Version 1.1

Background:

A decision was made by the Electronic Real Estate Recording Task Force (ERERTF) to be compliant with the national standards and use Version 1.05 of the Property Records Industry Association (PRIA) DTD National Standards instead of creating their own version of standards for the State of Minnesota.

Version 1.1 was designed based on Version 1.05 of the PRIA DTD National Standards. Extension Structures were used following the PRIA Extension Standards to accommodate additional information that was not accounted for in the PRIA DTD Standards. All documented PRIA naming standards were followed.

Please see PRIA's website for the complete standards and Version 1.05 DTD: http://taskforce.cifnet.com/priaus/

The following rules were enforced:

- 1. Schemas would be used to identify the data standards (A schema was created from PRIA's Version 1.05 DTD as a starting point)
- 2. Each document would have its own schema (Satisfaction, Certificate of Release, Affidavit of Purchaser, Assignment of Mortgage, Deeds (Warranty Deed, Limited Warranty Deed, Quit Claim Deed), and the CRV).
- 3. All PRIA elements and attributes would remain in the schema even if they were not used by the Minnesota Standards.
- 4. Current PRIA element and attribute structures reused in the Minnesota Extensions would remain consistent as originally designed by PRIA.
- 5. Existing PRIA relationships would be maintained unless a required field didn't support our existing business rules.
- 6. Business rules would be defined in each schema as much as possible using the Minnesota Extensions to reflect that document's requirements.

The following design standards were implemented:

- 1. All document schema files started with an upper case value
- 2. All datatype files started with "dt"
- 3. All sub-schema files used to create the document schemas started with a lower case value
- 4. Typing of element structures was used to allow for reuse of these structures and ease of maintenance
- 5. Grouping of attributes was used to allow for reuse of these groupings and ease of maintenance
- 6. W3C XML Signature standards were followed for the representations of the persons signing the document (endorsers, notaries, county personnel, buyers and sellers of the property)

There were 2 schemas designed:

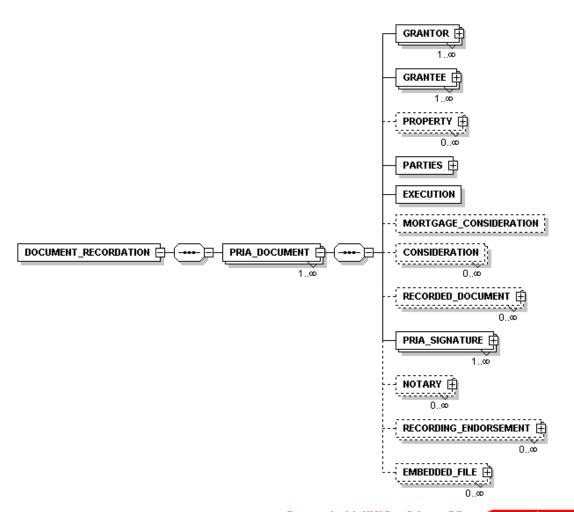
- Satisfaction
- Certificate of Release

PRIA Version 1.05 DTD was converted to a schema and gap analysis was conducted to map elements and attributes from the Minnesota Version 1.0 Schema to the PRIA Version 1.05 DTD to create the baseline for the Version 1.1 Minnesota Schema.

The spreadsheets PRIA_V1.05SATMN.xls and PRIA_V1.05CORMN.xls were created to show the mapping between the elements and attributes from Version 1.0 to Version 1.1. The red text indicates an extension had to be added to accommodate a Minnesota only requirement. The blue text indicates a PRIA element or attribute that was not in the Minnesota Version 1.0 schema. The black text indicates a match between the Minnesota Schema and the PRIA DTD. Please refer to these for the detailed mapping between the elements and attributes.

The following diagram depicts the PRIA Version 1.05 DTD converted to a Schema. This was the baseline for the Version 1.1 of the Minnesota Standard.

Version 1.1 Baseline



Generated with XMLSpy Schema Editor www.xmlspy.com

Satisfaction

Element Descriptions:

${\bf 1.\,DOCUMENT_RECORDATION}$

The **DOCUMENT_RECORDATION** element structure is the root or top-level element of the schema and is designed so it can handle multiple different documents of the **PRIA_DOCUMENT** element structure.

Version 1.1 DOCUMENT_RECORDATION

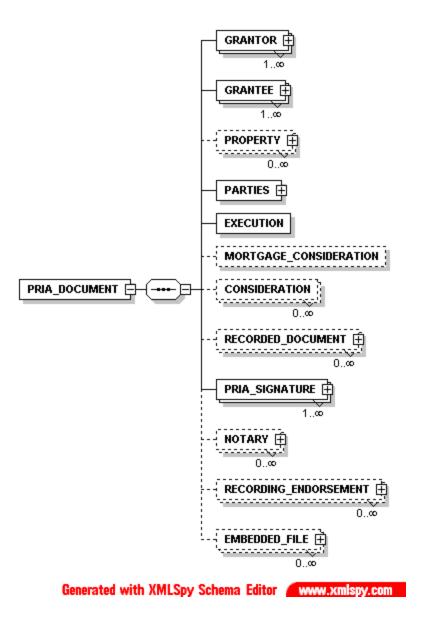


Extensions:

No Minnesota Extensions needed to be added.

