- Agile Backlog Reports
- Agile Burn Down
- Agile Velocity

<u>Implementation</u>

- Data conversion
- Data migration
- Configuration management
    - Source code
    - Development documentation/notes
    - Change control
- Installation
    - Instructions / procedures
    - Implementation schedule
    - Backup procedures
    - Change control
    - Installation acceptance testing
    - Regression testing
    - Backout / recovery plans and procedures
    - Help Desk Coordination (8:00 a.m. to 5:00 p.m. EST, Monday through Friday)
- Testing
    - Unit
    - Functional
    - Integration

- Verification
- Performance
- System and Standards
- User Acceptance Testing (UAT)
- Regression testing

- Warranty Period defect correction
  - Help Desk Coordination (8:00 a.m. to 5:00 p.m. EST, Monday through Friday)

Training / Documentation

- End User Guides
- Administration Guides
- Technical Installation & Support Guides

Warranty

- Release Warranty periods
- Final Release Warranty Period

Knowledge Transfer / Transition

- Transfer / transition workgroup sessions with appropriate supporting materials
- Security Information including accounts and pass codes

Future Enhancements

- Bank of hours for agreed enhancements

Optional Maintenance and Support / Extended Warranty Beyond Final Release

- At State's Option, Continued Warranty-Level Maintenance and Support for one additional year

A more detailed description of the software, services (work) and deliverables sought for this project is provided in Section 1.104, Work and Deliverables.

1.102 Out of Scope

- Procurement or installation of hardware.
- Procurement or installation of NAS / SAN disk.
- Initialization or deployment of virtual servers.
- Modification or change to the external interface systems.
- Modification or change to the Current Application.
- Operation Services for the Current Application.

- Maintenance and Support for the Current Application.
- Operation Services for the LOTS Solution.
- Hosting of the LOTS Solution.

1.103 Environment

Contractor shall comply with the State's Enterprise information technology (IT) policies, standards and procedures which includes security policy and procedures, eMichigan web development, and the State Unified Information Technology Environment (SUITE), the same being described and linked below.

Enterprise IT Policies, Standards and Procedures: http://michigan.gov/dtmb/0,4568,7-150-56355_56579_56755---,00.html

All software and hardware items provided by the Contractor must run on and be compatible with the DTMB Standard Information Technology Environment. Additionally, the State must be able to maintain software and other items produced as the result of the Contract. Therefore, non-standard development tools may not be used unless approved by DTMB. The Contractor must request, in writing, approval to use non-standard software development tools, providing justification for the requested change and all costs associated with any change. The State's Project Manager (DTMB PM) must approve any tools, in writing, before use on any information technology project.

It is recognized that technology changes rapidly. The Contractor may request, in writing, a change in the standard environment, providing justification for the requested change and all costs associated with any change. The DTMB PM must approve any changes, in writing, before work may proceed based on the changed environment.

The Contractor solution will be suitable for integration with the SOM's IT Identity and Access Management (IAM) environment as described in the State of Michigan Digital Strategy, which consist of:

- MILogin/Michigan Identity, Credential, and Access Management (MICAM)—An enterprise single sign-on and identity management solution based on IBM's Identity and Access Management products including, IBM Security Identity Manager (ISIM), IBM Security Access Manager for Web (ISAM), IBM Tivoli Federated Identity Manager (TFIM), IBM Security Access Manager for Mobile (ISAMM), and IBM DataPower, which enables the State to establish, manage, and authenticate user identities for the State's Information Technology (IT) systems.

- MILogin Identity Federation for allowing federated single sign-on (SSO) for business partner as well as Citizen –based applications.

- MILogin Multi Factor Authentication (MFA) for those applications whose data classification is Confidential and Restricted as defined by the 1340.00 Information Technology Information Security, that is it needs to comply with PHI, PCI, CJIS, IRS, and other standards.

- MILogin Identity Proofing services, which verify people's identities before the State allows access to its IT system, are based on "life history" or transaction information aggregated from public and proprietary data sources. This service is provided by a leading credit bureau.

Look and Feel Standard

All public facing software items provided by the Contractor must be Americans with Disabilities Act (ADA) compliant and adhere to the Look and Feel Standards www.michigan.gov/somlookandfeelstandards.

The State Unified Information Technology Environment (SUITE):

Includes standards for project management, systems engineering, and associated forms and templates – must be followed: http://www.michigan.gov/suite.

If an Agile process is proposed, then the project may be tailored using the State's "Agile Process Guide": http://www.michigan.gov/documents/suite/SUITE_Agile_Process_Guide_-_20120711_V.1_430719_7.pdf.

Agency Specific Technical Environment

The LOTS Solution must be hosted on the State's Next Generation Digital Infrastructure (NGDI). All NGDI servers will be virtual servers. The LOTS Solution must be compatible with virtualization, X86-compatible, and deploy on State-owned SAN or NAS storage solutions. OS must be Windows 2012 or higher (IIS 8.0 or higher). The LOTS Solution must run on a hardware load-balanced, virtual server environment.

Hardware Architecture

The State hosts a standard set of Production (PROD), Quality Assurance (QA), and Development (DEV) servers. Only State administrators have direct access to the PROD and QA servers. State application developers and vendors can have direct access to the DEV servers for testing, troubleshooting of applications, and patching.
Any necessary custom code for the LOTS Solution should adhere to the following Application Development standards:

Application Development Environment Standards (New applications and vendor)

- Framework - .NET 4.5 or higher
- Web Application Development Framework - ASP.NET MVC 4 or higher
- Programming Languages - C#.NET
- Integrated Development Environment (IDE) – Visual Studio 2013 or higher
- Internet Information Services (IIS) – IIS 8.0 or higher
- Supported Web Browsers – IE10* or higher, Chrome, Firefox, Safari

- Supported Database - SQL Server 2008 or higher
- Version control – 2013 Team Foundation Server (TFS)
- Reporting – Visual Studio local reporting (RDLC,RDL), 2008 SQL Server Reporting Services (SSRS) or higher
- Object Notation – XML, JSON
- Native Mobile – PhoneGap
- Web - HTML5, CSS3, jQuery, Ajax, JavaScript, AngularJS, Bootstrap, LESS
- Query Languages – T-SQL, Linq
- GIS – ESRI ArcGIS current version
- Third Party Tools – Only authorized items
- Debugging Tools - Fiddler
- Coding methods and best practices – Approved guidelines for this area

Application Development Testing Tool Standards

- QUnit
- Jasmine
- ADA compliance software – JAWS 13 or higher

*If required per project reference backward compatibility to eMichigan standards

1.104 Work and Deliverables

The Contractor must provide Deliverables/Services and staff, and otherwise do all things necessary for or incidental to the performance of work, as set forth in the Statement of Work and any Schedules and exhibits. The following section includes the work and deliverables that the Contractor will be required to perform and / or submit during the contract term.

The development of the LOTS Solution must agree with the standards set forth in 1.103 Environment.

In the event that code development is hosted by the Contractor, the Contractor will perform the initial installation and configuration into the DEV servers on site.

The project will utilize the State's SUITE (http://www.michigan.gov/suite) standards for project management, associated forms, and templates. All forms and templates referenced below (e.g., PMM-0102, SEM-0402, etc.) may be found at this SUITE link.

Contractor shall use an Agile process and shall tailor the project using the State's "Agile Process Guide". The items in Exhibits 1-23 Detailed Requirements will be used to create the Product backlog.

- Every Agile sprint cycle will conclude with the Sprint release code being applied to the State DEV servers. The sprint review (AKA "Show and Tell", "the Demo") will be conducted in the state "DEV" environment. The Contractor will provide all the documentation required to complete this task which includes but is not limited to test scripts and user manuals.

- In the event that Agile “Stand Up”, “Scrum of Scrums”, other meeting sessions will be conducted virtually, the Contractor shall describe the tools and technology to be used. The costs associated with hosting virtual sessions will be the responsibility of the Contractor.

The development of the LOTS Solution must agree with the planning guidelines set forth in Section 1.301 PROJECT PLAN MANAGEMENT.

Business Need Overview

The DNR is responsible for tracking, reporting on, and managing ownership and various complex business transactions for over six million acres of land. These transactions generate significant revenue for the State of Michigan and its businesses and communities. These transactions also require a significant amount of data collection, record keeping, and accounting. In order to accomplish these tasks, DNR requires a robust, enterprise software system that integrates with several other data sources and systems and that supports the following business needs:

• Title history	• Leases
• Buying and selling of rights in land	• Revenues and remittances
• Mineral leasing	• Remitter/lessee information
• Grant program funding attribution and usage	• Accounting and journal vouchers
• Legislatively-provided funding attribution	• Bond and insurance information
• Management programs	• Oil and gas drilling unit
• Various review statuses	• Mineral production
• Spatial data/location information	• Underground gas storage field location
• State payment in lieu of tax status	• Unitized areas, poolings, mine, and pit locations
• Local property tax record indexing	• PILT tax records
• Party/vendor information	• PILT payments in lieu of taxes
• Simultaneous actions on the records	• PILT parcel information
• Land examination records	• Swamp Tax records
• Easements	• Swamp Tax Obligation Statements
• Rights, restrictions, reservations, environmental disclosures, encumbrances, and other conditions of ownership rights	

DNR is currently using three systems to accomplish these business needs:

- Land Ownership Tracking System (LOTS)
- Payment In Lieu of Taxes System (PILT)
- Swamp Tax System

To remedy this situation, Contractor will consolidate these systems into one elegantly-designed solution, architected in the Microsoft .NET framework, and that conforms to the State’s Next Generation Digital Infrastructure (NGDI).

To minimize disruption to business users, Contractor will adopt a modular approach that supports running the current system and new LOTS Solution in parallel, retiring functionality in the current system as it becomes available in the new LOTS Solution. This approach also requires sharing data dynamically. The current application data resides in the LOTS and PILT Microsoft SQL Server (MSSQL) databases and in the Swamp Tax Excel "database." The RFP also indicates that the PILT and Swamp Tax data conversion effort will entail research to match the local tax parcel information to the LOTS parcel information for incorporation into the new LOTS Solution.

The new system will be responsive on any size screen to support users on desktops, laptops, tablets, and smart phones. It must also support:

- Direct desktop access by approximately 50 users with real-time record change capability and business processing;
- Up to 500 read-only users, some with the ability to add comments; and
- 100 remote location users with poor data transfer speed due to limited cell phone tower connectivity to the internet.

Development Approach

The LOTS Solution will strictly adhere to the Model View Controller (MVC) paradigm; all business logic will exist in the Model tier, which will be made up of service classes and Entity Framework objects accessed via LINQ. These service layer classes will allow for common business rule reuse throughout the application. The view layer will be HTML5-compliant and implemented with Razor templates. Contractor will adhere to all eMichigan design, look and feel standards, and ADA 508 compliance standards. Contractor's User Experience (UX) designer will create design mockups and work across teams to implement the user interface. The front end will be fully responsive for easy viewing on mobile devices. The controller layer will be implemented as REST-based controllers. This method sets the ground work for future API expansion into mobile applications and integrations across other systems.

Contractor will employ the SUITE PMM/SEM Integration for Agile, with the Scrum framework as the Agile derivative. Contractor will use the SUITE templates to develop and deliver applicable project management and software engineering artifacts, such as the Project Management Plan (PMM-0102), the Requirements Specification (SEM-0402), and all other project documentation deliverables, discussed in more details in the applicable Work and Deliverables sub-sections (A-H).

Contractor will run up to 4 scrum teams, working in parallel. At the end of each development sprint, Contractor will deploy the work of the scrum teams to the State DEV servers for a demonstration to the appropriate stakeholders. Contractor will also provide the necessary documentation, as specified in this Contract. The process of sprint development, testing, and deployment to the various state environments (DEV, QA, PROD) is detailed in section "D. Application Development**Error! Reference source not found.**".

Contractor's scrum teams will hold daily scrum meetings to ensure team communication and forward momentum. On a weekly basis, Contractor will conduct a Scrum of Scrums to ensure communication among the teams and forward momentum of the project. Contractor can provide remote access, via GoTo Meeting or Microsoft Lync, for stakeholders that wish to attend virtually. Call-in information will be provided in the agenda that accompanies the meeting invitation.

A. Business Requirements

The requirements of the LOTS Solution are documented in the Detailed Requirements Specifications for Land Ownership Tracking System Rewrite (Detailed Requirements Specifications), a separate document comprised of Exhibits 1-23, which is incorporated herein by reference.

The initial organizing tasks will execute during Planning (Sprint Zero / Initial Docs) and the outputs will include a scope baseline by release. This data will become a metric to monitor progress and support the creation of epics and user stories.

Contractor will work with the State to formally review the 1700+ existing requirements. This shall include analysis, validation and prioritization to ensure the list is complete and to determine the order in which development should occur.

Contractor will use a combination of JAMA and Jira for requirements tracking, test tracking, backlog management, sprint planning, and defect tracking. Contractor will ensure that State-designated staff also have access to the both systems.

At the beginning of sprint zero, Contractor will load the existing list of requirements into JAMA to support all scrum activities, as well as generation of SUITE-compliant artifacts. The Contractor Team will meet with identified stakeholders for preliminary requirements review, analysis, validation, and prioritization. Once these sessions are completed, Contractor will initiate a formal review cycle in JAMA to gain formal approval. The identified stakeholders can comment on the requirements, request refinement, approve, or reject requirements. Because all stakeholders can review and comment on the requirements simultaneously, JAMA has proved to substantially shorten review cycles.

Once the requirements have been reviewed and prioritized, Contractor will export the requirements into the Requirements Specification (SEM 0402) template for submission and final approval by the State. Contractor will also use the prioritized list to develop a scope baseline by release, which will be depicted in the Detailed Project Schedule and the updated Project Management Plan (PMM-0102).

The prioritized list of requirements will be automatically loaded into the product backlog in Jira – the Agile development management and issue tracking tool. Throughout the project, Contractor's Business Analysts (BAs) will conduct joint application design (JAD) sessions with key stakeholders, as needed, to gain additional understanding of the business processes and needs associated with specific requirements. They will then decompose those high-level requirements into user stories that communicate the needed functionality, as well as the business purpose. User stories will be written in the format of "As a user, I need …, so that I can…" such that they clearly communicate to Developers what the function is supposed to do and what business need it serves. Based on the information the BAs gather from the business users, the BAs will document DNR's acceptance criteria to aid Developers with unit testing. Finally, the BAs group will relate requirements into epics that make sprint planning easier.

When a sprint is completed in Jira, the user stories automatically flow into an appropriately named folder in JAMA. Contractor's BAs will link the user stories to the original requirements and Contractor's TAs will develop test cases and link them to the user stories, providing complete traceability from the test cases, to the user stories, back to the original requirements. JAMA will provide comprehensive test tracking and reporting tools, including the ability to export test cases, test results, and traceability information into SUITE-compliant Word documents, as well as Excel or PDF.

Contractor plans to use the Scrum, Agile framework. Scrum employs the use of iterative development, in which all SDLC phases are executed for a defined block of work known as a sprint. Contractor will use two-week sprints. Just before sprint planning, the Product Owner (the DNR PC) will review the backlog to ensure the highest priority work is at the top of the list. This is critical in today's environment of ever changing government regulations and technological advancements. During sprint planning, the Development team will use velocity values to determine the number of user stories from the top of the backlog that can be completed within the defined sprint time box. While Contractor's team is developing the code, Contractor's BAs begin writing test cases for various types of testing. As features are completed, the BAs will begin functional and system integration testing (SIT), which will allow the development and testing efforts to occur in tandem, compressing the development cycle to maximize efficiency. Contractor's BAs will immediately any defects they find. Contractor's BAs will also prepare test cases for user acceptance testing (UAT). Contractor will conduct UAT cycles at the end of each sprint, so that feedback from UAT can be acted upon prior to the formal release and when the code is fresh in the minds of the Developers. Once all the test cases for the sprint are written and executed, traceability information and test results can be exported from JAMA for the Requirements Traceability Matrix (SEM-0401).

The Requirements Traceability Matrix (SEM-0401) will be a living document that is updated at the end of each sprint. The preliminary version that is submitted at the end of sprint zero will demonstrate traceability from the user stories for the first few sprints back to the approved requirements. At the end of each release, an updated version will be submitted that shows traceability from test cases, to user stories, to original requirements for all work that was completed during the release cycle.

During sprint zero, Contractor's System Architect (SA) and Senior Software Engineer will meet with DNR and DTMB Technical Resources to validate existing technical, environmental, and security requirements and potentially generate new requirements if necessary. The SA will update the preliminary EASA that was originally included Contractor's bid proposal. Contractor's System Architect (SA) and Senior Software Engineer will also complete the DTMB Security Assessment (DTMB 170).

Deliverable(s)

Contractor is expected to submit the following:

1. Project Management Plan (PMM-0102)

    - Project Summary

- High Level Schedule
- Human Resource Management Plan
- Project Budget
- Communication Management Plan
- Change Management Plan
- Quality Management Plan
- Risk Management Plan
- Issue Management Plan

2. Detailed Project Schedule with tasks, durations, milestones, and resources identified.

    - The LOTS Solution Requirements should organize scope by development release and identify any scope which may be delayed without critically impacting the release of the LOTS Solution.

3. Requirements Specification (SEM-0402)

    - To create this deliverable, Contractor will facilitate work group meetings to review the specifications and identify gaps in scope of Exhibits 1-23 Detailed Requirements.

4. Requirements Traceability Matrix (SEM-0401)

5. Initial Schedule C – Preliminary EASA Worksheet which broadly defines the technologies supported by the State and is the corner stone of the system design.

Acceptance Criteria

High-level acceptance criteria for Document Deliverables and Software Deliverables are listed in Section 1.500 Acceptance and the criteria below.

To be acceptable to the State:

The Contractor will facilitate work group meetings with the intent of understanding and validating items in the Exhibits 1-23 Detailed Requirements.

The Contractor shall deliver **preliminary** content of the following documents:

- Project Management Plan (PMM-0102)
- Requirements Specification (SEM-0402)
- Requirements Traceability Matrix (SEM-0401)
- Enterprise Architecture Solution Assessment
- Security Assessment (DTMB 170 as amended)

B. Software

The software components are described in **1.104 Work And Deliverables - C. Application Design, D. Application Development, and E. Implementation**

The software components delivered for this contract will be owned by the State.

C. Application Design

The Contractor will create a functional and a system design for the LOTS Solution. Contractor shall use an Agile process and shall submit the Application Design deliverables at the end of Planning (Sprint Zero / Initial Docs).

<u>Functional Design</u>

Functional design is both an outcome and a process. As an outcome, it describes products that work well to perform their assigned tasks; as a process, functional design is a set of practices guided by the principles that produce a positive outcome.

<u>System Design</u>

The technical quality of software can be defined as the level of conformance of a software system to a set of rules and guidelines derived from experience and best practices. The rules should cover software architecture (dependency structure), programming in general, testing and coding style.

<u>Application Design Approach and Artifacts</u>

Using the Agile process, application design activities will occur iteratively, with each sprint. As such, the following documents will be created and updated throughout the Agile process, with preliminary versions being delivered during sprint zero:

- eMichigan Review (Template to be provided by the State)
- Project Management Plan (PMM-0102)
- Security Assessment (DTMB-170)
- Requirements Traceability Matrix (SEM-0401)
- Functional Design (SEM-0501)
- System Design (SEM-0604)
- Data Migration / Conversion Plan (SEM-0601)
- Test Plan (SEM-0602)
- Enterprise Architecture Solution Assessment

Contractor will schedule and facilitate JAD sessions that bring together Contractor's Project Managers, System Architects, and Business Analysts with users, stakeholders, DNR's Business Analysts, and DTMB Technical Resources to completely review and refine both the functional and technical aspects of the

LOTS Solution. The approved Requirement Specification (SEM-0402) will drive these sessions by expanding and mapping business requirements to detailed functional requirements, epics, and user stories and related solution concepts and components.

During sprint zero, Contractor will develop the LOTS Functional Design (SEM-0501) containing detailed information pertaining to the functionality selected for the first release, as well as security structure and role-based controls, including those internal and external to the SOM and DNR. Any dependencies, limitations, constraints, and prerequisites that may impact the Functional Design will be noted and mitigation strategies documented. The Functional Design will be updated throughout the development process with information for each sprint and submitted to the State for review with each release. This iterative progression ensures that the completed document accurately reflects the actual functionality of the system at the end of the two-year development cycle. The Functional Design will include business process flows with use cases, data specifications, user interface designs, and system interface designs.

The LOTS Functional Design (SEM-0501) provides information required to develop the LOTS System Design (SEM-0604) document. The detailed system design will be mapped directly to the functional design and include flow, solution components, integration points, and related technical details for each required functional area. The document development process will continue to bring together key Contractor project, technical, and application development teams with DNR and DTMB knowledgeable user teams to ensure that the System Design represents a joint effort. This document will contain the system architecture crafted to support the LOTS Solution, including the system and security architecture, database design, and specific data entities.

The System Design (SEM-0604) will fully document the application specifications and processing narratives for each module that will interact with and modify the conceptual data models, reports, integrations, and other system components identified in the functional design. It will also include detailed specifications for how the system integrates with other systems, including web services, database links, and flat files. Since the LOTS system will be integrated with many systems, the specific data flows for each integration will be identified and documented with flow charts or UML diagrams.

Contractor will also provide a Data Migration / Conversion Plan (SEM-0601) that documents data migration and conversion design and assumptions made during requirements validation. It will define the scope of the data conversion, all conversion activities, and all necessary resources, along with a schedule for when these activities will occur. It will also document conversion requirements such as attributes of input data and output data, including location, access methods, and security considerations; data specifications that explain how the data will be converted; and validation specifications that explain how the data conversion will be validated. This document will also be a living document that will be updated as necessary throughout the iterative Agile processes.

During sprint zero, Contractor will also develop a Test Plan (SEM-0602) that defines who will perform the testing, how, and when. It will define the scope of the testing, the necessary resources, test environment details, monitoring methods, defect reporting, and acceptance criteria.

Finally, the LOTS Project Management Plan (PMM-0102) will also be updated, as necessary, to incorporate any changes, relating to management of the project, as agreed upon during the initial project and sprint planning sessions.

All preliminary and updated documents will be provided for additional review and DNR and DTMB analysis and feedback as required by preliminary and updated documentation rules governing the project.

Deliverable(s)

The Contractor will create a Functional Design (SEM-0501) document which will be approved in writing by the DTMB PM and the DNR – Project Coordinator (DNR PC).

The Functional Design will include but is not limited to:

- A detailed description of functionality as result of the analysis and validation of Exhibits 1-23 Detailed Requirements
- Interfaces / Integrations
    - RPS
    - LANDSALE
    - GIS Interface
    - MIR 2000 / RBDMS
    - Mineral Auction
    - Par Class
    - LEX
    - TRAUC
    - GEM
    - VMS
    - Field Review System
- A description of functionality and how it will be incorporated into the new design
    - User Interface Design
    - User Interface Navigation Hierarchy
    - Function Categories (Use Cases)
    - Domain Design (Web solutions)
    - Data Design
    - Security structure and application roles
    - Mobile Design (Smartphones & Tablets)

The Contractor will create a System Design (SEM-0604) document which will be approved in writing by the DTMB PM and the DNR PC.

The System Design will include but is not limited to:

- A detailed description of functionality in support of the LOTS Enterprise Architecture Solution Assessment
- Mock-ups of all screens including their functionality

- Use-case document (initial) with business rules and calculations identified by data element and table
- A list and mock-up of the system-generated reports and queries in the LOTS Solution with all business rules and calculations identified by data element and table
- A Conceptual Data Model which identifies all major entities and the relationships between the Interfaces / Integrations
    - RPS
    - LANDSALE
    - GIS Interface
    - MIR 2000 / RBDMS
    - Mineral Auction
    - Par Class
    - LEX
    - TRAUC
    - GEM
    - VMS
    - Field Review System
- A description of all data flows to and from the new LOTS Solution
- Database entity relationship models
- Communication protocols
- File formats
- Web services or other forms of communication
- Performance measures
- Operational redundancy

The Contractor will create a Test Plan (SEM-0602) document which will be approved in writing by the DTMB PM and the DNR PC.

<u>The Contractor will create Application Design Supporting Documents</u>

The Contractor will deliver <u>**preliminary**</u> content of the following documents:

- eMichigan Review (Template to be provided by the State)

The Contractor will deliver <u>updated</u> content of the following documents:

- Project Management Plan (PMM-0102)
- Security Assessment (DTMB-170 as amended)
- Requirements Traceability Matrix (SEM-0401)

The Contractor will deliver <u>**final**</u> content of the following documents to the DTMB PM and the DNR PC for approval and signoff.

- Functional Design (SEM-0501)
- System Design (SEM-0604)
- Data Migration / Conversion Plan (SEM-0601)

- Test Plan (SEM-0602)
- Enterprise Architecture Solution Assessment (template to be provided by the State)

Any changes to the above template format must be approved in writing by the DTMB PM prior to submission.

Acceptance Criteria

High-level acceptance criteria for Document Deliverables and Software Deliverables are listed in Section 1.500 Acceptance and the criteria below.

To be acceptable to the State:

The Contractor will create a Functional Design (SEM-0501) document which will be approved in writing by the DTMB PM and the DNR PC.

The Contractor will create a System Design (SEM-0604) document which will be approved in writing by the DTMB PM and the DNR PC.

The Contractor will create a Test Plan (SEM-0602) document which will be approved in writing by the DTMB PM and the DNR PC.

The Contractor will create Application Design Supporting Documents which will be approved in writing by the DTMB PM and the DNR PC.

D. Application Development

The Contractor shall develop all business requirements identified in Exhibits 1-23 of the Detailed Requirements Specifications for Land Ownership Tracking System (LOTS) Rewrite, a separate document which is incorporated herein by reference, in the four releases detailed in Table 12: Implementation Plan and Detailed Payment Table below, and shall deliver the completed solution by a go-live date of 6/11/18.

All LOTS functionality must be continuously available at all times in either its original version or in the rewrite version throughout the project timeline.

Contractor shall coordinate the revenue distribution development in LOTS to align with the SIGMA release timeline to minimize the need for work-arounds.

Application Development deliverables will be reviewed at the end of a sprint, during the sprint review. Application Development deliverables will be accepted at the end of a release implementation into production.

<u>**The Contractor shall Develop the LOTS Solution**</u>

- Development scope will be managed as a series of releases.

- In accordance with the Requirements Traceability Matrix (SEM-0401), Functional Design (SEM-0501), System Design (SEM-0604) and the Requirements Specifications (SEM-0402) created as deliverables of Schedule A, Section 1.104, A. Business Requirements and B. Application Design.
- The LOTS Solution is written, organized, and documented in accordance with the standards identified in Schedule A, Section 1.103 Environment.
- Installed and validated in the State's DEV server environment, promoted and tested in the State's Quality Assurance (QA) environment prior to release into production. The Contractor should plan on a minimum of three weeks to promote the solution to production and this effort will be coordinated by the DTMB PM and the DNR PC.

Application Development and Artifacts

Contractor will employ the SUITE PMM/SEM Integration for Agile, with the Scrum framework as the Agile derivative. Contractor's Development Team will run two week sprints, in which all phases of the software development lifecycle are executed for a specified body of work. We will deliver formal releases every four months as requested in the RFP. Contractor understands that code promotion to production will take a minimum of three weeks.

Throughout the project, Contractor BAs will conduct joint application design (JAD) sessions with DNR business users for upcoming backlog items. These sessions will focus on clarifying current workflows and user pain points in order to develop a design that meets business requirements, while improving user experience and department efficiency. The BAs will generate artifacts such as flow diagrams and use cases to aid Architects and User Experience Designers with functional design. Our BAs will also decompose the high-level requirements into detailed user stories that are grouped into epics. This will the BAs to have the top backlog items clearly defined prior to sprint planning.

Just before each sprint commences, the DNR PC will review the backlog to ensure the highest priority items are at the top. After which, the sprint will begin and the Scrum Master will facilitate a sprint planning session with the Development team to select as many of the top priority user stories as can be completed within the two week time box. During the sprint, the selected user stories will be:

- Developed;
- Tested internally by Contractor's BA/Test Analysts;
- Demonstrated to business users and project stakeholders for feedback and, if necessary, revised; and
- Promoted to the QA environment for user acceptance testing (UAT).

Contractor's BAs will deliver UAT Test Cases and facilitate UAT. Any defects, resulting from a code failure or a failure to meet requirements, found during UAT will be corrected within the timeframe established by the DNR. At the end of UAT, the Contractor BAs will make the necessary updates to the Requirement Traceability Matrix (SEM-0401), including reporting test results. The Contractor Technical Writer will update the user documentation and the Michigan Public Health Institute (MPHI) Training Team, Contractor's strategic partner for LOTS Solution training, will update the training materials to reflect the newly developed functionality and, if necessary, the SUITE Training Plan (SEM-0703). The

Contractor Team will also create and maintain the Implementation Plan, Maintenance Plan (SEM-0301), Test Plan (SEM-0602), and Software Configuration Plan (SEM-0302), making all necessary updates at the end of each sprint. Contractor will also update the Data Migration / Conversion Plan (SEM-0601) and Security Assessment (DTMB-170), as necessary. Updating these documents at the end of each sprint ensures they are accurate, complete, and reflect the current state of the system.

At the scheduled release dates, Contractor will work with eMichigan to gain approval for the code scheduled for production release. Contractor represents that its experience working with eMichigan will facilitate efficient review and approval cycles. Once eMichigan approval is received, Contractor will work with DTMB and DNR to promote all newly created sprint code from the QA environment to the production environment and MPHI will conduct the requisite training sessions. Contractor will deliver all new and updated SUITE documents to the State for review during the scheduled documentation releases (releases 2 and 4).

The Contactor shall Track Defects

A defect is defined as a condition that prevents or impedes an affected state employee from performing their duties within the LOTS solution. Software must be efficient and responsive; slow or nonresponsive software may be deemed defective.

The Contractor shall maintain a log of software defects throughout the development, testing, implementation, maintenance and support efforts of this contract. Defects may be identified by anyone performing a role of this contract (See 1.200 - Roles and Responsibilities). The defects log must be communicated to the DTMB PM and the DNR PC on an agreed upon schedule, with email notifications and updates. The defects log must contain the following minimum elements:

- A unique identifier for each defect
- Description of each defect
- Defect identification date
- Defect status in resolution lifecycle (i.e. new, retest, closed, etc.)
- Priority for fixing defects (to be mutually agreed upon by the State and the Contractor)
- Contractor resources assigned responsibility for fixing each defect
- Estimated date for fixing each defect
- Description of the fix to be applied

Unless otherwise prioritized in the backlog by the Product Owner, Contractor shall resolve any defect during the spint immediately following the one in which it was identified. Unless otherwise prioritized in the backlog by the Product Owner, Contractor shall resolve any defect identified during UAT, prior to acceptance of that release. In any event, Contract shall effect all such defect resolutions with no negative impact to the work already scheduled to be completed during said immediate following sprint of scheduled timing of said release. Contractor shall resolve all identified defects at no additional cost to the State.

The Contractor shall Communicate Development Status

Contractor shall keep the DTMB PM and DNR PC fully informed of the status of development. This will be accomplished by facilitating workgroup meetings, production demonstrations, structured walkthroughs, or other methods as mutually agreed upon.

Contractor shall make the Product Backlog, Sprint Backlog, and the Sprint burn-down chart available whenever requested by the DTMB PM, the DNR PC, or the State Subject Matter Expert (SME).

The Contractor PM will hold a regular status meeting, at agreed upon intervals, and location. During these meetings, the Contractor PM will provide project status updates; discuss impediments, risks, and issues, including mitigation strategies; track action items to completion; and provide product demonstrations toward the end of each sprint.

The Contractor shall comply with Audits

The State reserves the right to audit development by reviewing source code and associated documents of any release. If the State discovers violations of standards or it is determined the quality is not acceptable, the Contractor will receive notification of the findings by the DTMB PM and will have 20 business days to submit a corrective action plan to the DTMB PM and the DNR PC for approval. The State reserves the right to validate that the remedies are in place as a result of executing the corrective plan. If corrective plan is not followed the State reserves the right to Stop Work.

Contractor shall comply with State audits of source code and associated documents. Contractor shall employ regular code reviews by senior members of the Development team to enforce strict coding standards and ensure high-quality, efficient, and easily maintainable code. Contractor shall comply with these audit procedures, including providing a corrective action plan within 20 days of notification should the State identify a quality issue.

The Contractor shall create Application Development Supporting Documents

The Contractor will deliver preliminary content of the following documents:

- Implementation Plan (No Template)
- Maintenance Plan (SEM-0301)
- Software Configuration Plan (SEM-0302)
- Epics and user stories (No Template)

The Contractor will deliver updated content of the following documents:

- Project Management Plan (PMM-0102)
- Test Plan (SEM-0602)
- Training Plan (SEM-0703)
- Security Assessment (DTMB-170 as amended)
- Data Migration / Conversion Plan (SEM-0601)
- Requirements Traceability Matrix (SEM-0401)
- Epics and user stories (No Template)

The Contractor will deliver final content of the following documents to the DTMB PM and the DNR PC for approval and written signoff.

- eMichigan Review (Template to be provided by the State)
- Epics and user stories (No Template)

Any changes to the above template format must be approved in writing by the DTMB PM prior to submission.

Acceptance Criteria

High-level acceptance criteria for Document Deliverables and Software Deliverables are listed in Section 1.500 Acceptance and the criteria below.

To be acceptable to the State:

- The LOTS Solution must perform as described in the Requirements Specifications (SEM-0402) and satisfy functional and non-functional requirements.
- All defects are resolved or mitigated as mutually agreed.
- All audit findings are resolved, closed, or mitigated as mutually agreed.

The Contractor will create Application Development Supporting Documents which will be approved in writing by the DTMB PM and the DNR PC.

E. Implementation

Contractor shall facilitate and manage the release of the LOTS Solution into the State Production Environment. The Contractor will perform the initial installation and configuration on site. This includes creating tasks on the project schedule, building release packages, convening workgroup meetings and creating step by step instructions. The implementation task list will be reviewed with the DTMB PM, DTMB SMEs, DNR PC, and impacted DNR SMEs.

The Contractor will also establish ongoing communications with the State's Help Desk (8:00 a.m. to 5:00 p.m. EST, Monday through Friday) for timely updates on LOTS issue ticket resolution.

Implementation Documentation

Throughout the project, Contractor will deliver the following implementation documents:

- Data Migration / Conversion Plan (SEM-0601)
- Test Plan (SEM-0602)
- Test Cases (SEM-0606)
- Requirements Traceability (SEM-0401)
- Software Configuration Plan (SEM-0302)
- Implementation Plan
- Operational Readiness Report
- Installation Plan (SEM-0702)
- Security Assessment (DTMB-170)
- User Guides
- Technical Guides
- Training Materials
- Training Plan (SEM-0703)
- Transition Plan (SEM-0701)
- Maintenance Plan (SEM-0301)

Many of these will be living documents that Contractor will update with each sprint. At the conclusion of development, Contractor will deliver finalized versions of these documents to the DTMB PM and DNR PC for final approval and acceptance.

Deliverable(s)

1. Data Conversion

The Contractor will convert any LOTS Application data, as necessary. The Contractor may be required to clean up bad data to enable such conversion. The Contractor will describe the conversion steps in the Data Migration / Conversion Plan (SEM-0601). Converted data will be loaded into the LOTS Solution database prior to final production implementation.

The Contractor will deliver final content of the following documents to the DTMB PM and the DNR PC for approval and written signoff.

- Data Migration / Conversion Plan (SEM-0601)

2. Data Migration

The Contractor will migrate the LOTS Application data as described and approved in the Data Migration / Conversion Plan (SEM-0601). Migrated data will be loaded into the LOTS Solution database prior to final production implementation. The Contractor is responsible for the mechanics of data cleansing (viz. writing database scripts). The State will collaborate with the Contractor to develop applicable rules.

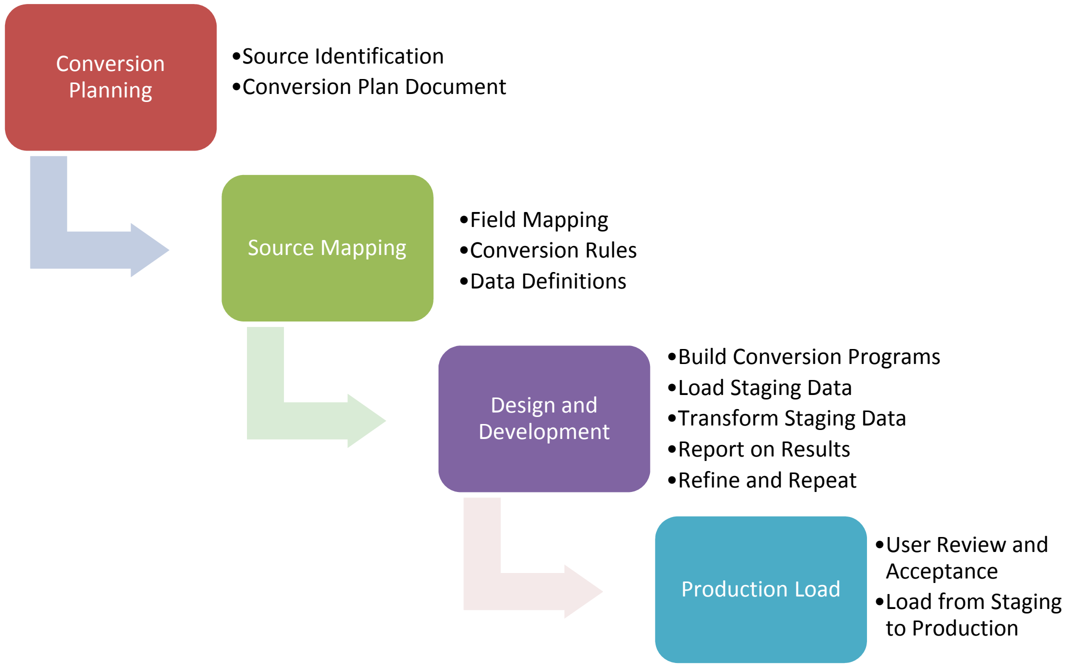
The Contractor will deliver final content of the following document to the DTMB PM and the DNR PC for approval and signoff.

- Data Migration / Conversion Plan (SEM-0601).

Data Conversion and Migration Approach

The solution will re-use the existing LOTS data model wherever possible. This approach will allow for parallel use of both systems. The exception to this rule will be if the data model is found to have serious consistency or normality issues that would undermine general system design. In that case, the existing data model will need to be transformed. Contractor will support bad data correction and data cleansing in collaboration with DTMB and DNR, as described in Data Migration/Conversion Plan (SEM-0601).

Functional modules that are not currently contained in the LOTS data model, but are in scope of the LOTS project, such as PILT, PTA, etc., will be targets of Contractor's standard conversion process. Contractor's standard conversion process is described at a high level in the diagram below and will be detailed in the Data Migration/Conversion Plan (SEM-0601) document.



3. Configuration

The Contractor will configure the LOTS Solution as described and approved in the Configuration Plan. This includes all configurations required by interfaces and integrations. During development, software and documentation version control will be managed through the vendors configuration management tool-set,, by the appointed Configuration Manager. This includes all SEM, PMM, and other documents, as well as all source code. Details will be provided in the Software Configuration Management Plan (SEM-0302).

Supporting Documents

The Contractor will deliver updated content of the following documents:

- Test Plan (SEM-0602)
- Requirements Traceability (SEM-0401)
- Training Plan (SEM-0703)

The Contractor will deliver final content of the following document to the DTMB PM and the DNR PC for approval and signoff.

- Software Configuration Plan (SEM-0302)

4. Installation

Contractor will work with the project stakeholders to plan each release, including release goals and dates. Contractor will publish a release calendar and update same as described in the Project Management Plan. The Installation Plan (SEM-0702) will explain, in detail, how releases will be promoted to the various environments (DEV, QA, and PROD). The build will be provided to DTMB and submitted through the appropriate change control process.

Web and database packages delivered to the State for installation at the State will include the following at a minimum:

- Source code from which the object code or executable was created
- Object code or executable
- Development notes
- Database scripts
- Supporting documentation
- Installation instructions
- Installation Support

Web and database software packages of the LOTS Solution will be installed and validated in the DEV server environment, prior to release into the PROD environment. Contractor will be responsible for ensuring packages themselves are correct and are successfully installed.

All interfaces, integrations, data conversions, and data migration must be complete and operational in the State's QA environment to ensure adherence to requirements and acceptable system performance prior to release into the PROD environment.

Web and database software packages of the LOTS Solution must have a formal UAT performed in the State's QA environment. All defects must be resolved or mitigated, with all exceptions documented and mutually agreed.

Web and database software packages of the LOTS Solution must be approved as production ready by the Local Change Control Board and Enterprise Change Control Boards prior to release into production. Allow at least three business weeks to complete this Request For Change (RFC) process, which is needed for each release implementation.

All defects must be resolved or mitigated, with all exceptions documented and mutually agreed prior to release into production.

<u>Supporting Documents</u>

The Contractor will deliver <u>preliminary</u> content of the following documents:

- Transition Plan (SEM-0701)

The Contractor will deliver <u>updated</u> content of the following document:

- Maintenance Plan (SEM-0301)

The Contractor will deliver <u>final</u> content of the following documents to the DTMB PM and the DNR PC for approval and signoff.

- Implementation Plan (No Template)

- Operational Readiness Report (No Template)
- Installation Plan (SEM-0702)
- Security Assessment (DTMB-170)

5. Testing

Testing is the process of evaluating a system or its components with the intent to discover if it satisfies the specified requirements or not. The Contractor will perform testing and validation for quality throughout the project as described and approved in the test and quality plan. Common test processes include but are not limited to:

- Unit
- Functional
- Integration
- Verification
- Performance
- System and Standards
- User Acceptance Testing (UAT)
- Regression testing

The scope of testing will include software development, data conversion, data migration, configuration, interfaces, integration, and installation. The Contractor will test to discover defects and to ensure the tested item functions to its intended purpose prior to testing being performed by State resources.

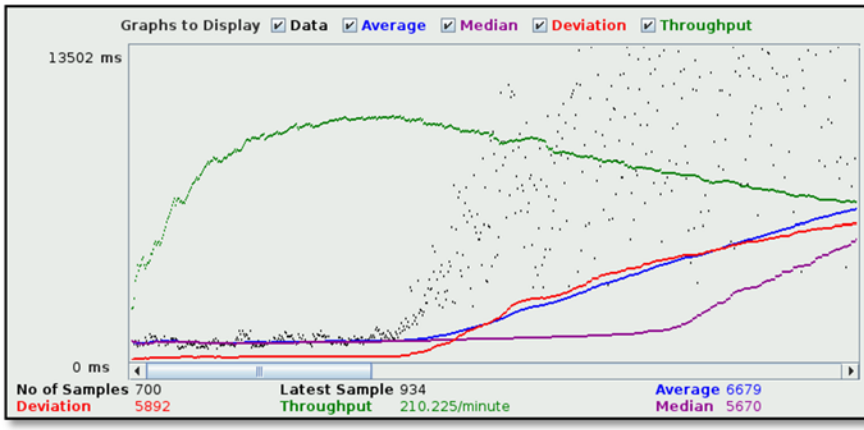
Defect tracking shall be maintained by the Contractor as noted 1.104 D – Application Development.

The software traceability matrix will be used to ensure all functionality is tested. Automated test processes must be documented and approved.

Testing Approach

Testing activities are part of the Agile development process; at the start of each sprint, testing activities will be defined as part of the "definition of done" of each story. Each scrum team will complete unit, functional, integration, and verification testing of each user story as part of the sprint in the development environment (DEV). Once the scrum team completes testing, the sprint code will be promoted to the QA environment, for performance and load testing; system and standards testing; regression testing, and user acceptance testing.

The purpose of performance and load testing is to validate and verify the attributes of the system, such as scalability, reliability, and resource/memory usage. Contractor shall use Apache JMeter, a Java tool, to execute performance and load testing. JMeter is designed to load test functional behavior and measure performance. It can be used to test performance both on static and dynamic resources (Web services (SOAP/REST), Web dynamic languages—PHP, Java, ASP.NET, Files, etc.—Java Objects, Data Bases and Queries, FTP Servers and more). It can be used to simulate a heavy load on a server, group of servers, network, or object to test its strength or to analyze overall performance under different load types. JMeter can be used to make a graphical analysis of performance or to test server/script/object behavior under heavy concurrent load.



Contractor will also facilitate user acceptance testing (UAT) in the QA environment, including providing UAT test cases. All testing will be tracked using JAMA, an intuitive web-based requirements and test tracking software. Test Cases will be authored in JAMA and assigned to individual testers. State Testers will record the results (Pass/Fail) of each test case step. If a step fails, the State Testers can enter details about the failure that aid the Development team with troubleshooting and correcting the failure. Malfunctioning code or code that doesn't meet requirements found during testing will be corrected prior to the end of the Sprint.

As part of sprint zero, Contractor will deliver preliminary versions of the Test Plan (SEM-0602), Test Cases (SEM-0606), and Requirements Traceability (SEM-0401). As the sprints are executed, these documents are updated with the information from each sprint. Contractor will export this information, along with test results and other metrics, from JAMA, ensuring complete and accurate SEM documentation.

Supporting Documents

The Contractor will deliver preliminary content of the following documents:

- User guides (No Template)
- Technical guides (No Template)
- Training materials (No Template)

The Contractor will deliver updated content of the following document:

- Implementation Plan (No Template)

The Contractor will deliver final content of the following documents to the DTMB PM and the DNR PC for approval and signoff.

- Test Plan (SEM-0602)
- Test cases (SEM-0606) The Contractor will lead testing tasks which includes the creation of test scripts and the analysis of test results. It is the responsibility of the Contractor to prove the Solution satisfies requirements.
- Requirements Traceability (SEM-0401)

Acceptance Criteria

The process of categorizing and managing defects during implementation will be the same as described in Section 1.500 Acceptance.

To be acceptable to the State:

- Data Conversion
  - Data converted as described in the Requirements Specification (SEM–0402) and approved by the DTMB PM and the DNR PC
  - Documents created by the Contractor utilize the following templates or as mutually agreed
    - Data Migration / Conversion Plan (SEM-0601)
- Data Migration
  - Data migrated and approved
  - Documents created by the Contractor utilize the following templates or as mutually agreed
    - Data Migration / Conversion Plan (SEM-0601)
- Configuration
  - LOTS Solution, interfaces, and integrations configured and approved
  - Convene product demonstrations as needed
  - Documents created by the Contractor utilize the following templates or as mutually agreed
    - Software Configuration Management Plan (SEM-0302)
- Installation
  - Installation packages successfully install into the DEV, QA, and PROD server environment.
  - Documents created by the Contractor utilize the following templates or as mutually agreed
    - Installation Plan (SEM-0702)
- Testing
  - All test scenarios execute as expected and testing is approved
  - Documents created by the Contractor utilize the following templates or as mutually agreed
    - Requirements Traceability Matrix (SEM-0401)
    - Test Plan (SEM-0602)
    - Test cases (SEM-0606)

All defects identified during Data Conversion, Data Migration, Configuration, Installation, or Testing must be reported and logged. Defects must be resolved or mitigated, per the process identified in the Quality Management Plan section of the final Project Management Plan. All exceptions will be documented and mutually agreed.

The Contractor shall deliver all supporting documents for implementation which will be approved in writing by the DTMB PM and the DNR PC. Changes to the above template format must be approved in writing by the DTMB PM prior to submission.

F. Training and Documentation

The Contractor must create a training plan for training users and administrators after UAT acceptance for each release / Warranty Period. The Contractor will provide the Training Plan (SEM-0703) at the end of the Planning (Sprint Zero / Initial Docs) stage.

LOTS training will support learners in their adoption and use of the modernized LOTS application. The MPHI Training Team will collaborate closely with Contractor to ensure accurate training is developed for the LOTS application. The MPHI Training Team will:

- Create a Training Plan (SEM-0703) that outlines the training approach, methods, schedules, tools, and curricula necessary to teach up to 50 End Users, up to five (5) System Administrators, and up to five (5) DNR trainers.
- Provide 16 hours of formal end-user training and four (4) hours of administrative training at the end of each release.
- Provide eight (8) hours of formal technical training for four (4) DTMB Technical Resources in all applicable application maintenance and support duties for the LOTS Solution.
- Provide informal training as requested by the State to support each sprint review.

The MPHI Training Team will create the materials for training by using the Successive Approximation Model (SAM), an iterative-based instructional design approach modeled after the Agile Manifesto. Using SAM will allow for early and continuous feedback throughout the development process, allowing the MPHI Training Team to create and update course content and training documentation in the same iterative fashion that the LOTS Solution will be developed – in sprints and releases.

Just before each release and prior to beginning training activities, the following will be delivered to the DTMB PM and the DNR PC for approval and signoff:

- Updated Training Plan (SEM-0703)
- End-User Training and Documentation
- System Administrator Training and Documentation
- 'Train-the-Trainer' Training and Documentation

The MPHI Training Team will deliver formal end-user training and system administrator training to applicable users after the UAT acceptance for each release.

Instructor-led training sessions will take place in a location provided by the State. Training sessions will be limited to no more than 20 participants at a time. Each learner will be provided with appropriate training materials. The LOTS QA environment will be used for demonstration during the training sessions and sufficient data will be available for trainers to use to simulate workflow processes and scenarios.

Each of the training sessions will include precisely focused, release-related presentations and demonstrations of the LOTS application, along with training resources and materials. Each training session will also include guided discussion and collaboration among learners to increase knowledge and understanding of real-life, release-based scenarios.

LOTS user involvement and exposure to a new system is vital to its success. The MPHI Training Team will create training materials that will be used in the formal training session. Training materials shall include (but are not limited to):

- Quick References – Documents that provide step-by-step instructions for specific processes or functions.
- Training Scenarios – Documents that provide real-life, release-based scenarios.
- How-To Videos – Short videos that give users a visual, step-by-step demonstration for specific processes or functions.
- Frequently Asked Questions (FAQs) – The questions users most frequently ask, with appropriate answers; they will be updated to include troubleshooting for problems that occur regularly to provide front-line help to users.
- Training Curriculum – An outline of the release-based topics addressed in the training.
- Instructor Guides and Presentations – Comprehensive documents and PowerPoint presentations, providing guidance and speaker notes for the trainers.
- Training Evaluations – Survey Monkey surveys to assess learner reaction to training and to measure learner knowledge.
- Task-Oriented End User and System Administration Guides

All materials will be created in a manner that makes them intuitive to use to support a train-the-trainer approach as needed by State staff.

Training materials will be updated based on each sprint in a release and finalized at the end of a release to ensure accuracy prior to the release date and training deployment.

After LOTS implementation, a finalized version of the professional training materials will be provided in both electronic and hard copy format to the State and KL&A.

Training will be on site at a single State-designated Lansing, Michigan location or as otherwise agreed.

The State will assume responsibility for providing physical resources for training which includes the following.

- Conference room with classroom style seating
- Single network connection for the instructor (optional Wi-Fi if available)
- Projector screen
- Teleconference enabled phone

After completing LOTS training at the end of each release, learners will:

- Be proficient in the use of the LOTS Solution to perform end-user job functions as identified in the LOTS requirements

- Be proficient in the administration of the LOTS Solution to perform system administrator job functions as identified in the LOTS requirements

Deliverable(s)

End User training

The Contractor is responsible to train up to fifty (50) End Users in the use of the application. Training shall include training identified stakeholders in the use of the system, testing, and validation.

End User training documentation

The Contractor will create professional training materials in both electronic and hard copy formats which will serve as a reference in the operation of the LOTS Solution for up to fifty (50) End Users. These documents must be current to the operational version of the LOTS Solution.

System Administrator training

The Contractor is responsible to train up to five (5) DNR resources in the administration of the LOTS Solution. This includes but is not limited to adding users, changing privileges, and updating key data elements.

System Administrator training documentation

The Contractor will create professional administrator training materials which will also serve as a reference in the administration of the LOTS Solution.

Technical training

The Contractor is responsible to train four (4) DTMB technical staff in the maintenance and support of the LOTS Solution.

Technical training documentation

The Contractor will create professional technical materials in both electronic and written formats which will also serve as a reference in the maintenance and support of the LOTS Solution for up to four (4) DTMB resources.

Train the Trainer

The Contractor will ensure the training plan and training materials support a train the trainer approach for up to five (5) DNR resources or as mutually agreed.

Acceptance Criteria

High-level acceptance criteria for Document Deliverables and Software Deliverables are listed in Section 1.500 Acceptance and the criteria below.

To be acceptable to the State:

For every release / Warranty Period:

- Identified DNR end users are proficient in the use of the LOTS Solution
- Identified DNR system administrators are proficient in the administration of the LOTS Solution

- Identified DTMB technical staff are knowledgeable in the maintenance and support of the LOTS Solution
- Identified DNR trainers are proficient in training future end users and system administrators
- End User, System Administration, and Technical manuals are submitted in both electronic and hard copy formats.
- Knowledge and proficiency will be measured by mutually agreed tests administered in-class or via survey

The Contractor will deliver final content of the following documents to the DTMB PM and the DNR PC for approval and signoff prior to beginning training activities. If the parties learn of potential improvements to the materials during training delivery, Contractor will update the documents and deliver such updated documents within ten (10) business days after completing the training.

- Training Plan (SEM-0703)
- End user training materials (No Template)
- Technical training materials (No Template)
- Administration training materials (No Template)

Upgrades and new versions to the system that affect end-user functionality will include training at no additional cost (e.g. classroom or online training, training flier, release features, etc.)

All training manuals, training plans and other documentation provided become the property of the State.

G. Maintenance and Support

System Maintenance refers to regular and routine work performed by the Contractor on the LOTS Solution under Warranty by the Contractor under this contract. System Maintenance includes corrective actions related to the system not performing as originally intended. This may include incorporation of any functionality documented in the Product Backlog / Requirements Specification (SEM-0402) that were specified as required but were deferred during implementation.

Remedial Maintenance addresses maintenance, often on an unscheduled basis, by the Contractor following a program fault or system failure. This includes, but is not limited to:

- Investigating, correcting, and documenting application faults, “bugs”, or defects. This may include corrective action for design errors, logic errors, and/or coding errors.
- Testing and implementing corrections to application faults, “bugs”, or defects
- Repairing data issues, if any, as a result of system software faults, “bugs”, or defects

Preventative Maintenance involves avoiding or detecting problems before they cause operational problems. Maintenance in this category includes a regular review of performance metrics and a continued analysis of loads and trends. It also includes adjustments to the system to ensure that operations are not disrupted.

Preventative Maintenance includes, but is not limited to:

- Improvements to the performance, maintainability, or other attributes of the system
- Run-time improvements
- Replacement or improvements to utilities to reduce run time
- Potential performance problem correction

Maintenance does not include professional services to modify, customize or enhance software to meet new State requests beyond what was documented and specified during the various LOTS Solution releases.

Support items include but are not limited to:

- Resolve new undocumented defects
- Resolve defects identified prior to the final release but deferred
- Assist DTMB resources in resolving tickets submitted in response to operational issues
- Assist DTMB resources in resolving tickets submitted in response to performance issues
- Assist DTMB resources in resolving tickets submitted in response to integration issues
- Clarify operational questions from the DNR SME
- Updating Documents to reflect the current operational version in production or discovered gaps.

Code patches are subject to standard release processes as identified in Schedule A, Section 1.104, E. Implementation and Installation.

The process of categorizing and managing defects during maintenance and support will be the same as described in Section 1.500 Acceptance.

The Contractor will also maintain prompt communications with the State's Help Desk. The State will also report issues via the DTMB SME from 8:00am to 5:00pm Eastern Time to the Contractor Help Desk (or as mutually agreed) as they are discovered with an identified impact with reference to a service level as noted below. Impact is defined as:

- Single User
- Multiple Users
- System Wide
- Administrative
- Other unique circumstance

<u>Service Levels</u>

Response and Resolution times will be measured from the time Contractor receives a Support Request until the respective times Contractor has (a) responded to that Support Request, in the case of response time and (b) Resolved that Support Request, in the case of Resolution time. "**Resolve**", "**Resolved**", "**Resolution**" and correlative capitalized terms mean, with respect to any particular Support Request, that Contractor has corrected the Error that prompted that Support Request and that the State has confirmed such correction and its acceptance of it in writing. Contractor shall respond to and Resolve all Support Requests within the following times based on the State's designation of the severity of the associated Error, subject to the parties' written agreement to revise such designation after Contractor's investigation of the reported Error and consultation with the State:

Severity Level of Error	Definition	Required Service Level Response and Response Time	Required Service Level Resolution Time
S1	**Business Critical Failures:** An Error that: (a) materially affects the operations of the State's business or marketability of its service or product; (b) prevents necessary work from being done; or (c) disables or materially impairs (i) any major function of the Software or (ii) the State's use of any major function of the Software.	**Level 1 Response:** Contractor shall acknowledge receipt of a Support Request within thirty (30) minutes. **Level 2 Response:** Contractor shall work on the problem continuously and: (a) restore the Software to a state that allows the State to continue to use all functions of the Software in all material respects within twenty four (24) hours after the Level 1 Response time has elapsed; and (b) exercise best efforts to Resolve the Error until full restoration of function is provided.	Contractor shall Resolve the Support Request as soon as practicable as and no later than twenty-four (24) hours after Contractor's receipt of the Support request. If the Contractor Resolves the Support Request by way of a work-around accepted in writing by the State, the severity level assessment will be reduced to a Severity Level of Error 2.
S2	**System Defect with Work-around:** (a) a Severity Level 1 Error for which the State has received, within the Resolution time for Severity Level 1 Errors, a work-around that the State has accepted in writing; or	**Level 1 Response:** Contractor shall acknowledge receipt of a Support Request or, where applicable, the State's written acceptance of a Severity Level 1 Error work-around, within two (2) hours.	Contractor shall Resolve the Support Request as soon as practicable as and no later than one (1) Business Day after Contractor's receipt of the Support Request or, where applicable, the State's written acceptance of a Severity Level 1 Error work-around.

	(b) an Error, other than a Severity Level 1 Error, that affects operations of the State's business or marketability of its service or product.	**Level 2 Response:** Contractor shall, within one (1) Business Day after the Level 1 Response time has elapsed, provide: (a) an emergency Software fix or work-around; or (b) temporary Software release or update release, that allows the State to continue to use all functions of the Software in all material respects.	
S3	**Minor Error:** An isolated or minor Error in the Software that meets each of the following requirements: (a) does not significantly affect Software functionality; (b) can or does impair or disable only certain non-essential Software functions; (c) does not materially affect the State's use of the Software; and (d) has no or no more than a minuscule effect on the operations of the State's business or	**Level 1 Response:** Contractor shall acknowledge receipt of the Support Request within four (4) hours.	Contractor shall Resolve the Support Request as soon as practicable as and no later than five (5) Business Days after Contractor's receipt of the Support Request.

	marketability of its service or product.		

All new releases and bug fixes (collectively referred to as “Changes”) for any software deliverable developed or published by Contractor and generally available to its other customers at no additional charge will be provided to the State at no additional charge.

Deliverable(s)

The Contractor will conduct maintenance meetings as needed with appropriate State staff regarding production, hosting, and database maintenance issues.

The Contractor will maintain the LOTS Solution in accordance with the Maintenance Plan (SEM-0301), in coordination with the DNR Project Coordinator, DTMB Subject Matter Experts, and DNR Subject Matter Experts.

Documentation, which includes user guides and training materials, must be updated to reflect the system “as is”. The Contractor shall provide status reports as specified in the Maintenance Plan (SEM-0301).

The Contractor will take ownership of all events associated with a disruption of service (referred to as “incident”) categorized as either severity one (S1), two (S2), or three (S3). The Contractor will work closely with the DTMB Subject Matter Expert until Resolution.

The Contractor will notify the State of any material errors or defects in the deliverables known, or made known to Contractor from any source during the Contract term that could cause the production of inaccurate, or otherwise materially incorrect, results and shall initiate actions as may be commercially necessary or proper to effect corrections of any such errors or defects.

Maintenance and Support Supporting Documents

The Contractor will deliver final content of the following document to the DTMB PM and the DNR PC for approval and signoff.

- Maintenance Plan (SEM-0301)

Acceptance Criteria

High-level acceptance criteria for Document Deliverables and Software Deliverables are listed in Section 1.500 Acceptance and the criteria below.

To be acceptable to the State:

The Contractor's help desk is staffed with qualified personnel familiar/knowledgeable of the Solution. Support is available Monday through Friday 8:00am to 5:00pm Eastern Time. The State can request, as necessary, escalation to senior technical/engineering staff, and then to higher management and/or senior management.

The Contractor performs remedial and preventative maintenance as needed or as planned. Failure to provide remedial maintenance within the specified Required Service Level Resolution Time may be subject to liquidated damages, as described in Section 1.301.

The Contractor updates documentation as required to reflect changes to the Solution.

The Contractor will create Maintenance and Support Supporting Documents which will be approved in writing by the DTMB PM and the DNR PC.

H. Warranty Period

The Warranty Period is defined in the Contract Terms.

The Warranty Period for any software package release of the LOTS Solution shall begin after it has been successfully installed into the DEV, QA, and PROD server environments.

During the Warranty Period, the Contractor will maintain prompt communications with the State's Help Desk, including technical staff appropriate to the Severity Level of Error. The Contractor will also provide appropriate status reporting concerning errors to State-designated stakeholders identified in Section 1.200.

For any Warranty Period, the Contractor warrants that the system will conform in all respects to the cumulative requirements that have been UAT accepted in any release to date. The final Warranty Period shall warranty conformance to all requirements noted in Exhibits 1-23 Detailed Requirements.

If, within a Warranty Period, the LOTS Solution fails to comply with this warranty, the Contractor must repair defects as necessary at no cost to the State to bring the system into compliance with the warranty.

The State is responsible for notifying the Contractor of the failure, providing the Contractor with adequate documentation and evidence to reproduce the failure, and when necessary demonstrating the failure so that the cause of the failure may be traced and corrected.

The process of categorizing and managing defects during the Warranty Period will be the same as described in Section 1.500 Acceptance.

Deliverable(s)

To be acceptable to the State:

Any defects discovered within the Warranty Period of operation will be fixed at no additional charge to the State.

Acceptance Criteria

High-level acceptance criteria for Document Deliverables and Software Deliverables are listed in Section 1.500 Acceptance and the criteria below.

The Contractor will deliver final content of the following documents to the DTMB PM and the DNR PC for approval and signoff.

- Maintenance Plan (SEM-0301)

1.200 Roles and Responsibilities

1.201 Contractor Staff, Roles, and Responsibilities

A. Contractor Staff

Contractor will provide sufficient qualified staffing to satisfy the deliverables of this Statement of Work. Since an Agile process will be used, Contractor will provide the "Development Team". The Development Team is responsible for delivering the product at the end of each Sprint (the Sprint Goal). A Development Team is made up of individuals with cross-functional skills (i.e. Business Analyst, Senior Software Engineer , System Architect, etc.) who do the actual work (analyze, design, develop, test, technical communication, document, etc.). Contractor developers shall be responsible for writing, configuring, testing, and installing software to satisfy requirements resulting in a high quality product which functions as designed without errors.

Key Personnel

Contractor commits the following Key Personnel for the duration of the project:

1. **Single Point of Contact (SPOC) and Contract Administrator**
   John K. Leigh, Partner
   2164 University Park Drive, Suite 200
   Okemos, MI 48864-3960
   j.leigh@kunzleigh.com
   517-202-4625
   The duties of the SPOC shall include, but not be limited to:
   - supporting the management of the Contract,
   - facilitating dispute resolution, and
   - advising the State of performance under the terms and conditions of the Contract.

2. **Project Manager**

Dave Desrochers
2164 University Park Drive, Suite 200
Okemos, MI 48864-3960
d.desrochers@kunzleigh.com

The Contractor Project Manager shall interact with designated personnel from the State to insure a smooth transition to the new system. The project manager will coordinate all of the activities of the Contractor personnel assigned to the project and create all reports required by State. The Contractor's Project Manager's responsibilities include at a minimum:

- Manage all defined Contractor responsibilities in the Scope of Services
- Manage identified subcontractors
- Develop the project management plan and schedule, updating as needed
- Serve as the point person for all project issues
- Coordinate and oversee the day-to-day project activities of the project team
- Assess and report project feedback and status
- Escalate project issues, project risks, and other concerns
- Review all project deliverables and provide feedback
- Proactively propose/suggest options and alternatives for consideration
- Utilize change control procedures
- Prepare project documents and materials

The Contractor Project Manager will fulfill the agile Contractor "Program Manager / Scrum Master" role. The agile Contractor Program Manager / Scrum Master responsibilities include:

- Manages planning process
- Manages overall program schedule
- Drives multiple releases for the contract
- Facilitates Release Planning & Retrospective
- Owns all action items for the project until he/she finds the right owner
- Owns reporting on project status, to DTMB PM and DNR PC
- Coordinates other release support
- Responsible for risk assessment & mitigation
- Finds and works to remove roadblocks
- Facilitates communication between roles for every aspect of the project
- Responsible for keeping release/project information consolidated, organized and up to date
- Drives the cross-functional team at all levels
- Drives the execution of sprint items
- Responsible for throughput (team velocity)

3. **Senior Business Analyst**
   Mrinal Sakpal
   2164 University Park Drive, Suite 200
   Okemos, MI 48864-3960
   m.sakpal@kunzleigh.com

   The Contractor Senior Business Analyst is responsible for eliciting functional and technical requirements, gap analysis, meeting facilitation, documenting use case scenarios, perform business and workflow analysis.

4. **Senior Software Engineer**
   Jason Kusnier
   2164 University Park Drive, Suite 200
   Okemos, MI 48864-3960
   j.Kusnier@kunzleigh.com

   The Senior Software Engineer is the development lead and has expert knowledge in matters of design and build of the solution. The Senior Software Engineer will lead cross functional teams of subject matter experts, developers, and business analyst and will facilitate workgroup meetings.

5. **System Architect**
   Donna McEvilly
   2164 University Park Drive, Suite 200
   Okemos, MI 48864-3960
   d.mcevilly@kunzleigh.com

   The Contractor System Architect is responsible for leading and/or consulting on the development of the System Architecture and work closely with the DTMB Architect to ensure the Solution satisfies requirements and will function as designed in the State Enterprise network.

6. **Training Manager**
   Laurie Taylor
   2164 University Park Drive, Suite 200
   Okemos, MI 48864-3960
   ltaylor@mphi.org

   The Contractor Training Manager is responsible for effectively leading training resources, development of the training plan, training manuals, and the execution of classes and other training opportunities.

7. **Test Manager**

Carla Barrows-Wiggins
2164 University Park Drive, Suite 200
Okemos, MI 48864-3960
c.barrows-wiggins@kunzleigh.com

The Contractor Test Manager is responsible for drafting, managing, and executing test scripts which satisfy documented scenarios as mapped against the requirements traceability matrix. The test manager is also responsible for drafting the test plan.

Non-Key Personnel

Contractor commits the following Non-Key Personnel for the duration of the project:

Number of Resources	Resource Title	Responsibility
4	Business Analysts	Complete tasks and deliverables assigned by the Project Manager, Senior Business Analyst, Testing Manager, and Agile Scrum Master, including, but not limited to: • Requirement elicitation and documentation • SUITE documentation development and/or maintenance • Testing
16	Software Engineer	Complete tasks and deliverables assigned by the Senior Software Engineer, Senior Architect, and Agile Scrum Master
1	Technical Writer	Complete tasks and deliverables assigned by the Project Manager, Senior Business Analyst, and Agile Scrum Master Author End-User and System Administration Guides Perform Quality Assurance functions on all technical writing activities

B. Subcontractors

Contractor shall utilize the following subcontractors:

MPHI 2440 Woodlake Circle Drive, Suite 150 Okemos, MI 48864 Jeff Allison P: 517-324-7369 M: 517-719-1299 E: jallison@mphi.org MPHI will provide training for the LOTS Solution.	*TEKsystems* 3940 Peninsular Drive, Suite 100 Grand Rapids, MI 49546 Craig Kapuscinski P: 646-974-1191 E: ckapusci@teksystems.com TEKsystems will provide the named Senior Software Engineer and supplemental technical staffing, if necessary.

C. On Site Work Requirements

1. Location of Work:

Work performed in the execution of this contract must occur at State facilities or Contractor offices located within 90 miles of Lansing Michigan, by individuals who are legally qualified to perform the work as defined by State and Federal labor laws. Tasks assigned to State resources will be executed in Lansing Michigan or as mutually agreed.

The State requires that the majority of contractor resources be physically co-located with the team within 90 miles of Lansing, Michigan when performing under this contract. The physical site may be subject to State visits and audits. See 1.302 Project Status Reporting for required physical presence of key project personnel.

The Contractor must identify in their proposal, with supporting justifications, the need to locate resources in State owned facilities. The State will consider these requests but cannot guarantee acceptance. In all scenarios it is the responsibility of the Contractor to secure space for Contractor resources in support of the project.

2. Hours of Operation:

Normal State working hours are 8:00 a.m. to 5:00 p.m. Eastern Time, Monday through Friday, with work performed as necessary after those hours to meet project deadlines. No overtime will be authorized or paid.

The State is not obligated to provide State management of assigned work outside of normal State working hours. The State reserves the right to modify the work hours in the best interest of the project.

Contractor shall observe the same standard holidays as State employees. The State does not compensate for holiday pay.

3. Additional Security and Background Check Requirements:

Contractor must present certifications evidencing satisfactory Michigan State Police Background checks (ICHAT) and drug tests for all staff identified for assignment to this project.

In addition, proposed Contractor personnel may be required to complete and submit an RI-8 Fingerprint Card for the National Crime Information Center (NCIC) Finger Print.

Contractor will pay for all costs associated with ensuring their staff meets all requirements.

1.202 State Staff, Roles, and Responsibilities

If requested by the Contractor and approved by the DTMB PM, the State will provide the following resources for the Contractor’s use on this project:

- State ID for admittance into a State facility
- Work space

- Minimum clerical support
- Telephone
- PC workstation
- Access to State servers and enterprise resources (e.g. email)
- Access to printers
- Access to copiers and fax machine
- Access to conference rooms

The State reserves the right to suspend or revoke access to State resources at any time.

The State appoints the following staff:

1. **Contract Administrator**
   Jarrod Barron, IT Buyer
   PO Box 30026
   Lansing, MI 48909-7526
   Barronj1@michigan.gov
   517-284-7045

2. **Single Point of Contact (SPOC)**
   Mike Cooley
   Cooleym@michigan.gov
   517-373-6608

   The duties of the SPOC shall include, but not be limited to:
   - supporting the management of the Contract,
   - facilitating dispute resolution, and
   - advising the State of performance under the terms and conditions of the Contract.

3. **State Project Manager – (DTMB PM)**
   Jeremy Newman
   Newmanj2@michigan.gov
   517-335-3260

   The DTMB PM will provide the following services:
   - Obtain the relevant DTMB, DNR, and/or State department/division concurrence(s) for any Contractor requested change or standard deviation to this contract.
   - Provide State facilities, as needed
   - Coordinate the State resources necessary for the project
   - Facilitate coordination between various external contractors
   - Facilitate communication between different State departments/divisions
   - Provide acceptance and sign-off of deliverable/milestone

- Review and sign-off of timesheets and invoices
- Resolve project issues
- Escalate outstanding/high priority issues
- Utilize change control procedures
- Conduct regular and ongoing review of the project to confirm that it meets original objectives and requirements
- Document and archive all important project decisions
- Arrange, schedule and facilitate State staff attendance at all project meetings.

The DTMB PM will fulfill the agile DTMB "Program Manager / Scrum Master" role. The agile DTMB Program Manager / Scrum Master responsibilities include:

- Manages planning process
- Manages overall program schedule
- Drives multiple releases/projects
- Facilitates Release Planning & Retrospective
- Provides access to tools and people
- Owns all action items for the project until he/she finds the right owner
- Owns reporting on project status, to all directions
- Coordinates other release support
- Responsible for risk assessment & mitigation
- Facilitates Sprint Planning, Review & Retrospective
- Finds and works to remove roadblocks
- Facilitates communication between roles for every aspect of the project
- Responsible for keeping release/project information consolidated, organized and up to date
- Drives the cross-functional team at all levels
- Drives the execution of sprint items
- Responsible for throughput (team velocity)

4. **DNR Sponsor**
Sharon Schafer
Schafers@michigan.gov
517-284-5958

The DNR Sponsor represents the business executive leadership for the project. The DNR Sponsor will coordinate with the DTMB Sponsor to:

- Resolve escalated project issues in a timely manner
- Review project management plan, schedule, status, and issues

- Resolve escalated deviations from project management plan or schedule
- Provide change control review and approval
- Ensure timely availability of escalated State resource issues

5. DTMB Sponsor

Jim Hogan
Hoganj@michigan.gov
517-284-6006

The DTMB Sponsor represents the technology executive leadership for the project. The DTMB Sponsor will coordinate with the DNR Sponsor to:

- Resolve escalated project issues in a timely manner
- Review project management plan, schedule, status, and issues
- Resolve escalated deviations from project management plan or schedule
- Provide change control review and approval
- Ensure timely availability of escalated State resource issues

1.203 Other Roles and Responsibilities

The State anticipates the following roles will be needed by the project and will assign resources to these roles.

<u>DTMB Roles</u>

- Project Owner
- Business Analysts
- Solution Architect
- Subject Matter Experts (SMEs) by discipline
    - Developer
    - Web hosting
    - Database
    - Telecom
    - Security

<u>DNR Roles</u>

- Project Coordinator
- Subject Matter Experts (SMEs) by discipline
    - Parcel maintenance

- GIS spatial data
- Mineral auction
- Mineral leasing
- Mineral production
- Land transaction accounting
- Case processing
- Land disposal
- Land management reporting
- VMS
- LEX
- TRAUC
- PILT
- Other as identified

DTMB - Project Owner

The DTMB Project Owner is responsible for assisting the DTMB PM in the execution of the project. This includes but is not limited to the assignment of State resources.

DTMB – Business Analyst

The DTMB Business Analyst is responsible for executing and completing tasks assigned by the DTMB PM, is expected to be knowledgeable in the application, and ensures DNR needs are being met.

DTMB – Solution Architect

The DTMB Solution Architect will coordinate with the DTMB PM to advise the Contractor in matters of system design to ensure the LOTS Solution supports State standards and the State Enterprise Environment.

DTMB – Subject Matter Expert(s)

A DTMB Subject Matter Expert is an individual who has expert knowledge of a technical subject or requirement and is able to answer questions brought forward.

DNR - Project Coordinator (DNR PC)

The DNR Project Coordinator has expert knowledge in matters of requirements and is responsible for assisting the DTMB PM in managing DNR resources in the execution of tasks.

- Resolve agency project issues in a timely manner

- Review project management plan, schedule, status, and issues
- Assist DTMB PM resolve deviations from the project management plan or schedule
- Provide acceptance sign-off
- Utilize change control procedures
- Ensure timely availability of agency resources

The DNR PC will fulfill the "Product Owner " role. The agile Product Owner's responsibilities include:

- Communicating the vision of the product to the development team.
- Must also represent the Agency's interests through requirements and prioritization. The Product Owner shall have the sole authority to determine the prioritization of the original requirements and all identified defects into the sprint and release backlog, regardless of how such defects were identified (e.g., during a sprint demo, during UAT or otherwise, etc).
- The Product Owner is the single individual who has project knowledge and the authority to make decisions.
- Facilitates release planning and retrospectives

DNR – Subject Matter Expert(s)

A DNR Subject Matter Expert is an individual who has expert knowledge of a business subject or requirement and is able to answer questions brought forward.

Typical Assignments

Steering Committee

- DNR Sponsor
- DNR Project Coordinator
- DTMB Sponsor
- DTMB PM
- DTMB Project Owner
- Contractor Contract Manager
- Contractor PM

Project Leadership

- Contractor PM
- Contractor Senior Software Engineer
- DTMB PM
- DTMB Project Owner
- DNR Project Coordinator

Project Change Control Board

- Contractor PM

- Contractor Senior Software Engineer
- DTMB PM
- DTMB Project Owner
- DNR Project Coordinator

1.300 Project Plan

1.301 Project Plan Management

Orientation Meeting

Upon thirty (30) calendar days from execution of the Contract, the Contractor shall attend an orientation meeting to discuss the content and procedures of the Contract. The meeting will be held in Lansing, Michigan, at a date and time mutually acceptable to the State and the Contractor. The State shall bear no cost for the time and travel of the Contractor for attendance of the meeting.

Performance Review Meetings

The State will require the Contractor to attend monthly meetings, at a minimum, to review the Contractor's performance under the Contract. The State shall bear no cost for the time and travel of the Contractor for attendance at the meeting.

See 1.302 Project Status Reporting for required physical presence of key project personnel.

Project Control

1. The Contractor will carry out this project under the direction and control of DTMB and DNR.
2. Within thirty (30) calendar days of the execution of the Contract, the Contractor will submit a final Project Management Plan (PM Plan) to the DTMB PM, the DNR PC, and appropriate stake holders for final approval. The project's PM Plan may be tailored using the State's "Agile Process Guide". This PM Plan must be in agreement with Schedule A, Section 1.104 Work and Deliverables, and must include the following:
   - Project Schedule with tasks, durations, milestones, and resources identified
   - Project network diagram illustrating the critical path and any near critical paths
   - Project Organizational Chart
   - Communication Plan showing all paths of communication and escalation
   - Human Resource Plan with all resources identified by role, purpose, and commitment
   - Scope Management Plan
   - Quality Management Plan which includes testing, defect management, and quality improvement
   - Risk Management *Plan, with appropriate mitigation/contingency plans*

3. The Contractor will manage the project in accordance with the SUITE methodology, which includes standards for project management, systems engineering, and associated forms and templates which are available at http://www.michigan.gov/suite

   a. Contractor will use an automated tool for planning, monitoring, and tracking the Contract's progress and the level of effort of any Contractor personnel spent performing Services under the Contract. The tool shall have the capability to produce:

      - Staffing tables with names of personnel assigned to Contract tasks.
      - Project schedule showing tasks, subtasks, deliverables, and the resources required and allocated to each (including detailed plans for all Services to be performed within the next ninety (90) calendar days, updated biweekly).
      - Updates must include actual time spent on each task and a revised estimate to complete.
      - Graphs showing critical events, dependencies and decision points during the course of the Contract.

   b. Contractor will use automated software to manage the following:

      - Product Backlog.
      - Sprint Backlog.
      - Sprint burn down charts.
      - Sprint velocity reports
      - Impediment/Stumbling blocks reports.
      - Sprint Retrospective meeting minutes.

   a. Any tool(s) used by Contractor for such purposes must produce information of a type and in a manner and format that will support reporting in compliance with the State standards.

Liquidated Damages

A Milestone is deemed complete when all of the deliverables within the milestone are complete and approved. Failure to provide deliverable/milestone, including but not limited to backlog items in the assigned sprint, by the identified date may be subject to liquidated damages. Contractor and the State agree that if there is a late or improper completion of a deliverable/milestone, the State is entitled to collect liquidated damages in the amount of $5,000.00 and an additional $1000.00 per day for each day Contractor fails to remedy the late or improper completion of a deliverable/milestone.

1.302 Project Status Reporting

Contractor shall submit reporting formats to the DTMB PM for approval within thirty (30) calendar days after contract execution. Once both parties have agreed to the format of the report, it shall become the standard to follow for the duration of the contract.

- Project status (PMM-0013)
    - Summary of activity during the reporting period
    - Accomplishments during the reporting period
    - Next steps for next reporting period
    - Risks & Issue status
- Project Change Requests, as defined in the Change Management Plan section of the Project Management Plan
    - Updated project schedule
    - Updated PM Plan
    - Update(s) to Deliverable definition or acceptance criteria
    - Risk & Issue mitigation

Status frequency and audience shall be as defined in the Communications Management Plan section of the Project Management Plan.

The State may require the Key Personnel to be physically present in Lansing Michigan for status reporting, software installation, or training needs. These periods of physical presence are expected to be 1 business day in length and may be required every two weeks.

1.400 Project Management

1.401 Issue Management

An issue is an identified event that if not addressed may affect schedule, scope, quality, or budget.

The Contractor shall maintain an issue log for issues relating to the provision of services under this Contract. The issue management log must be communicated to the DTMB PM on an agreed upon schedule, with email notifications and updates. The issue log must be updated and must contain the following minimum elements:

- Description of issue
- Issue identification date
- Responsibility for resolving issue.
- Priority for issue resolution (to be mutually agreed upon by the State and the Contractor)
- Resources assigned responsibility for resolution
- Resolution date
- Resolution description

Issues shall be escalated as mutually agreed in the PM Plan or as follows:

- Level 1 – Contractor Team/Technical leads, DNR SMEs, and DTMB SMEs.

- Level 2 – Contractor Project Manager, DTMB PM, DTMB Project Owner, and DNR Project Coordinator
- Level 3 – DTBM Sponsor and DNR Sponsor

Defect tracking shall be maintained by the Contractor as noted in 1.104 D – Application Development.

1.402 Risk Management

A risk is an unknown circumstance or event that, if it occurs, may have a positive or negative impact on the project.

Contractor shall establish a risk management plan and process, including the identification and recording of risk items, prioritization of risks, definition of mitigation strategies, monitoring of risk items, and periodic risk assessment reviews with the State.

Contractor shall submit a risk management plan format to the State for approval within twenty (20) business days after the contract effective date. The risk management plan will be developed during the initial planning phase of the project, and be in accordance with the State's PMM methodology. Once both parties have agreed to the format of the plan, it shall become the standard to follow for the duration of the contract. The plan must be updated bi-weekly, or as otherwise mutually agreed upon.

The Contractor shall provide the tool to track risks. The Contractor will work with the State and allow input into the prioritization of risks.

The Contractor shall identify risks for each phase of the project. The State shall assign all risks to the State or to the Contractor. The Contractor shall mitigate or eliminate all risks assigned to Contractor. The State will assume the same responsibility for risks assigned to the State.

1.403 Change Management

Change management is defined as the process to communicate, assess, monitor, and control all changes to system resources and processes. The State also employs change management in its administration of the Contract.

All changes must be submitted to and approved by the Project Change Control Board and signed by the DNR Project Coordinator.

If a proposed contract change is approved by the Project Change Control Board, the board will submit a request for change to the DTMB-Procurement Buyer, who will make recommendations to the Director of DTMB-Procurement regarding ultimate approval/disapproval of change request. If the DTMB-Procurement Director agrees with the proposed modification, and all required approvals are obtained (including State Administrative Board, if applicable), the DTMB-Procurement Buyer will amend the Contract. **Contractor shall not provide products or services prior to the issuance of a Contract Change Notice by the DTMB-Procurement, or it risks non-payment for the out-of-scope/pricing products and/or services.**

Each Contract Change Notice will require a Statement of Work containing the following:
- Background
- Project Objective
- Scope of Work
- Deliverables
- Acceptance Criteria
- Project Control and Reports
- Specific Department Standards
- Payment Schedule
- Project Contacts
- Agency Responsibilities and Assumptions
- Location of Where the Work is to be performed
- Expected Contractor Work Hours and Conditions
- Detailed Set of Requirements
- Staffing Plan/Work Breakdown Structure
- Project Plan tying deliverables to payments
- Cost Model

The Contractor must employ change management procedures to handle such things as "out-of-scope" requests or changing business needs of the State while the project is underway.

The Contractor will employ the change control methodologies to justify changes in the processing environment, and to ensure those changes will not adversely affect performance or availability.

Minimum conditions that could result in a contract amendment with potential additional costs could include, but are not limited to:
- New requirements as a result of legislative or departmental initiatives—these could include legislative mandates for reporting, additional processing, etc.
- Requirements not included in the RFP. These could be the result of the requirements validation process or the result of changes in DNR business processes. Examples could include additional validation, approvals, and audit trails in response to an audit comment. Most often a change request would result when these items have been identified after the requirements validation process. The SEM-0402 Requirements Specifications Document, the SEM-0401 Requirements Traceability Matrix, and User Stories will serve as the basis for determining whether the requirement is a change request or within the scope of the current contract.
- Slippage of schedule resulting from external factors not under the control of the project team. For example, if the SIGMA project and corresponding LOTS interface were delayed significantly, requiring a delay of that functionality in LOTS or the need to provide an interim interface to MAIN,

could result in a change request. Costs associated with the slippage would be documented as an issue and would also go through the Change Control Process.

- Mutually agreed schedule slippage as a result of unavailability of State Staff to perform needed project activities. Once the Project Schedule has been established and resources allocated, the Schedule will be baselined with specific deadlines for deliverables, milestones, and releases. There could be instances when the final schedule would need to be modified to accommodate outside commitments of State Staff, e.g., year-end closing, which would preclude DNR from staffing UAT or other project activities. This may or may not result in a cost associated with the slippage, but would result in the need to modify the dates for deliverable performance.

1.500 Acceptance

1.501 Criteria

The following criteria will be used by the State to determine Acceptance of the services and deliverables

<u>Document Deliverables</u>

1. Documents are dated and in electronic format, as mutually agreed with the State.
2. Requirements documents are reviewed and updated throughout the development process to assure requirements are delivered in the final product.
3. Draft documents are not accepted as final deliverables.
4. The documents will be reviewed and accepted in accordance with the requirements of the Contract.
5. DTMB will review documents within a mutually agreed upon timeframe.
    a. Approvals will be written and signed by DTMB PM and by DNR Project Coordinator.
    b. Issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit documents for approval within 30 days of receipt.

<u>Software Deliverables</u>

Software will be grouped into “Releases”, based on the Deliverable / milestones eligible for payment. Software acceptance, for each Release, can be achieved through a series of steps, conditions, and approvals:

1. Beta software is not accepted as part of any release.
2. The software will be reviewed and accepted in accordance with the requirements of the contract.

3. DTMB and DNR will review software within a mutually agreed upon timeframe for acceptance of functionality, usability, installation, performance, security, standards compliance, backup/recovery, and operation.
    a. Approvals will be written and signed by DTMB PM and the DNR PC.
    b. Unacceptable issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit software for approval within 30 days of receipt.
4. Software is installed and configured, with assistance from DTMB, in an appropriate environment (e.g. DEV, QA, PROD).
5. Contingency plans, de-installation procedures, and software are provided by the Contractor and approved by DTMB PM and the DNR PC.
6. Acceptance of the software will depend on the successful completion of User Acceptance Testing (UAT).
7. Testing will demonstrate the system's compliance with the requirements of the contract. At a minimum, the testing will confirm the following:
    a. Functional - the capabilities of the system with respect to the functions and features described in the contract.
    b. Performance - the ability of the system to perform the workload throughput requirements. All problems should be completed satisfactorily within the allotted time frame.
    c. All deviations from the contract requirements, as determined by the state, shall be logged and tracked as defects. Each defect will be categorized by the state as an S1 (Business Critical Failures), S2 (System Defect with Work-around), or S3 (Minor Error).
    d. A defect may be determined by the state to be resolved, if the deviation from the contract requirement is no longer present.
    e. A defect may be determined by the state to be mitigated, if the deviation from the contract requirement has an available work-around which imposes a trivial business impact.
    f. An unresolved or unmitigated defect may be subject to liquidated damages.
8. DTMB will review test software, data, and results within a mutually agreed upon timeframe.
    a. Approvals will be written and signed by DTMB PM and the DNR PC.
    b. Unacceptable issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit test software, data and results for approval within 30 days of receipt.
9. Software source code, where applicable, is reviewed by DTMB within a mutually agreed upon timeframe for readability, structure, and configuration management.

a. Approvals will be written and signed by DTMB PM and the DNR PC.

b. Unacceptable issues will be documented and submitted to the Contractor.

c. After issues are resolved or waived, the Contractor will resubmit source code for approval within 30 days of receipt.

10. Acceptance of the software will depend on the successful completion of the Warranty Period. All open S1 or S2 defects, as determined by the State, must be resolved before the Warranty Period may be successfully completed. Special care must be taken to insure that the May/November Oil and Gas Auction functionality is fully covered by Warranty. An unresolved defect may be subject to liquidated damages.

1.502 Final Acceptance

Final acceptance will occur when all deliverables defined in Schedule A and per the acceptance criteria defined in Section 1.501 have been completed and written approval have been obtained ("**Final Acceptance**"). Final acceptance will be given after the expiration of the Warranty Period if all outstanding issues have been resolved to the State's satisfaction. See also the Contract Terms for further details.

In the event the work and/or deliverable is not accepted by the DTMB PM and the DNR PC, the State will respond to the Contractor with written notice describing the deficiencies using a corrective action plan listing tasks with associated completion dates. The contractor has five (5) business days to respond to the notice indicating agreement to the terms unless an alternate solution is agreed by both parties. Upon completion, State will have ten (10) business days to accept and approve the revised deliverable(s).

If the State does not approve the revised deliverable(s) after the third (3rd) attempt, the State shall have the option to negotiate an acceptable alternative, collect penalties for the incomplete and/or late deliverable, or terminate the Contract pursuant to Termination for Cause.

1.600 Compensation and Payment

1.601 Compensation and Payment

Method of Payment

The project will be paid on a <u>firm fixed price basis</u>, including all post-implementation, maintenance and support costs. All costs associated with future enhancements will be submitted in a contract change notice with a Statement of Work for a firm fixed price in accordance with the Contractor's rate card. Payments will only be made upon successful completion and State's formal acceptance of items listed in the Pricing Schedule.

Travel

The State will **NOT** pay for any travel expenses, including hotel, mileage, meals, parking, etc. Travel time will not be reimbursed.

Invoicing

Contractor will submit properly itemized invoices for approved deliverables to:

DTMB – Financial Services
Accounts Payable
P.O. Box 30026
Lansing, MI 48909
or
DTMB-Accounts-Payable@michigan.gov

Incorrect or incomplete invoices will be returned to Contractor for correction and reissue.

Attachment 1: Background Technology, Approved Third-Party Materials, and Approved Open Source Components

Pending State review and approval, Contractor will use the third party and open source software listed in the table below as part of the DNR LOTS Solution. In the event the State does not approve use of any listed item, Contractor will utilize an alternative from the State's list of approved software. In the event there is no alternative from the State's list of approved software, the parties will identify a mutually agreeable alternative.

Licenses are referenced in the table below as follows:

- The Apache Software Foundation License, Version 2.0 (Apache V2)
- The GNU Lesser General Public License, version 2.1 (LGPL)
- The Massachusetts Institute of Technology License (MIT)
- The Microsoft Public License (MS-PL)
- The Simplified Berkeley Software Distribution 2-Clause License (BSD)

The license agreements for each product are attached following the table below, unless denoted as part of an existing State contract.

Package	License	Reason
Angular	MIT	Enhanced HTML JavaScript Framework
Antlr	BSD	Another Tool for Language Recognition, is a language tool that provides a framework for constructing recognizers, interpreters, compilers, and translators from grammatical descriptions containing actions in a variety of target languages.
Bootbox.JS	MIT	Wrappers for JavaScript alert(), confirm() and other flexible dialogs using Twitter's bootstrap framework.
bootstrap	MIT	front-end framework for developing responsive, mobile first projects on the web.
Bootstrap.Datepicker	Apache V2	Adds date picker controls to fields
Bootstrap.Switch	MIT	Turns checkboxes into toggle switches
bootstrap-select	MIT	Adds additional functionality to select switches
DotNetOpenAuth.AspNet	MS-PL	Adds authentication functionality based on the OpenAuth standard
elmah.corelibrary	Apache V2	Error logging and handling functionality
Elmah.Mvc	Apache V2	Error logging and handling functionality
EntityFramework	Apache V2	Entity Framework is Microsoft's recommended data access technology for new applications.

Package	License	Reason
FluentValidation	Apache V2	A validation library for .NET that uses a fluent interface to construct strongly-typed validation rules.
FluentValidation.MVC5	Apache V2	A validation library for .NET that uses a fluent interface to construct strongly-typed validation rules.
font-awesome	MIT	Font Awesome gives you scalable vector icons that can instantly be customized — size, color, drop shadow with CSS
Glimpse	Apache V2	Glimpse is a web debugging and diagnostics tool used to gain a better understanding of what's happening inside of your ASP.NET web application.
Glimpse.Ado	Apache V2	Glimpse is a web debugging and diagnostics tool used to gain a better understanding of what's happening inside of your ASP.NET web application.
Glimpse.EF6	Apache V2	Glimpse is a web debugging and diagnostics tool used to gain a better understanding of what's happening inside of your ASP.NET web application.
Grid.Mvc.Ajax	LGPL	Package provides functionality to build GridView based on your model items collection. Grid.Mvc support sorting, filtering and paging your data.
Grid.Mvc.Redux	LGPL	Package provides functionality to build GridView based on your model items collection. Grid.Mvc support sorting, filtering and paging your data.
jQuery	MIT	jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development.
jQuery.MoneyMask	MIT	A JQuery money mask that deletes from right to left and can be contextualized to region.
jQuery.UI.Combined	MIT	jQuery UI is an open source library of interface components — interactions, full-featured widgets, and animation effects — based on the stellar jQuery JavaScript library .
jQuery.Validation	MIT	Jquery module for easily writing front end validation
knockoutjs	MIT	A JavaScript MVVM library to help you create rich, dynamic user interfaces with clean maintainable code

Package	License	Reason
Modernizr	MIT	Modernizr adds classes to the <html> element which allow you to target specific browser functionality in your stylesheet.
mousetrap	Apache V2	A simple library for handling keyboard shortcuts in JavaScript.
Newtonsoft.Json	MIT	High performance JSON Library
normalize.css	MIT	Normalize.css is a customizable CSS file that makes browsers render all elements more consistently and in line with modern standards.
Rotativa	MIT	PDF generation tool for .NET
Select2.js	MIT	jQuery based replacement for select boxes. It supports searching, remote data sets, and infinite scrolling of results.
SimpleInjector	MIT	Simple Injector is an easy, flexible and fast dependency injection library
SimpleInjector.Integration.Web	MIT	Simple Injector is an easy, flexible and fast dependency injection library
SimpleInjector.Integration.Web.Mvc	MIT	Simple Injector is an easy, flexible and fast dependency injection library
Twitter.Typeahead	MIT	Inspired by twitter.com's autocomplete search functionality, typeahead.js is a flexible JavaScript library that provides a strong foundation for building robust type-a-heads.
WebGrease	Apache V2	WebGrease is a suite of tools for optimizing JavaScript, css files and images.
x-editable	MIT	In-place field editing

APACHE V2 LICENSE

Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/ (http://www.apache.org/licenses/)

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"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

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>
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>
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Schedule B: Pricing

a) Table 1: Summary of the Project Costs

Row	Project Costs	Cost
A	**Planning (Sprint Zero / Initial Docs)** Breakdown provided in Table 2	$985,965
B	**Release 1 / Warranty 1** Breakdown provided in Table 3	$985,965
C	**Release 2 / Warranty 2** Breakdown provided in Table 4	$985,965
D	**Documentation (Release 2)** Breakdown provided in Table 5	$434,984
E	**Release 3 / Warranty 3** Breakdown provided in Table 6	$985,965
F	**Release 4 / Warranty 4 (Final)** Breakdown provided in Table 7	$985,965
G	**Documentation (Release 4 Final)** Breakdown provided in Table 8	$434,984
	Total Cost	**$5,799,793**

b) Table 2: Planning (Sprint Zero/Initial Docs)

Task #	Project Milestone	Costing Details	Task Cost
	Planning (Sprint Zero / Initial Docs)		
	Activities		
2.0.01	Attend and present at Kick-off Meeting		$49,298
2.0.02	Requirements Analysis & Validation		$98,597
2.0.03	Scope validation		$98,597
2.0.04	Facilitate and attend Workgroup Meetings		$98,597
	Business Requirements		
2.0.05	Project Management Plan (PMM-0102)		$98,597
2.0.06	Detailed Project Schedule		$49,298
2.0.07	Requirements Specification (SEM-0402)		$49,298
2.0.08	Requirements Traceability matrix (SEM-0401)		$49,298
2.0.09	Product Backlog		$49,298
	Application Design		
2.0.10	Functional Design (SEM-0501)		$49,298
2.0.11	System Design (SEM-0604)		$49,298
2.0.12	Test Plan (SEM-0602)		$49,298
2.0.13	Data Migration / Conversion Plan (SEM-0601)		$49,298
2.0.14	eMichigan Review		$49,298
2.0.15	Enterprise Architecture Solution Assessment		$49,298
2.0.16	Security Assessment (DTMB 170)		$49,299
	Planning (Sprint Zero / Initial Docs) Costs Total		**$985,965**

c) Table 3: Release 1/Warranty 1

Task #	Project Milestone	Costing Details	Task Cost
	Release 1 / Warranty 1		
	Application Development		
3.0.01	Maintain Product Backlog		$9,860
3.0.02	Sprint Planning		$19,719
3.0.03	Maintain Sprint backlog		$9,860
3.0.04	Daily Scrum “Standup” meetings		$9,860
3.0.05	“Scrum of Scrum” meetings		$9,860
3.0.06	Sprint burn-down reports		$9,860
3.0.07	Install and configure Sprint software in State’s “Dev”		$29,579
3.0.08	Sprint review in State’s “Dev”		$19,719
3.0.09	Sprint Retrospective		$9,860
	Implementation		
3.0.10	Data Migration / Conversion Plan (SEM-0601)		$39,439
3.0.11	Test Plan (SEM-0602)		$39,439
3.0.12	Requirements Traceability matrix (SEM-0401)		$39,439
3.0.13	Software configuration Plan (SEM-0302)		$39,439
3.0.14	Install and configure Sprint software in State’s “QA”		$29,579
3.0.15	UAT Defect tracking		$29,579
3.0.16	UAT approval sign-off		$9,860
3.0.17	Transition Plan (SEM-0701)		$39,439
3.0.18	Maintenance Plan (SEM-0301)		$39,439
3.0.19	Implementation Plan		$29,579
3.0.20	Operational Readiness report		$29,579
3.0.21	Installation Plan (SEM-0702)		$39,439

Task #	Project Milestone	Costing Details	Task Cost
3.0.22	Local and Enterprise Change Control Board Approval		$29,579
3.0.23	Install and configure Sprint software in State's "PROD"		$39,439
3.0.24	Implementation testing Approval sign-off		$29,579
3.0.25	User Acceptance Testing (UAT)		$39,439
3.0.26	Test Cases (SEM-0606)		$49,298
	Training		
3.0.27	Training Plan (SEM-0703)		$29,579
3.0.28	End User Training		$9,860
3.0.29	End User Documentation		$9,860
3.0.30	System Administrator training		$9,860
3.0.31	System Administrator Documentation		$9,860
3.0.32	Technical training		$9,860
3.0.33	Technical Documentation		$9,860
3.0.34	"Train the Trainer" training		$9,860
	Documentation		
3.0.35	Data dictionary		$29,579
3.0.36	Installation procedure documentation		$29,579
3.0.37	Module configuration documentation		$29,579
3.0.38	Testing scripts		$29,579
	Knowledge Transfer / Transition		
3.0.39	Warranty Defect tracking		$29,579
3.0.40	Warranty Software patches / updates		$19,711
	Release 1 / Warranty 1 Costs Total		**$985,965**

d) Table 4: Release 2/Warranty 2

Task #	Project Milestone	Costing Details	Task Cost
	Release 2 / Warranty 2		
	Application Development		
4.0.01	Maintain Product Backlog		$9,860
4.0.02	Sprint Planning		$19,719
4.0.03	Maintain Sprint backlog		$9,860
4.0.04	Daily Scrum “Standup” meetings		$9,860
4.0.05	“Scrum of Scrum” meetings		$9,860
4.0.06	Sprint burn-down reports		$9,860
4.0.07	Install and configure Sprint software in State’s “Dev”		$29,579
4.0.08	Sprint review in State’s “Dev”		$19,719
4.0.09	Sprint Retrospective		$9,860
	Implementation		
4.0.10	Data Migration / Conversion Plan (SEM-0601)		$39,439
4.0.11	Test Plan (SEM-0602)		$39,439
4.0.12	Requirements Traceability matrix (SEM-0401)		$39,439
4.0.13	Software configuration Plan (SEM-0302)		$39,439
4.0.14	Install and configure Sprint software in State’s “QA”		$29,579
4.0.15	UAT Defect tracking		$29,579
4.0.16	UAT approval sign-off		$9,860
4.0.17	Transition Plan (SEM-0701)		$39,439
4.0.18	Maintenance Plan (SEM-0301)		$39,439
4.0.19	Implementation Plan		$29,579
4.0.20	Operational Readiness report		$29,579
4.0.21	Installation Plan (SEM-0702)		$39,439

Task #	Project Milestone	Costing Details	Task Cost
4.0.22	Local and Enterprise Change Control Board Approval		$29,579
4.0.23	Install and configure Sprint software in State's "PROD"		$39,439
4.0.24	Implementation testing Approval sign-off		$29,579
4.0.25	User Acceptance Testing (UAT)		$39,439
4.0.26	Test Cases (SEM-0606)		$49,298
	Training		
4.0.27	Training Plan (SEM-0703)		$29,579
4.0.28	End User Training		$9,860
4.0.29	End User Documentation		$9,860
4.0.30	System Administrator training		$9,860
4.0.31	System Administrator Documentation		$9,860
4.0.32	Technical training		$9,860
4.0.33	Technical Documentation		$9,860
4.0.34	"Train the Trainer" training		$9,860
	Documentation		
4.0.35	Data dictionary		$29,579
4.0.36	Installation procedure documentation		$29,579
4.0.37	Module configuration documentation		$29,579
4.0.38	Testing scripts		$29,579
	Knowledge Transfer / Transition		
4.0.39	Warranty Defect tracking		$29,579
4.0.40	Warranty Software patches / updates		$19,711
	Release 2 / Warranty 2 Costs Total		**$985,965**

e) Table 5: Documentation (Release 2)

Task #	Project Milestone	Costing Details	Task Cost
	Documentation (Release 2)		
	Business Requirements		
5.0.01	Project Management Plan (PMM-0102)		$13,050
5.0.02	Detailed Project Schedule		$13,050
5.0.03	Requirements Specification (SEM-0402)		$13,050
5.0.04	Requirements Traceability matrix (SEM-0401)		$13,050
5.0.05	Product Backlog		$13,050
	Application Design		
5.0.06	Functional Design (SEM-0501)		$13,050
5.0.07	System Design (SEM-0604)		$17,399
5.0.08	Test Plan (SEM-0602)		$13,050
5.0.09	Data Migration / Conversion Plan (SEM-0601)		$13,050
5.0.10	eMichigan Review		$13,050
5.0.11	Enterprise Architecture Solution Assessment		$21,749
5.0.12	Security Assessment (DTMB 170)		$21,749
	Implementation		
5.0.13	Data Migration / Conversion Plan (SEM-0601)		$13,050
5.0.14	Test Plan (SEM-0602)		$17,399
5.0.15	Requirements Traceability matrix (SEM-0401)		$13,050
5.0.16	Software configuration Plan (SEM-0302)		$13,050
5.0.17	Transition Plan (SEM-0701)		$13,050
5.0.18	Maintenance Plan (SEM-0301)		$13,050
5.0.19	Implementation Plan		$13,050
5.0.20	Installation Plan (SEM-0702)		$17,399
5.0.21	User Acceptance Testing (UAT)		$13,050
5.0.22	Test Cases (SEM-0606)		$13,050

Task #	Project Milestone	Costing Details	Task Cost
	Training		
5.0.23	Training Plan (SEM-0703)		$17,399
5.0.24	End User Documentation		$17,399
5.0.25	System Administrator Documentation		$17,399
5.0.26	Technical Documentation		$13,050
	Documentation		
5.0.27	Data dictionary		$13,050
5.0.28	Installation procedure documentation		$13,050
5.0.29	Module configuration documentation		$13,050
5.0.30	Testing scripts		$13,042
	Documentation (Release 2) Costs Total		**$434,984**

f) Table 6: Release 3/Warranty 3

Task #	Project Milestone	Costing Details	Task Cost
	Release 3 / Warranty 3		
	Application Development		
6.0.01	Maintain Product Backlog		$9,860
6.0.02	Sprint Planning		$19,719
6.0.03	Maintain Sprint backlog		$9,860
6.0.04	Daily Scrum “Standup” meetings		$9,860
6.0.05	“Scrum of Scrum” meetings		$9,860
6.0.06	Sprint burn-down reports		$9,860
6.0.07	Install and configure Sprint software in State’s “Dev”		$29,579
6.0.08	Sprint review in State’s “Dev”		$19,719
6.0.09	Sprint Retrospective		$9,860
	Implementation		
6.0.10	Data Migration / Conversion Plan (SEM-0601)		$39,439
6.0.11	Test Plan (SEM-0602)		$39,439
6.0.12	Requirements Traceability matrix (SEM-0401)		$39,439
6.0.13	Software configuration Plan (SEM-0302)		$39,439
6.0.14	Install and configure Sprint software in State’s “QA”		$29,579
6.0.15	UAT Defect tracking		$29,579
6.0.16	UAT approval sign-off		$9,860
6.0.17	Transition Plan (SEM-0701)		$39,439
6.0.18	Maintenance Plan (SEM-0301)		$39,439
6.0.19	Implementation Plan		$29,579
6.0.20	Operational Readiness report		$29,579
6.0.21	Installation Plan (SEM-0702)		$39,439

Task #	Project Milestone	Costing Details	Task Cost
6.0.22	Local and Enterprise Change Control Board Approval		$29,579
6.0.23	Install and configure Sprint software in State's "PROD"		$39,439
6.0.24	Implementation testing Approval sign-off		$29,579
6.0.25	User Acceptance Testing (UAT)		$39,439
6.0.26	Test Cases (SEM-0606)		$49,298
	Training		
6.0.27	Training Plan (SEM-0703)		$29,579
6.0.28	End User Training		$9,860
6.0.29	End User Documentation		$9,860
6.0.30	System Administrator training		$9,860
6.0.31	System Administrator Documentation		$9,860
6.0.32	Technical training		$9,860
6.0.33	Technical Documentation		$9,860
6.0.34	"Train the Trainer" training		$9,860
	Documentation		
6.0.35	Data dictionary		$29,579
6.0.36	Installation procedure documentation		$29,579
6.0.37	Module configuration documentation		$29,579
6.0.38	Testing scripts		$29,579
	Knowledge Transfer / Transition		
6.0.39	Warranty Defect tracking		$29,579
6.0.40	Warranty Software patches / updates		$19,711
	Release 3 / Warranty 3 Costs Total		**$985,965**

g) Table 7: Release 4/Warranty 4 (Final)

Task #	Project Milestone	Costing Details	Task Cost
	Release 4 / Warranty 4 (Final)		
	Application Development		
7.0.01	Maintain Product Backlog		$9,860
7.0.02	Sprint Planning		$19,719
7.0.03	Maintain Sprint backlog		$9,860
7.0.04	Daily Scrum “Standup” meetings		$9,860
7.0.05	“Scrum of Scrum” meetings		$9,860
7.0.06	Sprint burn-down reports		$9,860
7.0.07	Install and configure Sprint software in State’s “Dev”		$29,579
7.0.08	Sprint review in State’s “Dev”		$19,719
7.0.09	Sprint Retrospective		$9,860
	Implementation		
7.0.10	Data Migration / Conversion Plan (SEM-0601)		$39,439
7.0.11	Test Plan (SEM-0602)		$39,439
7.0.12	Requirements Traceability matrix (SEM-0401)		$39,439
7.0.13	Software configuration Plan (SEM-0302)		$39,439
7.0.14	Install and configure Sprint software in State’s “QA”		$29,579
7.0.15	UAT Defect tracking		$29,579
7.0.16	UAT approval sign-off		$9,860
7.0.17	Transition Plan (SEM-0701)		$39,439
7.0.18	Maintenance Plan (SEM-0301)		$39,439
7.0.19	Implementation Plan		$29,579
7.0.20	Operational Readiness report		$29,579
7.0.21	Installation Plan (SEM-0702)		$39,439

Task #	Project Milestone	Costing Details	Task Cost
7.0.22	Local and Enterprise Change Control Board Approval		$29,579
7.0.23	Install and configure Sprint software in State's "PROD"		$39,439
7.0.24	Implementation testing Approval sign-off		$29,579
7.0.25	User Acceptance Testing (UAT)		$39,439
7.0.26	Test Cases (SEM-0606)		$49,298
	Training		
7.0.27	Training Plan (SEM-0703)		$29,579
7.0.28	End User Training		$9,860
7.0.29	End User Documentation		$9,860
7.0.30	System Administrator training		$9,860
7.0.31	System Administrator Documentation		$9,860
7.0.32	Technical training		$9,860
7.0.33	Technical Documentation		$9,860
7.0.34	"Train the Trainer" training		$9,860
	Documentation		
7.0.35	Data dictionary		$29,579
7.0.36	Installation procedure documentation		$29,579
7.0.37	Module configuration documentation		$29,579
7.0.38	Testing scripts		$29,579
	Knowledge Transfer / Transition		
7.0.39	Warranty Defect tracking		$29,579
7.0.40	Warranty Software patches / updates		$19,711
	Release 4 / Warranty 4 (Final) Costs Total		**$985,965**

h) Table 8: Documentation (Release 4 Final)

Task #	Project Milestone	Costing Details	Task Cost
	Documentation (Release 4 Final)		
	Business Requirements		
8.0.01	Project Management Plan (PMM-0102)		$13,050
8.0.02	Detailed Project Schedule		$13,050
8.0.03	Requirements Specification (SEM-0402)		$13,050
8.0.04	Requirements Traceability matrix (SEM-0401)		$13,050
8.0.05	Product Backlog		$13,050
	Application Design		
8.0.06	Functional Design (SEM-0501)		$13,050
8.0.07	System Design (SEM-0604)		$17,399
8.0.08	Test Plan (SEM-0602)		$13,050
8.0.09	Data Migration / Conversion Plan (SEM-0601)		$13,050
8.0.10	eMichigan Review		$13,050
8.0.11	Enterprise Architecture Solution Assessment		$21,749
8.0.12	Security Assessment (DTMB 170)		$21,749
	Implementation		
8.0.13	Data Migration / Conversion Plan (SEM-0601)		$13,050
8.0.14	Test Plan (SEM-0602)		$17,399
8.0.15	Requirements Traceability matrix (SEM-0401)		$13,050
8.0.16	Software configuration Plan (SEM-0302)		$13,050
8.0.17	Transition Plan (SEM-0701)		$13,050
8.0.18	Maintenance Plan (SEM-0301)		$13,050
8.0.19	Implementation Plan		$13,050
8.0.20	Installation Plan (SEM-0702)		$17,399
8.0.21	User Acceptance Testing (UAT)		$13,050
8.0.22	Test Cases (SEM-0606)		$13,050

Task #	Project Milestone	Costing Details	Task Cost
	Training		
8.0.23	Training Plan (SEM-0703)		$17,399
8.0.24	End User Documentation		$17,399
8.0.25	System Administrator Documentation		$17,399
8.0.26	Technical Documentation		$13,050
	Documentation		
8.0.27	Data dictionary		$13,050
8.0.28	Installation procedure documentation		$13,050
8.0.29	Module configuration documentation		$13,050
8.0.30	Testing scripts		$13,042
	Documentation (Release 4 Final) Costs Total		**$434,984**

i) Table 9: Labor Rates for Future Enhancements

#	Staffing Category	Key Staff	Firm Fixed Hourly Rate
11.01	Project Manager	☑	$150.00
11.02	Business Analyst	☑	$115.00
11.03	Senior Software Engineer	☑	$130.00
11.04	System Architect	☑	$140.00
11.05	Training Manager	☑	$125.00
11.06	Test Manager	☑	$125.00
11.07	Developer		$110.00
11.08	Other(s)		$0.00
			Estimated Total

Hourly rates quoted are firm, fixed, fully loaded rates for the duration of the contract. Travel and other expenses will not be reimbursed. “Estimated Hours” and “Extended Price” are non-binding and will be used at the State’s discretion to determine best value to the State. Actual funding for enhancements will occur on a yearly basis, and there is no guarantee as to the level of funding, if any, available to the project. For further information, see Statement of Work, Change Management section.

j) Table 10: Optional Maintenance and Support / Extended Warranty Beyond Final Release

Task #	Project Milestone	Costing Details	Task Cost
	Ongoing Maintenance / Extended Warranty (one year)		
12.0.1	Warranty Defect tracking		$25,000
12.0.2	Warranty Software patches / updates		$75,000
	Updated Documentation		
12.0.3	Data dictionary		$12,500
12.0.4	Installation procedure documentation		$12,500
12.0.5	Module configuration documentation		$12,500
12.0.6	Testing scripts		$12,500
	Maintenance and Support / Extended Warranty Beyond Final Release Costs Total		**$150,000**

k) Table 11: Summary Payment Schedule (Chronological Order)

Project Milestone	Bill Date*	Payment Amount
Payment: July Sprint Zero Activities	11/12/16	$542,281
Payment: Release 1, Sprint 1	12/16/16	$86,273
Payment: Release 1, Sprint 2	12/23/16	$86,273
Payment: August + September Sprint Zero Activities	1/6/17	$443,684
Payment: Release 1, Sprint 3	1/13/17	$86,273
Payment: Release 1, Sprint 4	1/28/17	$86,273
Payment: Release 1, Sprint 5	2/11/17	$86,273
Payment: Release 1, Sprint 6	2/22/17	$86,273
Payment: Release 1, Sprint 7	3/8/17	$86,272
Payment: Release 1, Sprint 8	3/22/17	$86,272
Payment: Release 2, Sprint 1	4/16/17	$86,273
Payment: Release 1 Implementation	5/10/17	$295,783
Payment: Release 2, Sprint 2	5/10/17	$86,273
Payment: Release 2, Sprint 3	5/24/17	$86,273
Payment: Release 2, Sprint 4	6/7/17	$86,273
Payment: Release 2, Sprint 5	6/21/17	$86,273
Payment: Release 2, Sprint 6	7/7/17	$86,273
Payment: Release 2, Sprint 7	7/21/17	$86,272
Payment: Release 2, Sprint 8	8/4/17	$86,272
Payment: Documentation (Release 2)	8/4/17	$434,984
Payment: Release 3, Sprint 1	8/26/17	$86,273
Payment: Release 2 Implementation	9/9/17	$295,783
Payment: Release 3, Sprint 2	9/9/17	$86,273
Payment: Release 3, Sprint 3	9/23/17	$86,273
Payment: Release 3, Sprint 4	10/6/17	$86,273
Payment: Release 3, Sprint 5	10/20/17	$86,273
Payment: Release 3, Sprint 6	11/11/17	$86,273
Payment: Release 3, Sprint 7	11/24/17	$86,272
Payment: Release 3, Sprint 8	12/8/17	$86,272
Payment: Release 4, Sprint 1	12/29/17	$86,273
Payment: Release 4, Sprint 2	1/12/18	$86,273
Payment: Release 4, Sprint 3	1/27/18	$86,273

Project Milestone	Bill Date*	Payment Amount
Payment: Release 3 Implementation	2/10/18	$295,783
Payment: Release 4, Sprint 4	2/10/18	$86,273
Payment: Release 4, Sprint 5	2/22/18	$86,273
Payment: Release 4, Sprint 6	3/7/18	$86,273
Payment: Release 4, Sprint 7	3/21/18	$86,272
Payment: Release 4, Sprint 8	4/5/18	$86,272
Payment: Documentation (Release 4 Final) Costs Total	4/12/18	$434,984
Payment: Release 4 Implementation	6/9/18	$295,783
TOTAL	-	$5,799,793

*Note – Dates are subject to change based on mutually agreed upon project schedule.

