

Track & Civil Nameplates

AMT-WI-033

Applicability

ARTC Network Wide
SMS

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1 Introduction

1.1 Purpose

ARTC maintains an Asset Management System (AMS) to ensure that assets are fit for the purpose of allowing the operation of trains over ARTC infrastructure. The AMS enables ARTC to perform the following core responsibilities;

- Capital investment in the network
- Manage the infrastructure comprising the network
- Maintain the infrastructure comprising the network

The purpose of this work instruction is to supplement AMT-WI-023 in describing the mandatory attributes required by the system, as currently configured, to manage Nameplate data requirements for Track & Civil assets in the system in a way that ensures the stated purpose of the AMS above is achieved

1.2 Scope

This work instruction covers the information requirements to register the comprehensive data set for all Track & Civil assets in order to provide all Nameplate attributes, in the AMS that are necessary to allow for structured works management of these assets to be performed.

1.3 Procedure Owner

The Manager Asset Management Systems is the Document Owner and is the initial point of contact for all queries relating to this work instruction.

1.4 Responsibilities

The Manager Asset Strategy (IS) / Manager Engineering (HV) is responsible for the implementation of this guideline.

The Corridor Manager (IS) / Manager Maintenance (HV) is responsible for approving changes to infrastructure equipment details within the Ellipse equipment register.

The Area Manager is responsible for ensuring recommended changes to infrastructure equipment are appropriate and correct.

Change Initiators are responsible for advising Area Managers where changes are required to infrastructure equipment they are required to maintain.

Asset Data Administrators, Asset Maintenance Management System Administrator (AMMSA) and Asset Systems Support Officer (ASSO) are responsible for ensuring required changes are correctly recorded.

1.5 Reference Documents

The following documents support this work instruction:

- AMT-PR-010 Enterprise Asset Management System
- EGP-03-02 Equipment Register – Updating & Maintenance
- AMT-WI-023 Data Classification – Track & Civil

1.6 Definitions

Term	Description
Ellipse	Ellipse is a proprietary enterprise resource planning software provided by ABB that is used by ARTC to manage the assets.
Ellipse Applications	Various modules contained within Ellipse which assist ARTC in managing its assets during the entire life cycle from purchase through to disposal.
Equipment Register	Is used to record details of all infrastructure maintained by ARTC. Designated Ellipse application MSE600.
Equipment Number	A unique system generated number which is used to relate equipment to the various modules in Ellipse.
Attribute	Single component of an asset's record similar to a database field.
Controlled Attribute	An attribute that can only contain limited data types i.e. from a list.
Uncontrolled Attribute	An attribute that can hold any data (subject to character limit).
Automatic Attribute	An attribute that is reserved in Ellipse and are automatically populated on a Nameplate when certain Ellipse fields are completed. To make use of any automatic attributes they must be first set up as master attributes
Equipment Class (EC)	The equipment class is the highest level of the hierarchy used to organise assets in Ellipse. It is a controlled attribute. The rules for the Equipment Reference are defined against each equipment class.
Equipment Group Identifier (EGI)	The Equipment Group Identifier groups items of similar operating and maintenance characteristics. It is a controlled attribute. Equipment Nameplates are defined against each EGI.
Nameplates	Nameplates are used to store a variety of engineering characteristics against equipment in Ellipse
Equipment Reference (also known as Plant Number)	A combination of plant detail fields to form a unique equipment identifier. These fields are a combination of controlled and uncontrolled attributes. The structure of the Equipment Reference is defined by Equipment Class and the rules regarding these structures are detailed within this document.
Track Node	A point used to define the start or end position of a continuous asset or network element.
Through Road	The leg of a turnout designated as the track from which the turnout is being utilised to divert trains from. On standard conventional turnouts this will always be the straight leg.
Site	A virtual equipment item utilised in Ellipse to group equipment items from different Equipment Classes into a parent child hierarchy at logical locations like turnouts and level crossings.

1.7 Application of this Work Instruction

This work instruction predominantly describes data attributes or requirements that are governed by technical or other specific requisites of Track & Civil equipment Nameplate items. The information requirements to register all Track & Civil assets, including configuration, engineering data and attributes, in the AMS that are necessary to allow for structured works management of these assets to be performed are detailed in AMT-WI-023 Data Classification – Track & Civil. Universal data attributes or requirements are detailed in AMT-WI-020, those relevant only to Structures equipment are contained in AMT-WI-021 and Signals equipment in AMT-WI-022. This work instruction is intended to be read and used in conjunction with those other instructions, particularly AMT-WI-023.

2 Nameplate

2.1 Nameplate Overview

The Nameplate sub-frame in Ellipse contains data specific to the asset. The Nameplate allows ARTC to build a more comprehensive data set for each asset. Nameplate attributes are defined for each EGI and as such the EGI assigned to the asset determines what information can be recorded against that asset.