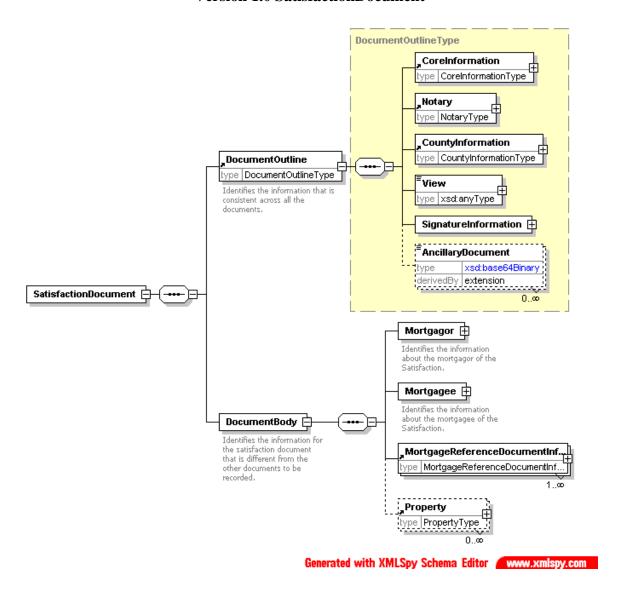
2. PRIA_DOCUMENT

The **PRIA_DOCUMENT** element structure contains all the information about the document.



This was mapped to the Version 1.0 **SatisfactionDocument** element structure. The concept of grouping Outline related information and Body related information was dropped and the remaining elements were used in the mapping.

Version 1.0 SatisfactionDocument



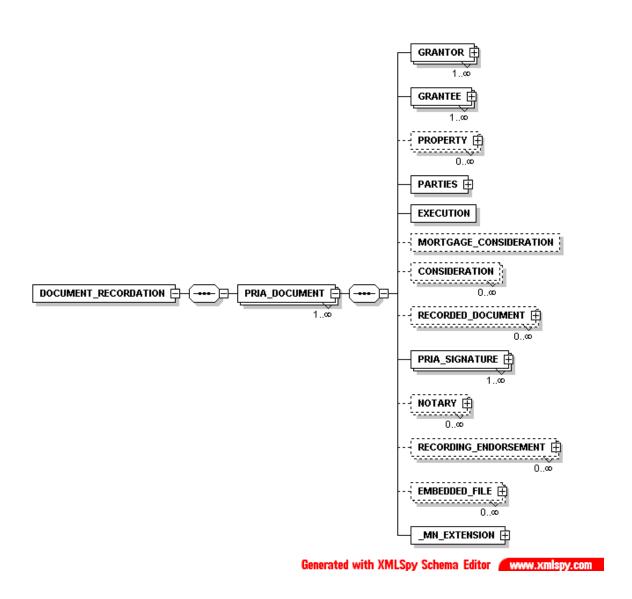
Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION, had to be added to accommodate the following Minnesota requirements:

- 1. The _MN_**PRIADocumentID** attribute was added for indicating the portion of the document that is being signed by the endorser
- 2. The _MN_PropertyCode attribute was added for identifying if the property is "Abstract", "Torrens" or "Both"
- 3. The _MN_SubType attribute was added for indicating if the mortgagee had a name change or not (eg. by corporation or by corporation name change)
- 4. The _MN_**Total_Fees** attribute was added for the total fees of the recording

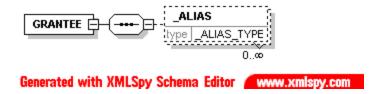
- 5. The _MN_REFERENCE element was added to identify the reference numbers (eg. Loan Number)
- 6. The _MN_VIEW element was added for holding the stylesheet that renders the XML into a user-friendly format

Version 1.1 PRIA_DOCUMENT



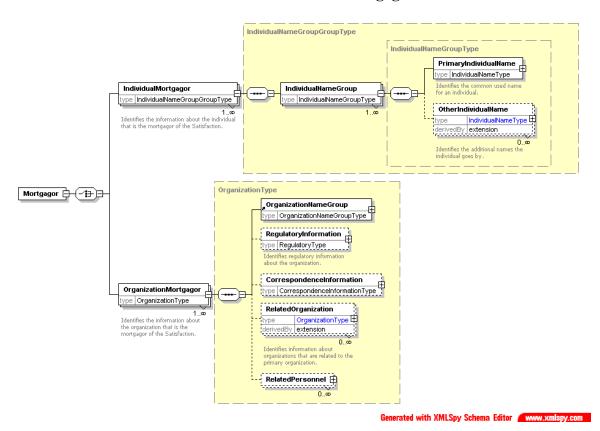
3. GRANTEE

The **GRANTEE** element structure contains all the information about the Grantee or Mortgagor of the document.