l) Table 12: Implementation Plan and Detailed Payment Table

Task #	Project Milestone	Duration	Start*	Finish*	Task Cost
	Planning (Sprint Zero / Initial Docs)	**66 days**	10/1/16	1/2/17	
2.0.15	Enterprise Architecture Solution Assessment	20 days	10/1/16	10/30/16	$49,298
2.0.16	Security Assessment (DTMB 170)	20 days	10/1/16	10/30/16	$49,299
2.0.03	Scope validation	21 days	10/1/16	10/31/16	$98,597
2.0.09	Product Backlog	21 days	10/1/16	10/31/16	$49,298
2.0.01	Attend and present at Kick-off Meeting	5 days	10/26/16	11/2/16	$49,298
2.0.05	Project Management Plan (PMM-0102)	23 days	10/1/16	11/2/16	$98,597
2.0.06	Detailed Project Schedule	23 days	10/1/16	11/2/16	$49,298
2.0.12	Test Plan (SEM-0602)	20 days	10/7/16	11/5/16	$49,298
2.0.13	Data Migration / Conversion Plan (SEM-0601)	20 days	10/7/16	11/5/16	$49,298
	Payment: July Sprint Zero Activities	**0 days**	11/12/16	11/12/16	**$542,281**
2.0.10	Functional Design (SEM-0501)	56 days	10/1/16	12/18/16	$49,298
2.0.04	Facilitate and attend Workgroup Meetings	63 days	10/1/16	12/27/16	$98,597
2.0.02	Requirements Analysis & Validation	66 days	10/1/16	1/2/17	$98,597
2.0.07	Requirements Specification (SEM-0402)	66 days	10/1/16	1/2/17	$49,298
2.0.08	Requirements Traceability matrix (SEM-0401)	66 days	10/1/16	1/2/17	$49,298
2.0.11	System Design (SEM-0604)	66 days	10/1/16	1/2/17	$49,298
2.0.14	eMichigan Review	10 days	12/19/16	1/2/17	$49,298
	Payment: August + September Sprint Zero Activities	**0 days**	1/6/17	1/6/17	**$443,684**
	Release 1 / Warranty 1	**122 days**	11/25/16	9/25/17	
	Release 1, Sprint 1	**10 days**	11/25/16	12/6/16	
3.0.01	Maintain Product Backlog	10 days	11/25/16	12/6/16	$1,233
3.0.02	Sprint Planning	10 days	11/25/16	12/6/16	$2,465
3.0.03	Maintain Sprint backlog	10 days	11/25/16	12/6/16	$1,233
3.0.04	Daily Scrum “Standup” meetings	10 days	11/25/16	12/6/16	$1,233
3.0.05	“Scrum of Scrum” meetings	10 days	11/25/16	12/6/16	$1,233
3.0.06	Sprint burn-down reports	10 days	11/25/16	12/6/16	$1,233
3.0.07	Install and configure Sprint software in State’s “Dev”	10 days	11/25/16	12/6/16	$3,697
3.0.08	Sprint review in State’s “Dev”	10 days	11/25/16	12/6/16	$2,465
3.0.09	Sprint Retrospective	10 days	11/25/16	12/6/16	$1,233
3.0.10	Data Migration / Conversion Plan (SEM-0601)	10 days	11/25/16	12/6/16	$4,930
3.0.11	Test Plan (SEM-0602)	10 days	11/25/16	12/6/16	$4,930
3.0.12	Requirements Traceability matrix (SEM-0401)	10 days	11/25/16	12/6/16	$4,930
3.0.13	Software configuration Plan (SEM-0302)	10 days	11/25/16	12/6/16	$4,930
3.0.14	Install and configure Sprint software in State’s “QA”	10 days	11/25/16	12/6/16	$3,697
3.0.17	Transition Plan (SEM-0701)	10 days	11/25/16	12/6/16	$4,930
3.0.18	Maintenance Plan (SEM-0301)	10 days	11/25/16	12/6/16	$4,930
3.0.19	Implementation Plan	10 days	11/25/16	12/6/16	$3,697

Task #	Project Milestone	Duration	Start*	Finish*	Task Cost
3.0.26	Test Cases (SEM-0606)	10 days	11/25/16	12/6/16	$6,162
3.0.27	Training Plan (SEM-0703)	10 days	11/25/16	12/6/16	$3,697
3.0.28	End User Training	10 days	11/25/16	12/6/16	$1,233
3.0.29	End User Documentation	10 days	11/25/16	12/6/16	$1,233
3.0.30	System Administrator training	10 days	11/25/16	12/6/16	$1,233
3.0.31	System Administrator Documentation	10 days	11/25/16	12/6/16	$1,233
3.0.32	Technical training	10 days	11/25/16	12/6/16	$1,233
3.0.33	Technical Documentation	10 days	11/25/16	12/6/16	$1,233
3.0.34	"Train the Trainer" training	10 days	11/25/16	12/6/16	$1,233
3.0.35	Data dictionary	10 days	11/25/16	12/6/16	$3,696
3.0.36	Installation procedure documentation	10 days	11/25/16	12/6/16	$3,696
3.0.37	Module configuration documentation	10 days	11/25/16	12/6/16	$3,696
3.0.38	Testing scripts	10 days	11/25/16	12/6/16	$3,696
	Payment: Release 1, Sprint 1	**0 days**	12/16/16	12/16/16	**$86,273**
	Release 1, Sprint 2	**10 days**	12/9/16	12/20/16	
	Payment: Release 1, Sprint 2	**0 days**	12/23/16	12/23/16	**$86,273**
	Release 1, Sprint 3	**10 days**	12/23/16	1/6/17	
	Payment: Release 1, Sprint 3	**0 days**	1/13/17	1/13/17	**$86,273**
	Release 1, Sprint 4	**10 days**	1/7/17	1/20/17	
	Payment: Release 1, Sprint 4	**0 days**	1/28/17	1/28/17	**$86,273**
	Release 1, Sprint 5	**10 days**	1/21/17	2/4/17	
	Payment: Release 1, Sprint 5	**0 days**	2/11/17	2/11/17	**$86,273**
	Release 1, Sprint 6	**10 days**	2/5/17	2/18/17	
	Payment: Release 1, Sprint 6	**0 days**	2/22/17	2/22/17	**$86,273**
	Release 1, Sprint 7	**10 days**	2/19/17	3/2/17	
	Payment: Release 1, Sprint 7	**0 days**	3/8/17	3/8/17	**$86,272**
	Release 1, Sprint 8	**10 days**	3/3/17	3/17/17	
	Payment: Release 1, Sprint 8	**0 days**	3/22/17	3/22/17	**$86,272**
	Release 1 Implementation				
3.0.15	UAT Defect tracking	15 days	3/30/17	4/21/17	$29,579
3.0.16	UAT approval sign-off	5 days	4/22/17	4/29/17	$9,860
3.0.20	Operational Readiness report	5 days	4/30/17	5/6/17	$29,579
3.0.21	Installation Plan (SEM-0702)	7 days	5/17/17	5/25/17	$39,439
3.0.22	Local and Enterprise Change Control Board Approval	5 days	4/30/17	5/6/17	$29,579
3.0.23	Install and configure Sprint software in State's "PROD"	5 days	5/7/17	5/14/17	$39,439
3.0.24	Implementation testing Approval sign-off	5 days	4/30/17	5/6/17	$29,579
3.0.25	User Acceptance Testing (UAT)	15 days	3/30/17	4/21/17	$39,439
3.0.39	Warranty Defect tracking	85 days	5/26/17	9/25/17	$29,579
3.0.40	Warranty Software patches / updates	85 days	5/26/17	9/25/17	$19,711
	Payment: Release 1 Implementation	**0 days**	5/10/17	5/10/17	**$295,783**
	Release 2 / Warranty 2	**122 days**	3/30/17	1/24/18	

Task #	Project Milestone	Duration	Start*	Finish*	Task Cost
	Release 2, Sprint 1	**10 days**	3/30/17	4/10/17	
	Payment: Release 2, Sprint 1	**0 days**	4/16/17	4/16/17	**$86,273**
	Release 2, Sprint 2	**10 days**	4/13/17	4/29/17	
	Payment: Release 2, Sprint 2	**0 days**	5/10/17	5/10/17	**$86,273**
	Release 2, Sprint 3	**10 days**	4/30/17	5/14/17	
	Payment: Release 2, Sprint 3	**0 days**	5/24/17	5/24/17	**$86,273**
	Release 2, Sprint 4	**10 days**	5/17/17	5/28/17	
	Payment: Release 2, Sprint 4	**0 days**	6/7/17	6/7/17	**$86,273**
	Release 2, Sprint 5	**10 days**	5/31/17	6/11/17	
	Payment: Release 2, Sprint 5	**0 days**	6/21/17	6/21/17	**$86,273**
	Release 2, Sprint 6	**10 days**	6/15/17	6/30/17	
	Payment: Release 2, Sprint 6	**0 days**	7/7/17	7/7/17	**$86,273**
	Release 2, Sprint 7	**10 days**	7/1/17	7/14/17	
	Payment: Release 2, Sprint 7	**0 days**	7/21/17	7/21/17	**$86,272**
	Release 2, Sprint 8	**10 days**	7/15/17	7/28/17	
	Payment: Release 2, Sprint 8	**0 days**	8/4/17	8/4/17	**$86,272**
	Release 2 Implementation				
4.0.15	UAT Defect tracking	15 days	8/5/17	8/26/17	$29,579
4.0.16	UAT approval sign-off	5 days	8/27/17	9/2/17	$9,860
4.0.20	Operational Readiness report	5 days	9/3/17	9/9/17	$29,579
4.0.21	Installation Plan (SEM-0702)	7 days	9/17/17	9/25/17	$39,439
4.0.22	Local and Enterprise Change Control Board Approval	5 days	9/3/17	9/9/17	$29,579
4.0.23	Install and configure Sprint software in State's "PROD"	5 days	9/10/17	9/16/17	$39,439
4.0.24	Implementation testing Approval sign-off	5 days	9/3/17	9/9/17	$29,579
4.0.25	User Acceptance Testing (UAT)	15 days	8/5/17	8/26/17	$39,439
4.0.39	Warranty Defect tracking	85 days	9/26/17	1/24/18	$29,579
4.0.40	Warranty Software patches / updates	85 days	9/26/17	1/24/18	$19,711
	Payment: Release 2 Implementation	**0 days**	9/9/17	9/9/17	**$295,783**
	Documentation (Release 2)	**0 days**	7/28/17	7/28/17	
5.0.01	Project Management Plan (PMM-0102)	0 days	7/28/17	7/28/17	$13,050
5.0.02	Detailed Project Schedule	0 days	7/28/17	7/28/17	$13,050
5.0.03	Requirements Specification (SEM-0402)	0 days	7/28/17	7/28/17	$13,050
5.0.04	Requirements Traceability matrix (SEM-0401)	0 days	7/28/17	7/28/17	$13,050
5.0.05	Product Backlog	0 days	7/28/17	7/28/17	$13,050
5.0.06	Functional Design (SEM-0501)	0 days	7/28/17	7/28/17	$13,050
5.0.07	System Design (SEM-0604)	0 days	7/28/17	7/28/17	$17,399
5.0.08	Test Plan (SEM-0602)	0 days	7/28/17	7/28/17	$13,050
5.0.09	Data Migration / Conversion Plan (SEM-0601)	0 days	7/28/17	7/28/17	$13,050
5.0.10	eMichigan Review	0 days	7/28/17	7/28/17	$13,050
5.0.11	Enterprise Architecture Solution Assessment	0 days	7/28/17	7/28/17	$21,749
5.0.12	Security Assessment (DTMB 170)	0 days	7/28/17	7/28/17	$21,749

Task #	Project Milestone	Duration	Start*	Finish*	Task Cost
5.0.13	Data Migration / Conversion Plan (SEM-0601)	0 days	7/28/17	7/28/17	$13,050
5.0.14	Test Plan (SEM-0602)	0 days	7/28/17	7/28/17	$17,399
5.0.15	Requirements Traceability matrix (SEM-0401)	0 days	7/28/17	7/28/17	$13,050
5.0.16	Software configuration Plan (SEM-0302)	0 days	7/28/17	7/28/17	$13,050
5.0.17	Transition Plan (SEM-0701)	0 days	7/28/17	7/28/17	$13,050
5.0.18	Maintenance Plan (SEM-0301)	0 days	7/28/17	7/28/17	$13,050
5.0.19	Implementation Plan	0 days	7/28/17	7/28/17	$13,050
5.0.20	Installation Plan (SEM-0702)	0 days	7/28/17	7/28/17	$17,399
5.0.21	User Acceptance Testing (UAT)	0 days	7/28/17	7/28/17	$13,050
5.0.22	Test Cases (SEM-0606)	0 days	7/28/17	7/28/17	$13,050
5.0.23	Training Plan (SEM-0703)	0 days	7/28/17	7/28/17	$13,050
5.0.24	End User Documentation	0 days	7/28/17	7/28/17	$17,399
5.0.25	System Administrator Documentation	0 days	7/28/17	7/28/17	$17,399
5.0.26	Technical Documentation	0 days	7/28/17	7/28/17	$17,399
5.0.27	Data dictionary	0 days	7/28/17	7/28/17	$13,050
5.0.28	Installation procedure documentation	0 days	7/28/17	7/28/17	$13,050
5.0.29	Module configuration documentation	0 days	7/28/17	7/28/17	$13,050
5.0.30	Testing scripts	0 days	7/28/17	7/28/17	$13,042
	Payment: Documentation (Release 2)		8/4/17	8/4/17	**$434,984**
	Release 3 / Warranty 3	**122 days**	8/5/17	5/25/18	
	Release 3, Sprint 1	**10 days**	8/5/17	8/18/17	
	Payment: Release 3, Sprint 1	**0 days**	8/26/17	8/26/17	**$86,273**
	Release 3, Sprint 2	**10 days**	8/19/17	9/2/17	
	Payment: Release 3, Sprint 2	**0 days**	9/9/17	9/9/17	**$86,273**
	Release 3, Sprint 3	**10 days**	9/3/17	9/16/17	
	Payment: Release 3, Sprint 3	**0 days**	9/23/17	9/23/17	**$86,273**
	Release 3, Sprint 4	**10 days**	9/17/17	9/30/17	
	Payment: Release 3, Sprint 4	**0 days**	10/6/17	10/6/17	**$86,273**
	Release 3, Sprint 5	**10 days**	10/1/17	10/14/17	
	Payment: Release 3, Sprint 5	**0 days**	10/20/17	10/20/17	**$86,273**
	Release 3, Sprint 6	**10 days**	10/15/17	10/30/17	
	Payment: Release 3, Sprint 6	**0 days**	11/11/17	11/11/17	**$86,273**
	Release 3, Sprint 7	**10 days**	10/31/17	11/13/17	
	Payment: Release 3, Sprint 7	**0 days**	11/24/17	11/24/17	**$86,272**
	Release 3, Sprint 8	**10 days**	11/14/17	11/26/17	
	Payment: Release 3, Sprint 8	**0 days**	12/8/17	12/8/17	**$86,272**
	Release 3 Implementation				
6.0.15	UAT Defect tracking	15 days	12/4/17	12/24/17	$29,579
6.0.16	UAT approval sign-off	5 days	12/25/17	1/1/18	$9,860
6.0.20	Operational Readiness report	5 days	1/2/18	1/8/18	$29,579
6.0.21	Installation Plan (SEM-0702)	7 days	1/19/18	1/27/18	$39,439

Task #	Project Milestone	Duration	Start*	Finish*	Task Cost
6.0.22	Local and Enterprise Change Control Board Approval	5 days	1/2/18	1/8/18	$29,579
6.0.23	Install and configure Sprint software in State's "PROD"	5 days	1/9/18	1/15/18	$39,439
6.0.24	Implementation testing Approval sign-off	5 days	1/2/18	1/8/18	$29,579
6.0.25	User Acceptance Testing (UAT)	15 days	12/4/17	12/24/17	$39,439
6.0.39	Warranty Defect tracking	81 days	1/28/18	5/25/18	$29,579
6.0.40	Warranty Software patches / updates	81 days	1/28/18	5/25/18	$19,711
	Payment: Release 3 Implementation	**0 days**	2/10/18	2/10/18	**$295,783**
	Release 4 / Warranty 4 (Final)	**122 days**	12/4/17	9/30/18	
	Release 4, Sprint 1	**10 days**	12/4/17	12/17/17	
	Payment: Release 4, Sprint 1	**0 days**	12/29/17	12/29/17	**$86,273**
	Release 4, Sprint 2	**10 days**	12/18/17	1/1/18	
	Payment: Release 4, Sprint 2	**0 days**	1/12/18	1/12/18	**$86,273**
	Release 4, Sprint 3	**10 days**	1/2/18	1/15/18	
	Payment: Release 4, Sprint 3	**0 days**	1/27/18	1/27/18	**$86,273**
	Release 4, Sprint 4	**10 days**	1/16/18	1/29/18	
	Payment: Release 4, Sprint 4	**0 days**	2/10/18	2/10/18	**$86,273**
	Release 4, Sprint 5	**10 days**	1/30/18	2/12/18	
	Payment: Release 4, Sprint 5	**0 days**	2/22/18	2/22/18	**$86,273**
	Release 4, Sprint 6	**10 days**	2/13/18	2/23/18	
	Payment: Release 4, Sprint 6	**0 days**	3/7/18	3/7/18	**$86,273**
	Release 4, Sprint 7	**10 days**	2/24/18	3/10/18	
	Payment: Release 4, Sprint 7	**0 days**	3/21/18	3/21/18	**$86,272**
	Release 4, Sprint 8	**10 days**	3/11/18	3/29/18	
	Payment: Release 4, Sprint 8	**0 days**	4/5/18	4/5/18	**$86,272**
	Release 4 Implementation				
7.0.15	UAT Defect tracking	15 days	4/6/18	4/28/18	$29,579
7.0.16	UAT approval sign-off	5 days	4/29/18	5/5/18	$9,860
7.0.20	Operational Readiness report	5 days	5/6/18	5/12/18	$29,579
7.0.21	Installation Plan (SEM-0702)	7 days	5/20/18	5/30/18	$39,439
7.0.22	Local and Enterprise Change Control Board Approval	5 days	5/6/18	5/12/18	$29,579
7.0.23	Install and configure Sprint software in State's "PROD"	5 days	5/13/18	5/19/18	$39,439
7.0.24	Implementation testing Approval sign-off	5 days	5/6/18	5/12/18	$29,579
7.0.25	User Acceptance Testing (UAT)	15 days	4/6/18	4/28/18	$39,439
7.0.39	Warranty Defect tracking	90 days	5/31/18	9/30/18	$29,579
7.0.40	Warranty Software patches / updates	90 days	5/31/18	9/30/18	$19,711
	Payment: Release 4 Implementation	**0 days**	6/9/18	6/9/18	**$295,783**
	Documentation (Release 4 Final)	0 days	3/30/18	3/30/18	
8.0.01	Project Management Plan (PMM-0102)	0 days	3/30/18	3/30/18	$13,050
8.0.02	Detailed Project Schedule	0 days	3/30/18	3/30/18	$13,050
8.0.03	Requirements Specification (SEM-0402)	0 days	3/30/18	3/30/18	$13,050

Task #	Project Milestone	Duration	Start*	Finish*	Task Cost
8.0.04	Requirements Traceability matrix (SEM-0401)	0 days	3/30/18	3/30/18	$13,050
8.0.05	Product Backlog	0 days	3/30/18	3/30/18	$13,050
8.0.06	Functional Design (SEM-0501)	0 days	3/30/18	3/30/18	$13,050
8.0.07	System Design (SEM-0604)	0 days	3/30/18	3/30/18	$17,399
8.0.08	Test Plan (SEM-0602)	0 days	3/30/18	3/30/18	$13,050
8.0.09	Data Migration / Conversion Plan (SEM-0601)	0 days	3/30/18	3/30/18	$13,050
8.0.10	eMichigan Review	0 days	3/30/18	3/30/18	$13,050
8.0.11	Enterprise Architecture Solution Assessment	0 days	3/30/18	3/30/18	$21,749
8.0.12	Security Assessment (DTMB 170)	0 days	3/30/18	3/30/18	$21,749
8.0.13	Data Migration / Conversion Plan (SEM-0601)	0 days	3/30/18	3/30/18	$13,050
8.0.14	Test Plan (SEM-0602)	0 days	3/30/18	3/30/18	$17,399
8.0.15	Requirements Traceability matrix (SEM-0401)	0 days	3/30/18	3/30/18	$13,050
8.0.16	Software configuration Plan (SEM-0302)	0 days	3/30/18	3/30/18	$13,050
8.0.17	Transition Plan (SEM-0701)	0 days	3/30/18	3/30/18	$13,050
8.0.18	Maintenance Plan (SEM-0301)	0 days	3/30/18	3/30/18	$13,050
8.0.19	Implementation Plan	0 days	3/30/18	3/30/18	$13,050
8.0.20	Installation Plan (SEM-0702)	0 days	3/30/18	3/30/18	$17,399
8.0.21	User Acceptance Testing (UAT)	0 days	3/30/18	3/30/18	$13,050
8.0.22	Test Cases (SEM-0606)	0 days	3/30/18	3/30/18	$13,050
8.0.23	Training Plan (SEM-0703)	0 days	3/30/18	3/30/18	$13,050
8.0.24	End User Documentation	0 days	3/30/18	3/30/18	$17,399
8.0.25	System Administrator Documentation	0 days	3/30/18	3/30/18	$17,399
8.0.26	Technical Documentation	0 days	3/30/18	3/30/18	$17,399
8.0.27	Data dictionary	0 days	3/30/18	3/30/18	$13,050
8.0.28	Installation procedure documentation	0 days	3/30/18	3/30/18	$13,050
8.0.29	Module configuration documentation	0 days	3/30/18	3/30/18	$13,050
8.0.30	Testing scripts	0 days	3/30/18	3/30/18	$13,042
	Payment: Documentation (Release 4 Final) Costs Total	**0 days**	4/12/18	4/12/18	**$434,984**

*Note – Dates are subject to change based on mutually agreed upon project schedule.

STATE OF MICHIGAN

CONTRACT 071B6600129

DETAILED REQUIREMENTS SPECIFICATIONS

FOR

LAND OWNERSHIP TRACKING SYSTEM (LOTS) REWRITE

Table of Contents

Glossary

Definitions and Abbreviations Commonly Used in this Document:

LOTS	Land Ownership Tracking System
DNR	Michigan Department of Natural Resources
DTMB	The Department of Technology, Management and Budget: the state agency that has the responsibility for technology and purchasing.
Normal Business Day	8:00 am – 5:00 pm, Monday thru Friday, excluding SOM holidays or days when SOM office locations at which the work to be performed are closed due to weather, natural disasters, power outages, fires, man-made disasters, and similar circumstances.
System	The web application solution to be provided by the vendor.

Overview

Requirement Categories:	**E** = Essential (Existing Core Functionality) **P** = Preferred (improves business process) **O =** Optional (nice to have)

1. Exhibit 1 – Maintain Parcel

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The system must provide a User Interface to maintain Parcel information.	E
2	The system must allow an authorized user to create a Parcel record. *Note: This is done outside of case processing where a parcel is created and attached to a case. In this particular user interface the system must allow an authorized user to create a Parcel record and attach it to a document and not the case.*	E
2.1	The system must assign a unique Parcel ID for each newly created Parcel record.	E
3	The system must provide an authorized user with the ability to find parcel(s) based on any or all of the following search criteria: • Town/Range/Section/Q/QQ • Legal Description • County • Local Par Number • Admin Agency • Parcel Type • Parcel Status • Jurisdiction Name • Jurisdiction Type • Ward/Item • Tax Sale Year/Number • Street Name/Direction • Private Claim Number • Parcel ID • Subdivision • Block • Lot • Consolidation Status • State OG Ownership • Trespass Number • CIS Index • Subdivision ID • Subdivision Liber • Subdivision Liber Page • Jurisdiction ID • REIS Sub Code Number	E

Business Req. No.	• Detailed Requirement Description	Category
3.1	The system must allow an authorized user to search Parcels based on any or all of the following document information attached to a parcel: • Document Number • Transaction Type • Inventory Action • Most Recent Type • Doc Date • Document ID • Certificate Number • Exchange Case Number • Public Act • Fund Type • Party Relation Type • WSFR/FBMS • P-Key • Grant Name • Grant Date *Note: The WSFR Grant number would be named as FBMS number by the US Fish and Wildlife services.*	E
3.1.1	The system must allow an authorized user to search parcels by selecting Multiple Fund types.	P
3.2	The system must search Parcels based on any or all of the following Party Information on a Parcel: • Party ID • Party Type • Grantor Type • Address Type • Last Name • First Name • Address Line 1 • Address Line 2 • Address Line 3 • Party FID • Phone # • Email • City/State/Zip/Country • Marital Status • H/W ID • H/W number	E

Business Req. No.	• Detailed Requirement Description	Category
3.3	The system must allow an authorized user to search Parcels based on any or all of the following Current Rights information on a Parcel: Current Right Name (Drop down menu) • Percent Owned • Reservation (Yes/No) • Expiration Date • Reservation Period • Reversion(Yes/No) • Expiration Date • Reversion Period	E
3.3.1	The system must allow an authorized user to Select one or multiple Current Right(s) from the drop down menu to display list of Parcels associated to those rights.	P
3.3.2	The system must allow an authorized user to select one or multiple Reservation and Reversion user fields for each Current Right selected.	P
3.4	The system must allow an authorized user to search Parcels based on following Project information on a Parcel: • Project Use • Project Name • Department • Category • Admin Division	E
3.5	The system must allow an authorized user to search Parcels based on following Activities information associated to a Parcel: • Activity Name OR • Date *Note: The system must consider the manually entered date at the time of activity assignment and not a system generated date/time stamp value.*	E

Business Req. No.	• Detailed Requirement Description	Category
3.6	The system must allow an authorized user to search Parcels based on any or all the following Land Exam information on a Parcel: • Examiner ID • Land Exam ID • LEX Par ID • Examiner Name • Possible Contamination • Recommendation • Special Assessment • Completion Date • Minimum Bid • Property Type • Occupied Served • Check Box for FMFM/Parks/Wildlife/Fish • DNR Comment • Check Box for Most Recent Exam	E
3.7	The system must allow an authorized user to search Parcels based on following Disclosures information on a Parcel: • Disclosure Name • Date	E

Business Req. No.	• Detailed Requirement Description	Category

3.8	The system must allow an authorized user to search Parcels based on any or all of the following Lease information on a parcel:
	• Lease Number
	• Lease Number Suffix
	• Lease Type
	• Current Lease Class
	• Previous Lease Class
	• Lease Status
	• HBP (Yes/No/Not Applicable)
	• Lease On Hold
	• Terms ID
	• Extension Status
	• Lease Date
	• Lease Expiration Date
	• Lease End Date
	• Sent to Record Center Date
	• Lessee
	• Parcel ID
	• Parcel Location
	  ✓ County
	  ✓ (Town/Range/Section/Q/QQ)
	• Mineral Parcel Fund
	• Surface Parcel Fund
		E

3.8.1	The system must allow an authorized user to select one or multiple Min Par Funds/Sur Par funds from the drop down menu to display a List of Parcels associated with those funds.	P
3.9	The system must validate the criteria entered by the user and throw appropriate error message in case of "invalid criteria" or "parcels not found".	E
3.10	The system must provide the search criteria to find all parcel records that have null values in a particular field.	P
3.11	The system must consider all the find parcel criteria entered by user as a single condition rather than a nested condition for search.	E
3.12	The system must provide a Query Tool with complex querying capabilities, allowing user to enter 'and', 'or' or any other condition user may choose. The user must be able to filter query results if needed or re- query results.	P
3.13	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E
4	The system must display Maintain Parcel Window with the list of parcel(s) and list of all related documents.	E

Business Req. No.	• Detailed Requirement Description	Category
5	• The system must display following details of a parcel selected by an authorized user: • Parcel Status • Environmental Status • Admin Agency • Certificate # • Category • Parcel Type • Building • Water Frontage • Project Use • Data Source • Project Name • Trespass Number • Consolidation Status • Legal Description • Date/Time stamp • Restriction Name	E
5.1	The system must allow an authorized user to Add/Update the details on the parcel details tab and save the changes.	E
6	The system must display following Location details on a parcel: • Total Acreage • Ward/Item • County • Street Name/Direction • Legal Description • Town/Range/Section/QQ/Q/Acreage • Private Claim/Acreage/Whole Lots/Fraction Lots • Jurisdiction ID/Jurisdiction Type/Jurisdiction Name	E
6.1	The system must allow an authorized user to Add/Update location details on a parcel with an appropriate date/time stamp value.	E
6.2	The system must allow an authorized user to Add/Update/Delete one or multiple Town/Range/Section/QQ/Q/Acreage fields and Pvt. Claim/Acreage/Whole Lots/Fraction Lots fields.	E
6.2.1	The system must allow an authorized user to save updates to the Location detail. The system must throw an error if the multiple location acreages do not sum up to the manually entered Total acreage field.	E

Business Req. No.	• Detailed Requirement Description	Category
6.3	The system must allow an authorized user to Add/Change/Remove one or multiple Jurisdiction information.	E
6.3.1	The system must allow an authorized user to select the Jurisdiction data from the system reference table in case the user needs to Add a new Jurisdiction record on a Parcel.	E
7	The system must display following Subdivision information on a parcel: • Subdivision Name • Subdivision Liber • Subdivision Liber page • Subdivision ID • CIS Index • REIS Sub Code number • Whole Lots • Fraction Lots • Block/Lot/Lot Fraction • Date/Time stamp	E
7.1	The system must allow an authorized user to Associate a Subdivision record on a parcel by selecting a Subdivision from the system reference table.	E
7.2	The system must allow an authorized user to Remove a Subdivision record on the parcel.	E
7.3	The system must allow an authorized user to Add/Update/Delete one or multiple Block/Lot/Lot Fraction fields.	E
8	The system must display following Current Rights details on a Parcel: • State OG Ownership • Opinion Date • Opinion Received Date • Right Name/Right%/Reservation/Period (Years)/Expiration/Reversion/Period (Years)/Revert Date	E
8.1	The system must allow an authorized user to Add/Update/Delete and restore one or multiple Right Name/Right%/Reservation/Period (Years)/Expiration/Reversion/Period (Years)/Revert Date fields.	E
8.2	The system must provide upload function to allow an authorized user to save a scanned copy of any attorney title opinion file.	E
8.3	The system must provide “Apply rights to all” function through the documents attached to the parcel.	E

Business Req. No.	• Detailed Requirement Description	Category
9	The system must display following Easement details on a Parcel: Granted Easement • Document ID • Easement Use • Length • Width • Temporary • Consideration Acquired Easement • Document ID • Easement Use • Easement type • Length • Width • Tax • Rent Term • Rent Amount • Renew Date • Expire Date • Tickler Date	E
9.1	The system must allow an authorized user to Add/Update/Delete and restore one or multiple Granted and Acquired easement information on a Parcel.	E
10	The system must display Parcel Genealogy information with Parcel ID, Date, Parcel type and Acreage details.	E
11	The system must display following Par Number details on a Parcel: • Date • Type • Tax Sale Year • Ward • Number	E
11.1	The system must allow an authorized user to Add/Update/Delete and restore one or multiple Par Number records.	E

Business Req. No.	• Detailed Requirement Description	Category
12	The system must display following Fund details on a Parcel: • Document ID • Fund% • Fund Code • Fund Name • Date/Time stamp value	E
12.1	The system must allow an authorized user to Add/Update/Delete and restore one or multiple Fund records.	E
13	The system must display comments on a Parcel.	E
13.1	The system must allow an authorized user to Add/Update/Delete and restore a Comment with an appropriate date/time stamp value.	E
14	The system must display description of a parcel and allow an authorized user to add/update/delete a description with an appropriate date/time stamp value.	E
15	The system must display compatible Activities to be assigned/Un-assigned to a parcel.	E
15.1	The system must allow an authorized user to manually assign/un-assign one or multiple activities to a parcel.	E
15.2	The system must provide for automated activities to be assigned to a parcel if they are compatible activities.	E
15.3	The system must allow a warning activity to be assigned to a parcel with a warning message if permitted by other activities on the parcel.	E
15.4	The system must auto-update Parcel activities based on triggers from VMS. *Note: Please refer to VMS interface for more details.*	P

Business Req. No.	• Detailed Requirement Description	Category
16	The system must display the Land Exam record on a parcel with following details: • Land Exam ID • LEX Par ID • Examiner ID • Examiner • Possible Contamination • Recommendation • Special Assessment • Completion Date • Minimum Bid • Property Type • Occupied Served • DNR Comment • Suggested Division Use • (FMFM/Parks/Wildlife/Fish)	E
16.1	The system must allow an authorized user to Add/Update Land Exam information on a parcel.	E
16.2	The system must allow an authorized user to attach/detach photos of parcels with Latitude/Longitude data.	E
17	The system must allow an authorized user to assign/un-assign one or multiple Disclosures to a Parcel.	E
18	The system must display following Lease details on a Parcel: • Lease Number • Lease Type • Lease Status • HBP • Lessee • Lease Date • Expiration Date • Note/Class • Extension Status	E
18.1	The system must provide a RMB option to an authorized user to access more Lease details. *NOTE: More Lease details are mentioned in Maintain Lease section of the document.*	E
19	The system must allow an authorized user to attach/detach files to a parcel record.	E

Business Req. No.	• Detailed Requirement Description	Category
20	The system must display following WSFR/FBMS details on a Parcel: • WSFR Grant Program • WSFR Grant Name • Primary-Key • DNR Document ID • WSFR Grant Acres • WSFR Transaction Grant Date • WSFR Transaction Amount • WSFR Transaction Fund % • Trans Acquired Interest • Trans Land Acquisition Price	E
20.1	The system must allow an authorized user to Add/Update/Delete one or multiple WSFR/FBMS details on a Parcel record.	E
20.2	The system must allow an authorized user to enter 2 different P-keys for parcels acquired through same fund with same DOCUMENT ID but authorized under 2 different Primary-Keys.	P
20.3	The system must allow an authorized user to Add/Update/Delete one or multiple conditions from the drop down list and add comments on the WSFR/FBMS details on a Parcel record.	E
21	The system must display following details of document(s) attached to a Parcel: • Document Sequence Number • Document Number • Document ID • Document Date • Transaction Type • Inventory Action • Document Type • Surface % • Mineral % • Other Rights • Party • Rev Deed • Comments • Case Number • Case Date	E
21.1	The system must allow an authorized user to view image files of deeds (documents) attached to a Parcel.	E

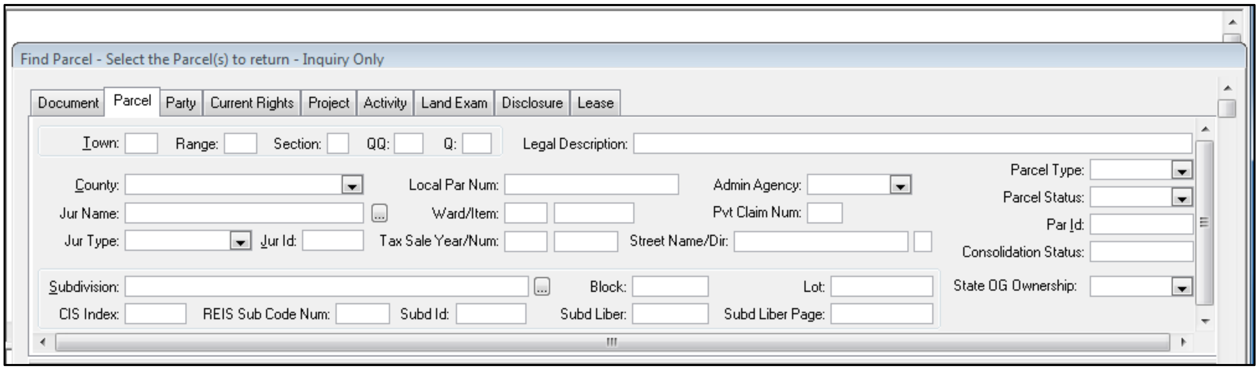
Busines s Req. No.	• Detailed Requirement Description	Category
21.2	The system must allow an authorized user to View additional details on document(s) by re-directing the user to Maintain Document details screen. *Note: Please refer to Maintain Document Details for more info on Documents.*	E
22	The system must allow an authorized user to View Case Details on a Parcel by providing a RMB option and re-directing a user to Maintain Case screen. *Note: Please refer to Maintain Case window for more info on Case details.*	E
23	The system must allow an authorized user to View Timber Sale information on a Parcel if a Parcel is involved in an active Timber Sale Activity by providing a RMB option.	O
24	The system must provide a RMB option to allow an authorized user to View an Aerial Map of the Parcel by re-directing to GIS interface. *Note: Please refer to GIS interface for more info on Maps.*	E
25	The system must display the “Trespass Number” field in the search criteria and parcel details tab if a parcel has a trespass record. *Note: The Trespass number would be imported from DNR’s GIS Enterprise Environment database.*	P
26	The system must provide a Capital Improvements tab on a Parcel for Audit purposes.	E
26.1	The system must allow an authorized user to View and Edit (MANUALLY) the following Capital Improvements details on a Parcel: • Type of facility constructed or improved • Grant Title • Federal share of development project cost • Total cost of capital improvement project • Description of source for non-federal share of total cost (e.g. State license $, other State funds, third party donation, etc.) • Latitude and Longitude • Calendar Year in which the facility was constructed or improved • Useful Life of newly constructed Capital Improvement or added years of useful life from this federally funded improvement project (see WSFR regulations at 50 CFR 80 for definitions and explanations) • Notes, other explanation	E

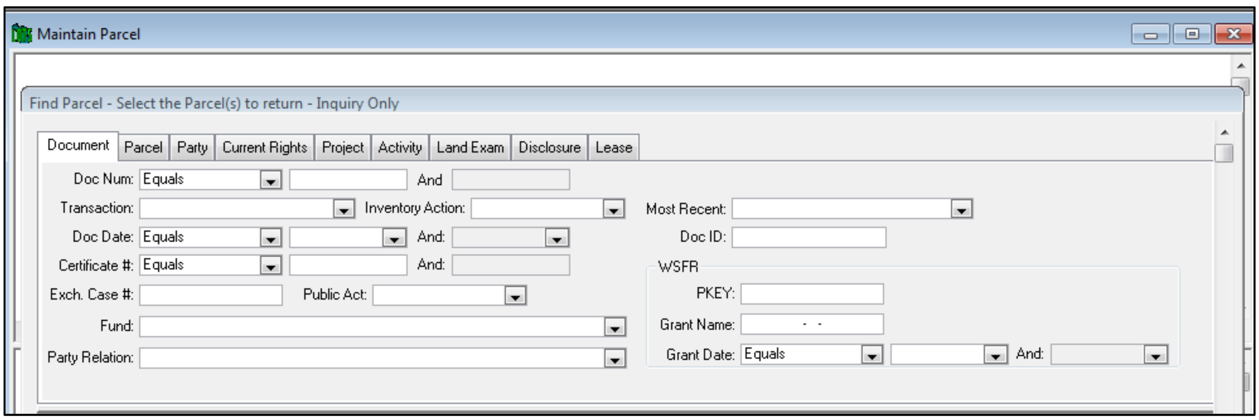
Business Req. No.	• Detailed Requirement Description	Category
27	The system must provide a well info tab on a Parcel to display following details: • All inactive permitted wells associated with a parcel (e.g. dry holes (DH), injection wells (WIW), brine disposal wells (BDW), plugged wells (PLC and PLA), observation wells) not in an active Drilling Unit. • Production data by PRU sorted by month by year • Field notes by permit number by date • New Well Permit Application data (LOTS "Display Parcel" level by County, Town, Range, Section, Quarter/Quarter location) • DEQ Well Bond data by company, by well or all company wells covered by one blanket well bond • Well Operator (current Permittee) Company data *Note: This is a View only tab and no Update permissions should be provided to a User*	E
28	The system must allow an authorized user to save all changes made to the database.	E
29	The system must provide an interactive map viewer interface to allow an authorized user to create a draft version of a polygon for a newly created parcel geographically.	P
29.1	The system must allow an authorized user to split draft version of the polygon manually into 2 separate parcels by editing the parcel boundaries and allowing copy/paste feature to move real parcel data into the draft version in case the parcel is split through tabular data. *Note: Usually a user performs the Split function and creates 2 new child parcels from the Parent parcel. The new system must provide a map interface to create a draft version of the polygon and edit the parcel boundaries to have 2 new child parcel polygons from the parent parcel polygon.*	P
29.2	The system must allow an authorized user to edit all relevant data pertaining to a parcel in order to create a draft version of the polygon. *Note: This draft version of polygon would later be provided to GIS team to make an official version of new parcel polygon.*	P

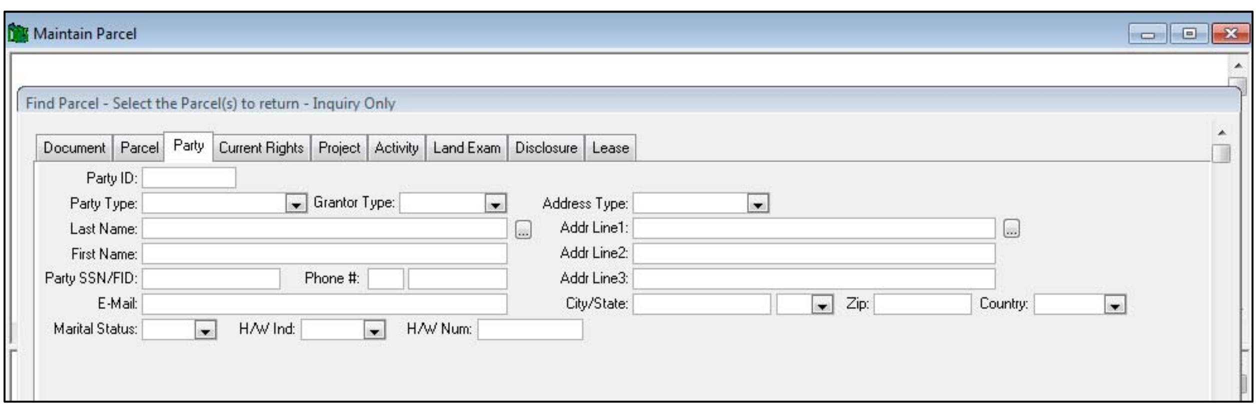
Business Req. No.	• Detailed Requirement Description	Category
30	The system must allow an authorized user to search acreage parcels using following criteria: • Town/Range/Section/Quarter/QuarterQuarter • Parcel ID • Consolidation Status (Drop down menu) • Current Rights: Surface %, Minerals % & All Other • Currrent Surface Rights Fund (Lookup table needed) • Project Use (Drop down menu) • Project Name (Drop down menu) • County/Jurisdiction *Note: Field officers prefer a simple search page to retrieve acreage parcel details as opposed to all the search criteria mentioned in requirement # 3, 3.1, 3.1.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 and 3.8*	E
31	The system must provide a user field named "Management Restrictions on Parcel" as a drop down menu.	E
31.1	The system must associate this field to the Restrictions part of the Activities/Restrictions system reference table. *Note: Mentioned in Exhibit 17, System Reference tables Part 4 - Activities/Restrictions*	E
31.2	The system must display warning messages for all the parcels that have Restrictions in the event the parcels are Split, Sold or Leased.	E
31.3	The system must allow an authorized user to search Parcels based on following Restriction information associated to a Parcel: • Restriction Name (drop down) OR • Date *Note: The system must consider the manually entered date at the time of Restriction assignment and not a system generated date/time stamp value.*	E
31.4	The system must display compatible Restrictions to be assigned/Un-assigned to a parcel.	E
31.4.1	The system must allow an authorized user to manually assign/un-assign one or multiple Restrictions to a parcel.	E
31.4.2	The system must provide for automated Restrictions to be assigned to a parcel if they are compatible Restrictions.	E
31.4.3	The system must allow a warning Restriction to be assigned to a parcel with a warning message if permitted by other Restrictions on the parcel.	E

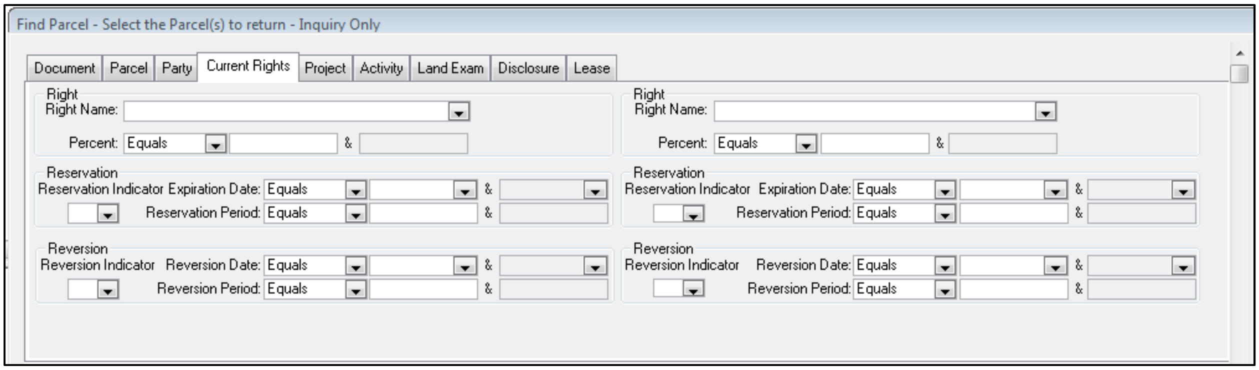
B. AS-IS System Screenshots

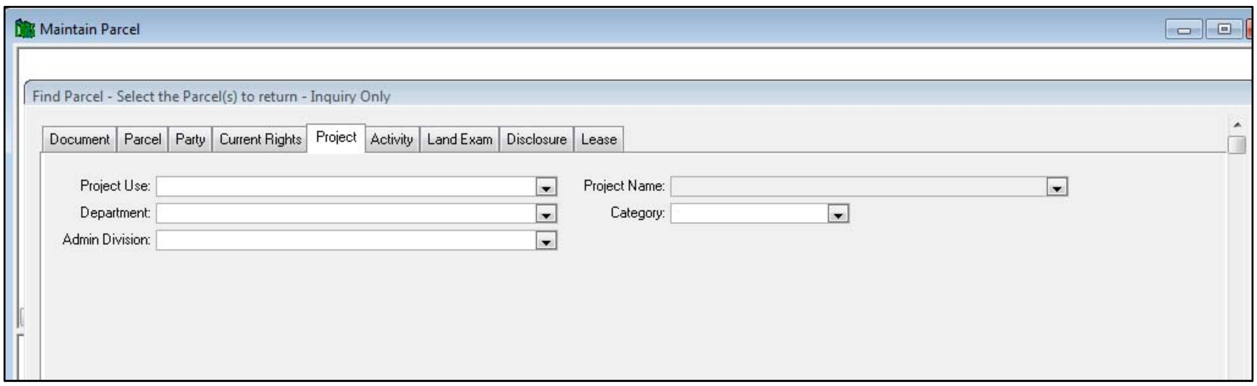
Find Parcel search criteria in the current system with all the tabs:



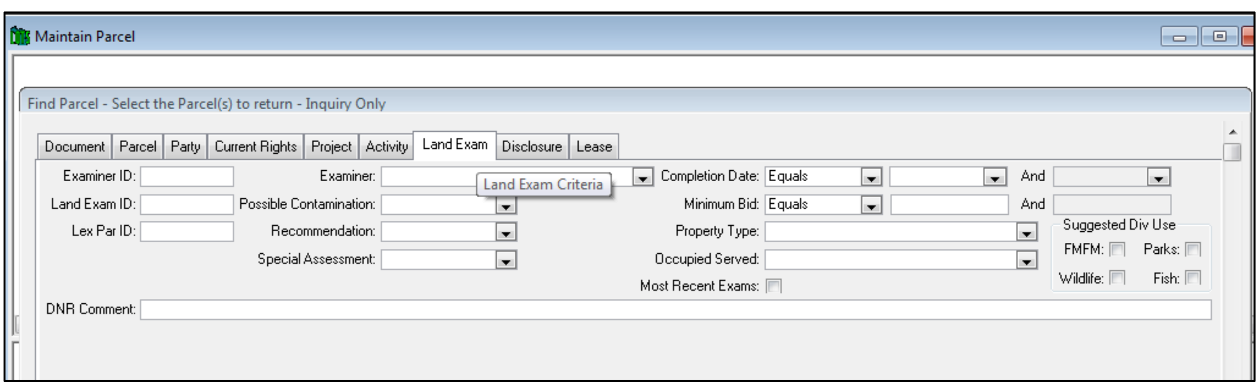


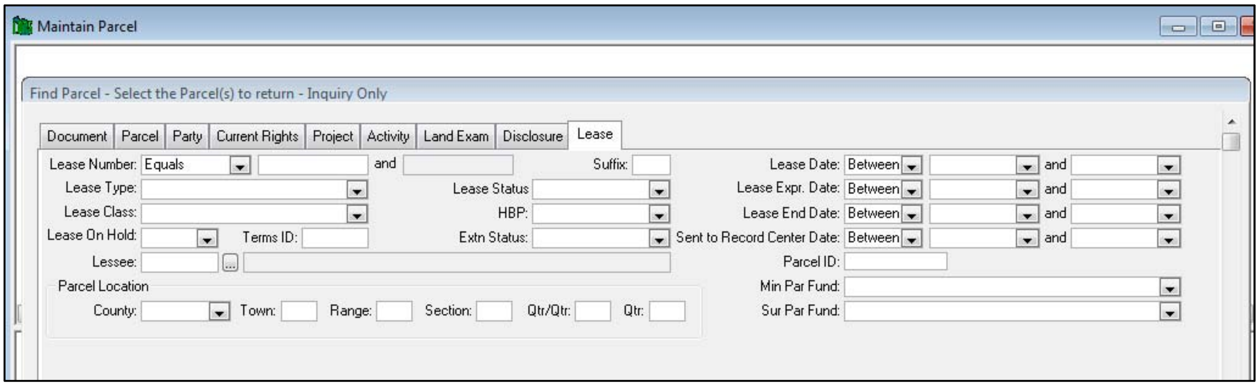



Find Parcel - Select the Parcel(s) to return - Inquiry Only
Document
Parcel
Party
Current Rights
Project
Activity
Land Exam
Disclosure
Lease
Right
Right Name:
Percent: Equals
&
Reservation
Reservation Indicator
Expiration Date: Equals
Reservation Period: Equals
Reversion
Reversion Indicator
Reversion Date: Equals
Reversion Period: Equals

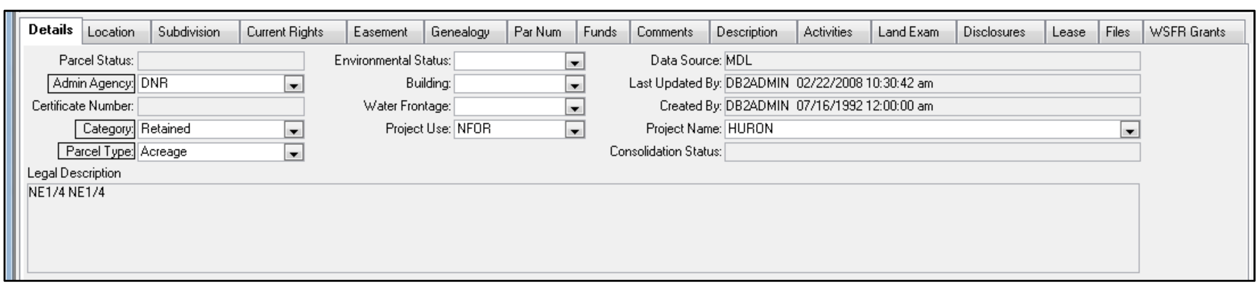

Maintain Parcel
Find Parcel - Select the Parcel(s) to return - Inquiry Only
Document
Parcel
Party
Current Rights
Project
Activity
Land Exam
Disclosure
Lease
Project Use:
Department:
Admin Division:
Project Name:
Category:

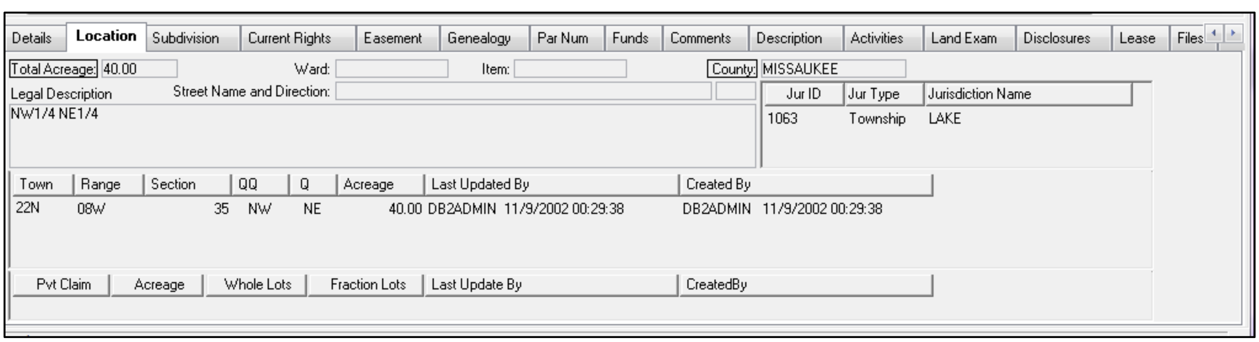

Find Parcel - Select the Parcel(s) to return - Inquiry Only
Document
Parcel
Party
Current Rights
Project
Activity
Land Exam
Disclosure
Lease
Activity:
Activity Criteria
Date: Equals
And


Maintain Parcel
Find Parcel - Select the Parcel(s) to return - Inquiry Only
Document
Parcel
Party
Current Rights
Project
Activity
Land Exam
Disclosure
Lease
Examiner ID:
Land Exam ID:
Lex Par ID:
Examiner:
Land Exam Criteria
Possible Contamination:
Recommendation:
Special Assessment:
Completion Date: Equals
Minimum Bid: Equals
And
Property Type:
Occupied Served:
Most Recent Exams:
Suggested Div Use
FMFM:
Parks:
Wildlife:
Fish:
DNR Comment:



Parcel information on all tabs:





Details | Location | **Subdivision** | Current Rights | Easement | Genealogy | Par Num | Funds | Comments | Description | Activities | Land Exam | Disclosures | Lease | Files

Subdivision Name:
Subd Liber:
CIS Index:
Reis Sub Code Number:
Subd Liber Page:
Whole Lots: 0
Fraction Lots: 0
Subdivision ID:

Block /	Lot /	Lot Fraction /	Last Updated by	Created by

Details | Location | Subdivision | **Current Rights** | Easement | Genealogy | Par Num | Funds | Comments | Description | Activities | Land Exam | Disclosures | Lease | Files

State OG Ownership: N/A
Opinion Date:
Opinion Received Date:

Right Name	Right %	Reservation	Period (Years)	Expiration	Reversion	Period (Years)	Revert Date
SUR - Surface	0.00						
MIN - Mineral	100.00						

Details | Location | Subdivision | Current Rights | **Easement** | Genealogy | Par Num | Funds | Comments | Description | Activities | Land Exam | Disclosures | Lease | Files

Granted Easement

Doc ID	Easement Use	Length	Width	Temporary	Consideration

Acquired Easement

Doc ID	Easement Use	Eamt Typ	Length	Width	Tax	Rent Term	Rent Amt	Renew Date	Expire Date	Tickler Date

Details | Location | Subdivision | Current Rights | Easement | **Genealogy** | Par Num | Funds | Comments | Description | Activities | Land Exam | Disclosures | Lease | Files

Parcel ID	Date	Parcel Type	Acreage

Details | Location | Subdivision | Current Rights | Easement | Genealogy | **Par Num** | Funds | Comments | Description | Activities | Land Exam | Disclosures | Lease | Files

Date	Type	Tax Sale Year	Ward	Number	CreatedBy	Last Update By
01/11/2011	Local Parcel Number			04-084-035-000-010-00	STRZELECD 1/11/2011 13:14:13	STRZELECD 1/11/2011 13:14:13

Details | Location | Subdivision | Current Rights | Easement | Genealogy | Par Num | **Funds** | Comments | Description | Activities | Land Exam | Disclosures | Lease | Files

Doc ID	Fund %	Fund Code	Fund Name	Updated By	Created By
2041100	100.00	3T	Mich Natural Resources Trust Fund	STRZELECD 1/12/2011 10:4	STRZELECD 1/12/2011 10:4

Details | Location | Subdivision | Current Rights | Easement | Genealogy | Par Num | Funds | **Comments** | Description | Activities | Land Exam | Disclosures | Lease | Files

Type	Comment By	Doc ID	Comment
Document	STRZELECD 8/1/2012	2041100	Reservation of an exclusive, non-transferable occupancy of cabin and land within a 150 foot radius from center of the cabin for one year from date of closing. Recorded in Liber 481, Page 788 (Page 1 of 2). Terminated on 02/17/2012 (recorded in Liber 487, Page 246).
Document	STRZELECD 1/11/2011	2041100	MNRTF N. Lower Peninsula Eco-Regional Land Consolidation, Act 23 of 2009, TF#08-134, Project #750820-09, PCA 95808

Details | Location | Subdivision | Current Rights | Easement | Genealogy | Par Num | Funds | Comments | **Description** | Activities | Land Exam | Disclosures | Lease | Files

Northwest 1/4 of the Northeast 1/4

Details | Location | Subdivision | Current Rights | Easement | Genealogy | Par Num | Funds | Comments | Description | **Activities** | Land Exam | Disclosures | Lease | Files

Assigned Activites

Name	ID	Used by System
Nominated for Mineral Lease	17	Yes
Attached to Land Sale	116	

Details | Location | Subdivision | Current Rights | Easement | Genealogy | Par Num | Funds | Comments | Description | Activities | **Land Exam** | Disclosures | Lease | Files

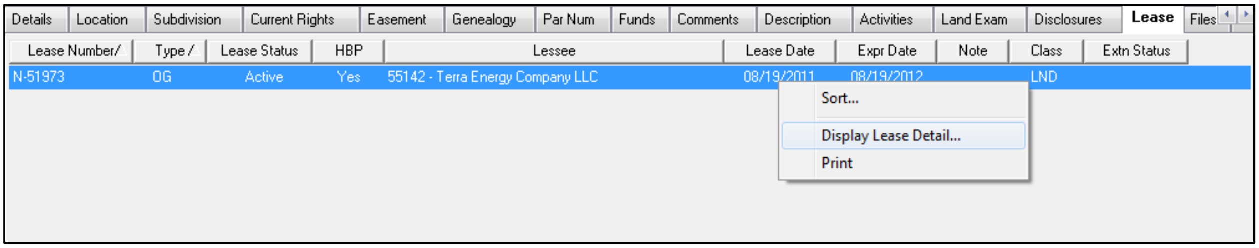
Examiner ID: 6
Examiner: ABERCROMBIE, N. THOMAS
Completion Date: 7/10/2008
1 Picture Attachments
Land Exam ID: 165670
Possible Contamination:
Minimum Bid: $4,628.61
LEX Par ID: 113079
Recommendation: Sell
Property Type: Occupied Structure
Sp Assessment: $.00
Occupied Served: Unable to Serve
DNR Comment: GMAC Realty in yard.

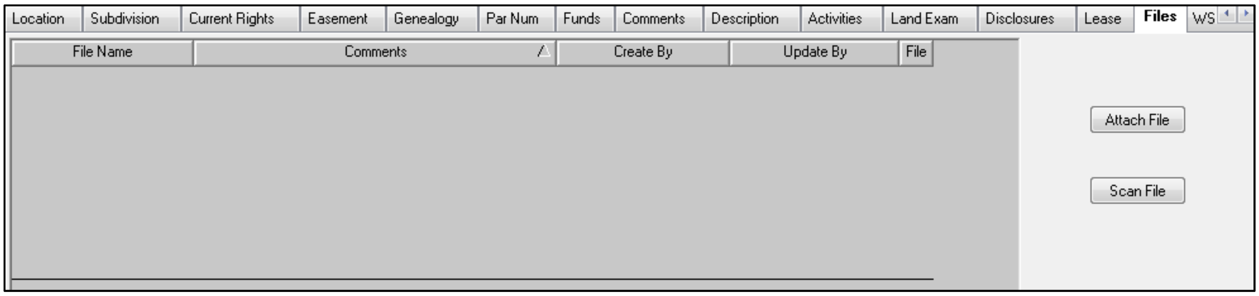
Suggested Div Use
FMFM: ☐ Parks: ☐
Wildlife: ☐ Fish: ☐

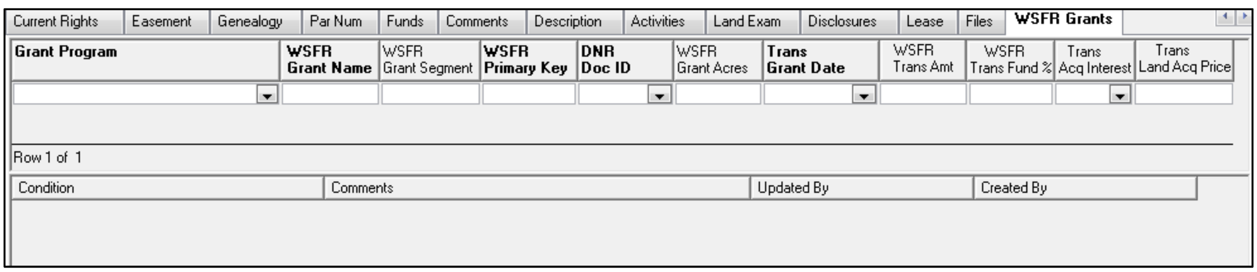
Details | Location | Subdivision | Current Rights | Easement | Genealogy | Par Num | Funds | Comments | Description | Activities | Land Exam | **Disclosures** | Lease | Files

Assigned Disclosures:

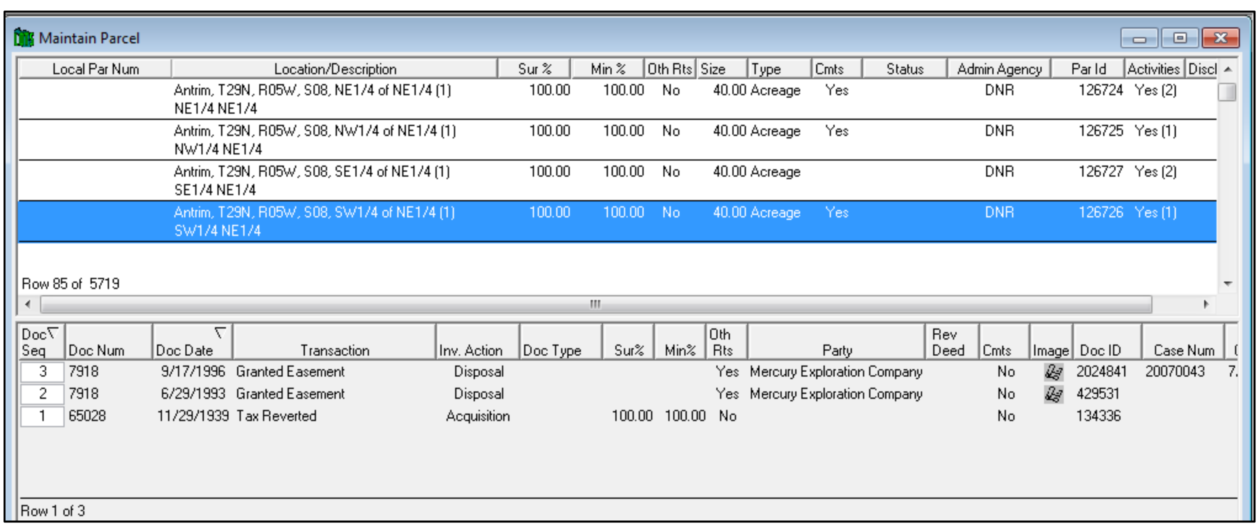
DEQ Easement
Possible Contamination



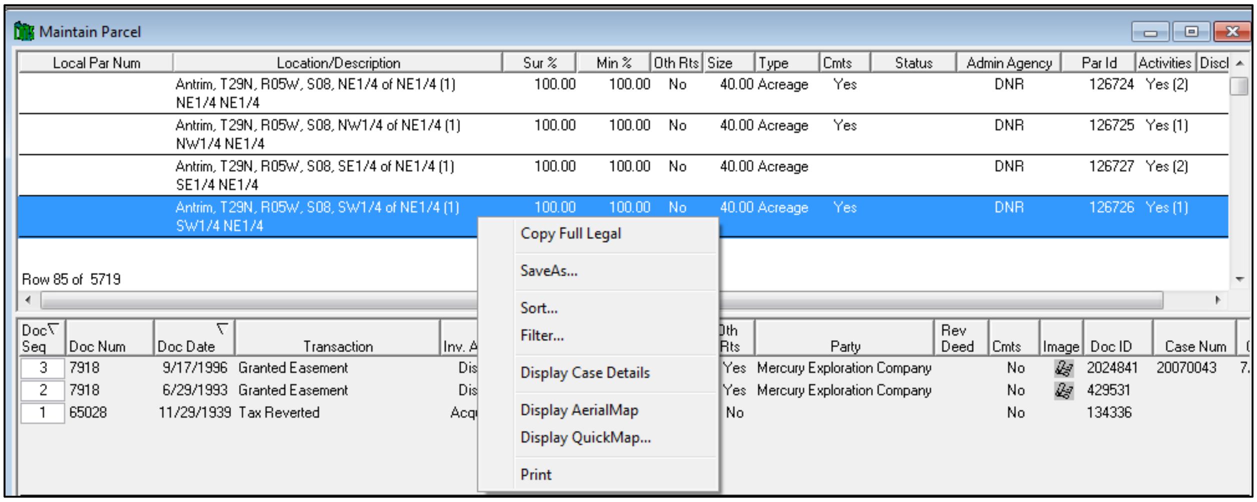




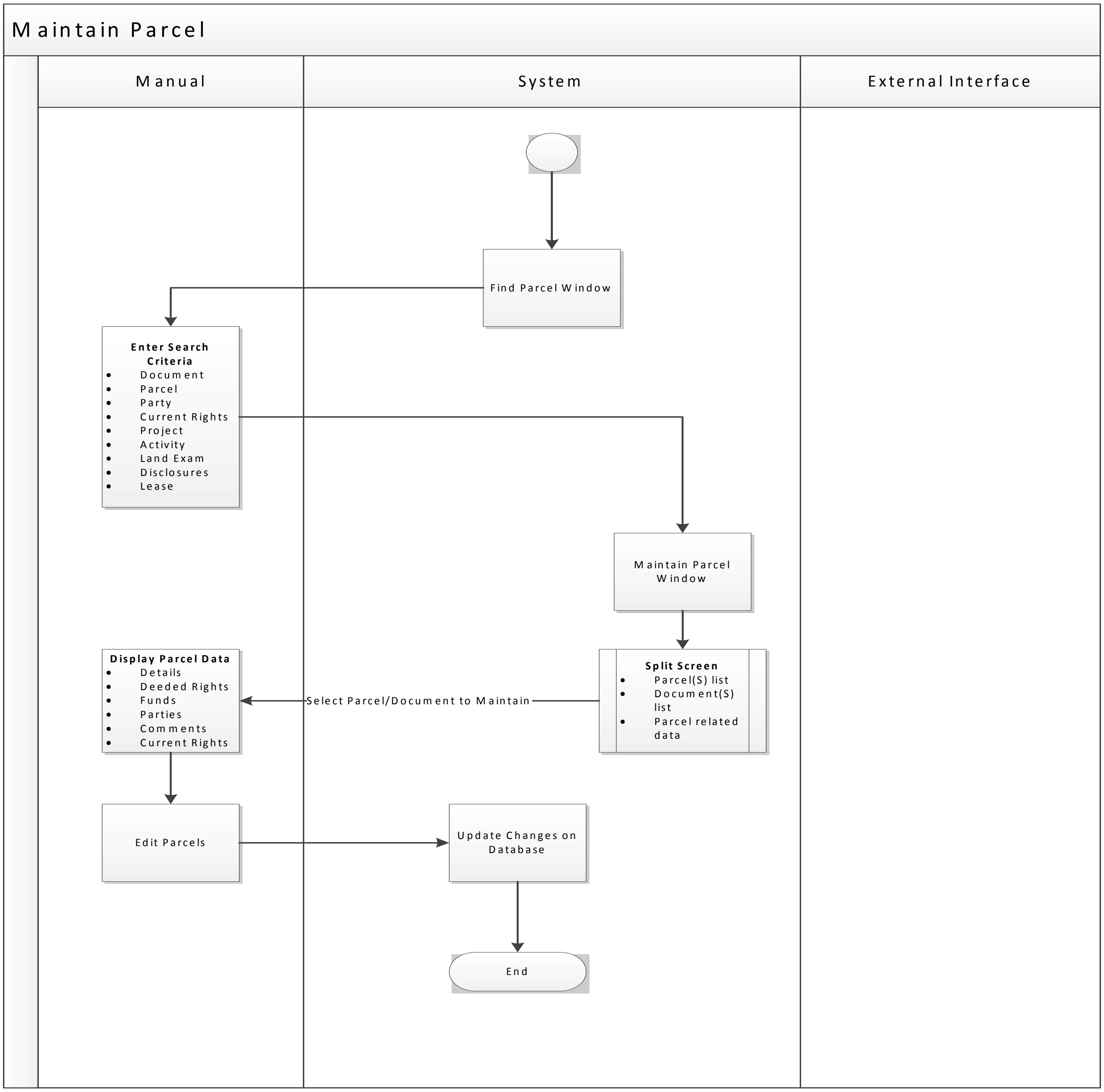
Parcel list and Documents attached to each Parcel:



RMB functions on a Parcel:



C. Process Flow Diagram



2. Exhibit 2 – Maintain Document

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The system must provide a user interface to maintain document records.	E
2	The system must provide the user with the ability to create a document. *Note: Documents are created in the system via case processing function, uploads from Department of Treasury interface, and deed replacement function*.	E
2.1	The system must provide a customized build deed document capability and once built, export the document to MS Word processor.	E
3	The system must allow an authorized user to search documents based on following document information: • Document Number • Transaction Type • Inventory Action • Most Recent Type • Document Date • Document ID • Certificate Number • Exchange Case Number • Public Act • Fund Type • Party Relation Type • WSFR/FBMS • P-Key • Grant Name • Grant Date *Note: The WSFR Grant number would be named as FBMS number by the US Fish and Wildlife services.*	E
3.1	The system must allow an authorized user to search documents by selecting Multiple Fund types.	P

Business Req. No.	• Detailed Requirement Description	Category
3.2	The system must provide an authorized user with the ability to find document(s) based on the following Parcel details: • Town/Range/Section/Q/QQ • Legal Description • County • Local Par Number • Admin Agency • Parcel Type • Parcel Status • Jurisdiction Name • Jurisdiction Type • Ward/Item • Tax Sale Year/Number • Street Name/Direction • Private Claim Number • Parcel ID • Jurisdiction ID • REIS Subdivision code • Subdivision • Block • Lot • Consolidation Status • State OG Ownership • Trespass Number • CIS Index • Subdivision ID • Subdivision Liber • Subdivision Liber Page	E

Business Req. No.	• Detailed Requirement Description	Category
3.3	The system must search Documents based on following Party Information: • Party ID • Party Type • Grantor Type • Address Type • Last Name • First Name • Address Line 1 • Address Line 2 • Address Line 3 • Party/FID • Phone # • Email • City/State/Zip/Country • Marital Status • H/W ID • H/W number	E
3.4	The system must allow an authorized user to search Documents based on following Current Rights information on a Parcel: • Current Right Name (Drop down menu) • Percent Owned • Reservation (Yes/No) • Expiration Date • Reservation Period • Reversion(Yes/No) • Expiration Date • Reversion Period	E
3.4.1	The system must allow an authorized user to Select one or multiple Current Right(s) from the drop down menu to display list of Documents associated to those rights.	E
3.4.2	The system must allow an authorized user to select one or multiple Reservation and Reversion user fields for each Current Right selected.	E
3.5	The system must allow an authorized user to search Documents based on following Project information: • Project Use • Project Name • Department • Category • Admin Division	E
3.6	The system must allow an authorized user search Documents based on following Activities information associated to a Parcel: • Activity Name • Date	E

Business Req. No.	• Detailed Requirement Description	Category
3.7	The system must allow an authorized user to search Documents based on following Land Exam information on a Parcel: • Examiner ID • Land Exam ID • LEX Par ID • Examiner Name • Possible Contamination • Recommendation • Special Assessment • Completion Date • Minimum Bid • Property Type • Occupied Served • Check Box for FRD/Parks/Wildlife/Fish • DNR Comment • Check box for most recent Exam	E
3.8	The system must allow an authorized user to search Documents based on following Disclosures information: • Disclosure Name • Date	E
3.9	The system must allow an authorized user to search Documents based on following Lease information on a parcel: • Lease Number • Lease Type • Lease Class • Lease Status • HBP (Yes/No/Not Applicable) • Lease On Hold • Terms ID • Extension Status • Lease Date • Lease Expiration Date • Lease End Date • Sent to Record Center Date • Lessee • Parcel ID • Parcel Location (Town/Range/Section/Q/QQ/County) • Mineral Parcel Fund • Surface Parcel Fund	E
3.9.1	The system must allow an authorized user to select one or multiple Min Par Funds/Sur Par funds from the drop down menu to display a List of Documents associated with those funds.	P

Business Req. No.	• Detailed Requirement Description	Category
3.10	The system must validate the criteria entered by the user and throw appropriate error message in case of “invalid criteria” or “Documents not found”.	E
3.11	The system must provide the search criteria to find all document records that have null values in a specified field.	E
3.12	The system must consider all the find document criteria entered by user as a single condition rather than a nested condition for search.	E
3.13	The system must provide a Query Tool with complex querying capabilities, allowing user to enter ‘and’ ‘or’ or any other condition user may choose. The user must be able to filter query results if needed or re-query results.	E
3.14	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E
4	The system must display Maintain Document Window with the list of Documents and list of all related Parcels.	E
4.1	The system must allow an authorized user to display following parcel details on a document: • Local Par Number • Location/Description • Surface % • Mineral % • Other Rights • Size • Type • Comments • Status • Admin Agency • Parcel ID • Purchase Amount	E
4.2	The system must allow an authorized user to display more Parcel details by re-directing to the Maintain Parcel Window. *Note: Please refer to the Maintain Parcel Window for more details on the Parcel*.	E
4.3	The system must allow an authorized user to Add a Parcel record to the Document. *Note: The system must allow an authorized user to find a Parcel by re-directing to Maintain Parcel window and then allow selection of a Parcel record.*	E
4.4	The system must allow an authorized user to Remove one or multiple Parcels attached to a document.	E

Business Req. No.	• Detailed Requirement Description	Category
4.5	The system must allow an authorized user to Move One or Multiple Parcels from One document to Other.	E
5	The system must display following details of document selected by an authorized user: • Document Number • Document Date • Transaction Type • Act Number • Act Year/Act Part/Act Subpart • Act Name • Liber • Begin Page • End Page • Data Source • Recording Liber • Recording Begin Page 1 • Recording Begin Page 2 • Exch. Case # • Exch. Case Date • Exch. Case Segment # • Document Amount • Certificate # • DMB Record Center • Record Center #/Box # • File/Lot #	E
5.1	The system must allow an authorized user to Add/Update the details on the Document details tab with an appropriate date/Time stamp value.	E
5.2	The system must allow an authorized user to Add/Delete either Acquired Easement information or Granted Easement information.	E

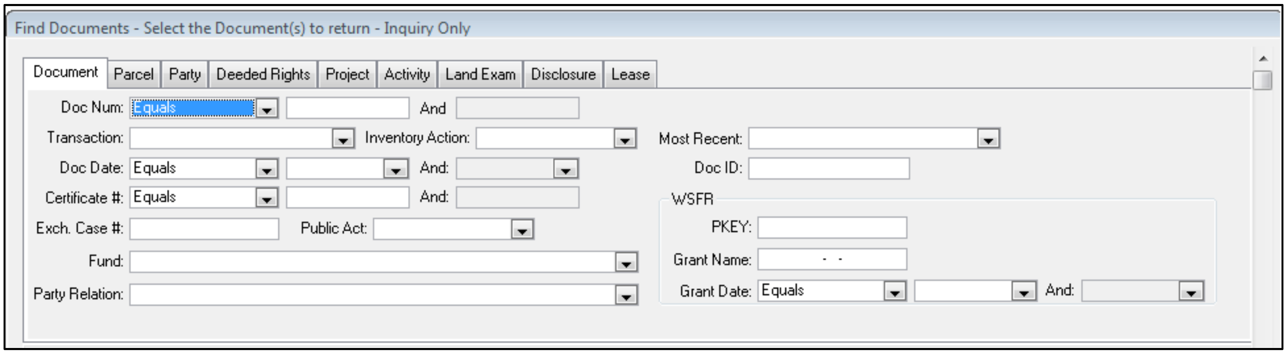
Business Req. No.	• Detailed Requirement Description	Category
5.2.1	The system must allow an authorized user to Enter following information for Acquired Easement: • Usage • Length • Rent Term • Tax Indicator • Expiration Date • Type • Width • Rent Amount • Renewal Date • Tickler Date	E
5.2.2	The system must allow an authorized user to enter following information for Granted Easement: • Usage • Temporary • Length Width • Consideration	E
5.3	The system must allow an authorized user to view deed images(Documents)	E
6	The system must display following Deeded Rights details: • Parcel ID • Right Name • Right % • Reservation • Period(Years) • Expiration • Reversion • Period(Years) • Revert Date	E
6.1	The system must allow an authorized user to Add/Update the Deeded Rights details on a Document.	E
6.2	The system must allow an authorized user to apply Rights to all Parcels on a Document by providing an option to add more rows of information for each Parcel.	E

Business Req. No.	• Detailed Requirement Description	Category
7	The system must display following Fund details on a Parcel: • Doc ID • Fund% • Fund Code • Fund Name	E
7.1	The system must allow an authorized user to Add/Update/Delete one or multiple Fund records.	E
8	The system must display following Party details on a document: • Party Relation • Marital Status • H/W Number • Sort Order • Grantor Type • Party Type • Last Name • Middle Name • First Name • Type Code • Party ID • Party FID • Address Type • Address ID • Address Line 1 • Address Line 2 • Address Line 3 • City/State • Zip code • Home Phone # • Work Phone # • Mobile Phone # • Fax #	E
8.1	The system must allow an authorized user to Associate a Party record from the Maintain Party window in case the Party information is not already attached to a document.	E
8.2	The system must allow an authorized user to Remove a Party record already attached to a document.	E

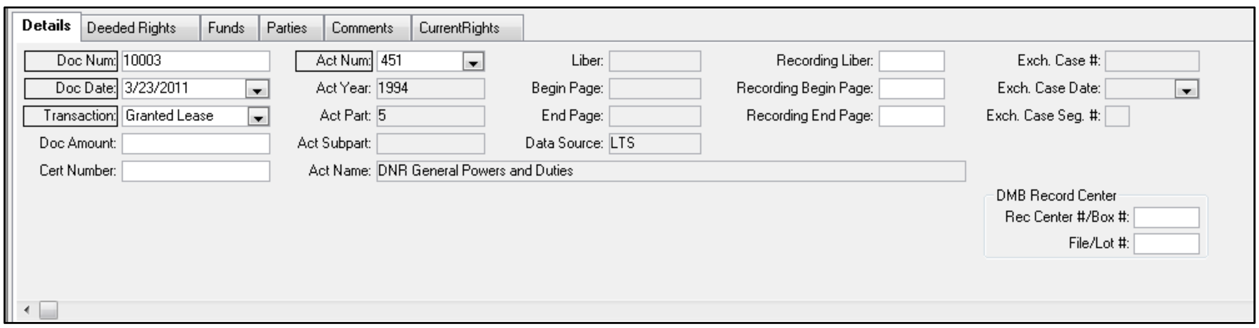
Business Req. No.	• Detailed Requirement Description	Category
8.3	The system must allow an authorized user to Find a Party record by re-directing a user to the Maintain Party Window and must provide an ability to create a Party record in case the Party does not exist in the system. *Note: Please refer to Maintain Party section for more details on this functionality. The user should be able to find and create a Party record from Maintain Document Window like it does for Maintain Party Window.*	P
9	The system must display comments on a document.	E
9.1	The system must allow an authorized user to Add/Update/Delete a Comment with an appropriate date/time stamp value.	E
10	The system must display following Current Rights details: • Parcel ID • Right Name • Right % • Reservation • Period(Years) • Expiration • Reversion • Period(Years) • Revert Date	E
10.1	The system must allow an authorized user to Add/Update the Deeded Rights details on a Document.	E
10.2	The system must allow an authorized user to apply Rights to all parcels on a Document by providing an option to add more rows of information for each Parcel.	E
11	The system must allow an authorized user to display case details by re-directing to the Maintain Case Window. *Note: Please refer to Exhibit 18 – Case Processing for more details*	E
12	The system must allow an authorized user to save all changes made to the database.	E

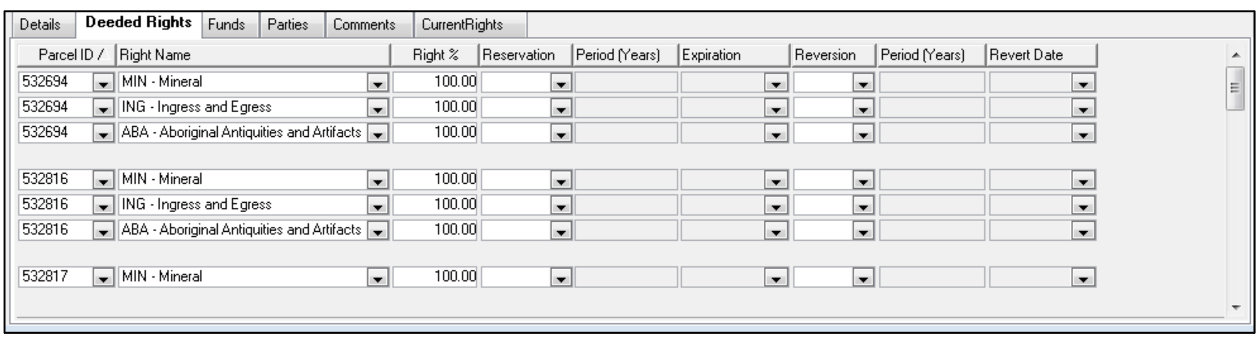
B. AS-IS System Screenshots

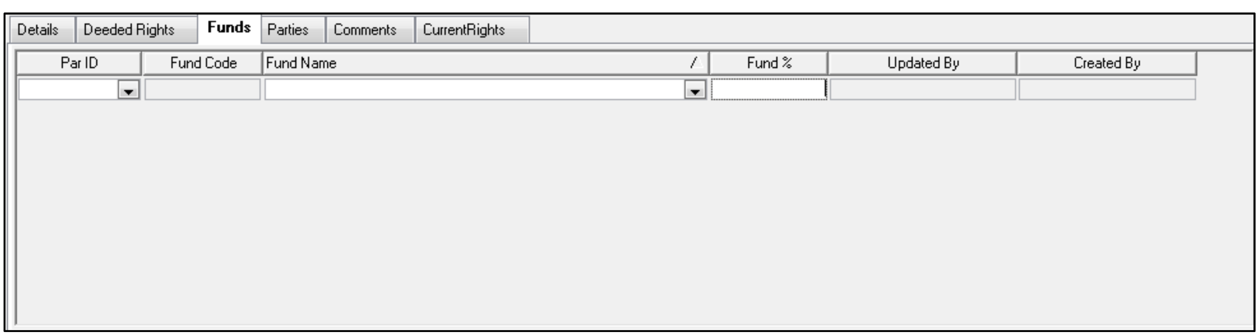
Find Document search criteria in the current system:

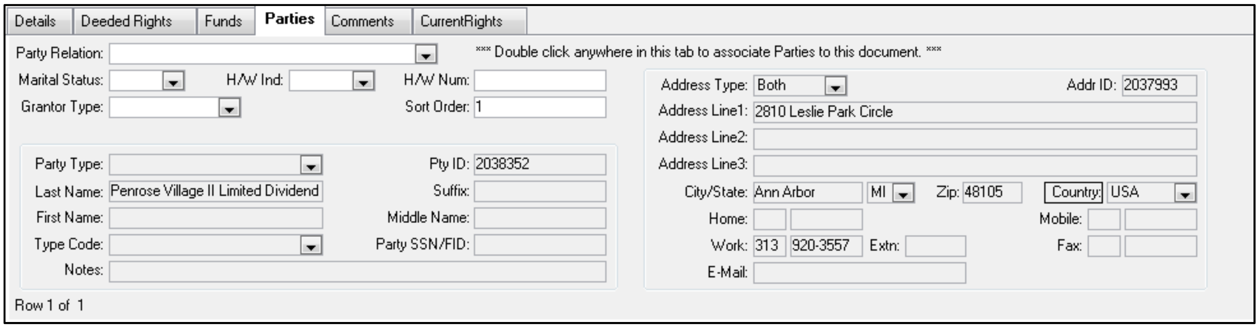


Document details screen in current system:





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Funds
Parties
Comments
CurrentRights
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H/W Num:
Grantor Type:
Sort Order: 1
Address Type: Both
Addr ID: 2037993
Address Line1: 2810 Leslie Park Circle
Address Line2:
Address Line3:
Party Type:
Pty ID: 2038352
Last Name: Penrose Village II Limited Dividend
Suffix:
First Name:
Middle Name:
Type Code:
Party SSN/FID:
Notes:
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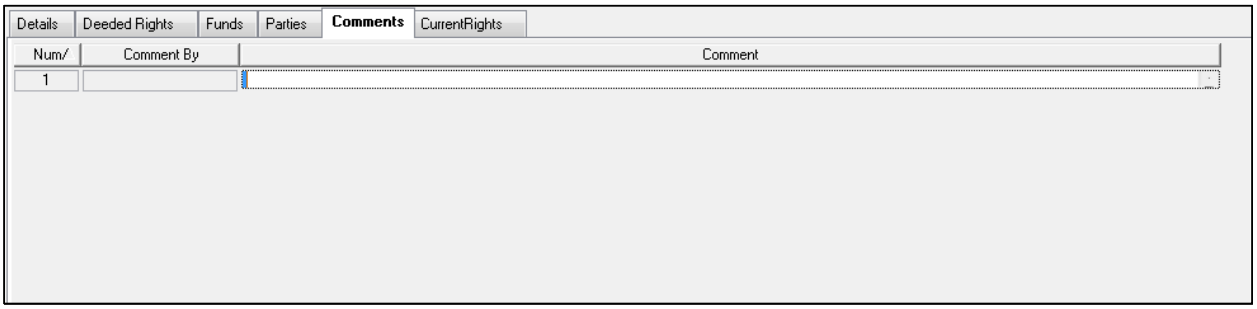
Zip: 48105
Country: USA
Home:
Mobile:
Work: 313 920-3557
Extn:
Fax:
E-Mail:
Row 1 of 1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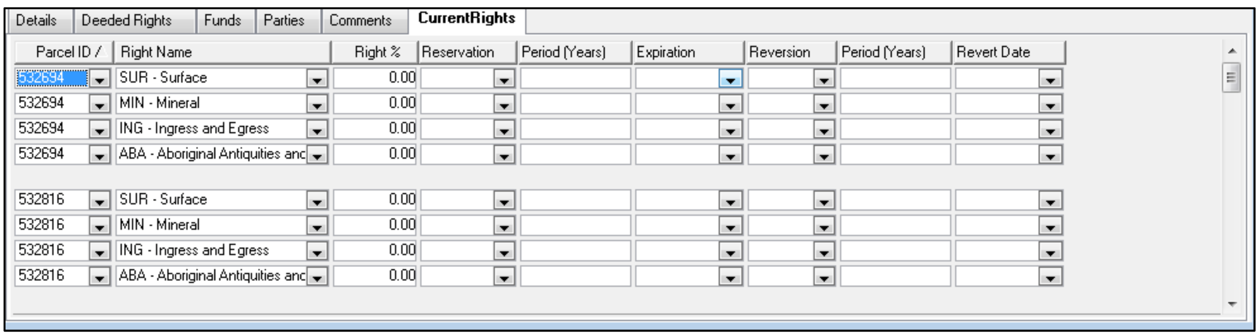
Funds
Parties
Comments
CurrentRights
Num/
Comment By
Comment
1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Funds
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Comments
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Right Name
Right %
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Expiration
Reversion
Period (Years)
Revert Date
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532694 MIN - Mineral 0.00
532694 ING - Ingress and Egress 0.00
532694 ABA - Aboriginal Antiquities anc 0.00
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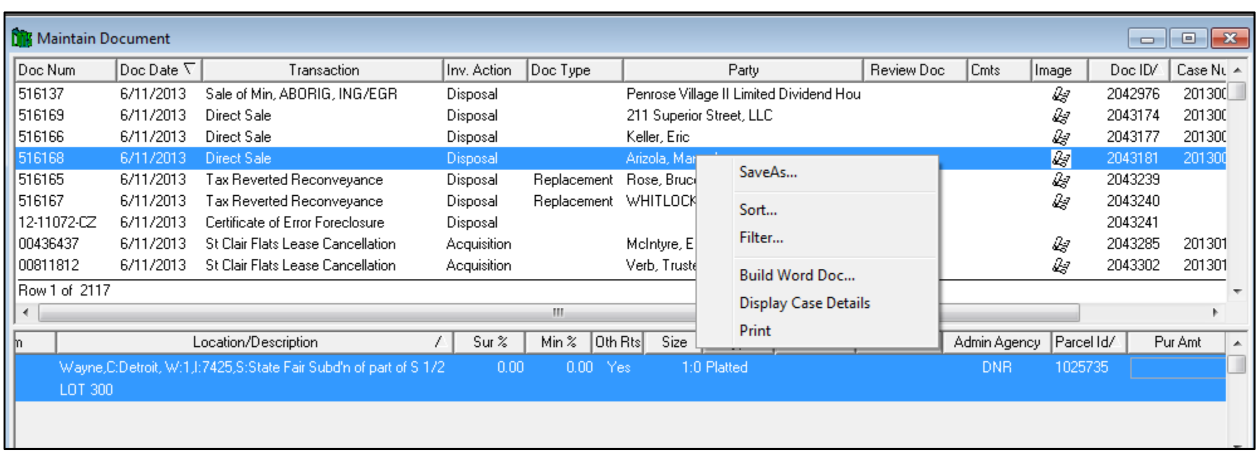
Maintain Document
Doc Num
Doc Date
Transaction
Inv. Action
Doc Type
Party
Review Doc
Cmts
Image
Doc ID/
Case Nu
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516169 6/11/2013 Direct Sale Disposal 211 Superior Street, LLC 2043174 201300
516166 6/11/2013 Direct Sale Disposal Keller, Eric 2043177 201300
516168 6/11/2013 Direct Sale Disposal Arizola, Mar 2043181 201300
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00436437 6/11/2013 St Clair Flats Lease Cancellation Acquisition McIntyre, E 2043285 201301
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Row 1 of 2117
SaveAs...
Sort...
Filter...
Build Word Doc...
Display Case Details
Print
Location/Description
Sur %
Min %
Oth Rts
Size
Admin Agency
Parcel Id/
Pur Amt
Wayne,C:Detroit, W:1,I:7425,S:State Fair Subd'n of part of S 1/2
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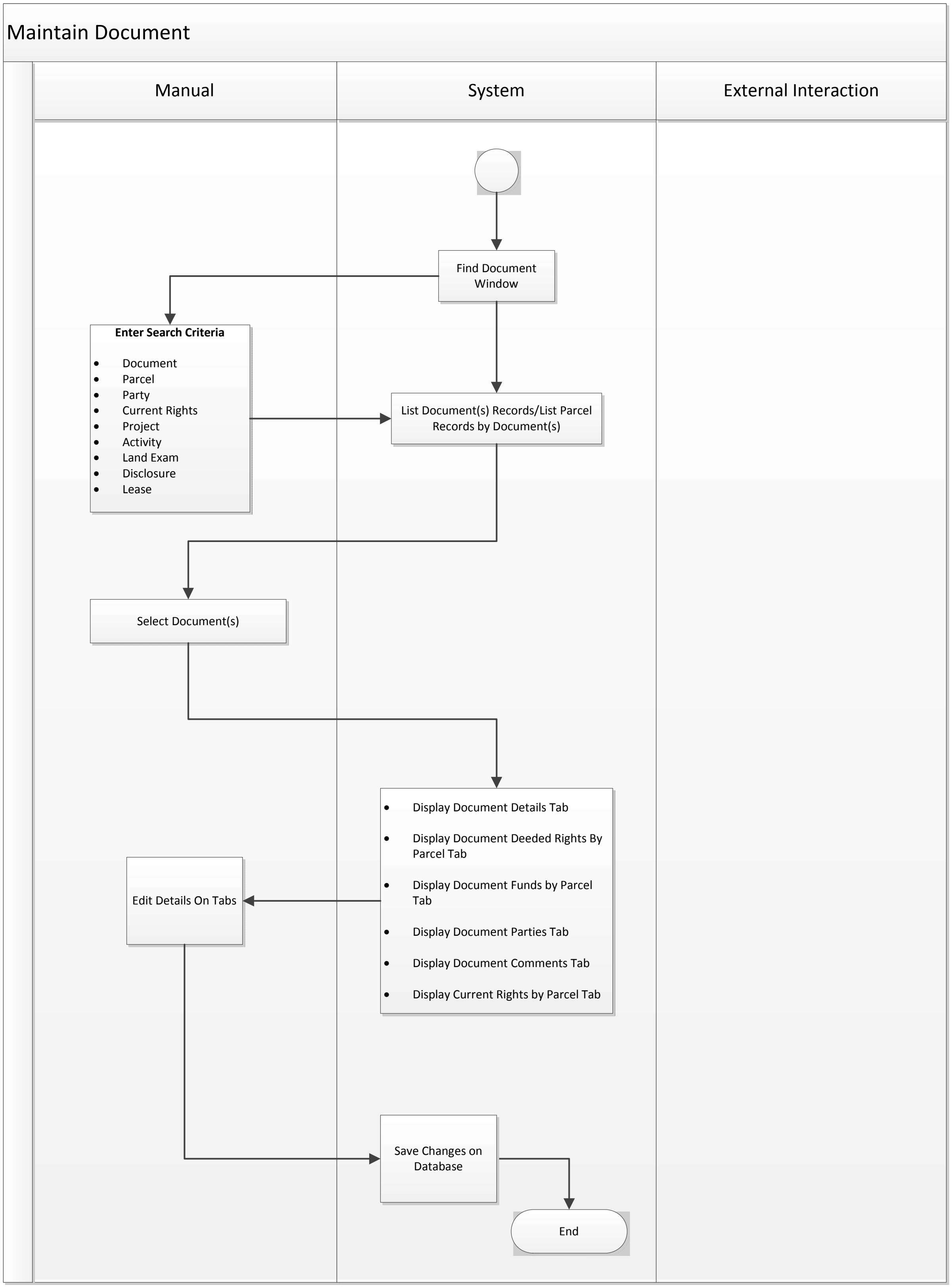
DNR
1025735

C. Process Flow Diagram



3. Exhibit 3 – System Reference Tables Part 1

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
	Maintain Jurisdiction	
1.0	The system must provide user interface for maintaining Jurisdiction reference table records.	E
1.1	The maintenance user interface must display a list of Jurisdiction records with following details: • Jurisdiction Name • Jurisdiction Type • Jurisdiction ID • Date/Time stamp	E
1.2	The user interface must allow an authorized user to add/update the details on a Jurisdiction record.	E
1.3	The user interface must give an authorized user the ability to create a Jurisdiction.	E
1.3.1	The user interface must assign a unique ID for each newly created Jurisdiction record.	E
1.4	The user interface must allow an authorized user to merge records when user needs to merge duplicate or related records.	O
1.5	The user interface must allow an authorized user to assign one or multiple counties to a Jurisdiction record.	E
1.6	The user interface must allow an authorized user to delete a record.	E
1.7	The user interface must give the authorized user the ability to save a record to the database.	E
1.8	The user interface must provide canned reports for Jurisdiction records.	E
	Maintain Subdivision	
2.0	The system must provide user interface for maintaining Subdivision reference table records.	E

Business Req. No.	• Detailed Requirement Description	Category
2.1	The user interface must give user the ability to search Sub-Division record based on the following search criteria: • CIS Index Number • REIS Subdivision Number • Subdivision ID • Has Parcels (Yes/No) • Subdivision Name • Liber • Liber Page Jurisdiction (must provide lookup button that opens the find jurisdiction window and returns a selection to the Maintain Subdivision window) • County • Jurisdiction Name • Jurisdiction Type • Jurisdiction ID Location • Town/Range/Section/Q/QQ • Private Claim	E
2.2	The user interface must allow an authorized user to View a list of Subdivision records with following details: • CIS Index Number • Subdivision ID • REIS Subdivision ID • Subdivision Name • Liber • Liber Page • Date/Time stamp	E

Business Req. No.	• Detailed Requirement Description	Category
2.3	The system Must display selected subdivision information on the detail tab: • CIS Index Number • REIS Subdivision ID • Subdivision ID • Subdivision Name • Liber • Liber Page • Date/Time stamp • Jurisdiction ✓ County ✓ Jurisdiction Name ✓ Jurisdiction Type And must display multiple locations for each subdivision with the following • Town/Range/Section/Q/QQ • Private Claim • Date/Time stamp	E
2.4	The user interface must give an authorized user the ability to create a Subdivision record.	E
2.4.1	The user interface must assign a unique ID for each newly created Subdivision record.	E
2.5	The user interface must allow an authorized user to add one or multiple Jurisdiction and Location description to a Subdivision record.	E
2.6	The user interface must give an authorized user the ability to merge records when user needs to merge duplicate or related records.	E
2.7	The user interface must give the authorized user the ability to delete a subdivision record.	E
2.8	The user interface must give the authorized user the ability to save a record to the database.	E
2.9	The user interface must provide canned reports for Subdivision records.	E
	Maintain Project	
3.0	The system must provide user interface for maintaining Project reference table records.	E
3.1	The user interface must display a list of all existing Projects with following details: • Project Name • Project Use • Administering Division • Department	E
3.2	The user interface must allow an authorized user to add/update the details on a Project record.	E

Business Req. No.	• Detailed Requirement Description	Category
3.3	The user interface must allow an authorized user to create a Project record.	E
3.3.1	The user interface must assign a unique ID for each newly created Project record.	E
3.4	The user interface must give an authorized user the ability to merge records when user needs to merge duplicate or related records.	O
3.5	The user interface must give the authorized user the ability to delete a record.	E
3.6	The user interface must give the authorized user the ability to save a record to the database.	E
3.7	The user interface must provide canned reports for Project records.	E
	Maintain Project Use Type	
4.0	The system must provide user interface for maintaining Project Use Type reference table records.	E
4.0.1	The system must display a list of existing Project use type records with following details: • Usage Code • Project use type • Description • Date/Time stamp	E
4.1	The user interface must give the authorized user the ability to EDIT a Project Use type record.	E
4.2	The user interface must give an authorized user the ability to create a Project Use Type record.	E
4.2.1	The system must allow an authorized user to enter Usage code for each newly created Project use type record.	E
4.3	The user interface must give an authorized user the ability to merge records when user needs to merge duplicate or related records.	O
4.4	The user interface must give the authorized user the ability to delete a record. *NOTE – for all record deletes in System Tables – there must be no instances of use in the records.*	E
4.5	The user interface must give the authorized user the ability to save a record to the database.	E
4.6	The user interface must provide canned reports for Project Use Type records.	E
	Maintain Disclosures	
5.0	The system must provide a user interface to maintain Disclosure records.	E
5.0.1	The system must display a list of existing Disclosure records with following details: • Disclosure Type • Description • Detail • Disclosure ID	E

Business Req. No.	• Detailed Requirement Description	Category
5.1	The user interface must allow an authorized user to Add a Disclosure record.	E
5.1.1	The user interface must assign a unique ID for each newly added Disclosure record.	E
5.2	The user interface must allow an authorized user to select a Disclosure from the list and view the following Details: • Disclosure Type • Description • Detail • Disclosure ID • Sale Book Text • Deed Text • Date/Time stamp value	E
5.3	The user interface must allow an authorized user to EDIT the details on a Disclosure record.	E
5.4	The user interface must allow an authorized user to Delete a Disclosure record.	E
5.5	The user interface must allow an authorized user to save changes made to the database.	E
5.6	The user interface must provide canned reports for Disclosure records.	E
	Maintain Deed Parameters - Notary	
6.0	The system must provide a user interface to maintain Deed Parameters – Notary records. *Note: Currently, The deed Parameters user interface has 4 tabs on it with their respective details:* • *Notary* • *Signer* • *Witness* • *Role*	E
6.1	The system must display a list of all existing notaries with following information: • Notary Name • Notary County • Expiration Date • Notary ID	E
6.2	The user interface must allow an authorized user to Add a new notary record.	E
6.2.1	The user interface must assign a unique ID (Notary ID) for each newly added notary record.	E

Business Req. No.	• Detailed Requirement Description	Category
6.3	The user interface must allow an authorized user to select a notary from the list and view the following Details: • Notary ID • Notary Name • Notary County • Expiration Date • Date/Time stamp value	E
6.4	The user interface must allow an authorized user to EDIT the details on a notary record.	E
6.5	The user interface must allow an authorized user to Delete a notary record.	E
6.6	The user interface must allow an authorized user to save changes made to the database.	E
6.7	The user interface must provide canned reports for Notary records.	E
	Maintain Deed Parameters -Signer	
7.0	The system must provide a user interface to maintain Signer records.	E
7.1	The system must display a list of all existing Signer records with following information: • Signer Name • Default Signer Role • Signer ID	E
7.2	The user interface must allow an authorized user to Add a new Signer record.	E
7.2.1	The user interface must assign a unique ID (Signer ID) for each newly added Signer record.	E
7.3	The user interface must allow an authorized user to select a Signer from the list and view the following Details: • Signer ID • Signer Name • Default Signer Role • Date/Time stamp value	E
7.4	The user interface must allow an authorized user to EDIT the details on a Signer record.	E
7.5	The user interface must allow an authorized user to Delete a Signer record.	E
7.6	The user interface must allow an authorized user to save changes made to the database.	E
7.7	The user interface must provide canned reports for Signer records.	E
	Maintain Deed Parameters - Witness	
8.0	The system must provide a user interface to maintain Witness records.	E

Business Req. No.	• Detailed Requirement Description	Category
8.1	The system must display a list of all existing witness records with following information: • First Name • Last Name • Witness ID	E
8.2	The user interface must allow an authorized user to Add a new Witness record.	E
8.2.1	The user interface must assign a unique ID (Witness ID) for each newly added Witness record.	E
8.3	The user interface must allow an authorized user to select a Witness record from the list and view the following Details: • Witness ID • Witness First Name • Witness Last Name • Date/Time stamp value	E
8.4	The user interface must allow an authorized user to EDIT the details on a Witness record.	E
8.5	The user interface must allow an authorized user to Delete a Witness.	E
8.6	The user interface must allow an authorized user to save changes made to the database.	E
8.7	The user interface must provide canned reports for Witness records.	E
	Maintain Deed Parameters - Role	
9.0	The system must provide a user interface to assign a Role to a Notary, Signer, or Witness record.	E
9.1	The system must display all existing roles with following information: • Role Name • Role ID	E
9.2	The system must allow an authorized user to EDIT a role record.	E
9.3	The user interface must allow an authorized user assign a role.	E
9.3.1	The system must assign a unique ID (Role ID) for each newly created role record.	E
9.4	The system must allow an authorized user to save any changes made to the database.	E
	Maintain Fund	
10.0	The system must provide user interface to maintain a Fund record.	E

Business Req. No.	• Detailed Requirement Description	Category
10.1	The system must display a list of all existing Fund records with following information: • Fund Code • Acquisition Fund Name • Fund Purpose • PILT Fund Name • Status	E
10.2	The user interface must allow an authorized user to Add a new Fund record and must assign a unique Fund ID	E
10.3	The user interface must assign a status of Active for each newly created Fund record and display the Active date as fund addition date.	E
10.4	The user interface must allow an authorized user to select and display following details on a Fund: • Acquisition Fund Name • Fund Code • Fund ID • MCL Index • Fund Purpose • PILT Fund Name • Founding Act. • Active Date • Inactive Date • Status • User Comment • Date/Time stamp value	E
10.4.1	The user interface must allow an authorized user to display/assign/remove a transaction to the Fund from available transactions under a separate Inactive process tab.	E
10.5	The user interface must allow an authorized user to EDIT the details on a Fund record.	E
10.6	The user interface must allow an authorized user to input Inactive date. The system must update the Status of the Fund to Inactive if the Inactive date is less than or equal to the current date.	E
10.7	The user interface must allow an authorized user to Delete a Fund record only if there are no instances of use.	E
10.8	The user interface must allow an authorized user to save changes made to the database.	E
10.9	The user interface must provide canned reports for Fund records.	E
	Maintain Right	
11.0	The system must provide a user interface to maintain a Right record.	E

Business Req. No.	• Detailed Requirement Description	Category
11.1	The system must display a list of all existing Right records with following information: • Right Code • Sort Order • Name • Description • Status	E
11.2	The user interface must allow an authorized user to Add a new Right record.	E
11.2.1	The user interface must assign a unique ID for each newly created Right record.	E
11.3	The user interface must assign a status of Active for each newly created Right record and display the Active date as Right addition date.	E
11.4	The user interface must allow an authorized user to select a right and display following details: • Right Code • Right ID • Sort Order • Name • Description • Active Date • Inactive Date • Date/Time stamp value	E
11.5	The user interface must allow an authorized user to EDIT the details on a Right record.	E
11.6	The user interface must allow an authorized user to input Inactive date. The system must change the status of the Right to Inactive if the Inactive date is less than or equal to the current date.	E
11.7	The user interface must allow an authorized user to Deactivate a Right record but must not allow deleting it.	E
11.8	The user interface must allow an authorized user to save changes made to the database.	E
11.9	The user interface must provide canned reports for Right records.	E
	Maintain Public Act	
12.0	The system must provide a user interface to maintain Public Act records.	E

Business Req. No.	• Detailed Requirement Description	Category
12.1	The system must display a list of all existing Public act records with following information: • Act Number • Act year • Part • Subpart • Public Act name • Status	E
12.2	The user interface must allow an authorized user to Add/Update a Public Act record.	E
12.2.1	The user interface must display a Warning message “Add/Update can have system wide consequences”.	E
12.3	The user interface must assign a unique ID (Act ID) for each newly created Public Act.	E
12.4	The user interface must assign a status of Active for each newly created Public Act.	E
12.5	The user interface must allow an authorized user to select and display the following Public Act fields: • Act Number • Act Year • Act Part/section • Act subpart/Option • Act Name • Description • Active Date • Inactive Date • User Notes • Act ID • Status • Date/Time stamp value	E
12.6	The user interface must allow an authorized user to EDIT following fields: • Act Number • Act Year • Act Part/section • Act subpart/Option • Act Name • Description • Active Date • Inactive Date • User Notes	E

Business Req. No.	• Detailed Requirement Description	Category
12.7	The user interface must allow an authorized user to input Inactive date and change the status of the Public Act to Inactive if the Inactive date is less than or equal to the current date.	E
12.8	The user interface must allow an authorized user to “Supersede an Old Public Act” with a New Act and retain all old transaction documents and create all new transaction documents.	E
12.9	The user interface must allow an authorized user to save any changes made to the Database.	E
12.10	The user interface must provide canned reports for Public Act records.	E
	Maintain Transaction Document Group	
13.0	The system must provide a user interface to maintain Transaction Document Group records.	E
13.1	The system must display a list of all existing Transaction Document group records with following information: • Transaction Group Code • Transaction Group Name • Generation Type	E
13.2	The user interface must allow an authorized user to Add/Update a Transaction Document Group record.	E
13.3	The user interface must allow an authorized user to select and display the following Transaction Document Group Details: • Transaction Group Code • Transaction Group Name • Generation Type • Next Document Number • Date/Time stamp value	E
13.3.1	The user interface must allow an authorized user to EDIT following fields: • Transaction Group Code • Transaction Group Name • Generation Type • Next Document Number	E
13.4	The user interface must allow an authorized user to save any changes made to the Database.	E
13.5	The user interface must provide canned reports for Transaction Document Group records.	E
	Maintain Transaction Type	
14.0	The system must provide a maintenance user interface for Transaction Type records.	E

Business Req. No.	• Detailed Requirement Description	Category
14.1	The user interface must display a list of Transaction Types with the following details: • Code • Transaction Type Name • Transaction Group • Inventory Action • ID • Status • Activity	E
14.2	The user interface must allow an authorized user to create a new Transaction Type record.	E
14.2.1	The user interface must assign a unique ID for each newly created Transaction Type.	E
14.2.2	The user interface must set the status of "Active" for each newly created Transaction Type.	E
14.3	The user interface must allow an authorized user to select a transaction type and display following details: • Transaction Code • Transaction Name • Transaction Group • Inventory Action • Transaction Type ID • Active Date • Inactive Date • Status • Activity • Description • Date/Time stamp value	E
14.3.1	The user interface must allow an authorized user to EDIT following details: • Transaction Code • Transaction Group • Transaction Name • Active Date • Inactive Date • Activity • Description	E
14.4	The user interface must allow an authorized User to associate/dissociate Public Acts for a Transaction Type.	E

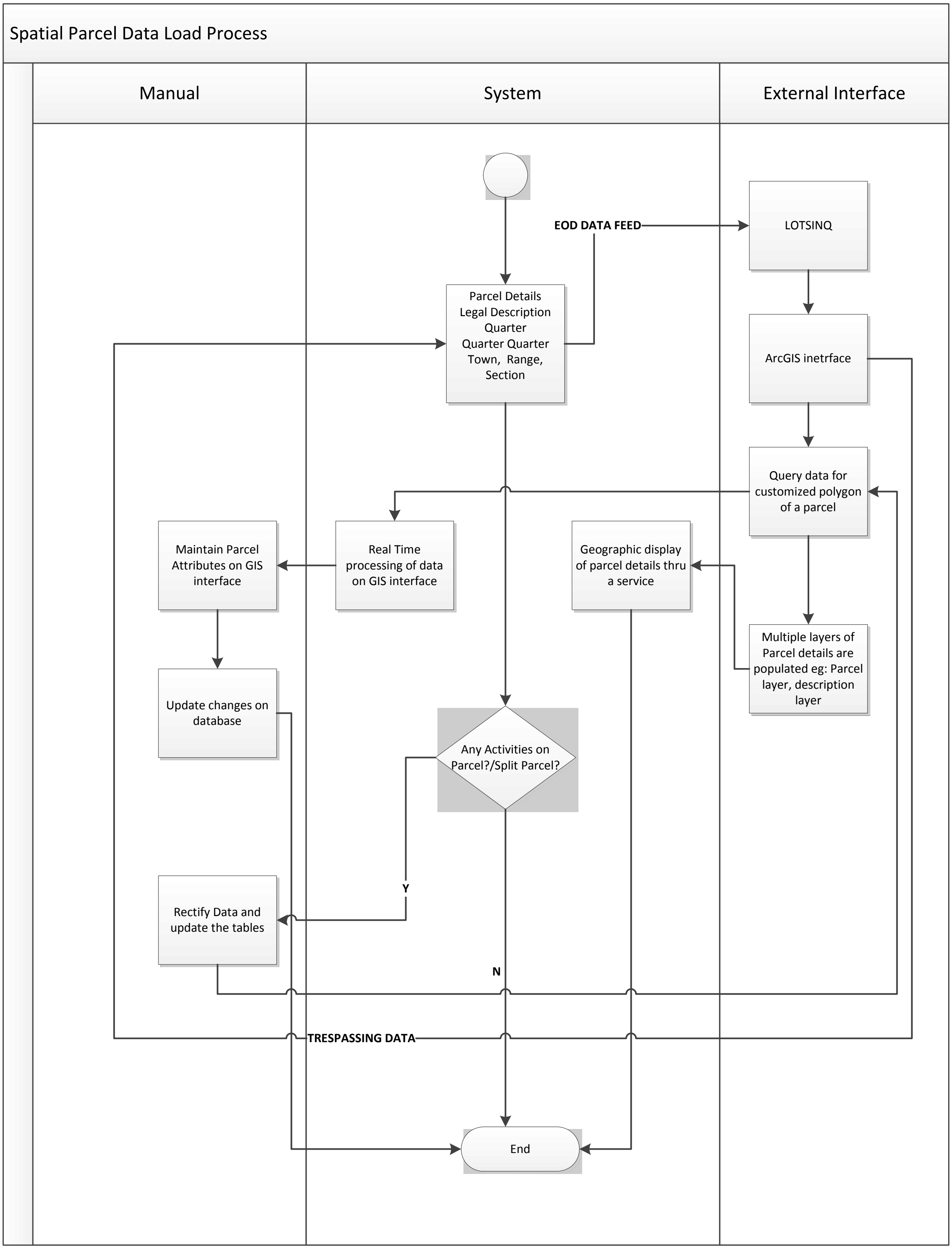
Business Req. No.	• Detailed Requirement Description	Category
14.5	The user interface must allow an authorized User to associate/dissociate Right(s) for a Transaction Type.	E
14.6	The user interface must allow an authorized user to select a particular Right and update the percentage.	E
14.7	The user interface must allow an authorized user Inactivate a Transaction Type (and not DELETE) by setting up the Inactive date in the details tab.	E
14.8	The user interface must allow an authorized user to save any changes made to the database.	E
14.9	The user interface must provide canned reports for Transaction Type records.	E

4. Exhibit 4 – Spatial Data load (GIS Interface)

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1.0	The system must provide an interface to the DNR's GIS Enterprise Environment either by accessing ESRI's ArcGIS application, or by using a Web Map Service (WMS) or Application Program Interface (API).	E
1.1	The system must provide an authorized user a state authorized, secure connection to GIS Enterprise Environment's parcel layers.	E
1.2	The system must provide a display window populated directly from certain department wide databases with preset options for users.	E
1.3	The system must provide a tab on display parcel record window and populate it when information from certain other databases for that parcel record exists.	E
1.3.1	The system must not show above tab when information doesn't exist in certain other databases related to that particular parcel record.	E
1.4	The system must provide a basic view of the GIS parcel layer for a LOTS Parcel ID for any user who opens a LOTS parcel record (Examples could be Street View, Satellite View, Plat Book View, adjacent Parcels).	E
1.5	The system must enable a geographical query in which a spatial area can be defined and used as parameters to return LOTS parcel records.	P
1.6	The system must allow the user for Real-time Processing of Data on ArcGIS.	E
1.6.1	The system must provide a notification to the major business areas and GIS support staff whenever the geographic characteristics of a LOTS parcel are updated or changed.	E
1.7	The system must allow an authorized user to Enable Latitude/Longitude searches.	P
1.8	While displaying shape(s) for parcel(s), the system must allow an authorized user to either select one parcel to display the shape in a map format, or select multiple parcels based on a query result and display all shapes for all parcels on one map.	P
1.9	The system must display the Trespass Number on Parcel details as an indicator whether the Parcel has a Trespass record or not.	P
1.10	The system must allow an authorized user to search Parcels based on the user field "Trespass Number" to retrieve parcel(s) list.	P
1.11	The system must import the Trespass number from the DNR's GIS Enterprise Environment database.	P
1.12	Currently The DNR Enterprise GIS Environment gets LOTS data from LOTSINQ in a nightly batch job. The new system must allow for direct retrieval of LOTS data for GIS use.	E