Nameplates serve two primary functions:

- To provide a list of reference information against each asset in a standard format.
- To provide a basis for complex database searches to be performed on this information.

The functionality provides for data entry and retrieval of information about master attributes, attribute nameplates and equipment attribute values.

The Nameplate sub-frame consists of three parts:

- The nameplate controlled attribute tables which are created and populated by the ARTC system administrator.
- The nameplate template that is linked to each EGI which is also created by the ARTC system administrator.
- The values that are entered against the asset in uncontrolled attribute fields within the nameplate template.

Fields in the nameplate are either classified as automatic attributes or not. Currently the 4 to 6 Plant Level fields used to compile the Equipment Reference are automatically populated on the nameplate.

Nameplate controlled attribute tables are lists of attributes available to be used to describe common attribute types and are presented as drop-down lists.

Each attribute record is uniquely identified by an attribute name and contains the following information to define the attribute characteristics:

- Description
- Maximum Length
- Field Type
- Table Type
- Error Number
- Special editing.

Nameplate uncontrolled attribute fields are used to enter data specific to each individual asset like size or length etc. The data contained in this attribute is editable by the responsible Area Manager.

The Area Manager shall ensure that the records for each asset in the Nameplate are as complete and accurate as possible.

2.2 Track & Civil Nameplate Template Data Rules

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
AIR001 - Airstrip									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0100	ROUTE		Route	03		alpha numeric	+COR	Corridor	Yes
0200	BASECODE		Track BaseCode	05		alpha numeric	+BAS	Track Basecode	Yes
0300	NKMFROM		Kilometre From	08	3 decimal places are allowed	numerical > or = zero			Yes
0400	NKMTO		Kilometre To	08	3 decimal places are allowed	numerical > or = zero			Yes
IJOINT - Insulated Joint									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0100	LMJOINT		Length of Joint m	08	2 decimal places are allowed	numerical > or = zero			No
0200	VERSINE		Versine	08		numerical > or = zero			No
0300	TYPEJOINT		Joint Type	02		alpha numeric	+IJT	Insulated Joint Type	No
0400	WEIRAILGRP		Rail Section Group	10		alpha numeric	+RLS	Rail Section (Weight)	No
0500	GRADERAIL		Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
0600	DTINSTALL		Install Date	08		date dd/mm/yy			No
0700	MANJOINT		Manufacturer	02		alpha numeric	+IJM	I J Manufacturer	No
0800	YNMITRED	N	Mitred Y/N	01	yes, no or space	alpha			No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TR0001 – Track Running Line & TR0002 – Track Siding									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0100	NKMFROM		Kilometre From	08	3 decimal places are allowed	numerical > or = zero			Yes
0200	NKMTO		Kilometre To	08	3 decimal places are allowed	numerical > or = zero			Yes
0300	TYPETRACK		Track Type	02		alpha numeric	+TKT	Track Type	No
0400	CLASSTRACK		Track Class	10		alpha numeric	+TKC	Track Class	No
0500	TRACKCENTRE		Track Centres MST applied	03		alpha			No
0600	CLEARANCES		Clearances MST applies	03	Yes or No	alpha			No
0700	APPROVEDINFRI NGE		Approved infringements	03	Yes or No	alpha			No
0800	RAILJOIN		Rail Join	03	JWR or LWR	alpha			No
0900	WETLOCATION		Wet Locations	03	Yes or No	alpha			No
1000	GUARDRAIL		Guard Rails	03	Yes or No	alpha			No
TR0003 – Crossover									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0100	NKMFROM		Kilometre From	08	3 decimal places are allowed	numerical > or = zero			Yes
0200	NKMTO		Kilometre To	08	3 decimal places are allowed	numerical > or = zero			Yes
0300	ASSTO		Associated Turnout 1	12	Equipment number	alpha numeric			No
0400	ASSTO		Associated Turnout 2	12	Equipment number	alpha numeric			No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TR0004 – Yard									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0100	NKMFROM		Kilometre From	08	3 decimal places are allowed	numerical > or = zero			Yes
0200	NKMTO		Kilometre To	08	3 decimal places are allowed	numerical > or = zero			Yes
LUB001 - Rail Lubricator									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0060	PLANTSEG6		Plant Segment 6	10		alpha numeric			No
0100	SIDERAIL		Rail Side	02		alpha numeric	+SDE	Rail / Track Side	No