This structure mapped to the Version 1.0 **Mortgagor** element in the Satisfaction document.

Minnesota Version 1.0 Mortgagor:



One of the business rules that needed to be maintained was the relationship of the mortgagor individuals.

For example:

THAT CERTAIN MORTGAGE owned by the undersigned, a **National Banking Association** under the laws of **The United States of America**, DATED, **June 9**, **1995** executed by **Jim Johnson and Mary Johnson**, as **husband and wife** and

Nancy James and Bill James, as wife and husband to U.S. Bank National Association ND MORTGAGEE, and filed for record July 14, 1995, as Document Number 10298734 in the Office of the County Recorder of Aitkin County, Minnesota, is, with the indebtedness thereby secured, fully paid, satisfied, released and discharged.

The requirement to keep Jim and Mary Johnson as husband and wife and Nancy and Bill James as husband and wife is necessary to be able to recreate the correct format when displaying the document in the user-friendly view.

The **GRANTEE** element had a _MaritalStatusType attribute which contained the following values: "Married, Not Provided, Divorced, Separated, Unknown, Not Married" but didn't handle the "husband and wife" and "wife and husband" relationship. Minnesota needed the latter relationship for creating the document in the appropriate format in the user-friendly view.

If the current structure was used, each person would be represented by a **GRANTEE** element using the value of "Married" for the **_MaritalStatusType**. This was not sufficient as the correct relationship needed to be identified.

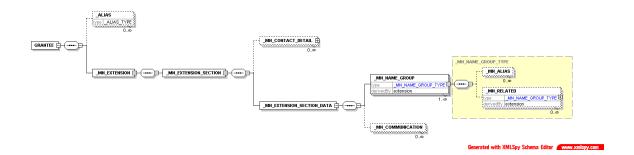
If "husband and wife" and "wife and husband" were added to the values for the _MaritalStatusType attribute, then a relationship would need to be created to group the appropriate GRANTEE elements together. The schema, as it stands, does not allow for a relationship to be built between the GRANTEE elements so adding these new values would not solve the problem.

Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION, had to be added to accommodate the following Minnesota requirements:

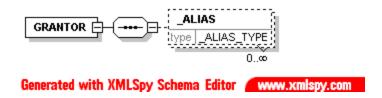
- 1. Attributes were added for the address of the Grantee
- 2. The _MN_NAME_GROUP element structure was added to accommodate the name and alias names of the grantor. This element contained the _MN_RelationshipStatus attribute which identified the "as husband and wife", "as wife and husband" and "a single person". This element grouped the related grantors together that pertained to the relationship
- 3. The _MN_RELATED element structure was added for the organizations that were related to the grantor (eg. a merger or assignment from one organization to another)
- 4. THE _MN_COMMUNICATION element was added for allowing more than one contact means (ie. phone number, pager number, fax number, etc.)

Version 1.1 GRANTEE



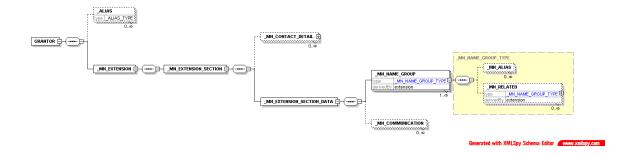
4. GRANTOR

The **GRANTOR** element contains information about the Grantor or Mortagee of the document.



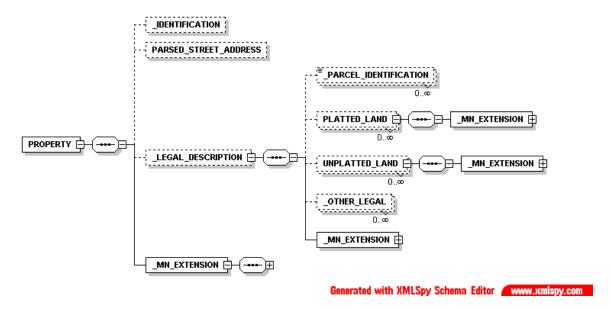
This structure mapped to the Version 1.0 **Mortgagee** element and was created the same as the **GRANTEE**.

Version 1.1 GRANTOR



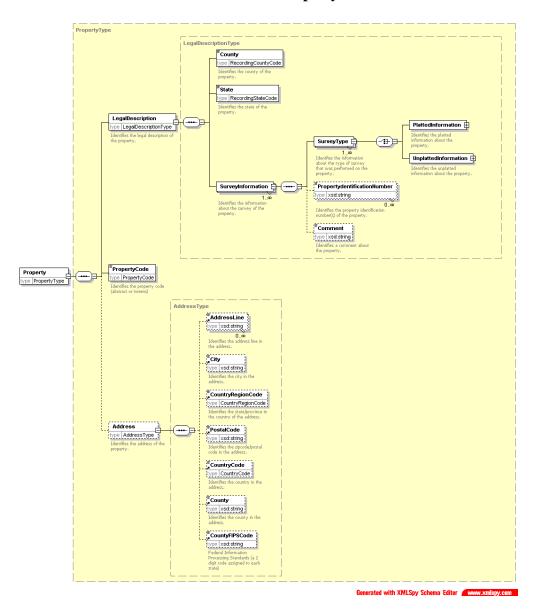
5. PROPERTY

The **PROPERTY** element structure contains the information about the property on the document



This structure mapped to the Version 1.0 **Property** element.