B. Process Flow Diagram



5. Exhibit 5 – Link/Split Parcel, Build Deeds and Create Documents

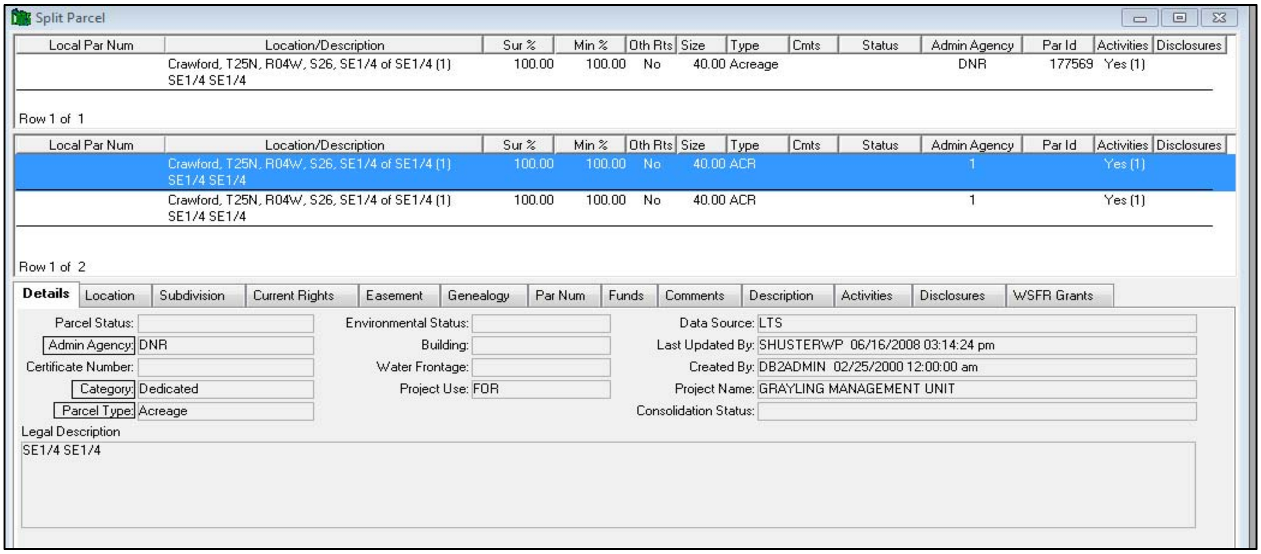
A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
	Split Parcel	
1	The system must provide user with the ability to find parcel(s) based on the search criteria entered by user.	E
1.1	The system must provide the same set of search parcel criteria as found on maintain parcel details user interface	E
1.1.1	The parcel status field in search criteria should default to ‘active’.	E
1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or parcels not found.	E
1.3	The search criteria must accept ‘null’ as input in a search field when user wants to retrieve records with null value for that particular field.	P
1.4	The system must consider all the find parcel criteria entered by user as a single condition rather than a nested condition for search.	E
1.5	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E
2	The system must display list of parcels based on search criteria.	E
2.1	The system must allow user to select ONLY one parcel for split function.	E
2.2	The system must split the parent parcel into 2 child parcels by default and allow user to add more child parcels if needed.	E
2.3	Once split, the system must change parent parcel status to split.	E
2.4	The system must allow the records of parent parcel to be incorporated in child parcels.	E
2.5	The system must display selected child parcel details. Note: These are the same details that can be seen on maintain parcel details.	E
3	The system must allow an authorized user to edit child parcel details on location, sub-div, description fields.	E
3.1	The system must copy the comments field data from parent parcel to child parcels without changing date and time stamp.	E
4	The system must allow an authorized user to make changes to child parcel details and save all changes to the database.	E
	Link Parcel	
1	The system must provide a function to link two parcels to consolidate information on parcels.	E

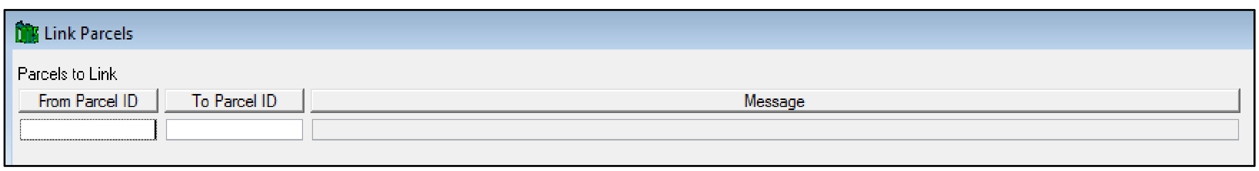
Business Req. No.	• Detailed Requirement Description	Category
1.1	The system must validate the rules in order to link parcels successfully.	E
2	The system must move all parcel relationship information on 'FROM parcel' to 'TO parcel' record.	E
2.1	The system must retain the 'TO Parcel ID' When linking parcels.	E
2.2	Common data in To Parcel remains the same and data specific to From parcel is appended to data in To Parcel in respective fields. One exception to this rule is comments field. Comments field data from To Parcel must be retained.	E
2.3	The system must retain common information in 'TO parcel'.	E
3	The system must delete/archive 'FROM parcel'.	E
4	The system must allow an authorized user to save changes to database.	E
	Build Deeds	
1	The system must provide search document functionality to find documents to build deeds.	E
2	The system must provide a user interface to build customized deed document and once built, export the document to MS Word processor for further processing.	E
2.1	The build deed user interface must capture user input and provide a list of boiler plate document options to select from.	E
2.2	To build deeds, the system must combine document data, user input on build deed user interface and information on the boiler plate document.	E
2.3	The system must provide user an option to save deed documents in LOTS system database.	O
	Create Document	
1	The system must allow the user to create a document. Note: Unlike creating a document record in maintain document, this function creates a word document.	E
2	The system must allow user to save the document in database.	E

B. AS-IS System Screenshots

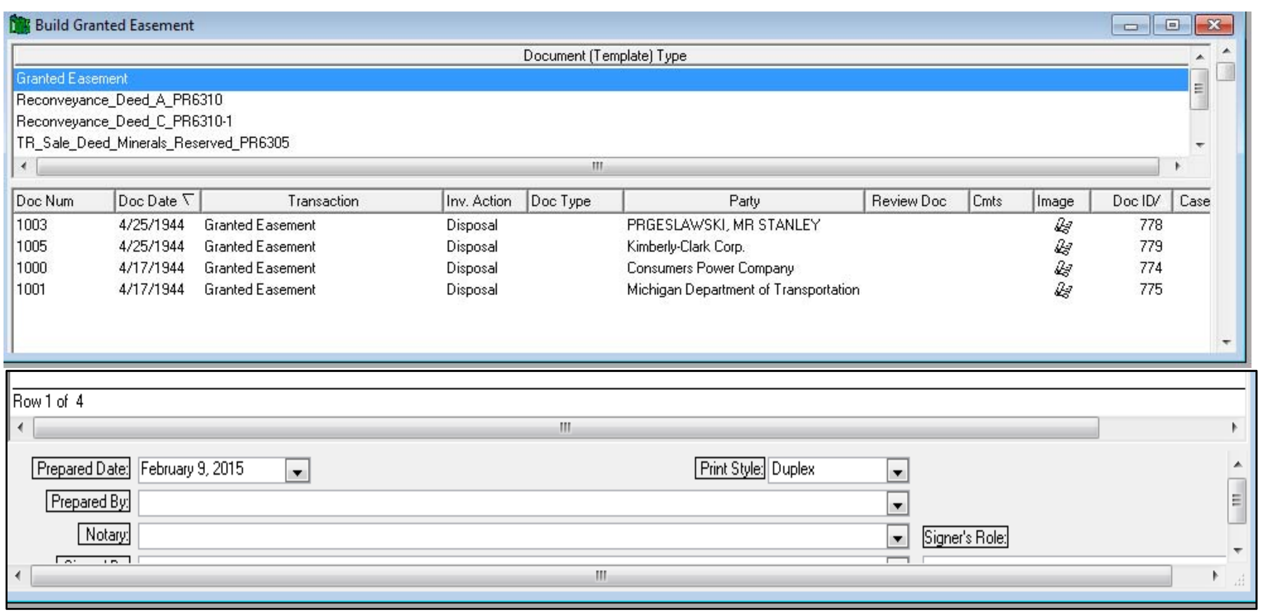
Split Parcel Window:



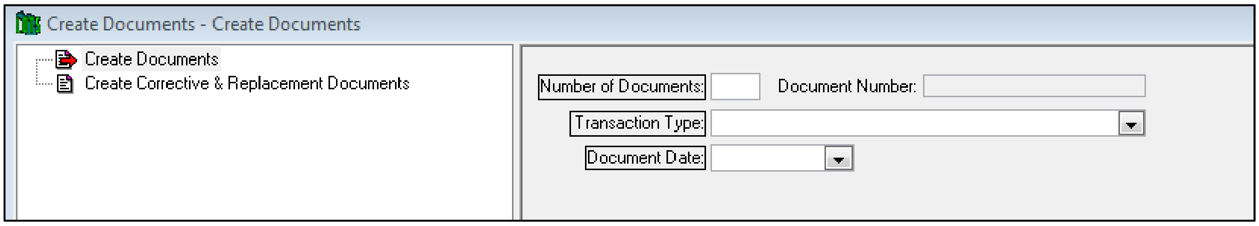
Link Parcel Window:



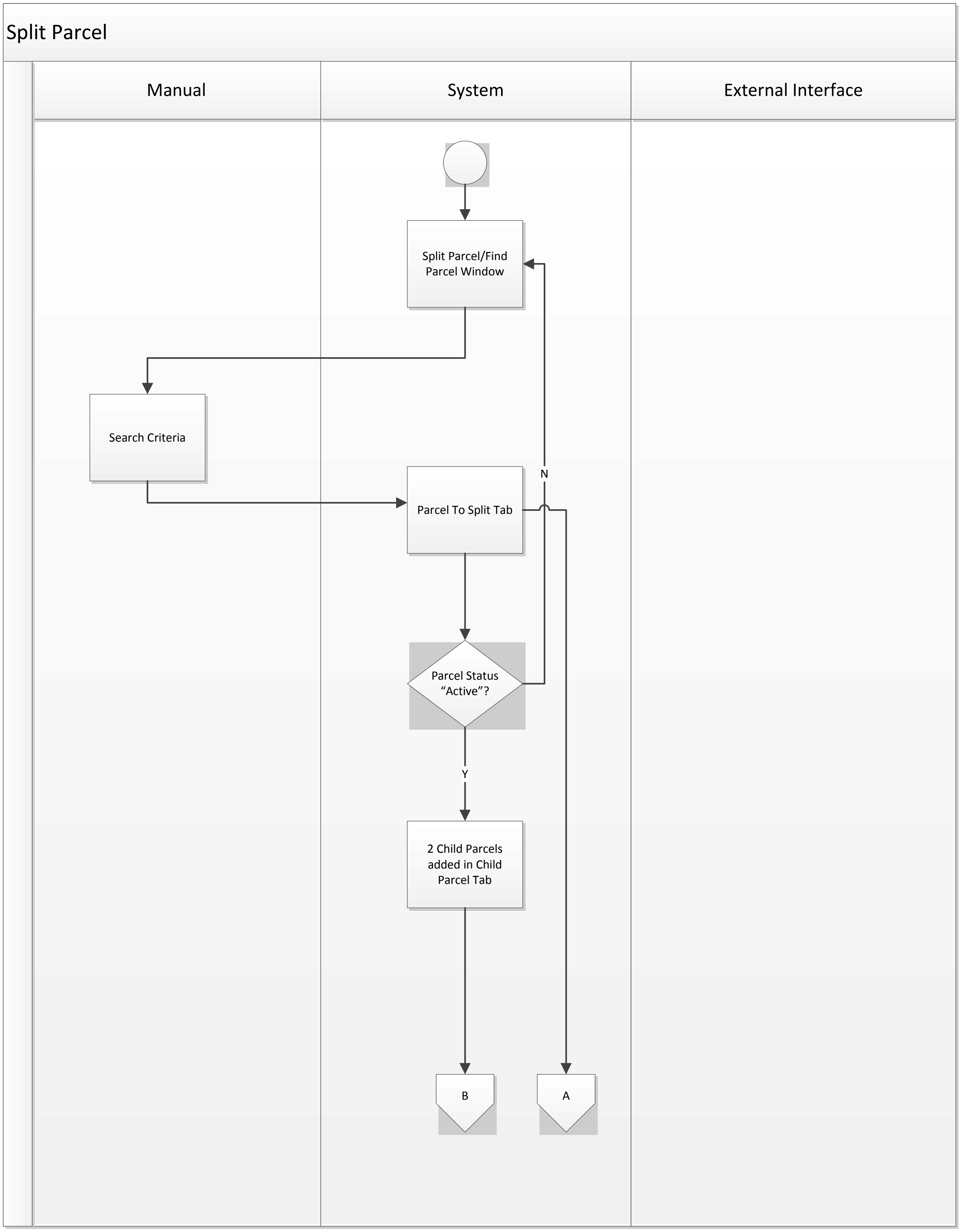
Build Deed GUI:

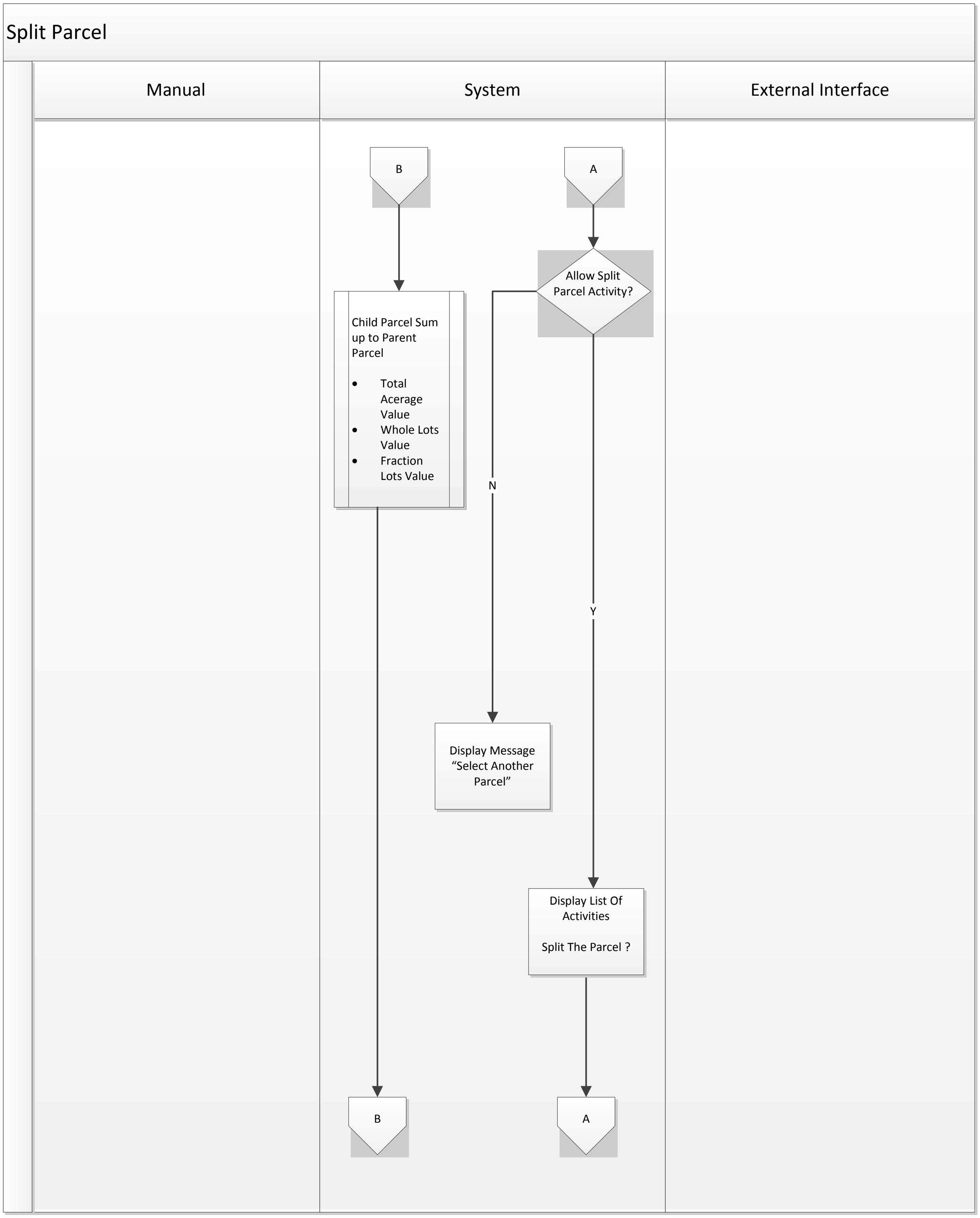


Create Documents:

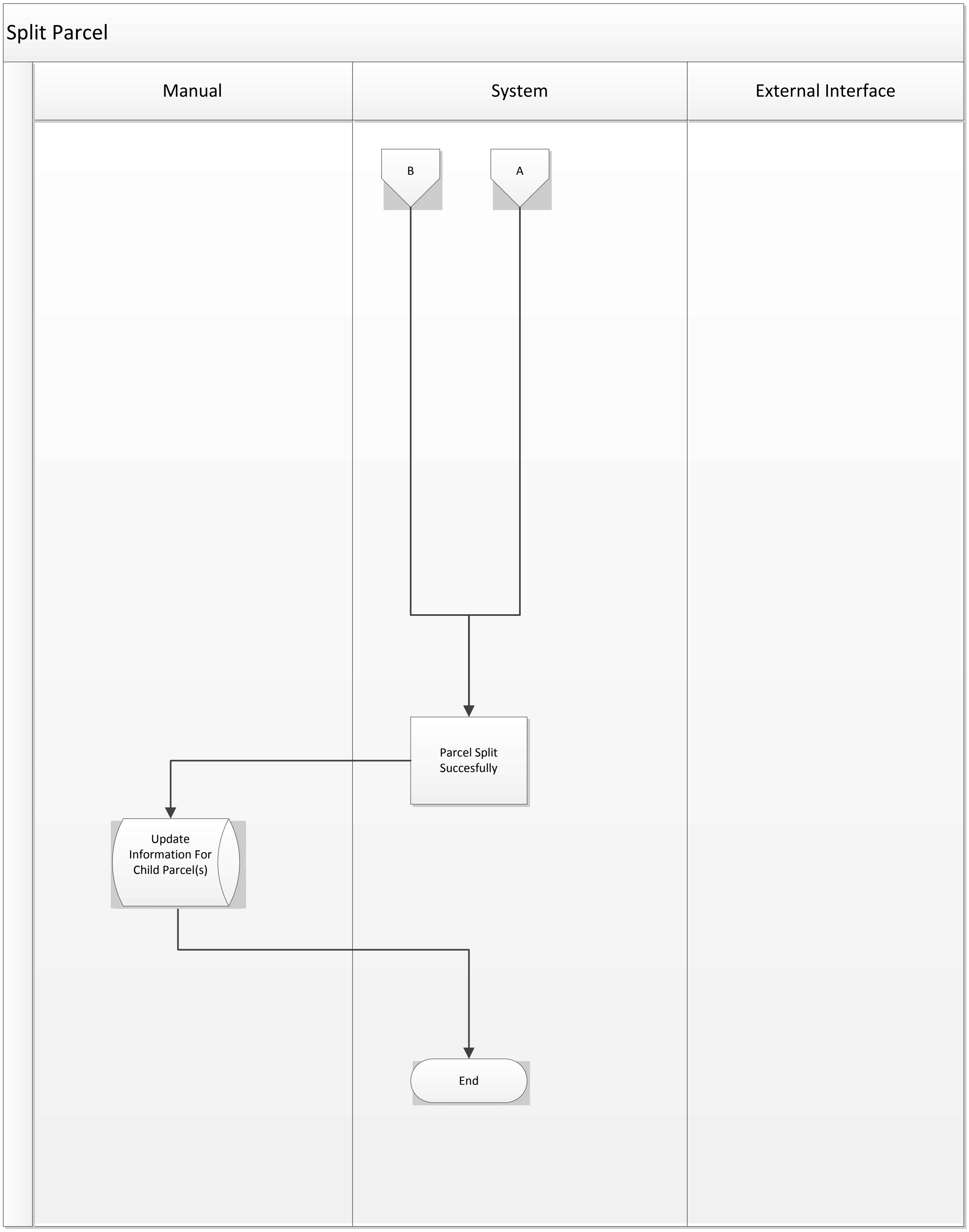


C. Process Flow Diagram





Split Parcel
Manual
System
External Interface
B
A
Allow Split Parcel Activity?
Child Parcel Sum up to Parent Parcel
• Total Acerage Value
• Whole Lots Value
• Fraction Lots Value
N
Y
Display Message “Select Another Parcel”
Display List Of Activities
Split The Parcel ?
B
A


Split Parcel
Manual
System
External Interface
B
A
Parcel Split Succesfully
Update Information For Child Parcel(s)
End

6. Exhibit 6 – Mineral Auction, Nomination and Parcel Classification

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
	Maintain Mineral Auction	
1	The system must provide a user interface to maintain mineral auction records.	E
1.1	The system must give user the ability to create an auction record.	E
1.1.1	The system must assign a unique ID for each newly created auction record.	E
1.2	The system must provide user with the ability to search for auction(s) based on the following search criteria: • Auction ID • Auction start date • Auction end date • Nomination start date • Nomination end date • Parcel ID • County • Town/Range/Section/Q/QQ • Lease type • Lease number • Current lease • Previous lease	E
1.2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or auction(s) not found.	E
1.2.2	The system must provide the search criteria to find all auction(s) records that have null values in a particular field.	E
1.2.3	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E
1.3	The system must give user the ability to display and edit auction details.	E
1.4	The system must give user the ability to delete an auction provided there are no parcel(s) attached to it.	E
1.5	The system must give user the ability to add notes on an auction record.	E
1.6	The system must give user the ability to add parcel(s) to an auction record.	E
1.6.1	The system must post “offered for mineral lease” activity for such parcel(s) and clear parcel’s activity of “nominated for mineral lease”.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.6.2	The system must allow the user to select one or multiple added parcels to add a single note on them.	E
1.7	The system must give user the ability to delete parcel(s) attached to an auction.	E
1.7.1	The system must allow the user to add a note to indicate why the parcel is deleted and clear the parcel's "Offered for Mineral Lease" activity.	E
1.8	The system must allow the authorized user to select one or multiple parcels and set the status of parcel(s) to "Withdrawn" and clear the parcel's "Offered for Mineral Lease" activity.	E
1.8.1	The system must allow the user to select one or multiple parcels to add a single note on parcel(s) indicating why the parcel auction status is withdrawn.	E
1.9	The system must allow the authorized user to select one or multiple parcels to set the status of a parcel(s) to "Pending" if needed and clear the "Offered for Mineral Lease Activity "and set "Nominated for Mineral Lease Activity".	E
1.9.1	The system must allow the authorized user to select one or multiple parcels to add a single note indicating why the parcel(s) auction status is pending.	E
1.10	The system must allow an authorized user to change the Parcel's auction status to "Active" for a "Withdrawn" or "Pending" parcel. This will clear the activity of "Nominated for Mineral Lease" and set "Offered for Mineral Lease" activity.	E
1.11	The system must make the parcel's auction status to "Inactive" when needed.	E
1.12	The system must allow user to select one or multiple parcels from the list to display parcel(s) details.	E
1.13	The system must display the following details for a parcel associated with an auction • Classification History • Mineral Lease Auction History • Nomination History	E
1.14	The system must allow system/authorized user to assign/reassigning offering numbers to an auction.	E
1.14.1	The system must keep Parcel's activity as 'nominated for mineral lease' and add the activity of 'offered for mineral lease'.	E
1.15	The system must provide a "Load parcel(s)" function to allow an authorized user to import all the Active parcels having a parcel classification history associated to the nominated parcels for that particular auction ID.	E
1.16	The system must give user the ability to generate the Auction Catalog Print File (in MS Word format) for a given Auction.	E
1.17	The system must allow user to save changes to an auction.	E
1.18	The system must provide standard, printable, downloadable to MS Office reports.	E
	Maintain Nominations	
1	The system must provide a user interface to maintain mineral nominations.	E
1.1	The system must provide user with the ability to create a nomination record.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.1.1	The system must assign a unique ID for each newly created nomination record.	E
1.2	The system must provide user with the ability to search for nomination(s) based on the following search criteria: • Nomination ID • Nomination Type • Lease Type • Nomination Date • Nomination status • Vendor • Nominated by • Parcel ID • County • Town/Range/Section/Q/QQ	E
1.2.1	The system must validate the search criteria entered by the user and throw appropriate error message in case of invalid criteria or nominations not found.	E
1.2.2	The system must provide the search criteria to find all nominations records that have null values in a particular field.	E
1.2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
1.3	The system must provide the user with the ability to display and edit nomination(s) details.	E
1.4	The system must allow a user to add a note to a Nomination.	E
1.5	The system must allow user to select one or multiple parcels from the list to change auction status simultaneously.	E
1.6	The system must allow user to add parcel(s) to a nomination and must set parcel's activity to "Nominated for: • Oil & Gas Lease • Metallic Mineral Lease • Non-Metallic Mineral Lease • Gas Storage Lease • Surface Use Lease Depending upon the type of Lease.	E
1.6.1	The system must Display the Activities of the Parcel already Nominated for other Lease Types.	E
1.6.2	The system must give the user an ability to select one or multiple parcels and add a single note on them.	E
1.6.3	The system must allow user to add parcel(s) for a given location to a nomination.	E
1.7	The system must allow user to add the same parcel in multiple nominations.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.8	The system must allow user to delete parcel(s) from a nomination and it must clear the parcels' Nomination status of "Nominated for Mineral Lease Activity" provided it's not nominated for other mineral lease activities.	E
1.9	The system must allow user to display selected parcel's details from the list of parcels on a nomination.	E
1.10	The system must display the following details for a parcel associated with an auction • Classification History • Mineral Lease Auction History • Nomination History	E
1.11	The system must associate min par fund to a parcel and also allow the user to view and edit min par fund information on parcel(s) attached to a nomination.	E
1.12	The system must associate sur par fund to a parcel and also allow the user to view and edit sur par fund information on parcel(s) attached to a nomination.	E
1.13	The system must give user the ability to change attached parcel(s) nomination status to "Active" or "Inactive".	E
1.14	The system must allow user to activate a parcel that was previously withdrawn or pending from a Nomination and must set parcel's activity to "Nominated for Mineral Lease".	E
1.15	The system must allow user to withdraw a parcel from nomination and must clear parcel's activity of "Nominated for Mineral Lease" provided, the parcel(s) are not associated with any other current nomination attached to it.	E
1.16	The system must allow user to set parcel's nomination status to pending and must not clear parcel's activity of "Nominated for Mineral Lease".	E
1.17	The system must allow user to delete a nomination provided there are no parcels attached to it.	E
1.18	The system must allow user to save changes to a nomination.	E
1.19	The system must provide standard, printable, downloadable to MS Office, reports.	E
1.19.1	Nomination Summary by Location report should have "Jurisdiction" field added in user input area.	P
	Maintain mineral parcel fund association	
1	The system must provide a user interface to maintain mineral parcel fund association record.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.1	The system must provide the ability to search based on the following search criteria: • nomination ID • auction ID • Acquisition Fund • Mineral Revenue distribution fund • Parcel ID • Nomination Date • Nomination Parcel Status • Nomination type • Lease type • Auction date • Auction parcel status • County • Town/Range/Section/Q/QQ • Lease number • Lease status	E
1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or mineral parcel fund association not found.	E
1.3	The system must provide the search criteria to find all mineral parcel fund association records that have null values in a particular field.	E
1.4	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
1.5	The system must display mineral parcel fund to parcel associations. Display all the Funds associated with each Parcel in the list of parcels for the purpose of mineral lease revenue and mineral production revenue distribution.	E
1.5.1	The system must allow user to select one or multiple parcels to display parcel details.	E
1.5.2	The system must allow user to select one or multiple parcels to display parcel to min par fund associations through printable report.	E
1.5.3	The system must provide a separate report to display one or multiple parcel to mineral parcel fund association details.	E
1.6	The system must allow user to add one or multiple mineral parcel funds to a parcel.	E
1.7	The system must allow user to change mineral parcel fund association to a parcel.	E
1.8	The system must allow user to save changes to a mineral parcel fund association.	E
1.9	The system must provide standard, printable, downloadable to MS Office reports.	E
	Maintain Surface Parcel Fund Association	
1	The system must provide a user interface to maintain surface parcel fund association record.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.1	The system must provide the ability to search based on following search criteria: • nomination ID • auction ID • Acquisition Fund • Mineral Revenue distribution fund • Parcel ID • Nomination Date • Nomination Parcel Status • Nomination type • Lease type • Auction date • Auction parcel status • County • Town/Range/Section/Q/QQ • Lease number • Lease status	E
1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or surface parcel fund association not found.	E
1.3	The system must provide the search criteria to find all surface parcel fund association records that have null values in a particular field.	E
1.4	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
1.5	The system must display surface parcel fund - parcel association(s) along with list of parcel(s). Display all the funds associated with a parcel for the purpose of mineral lease revenue and mineral production revenue distribution.	E
1.5.1	The system must allow user to select one or multiple parcels to display parcel details.	E
1.6	The system must allow user to add one or multiple surface parcel funds to a parcel.	E
1.7	The system must allow user to change surface parcel fund – parcel association.	E
1.8	The system must allow user to save changes to a surface parcel fund association.	E
1.9	The system must provide standard, printable, downloadable to MS Office reports.	E
	Maintain Parcel Review Classification	
1	The system must provide a user interface to maintain parcel classification record.	E
1.1	The system must provide the ability to create a Parcel Classification.	E
1.2	The system must provide the ability to search for Parcel Classification based on the search criteria entered.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.2.1	The system must provide the ability to search based on the following search criteria: • nomination ID • Lease type • nomination ID • auction ID • Classification Date • Classification ID • Nomination date • Nomination type • Lease class • Vendor • Parcel ID • County • Town/Range/Section/Q/QQ	E
1.2.2	The system must provide a search field of "Most recent classification" and then be able to pick which classification is intended (NL, LND, LDR, LD, and Null) to fetch all parcels with that type of classification.	E
1.2.3	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or parcel classification not found.	E
1.2.4	The system must provide the search criteria to find all parcel classification records that have null values in a particular field.	E
1.2.5	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
1.5	The system must display following details: • Parcel ID • Classification Date • Lease class • Location • Short Legal • Respondent • Notes • Date/Time stamp • Parcel Classification ID	E
1.5.1	The system must allow a user to select one or multiple parcels to display parcel(s) details.	E
1.6	The system must allow user to select one or multiple parcels to add a single note.	E
1.7	The system must provide the ability to edit/update parcel classification.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.8	The system must provide the ability to delete a parcel classification.	E
1.9	The system must allow user to select one or multiple parcels to add a reason.	E
1.10	The system must provide the ability to delete a reason from a parcel classification.	E
1.11	The system must allow user to select one or multiple parcels to add a stipulation.	E
1.12	The system must provide the ability to delete a stipulation from a parcel classification.	E
1.13	The system must provide the ability to display parcel classification history for a parcel.	E
1.14	The system must provide the ability to display all nominations for a parcel.	E
1.15	The system must provide a tab to show all the reviewer recommendations related to a parcel(s).	E
1.16	The system must allow user to create reports for all the reviews on a parcel with created by and date/time stamp.	E
1.17	The system must allow the user to save changes to the database.	E
1.18	The system must provide standard, printable, downloadable to MS Office reports.	E
	Parcel Review System – Interface	
1	The system must provide a real time interface to Parcel Review System (PRS).	E
2	The system must provide field mapping between tables in LOTS system, Interface tables (middle layer) and PRS system tables to send/ receive data.	E
3	The system must allow PRS to read and access data required for parcel review.	E
4	The system must allow interface tables to receive data from PRS.	E
5	The system must apply business rules and match data (e.g. Matching lease class to stipulation, reason) before initiating upload from interface/middle layer tables to LOTS tables.	E
6	The system must provide user interface to initiate upload process from middle layer/interface tables into LOTS tables.	E
6.1	The system must allow an authorized user to upload data from middle layer/interface tables to respective LOTS tables based on field mapping.	E
6.2	The system must allow an authorized user to input auction type, nomination date, Nomination Type and other details as needed, to initiate upload process.	E
6.3	The system must allow an authorized user to view PRS interface log / summary.	E
7	The system must send an Email notification to minerals section when a parcel with active nomination(s) is split.	E
8	The system must mark nomination IDs in PRS system with a date stamp (so it is identified as historic) when LOTS system receives classification data from PRS.	E
	Lease Auction System Interface	
1	The system must provide an Interface to Land Auction System (LAS).	E
2	The system must provide field mapping between auction tables in LOTS system and LAS system tables to send/ receive data.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
	Download	
3	The system must provide a Download Lease Auction Data user interface.	E
3.1	The system must allow authorized user to input lease type, auction date and any other required data for download.	E
3.2	The system must allow an authorized user to select download function to initiate the process.	E
3.3	The system must read and send auction data from LOTS auction tables to LAS system.	E
	UPLOAD	
4	The system must provide an Upload Lease Auction Data user interface.	E
4.1	The system must allow authorized user to input lease type, auction date and any other required data for upload.	E
4.2	The system must allow an authorized user to select upload function to initiate the process.	E
4.3	The system must read auction data and allow data to be inserted into respective LOTS tables.	E
	Match Bidder to Vendor	
1	The system must provide a user interface to maintain Match bidder to vendor function.	E
2	The system must allow an authorized user to select or input an auction (lease type and auction date).	E
3	The system must allow an authorized user to select match Bidder to Vendor function.	E
3.1	The system must read bidder details from auction data based on user input in above requirement.	E
3.2	The system must display Bidder list with corresponding vendor list and bidder details for any selected record in bidder list.	E
3.3	The system must allow an authorized user to match bidder in LAS system to corresponding Vendor in LOTS system.	E
3.4	The system must allow an authorized user to change Vendor number (vendor number that was matched to a particular bidder previously) in bidder details if needed.	E
4	The system must save Match Vendor to Bidder data into the database.	E
	Maintain Lease Term Record	
1	The system must provide a user interface to maintain Lease Terms record.	E
1.1	The system must allow the user to create a Lease term record.	E
1.1.1	The system must assign a Unique ID for newly created Lease term record	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.2	The system must provide user with the ability to search for Lease Term record(s) based on the search criteria entered.	E
1.2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Lease Term record(s) not found.	E
1.2.2	The system must provide the search criteria to find all Lease Term Record(s) records that have null values in a particular field.	E
1.2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
1.3	The user interface must give a user the ability to Display and Edit Lease term record details.	E
1.4	The system must give a user the ability to add a note to a lease Term record.	E
1.5	The system must save the changes to the database.	E
1.6	The system must save changes to the database.	E
1.7	The system must provide standard, printable, downloadable to MS Office reports.	E
	Maintain Lease	
1	The system must provide a user interface to maintain Lease record.	E
1.1	The system must give a user the ability to create a Lease record.	E
1.1.1	The system must assign a unique ID to a newly created Lease record.	E
1.1.2	The system must assign Lease number for newly created lease record.	E
1.2	The system must give a user the ability to create all the Leases for a given Oil and Gas Auction.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.3	The system must provide user with the ability to search for Lease(s) based on: • Lease Number • Lease Type • Lease Class • Lease on hold(Y/N) • Current Lessee • Previous Lessee • Lease Date • Lease Expiration date • Held by Storage (Y/N) – For Gas Storage Leases only • Lease Extension Expiration date • Lease End date • Sent to Record center date • Lease Origin • Terms ID • HBP (Y/N) • Lease Status • Extension Status • Min Par Fund • Sur Par Fund Parcel Location by: • County • Town • Range Section • QQ • Q	E
1.3.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Lease not found.	E
1.3.2	The system must provide the search criteria to find all Lease that have null values in a particular field.	E
1.3.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
1.4	The system must provide a user with the ability to Display and Edit the Lease details.	E
1.5	The system must allow the user to delete a Lease provided that there are no Parcels, Assignments and Extensions associated with the Lease.	E
1.6	The system must provide the user with the ability to add parcel(s) to the Lease.	E
1.7	The system must allow the user to add all parcels for a given location to a Lease	E
1.8	The system must allow the user to delete parcel(s) from the Lease	E

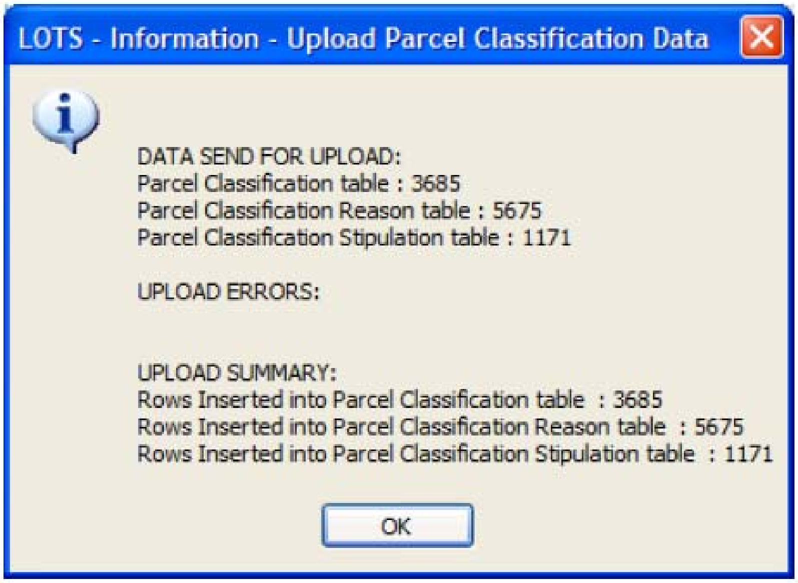
Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.9	The system must allow the user to add a note to the Lease.	E
1.10	The system must allow the user to release one or more parcels from a lease	E
1.10.1	The system must remove the "Active Mineral Lease" activity from the released parcel.	E
1.11	The system must allow the user to release the entire Lease	E
1.12	The system must allow the user to extend a Lease.	E
1.13	The system must allow the user to Display Lease Terms.	E
1.14	The system must allow the user to Maintain the funds associated with the Lease through Parcel(s).	E
1.15	The system must allow the user to attach Lease pdf documents, Extensions and Assignments to a Lease.	E
1.16	The system must allow the user to detach Lease pdf documents, Extensions and Assignments to a Lease.	E
1.17	The system must allow the user to Split a Lease into one or multiple Child Leases.	E
1.17.1	The system must keep the parent lease "Active"	E
1.17.2	The system must assign same lease numbers with a suffix (A,B..) to the Child Lease(s)	E
1.16.3	The system must assign same Lease terms to the Child Lease(s)	E
1.17	The system must allow the user set/unset the lease on Hold by utilizing the "Lease on Hold" function.	E
1.18	The system must allow an authorized user to select one or multiple leases in order to make it Active or Inactive by using the "Lease on Hold" function. *Note: Currently, a user can only select one lease and set it on Hold to make it Active and vice-versa. The new system must allow multiple selections of leases and make them active/inactive using the "lease on hold" function.*	E
1.18.1	For Active leases, the system must remove the "Nominated for mineral lease" activity and assign "Offered for mineral". For Inactive leases, the system must remove the "Offered for mineral lease" activity and assign "Nominated for mineral lease" activity.	E
1.19	The system must give a user the ability to Disassociate a Lease Term from a Lease.	E
1.20	The system must save the changes to the database.	E
1.21	The system must provide standard, printable, downloadable to MS Office reports.	E
	Maintain Lease user interface – Lease Type: Nonmetallic	
1	The maintain Lease user interface must provide the same functionality as described in "Maintain Lease" section with few exceptions for lease type –Nonmetallic	E

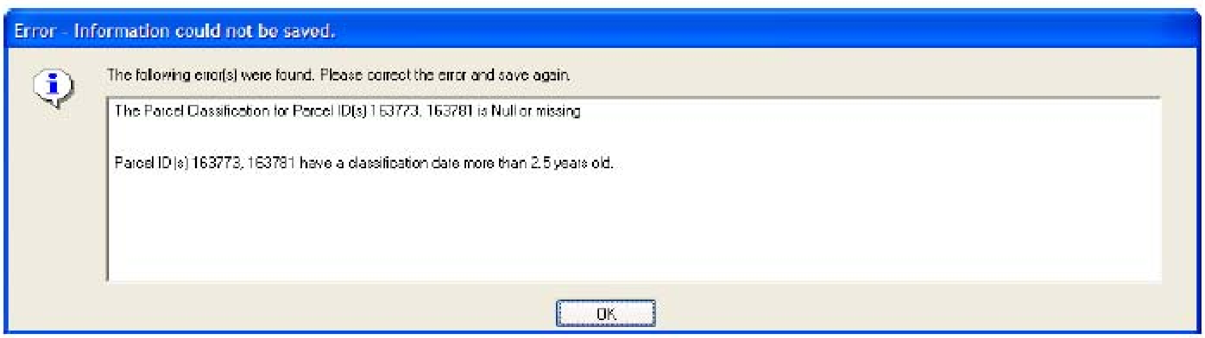
Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.1	For Nonmetallic Lease, The Maintain Lease user interface search window must provide a drop down field for “Held By Production (HBP)” with values as “Yes, No & Not Applicable” (Currently the HBP has only “Yes” and “No” for all lease types)	E
1.2	For Nonmetallic Lease, The Maintain Lease user interface must provide a drop down list for Commodity Types being pulled from the system reference table product type (Non-Metallic)	E
1.2.1	The system must allow an authorized user to select a commodity type and add multiple commodity types for a Nonmetallic lease.	E
1.3	For Nonmetallic Lease, The Maintain Lease user interface must display “Held By Production (HBP)” details as Yes, No or Not Applicable depending on the Commodity type associated with that lease.	E
1.4	For Nonmetallic Lease, The maintain Lease user interface must display “Extension Thru date” under Terms details	E
1.5	For Nonmetallic Lease, The maintain Lease user interface must display “From Date” and “Thru date” for the Royalty Rate description under Terms details	E
	Maintain Vendor	
1	The system must provide a user interface to maintain Vendor record.	E
1.1	The system must allow the user to create a Vendor record.	E
1.1.1	The system must assign a unique ID for each Vendor.	E
1.2	The system must provide user with the ability to search for vendor record(s) based on the search criteria entered.	E
1.2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or vendor record(s) not found.	E
1.2.2	The system must provide the search criteria to find all vendor Record(s) records that have null values in a particular field.	E
1.2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
1.3	The system must provide a tab to attach/detach pdf files of Bond, Insurance, or Vendor Entity Information.	E
1.4	The system must allow the user to Display and Edit • vendor information • Vendor type • Contact Information Qualification Information • Bond information for Vendor Insurance information for a Vendor	E

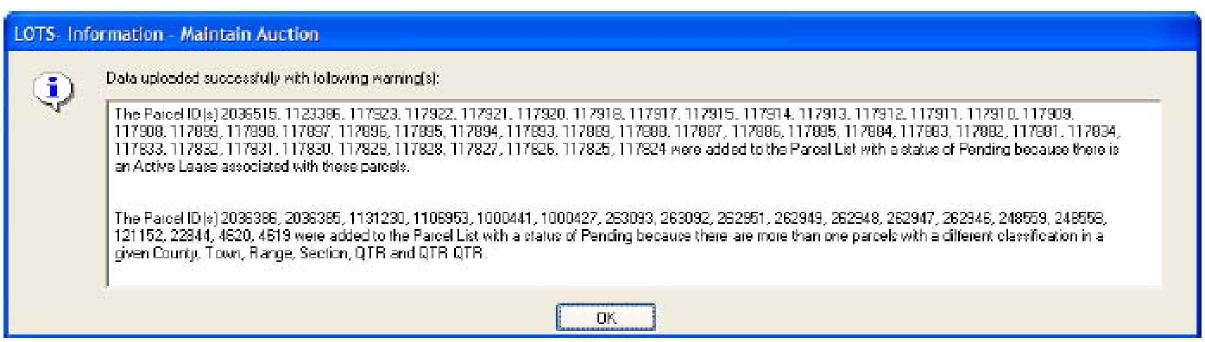
Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.5	The system must allow the user to Delete • Vendor information • Vendor type • Contact Information Qualification Information • Bond information for Vendor • Insurance information for a Vendor	E
1.6	The system must allow the user to associate Vendor type to a Vendor.	E
1.7	The system must allow the user to remove Vendor type from a Vendor.	E
1.8	The system must save changes to the database.	E
1.9	The system must provide standard, printable, downloadable to MS Office reports.	E
2	The system must combine Vendor and Party maintenance user interfaces Note: The system must explore possibilities of combining Vendor and Party maintenance windows and capture Vendor relevant, Party relevant information respectively using the same window.	O
	Build Lease	
1	The system must provide a build Lease user interface.	E
2	The system must provide user with the ability to search for Lease(s) based on the search criteria entered.	E
2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Lease not found.	E
2.2	The system must provide the search criteria to find all Lease that have null values in a particular field.	E
2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
3	The system must allow an authorized user to select a document template to build a Non-Metallic lease.	E
3.1	The system must allow an authorized user to build a lease (Except Non-Metallic) using a Standard Document Template.	E

B. AS-IS System Screenshots

Parcel Review System – Error Log:

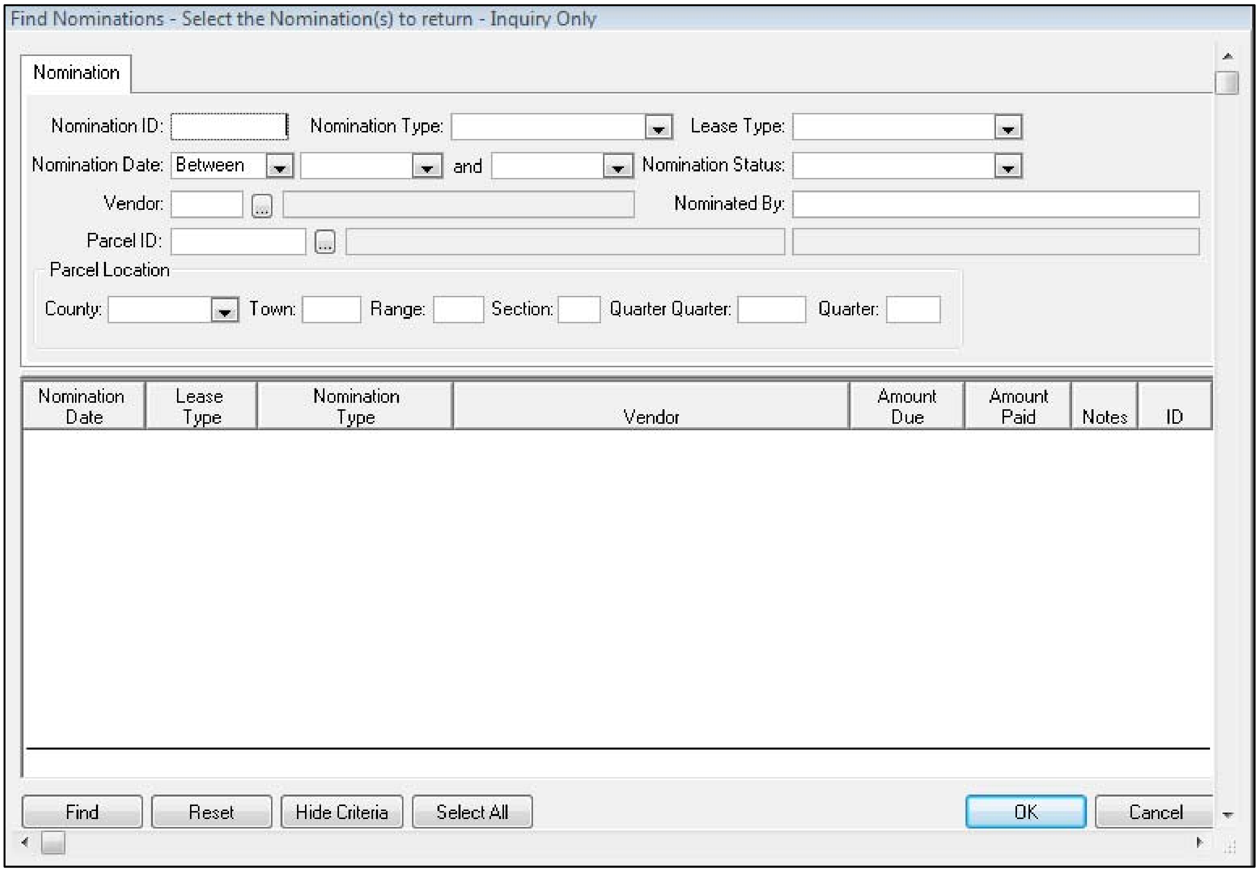




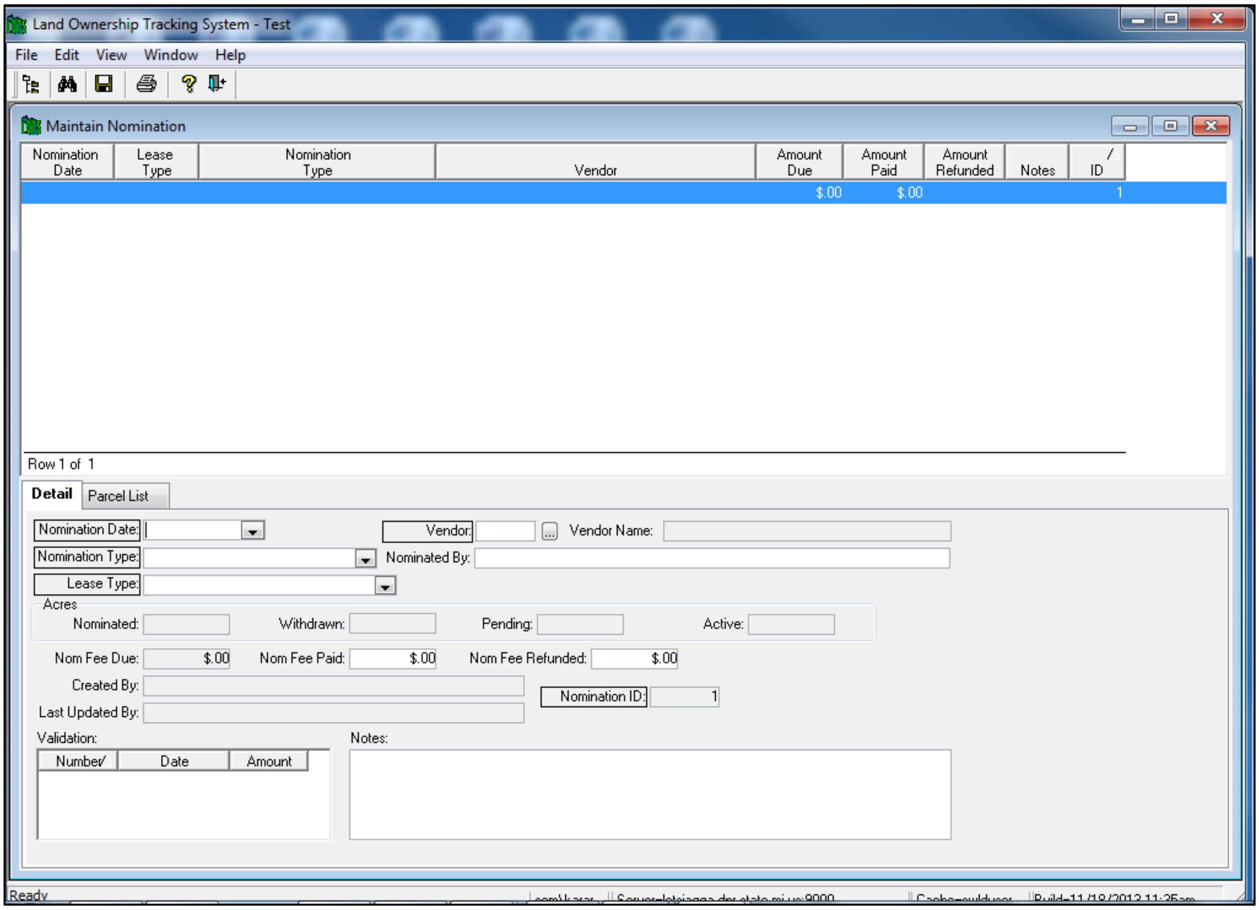


2036386,2036385,1131230,1106953,1000441,1000427,263093,263092,262951,262948,262949,262947,262946,248559,248558,121152,22844,4620,4619

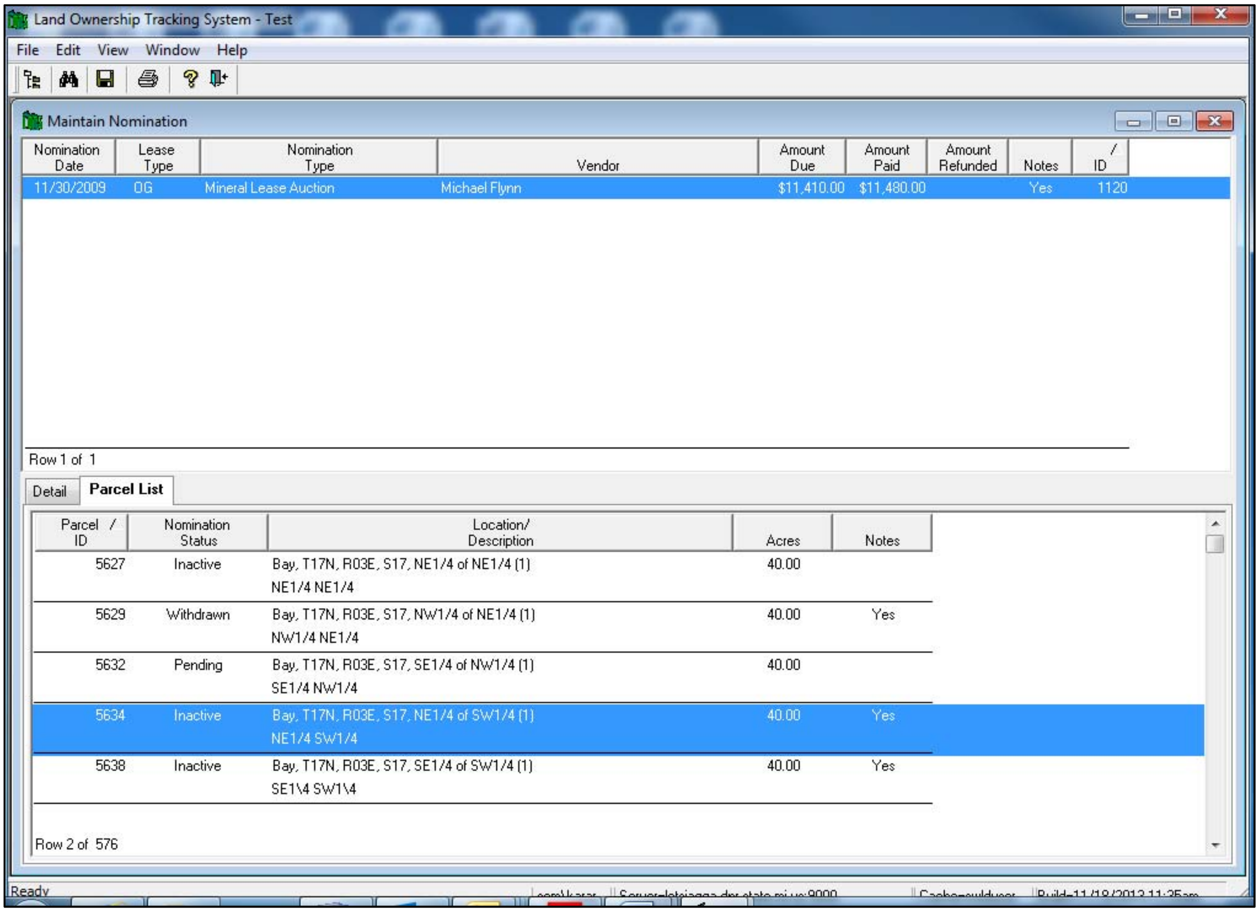
Search window on Maintain Nomination in LOTS:



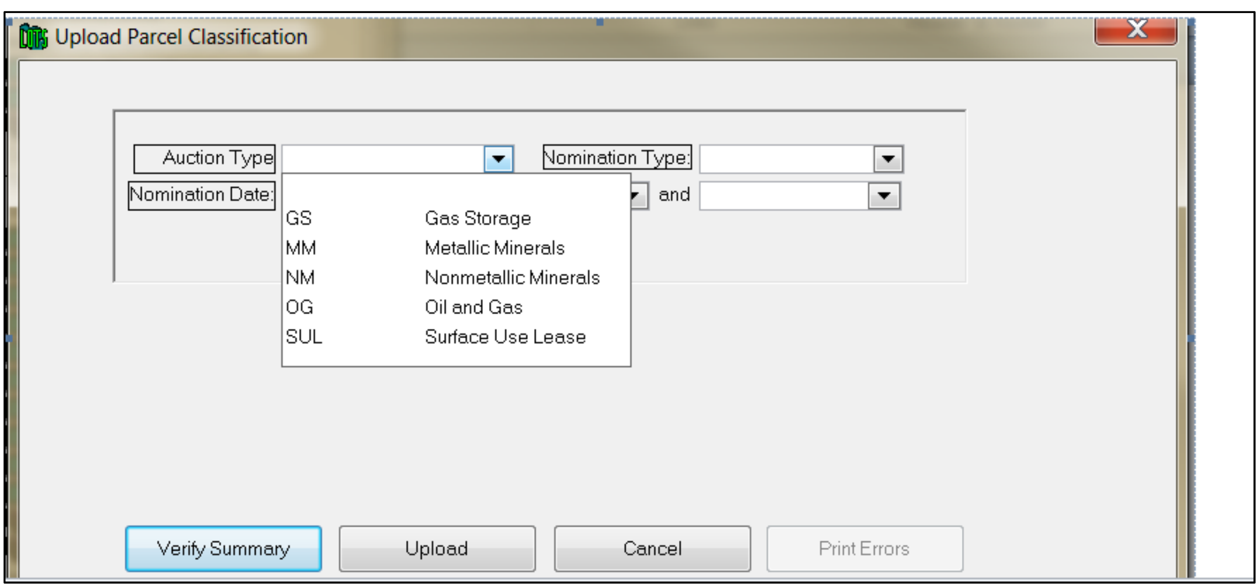
Maintain Nomination Window – Nomination Detail's tab in LOTS system:



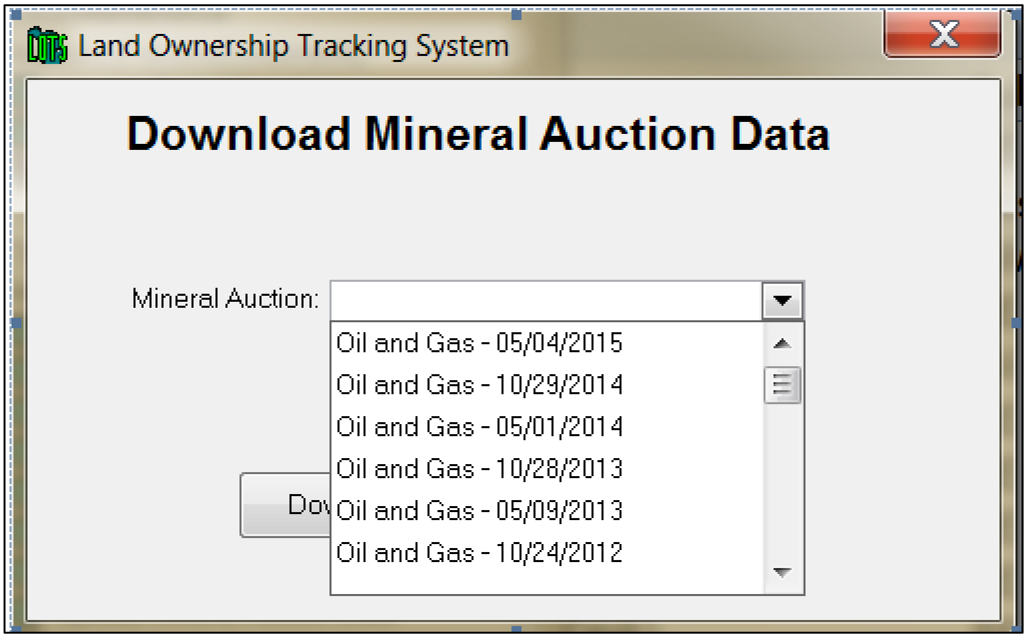
Maintain Nomination Window – Parcel list tab in LOTS system:

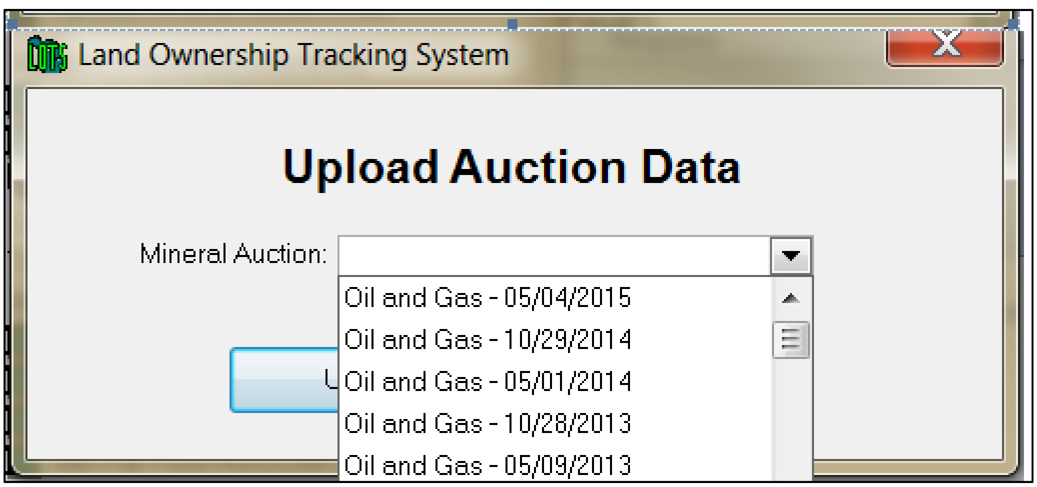


PRS Interface - Upload Parcel Classification window in LOTS system:

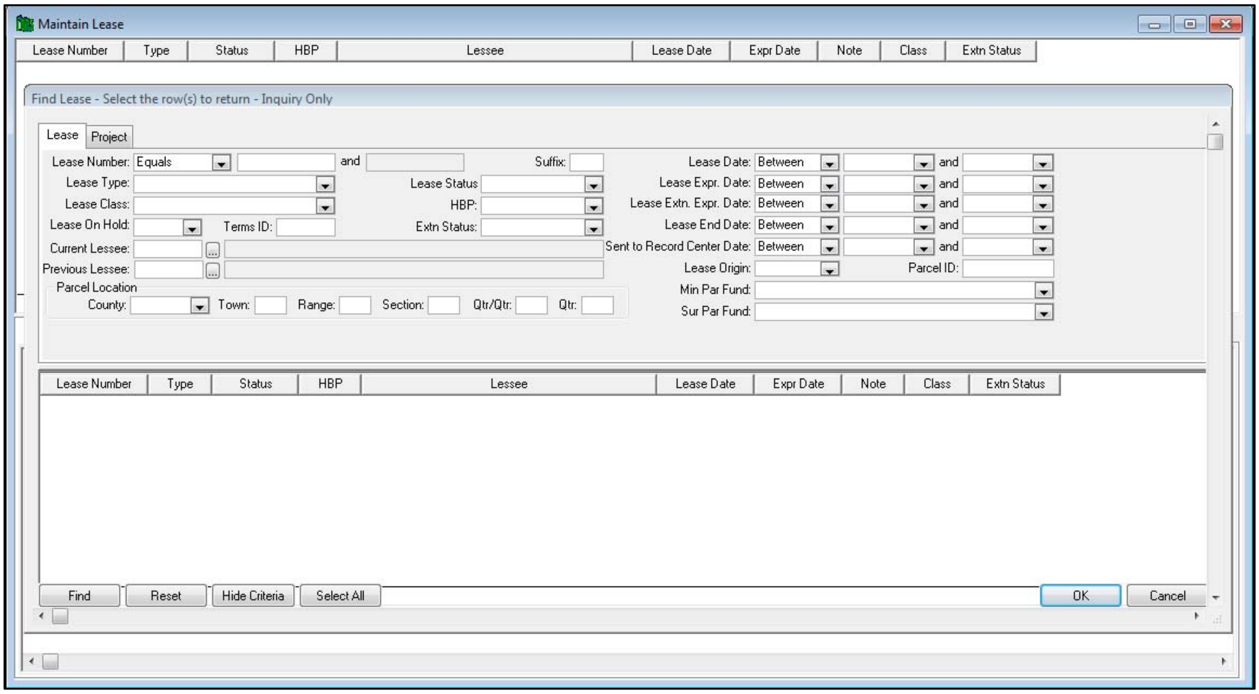


LAS Interface – Upload and Download auction data Windows in LOTS:

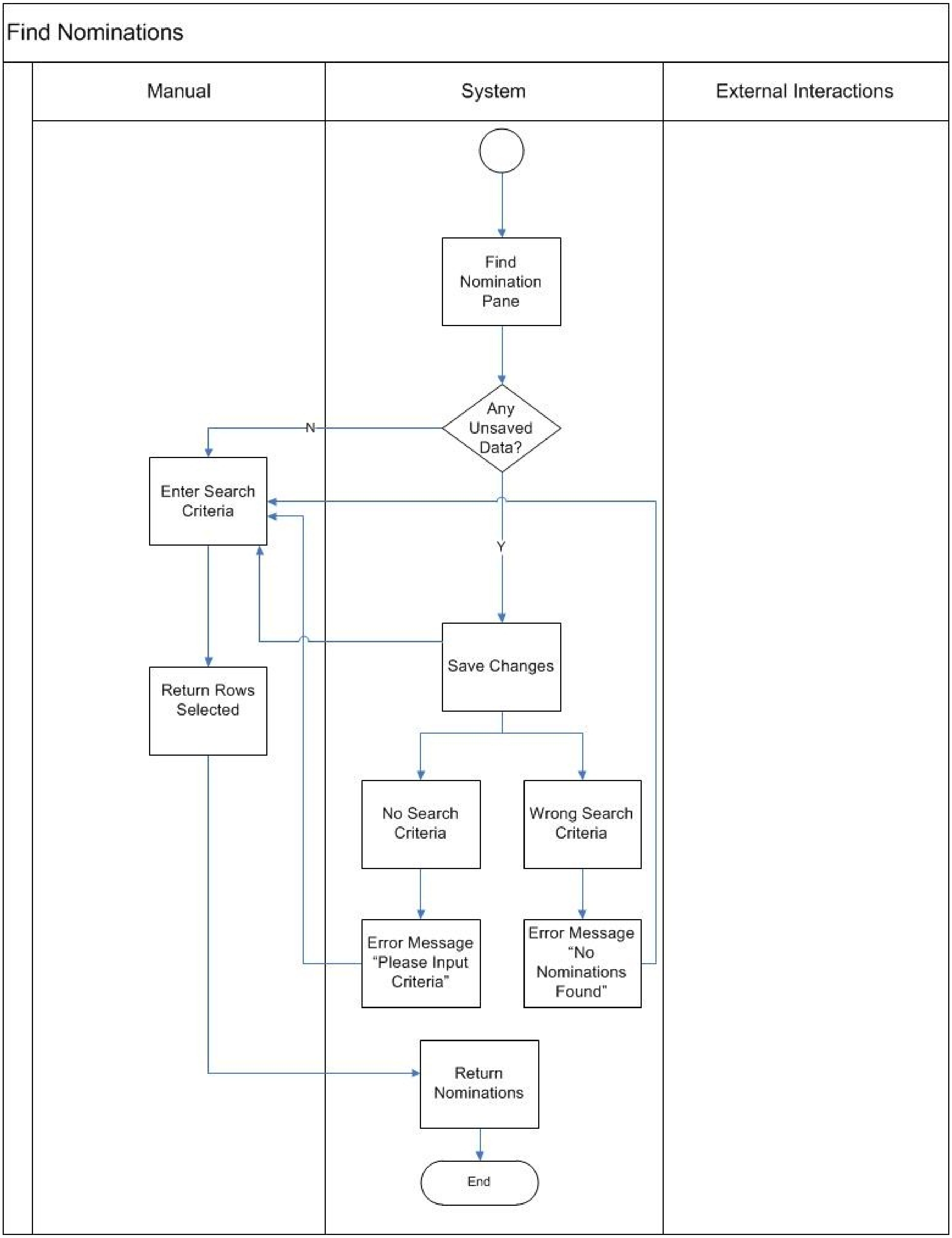


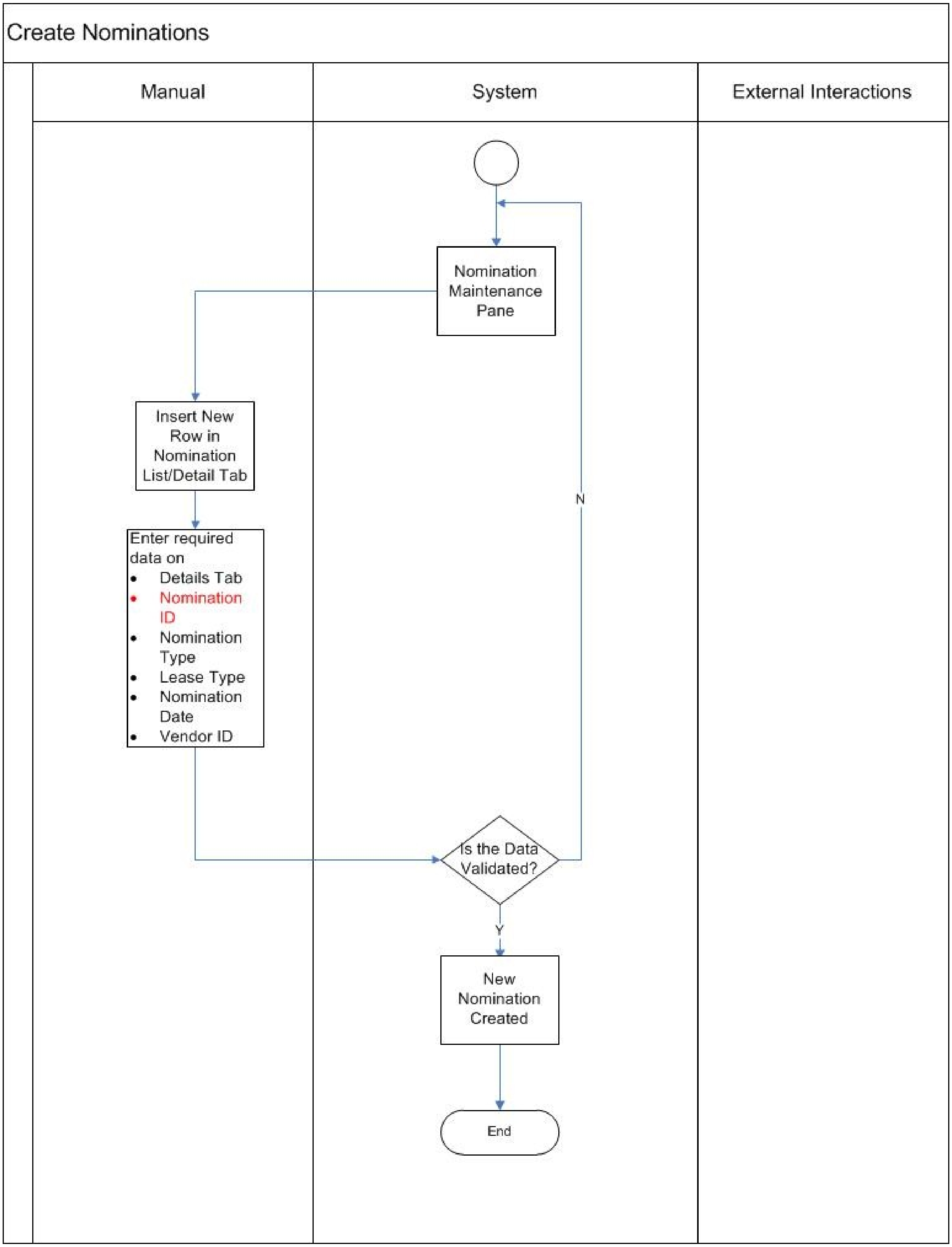


Maintain Lease – Search Window:

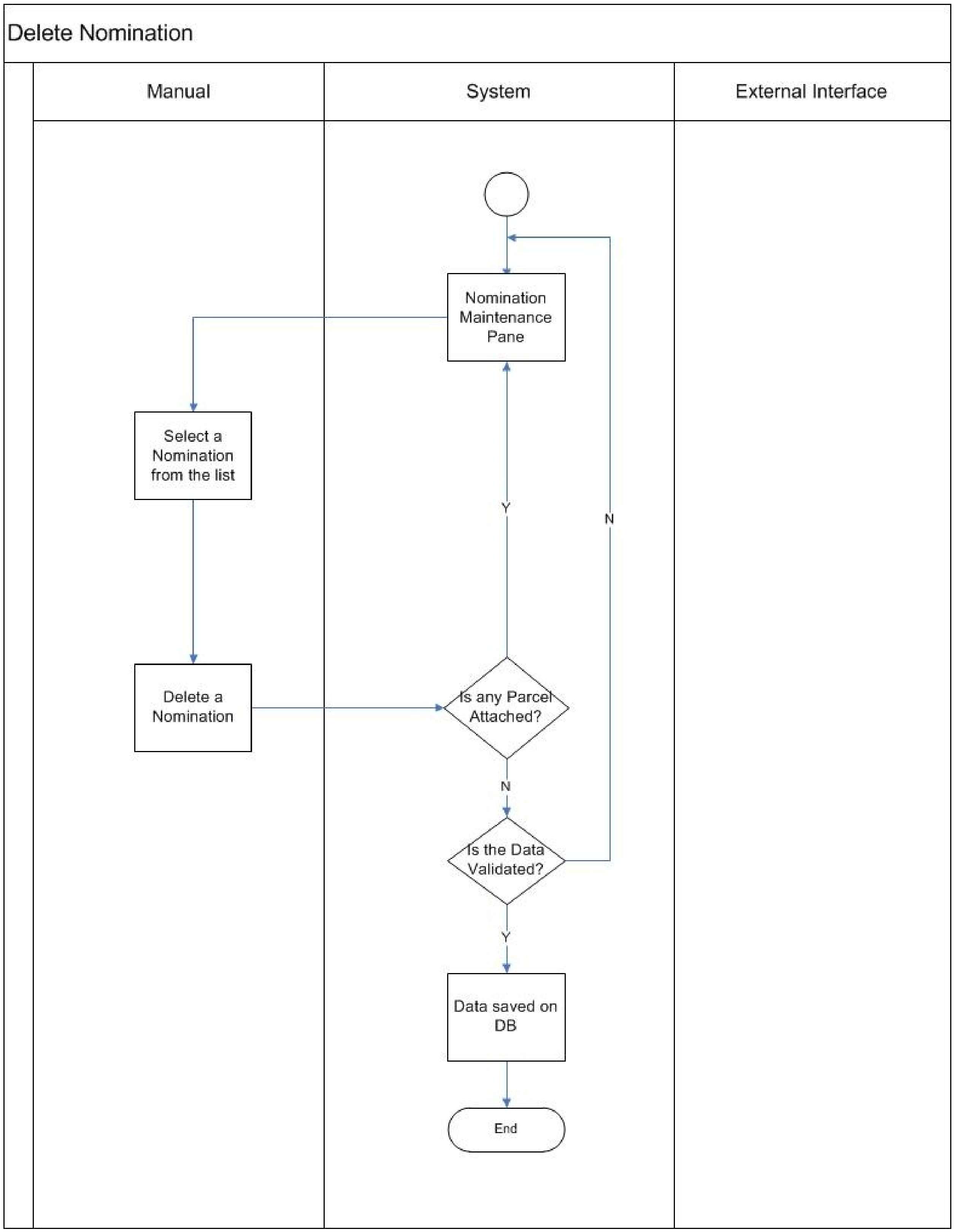


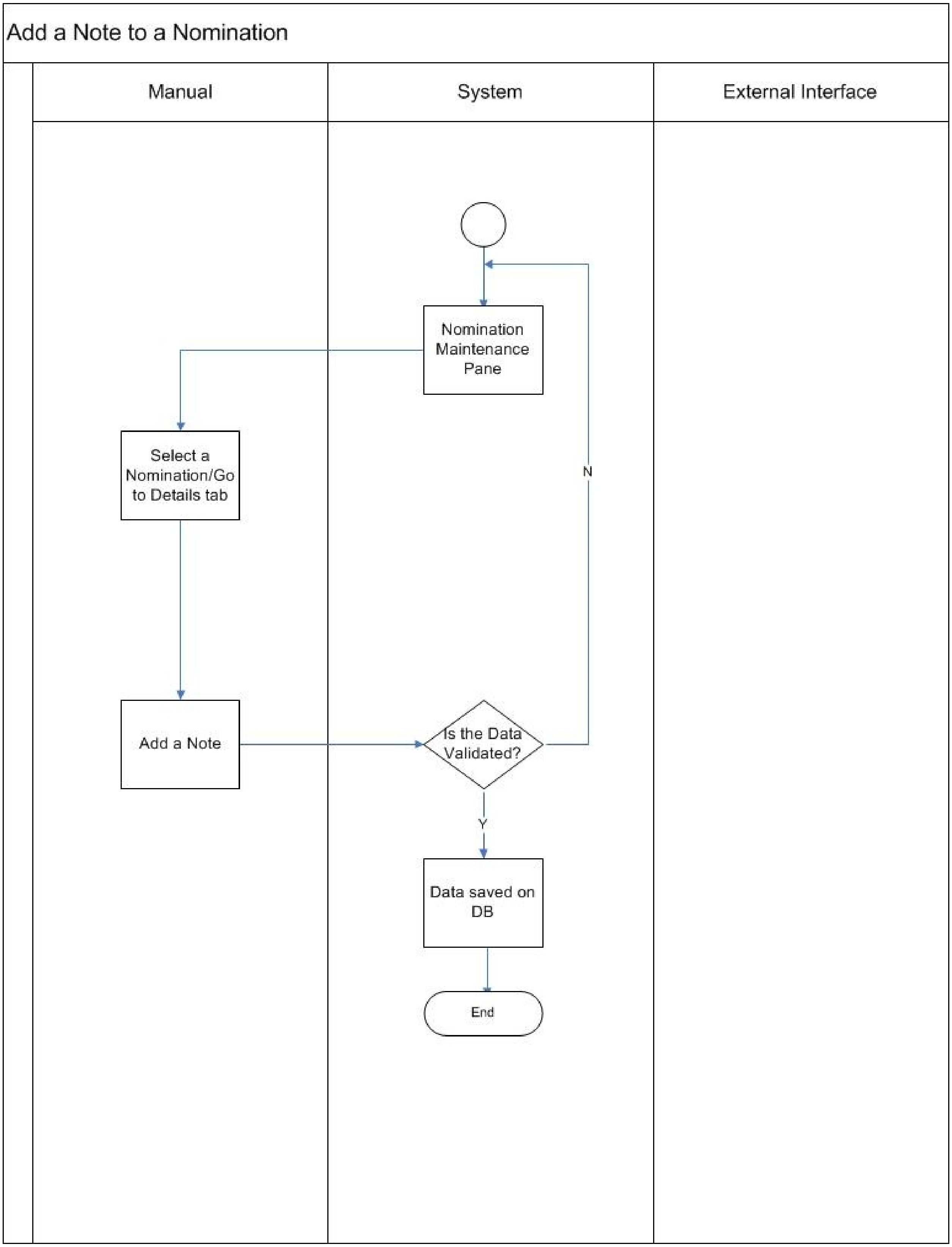
C. Process Flow Diagram



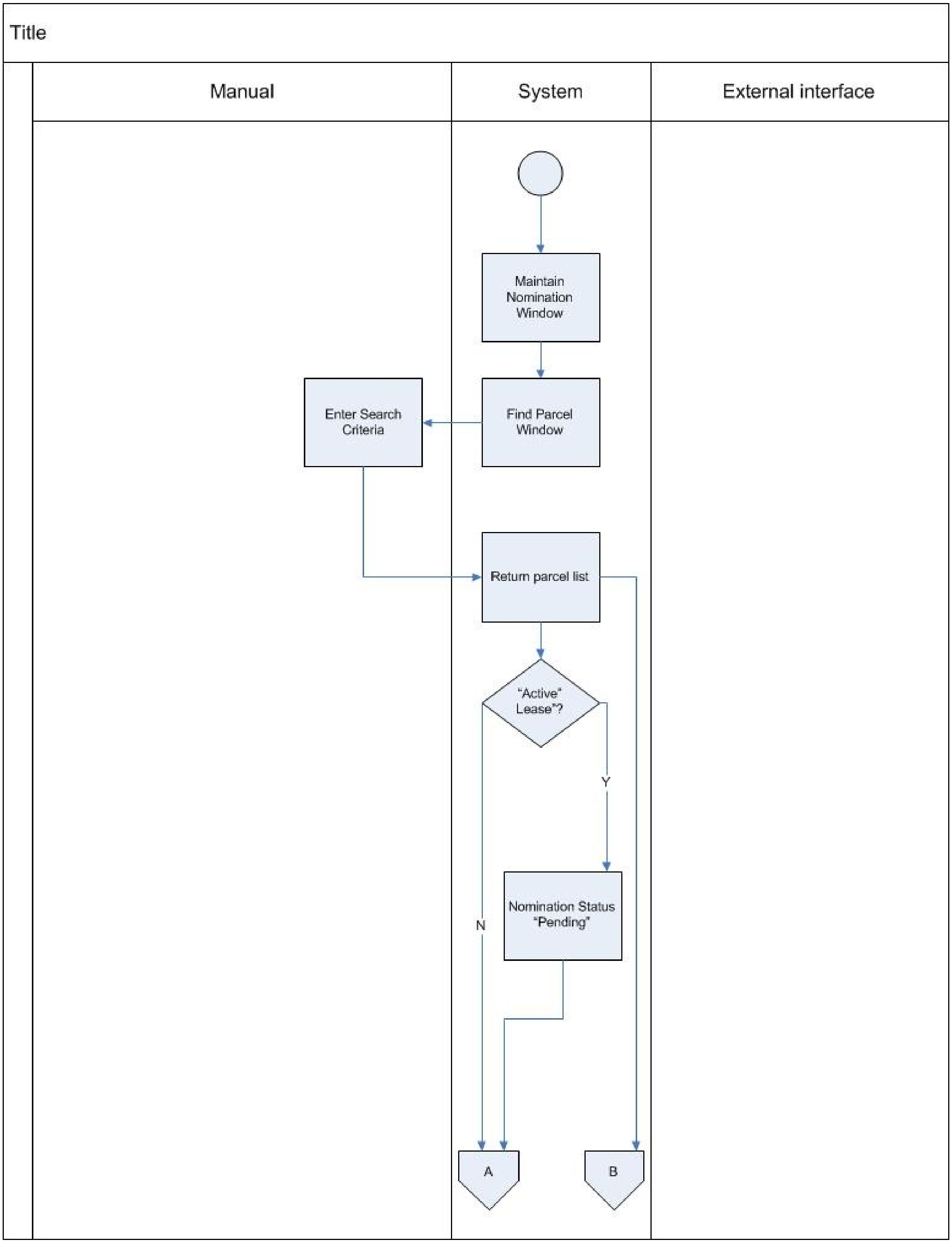


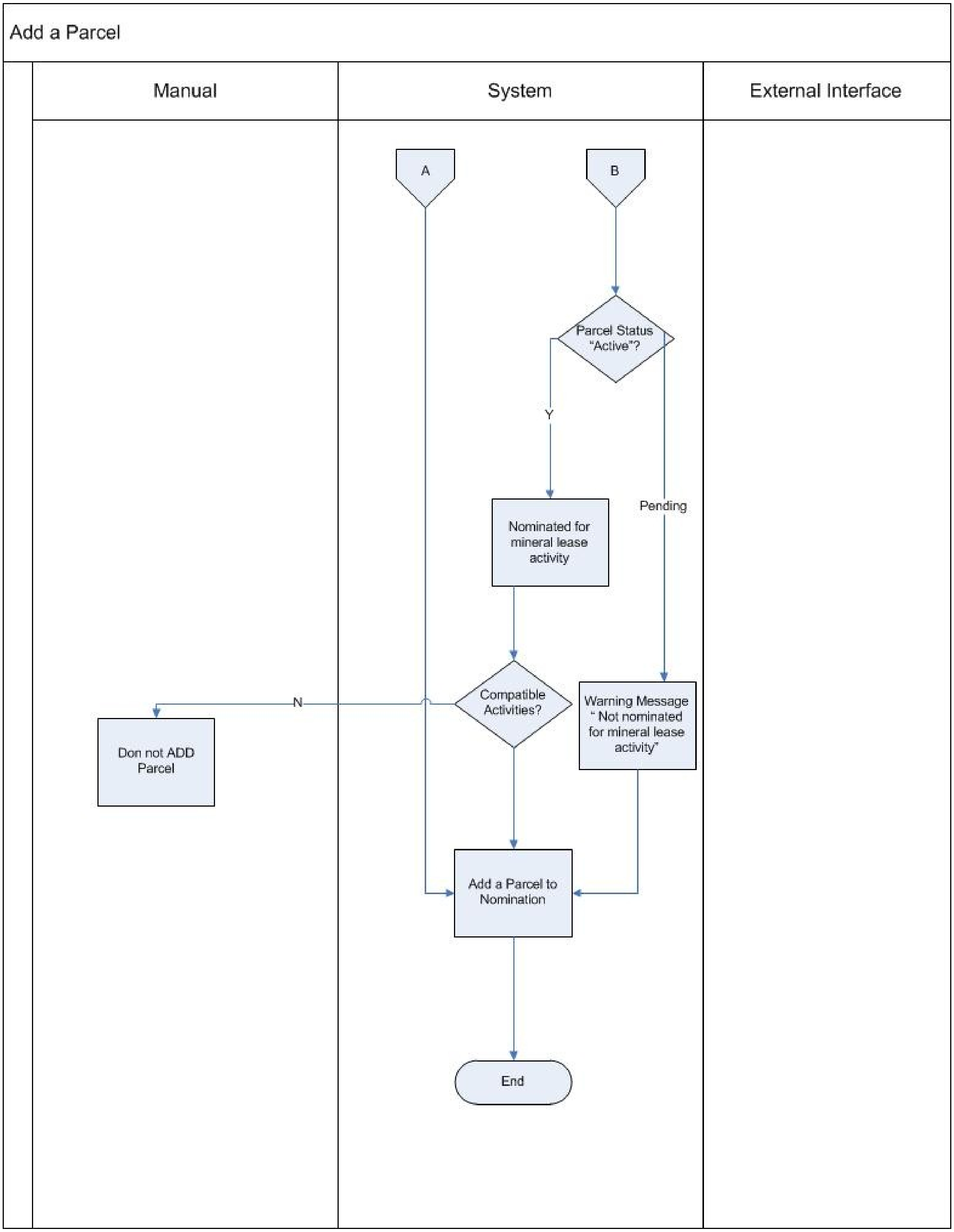
Create Nominations
Manual
System
External Interactions
Nomination Maintenance Pane
Insert New Row in Nomination List/Detail Tab
Enter required data on
• Details Tab
• Nomination ID
• Nomination Type
• Lease Type
• Nomination Date
• Vendor ID
N
Is the Data Validated?
Y
New Nomination Created
End

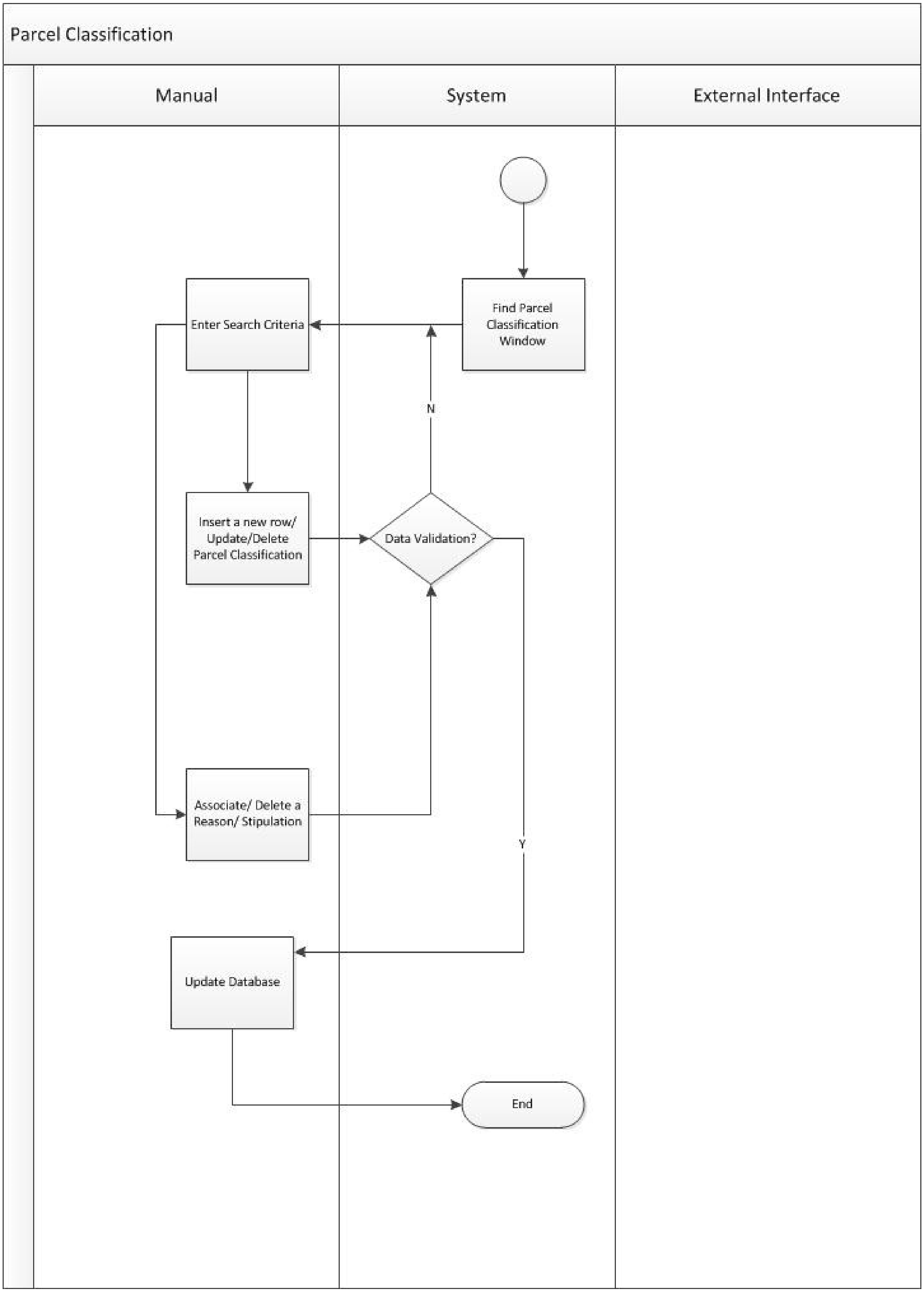

Delete Nomination
Manual
System
External Interface
Nomination Maintenance Pane
Select a Nomination from the list
Delete a Nomination
Is any Parcel Attached?
Y
N
Is the Data Validated?
N
Y
Data saved on DB
End

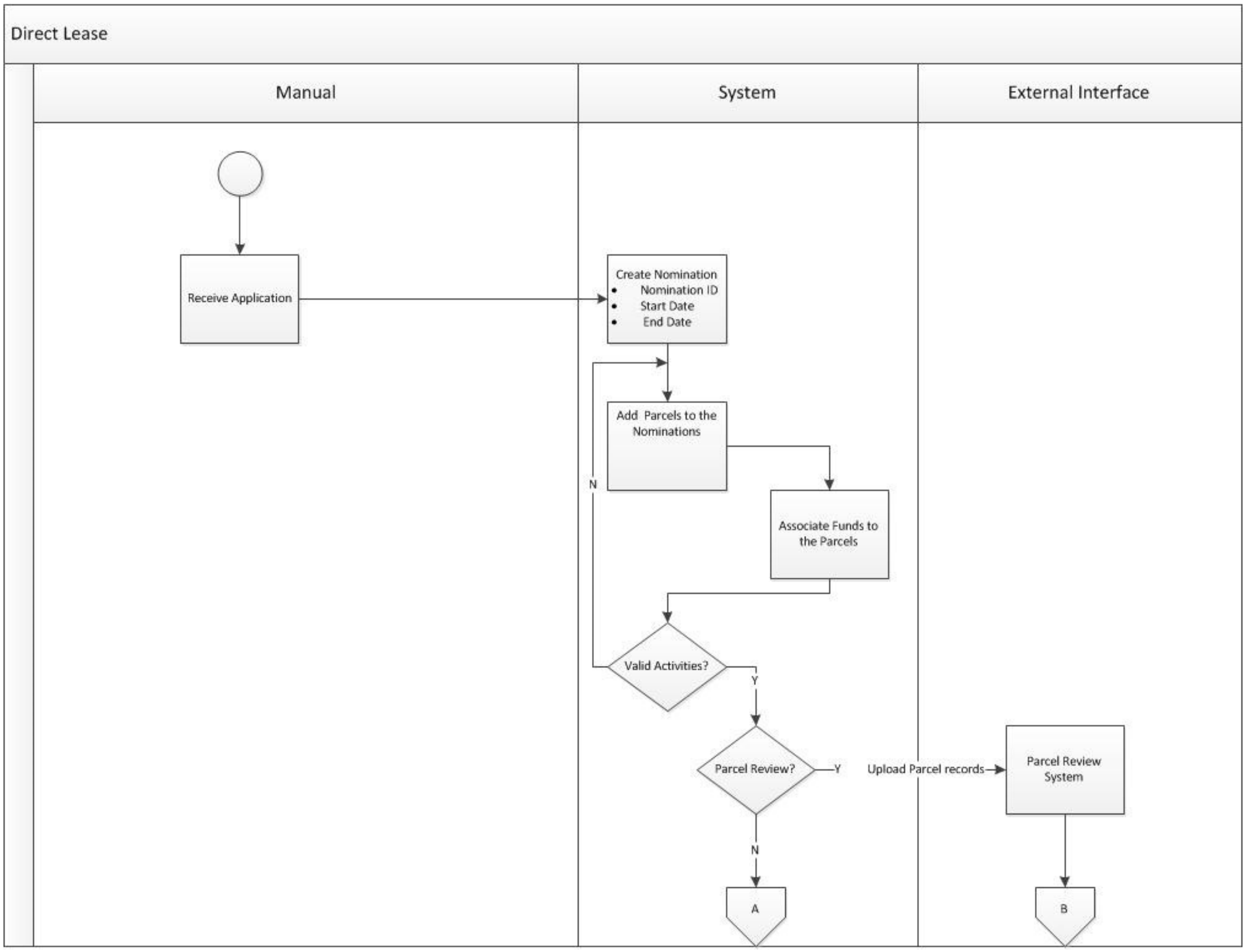


Add a Note to a Nomination
Manual
System
External Interface
Nomination Maintenance Pane
Select a Nomination/Go to Details tab
N
Add a Note
Is the Data Validated?
Y
Data saved on DB
End

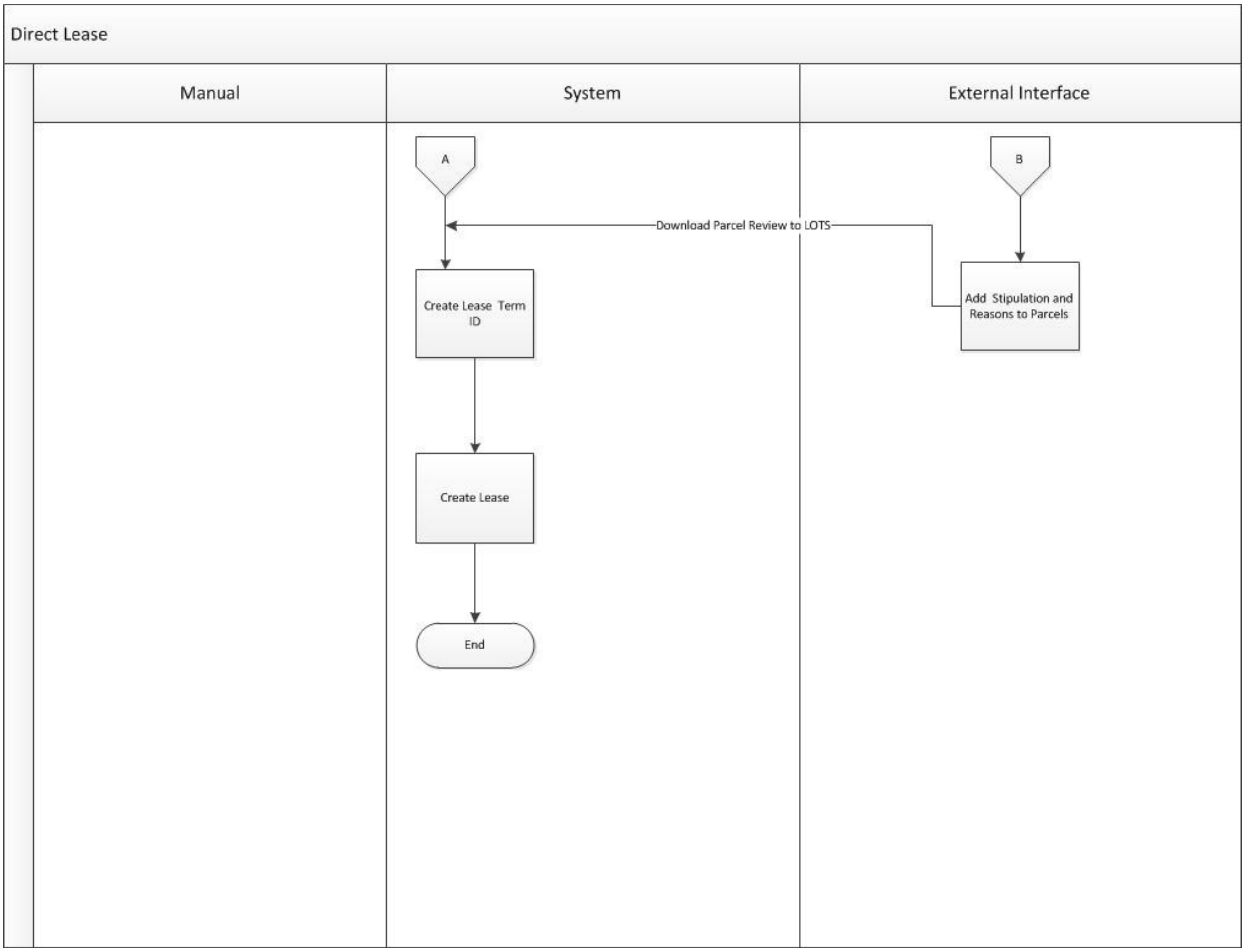

Title
Manual
System
External interface
Maintain Nomination Window
Find Parcel Window
Enter Search Criteria
Return parcel list
"Active" Lease"?
Y
N
Nomination Status "Pending"
A
B

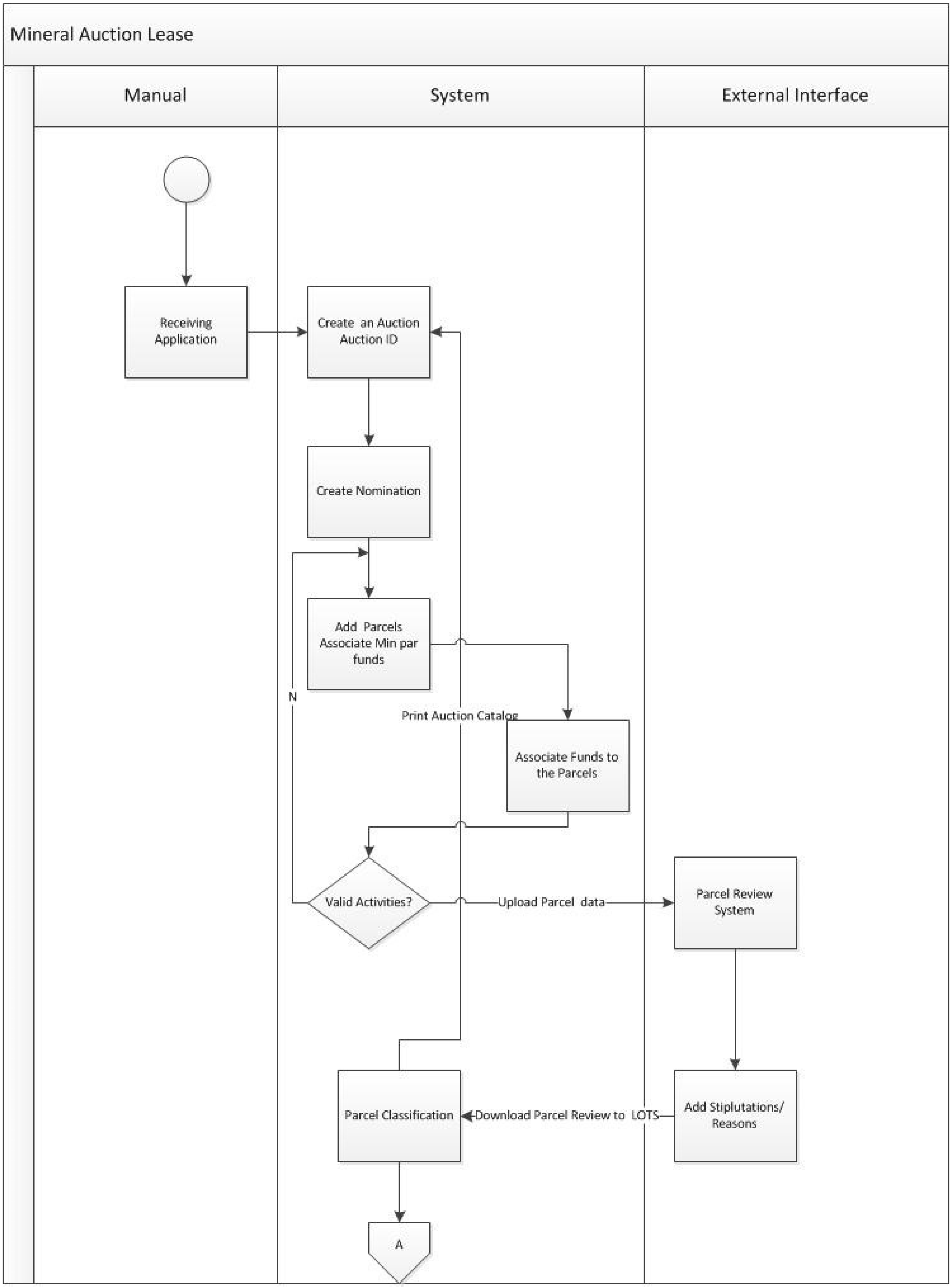

Add a Parcel
Manual
System
External Interface
A
B
Parcel Status "Active"?
Y
Pending
Nominated for mineral lease activity
Compatible Activities?
N
Warning Message " Not nominated for mineral lease activity"
Don not ADD Parcel
Add a Parcel to Nomination
End

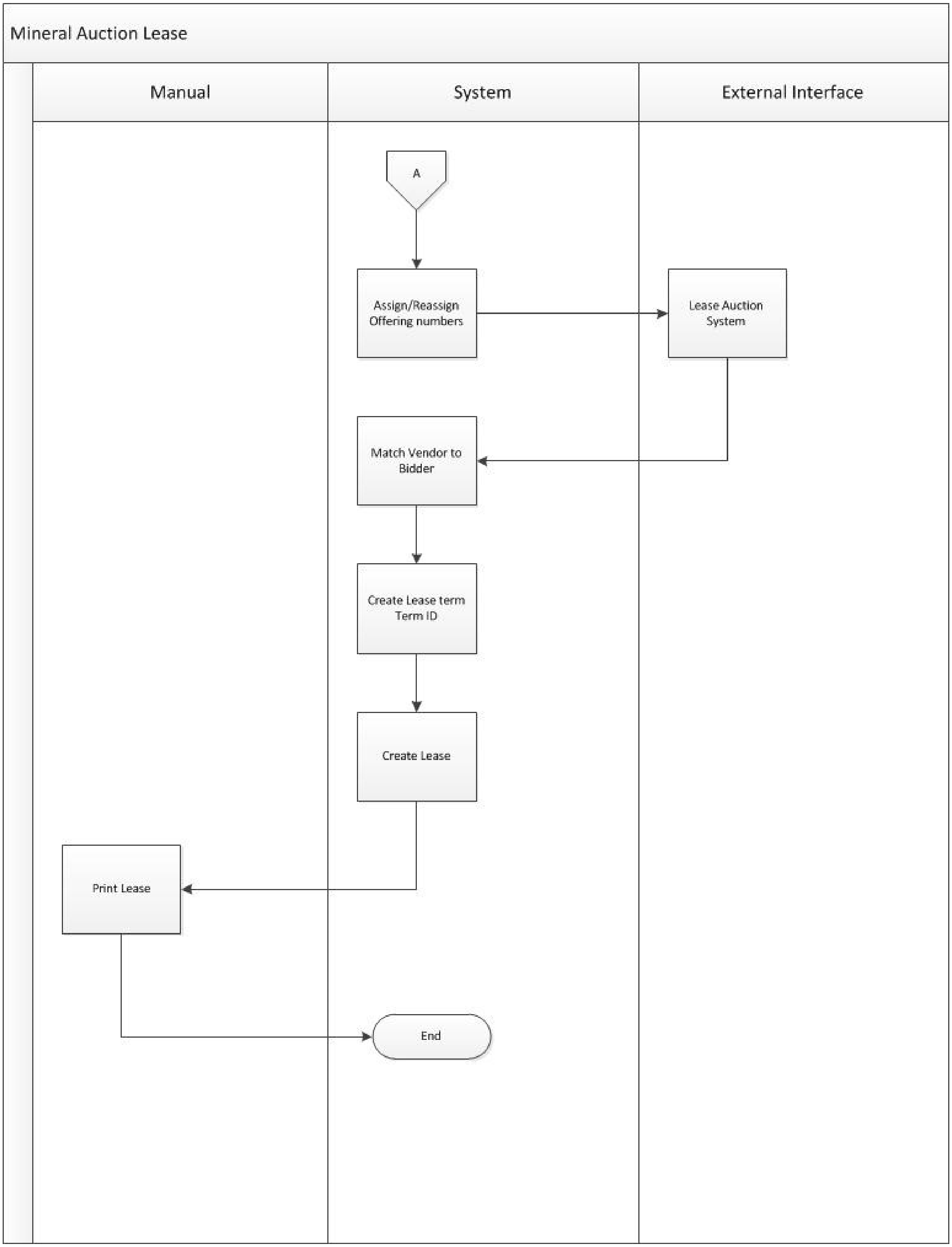

Parcel Classification
Manual
System
External Interface
Find Parcel Classification Window
Enter Search Criteria
N
Insert a new row/ Update/Delete Parcel Classification
Data Validation?
Associate/ Delete a Reason/ Stipulation
Y
Update Database
End



Direct Lease
Manual
System
External Interface
Receive Application
Create Nomination
Nomination ID
Start Date
End Date
Add Parcels to the Nominations
Associate Funds to the Parcels
Valid Activities?
N
Y
Parcel Review?
Y
Upload Parcel records
Parcel Review System
N
A
B


Direct Lease
Manual
System
External Interface
A
B
Download Parcel Review to LOTS
Create Lease Term ID
Add Stipulation and Reasons to Parcels
Create Lease
End


Mineral Auction Lease
Manual
System
External Interface
Receiving Application
Create an Auction Auction ID
Create Nomination
Add Parcels Associate Min par funds
N
Print Auction Catalog
Associate Funds to the Parcels
Valid Activities?
Upload Parcel data
Parcel Review System
Parcel Classification
Download Parcel Review to LOTS
Add Stiplutations/ Reasons
A


Mineral Auction Lease
Manual
System
External Interface
A
Assign/Reassign Offering numbers
Lease Auction System
Match Vendor to Bidder
Create Lease term Term ID
Create Lease
Print Lease
End

7. Exhibit 7 – Technical Requirements

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
	General Solution Requirements	
1	The system must meet Enterprise Architecture (EA) assessment standards. *Note: (Enterprise Architecture Standards for LOTS rewrite worksheet is attached at the end of requirements section of this document)*	E
1.1	The system must be based on SQL version/technology installed at DTMB (currently MSSQL 2008 R2 or 2012), or the vendor must provide a total cost for new solution technology, including training and knowledge transfer.	E
2	The system must be able to reside within the State of Michigan network.	E
2.1	The State of Michigan will provide internal support for hosting the system within the state network.	E
3	The system must be written in the .NET version/technology installed at DTMB (currently .NET 4.5) or the vendor must provide a total cost for new solution technology, including training and knowledge transfer.	E
4	The system must meet State of Michigan public access standards based on the web content accessibility guidelines. **http://www.w3.org/TR/WAI-WEBCONTENT**	E
5	The system must be able to operate in a State of Michigan secure environment.	E
6	The proposed solution must provide built-in document management (scanning and indexing) capabilities equivalent to the existing system.	E
6.1	An alternative document management (scanning and indexing) solution may be proposed that uses one of the current Enterprise Architecture scanning and indexing standards. (such as CSS File Net or HP Records Manager with PDF and Word 2013)	O
7	The system must comply with the Michigan Cyber Security (MCS) standards.	E
8	The system must support mobile web application accessibility.	E
8.1	Mobile web applications must run on various types of devices with popular operating systems.	E
8.2	Mobile applications must comply with Enterprise Architecture Mobile Application Standards.	E
9	A GIS component in the system must leverage the State of Michigan Geographic Information System solution and framework, or the vendor must provide a total cost of ownership for a proposed alternative.	E
10	Release promotion and testing must occur on State equipment.	E
11	The system must be fully functional in clustered-server architecture.	E
12	The system must be able to integrate with SQL-Server Reporting Services, or the vendor must provide a total cost for new solution technology, including training and knowledge transfer.	E

Business Req. No.	• Detailed Requirement Description	Category
13	The system must be able to operate in a virtual environment (VMS).	E
14	Any code provided for the development of the system must pass security tool testing to be run by State, using IBM Security App Scan.	E
15	The selected vendor must provide DTMB notification of any 3rd party tools used to support development and maintenance.	E
16	The selected vendor must use a code repository that is compatible in structure and format to the State's Team Foundation Server (TFS) standard.	E
17	Development must be completed within a SOM developer environment. The Project Manager, Business analysts and Lead Developer must be accessible for weekly meetings and consultations.	E
18	The selected vendor must be able to migrate releases to the State when ready for promotion.	E
19	The selected vendor must use Enterprise Architecture standard defect tracking tool for defect tracking.	E
20	Latitude/Longitude data must use the following hierarchy for latitude/longitude, if a discrepancy exists: GPS Map Interpolation Address match **www.michigan.gov/landforsale**	E
21	The Vendor must be responsible for installation and support of all software.	E
22	The Vendor must be responsible for the Application performance and response time; it must satisfy various offices in Lansing and fields.	E
23	The Application must be scalable including number of users, data storages, and supported user devices.	E
24	The screens must be ADA compliant. **http://www.michigan.gov/documents/som/Look_and_Feel_Standards_302051_7.pdf**	E
24.1	The system must support internet access through a standard PC and mobile devices for customer access and use of the system without special software or configuration.	E
	Documentation	
25	All source code must contain internal comments clearly explaining the purpose, process flow and dependencies.	E
26	All system documentation must remain current for the life of the contract. Said documentation must be provided to the State as releases and/or changes are made to the system.	E
	System Architecture	
27	The system must employ a web-based architecture with a client accessing a central database through a web/application server.	E
28	The system architecture must be separated into multi-tiered.	E

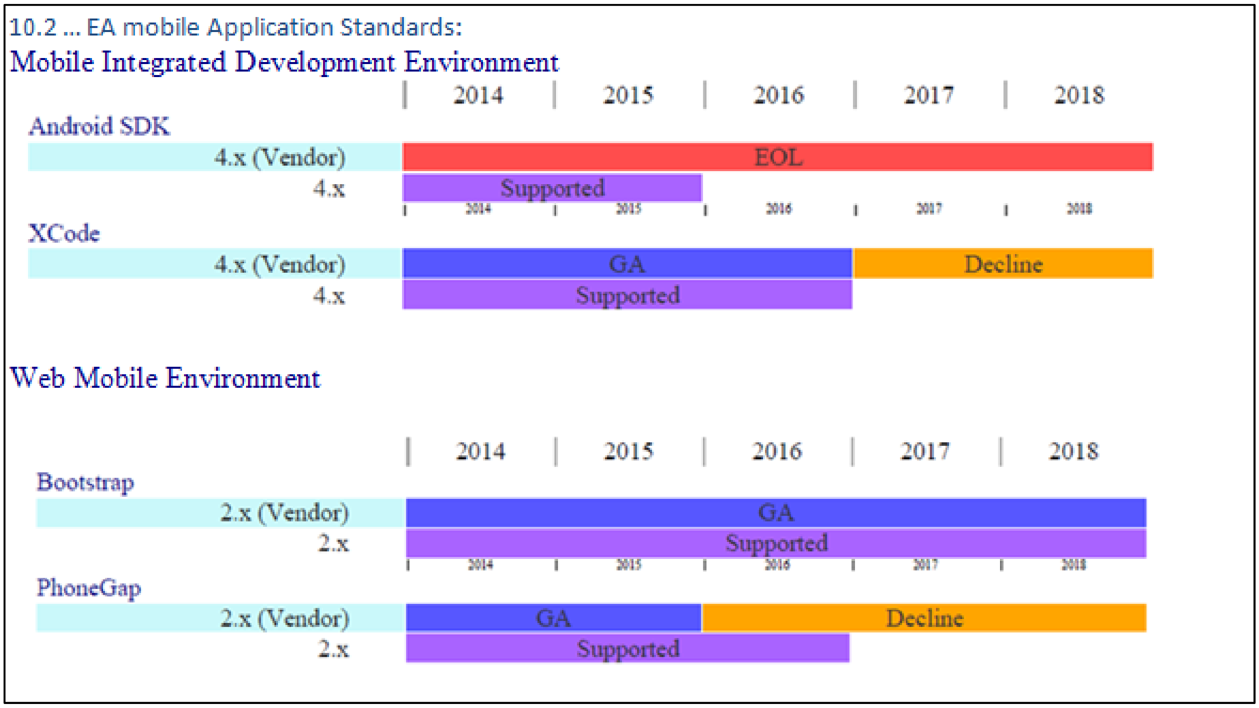
Business Req. No.	• Detailed Requirement Description	Category
29	The system must support a record size that is limited only by the constraints of the underlying technology (.Net and MS SQL 2008) and the available resources of the hardware.	E
30	The system must be modular in design.	E
31	The system must record User ID, date, and time for all adds, changes or deletes to a record.	E
32	The design must support low bandwidth users. (Low bandwidths including dial up will exist due to availability or cost issues for some users/locations)	E
33	The system must provide an Application Error Log to keep track of all errors.	E
34	The System must ensure that the integrity and confidentiality of the data is protected by safeguards to prevent release of information without proper consent and hard-coded logic.	E
	Security Requirements – Application Access	
35	The system must provide business specific role based security at database level.	E
36	The system must provide application level secure access control based upon unique user login, for types of user roles (such as but not limited to Customer, Agent, NEW SYSTEM Support) as well as by function performed upon the record (e.g., Display, Add, Edit, & Delete.) by the user.	E
37	The system must check each user's access privileges at login, and automatically disable or enable client functions (in real time) based upon the user's profile.	E
38	If the solution does not employ integration with active directory, then:	E
38.1	The System must provide secure access control for administrator accounts based upon unique user login, for types of record as well as by function performed. http://inside.michigan.gov/dtmb/wr/psp/Documents/1335.00.20%20Active%20Directory%20Password%20Standard.pdf	E
39	The System must support password entry in a non-display field.	E
	Application Performance	
40	The Application must have optimal response time. **http://www.michigan.gov/documents/som/Look_and_Feel_Standards_302051_7.pdf** Page # 36	E
	Validation	
41	The system must include comprehensive field edits and warnings to prevent incomplete or incorrect data from entering the system.	E
42	The errors resulting from field level validations must be communicated to the user immediately in wording that allows easy comprehension of the problem/solution.	E
43	Server side validation must be done of any input from the user.	E
44	The system must highlight the missing required fields and incorrect data fields.	E
	Audit Trails	

Business Req. No.	• Detailed Requirement Description	Category
45	The system must give the ability to an authorized role to query a historical record of all changes made to any item within the system, the ID of the person or process that made the change and the date and time the change was made. Changes includes adds, edits and deletes. The system must store all changes in historical data.	E
46	The system must have the ability to query, view, filter, and sort the system audit trail. The system is able to store the queries.	E
	Internal Reporting (not for the Public Interface users)	
47	The system must provide reports to be generated automatically per a schedule.	E
48	The system must ensure ad-hoc queries do not access data restricted from the user.	E
49	The system must provide an ad-hoc reporting capability that will enable only to State of Michigan Employees to create reports on demand without programming assistance or Vendor support.	E
50	The system must support retention of Ad-hoc queries for State Of Michigan employees only	E
51	The system must allow modification of retained ad-hoc queries for State Of Michigan employees only.	E
52	The system must support the ability for report results to be downloaded. This means, for example, to MS Excel, MS Word, PDF File or Text.	E

