



eSubmission Spatial Data
Submission Standards Manual
VERSION 1.2: December 2019

About the Commission

The BC Oil and Gas Commission (Commission) is the single-window regulatory agency with responsibilities for regulating oil and gas activities in British Columbia, including exploration, development, pipeline transportation and reclamation.

The Commission's core roles include reviewing and assessing applications for industry activity, consulting with First Nations, ensuring industry complies with provincial legislation and cooperating with partner agencies. The public interest is protected by ensuring public safety, protecting the environment, conserving petroleum resources and ensuring equitable participation in production.

VISION

Safe and responsible energy resource development for British Columbia.

MISSION

We provide British Columbia with regulatory excellence in responsible energy resource development by protecting public safety, safeguarding the environment and respecting those individuals and communities who are affected.

VALUES

Transparency

Is our commitment to be open and provide clear information on decisions, operations and actions.

Innovation

Is our commitment to learn, adapt, act and grow.

Integrity

Is our commitment to the principles of fairness, trust and accountability

Respect

Is our commitment to listen, accept and value diverse perspectives.

Responsiveness

Is our commitment to listening and timely and meaningful action.



Table of Revisions

The Commission is committed to the continuous improvement of its documentation. The table below highlights the revisions to the eSubmission Spatial Data Submission Standards Manual. Once published, revisions are highlighted in this section and posted to the [Documentation section](#) of the Commission's website.

For more information about the Commission's documentation processes, visit the [Documentation Section](#) of the Commission's website. For more information on eSubmission please visit the [eSubmission Online Services](#) section of the Commission's website. Stakeholders are invited to provide input or feedback on Commission documentation to servicedesk@bcogc.ca.

Posted Date	Effective Date	Chapter	Summary of Revision(s)
June 2016	-	-	This is a draft document. Users are encouraged to review in full for training purposes.
July 2016	-	-	Updates to original draft document
February 2017	XXX	All	Updated terminology Stream Impacts to Changes in and about a Stream
February 2017	XXX	Spatial Data Submission Packages	Added section to Spatial Data Submission Section regarding package naming convention.
February 2017	XXX	Chapter 1	Corrected File Naming Standards to show <Disposal Number>
February 2017	XXX	Chapter 3	Added note on historical associated activity and related ancillary types (AS_TYPE) submissions
February 2017	February 2016	Chapter 2	Updated Shapefile Standards for Geophysical Final Plans and Changes in and about a Stream to include Construction Codes.
February 2017	February 2016	Chapter 3	Added Changes in and about a Stream – Shapefile Standards to Post Construction to reflect updated requirements.
November 2019	September 2019	Chapter 2 and 3	Removed "MULT" (multi-types) as option for crossing type submission with Geophysical Final Plan and Post Construction Submissions.
December 2019	January 1, 2020	Chapter 2 and 3	Definition clarification for CIAS_NUM and LOC_ID attributes.

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Preface

About

The eSubmission Spatial Data Submission Standards Manual is intended to be a reference document for permit holders and contractors working on their behalf, and is meant to provide an overview of the requirements and procedures for preparing the spatial data packages required by eSubmission to fulfill reporting requirements. The manual has been prepared to be as comprehensive as possible; however it is not all encompassing and may not cover all situations. This manual is meant to be used in conjunction with the [eSubmission Portal User Guide](#).

One of the expected outcomes of the Commissions eSubmission Spatial Data Submission Standards Manual is to ensure that clients assemble their spatial data in a consistent and accurate manner. By doing so will maximize the Commissions ability to incorporate both business and spatial data in the most efficient and accurate means possible. All companies and contractors working on behalf of those companies must adhere to the following criteria for spatial data standards.

The Commission GIS systems are based on the ESRI ArcGIS suite of software and as a result the following standards outline how spatial submissions must be prepared in order to be incorporated without issue.

This document will be revised annually but may be updated periodically during the year as well. If there are any changes or updates, release notes will be sent out at that time. Where circumstances or scenarios arise and are not covered by this manual, please contact the Commission.

Manual Structure

Beginning with general spatial data submission requirements, this manual guides the client through the preparation of data for submission in eSubmission. Each chapter follows the same structure: data structure, mandatory attributes and specific topology rules for each post permit submission type.

The appendices and links to other documentation included in this manual can be referenced when compiling information required by the Commission.

Manual Scope

This manual is limited in scope to the submission of spatial data post permit reporting requirements to the Commission issued under regulation or specified enactments.

Additional Guidance

As this Spatial Data Submission Standards manual is supplemental to the [eSubmission Portal User Guide](#), please refer back to it where needed. Throughout these two documents there are references to guides, forms, tables and definitions to assist in compiling all required information.