Version 1.0 Property



Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION, had to be added to the **PROPERTY** element to accommodate the following Minnesota requirements:

- **1.** THE _MN_**PropertyCode** attribute was added to indicate if the property is "Abstract", "Torrens" or "Both".
- **2.** THE _MN_Country attribute was added to indicate the country the property was located
- 3. THE _MN_CountryCode attribute was added to indicate the code of the country the property was located in

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the PLATTED_LAND element to accommodate the following Minnesota requirements:

1. THE _MN_PartOfFlag attribute was added to indicate that the legal description respresented only part of the property

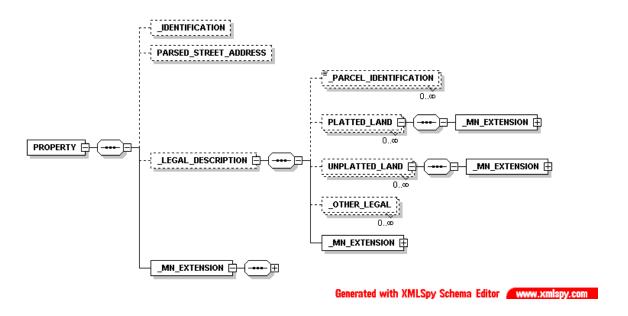
A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the UNPLATTED_LAND element to accommodate the following Minnesota requirements:

- 1. THE _MN_QuarterQuarterSectionIdentifier attribute was added for identifying the the quarter quarter section
- 2. THE _MN_QuarterQuarterQuarterSectionIdentifier attribute was added for identifying the quarter quarter quarter section
- 3. THE _MN_QuarterQuarterQuarterQuarterSectionIdentifier attribute was added for identifying the quarter quarter quarter quarter section

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the _LEGAL_DESCRIPTION element to accommodate the following Minnesota requirements:

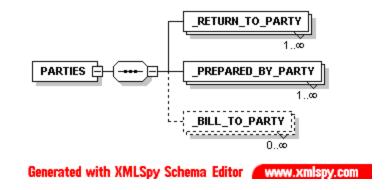
1. THE _MN_OtherLot attribute was added for the value of the additional lot information (eg. Parks) on the property

Version 1.1 PROPERTY



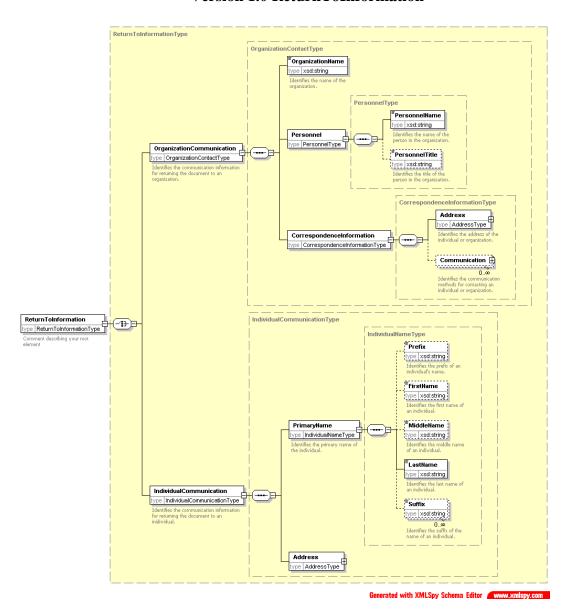
6. PARTIES

The **PARTIES** element structure contains the information about the additional parties involved in the Satisfaction outside of the grantor and grantee.

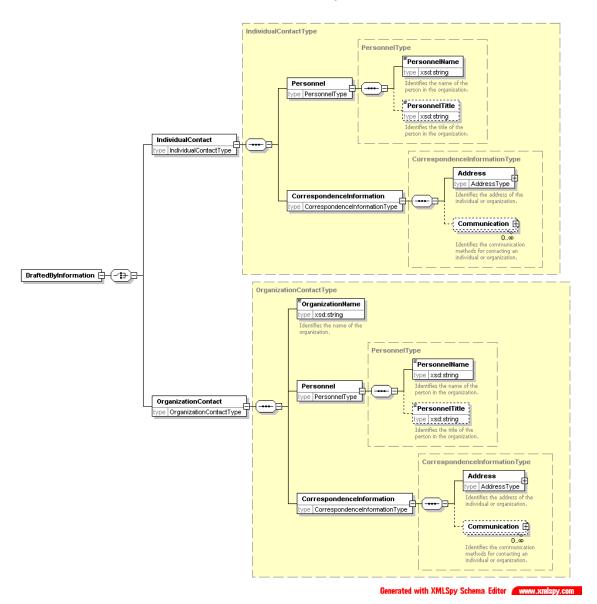


The **_RETURN_TO_PARTY** element mapped to the Version 1.0 **ReturnToInformation** element.