IT Policies Standards and Procedures:

http://michigan.gov/dtmb/0,4568,7-150-56355_56579_56755---,00.html

Mobile Application Standards:



Web Hosting Environment – Software Architecture Standards:

Hosting_Doc_Draft.latest (2).doc

8. Exhibit 8 – Minerals System Reference Tables (Part 2 & 3)

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
	Vendor Type	
1	The system must provide a user interface for Vendor Type system reference table maintenance.	E
2	The user interface must allow user to view Vendor Type record details.	E
3	The user interface must allow an authorized user to create a unique, new Vendor Type record.	E
3.1	The user interface must assign an “active” status to the new Vendor Type record.	E
3.2	The user interface must consider that the status of the Vendor type is determined by manually updating the Active/Inactive dates.	E
4	The user interface must allow an authorized user to edit a Vendor Type record.	E
5	The user interface must allow an authorized user to inactivate a Vendor Type record.	E
6	The user interface must NOT allow an authorized user to delete a Vendor Type record but must allow an authorized user to Inactivate the record.	O
7	The user interface must allow an authorized user to save changes made to Vendor Type record.	E
	Lease type	
1	The system must provide a user interface for Lease Type system reference table maintenance.	E
2	The user interface must allow user to view Lease Type record details.	E
3	The user interface must allow an authorized user to create a unique, new Lease Type record.	E
3.1	The user interface must assign an “active” status to the new Lease type record.	E
3.2	The user interface must consider that the status of the Lease type is determined by manually updating the Active/Inactive dates.	E
4	The user interface must allow an authorized user to edit a Lease Type record.	E
5	The user interface must NOT allow an authorized user to delete a Lease Type record but must allow an authorized user to Inactivate the record.	E
6	The user interface must allow an authorized user to save changes made to Lease Type record.	E
7	The user interface must add a description field in Maintain Lease Type table and allow user to view and edit and save the field value.	E
	Unit Measures	
1	The system must provide a user interface for Unit of Measure system reference table maintenance.	E
2	The user interface must allow user to view Unit of Measure record details.	E

Business Req. No.	• Detailed Requirement Description	Category
3	The user interface must allow an authorized user to create a new Unit of Measure record and a unique ABBR field.	E
3.1	The user interface must assign a unique Unit Measure ID to each new Unit of Measure record.	E
3.2	The user interface must assign an "active" status to the newly created Unit of Measure record.	E
4	The user interface window must allow an authorized user to edit a Unit of Measure record.	E
5	The user interface must allow an authorized user to inactivate a Unit of Measure record.	E
5.1	The user interface must NOT allow an authorized user to delete a Unit of Measure record.	E
6	The user interface must allow an authorized user to save changes made to Unit of Measure record.	E
7	The user interface must add a description field in Maintain Unit Measure table and allow user to view and edit and save the field value.	E
	Lease Class	
1	The system must provide a user interface for Lease Class system reference table maintenance.	E
2	The user interface must allow user to view Lease Class record details.	E
3	The user interface must allow an authorized user to create a new Lease Class record.	E
3.1	The user interface must assign an "active" status to the new Lease Class record.	E
3.2	The status of the Lease Class is determined by manually updating the Active/Inactive dates.	E
4	The user interface must allow an authorized user to edit a Lease Class record.	E
5	The user interface must allow an authorized user to delete a Lease Class record.	E
6	The user interface must allow an authorized user to save changes made to Lease Class record.	E
7	The user interface must allow an authorized user to associate/disassociate stipulation(s) to a Lease Class record.	E
8	The user interface must allow an authorized user to associate/disassociate reason(s) to a Lease Class record.	E
9	The system must maintain a history of lease classifications for each parcel.	E
	Production Deduction	
1	The system must provide a user interface for Production Deduction system reference table maintenance.	E
2	The user interface must allow user to view Production Deduction record details.	E
3	The user interface must allow an authorized user to create a new, unique Production Deduction record.	E
3.1	The user interface must assign an "active" status to the new Production Deduction record.	E

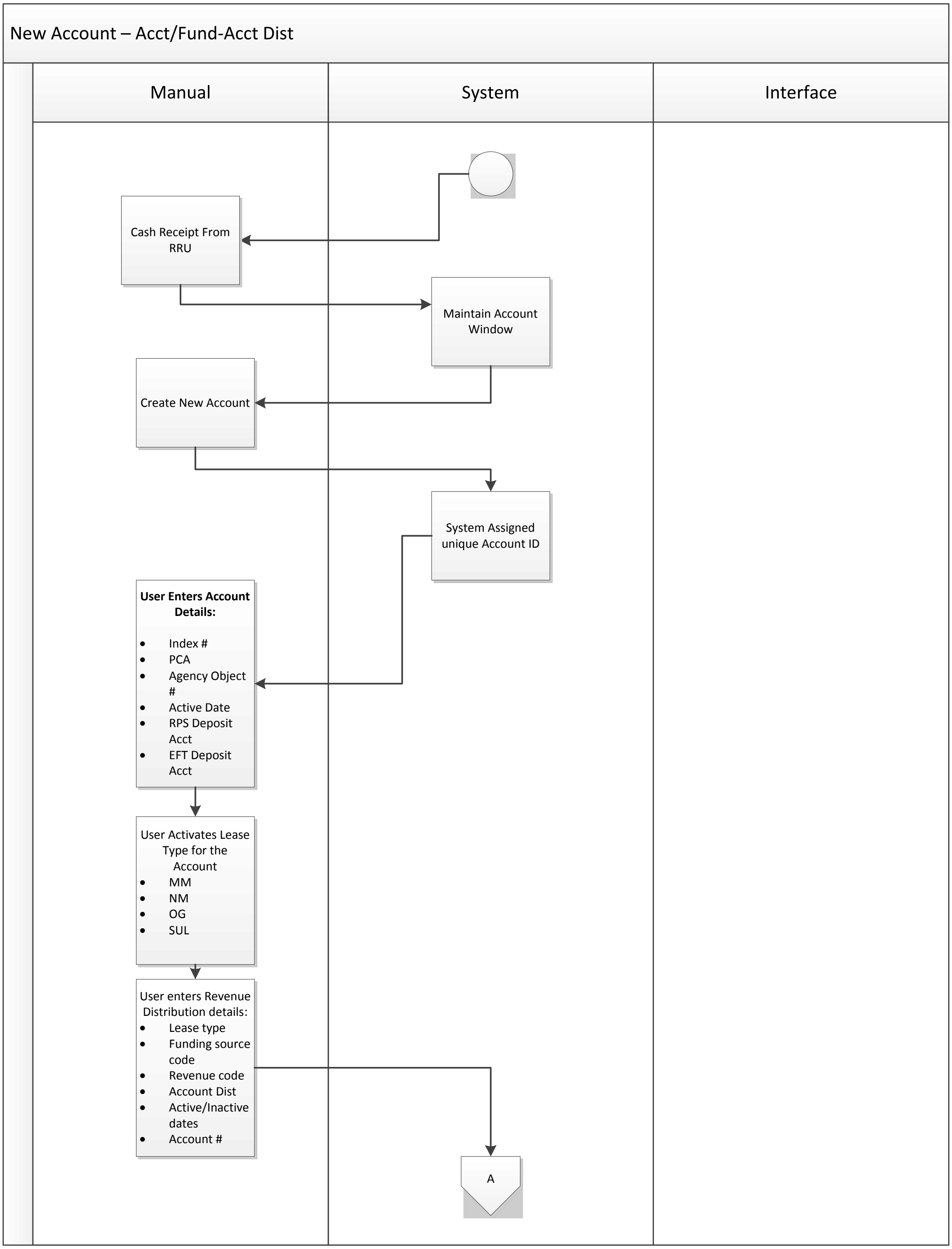
Business Req. No.	• Detailed Requirement Description	Category
3.1.1	The user interface must consider that the status of the Production Deduction record is determined by manually updating the Active/Inactive dates.	E
4	The user interface must allow an authorized user to edit a Production Deduction record.	E
5	The user interface must NOT allow an authorized user to delete a Production Deduction record but must allow an authorized user to Inactivate the record.	E
6	The user interface must allow an authorized user to save changes made to Production Deduction record.	E
7	The user interface must add a description field in Maintain Production Deduction table and allow user to view and edit and save the field value.	E
	Acct/Fund-Acct Distribution	
1	The system must provide a maintenance user interface for Acct/Fund-Acct Distribution reference table maintenance.	E
2	The Acct/Fund-Acct Distribution user interface must allow user to sort records to view Acct/Fund-Acct Distribution details with active Account IDs showing on the top.	E
3	The Acct/Fund-Acct Distribution user interface must allow an authorized user to add an account.	E
3.1	The user interface must assign a unique Account ID to each newly created account.	E
3.2	The Acct/Fund-Acct Distribution user interface must allow an authorized user to add account data in Account Detail tab.	E
3.3	The Acct/Fund-Acct Distribution user interface must allow an authorized user to select the applicable lease types.	E
3.4	The Acct/Fund-Acct user interface must allow an authorized user to add revenue distribution records.	E
3.4.1	The Acct/Fund-Acct Distribution user interface must allow an authorized user to split revenue between multiple accounts. *Note: By default, 100% of revenue is distributed to an account as defined by the remittance type, lease type, funding source code and revenue code. If required, the revenue can be split (shared) between multiple accounts. The list of valid accounts is based on their active status and lease type.*	E
3.4.1.1	The user interface must provide a Pop-up menu to allow an authorized user to enter split distribution percentages in different active accounts and sum up the total to 100%. *Note: The sum must not exceed 100%*	E
4	The Acct/Fund Distribution user interface must allow the authorized User to Create Duplicate Acct IDs including all details in the associated tabs. The source Acct ID will automatically be inactivated and the details on the duplicate records including tab details can be edited and saved.	E
5	The Acct/Fund-Acct Distribution user interface must allow an authorized user to edit account details, Revenue distribution details, Acct/Fund-Acct Distribution details.	E

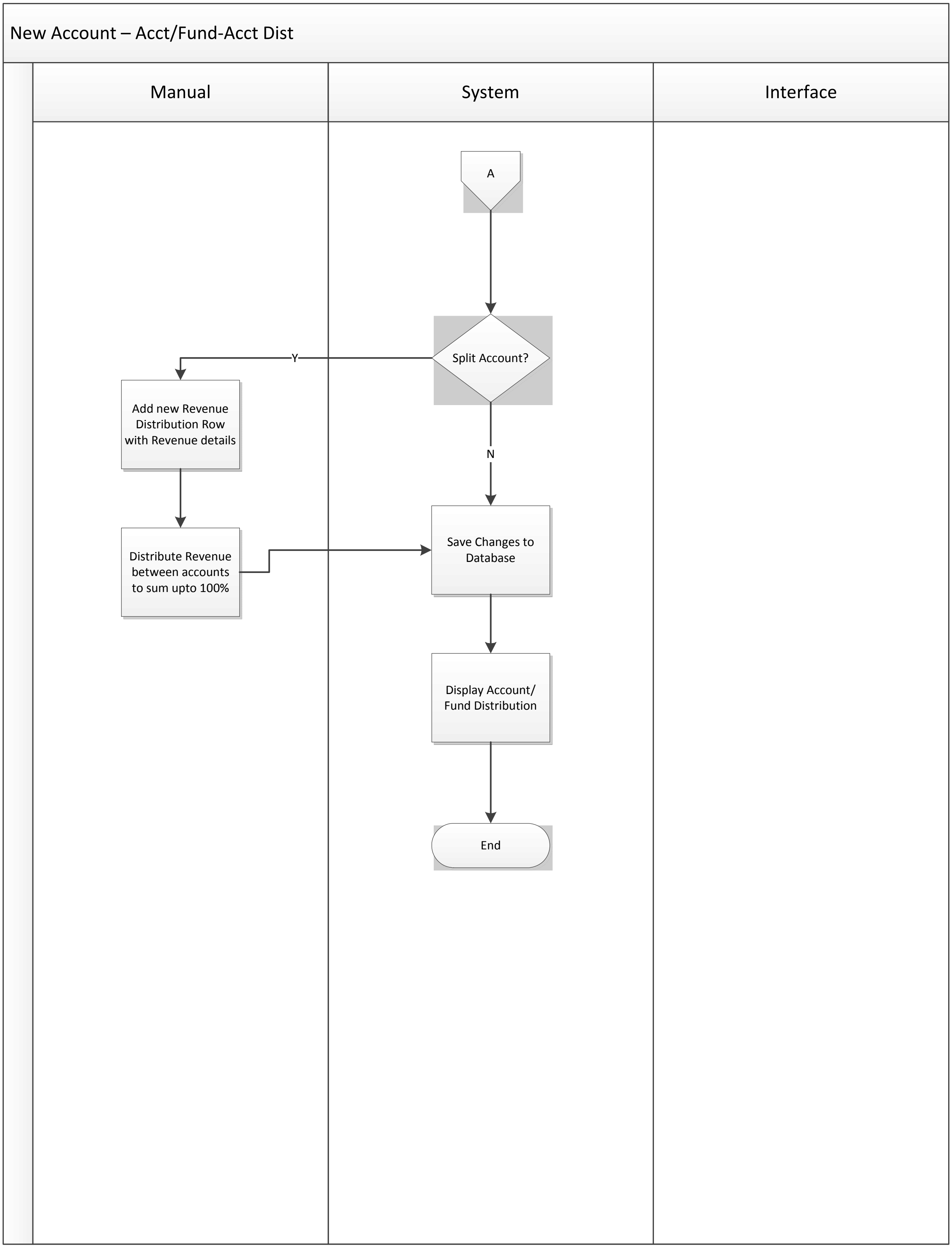
Business Req. No.	• Detailed Requirement Description	Category
6	The Acct/Fund-Acct Distribution user interface must allow an authorized user to delete account details, Revenue distribution details, Acct/Fund-Acct Distribution details.	E
6.1	The Acct/Fund-Acct Distribution user interface must NOT allow the user to delete a distribution record but must allow an authorized user to inactivate the record.	E
7	The Acct/Fund-Acct Distribution user interface must allow an authorized user to save changes made to an account and/or Acct/Fund-Acct Distribution details.	E
	Revenue Code	
1	The system must provide a user interface for Revenue Code system reference table maintenance.	E
2	The user interface must allow user to view Revenue Code record details.	E
3	The user interface must allow an authorized user to create a new Revenue Code record.	E
3.1	The user interface must assign a unique Revenue Code ID to each new Revenue code record.	E
3.2	The user interface must assign an “active” status to the newly created Revenue Code record.	E
3.2.1	The user interface must consider that the status of the Production Deduction record is determined by manually updating the Active/Inactive dates.	E
4	The user interface must allow an authorized user to edit a Revenue Code record.	E
5	The user interface must NOT allow an authorized user to delete a Revenue Code record but must allow an authorized user to Inactivate the record.	E
6	The user interface must not allow user to inactivate a Revenue Code record, if the Revenue Code is associated in any remittance.	E
7	The user interface must allow an authorized user to save changes made to Revenue Code record.	E
	Maintain Reason – Reference Table	
1	The system must provide a user interface to maintain Reason records.	E
1.1	The user interface must allow an authorized user to Add a Reason record.	E
1.1.1	The system must assign a unique ID for each newly created Reason record.	E
1.1.2	The system must set the status of the each newly created Reason to “Active”	E
1.2	The user interface must allow an authorized user to select and display following details: • Unique Reason Code • Reason Name • Description • Note • Active Date • Inactive Date • Reason ID • Date/Time stamp value	E

Business Req. No.	• Detailed Requirement Description	Category
1.3	The user interface must allow an authorized user to select and EDIT following details: • Unique Reason Code • Reason Name • Description • Note • Active Date • Inactive Date	E
1.3.1	The user interface must allow an authorized user to enter an inactive date later than or equal to the active date. *Note: This would change the Status of the Reason to Inactive.*	E
1.3.2	The user interface must allow an authorized user to delete a Reason record only if it is not associated to one or more Lease classes and Parcel Classification.	E
1.4	The user interface must allow an authorized user to save any changes made to the database.	E
	Maintain Stipulation – Reference Table	
1	The system must provide a user interface to maintain Stipulation records.	E
1.1	The user interface must allow an authorized user to Add a Stipulation record.	E
1.1.1	The user interface must assign a unique ID for each newly created Stipulation record.	E
1.1.2	The user interface must set the status of the each newly created Stipulation to "Active"	E
1.2	The user interface must allow an authorized user to select and display following details: • Stipulation Name • Description • Note • Active Date • Inactive Date • Stipulation ID • Date/Time stamp value	E
1.3	The user interface must allow an authorized user to select and EDIT following details: • Stipulation Name • Description • Note • Active Date • Inactive Date	E
1.3.1	The user interface must allow an authorized user to input Description with sufficient characters without any truncation.	E
1.3.1.1	The user interface must allow an authorized user to copy the Description data on to MS word document for processing.	E

Business Req. No.	• Detailed Requirement Description	Category
1.3.2	The user interface must allow an authorized user to enter an inactive date later than or equal to the active date. *Note: This would change the Status of the Stipulation to Inactive.*	E
1.3.3	The user interface must allow an authorized user to delete a Stipulation record only if it is not associated to one or more Lease classes and Parcel Classification.	E
1.4	The user interface must allow an authorized user to save any changes made to the database.	E

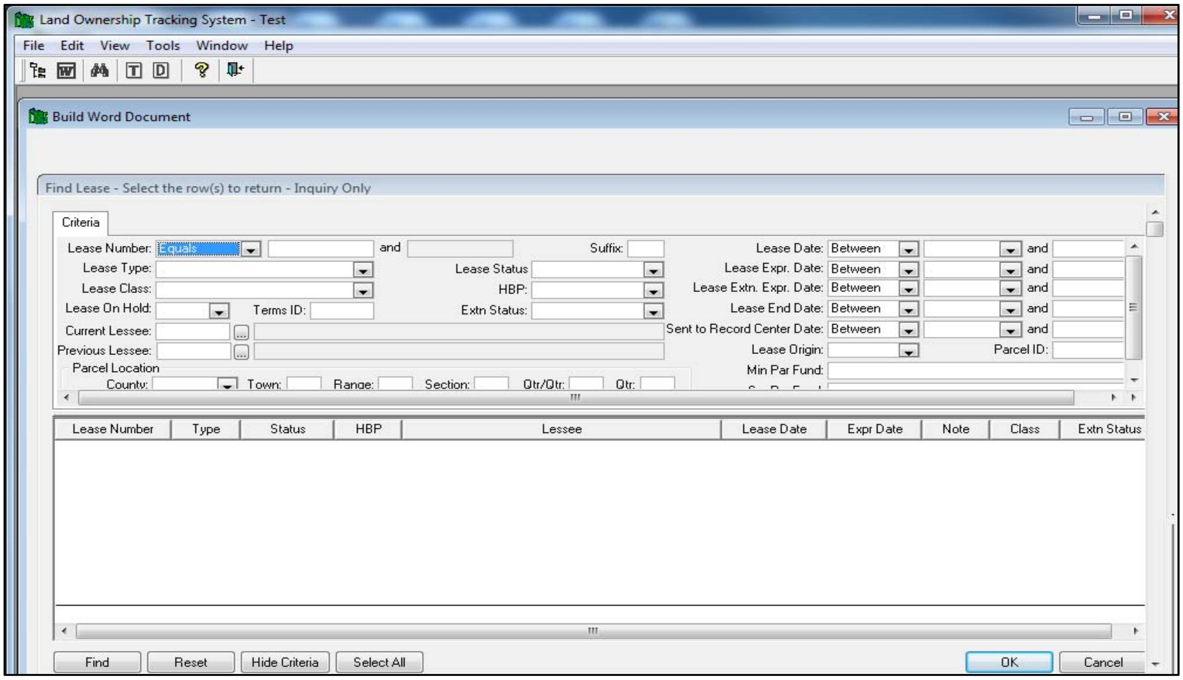
B. Process Flow Diagram



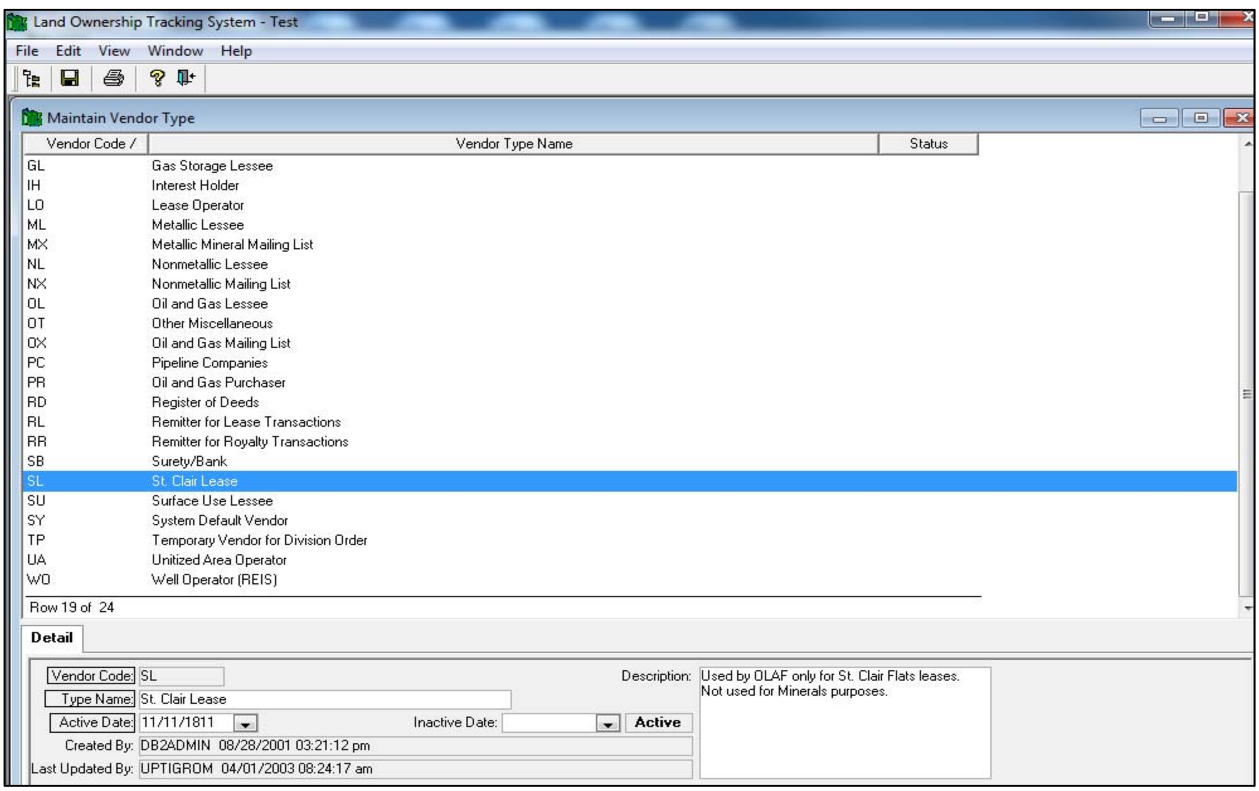


New Account – Acct/Fund-Acct Dist
Manual
System
Interface
A
Split Account?
Y
N
Add new Revenue Distribution Row with Revenue details
Distribute Revenue between accounts to sum upto 100%
Save Changes to Database
Display Account/ Fund Distribution
End

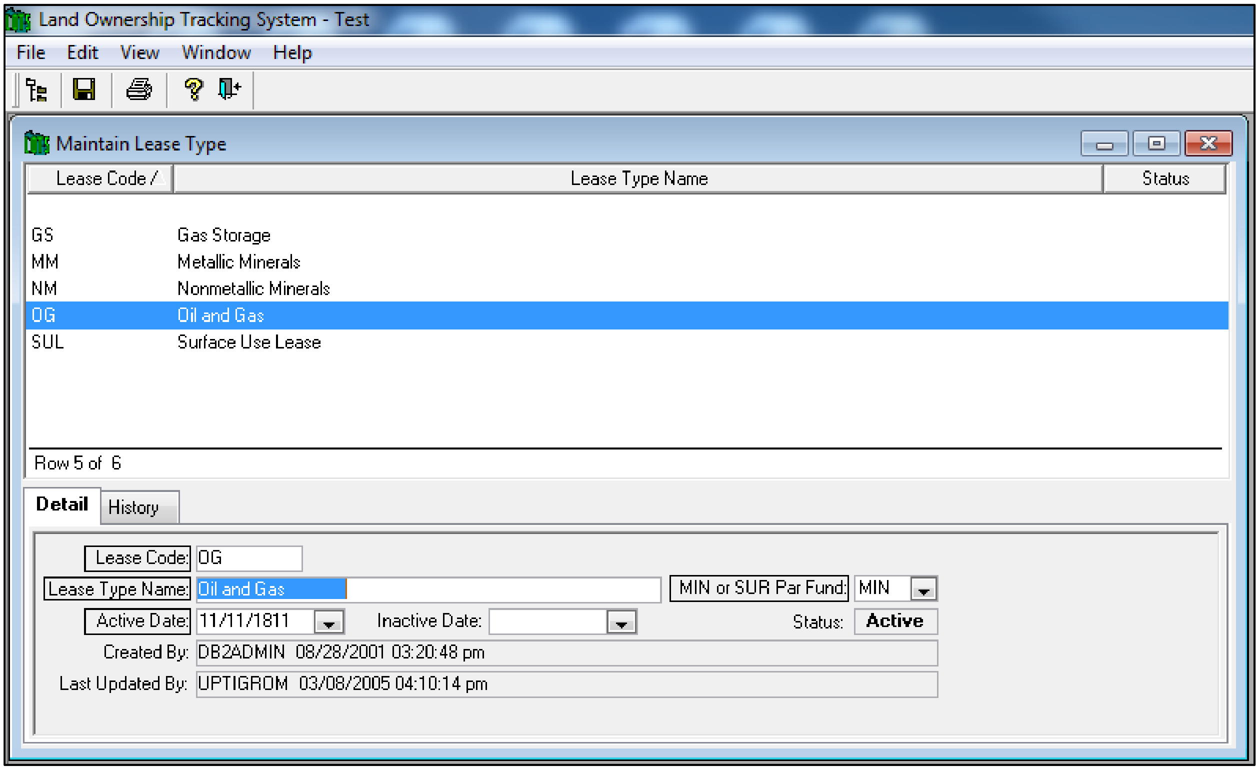
Build Lease Window in current LOTS:



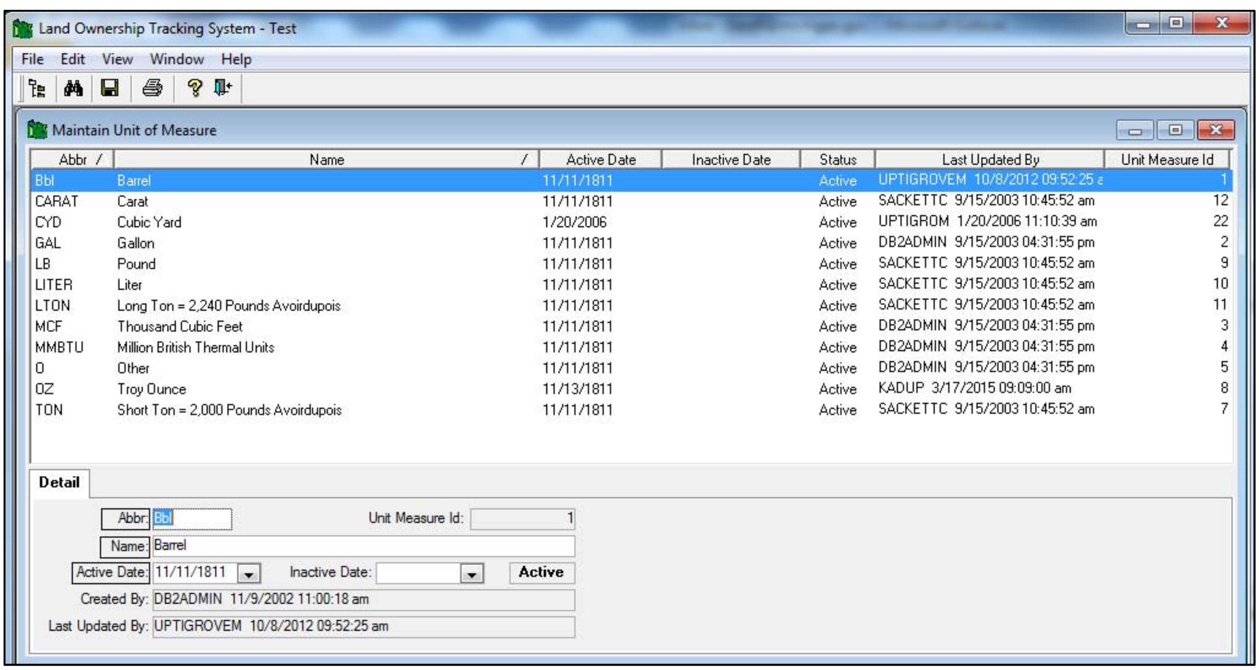
Vendor Type system reference table maintenance window:



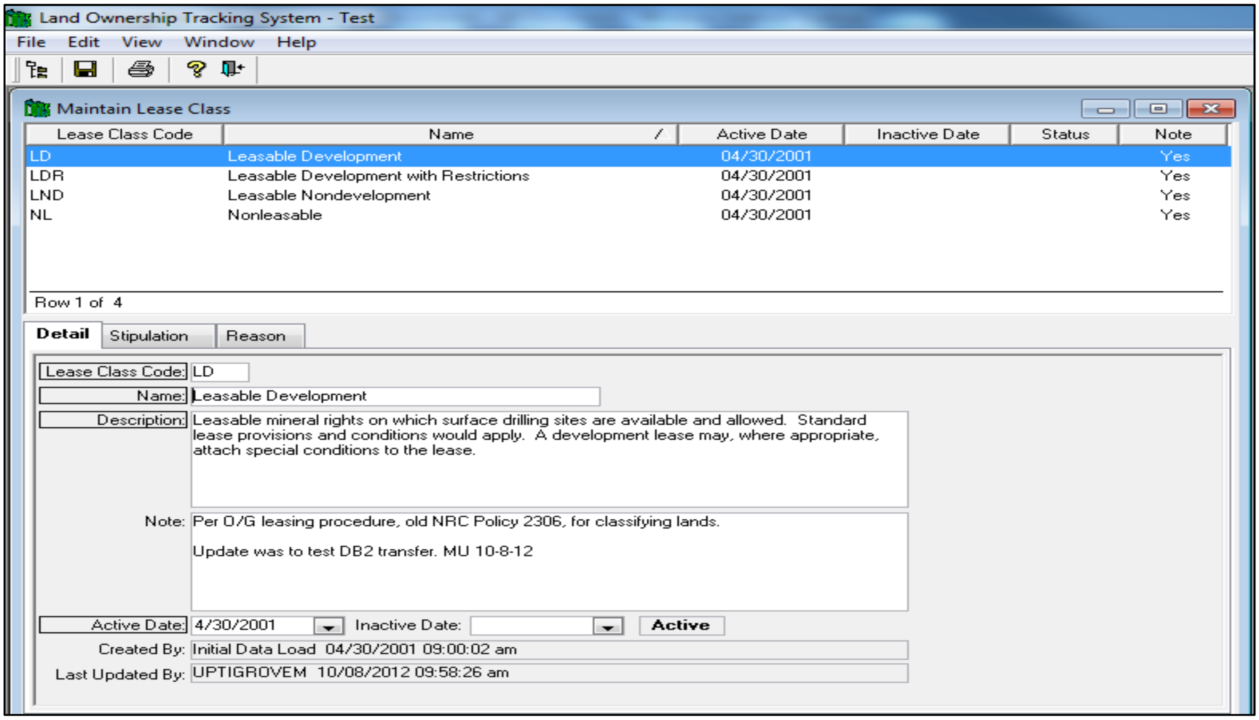
Lease Type system reference table window in current LOTS:



Unit Measure system reference table window in current LOTS:



Lease Class system reference table window in current LOTS:



Land Ownership Tracking System - Test

File Edit View Window Help

Maintain Lease Class

Lease Class Code	Name	Active Date	Inactive Date	Status	Note
LD	Leasable Development	04/30/2001			Yes
LDR	Leasable Development with Restrictions	04/30/2001			Yes
LND	Leasable Nondevelopment	04/30/2001			Yes
NL	Nonleasable	04/30/2001			Yes

Row 1 of 4

Detail | Stipulation | Reason

Lease Class Code: LD

Name: Leasable Development

Description: Leasable mineral rights on which surface drilling sites are available and allowed. Standard lease provisions and conditions would apply. A development lease may, where appropriate, attach special conditions to the lease.

Note: Per O/G leasing procedure, old NRC Policy 2306, for classifying lands.

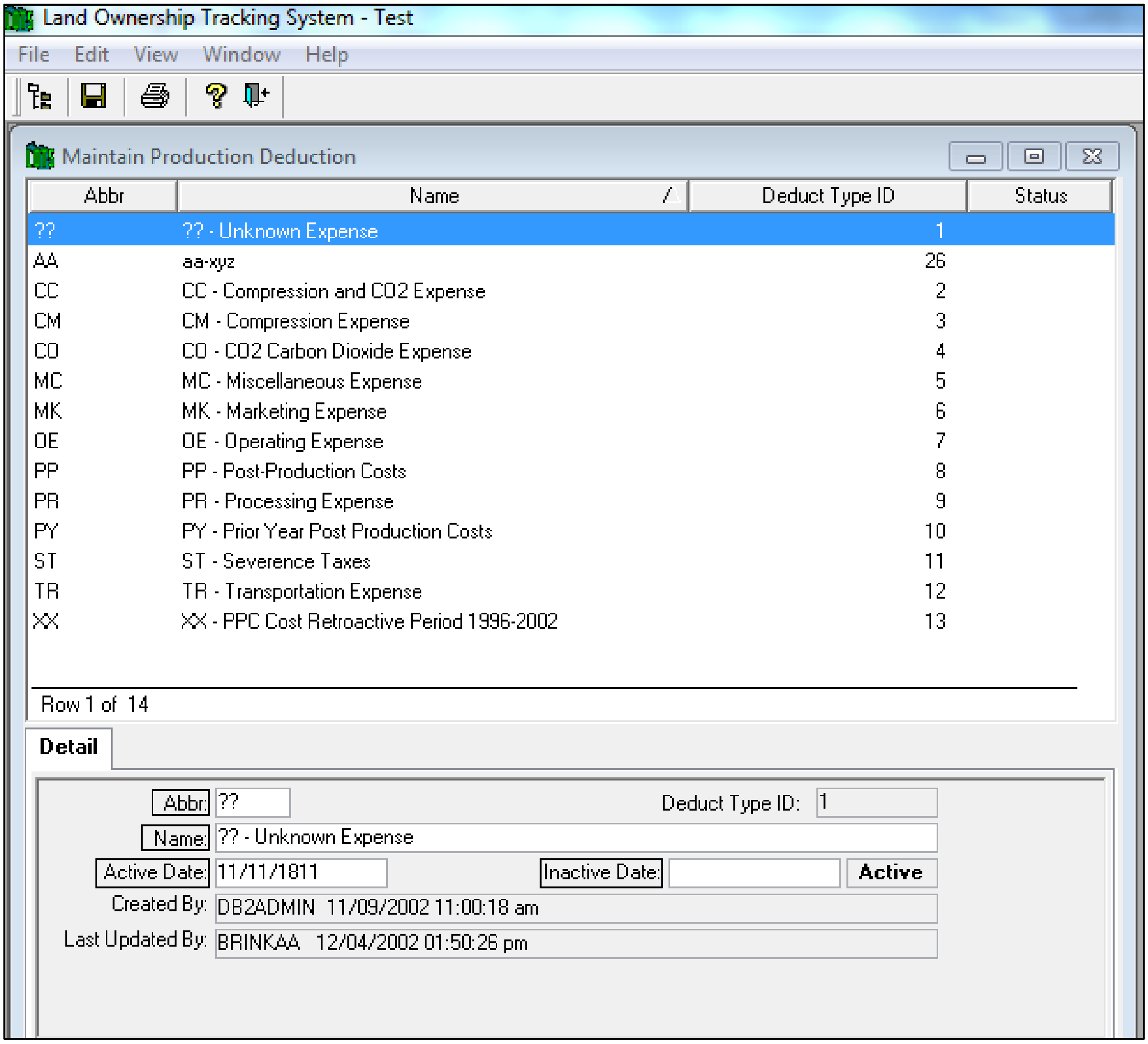
Update was to test DB2 transfer. MU 10-8-12

Active Date: 4/30/2001 Inactive Date: Active

Created By: Initial Data Load 04/30/2001 09:00:02 am

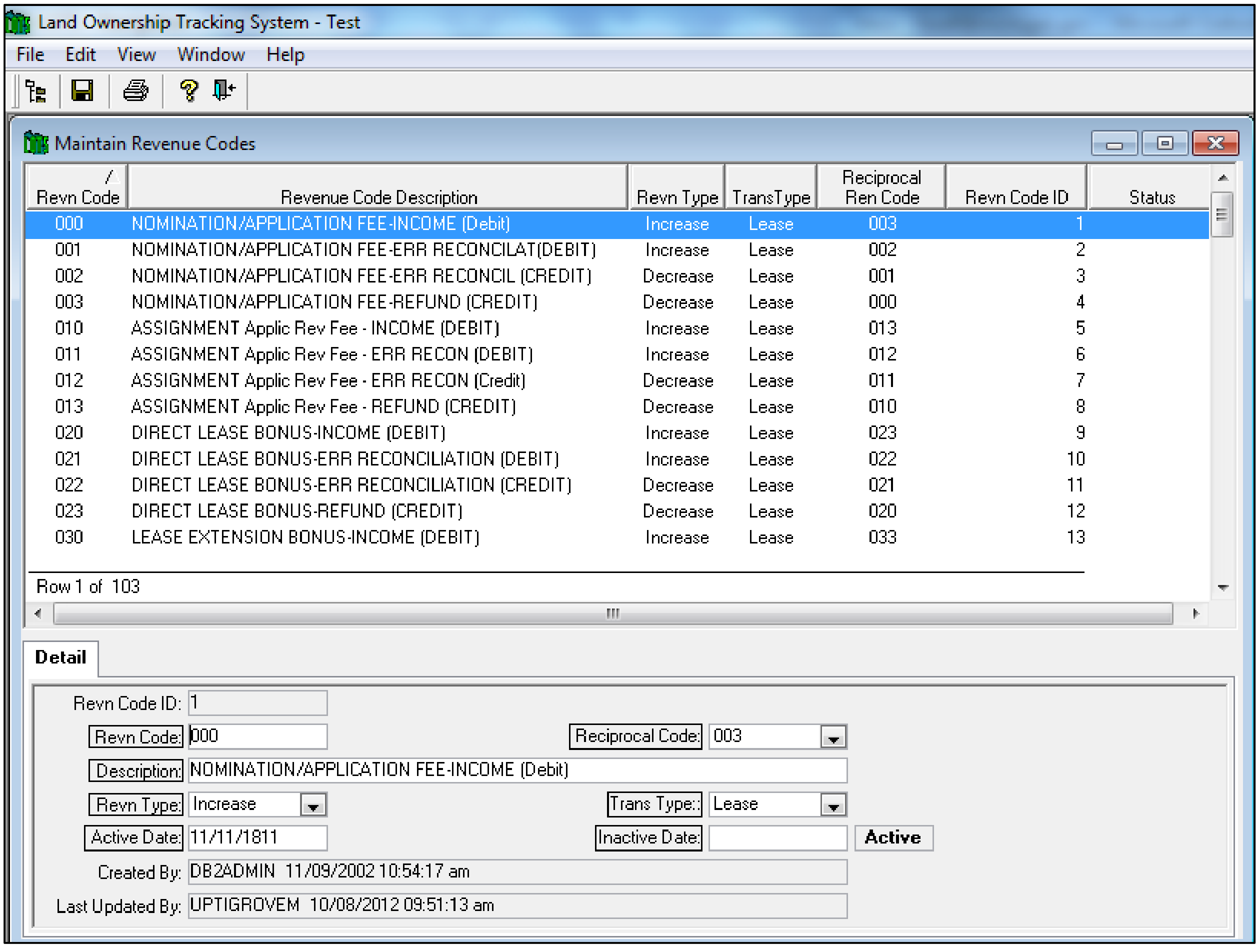
Last Updated By: UPTIGROVEM 10/08/2012 09:58:26 am

Production Deduction system reference table window in current LOTS:



Abbr	Name	Deduct Type ID	Status
??	?? - Unknown Expense	1	
AA	aa-xyz	26	
CC	CC - Compression and CO2 Expense	2	
CM	CM - Compression Expense	3	
CO	CO - CO2 Carbon Dioxide Expense	4	
MC	MC - Miscellaneous Expense	5	
MK	MK - Marketing Expense	6	
OE	OE - Operating Expense	7	
PP	PP - Post-Production Costs	8	
PR	PR - Processing Expense	9	
PY	PY - Prior Year Post Production Costs	10	
ST	ST - Severence Taxes	11	
TR	TR - Transportation Expense	12	
XX	XX - PPC Cost Retroactive Period 1996-2002	13	

Revenue Code system reference table window in current LOTS:



Land Ownership Tracking System - Test

File Edit View Window Help

Maintain Revenue Codes

Revn Code	Revenue Code Description	Revn Type	TransType	Reciprocal Ren Code	Revn Code ID	Status
000	NOMINATION/APPLICATION FEE-INCOME (Debit)	Increase	Lease	003	1	
001	NOMINATION/APPLICATION FEE-ERR RECONCILAT(DEBIT)	Increase	Lease	002	2	
002	NOMINATION/APPLICATION FEE-ERR RECONCIL (CREDIT)	Decrease	Lease	001	3	
003	NOMINATION/APPLICATION FEE-REFUND (CREDIT)	Decrease	Lease	000	4	
010	ASSIGNMENT Applic Rev Fee - INCOME (DEBIT)	Increase	Lease	013	5	
011	ASSIGNMENT Applic Rev Fee - ERR RECON (DEBIT)	Increase	Lease	012	6	
012	ASSIGNMENT Applic Rev Fee - ERR RECON (Credit)	Decrease	Lease	011	7	
013	ASSIGNMENT Applic Rev Fee - REFUND (CREDIT)	Decrease	Lease	010	8	
020	DIRECT LEASE BONUS-INCOME (DEBIT)	Increase	Lease	023	9	
021	DIRECT LEASE BONUS-ERR RECONCILIATION (DEBIT)	Increase	Lease	022	10	
022	DIRECT LEASE BONUS-ERR RECONCILIATION (CREDIT)	Decrease	Lease	021	11	
023	DIRECT LEASE BONUS-REFUND (CREDIT)	Decrease	Lease	020	12	
030	LEASE EXTENSION BONUS-INCOME (DEBIT)	Increase	Lease	033	13	

Row 1 of 103

Detail

Revn Code ID: 1

Revn Code: 000 Reciprocal Code: 003

Description: NOMINATION/APPLICATION FEE-INCOME (Debit)

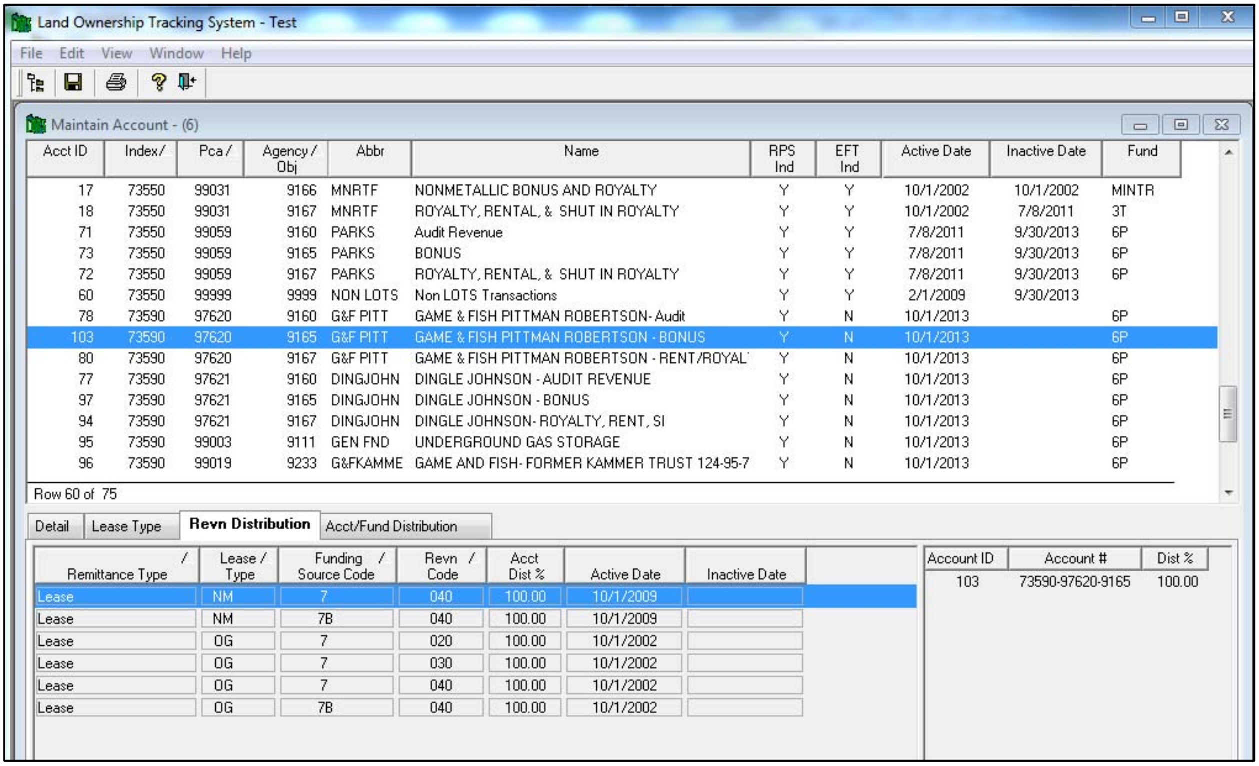
Revn Type: Increase Trans Type:: Lease

Active Date: 11/11/1811 Inactive Date: **Active**

Created By: DB2ADMIN 11/09/2002 10:54:17 am

Last Updated By: UPTIGROVEM 10/08/2012 09:51:13 am

Fund/Acct – Account Distribution system reference table window in current LOTS:



Acct ID	Index/	Pca /	Agency / Obj	Abbr	Name	RPS Ind	EFT Ind	Active Date	Inactive Date	Fund
17	73550	99031	9166	MNRTF	NONMETALLIC BONUS AND ROYALTY	Y	Y	10/1/2002	10/1/2002	MINTR
18	73550	99031	9167	MNRTF	ROYALTY, RENTAL, & SHUT IN ROYALTY	Y	Y	10/1/2002	7/8/2011	3T
71	73550	99059	9160	PARKS	Audit Revenue	Y	Y	7/8/2011	9/30/2013	6P
73	73550	99059	9165	PARKS	BONUS	Y	Y	7/8/2011	9/30/2013	6P
72	73550	99059	9167	PARKS	ROYALTY, RENTAL, & SHUT IN ROYALTY	Y	Y	7/8/2011	9/30/2013	6P
60	73550	99999	9999	NON LOTS	Non LOTS Transactions	Y	Y	2/1/2009	9/30/2013	
78	73590	97620	9160	G&F PITT	GAME & FISH PITTMAN ROBERTSON- Audit	Y	N	10/1/2013		6P
103	73590	97620	9165	G&F PITT	GAME & FISH PITTMAN ROBERTSON - BONUS	Y	N	10/1/2013		6P
80	73590	97620	9167	G&F PITT	GAME & FISH PITTMAN ROBERTSON - RENT/ROYAL'	Y	N	10/1/2013		6P
77	73590	97621	9160	DINGJOHN	DINGLE JOHNSON - AUDIT REVENUE	Y	N	10/1/2013		6P
97	73590	97621	9165	DINGJOHN	DINGLE JOHNSON - BONUS	Y	N	10/1/2013		6P
94	73590	97621	9167	DINGJOHN	DINGLE JOHNSON- ROYALTY, RENT, SI	Y	N	10/1/2013		6P
95	73590	99003	9111	GEN FND	UNDERGROUND GAS STORAGE	Y	N	10/1/2013		6P
96	73590	99019	9233	G&FKAMME	GAME AND FISH- FORMER KAMMER TRUST 124-95-7	Y	N	10/1/2013		6P

/ Remittance Type	Lease / Type	Funding / Source Code	Revn / Code	Acct Dist %	Active Date	Inactive Date
Lease	NM	7	040	100.00	10/1/2009	
Lease	NM	7B	040	100.00	10/1/2009	
Lease	OG	7	020	100.00	10/1/2002	
Lease	OG	7	030	100.00	10/1/2002	
Lease	OG	7	040	100.00	10/1/2002	
Lease	OG	7B	040	100.00	10/1/2002	

Account ID	Account #	Dist %
103	73590-97620-9165	100.00

9. Exhibit 9 – DB Updates

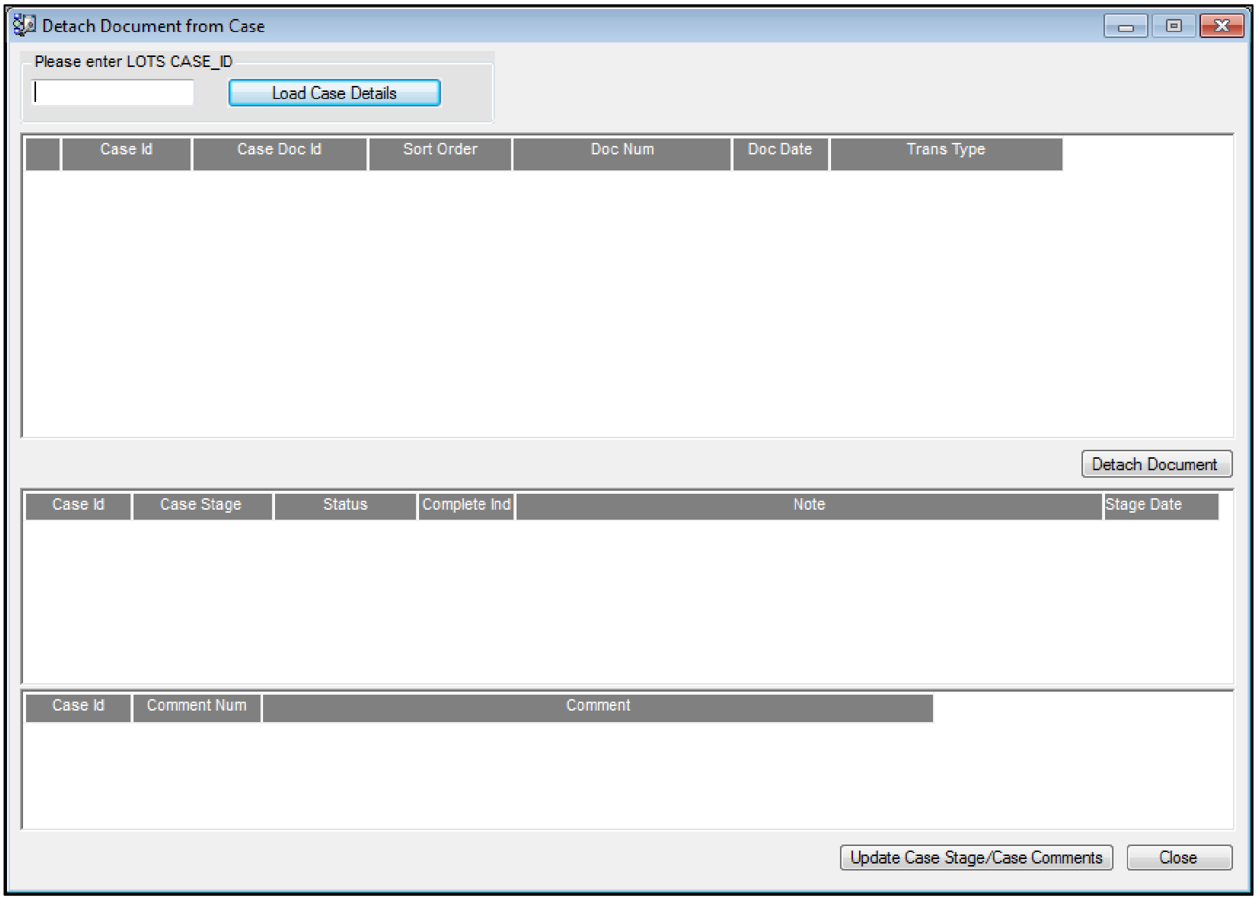
A. Requirements

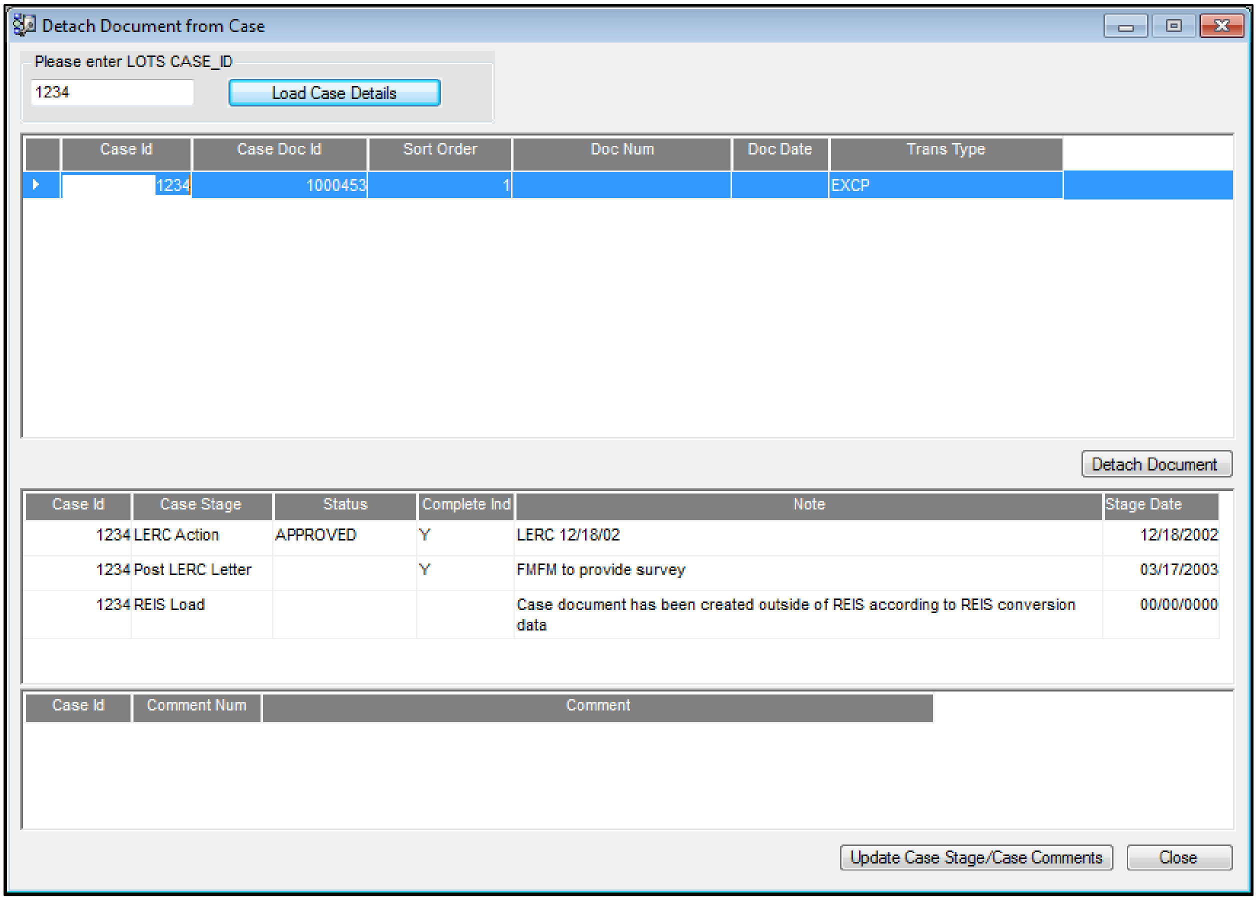
Business Req. No.	• Detailed Requirement Description	Category
	Delete Parcel, Delete Document DB Update user interface	
1	The system must provide a user interface for DB updates for delete Parcel(s), delete Document(s) functions.	E
2	The DB updates user interface must give an authorized user an option to • Delete single/multiple Parcels • Delete Single/multiple Documents	E
3	The DB updates user interface must validate user input and throw appropriate error messages when needed.	E
4	The DB updates user interface must allow an authorized user to delete Parcel(s)/Document(s).	E
5	The system must display a detailed list of database tables that get affected by the deletion of Parcel(s)/Document(s).	E
5.1	The DB updates user interface must allow user to continue with the deletion process.	E
6	The DB updates user interface must display an informational message with deletion process status.	E
7	The DB updates user interface must display a detailed list of parcel(s)/ Document(s) that are deleted.	E
8	The system must save changes to the database	E
	Attach/Detach Document From Case DB Update user interface	
1	The system must provide an “attach/detach document(s) from case DB update” user interface.	E
2	The user interface must allow an authorized user to enter Case number.	E
3	The user interface must validate user input and throw appropriate error messages when needed.	E
4	The user interface must allow an authorized user to load case details.	E
4.1	The user interface must display case details.	E
5	The user interface must allow an authorized user to update Case Stage / Case Comments.	E
6	The user interface must throw a warning message to confirm the attachment/detachment of document from Case.	E
7	The user interface must allow an authorized user to attach/detach Document(s) from the Case.	E
8	The user interface must throw a warning message to confirm the attachment/detachment of document from Case.	E
9	The user interface must display an informational message with attaching/detaching process status.	E

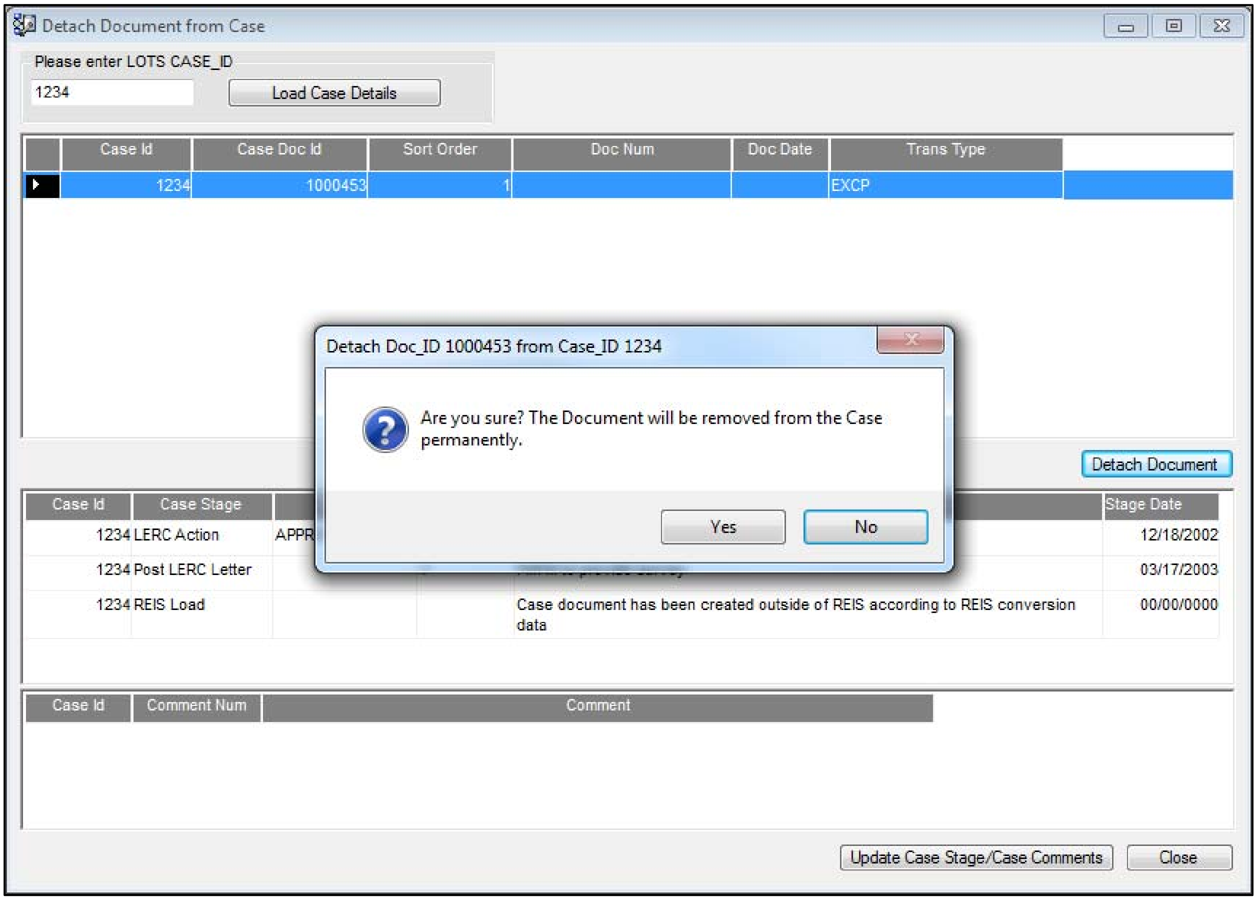
Business Req. No.	• Detailed Requirement Description	Category
10	The user interface must display Case details along with attached/detached Document(s).	E
11	The user interface window must display case details.	E
	Consolidate Subdivision	
1	The user interface must provide a Consolidate Subdivision function to allow an authorized user to combine duplicate Subdivision records and associate all parcels from either Subdivision into the combined Subdivision.	E

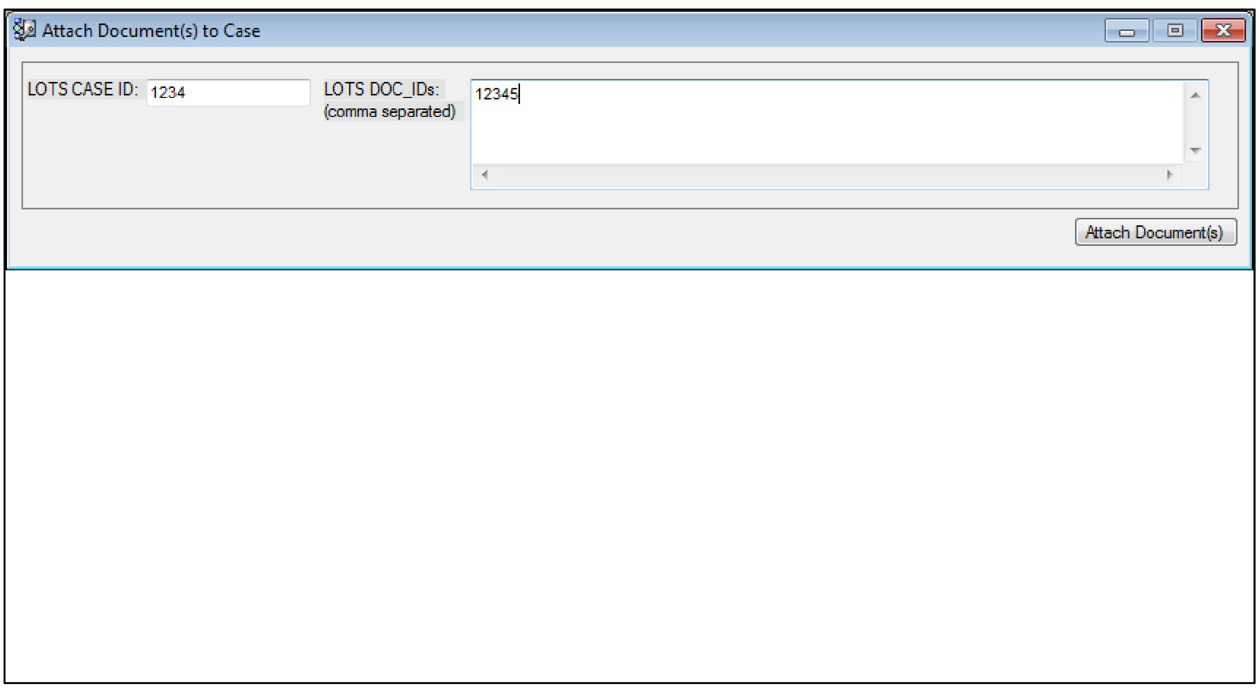
B. AS-IS System Screenshots

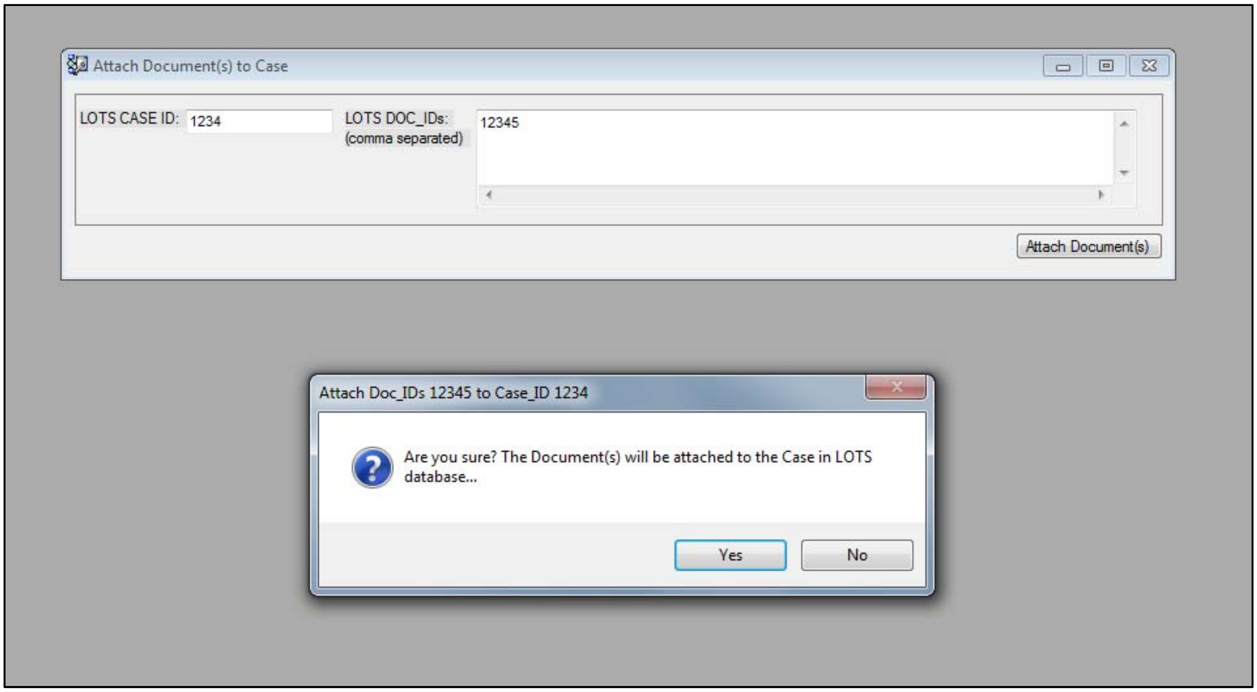
DB Updates user interface in current LOTS:

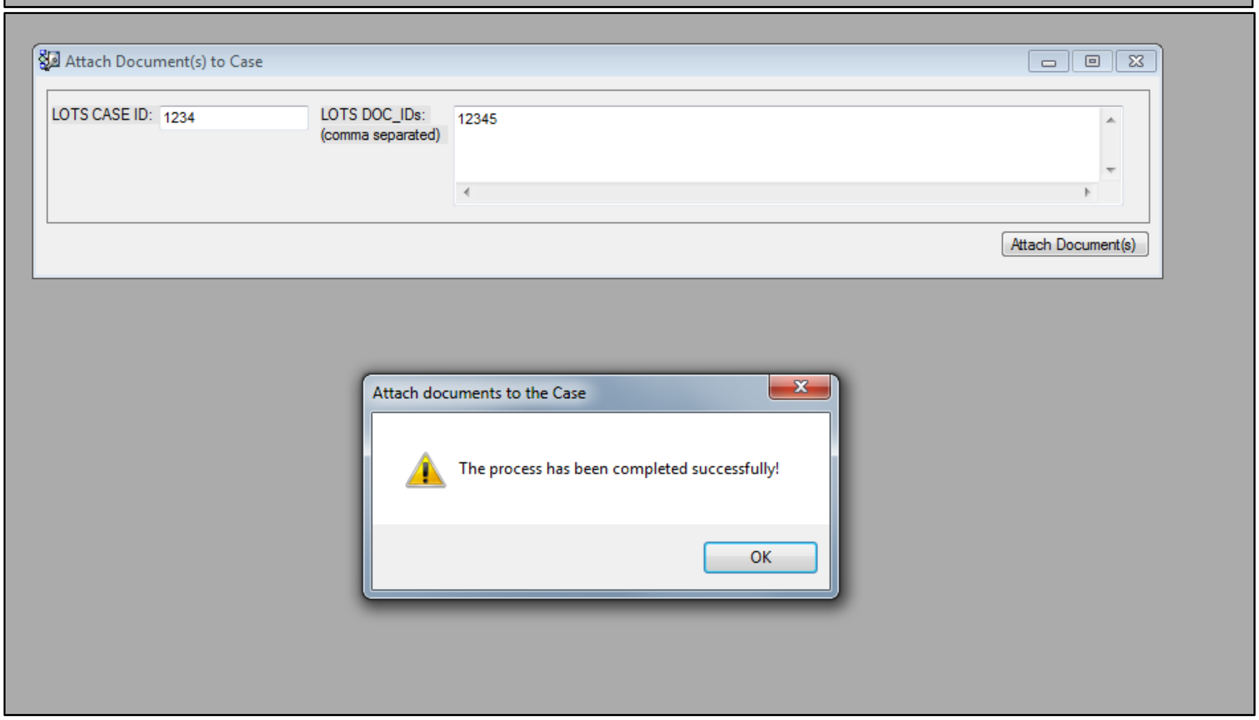


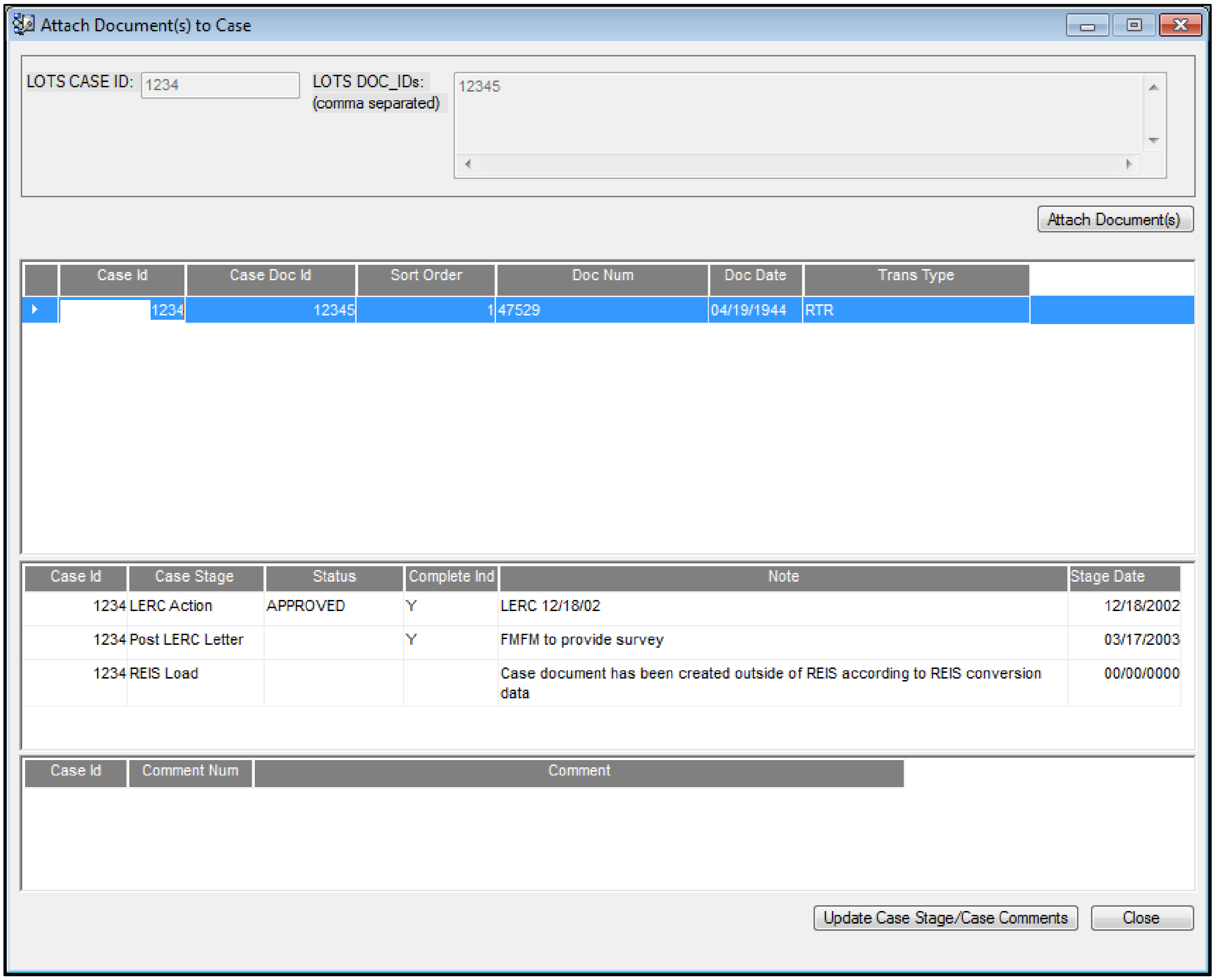

Detach Document from Case
Please enter LOTS CASE_ID
1234
Load Case Details
Case Id | Case Doc Id | Sort Order | Doc Num | Doc Date | Trans Type
1234 | 1000453 | 1 | | | EXCP
Detach Document
Case Id | Case Stage | Status | Complete Ind | Note | Stage Date
1234 | LERC Action | APPROVED | Y | LERC 12/18/02 | 12/18/2002
1234 | Post LERC Letter | | Y | FMFM to provide survey | 03/17/2003
1234 | REIS Load | | | Case document has been created outside of REIS according to REIS conversion data | 00/00/0000
Case Id | Comment Num | Comment
Update Case Stage/Case Comments
Close

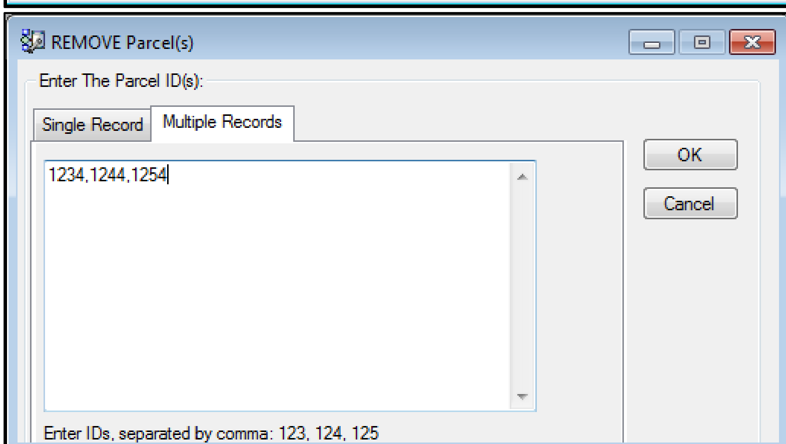

Detach Document from Case
Please enter LOTS CASE_ID
1234
Load Case Details
Case Id
Case Doc Id
Sort Order
Doc Num
Doc Date
Trans Type
1234
1000453
1
EXCP
Detach Doc_ID 1000453 from Case_ID 1234
Are you sure? The Document will be removed from the Case permanently.
Yes
No
Detach Document
Case Id
Case Stage
Stage Date
1234 LERC Action
APPR
12/18/2002
1234 Post LERC Letter
03/17/2003
1234 REIS Load
Case document has been created outside of REIS according to REIS conversion data
00/00/0000
Case Id
Comment Num
Comment
Update Case Stage/Case Comments
Close

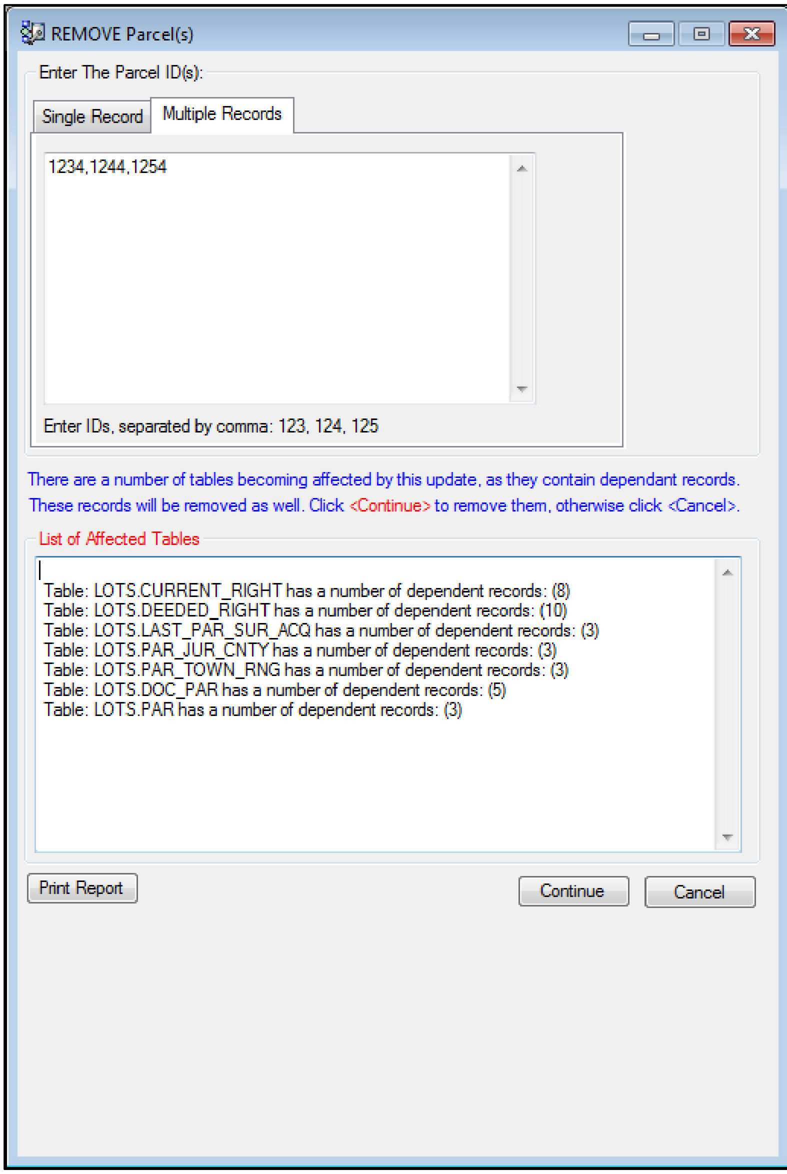

Attach Document(s) to Case
LOTS CASE ID:
1234
LOTS DOC_IDs:
(comma separated)
12345
Attach Document(s)

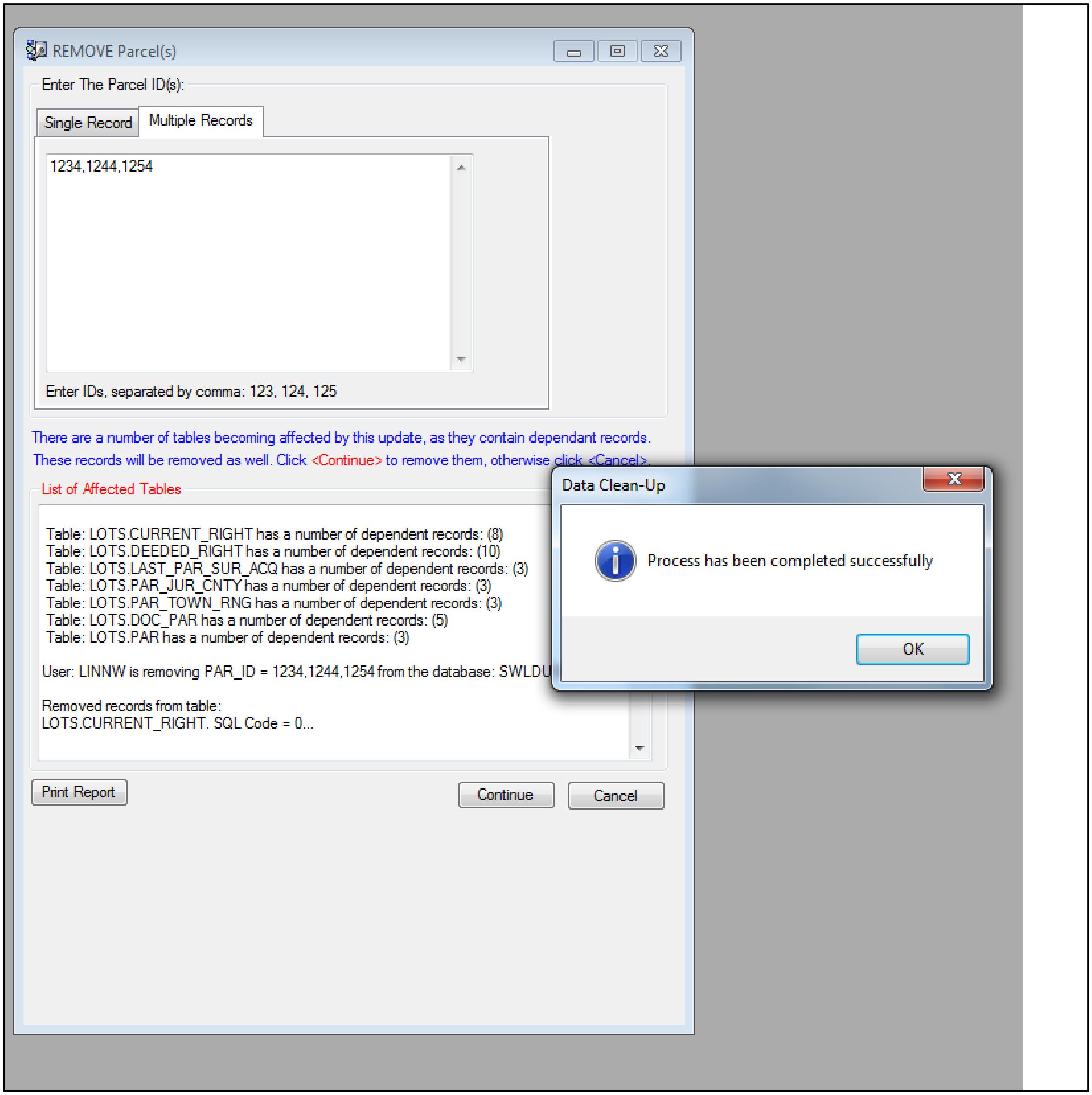

Attach Document(s) to Case
LOTS CASE ID:
1234
LOTS DOC_IDs:
(comma separated)
12345
Attach Document(s)
Attach Doc_IDs 12345 to Case_ID 1234
Are you sure? The Document(s) will be attached to the Case in LOTS database...
Yes
No

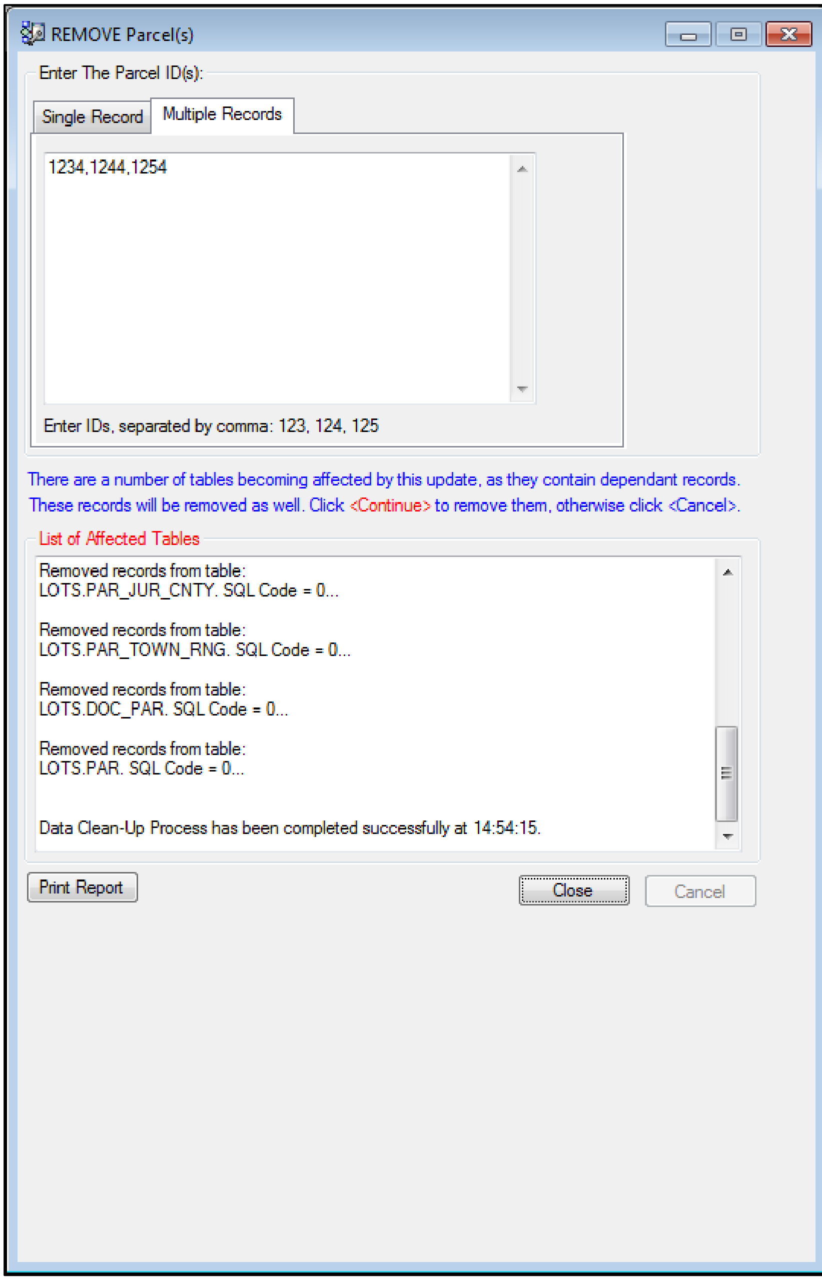

Attach Document(s) to Case
LOTS CASE ID:
1234
LOTS DOC_IDs:
(comma separated)
12345
Attach Document(s)
Attach documents to the Case
The process has been completed successfully!
OK


Attach Document(s) to Case
LOTS CASE ID: 1234
LOTS DOC_IDs: (comma separated)
12345
Attach Document(s)
Case Id | Case Doc Id | Sort Order | Doc Num | Doc Date | Trans Type
1234 | 12345 | 1 | 47529 | 04/19/1944 | RTR
Case Id | Case Stage | Status | Complete Ind | Note | Stage Date
1234 | LERC Action | APPROVED | Y | LERC 12/18/02 | 12/18/2002
1234 | Post LERC Letter | | Y | FMFM to provide survey | 03/17/2003
1234 | REIS Load | | | Case document has been created outside of REIS according to REIS conversion data | 00/00/0000
Case Id | Comment Num | Comment
Update Case Stage/Case Comments
Close

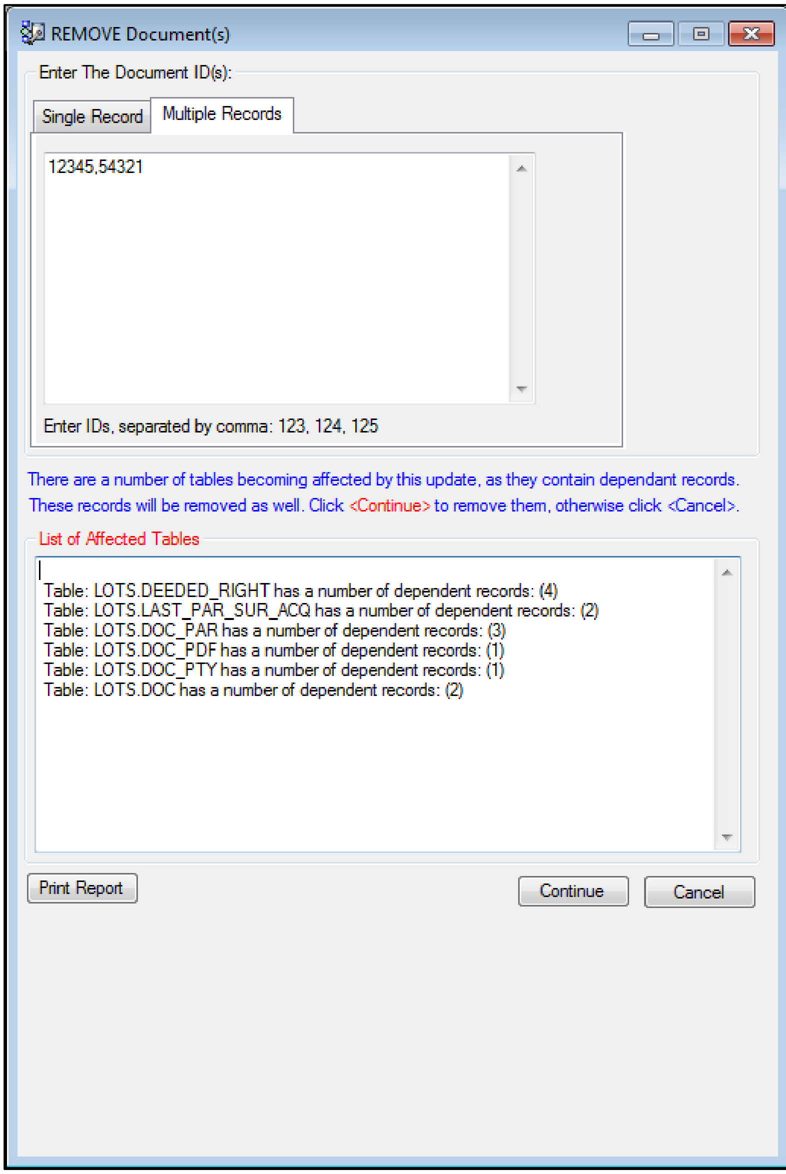

REMOVE Parcel(s)
Enter The Parcel ID(s):
Single Record
Multiple Records
1234,1244,1254
OK
Cancel
Enter IDs, separated by comma: 123, 124, 125

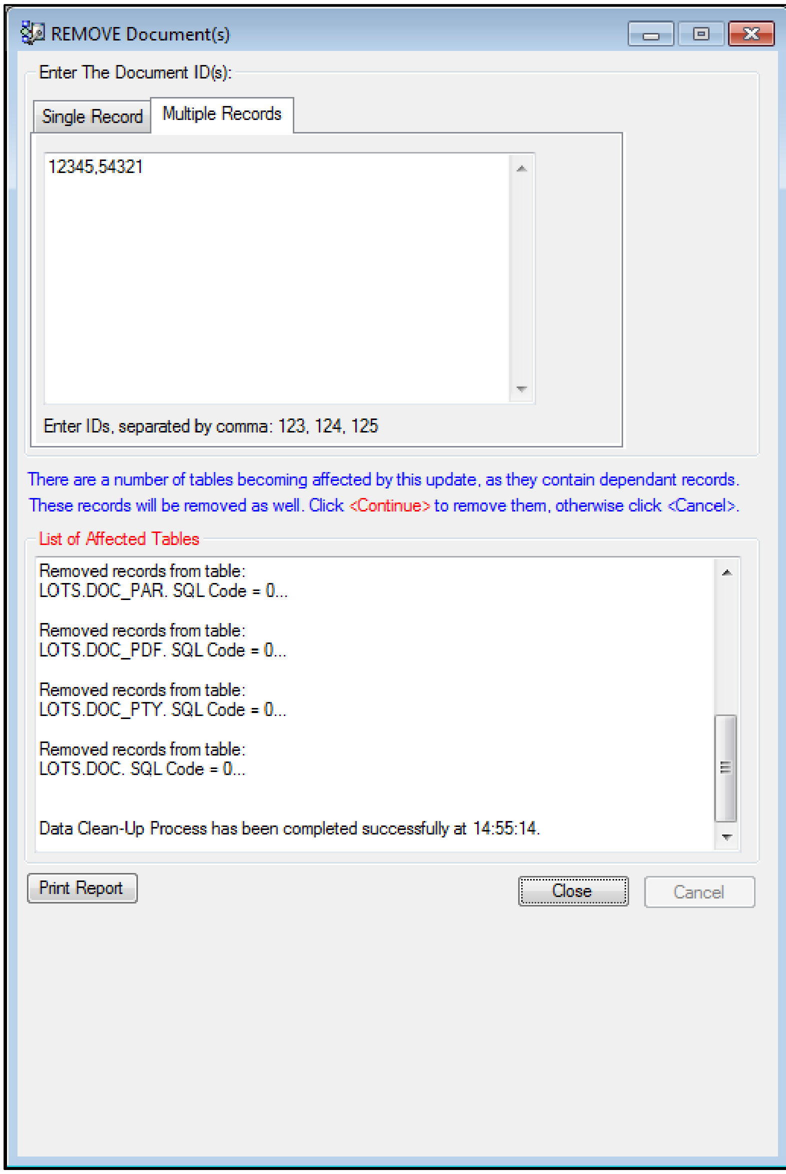

REMOVE Parcel(s)
Enter The Parcel ID(s):
Single Record
Multiple Records
1234,1244,1254
Enter IDs, separated by comma: 123, 124, 125
There are a number of tables becoming affected by this update, as they contain dependant records.
These records will be removed as well. Click <Continue> to remove them, otherwise click <Cancel>.
List of Affected Tables
Table: LOTS.CURRENT_RIGHT has a number of dependent records: (8)
Table: LOTS.DEEDED_RIGHT has a number of dependent records: (10)
Table: LOTS.LAST_PAR_SUR_ACQ has a number of dependent records: (3)
Table: LOTS.PAR_JUR_CNTY has a number of dependent records: (3)
Table: LOTS.PAR_TOWN_RNG has a number of dependent records: (3)
Table: LOTS.DOC_PAR has a number of dependent records: (5)
Table: LOTS.PAR has a number of dependent records: (3)
Print Report
Continue
Cancel


REMOVE Parcel(s)
Enter The Parcel ID(s):
Single Record
Multiple Records
1234,1244,1254
Enter IDs, separated by comma: 123, 124, 125
There are a number of tables becoming affected by this update, as they contain dependant records.
These records will be removed as well. Click <Continue> to remove them, otherwise click <Cancel>.
List of Affected Tables
Table: LOTS.CURRENT_RIGHT has a number of dependent records: (8)
Table: LOTS.DEEDED_RIGHT has a number of dependent records: (10)
Table: LOTS.LAST_PAR_SUR_ACQ has a number of dependent records: (3)
Table: LOTS.PAR_JUR_CNTY has a number of dependent records: (3)
Table: LOTS.PAR_TOWN_RNG has a number of dependent records: (3)
Table: LOTS.DOC_PAR has a number of dependent records: (5)
Table: LOTS.PAR has a number of dependent records: (3)
User: LINNW is removing PAR_ID = 1234,1244,1254 from the database: SWLDU
Removed records from table:
LOTS.CURRENT_RIGHT. SQL Code = 0...
Print Report
Continue
Cancel
Data Clean-Up
Process has been completed successfully
OK



REMOVE Parcel(s)
Enter The Parcel ID(s):
Single Record
Multiple Records
1234,1244,1254
Enter IDs, separated by comma: 123, 124, 125
There are a number of tables becoming affected by this update, as they contain dependant records.
These records will be removed as well. Click <Continue> to remove them, otherwise click <Cancel>.
List of Affected Tables
Removed records from table:
LOTS.PAR_JUR_CNTY. SQL Code = 0...
Removed records from table:
LOTS.PAR_TOWN_RNG. SQL Code = 0...
Removed records from table:
LOTS.DOC_PAR. SQL Code = 0...
Removed records from table:
LOTS.PAR. SQL Code = 0...
Data Clean-Up Process has been completed successfully at 14:54:15.
Print Report
Close
Cancel


REMOVE Document(s)
Enter The Document ID(s):
Single Record
Multiple Records
12345,54321
Enter IDs, separated by comma: 123, 124, 125
There are a number of tables becoming affected by this update, as they contain dependant records.
These records will be removed as well. Click <Continue> to remove them, otherwise click <Cancel>.
List of Affected Tables
Table: LOTS.DEEDED_RIGHT has a number of dependent records: (4)
Table: LOTS.LAST_PAR_SUR_ACQ has a number of dependent records: (2)
Table: LOTS.DOC_PAR has a number of dependent records: (3)
Table: LOTS.DOC_PDF has a number of dependent records: (1)
Table: LOTS.DOC_PTY has a number of dependent records: (1)
Table: LOTS.DOC has a number of dependent records: (2)
Print Report
Continue
Cancel


REMOVE Document(s)
Enter The Document ID(s):
Single Record
Multiple Records
12345,54321
Enter IDs, separated by comma: 123, 124, 125
There are a number of tables becoming affected by this update, as they contain dependant records.
These records will be removed as well. Click <Continue> to remove them, otherwise click <Cancel>.
List of Affected Tables
Removed records from table:
LOTS.DOC_PAR. SQL Code = 0...
Removed records from table:
LOTS.DOC_PDF. SQL Code = 0...
Removed records from table:
LOTS.DOC_PTY. SQL Code = 0...
Removed records from table:
LOTS.DOC. SQL Code = 0...
Data Clean-Up Process has been completed successfully at 14:55:14.
Print Report
Close
Cancel

10. Exhibit 10 – MIR Interface

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The system must provide a user interface for MIR (RBDMS) application.	E
1.1	The system must allow an authorized user to view the following details under the drilling unit tab under mineral lease. *Note: Same as "Drilling Unit" window found in Navigation Tree under "Mineral Production.*	E
1.1 contd..	• Active wells • Permit Number • API Well Number • Well Name • Well Number • Well Type • Well Operator • Well Status • Producing Formation • Field Name • Deepest Formation • State Interest • PRU Number • Surface Hole Location (by County, Town, Range, Section, Quarter/Quarter/Quarter) • Bottom Hole Location (by County, Town, Range, Section, Quarter/Quarter/Quarter) • Drilling Unit Locations (by County, Town, Range, Section, Quarter/Quarter) • Well History (Date, Type of Work, and Comments)	E
1.2	The system must allow an authorized user to view following details under the well info tab at display parcel level.	E
1.2 Contd..	• All inactive permitted wells associated with a parcel (e.g. dry holes (DH), injection wells (WIW), brine disposal wells (BDW), plugged wells (PLC and PLA), observation wells) not in an active Drilling Unit. • Production data by PRU sorted by month by year • Field notes by permit number by date • New Well Permit Application data (LOTS "Display Parcel" level by County, Town, Range, Section, Quarter/Quarter location) • DEQ Well Bond data by company, by well or all company wells covered by one blanket well bond • Well Operator (current Permittee) Company data • Well Completion date • Well Plugging date	E

Business Req. No.	• Detailed Requirement Description	Category
1.4	The system must provide an authorized user with a Read-Only access to the Well Info Tab.	E
1.5	The system must populate the Well Info tab on Parcel Level and Drilling Unit tab at Lease level with MIR data from the MIR database as a daily batch job.	E
1.6	The system must allow an authorized user to view the following details under the Uniform Spacing Plan window found in Navigation Tree under Mineral Production. • USP application date • USP effective date • USP Operator • USP locations • Total USP Acres • Notes related to specific drilling requirements for the subject USP	E
1.7	The system must allow an authorized user to view the following details under the Revenue Reporting Unit window found in Navigation Tree under Mineral Production: • Production Data by PRU by month by year • List all wells reporting to the same PRU • Well History *NOTE: For more information on Uniform Spacing Plan, please refer to the USP section of Mineral Production document.*	E

11. Exhibit 11 – Audit Tracking Of Capital Improvements

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The system must provide an additional tab (Capital Improvements) on Maintain Parcel user interface to keep track of Capital Improvements for Audit purposes.	E
2	The Capital Improvements tab must provide fields as follows- • Type of facility constructed or improved • Grant Title • Federal share of development project cost • Total cost of capital improvement project • Description of source for non-federal share of total cost (e.g. State license $, other State funds, third party donation, etc.) • Latitude and Longitude • Calendar Year in which the facility was constructed or improved • Useful Life of newly constructed Capital Improvement or added years of useful life from this federally funded improvement project (see WSFR regs at 50 CFR 80 for definitions and explanations) • Notes, other explanation, etc. • Development Grant P key • Development Grant 10 digit grant number • Development Grant Issued date	E
2.1	The system must allow an authorized user to input one or more Development Grant 10 digit number.	E
3	The system must allow an authorized user to MANUALLY populate the fields on Capital Improvements tab and must allow an authorized user to save changes to the record on the database.	E

12. Exhibit 12 – Mineral Production

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
	Maintain Drilling Unit	
1.0	The system must provide a Maintain Drilling Unit user interface window.	E
1.1	The Maintain Drilling Unit user interface window must provide user with the ability to find Drilling Unit based on the search criteria entered by user.	E
1.1.1	The search criteria must be provided with fields populated by MIR interface -	E

1.1.1 ctd..	• API Well Number • Well Name • Well Number • Operator • Well Status • Permit Number • PRU number • Drilling Unit Location – ✓ County ✓ Town ✓ Range ✓ Section ✓ QQQ ✓ QQ ✓ Q • Surface Hole Location – ✓ County ✓ Town ✓ Range ✓ Section ✓ QQQ ✓ QQ ✓ Q • Bottom Hole Location – ✓ County ✓ Town ✓ Range ✓ Section ✓ QQQ ✓ QQ ✓ Q and fields in LOTS tables-Unitized/Pooled • Parcel- ✓ Parcel ID ✓ County ✓ Town ✓ Range ✓ Section ✓ QQ ✓ Q • Lease- ✓ Type ✓ Number ✓ Suffix ✓ Current Lessee	E

Business Req. No.	• Detailed Requirement Description	Category
	Previous Lessee	
1.1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Drilling Units not found.	E
1.1.3	The system must provide the search criteria to find all Drilling Unit records that have null values in a particular field.	E
1.1.4	The system must consider the entire find Drilling Unit criteria entered by user as a single condition rather than a nested condition for search.	E
1.2	The Maintain Drilling Unit window must allow an authorized user to create a new Drilling Unit record.	E
1.2.1	The system must assign a unique ID for each newly created Drilling Unit record.	E

Business Req. No.	• Detailed Requirement Description	Category
1.3	The Maintain Drilling Unit window must display Drilling Unit record details as follows- • API Well Number • Well Name • Well Number • Operator • Well Status • Well Type • Permit Number • PRU number • Spacing Unit Acres • Production Formation • State Interest (System must translate State Interest field value from MIR to Y/N value and Display as Y/N in this window) • Rent Abated From Date • Rent Abated Thru Date • Shut In Date • Shut In Paid To Date • Spaced DU Acres • Additional Pooled Acres • Note • Surface Hole Location – ✓ County ✓ Town ✓ Range ✓ Section ✓ QQQ ✓ QQ ✓ Q • Bottom Hole Location – ✓ County ✓ Town ✓ Range ✓ Section ✓ QQQ ✓ QQ ✓ Q	E

Business Req. No.	• Detailed Requirement Description	Category
1.3.1	The Maintain Drilling Unit window must display from MIR, Drilling Unit locations by: • County • Town • Range • Section • QQ • Q • Location Type	E
1.3.2	The Maintain Drilling Unit window must display from the system itself, Pooled locations by: • County • Town • Range • Section • QQ • Q A Grid map with legends as: • No drilling unit • Invalid Section • Spaced Location • Pooled Location • Surface Location	E
1.3.3	The Maintain Drilling Unit window must display list of all the parcels associated to all the Active Oil and Gas leases on the drilling unit with following details: • Parcel ID • End Date • Location/Description • Surface % • Mineral % • ROM% • Acres • State/Mineral Royalty Acres • Lease Number • Lease Type • Lease Status	E
1.3.4	The Maintain Drilling Unit window must display following Well History details: • Date • Type of work • Comments	E

Business Req. No.	• Detailed Requirement Description	Category
1.3.5	The Maintain Drilling Unit window must display following Unit Area details: • Unit Number • Lease Type • Unit Name • Operator • Effective Date • Termination Date • State Acres • Total Acres • Note indicator (Y/N) • End Date	E
1.3.6	The Maintain Drilling Unit window must display all Active oil and gas leases associated to parcels attached to the Drilling Unit with following information: • Lease Number • Type • Status • Lessee • Lease Date • Expiration Date • Note indicator (Y/N) • Class • Extension status • End date	E
1.3.7	The Maintain Drilling Unit window must display following Revenue Reporting Unit details: • RRU Number • Effective Date • Termination Date • Unit Area • Decimal Interest • Section 29 % • RIK • Note indicator (Y/N)	E
1.4	The Maintain Drilling Unit window must allow an authorized user to Edit the following details: • Rent Abated From Date • Rent Abated Thru Date • Shut In Date • Shut In Paid To Date • Spaced DU Acres • Additional Pooled Acres • Note	E

Business Req. No.	• Detailed Requirement Description	Category
1.4.1	The Maintain Drilling Unit window must allow an authorized user to Add/Delete Pooled location records for the Drilling Unit by • Clicking/unclicking on the grid (or) • Selecting add /delete location option *Note: Spaced Location on this grid is DEQ assigned and is not changeable.*	E
1.4.1.1	The Maintain Drilling Unit window must allow user to copy Pooled Unit Location Description to Windows Clip Board.	E
1.4.2	The Maintain Drilling Unit window must allow an authorized user to load all the parcels associated to all locations that are associated to a Drilling Unit.(The system matches Parcel records in LOTS to Spaced Locations and Drilling Units data sent by MIR).	E
1.4.2.1	While loading Parcels for a Drilling Unit, the Maintain Drilling Unit window must load all the parcels for the drilling unit and populate all Active Oil and Gas leases associated with Parcels simultaneously.	O
1.4.2.2	The Maintain Drilling Unit window must provide an authorized user with "Add Parcels" function in addition to Load Parcel(s) to a Drilling Unit.	E
1.4.2.2A	The system must allow user to find Parcels to be able to add them to Drilling Unit.	E
1.4.2.3	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value. When User changes Mineral/Royalty Acres on a Parcel the system must recalculate the Total State Mineral Acres In Drilling Unit.	E
1.4.2.3A	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value.	E
1.4.2.4	The Maintain Drilling Unit window must provide an authorized user with "Delete Parcels" function in case if erroneous data is entered. This will delete the parcel from the list not from the database.	E
1.4.2.5	The Maintain Drilling Unit window must provide an authorized user with "End Parcel Association" function. This function must allow user to input Date to end the association. This will end the Parcel's association with the Drilling Unit effective the date entered by user.	E
1.4.2.6	The Maintain Drilling Unit window must provide an authorized user with "Display Parcel Details" function.	E
1.4.2.7	The Maintain Drilling Unit window must allow an authorized user to load Leases associated to Parcels in a Drilling Unit.	E
1.4.3	The Maintain Drilling Unit window must allow an authorized user to add Leases associated to Parcels in a Drilling Unit in addition to Load Parcels.	E
1.4.3.1	The Maintain Drilling Unit window must allow an authorized user to add Leases associated to Parcels in a Drilling Unit in addition to Load Parcels.	E
1.4.3.2	The Maintain Drilling Unit window must allow an authorized user to delete Leases associated to Parcels in a Drilling Unit.	E

Business Req. No.	• Detailed Requirement Description	Category
1.4.3.3	The Maintain Drilling Unit window must allow an authorized user to end Lease association in a Drilling Unit.	E
1.4.3.4	The Maintain Drilling Unit window must allow an authorized user to view Lease details.	E
1.5	The Maintain Drilling Unit window must allow an authorized user to Save any changes made to the Drilling Unit record.	E
	Maintain Unit Area	
2.0	The system must provide a Maintain Unit Area User Interface window.	E
2.1	The Maintain Unit Area User Interface Window must provide the user with the ability to find Unit Area based on the search criteria entered by user.	E
2.1.1	The search criteria must be provided with following fields- Unit Agreement: • Number • Name • Lease Type • Formation • Current Operator ID • Previous Operator ID • Application Date • Royalty Allocation Method • Unit Type • Effective Date • Termination date • County, Town, Range, Section, QQ, Q Revenue Reporting Unit: • RRU Number • RIK Drilling Unit: • API Well Number • Permit Number • Well Name • Well Number • PRU Number Parcel: • Parcel ID • County, Town, Range, Section, QQ, Q Lease: • Type • Number • Suffix • Current Lessee • Previous Lessee	E

Business Req. No.	• Detailed Requirement Description	Category
2.1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Unit Area not found.	E
2.1.3	The system must provide the search criteria to find all Unit Area records that have null values in a particular field.	E
2.1.4	The system must consider the entire find Unit Area criteria entered by user as a single condition rather than a nested condition for search.	E
2.2	Maintain Unit Area User Interface window must allow an authorized user to create a new Unit Area record.	E
2.2.1	The system must assign a unique ID for each new Unit Area record.	E
2.3	The Maintain Unit Area window must display Unit Area record details as follows- • Unit Number • Unit Name • Lease Type • Operator ID • Unit Type • Application Date • Formation • State Wells • Status • Effective Date • Royalty Allocation Method • Total Wells • State Mineral/Royalty Acres • Termination Date • Production Multiplier • Total Unit Area Acres • Note • Created By • Updated By	E
2.3.1	The Maintain Unit Area window must display Unit Area record details as follows- • Unit Area Location Description • Grid Information with Unit Area Legend	E

Business Req. No.	• Detailed Requirement Description	Category
2.3.2	The Maintain Unit Area window must display Parcel List associated with Unit Area with following details: • Parcel ID • End Date • Location/Description • Surface % • Mineral % • ROM% • Acres • State/Mineral Royalty Acres • Lease Number • Lease Type • Lease Status	E
2.3.3	The Maintain Unit Area window must display Drilling Unit(s) associated with the Unit Area with following details: • API Well Number • Permit Number • Well Operator • Abate From Date • Abate Thru Date • Pooled • Well Status • PRU • Note indicator (Y/N) • End Date	E
2.3.4	The Maintain Unit Area window must display Operator History details as follows- • Operator Number/Name • Operator Thru Date	E
2.3.5	The Maintain Unit Area window must display List of Leases associated with the Parcels in an Unit Area with following details: • Lease Number • Type • Status • Lessee • Lease Date • Expiration Date • Note indicator (Y/N) • Class • Extension status • End date	E

Business Req. No.	Detailed Requirement Description	Category
2.3.6	The Maintain Unit Area window must display Revenue Reporting Unit Details as follows: • RRU Number • Effective Date • Termination Date • Unit Area • Decimal Interest • Section 29 % • RIK • Note indicator (Y/N)	E
2.3.7	The Maintain Unit Area window must display USP details as follows: • USP Number • USP Name • Effective Date • Termination Date • State Acres • Total Acres • Note indicator (Y/N)	E
2.4	The Maintain Unit Area window must allow an authorized user to Edit the following fields in details tab: • Unit Name • Lease Type • Operator ID • Unit Type • Application Date • Formation • State Wells Effective Date • Royalty Allocation Method • Total Wells • Termination Date • Production Multiplier • Total Unit area Acres • Note	E
2.4.1	The Maintain Unit Area window must provide the Note field with unlimited number of characters.	E
2.4.1.1	The Maintain Unit Area window must allow the user to add/update one or more notes and the system must allow an user to view each note with • Created by • Updated by • Date/time stamp value.	O

Business Req. No.	• Detailed Requirement Description	Category
2.4.2	The Maintain Unit Area window must allow an authorized user to Add/Delete Unit Area Location records for the Unit Area by • Clicking/unclicking on the grid (or) • Selecting add /delete location option	E
2.4.2.1	The Maintain Unit Area window must allow user to copy Unit Area Location Description to Windows Clip Board.	E
2.4.2.2	The Maintain Unit Area window must allow an authorized user to load all the parcels associated to all locations that are associated to a Unit Area. (The system matches Parcel records in LOTS to Unit Area Locations and Unit Area IDs).	E
2.4.2.3	The Maintain Unit Area window must load all the parcels for the Unit Area and populate all Active Oil and Gas leases associated with Parcels simultaneously while loading Parcels for a Unit Area.	O
2.4.2.4	The Maintain Unit Area window must provide an authorized user with "add Parcels" function in addition to Load Parcel(s) to a Unit Area.	E
2.4.2.5	The system must allow user to find Parcels to be able to add them to Unit Area.	E
2.4.2.6	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value. When User changes Mineral/Royalty Acres on a Parcel the system must recalculate the Total State Mineral Acres In Unit Area.	O
2.4.2.7	The Maintain Unit Area window must provide an authorized user with "delete Parcels" function in case if erroneous data is entered. This will delete the parcel from the list not from the database.	E
2.4.2.8	The Maintain Unit Area window must provide an authorized user with "end Parcel Association" function. This function must allow user to input Date to end the association. This will end the Parcel's association with the Unit Area effective the date entered by user.	E
2.4.2.9	The Maintain Unit Area window must provide an authorized user with "Display Parcel Details" function.	E
2.4.2.10	The Maintain Unit Area window must allow an authorized user to copy full Legal Description of a Parcel Record to Windows clip board.	E
2.4.3	The Maintain Unit Area window must allow an authorized user to load Leases associated to Parcels in a Unit Area.	E
2.4.3.1	The Maintain Unit area window must allow an authorized user to add Leases associated to Parcels in a Unit Area in addition to Load Parcels.	E
2.4.3.2	The Maintain Unit Area window must allow an authorized user to delete Leases associated to Parcels in a Unit Area.	E
2.4.3.3	The Maintain Unit Area window must allow an authorized user to end Lease association in a Unit Area.	E
2.4.3.4	The Maintain Unit Area window must allow an authorized user to view Lease details.	E
2.5	The Maintain Unit Area window must allow an authorized user to Save any changes made to the Unit Area record.	E

Business Req. No.	• Detailed Requirement Description	Category
2.6	The system must provide a spatial/tabular search interface that would retrieve data from DEQ databases to provide downloadable and printable spreadsheet of any mineral lease nominated parcels that intersect the area of any contamination sites or environmentally sensitive areas including, but not limited to active landfills, Inactive landfills, Kermit areas, Underground storage tanks, and Part 201 areas.	o
	Uniform Spacing Plan	
3.0	The system must provide a Maintain Uniform Spacing Plan (USP) User Interface.	E
3.1	The Maintain USP user interface must provide the user with the ability to find Uniform Spacing Plan based on the search criteria entered by user.	E
3.1.1	The search criteria must be provided with following fields- Uniform Spacing Plan: • Number • Name • Application Date • Formation • Effective Date • Termination date • County, Town, Range, Section, QQ, Q Unit Area Operator: • Current Operator • Previous Operator Revenue Reporting Unit • RRU Number • Unit Number Drilling Unit: • API Well Number • Permit Number • Well Name • Well Number • PRU Number Parcel • Parcel ID • County, Town, Range, Section, QQ, Q	E
3.1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Uniform Spacing Plan not found.	E
3.1.3	The system must provide the search criteria to find all Uniform Spacing Plan records that have null values in a particular field.	E
3.1.3	The system must consider all the find Uniform Spacing Plan criteria entered by user as a single condition rather than a nested condition for search.	E

Business Req. No.	• Detailed Requirement Description	Category
3.2	The USP user interface must allow an authorized user to create a new Uniform Spacing Plan record.	E
3.2.1	The system must assign a unique ID for each new Uniform Spacing Plan record.	E
3.3	The USP user interface must display Uniform Spacing Plan details as follows- • USP Number • USP Name • Unit Area Number • Operator ID • Application Date • Formation • Status • Effective Date State Wells • Total State Mineral/Royalty Acres • Termination Date • Total Wells • Total USP Acres • Note • Created By • Updated By	E
3.3.1	The Maintain USP user interface must display • USP Location Description • USP Locations Grid Information with Legend.	E
3.3.2	The USP user interface must display Parcel List associated with USP with following information: • Parcel ID • End Date • Location/Description • Surface % • Mineral % • ROM% • Acres • State/Mineral Royalty Acres • Lease Number • Lease Type • Lease Status	E