0200	MANRESVOIR		Reservoir Manufacturer	03		alpha numeric	+LMN	Lubricator Manufacturer	No
0300	MODELRESVOIR		Reservoir Model	02		alpha numeric	+LML	Lubricator Model	No
0400	WEIKGRESVR		Reservoir Capacity kg	08	2 decimal places are allowed	numerical > or = zero			No
0500	TYPELUBE		Lubricant Type	02		alpha numeric	+LUB	Lubricant Type	No
0600	TYPELUBVALVE		Filler Valve Type	02		alpha numeric	+LVT	Lub. Filler Valve Type	No
0700	YNLUBVALVE	N	Gate Valve Y/N	01	yes, no or space	alpha			No
0800	MANLUBPUMP		Pump Manufacturer	03		alpha numeric	+LMN	Lubricator Manufacturer	No
0900	MODELLUBPUMP		Pump Model	02		alpha numeric	+LPM	Lub. Pump/Blade Model	No
1000	SIDELUBPUMP		Pump Side	02		alpha numeric	+SDE	Rail / Track Side	No
1100	HMMLUBPUMPL		Pump Height Lt mm	08	1 decimal place allowed	numerical > or = zero			No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
LUB001 - Rail Lubricator (cont)									
1200	HMMLUBPUMPR		Pump Height Rt mm	08	1 decimal place allowed	numerical > or = zero			No
1300	MANLUBBLADE		Blade Manufacturer	03		alpha numeric	+LMN	Lubricator Manufacturer	No
1400	MODELBLADE		Blade Model	02		alpha numeric	+LPM	Lub. Pump/Blade Model	No
1500	LLUBBLADE		Blade Length mm	08		numerical > or = zero			No
1600	NLUBBLADE		Blade Number	08		numerical > or = zero			No
1700	HMMLUBBLADEL		Blade Height Lt mm	08	1 decimal place allowed	numerical > or = zero			No
1800	HMMLUBBLADER		Blade Height Rt mm	08	1 decimal place allowed	numerical > or = zero			No
1900	YNLUBETOP	N	Lubrication Top of Rail	01	yes, no or space	alpha			No
2000	YNLUBESIDE	N	Lubrication Side of Rail	01	yes, no or space	alpha			No
TO0001 – Turnout Running Line & TO0002 – Turnout Siding									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0060	PLANTSEG6		Plant Segment 6	10		alpha numeric			No
0100	CLASSTRACK		Track Class	10		alpha numeric	+TKC	Track Class	No
0200	LAYTO		Layout	04		alpha numeric	+TOL	Turnout Layout	No
0300	BASTHRU		BaseCode (Through)	05		alpha numeric	+BAS	Track Basecode	Yes
0400	BASTOUT		BaseCode (To)	05		alpha numeric	+BAS	TRACK BASECODE	No
0500	MATTOBEARER		Bearer Material	02		alpha numeric	+SML	Sleeper/Bearer Material	No
0600	CATTO		Catalogue No.	10		alpha numeric			No
0700	RATIOTO		Crossing Rate (1 in.)	10		alpha numeric			No
0800	DIRTO		Turnout Direction	02	LT-Left or RT-Right	alpha numeric	+TOD	Turnout Direction	No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TO0001 – Turnout Running Line & TO0002 – Turnout Siding (cont)									
0900	DIRTOTRAFFIC		Traffic Facing or Trailing	01	F-Facing or T-Trailing	alpha numeric	+TFT	Turnout Facing - Trailing	No
1000	TYPETURNOUT		Turnout Type	02		alpha numeric	+TNT	Turnout Type	No
1100	LMTURNOUT		Turnout Length m	08	3 decimal places are allowed	numerical > or = zero			No
1200	WEITORL		Turnout Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
1300	GRADETOUTRL		Turnout Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
1400	WEITHRL		Through Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
1500	GRADETHRURL		Through Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
1600	TYPETOSWTCHL		LH Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
1700	WEISWL		LH Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
1800	GRADESWRL		LH Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
1900	LMSWITL		LH Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
2000	YNPNTSHOUSEL	N	LH Housed Points	01	yes, no or space	alpha			No
2100	TYPETOACDL		LH Anti-Creep Type	03		alpha numeric	+ACD	Anti-Creep Device	No
2200	TYPETOSWTCHR		RH Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
2300	WEISWR		RH Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
2400	GRADESWRLR		RH Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
2500	LMSWITCHR		RH Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
2600	YNPNTSHOUSER		RH Housed Points	01	yes, no or space	alpha			No
2700	TYPETOACDR		RH Anti-Creep Type	03		alpha numeric	+ACD	Anti-Creep Device	No
2800	TYPETOMECH		Turnout Mechanism	02		alpha numeric	+TMT	TO Mechanism Type	No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TO0001 – Turnout Running Line & TO0002 – Turnout Siding (cont)									
2900	TYPETOXING		Crossing Type	02		alpha numeric	+TCT	Turnout Crossing Type	No
3000	WEIXNG		Crossing Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
3100	GRADEXINGRL		Crossing Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
3200	MANXING		Crossing Manufacturer	03		alpha numeric	+TOM	TO X-ing Manufacturer	No
3300	ASSDIAMOND		Associated Diamond	12	Equipment number	alpha numeric			No
3400	ASSCATCHPT		Associated Catch Point	12	Equipment number	alpha numeric			No
3500	ASSTO		Associated Turnout	12	Equipment number	alpha numeric			No
3600	SPEEDKMHTH		Speed Through Road	08		numerical > or = zero			No
3700	SPEEDKMHTO		Speed Turnout Road	08		numerical > or = zero			No
3800	RADTOM		Turnout Radius m	08	3 decimal places are allowed	numerical > or = zero			No
3900	DTINSTALL		Install Date	08		date dd/mm/yy			No
4000	DTYYYYLIFE		Lifespan years	08		numerical > or = zero			No
4100	DTRENEW		Renew Date	08		date dd/mm/yy			No
4200	DTRENEWSWCH		Switch Renew Date	08		date dd/mm/yy			No
TO0003 – Catch Points Running Line & TO0004 – Catch Points Siding									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0060	PLANTSEG6		Plant Segment 6	10		alpha numeric			No
0100	CLASSTRACK		Track Class	10		alpha numeric	+TKC	Track Class	No
0200	LAYTO		Layout	04		alpha numeric	+TOL	Turnout Layout	No
0300	MATTOBEARER		Bearer Material	02		alpha numeric	+SML	Sleeper/Bearer Material	No
0400	LMCATCHPOINT		Catchpoint Length m	08	3 decimal places are allowed	numerical > or = zero			No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TO0003 – Catch Points Running Line & TO0004 – Catch Points Siding (cont)									
0500	WEICPSTOCK		Stock Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
0600	GRADECPSTOCK		Stock Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
0700	TYPECPSWTCH		Switch Type	02		alpha numeric	+TNT	Turnout Type	No
0800	WEICPSWTCH		Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
0900	GRADECPSWTCH		Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
1000	LMCPSWITCH		Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
1100	WEICPTHRW		Throw Off Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
1200	GRADECPTHRW		Throw Off Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
1300	LMTHROWOFF		Throw Off Rail L'gth m	08	3 decimal places are allowed	numerical > or = zero			No
1400	TYPECPMECH		Mechanism Type	02		alpha numeric	+TMT	TO Mechanism Type	No
1500	TYPECPBLOCK		Block Type	02		alpha numeric	+CPB	Catchpoint Block Type	No
1600	DESCLAND		Landing Zone Desc.	30		alpha numeric			No
1700	ASSTO		Associated Turnout	12	Equipment number	alpha numeric			No
1800	DTINSTALL		Install Date	08		date dd/mm/yy			No
1900	DTYYYYLIFE		Lifespan years	08		numerical > or = zero			No
2000	DTRENEW		Renew Date	08		date dd/mm/yy			No
TO0005 – Diamond Running Line & TO0006 – Diamond Siding									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0060	PLANTSEG6		Plant Segment 6	10		alpha numeric			No
0100	CLASSTRACK		Track Class	10		alpha numeric	+TKC	Track Class	No
0200	LAYTO		Layout	04		alpha numeric	+TOL	Turnout Layout	No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TO0005 – Diamond Running Line & TO0006 – Diamond Siding (cont)									
0300	BASECODE1		BaseCode (Main Line)	05		alpha numeric	+BAS	TRACK BASECODE	No
0400	BASECODE2		BaseCode (S'dary Line)	05		alpha numeric	+BAS	TRACK BASECODE	No
0500	MATTOBEARER		Bearer Material	02		alpha numeric	+SML	Sleeper/Bearer Material	No
0600	CATK1		K1 Catalogue No.	10		alpha numeric			No
0700	RATIOK1		K1 Crossing Rate (1 in:)	08	3 decimal places are allowed	numerical > or = zero			No
0800	CATK2		K2 Catalogue No.	10		alpha numeric			No
0900	RATIOK2		K2 Crossing Rate (1 in:)	08	3 decimal places are allowed	numerical > or = zero			No
1000	CATV1		V1 Catalogue No.	10		alpha numeric			No
1100	RATIOV1		V1 Crossing Rate (1 in:)	08	3 decimal places are allowed	numerical > or = zero			No
1200	CATV2		V2 Catalogue No.	10		alpha numeric			No
1300	RATIOV2		V2 Crossing Rate (1 in:)	08	3 decimal places are allowed	numerical > or = zero			No
1400	WEIDIAMOND		Diamond Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
1500	GRADEDIAMOND		Diamond Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
1600	TYPEDIS1		S1 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
1700	WEIDIS1		S1 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
1800	GRADEDIS1		S1 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
1900	LMDIS1		S1 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
2000	TYPEDIS2		S2 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
2100	WEIDIS2		S2 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
2200	GRADEDIS2		S2 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
2300	LMDIS2		S2 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TO0005 – Diamond Running Line & TO0006 – Diamond Siding (cont)									
2400	TYPEDIS3		S3 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
2500	WEIDIS3		S3 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
2600	GRADEDIS3		S3 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
2700	LMDIS3		S3 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
2800	TYPEDIS4		S4 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
2900	WEIDIS4		S4 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
3000	GRADEDIS4		S4 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
3100	LMDIS4		S4 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
3200	TYPEDIS5		S5 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
3300	WEIDIS5		S5 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
3400	GRADEDIS5		S5 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
3500	LMDIS5		S5 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
3600	TYPEDIS6		S6 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
3700	WEIDIS6		S6 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
3800	GRADEDIS6		S6 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
3900	LMDIS6		S6 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
4000	TYPEDIS7		S7 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
4100	WEIDIS7		S7 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
4200	GRADEDIS7		S7 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TO0005 – Diamond Running Line & TO0006 – Diamond Siding (cont)									
4300	LMDIS7		S7 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
4400	TYPEDIS8		S8 Switch Type	02		alpha numeric	+TST	Turnout Switch Type	No
4500	WEIDIS8		S8 Switch Rail Section	10		alpha numeric	+RLS	Rail Section (Weight)	No
4600	GRADEDIS8		S8 Switch Rail Grade	02		alpha numeric	+RLG	Rail Grade	No
4700	LMDIS8		S8 Switch Length m	08	3 decimal places are allowed	numerical > or = zero			No
4800	TYPEMECHS1S2		S1 & S2 Mechanism	02		alpha numeric	+TMT	TO Mechanism Type	No
4900	TYPEMECHS3S4		S3 & S4 Mechanism	02		alpha numeric	+TMT	TO Mechanism Type	No
5000	TYPEMECHS5S6		S5 & S6 Mechanism	02		alpha numeric	+TMT	TO Mechanism Type	No
5100	TYPEMECHS7S8		S7 & S8 Mechanism	02		alpha numeric	+TMT	TO Mechanism Type	No
5200	ASSTO1		Associated Turnout 1	12	Equipment number	alpha numeric			No
5300	ASSTO2		Associated Turnout 2	12	Equipment number	alpha numeric			No
5400	ASSTO3		Associated Turnout 3	12	Equipment number	alpha numeric			No
5500	ASSTO4		Associated Turnout 4	12	Equipment number	alpha numeric			No
5600	SPEEDKMHMAIN		Speed Main Line	03	(km/h)	numerical > or = zero			No
5700	SPEEDKMHSCND		Speed Secondary Line	03	(km/h)	numerical > or = zero			No
5800	DTINSTALLK1		K1 Install Date	08		date dd/mm/yy			No
5900	DTYYYYLIFEK1		K1 Lifespan years	08		numerical > or = zero			No
6000	DTRENEWK1		K1 Renew Date	08		date dd/mm/yy			No
6100	DTINSTALLK2		K2 Install Date	08		date dd/mm/yy			No
6200	DTYYYYLIFEK2		K2 Lifespan years	08		numerical > or = zero			No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
TO0005 – Diamond Running Line & TO0006 – Diamond Siding (cont)									
6300	DTRENEWK2		K2 Renew Date	08		date dd/mm/yy			No
6400	DTINSTALLV1		V1 Install Date	08		date dd/mm/yy			No
6500	DTYYYYLIFEV1		V1 Lifespan years	08		numerical > or = zero			No
6600	DTRENEWV1		V1 Renew Date	08		date dd/mm/yy			No
6700	DTINSTALLV2		V2Install Date	08		date dd/mm/yy			No
6800	DTYYYYLIFEV2		V2Lifespan years	08		numerical > or = zero			No
6900	DTRENEWV2		V2 Renew Date	08		date dd/mm/yy			No
7000	DTINSTALLS1		S1 Install Date	08		date dd/mm/yy			No
7100	DTYYYYLIFES1		S1 Lifespan years	08		numerical > or = zero			No
7200	DTRENEWS1		S1 Renew Date	08		date dd/mm/yy			No
7300	DTINSTALLS2		S2 Install Date	08		date dd/mm/yy			No
7400	DTYYYYLIFES2		S2 Lifespan years	08		numerical > or = zero			No
7500	DTRENEWS2		S2 Renew Date	08		date dd/mm/yy			No
7600	DTINSTALLS3		S3 Install Date	08		date dd/mm/yy			No
7700	DTYYYYLIFES3		S3 Lifespan years	08		numerical > or = zero			No
7800	DTRENEWS3		S3 Renew Date	08		date dd/mm/yy			No
7900	DTINSTALLS4		S4 Install Date	08		date dd/mm/yy			No
8000	DTYYYYLIFES4		S4 Lifespan years	08		numerical > or = zero			No
8100	DTRENEWS4		S4 Renew Date	08		date dd/mm/yy			No
8200	DTINSTALLS5		S5 Install Date	08		date dd/mm/yy			No
8300	DTYYYYLIFES5		S5 Lifespan years	08		numerical > or = zero			No
8400	DTRENEWS5		S5 Renew Date	08		date dd/mm/yy			No
8500	DTINSTALLS6		S6 Install Date	08		date dd/mm/yy			No
8600	DTYYYYLIFES6		S6 Lifespan years	08		numerical > or = zero			No
8700	DTRENEWS6		S6 Renew Date	08		date dd/mm/yy			No
8800	DTINSTALLS7		S7 Install Date	08		date dd/mm/yy			No
8900	DTYYYYLIFES7		S7 Lifespan years	08		numerical > or = zero			No
9000	DTRENEWS7		S7 Renew Date	08		date dd/mm/yy			No
9100	DTINSTALLS8		S8 Install Date	08		date dd/mm/yy			No

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
9200	DTYYYYLIFES8		S8 Lifespan years	08		numerical > or = zero			No
TO0005 – Diamond Running Line & TO0006 – Diamond Siding (cont)									
9300	DTRENEWS8		S8 Renew Date	08		date dd/mm/yy			No
DSYS01 – Drainage System									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0100	NKMFROM		Kilometre From	08	3 decimal places are allowed	numerical > or = zero			Yes
0200	NKMTO		Kilometre To	08	3 decimal places are allowed	numerical > or = zero			Yes
LCING1 - Level Crossing									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0100	REFLXM		LXM Number	10		alpha numeric		The unique identifier number in LXM Database "Crossing Number" where it exists in the database	No
0300	NAMECOMMON		Common Name	30		alpha numeric		Name that is most commonly used to describe crossing - E.g. Smiths crossing or for a Public road the name of the road based on Google maps naming - Roads with different names either side of crossing shall show both.	No
0400	ADDRESSLC		Property Contact	30		alpha numeric		For private crossings -	No

								Details of contact for liaison	
0500	USELC		Usage	02		alpha numeric	+LCU	The most appropriate PRIMARY usage of the crossing	No
0700	TYPELC		Legal Type	02		alpha numeric	+LLT	Tenure - The legal reason to exist	No
0900	MATLC		Road Surface Material	02		alpha numeric	+LCM	Level X-ing Surface Material	No
1000	WMROAD		Road Width m	08	2 decimal places are allowed	numerical > or = zero		Total effective width of all lanes over crossing	No
1002	TYPEXINGPRFL		Crossing Profile	02		alpha numeric	+XPF	Gradient of approach road	No
1003	GRADEUP		Gup	16		alpha numeric		Average approach Grade (m/m) per AS1742.7 2016 section D4 "G" for UP side of track - Applicable to all protection types refer section D2	
1004	GRADEFACUP		GSup	20		alpha numeric		Grade correction factor (m/m) per AS1742.7 2016 section D3 "Gs" on UP side of the track - used to determine S3 at Passive protected crossings	
1005	ANGLEUP		ZUp	16		alpha numeric		Angle between the road and railway per AS1742.7 2016 Figure D1 "Z" for Up side of track - Applicable to Passive protected crossings	
1006	GRADEDN		GDown					Average approach Grade (m/m) per AS1742.7 2016 section D4 "G" for Down side of track - Applicable to all protection types refer section D2	
1007	GRADEFACDN		GSDown					Grade correction factor (m/m) per	

								AS1742.7 2016 section D3 "Gs" on DN side of the track - used to determine S3 at Passive protected crossings	
1008	ANGLEDN		ZDown					Angle between the road and railway per AS1742.7 2016 Figure D1 "Z" for Down side of track - Applicable to Passive protected crossings	
1100	TYPELCPROT		Protection Type	02		alpha numeric	+LCP	Level X-ing Protection Type	No
1200	CFGSIGNUP		Signage Configuration UP Side	02		alpha numeric	+LCC	Level X-ing Signage Config	No
1300	CFGSIGNDN		Signage Configuration DN Side	02		alpha numeric	+LCC	Level X-ing Signage Config	No
1500	TYPELCVEH		Vehicle Type (Max)	02		alpha numeric	+LCV	Level X-ing Vehicle Type	No
1600	NTRACKS		Number of Tracks	02		numerical > or = zero			No
1700	YNMIRRORUP	N	Mirror UP Side	01	yes, no or space	alpha		A Mirror exists to improve visibility	No
1800	YNMIRRORDN	N	Mirror DN Side	01	yes, no or space	alpha		A Mirror exists to improve visibility	No
1900	YNTMPOBST	N	Temporarily Obstructed	01	yes, no or space	alpha		There is a siding or loop within the proximity of the level crossing and if occupied may obstruct the view of trains to level crossing users.	No
2000	YNSHAREDLC	N	Shared Crossing	01	yes, no or space	alpha		Other RIMs tracks form part of the level crossing	No
2100	WMWINGFENCE		Roadway minimum horizontal Clearance m	08	3 decimal places are allowed	numerical > or = zero		Minimum horizontal roadway	No

								clearance where wing fences, railway crossing width markers or other related level crossing infrastructure exists	
2101	DTCONSTRUCT		YEAR CONSTRUCTED			alpha numeric	+YER	The year the crossing was constructed OR last upgrade intended to bring the level crossing up to current standards. Whichever date is the newest.	

LCING1 Nameplate Table Code Descriptions

Table Code +LCU

Code	Description	Extended Description
PD	Pedestrian	Primary usage = Pedestrian
PR	Private	Primary usage = Road Vehicles on Private
PU	Public	Primary usage = Road Vehicles on Public road
TO	Service/Take- off	Primary usage = Rail Vehicles and Road /Rail Vehicles for railway maintenance purposes

Table Code +LLT

Code	Description	Extended Description
AC	Statutory	There is a Statutory legal right that requires a continuity of access to be provided for purposes in accordance with the applicable legislation. Generally, the Railway construction severed the land or road at the time of construction.
AG	Agreement	There are no Statutory rights and a licence/agreement has been entered into between the RIM (Rail) and External party(s) - Can be for Private or Public usage types.
AP	Agreement - Pending	The intent is to have an agreement in place and either parties are currently working towards executing the agreement
EA	Agreement - Expired	The last agreement has expired - generally this will be related to the term of the agreement or change of landowner/user.
AD	Agreement Currency under determination	There is an agreement however its currency has not been validated yet. Such as licensee verses current land owner/occupier or within the period of the term. Following determination, the code is to be updated to either AG – Agreement or EA – Agreement Expired.
UI	Under Investigation	There is not enough information to determine what legal type (tenure) applies to the level crossing and this is under investigation.
RO	Railway Only	For Railway use only

Table Code +LCM

Code	Description	Extended Description
1	Asphalt	Sealed with Asphalt surface
2	Ballast	Unsealed with ballast flooded to provide road surface
3	Concrete	In situ cast Concrete
4	Gravel	Unsealed with gravel covering track elements
6	Rubber	Modular Rubber panels (Removable)
7	Steel	Steel Deck type
8	Timber	Includes Timber sleepers or laminated decking material
12	Concrete Modular	Modular Concrete panels (removable)
13	Concrete Track Slab	Preformed Concrete Track slab crossing - typically with rail bonded into slab channels

Table Code +XPF

Code	Description	Extended Description
10	Humped	The average gradient leading into the level crossing on either side having an incline of $\geq 8\%$, taken over a distance based on the longest permitted vehicle for the road.
20	Level	The average gradient leading into the level crossing on either side having an incline of $< 8\%$, taken over a distance based on the longest permitted vehicle for the road.

Table Code +LCP

Code	Description	Extended Description
AV	Active	Primary Controls are active
PV	Passive	Primary Controls are passive

Table Code +LCC

Code	Description	Extended Description
1	RX-1	Give Way as per AS1742.7 assembly designations
2	RX-1 With R6-24	Give Way as per AS1742.7 assembly designations
3	RX-1 With R6-24 and RX-9	Give Way as per AS1742.7 assembly designations
4	RX-1 With R6-25	Give Way as per AS1742.7 assembly designations
5	RX-1 With R6-25 and RX-9	Give Way as per AS1742.7 assembly designations
6	RX-1 With RX-9	Give Way as per AS1742.7 assembly designations
7	RX-2	Stop as per AS1742.7 assembly designations
8	RX-2 With R6-24	Stop as per AS1742.7 assembly designations
9	RX-2 With R6-24 and RX-9	Stop as per AS1742.7 assembly designations
10	RX-2 With R6-25	Stop as per AS1742.7 assembly designations
11	RX-2 With R6-25 and RX-9	Stop as per AS1742.7 assembly designations
12	RX-2 With RX-9	Stop as per AS1742.7 assembly designations
13	RX-5	Flashing lights as per AS1742.7 assembly designations
15	RX-5 with half boom barriers	Flashing lights with half booms as per AS1742.7 assembly designations
16	RX -12	Pedestrian active lights as per AS1742.7 assembly designations
17	RX -12 with barriers	Pedestrian active lights and barriers - Swing gates or other types including booms

Table Code +LCV

Code	Description	Extended Description
1	B-Double	As specified by the road authorities – typically up to 26m in length
2	Car	As specified by the road authorities
3	Rigid Truck	As specified by the road authorities
4	Road Train	As specified by the road authorities – typically longer than 26m in length

5	Semi	As specified by the road authorities – typically up to 19m in length
6	Truck	As specified by the road authorities - typically up to 19m in length
7	Pedestrian	Pedestrians including dismounted cyclists

LELC01 Nameplate Table Code Descriptions

Note this equipment is Logical and relates to level crossings that had, have or will have Licence Agreements. Table code relationships with EGI LCING1 is outlined in the following matrix table.

LCING1 - Legal Type +LLT		LELC01 Licence Status +LC2			
Code	Description	Current	Non-current	Interim Licence*	In-Progress
AG	Agreement	Y	N	Y	N
AP	Agreement Pending	N	N	N	Y
EA	Agreement Expired	N	Y	N	N
AD	Agreement Currency under determination	N	N	N	Y

*Note – An Interim Licence is only applicable for specific legacy situations where a letter has been sent to extend the term of the current licence agreement.

SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
LELC01 – Level Crossing Licence (Logical Equipment)									
0100	DTCOMMENCE		Licence Commencement Date	10		alpha numeric			No
0200	DTEXECUTE		Licence Execution Date	10		alpha numeric			No
0300	NUMTERM		Term of Licence	10		alpha numeric	+LC1		No
0400	DTEXPIRE		Licence Term Expiry Date	10		alpha numeric			No
0500	LESTATUS		Licence Status	10		alpha numeric	+LC2		No
0600	NAMELICENSEE		Primary Licensee	10		alpha numeric			No
0700	USELICENSE		Licence LXING Usage Type	30		alpha numeric	+LC3		No
0800	YNSIGNAGE		Has temporary Signage Clause	2		alpha	+LC4		No

Table Code +LC1

Code	Description	Extended Description
A	1 Year	Term of the licence is 1 Year.
B	5 Years	Term of the licence is 5 Years.
C	10 Years	Term of the licence is 10 Years.
D	N/A	The Licence has no term expiry

Table Code +LC2

Code	Description	Extended Description
05	Current	All aspects of the licence is current, this included licensee's, and term as applicable
10	Non-current	A Licence exists for the crossing however it's not current for any reason
15	Interim Licence	The Licence term has expired however a specific letter has been sent to the licensee to extend the term pending new licence issue.
20	In-Progress	!) There is an intent from both parties to entering into a licence agreement and this is currently in progress pending execution. OR 2) The Currency of the last known licence is under determination

Table Code +LC3

Code	Description	Extended Description
10	Public	The level crossing is on a Public road.
05	Private	The Level Crossing is not on a Public road.

Table Code +LC4 – Has Temporary Signage Clause

Code	Description	Extended Description
Y	Yes	The agreement has a clause that requires a sign to be erected at all times that indicates the crossing is temporary.
N	No	The agreement has no temporary signage clause.

RW001 - Right of Way									
SEQ NO	ATTRIBUTE NAME	DEFAULT	ATTRIBUTE DESC	LENGTH	SPECIAL EDIT RULES	FIELD TYPE DESCRIPTION	TABLE CODE	TABLE DESCRIPTION	MANDATORY
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0100	NKMFROM		Kilometre From	08	3 decimal places are allowed	numerical > or = zero			Yes
0200	NKMTO		Kilometre To	08	3 decimal places are allowed	numerical > or = zero			Yes
BUILD1 - Building / Facility									
0010	PLANTSEG1		Plant Segment 1	10		alpha numeric			No
0020	PLANTSEG2		Plant Segment 2	10		alpha numeric			No
0030	PLANTSEG3		Plant Segment 3	10		alpha numeric			No
0040	PLANTSEG4		Plant Segment 4	10		alpha numeric			No
0050	PLANTSEG5		Plant Segment 5	10		alpha numeric			No
0060	PLANTSEG6		Plant Segment 6	10		alpha numeric			No
0100	ROUTE		Route	03		alpha numeric	+COR	CORRIDOR	Yes
0200	BASECODE		Track BaseCode	05		alpha numeric	+BAS	TRACK BASECODE	Yes
0300	NKMFROM		Kilometre From	08	3 decimal places are allowed	numerical > or = zero			Yes
0400	NKMTO		Kilometre To	08	3 decimal places are allowed	numerical > or = zero			Yes
SIGN01 - Sign									
0010	0010	0010	0010	0010	0010	0010	0010	0010	0010
0020	0020	0020	0020	0020	0020	0020	0020	0020	0020
0030	0030	0030	0030	0030	0030	0030	0030	0030	0030
0040	0040	0040	0040	0040	0040	0040	0040	0040	0040
0100	0100	0100	0100	0100	0100	0100	0100	0100	0100
0200	0200	0200	0200	0200	0200	0200	0200	0200	0200