Version 1.0 ReturnToInformation



The **_PREPARED_BY_PARTY** element mapped to the Version 1.0 **DraftedByInformation** element.



Version 1.0 DraftedByInformation

Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the _PREPARED_BY_PARTY element to accommodate the following Minnesota requirements:

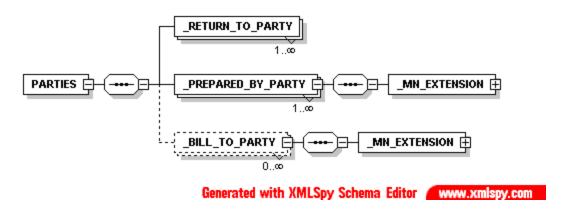
1. THE _MN_COMMUNICATION element was added for allowing more than one contact means (ie. phone number, pager number, fax number, etc.)

The **_BILL_TO_PARTY** did not have a corresponding Version 1.0 element or attribute to map to.

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the _BILL_TO_PARTY element to accommodate the following Minnesota requirements:

1. THE _MN_COMMUNICATION element was added for allowing more than one contact means (ie. phone number, pager number, fax number, etc.)

Version 1.1 PARTIES



7. EXECUTION

The **EXECUTION** element contains information about the date, city, county and state that the document was signed in. This information was contained in the **DocumentOutline** element structure in Version 1.0.

Version 1.1 EXECUTION



Extensions:

No Minnesota Extensions needed to be added.

8. MORTGAGE_CONSIDERATION

This element is not used by the Minnesota Satisfaction document.

Version 1.1 MORTGAGE_CONSIDERATION



No Minnesota Extensions needed to be added.

9. CONSIDERATION

The **CONSIDERATION** element contains information about the amount of the mortgage.



This information was contained in the Version 1.0 MortgageAmount element structure under the MortgageReferenceDocumentInformation element structure.

MortgageReferenceDocumentInformationType ReferenceDocumentInformation type ReferenceDocumentInformation.. Identifies recorded information about the mortgage document. NumericAmount MoneyType min/maxIncl 0 Identifies the mortgage amount in numerical form. **~**!} □ MortgageAmount 🖨 MortgageReferenceDocumentInf. Identifies the mortgage amount. TextAmount type MortgageReferenceDocumentInf... type xsd:string Identifies the mortgage amount in textual form. . OriginalMortgagor 🖽 Identifies the original mortgagor on the recorded mortgage document. OriginalMortgagee 🖽 Identifies the original mortgagee on the recorded mortgage document.

Version 1.0 MortgageAmount

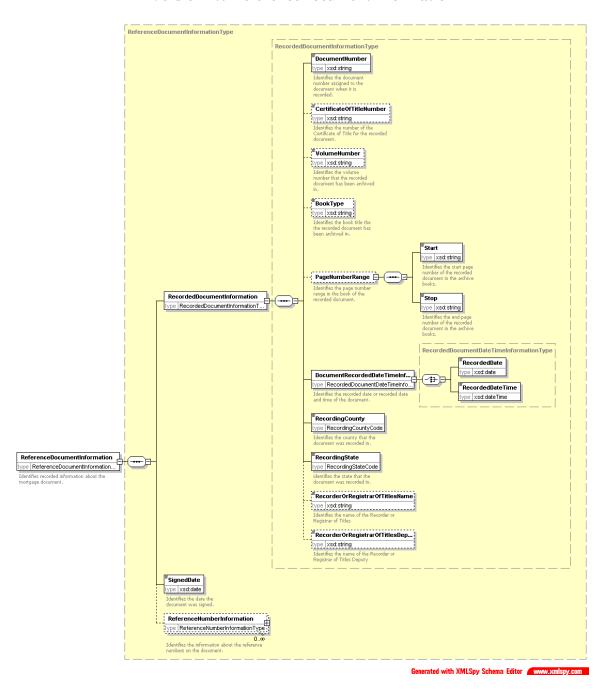
Generated with XMLSpy Schema Editor www.xmlspy.com

No Minnesota Extensions needed to be added.

10. RECORDED_DOCUMENT

The **RECORDED_DOCUMENT** element structure mapped to the Version 1.0 **ReferenceDocumentInformation** element structure.