Business Req. No.	• Detailed Requirement Description	Category
3.3.3	The USP user interface window must display following details of Drilling Unit(s) associated with the USP: • API Well Number • Well Name/Number • Permit Number • Well Operator • Abate From Date • Abate Thru Date • Pooled • Well Status • PRU • Note indicator (Y/N) • End Date	E
3.3.4	The USP user interface must display following Operator History details: • Operator Name/Number • Thru Date	E
3.3.5	The USP user interface must display List of Leases associated with an USP with following information: • Lease Number • Type • Status • Lessee • Lease Date • Expiration Date • Note indicator (Y/N) • Class • Extension status • End date	E
3.3.6	The USP user interface must display following Revenue Reporting Unit details associated with an USP: • RRU Number • Effective Date • Termination Date • Unit Area • Decimal Interest • Section 29 % • RIK • Note indicator (Y/N)	E

Business Req. No.	• Detailed Requirement Description	Category
3.4	The USP user interface must allow an authorized user to Edit the following fields in details tab: • USP Name • Application Date • Effective Date • State Wells • Termination Date • Total Wells • Total USP Acres • Note	E
3.4.1	The Maintain USP window must provide the Note field with unlimited number of characters.	E
3.4.1.1	The Maintain USP window must allow the user to add/update note field. The new note must be appended in the field each time it is added. A date time stamp value must be saved for each note field added/updated.	E
3.4.2	The USP user interface must allow an authorized user to Add/Delete USP Location records based on the Unit Area for the USP by • Clicking/unclicking on the grid (or) • Selecting add /delete location option	E
3.4.2.1	The USP user interface must allow an authorized user to load entire UA locations to the USP.	E
3.4.2.2	The USP user interface must allow user to copy USP Location Description to Windows Clip Board.	E
3.5	The USP user interface must allow an authorized user to load all the parcels associated to all USP Locations in an USP and populate all Active leases associated with Parcels simultaneously while loading Parcels for an USP. (The system matches Parcel, Leases in LOTS to USP Locations and USP IDs).	E
3.5.1	The USP user interface must provide an authorized user with “Add Parcels” function in addition to Load Parcel(s) to a USP.	E
3.5.1.1	The system must allow user to find Parcels to be able to add them to USP.	E
3.5.2	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value. When User changes Mineral/Royalty Acres on a Parcel the system must recalculate the Total State Mineral Acres In USP.	E
3.5.2.1	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value.	E
3.5.3	The Maintain USP window must provide an authorized user with “Delete Parcels” function in case if erroneous data is entered. This will delete the parcel from the list not from the database.	E
3.5.4	The USP user interface must provide an authorized user with “End Parcel Association” function. This function must allow user to input Date to end the association. This will end the Parcel’s association with the USP effective the date entered by user.	E

Business Req. No.	• Detailed Requirement Description	Category
3.5.5	The USP user interface must provide an authorized user with “Display Parcel Details” function.	E
3.5.6	The USP user interface must allow an authorized user to copy full Legal Description of a Parcel Record to Windows clip board.	E
3.6	The USP user interface must allow an authorized user to load all Drilling Units associated to all USP Locations in an USP (The system matches Drilling Unit to USP Location and USP IDs).	E
3.6.1	The USP user interface must provide an authorized user with “add Drilling Units” function in addition to Load Drilling Units to an USP.	E
3.6.2	The system must allow user to find Drilling Units to be able to add them to USP.	E
3.6.3	The Maintain USP window must provide an authorized user with “delete Drilling Units” function in case if erroneous data is entered. This will delete the Drilling Units from the list and not from the database.	E
3.6.4	The USP user interface must provide an authorized user with “end Drilling Unit Association” function. This function must allow user to input Date to end the association. This will end the Drilling Unit’s association with the USP effective the date entered by user.	E
3.7	The USP user interface must provide an authorized user with “Display Drilling Unit Details” function.	E
3.8	The USP user interface must provide an authorized user with “Display Vendor Details” function.	E
3.9	The Maintain Unit Area window must allow an authorized user to load Leases associated to Parcels in an USP.	E
3.10	The USP user interface must allow an authorized user to add Leases associated to Parcels in an USP in addition to Load Parcels.	E
3.11	The USP user interface must allow an authorized user to delete Leases associated to Parcels in an USP.	E
3.12	The USP user interface must allow an authorized user to end Lease association in an USP.	E
3.13	The USP Window must allow an authorized user to view Lease details.	E
3.14	The USP Window must allow an authorized user to view Revenue Reporting Unit details.	E
3.15	The Maintain USP window must allow an authorized user to Save any changes made to the USP record.	E
	Revenue Reporting Unit	
4.0	The system must provide a Maintain Revenue Reporting Unit user interface.	E
4.1	The Maintain Revenue Reporting Unit must provide the user with the ability to find a Revenue Reporting Unit (RRU) based on the search criteria entered by user.	E

Business Req. No.	• Detailed Requirement Description	Category
4.1.1	The search criteria must be provided with following fields- Revenue Reporting Unit: • RRU Number • Lease Type • RIK • Effective Date • Termination Date Royalty Remitter • Current Remitter • Previous Remitter • Product Type • Property Payment Number NM/MM Location • Number • Name • County, Town, Range, Section, QQ, Q OG Location • Number • Name • County, Town, Range, Section, QQ, Q Drilling Unit: • API Well Number • Permit Number • Well Name • Well Number • PRU Number Oil and Gas Lease • Type • Number • Suffix • Current Lessee • Previous Lessee	E
4.1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or RRU not found.	E
4.1.3	The system must provide the search criteria to find all RRU records that have null values in a particular field.	E

Business Req. No.	• Detailed Requirement Description	Category
4.1.4	The system must consider all the find RRU criteria entered by user as a single condition rather than a nested condition for search.	E
4.2	The RRU user interface must allow an authorized user to create a new RRU record.	E
4.2.1	The system must assign a unique ID for each new RRU record.	E
4.3	The Maintain RRU window must display RRU record details as follows- • RRU Number • RIK • Lease Type • Effective Date • Decimal Interest • Termination Date • Note • Created By • Updated By	E
4.3.1	The Maintain user interface must display following Royalty Remitter data for the RRU: • Vendor • Property payment number • Product • Product decimal interest • Share percentage • Remitter product decimal interest • Effective date • Termination date	E
4.3.2	The Maintain RRU user interface must display following Unit Area Details for the RRU: • API Well Number • Permit Number • Well Operator • Abate From Date • Abate Thru Date • Pooled • Well Status • PRU • Note indicator (Y/N) • End Date	E

Business Req. No.	• Detailed Requirement Description	Category
4.3.3	The Maintain RRU user interface must display Drilling Unit(s) associated with the RRU with following information: • API Well Number • Well Name/Number • Permit Number • Well Operator • Abate From Date • Abate Thru Date • Pooled • Well Status • PRU • Note indicator (Y/N) • End Date	E
4.3.4	The Maintain RRU user interface must display Parcel list associated with the RRU. The system must identify and load Parcels to associate with RRU(identify Parcels based on Vendor Number + Lease Type +Property Payment Number + Product code) The parcel details are as follows; • Par ID • Location Description • Surface % • Mineral % • ROM% • Acres • Lease Number • Lease type • Lease status • Lease effective date	E
4.3.5	The Maintain RRU user interface must load and display Fund(s) associated with the RRU.	E
4.3.6	The Maintain RRU user interface must display current Fund to RRU distribution.	E
4.3.7	The Maintain RRU user interface must display the list of all leases on all Parcels associated with the RRU.	E
4.3.8	The system must pull up the correct RRU number based on the remittance entry with vendor number, lease type, property payment number and production code information.	E
4.3.8.1	The system must pull up the proper funds into the correct RRU number based on the parcels in that RRU. The fund, production code, lease type, revenue code then determines the account coding (PCA, Object, and Index).	E
4.3.9	The system must provide a mining unit tab to display mining information.	E
4.3.10	The Maintain RRU user interface must provide a separate tab to display decimal interest history. This tab must display each decimal rate entry along with rate's effective date.	E

Business Req. No.	• Detailed Requirement Description	Category
4.4	The Maintain RRU user interface allow an authorized user to Edit the following fields in details tab: • RIK • Effective Date • Decimal Interest • Termination Date • Note	E
4.4.1	The Maintain RRU window must allow the user to add/update note field. The new note must be appended in the field each time it is added. A date time stamp value must be saved for each note field added/updated.	E
4.4.2	The Maintain RRU user interface must allow an authorized user to Edit all the fields in Royalty Remitter tab.	E
4.4.2.1	The Maintain RRU USER INTERFACE Window must allow an authorized user to add, insert and delete Royalty Remitter records to an RRU.	E
4.4.2.2	The Maintain RRU user interface must allow an authorized user to select a vendor record to open maintain vendor window and view vendor details.	E
4.4.2.3	The Maintain RRU user interface must throw a warning message when the decimal interest on details tab and decimal interest rate on royalty remitter tab do not match.	E
4.4.3	The Maintain RRU user interface must allow an authorized user to select a Unit Area record to open maintain Unit Area window and view Unit Area details. However Unit area field on this tab must be a display only field.	E
4.4.4	The Maintain RRU user interface must allow an authorized user to add/delete a Drilling Unit record to an RRU.	E
4.4.4.1	The Maintain RRU user interface must allow an authorized user to select a Drilling Unit record to open maintain Drilling Unit window and view Drilling Unit details.	E
4.4.5	The Maintain RRU user interface must allow an authorized user to add/delete fund(s) to RRU and change revenue distribution % on a fund(s).	E
4.5	The Maintain RRU window must allow an authorized user to Save any changes made to the RRU record.	E
4.6	The Maintain RRU window must provide RRU list, RRU details canned reports.	E
4.7	The Maintain RRU window must provide following canned reports - • RRU list • RRU details And allow an authorized user to download them in pdf format.	E
	Pit/ Mining Unit	
5.0	The system must provide a maintain Pit/Mining Unit user interface.	E
5.1	The Maintain Pit/Mining Unit user interface must provide user with the ability to find Pit/Mining Unit based on the search criteria entered by user.	E

Business Req. No.	• Detailed Requirement Description	Category
5.1.1	The search criteria must be provide with the following user fields for Pit/Mining Unit: • Pit/Mining Unit Number • Name • Operator ID • Production Start Date • Production End Date • County • Town • Range • Section • QQ • Q • Product Type • Pit/Mining Unit Type • RRU number Parcel details by: • Parcel ID • County • Town • Range • Section • QQ • Q Lease details as: • Lease Type • Lease Number • Current Lessee • Previous Lessee	E
5.1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Pit/Mining Units not found.	E
5.1.3	The system must provide the search criteria to find all Pit/Mining Unit records that have null values in a particular field.	E
5.1.4	The system must consider the entire find Pit/Mining Unit criteria entered by user as a single condition rather than a nested condition for search.	E
5.2	The Maintain Pit/Mining Unit must allow an authorized user to create a Pit/Mining unit.	E
5.2.1	The System must assign a DNR PIT ID number for each created Pit/Mining Unit corresponding to the Pit/Mining Unit Number.	E

Business Req. No.	• Detailed Requirement Description	Category
5.3	The Maintain Pit/Mining Unit must display Pit/Mining Unit record details as follows: • Pit/Mining Unit Number • DNR PIT ID Number • Unit Name • Lease Type • Pit/Mining Unit Type • Total State Mineral/Royalty Acres • Production Start Date • Production End Date • Total Pit/Mining Unit Acres • Status • Minimum Royalty PTD • Note	E
5.3.1	The Maintain Pit/Mining Unit must display Pit/Mining Unit location records by: • County • Town • Range • Section • QQ • Q • A Grid map with legends	E
5.3.2	The Maintain Pit/Mining Unit window must display list of all the parcels associated to all the Active leases on the Pit/Mining unit with following information: • Parcel ID • End Date • Location/Description • Surface % • Mineral % • ROM% • Acres • State/Mineral Royalty Acres • Lease Number • Lease Type • Lease Status	E
5.3.3	The Maintain Pit/Mining Unit window must display Operator details as follows: • Operator Name/Number • From Date • Thru Date	E
5.3.4	The Maintain Pit/Mining Unit window must allow an authorized user to assign a product type to the mining unit.	E
5.3.5	The Maintain Pit/Mining Unit window must display all Active leases associated to parcels attached to the Pit/Mining Unit.	E
5.3.6	The Maintain Pit/Mining Unit window must display Revenue Reporting Unit details.	E

Business Req. No.	• Detailed Requirement Description	Category
5.4	The Maintain Pit/Mining Unit window must allow an authorized user to Edit the following details: • Unit Name • Pit/Mining Unit Type • Lease Type • Total Pit/Mining Unit Acres • Production Start Date • Production End Date • Minimum Royalty PTD • Note	E
5.4.1	The Maintain Pit/Mining Unit window must provide the Note field with unlimited number of characters.	E
5.4.1.1	The Maintain Pit/Mining Unit window must allow the user to add/update note field. The new note must be appended in the field each time it is added. A date time stamp value must be saved for each note field added/updated.	O
5.4.2	The Maintain Pit/Mining Unit window must allow an authorized user to Add/Delete Pit/Mining Unit Location records for the Unit Area by • Clicking/unclicking on the grid (or) • Selecting add /delete location option	E
5.4.2.1	The Maintain Pit/Mining Unit window must allow user to copy Pit/Mining Unit Location Description to Windows Clip Board.	E
5.4.2.2	The Maintain Pit/Mining Unit window must allow an authorized user to load all the parcels associated to all locations that are associated to a Pit/Mining Unit.(The system matches Parcel records in LOTS to Pit/Mining Unit Locations and Pit/Mining Unit IDs).	E
5.4.2.3	The Maintain Pit/Mining Unit window must load all the parcels for the Pit/Mining Unit and populate all Active leases associated with Parcels simultaneously, while loading Parcels for a Pit/mining Unit.	O
5.4.2.4	The Maintain Pit/Mining Unit window must provide an authorized user with “Add Parcels” function in addition to Load Parcel(s) to a Pit/Mining Unit.	E
5.4.2.5	The system must allow user to find Parcels to be able to add them to Pit/Mining Unit.	E
5.4.2.6	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value. When User changes Mineral/Royalty Acres on a Parcel the system must recalculate the Total State Mineral Acres Pit/Mining unit.	O
5.4.2.7	The system must allow user to edit State Mineral/Royalty Acres field, the user must be able to enter more than 40 acres and must be able to save the same value.	O
5.4.2.8	The Maintain Pit/Mining Unit window must provide an authorized user with “Delete Parcels” function in case if erroneous data is entered. This will delete the parcel from the list not from the database.	E

Business Req. No.	• Detailed Requirement Description	Category
5.4.2.9	The Maintain Pit/Mining Unit window must provide an authorized user with "End Parcel Association" function. This function must allow user to input Date to end the association. This will end the Parcel's association with the Pit/Mining Unit effective the date entered by user.	E
5.4.2.10	The Maintain Pit/Mining Unit window must provide an authorized user with "Display Parcel Details" function.	E
5.4.2.11	The Maintain Pit/Mining Unit window must allow an authorized user to copy full Legal Description of a Parcel Record to Windows clip board.	E
5.5	The Maintain Pit/Mining Unit window must allow an authorized user to load Leases associated to Parcels in a Pit/Mining Unit.	E
5.5.1	The Maintain Pit/Mining Unit window must allow an authorized user to add Leases associated to Parcels in a Pit/Mining Unit in addition to Load Parcels.	E
5.5.2	The Maintain Pit/Mining Unit window must allow an authorized user to delete Leases associated to Parcels in a Pit/Mining Unit.	E
5.5.3	The Maintain Pit/Mining Unit window must allow an authorized user to end Lease association in a Pit/Mining Unit.	E
5.5.4	The Maintain Pit/Mining Unit window must allow an authorized user to view Lease details.	E
5.6	The Maintain Pit/Mining Unit window must allow an authorized user to Edit Operator details as: • Operator Number • From Date • Thru Date	E
5.7	The Maintain Pit/Mining unit user interface must allow an authorized user to add/delete Product Type(s) to a Pit/Mining Unit pulled from the system reference table for product type.	E
5.8	The Maintain Pit/Mining Unit window must allow an authorized user to Save any changes made to the Pit/Mining Unit record.	E
	Gas Storage	
6.0	The system must provide a Maintain Gas Storage Area Window.	E
6.1	The Maintain Gas Storage Area user interface must provide the user with the ability to find a Gas Storage Area based on the search criteria entered by user.	E

Business Req. No.	• Detailed Requirement Description	Category
6.1.1	The search criteria must be provided with following fields- Gas Storage Area: • Number • Name • Lease Type • Formation • Current Operator ID • Previous Operator ID • Application Date • Effective Date • Termination date • County, Town, Range, Section, QQ, Q Revenue Reporting Unit: • RRU Number Drilling Unit: • API Well Number • Permit Number • Well Name • Well Number • PRU Number Parcel: • Parcel ID • County, Town, Range, Section, QQ, Q Lease: • Type • Number • Suffix • Current Lessee • Previous Lessee	E
6.1.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Gas Storage Area not found.	E
6.1.3	The system must provide the search criteria to find all Gas Storage Area records that have null values in a particular field.	E
6.1.4	The system must consider the entire find Gas Storage Area criteria entered by user as a single condition rather than a nested condition for search.	E
6.2	Maintain Gas Storage Area user interface must allow an authorized user to create a new Gas Storage Area record.	E
6.2.1	The system must assign a unique ID for each new Gas Storage Area record.	E

Business Req. No.	• Detailed Requirement Description	Category
6.3	The Maintain Gas Storage Area window must display Gas Storage Area record details as follows- • Unit Number • Unit Name Lease Type: This field must contain only 'Gas Storage' and a display only field. • Operator ID Unit Type: This field must contain only 'Gas Storage' and a display only field. • Application Date • Formation • State Wells • Status • Effective Date • Total Wells • State Rental Acres • Termination Date • Total Storage area acres • Note • Created By • Updated By	E
6.3.1	The Maintain Gas Storage Area window must display Gas Storage Area record details as follows- • Storage area Location Description • Grid Information with Gas Storage Area Legend.	E
6.3.2	The Maintain Gas Storage Area window must display Parcel List associated with Gas Storage Area with following information: • Parcel ID • Location Description • Surface % • Mineral % • State Lease/Rental Acres • Acres • Lease Number • Lease type • Lease status • Lease effective date	E
6.3.3	The Maintain Gas Storage Area window must display Operator History details as follows: • Operator Name/Number • Thru date	E

Business Req. No.	• Detailed Requirement Description	Category
6.3.4	The Maintain Gas Storage Area window must display List of all mineral Leases and oil/gas Drilling units and unit areas associated with the Parcels in a Gas Storage Area.	E
6.3.5	The Maintain Gas Storage Area window must display Parcel List of all gas storage and oil/gas leases associated with Gas Storage Area having following information: • Parcel ID • End Date • Location/Description • Surface % • Mineral % • Acres • State Lease/Rental Acres • Lease Number • Lease Type – Gas storage(by default) • Lease Status	E
6.3.5.1	The Maintain Gas Storage Area window, in Parcel List tab must include two additional columns to track- 1. Lease Surface-only Acres 2. Lease Mineral-only Acres 3. Lease fee acres.	E
6.3.6	The Maintain Gas Storage Area window must display following Revenue Reporting Unit Details: • RRU Number • Effective Date • Termination Date • Unit Area • Section 29 % • RIK • Note indicator (Y/N)	E
6.4	The Maintain Gas Storage Area window must allow an authorized user to Edit the following fields in details tab: Unit Name • Operator Id • Application Date • Formation • State Wells • Effective Date • Total Wells • Termination Date • Total Gas Storage area Acres • Note	E
6.4.1	The Maintain Gas Storage Area window must provide the Note field with unlimited number of characters.	E

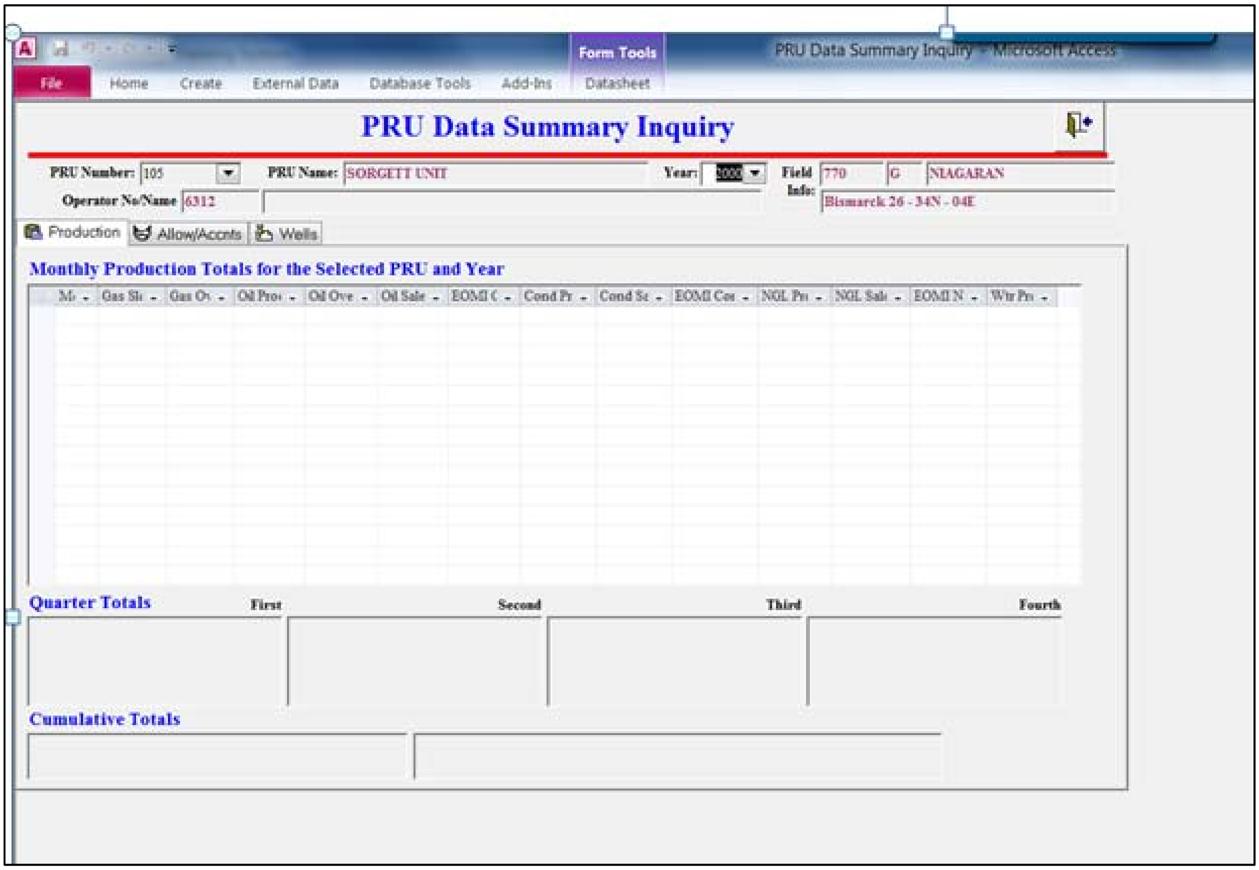
Business Req. No.	• Detailed Requirement Description	Category
6.4.1.1	The Maintain Gas Storage Area window must allow the user to add/update note field. The new note must be appended in the field each time it is added. A date time stamp value must be saved for each note field added/updated.	O
6.4.2	The Maintain Gas Storage Area window must allow an authorized user to Add/Delete Unit Area Location records for the Gas Storage Area by • Clicking/unclicking on the grid (or) • Selecting add /delete location option	E
6.4.2.1	The Maintain Gas Storage Area window must allow user to copy Unit Area Location Description to Windows Clip Board.	E
6.4.2.2	The Maintain Gas Storage Area window must allow an authorized user to load all the parcels associated to all locations that are associated to a Gas Storage Area.(The system matches Parcel records in LOTS to Gas Storage Area Locations and Unit Area IDs).	E
6.4.2.3	The Maintain Gas Storage Area window must load all the parcels for the Gas Storage Area and populate all Gas Storage leases associated with Parcels simultaneously while loading Parcels for a Unit Area.	O
6.4.2.4	The Maintain Gas Storage Area window must provide an authorized user with “Add Parcels” function in addition to Load Parcel(s) to a Gas Storage Area.	E
6.4.2.5	The system must allow user to find Parcels to be able to add them to Gas Storage Area.	E
6.4.2.6	The system must allow user to edit State Rental Acres field, the user must be able to enter more than 40 acres and must be able to save the same value. When User changes Lease/Storage Acres on a Parcel the system must recalculate the Total State Mineral Acres In Gas Storage Area.	O
6.4.2.7	The Maintain Gas Storage Area window must provide an authorized user with “Delete Parcels” function in case if erroneous data is entered. This will delete the parcel from the list not from the database.	E
6.4.2.8	The Maintain Gas Storage Area window must provide an authorized user with “End Parcel Association” function. This function must allow user to input Date to end the association. This will end the Parcel’s association with the Gas Storage Area effective the date entered by user.	E
6.4.2.9	The Maintain Unit Area window must provide an authorized user with “Display Parcel Details” function.	E
6.4.2.10	The Maintain Gas Storage Area window must allow an authorized user to copy full Legal Description of a Parcel Record to Windows clip board.	E
6.4.3	The Maintain Gas Storage Area window must allow an authorized user to load Leases associated to Parcels in a Storage area.	E
6.4.3.1	The Maintain Gas Storage Area window must allow an authorized user to add Leases associated to Parcels in a Gas Storage Area in addition to Load Parcels.	E
6.4.3.2	The Maintain Gas Storage Area window must allow an authorized user to delete Leases associated to Parcels in a Gas Storage Area.	E
6.4.3.3	The Maintain Gas Storage Area window must allow an authorized user to end Lease association in a Gas Storage Area.	E

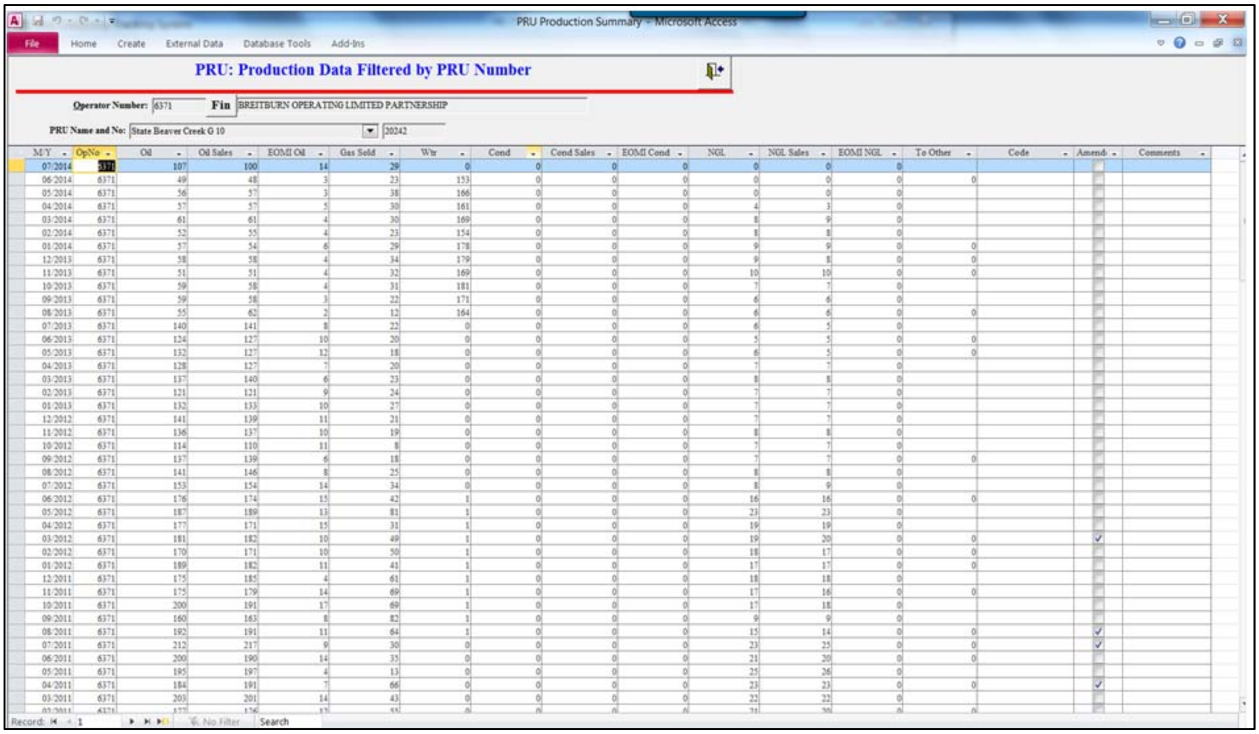
Business Req. No.	• Detailed Requirement Description	Category
6.4.3.4	The Maintain Gas Storage Area window must allow an authorized user to view Lease details.	E
6.5	The Maintain Gas Storage Area window must allow an authorized user to Save any changes made to the Gas Storage Area record.	E
	Production Reporting Unit	E
7.0	The system must provide a Display Production Reporting Unit Details Window.	E
7.1	The Display Production Reporting Unit Details Window must display PRU's production data filtered by PRU number with following details: • PRU number • PRU Name • Monthly and Yearly Summary of production data • Operator Number • Operator Name *Note: Refer to screen shot of current MIR's PRU window.*	E
7.2	The system must allow user to click on PRU number field and select option to view PRU details in "Display Production Reporting Unit Details Window" from Drilling Unit, Unit Area and RRU windows.	E
7.3	The system must match MIR's PRU number to LOTS's RRU number.	E
	Well Reports	
8.0	The system must provide following reports under Mineral Production section of the system.	E

<table>
<tr><th>Business Req. No.</th><th>• Detailed Requirement Description</th><th>Category</th></tr>
<tr><td>8.1</td><td><table>
<tr><td>Report Name</td><td>Report Arguments</td></tr>
<tr><td>All Statewide Wells</td><td>None</td></tr>
<tr><td>All Statewide Wells in UA</td><td>None</td></tr>
<tr><td>All Statewide Wells not in UA</td><td>None</td></tr>
<tr><td>All Statewide Wells by Lease</td><td>Lease Type</td></tr>
<tr><td>All Statewide Wells in UA by Lease</td><td>Lease Type</td></tr>
<tr><td>All Statewide Wells not in UA by Lease</td><td>Lease Type</td></tr>
<tr><td>All Statewide Wells for Operator</td><td>Operator</td></tr>
<tr><td>All Statewide Wells for Operator & Lease</td><td>Lease Type, Operator</td></tr>
</table></td><td>E</td></tr>
<tr><td>8.2</td><td>The system must provide any additional reports if needed.</td><td>E</td></tr>
</table>

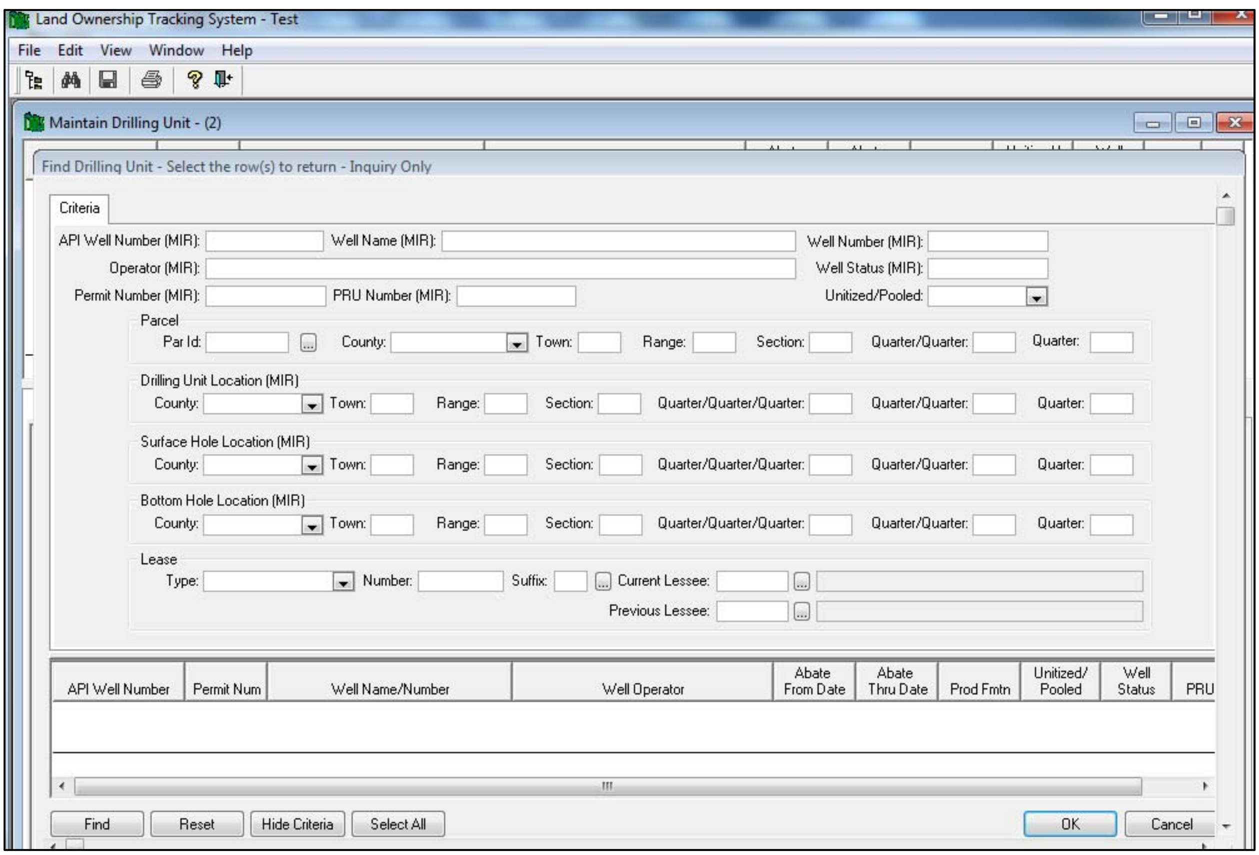
B. AS-IS System Screenshots

Current MIR's PRU window:

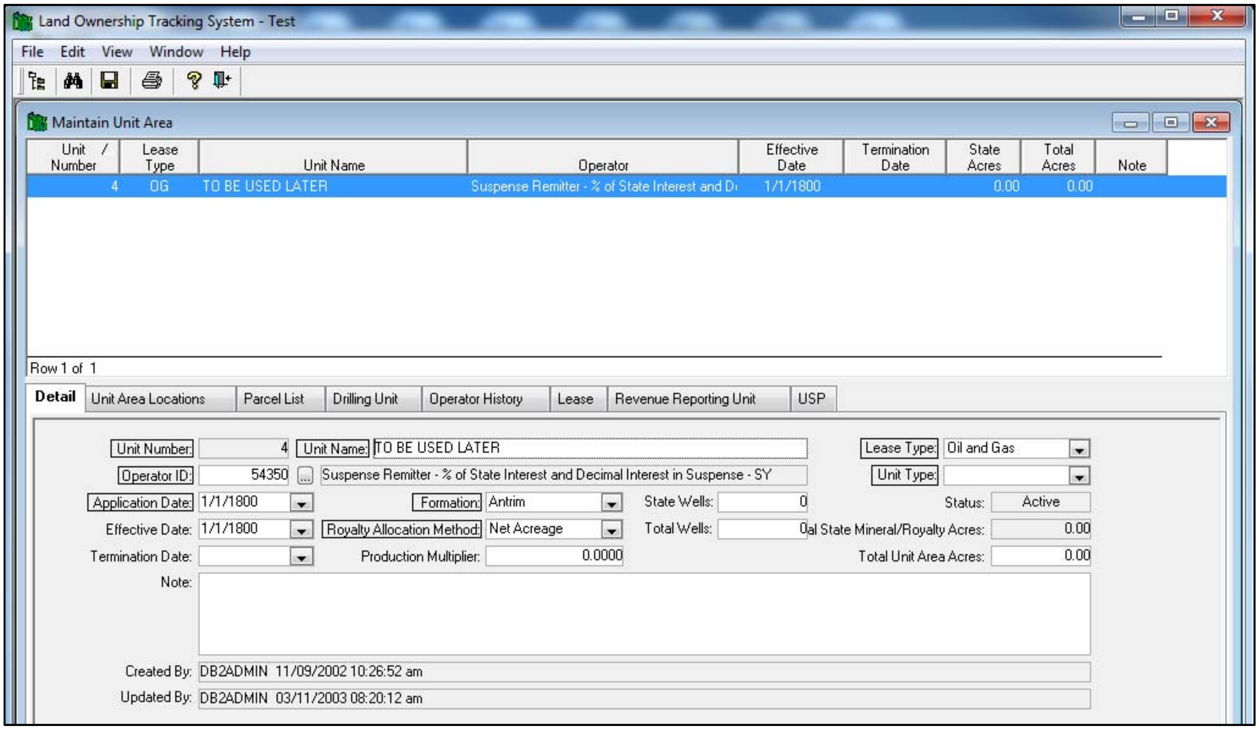




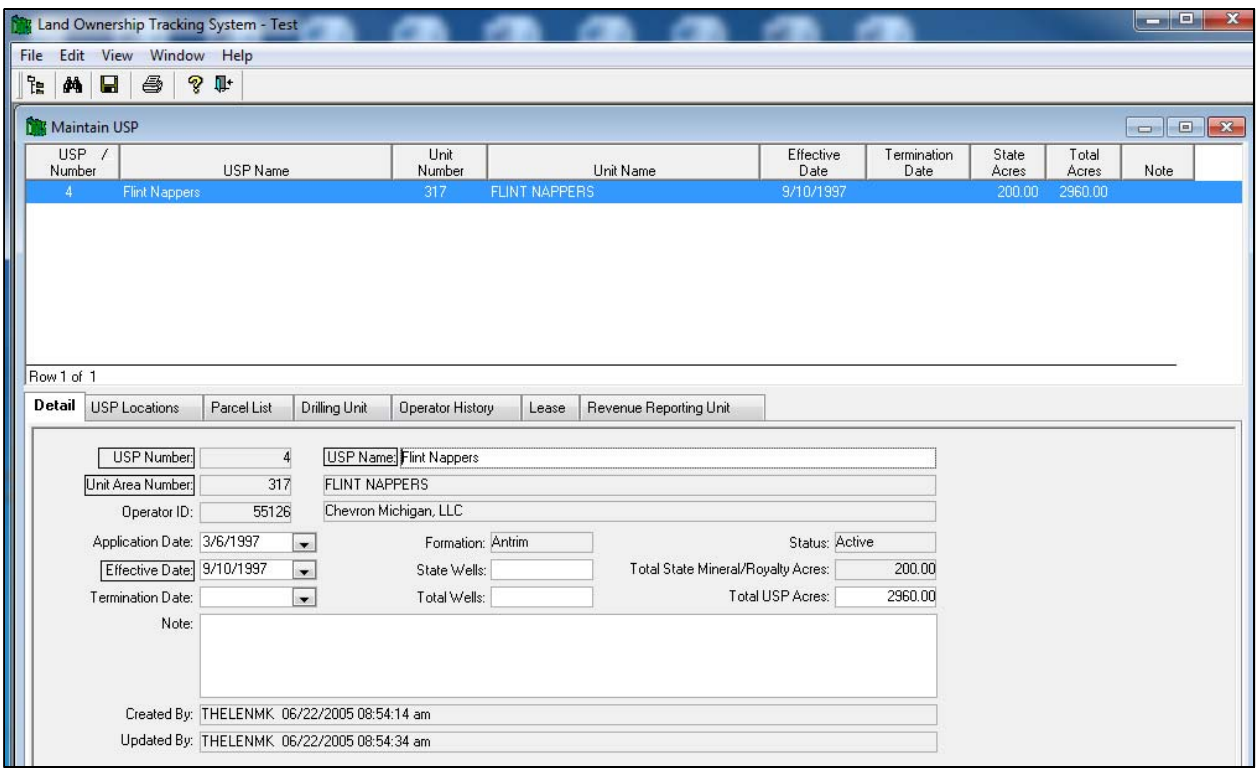
Maintain Drilling Unit Window:



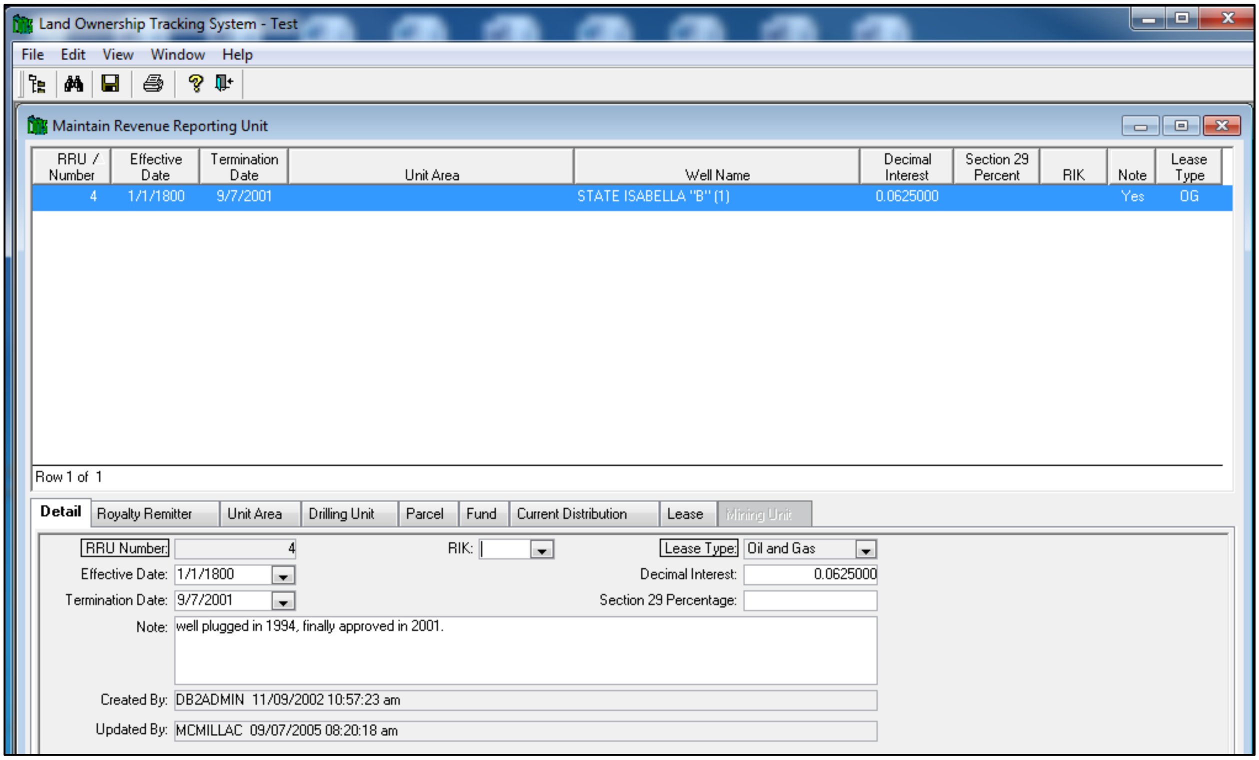
Maintain Unit Area Window:

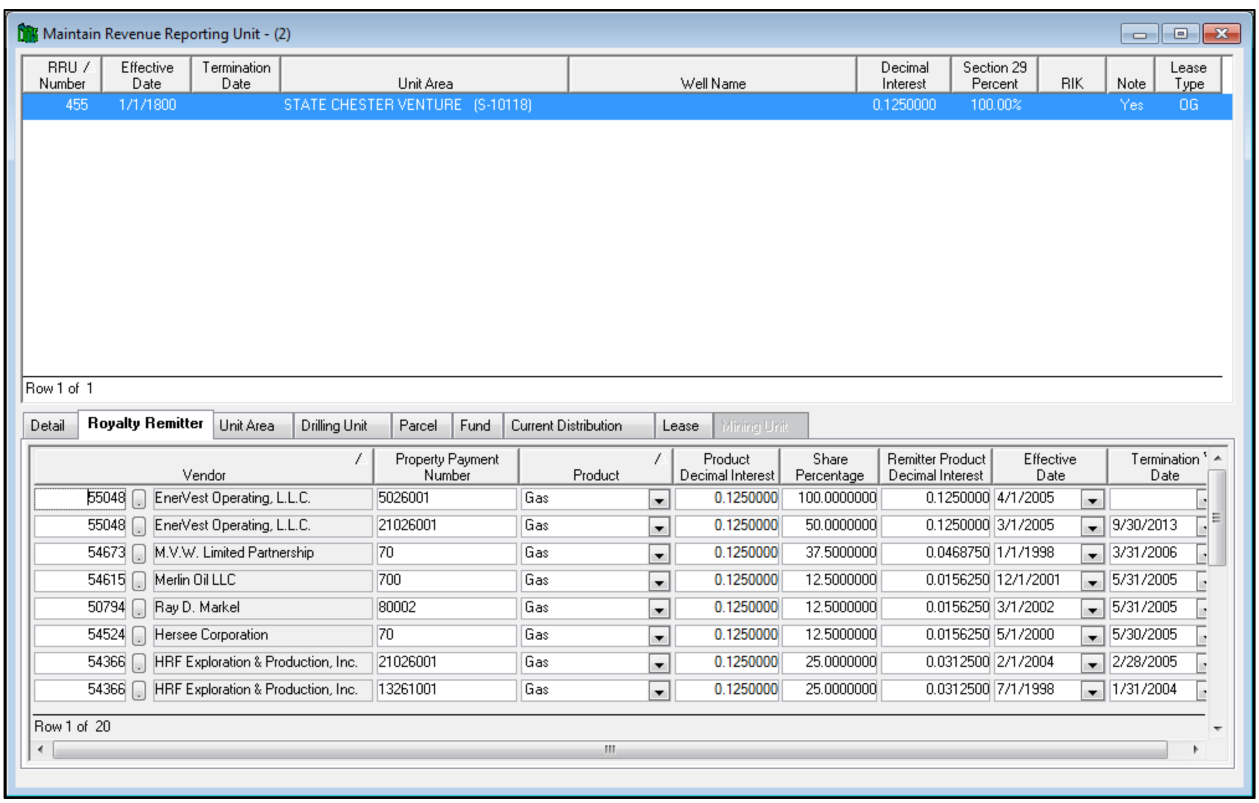


Maintain USP Window:



Maintain RRU Window:





Maintain Revenue Reporting Unit - (2)

RRU / Number	Effective Date	Termination Date	Unit Area	Well Name	Decimal Interest	Section 29 Percent	RIK	Note	Lease Type
455	1/1/1800		STATE CHESTER VENTURE (S-10118)		0.1250000	100.00%		Yes	OG

Row 1 of 1

Detail | Royalty Remitter | **Unit Area** | Drilling Unit | Parcel | Fund | Current Distribution | Lease | Mining Unit

Unit Number: 16 STATE CHESTER VENTURE (S-10118)

Operator: EnerVest Operating, L.L.C. Royalty Allocation Method: Net Acreage

API / Well Num	Permit Num	Well Name/Number	Well Operator	Abate From Date	Abate Thru Date	Pooled	Well Status	PRU	Note	End Date
1-137-20237-01-0	26467	STATE CHESTER 5	WELCH MURELL			Yes	PLA	17205	Yes	
1-137-26074-00-0	26074	STATE CHESTER 1	ENERVEST OPERATING LLC	09/24/1965		Yes	PR	17205	Yes	
1-137-26201-00-0	26201	STATE CHESTER 2	FRUEHAUF ANTRIM LP			Yes	PLA	17205	Yes	
1-137-26381-00-0	26381	STATE CHESTER 3	ENERVEST OPERATING LLC	05/25/1966		Yes	PR	17205	Yes	
1-137-26382-00-0	26382	STATE CHESTER 4	ENERVEST OPERATING LLC	06/03/1966		Yes	PR	17205	Yes	
1-137-26627-00-0	26627	STATE CHESTER 6	ENERVEST OPERATING LLC	10/30/1966		Yes	PR	17205	Yes	

Row 1 of 71

Maintain Revenue Reporting Unit

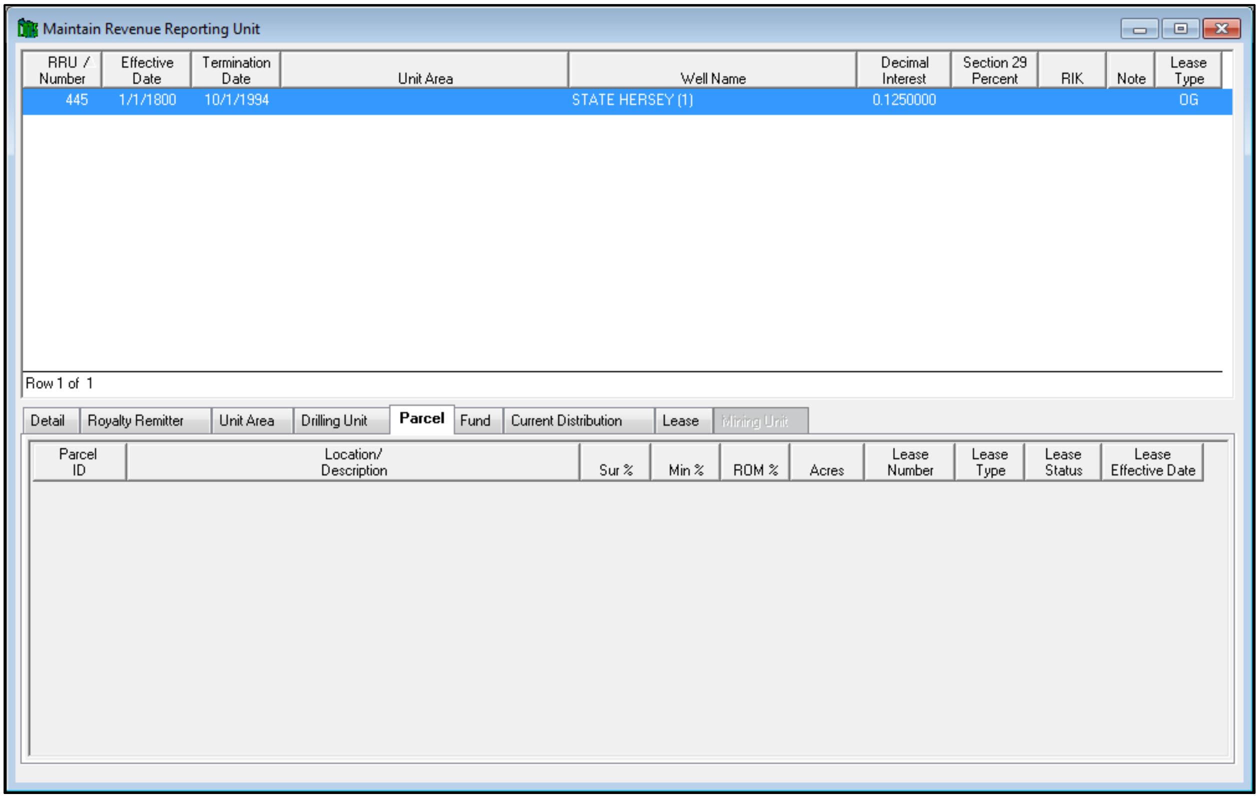
RRU / Number	Effective Date	Termination Date	Unit Area	Well Name	Decimal Interest	Section 29 Percent	RIK	Note	Lease Type
445	1/1/1800	10/1/1994		STATE HERSEY (1)	0.1250000				OG

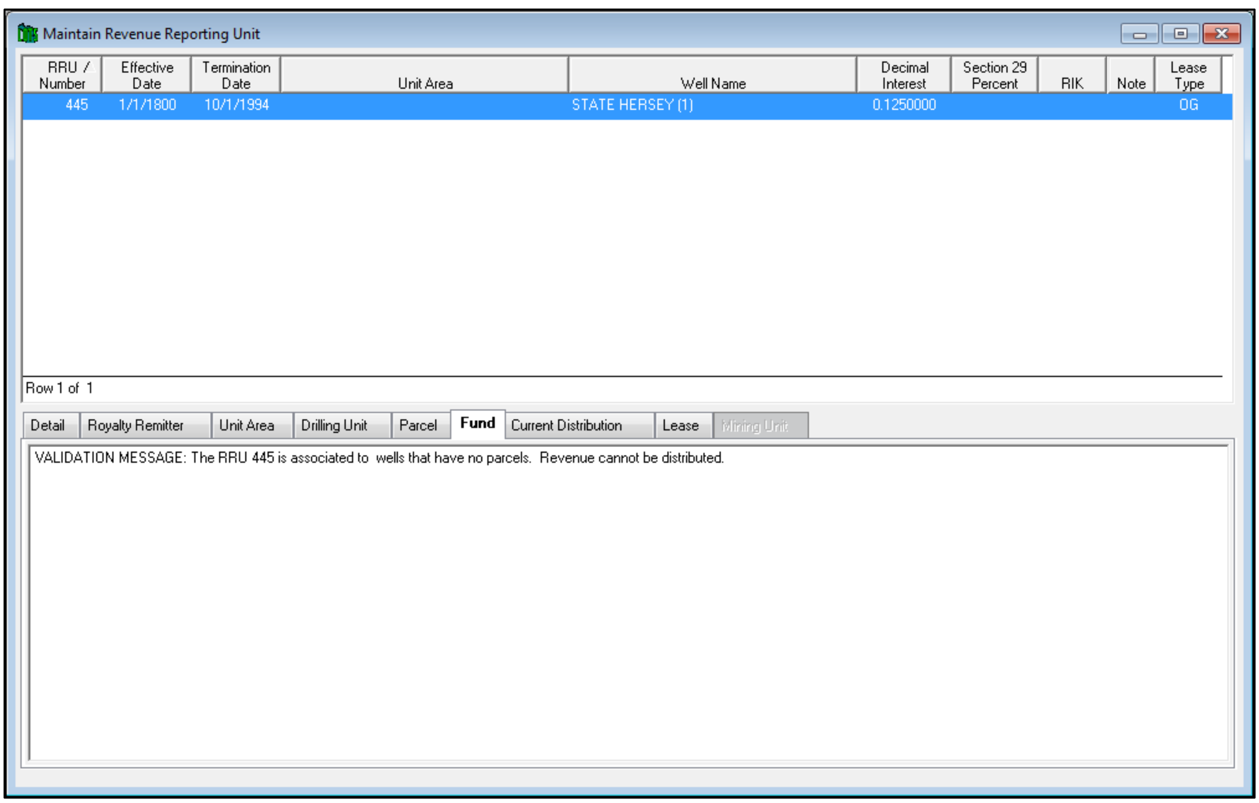
Row 1 of 1

Detail | Royalty Remitter | Unit Area | **Drilling Unit** | Parcel | Fund | Current Distribution | Lease | Mining Unit

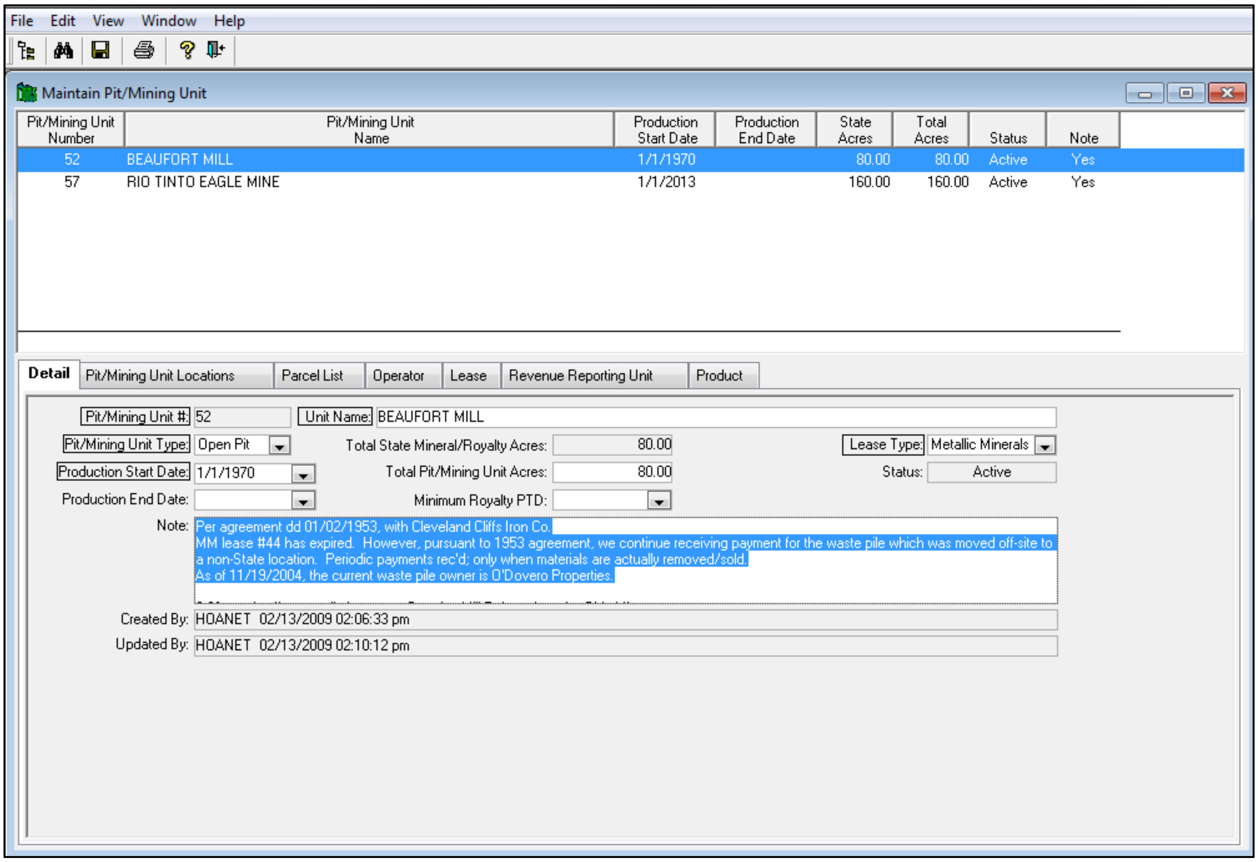
API Well Number /	Permit Num	Well Name/Number	Well Operator	Abate From Date	Abate Thru Date	Prod Fmtn	Pooled	Well Status	PRU	Note
21-133-27468-00-00	27468	STATE HERSEY 1	MUSKEGON DEVELOPMENT CO AND SI				No	PLC	7309	Yes

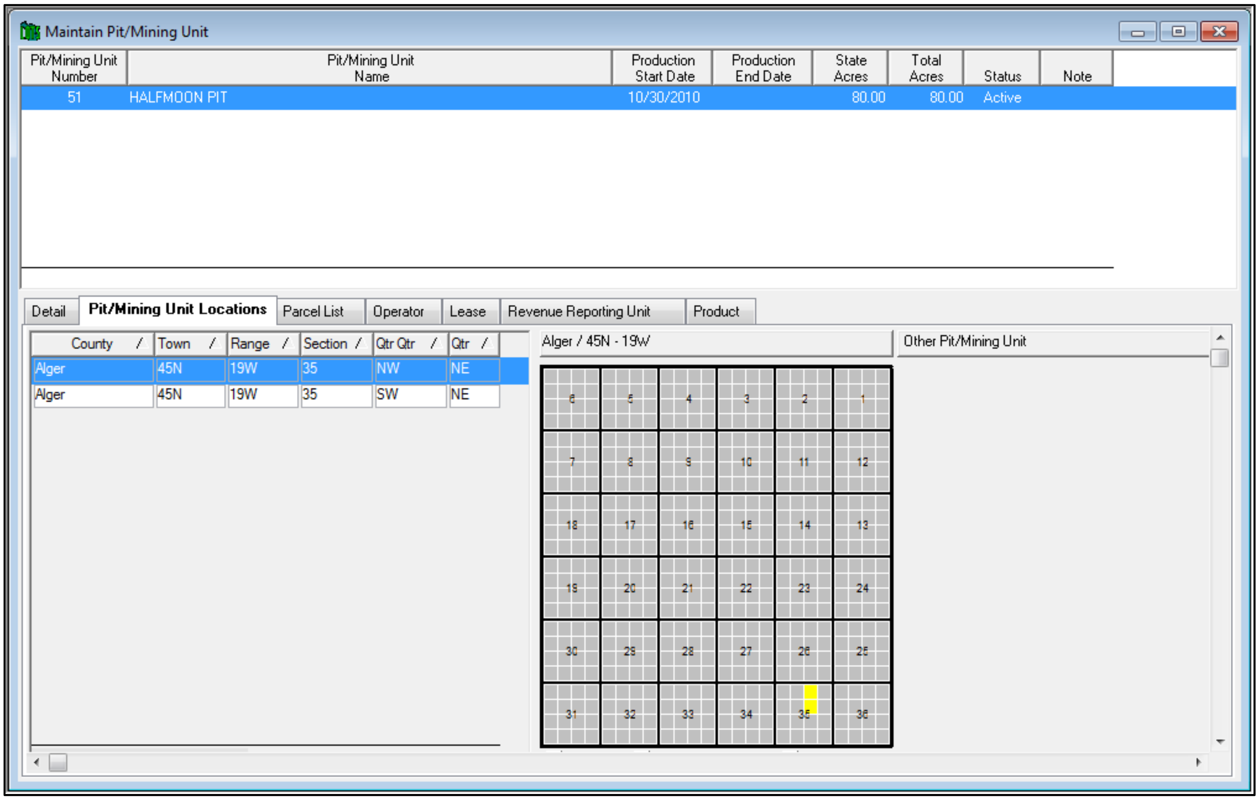
Row 1 of 1

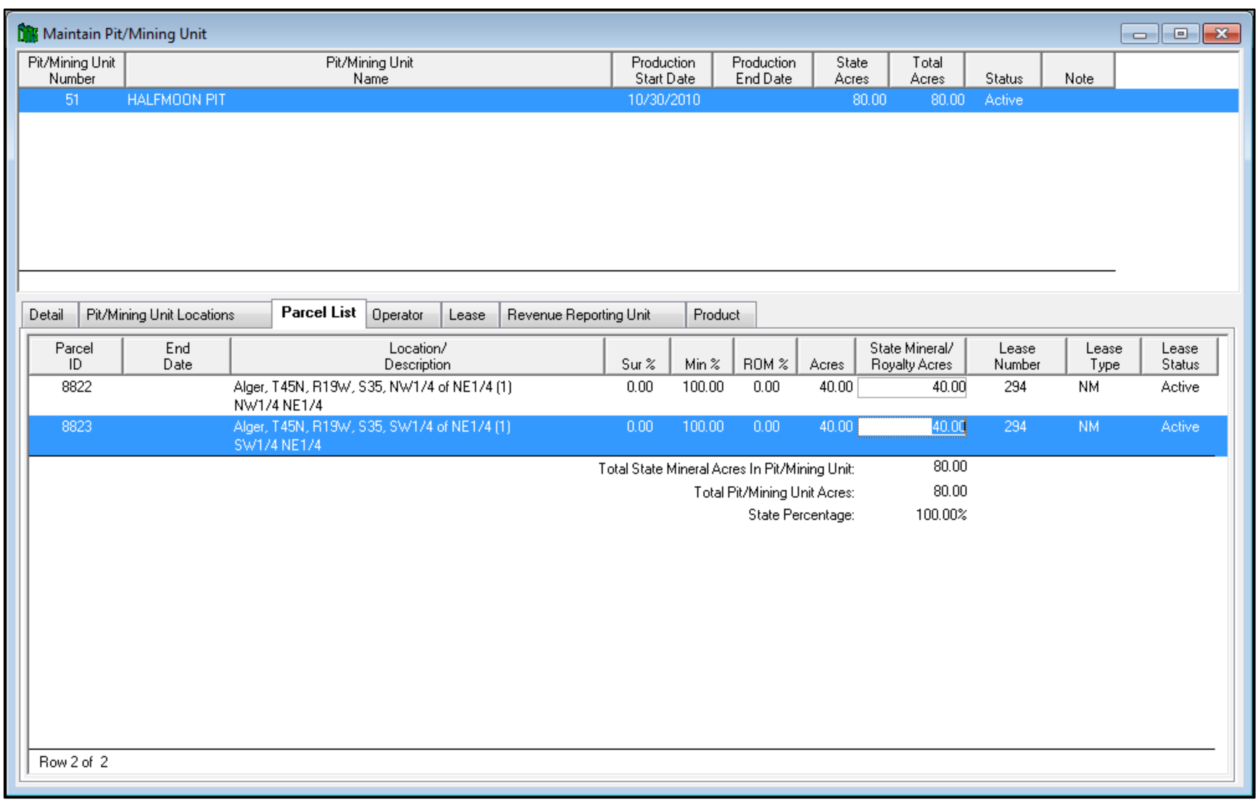

Maintain Revenue Reporting Unit
RRU / Number
Effective Date
Termination Date
Unit Area
Well Name
Decimal Interest
Section 29 Percent
RIK
Note
Lease Type
445
1/1/1800
10/1/1994
STATE HERSEY (1)
0.1250000
OG
Row 1 of 1
Detail
Royalty Remitter
Unit Area
Drilling Unit
Parcel
Fund
Current Distribution
Lease
Mining Unit
Parcel ID
Location/ Description
Sur %
Min %
ROM %
Acres
Lease Number
Lease Type
Lease Status
Lease Effective Date


Maintain Revenue Reporting Unit
RRU / Number
Effective Date
Termination Date
Unit Area
Well Name
Decimal Interest
Section 29 Percent
RIK
Note
Lease Type
445
1/1/1800
10/1/1994
STATE HERSEY (1)
0.1250000
OG
Row 1 of 1
Detail
Royalty Remitter
Unit Area
Drilling Unit
Parcel
Fund
Current Distribution
Lease
Mining Unit
VALIDATION MESSAGE: The RRU 445 is associated to wells that have no parcels. Revenue cannot be distributed.

Maintain Pit/Mining Unit:




Maintain Pit/Mining Unit
Pit/Mining Unit Number
Pit/Mining Unit Name
Production Start Date
Production End Date
State Acres
Total Acres
Status
Note
51
HALFMOON PIT
10/30/2010
80.00
80.00
Active
Detail
Pit/Mining Unit Locations
Parcel List
Operator
Lease
Revenue Reporting Unit
Product
County
Town
Range
Section
Qtr Qtr
Qtr
Alger 45N 19W 35 NW NE
Alger 45N 19W 35 SW NE
Alger / 45N - 19W
Other Pit/Mining Unit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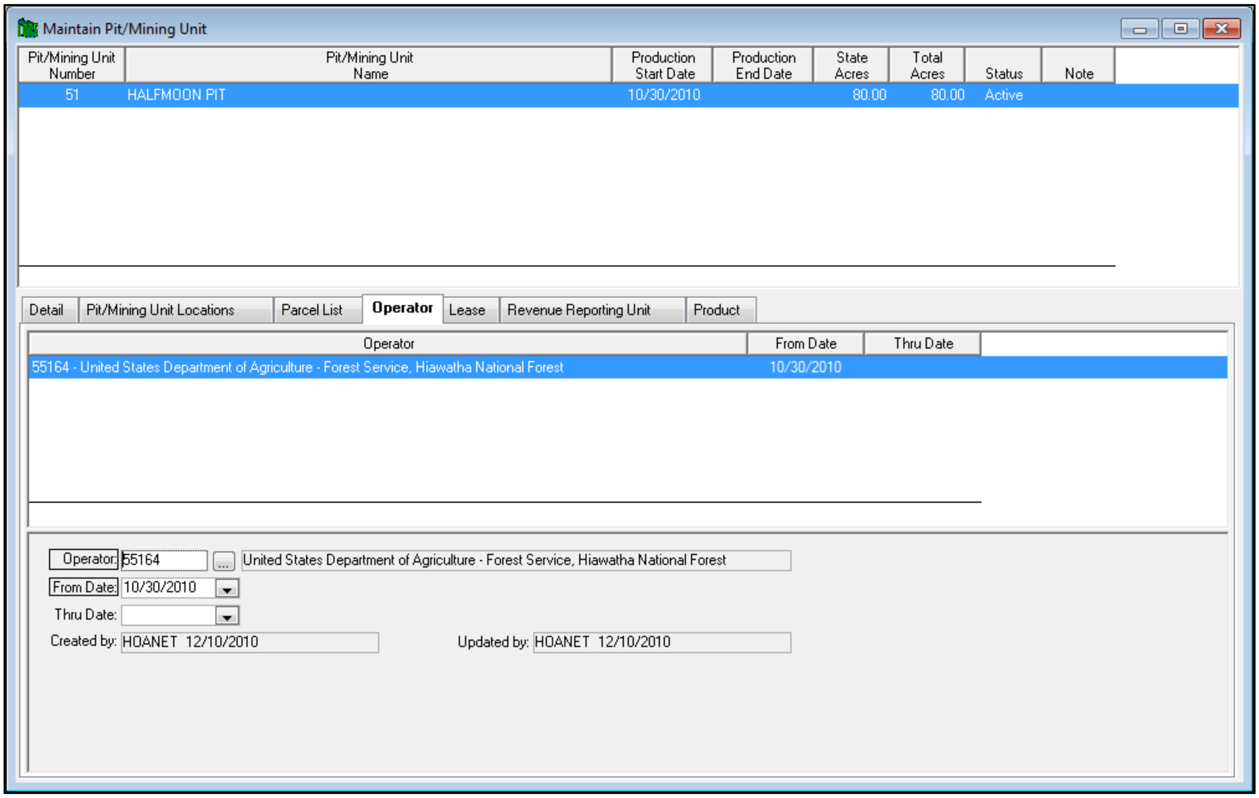
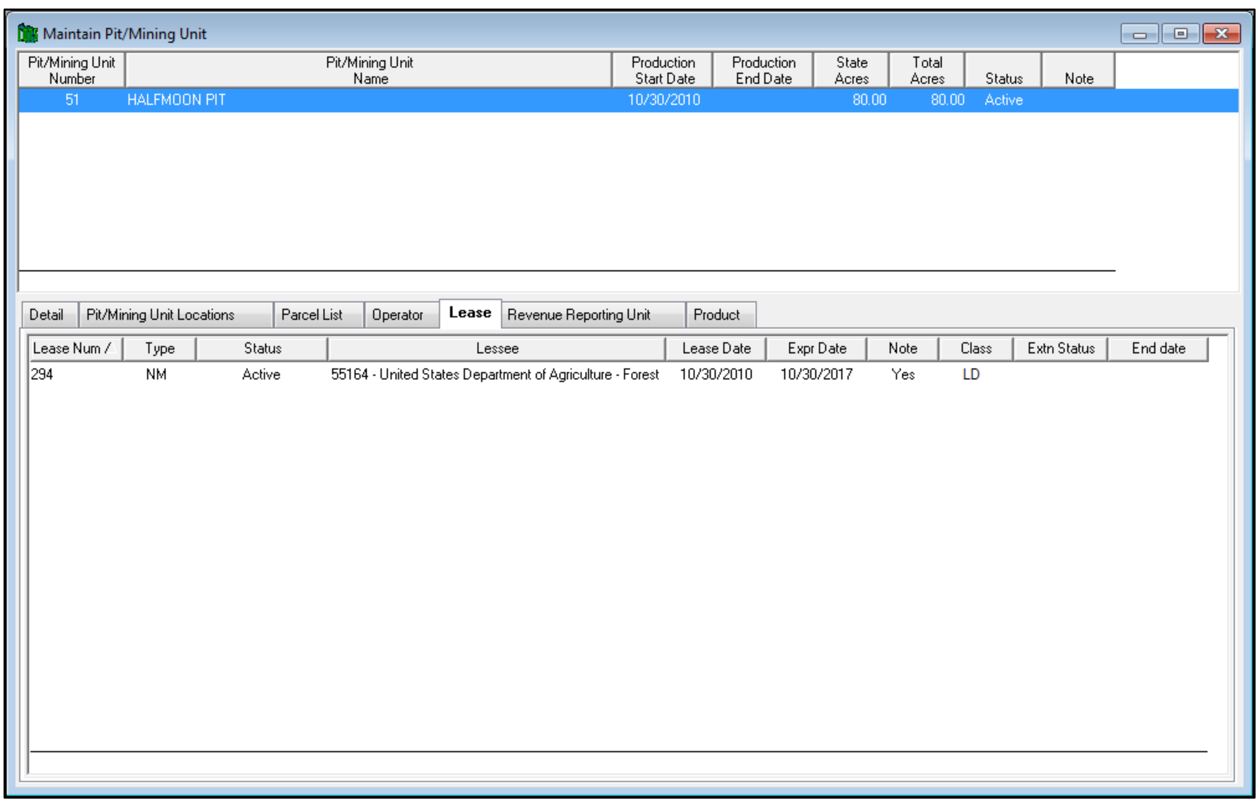
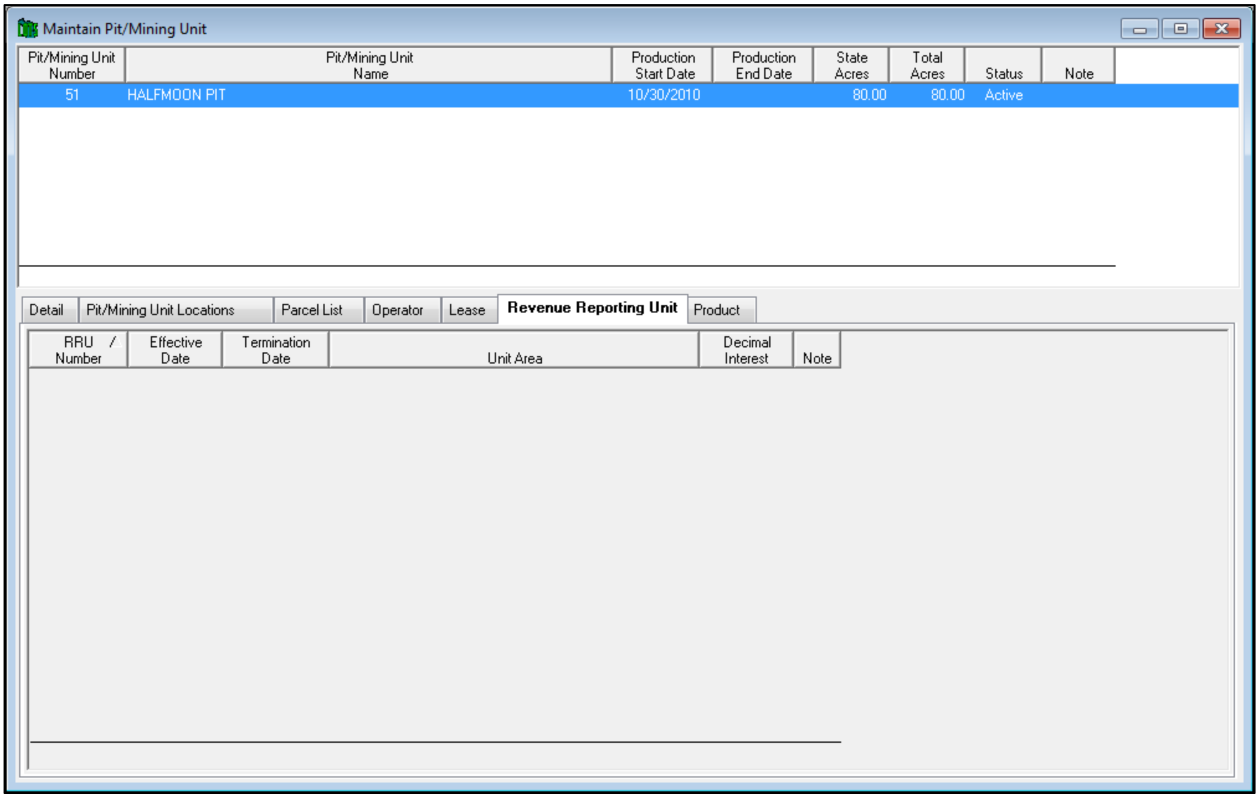
Pit/Mining Unit Number
Pit/Mining Unit Name
Production Start Date
Production End Date
State Acres
Total Acres
Status
Note
51
HALFMOON PIT
10/30/2010
80.00
80.00
Active
Detail
Pit/Mining Unit Locations
Parcel List
Operator
Lease
Revenue Reporting Unit
Product
Parcel ID
End Date
Location/ Description
Sur %
Min %
ROM %
Acres
State Mineral/ Royalty Acres
Lease Number
Lease Type
Lease Status
8822 Alger, T45N, R19W, S35, NW1/4 of NE1/4 (1) NW1/4 NE1/4 0.00 100.00 0.00 40.00 40.00 294 NM Active
8823 Alger, T45N, R19W, S35, SW1/4 of NE1/4 (1) SW1/4 NE1/4 0.00 100.00 0.00 40.00 40.00 294 NM Active
Total State Mineral Acres In Pit/Mining Unit: 80.00
Total Pit/Mining Unit Acres: 80.00
State Percentage: 100.00%
Row 2 of 2


Maintain Pit/Mining Unit
Pit/Mining Unit Number
Pit/Mining Unit Name
Production Start Date
Production End Date
State Acres
Total Acres
Status
Note
51 HALFMOON PIT 10/30/2010 80.00 80.00 Active
Detail
Pit/Mining Unit Locations
Parcel List
Operator
Lease
Revenue Reporting Unit
Product
Operator
From Date
Thru Date
55164 - United States Department of Agriculture - Forest Service, Hiawatha National Forest 10/30/2010
Operator: 55164
United States Department of Agriculture - Forest Service, Hiawatha National Forest
From Date: 10/30/2010
Thru Date:
Created by: HOANET 12/10/2010
Updated by: HOANET 12/10/2010


Maintain Pit/Mining Unit
Pit/Mining Unit Number
Pit/Mining Unit Name
Production Start Date
Production End Date
State Acres
Total Acres
Status
Note
51 HALFMOON PIT 10/30/2010 80.00 80.00 Active
Detail
Pit/Mining Unit Locations
Parcel List
Operator
Lease
Revenue Reporting Unit
Product
Lease Num /
Type
Status
Lessee
Lease Date
Expr Date
Note
Class
Extn Status
End date
294 NM Active 55164 - United States Department of Agriculture - Forest 10/30/2010 10/30/2017 Yes LD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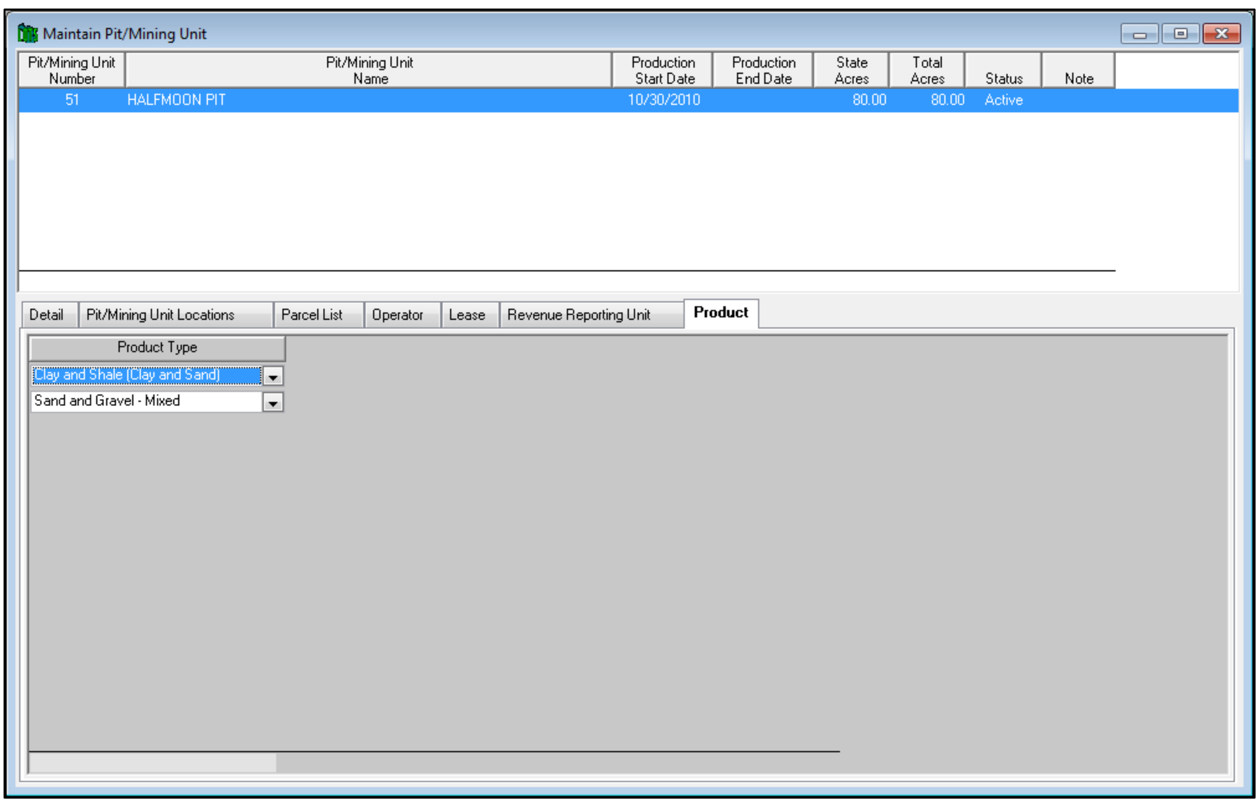
Pit/Mining Unit Number
Pit/Mining Unit Name
Production Start Date
Production End Date
State Acres
Total Acres
Status
Note
51
HALFMOON PIT
10/30/2010
80.00
80.00
Active
Detail
Pit/Mining Unit Locations
Parcel List
Operator
Lease
Revenue Reporting Unit
Product
RRU / Number
Effective Date
Termination Date
Unit Area
Decimal Interest
Note


Maintain Pit/Mining Unit
Pit/Mining Unit Number
Pit/Mining Unit Name
Production Start Date
Production End Date
State Acres
Total Acres
Status
Note
51
HALFMOON PIT
10/30/2010
80.00
80.00
Active
Detail
Pit/Mining Unit Locations
Parcel List
Operator
Lease
Revenue Reporting Unit
Product
Product Type
Clay and Shale (Clay and Sand)
Sand and Gravel - Mixed

13. Exhibit 13 – Mineral Revenue RPS

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The System must provide a GUI for maintaining the Remittance information from the Remittance Processing system (RPS).	E
2	**The system must accept Remittance information on deposits from MiCARS through a web service on daily basis.**	**E**
3	**The system must be able to accept following fields From MiCARS through the web service:** • **Control Number** • **Process Date*** • **Remitter/Vendor Name** • **Receipt Amount** • **Account Number** *** The web service must query MiCARS HISTREC table based on deposit dates for the previous day (& not the Process date) to retrieve the process date**	**E**
4	To bring in remittance information from vendor, a web based form must be developed to capture - • Production remittance (and/or) • Lease remittance (and/or) • Shut-In Royalty remittance Once captured, the system must match remittance information with Vendor Information and must populate Cashier's Receipt Processing System user interface. *Note: DNR's current remittance (paper) forms for Production, Lease, Shut-In Royalty remittances are attached to this document for reference.*	P

<table>
<tr><th>Business Req. No.</th><th>• Detailed Requirement Description</th><th>Category</th></tr>
<tr><td>4.1</td><td>The system must display following Vendor Information for Production on each selected Remittance:
Remitter’s Name
Lease Type
Prop Payment #/Lease #
Transaction ID
Production Code
Production Month
Production Year
Unit Measure
Revenue Code
Revenue Amount
Account Number
Gross Volume
Gross Revenue
Base Rate
State Decimal Interest
RRU Number
Comment
The system must display Deduction details if any:
Deduction Name
Gross Costs
Net Costs
Total of Gross Costs
Total of Net Costs</td><td>P</td></tr>
<tr><td>4.2</td><td>The system must display following Vendor Information for Lease on each selected Remittance:
Remitter’s Name
Lease Type
Lease Number
Transaction
Rent Paid From Date
Rent Paid To Date
Existing Rent Paid To Date
Account Number
Revenue Code
Comment</td><td>P</td></tr>
</table>

Business Req. No.	• Detailed Requirement Description	Category
4.3	The system must display following Vendor Information for Shut-In Royalty on each selected Remittance: • Remitter's Name • Lease Type – Oil & Gas (Default Value) • Lease Number • Transaction ID • Permit Number • API Well Number • Shut-In Date • Shut-In Paid To Date • Well Shut-In Date • Well Shut-In Paid To Date • State Acres • Amount Due Per Acres • Total Amount Due • Revenue Code • Account Number • Comment	P
4.4	The system must allow an authorized user to both manually enter the vendor information and also through electronic web form based/Upload functionality.	P
5	The system must provide user with the ability to find the Remittance information based on the search criteria entered by user.	E
5.1	The search criteria must be provided with: • Control Number • Process Date • Remitter/Vendor Name • Receipt Amount • Account Number Also, Allow the user to select following check box criteria: • Include Fully Distributed Remittances • Include All RPS Accounts • Include Excluded Remittances	E
5.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Remittance not found.	E
5.3	The system must provide the search criteria to find all Remittance records that have null values in a particular field.	E
5.4	The system must consider the entire find Remittance record criteria entered by user as a single condition rather than a nested condition for search.	E
6	The system must allow an authorized user to Add one or multiple Transactions (Vendor Information) on a remittance for Production, Lease and Shut-In Royalty.	E

Business Req. No.	• Detailed Requirement Description	Category
6.1	The System must assign a Transaction ID for each transaction.	E
7 & 7.1	**The system must provide a solution through which an authorized user can process undistributed or non JV deposits without modifying the deposit amount and/or other fields received from MiCARS to retain consistency across both the systems.** ***NOTE: In a rare instance, the deposits info on Production that LOTS receives from MiCARS, can have a single check with actual payment and nomination fee. This payment info is distributed in LOTS accounts and is sent for monthly JV processing but the nomination fee has to be manualy separated from the transaction(by modying the deposit amount/account number) to distribute it to an account without sending it for JV processing.***	**E**
7.2	In case any erroneous data is entered, the system must display a error message and allow the authorized user to enter the information.	E
7.3	The system must allow an authorized user to Post a transaction for Revenue Distribution and send the distributed Revenue to RPS interface.	E
7.3.1	The system must always allow an authorized user to distribute Revenue and JV unless special circumstances exist in which the user must have the option to choose not to distribute and must include a note as to why.	E
7.3.2	The system must not allow an authorized user to make changes to the remittance information and/or Add/update transaction details once the remittance is posted for distribution.	E
7.4	The system must allow an authorized user to Un-Post a remittance for Revenue Distribution and also allow Add/Update the vendor information and posting the remittance again.	E
7.5	For Lease Vendor information on a Remittance, the system must allow an authorized user to Generate an Auction Transaction to change the Deposit Accounts by entering following information: • Mineral Auction date • Minimum Rent Amount • Bonus Revenue Code • Rent Revenue Code • Bonus Account Number • Rent Account Number	E
7.6	The system must allow an authorized user to Exclude a Remittance.	E
7.7.1	The system must not allow an authorized user to update any information on the Production/Lease/Shut-In Royalty transaction for that particular Excluded Remittance	E
7.8	The system must allow an authorized user to Include Excluded Remittance.	E
7.8.1	The system must allow an authorized user to update the Production/Lease/Shut-In Royalty transaction details for that Included Remittance.	E

Business Req. No.	• Detailed Requirement Description	Category
8	The system must allow an authorized user to Edit Production/Lease/Shut-In Royalty transaction details on a Remittance except for: • RRU Number (may or may not be a 4 way match between property payment #/ production code (optional)/ Lease type/ Remitter Number) To bring well related info from MIR	E
8.1	The system must display an Error message in case erroneous data is populated on the Transaction.	E
8.2	The system must allow an authorized user to "Batch Update" the transaction to modify Production Month, Production Year, Base Rate and/or State Decimal Interest within the same remittance.	E
9	The system must allow an authorized user to save all the changes made to the database.	E
10	The system must allow an authorized user to print Remittance list and Remittance details.	E
11	The System must provide data archival capabilities for all the details coming from RPS.	E
	Enter EFT Remittance	
1	**The system must provide a GUI to accept EFT transactions from MiCARS through a web service (the same web service which would be used to accept checks/cash deposits)**	**E**
2	The system must provide user with the ability to find the Remittance information based on the search criteria entered by user.	E
2.1	The search criteria must be provided with: • Control Number • Process Date Also, Allow the user to select following check box criteria: • Include Fully Distributed Remittances.	E
2.2	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Remittance not found.	E
2.3	The system must provide the search criteria to find all Remittance records that have null values in a particular field.	E
2.4	The system must consider the entire find Remittance record criteria entered by user as a single condition rather than a nested condition for search.	E
2.5	The system must allow an authorized user to find a specific Remittance by providing the following required fields: • Control Number • Process Date • Remit Amount • Account Number Also, an optional field as: • SIGMA Document # (Would come via RPS)	E
2.6	The system must display an Error message in case the user enters invalid required criteria.	E

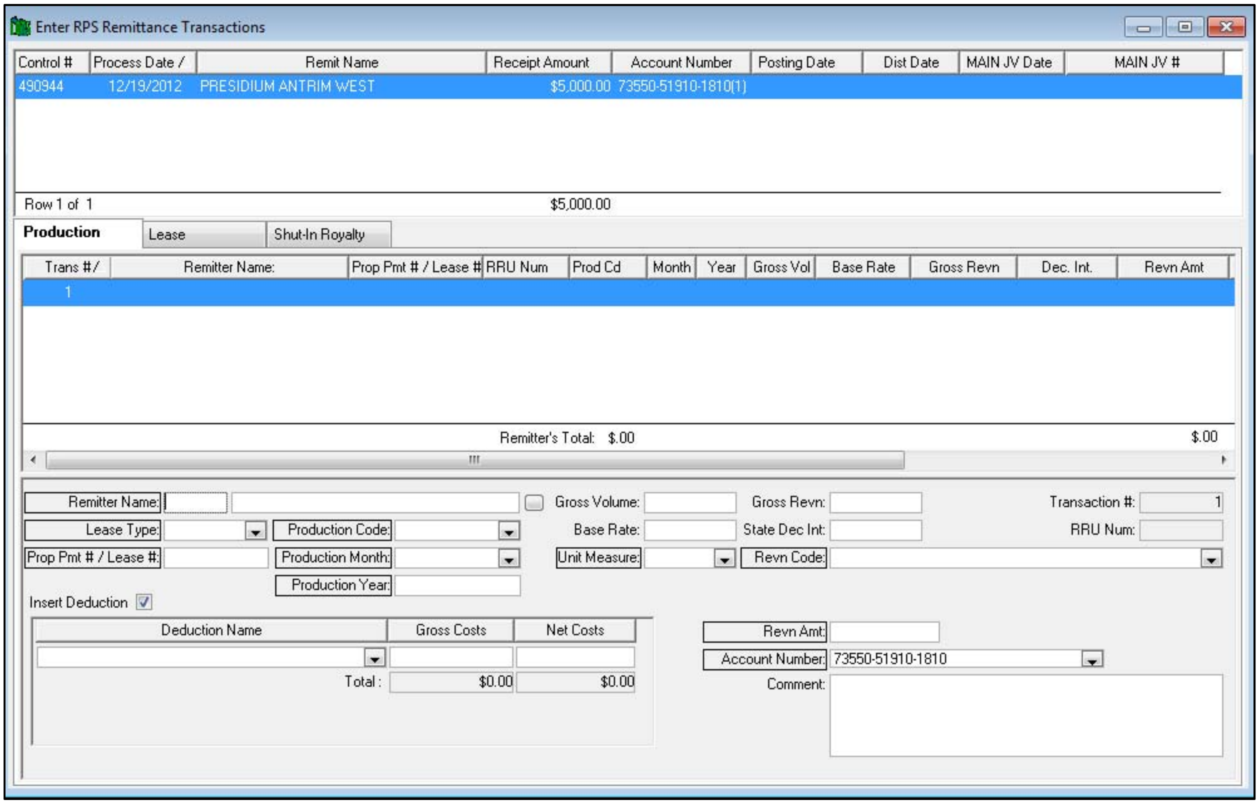
Business Req. No.	• Detailed Requirement Description	Category
3	The system must allow an authorized user to Add one or multiple Transactions on a remittance for Production, Lease and Shut-In Royalty.	E
3.1	The System must assign a Transaction ID for each transaction.	E
3.2	The system must display the summary of following details for each remittance: • Control Number • Process Date • Remitter/Vendor Name • Receipt Amount • Account Number	E
3.3	The system must allow an authorized user to view following transaction details for Production on each selected Remittance: • Remitter's Name • Lease Type • Prop Payment #/Lease # • Transaction ID • Production Code • Production Month • Production Year • Unit Measure • Revenue Code • Revenue Amount • Account Number • Gross Volume • Gross Revenue • Base Rate • State Decimal Interest • RRU Number • Comment The system must display Deduction details if any: • Deduction Name • Gross Costs • Net Costs • Total of Gross Costs • Total of Net Costs	E

Business Req. No.	• Detailed Requirement Description	Category
3.4	The system must allow an authorized user to view following transaction details for Lease on each selected Remittance: • Remitter's Name • Lease Type • Lease Number • Transaction ID • Rent Paid From Date • Rent Paid To Date • Existing Rent Paid To Date • Account Number • Revenue Code • Comment	E
3.5	The system must allow an authorized user to view following transaction details for Shut-In Royalty on each selected Remittance: • Remitter's Name • Lease Type – Oil & Gas (Default Value) • Lease Number • Transaction ID • Permit Number • API Well Number • Shut-In Date • Shut-In Paid To Date • Well Shut-In Date • Well Shut-In Paid To Date • State Acres • Amount Due Per Acres • Total Amount Due • Revenue Code • Account Number • Comment	E
4	The system must provide a solution through which an authorized user can process undistributed or non JV deposits without modifying the deposit amount and/or other fields received from MiCARS to retain consistency across both the systems. *Note: Please refer to Exhibit: Mineral Revenue RPS, Req # 7 & 7.1*	P
4.1	In case any erroneous data is entered, the GUI must display an error message and allow the authorized user to enter the information.	P
4.2	The system must allow an authorized user to Exclude a Remittance if necessary.	P

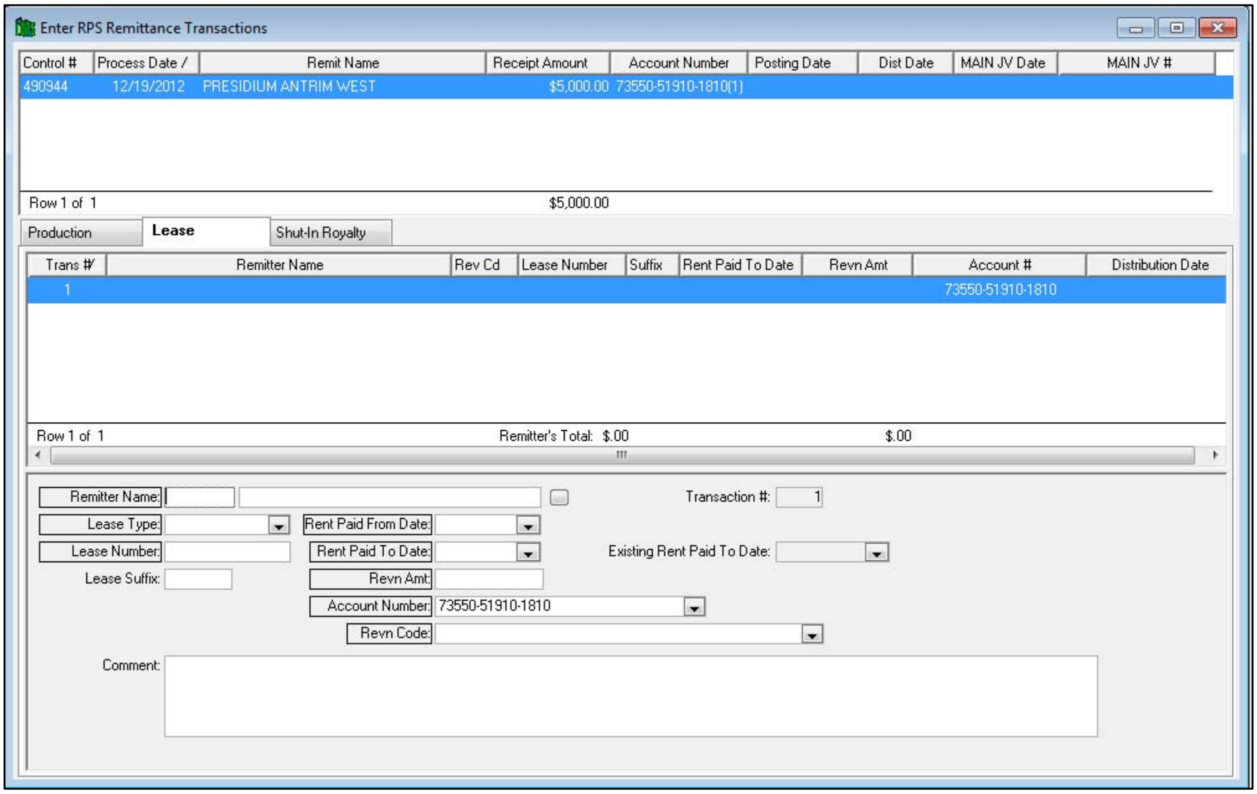
Business Req. No.	• Detailed Requirement Description	Category
4.3	The system must allow an authorized user to Post a transaction for Revenue Distribution.	E
4.3.1	**The system must allow an authorized user to create a Revenue Distribution JV to be sent to MiCARS through a web service.**	**P**
4.3.2	The user interface must not allow a user to make changes to the remittance information and/or Add/update transaction details once the remittance is posted for distribution.	E
4.4	For Lease transaction on a Remittance, the system must allow an authorized user to Generate an Auction Transaction to change the Deposit Accounts by entering following information: • Mineral Auction date • Minimum Rent Amount • Bonus Revenue Code • Rent Revenue Code • Bonus Account Number • Rent Account Number	E
5	The system must allow an authorized user to Edit Production/Lease/Shut-In Royalty transaction details on a Remittance except for: • RRU Number • Transaction ID • API Well Number	P
5.1	The system must display an Error message in case erroneous data is populated on the Transaction.	P
5.2	The system must allow an authorized user to Batch Update the transaction to modify Production Month, Production Year, Base Rate and/or State Decimal Interest.	E
6	The system must allow an authorized user to select a particular Remittance and distribute the revenue between accounts.	E
6.1	The system must not allow any user to make changes to the transaction when the revenue is distributed between accounts.	E
6.2	The system must allow an authorized user to select a distributed Remittance and un-distribute it again.	E
6.2.1	The system must display a warning message that “it would clear all values of control number on an instance in Main JV report and should only be done when erroneous information is entered and Main JV report needs to be re-created.”	E
6.3	The system must allow an authorized user to make necessary changes in the transactions when the revenue is un-distributed.	E
7	The system must allow an authorized user to Update All Main Accounts once the revenue is distributed.	E
8	The system must allow an authorized user to save all the changes made to the database.	E
9	The system must allow an authorized user to print Remittance list and Remittance details.	E

B. AS-IS System Screenshots

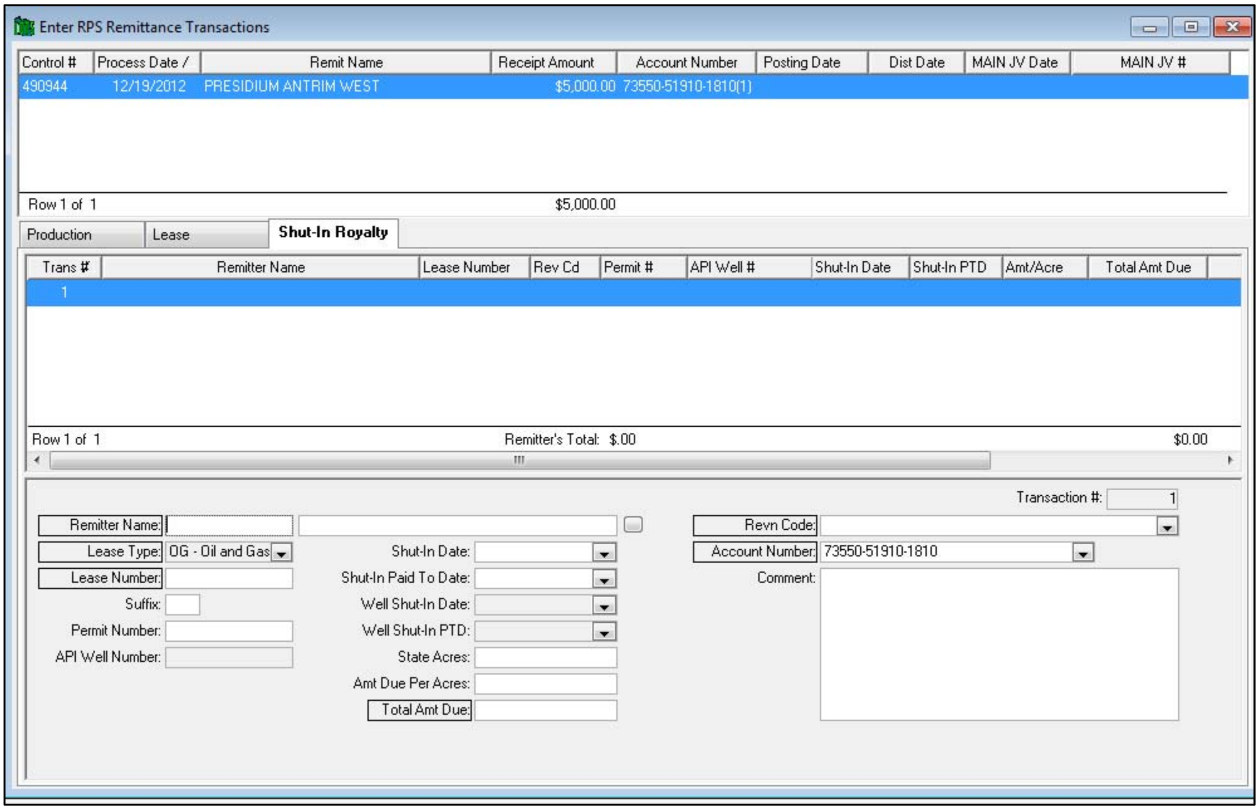
Maintain RPS Remittance Window – Production Screen:



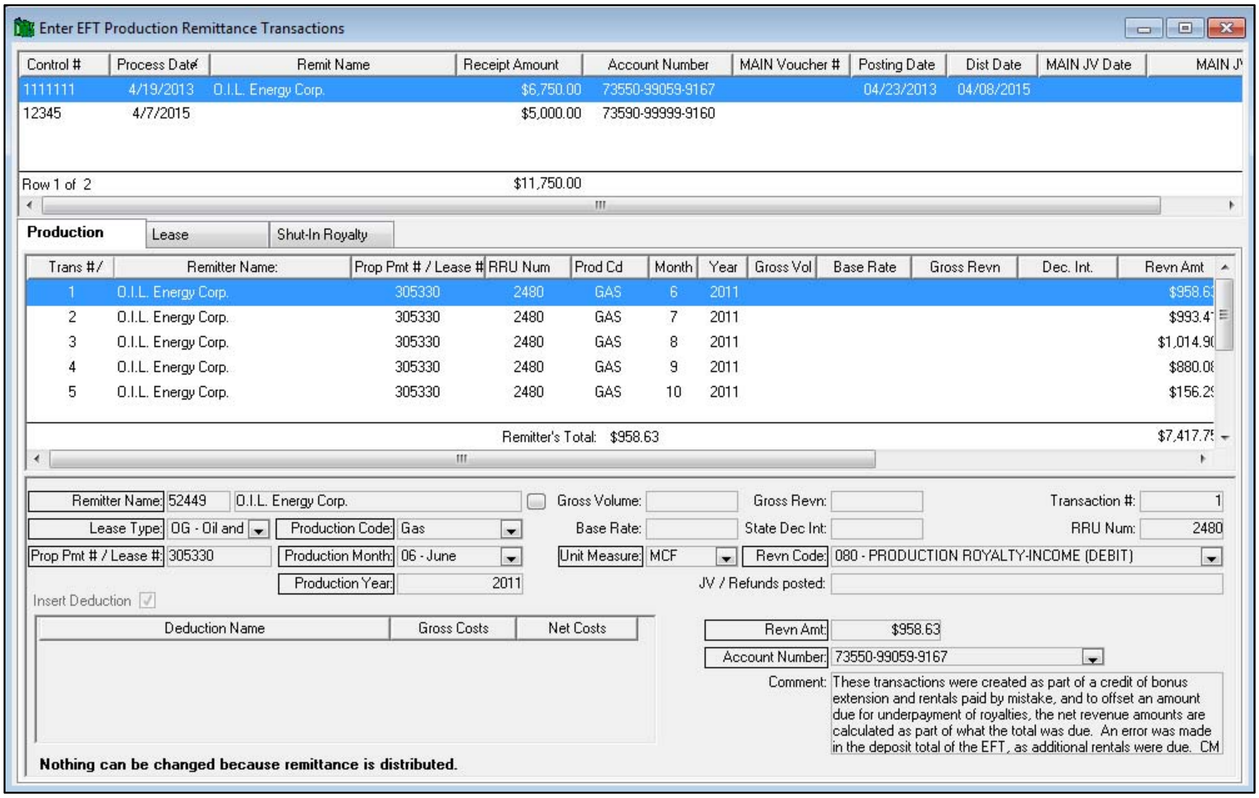
Maintain RPS Remittance Window – Lease Screen:



Maintain RPS Interface – Shut-In Royalty Screen:



Maintain EFT Remittance Window – Production Screen:



Sample DNR's Remittance Forms:

PR4227-7_UniformProdRoyaltyRemittance

Shut-In Royalty Remittance PR-6333E

OG Lease Rental Remittance PR-6325

NOTE: There are several other Remittance forms for Lease Type Metallic, Non-Metallic leases for Production, Mineral Roylaty and Shut-In Royalty remittances.