Additional resources include:

- [Glossary and acronym listing](#) on the Commission website.
- [Documentation and guidelines](#) on the Commission website.
- [Frequently asked questions](#) on the Commission website.
- [Advisories, bulletins, reports and directives](#) on the Commission website.
- [Regulations and Acts](#) listed on the Commission website.

Company Administration & Account Information for Commission Information Systems

Please refer to the [eSubmission Portal User Guide](#) for information on creating a user account. Once the user account has been created, limited access is granted to the eSubmission Portal. Full access to applications within the eSubmission Portal is gained by contacting the user's Company Administrator and updating security roles associated with the user account. The user roles that are required to submit spatial data in eSubmission are listed here:

- **Geophysical Portal:** Allows the user to access and submit geophysical information through the Geophysical application within the eSubmission portal.
- **Land Representative:** Allows the user to view permitted oil and gas activities and submit Post Construction and Preliminary Statutory Rights of Way Plans through the Permit Administration application within the eSubmission portal.
- **Waste Disposal Representative:** Allows the user to submit and review waste related data such as sumps and pits through the Waste Disposal application within the

Spatial Data Submission Packages

The applicant is required to assemble a spatial data package containing a series of shapefiles and if required PDF files representing post permit oil and gas submissions.

Submissions of spatial and pdf files are accepted for the following post permit activities:

- Drilling Waste Disposal Final Plans
- Geophysical Final Plans
- Post Construction Plans
- Statutory Right of Way Plans

Shapefile Data Format

All spatial data must be submitted as an ESRI™ polygon, polyline or point feature and must conform to the shapefile spatial data format. These shapefile standards are outlined in the ESRI White Paper, [ESRI Shapefile Technical Description](#).

Shapefile Templates

Spatial data for eSubmission must meet stringent data standards in order to be accepted by the system. Templates representing the mandatory requirements for the shapefiles with the correct structure of each submission type are available for download on the [Commissions eSubmission webpage](#) to support spatial submissions.

Shapefile Package Naming Convention

All shapefile packages uploaded into eSubmission require a specified naming convention. This naming convention is noted at the beginning of each of the following chapters. A sample noted here shows the general format.

<Permit Number>_<PPCP>_<YYYYMONDD>_<OPTIONAL TEXT>.

Please note that the Permit Number refers to the Permit Application Determination Number (Permit AD) which is a 9 character numeric field. Permit Application Determination Numbers (Permit AD) have been assigned to all existing permissioned activities and will be assigned to all new permits.

Projection

Clients can choose to either include their projection file as part of the shapefile submission, or upon upload of the spatial data package select the applicable projection from the dropdown menu. All data must be spatially referenced

to GCS North American 1983 and projected in one of the following:

Universal Transverse Mercator (UTM) Zone [9](#), [10](#), [11](#)

Or

BC Albers Equal Area, with the parameters of:

Central meridian: -126.0 (126:00:00 West longitude)
 First standard parallel: 50.0 (50:00:00 North latitude)
 Second standard parallel: 58.5 (58:30:00 North latitude)
 Latitude of projection origin: 45.0 (45:00:00 North latitude)
 False northing: 0.0
 False easting: 1000000.0 (one million metres)

Data Capture Methods

All spatial data prepared for submission of application spatial data to the Commission must use one of the following acceptable data capture methods. It is understood that capture methods will vary depending on the application and activity types.

<i>GPSD</i>	<i>GPS - Differential</i>
<i>GPSND</i>	<i>GPS - Non Differential</i>
<i>ORTHO</i>	<i>Ortho Photography</i>
<i>CGWC</i>	<i>Coordinate Geometry With Control</i>
<i>SNK</i>	<i>Source not Known</i>

Data Integrity

When shapefiles uploaded into eSubmission are validated, they are tested for geometry errors that would prevent the data in the shapefile from being accepted into the Commission spatial database. If geometry errors are identified the validation will fail and the system will return an error to the applicant. An example of a geometry error could be a self-intersecting line. It is recommended that applicants use tools such as 'Check Geometry' and 'Repair Geometry' in the ESRI Desktop suite or 'Geometry Validator' within Feature Manipulation Engine (FME) on prepared shapefiles to ensure the success of upload validation.

Specific topology rules are outlined as part of the following chapters and a list of error messages caused by topology are included in the appendix.

Reporting Forest Cut

All new forest cut must be reported when making post approval submissions for Post Construction, or Geophysical Final Plans. In both cases, forest cut will be reported on a per cutting permit basis, for any new or additional cut that was performed since;

- The approval of the application (first submission of a Post Construction Plan, or Geophysical Final Plan)

- Any subsequent submission of a Post Construction Plan

The entry of the actual area of forest cut will be reported in the eSubmission application. Clients will be required to enter the "Actual Area of New Cut (ha)" information from the "Forest Cut" tab in eSubmission when submitting a either the Post Construction Plan or Geophysical Final Plan.

Forest District	Master License Cut Number	Cutting Permit Number	Timber Mark Number	Approved Area of New Cut (ha)	Actual Area of New Cut (ha)
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When data entering the value of the "Actual Area of New Cut (ha)", the entered value must not be null, and must be equal to or greater than 0.

1. Drilling Waste Disposal

The Drilling Waste Disposal submission requires the following mandatory data set collections:

- [Mandatory] Drilling Waste Disposal – polygons

Data Package File Naming Standards:

Name of File	File Type	Submission Value
Spatial Submission File	.zip	<Disposal Number>_<WDSP>_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP

Drilling Waste Disposal – Shapefile Standards:

Feature Name: Drilling Waste Disposal

Description: Capture spatial data on types of Drilling Waste Disposal areas that define the spatial extent of the land where the disposal of drilling waste is deposited.

Geometry: Polygon

File Naming Convention: (*_dwd.*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature
WD_NUMBER	NUMBER(9)	Any number		Mandatory	The value used to identify the waste disposal number

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown, or private land.
		CRWN	Crown Land		
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source Not Known		

Drilling Waste Disposal – Business and Topology Validation Rules:

- Must be single part line
- A Waste Disposal site must not:
 - Self-intersect.
 - Self-overlap.
 - Intersect with a well and/or facility point.
 - Intersect with a well/facility land area or a well/facility land area.
 - Intersect with a pipe centre-line.
 - Intersect with a pipeline land area.

2. Geophysical Final Plans

The Geophysical Final Plan submission requires the following mandatory data set collections:

- [Mandatory] Geophysical Lines – lines
- [Mandatory, if present] Associated Activities – polygons
- [Mandatory, if present] Changes in and about a Stream – points

Data Package File Naming Standards:

Name of File	File Type	Submission Value
Final Plan Cover Sheet	.pdf	<Geophysical Program Name>_GFPL_<YYYYMONDD_<OPTIONAL TEXT>.PDF
1:50,000 Final Plan Map		
Spatial Submission File	.zip	<Geophysical Program Name>_GFPL_<YYYYMONDD_<OPTIONAL TEXT>.ZIP

Geophysical Final Plan– Shapefile Standards:

Feature Class Name: Geophysical

Description: Capture spatial data on types of Geophysical seismic lines.

Geometry Type: Line

File Name Convention: (*_gl.*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown, private, or both.
		CRWN	Crown Land		
GEO_NUM	String(8)	YYYY-9999		Mandatory	Number to identify the individual Geophysical Program
LINE_TYPE	String (6)	COMBO	Combination	Mandatory	Describes purpose of geophysical line.
		NONE	No Source/No Receiver		
		REC	Receiver		
		SOURCE	Source		
CUT_TYPE	String (5)	ECC	Existing Cat Cut	Mandatory	Describes the GAFA Line Type
		EHC	Existing Hand Cut		
		EMC	Existing Mulcher Cut		
		EPO	Existing Push Out		
		GRAV	Gravity/Aeromagnetic		
		NCC	New Cat Cut		
		NCPO	New Cut Push Out		
		NHC	New Hand Cut		
		NMC	New Mulcher Cut		
LINE_WIDTH	Decimal (6,2)	NNNN.NN		Mandatory	Width of the seismic line in metres

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the location.
		NTBC	Never to be constructed		
		TBC	Future construction		
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source Not Known		

Geophysical Final Plans – Business and Topology Validation Rules:

- Lines must be single part.
- Geophysical lines must not:
 - Self-intersect.
 - Self-overlap.
 - Intersect with a well and/or facility point.
 - Intersect with a well/facility land area or a well/facility land area.
 - Intersect with a pipe centre-line.
 - Intersect with a pipeline land area.
- *Please see– Reporting Forest Cut, above.*

Changes in and about a Stream – Shapefile Standards:

Feature Class Name: Changes In and About a Changes in and about a Stream Locations

Description: Capture spatial data on types of Changes in and about a Stream for Changes in and About a Stream that defines the spatial location of the impact.

Geometry Type: Point

File Naming Convention: (*_si.*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature
CIAS_NUM	String(7)	A text string of length 7, or less		Mandatory – must be unique	Unique Change In and About a Stream Number
LOC_ID	Number(5)	Any number (NNNNN)		Mandatory – must be unique within a project	Unique Location ID Number
WC_NAME	String (50)	A text string of length 50, or less		Mandatory	The name of the Water Course that is impacted
RIP_CLASS	String (4)	S1	S1	Mandatory	Indicate the riparian class and lake classification.
		S2	S2		
		S3	S3		
		S4	S4		
		S5	S5		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		S6	S6		
		L1-A	L1-A		
		L1-B	L1-B		
		L2	L2		
		L3	L3		
		L4	L4		
		W1	W1		
		W2	W2		
		W3	W3		
RIP_VER	String (4)	DESK	Desk Top Verified	Mandatory	Indicates how the riparian class was verified
		FIEL	Field Verified		
DURATION	String (4)	T	Temporary	Mandatory	Describes the purpose duration of a feature
		P	Permanent		
TYPE	String (4)	AERL	Aerial	Mandatory	Describes the type of a feature. Where a CIAS was permitted as "multi-type", the permit holder should select the appropriate crossing method which advises 'how' they crossed the stream.
		BEPR	Bank Erosion Protection		
		BRDG	Bridge		
		CBRD	Clearspan Bridge		
		CULV	Culvert		
		DEBR	Debris Removal		
		FLIS	Flow Isolation		
		GRVR	Gravel Removal		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		HDD	(HDD) Directional Drill		
		ICBR	Ice Bridge Crossing		
		MATT	Matting		
		MCUL	Major Culvert		
		MTUN	Micro Tunnelling		
		OCUT	Open Cut		
		PUBO	Punch and Bore		
		SNFL	Snow Fill Crossing		
		STRD	Stream Diversion		
		TFRD	Temporary Ford		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the location.
		NTBC	Never to be constructed		
		TBC	Future construction		
SOURCE	String (5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

Changes in and about a Stream – Business and Topology Validation Rules:

- Points must be disjoint.

3. Post Construction Plans

The Post Construction Plan submission requires the following mandatory data set collections:

- [Mandatory] Land Area – polygons
- [Mandatory, if present] Associated Activities – polygons
- [Mandatory, if present] Changes in and about a Stream - Points

Data Package File Naming Standards:

Name of File	File Type	Submission Value
Post Construction Survey Plan	.pdf	<Permit Number>_<PPCP>_<YYYYMONDD>_<OPTIONAL TEXT>.PDF
Spatial Submission File	.zip	<Permit Number>_<PPCP>_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP

Land Area – Shapefile Standards:

Feature Name: Land Area

Description: Capture spatial data on the types of Post Construction Land Areas that defines the spatial extent of the land where construction has taken place on the land.

Geometry: Polygon

File Naming Convention: (*_la.*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	Object ID	System Defined		Mandatory	Unique identifier for spatial feature.
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature.
LAND_ID	Number (9)	Any number		Mandatory	Indicates the previously permitted polygon.

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
LAND_TYPE	String(4)	PLA	Pipeline Land Area	Mandatory	Indicates the type of activity that occurs within the polygon area.
		RLA	Road Land Area		
		WFLA	Well Facility Land Area		
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown or private land
		CRWN	Crown Land		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the land.
		NTBC	Never To Be Constructed		
		TBC	Future Construction		
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source Not Known		

Land Area – Business and Topology Validation Rules:

- Land areas must not overlap within the same permit.
 - Exception: Only Road and Pipeline land areas can overlap each other within the same permit.
- Well and/or Facility land areas must not:
 - Overlap road centerlines and/or another road land area.
 - Overlap geophysical lines.
- Pipeline land areas must not:
 - Overlap geophysical lines.
- Road land area must not:
 - Intersect with a well point or a facility point.
- *Please see– Reporting Forest Cut, above.*

Associated and Ancillaries – Shapefile Standards:

Feature Class Name: Associated Activities

Description: Capture spatial data on types of Associated Oil & Gas Activities (AOGA) that defines the spatial extent of the land where an Associated Activity is located.

Geometry Type: Polygon

File Naming Convention: (*_anc.*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	Object ID	System Defined		Mandatory	Unique identifier for spatial feature
SHAPE	Geometry	System Defined		Mandatory	Contains the spatial feature
LAND_ID	Number (9)	Any number		Mandatory	Indicates the previously permitted polygon.
AS_TYPE	String (4)	ACCS	Access	Mandatory	Describes the type of the Associated Activity.
		AGRO	Aggregate Operations / Borrow Pit		
		AGWL	Above Ground Fresh Water Line		
		AIR	Air Strip		
		CAMP	Campsite		
		COMS	Communication Site		
		CPAB	Cathodic Protection / Anode Bed		
		DECK	Deck Site		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		FWS	Fresh Water Storage Site		
		GATE	Gate Monitoring		
		HELI	Helipad		
		INV	Investigative Use - General		
		INVW	Investigative Use - Water Well Testing		
		MONS	Monitoring Site		
		POWR	Powerline		
		SREM	Site Remediation		
		STAR	Staging Area		
		STOR	Storage Area		
		SUMP	Sump		
		WASD	Water Source Dugout		
		WSPC	Workspace		
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown, or private land.
		CRWN	Crown Land		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the land.
		NTBC	Never To Be Constructed		
		TBC	Future Construction		
SOURCE	String (5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		GPSD	GPS - Differential		spatial data was captured; with inferred accuracies.
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

**NOTE: If the permit was issued prior to July 2016, the OGAA associated oil and gas activity or NEB related ancillary may have been permitted with a historical associated or ancillary types (AS_TYPE) from the options listed above. In these cases are the originally permitted AS_TYPE may be used.

Associated and Ancillary – Business and Topology Validation Rules:

- None

Changes in and about a Stream – Shapefile Standards:

Feature Class Name: Changes In and About a Changes in and about a Stream Locations

Description: Capture spatial data on types of Changes in and about a Stream for Changes in and About a Stream that defines the spatial location of the impact.

Geometry Type: Point

File Naming Convention: (*_si.*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature
CIAS_NUM	String(7)	A text string of length 7, or less		Mandatory – must be unique	Unique Change In and About a Stream Number
LOC_ID	Number(5)	Any number (NNNNN)		Mandatory – must be unique within a project	Unique Location ID Number
WC_NAME	String (50)	A text string of length 50, or less		Mandatory	The name of the Water Course that is impacted
RIP_CLASS	String (4)	S1	S1	Mandatory	Indicate the riparian class and lake classification.
		S2	S2		
		S3	S3		
		S4	S4		
		S5	S5		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		S6	S6		
		L1-A	L1-A		
		L1-B	L1-B		
		L2	L2		
		L3	L3		
		L4	L4		
		W1	W1		
		W2	W2		
		W3	W3		
RIP_VER	String (4)	DESK	Desk Top Verified	Mandatory	Indicates how the riparian class was verified
		FIEL	Field Verified		
DURATION	String (4)	T	Temporary	Mandatory	Describes the purpose duration of a feature
		P	Permanent		
TYPE	String (4)	AERL	Aerial	Mandatory	Describes the type of a feature. Where a CIAS was permitted as "multi-type", the permit holder should select the appropriate crossing method which advises 'how' they crossed the stream.
		BEPR	Bank Erosion Protection		
		BRDG	Bridge		
		CBRD	Clearspan Bridge		
		CULV	Culvert		
		DEBR	Debris Removal		
		FLIS	Flow Isolation		
		GRVR	Gravel Removal		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		HDD	(HDD) Directional Drill		
		ICBR	Ice Bridge Crossing		
		MATT	Matting		
		MCUL	Major Culvert		
		MTUN	Micro Tunnelling		
		OCUT	Open Cut		
		PUBO	Punch and Bore		
		SNFL	Snow Fill Crossing		
		STRD	Stream Diversion		
		TFRD	Temporary Ford		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the location.
		NTBC	Never to be constructed		
		TBC	Future construction		
SOURCE	String (5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

Changes in and about a Stream – Business and Topology Validation Rules:

- Points must be disjoint.

4. Statutory Right of Way Plans

The Statutory Right of Way submission requires the following mandatory data set collections:

- [Mandatory] Statutory Right of Way – polygons

Data Package File Naming Standards:

Name of File	File Type	Submission Value
Survey Plan	.pdf	<Permit Number>_<PSRW>_<YYYYMONDD>_<OPTIONAL TEXT>.PDF
Spatial Submission File	.zip	<Permit Number>_<PSRW>_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP

Statutory Right of Way Plan – Shapefile Standards:

Feature Class Name: Statutory Right of Way

Description: Capture spatial data on a Statutory Right of Way that defines the spatial extent of the land where the Statutory Right of Way will exist.

Geometry Type: Polygon

File Naming Convention: (*_srw.*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	Object ID	System Defined		Mandatory	Unique identifier for spatial feature.
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature.
TENURE_NUM	String(8)	A text string of length 8		Mandatory	The Tenure File Number to identify the

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
					individual polygon
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

Statutory Right of Way Plan – Business and Topology Validation Rules:

- None