Version 1.0 ReferenceDocumentInformation



A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the RECORDED_DOCUMENT element to accommodate the following Minnesota requirements:

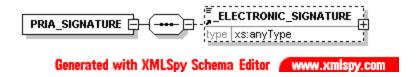
- 1. THE _MN_EndPageNumber attribute was added for identifying the last page number that the document was recorded on in the book
- 2. THE _MN_CertificateOfTitleNumber attribute was added for the Torrens property
- 3. THE _MN_**PropertyCode** attribute was added for indicating if the recording of this property was "Abstract" or "Torrens"
- 4. THE _MN_InstrumentDate attribute was added for the signed date on the Mortgage
- 5. THE _MN_REFERENCE element was added for the Mortgage document reference numbers

Version 1.1 RECORDED_DOCUMENT



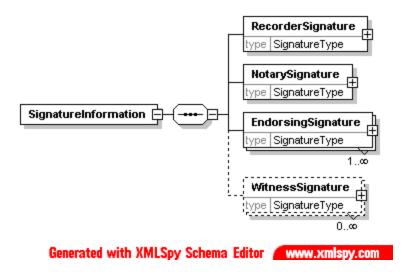
11. PRIA_SIGNATURE

The **PRIA_SIGNATURE** element contains the information about the persons signing the document excluding the Notary and the County personnel.



The _ELECTRONIC_SIGNATURE mapped to the Version 1.0 EndorsingSignature and WitnessSignature element structures under the SignatureInformation element.

Version 1.0 SignatureInformation

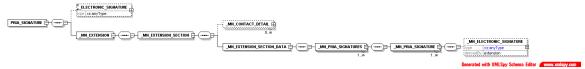


Minnesota required the need to group the persons signing the document for the appropriate organization they are signing for. The **PRIA_SIGNATURE** element structure did not allow for this grouping.

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the PRIA_SIGNATURE element to accommodate the following Minnesota requirements:

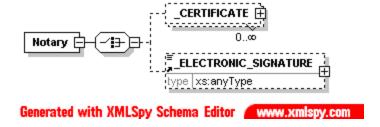
- THE _MN_PRIASignatureRootID attribute was added to enable the Notary signature to reference the persons they had notarized (see _MN_ElectronicSignatureIDRef attribute under NOTARY extension)
- 2. THE _MN_PRIA_SIGNATURES element structure was added to group the signatures together and identify the organization they are signing for, if applicable
- 3. THE _MN_PRIA_SIGNATURE element structure was added which mirrored the Version 1.05 PRIA_SIGNATURE element structure

Version 1.1 PRIA_SIGNATURE



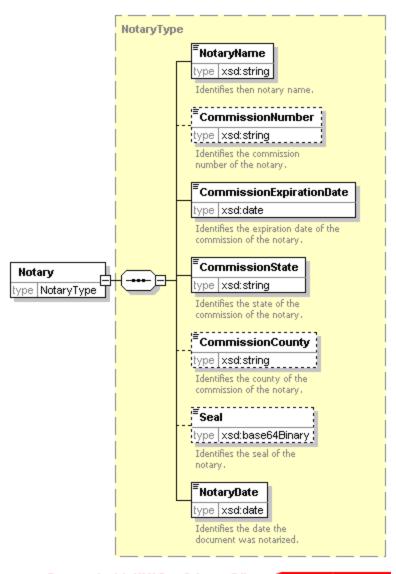
12. NOTARY

The **NOTARY** element structure contains all the information about the notary including the notary's signatures.



The **NOTARY** element mapped to the Version 1.0 **Notary** element.

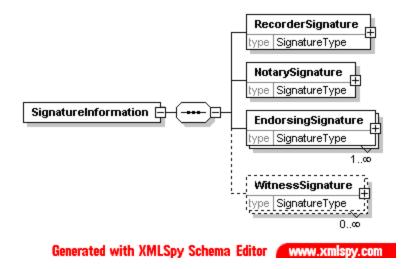
Version 1.0 Notary



Generated with XMLSpy Schema Editor www.xmlspy.com

The **NOTARY_ELECTRONIC_SIGNATURE** element mapped to Version 1.0 **NotarySignature** element structure under the **SignatureInformation** element.

Version 1.0 SignatureInformation

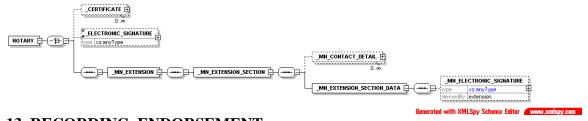


Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the NOTARY element to accommodate the following Minnesota requirements:

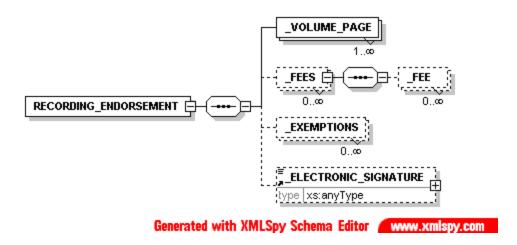
- 4. THE _MN_Seal attribute was added for the image of the Notary seal
- 5. THE _MN_ELECTRONIC_SIGNATURE element was added with the _MN_ElectronicSignatureIDRef attribute to accommodate the reference to what part of the document the Notary was signing