14. Exhibit 14 – MAIN Exception Reporting

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The System must provide a user interface to Generate a report of fund/account balances and the amount of revenue to be "journal vouchered" in Main/SIGMA.	E
1.1	Once the Revenue is distributed into the Target Accounts from the Source Accounts for Production, Lease and/or All Remittances, the data must be updated on the Main/SIGMA Report.	E
1.2	The system must create a time stamp entry for each Revenue transaction.	E
1.2.1	The system must not allow an authorized user to create a Main/SIGMA Report if the Revenue is already distributed.	E
1.3	The Main/SIGMA Report user interface must allow an user to select Remittance type: • Production • Lease • All And • Allow selecting a Process date for that Remittance type	E
	Revenue Reports	
1	The system must provide a user interface to generate Revenue reports	E
1.1	The system must allow an authorized user to create following reports with supporting arguments: 1) 100% Decimal Interest • Production Type (Oil or Gas) • Production Month • Production Year • Remitter's Name 2) Account Receivable (Distributed) • Process Date Between • Before Production Month and Year 3) Account Receivable (Distributed & Non-Distributed) • Process Date Between • Before Production Month and Year 4) Account Receivable (Not Distributed) • Process Date Between • Before Production Month and Year	E

	5) Delinquent Rent Summary • Through date • Lease Type 6) Lease Remittances • Lease Type • Process Date Between • Lease # • Vendor # & Name 7) Main JV Report (Report Execution Date) • Main JV Report Date The report should include • Deposit Account # • Process Date • Control # • Fund Codes • Acquisition Fund Name • Balance Amount • Deposit Amount • Debit Account • Credit Account • Amount 8) Production Remittance Detail (Control#) • Control Number • Process Date • EFT Remittance (Y/N) 9) Production Remittance Detail (Date Range) • Start Date • Thru Date • #, then Control # • RRU#, then Production Month & Year, then Control # • RRU#, then Control #	E

Business Req. No.	• Detailed Requirement Description	Category
	10) Property Payment # Remittance • Property Payment # • Process Date Between Sort by • Control # • Production Month and Year, then Control # • Production Month and Year, RRU 11) Remittance Refund By RRU/Lease • Start Date • Through Date 12) Remittance Transaction JV Summary • Start Date • Through Date 13) Remittance Transaction Refund Summary • Start Date • Through Date 14) Remittance Transaction Summary • Start Date • Through Date 15) Remittance Year End Summary • Start Date • Through Date 16) Rent Verification Report • Lease Type • From Date • To Date 17) Revenue by Fund and Account • Remittance Type • From Process Date • To Process Date	E

Business Req. No.	• Detailed Requirement Description	Category
	18) Refund Lease Detail • Process Date Between • Control Number • Lease # • Lease Type • Vendor ID • State OG Ownership 19) Royalty Late Payments • Production Type • Production Month & Year 20) Royalty Payment Verification • Production Type • Production Month & Year • Remitter's Name 21) RRU Remittances • RRU# • Process Date Between 22) RRU Remittance by Prod Month & Year • RRU# • From Production Month/Year • To Production Month/Year 23) Shut-In Remittance Detail • Start Date • Thru Date • Lease Type • Lease # • RRU ID 24) Unit Area Remittances • Unit Area # • Process Date Between	E

Business Req. No.	• Detailed Requirement Description	Category
	25) Vendor Production Remittances • Vendor ID • Process Date Between Sort by • Control # • Production Month and Year, then Control # • Production Month and Year, RRU #, then Control # • RRU#, then Production Month & Year, then Control # • RRU#, then Control # 26) Well Name Remittance Detail • Well Name • Process Date Between 27) Well Permit Remittance Detail • Well Permit # • Process Date Between	E
	RPS Production Journal Voucher/Refund	
1	The system must provide "create RPS Production Journal Voucher/Refund user interface" to process refund or adjustment Journal Voucher entries against Production remittance transactions. *Note: 1. These refund/adjustment Journal Voucher entries are then posted to accounting system (SIGMA/Main).* *2. Screen shot of the current JV window is attached for reference.*	E
2	The RPS Production Journal Voucher/Refund user interface must provide user with the ability to find remittance transaction(s) based on the search criteria entered by user.	E
2.1	The search criteria must be provided with following fields- • Control Number • Transaction Number • Process Date • Vendor Number/Name • Property Payment number • Lease Type • Production Code • Production Month • Production Year • Revenue Code • Distribution account Number • Deposit Account Number • RRU number • Transaction Type (this field is display only and must have a default value as "Production")	E

Business Req. No.	• Detailed Requirement Description	Category
2.2	The system must validate the criteria entered by user and throw appropriate error message in case of invalid criteria or Remittance Transaction(s) not found.	E
2.3	The system must provide the search criteria to find all Remittance Transaction records that have null values in a particular field.	E
2.4	The system must consider the entire find Remittance Transaction criteria entered by user as a single condition rather than a nested condition for search.	E
2.5	The search window must display the list of Remittance Transactions retrieved based on the criteria entered.	E
3	The RPS Production Journal Voucher/Refund user interface must display the list of Remittance Transaction records retrieved by search criteria.	E
3.1	The RPS Production Journal Voucher/Refund user interface must display Revenue details for a selected Remittance Transaction.	E
3.2	The RPS Production Journal Voucher/Refund user interface must display remittance Transaction details with following fields- • Vendor Number and Name • Lease Type • Property payment Number • Production Code • Production Month • Production Year • Gross Volume • Base Rate • Unit Measure • Gross Revenue • State Decimal Interest • Revenue Code • Transaction Number • RRU Number • Revenue Amount • Deposit Account Number • Comment	E

Business Req. No.	• Detailed Requirement Description	Category
3.3	The RPS Production Journal Voucher/Refund user interface must display Revenue Distribution details with following fields— • Distribution Indicator • Distribution Date • Deposit Fund • Deposit Account • Distribution Fund • Distribution Account • Distribution Amount • Accounting System MAIN/SIGMA) Report Date	E
3.4	The RPS Production Journal Voucher/Refund user interface must display Revenue Distribution History details with following fields— • Distribution Indicator • Distribution Date • Fund Code • Deposit/Distribution account • Decrease Amount • Increase Amount • Accounting System(MAIN/SIGMA) report Date	E
4	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to export the list of records to MS Excel, MS Word.	E
4.1	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to sort the list in ascending/descending order based selected field name.	E
4.2	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to process Refund for a selected Remittance Transaction.	E
4.2.1	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must open a new window allowing user to input • Refund Amount • Comment And allow user to select save/cancel.	E
4.2.2	The system must then process the Refund and save the same to database or cancel the transaction based on user selection.	E
4.3	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to split a Prod Remittance transaction.	E

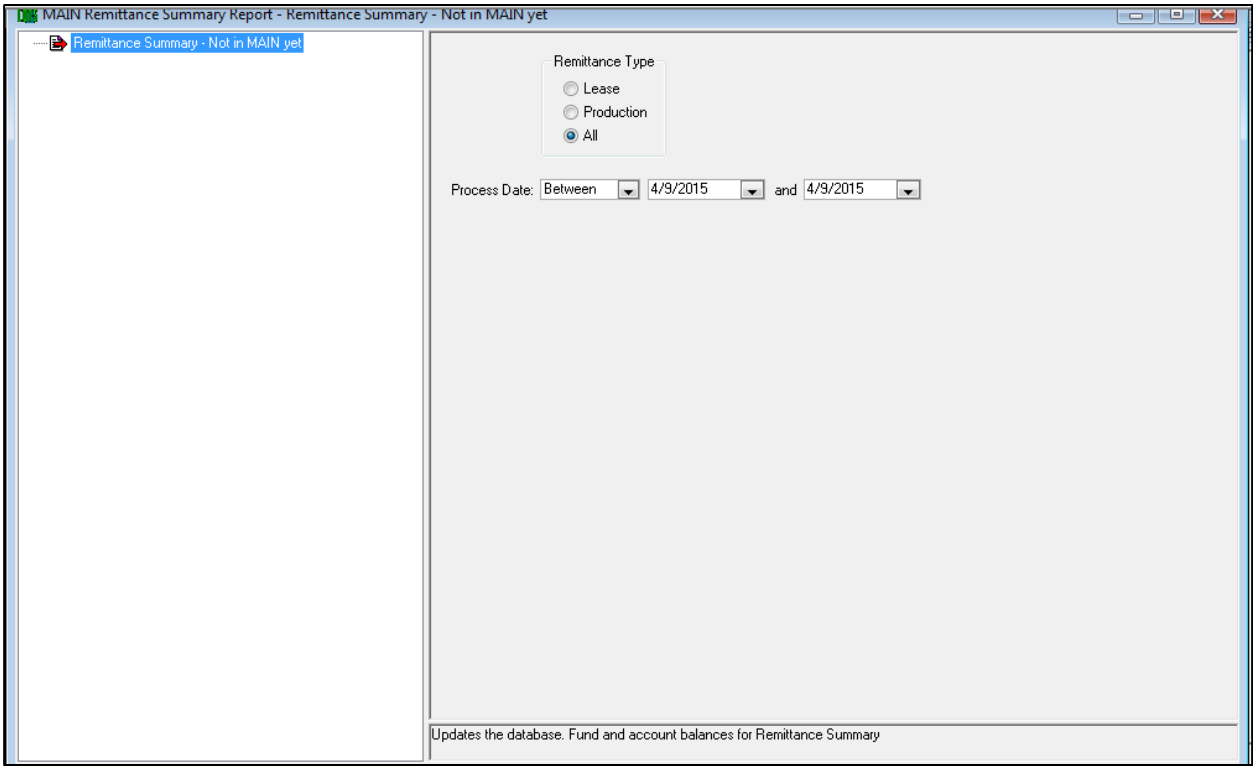
Business Req. No.	• Detailed Requirement Description	Category
4.3.1	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must open a new window allowing user to input- • Split to Amounts (allow user to enter multiple split amounts if needed) • Comments • Revenue Amount (display only) And allow user to select save/cancel. *Note: total of split amounts must be equal to remittance transaction Revenue amount*.	E
4.3.2	The system must then process the Split Amounts and save the same to database or cancel the transaction based on user selection.	E
4.4	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to Change Deposit Accounts.	E
4.4.1	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must open a new window allowing user to input- • Active From Deposit Accounts • To Deposit Accounts • From Deposit account (This is a display only field with "From Deposit Account" field value from transaction) And allow user to select save/cancel. *Note: This is normally done to change accounts when wrong accounts assigned before.*	E
4.4.2	The system must then process the Change Deposit amounts and save the same to database or cancel the transaction, based on user selection.	E
4.5	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to Distribute the revenue based on current fund account balances.	E
4.5.2	The system must then process Distribution and save the same to database or cancel the transaction based on user selection.	E
4.6	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to select to view Audit History report, save and print the same.	E

Business Req. No.	• Detailed Requirement Description	Category
4.7	The RPS Production Journal Voucher/Refund user interface, in the Remittance Transaction list section, must allow an authorized user to select Batch Update function to be able to update multiple field values at a time for a previously saved record. *Note: This function must NOT allow user to change/update Account Number and any $ Amount field(s) values while allowing all other field values in the transaction be changed.*	E
4.8	The RPS Production Journal Voucher/Refund user interface, in the Revenue section, must allow an authorized user to select to sort the list in ascending/descending order and based on column name.	E
4.9 4.9.1 & 4.9.2	**The system must accept RPS Production Journal Voucher/Refund and/or the reallocation records from MiCARS and confirmation notification once MiCARS has sent the reclass transactions to SIGMA along with the reclassification number through a web service.**	**E**
4.10	The RPS Production Journal Voucher/Refund user interface in the Details section, must allow an authorized user to change Production JV/Refund Details fields- • Vendor Number and Name • Lease Type • Property payment Number • Production Code • Production Month • Production Year • Gross Volume • Base Rate • Unit Measure • Gross Revenue • State Decimal Interest • Revenue Code • Comment	E
5	**The system must be able to post all JV entries to MiCARS through a web service.**	**E**
6	The RPS Production Journal Voucher/Refund user interface must give an authorized user an option whether to post a JV entry to Accounting System (SIGMA) or just save it as an adjustment entry in LOTS.	E

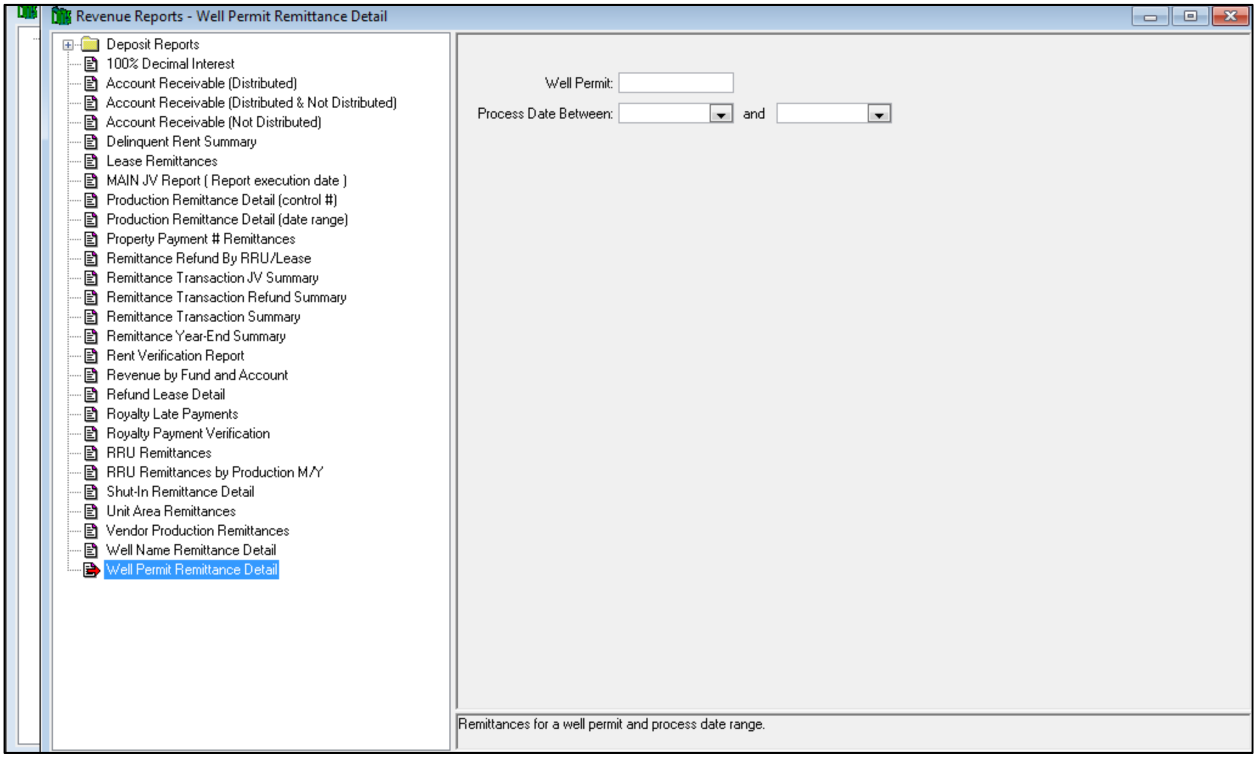
Business Req. No.	• Detailed Requirement Description	Category
7	The system must provide five more (in addition to the above mentioned window) “create RPS Journal Voucher/Refund GUI Windows” to process refund or adjustment Journal Voucher entries for- • Create RPS Lease JV/Refund • Create RPS Shut-In JV/Refund • Create EFT Prod JV/Refund • Create EFT Lease JV/Refund • Create EFT Shut-In JV/Refund *Note 1: Prod (production), Lease, Shut-in JV/Refund windows’ search criteria and details tab fields may be slightly different (fields wise) but the process/functionality of all the windows is same. So only Prod JV/Refund window’s requirements are written here.* *Note 2: Any/all of these refund/adjustment Journal Voucher entries are then posted to accounting system (SIGMA/Main) periodically.*	E

B. AS-IS System Screenshots

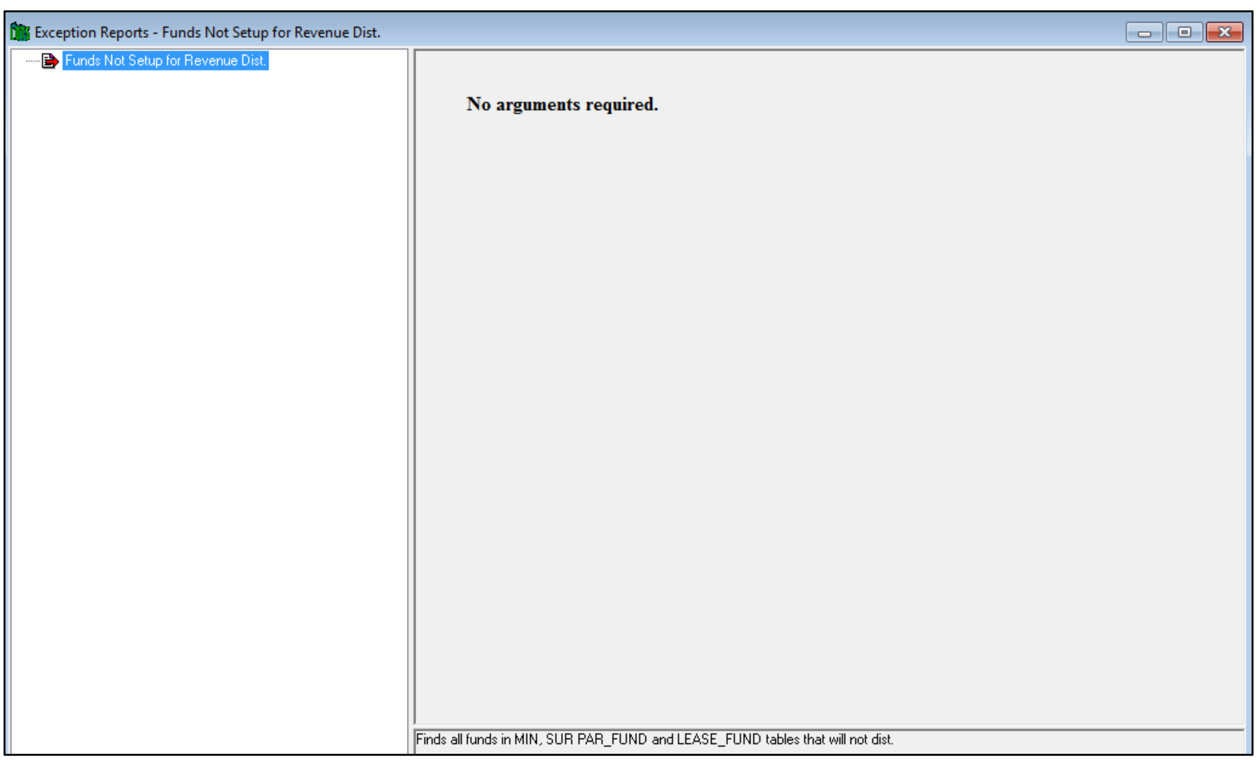
Main Summary Report:



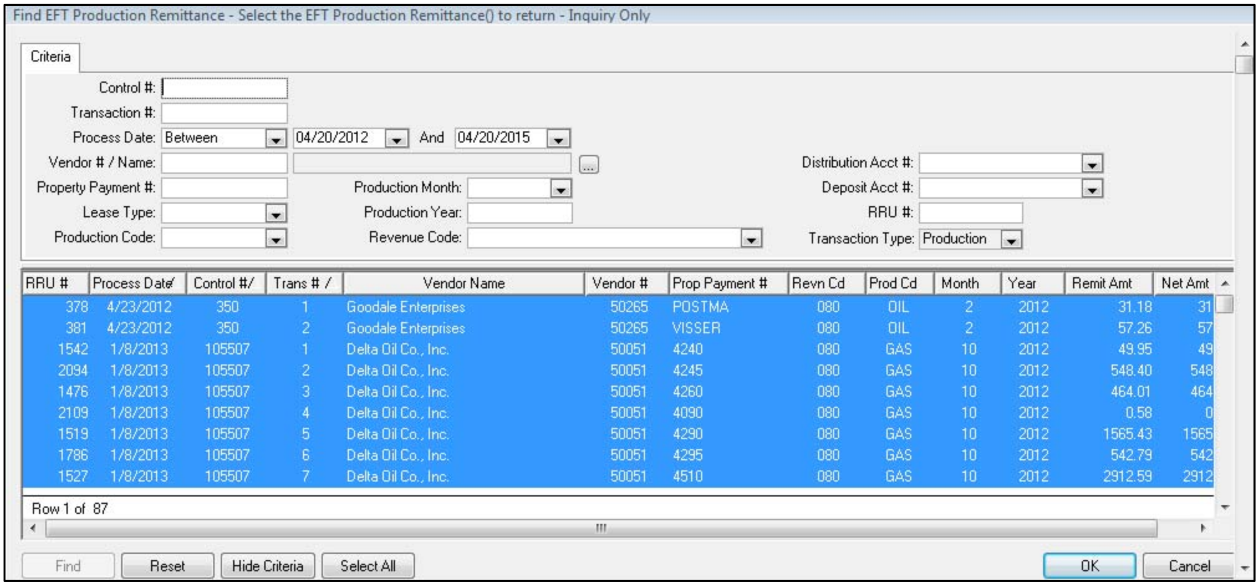
Revenue Reports:



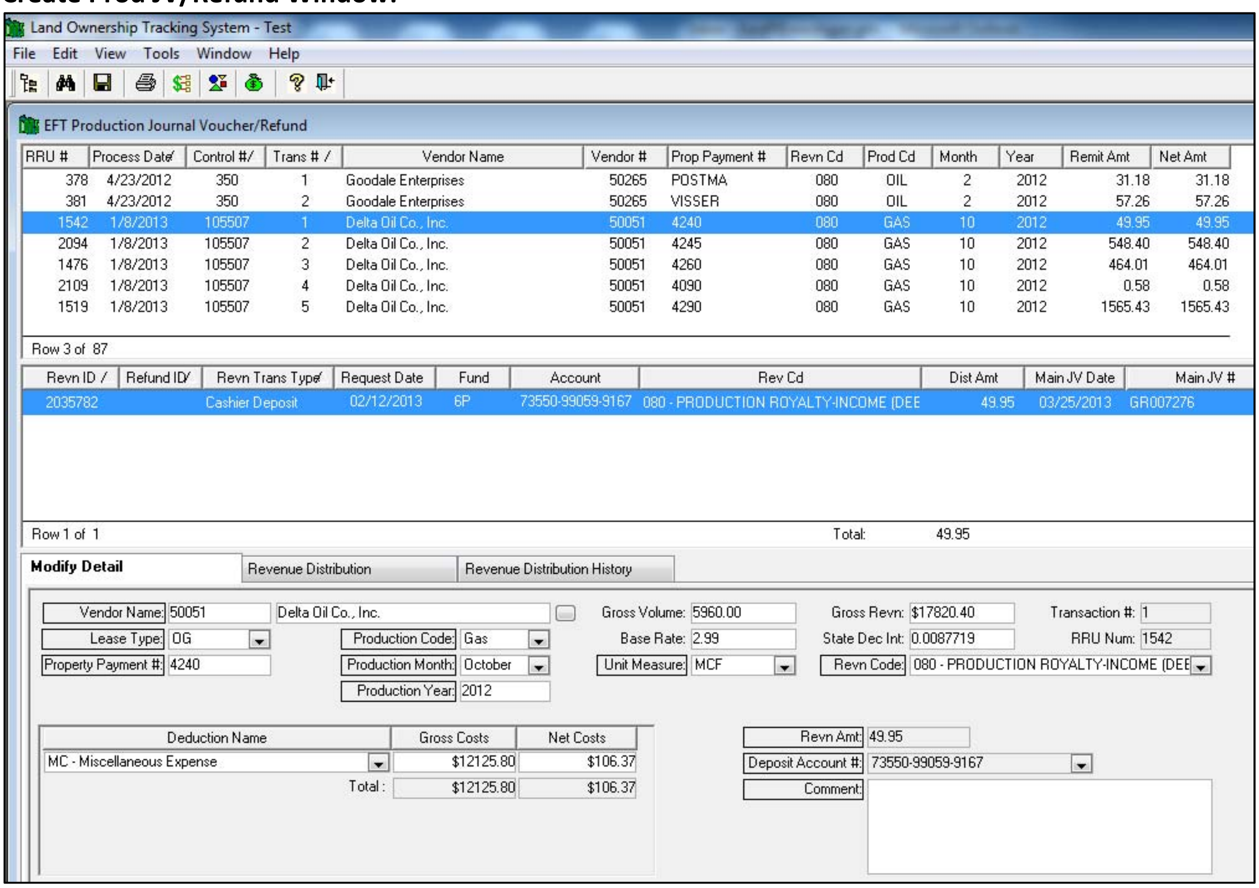
Exception Report:



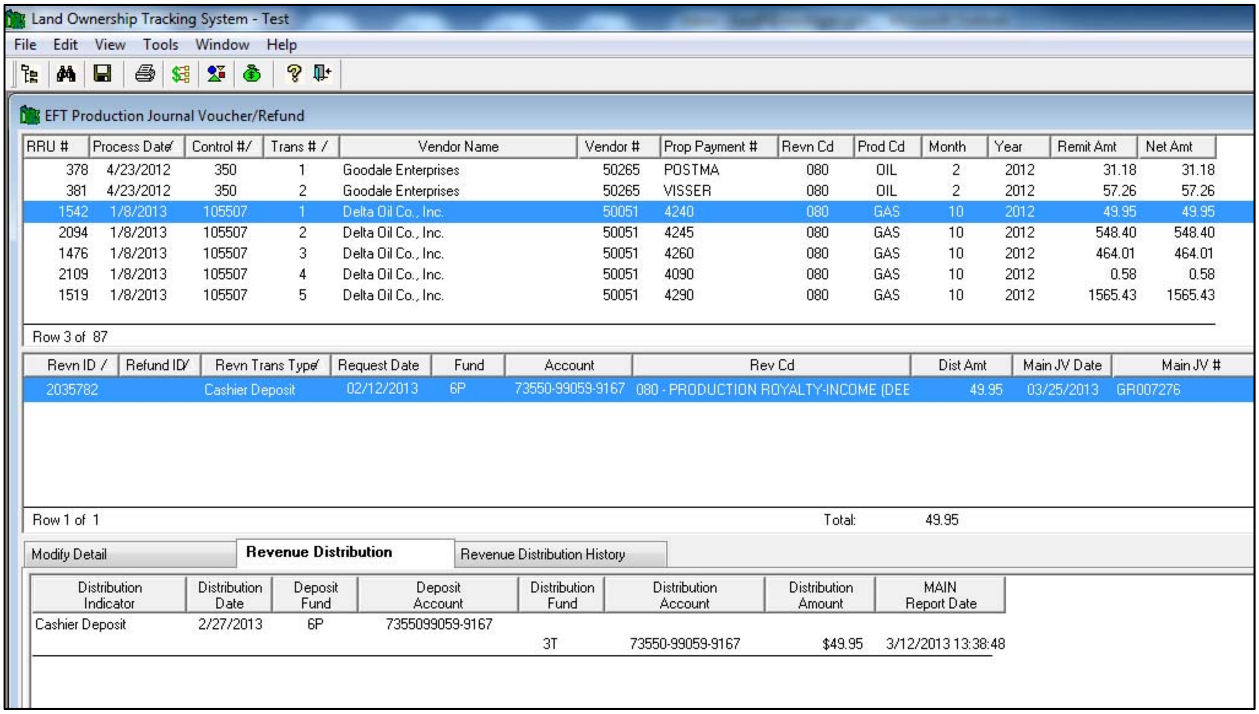
Search Criteria for Create Prod JV/Refund window:



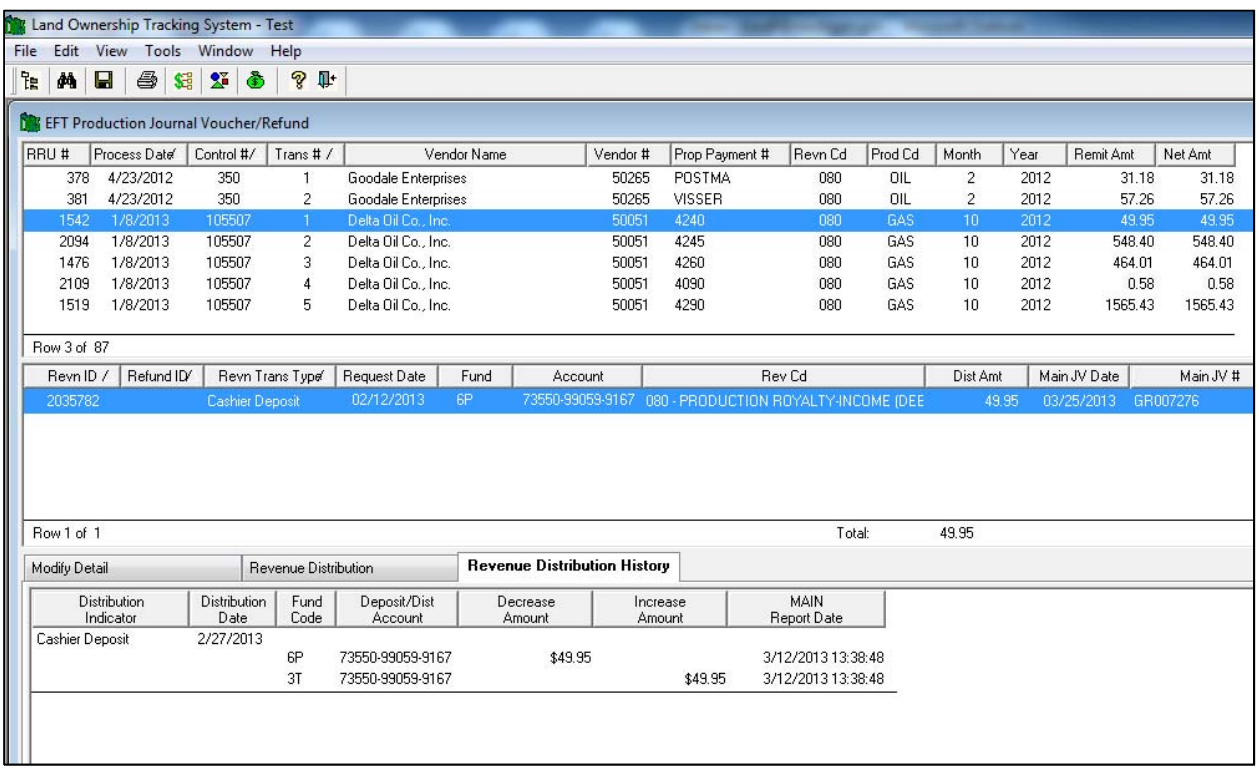
Create Prod JV/Refund Window:



Showing Revenue dist tab details of Prod JV/Refund Window:



Showing Revenue distribution history tab of Create Prod JV/Refund Window:



15. Exhibit 15 – Security Administration (PFC)

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The system must provide a maintenance user interface for security/authorization role based administration.	E
2	The security/authorization role based administration user interface window must provide following fields- • Authorization Group Name • Authorization Group Description • Object Name (e.g. Application Window) • Security Object Level (e.g. window/tab) • Access type(e.g. Display, Enable, Disable, Invisible) • User ID (LOTS user's ID) • Members (LOTS User's Name)	E
3	The system must pre-populate security/authorization tables' following fields- Authorization Group Name • Authorization Group Description • Object Name (e.g. Application Window) • Security Object Level (e.g. window/tab) • Access type(e.g. Display, Enable, Disable, Invisible) • User ID (LOTS user's ID) • Members (LOTS User's Name)	E
3.1	The security/authorization role based administration user interface window must allow an authorized user to add entries in following fields- • Object Name (e.g. Application Window) • Security Object Level • User ID (LOTS user's ID) • Members (LOTS User's Name)	E
4	The system must allow an authorized user to create a new user record.	E
5	The security/authorization role based administration user interface window must provide an authorized user with the ability to create a new Authorization Group with Group Description.	E
5.1	The security/authorization role based administration user interface window must Automatically add all current SOM ID's as SOM users.	E
5.1.1	The security/authorization role based administration user interface window must Automatically add all current DNR ID's to the DNR SOM users.	E
5.1.2	The security/authorization role based administration user interface window must allow addition of all DNR SOM ID's to the DNR group and DNR ID's to the PILT and Treasury Groups.	E

Business Req. No.	• Detailed Requirement Description	Category
5.13	The security/authorization role based administration user interface must allow addition of Treasury ID’s to DNR, PILT and Treasury groups.	E
5.1.4	The security/authorization role based administration user interface window must provide a Verification function to confirm that the User ID is a valid SOM user ID.	E
5.2	The security/authorization role based administration user interface window must provide an authorized user with the ability to assign Security Object Level(s), Access to Objects.	E
5.3	The security/authorization role based administration user interface window must provide an authorized user with the ability to add object(s) to an Authorization Group.	E
6	The security/authorization role based administration user interface window must provide authorized user with the ability to view/display details of following fields- • Authorization Group Name • Authorization Group Description • Object Name (e.g. Application Window) • Security Object Level (e.g. window/tab) • Access type(e.g. Display, Enable, Disable, Invisible) • User ID (LOTS user’s ID) • Members (LOTS User’s Name)	E
7	The security/authorization role based administration user interface window must provide an authorized user with the ability to edit assignment of User IDs to authorization Groups.	E
7.1	The security/authorization role based administration user interface window must provide an authorized user with the ability to edit assignment of Objects to Authorization groups.	E
7.2	The security/authorization role based administration user interface window must provide an authorized user with the ability to edit assignment of Security Object Level, Access to Objects.	E
7.3	The security/authorization role based administration user interface window must provide an authorized user with the ability to edit User IDs and Members field values.	E
8	The security/authorization role based administration user interface window must provide an authorized user to save changes.	E

NOTE: Please refer to the Existing Security Groups for additional Information

Copy of LOTS Security Groups.xlsx

16. Exhibit 16 – Land Transaction Accounting

A. Requirements

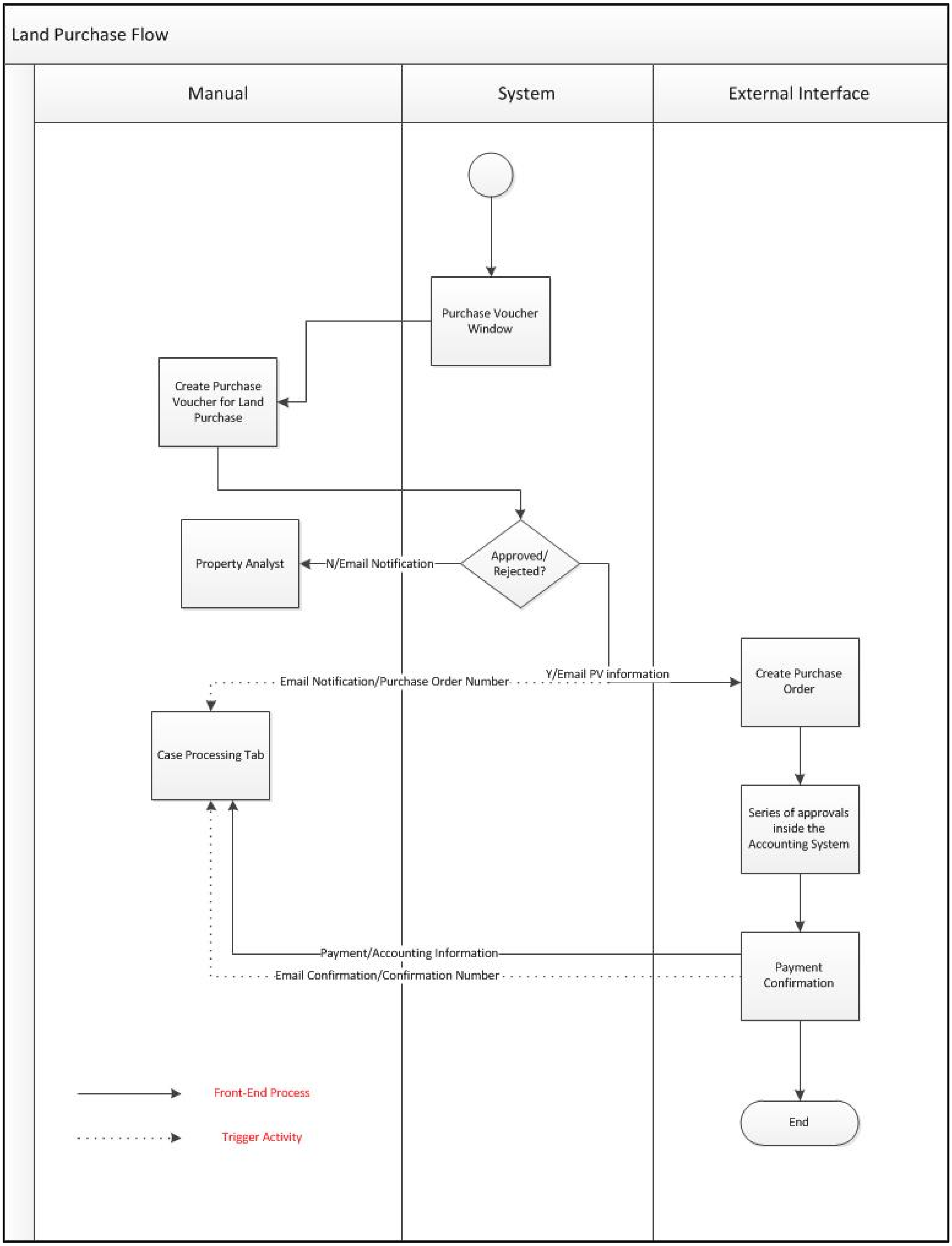
Business Req. No.	• Detailed Requirement Description	Category
	Land Purchase	
1	The system must provide a Payment Voucher tab in Maintain Case user interface with following fields- • Date • Vendor ID # (SIGMA) • Payee Name • Payee Address • Total amount of Payment Voucher (total is not needed if addition can take place for each individual amount—see below) • Due Date • LOTS # and Project Name • Comment field (Sufficient Characters) • Fund Source/TF# (this field is to put what funding source is being used for the entire payment voucher). There should be two fields, one for the Fund (TF and P code) and the second for the Source (1, 2, 4, 6, Grant #) • Purchase price/commodity/amount/accounting information • Title insurance/commodity/amount/accounting information • Pro-rated taxes/commodity/amount/accounting information • Property transfer tax/commodity/amount/accounting information • Recording Fees/commodity/amount/accounting information • Closing Costs/commodity/amount/accounting information • Miscellaneous/commodity/amount/accounting information	E
1 contd..	• Field name: purchase price • Commodity: to be entered • Amount: to be entered • Accounting information from SIGMA: (BFY, Unit, Department Object, Function, Location, Activity, Fund, Sub Fund, Appropriation, Program) • Field name: title insurance • Commodity: to be entered • Amount: to be entered • Accounting information from SIGMA: (BFY, Unit, Department Object, Function, Location, Activity, Fund, Sub Fund, Appropriation, Program)	E
1.1	The Payment Voucher tab must allow an authorized user to generate a Downloadable, Editable MS word document for each newly created Voucher.	E
2	The system on Payment Voucher Tab, must allow an authorized user to create one or multiple Payment Vouchers under each Case. (One at a time)	E

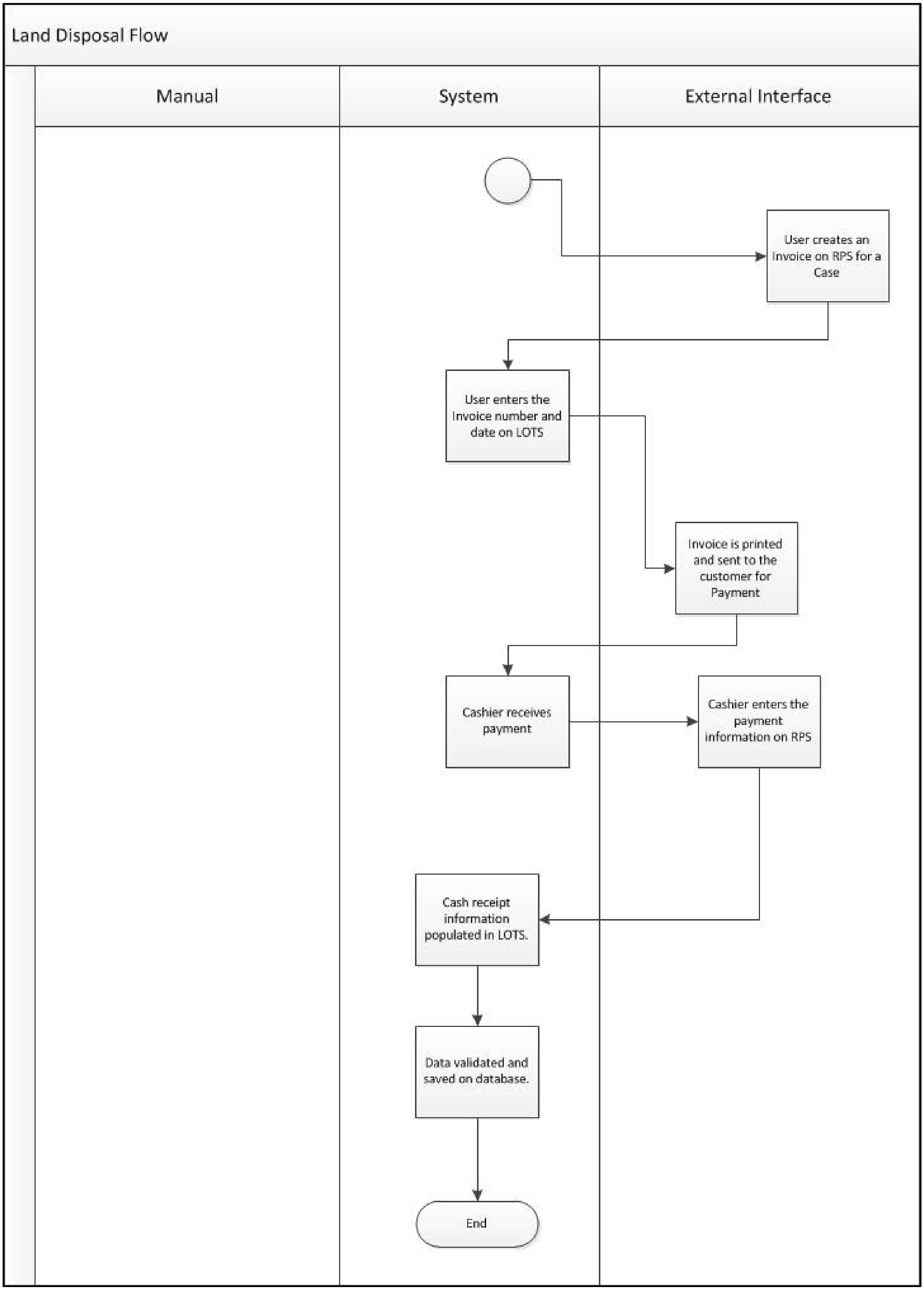
Business Req. No.	• Detailed Requirement Description	Category
2.1	The system must assign a unique ID for every new Payment Voucher record created under a Case and populate Payment Voucher Number field (display only) on the tab with the same unique number. Note: The composition of this number currently is – Case Number (Payment Voucher) + XX1 (for voucher # 1 for that case)	E
3	The Payment Voucher Tab must allow an authorized user to view voucher and related Accounting information.	E
4	The Payment Voucher Tab must allow an authorized user to edit voucher information.	E
5	The Payment Voucher Tab must allow an authorized user to save voucher information in database.	E
	Accounting Information for Purchase of Land	
1.1	The system must provide an interface to bring in Payment Voucher's post processing accounting information from SIGMA or the Data Warehouse from SIGMA.	E
1.2	The system must display (only) Land Purchase transaction Accounting System Information (captured above) in LOTS Case Processing Window's Payment Voucher Tab with following fields- • SIGMA Payment # • SIGMA EFT/Warrant # *Note: Requirements for Case Processing Window are written separately in related requirements document.*	E
1.3	The system must save all the records on the database.	E
	Accounting Information for Sale of Land	
1	The system must provide a Remittance Processing system (RPS) inbound interface via a daily batch job. *Note: This interface brings in Land Sale and Minerals Revenue cash receipt information together. So it is the same Interface that was mentioned in SEM 6.3.2*	E
1.2	The system must allow RPS interface to populate Invoice related information and Cash receipt related information on Land Sale tab on maintain Case window.	E

Business Req. No.	• Detailed Requirement Description	Category
2	The system must provide a Land Sale Tab in Maintain Case Window with following fields- User Input Fields- • Invoice Number • Invoice Date • Date Paid • Total Billed Note: When user enters Invoice Number, Invoice Date System changes status to "Bill Sent". When user enters Date Paid, System changes status to "Final Payment Received" RPS Interface populated (display only) fields- • Program Code • Invoice Type • Reference Number • Invoice Notes • Customer Information • Description • Quantity • Unit Cost • BFY • Unit • Department Object (For expenses) • Department Revenue (For Revenue) • Function • Location • Activity • Fund • Sub Fund • Appropriation • Program • Charges(Amount)	E
2 Contd..	Cash receipt Information from RPS Interface populated (display only) fields- • Invoice Number • Date of Invoice • Amount • Control Number • Date Paid • Remit Name • Check Number • Deposit Number/Suffix	E

Business Req. No.	• Detailed Requirement Description	Category
2.1	The Land Sale tab must provide an "Invoice Status" display ONLY field to track and display Invoice status for each invoice attached to a Case. *Note: This field must be populated by system based on invoice date and date paid field values.*	E
3	The Land Sale Tab in Maintain Case Window must allow an authorized user to save changes to database.	E

B. AS-IS System Screenshots




Land Disposal Flow
Manual
System
External Interface
User creates an Invoice on RPS for a Case
User enters the Invoice number and date on LOTS
Invoice is printed and sent to the customer for Payment
Cashier receives payment
Cashier enters the payment information on RPS
Cash receipt information populated in LOTS.
Data validated and saved on database.
End

17. Exhibit 17 – System Reference Tables Part 4

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
	Maintain Party	
1	The system must provide a user interface to maintain Party System Reference Table records.	E
2	The Maintain Party user interface must allow an authorized user to search for Party records with following search criteria- • Display Primary / Contact • Party ID • Party Type • Last Name • First Name • Party FID • E-mail • Address Type • Address ID • Address Line 1 • Address Line 2 • Address Line 3 • City/State, Zip, Country • Phone # *NOTE: Name/Address field must have sufficient character spacing to accommodate long Addresses.*	E
2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Party not found.	E
2.2	The system must provide the search criteria to find all Party records that have null values in a particular field.	E
2.3	The system must consider all the find Party criteria entered by user as a single condition rather than a nested condition for search.	E
2.4	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E

Business Req. No.	• Detailed Requirement Description	Category
3	The user interface must display a list of all existing Party records with following information: • Party ID • Name • Address Line 1 City • Zip Code • Party FID • Party Type • Is Contact?	E
4	The Maintain Party user interface must provide sort criteria with field names and allow an authorized user to sort Party records by field names.	E
5	The Maintain Party user interface must allow an authorized user to create a new Party record.	E
5.1	The system must assign a unique Party ID for each new Party record.	E
5.2	The system must keep Parent Party (display ONLY) field empty.	E
5.2.2	The user interface must assign Party record ID as Parent Party ID (display ONLY field) for newly created Contact record. *Note: This will create an association between Contact and its Parent Party.*	E
5.3	The user interface must allow an authorized user to create new Address for a Party/Contact (Party ID).	E
5.3.1	The user interface must assign a unique Address ID for each new Address record.	E
5.3.2	The user interface must allow an authorized user to attach newly created Address(s) to a Party/Contact (Party ID).	E
5.3.3	The user interface must display following Address information attached to a Party record: • Address Type • Active Date • Inactive Date • Address Line 1/Line 2/Line 3 • Home # • Work # • Mobile # • Fax # • City/State • Zip code • Country	E
5.3.4	The user interface must allow an authorized user to attach an existing address to a Party/Contact (Party ID).	E
5.3.5	The Maintain Party user interface must allow an authorized user to detach an existing address to a Party/Contact (Party ID).	E

Business Req. No.	• Detailed Requirement Description	Category
5.3.6	The Maintain Party user interface must allow an authorized user to edit Address details assigned to a Party/Contact (Party ID).	E
5.3.7	The Maintain Party user interface must provide change of address function to allow an authorized user to inactivate an existing address and enter a new address. *Note: When user selects this function, system must populate an inactive date (uses current system date) for the selected Address and allows user to create a new Address record (system assigns a new Address ID)*	E
6	The user interface must allow an authorized user to edit Party record details within following fields- • Party Type • Company/Last Name • First Name • Type Code • Email • Notes • Suffix • Middle Name *NOTE: Name/Address field must have sufficient character spacing to accommodate long Addresses.*	E
6.1	The user interface must capture and display (ONLY) Date Timestamp in “Created by” and “Last Updated by” fields.	E
6.2	The user interface must allow an authorized user to edit Contact details for a Party record.	E
6.2.1	The user interface must allow an authorized user to remove Contact’s association from Parent Party.	E
7	The Maintain Party user interface must allow an authorized user to Delete a Party Record. *Note: A Contact, which has Addresses or is used in any of the child tables, cannot be deleted.*	E
8	The Maintain Party user interface must allow an authorized user to Save changes to database.	E
9	The system must combine Vendor and Party maintenance user interfaces. *Note: The system must explore possibilities of combining Vendor and Party maintenance windows and capture Vendor relevant, Party relevant information respectively using the same window.*	O
10	The user interface must provide canned reports for Party records.	E
	Maintain Activities/Restrictions	

Business Req. No.	• Detailed Requirement Description	Category
1	The system must provide a user interface to maintain Activities and Restrictions system reference table. *Note: This user interface currently doesn't have a field to identify the category of each record in the table (whether a particular record is an Activity or a Restriction). So, this window must provide an additional field (Category) to capture the same information.*	E
2	The user interface must display a list of all existing Activity/Restriction records with following information: • Activity Name • Restriction Name • Activity ID • Restriction ID • Used By System (Yes/No) • Restriction(Yes/No)	E
3	The user interface must allow an authorized user to create an Activity/Restriction record and allow user to associate other Allowed Activities and or Restrictions.	E
3.1	The user interface must assign a Unique ID for a newly created Activity/Restrcition record.	E
3.2	The user interface must capture and display (ONLY) Date Timestamp in "Created By" field for each Activity/Restriction record created.	E
4	The user interface must allow an authorized user to View/Edit the following Activity/Restriction record details: • Name • Description • Used By System(Check Box) • Activity ID (Display only) • Restriction ID (Display only) • Date/Time stamp value	E
4.1	The user interface must allow an authorized user to edit association (associate/dissociate) of Allowed ActivitiesRestrictions for a particular Activity/Restriction. An Allowed Activity/Restriction can't be dissociated if the Activity/Restriction is currently used on a Parcel.	E
4.2	The user interface must allow an authorized user to edit Warning(s)/Permission(s) for another Allowed Activity/Restrcition.	E
4.3	The user interface must capture and display (ONLY) Date Timestamp in "Last Update By" field after any change made to an Activity/Restriction record.	E
5	The user interface must allow an authorized user to delete an Activity/Restriction record if the activity/Restriction is NOT associated with a Parcel. Deleting an Activity/Restriction results in deletion of its associations to Allowed Activities/Restrictions.	E
6	The user interface must allow an authorized user to save changes to database.	E
7	The user interface must provide canned reports for Activity/Restriction records.	E

18. Exhibit 18 – Case Processing

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
	Maintain Case/Case closing/Escrow Closing	
1	The system must provide a Global document Reader functionality to allow an authorized user to build a document by importing the case processing information from internal(within the system) and external (from web, Review system) sources for each of the Land transaction type.	O
1.1	The document(s) created by the above process must be Editable, Printable and downloadable into MS Word.	O
1.2	The system must allow an Appraisal Reviewer to build an appraisal review form having information been populated with Parcel details from Case Parcel(s) or Case Parcel(s) records.	P
1.3	The system must provide a functionality to export the Status Reports on cases to the web page for the general public to download.	O
2	The system must allow an authorized user to attach copies of documents to a Case including HTML, XML, WORD, PDF, CSV, EXCEL formats.	P
2.1	The system must allow an authorized user to drag and drop external files into other software from programs such as emails and MS explorer.	O
3	The system must provide a maintenance GUI to maintain all case records.	E
4	The system must allow an authorized user to create a Case record.	E
4.1	The system must assign a unique Case ID for each newly created Case record.	E
4.2	The system must insert current date as the Case date on newly created Case.	E
4.2.1	The system must allow an authorized user to manually update the Case date.	E
5	The system must provide user with the ability to search for Case(s) based on the search criteria entered.	E
5.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Case(s) not found.	E
5.2	The system must provide the search criteria to find all Case(s) records that have null values in a particular field.	E
5.3	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E

Business Req. No.	• Detailed Requirement Description	Category
5.4	The system must search the following criteria: • Case Number • Case ID • Case County • Case Date • Case Transaction Type • Case Name • Applicant Name • Admin Division • Case Manager Name • Field Reviewer Name • Process Stage • Process time (Case timeline per process stage)	E
5.4.1	The system must allow an authorized user to Enable GIS based case searches by case parcel or case parcel. *NOTE: Requires enforcement of business rule requiring entry of parcels when a case is initiated. Refer to Maintain Case section.*	P
6	The system must allow an authorized user to Add and Display following details to the case: • Case Name • Case Date • State Acres • Acres Offered • Case Project Area (Drop Down List) • Case Admin Division • Trespass Indicator • Trail Indicator • Applicant Name • Case County(s) • Case Manager(s)	E
6.1	The system must allow an authorized user to add one or multiple Counties to a Case.	E
6.2	The system must allow an authorized user to select one or multiple Case Manager Names from the drop down list.	E
6.2.1	The system must populate the following Case Manager details after the selection: • User ID • Work Phone • Office Address • Email	E

Business Req. No.	• Detailed Requirement Description	Category
7	The system must allow an authorized user to select one of the following process stage: • Initiated • Request Field Review • MLMS Review • LERC Action • Review Appraisal • Option/Agreement Signed • Title Commitment • Director Action • Auction Noticed • FWD to AG • AG Opinion • Complete Field Review • Select for LERC • Post LERC Letter • Request Appraisal • Option/Agreement Sent • Document Issued • Transaction Closed • Document Recorded • Record Archived • Cancel	E
7.1	The system must insert the Initial date, date/time stamp, current date and User ID after the selection.	E
7.1.1	The system must allow an authorized user to manually update both Initial and current Date.	E
7.2	The system must allow an authorized user to enter status, status date and comment as the Case moves through the process stages.	E
7.2.1	The system must allow an authorized user to select a Status from the following list: • Approved • Approved with Conditions • Denied • Tabled • Cancelled • LEFF Approved • LEFF Denied	E
7.2.2	When a particular process stage is Complete, the system must provide a user with the ability to check “Complete” check box to indicate/Enable the status field to input any of the above values.	E
7.3	The system must automatically insert some process stages based on user actions.	E

<table>
<tr><th>Business Req. No.</th><th>• Detailed Requirement Description</th><th>Category</th></tr>
<tr><td>7.3.1</td><td>Following table is the list of Process stages currently inserted by the system based on user actions:
<table>
<tr><th>Action</th><th>Process Stage Inserted</th><th></th><th></th></tr>
<tr><td>User Creates a new case and saves.</td><td>Initiated</td><td></td><td></td></tr>
<tr><td>User assigns field reviewers and saves.</td><td>Request Field Review</td><td></td><td></td></tr>
<tr><td>MLMS review is entered and saved.</td><td>MLMS Review</td><td></td><td></td></tr>
</table></td><td>E</td></tr>
<tr><td>7.4</td><td>The system must provide an authorized user with the ability to check/uncheck a “Lock” box to Enable/Disable process stage, status, status date, comment, process stage date fields to prevent loss of data.</td><td>E</td></tr>
<tr><td>7.5</td><td>The system must provide an ability to attach supporting documents/files to the Status Tab and if the document is saved here then it must be automatically saved in case files tab.

NOTE: This will permit the Case Managers to very quickly see the status and check the document that supports it.</td><td>P</td></tr>
<tr><td>8</td><td>The system must provide a separate comments tab to allow an authorized user to Add/Update/Delete a comment and insert date/time stamp and User ID value.</td><td>E</td></tr>
<tr><td>8.1</td><td>The system must provide the user with an ability to enter characters with no pre-set criteria and must display the complete comment.</td><td>E</td></tr>
<tr><td>9</td><td>The system must allow an authorized user to Add and Display following details under Closing details tab:
• Title Commit Number
• Title Commit Date
• Ag Request Number (System generated)
• Future Summer Tax to be paid check box
    ✓ Amount Paid
• Future Winter Tax to be paid check box
    ✓ Amount Paid
• Date/Time stamp value</td><td>E</td></tr>
<tr><td>9.1</td><td>The system must allow an authorized user to check the “Future Summer/Winter tax” check box once the status of the case closing tab is set to “Transaction closed”.</td><td>E</td></tr>
<tr><td>9.1.1</td><td>The system must allow an authorized user to enter the amount (Even if its 0) in the “Amount Paid” field and uncheck the “Future Summer/Winter tax” check box.</td><td>E</td></tr>
</table>

<table>
<tr><th>Business Req. No.</th><th>• Detailed Requirement Description</th><th>Category</th></tr>
<tr><td>10</td><td>The system must allow an authorized user to record key events in the closing process. Some of these events result in a Case Status being automatically inserted. Below is the list of Closing Statuses:
<table>
<tr><th>Closing Status (ID)</th><th>Notes</th><th></th><th></th></tr>
<tr><td>Request to Attorney General</td><td>Automatically generates AG Request Number on closing Details tab. Automatically inserts process stage FWD to AG</td><td></td><td></td></tr>
<tr><td>Attorney General Opinion Returned</td><td>Automatically inserts process stage AG Opinion</td><td></td><td></td></tr>
<tr><td>Check Received</td><td></td><td></td><td></td></tr>
<tr><td>Deed Mailed</td><td></td><td></td><td></td></tr>
<tr><td>Case Closed</td><td>Automatically inserts process stage Transaction Closed</td><td></td><td></td></tr>
<tr><td>Sent to Registrar of Deeds</td><td>Automatically inserts process stage Document Recorded</td><td></td><td></td></tr>
<tr><td>Closing Memo Sent</td><td></td><td></td><td></td></tr>
<tr><td>Final Title Policy Received</td><td></td><td></td><td></td></tr>
</table></td><td>E</td></tr>
<tr><td>10.1</td><td>The system must allow an authorized user to insert multiple Closing status ID’s and enter the Status date, comment and date/time stamp value for each status.</td><td>E</td></tr>
</table>

Business Req. No.	• Detailed Requirement Description	Category
11	The system must allow an authorized user to select a Escrow Closing Service name from the drop down list and Display the following details: • Closing Service Name • Address • Work Phone • Fax Number • Mobile Phone • Name of the Contact • Letter of Engagement Date • Closing Confirmation Letter Date • Special Closing Instructions	E
11.1	The system must allow an authorized user to Create a new Contact for Escrow Closing service record.	E
11.1.1	The system must assign a unique Agent ID for each newly created Escrow Closing service record.	E
11.1.2	The system must allow an authorized user to enter following details for each newly created Escrow Closing service record: • Closing Service Name • Address • Work Phone • Fax Number • Mobile Phone • Main ID – mail code • Active Date • Inactive Date • Comment • Date/Time stamp value	E
11.1.3	The system must allow an authorized user to add/delete a contact to the Escrow Closing Service record.	E
11.1.4	The system must assign a unique contact ID for each newly added contact record.	E
11.1.5	The system must allow an authorized user to add/update/delete following details to a contact record: • First Name • Last Name • Work phone • Email • Mobile • Comment • Date/Time Stamp Value.	E
11.1.6	The system must allow an authorized user to Create a “Letter of Engagement” by populating the closing information on the case and an appropriate date.	E
11.1.7	The system must allow an authorized user to Create a “Closing confirmation Letter” by populating the closing information on the case and an appropriate date.	E

Business Req. No.	• Detailed Requirement Description	Category
12	The system must allow an authorized user to View MLMS reviews imported from the Field Review System with following details: • Commented by • Review Date • Estimated Value per Acre • Comment	P
13	The system must allow an authorized user to Add documents to the case.	E
13.1	The system must allow an authorized user to Delete an existing document from the Case.	E
13.2	The system must allow an authorized user to update a document added to a case.	E
13.3	The system must allow an authorized user to create a new document record.	E
13.3.1	The system must allow an authorized user to Add and display following details on a document: • Document Number • Document date • Transaction Type • Deeded Rights ✓ Parcel ID ✓ Right Name ✓ Right % ✓ Reservation ✓ Reversion • Funds • Parties • Comments	E
13.4	The system must allow an authorized user to Add parcels to the document attached to a case.	E

Business Req. No.	• Detailed Requirement Description	Category
13.4.1	The system must allow an authorized user to view following Parcel details: • Parcel Status • Admin Agency • Certificate Number • Category • Parcel Type • Legal Description • Environmental Status • Building • Water frontage • Project Use • Project Name • Data Source • Date/Time stamp Value • Consolidation Status **Location** • Total Acreage • Ward • Item • County • Legal Description • Street Name & Direction • Jurisdiction ID/Type/Name • Town/Range/Section/Q/QQ/Acreage • Private Claim/Acreage/Whole Lots/Fraction Lots **Subdivision** • Name • CIS Index • Subdivision ID • Block/Lot/Lot Fraction • Whole Lots • Fraction Lots	E

Business Req. No.	• Detailed Requirement Description	Category
13.4.1 Contd..	**Par Number** • Date • Type • Tax Sale Year • Ward • Number **Funds** • Doc ID • Fund % • Fund Code • Fund Name **Description** (Sufficient Characters)	E
13.5	The system must allow an authorized user to Create Parcels to be attached to the document associated with a case. *NOTE: the Create Parcel functionality is ONLY available here. You would not find Create Parcel function anywhere in LOTS system not even in Maintain Parcel window and Maintain Document window.*	E
13.5.1	The system must allow an authorized user to input following information in order to attach a newly created parcel to the document associated with the case Details: (Add/Remove/Update) • Admin Agency • Category • Parcel Type • Environmental Status • Building • Water frontage **Location**(Add/Remove/Update) • Total Acreage • County • Legal Description • Street Name & Direction • Jurisdiction ID/Type/Name • Town/Range/Section/Q/QQ/Acreage • Private Claim/Acreage/Whole Lots/Fraction Lots **Subdivision(**Add/Remove/Update) • Block/Lot/Lot Fraction • Whole Lots • Fraction Lots **Parcel Number**(Add/Remove/Update) • Date • Type • Number	E

Business Req. No.	• Detailed Requirement Description	Category
13.5.1 Contd..	**Funds** • Document ID • Fund % • Fund Code • Fund Name **Description** (Sufficient Characters)	E
14	The system must allow an authorized user to Post/Verify a case.	E
14.1	The system must display the Updated documents and parcels in the Maintain document/parcel windows once the case is Posted.	E
14.2	The system must generate a unique Parcel ID and Document ID once the Case is Posted and must display them on Maintain Parcel/Document windows.	E
14.3	The system must apply all validation rules in order to post a case for processing.	E
15	The system must classify each case user Case manager user type.	E
16	The system must allow an authorized user to save all changes made to the database.	E
17	The system must allow an authorized user to generate reports by counties, parcels, documents, reviews etc.	E
18	**The system must allow an authorized user to search a case using following criteria:** • **Case number** • **Case year** • **Party name** • **Admin Division (Drop down menu)** • **Status (Drop down menu)** **Note: Field officers prefer a simple search page to retrieve case details as opposed to all the search criteria mentioned in requirement 5.4**	**E**
	Maintain Granted Easement Information	
1	The system must provide an interface to maintain Granted Easement information similar to what is currently found in the GEM database.	P
2	The system must have the following features and functionalities provided by GEM database: • Current schedules for easement and timber fees • Ability to distribute review based on project area, and not just county • Form to calculate fees, and what accounts to distribute the fees to • Generate correspondence to applicant acknowledging the application, delivering the bill, and delivering the document. • Generate an easement document that contains custom language based on the type of easement • Generate custom review instructions/reviewers based on the funding source of the land involved in the case	P

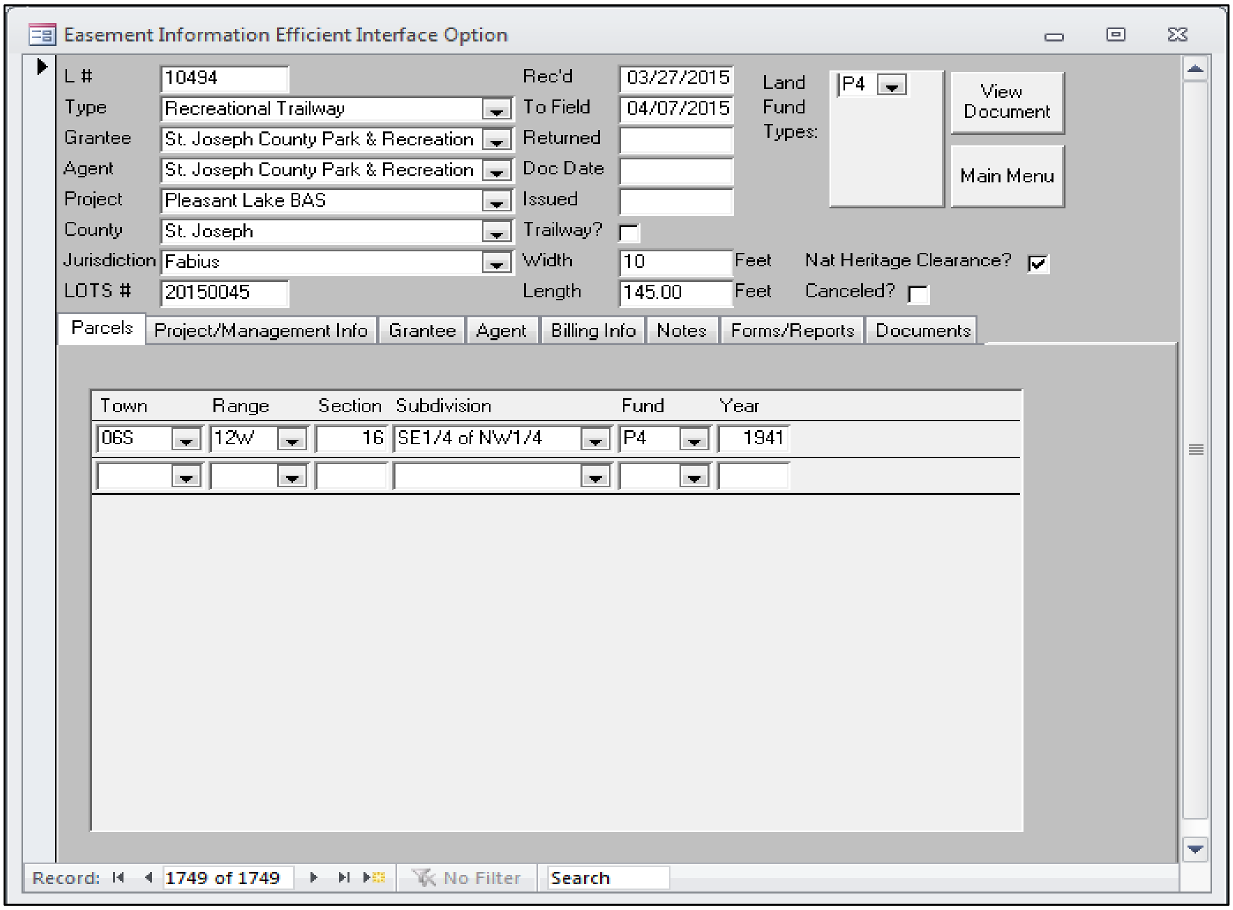
Business Req. No.	• Detailed Requirement Description	Category
	Field Review System Interface	
1	The system must provide an interface to the Field Review system to bring in the Land review information in to LOTS	E
1.1	The system must integrate the land reviews to their respective cases in LOTS and allow an authorized user to view/query the status within LOTS.	E
1.2	The system must import following information from the field review system: • Case Review Start Date • Selected Final Review Information • Final Review Recommendation • Recommendation Date *NOTE: more fields might get added in future.*	P
1.3	The system must consider the Case Review start date as a trigger for "Request Field Review" stage in LOTS.	P

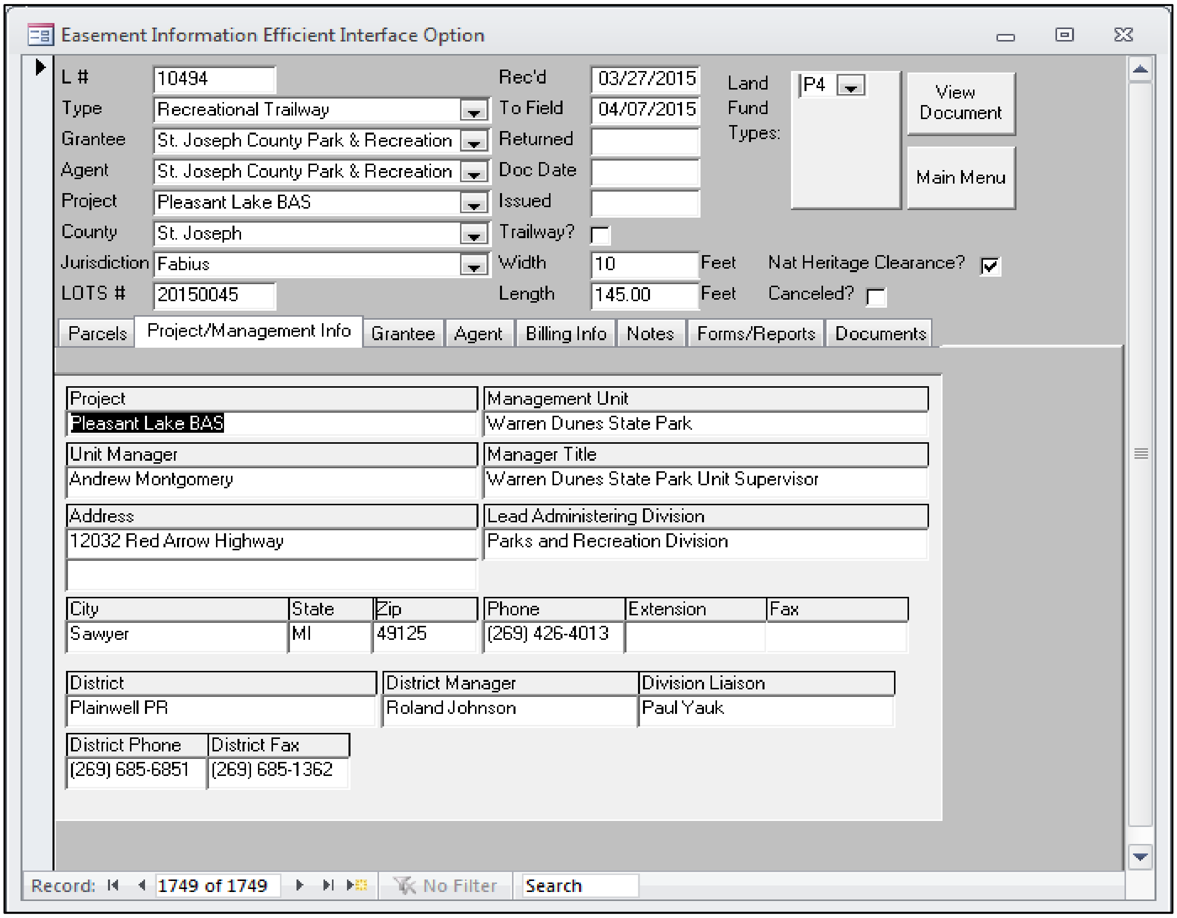
Please refer to the Case Stages spreadsheet for current business practices:

Copy of Summary Case Stage.xlsx

B. AS-IS System Screenshots

Screenshots for GEM:





Easement Information Efficient Interface Option

L #	10494	Rec'd	03/27/2015	Land Fund Types:	P4
Type	Recreational Trailway	To Field	04/07/2015		
Grantee	St. Joseph County Park & Recreation	Returned			
Agent	St. Joseph County Park & Recreation	Doc Date			
Project	Pleasant Lake BAS	Issued			
County	St. Joseph	Trailway?	☐		
Jurisdiction	Fabius	Width	10 Feet	Nat Heritage Clearance?	☑
LOTS #	20150045	Length	145.00 Feet	Canceled?	☐

View Document

Main Menu

Parcels | Project/Management Info | Grantee | Agent | Billing Info | Notes | Forms/Reports | Documents

Project	Management Unit
Pleasant Lake BAS	Warren Dunes State Park

Unit Manager	Manager Title
Andrew Montgomery	Warren Dunes State Park Unit Supervisor

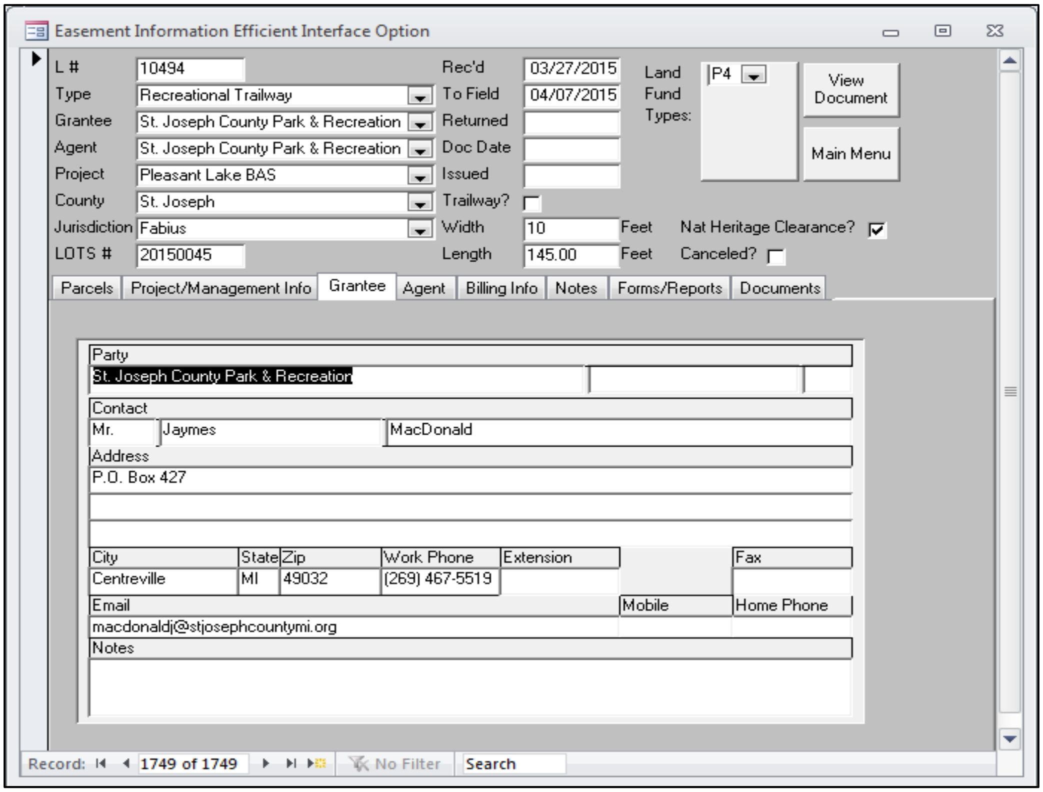
Address	Lead Administering Division
12032 Red Arrow Highway	Parks and Recreation Division

City	State	Zip	Phone	Extension	Fax
Sawyer	MI	49125	(269) 426-4013		

District	District Manager	Division Liaison
Plainwell PR	Roland Johnson	Paul Yauk

District Phone	District Fax
(269) 685-6851	(269) 685-1362

Record: 1749 of 1749 No Filter Search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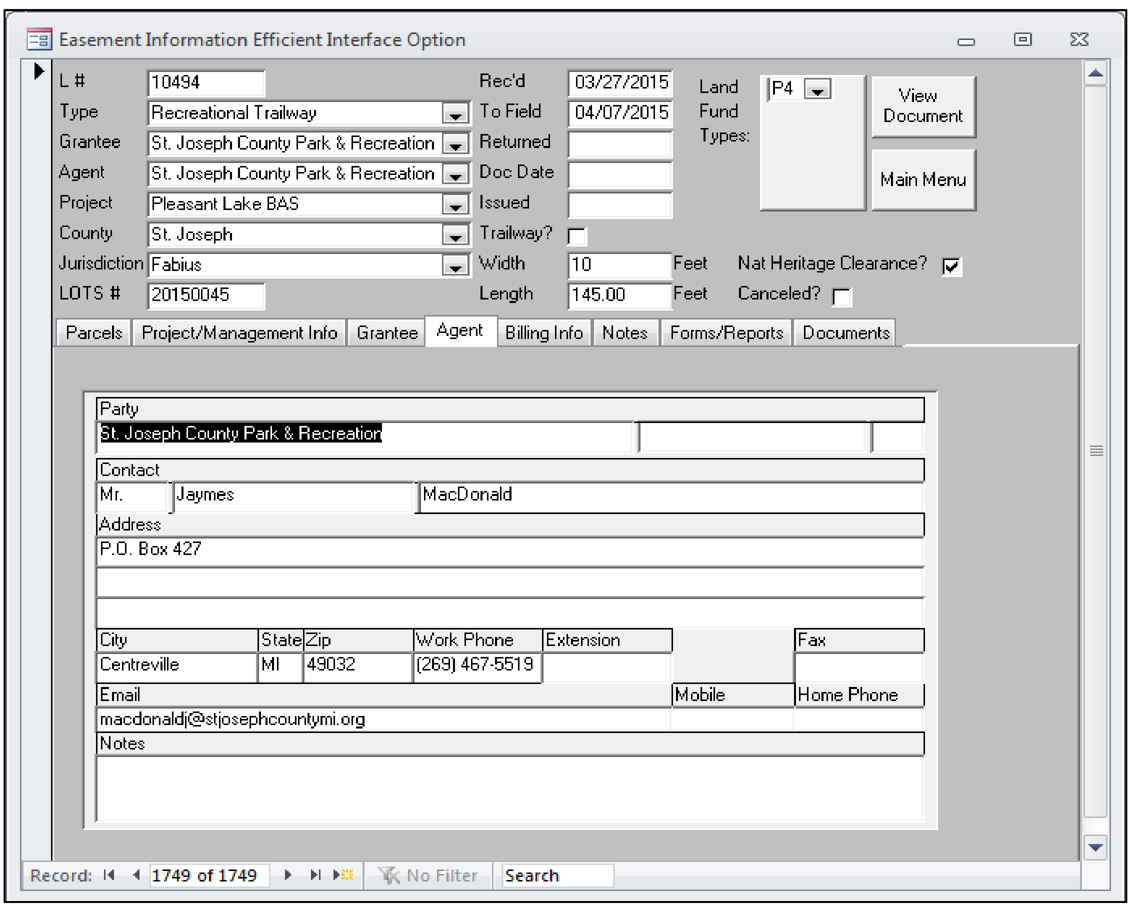
Grantee St. Joseph County Park & Recreation
Agent St. Joseph County Park & Recreation
Project Pleasant Lake BAS
County St. Joseph
Jurisdiction Fabius
LOTS # 20150045
Rec'd 03/27/2015
To Field 04/07/2015
Returned
Doc Date
Issued
Trailway?
Width 10 Feet
Length 145.00 Feet
Land Fund Types: P4
Nat Heritage Clearance?
Canceled?
View Document
Main Menu
Parcels Project/Management Info Grantee Agent Billing Info Notes Forms/Reports Documents
Party
St. Joseph County Park & Recreation
Contact
Mr. Jaymes MacDonald
Address
P.O. Box 427
City State Zip Work Phone Extension Fax
Centreville MI 49032 (269) 467-5519
Email Mobile Home Phone
macdonaldj@stjosephcountymi.org
Notes
Record: 1749 of 1749 No Filter Search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Grantee St. Joseph County Park & Recreation
Agent St. Joseph County Park & Recreation
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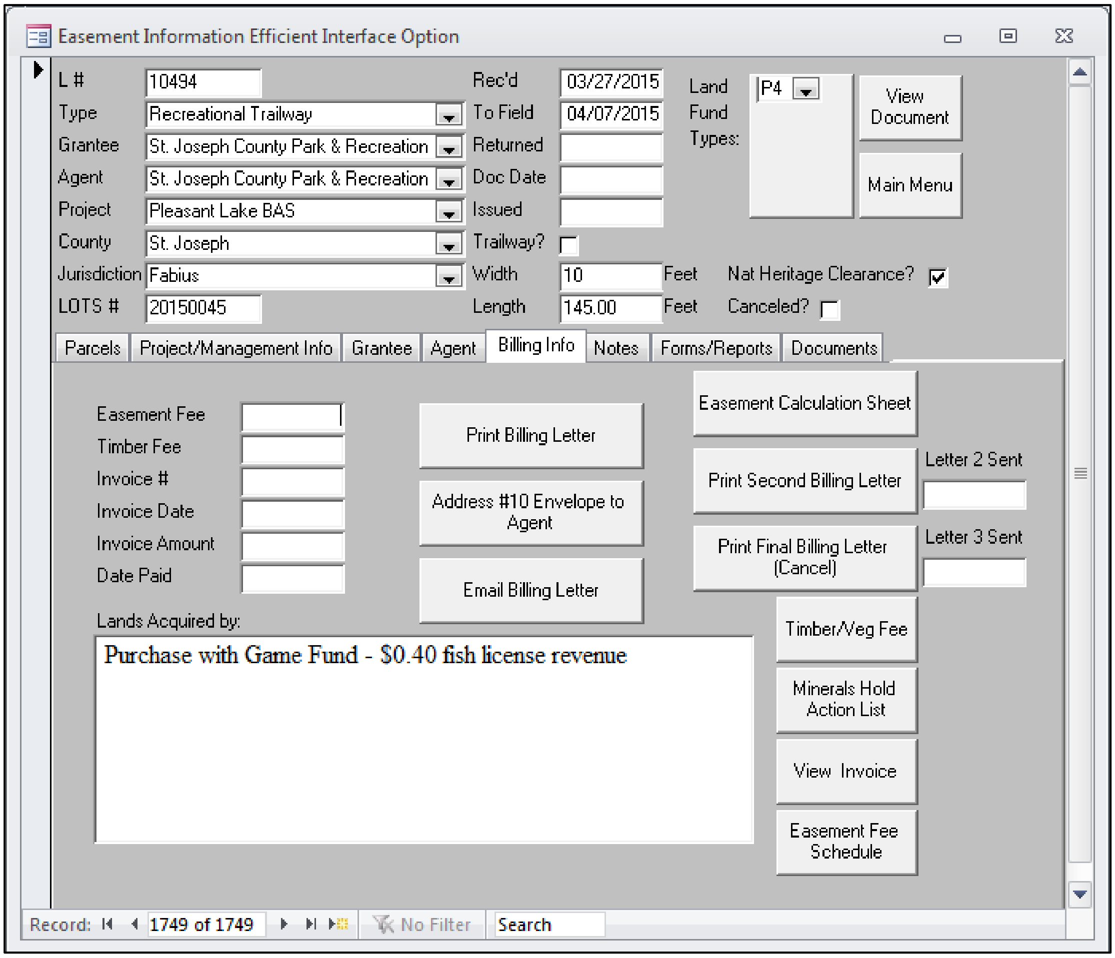
macdonaldj@stjosephcountymi.org
Notes
Record: 1749 of 1749 No Filter Search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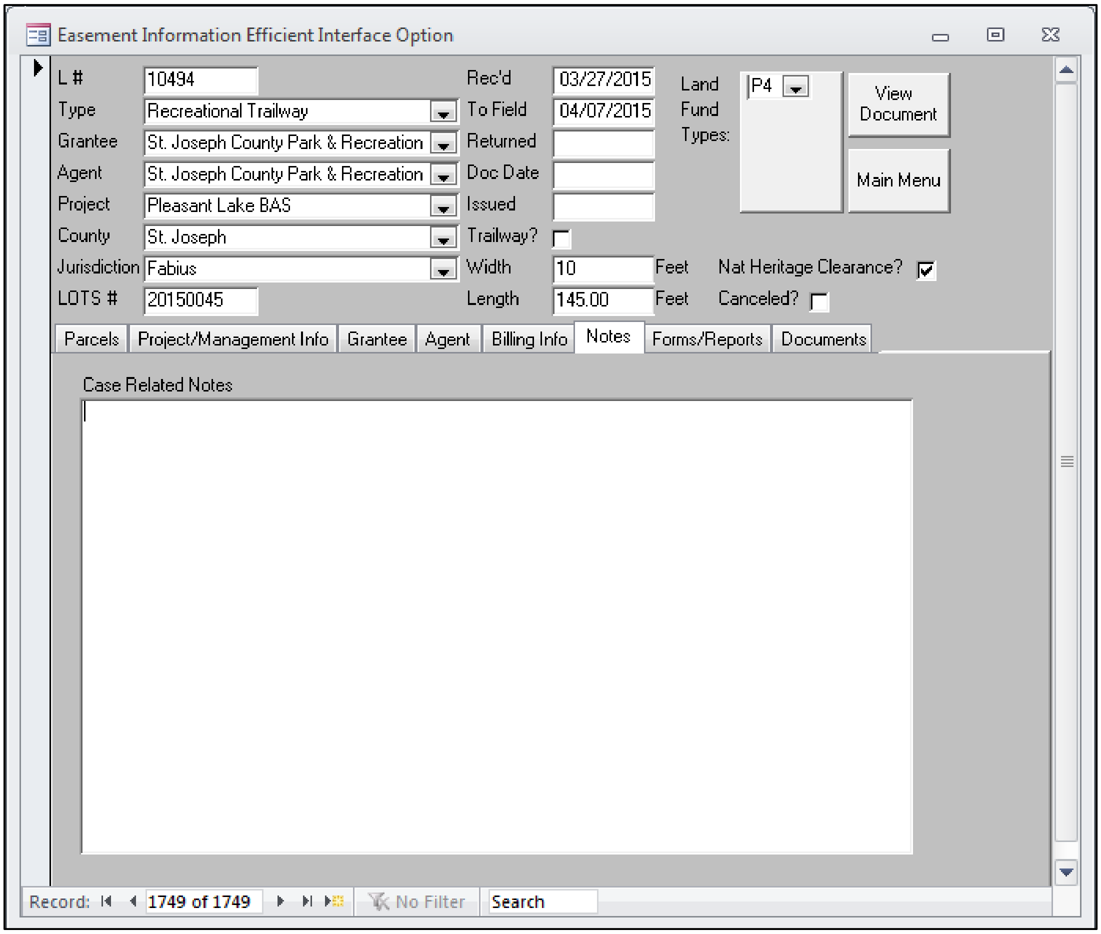
Land Fund Types:
P4
View Document
Main Menu
Nat Heritage Clearance?
Canceled?
Parcels
Project/Management Info
Grantee
Agent
Billing Info
Notes
Forms/Reports
Documents
Easement Fee
Timber Fee
Invoice #
Invoice Date
Invoice Amount
Date Paid
Print Billing Letter
Address #10 Envelope to Agent
Email Billing Letter
Easement Calculation Sheet
Print Second Billing Letter
Letter 2 Sent
Print Final Billing Letter (Cancel)
Letter 3 Sent
Lands Acquired by:
Purchase with Game Fund - $0.40 fish license revenue
Timber/Veg Fee
Minerals Hold Action List
View Invoice
Easement Fee Schedule
Record: 1749 of 1749
No Filter
Search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Recreational Trailway
Grantee
St. Joseph County Park & Recreation
Agent
St. Joseph County Park & Recreation
Project
Pleasant Lake BAS
County
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Width
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Length
145.00
Feet
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Main Menu
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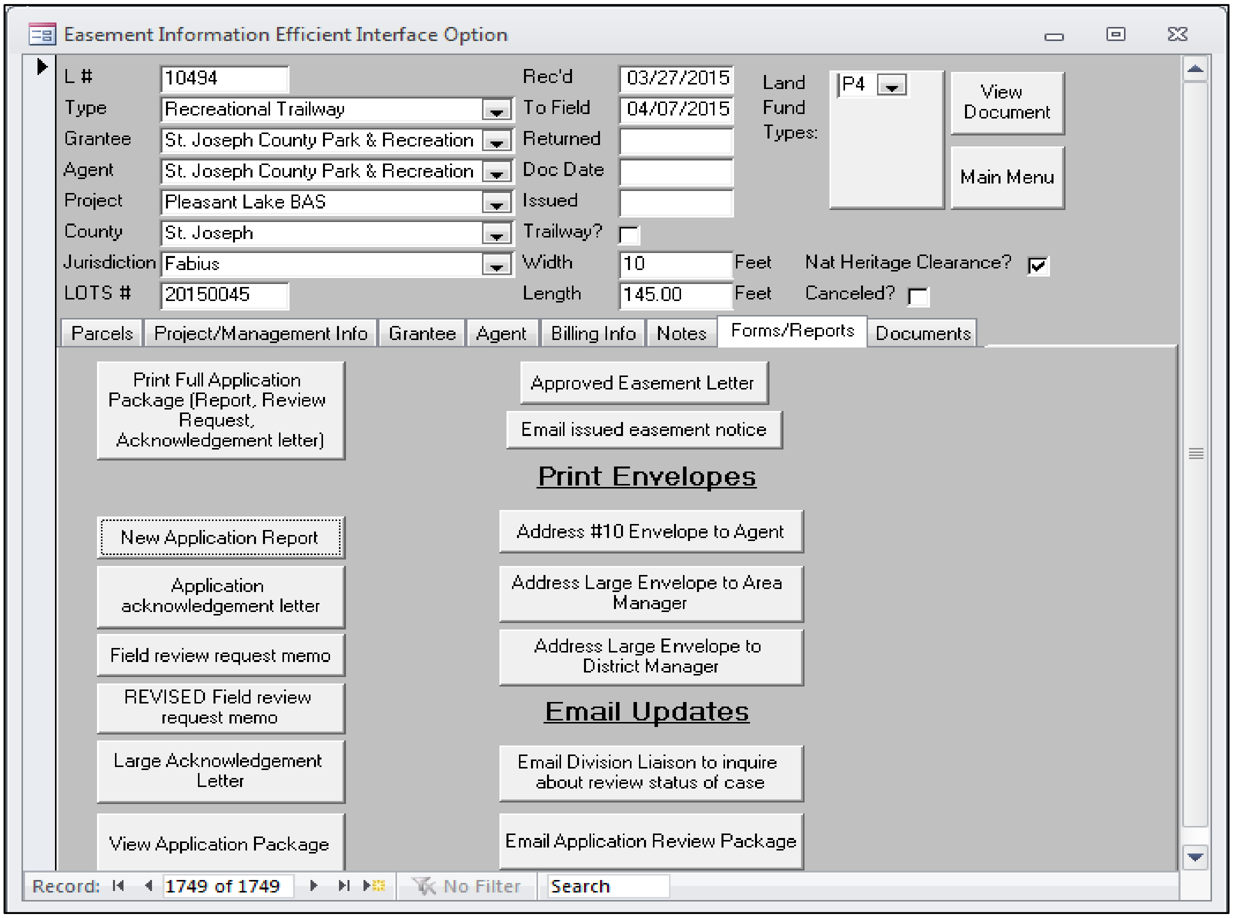
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Grantee St. Joseph County Park & Recreation
Agent St. Joseph County Park & Recreation
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County St. Joseph
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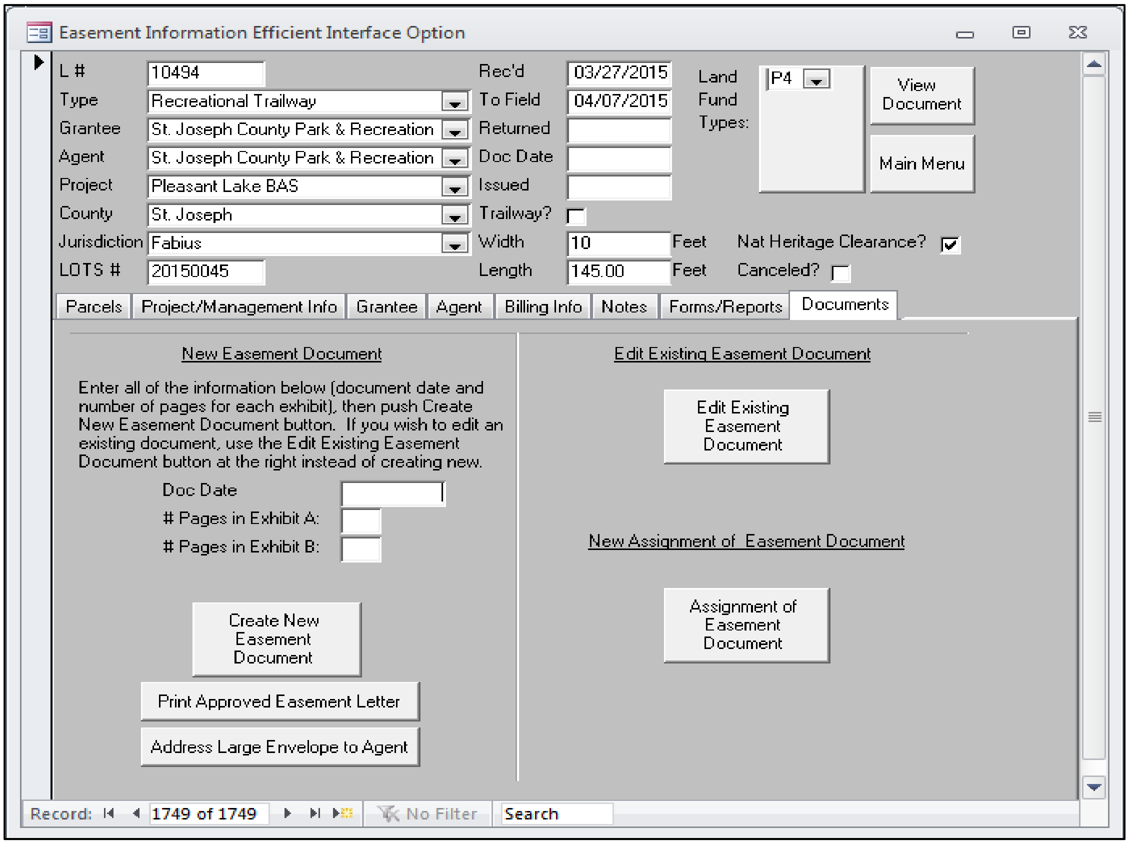
Length 145.00 Feet
Land Fund Types:
P4
View Document
Main Menu
Nat Heritage Clearance?
Canceled?
Parcels
Project/Management Info
Grantee
Agent
Billing Info
Notes
Forms/Reports
Documents
Print Full Application Package (Report, Review Request, Acknowledgement letter)
New Application Report
Application acknowledgement letter
Field review request memo
REVISED Field review request memo
Large Acknowledgement Letter
View Application Package
Approved Easement Letter
Email issued easement notice
Print Envelopes
Address #10 Envelope to Agent
Address Large Envelope to Area Manager
Address Large Envelope to District Manager
Email Updates
Email Division Liaison to inquire about review status of case
Email Application Review Package
Record: 1749 of 1749
No Filter
Search



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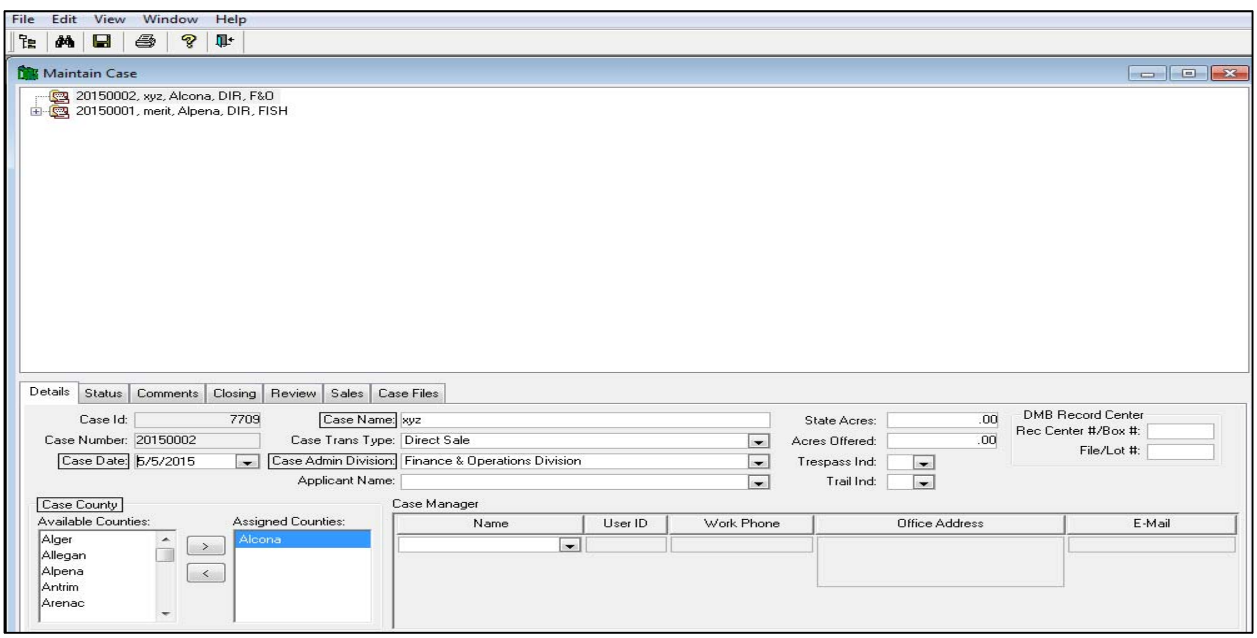

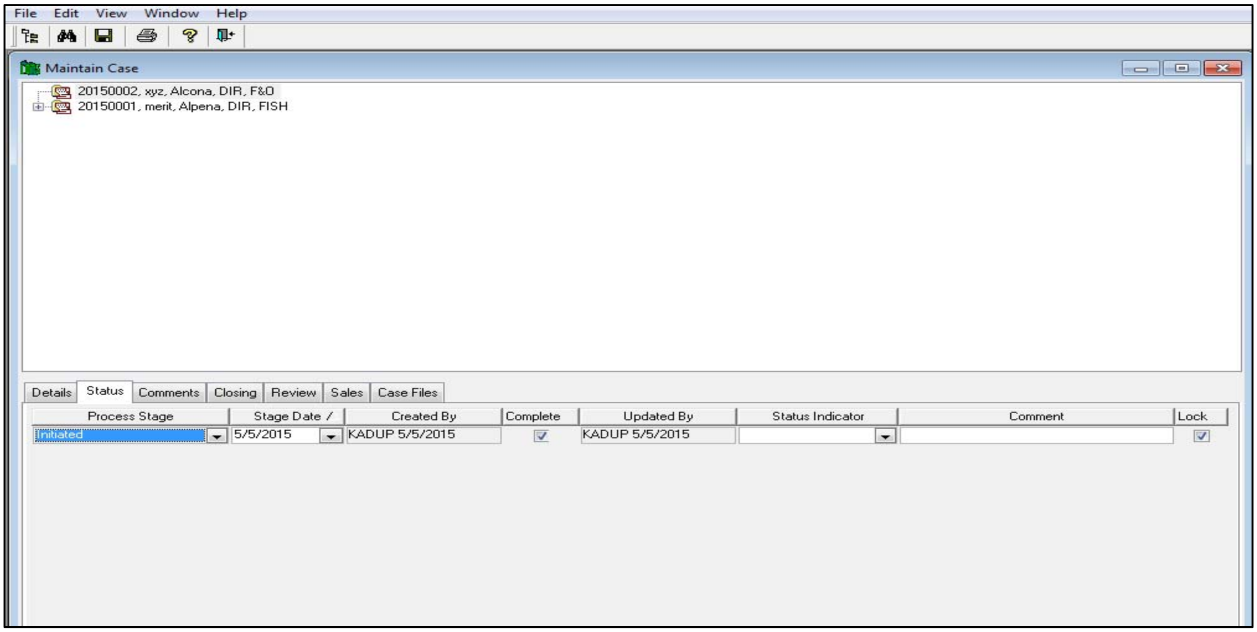
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20150001, merit, Alpena, DIR, FISH
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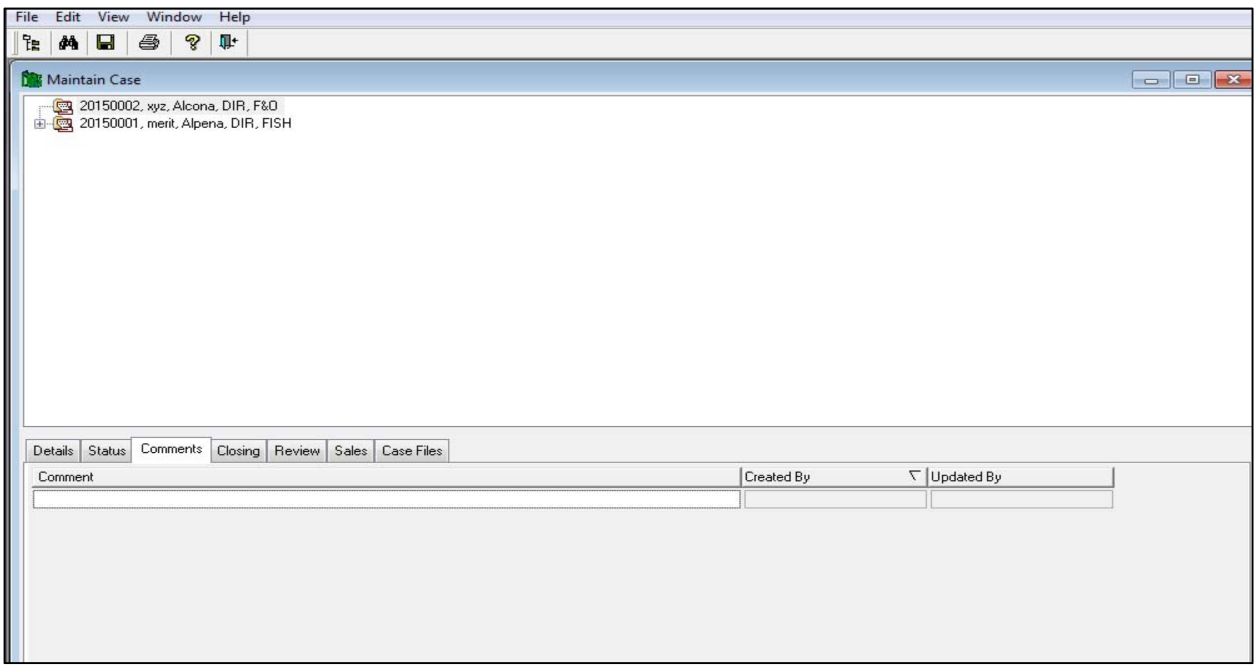
Process Stage Stage Date Created By Complete Updated By Status Indicator Comment Lock
Initiated 5/5/2015 KADUP 5/5/2015 KADUP 5/5/2015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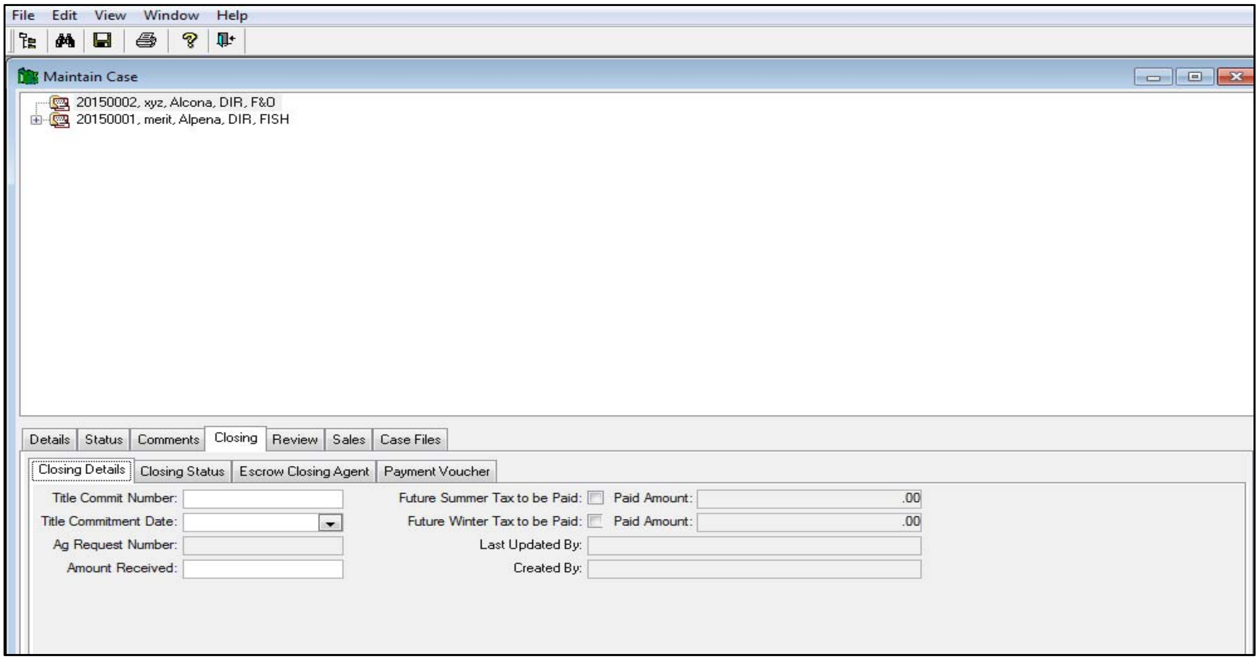
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20150001, merit, Alpena, DIR, FISH
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Status
Comments
Closing
Review
Sales
Case Files
Closing Details
Closing Status
Escrow Closing Agent
Payment Voucher
Title Commit Number:
Title Commitment Date:
Ag Request Number:
Amount Received:
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Paid Amount:
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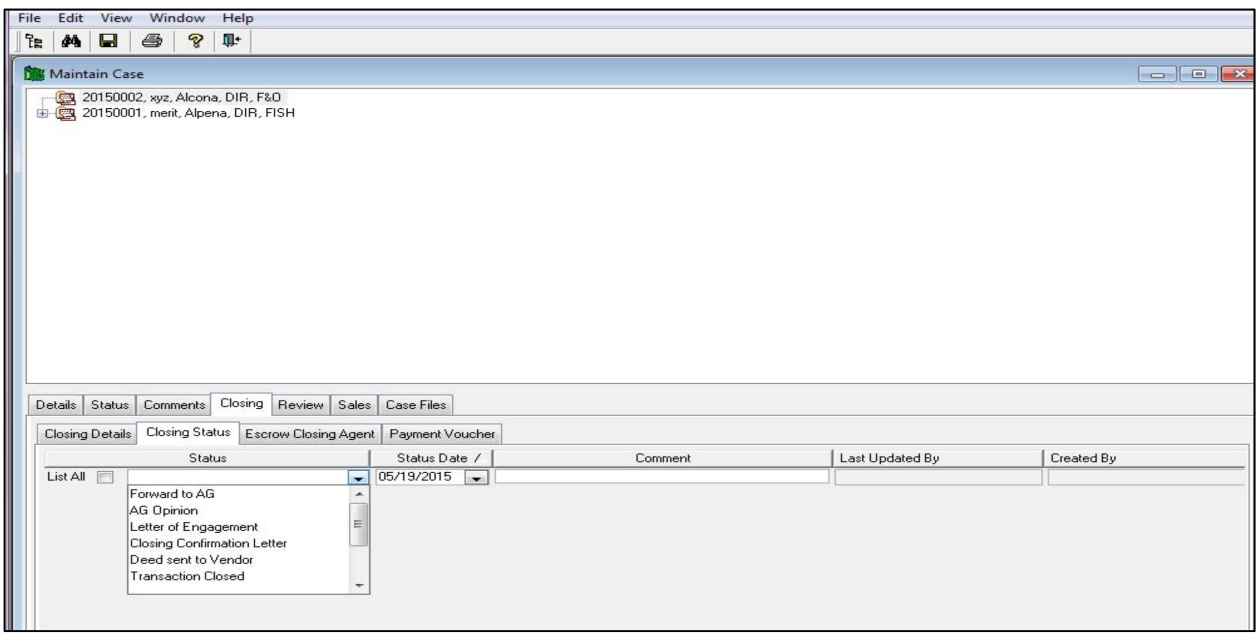
Future Winter Tax to be Paid:
Paid Amount:
.00
Last Updated By:
Created By: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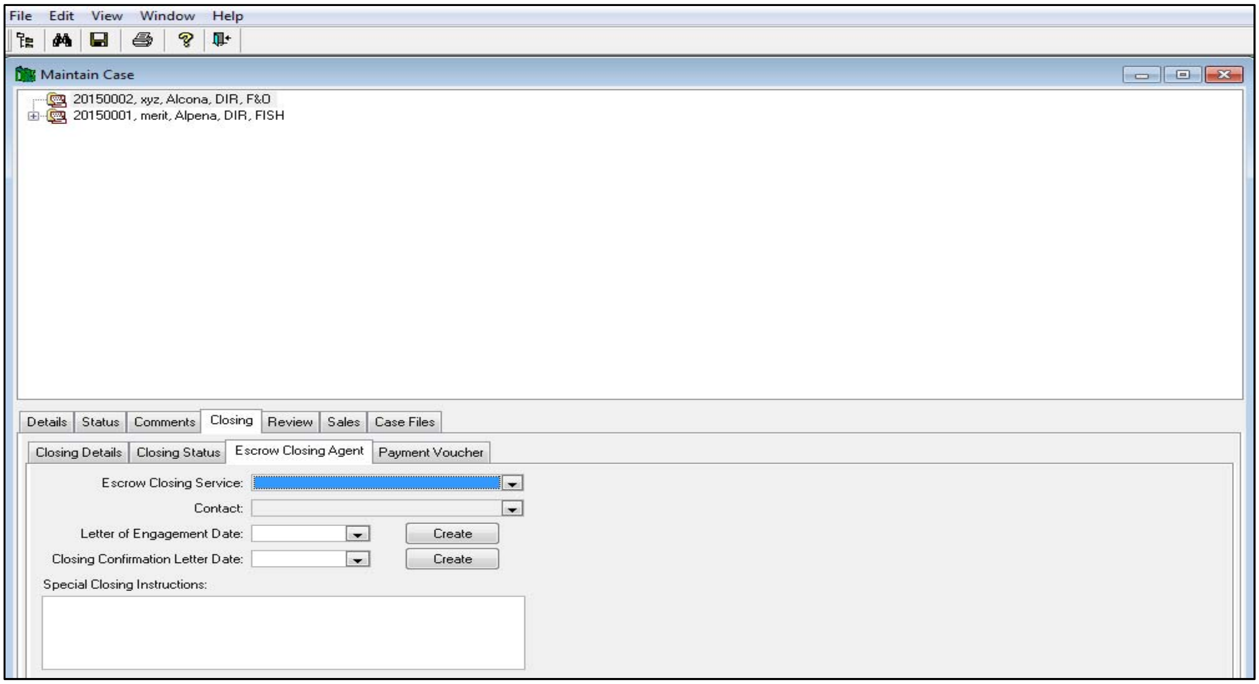
Status
Comments
Closing
Review
Sales
Case Files
Closing Details
Closing Status
Escrow Closing Agent
Payment Voucher
Status
Status Date
Comment
Last Updated By
Created By
List All
05/19/2015
Forward to AG
AG Opinion
Letter of Engagement
Closing Confirmation Letter
Deed sent to Vendor
Transaction Closed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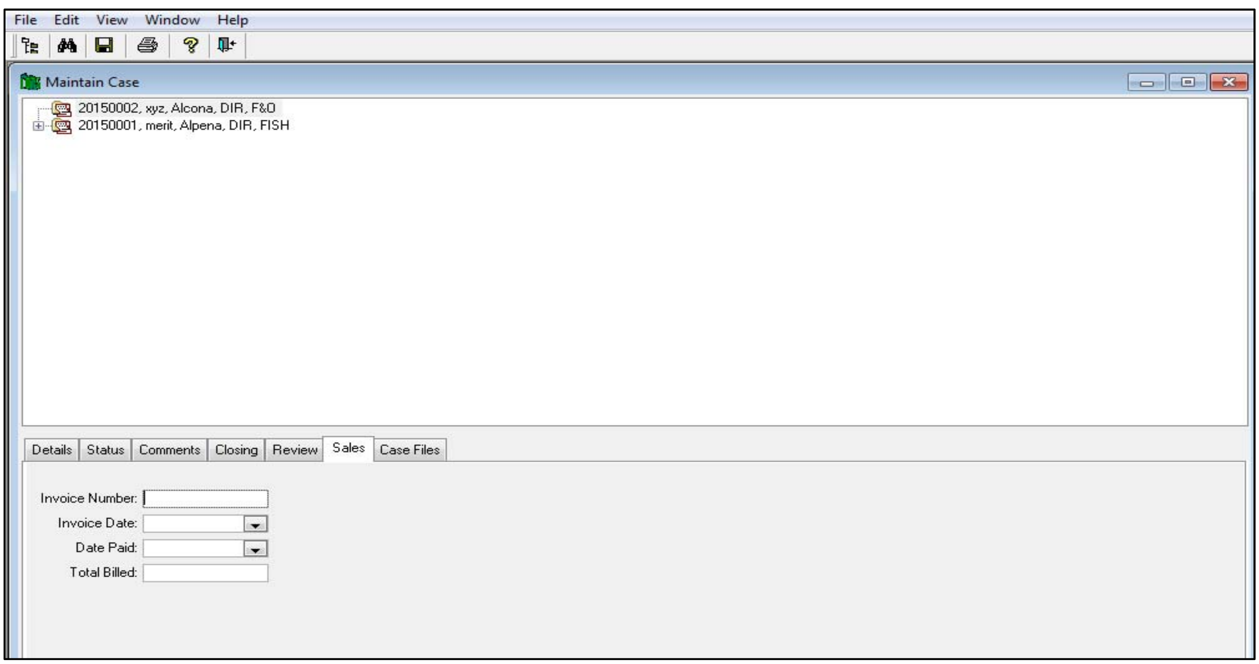
Closing
Review
Sales
Case Files
Closing Details
Closing Status
Escrow Closing Agent
Payment Voucher
Escrow Closing Service:
Contact:
Letter of Engagement Date:
Create
Closing Confirmation Letter Date:
Create
Special Closing Instructions: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Status
Comments
Closing
Review
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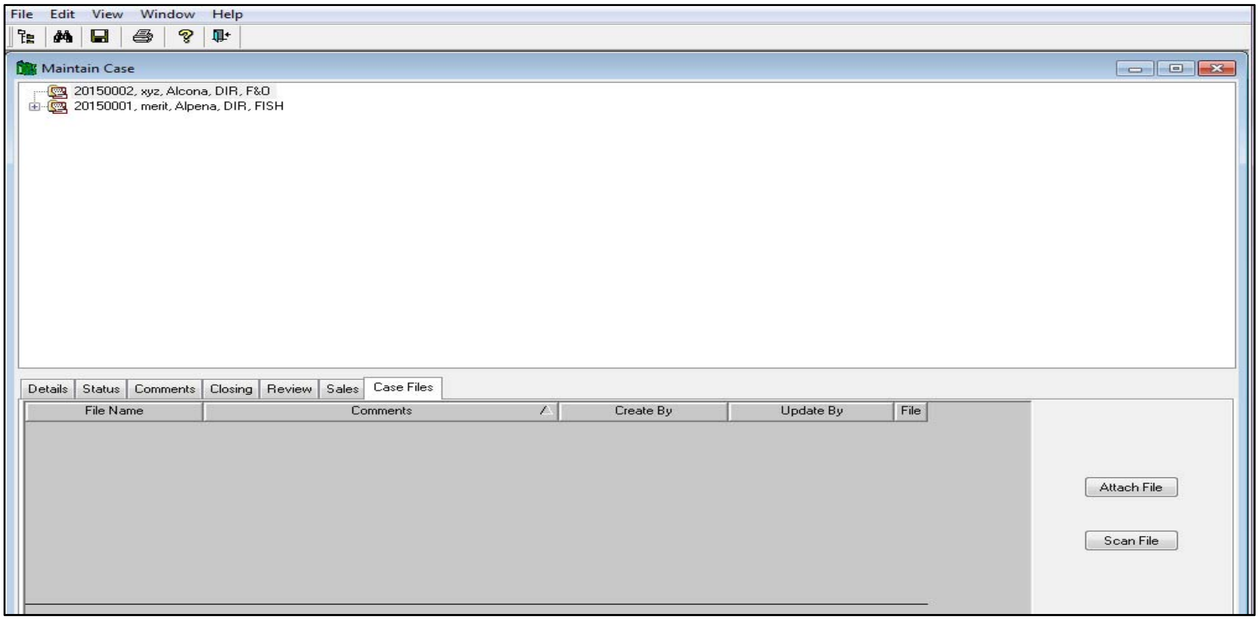
Total Billed:



C. Process Flow Diagram

2015-05-01
Combined Typical CM

19. Exhibit 19 – VMS Interface

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
1	The System must provide both Real-Time Read and Write access to the Vegetative Management System.	E
1.1	The system must provide Write Access ONLY to Add/Modify the Activity and Restriction records on the Parcels associated with the Timber Sale.	E
1.2	The system must provide Secured access to one/multiple Authorized users from VMS.	E
2	The system must allow an authorized VMS user to query the database based on: • Parcels • Documents • Funding sources • Transaction on Parcels • Real Estate Phone Numbers • Legal description of Parcels • Field reviews on Parcels • DNR Ownership • Grid information on Parcels based on Polygons.	E
2.1	The System must Display Parcel details along with its grid information based on the Search Criteria entered.	E
2.2	The System must allow an authorized VMS user to Add/Update the following Activity records for Parcels involved in Timber Sales. • Offered for Timber Sale (This activity must be created when a prospectus has been advertised on Parcel(s) involved in Timber Sale(s)) • Active Timber Sale (This activity must be created when a contract is awarded and it must allow the user to expire “Offered for Timber” Sale activity on the Parcel(s).	E
2.2.1	When the contract is complete, The system must allow an authorized VMS user to expire the “Active Timber Sale” activity on the Parcel(s).	E

Business Req. No.	• Detailed Requirement Description	Category
2.2.2	The system must allow an authorized VMS user to populate the following details on the Activities on the Parcel(s) for Display Purposes: • Offered for Timber Sale ✓ Auction Date ✓ Bid Open Date ✓ DNR Contact Person (Unit Manager) ✓ Phone Number (Unit Manager) ✓ Par ID(s) • Active Timber Sale ✓ Contract Issue Date ✓ Contract Expiration Date ✓ DNR Contact Person (Unit Manager) ✓ Phone Number (Unit Manager) ✓ Par ID(s) ✓ Sale Number ✓ Sale Name *NOTE: This is the Interface for "Information on Timber Sale" mentioned in Exhibit 1 - Maintain Parcel Details user interface requirement # 23*	O(New)
2.3	The system must provide a reporting capability to capture parcel surface acquisition and fund information for an entire Town, Range, Section, Quarter, Quarter Quarter for timber sale fund distribution decisions.	E
2.4	The system must save the changes made to the database.	E

20. Exhibit 20 – Land Disposal

A. Requirements

Business Req. No.	Detailed Requirement Description	Category
	Maintain Parcel Review	
1	The system must provide a maintenance user interface for Parcel Reviews.	E
2	The system must provide user with the ability to search for Parcel(s) based on the following criteria: • Parcel ID • Review Comments • Legal Description • Surface Rights • County • Consolidation Status • Parcel Stage • Parcel Type • Activity • Offer ID • Offer Status • Land Sale ID • Property Info ID • Land Sale Status	E
2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Parcel(s) not found.	E
2.2	The system must provide the search criteria to find all Parcel(s) records that have null values in a particular field.	E
2.3	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E
3	The system must display a list of parcels as a result of the search criteria entered.	E
4	The system must allow an authorized user to view Parcel/document details by RMB option.	E
5	The system must allow an authorized user to view the following details on parcel reviews: • Parcel ID • Land Consolidation Indicator • Legal Description • Local Par number • Local Par number date	E

Business Req. No.	Detailed Requirement Description	Category
6	The system must allow an authorized user to enter the following Review stage for Parcels reviews: • DNR-Record Review • Phase II Review • Local Record Review • Minerals Review • Offered • Appraisal Requested • Value Certified • Review Info • Selection for Auction • Listed for Auction • Listed for Direct Sale • In Closing • Sold	E
6.1	The system must allow an authorized user to insert multiple Review Stages and allow for both manual and automated updates to the Stage date, comment with appropriate date/time stamp value for each stage.	E
7	The system must allow an authorized user to input Review comments on the comments tab. *NOTE: Review comments pertain to the parcel review and are not displayed on a web page.*	E
8	The system must allow an authorized user to assign/remove “Hold” activities on the Parcel(s). *NOTE: These hold activities needs to be compatible with other activities on the parcel(s) in order to assign them to a parcel.*	E
9	The system must allow an authorized user to populate the Latitude/Longitude data on the parcel.	E
9.1	The system must provide a functionality to automatically calculate the Centroid of the Latitude/Longitude data on a Parcel.	E
10	The system must save all the changes made to the database.	E
	Maintain Land Offer	
1	The system must allow an authorized user to maintain Land offer records on the parcel(s).	E
2	The system must allow an authorized user to create a Land offer record.	E
2.1	The system must assign a unique ID for each newly created Land offer record.	E

Business Req. No.	Detailed Requirement Description	Category
3	The system must provide user with the ability to search for Land Offer(s) based on the following criteria: • Land Offer ID • Offer Start Date • Offer End Date • County • Parcel ID's (one or multiple parcels)	E
3.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Land Offer(s) not found.	E
3.2	The system must provide the search criteria to find all Land Offer(s) records that have null values in a particular field.	E
3.3	The system must be able to accommodate for valid number of records the search may retrieve based on the criteria entered by the user and must not affect the system response time.	E
3.4	The system must display a list of Land Offers as a result of the search criteria entered.	E
4	The system must display following details on a land offer record: • Offer ID • Start Date • Thru Date • Note • Date/Time stamp value	E
4.1	The system must automatically input the Start date as the Current date on a newly created Land Offer record. *Note: The Start date is the trigger to populate the Land Offer parcels on internet web page for Land sale. The Thru date is not required but if entered it acts as a trigger to remove the Land offer parcels from the internet. The Note field once updated by the user can be displayed on the land offer parcels on the internet.*	E
4.1.1	The system must allow an authorized user to manually update the Start Date.	E
5	The system must allow an authorized user to attach parcel(s) to a Land Offer record.	E
6	The system must allow an authorized user to delete a parcel from the Land Offer record.	E
7	The system must allow an authorized user to set a parcel status to: • Active • Withdrawn • Disposed	E
7.1	In case a parcel with an offer status of Active is added to the parcel list, the system must generate an "Attached to Land Offer" activity on the parcel.	E
7.2	In case a parcel with an offer status of Active is deleted from the parcel list, the system must remove "Attached to Land Offer" activity from the parcel.	E

Business Req. No.	Detailed Requirement Description	Category
7.3	The system must remove "Attached to Land Offer" activity from the parcel; In case an authorized user changes the Land Offer status on a Parcel from "Active" to any other Status like Withdrawn or Disposed.	E
7.4	The system must generate a "Attached to Land Offer" activity added to the parcel; In case an authorized user changes the Land Offer status on a Parcel from Withdrawn, Disposed to an "Active Status".	E
7.5	The system must allow an authorized user to use "Add/Update Parcel Notes" pop up menu option in case a Parcel is "Withdrawn" from a Land Offer.	E
7.5.1	The system must throw an error message in case the user does not add/update notes.	E
7.6	The system must check • The Land Consolidation status of the parcel • Surface Rights • Mineral Reviews In order to allow a parcel to be added to the Land Offer.	E
7.7	The system must allow an authorized user to set the status of the parcel to "Pending" in case any of the above criteria is not satisfied.	E
7.8	The system must not allow an authorized user to attach parcel(s) to a Land offer that are already attached to another Land offer.	E
7.9	The system must not allow an authorized user to attach parcel(s) that are already attached to a Land sale record.	E
7.10	The system must provide a • Quick link to Display Parcel/Document Details • Quick link to Display Parcel Reviews	E
8	The system must save any changes made to the database.	
	Maintain Property Information	
1	The system must allow an authorized user to maintain property information records on the parcel(s).	E
2	The system must allow an authorized user to create a property information record.	E
2.1	The system assign a unique ID for each newly created property information record.	E
3	The system must provide user with the ability to search for property information based on the following criteria: • Property information ID • Property information Date • Parcel ID's (Multiple Parcels) • County • Land Sale ID • Created by	E

Business Req. No.	Detailed Requirement Description	Category

4	The system must allow an authorized user to View and Edit following details on a Property information record:
	• Property information ID(Display only)
	• Size(Acres)
	• Minimum Amount
	• Property Information Date
	• Parcel ID
	• Frontage
	• Utilities
	• Cover
	    ✓ Mixed
	    ✓ Open
	    ✓ Forested
	• Property Description
	• Location
	• Improvements & Conditions
	• Environmental Concerns
	• Comments
		E

5	The system must allow an authorized user to attach parcel(s) to a property information record.	E
6	The system must allow an authorized user to delete parcel(s) from a property information record.	E
7	The system must populate the property description field on details tab when a user adds a parcel to the property information record.	E
8	The system must throw a warning message "The description has been altered or parcels have been assembled as a sale unit. Please verify description with the Closing Manager." will be displayed anytime parcels are added or removed from the Property Information record.	E
9	The system must not allow an authorized user to delete a parcel in case a parcel is listed for Land sale.	E
10	The system must allow an authorized user to attach one or multiple photos of the parcel to the property information record.	E
10.1	The system must allow an authorized user to verify the photos and provide an option to publish/un-publish on the web.	E

Business Req. No.	Detailed Requirement Description	Category
11	The system must allow an authorized user to enter following property information conditions : • Reservation • Disclaimer • Restriction • Disclosure • Deed conditions	E
12	The system must allow an authorized user to “Split property information” record if it has at least 2 parcels associated to it.	E
12.1	The system must allow an authorized user to categorize the Split property information record by selecting the parcels to be added in that property info record.	E
12.2	The system must allow an authorized user to attach photos of the parcel(s) to any child property info records.	E
13	The system must allow an authorized user to generate a Property Info Detail Summary report to display following details: • Property ID • Par ID • Location • Acres • Price • Sorted by Property ID	E
14	The system must save all changes made to the database.	E
	Land Disposal Reporting	
1	The system must allow an authorized user to generate Ad-hoc Query based Disposal Reports for: • Sale Info List • Sale Info Detail	E
1.1	The system must allow an authorized user to generate Ad-hoc Query based disposal Reports for: • Land Offer Status Report (In Print menu) • Land Auction Parcel Report (In Print menu) • Land Auction Sales Report (drawing Sales info from RPS/MICARS interface)	P

<table>
<tr><th>Business Req. No.</th><th>Detailed Requirement Description</th><th>Category</th></tr>
<tr><td>2</td><td>The system must allow an authorized user to generate Pre-defined Disposal reports for:
Auction Reference report
✓ Land sale date
Immediate Purchase properties
✓ County code (Hide Minimum Amount)
Sale List Report
✓ Land Sale date (Hide Minimum Amount)</td><td>E</td></tr>
<tr><td>2.1</td><td>The system must allow an authorized user to generate Pre-defined Disposal reports for:
Annual Sales Summary
✓ Calendar Year
Field Update by County
✓ Doc Date Range
✓ County</td><td>P</td></tr>
<tr><td>3</td><td>The system must allow an authorized user to generate Parcel Latitude/Longitude reports either through LOTS or GIS.</td><td>P</td></tr>
<tr><td>4</td><td>The system must allow an authorized user to generate Audit Pre-defined report for:
Land Consolidation Summary report
✓ From Date
✓ To Date</td><td>E</td></tr>
<tr><td></td><td>Maintain Land Sale</td><td></td></tr>
<tr><td>1</td><td>The system must provide a user interface to maintain Land sale records.</td><td>E</td></tr>
<tr><td>2</td><td>The system must allow an authorized user to search a land sale record by entering one or more of the following information:
Land Sale ID
Auction Start Date
Auction End Date
Direct Sale Start Date
Direct Sale End Date
Parcel ID’s (Multiple Parcels)
County
Property Info ID</td><td>E</td></tr>
<tr><td>2.1</td><td>The system must validate the criteria entered by the user and throw appropriate error message in case of “invalid criteria” or “Land sale not found”.</td><td>E</td></tr>
<tr><td>2.2</td><td>The system must provide the search criteria to find all land sale records that have null values in a particular field.</td><td>E</td></tr>
<tr><td>2.3</td><td>The system must consider all the find land sale criteria entered by user as a single condition rather than a nested condition for search.</td><td>E</td></tr>
<tr><td>3</td><td>The system must allow an authorized user to create a new land sale record.</td><td>E</td></tr>
</table>

Business Req. No.	Detailed Requirement Description	Category
3.1	The system must assign a unique ID for each newly created Land sale record.	E
4	The system must display following details on a land sale record: • Land sale ID • Auction Start Date • Auction Thru Date • Bid Open Date • Direct Sale Start Date • Direct Sale Thru Date • Notes (Virtually unlimited characters) • Date/Time stamp	E
5	The system must allow an authorized user to edit the land sale records.	E
6	The system must allow an authorized user to add one or more parcels to a land sale record	E
6.1	The system must assign a sale status of Pending to a newly added parcel.	E
7	The system must allow an authorized user to delete a parcel from the land sale record.	E
8	The system must allow an authorized user to add/update notes on each parcel attached to a land sale.	E
9	The system must allow an authorized user to assign the status of "Active" to parcel when business rules are met.	E
9.1	The system must change the offer status of parcel from "Active" to "public Sale" and remove "Attached to Land offer" activity if any.	E
10	The system must allow an authorized user to assign Withdrawn/Disposed status to a parcel and/or change the Active status to Withdrawn/Disposed.	E
10.1	The system must allow an authorized user to add/update notes on the parcel explaining the reason for withdrawal.	E
10.2	The system must remove the "Attached to Land Sale" activity on the withdrawn parcel.	E
11	The system must allow an authorized user to change the Withdrawn/Disposed status on a parcel to Active.	E
11.1	The system must assign the "Attached to Land Sale" activity on the parcel.	E
12	The system must allow an authorized user to display parcel details on each parcel by providing a quick link to the display parcel details user interface.	E
13	The system must allow an authorized user to display document details on each parcel by providing a quick link to the display document details user interface.	E
14	The system must allow an authorized user to display property info details on each parcel by providing a quick link to the display property info details user interface.	E

Business Req. No.	Detailed Requirement Description	Category
15	The system must consider the Auction start date as a trigger and required condition for display of land sale properties on the internet Auction page. Note: Auction web Page interface is out of scope for this system.	E
15.1	The system must consider the Auction Thru date as a trigger and required condition for removal of land sale properties on the internet Auction page.	E
15.2	The system must consider the Direct Sale Start date as a trigger and required condition for display of property records on the internet land sale page. Note: Land sale web Page interface is out of scope for this system.	E
15.3	The system must consider Direct sale Thru date as a trigger for removal of property records from the internet land sale web page.	E
15.4	The system must allow an authorized user to add/edit/view notes on auction and or land sale record and must not display it on the internet auction and or land sale web pages.	E
16	The system must allow an authorized user to display parcel details by providing a quick link to the display parcel details user interface.	E
17	The system must allow an authorized user to display document details by providing a quick link to the display document details user interface.	E
18	The system must allow an authorized user to display property info details by providing a quick link to the display property info details user interface.	E
19	The system must allow an authorized user to generate canned reports of land sale records with all the details and parcels attached to the land sale.	E
20	The system must allow an authorized user to save any changes made to the database.	E

21. Exhibit 21 – Land Transaction Reporting

A. Requirements

Business Req. No.	Detailed Requirement Description	Category
1	The system must provide 2 kinds of reporting capabilities: • Ad-hoc Query based reporting • Standard Pre-defined reporting.	E
1.1	Ad-hoc Query Based reporting must consider all the search criteria entered by an authorized user to return specific values for the result.	E
1.2	The system must allow an authorized user to generate Pre-defined reports from all Maintenance user interfaces.	E
	Land Disposal Reporting	
1	The system must allow an authorized user to generate Ad-hoc Query based Disposal Reports for: • Sale Info List • Sale Info Detail	E
1.1	The system must allow an authorized user to generate Ad-hoc Query based disposal Reports for: • Land Offer Status Report (In Print menu) • Land Auction Parcel Report (In Print menu) • Land Auction Sales Report (drawing Sales info from RPS/MICARS interface)	P
2	The system must allow an authorized user to generate Pre-defined Disposal reports for: • Auction Reference report ✓ Land sale date • Immediate Purchase properties ✓ County code (Hide Minimum Amount) • Sale List Report ✓ Land Sale date (Hide Minimum Amount)	E
2.1	The system must allow an authorized user to generate Pre-defined Disposal reports for: • Annual Sales Summary ✓ Calendar Year • Field Update by County ✓ Doc Date Range ✓ County	P
3	The system must allow an authorized user to generate Parcel Latitude/Longitude reports either through LOTS or GIS.	P

Business Req. No.	Detailed Requirement Description	Category

4	The system must allow an authorized user to generate Audit Pre-defined report for:
	• Land Consolidation Summary report
	  ✓ From Date
	  ✓ To Date
		P

	Maintain Parcel Reports	
1	The system must allow an authorized user to generate Ad-hoc query based Parcel reports for: • Parcel List report • Parcel detail report • Parcel Easement report • Parcel Genealogy report • Parcel Land Exam report • Blank Parcel Land Exam report • Parcel Disclosures report • WSFR Purchase report	E
1.1	The system must allow an authorized user to generate any Ad-hoc query that utilizes GIS shape for part of the search criteria.	P

2	The system must allow an authorized user to generate Pre-defined Parcel reports for:
	• Forest Inventory Section Acreage Summary
	  ✓ Town
	  ✓ Range
	  ✓ Section
	• Land Consolidation Status
	  ✓ County
	  ✓ Classification
	• Parcel Acreage Report
	• Parcels with No Rights
	  ✓ Transaction Type
	• Purchased Parcels for SURFACE/MINERAL
	  ✓ Through Date
	• Purchased Parcels for SURFACE/MINERAL in Date Range
	  ✓ Start Date
	  ✓ Through Date
	• Purchased Parcels All details SURFACE/MINERAL in Date Range
	  ✓ Start Date
	  ✓ Through Date
	• Purchased Parcels some details SURFACE/MINERAL in Date Range
	  ✓ Start Date
	  ✓ Through Date
	• Purchased Parcels for MINERAL only
	  ✓ Through Date
	• Purchased Parcels for MINERAL only in Date Range
		E

Business Req. No.	Detailed Requirement Description	Category
	✓ Start Date ✓ Through Date • Fund Acq/Disp to Date ✓ Through Date ✓ Fund code • Fund Acq for Game areas • Fund Acq/Disp in Date Range ✓ Start Date ✓ Through Date ✓ Fund Code • Fund 4D or 7 Acq for State Parks • Project Summary by County ✓ Project • Parcels Acreage by Project summary ✓ County ✓ From Date ✓ To Date • Parcels Acreage by County summary ✓ From Date ✓ To Date • Parcels Acreage by Fund summary ✓ County ✓ From Date ✓ To Date • Parcels Acreage by Transaction – Type summary ✓ County ✓ From Date ✓ To Date • Parcel Acq/Disp Trans & Funding by Project ✓ Start Date ✓ Through Date	E

Business Req. No.	Detailed Requirement Description	Category
	• Parcel Acq/Disp Trans by Project for a Fund Start Date Through Date Fund Code • Parcel Acq/Disp Trans & Funding by Project for a Division Start Date Through Date Division • Parcel Acq/Disp Trans & Funding by Fund Start Date Through Date • Parcel Acq/Disp Trans & Funding by Document ID Start Date Through Date • Land Transaction by Type and Document Date Transaction Type Start Date Through Date • Land Transaction by Public Act and Document Date Public Act Start Date Through Date • Land Transaction summary by Public Act and Document Date Public Act Start Date Through Date • Payment Received for sold Parcels	E
	• Find Exchange Parcels ✓ Parcel ID • Parcel Acreage report	
3	The system must allow an authorized user to generate Parcel Acreage report by multiple selected areas like: • Project • County • GIS Polygon *NOTE: More areas might be added to have specific reports.*	P
	PA240 based Reports	
1	In accordance with part 503 of PA240 subsection (3) and (4), The system must allow an authorized user to generate reports to maintain total amount of land after acquisition/sale/transfer to reflect the surface rights and to split reporting based on a defined North/South line.	E

Business Req. No.	Detailed Requirement Description	Category
2	In accordance with part 503 of PA240 subsection (5), The system must allow an authorized user to generate reports on surface rights that does not include subsection (5) (a) to (c) and to split reporting based on a defined North/South line.	E
3	In accordance with part 503 of PA240 subsection (5) (a) to (c), The system must allow an authorized user to generate reports with following details: • Location • Acreage • Date Of Acquisition • Use of Land and to split reporting based on a defined North/South line.	E
3.1	In accordance with the above Act, The system must allow an authorized user to Generate and publish reports on Web with following information: A. The number of acres of land, including land as described in subsection (5), in which the department owns surface rights 1. North of the Mason-Arenac line, 2. South of the Mason-Arenac line 3. In total for this state, and by program. B. The number of acres of land, excluding land as described in subsection (5), in which the department owns surface rights 1. North of the Mason-Arenac line 2. South of the Mason-Arenac line 3. In total for this state, and by Program. C. Allow publication of custom query within a standard format.	E
4	In accordance with part 503 of PA240 subsection (8), The system must allow an authorized user to generate reports that specify and update Regions with multiple counties.	E
	Reports for Real Estate Manager	

<table>
<tr><th>Business Req. No.</th><th>Detailed Requirement Description</th><th>Category</th></tr>
<tr><td>1</td><td>The system must allow an authorized user to generate Case Manager Status reports with the following details:
Case #
Case Date
Case Name
Case Transaction Type
Case Admin Division
Case Project
Current Stage
Current Stage Date
The arguments are as follows:
Case Manager
Case Date range
Case Admin Division
Active/Inactive Cases.
NOTE: These reports should capture arguments as header.</td><td>E</td></tr>
<tr><td>2</td><td>The system must allow an authorized user to generate Land Transaction Status Report with following details:
Case #
Case Date
Case Name
Case Status
Case Admin Division
Case Project
Location (County, Jurisdiction, TRS)
Transaction type
Current Stage
Case Manager
The arguments are as follows:
Case Date range
Case Admin Division(Optional)
NOTE: The report would sort by these above selected criteria.</td><td>E</td></tr>
</table>

Business Req. No.	Detailed Requirement Description	Category
3	The system must allow an authorized user to generate Division Land Transaction Report with following details: • Case # • Case Date • Case Name • Case Admin Division • Case Project • Current Stage • Case Manager The arguments are as follows: • Case Date Range(required) • Case Admin Division *NOTE: The report should sort by Current stage and or user.*	E
4	The system must allow an authorized user to Print • Case Manager Status reports • Land Transaction Status Report • Division Land Transaction Report and provide a RMB option to export these reports to MS EXCEL.	E
	Case Processing Reports	
1	The system must allow an authorized user to generate Ad-hoc Query-based Reports based and Enable find cases for the "most recent Process Stage date" within a date range	E
2	The system must allow an authorized user to Enable GIS based case searches by case parcel or case case parcel. *NOTE: Requires enforcement of business rule requiring entry of parcels when a case is initiated. Refer to Maintain Case section in this Exhibit.*	P
3	The system must allow an authorized user to add a button that lets the user export the results to PDF and MS Office products.	E
4	The system must allow an authorized user to generate the following Pre-defined reports: • Future Summer Winter Taxes • Completed Transactions • Start Date • Through Date	E
5	For all Ad-hoc query based reports, The system must allow an authorized user to make columns invisible, sort by columns, and export or print the result.	E
	Appraisal Reports	

Business Req. No.	Detailed Requirement Description	Category
1	The system must allow an Appraisal Reviewer to generate a report with Parcel details from Case Parcel or Case Case Parcel records.	E

Please refer to the PA 240 Act part 503 for more information on Reporting requirements for PA240:

http://legislature.mi.gov/doc.aspx?mcl-324-503

22. Exhibit 22 – LEX, TRAUC and Land Examiner SRT

A. Requirements

<table>
<tr><th>Business Req. No.</th><th>• Detailed Requirement Description</th><th>Category</th></tr>
<tr><td></td><td>Land Exam Interface</td><td></td></tr>
<tr><td>1</td><td>The system must provide a maintenance user interface to enable an inbound Land Exam interface to import the following information from LEX:
Land Exam ID
LEX Par ID
Examiner
Possible contamination (Yes/No)
Recommendation (Sell/Hold/Public Use)
Special Assessment
Completion Date
Minimum Bid
Property type (Vacant Land/Occupied structure/Unoccupied abandoned structure)
Occupied served (Able to serve/unable to serve)
DNR Comment
Suggested Division use (FMFM/Parks/Wildlife/Fish)</td><td>E</td></tr>
<tr><td>1.1</td><td>The system must also display the “Examiner ID” in the Land Exam interface.

NOTE: Examiner ID is generated within the system under Land Examiner System Reference Table.</td><td>E</td></tr>
<tr><td>1.2</td><td>The system must allow an authorized user to attach photos of properties to the Land Exam interface.
NOTE: Photos can have different file formats.</td><td>E</td></tr>
</table>

Business Req. No.	• Detailed Requirement Description	Category
2	The system must display the Parcel record attached to the Land Exam with following information: • Local Parcel Number • Location Description • Surface Rights % • Mineral Rights % • Other Rights • Size • Type • Comments • Status • Admin Agency • Parcel ID • Activities • Disclosure	E
3	The system must display the documents attached to the parcel associated with the Land Exam with following information: • Document Sequence Number • Document Number • Document Date • Transaction • Inventory Action • Document Type • Surface rights % • Mineral rights % • Other Rights • Party • Rev. Deed • Comments • Document ID • Case Number • Case Date • Document Image	E

Business Req. No.	• Detailed Requirement Description	Category
4	The system must allow an authorized user to add/update the following information on Land Exam interface: • Examiner • Possible contamination (Yes/No) • Recommendation (Sell/Hold/Public Use) • Special Assessment • Completion Date • Minimum Bid • Property type (Vacant Land/Occupied structure/Unoccupied abandoned structure) • Occupied served (Able to serve/unable to serve) • DNR Comment • Suggested Division use (FMFM/Parks/Wildlife/Fish)	E
5	The system must allow multiple entries of Land Exams on a Parcel.	E
6	The system must not allow Deletion of a Land Exam.	E
7	The system must allow an authorized user to generate a report on Parcel Land Exam by considering all the information provided by LEX.	E
8	The system must allow saving any necessary changes made to the database.	E
	Maintain Land Examiner - SRT	
1	The system must provide a user interface to maintain Land Examiner record.	E
2	The system must allow an authorized user to create Land Examiner record.	E
2.1	The system must assign a unique ID for each newly created Land Examiner record.	E
3	The system must provide a list of all the Land Examiner records.	E
4	The system must display following information on a Land Examiner record: • Name • Active Date • Department • Inactive Date • Status • Land Examiner ID • Date/Time stamp	E
5	The system must allow an authorized user to add/update following information on a Land Examiner record: • Name • Active date • Inactive date • Department	E

Business Req. No.	• Detailed Requirement Description	Category
6	The system must allow an authorized user to Logically Delete a Land Examiner record by entering the Inactive Date.	E
6.1	The system must change the status to Inactive if the Inactive Date is less than/equal to the current date.	E
7	The system must allow an authorized user to save all the changes made to the database.	E
	Tax Reversion – LEX Upload	
1	The system must provide an interface to import Land Exams and Tax reverted Parcels information from LEX.	E
2	The system must add the LEX Local Parcel Number to the LOTS Local Parcel Number On a land exam record for each parcel that already exist in the system.	E
3	The system must enable importing new Parcel record from LEX and assign a unique Parcel ID along with the Land Exam information for Parcels that does not exist in the system. *NOTE: LEX creates a new parcel if the parcel does not exist in LOTS and assigns a LEX Parcel ID. LEX parcel ID is linked to parcel ID in LOTS for the newly created parcel.*	E
4	The system must allow an authorized user to enter the following information on LEX upload interface to import data from LEX: • Parcels ready to process (#) Document Template information • Transaction Type • Act Name • Earliest Upload date • Transaction Act Indicator • Act Number (display only) • Act Year(display only) • Act Part Act Sub-Part(display only)	E
4.1	The system must verify if: • County and Jurisdiction of LEX parcel agrees with County and Jurisdiction of existing LOTS parcel. • LEX platted parcel information agrees with LOTS platted parcel information. • The LEX parcel has LOTS Subdivision ID number and Lot Number. • The LEX parcel that has Block and/or Lot Fraction agrees with the LOTS Block and/or Lot Fraction. • LEX acreage parcel information agrees with LOTS acreage parcel information. • The LEX parcel has Town, Range, and Section. • The LEX parcel that has Quarters or Quarter Quarters agrees with LOTS.	E

Business Req. No.	• Detailed Requirement Description	Category
4.2	The system must allow LEX to over write Legal Description on LEX parcels with the Legal Description on LOTS parcels for those Parcels that already exists in the system.	E
4.3	The system must provide a LEX Parcel ID to LOTS Parcel ID to LEX Land Exam ID cross-reference so LEX identifies the Parcel ID assigned by LOTS for each parcel imported.	E
4.4	The system must ensure that each imported LEX parcel has a Judgement date and Court case number.	E
4.5	The system must verify all the parcel data and Land exam data coming from LEX before importing. In other words, the system must conduct validation of business and data integrity rules.	E
4.6	For Parcels that does not pass validation, The system must display a message indicating the number of parcels that passed validation and a count of parcels that did not pass validation.	E
5	The system must allow an authorized user to generate LEX upload reports based on counties	E
5.1	The system must allow an authorized user to generate LEX upload summary reports based on Counties	E
5.2	The system must allow an authorized user to generate LEX upload verification reports based on counties.	E
5.3	The system must allow an authorized user to generate LEX upload error reports based on counties.	E
6	The system must allow an authorized user to save all changes made to the database.	E
	Tax Reversion – Initiate for Public Auction	
1	The system must provide a user interface to allow an authorized user to Mark/Unmark parcels for Public Land Auction.	E
2	The system must provide user with the ability to search for Parcels based on the search criteria entered. *NOTE: Same search criteria as for Maintain Parcel window with a default value of Parcel status "Active" and Surface ownership of > 0*	E
2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Parcel(s) not found.	E
2.2	The system must provide the search criteria to find all Parcel(s) records that have null values in a particular field.	E
2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
3	The system must allow an authorized user to select one or multiple parcels and Mark/Unmark them for Public Land Auction in case they pass the validation test.	E
3.1	The system must flag the Marked parcel(s) for download on to the TRAUC system.	E

Business Req. No.	• Detailed Requirement Description	Category
3.2	The system must not allow the selected Parcel(s) to be Marked for Auction in case it has following criteria: • Parcel status is not Active • Incomplete Land Exam on Parcel(s) • Incompatible Activities on Parcel(s) • Current Surface Ownership of less than 100%	E
3.2.1	The system must throw an Error message in case the parcel(s) has one or all the above criteria.	E
3.3	The system must assign current date for all the Parcels Marked for Auction.	E
3.4	The system must not allow the parcel(s) to be Unmarked in case the Parcel(s) are already downloaded for TR Auction (TRAUC).	E
3.5	The system must assign an activity of “Initiated for Public Land Auction” for all the parcels Marked for Auction.	E
4	The system must allow an authorized user to generate “Parcels Marked for Auction Report”.	E
5	The system must allow an authorized user to save any changes made to the database.	E
	Maintain Parcel Disclosures	
1	The system must provide a user interface to assign/un-assign disclosures to the parcel(s).	E
2	The system must provide a user with the ability to search for Parcels based on the search criteria entered.	E
2.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Parcel(s) not found.	E
2.2	The system must provide the search criteria to find all Parcel(s) records that have null values in a particular field.	E
2.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
3	The system must allow an authorized user to assign/un-assign one or multiple disclosures to a Parcel.	E
4	The system must allow an authorized user to generate Parcel Disclosure reports.	E
4	The system must allow an authorized user to save all the changes made to the database.	E
	Tax Reversion – Maintain Tax Reversion Auction download	
1	The system must provide an interface to export Tax reverted Parcels into TRAUC system.	E
2	The system must identify the parcels Marked for Public Land Auction.	E

Business Req. No.	• Detailed Requirement Description	Category
3	The system must provide user with the ability to search for Parcels based on the search criteria entered.	E
3.1	The system must validate the criteria entered by the user and throw appropriate error message in case of invalid criteria or Parcel(s) not found.	E
3.2	The system must provide the search criteria to find all Parcel(s) records that have null values in a particular field.	E
3.3	The system must be able to accommodate for any number of records the search may retrieve based on the criteria entered by the user without limiting the number of records.	E
4	The system must not allow the Parcel(s) to be downloaded to TR auction in case: • The Parcel(s) status is not Active • The Parcel does not have an activity of "Initiated for Public Land Auction" • Parcel(s) has any incompatible activities	E
4.1	The system must throw appropriate error messages in case the parcels selected for download to the TRAUC system do not pass the validation test.	E
5	The system post "Downloaded for TR Auction" activity on the parcels exported to TRAUC system in addition to the "Initiated for Public Land Auction" activity.	E
6	The system must allow an authorized user to save all changes made to the database.	E
	Tax Reversion – Maintain TR Auction Upload	
1	The system must provide a user interface to import Sale information on tax reverted parcels from TRAUC system.	E
2	The system must export following information from TRAUC system: • Type of Certificate • Transaction type • Parcel Price information • Grantee information • Changes in disclosures of parcel	E
3	The system must allow an authorized user to create a document for each certificate type for Parcels sold to State, County, Local units of Government, Minimum Bid and No Minimum Bid Certificate types.	E
3.1	The system must populate all sold parcel certificates information on documents.	E
3.2	The system must create deeded rights for all the parcels on the document.	E
3.3	The system must adjust the current rights for all the parcels on the document.	E
3.4	The system must update the disclosures information on parcels by populating it from the TRAUC system, if necessary.	E
3.5	The system must remove the "Initiated for Public Land Auction" and "Downloaded for TR auction" activities from the parcels and update the status on the parcel as "Sold".	E

Business Req. No.	• Detailed Requirement Description	Category
3.6	The system must utilize the "judgement date" as the document date and "court case number" as the document number, both of which are populated from TRAUC system.	E
4	The system must allow an authorized user to create a document for parcels that are Returned to the Local Unit Of Government (LUG) with the information been populated from TRAUC with a Certificate type "Return". *Note: For Parcels that are not sold are returned to the Local Unit of Government (LUG) unless the LUG objects in writing. Parcels returned to the LUG are treated similar to those sold on a Certificate. A "RETURN" certificate type will be used to determine the Transaction and Public Act (including part and subpart) used to create a LOTS document. The "RETURN" Certificate Type is not a true certificate type, but is used to indicate which Transaction and Public Act to use when LOTS creates a document.*	E
4.1	The system must allow an authorized user to create document for parcels with Minerals reserved for disclosures and the information been populated from the certificate type "Return-R" from TRAUC. *Note: Minerals may be reserved by the state on a return to the LUG. If this is the case, a "RETURN-R" certificate type will be used to determine the Transaction and Public Act (including part and subpart) used to create a LOTS document.*	E
4.2	The system must populate the Grantee name and Address on the document from the TRAUC system and the system must create a new Party and Address record.	E
4.3	The system must create deeded rights for all the parcels on the document.	E
4.4	The system must adjust the current rights for all the parcels on the document.	E
4.5	The system must remove the "Initiated for Public Land Auction" and "Downloaded for TR auction" activities from the parcels.	E
4.6	The system must utilize the "judgement date" as the document date and "court case number" as the document number, both of which are populated from TRAUC system.	E
5	The system must allow an authorized user to create a document for all Unsold parcel information populated from TRAUC system.	E
5.1	The system must utilize the "judgement date" as the document date and "court case number" as the document number, both of which are populated from TRAUC system.	E
6	The system must allow an authorized user to create a document for each Parcels that are cancelled using the Transaction Type and Public Act associated with the "CANCEL" certificate type.	E
6.1	The system must create deeded rights of 100% SUR and 100% MIN for all the parcels on the document.	E
6.2	The system must adjust the current rights for all the parcels on the document.	E

Business Req. No.	• Detailed Requirement Description	Category
6.3	The system must copy the reason for a parcel been cancelled as a comment on the parcel.	E
6.4	The system must utilize the “judgement date” as the document date and “court case number” as the document number, both of which are populated from TRAUC system.	E
7	The system must allow an authorized user to enter following information on the TR Auction Upload interface: • Certificates Ready To Process • Return Parcels Ready To Process • Cancelled Parcels Ready To Process • Unsold Parcels Ready To Process • Certificate Type/Transaction Type/Act (Selection option)	E
8	The system must update a copy to TRAUC with the processed date, document date and document number for each Certificate processed.	E
9	The system must allow an authorized user to save all changes made to the database.	E
	LEX Reports	
1	The system must provide following LEX reports: • LEX Upload report ✓ Forfeit Year ✓ County Code • Lex Upload report – All Counties ✓ Forfeit Year • LEX Upload Summary report ✓ Forfeit Year ✓ County Code • LEX Upload Summary report – All Counties ✓ Forfeit Year • LEX Upload Verification report – All Counties • LEX Error report – County • LEX Error report – All Counties • LEX Upload exception report ✓ Forfeit Year ✓ County Code • LEX upload exception report – All Counties	E
	Tax Reversion reports	

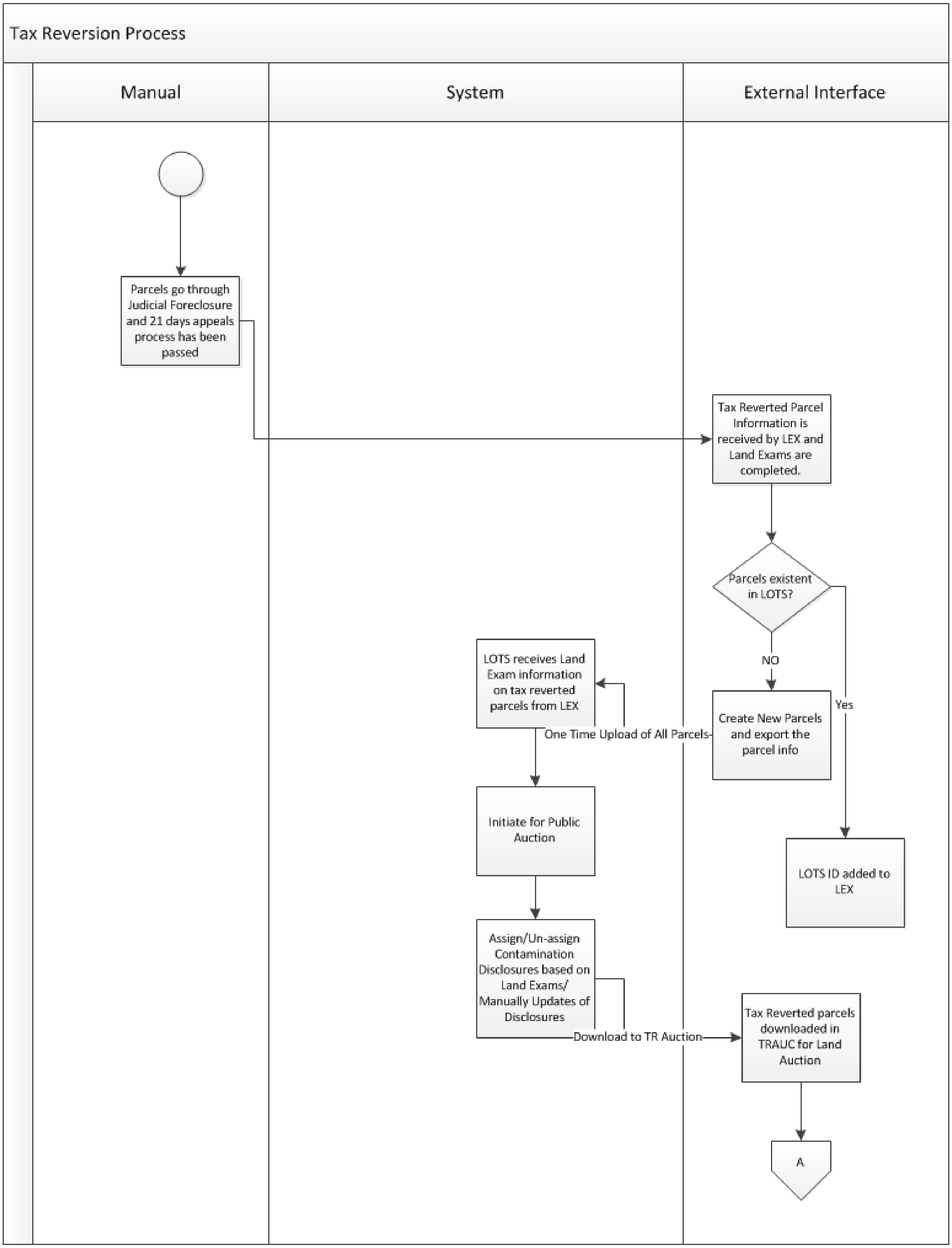
Business Req. No.	• Detailed Requirement Description	Category
1	The system must provide following Tax reversion reports: • Parcels Marked for Auction ✓ Start Date ✓ Through Date • Tax Reversion Upload error report ✓ Start Date ✓ Through Date	E

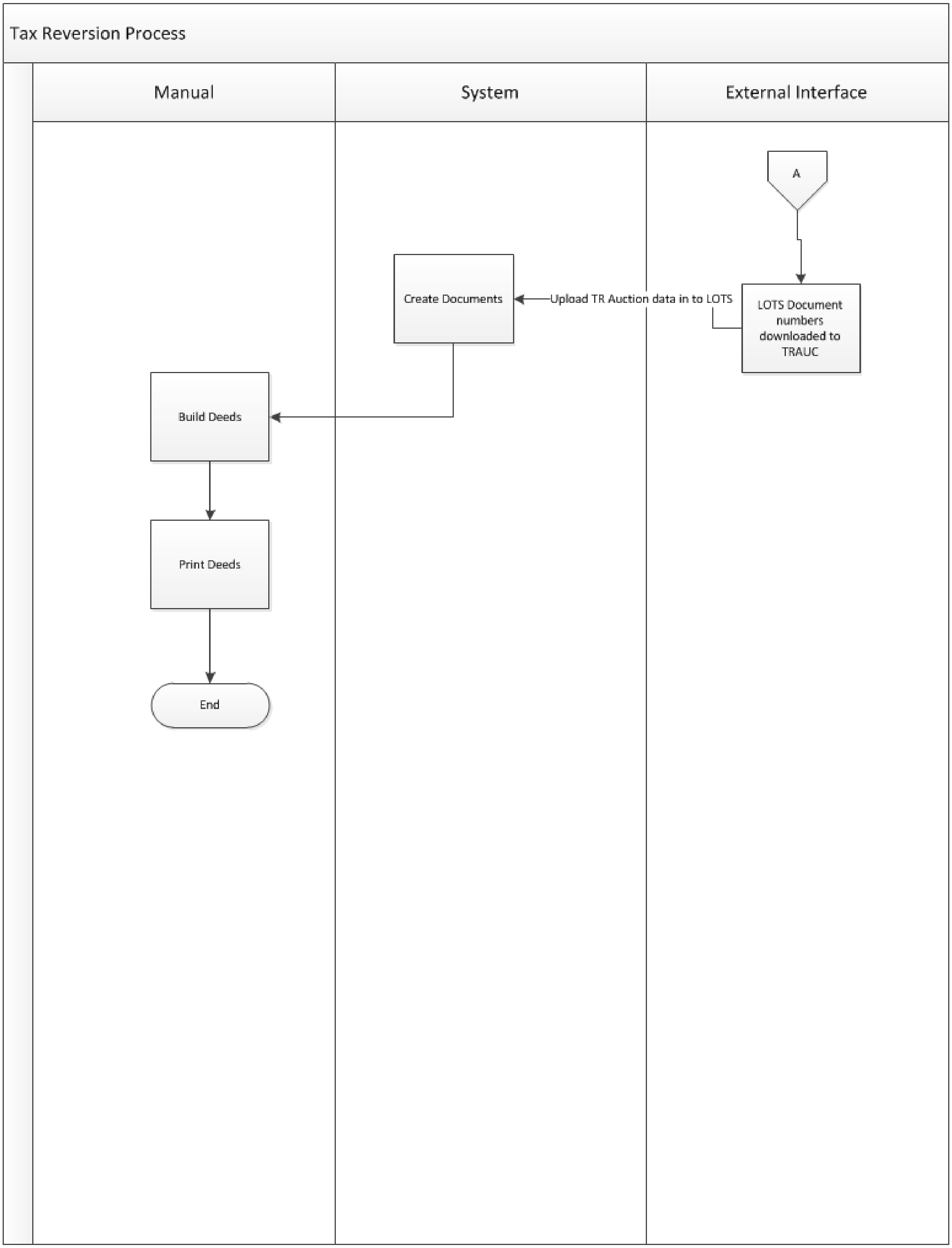
All Certificate Types:

Certificate Type	Description	Trans Type	Public Act Num	Year	Part	Sub-Part	Rights Disposed	
							Sur	Min
STATE: Tax-Foreclosed Government Purchase - State Agency (Fair Market Value)	Certificate used for Act 123 tax-foreclosed parcel purchases by state agencies for fair market value.	GOVS	123	1999	211.78m	1	100%	100%
STATE-R: Tax-Foreclosed Government Purchase - State Agency (Fair Market Value) (minerals reserved)	Certificate used for Act 123 tax-foreclosed parcel purchases by state agencies for fair market value. Mineral rights reserved to the State.	GOVS	123	1999	211.78m	1	100%	
COUNTY: Tax-Foreclosed Governmental Purchase - County Agency (Minimum Bid)	Certificate used for Act 123 tax-foreclosed parcel purchases by county agencies for minimum bid amount.	GOVS	123	1999	211.78m	1	100%	100%
COUNTY-R: Tax-Foreclosed Governmental Purchase - County Agency (Minimum Bid) (minerals reserved)	Certificate used for Act 123 tax-foreclosed parcel purchases by county agencies for minimum bid amount. Mineral rights reserved to the State.	GOVS	123	1999	211.78m	1	100%	
LUG: Tax-Foreclosed Government Purchase - Local Unit (Min Bid Minus Amount Due Self)	Certificate used for Act 123 tax-foreclosed parcel purchases by cities, townships and villages for minimum bid minus jurisdictional delinquencies.	GOVS	123	1999	211.78m	1	100%	100%
LUG-R: Tax-Foreclosed Government Purchase - Local Unit (Min Bid Minus Amount Due Self) (minerals reserved)	Certificate used for Act 123 tax-foreclosed parcel purchases by cities, townships and villages for minimum bid minus jurisdictional delinquencies. Mineral rights reserved to the State.	GOVS	123	1999	211.78m	1	100%	
MINBID: Tax-Foreclosed State Land Purchase Minimum Bid Auction	Certificate used for initial public auctions of Act 123 tax-foreclosed parcels. Parcels have an established minimum bid.	AUC	123	1999	211.78m	4	100%	100%
MINBID-R: Tax-Foreclosed State Land Purchase Minimum Bid Auction (minerals reserved)	Certificate used for initial public auctions of Act 123 tax-foreclosed parcels. Parcels have an established minimum bid. State reserves the mineral rights.	AUC	123	1999	211.78m	4	100%	
NOBID: Tax-Foreclosed State Land Purchase No Minimum Bid Auction	Certificate used for second public auctions of Act 123 tax-foreclosed parcels. Parcels have no established minimum bid.	AUC	123	1999	211.78m	5	100%	100%

NOBID-R: Tax-Foreclosed State Land Purchase No Minimum Bid Auction (minerals reserved)	Certificate used for second public auctions of Act 123 tax-foreclosed parcels. Parcels have no established minimum bid. State reserves the mineral rights.	AUC	123	1999	211.78m	5	100%	
SALE: Tax-Reverted State Land Purchase	Certificate used of public auctions of Act 206 tax-reverted parcels.	AUC	206	1893	131		100%	100%
SALE-R: Tax-Reverted State Land Purchase (minerals reserved)	Certificate used of public auctions of Act 206 tax-reverted parcels. State reserves the mineral rights.	AUC	206	1893	131		100%	
RETURN: Local Unit Transfer of Unsold Tax-Foreclosed Parcels	Pseudo-Certificate used for transfer of unsold Act 123 tax-foreclosed parcels back to the local jurisdiction. No money is paid for parcels.	LUT	123	1999	211.78m	6	100%	100%
RETURN-R: Local Unit Transfer of Unsold Tax-Foreclosed Parcels (minerals reserved)	Pseudo-Certificate used for transfer of unsold Act 123 tax-foreclosed parcels back to the local jurisdiction. No money is paid for parcels.	LUT	123	1999	211.78m	6	100%	
CANCEL:	Pseudo-Certificate used for parcels cancelled from sale.	AJ	123	1999	78k		100%	100%

B. Process Flow Diagram




Tax Reversion Process
Manual
System
External Interface
A
Create Documents
Upload TR Auction data in to LOTS
LOTS Document numbers downloaded to TRAUC
Build Deeds
Print Deeds
End

23. Exhibit 23 – PILT, PTA and Swamp Tax Payments

A. Requirements

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
	Maintain Tax Authority types – SRT	
1.0	The system must provide a user interface to maintain Tax Authority type records.	E
1.1	The system must allow an authorized user to add/delete a Tax Authority type record. *Note: Currently, There are 8 Tax Authorities listed as follows:* • *County* • *Township* • *Village* • *City* • *School* • *Community College* • *Library* • *ISD* *And for each Tax Authority, there are respective tabs on Edit Parcel Screen.*	E
1.1.1	The system must assign a unique ID for each newly created Tax Authority type record.	E
1.1.2	The system must enable a tab on Edit Parcel screen for each newly created Tax Authority record. *Note: User needs only one extra tax authority to be added and displayed as a tab on edit parcel screen in addition to the existing 8 tax authorities mentioned above.*	E
1.1.3	The system must display the newly created Tax Authority type in the Tax Authority module. *Note: Currently, Tax Authority is a drop down menu listed in System Reference Tables functionality and it provides a list of all the Tax Authority types created.*	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
1.2	By default, the system must display following Tax Authority types: • County • Township • Village • City • School • Community College • Library • ISD	E
1.2.1	The system must allow an authorized user to select one or multiple categorization of each Tax Authority type from a drop down menu: • School District(Yes/No) • Vendor(Yes/No) • Education(Yes/No) • Village(Yes/No)	E
1.3	The system must allow an authorized user to save any changes made to the database.	E
1.4	The system must allow an authorized user to Export the Tax Authority types into an Excel sheet and/or PDF.	E
	Maintain Millage Types - SRT	
2.0	The system must provide a User Interface to maintain Millage Type records.	E
2.1	The system must allow an authorized user to create a Millage type record.	E
2.1.1	The system must assign a unique ID for each newly created Millage type record.	E
2.2	The system must allow an authorized user to delete a Millage type record.	E
2.3	The system must allow an authorized user to export Millage type records on to Excel and PDF. *Note: Millage rates are not maintained in this screen as they vary by Taxing Authority, Tax Year and Tax seasons.*	E
2.4	The system must allow an authorized user to save all changes made to the database.	E
	Maintain Tax Authorities	
3.0	The system must provide a user interface to maintain Tax Authorities records.	E
3.1	The system must allow an authorized user to select a Tax Authority from the list and allow manual updates.	E
3.2	The system must allow an authorized user to define different tax authorities in different tax years.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
	System Tables/Tax Authorities/ Counties	
4.0	The system must provide a user interface to maintain Counties records.	E
4.1	The system must display a list of all Counties with following details: • Tax Authority Name (County Treasurer) • County Name • Vendor Number	E
4.1.1	The system must allow an authorized user to insert a row or create a new county record.	E
4.1.2	The system must allow an authorized user to delete a county record.	E
4.1.3	The system must allow an authorized user to select a County record from the list and display an Edit form to add/update/delete following information: • Tax Authority Name • Vendor Number • Address Line 1/2/3 • City/State/Zip • Email • Phone • Contact Name • Comments • Jurisdiction	E
4.1.4	By default, The system must display the Tax Auth ID, Tax Authorization Type and County Name on the Edit form for each selected county record. *Note: Tax Auth ID, Tax Authorization type and County Name are system generated based on the type of record being created.*	E
4.1.5	The system must display 2 tabs on the Edit form for maintaining a county record: • Millage • Special Assessment	E
4.1.5.1	The system must allow an authorized user to View and Add/Update/Delete following details of a county record on Millage tab: • Tax Year • Season • Millage Type • Millage rate • Adjust	E
4.1.5.1A	The system must throw an error message in case an authorized user does not enter any of the required fields on the Edit form.	E
4.1.5.1B	The system must allow an authorized user to view and Add/Update/Delete comments on the county record on Millage tab.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
4.1.5.1C	The system must allow an authorized user to add one or multiple Millage type records for a current year.	E
4.1.5.1D	The system must allow an authorized user to select either Current year Millages or All years of millages to display as a list. *Note: When a user selects display millages for all years, it means the base year is 2004 and the user can only view the Millages from 2004 to the present date.*	E
4.2	The system must allow an authorized user to View and Add/Update/Delete following details of any Tax Authority on Special Assessment tab: • Tax Year • Assessment type • Millage rate • Amount • Comment	E
4.3	The system must allow an authorized user to save changes made to the database and throw appropriate error messages wherever necessary.	E
	System Tables/ Tax Authority/ Township-Cities-Villages	
5.0	The system must provide a User Interface to maintain Township/Cities/Villages records.	E
5.1	The system must display a list of all Township/Cities/Villages records with following information: • County Code • County Name • County Name Mixed Jurisdiction • Tax Auth Name • Jurisdiction • Tax Auth Type • Vendor Number *Note: Currently, the system has a split screen for Counties record and the associated Jurisdictions.*	E
5.1.1	The system must allow an authorized user to insert a row or create a new Township/Cities/Villages record.	E
5.1.2	The system must allow an authorized user to delete a Township/Cities/Villages record.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
5.1.3	The system must allow an authorized user to select a Township/Cities/Villages record from the list and display an Edit form to add/update/delete following information: • Tax Auth Name • Vendor Number • Address Line 1/2/3 • City/State/Zip • Email • Phone • Contact Name • Comments • Jurisdiction	E
5.1.4	By default, The system must display the Tax Auth ID on the Edit form for each selected Township/Cities/Villages record. *Note: Tax Auth ID is system generated based on the type of record being created.*	E
5.1.5	The system must allow an authorized user to identify and input the following required fields on a Edit form for Township/Cities/Villages record: • Tax Auth Name • Tax Auth Type • Jurisdiction *Note: Since There are 3 different Tax Auth types in this user interface (Township, City and Village) it is imperative to manually define their relationship with respective Jurisdictions.*	E
5.1.5.1	The system must throw an error message in case an authorized user does not enter any of the required fields on the Edit form.	E
5.1.6	The system must display 3 tabs on the Edit form for maintaining a Township/Cities/Villages record: • Millage • Special Assessment • County	E
5.1.6.1	The system must allow an authorized user to View and Add/Update/Delete following details of a Township/Cities/Villages record on Millage tab: • Tax Year • Season • Millage Type • Millage rate • Adjust • Comment	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
5.1.6.2	The system must allow an authorized user to add one or multiple Millage type records for a current year.	E
5.1.6.3	The system must allow an authorized user to select either Current year Millages or All years of millages to display as a list. *Note: When a user selects display millages for all years, it means the base year is 2004 and the user can only view the Millages from 2004 to the present date.*	E
5.1.7	The system must allow an authorized user to View and Add/Update/Delete following details of Township/Cities/Villages record on Special Assessment tab: • Tax Year • Assessment type • Millage rate • Amount • Comment	E
5.1.8	The system must allow an authorized user to View and Add/Update/Delete the counties associated to a Township/Cities/Villages on Counties tab.	E
5.2	The system must allow an authorized user to save changes made to the database and throw appropriate error messages wherever necessary.	E
	System Tables/ Tax Authority/ School	
6.0	The system must provide a user interface to maintain School records.	E
6.1	The system must display a list of all School records with following information: • County Code • County Name • County Name Mixed School • Tax Auth Name • Tax Auth Type • School Code • Comment *Note: Currently, the system has a split screen for County records and the associated Schools.*	E
6.1.1	The system must allow an authorized user to insert a row or create a new School record.	E
6.1.2	The system must allow an authorized user to delete a School record.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
6.1.3	The system must allow an authorized user to select a School record from the list and display an Edit form to add/update/delete following information: • Tax Auth Name • Code • Address Line 1/2/3 • City/State/Zip • Email • Phone • Contact Name • Comments	E
6.1.4	By default, The system must display the Tax Auth ID and Tax Auth type on the Edit form for each selected School record. *Note: Tax Auth ID and Tax Auth type are system generated fields for a School.*	E
6.1.5	The system must allow an authorized user to identify and input the Tax Auth Name required field on the Edit form for each School record.	E
6.1.5.1	The system must throw an error message in case an authorized user does not enter the required field on the Edit form.	E
6.1.6	The system must display 3 tabs on the Edit form for maintaining a School record: • Millage • Special Assessment • County	E
6.1.6.1	The system must allow an authorized user to View and Add/Update/Delete following details of a School record on Millage tab: • Tax Year • Season • Millage Type • Millage rate • Adjust • Comment	E
6.1.6.2	The system must allow an authorized user to add one or multiple Millage type records for a current year.	E
6.1.6.3	The system must allow an authorized user to select either Current year Millages or All years of millages to display as a list. *Note: When a user selects display millages for all years, it means the base year is 2004 and the user can only view the Millages from 2004 to the present date.*	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
6.1.7	The system must allow an authorized user to View and Add/Update/Delete following details of School record on Special Assessment tab: • Tax Year • Assessment type • Millage rate • Amount • Comment	E
6.1.8	The system must allow an authorized user to View and Add/Update/Delete the counties associated to a School on Counties tab.	E
6.2	The system must allow an authorized user to save changes made to the database and throw appropriate error messages wherever necessary.	E
	System Tables/Tax Authority/ ISD	
7.0	The system must provide a user interface to maintain ISD records.	E
7.1	The system must display a list of all ISD records with following information: • County Code • County Name • County Name Mixed ISD • Tax Auth Name • Tax Auth Type • ISD Code • Comment *Note: Currently, the system has a split screen for County records and the associated ISDs.*	E
7.1.1	The system must allow an authorized user to insert a row or create a new ISD record.	E
7.1.1.1	The system must allow an authorized user to delete an ISD record.	E
7.1.2	The system must allow an authorized user to select an ISD record from the list and display an Edit form to add/update/delete following information: • Tax Auth Name • Code • Address Line 1/2/3 • City/State/Zip • Email • Phone • Contact Name • Comments	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
7.1.3	By default, The system must display the Tax Auth ID and Tax Auth type on the Edit form for each selected ISD record. *Note: Tax Auth ID and Tax Auth type are system generated fields for an ISD.*	E
7.1.4	Th system must allow an authorized user to identify and input the Tax Auth Name required field on the Edit form for each ISD record.	E
7.1.4.1	The system must throw an error message in case an authorized user does not enter the required field on the Edit form.	E
7.1.5	The system must display 3 tabs on the Edit form for maintaining an ISD record: • Millage • Special Assessment • County	E
7.1.5.1	The system must allow an authorized user to View and Add/Update/Delete following details of an ISD record on Millage tab: • Tax Year • Season • Millage Type • Millage rate • Adjust • Comment	E
7.1.5.2	The system must allow an authorized user to add one or multiple Millage type records for a current year.	E
7.1.5.3	The system must allow an authorized user to select either Current year Millages or All years of millages to display as a list. *Note: When a user selects display millages for all years, it means the base year is 2004 and the user can only view the Millages from 2004 to the present date.*	E
7.1.6	The system must allow an authorized user to View and Add/Update/Delete following details of ISD record on Special Assessment tab: • Tax Year • Assessment type • Millage rate • Amount • Comment	E
7.1.7	The system must allow an authorized user to View and Add/Update/Delete the counties associated to an ISD record on Counties tab.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
7.2	The system must allow an authorized user to save changes made to the database and throw appropriate error messages wherever necessary.	E
	System Tables/Tax Authority/Community College	
1	The system must provide a user interface to maintain Community College records.	E
2	The system must display a list of all Community College records with following information: • County Code • County Name • County Name Mixed Community College • Tax Auth Name • Tax Auth Type • College Code • Comment *Note: Currently, the system has a split screen for County records and the associated* Community Colleges*.*	E
2.1	The system must allow an authorized user to insert a row or create a new Community College record.	E
2.2	The system must allow an authorized user to delete a Community College record.	E
2.3	The system must allow an authorized user to select a Community College record from the list and display an Edit form to add/update/delete following information: • Tax Auth Name • Code • Address Line 1/2/3 • City/State/Zip • Email • Phone • Contact Name • Comments	E
2.4	By default, The system must display the Tax Auth ID and Tax Auth type on the Edit form for each selected Community College record. *Note: Tax Auth ID and Tax Auth type are system generated fields for an* Community College*.*	E
2.5	The system must allow an authorized user to identify and input the Tax Auth Name required field On the Edit form for each Community College record.	E
2.5.1	The system must throw an error message in case an authorized user does not enter the required field on the Edit form.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
2.6	The system must display 3 tabs on the Edit form for maintaining a Community College record: • Millage • Special Assessment • County	E
2.6.1	The system must allow an authorized user to View and Add/Update/Delete following details of a Community College record on Millage tab: • Tax Year • Season • Millage Type • Millage rate • Adjust • Comment	E
2.6.2	The system must allow an authorized user to add one or multiple Millage type records for a current year.	E
2.6.3	The system must allow an authorized user to select either Current year Millages or All years of millages to display as a list. *Note: When a user selects display millages for all years, it means the base year is 2004 and the user can only view the Millages from 2004 to the present date.*	E
2.7	The system must allow an authorized user to View and Add/Update/Delete following details of Community College record on Special Assessment tab: • Tax Year • Assessment type • Millage rate • Amount • Comment	E
2.8	The system must allow an authorized user to View and Add/Update/Delete the counties associated to a Community College record on Counties tab.	E
3	The system must allow an authorized user to save changes made to the database and throw appropriate error messages wherever necessary.	E
	System Tables/ Tax Authority/Libraries	
1	The system must provide a user interface to maintain Library records.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
2	The system must display a list of all Library records with following information: • County Code • County Name • County Name Mixed Library • Tax Auth Name • Tax Auth Type • Library Code *Note: Currently, the system has a split screen for County records and the associated* Libraries.	E
2.1	The system must allow an authorized user to insert a row or create a new Library record.	E
2.2	The system must allow an authorized user to delete a Library record.	E
2.3	The system must allow an authorized user to select a Library record from the list and display an Edit form to add/update/delete following information: • Tax Auth Name • Code • Address Line 1/2/3 • City/State/Zip • Email • Phone • Contact Name • Comments	E
2.4	By default, The system must display the Tax Auth ID and Tax Auth type on the Edit form for each selected Library record. *Note: Tax Auth ID and Tax Auth type are system generated fields for a* Library.	E
2.5	Th system must allow an authorized user to identify and input the Tax Auth Name required field on the Edit form for each Library record.	E
2.5.1	The system must throw an error message in case an authorized user does not enter the required field on the Edit form.	E
2.6	The system must display 3 tabs on the Edit form for maintaining a Library record: • Millage • Special Assessment • County	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
2.6.1	The system must allow an authorized user to View and Add/Update/Delete following details of a Library record on Millage tab: • Tax Year • Season • Millage Type • Millage rate • Adjust • Comment	E
2.6.2	The system must allow an authorized user to add one or multiple Millage type records for a current year.	E
2.6.3	The system must allow an authorized user to select either Current year Millages or All years of millages to display as a list. *Note: When a user selects display millages for all years, it means the base year is 2004 and the user can only view the Millages from 2004 to the present date.*	E
2.7	The system must allow an authorized user to View and Add/Update/Delete following details of Library record on Special Assessment tab: • Tax Year • Assessment type • Millage rate • Amount • Comment	E
2.8	The system must allow an authorized user to View and Add/Update/Delete the counties associated to a Library record on Counties tab.	E
3	The system must allow an authorized user to save changes made to the database and throw appropriate error messages wherever necessary.	E
	System Tables/ Tax Authority/ Complete list of all Tax Authorities	
1	The system must provide a user interface to display a read only list of all Tax Authorities as a look up function without a need to rely on county name to determine where the Tax Authority resides. *Note: Currently, this user interface helps user to avoid accidental duplication of the same Tax Authority for different counties.*	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
2	The system must display a list of all Tax Authorities for all counties with following information: • Tax Auth ID • Tax Auth Name • Vendor Number • Tax Auth Type • Tax Authority County	E
3	The system must allow an authorized user to Export the complete list of all Tax Authorities into an Excel sheet and/or PDF.	E
	PCA Codes/Funds	
1	The system must provide a user interface to maintain PCA codes (Accounting information) Fund information association.	E
2	The system must display a list of all PCA codes and county codes describing the funds they are associated with.	E
2.1	The system must display following details: • PCA Code • PCA Index • Agency Object • PCA Description (Fund Name) *Note: Currently, LOTS does not have PCA codes and would not be needed for any other functionality except PILT. The Funds in PILT is a Consolidated list of Funds in LOTS.*	E
3	The system must allow an authorized user to insert a row or created a new PCA code/Funds association record.	E
4	The system must allow an authorized user to delete a new PCA code/Funds association record.	E
5	The system must allow an authorized user to select a PCA code/Funds association record and display a Edit form to Add/Update/Delete following information: • PCA code • PCA Index • Agency Object • PCA Description • Is Education (Yes/No)	E
5.1	The system must provide a Funds tab on the Edit form to display following details: • PCA code • PCA Index • Fund Name • Active Date • Inactive Date	E
5.2	The system must allow an authorized user to insert a new row on the funds tab to create a new association record.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
5.2.1	The system must display the Active date as Creation date for all newly created records.	E
5.3	The system must allow an authorized user to change remove/edit the inactive date if the fund is no longer associated to the PCA codes and is not required for system calculations by Tax year.	E
5.4	The system must allow an authorized user to Export the PCA Codes/Funds association to an Excel sheet and or PDF.	E
6	The system must allow an authorized user to save any changes made to the database.	E
	Look-Up table – Jurisdiction	
1	The system must provide a user interface to look up LOTS Jurisdiction table populated in PILT System Tables module for display purposes. *Note: Currently, LOTS has a System Reference table on Jurisdiction and PILT system imports the Jurisdiction Table for information purposes.*	E
2	The system must display following details on the Jurisdiction record: • Jurisdiction County ID • Jurisdiction Code • Jurisdiction Index • Jurisdiction Name U • Subdivision Code • Subdivision Name	E
	Look-Up table - Subdivision	
1	The system must provide a user interface to look up LOTS Subdivision table populated in PILT system tables module for display purposes. *Note: Currently, LOTS has a System Reference table on Subdivision and PILT system imports the Subdivision Table for information purposes.*	E
2	The system must provide following details on the Subdivision record: • Subdivision ID • Subdivision Code • Subdivision Abbreviation • Subdivision Name	E
3	The system must allow an authorized user to export the Jurisdiction record list on to Excel and or PDF.	E
	Look-Up table - Funds	
1	The system must provide a user interface to look up LOTS Funds table populated in PILT system tables module for display purposes.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
2	The system must provide following details on the Funds record: • Fund ID • Fund Name Tax • Method or Fund used to Acquire • Fund Description	E
3	The system must allow an authorized user to export the Jurisdiction record list on to Excel and or PDF.	E
	Parcel Maintenance	
1	The system must provide a User Interface to Maintain PILT parcel records.	E
1.1	The system must allow an authorized user to Create a New PILT Parcel record.	E
2	The system must display following user fields to add new Parcel record details: County* Jurisdiction* First Year Taxable* Village Subdivision Legal Description Town/Range/Section Part Disposed Status Acreage Inactive Tax Year *Note: (*) represents required fields.* *Note: First Year Taxable Field is automatically filled in based on the latest PILT year in system.*	E
2.1	The system must throw an error message in case an user does not enter any of the required fields.	E
3	The system must generate a unique ID for each newly created PILT parcel.	E
4	The system must not allow the authorized user to delete a PILT Parcel Number.	E
4.1	The system must allow an authorized user to set the Status of the Parcel to “Inactive” to remove it from tax calculations and future editing.	E
4.2	The system must throw a warning message in case an authorized user changes the parcel status from “Active” to “Inactive”.	E
4.3	The system must set the Inactive date year field as the Current date year in case an user sets the parcel status to “Inactive”.	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
5	The system must allow an authorized user to search existing PILT parcel records using following user fields: • Parcel ID • County • Jurisdiction • Subdivision • Village • Town/Range/Section	E
5.1	The system must allow an authorized user to search parcel(s) based on entering valid search criteria and throw appropriate error message when necessary.	E
5.2	The system must retrieve a list of active parcels with following information: • PILT Par ID • County • Status • Town/Range/Section • Jurisdiction • Subdivision • Village • Legal Description • Acres	E
5.3	The system must allow an authorized user to export the list of parcels on to Excel and or PDF.	E
6	The system must allow an authorized user to Edit existing PILT parcel record to set up relationship between parcel and tax authorities for successful tax calculations.	E
6.1	The system must allow an authorized user to Edit the following basic information on a PILT Parcel: • County • Jurisdiction • Village • Subdivision • Legal Description • Town/Range/Section • First Year Taxable • Part. Disposal • Status • Acreage	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
6.2	The system must display following tabs/attributes of a PILT parcel: • Schools • ISDs • Colleges • Libraries • Funds • Local Par Number • Special Assessments • LOTS Parcels • Comments • Acreage • Par Value • PILT Billed • Millage Adjust *Note: These tabs/attributes define all relationships with any parcel and tax authorities.*	E
6.2.1	The system must allow an authorized user to add/delete/update the one or multiple School records on a parcel.	E
6.2.2	The system must allow an authorized user to add/delete/update one or multiple ISD records on a parcel.	E
6.2.3	The system must allow an authorized user to add/delete/update one or multiple Community college records on a parcel.	E
6.2.4	The system must allow an authorized user to add/delete/update one or multiple Library records on a parcel.	E
6.2.5	The system must allow an authorized user to add/delete/update one or multiple Tax authority records on a parcel.	E
6.2.6	The system must allow an authorized user to define tax year attribute to different parcel-tax authority relationship records except for • Parcel-County • Parcel-Jurisdiction • Parcel Village In other words, The change in county/jurisdiction/village record on a parcel must be re-entered with new records.	E
6.2.6.1	The system must allow an authorized user to add/delete/update one or multiple Funds records on a Parcel.	E
6.2.6.2	The system must allow an authorized user to input one or multiple Funds on a Parcel in a single tax year in case the parcel is acquired with more than one fund.	E
6.2.6.3	The system must automatically calculate the total funding for the year to be equal to 100% for each newly added fund record for any tax year.	E
6.2.7	The system must allow an authorized user to manually update the fund percentages and must make sure that the total is equal to 100%.	E

Business Req. No.	• Detailed Requirement Description	Category
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6.2.8	The system must allow an authorized user to add/update/delete one or multiple Local Parcel Numbers for a single or multiple tax years along with their descriptions.	E
6.2.9	The system must allow an authorized user to add/delete/update one or multiple LOTS Par IDs on a PILT Parcel. *Note: LOTS Parcels and PILT Parcels are different in lot of ways such as legal description, jurisdiction, acreage etc.*	E
6.2.10	The system must allow an authorized user to add/delete/update one or more comments on parcel with an appropriate date/time stamp value and commented by value.	E
6.2.10	The system must allow an authorized user to add/delete/update Acreage records on parcel and must display the most recent acreage on basic information of a Parcel. *Note: The basic info of a parcel has an Acreage field but it is not editable. The system must allow changes to be made on acreage tab/attribute.*	E
6.2.11	The system must display parcel value information for each tax year on parcel with following information: • Tax Year • Previous Tax Value • Losses • Tax Value Factor • Additions • Tax Value • Locked(Read-Only) – (Yes/No) • Comments • Previous TCV • TCV	E
6.2.11.1	For Existing PILT Parcels only, The system must automatically populate the Par Value tab for each parcel with the new year taxable value information after Annual Initialization is performed under Administer Tax Factor and Tax Calculations user interface. *Note: Please refer to Maintain Administer Tax Factor and Tax Calculations user interface for more details.*	E
6.2.11.2	For Newly Purchased PILT parcels only, The system must automatically populate the Taxable value on each parcel under the Par Value tab and the newly created PILT Parcels/Numbers must get the new PILT year on them. *Note: For newly purchased parcels, corresponding new PILT Parcels are created in Parcel Maintenance and Parcel Taxable Values are manually entered on the Maintain Annual Parcel Value user interface and that information is automatically populated on the Par Value tab of Parcel Maintenance.*	E

Business Req. No.	• Detailed Requirement Description	Category
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6.2.12	The system must display PILT billed information on a Parcel for each tax authority type with following information: • PILT Parcel ID • Tax Value • Tax Auth Name • Tax Authority Type • DOE • Millage Type • Tax Amount • Millage Rate *Note: This is a display only tab*	E
6.2.12.1	The system must not display PILT billed information in case the currently set as Active Application Tax year has not been initialized. *Note: Please refer to maintain Annual Tax settings and calculations module for more information.*	E
6.2.12.2	The system must not display PILT billed information in case the Parcel-tax authority relationship is not defined in Parcel maintenance user interface.	E
6.2.12.3	The system must not display PILT billed information in case there are no Millages entered for related tax authorities for the currently active tax year.	E
6.2.12.4	The system must allow an authorized user to verify if the millages have been entered for a corresponding tax authority in case any millages are missing and incomplete information is displayed on the PILT billed tab. *Note: Currently, user can go in Maintain Tax authority user interface and check if millages are entered and or adjusted for corresponding tax authorities.*	E
6.3	For Millage Adjust Tab, The system must allow an authorized user to Manually update the Millage rates for each Parcel in each tax authority. *Note: Local Units sends millage rates for each parcel in each tax authority. These rates vary every tax year and are used to calculate the tax payments. Please refer to PTA for Millage rate Loader functionality.*	E
6.3.1	The system must provide a function to Assign the millage rate on the tax authority to the parcel record.	E
6.3.1.1	The system must provide a function to Assign the Millage rates on multiple parcels in all the respective tax authorities in a jurisdiction/village. *Note: Currently, the user has to manually add millage rates on each parcel and the information is automatically updated on Generate Payments user interface.*	P
6.3.2	The system must provide a function to Remove the Millage rate on the tax authority from the parcel record.	E
6.4	The system must allow an authorized user to save any changes made to the database.	E

Business Req. No.	• Detailed Requirement Description	Category
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	Annual Parcel Value Maintenance	
1	The system must provide a user interface to maintain Annual Parcel Valuation for a selected year via setting up losses and adjustments.	E
2	The system must allow an authorized user to enter following search criteria to retrieve parcel records: • Parcel ID • Tax Year • First Taxable Year • County • Jurisdiction • Subdivision • Part Disposal *Note: Like Parcel Maintenance user interface, Annual Parcel Value user interface requires search window to find parcel(s).*	E
2.1	The system must retrieve Parcel Value records across many tax years in case no criterion is provided by an authorized user.	E
2.2	The system must display following information on retrieved list of parcel value records: • Tax Year • Par ID • County • Jurisdiction • Previous Tax Value • Losses • Tax Value Factor • Additions • Tax Value • Locked • Comment • Previous TCV • TCV • TVA +/-	E
2.3	The system must allow an authorized user to export the list of Parcel Value records on to Excel and or PDF.	E
3	For newly purchased PILT parcels only, The system must automatically create a Parcel Value record in case a new PILT parcel has been created under DNR jurisdiction. *Note: Please refer to Parcel Maintenance – create a PILT parcel function for more details.*	E

Business Req. No.	• Detailed Requirement Description	Category
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3.1	The system must allow an authorized user to maintain correct parcel tax value for such parcel by adjusting Additions amount based on determined value and the Tax value would become equal to the Additions value based on the Tax Value formula. *Note: Taxable Value of a newly purchased PILT parcel is calculated outside of PILT system and manually entered in the Maintain Annual Parcel Value user interface after a New PILT parcel is created.*	E
3.1.1	The system must display zero as a value for previous year tax value for such parcels.	E
	System Administration/Administer Tax Factor and Tax Calculations	
1	The system must provide a maintenance user interface to Administer Tax Factor and Tax value Calculations for different tax years as a set of database user defined functions. Note: Standard Tax Calculation Method (Based on Public Act 513 of 2004) = (Prev. Year Tax Value – Losses)*Tax Value Factor*(Lesser or Cap Factor and Consumer Price Index) + Additions	E
2	The system must allow an authorized user to View and Edit following information: • Tax Year • Tax Value Factor • True Cash Factor • Is Base Year (Yes/No)* • Millage – Align with Base Year • Tax Value – Align with Base Year • Is Read-Only(Yes/No) • Tax Value Calculation Method • Comment *(*) – Base Year is by default 2004*	E
2.1	The system must allow an authorized user to add a new row with the above information for each new tax year.	E
3	The system must provide a function to access only the currently active tax year to filter out information in many application forms by tax year and providing current tax year for all new records created in the system	E
3.1	The system must allow an authorized user to set the current tax year.	E
4	The system must allow an authorized user to Perform Annual Initialization by entering the Tax Year to be Initialized field. *Note: Currently, The Annual Initialization function is disabled for already initialized tax years.*	E

Business Req. No.	• Detailed Requirement Description	Category
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4.1	For PILT parcels involved in the Annual Initialization process, The system must populate the following information from Previous tax year to the Initialized tax year: • Parcel Value records if any • Parcel Fund records if any • Parcel Tax Authority records if any • Parcel Acreage records if any • Parcel Local Par Number records if any	E
5	The system must allow an authorized user to export a list of all Tax Factors, Calculations, Tax year, Millages on to Excel and or PDF	E
6	The system must provide a function to Close a tax year to prevent future editing.	E
6.1	The system must allow an authorized user to enter the closing tax year and must make all the information related to the closed tax year Read-only (Locked).	E
7	The system must provide a function to unlock the closed tax year record for editing.	E
7.1	The system must allow an authorized user to enter the closed tax year and must make all the information related to the closed tax year updatable.	E
7.2	The system must lock the closed tax year information making it Read-Only once the authorized user Logs out of the system. *Note: This activity would make sure that only specially authorized user can edit closed tax year details and must not allow concurrent users to edit closed tax year records.*	E
	Parcel Tracking and Adjustments	
1	The system must provide maintenance User Interface for Parcel adjustment and tracking functionality. *Note: PTA keeps track of missing parcels, special assessments, penalties etc. before the payments are made to the local units.*	E
2	The system must provide a search function to find parcels identified for tax payments with following search criteria: • Tax Year • County • Jurisdiction • Season	E

Business Req. No.	• Detailed Requirement Description	Category
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2.1	The system must retrieve a list of parcels with following information: • Tax Year • Season • PILT Parcel ID • Payment Recipient ID/Name • County-Jurisdiction • Village • Local Par Number • Tax Value • To Be Paid Amount • Received Date • Special Assessment Amount • LU Penalty Amount • SOM Penalty Amount • Sum (To Be Paid + Sa – Lu + SOM) • Pay Date • Comment • Vendor Number • Main Warrant Number • DNR To be paid Amount • Doe To be paid Amount • Create Timestamp • Create ID • Updated Timestamp • Update ID • DNR_3t_to be paid_amount	E
2.2	The system must provide a count of all the parcels, Payments to be made on the number of parcels, Special Assessment amount/Lu penalty amount/SOM penalty charged on the number of parcels.	E
2.4	The system must display the count of all missing parcels due for payments. *Note: Missing parcels would let the user know that which bills are not received from the Local unit*	E
2.5	The system must provide a function to calculate: • Sum of all the Tax value on Parcels • Sum of all the To Be Paid amount on all Parcels • Sum of all Special Assessment Amount on all Parcels • Sum of all Lu Penalty amounts on all Parcels • Sum of all SOM penalty amounts on all parcels • Sum of to Be Paid + SA – LU + SOM Penalty on all parcels	E

Business Req. No.	• Detailed Requirement Description	Category
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2.6	The system must provide a Receive Date tab to allow an authorized user to determine whether or not a local unit is going to be assessed a late fee by entering the receive date and retrieving the following information: Tax Year, Season, PILT Par ID, Rec Date, Rec Date Village, Local Par Number, Tax value, Comment, Create date/time stamp and Create ID	E
2.7	The system must provide a Special Assessment tab to allow an authorized user to enter either Special Assessment amount and/or Millage rate to calculate the special assessment amount using the formula: *Amount or Tax Value*(Millage/1000)* *Note: Currently, there can be both Lump Sum special and a Millage rate special on the same parcel.*	E
2.8	The system must provide a LU penalty tab to allow an authorized user to enter the penalty due date and penalty percentage for calculating the penalty amount using the formula: *(To Be Paid Amount+Special Assessment Amount*((Days Pass Due/30)*5%)*	E
2.9	The system must provide a Paid Date tab to allow an authorized user to determine if State of Michigan owes penalty for not getting the payment out on time.	E
2.10	The system must provide SOM Penalty Tab to allow an authorized user to enter the penalty date and percentage for calculating the penalty using the following formula: ((To be Paid amount + special assessment amount)*3%) + ((To be paid amount + special assessment amount)*days late/30*1%)	E
2.11	The system must provide a Village tab to allow an authorized user to search only the parcels that belong to particular village. *Note: A village is a Jurisdiction type which can be part of 1 or more townships in a particular county and the system must retrieve all the parcels in a specific village in all townships.*	E
2.12	The system must provide a Print tab to print sum of all penalties and special assessments on all the parcels in a Jurisdiction/Village.	E

Business Req. No.	• Detailed Requirement Description	Category
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2.12.1	The system must provide a "Payment Voucher" detail function under Print tab to populate a report on Parcels in a Jurisdiction/Village with following information: • Tax Year • County • Season • Vendor • Fund Codes (Index/Comp Object/Agency Object/ Name) • Amount • Special Assessment amount Lun amount • SOM amount • Total Amount • Jurisdiction • Total by Treasury • Education	E
2.12.2	The system must provide a "Payment detail" report under Print tab to display following information on all the parcels: • PILT par ID • Local Par Number • School Code • Tax Value • County Millage • Township/City Millage • Village Millage • Library Millage • Treasury Local Unit Penalty • Treasury SOM Penalty • Spec. Assessment • Treasury Millages Payable • Treasury Amount Due • School Millage • Community College Millage • ISD Millage • DOE Millages Payable • DOE Amount Due • Total Millage Rates Payable • Total Tax Value • Total by Treasury • Total Local Unit Penalty • Total SOM Penalty • Total Spec Assessment Amount	E

Business Req. No.	• Detailed Requirement Description	Category
•	•	•
2.12.2 contd…	• Total Treasury Amount Due • DOE Local Unit Penalty • DOE SOM Penalty • Total Amount Due • Total by education	E
2.12.3	The system must provide a report on voucher detail to list out each parcel on the voucher with its fund codes, PILT Par ID, Amount, Special Assessment, LU Penalty Amount, SOM Penalty Amount, and Total Amount for specific tax year, season, county, jurisdiction and vendor.	E
2.12.4	The system must provide a "Millages by Tax Authority" report grouped by school district under Print tab to print all the tax authorities in a county/Township and the billed Millages.	E
2.12.5	The system must provide a "Payment Comments" report function under print tab to capture all the comments made on the PILT parcels in a tax year sorted by county/season and display following information: • PILT Par ID • Local Par Number • Tax Value • Total Amount Due • Comments	E
2.12.6	The system must provide a "Millages detail" report under print tab to capture the billed millages and payable millages on all the parcels and their respective tax authorities in a specific county/township.	E
2.12.7	The system must provide a "Voucher Main – Village" report under print tab to capture the Payment info on villages with following information: • Tax Year • County • Season • Jurisdiction • Vendor • Fund Codes (Index/Comp Object/ Agency Object/ Name) • Amount • Spec. Assessment • Lu penalty • SOM penalty • Total Amount • Total Amount Due • Total Treasury • Total Local Unit Penalty • Total SOM Penalty • Total Spec Assessment Amount • Total Education	E

Business Req. No.	• Detailed Requirement Description	Category
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2.12.8	The system must provide a "Voucher Main – Cities/Township" report under print tab to capture the Payment info on villages with following information: • Tax Year • County • Season • Jurisdiction • Vendor • Fund Codes (Index/Comp Object/ Agency Object/ Name) • Amount • Spec. Assessment • Lu penalty • SOM penalty • Total Amount • Total Amount Due • Total Tax Value • Total Treasury • Total Local Unit Penalty • Total SOM Penalty • Total Spec Assessment Amount • Total Education	E
2.12.9	The system must provide voucher detail report, payment detail report, and millage by tax authority, payment comment report and millages detail report for all villages.	E
2.12.10	The system must provide function to print the local unit packet, file packet and all packets under the print tab.	E
2.12.11	The system must provide the function to allow an authorized user to re-query the results under the print tab for all the customized reports. *Note: The system must allow re-query – that is if a user makes a change, the reports will be updated with the change as well instead of having to close out PTA and bring up again.*	E
3	The system must provide a function to generate "Parcel Bill receipt" to display the tax value on each PILT parcel for a particular tax year and season	E
4	The system must provide a Millage Loader functionality to import all millage rates from a .CSV file.	E
4.1	The system must allow an authorized user to enter the tax year and season to import the millage rates from the .CSV file.	E
4.2	The system must provide an import function to browse the.CSV file from system folder and a Load function to load the file in the database.	E

Business Req. No.	• Detailed Requirement Description	Category
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4.3	The system must display following information from the .CSV file for all tax authorities: • Tax Auth ID • Tax Year • Season • Millage Type • Millage • Comment	E
4.4	The system must provide a verification function to check duplicates and or missing millage related information.	E
5	The system must provide a function to look up Parcel numbers for the bills sent by Local units that are not paid.	E
5.1	The system must allow an authorized user to search for parcel numbers based on following criteria: ✓ Local Parcel Number • Tax Year • County • Jurisdiction • Season • Local Parcel Number • PILT Par ID • Village • Tax Value ✓ Fund • PILT Par ID • Tax Year • Fund ID • Fund % • Fund Name Tax • Fund Name Pur • Fund Description ✓ Payments • Tax year • Season • PILT Par ID • Millage Type ID • Actual Paid Amount • Payment Recipient ID	E

Business Req. No.	• Detailed Requirement Description	Category
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5.1 Ctd..	✓ Payment Tracking Adjustment • Tax Year • Season • PILT Par ID • Local Par Number • County • Jurisdiction • Village • Tax Value • To be Paid amount ✓ Inactive • Parcel ID • County • Jurisdiction • 1st year • Inactive year	E
6	The system must provide a "Main Loader" function to import following details from the Main accounting system for a particular tax year and season: • Agency • Current Doc • Current Doc PCA Index suffix • Fund ID • Agency Object • Amount • Vendor Number • Vendor Name • Pay Date • Create ID • Create Timestamp • Tax Authority ID • Comment • MAIN Warrant Number	E
7	The system must allow an authorized user to export all reports on to Excel and or PDF.	E
8	The system must allow an authorized user to save any changes made to the database	E
9	The system must provide a function to "check/uncheck" one or multiple records on all tabs of the parcel tracking and adjustment module	E
10	The system must provide a "Clear Checked Comments" function to allow an authorized user to erase the comments on user selected records.	E

Business Req. No.	• Detailed Requirement Description	Category
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	Tax Payments/Generate Tax Payments	
1	The system must provide a maintenance user interface to Generate Tax Payment records on Parcels and perform Tax bill Calculations.	E
2	The system must allow an authorized user to search parcels based on following criteria: • Tax Year • Tax Season • County • Jurisdiction • Village • Parcel ID	E
2.1	The system must throw an error message if any of the criteria is missing or un – entered. *Note: the user must choose Jurisdiction or Villages along with all other required fields.*	E
2.2	The system must retrieve a list of Parcels with following information: • Par ID • Tax Auth Name • School Code • Millage Type • Current Millage Billed • Base Year Millage • Sum Base Year Millage • Adjustment Factor • Effective Millage • Tax Value • Billed Amount • To Be Paid amount • Is Spec. Assessment (Yes/No) • Comment • Tax Year • Season • Education (Yes/No) • Proc'd (Yes/No) • Is Manual (Yes/No) • Is Total (Yes/No) • Special Assessment millage • Special Assessment Amount	E

Business Req. No.	• Detailed Requirement Description	Category
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3	The system must provide a verification function to: • Allow Parcel Millage rates of any tax year to exceed Base Year Millage rate. • Make sure the summary rates per parcel do not exceed the base year summary rates.	E
3.1	In case the current summary rates exceed the base year summary rates, the system must apply an “Adjustment factor” to equate the current summary and base year summary.	E
3.2	The system must provide an algorithm to calculate Millage adjustments according to the millage weight factor. *Note: Adjustment factor = Base millage rate – Current year millage rate*	E
3.3	The system must take into consideration that these adjustments are made separately for DNR millages vs. Education millages, Village millages vs. City/Township millages.	E
3.4	The system must apply the adjustment factor for each millage even when some individual millage is not exceeding the base year millage.	E
4	The system must allow an authorized user to consider following possibilities to calculate Tax amounts: • Calculate based on the adjustment factors (Calculate paid amount) • Apply base year millage rates to each millage rate in current tax year and calculate it as it was a base year (Calculate with respect to Base Year rates) • Manually adjust the rates as needed.	E
5	The system must allow an authorized user to select one or multiple parcels from the list to calculate Tax amounts.	E
6	For calculations based on Adjustment factor, The system must suggest the adjustment factor = Base Year summary rate – Current year summary rate for all the parcels millages that exceed summary base year millage.	E
6.1	The system must calculate the “Effective Millage rate” based on the parcel tax value.	E
6.2	The system must allow an authorized user to manually update the “Effective Millage Rate to match the current millage rate.	E
6.3	The system must allow an authorized user to manually update the “To Be Paid amount” if necessary.	E
6.4	The system must display a message to verify if the user wants to recalculate the Millae rates based on the updated “To Be Paid amounts.	E
7	For calculations based on base year rates, The system must apply base year millage to each millage in the list and therefore making Effective Millage Rate = Base Year Rate.	E
7.1	The system must display a warning message as a reminder to adjust the rates manually in case any Millage type in current tax year has not been found in base year.	E

Business Req. No.	• Detailed Requirement Description	Category
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8	For calculations based on manually entered millages, the system must allow an authorized user to run system based calculations and update the Effective Millages and To Be Paid amounts manually afterwards. Note: Currently even if an user manually update Effective millages and To Be Paid amounts and then runs a system based calculation, the system overwrites the manual updates.	E
9	The system must provide a function to display and edit Special Assessments millage and amount on appropriate parcel(s) in the list. *Note: Spec Assessment does not affect tax calculations; however an user is allowed to delete it if necessary.*	E
10	The system must provide a function to “Assign a Vendor” to a Parcel that does not have previous year tax information for the system to determine which tax authority is supposed to receive payments.	E
10.1	The system must display a warning message in case a user does not assign a vendor to a parcel that does not have previous year tax information.	E
10.1.1	The system must provide “show total” function to view the grand totals on current millage billed, billed amount and to be paid amount.	E
11	The system must allow an authorized user to save any changes made to the database.	E
	Payment Processing	
1	The system must provide a Payment Processing user interface to process and maintain all the tax payment records.	E
1.1	The system must allow an authorized user to manually edit all the tax payment records for corrections and or adding/deleting a record. *Note: The Generate tax payment user interface allows updates on only “Effective Millage” rate and “To Be Paid” amount fields to maintain Tax Payment records. However, this user interface must allow updates on all the fields.*	E
2	The system must keep track of all the manual updates made in this user interface by maintaining a Manual Entry Flag and group all payments according to this flag.	E
3	The system must provide a function to make “Partial Payments” to tax authorities by allowing an authorized user to split the funds by departments.	E
3.1	The system must provide a separate “Actual Paid Amount” field in addition to the TO Be Paid field to keep record of all the adjusted paid amounts.	E
4	The system must allow an authorized user to generate “Payment Detail report’ with actual payment details presenting summary by millages and adjustments by each parcel and individual millage breakdown by taxing authorities. *Note: Payment detail report is canned report of all the parcels, tax authorities, millages and payment information sent along with the Payment voucher to the vendor (Recipient).*	E

Business Req. No.	• Detailed Requirement Description	Category
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4.1	The system must allow an authorized user to generate "Payment Details report" by Millages in tax authorities also.	E
5	The system must allow an authorized user to generate "Payment Voucher" to present funds/account structure breakdown by departments for a particular tax year, season, county/jurisdiction and vendor.	E
5.1	Since parcels can have more than one acquisition fund link, The system must provide a capability to consider rounding and adjustments in the amounts on the Payment Voucher.	E
6	The system must provide a function to generate a standard Payment letter through a document template.	E
7	The system must provide a function to View and Print all historic PILT payments made to the tax authorities.	E
8	The system must allow an authorized user to export all Tax payments records and reports on to Excel and or PDF.	E
9	The system must allow an authorized user to save any changes made to the database.	E
	System Reports	
1	In accordance with the Public Act 451 of 1994 Part 21, Subpart 14, The system must provide a "Tax Record Master List" report to list all the parcels for a specific DNR Fund showing percentage for each parcel and jurisdiction for a specific tax value factor and tax year with following information: • PILT Par ID • Local Par Number • Legal Description *(Virtually unlimited characters)* • Town/Range/Section • Acreage • Taxable Value • Winter Tax • Summer Tax	E
1.1	The system must allow an authorized user to search and retrieve the parcels in the "Tax Record Master List" report by state, by county or by county and jurisdiction with all the details mentioned above.	E
1.2	The system must allow an authorized user to Publish the Tax Record Master List on the State Tax Commission webpage.	E
2	The system must provide a state wide level "Jurisdiction Summary" report to list all jurisdictions in all counties with their respective number of parcels, acreage and taxable values.	E
2.1	The system must provide a county level "Jurisdiction Summary" report to list all jurisdictions in specific county with their respective number of parcels, acreage and taxable values.	E
3	The system must provide a state wide level "County Summary" report to list all counties in Michigan with their respective number of jurisdictions, parcel numbers, acreage and tax values.	E

Business Req. No.	• Detailed Requirement Description	Category
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4	The system must provide a state wide level “Summary by Tax Authority” report to list all jurisdictions in all counties in Michigan with following details per tax year: • Treasury Actual Paid • School Actual Paid • Amount Paid • Special Assessment Amount • Local Unit Penalty Amount • SOM Penalty Amount • Total Amount Paid	E
4.1	The system must provide a county level “Summary by Tax Authority” to list all the jurisdictions in a county with following information per tax year: • Treasury Actual Paid • School Actual Paid • Amount Paid • Special Assessment Amount • Local Unit Penalty Amount • SOM Penalty Amount • Total Amount Paid	E
4.2	The system must provide county level “Detail by Tax Authority” report to list all the parcels by jurisdiction in a specific county with their tax values and following details: • Treasury Actual Paid • School Actual Paid • Amount Paid • Special Assessment Amount • Local Unit Penalty Amount • SOM Penalty Amount • Total Amount Paid	E
5	The system must provide a state wide level “Fund Report” to list all fund names with actual paid amount, special assessment, local unit penalty, SOM penalty and grand total by each tax year.	E
5.1	The system must provide county level “Fund report” to list all the funds names with actual paid amount, special assessment, local unit penalty and grand total by each tax year for specific county.	E
5.2	The system must provide a jurisdiction level fund report to list all the funds names with actual paid amount, special assessment, local unit penalty and grand total by each tax year.	E
6	The system must provide a “Missing Parcels by county” report to list all the PILT Par ID, parcels information and their respective jurisdictions and local parcel numbers for a tax year	E
7	The system must provide a “Special Assessment” report to list all the counties/jurisdiction and the special assessment amounts for a tax year at both County & State level	E

Business Req. No.	• Detailed Requirement Description	Category
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8	The system must provide a "Penalty" report to list all the Local unit penalties and SOM penalties by their respective county/jurisdiction for a tax year at both County & State level	E
9	The system must provide a state wide level "Village Summary" report to list all the Villages with their respective number of parcels, acreage and tax value for a tax year.	E
10	The system must provide "Village Jurisdiction Summary" report to verify all the villages and townships associated with them.	E
11	The system must provide "MAIN payment report" by county or state to display the following information: • Tax year • Season • Agency • Current doc • Vendor name • Vendor No. • MAIN warrant Number • Pay Date • Amount • Tax authority ID • County-Jurisdiction • Document Suffix • PCA Index	E
	Swamp Tax	
1	In accordance with the Act 451, P.A. 1994 – Part 21, Subpart 13, and The system must provide a user interface to maintain Swamp Tax records to manage Swamp land payments for Tax reverted and or gift parcel records.	O
2	The system must allow an authorized user to View/Add/Update/Delete following details on the swamp parcels: • Town/Range/Section • Jurisdiction • Acres • Total Acreage by Township • Legal Description of parcels *Note: The legal description of swamp parcels is different from that LOTS parcels. The only thing in common between Swamp Parcels and LOTS Parcels is Town/Range/Section.*	O

Business Req. No.	• Detailed Requirement Description	Category
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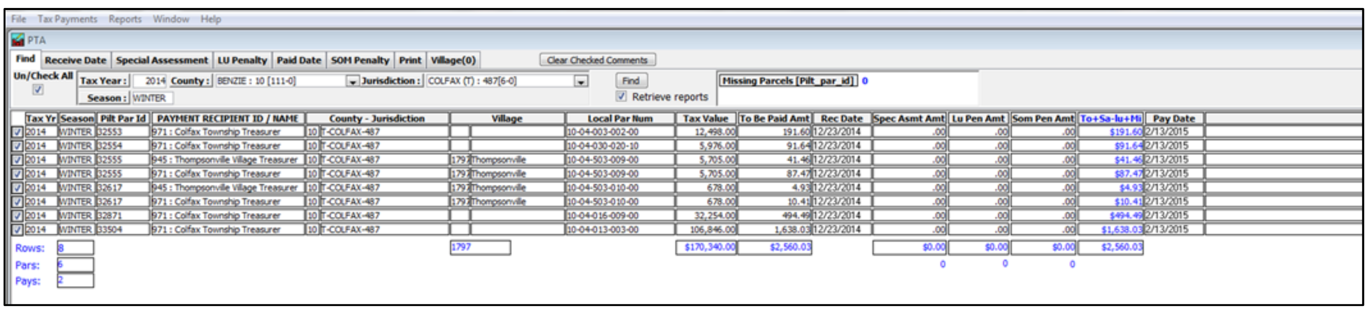
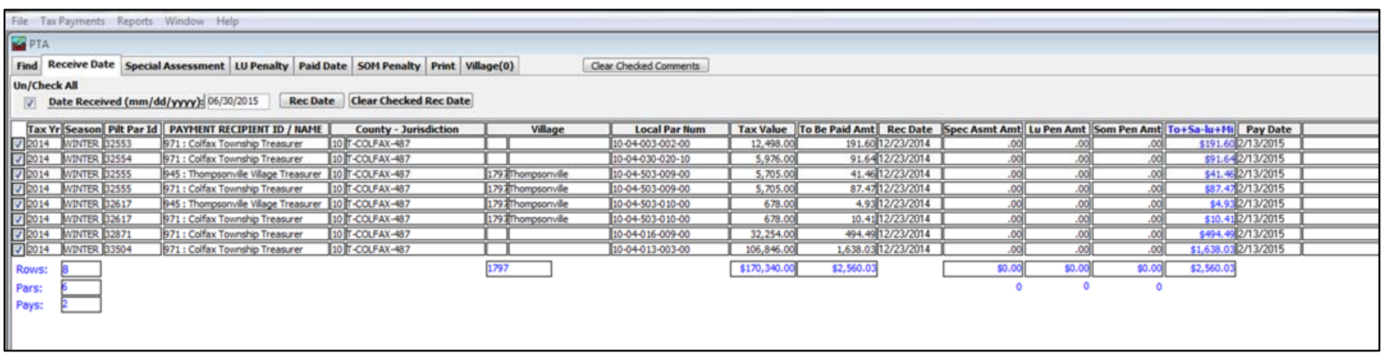
3	The system must allow an authorized user to generate an "Annual Swampland Payments" report with following information: • County • Acres • Price per acres • Payment amount • Prorated Price per acre • Prorated payment amount *Note: Swampland payments are made on December 15th every year for tax reverted land purchased as of December 1st.*	O
4	The system must allow an authorized user to create "Payment Voucher" for each county with following information: • County Treasurer • Vendor Number • Invoice Number • Invoice description • Index • Agency Object • Total Amount • Voucher Number • Comments *Note: Payment voucher is sent to county treasurer for each county with swamp land payments details.*	O
5	The system must allow an authorized user to generate templates to be sent to county treasurer along with the payment voucher. *Note: As of today, based on Public Act 603 of 2012 in December 2015 the Swampland amount per acre goes from $3.00 to $4.00.*	O
	LOTS Parcels vs. PILT Parcels	
1	The system must match the county and jurisdiction records of LOTS parcels and PILT parcels.	E
2	The system must match the platted parcel information on LOTS parcels with PILT parcels.	E
3	The system must match the subdivision ID number and Lot number of LOTS parcels to that of PILT parcels.	E
4	In case PILT parcel has Block and Lot fraction field that is NULL, the system must match it with the Block and Lot fraction field on LOTS parcels.	E
5	The system must match the Acreage information on LOTS parcel to that of PILT parcel.	E
6	The system must match the Town, Range and Section information on LOTS parcels with that of PILT parcel & PILT Par ID	E

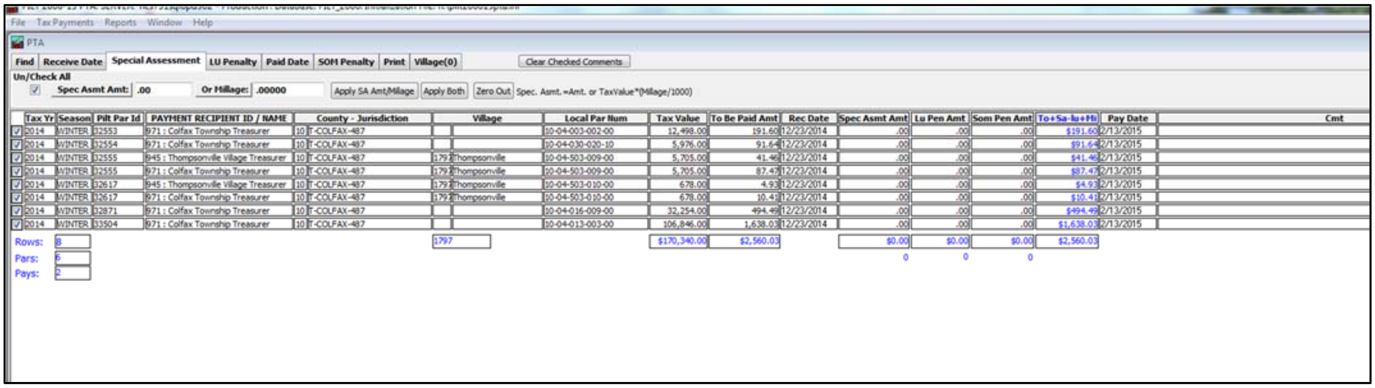
Business Req. No.	• Detailed Requirement Description	Category
•	•	•
6.1	In case the PILT parcel has Quarter or Quarter Quarter information, the system must match it with that of LOTS parcel.	E
7	The system must link all PILT ID’s to all corresponding LOTS ID’S.	E
8	The system must maintain a table for PILT parcel’s legal descriptions with editing capabilities.	E
9	The system must provide a functionality to allow an authorized user to use LOTS legal description information on parcels for PILT processing.	E
10	The system must provide an indicator on LOTS parcel whether it’s a PILT parcel or a Swamp parcel. *Note: Swamp Parcels are acreage tax reverted parcels and or gifts. If the most recent transaction type on such parcels is Acquired then they are Swamp parcels.*	E

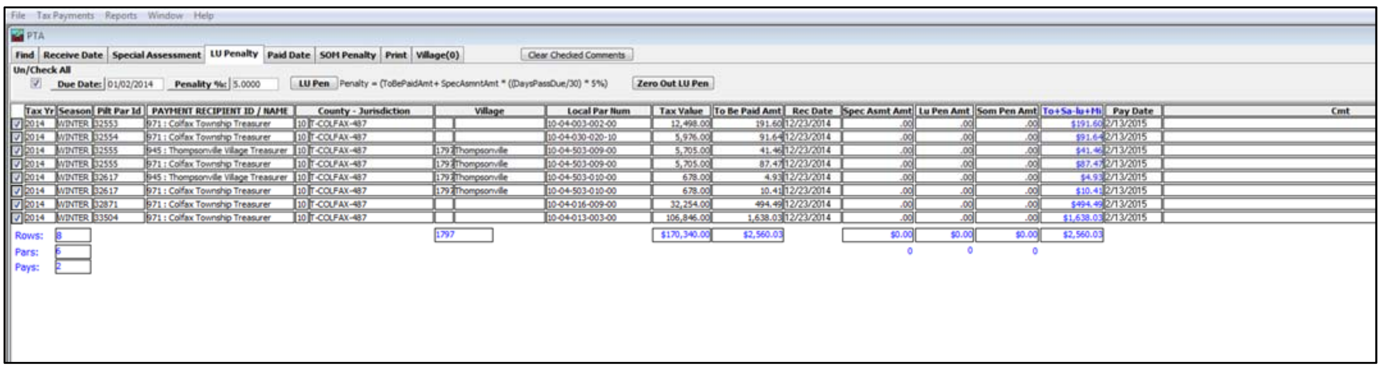
B. AS-IS System Screenshots

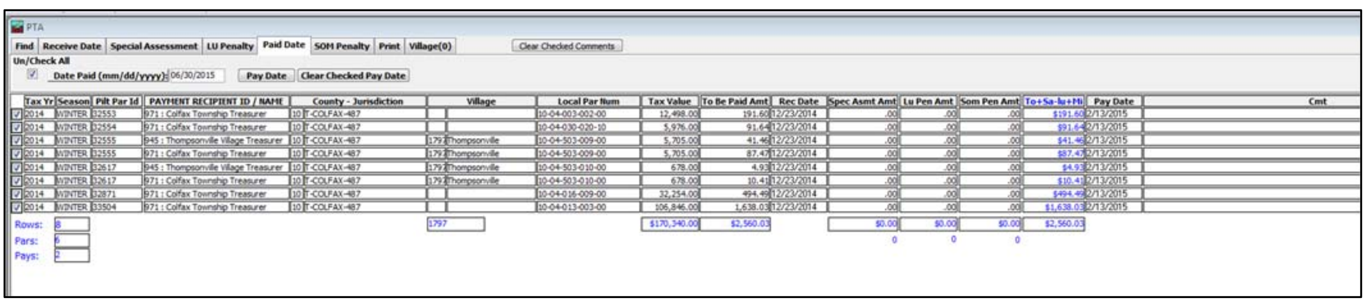
PTA Screens:

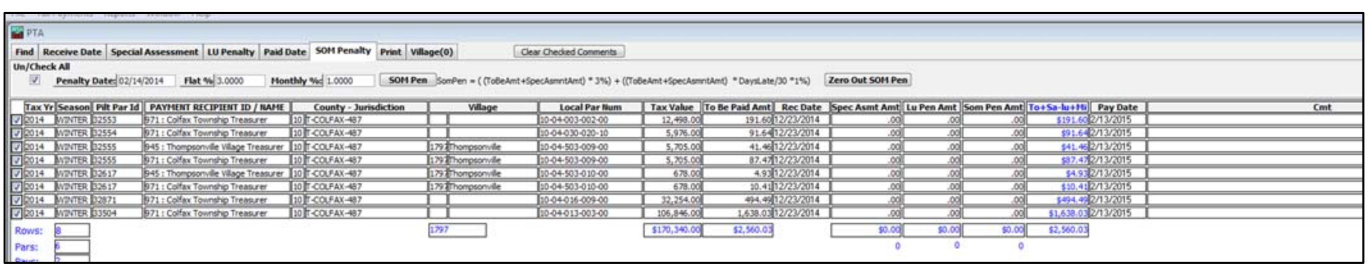


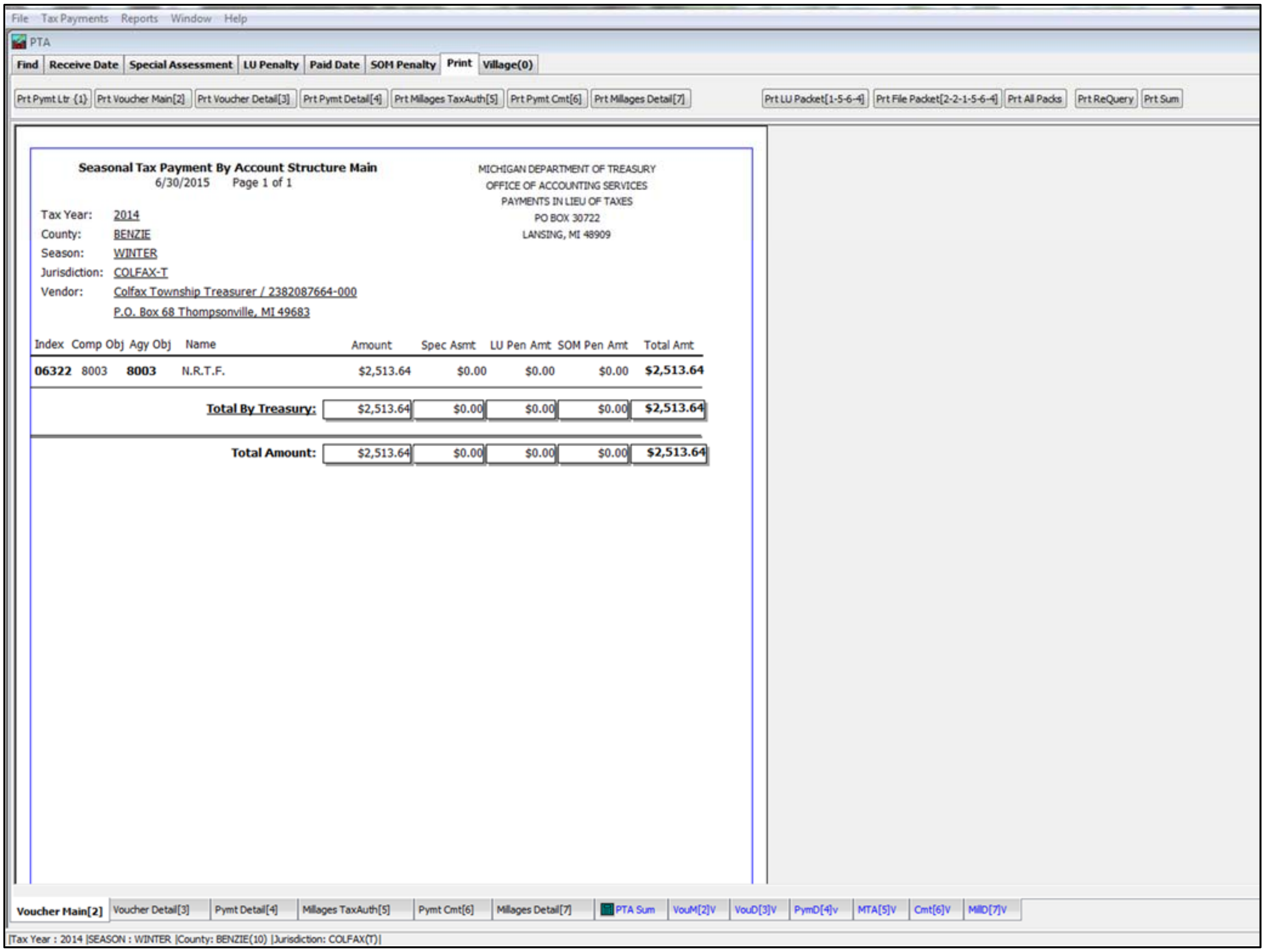



PTA
Find
Receive Date
Special Assessment
LU Penalty
Paid Date
SOM Penalty
Print
Village(0)
Clear Checked Comments
Un/Check All
Spec Asmt Amt:
Or Millage:
Apply SA Amt/Millage
Apply Both
Zero Out
Rows:
Pars:
Pays:


PTA
Find
Receive Date
Special Assessment
LU Penalty
Paid Date
SOM Penalty
Print
Village(0)
Clear Checked Comments
Un/Check All
Due Date:
Penalty %:
LU Pen
Zero Out LU Pen
Rows:
Pars:
Pays:


PTA
Find
Receive Date
Special Assessment
LU Penalty
Paid Date
SOM Penalty
Print
Village(0)
Clear Checked Comments
Un/Check All
Pay Date
Clear Checked Pay Date
Rows:
Pars:
Pays:


PTA
Find
Receive Date
Special Assessment
LU Penalty
Paid Date
SOM Penalty
Print
Village(0)
Clear Checked Comments
Un/Check All
SOM Pen
Zero Out SOM Pen
Rows:
Pars:


File Tax Payments Reports Window Help

PTA

Find | Receive Date | Special Assessment | LU Penalty | Paid Date | SOM Penalty | Print | Village(0)

Prt Pymt Ltr (1) | Prt Voucher Main[2] | Prt Voucher Detail[3] | Prt Pymt Detail[4] | Prt Millages TaxAuth[5] | Prt Pymt Cmt[6] | Prt Millages Detail[7] | Prt LU Packet[1-5-6-4] | Prt File Packet[2-2-1-5-6-4] | Prt All Packs | Prt ReQuery | Prt Sum

Seasonal Tax Payment By Account Structure Main
6/30/2015 Page 1 of 1

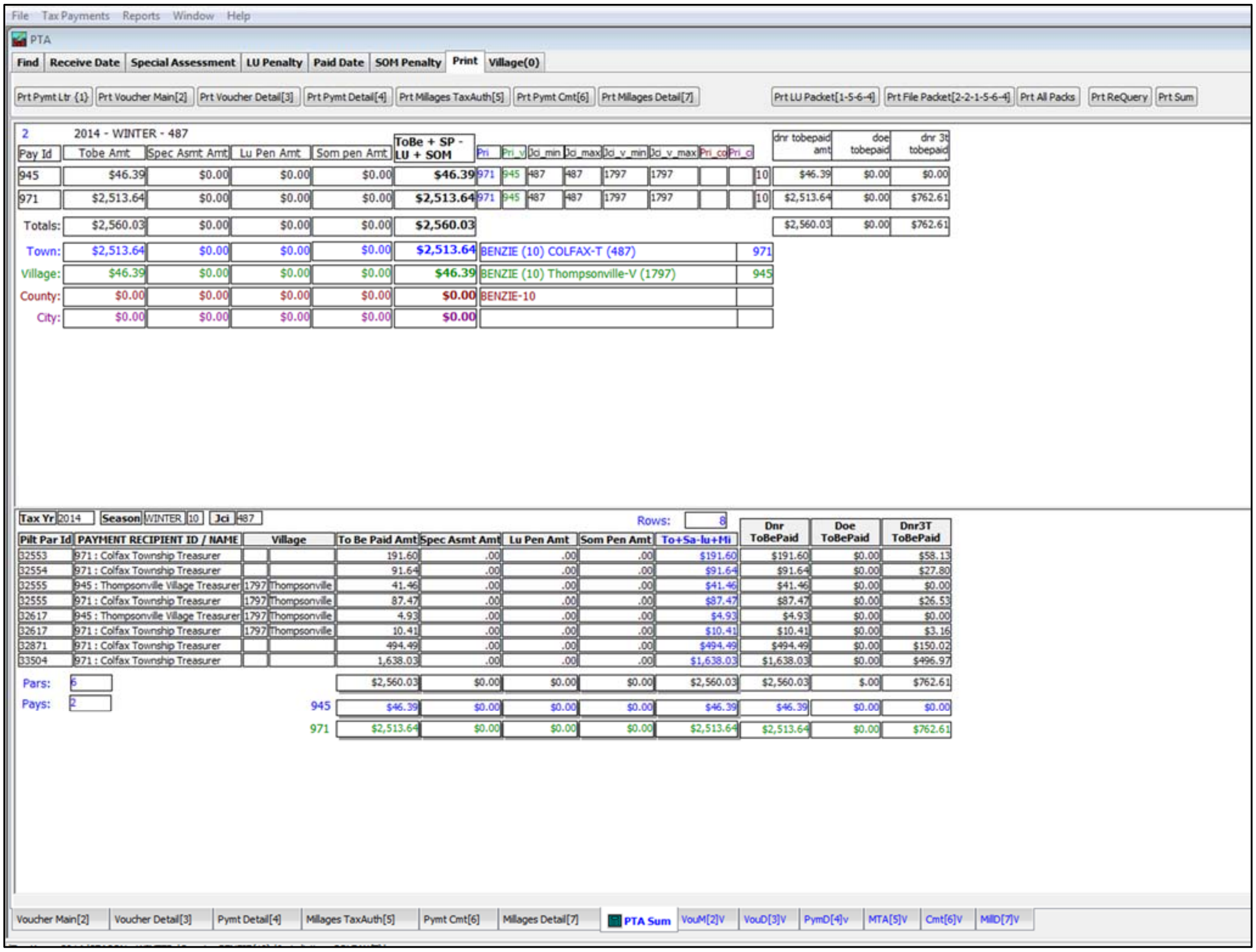
MICHIGAN DEPARTMENT OF TREASURY
OFFICE OF ACCOUNTING SERVICES
PAYMENTS IN LIEU OF TAXES
PO BOX 30722
LANSING, MI 48909

Tax Year: 2014
County: BENZIE
Season: WINTER
Jurisdiction: COLFAX-T
Vendor: Colfax Township Treasurer / 2382087664-000
P.O. Box 68 Thompsonville, MI 49683

Index	Comp Obj	Agy Obj	Name	Amount	Spec Asmt	LU Pen Amt	SOM Pen Amt	Total Amt
06322	8003	**8003**	N.R.T.F.	$2,513.64	$0.00	$0.00	$0.00	**$2,513.64**
			Total By Treasury:	$2,513.64	$0.00	$0.00	$0.00	**$2,513.64**
			Total Amount:	$2,513.64	$0.00	$0.00	$0.00	**$2,513.64**

Voucher Main[2] | Voucher Detail[3] | Pymt Detail[4] | Millages TaxAuth[5] | Pymt Cmt[6] | Millages Detail[7] | PTA Sum | VouM[2]V | VouD[3]V | PymD[4]V | MTA[5]V | Cmt[6]V | MillD[7]V

|Tax Year : 2014 |SEASON : WINTER |County: BENZIE(10) |Jurisdiction: COLFAX(T)|

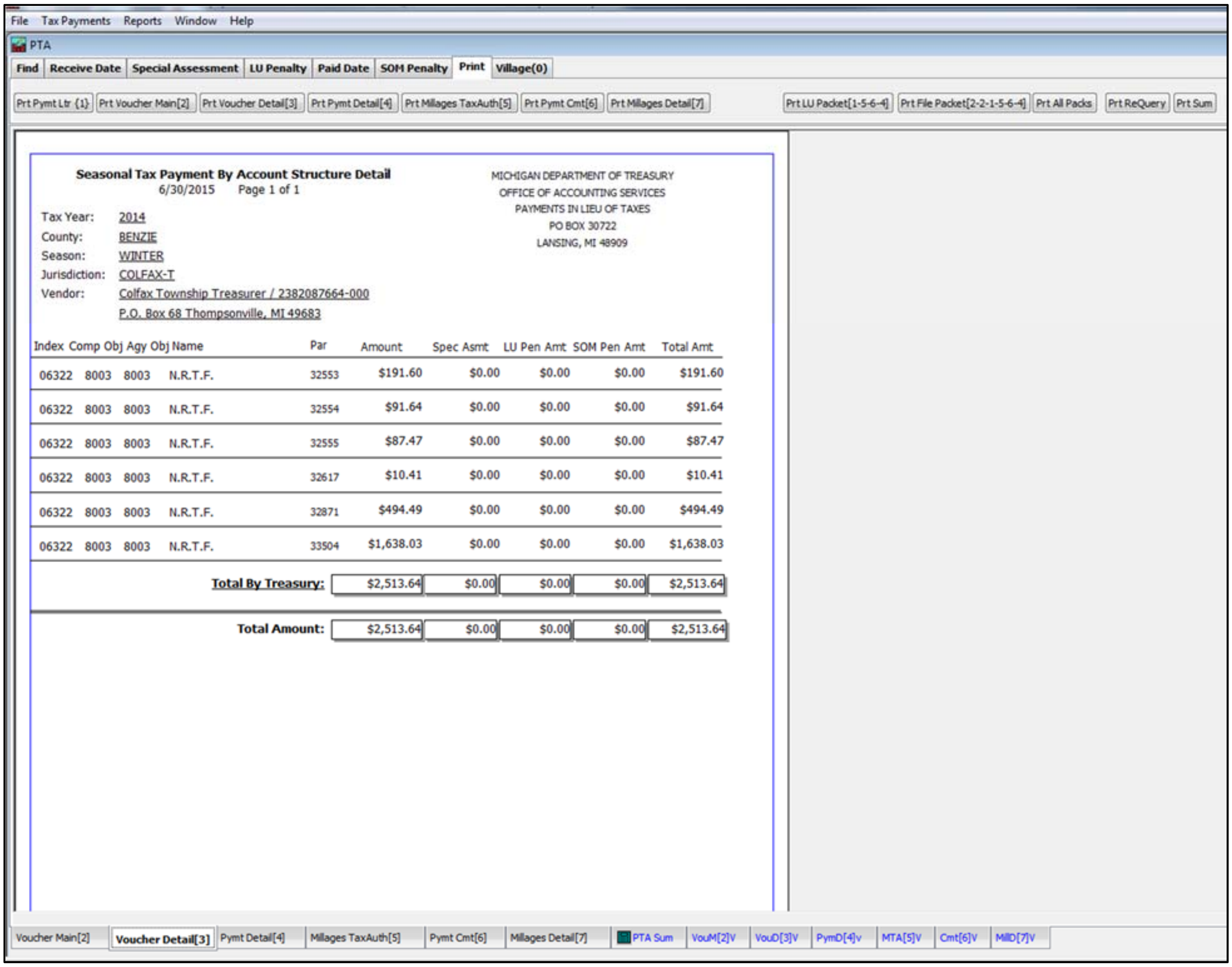


Pay Id	Tobe Amt	Spec Asmt Amt	Lu Pen Amt	Som pen Amt	ToBe + SP - LU + SOM	Pri	Pri_v	Jci_min	Jci_max	Jci_v_min	Jci_v_max	Pri_co	Pri_ci		dnr tobepaid amt	doe tobepaid	dnr 3t tobepaid
945	$46.39	$0.00	$0.00	$0.00	$46.39	971	945	487	487	1797	1797			10	$46.39	$0.00	$0.00
971	$2,513.64	$0.00	$0.00	$0.00	$2,513.64	971	945	487	487	1797	1797			10	$2,513.64	$0.00	$762.61
Totals:	$2,560.03	$0.00	$0.00	$0.00	$2,560.03										$2,560.03	$0.00	$762.61

Town:	$2,513.64	$0.00	$0.00	$0.00	$2,513.64	BENZIE (10) COLFAX-T (487)	971
Village:	$46.39	$0.00	$0.00	$0.00	$46.39	BENZIE (10) Thompsonville-V (1797)	945
County:	$0.00	$0.00	$0.00	$0.00	$0.00	BENZIE-10	
City:	$0.00	$0.00	$0.00	$0.00	$0.00		

Tax Yr 2014 Season WINTER 10 Jci 487 Rows: 8

Pilt Par Id	PAYMENT RECIPIENT ID / NAME	Village		To Be Paid Amt	Spec Asmt Amt	Lu Pen Amt	Som Pen Amt	To+Sa-lu+Mi	Dnr ToBePaid	Doe ToBePaid	Dnr3T ToBePaid
32553	971 : Colfax Township Treasurer			191.60	.00	.00	.00	$191.60	$191.60	$0.00	$58.13
32554	971 : Colfax Township Treasurer			91.64	.00	.00	.00	$91.64	$91.64	$0.00	$27.80
32555	945 : Thompsonville Village Treasurer	1797	Thompsonville	41.46	.00	.00	.00	$41.46	$41.46	$0.00	$0.00
32555	971 : Colfax Township Treasurer	1797	Thompsonville	87.47	.00	.00	.00	$87.47	$87.47	$0.00	$26.53
32617	945 : Thompsonville Village Treasurer	1797	Thompsonville	4.93	.00	.00	.00	$4.93	$4.93	$0.00	$0.00
32617	971 : Colfax Township Treasurer	1797	Thompsonville	10.41	.00	.00	.00	$10.41	$10.41	$0.00	$3.16
32871	971 : Colfax Township Treasurer			494.49	.00	.00	.00	$494.49	$494.49	$0.00	$150.02
33504	971 : Colfax Township Treasurer			1,638.03	.00	.00	.00	$1,638.03	$1,638.03	$0.00	$496.97
Pars: 6				$2,560.03	$0.00	$0.00	$0.00	$2,560.03	$2,560.03	$.00	$762.61
Pays: 2			945	$46.39	$0.00	$0.00	$0.00	$46.39	$46.39	$0.00	$0.00
			971	$2,513.64	$0.00	$0.00	$0.00	$2,513.64	$2,513.64	$0.00	$762.61



File Tax Payments Reports Window Help

PTA

Find | Receive Date | Special Assessment | LU Penalty | Paid Date | SOM Penalty | Print | Village(0)

Prt Pymt Ltr {1} | Prt Voucher Main[2] | Prt Voucher Detail[3] | Prt Pymt Detail[4] | Prt Millages TaxAuth[5] | Prt Pymt Cmt[6] | Prt Millages Detail[7] | Prt LU Packet[1-5-6-4] | Prt File Packet[2-2-1-5-6-4] | Prt All Packs | Prt ReQuery | Prt Sum