Version 1.1 NOTARY



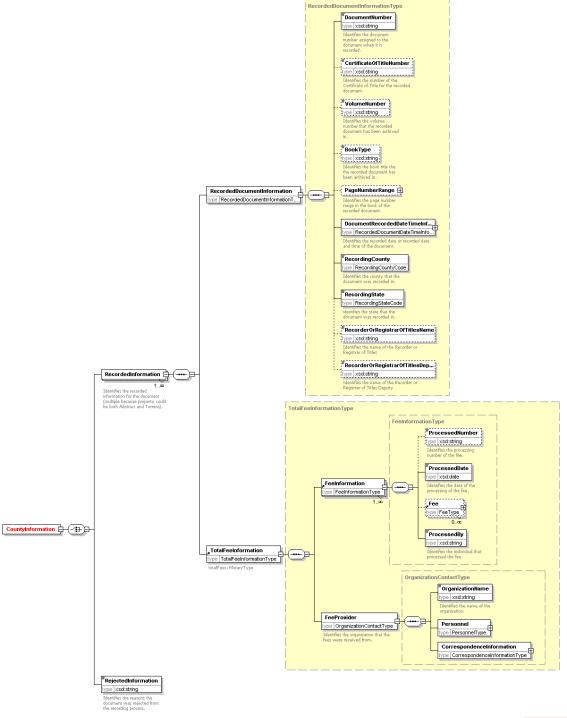
13. RECORDING_ENDORSEMENT

The **RECORDING_ENDORSEMENT** element structure contains the information about the recording of the document.



The **RECORDING_ENDORSEMENT** element structure mapped to the Version 1.0 **RecordedInformation** element structure of Version 1.0 CountyInformation element.

Version 1.0 RecordedInformation



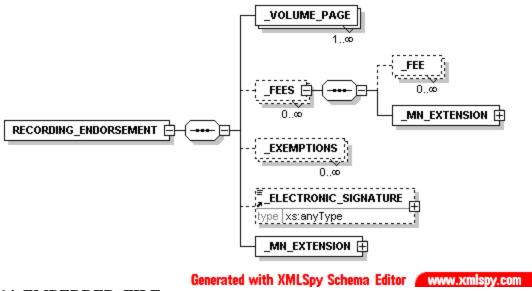
A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the **FEES** element to accommodate the following Minnesota requirements:

- 1. THE _MN_ProcessedBy attribute was added for the person that processed the recording fees
- 2. THE _MN_ProcessedDate attribute was added for the date the recording fees were processed

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the **RECORDING_ENDORSEMENT** element to accommodate the following Minnesota requirements:

- 1. THE _MN_CertificateOfTitleNumber attribute was added for the Torrens recordings
- 2. THE _MN_**DeputysName** attribute was added for the name of the deputy that signed the document
- 3. THE _MN_OfficersTitle attribute was added for the distinquishing between the County Recorder and Registrar of Titles.
- 4. THE _MN_REJECTION_REASONS element structure was added for identifying the reasons the document was rejected
- 5. THE _MN_VIEW element was added for an image of the receipt of fees
- 6. THE _MN_ELECTRONIC_SIGNATURE element was added with the _MN_ElectronicSignatureIDRef attribute to accommodate the reference to what part of the document the County Recorder or Deputy was signing

Version 1.1 RECORDING_ENDORSEMENT



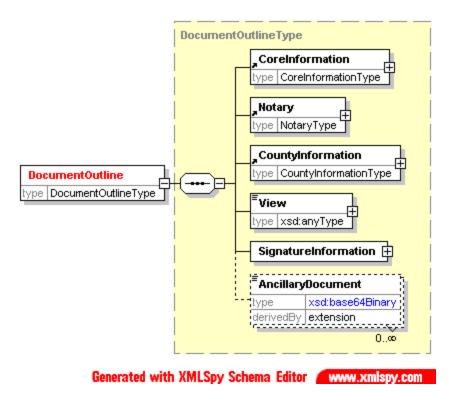
14. EMBEDDED_FILE

The **EMBEDDED_FILE** element structure contains the information about a file that was scanned in and the image was attached.



The **EMBEDDED_FILE** element structure mapped to the Version 1.0 **AncillaryDocument** element under the **DocumentOutline** element structure.

Version 1.0 AncillaryDocument



Extensions:

No Minnesota Extensions needed to be added.

Certificate of Release Document

Element Descriptions:

1. DOCUMENT_RECORDATION

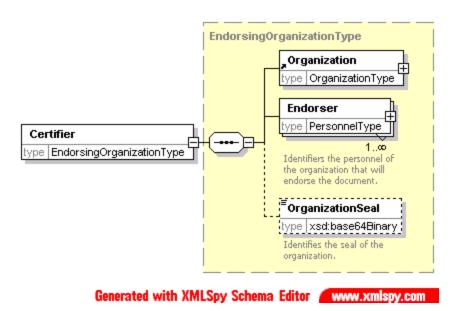
Same as Satisfaction Document.

2. PRIA_DOCUMENT

Same as Satisfaction Document except for the following:

Version 1.0 identified the Title Company or Agent that was processing the document. This was termed as the Certifier.

Version 1.0 Certifier

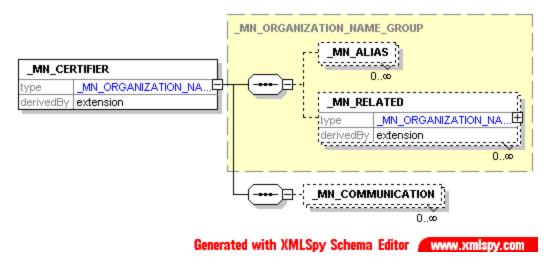


Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the PRIA_DOCUMENT element to accommodate the following Minnesota requirements:

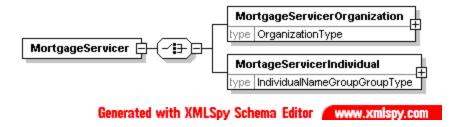
1. THE _MN_CERTIFIER element structure was added to identify the organization or person certifying the document

Version 1.1 _MN_CERTIFIER



Version 1.0 identified the name of the organization or person that was servicing the document. This was termed as the MortgageServicer.

Version 1.0 MortgageServicer

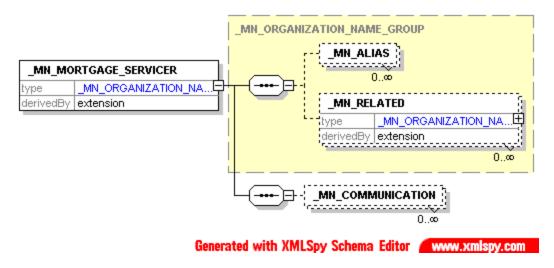


Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the PRIA_DOCUMENT element to accommodate the following Minnesota requirements:

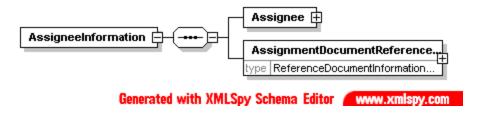
1. THE _MN_MORTGAGE_SERVICER element structure was added to identify the organization or person servicing the document

Version 1.1 _MN_MORTGAGE_SERVICER



Version 1.0 identified the name of the organization that had been assigned the mortgage along with the recorded information of the assignment of the mortgage. This was termed as the AssigneeInformation.

Version 1.0 AssigneeInformation

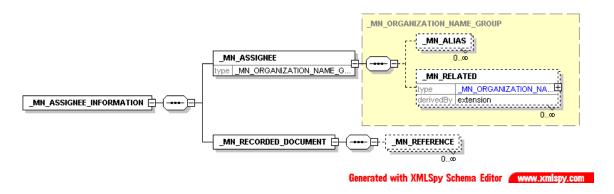


Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the PRIA_DOCUMENT element to accommodate the following Minnesota requirements:

1. THE _MN_ASSIGNEE_INFORMATION element structure was added to identify the organization or person that was assigned the document as well as the recorded information of the assignment.

Version 1.1 _MN_ASSIGNEE_INFORMATION



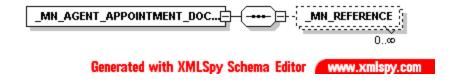
The Appointment of Agent was added in Version 1.1. This contained the information about the Appointment of Agent document that was recorded at the county giving authority for the Certifier to file a Certificate of Release for an organization.

Extensions:

A Minnesota Extension element structure, labelled _MN_EXTENSION had to be added to the PRIA_DOCUMENT element to accommodate the following Minnesota requirements:

 THE _MN_AGENT_APPOINTMENT_DOCUMENT element structure was added to identify the recorded information of the appointment of agent.

Version 1.1 _MN_AGENT_APPOINTMENT_DOCUMENT



3. GRANTOR

Same as Satisfaction Document except the Version 1.0 element structure was named **OriginalMortgagee** instead of **Mortgagee**.

4. GRANTEE

Same as Satisfaction Document except the Version 1.0 element structure was named **OriginalMortgagor** instead of **Mortgagor**.

5. PROPERTY

Same as Satisfaction Document.

6. PARTIES

Same as Satisfaction Document.

7. EXECUTION

Same as Satisfaction Document.

8. MORTGAGE_CONSIDERATION

Same as Satisfaction Document.

9. CONSIDERATION

Same as Satisfaction Document.

10. RECORDED_DOCUMENT

Same as Satisfaction Document.

11. PRIA_SIGNATURE

Same as Satisfaction Document.

12. NOTARY

Same as Satisfaction Document.

13. RECORDING_ENDORSEMENT

Same as Satisfaction Document.

14. EMBEDDED_FILE

Same as Satisfaction Document.