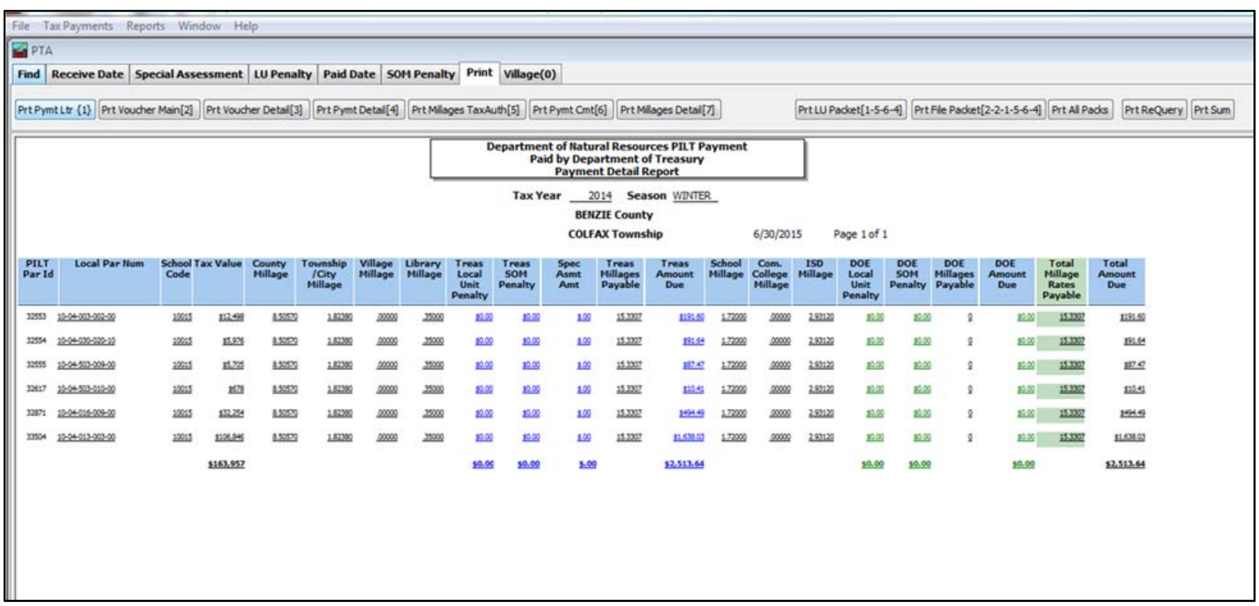
Seasonal Tax Payment By Account Structure Detail
6/30/2015 Page 1 of 1

MICHIGAN DEPARTMENT OF TREASURY
OFFICE OF ACCOUNTING SERVICES
PAYMENTS IN LIEU OF TAXES
PO BOX 30722
LANSING, MI 48909

Tax Year: 2014
County: BENZIE
Season: WINTER
Jurisdiction: COLFAX-T
Vendor: Colfax Township Treasurer / 2382087664-000
P.O. Box 68 Thompsonville, MI 49683

Index	Comp Obj	Agy Obj	Name	Par	Amount	Spec Asmt	LU Pen Amt	SOM Pen Amt	Total Amt
06322	8003	8003	N.R.T.F.	32553	$191.60	$0.00	$0.00	$0.00	$191.60
06322	8003	8003	N.R.T.F.	32554	$91.64	$0.00	$0.00	$0.00	$91.64
06322	8003	8003	N.R.T.F.	32555	$87.47	$0.00	$0.00	$0.00	$87.47
06322	8003	8003	N.R.T.F.	32617	$10.41	$0.00	$0.00	$0.00	$10.41
06322	8003	8003	N.R.T.F.	32871	$494.49	$0.00	$0.00	$0.00	$494.49
06322	8003	8003	N.R.T.F.	33504	$1,638.03	$0.00	$0.00	$0.00	$1,638.03
			Total By Treasury:		$2,513.64	$0.00	$0.00	$0.00	$2,513.64
			Total Amount:		$2,513.64	$0.00	$0.00	$0.00	$2,513.64

Voucher Main[2] | Voucher Detail[3] | Pymt Detail[4] | Millages TaxAuth[5] | Pymt Cmt[6] | Millages Detail[7] | PTA Sum | VouM[2]V | VouD[3]V | PymD[4]V | MTA[5]V | Cmt[6]V | MillD[7]V



File Tax Payments Reports Window Help

PTA

Find | Receive Date | Special Assessment | LU Penalty | Paid Date | SOM Penalty | Print | Village(0)

Prt Pymt Ltr {1} | Prt Voucher Main[2] | Prt Voucher Detail[3] | Prt Pymt Detail[4] | Prt Millages TaxAuth[5] | Prt Pymt Cmt[6] | Prt Millages Detail[7] | Prt LU Packet[1-5-6-4] | Prt File Packet[2-2-1-5-6-4] | Prt All Packs | Prt ReQuery | Prt Sum

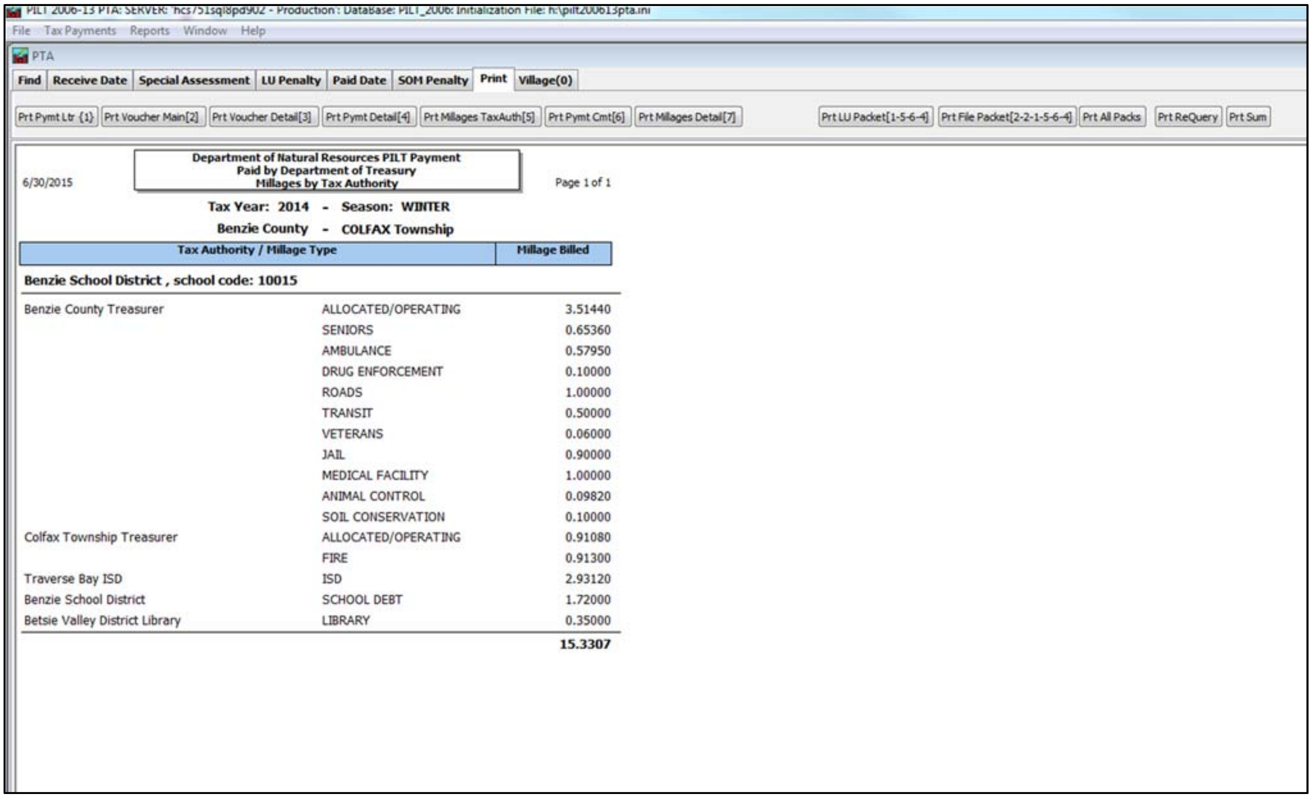
Department of Natural Resources PILT Payment
Paid by Department of Treasury
Payment Detail Report

Tax Year 2014 **Season** WINTER

BENZIE County

COLFAX Township 6/30/2015 Page 1 of 1

PILT Par Id	Local Par Num	School Code	Tax Value	County Millage	Township /City Millage	Village Millage	Library Millage	Treas Local Unit Penalty	Treas SOM Penalty	Spec Asmt Amt	Treas Millages Payable	Treas Amount Due	School Millage	Com. College Millage	ISD Millage	DOE Local Unit Penalty	DOE SOM Penalty	DOE Millages Payable	DOE Amount Due	Total Millage Rates Payable	Total Amount Due
32553	10-04-003-002-00	10015	$12,498	8.50570	1.82380	.00000	.35000	$0.00	$0.00	$.00	15.3307	$191.60	1.72000	.00000	2.93120	$0.00	$0.00	0	$0.00	15.3307	$191.60
32554	10-04-030-020-10	10015	$5,976	8.50570	1.82380	.00000	.35000	$0.00	$0.00	$.00	15.3307	$91.64	1.72000	.00000	2.93120	$0.00	$0.00	0	$0.00	15.3307	$91.64
32555	10-04-503-009-00	10015	$5,705	8.50570	1.82380	.00000	.35000	$0.00	$0.00	$.00	15.3307	$87.47	1.72000	.00000	2.93120	$0.00	$0.00	0	$0.00	15.3307	$87.47
32617	10-04-503-010-00	10015	$678	8.50570	1.82380	.00000	.35000	$0.00	$0.00	$.00	15.3307	$10.41	1.72000	.00000	2.93120	$0.00	$0.00	0	$0.00	15.3307	$10.41
32871	10-04-016-009-00	10015	$32,254	8.50570	1.82380	.00000	.35000	$0.00	$0.00	$.00	15.3307	$494.49	1.72000	.00000	2.93120	$0.00	$0.00	0	$0.00	15.3307	$494.49
33504	10-04-013-003-00	10015	$106,846	8.50570	1.82380	.00000	.35000	$0.00	$0.00	$.00	15.3307	$1,638.03	1.72000	.00000	2.93120	$0.00	$0.00	0	$0.00	15.3307	$1,638.03
			$163,957					$0.00	$0.00	$.00		$2,513.64				$0.00	$0.00		$0.00		$2,513.64



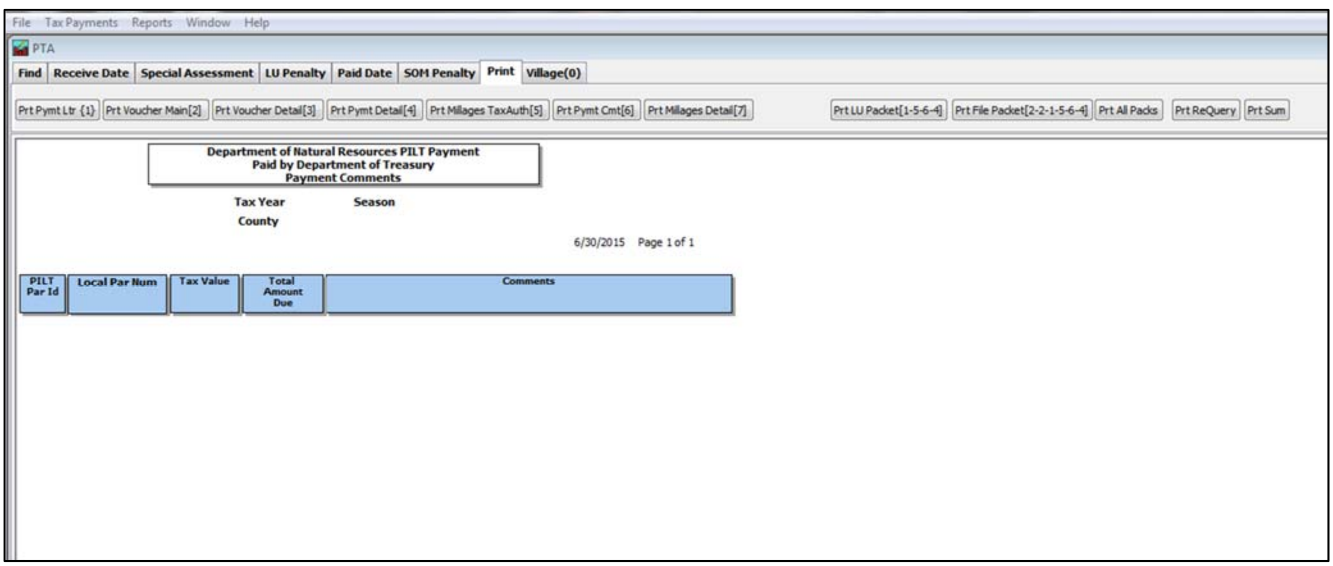
Department of Natural Resources PILT Payment
Paid by Department of Treasury
Millages by Tax Authority

6/30/2015 Page 1 of 1

Tax Year: 2014 - Season: WINTER

Benzie County - COLFAX Township

Tax Authority / Millage Type		Millage Billed
Benzie School District , school code: 10015		
Benzie County Treasurer	ALLOCATED/OPERATING	3.51440
	SENIORS	0.65360
	AMBULANCE	0.57950
	DRUG ENFORCEMENT	0.10000
	ROADS	1.00000
	TRANSIT	0.50000
	VETERANS	0.06000
	JAIL	0.90000
	MEDICAL FACILITY	1.00000
	ANIMAL CONTROL	0.09820
	SOIL CONSERVATION	0.10000
Colfax Township Treasurer	ALLOCATED/OPERATING	0.91080
	FIRE	0.91300
Traverse Bay ISD	ISD	2.93120
Benzie School District	SCHOOL DEBT	1.72000
Betsie Valley District Library	LIBRARY	0.35000
		15.3307



Department of Natural Resources PILT Payment
Paid by Department of Treasury
Payment Comments

Tax Year **Season**

County

6/30/2015 Page 1 of 1

PILT Par Id	Local Par Num	Tax Value	Total Amount Due	Comments

File Tax Payments Reports Window Help

PTA

Find | Receive Date | Special Assessment | LU Penalty | Paid Date | SOM Penalty | Print | Village(0)

Prt Pymt Ltr {1} | Prt Voucher Main[2] | Prt Voucher Detail[3] | Prt Pymt Detail[4] | Prt Millages TaxAuth[5] | Prt Pymt Cmt[6] | Prt Millages Detail[7] | Prt LU Packet[1-5-6-4] | Prt File Packet[2-2-1-5-6-4] | Prt All Packs | Prt ReQuery | Prt Sum

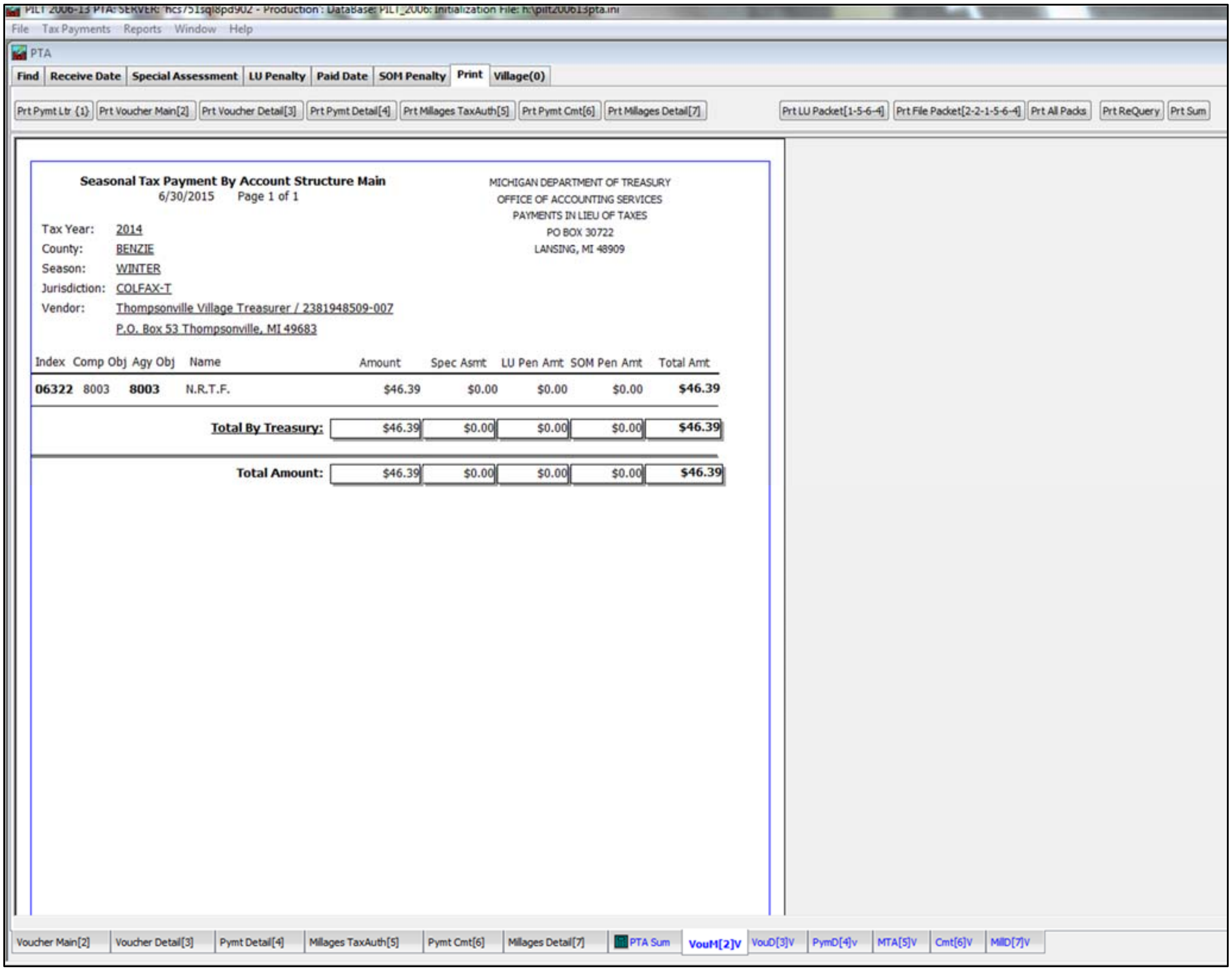
Department of Natural Resources PILT Payment
Paid by Department of Treasury
Detailed Millages

Tax Year 2014 **Season** WINTER

BENZIE County

COLFAX Township 6/30/2015 Page 1 of 4

Par_Id / School / Tax Authority / Millage Type				Millage Billed	Millage Payable
32553	Benzie School District , sc	Benzie County Treasurer	ALLOCATED/OPERATING	3.51440	
32553	Benzie School District , sc	Benzie County Treasurer	SENIORS	.65360	
32553	Benzie School District , sc	Benzie County Treasurer	AMBULANCE	.57950	
32553	Benzie School District , sc	Benzie County Treasurer	DRUG ENFORCEMENT	.10000	
32553	Benzie School District , sc	Benzie County Treasurer	ROADS	1.00000	
32553	Benzie School District , sc	Benzie County Treasurer	TRANSIT	.50000	
32553	Benzie School District , sc	Benzie County Treasurer	VETERANS	.06000	
32553	Benzie School District , sc	Benzie County Treasurer	JAIL	.90000	
32553	Benzie School District , sc	Benzie County Treasurer	MEDICAL FACILITY	1.00000	
32553	Benzie School District , sc	Benzie County Treasurer	ANIMAL CONTROL	.09820	
32553	Benzie School District , sc	Benzie County Treasurer	SOIL CONSERVATION	.10000	
32553	Benzie School District , sc	Colfax Township Treasurer	ALLOCATED/OPERATING	.91080	
32553	Benzie School District , sc	Colfax Township Treasurer	FIRE	.91300	
32553	Benzie School District , sc	Traverse Bay ISD	ISD	2.93120	
32553	Benzie School District , sc	Benzie School District	SCHOOL DEBT	1.72000	
32553	Benzie School District , sc	Betsie Valley District Library	LIBRARY	.35000	
			TREASURY:	15.33070	15.33070
Totals By Par_Id: 32553				**15.33070**	**15.33070**
32554	Benzie School District , sc	Benzie County Treasurer	ALLOCATED/OPERATING	3.51440	
32554	Benzie School District , sc	Benzie County Treasurer	SENIORS	.65360	
32554	Benzie School District , sc	Benzie County Treasurer	AMBULANCE	.57950	
32554	Benzie School District , sc	Benzie County Treasurer	DRUG ENFORCEMENT	.10000	
32554	Benzie School District , sc	Benzie County Treasurer	ROADS	1.00000	
32554	Benzie School District , sc	Benzie County Treasurer	TRANSIT	.50000	
32554	Benzie School District , sc	Benzie County Treasurer	VETERANS	.06000	
32554	Benzie School District , sc	Benzie County Treasurer	JAIL	.90000	
32554	Benzie School District , sc	Benzie County Treasurer	MEDICAL FACILITY	1.00000	
32554	Benzie School District , sc	Benzie County Treasurer	ANIMAL CONTROL	.09820	
32554	Benzie School District , sc	Benzie County Treasurer	SOIL CONSERVATION	.10000	
32554	Benzie School District , sc	Colfax Township Treasurer	ALLOCATED/OPERATING	.91080	
32554	Benzie School District , sc	Colfax Township Treasurer	FIRE	.91300	
32554	Benzie School District , sc	Traverse Bay ISD	ISD	2.93120	
32554	Benzie School District , sc	Benzie School District	SCHOOL DEBT	1.72000	



PILT 2006-13 PTA: SERVER: 'hcs751sql8pd902 - Production': DataBase: PILT_2006: Initialization File: h:\pilt200613pta.ini

File Tax Payments Reports Window Help

PTA

Find | Receive Date | Special Assessment | LU Penalty | Paid Date | SOM Penalty | Print | Village(0)

Prt Pymt Ltr (1) | Prt Voucher Main[2] | Prt Voucher Detail[3] | Prt Pymt Detail[4] | Prt Millages TaxAuth[5] | Prt Pymt Cmt[6] | Prt Millages Detail[7] | Prt LU Packet[1-5-6-4] | Prt File Packet[2-2-1-5-6-4] | Prt All Packs | Prt ReQuery | Prt Sum

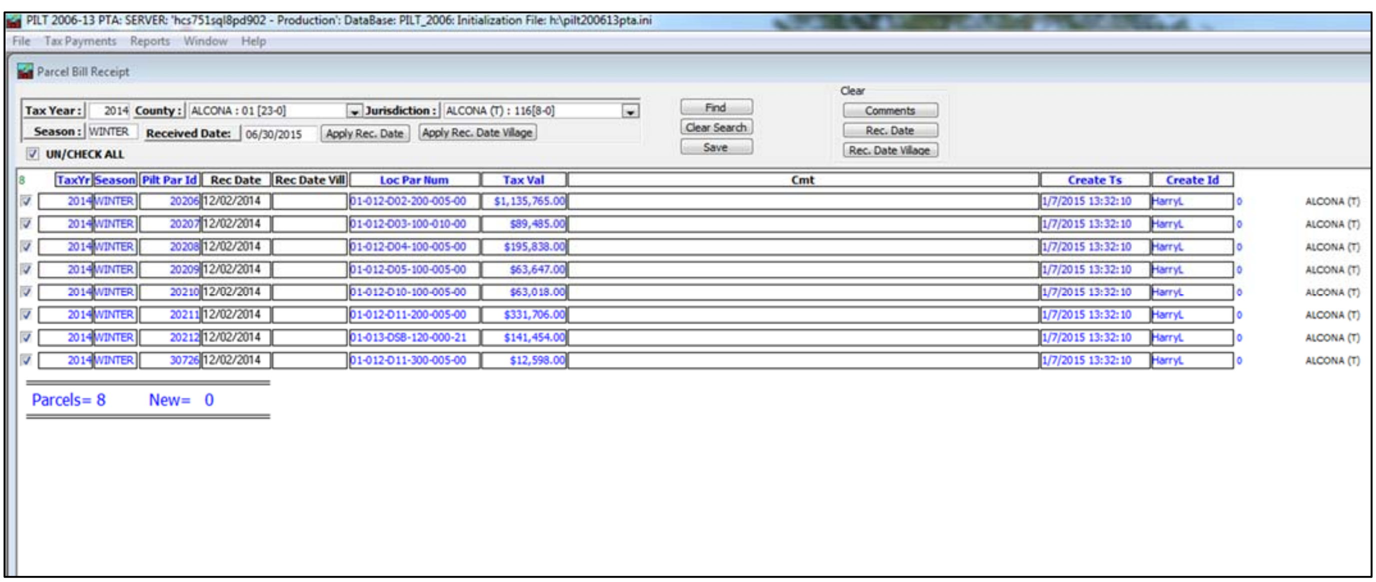
Seasonal Tax Payment By Account Structure Main
6/30/2015 Page 1 of 1

MICHIGAN DEPARTMENT OF TREASURY
OFFICE OF ACCOUNTING SERVICES
PAYMENTS IN LIEU OF TAXES
PO BOX 30722
LANSING, MI 48909

Tax Year: 2014
County: BENZIE
Season: WINTER
Jurisdiction: COLFAX-T
Vendor: Thompsonville Village Treasurer / 2381948509-007
P.O. Box 53 Thompsonville, MI 49683

Index	Comp Obj	Agy Obj	Name	Amount	Spec Asmt	LU Pen Amt	SOM Pen Amt	Total Amt
06322	8003	**8003**	N.R.T.F.	$46.39	$0.00	$0.00	$0.00	**$46.39**
			Total By Treasury:	$46.39	$0.00	$0.00	$0.00	**$46.39**
			Total Amount:	$46.39	$0.00	$0.00	$0.00	**$46.39**

Voucher Main[2] | Voucher Detail[3] | Pymt Detail[4] | Millages TaxAuth[5] | Pymt Cmt[6] | Millages Detail[7] | PTA Sum | VouM[2]V | VouD[3]V | PymD[4]v | MTA[5]V | Cmt[6]V | MillD[7]V



PILT 2006-13 PTA: SERVER: 'hcs751sql8pd902 - Production': DataBase: PILT_2006: Initialization File: h:\pilt200613pta.ini

File Tax Payments Reports Window Help

Parcel Bill Receipt

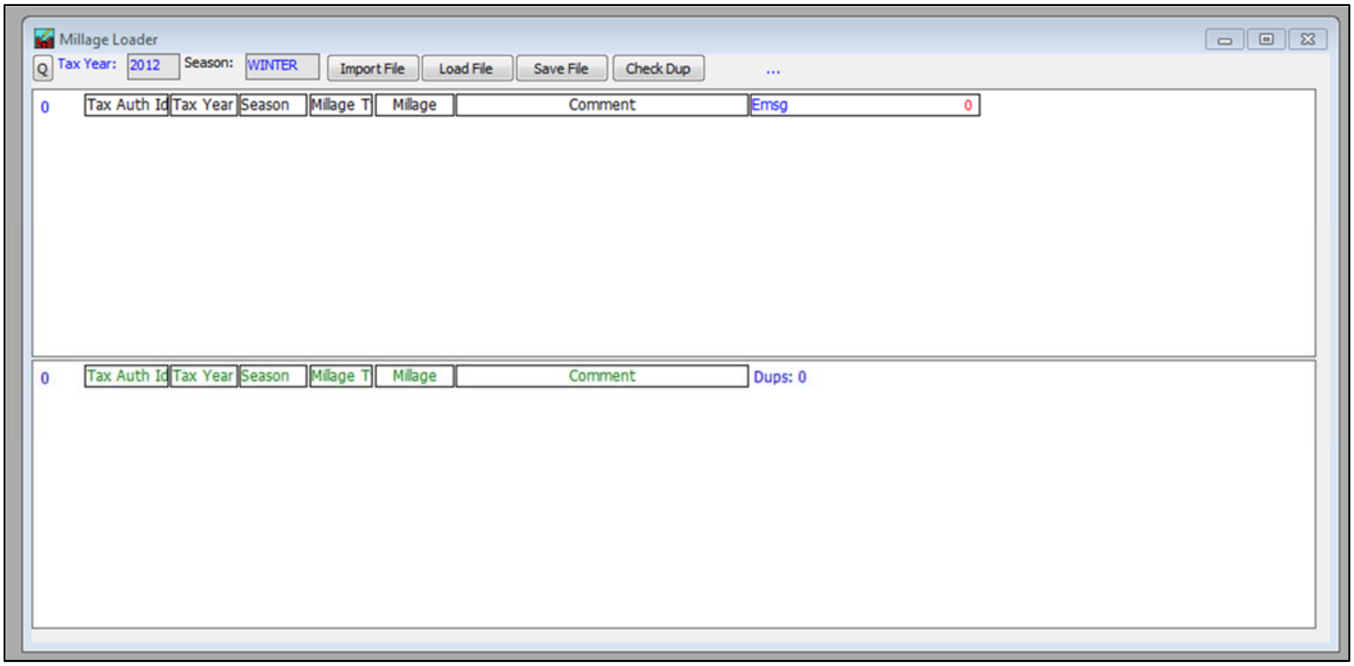
Tax Year: 2014 County: ALCONA : 01 [23-0] Jurisdiction: ALCONA (T) : 116[8-0]
Season: WINTER Received Date: 06/30/2015 Apply Rec. Date | Apply Rec. Date Village
UN/CHECK ALL

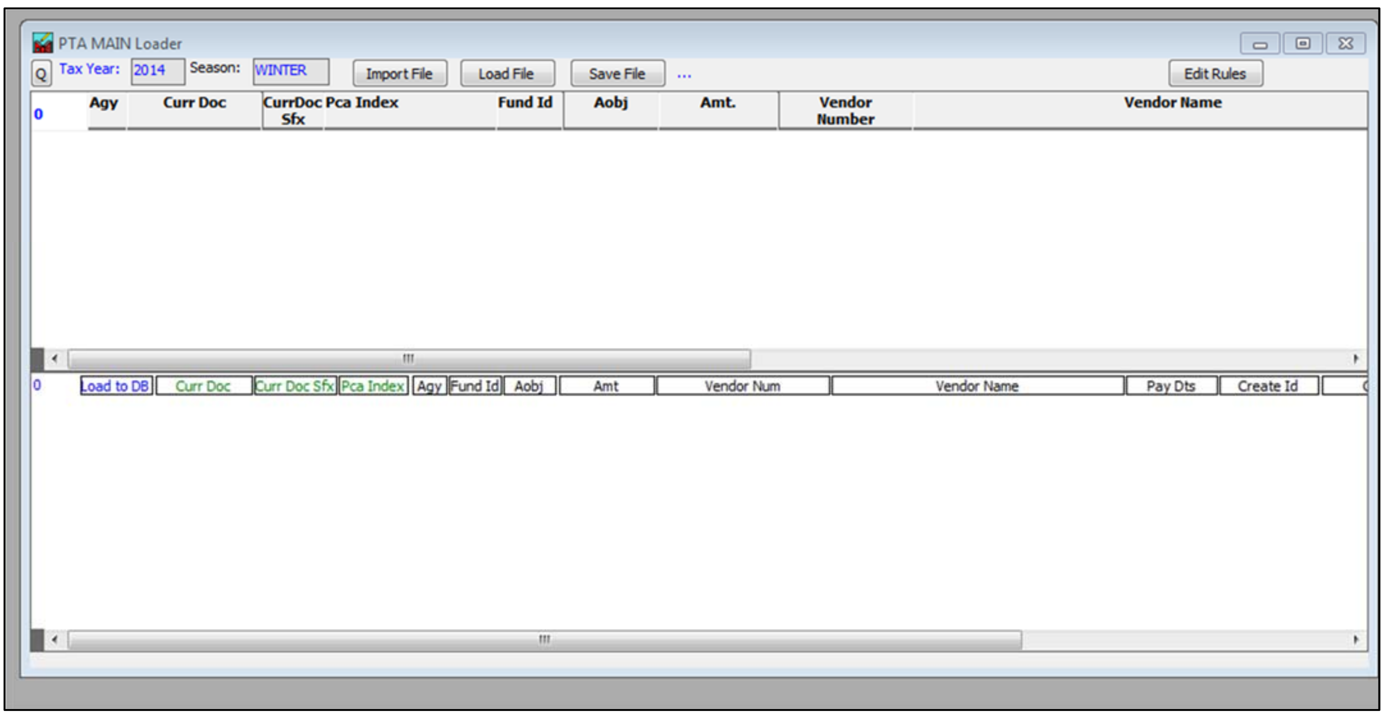
Find | Clear Search | Save

Clear: Comments | Rec. Date | Rec. Date Village

8	TaxYr	Season	Pilt Par Id	Rec Date	Rec Date Vill	Loc Par Num	Tax Val	Cmt	Create Ts	Create Id		
☑	2014	WINTER	20206	12/02/2014		01-012-D02-200-005-00	$1,135,765.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)
☑	2014	WINTER	20207	12/02/2014		01-012-D03-100-010-00	$89,485.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)
☑	2014	WINTER	20208	12/02/2014		01-012-D04-100-005-00	$195,838.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)
☑	2014	WINTER	20209	12/02/2014		01-012-D05-100-005-00	$63,647.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)
☑	2014	WINTER	20210	12/02/2014		01-012-D10-100-005-00	$63,018.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)
☑	2014	WINTER	20211	12/02/2014		01-012-D11-200-005-00	$331,706.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)
☑	2014	WINTER	20212	12/02/2014		01-013-D5B-120-000-21	$141,454.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)
☑	2014	WINTER	30726	12/02/2014		01-012-D11-300-005-00	$12,598.00		1/7/2015 13:32:10	HarryL	0	ALCONA (T)

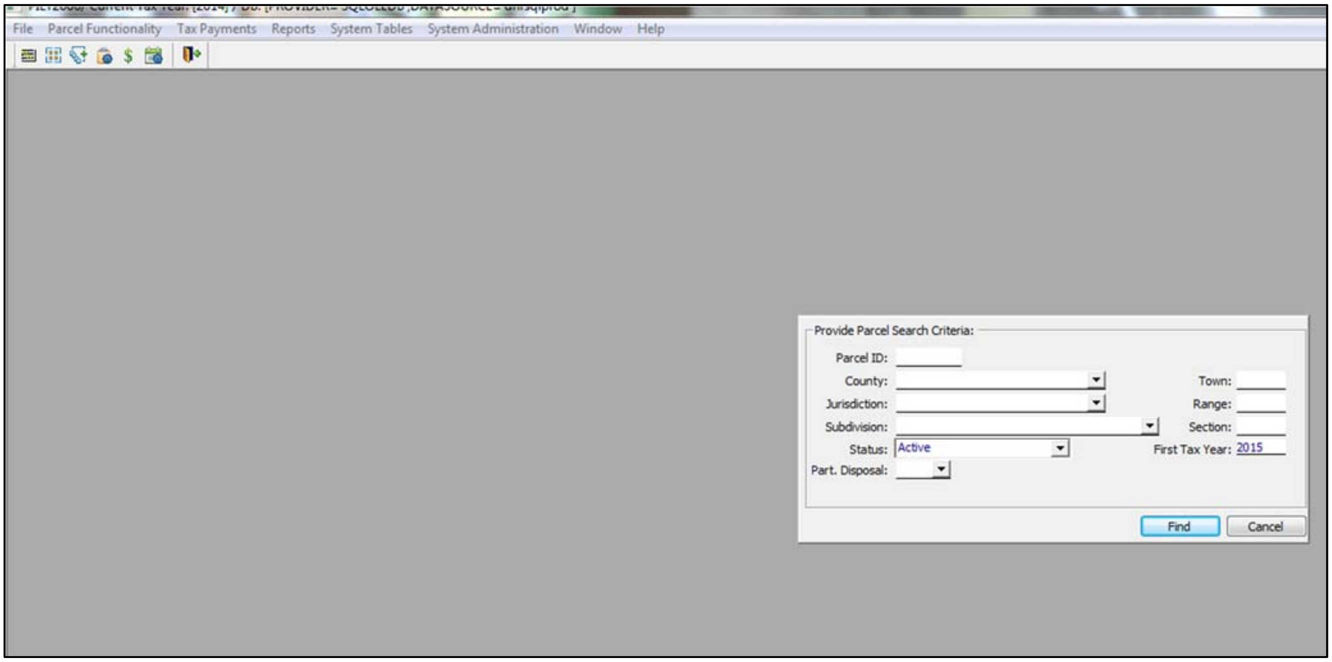
Parcels= 8 New= 0

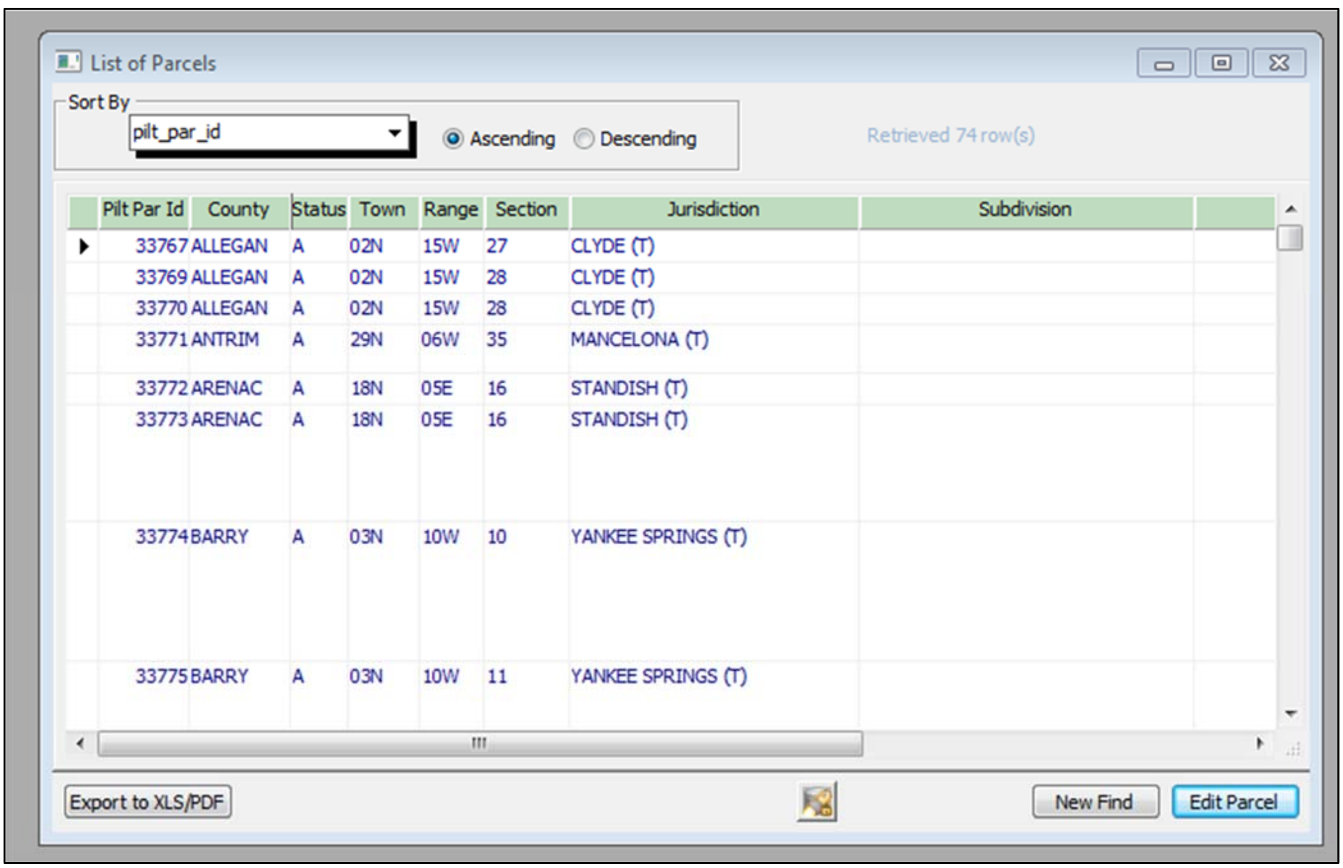

Millage Loader
Q
Tax Year:
2012
Season:
WINTER
Import File
Load File
Save File
Check Dup
...
0
Tax Auth Id
Tax Year
Season
Millage T
Millage
Comment
Emsg
0
0
Tax Auth Id
Tax Year
Season
Millage T
Millage
Comment
Dups: 0

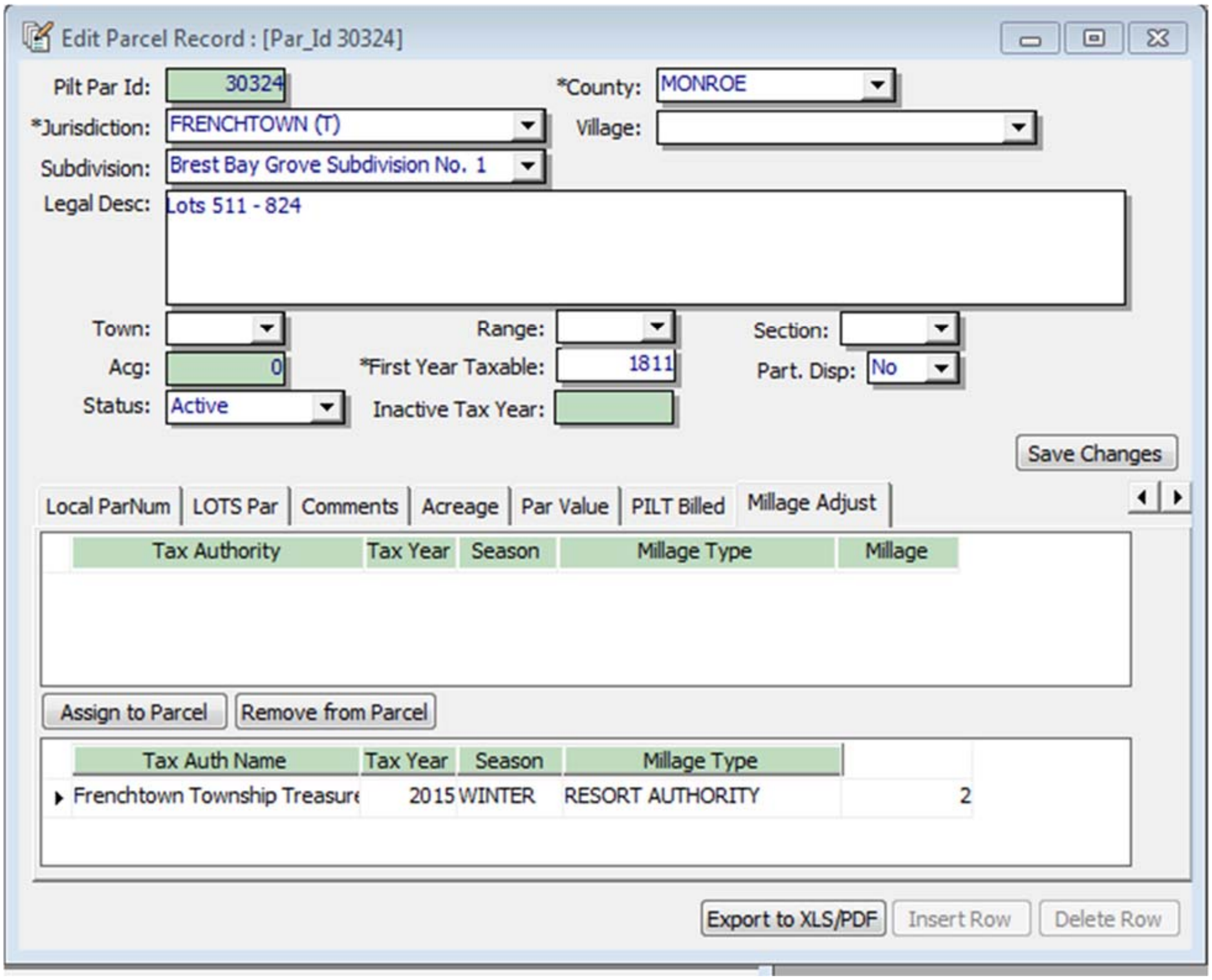

PTA MAIN Loader
Q
Tax Year:
2014
Season:
WINTER
Import File
Load File
Save File
...
Edit Rules
0
Agy
Curr Doc
CurrDoc Sfx
Pca Index
Fund Id
Aobj
Amt.
Vendor Number
Vendor Name
0
Load to DB
Curr Doc
Curr Doc Sfx
Pca Index
Agy
Fund Id
Aobj
Amt
Vendor Num
Vendor Name
Pay Dts
Create Id

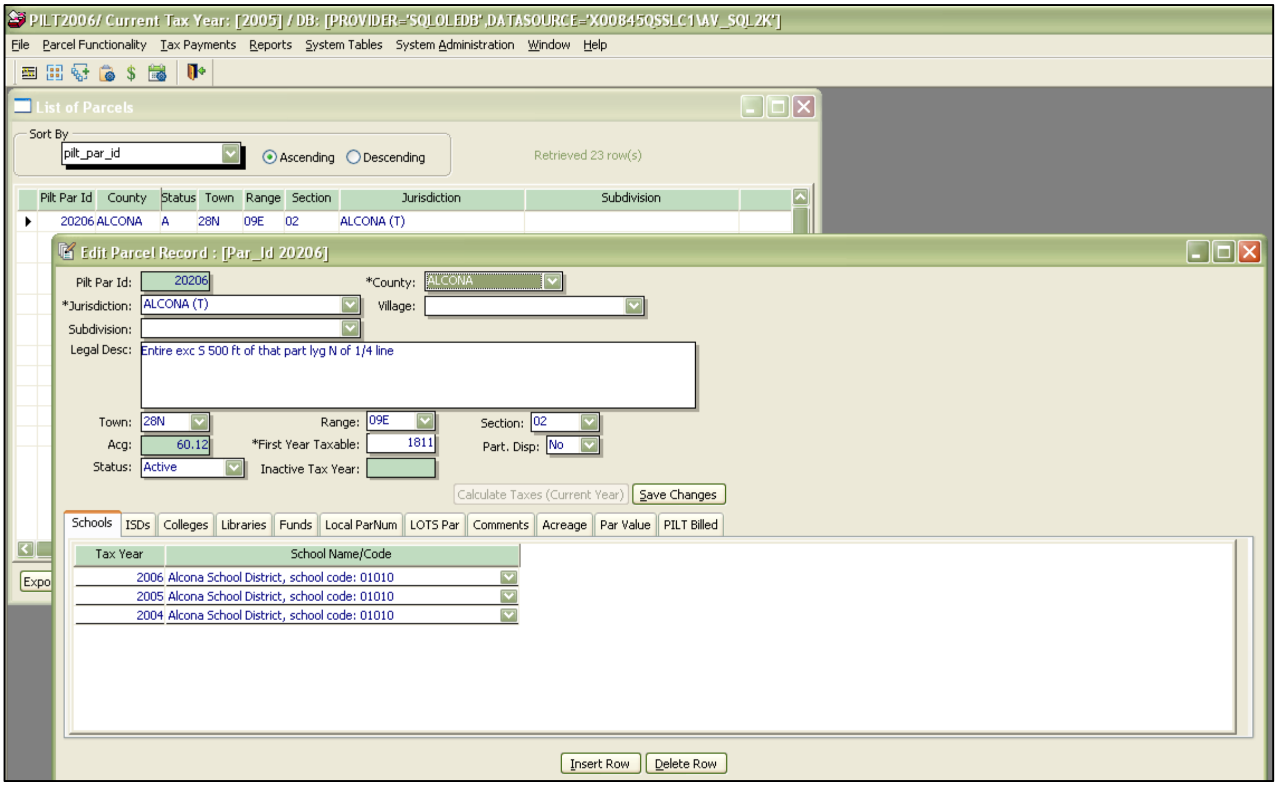
Treasury Codes for PILT and Swampland:

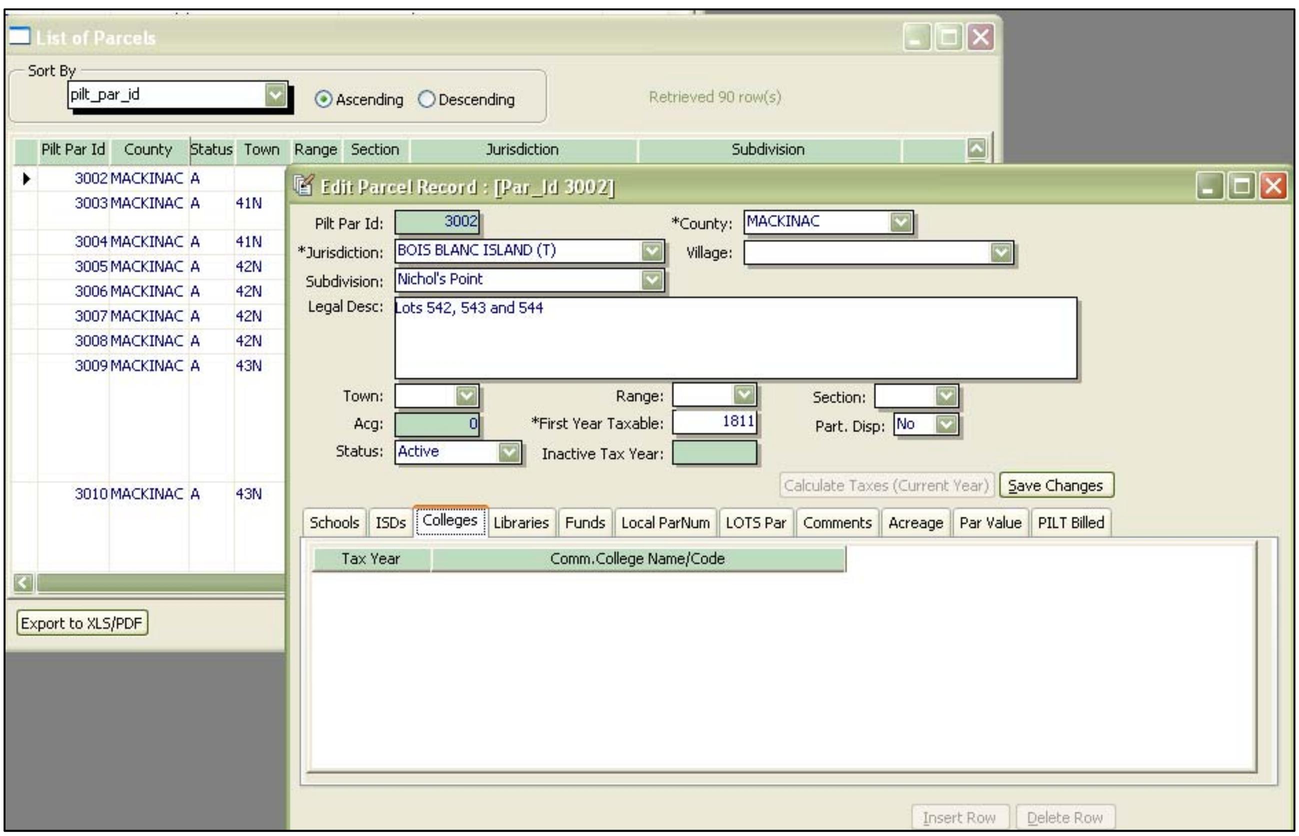
	Treasury payments for taxes billed for 2008 to current year 2015					
	Index	Agy Obj	Comp Obj	PCA	Fund	Appn
PILT						
General	06302	8003	8003	**06302**	0001	06302
Waterways	06332	8003	8003	**06317**	6117	06302
100% game and Fish	06312	8003	8003	**06312**	6112	06302
Natural Resource Trust	06322	8003	8003	**06329**	6129	06302
1/12 Game and Fish & 11/12 General	06313	8003	8003	**06302, 06312**	0001, 6112	06302
Education	**06305**	8004	8003	**06302**	0001	06302
Private Funds Treasury	**06342**	**8003**	**8003**	**06315**	**6115**	**06302**
Private Funds Natural Resources	**24001**	**8003**	**8003**	**20000**	**0401**	**01309**
Swampland	06303	8003	8003	**06303**	0001	06303
Commercial Forest	06301	8003	8003	**06301**	0001	06301

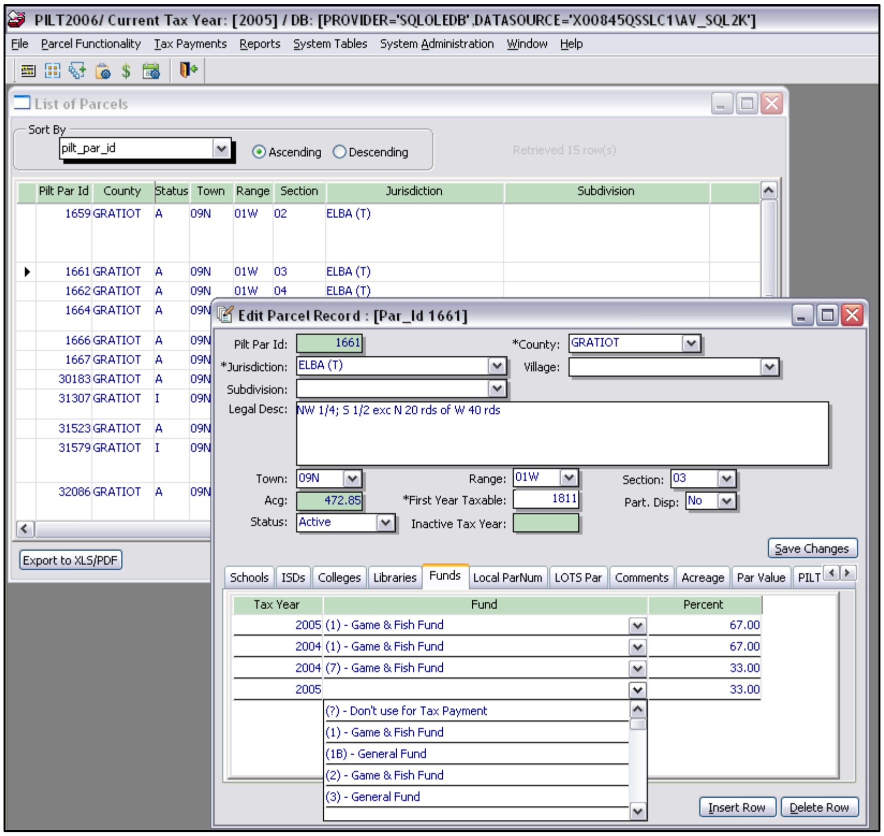

File
Parcel Functionality
Tax Payments
Reports
System Tables
System Administration
Window
Help
Provide Parcel Search Criteria:
Parcel ID:
County:
Town:
Jurisdiction:
Range:
Subdivision:
Section:
Status: Active
First Tax Year: 2015
Part. Disposal:
Find
Cancel

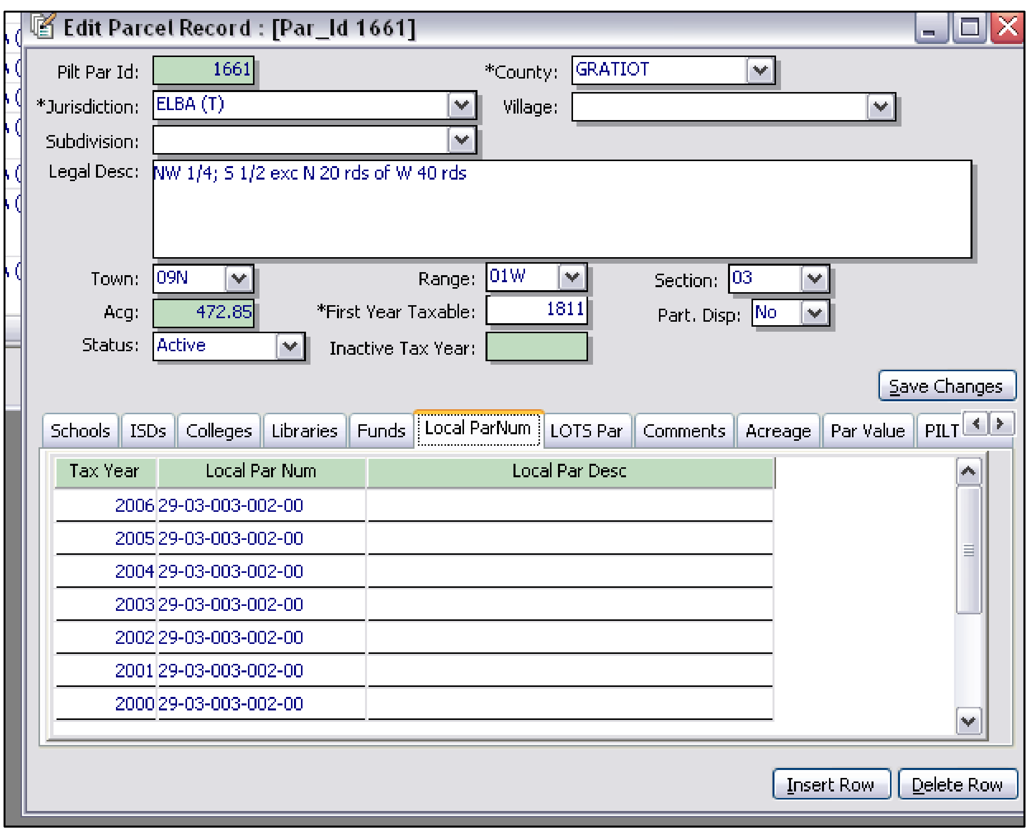

List of Parcels
Sort By
pilt_par_id
Ascending
Descending
Retrieved 74 row(s)
Pilt Par Id | County | Status | Town | Range | Section | Jurisdiction | Subdivision
33767 ALLEGAN A 02N 15W 27 CLYDE (T)
33769 ALLEGAN A 02N 15W 28 CLYDE (T)
33770 ALLEGAN A 02N 15W 28 CLYDE (T)
33771 ANTRIM A 29N 06W 35 MANCELONA (T)
33772 ARENAC A 18N 05E 16 STANDISH (T)
33773 ARENAC A 18N 05E 16 STANDISH (T)
33774 BARRY A 03N 10W 10 YANKEE SPRINGS (T)
33775 BARRY A 03N 10W 11 YANKEE SPRINGS (T)
Export to XLS/PDF
New Find
Edit Parcel

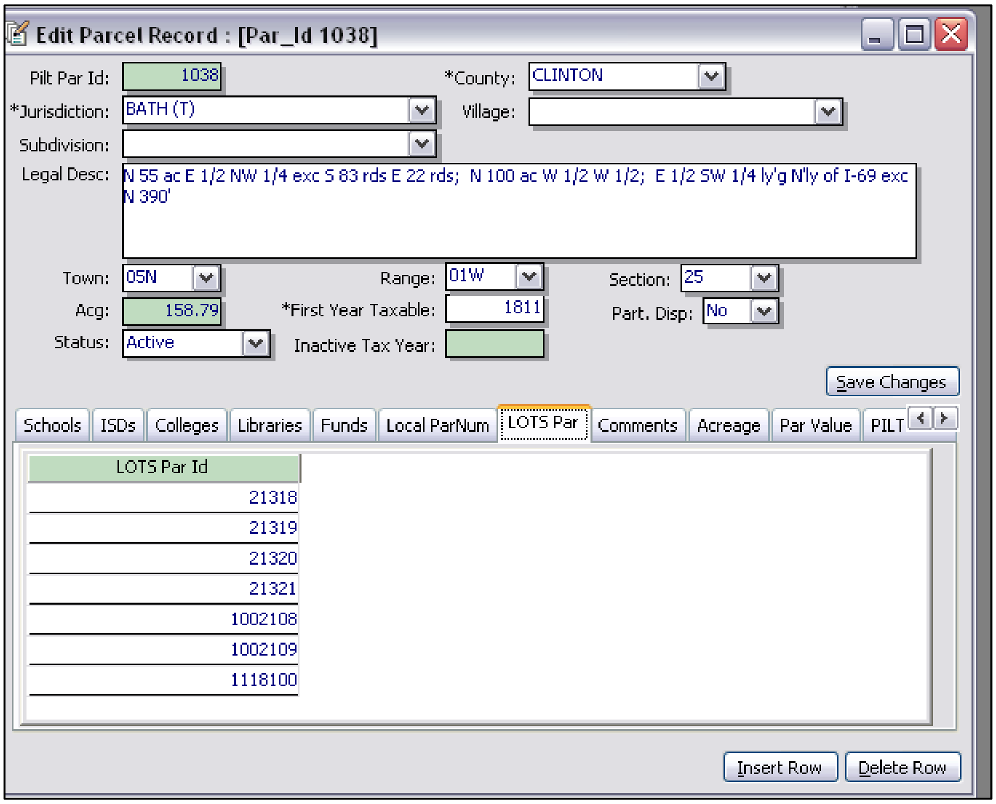

Edit Parcel Record : [Par_Id 30324]
Pilt Par Id: 30324
*County: MONROE
*Jurisdiction: FRENCHTOWN (T)
Village:
Subdivision: Brest Bay Grove Subdivision No. 1
Legal Desc: Lots 511 - 824
Town:
Range:
Section:
Acg: 0
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Save Changes
Local ParNum
LOTS Par
Comments
Acreage
Par Value
PILT Billed
Millage Adjust
Tax Authority
Tax Year
Season
Millage Type
Millage
Assign to Parcel
Remove from Parcel
Tax Auth Name
Tax Year
Season
Millage Type
Frenchtown Township Treasure
2015 WINTER
RESORT AUTHORITY
2
Export to XLS/PDF
Insert Row
Delete Row

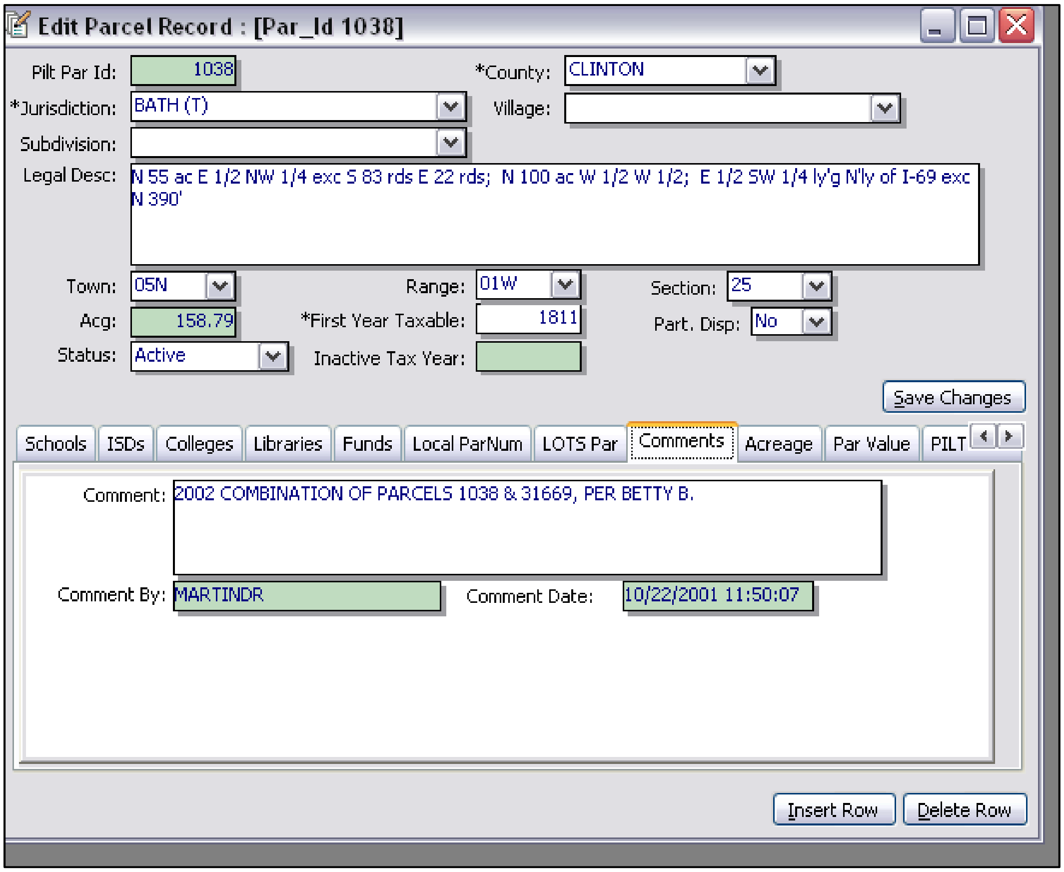

PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K']
File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
List of Parcels
Sort By
pilt_par_id
Ascending
Descending
Retrieved 23 row(s)
Pilt Par Id County Status Town Range Section Jurisdiction Subdivision
20206 ALCONA A 28N 09E 02 ALCONA (T)
Edit Parcel Record : [Par_Id 20206]
Pilt Par Id: 20206
*County: ALCONA
*Jurisdiction: ALCONA (T)
Village:
Subdivision:
Legal Desc: Entire exc S 500 ft of that part lyg N of 1/4 line
Town: 28N
Range: 09E
Section: 02
Acg: 60.12
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Calculate Taxes (Current Year)
Save Changes
Schools ISDs Colleges Libraries Funds Local ParNum LOTS Par Comments Acreage Par Value PILT Billed
Tax Year School Name/Code
2006 Alcona School District, school code: 01010
2005 Alcona School District, school code: 01010
2004 Alcona School District, school code: 01010
Expo
Insert Row
Delete Row

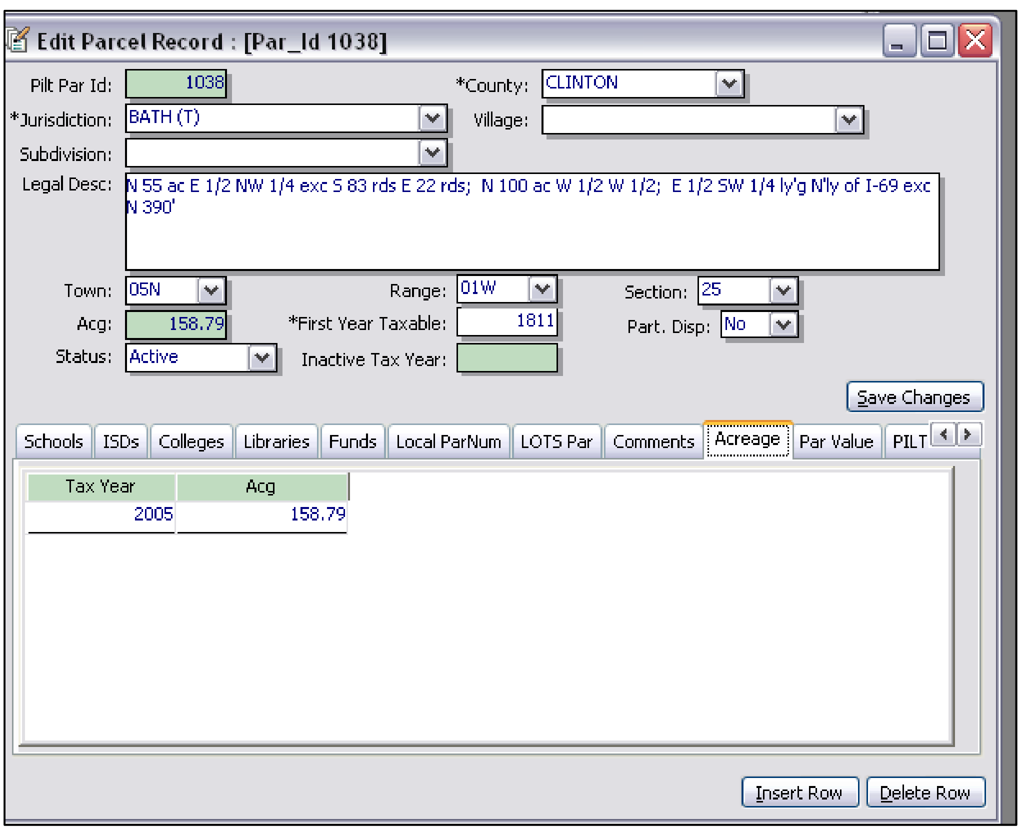

List of Parcels
Sort By
pilt_par_id
Ascending
Descending
Retrieved 90 row(s)
Pilt Par Id County Status Town Range Section Jurisdiction Subdivision
3002 MACKINAC A
3003 MACKINAC A 41N
3004 MACKINAC A 41N
3005 MACKINAC A 42N
3006 MACKINAC A 42N
3007 MACKINAC A 42N
3008 MACKINAC A 42N
3009 MACKINAC A 43N
3010 MACKINAC A 43N
Export to XLS/PDF
Edit Parcel Record : [Par_Id 3002]
Pilt Par Id: 3002
*County: MACKINAC
*Jurisdiction: BOIS BLANC ISLAND (T)
Village:
Subdivision: Nichol's Point
Legal Desc: Lots 542, 543 and 544
Town:
Range:
Section:
Acg: 0
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Calculate Taxes (Current Year)
Save Changes
Schools ISDs Colleges Libraries Funds Local ParNum LOTS Par Comments Acreage Par Value PILT Billed
Tax Year Comm.College Name/Code
Insert Row
Delete Row

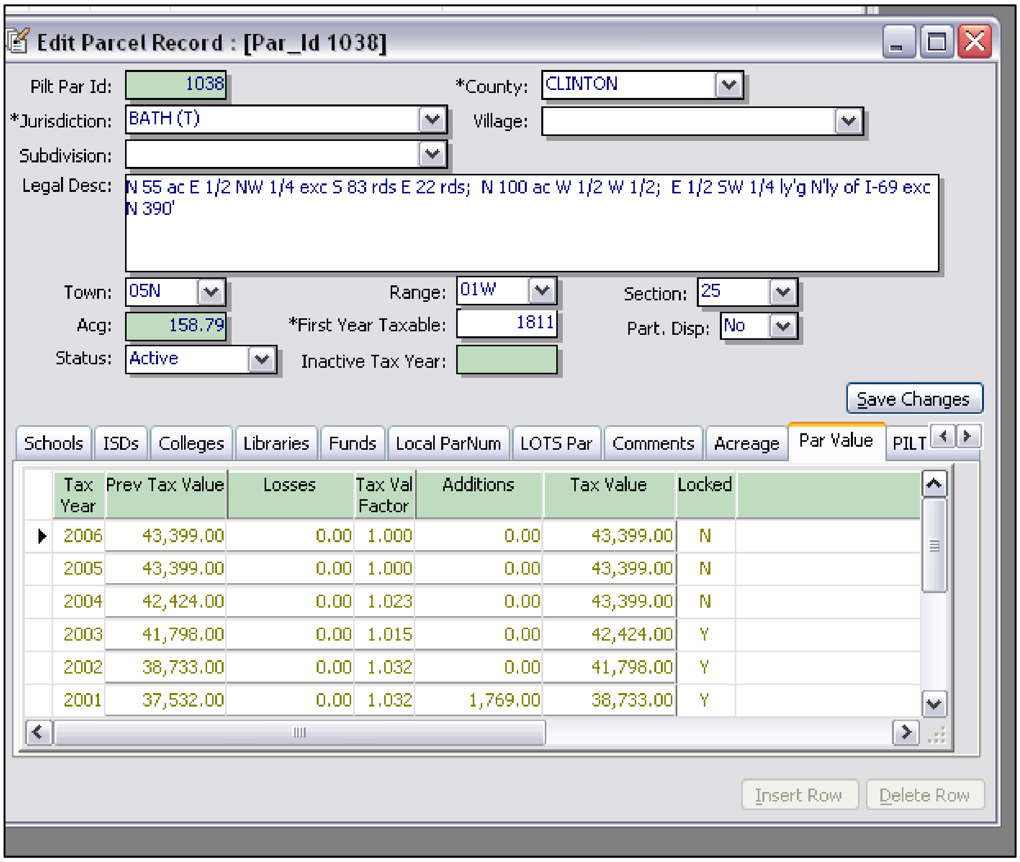

PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K']
File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
List of Parcels
Sort By
pilt_par_id
Ascending Descending
Retrieved 15 row(s)
Pilt Par Id County Status Town Range Section Jurisdiction Subdivision
1659 GRATIOT A 09N 01W 02 ELBA (T)
1661 GRATIOT A 09N 01W 03 ELBA (T)
1662 GRATIOT A 09N 01W 04 ELBA (T)
1664 GRATIOT A 09N
1666 GRATIOT A 09N
1667 GRATIOT A 09N
30183 GRATIOT A 09N
31307 GRATIOT I 09N
31523 GRATIOT A 09N
31579 GRATIOT I 09N
32086 GRATIOT A 09N
Export to XLS/PDF
Edit Parcel Record : [Par_Id 1661]
Pilt Par Id: 1661
*County: GRATIOT
*Jurisdiction: ELBA (T)
Village:
Subdivision:
Legal Desc: NW 1/4; S 1/2 exc N 20 rds of W 40 rds
Town: 09N
Range: 01W
Section: 03
Acg: 472.85
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Save Changes
Schools ISDs Colleges Libraries Funds Local ParNum LOTS Par Comments Acreage Par Value PILT
Tax Year Fund Percent
2005 (1) - Game & Fish Fund 67.00
2004 (1) - Game & Fish Fund 67.00
2004 (7) - Game & Fish Fund 33.00
2005 33.00
(?) - Don't use for Tax Payment
(1) - Game & Fish Fund
(1B) - General Fund
(2) - Game & Fish Fund
(3) - General Fund
Insert Row Delete Row


Edit Parcel Record : [Par_Id 1661]
Pilt Par Id: 1661
*County: GRATIOT
*Jurisdiction: ELBA (T)
Village:
Subdivision:
Legal Desc: NW 1/4; S 1/2 exc N 20 rds of W 40 rds
Town: 09N
Range: 01W
Section: 03
Acg: 472.85
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Save Changes
Schools ISDs Colleges Libraries Funds Local ParNum LOTS Par Comments Acreage Par Value PILT
Tax Year Local Par Num Local Par Desc
2006 29-03-003-002-00
2005 29-03-003-002-00
2004 29-03-003-002-00
2003 29-03-003-002-00
2002 29-03-003-002-00
2001 29-03-003-002-00
2000 29-03-003-002-00
Insert Row Delete Row


Edit Parcel Record : [Par_Id 1038]
Pilt Par Id: 1038
*County: CLINTON
*Jurisdiction: BATH (T)
Village:
Subdivision:
Legal Desc: N 55 ac E 1/2 NW 1/4 exc S 83 rds E 22 rds; N 100 ac W 1/2 W 1/2; E 1/2 SW 1/4 ly'g N'ly of I-69 exc N 390'
Town: 05N
Range: 01W
Section: 25
Acg: 158.79
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Save Changes
Schools
ISDs
Colleges
Libraries
Funds
Local ParNum
LOTS Par
Comments
Acreage
Par Value
PILT
LOTS Par Id
21318
21319
21320
21321
1002108
1002109
1118100
Insert Row
Delete Row


Edit Parcel Record : [Par_Id 1038]
Pilt Par Id: 1038
*County: CLINTON
*Jurisdiction: BATH (T)
Village:
Subdivision:
Legal Desc: N 55 ac E 1/2 NW 1/4 exc S 83 rds E 22 rds; N 100 ac W 1/2 W 1/2; E 1/2 SW 1/4 ly'g N'ly of I-69 exc N 390'
Town: 05N
Range: 01W
Section: 25
Acg: 158.79
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Save Changes
Schools
ISDs
Colleges
Libraries
Funds
Local ParNum
LOTS Par
Comments
Acreage
Par Value
PILT
Comment: 2002 COMBINATION OF PARCELS 1038 & 31669, PER BETTY B.
Comment By: MARTINDR
Comment Date: 10/22/2001 11:50:07
Insert Row
Delete Row


Edit Parcel Record : [Par_Id 1038]
Pilt Par Id: 1038
*County: CLINTON
*Jurisdiction: BATH (T)
Village:
Subdivision:
Legal Desc: N 55 ac E 1/2 NW 1/4 exc S 83 rds E 22 rds; N 100 ac W 1/2 W 1/2; E 1/2 SW 1/4 ly'g N'ly of I-69 exc N 390'
Town: 05N
Range: 01W
Section: 25
Acg: 158.79
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:
Save Changes
Schools
ISDs
Colleges
Libraries
Funds
Local ParNum
LOTS Par
Comments
Acreage
Par Value
PILT
Tax Year
Acg
2005
158.79
Insert Row
Delete Row



Edit Parcel Record : [Par_Id 1038]

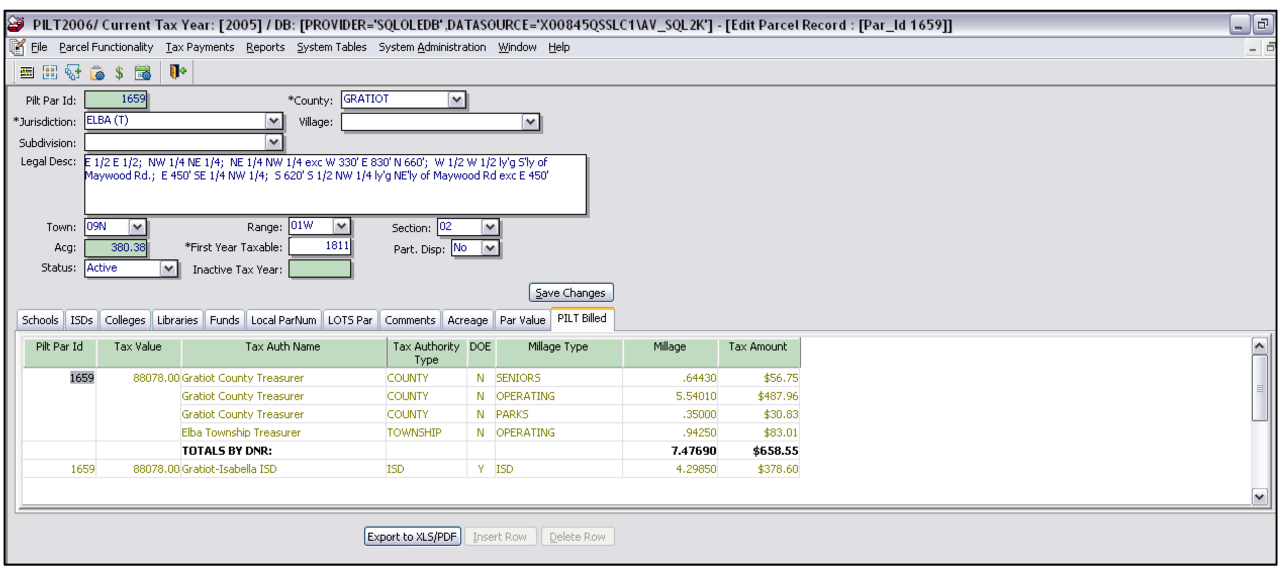
Pilt Par Id: 1038
*County: CLINTON
*Jurisdiction: BATH (T)
Village:
Subdivision:
Legal Desc: N 55 ac E 1/2 NW 1/4 exc S 83 rds E 22 rds; N 100 ac W 1/2 W 1/2; E 1/2 SW 1/4 ly'g N'ly of I-69 exc N 390'
Town: 05N
Range: 01W
Section: 25
Acg: 158.79
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:

Save Changes

Schools | ISDs | Colleges | Libraries | Funds | Local ParNum | LOTS Par | Comments | Acreage | Par Value | PILT

Tax Year	Prev Tax Value	Losses	Tax Val Factor	Additions	Tax Value	Locked
2006	43,399.00	0.00	1.000	0.00	43,399.00	N
2005	43,399.00	0.00	1.000	0.00	43,399.00	N
2004	42,424.00	0.00	1.023	0.00	43,399.00	N
2003	41,798.00	0.00	1.015	0.00	42,424.00	Y
2002	38,733.00	0.00	1.032	0.00	41,798.00	Y
2001	37,532.00	0.00	1.032	1,769.00	38,733.00	Y

Insert Row
Delete Row



PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K'] - [Edit Parcel Record : [Par_Id 1659]]

File | Parcel Functionality | Tax Payments | Reports | System Tables | System Administration | Window | Help

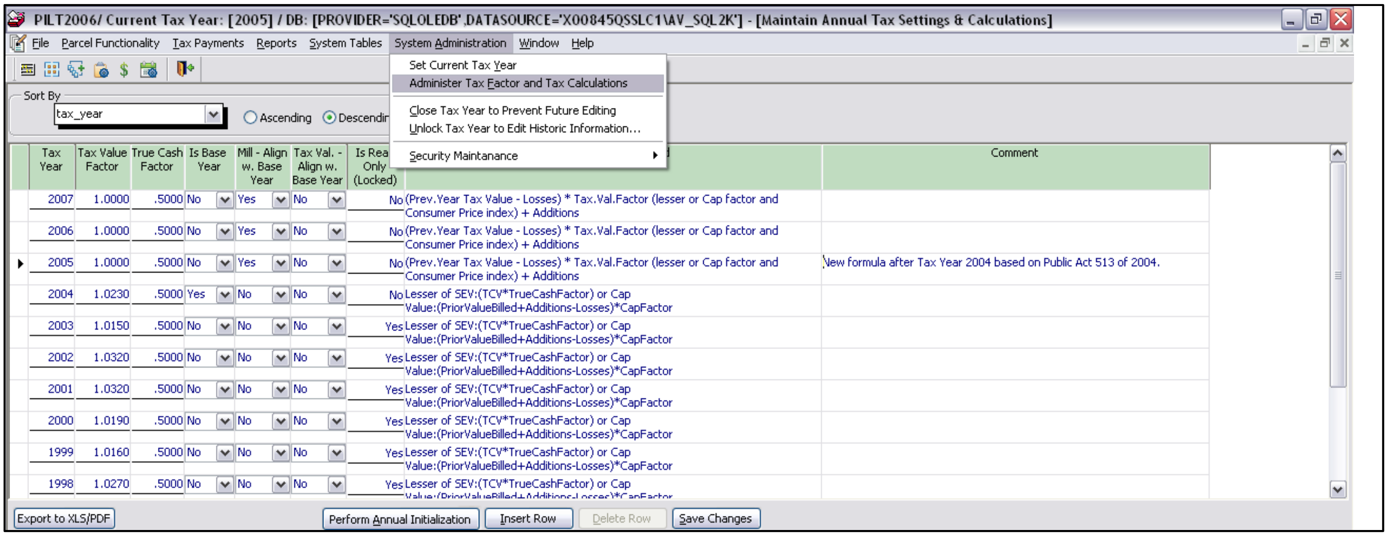
Pilt Par Id: 1659
*County: GRATIOT
*Jurisdiction: ELBA (T)
Village:
Subdivision:
Legal Desc: E 1/2 E 1/2; NW 1/4 NE 1/4; NE 1/4 NW 1/4 exc W 330' E 830' N 660'; W 1/2 W 1/2 ly'g S'ly of Maywood Rd.; E 450' SE 1/4 NW 1/4; S 620' S 1/2 NW 1/4 ly'g NE'ly of Maywood Rd exc E 450'
Town: 09N
Range: 01W
Section: 02
Acg: 380.38
*First Year Taxable: 1811
Part. Disp: No
Status: Active
Inactive Tax Year:

Save Changes

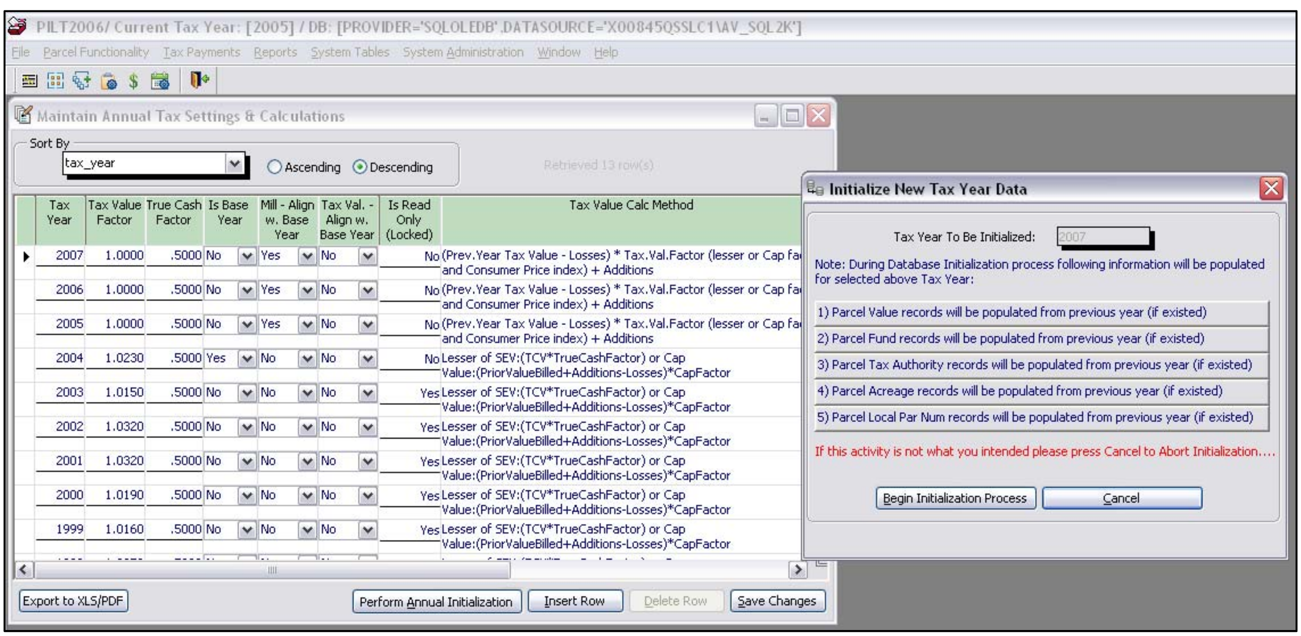
Schools | ISDs | Colleges | Libraries | Funds | Local ParNum | LOTS Par | Comments | Acreage | Par Value | PILT Billed

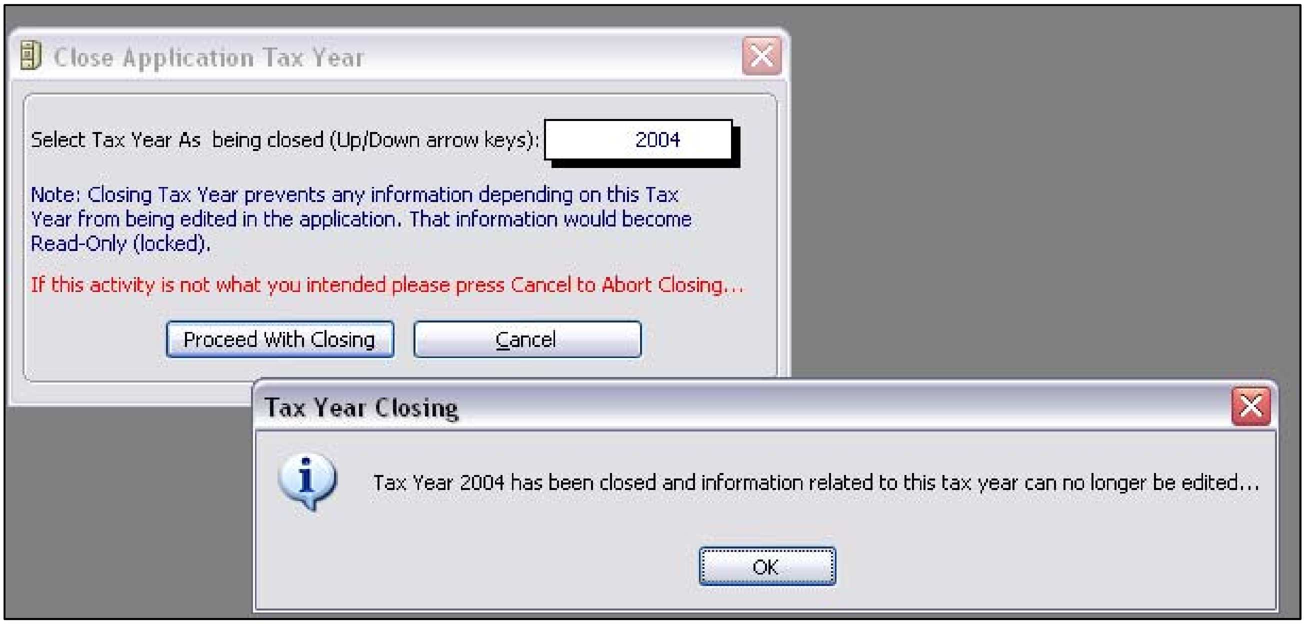
Pilt Par Id	Tax Value	Tax Auth Name	Tax Authority Type	DOE	Millage Type	Millage	Tax Amount
1659	88078.00	Gratiot County Treasurer	COUNTY	N	SENIORS	.64430	$56.75
		Gratiot County Treasurer	COUNTY	N	OPERATING	5.54010	$487.96
		Gratiot County Treasurer	COUNTY	N	PARKS	.35000	$30.83
		Elba Township Treasurer	TOWNSHIP	N	OPERATING	.94250	$83.01
		TOTALS BY DNR:				**7.47690**	**$658.55**
1659	88078.00	Gratiot-Isabella ISD	ISD	Y	ISD	4.29850	$378.60

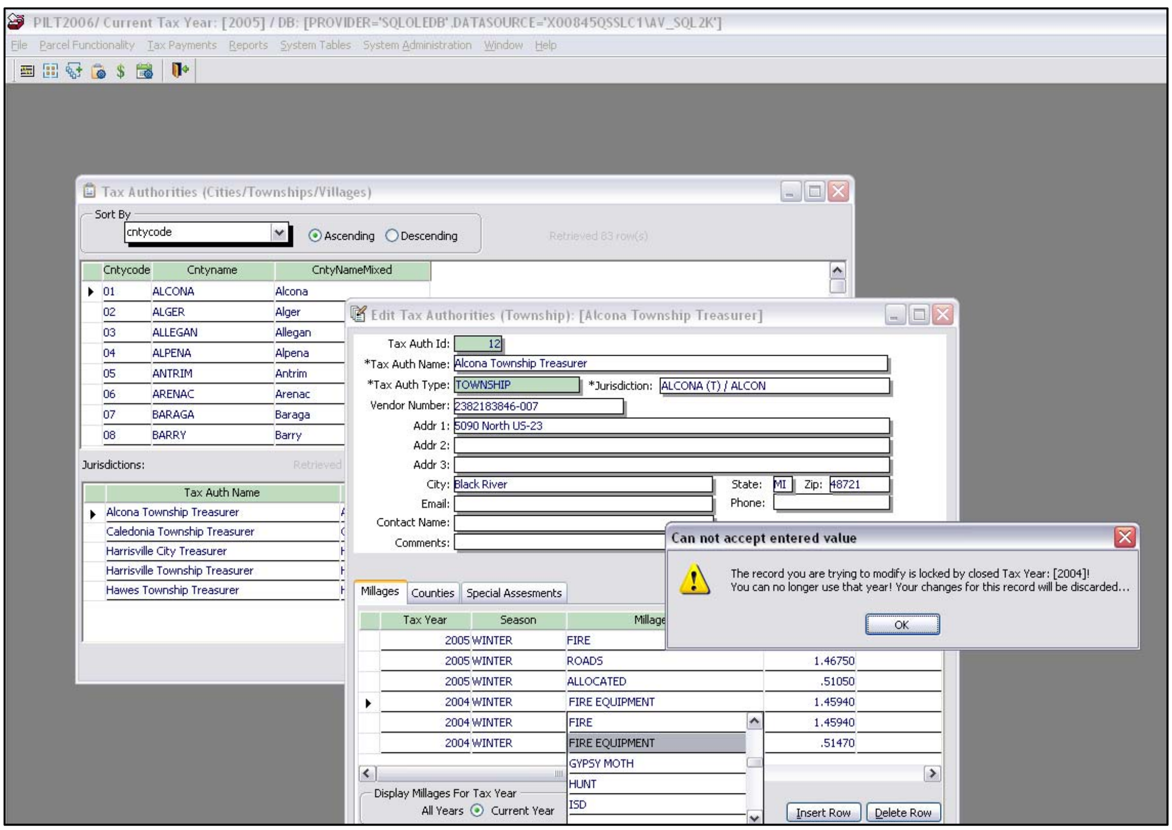
Export to XLS/PDF
Insert Row
Delete Row

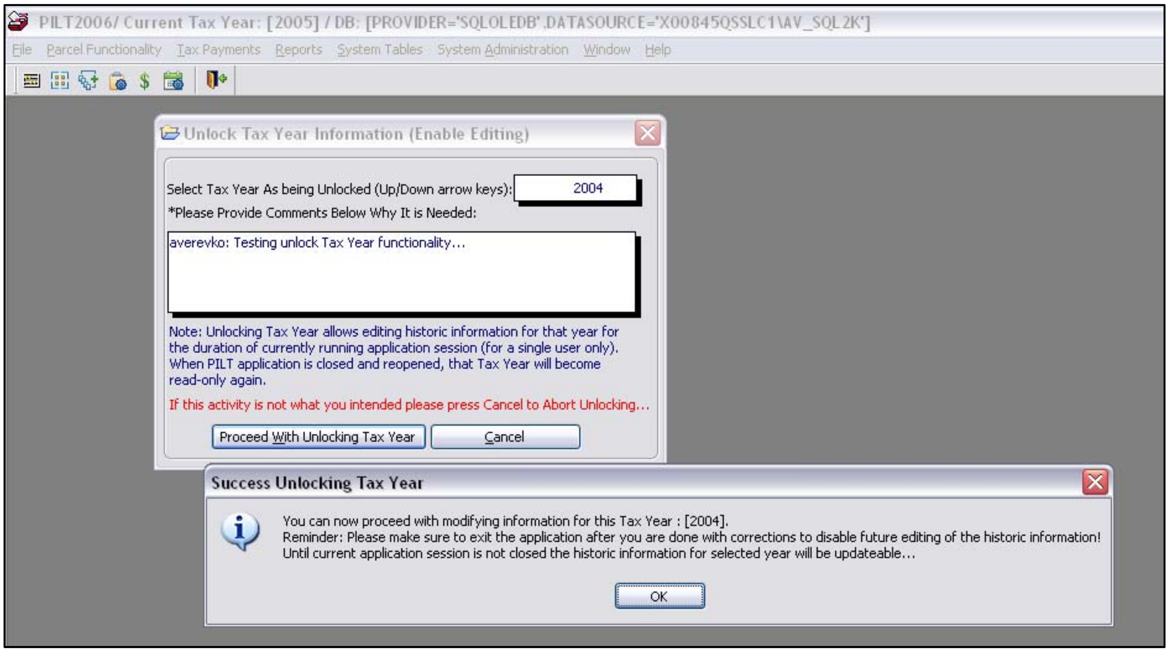

PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K'] - [Maintain Annual Tax Settings & Calculations]
File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
Set Current Tax Year
Administer Tax Factor and Tax Calculations
Close Tax Year to Prevent Future Editing
Unlock Tax Year to Edit Historic Information...
Security Maintanance
Sort By
tax_year
Ascending
Descending
Tax Year
Tax Value Factor
True Cash Factor
Is Base Year
Mill - Align w. Base Year
Tax Val. - Align w. Base Year
Is Read Only (Locked)
Comment
2007 1.0000 .5000 No Yes No No (Prev.Year Tax Value - Losses) * Tax.Val.Factor (lesser or Cap factor and Consumer Price index) + Additions
2006 1.0000 .5000 No Yes No No (Prev.Year Tax Value - Losses) * Tax.Val.Factor (lesser or Cap factor and Consumer Price index) + Additions
2005 1.0000 .5000 No Yes No No (Prev.Year Tax Value - Losses) * Tax.Val.Factor (lesser or Cap factor and Consumer Price index) + Additions
New formula after Tax Year 2004 based on Public Act 513 of 2004.
2004 1.0230 .5000 Yes No No No Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2003 1.0150 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2002 1.0320 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2001 1.0320 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2000 1.0190 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
1999 1.0160 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
1998 1.0270 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap
Export to XLS/PDF
Perform Annual Initialization
Insert Row
Delete Row
Save Changes

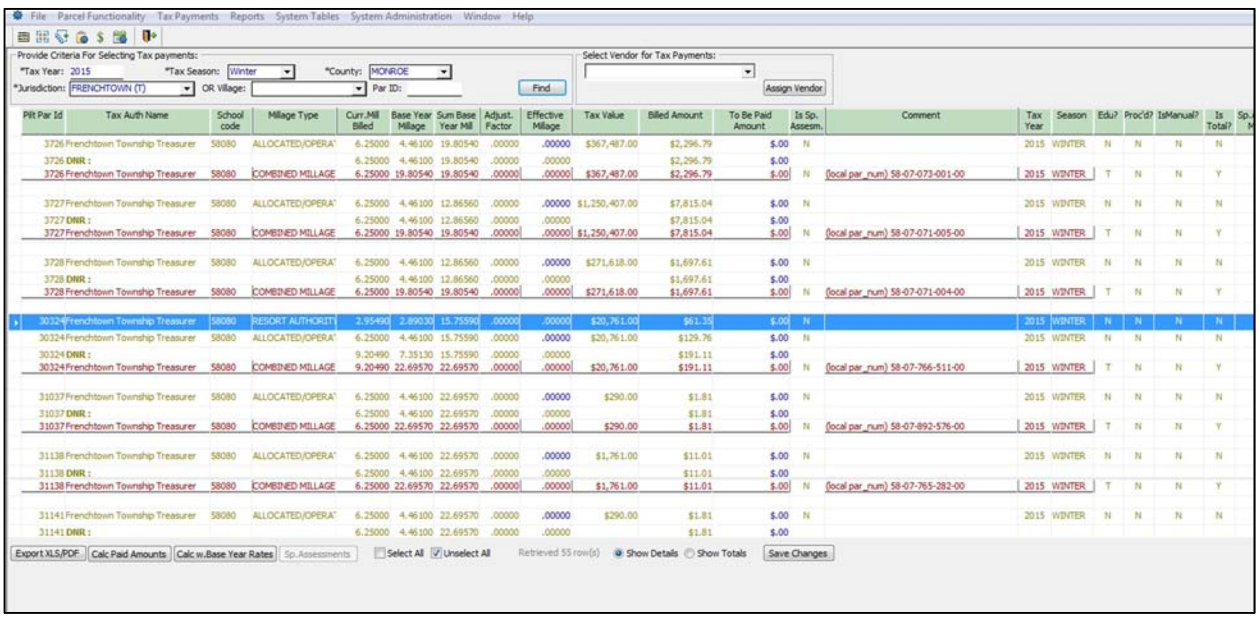

PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K']
File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
Application Default Tax Year
Set Default Tax Year:
2005
OK
Note: Default Tax Year only affects displayed information and newly added record defaults in PILT_2006, no other action is performed after changing the year in this dialog window.

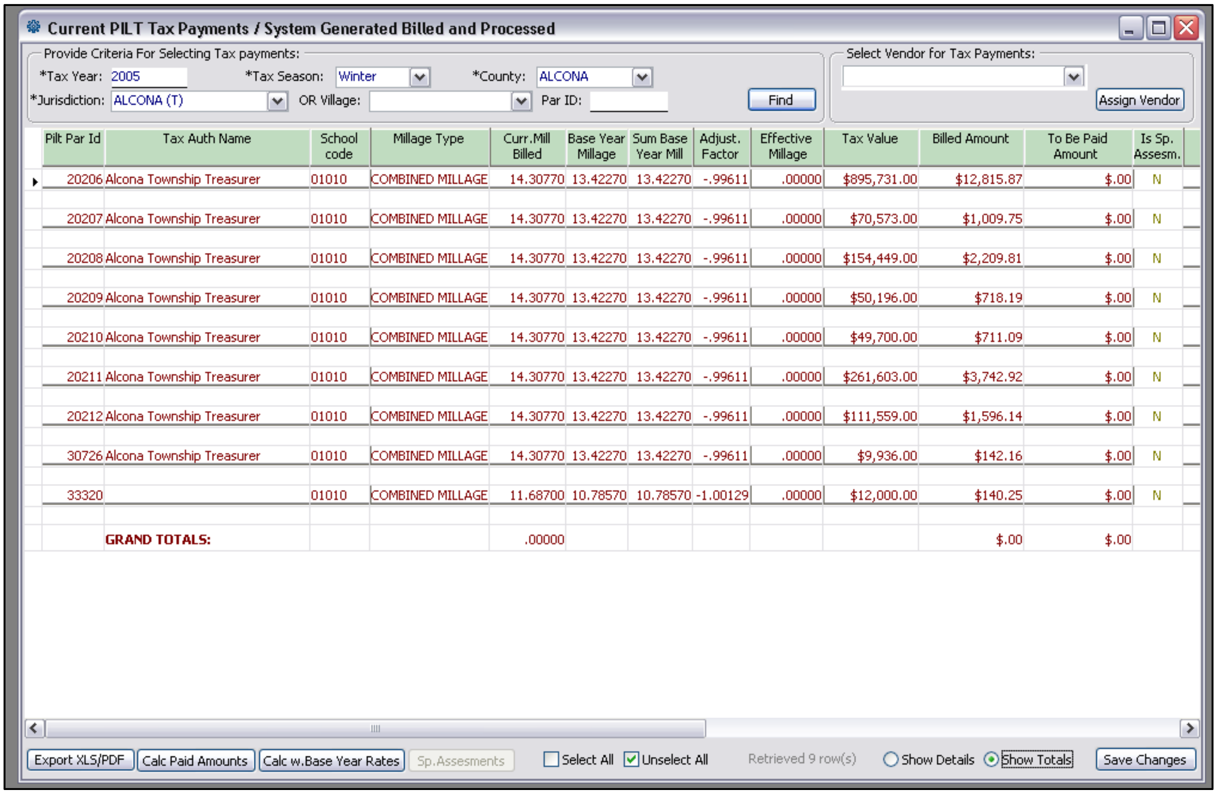

PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K']
File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
Maintain Annual Tax Settings & Calculations
Sort By
tax_year
Ascending
Descending
Retrieved 13 row(s)
Tax Year
Tax Value Factor
True Cash Factor
Is Base Year
Mill - Align w. Base Year
Tax Val. - Align w. Base Year
Is Read Only (Locked)
Tax Value Calc Method
2007 1.0000 .5000 No Yes No No (Prev.Year Tax Value - Losses) * Tax.Val.Factor (lesser or Cap fa and Consumer Price index) + Additions
2006 1.0000 .5000 No Yes No No (Prev.Year Tax Value - Losses) * Tax.Val.Factor (lesser or Cap fa and Consumer Price index) + Additions
2005 1.0000 .5000 No Yes No No (Prev.Year Tax Value - Losses) * Tax.Val.Factor (lesser or Cap fa and Consumer Price index) + Additions
2004 1.0230 .5000 Yes No No No Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2003 1.0150 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2002 1.0320 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2001 1.0320 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
2000 1.0190 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
1999 1.0160 .5000 No No No Yes Lesser of SEV:(TCV*TrueCashFactor) or Cap Value:(PriorValueBilled+Additions-Losses)*CapFactor
Export to XLS/PDF
Perform Annual Initialization
Insert Row
Delete Row
Save Changes
Initialize New Tax Year Data
Tax Year To Be Initialized:
2007
Note: During Database Initialization process following information will be populated for selected above Tax Year:
1) Parcel Value records will be populated from previous year (if existed)
2) Parcel Fund records will be populated from previous year (if existed)
3) Parcel Tax Authority records will be populated from previous year (if existed)
4) Parcel Acreage records will be populated from previous year (if existed)
5) Parcel Local Par Num records will be populated from previous year (if existed)
If this activity is not what you intended please press Cancel to Abort Initialization....
Begin Initialization Process
Cancel


Close Application Tax Year
Select Tax Year As being closed (Up/Down arrow keys): 2004
Note: Closing Tax Year prevents any information depending on this Tax Year from being edited in the application. That information would become Read-Only (locked).
If this activity is not what you intended please press Cancel to Abort Closing...
Proceed With Closing
Cancel
Tax Year Closing
Tax Year 2004 has been closed and information related to this tax year can no longer be edited...
OK


PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K']
File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
Tax Authorities (Cities/Townships/Villages)
Sort By
cntycode
Ascending
Descending
Cntycode Cntyname CntyNameMixed
01 ALCONA Alcona
02 ALGER Alger
03 ALLEGAN Allegan
04 ALPENA Alpena
05 ANTRIM Antrim
06 ARENAC Arenac
07 BARAGA Baraga
08 BARRY Barry
Jurisdictions:
Tax Auth Name
Alcona Township Treasurer
Caledonia Township Treasurer
Harrisville City Treasurer
Harrisville Township Treasurer
Hawes Township Treasurer
Edit Tax Authorities (Township): [Alcona Township Treasurer]
Tax Auth Id: 12
*Tax Auth Name: Alcona Township Treasurer
*Tax Auth Type: TOWNSHIP
*Jurisdiction: ALCONA (T) / ALCON
Vendor Number: 2382183846-007
Addr 1: 5090 North US-23
Addr 2:
Addr 3:
City: Black River
State: MI
Zip: 48721
Email:
Phone:
Contact Name:
Comments:
Millages
Counties
Special Assesments
Tax Year Season Millage
2005 WINTER FIRE
2005 WINTER ROADS 1.46750
2005 WINTER ALLOCATED .51050
2004 WINTER FIRE EQUIPMENT 1.45940
2004 WINTER FIRE 1.45940
2004 WINTER FIRE EQUIPMENT .51470
GYPSY MOTH
HUNT
ISD
Display Millages For Tax Year
All Years
Current Year
Insert Row
Delete Row
Can not accept entered value
The record you are trying to modify is locked by closed Tax Year: [2004]!
You can no longer use that year! Your changes for this record will be discarded...
OK


PILT2006/ Current Tax Year: [2005] / DB: [PROVIDER='SQLOLEDB',DATASOURCE='X00845QSSLC1\AV_SQL2K']
File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
Unlock Tax Year Information (Enable Editing)
Select Tax Year As being Unlocked (Up/Down arrow keys): 2004
*Please Provide Comments Below Why It is Needed:
averevko: Testing unlock Tax Year functionality...
Note: Unlocking Tax Year allows editing historic information for that year for the duration of currently running application session (for a single user only). When PILT application is closed and reopened, that Tax Year will become read-only again.
If this activity is not what you intended please press Cancel to Abort Unlocking...
Proceed With Unlocking Tax Year
Cancel
Success Unlocking Tax Year
You can now proceed with modifying information for this Tax Year : [2004].
Reminder: Please make sure to exit the application after you are done with corrections to disable future editing of the historic information!
Until current application session is not closed the historic information for selected year will be updateable...
OK


File Parcel Functionality Tax Payments Reports System Tables System Administration Window Help
Provide Criteria For Selecting Tax payments:
*Tax Year: 2015 *Tax Season: Winter *County: MONROE
*Jurisdiction: FRENCHTOWN (T) OR Village: Par ID: Find
Select Vendor for Tax Payments:
Assign Vendor
Pilt Par Id | Tax Auth Name | School code | Millage Type | Curr.Mill Billed | Base Year Millage | Sum Base Year Mill | Adjust. Factor | Effective Millage | Tax Value | Billed Amount | To Be Paid Amount | Is Sp. Assesm. | Comment | Tax Year | Season | Edu? | Proc'd? | IsManual? | Is Total?
3726 Frenchtown Township Treasurer 58080 ALLOCATED/OPERA 6.25000 4.46100 19.80540 .00000 .00000 $367,487.00 $2,296.79 $.00 N 2015 WINTER N N N N
3726 DNR : 6.25000 4.46100 19.80540 .00000 .00000 $2,296.79 $.00
3726 Frenchtown Township Treasurer 58080 COMBINED MILLAGE 6.25000 19.80540 19.80540 .00000 .00000 $367,487.00 $2,296.79 $.00 N (local par_num) 58-07-073-001-00 2015 WINTER T N N Y
3727 Frenchtown Township Treasurer 58080 ALLOCATED/OPERA 6.25000 4.46100 12.86560 .00000 .00000 $1,250,407.00 $7,815.04 $.00 N 2015 WINTER N N N N
3727 DNR : 6.25000 4.46100 12.86560 .00000 .00000 $7,815.04 $.00
3727 Frenchtown Township Treasurer 58080 COMBINED MILLAGE 6.25000 19.80540 19.80540 .00000 .00000 $1,250,407.00 $7,815.04 $.00 N (local par_num) 58-07-071-005-00 2015 WINTER T N N Y
3728 Frenchtown Township Treasurer 58080 ALLOCATED/OPERA 6.25000 4.46100 12.86560 .00000 .00000 $271,618.00 $1,697.61 $.00 N 2015 WINTER N N N N
3728 DNR : 6.25000 4.46100 12.86560 .00000 .00000 $1,697.61 $.00
3728 Frenchtown Township Treasurer 58080 COMBINED MILLAGE 6.25000 19.80540 19.80540 .00000 .00000 $271,618.00 $1,697.61 $.00 N (local par_num) 58-07-071-004-00 2015 WINTER T N N Y
30324 Frenchtown Township Treasurer 58080 RESORT AUTHORITY 2.95490 2.89030 15.75590 .00000 .00000 $20,761.00 $61.35 $.00 N 2015 WINTER N N N N
30324 Frenchtown Township Treasurer 58080 ALLOCATED/OPERA 6.25000 4.46100 15.75590 .00000 .00000 $20,761.00 $129.76 $.00 N 2015 WINTER N N N N
30324 DNR : 9.20490 7.35130 15.75590 .00000 .00000 $191.11 $.00
30324 Frenchtown Township Treasurer 58080 COMBINED MILLAGE 9.20490 22.69570 22.69570 .00000 .00000 $20,761.00 $191.11 $.00 N (local par_num) 58-07-766-511-00 2015 WINTER T N N Y
31037 Frenchtown Township Treasurer 58080 ALLOCATED/OPERA 6.25000 4.46100 22.69570 .00000 .00000 $290.00 $1.81 $.00 N 2015 WINTER N N N N
31037 DNR : 6.25000 4.46100 22.69570 .00000 .00000 $1.81 $.00
31037 Frenchtown Township Treasurer 58080 COMBINED MILLAGE 6.25000 22.69570 22.69570 .00000 .00000 $290.00 $1.81 $.00 N (local par_num) 58-07-892-576-00 2015 WINTER T N N Y
31138 Frenchtown Township Treasurer 58080 ALLOCATED/OPERA 6.25000 4.46100 22.69570 .00000 .00000 $1,761.00 $11.01 $.00 N 2015 WINTER N N N N
31138 DNR : 6.25000 4.46100 22.69570 .00000 .00000 $11.01 $.00
31138 Frenchtown Township Treasurer 58080 COMBINED MILLAGE 6.25000 22.69570 22.69570 .00000 .00000 $1,761.00 $11.01 $.00 N (local par_num) 58-07-765-282-00 2015 WINTER T N N Y
31141 Frenchtown Township Treasurer 58080 ALLOCATED/OPERA 6.25000 4.46100 22.69570 .00000 .00000 $290.00 $1.81 $.00 N 2015 WINTER N N N N
31141 DNR : 6.25000 4.46100 22.69570 .00000 .00000 $1.81 $.00
Export XLS/PDF Calc Paid Amounts Calc w.Base Year Rates Sp.Assessments Select All Unselect All Retrieved 55 row(s) Show Details Show Totals Save Changes



Current PILT Tax Payments / System Generated Billed and Processed

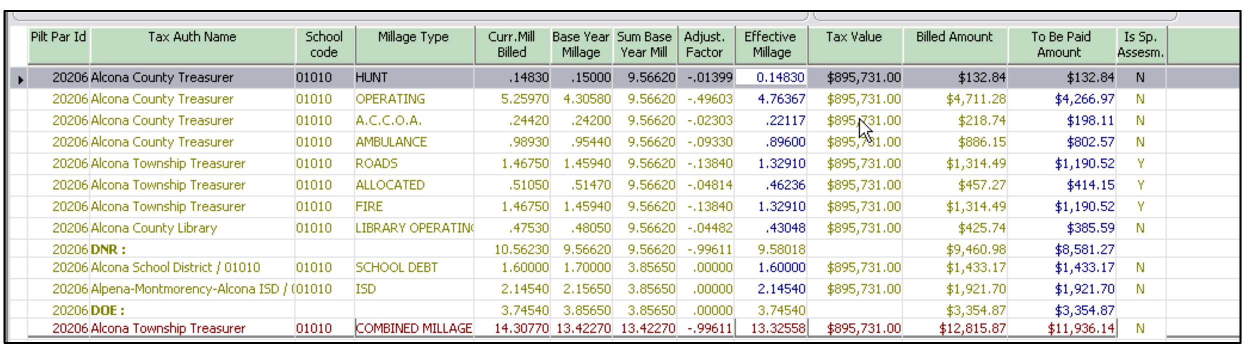
Provide Criteria For Selecting Tax payments:
*Tax Year: 2005 *Tax Season: Winter *County: ALCONA
*Jurisdiction: ALCONA (T) OR Village: Par ID: Find

Select Vendor for Tax Payments: Assign Vendor

Pilt Par Id	Tax Auth Name	School code	Millage Type	Curr.Mill Billed	Base Year Millage	Sum Base Year Mill	Adjust. Factor	Effective Millage	Tax Value	Billed Amount	To Be Paid Amount	Is Sp. Assesm.
20206	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$895,731.00	$12,815.87	$.00	N
20207	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$70,573.00	$1,009.75	$.00	N
20208	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$154,449.00	$2,209.81	$.00	N
20209	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$50,196.00	$718.19	$.00	N
20210	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$49,700.00	$711.09	$.00	N
20211	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$261,603.00	$3,742.92	$.00	N
20212	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$111,559.00	$1,596.14	$.00	N
30726	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	.00000	$9,936.00	$142.16	$.00	N
33320		01010	COMBINED MILLAGE	11.68700	10.78570	10.78570	-1.00129	.00000	$12,000.00	$140.25	$.00	N
	GRAND TOTALS:			.00000						$.00	$.00	

Export XLS/PDF | Calc Paid Amounts | Calc w.Base Year Rates | Sp.Assesments | Select All | Unselect All | Retrieved 9 row(s) | Show Details | Show Totals | Save Changes

Generate Tax Payments:



Pilt Par Id	Tax Auth Name	School code	Millage Type	Curr.Mill Billed	Base Year Millage	Sum Base Year Mill	Adjust. Factor	Effective Millage	Tax Value	Billed Amount	To Be Paid Amount	Is Sp. Assesm.
20206	Alcona County Treasurer	01010	HUNT	.14830	.15000	9.56620	-.01399	0.14830	$895,731.00	$132.84	$132.84	N
20206	Alcona County Treasurer	01010	OPERATING	5.25970	4.30580	9.56620	-.49603	4.76367	$895,731.00	$4,711.28	$4,266.97	N
20206	Alcona County Treasurer	01010	A.C.C.O.A.	.24420	.24200	9.56620	-.02303	.22117	$895,731.00	$218.74	$198.11	N
20206	Alcona County Treasurer	01010	AMBULANCE	.98930	.95440	9.56620	-.09330	.89600	$895,731.00	$886.15	$802.57	N
20206	Alcona Township Treasurer	01010	ROADS	1.46750	1.45940	9.56620	-.13840	1.32910	$895,731.00	$1,314.49	$1,190.52	Y
20206	Alcona Township Treasurer	01010	ALLOCATED	.51050	.51470	9.56620	-.04814	.46236	$895,731.00	$457.27	$414.15	Y
20206	Alcona Township Treasurer	01010	FIRE	1.46750	1.45940	9.56620	-.13840	1.32910	$895,731.00	$1,314.49	$1,190.52	Y
20206	Alcona County Library	01010	LIBRARY OPERATIN(	.47530	.48050	9.56620	-.04482	.43048	$895,731.00	$425.74	$385.59	N
20206	**DNR :**			10.56230	9.56620	9.56620	-.99611	9.58018		$9,460.98	$8,581.27	
20206	Alcona School District / 01010	01010	SCHOOL DEBT	1.60000	1.70000	3.85650	.00000	1.60000	$895,731.00	$1,433.17	$1,433.17	N
20206	Alpena-Montmorency-Alcona ISD / (	01010	ISD	2.14540	2.15650	3.85650	.00000	2.14540	$895,731.00	$1,921.70	$1,921.70	N
20206	**DOE :**			3.74540	3.85650	3.85650	.00000	3.74540		$3,354.87	$3,354.87	
20206	Alcona Township Treasurer	01010	COMBINED MILLAGE	14.30770	13.42270	13.42270	-.99611	13.32558	$895,731.00	$12,815.87	$11,936.14	N

Payment Processing: