
# BRIDGE INFORMATION SYSTEM (BIS)

# Coding Guide

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|---|---|
| Version | 2.05 |
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# P R E F A C E

Meetings were held in the Bridge Branch Boardroom on 21, 22 and 23 April 1980 to decide on the items needed in the New Metric version of the Bridge Information System and to review the items existing in the present B.I.S.

Present in the meetings:

- F.C. Harvey, R.L. Foster, G.E. Vincent, L. Koziol, W. Hamilton,
- I. Lawson-Williams, G.M. Mazurek, R.W. Kornelsen, and D.K. Dasmohapatra

It was agreed that B.I.S. should be flexible enough to communicate with a Department wide system that might be developed in the future, to keep it pure by not cluttering it up with items for which information may be difficult to obtain. The data would be strictly of an informative nature. Other related information like Maintenance, Drawings and etc. would have separate Data files to suit their needs but be able to communicate and extract the required information out of B.I.S.

The following pages contain the Agreed Items with their descriptions as per discussions.

# DATA CODES AND CODING INSTRUCTION

## GENERAL

This section describes the data codes, their definitions and meanings, and gives detailed instruction in coding them.

The Data Coding Sheet takes on two (2) forms:

1. **Insert New Record:** This is for creating a new record on a new bridge file number.
2. **Change Fields in a Record:** Used to change data in individual fields in the record. Note that this requires a special procedure for blanking out an existing field. (Putting asterisks * in the required field to be blanked).

## Some general coding rules are:

1. All numerical items must be coded with leading zeros. Numerical data too large for the field should be coded as all nines (9's).
2. All Data entry has to start on the first column assigned to that Data Field, except where specifically noted. (Where the data is less than the Field length).
3. Character data is always in upper case and must be left-justified.
4. If data cannot be found, the field should be left blank.
5. Items appearing with an asterisk (*) must be coded, as the information is always obtainable.

Any questions regarding the contents of this guide, contact the Alberta Transportation *Regional Bridge Manager* for more information.

# 1.0 Bridge File Number (*)

( 99999 ) _ _ _ _ _

A Bridge File Number uniquely identifies a Structure Site. This is a five-digit number (coded with leading zeros where applicable) that refers to a specific Structure Site. At least one structure must exist at the site when the site is created. All structures are identified uniquely with a combination of a Bridge File Number and a two-digit Structure Number that stays with the structure forever.

A Structure Number (For a definition, refer to Item 59.0 Structure Number) is forced whenever a new Bridge File Number is created. The structure number starts with 1 and is incremented by 1 for every subsequent structure that is added or replaced. Typically structure numbers are chronological in the order they are built, except when historical structures are created (as they are discovered) and entered in TIMS. A *Structure Status* (For a definition, refer to Item 60.0 Structure Status) is *Mandatory* when a structure is created.

Structure Site numbers (Bridge File Numbers) need not be sequential; however, they must be unique to the site forever.

The valid File Number ranges are:

| | | |
|---|---|---|
| 00101 | to | 02499 |
| 06500 | to | 09999 |
| 13000 | to | 13999 |
| 70000 | to | 99999 |

This rule shall be strictly adhered to, for all new structures and/or new Bridge Engineering Projects.

Currently, the assignment and management of Bridge File Numbers is the responsibility of the Regional Bridge Manager of each Region. A block of Bridge File Numbers is provided to each Region for simplifying the Administration. The Current Assignments are:

- Region 1 Southern Region 84000 to 84999 and 87000 to 87999
- Region 3 Central Region 83000 to 83999 and 88000 to 88999
- Region 5 North Central Region 85000 to 85999 and 89000 to 89999
- Region 6 Peace Region 86000 to 86999 and 90000 to 90999

## Structures and Structure Sites:

Structures may have a Visual Identifier (For a definition, refer to Item 2.0 Direction (Visual Identifier) ) to include travel direction and/or non primary structure associations (like Z for Signs) to facilitate structure identification with a File.

A Bridge or Bridge Culvert (known as Primary Structure) provides a continuous passage over a body of water, pathway, roadway, railway, or valley. Usually, a Bridge or a Bridge Culvert supports a pathway, road, or railroad, but it may support signs, equipment, or devices. The different interaction of the “ON” and “OVER” relationships are known as “Functional Crossings”.

A Structure Site has no clearly defined geographic area. It is established based on the unique functional crossing type to which a Bridge File Number is assigned. All structures related to this functional crossing site inherit its Bridge File Number.

There are other structures along streams or highways that are not related to a Functional Crossing. Such structures may be Sign Structures guide banks, spurs, drop structures, etc. A Bridge File Number is assigned to these site based on functionality and structures may be grouped.

## 2.0 Direction (Visual Identifier)

( XXX ) _ _ _

This is a *3 character alphabetic field* (suffix) and must be coded where there is more than one structure for carrying different directions of traffic flow. Always code left justified. This field will be blank when a single structure carries both directions of traffic. In TIMS direction is referred to as Visual Identifier.

Direction shall be that of the traffic flow. Possible codes are:

| Suffix | Description |
|---|---|
| **Blank** | For structures carrying two way traffic |
| **N** or **E** | For North bound or East bound lanes |
| **S** or **W** | For South bound or West bound lanes |
| **NC** or **EC** | For North bound or East bound Collectors |
| **SC** or **WC** | For South bound or West bound Collectors |
| **O** | Use temporarily for structures to become Cat "N" |
| **B** | For Bank Protection or River Training Works only |
| **A** | Associated file for records with more than 2 Span types |
| **Zdd** | Sign Structure with direction (as approaching the bridge). |

Where the direction cannot be resolved, the code shall indicate only the Principal direction of that highway and shall be chosen in accordance with the direction indicated in "Appendix B. List of Primary Highways". EG: Highway #43 is mainly an East-West Highway although it goes at an angle and twin structures on that highway will either be W or E.

## 3.0 Associated File

( XXXXX ) _ _ _ _ _

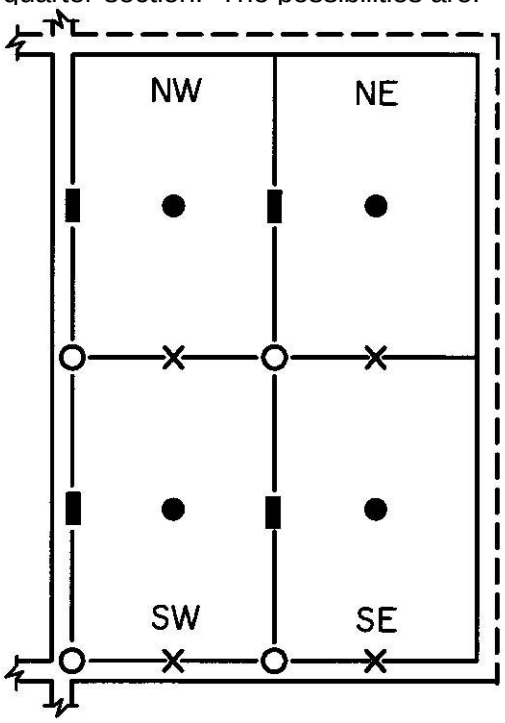
This field will be used to indicate any other bridges at this site with a different Bridge File Number. *Maximum of 2 Associated File Numbers* are permitted. Primary use will be to trap different level structures and pre-1981 bridges with different Bridge File Numbers that did not follow the rule in Item No. 1.0 Bridge File Number. This also provides a link to bridge file numbers used by cities. Some of their numbering conventions include letters.

## 4.0 Legal Land Location (*)

( XXX-99-999-99-9 ) _ _ _ _ _ _ _ _ _ _ _ _ _

1. Quarter-section designation - Unless the location is distinctly on the boundary of the quarter-section, it should be given as "In" the quarter-section. The possibilities are:

| | |
|---|---|
| INE, INW, ISE, ISW | ● |
| WNE, WNW, WSE, WSW | ▮ |
| SNE, SNW, SSE, SSW | X |
| IDC, WDC, SDC, SWC | O |




2. Section - from 01 to 36
3. Township - from 001 to 126
4. Range - from 01 to 31
5. Meridian - 4, 5, or 6

## 5.0 Bridge Name or Nearest Place Name (*)

( XXXXXXXXXXXX ) _ _ _ _ _ _ _ _ _ _ _ _

If a bridge has an established name, that name would take precedence over the place name. Well known town names would of course take precedence over lesser known town names. The town name used should generally be the nearest one, except in cases such as where the nearest town might be across a major river and thus physically remote. Care should be taken to use the established spelling as is given in the 'Dictionary of Names' that has been produced for the Bridge Engineering Branch. The coding is left-justified, and must appear. Because the *name is restricted to 12 characters*, certain abbreviations have been adopted and appear in the Dictionary. New names should be abbreviated as much as possible by merely dropping the letters after the 12th one. ***Do not use "UNNAMED"***

## 6.0 Stream Name (The Facility Being Crossed)

( XXXXXXXXXXXX ) _ _ _ _ _ _ _ _ _ _ _ _

Use the established spellings given in the "Dictionary of Names". Left justify Coding. Use only established names. Leave blank for un-named streams. If the "Stream" happens to be another road or railroad, code it as such. For multiple streams the second stream name always starts in the 6th position. Common abbreviations include:

| **Code** | **Description** |
|---|---|
| R | for River |
| Ck | for Creek |
| Lk | for Lake |
| HWY LOCAL | for Local Roads |
| M01A | for Main Highway 1A |
| CPR,CNR,LRT | for Railways |
| IRRIGATION C | for Irrigation Canals |
| CPR_ _M01A (M01A will start in column 6) | for a situation where a railway and a road for multiple sign bridge (file 75522ZS2) are being crossed - give the railway first. |
| M02A _M02 | M02 will start in Column 6 |
| 109 ST | for an urban situation. |

For multiple streams, the second stream always starts in column 6 as shown in the example above.

For sign bridges the first five characters are the same as the associated bridge. Characters 6 through 9 describe the road that actually passes under the sign bridge. Characters 10 to 12 can be used to describe the location of the sign bridge relative to the direction of travel.

If the stream name is too long for the 12 characters allowed, and is not yet in the Dictionary, choose an abbreviation that is meaningful, but try to do this by truncating the characters after the 12th one.

## 7.0 Control Section And Stream Sequence Number (KM)

(999 99.999 ) _ _ _ _ _ . _ _ _

These two items are required only when the facility being crossed (see "Stream Name ( The Facility being Crossed )" ) is a *Primary Highway (M)* or a *Secondary Highway (S)*.

The Control Section here, refers to that of the facility being crossed. ( For definition refer to Item 12.0 "Highway Control Section**").**

The *Stream Sequence Number is given in kilometres*, rounded to the nearest metre, and is the distance from the start of the Control Section for Primary and Secondary Highways and describes a site's relative position along a Primary or a Secondary Highway if that Highway goes under the Bridge ( i.e. the "Stream Name ( The Facility being Crossed )" is a Highway ). This number will trap all Bridges going over the Highway.

Only sites on Primary and Secondary Highways require this number, which is chosen in accordance with Item 13.0 " Bridge Sequence Number within Control Section (*) ( km )"

## 8.0 Electoral District Number (*)

(CSbb 999bbbb ) _ _ _ _ _ _ _ _ _ _ _

**The Departments DB2 tables describe the type as "CS" for Constituency. This prefix is omitted from the BIS coding.** Since the Electoral Districts (i.e.: constituencies) are known by their name, the **Department** is using a generally adopted three digit code in lieu of the name. **Two digit codes (i.e.: last two digits shown below) remain in effect until the BIS data base is restructured. Highlighted names are adopted as of September 12, 1994.** The codes are obtainable from maps and are:

| Code | Electoral District | Code | Electoral District |
|---|---|---|---|
| **000** | **Not Applicable** | 043 | Edmonton-McClung |
| 001 | Athabasca-Wabasca | 044 | Edmonton-Meadowlark |
| 002 | Banff-Cochrane | 045 | Edmonton-Mill Woods |
| 003 | Barrhead-Westlock | 046 | Edmonton-Norwood |
| 004 | Bonnyville | 047 | Edmonton-Roper |
| 005 | Bow Valley | 048 | Edmonton-Rutherford |
| 006 | Calgary-Bow | 049 | Edmonton-Strathcona |
| 007 | Calgary-Buffalo | 050 | Edmonton-Whitemud |
| 008 | Calgary-Cross | 051 | City of Fort McMurray |

| Code | Electoral District | Code | Electoral District |
|---|---|---|---|
| 009 | Calgary-Currie | 052 | Grande Prairie-Smoky |
| 010 | Calgary-East | 053 | Grande Prairie-Wapiti |
| 011 | Calgary-Egmont | 054 | Highwood |
| 012 | Calgary-Elbow | 055 | Innisfail-Sylvan Lake |
| 013 | Calgary-Fish Creek | 056 | Lac La Biche-St. Paul |
| 014 | Calgary-Foothills | 057 | Lacombe-Stettler |
| 015 | Calgary-Glenmore | 058 | Leduc |
| 016 | Calgary-Lougheed | 059 | Lesser Slave Lake |
| 017 | Calgary-McCall | 060 | Lethbridge -East |
| 018 | Calgary-Montrose | 061 | Lethbridge-West |
| 019 | Calgary-Mountain View | 062 | Little Bow |
| 020 | Calgary-North Hill | 063 | City of Medicine Hat |
| 021 | Calgary-North West | 064 | Olds-Didsbury |
| 022 | Calgary-Nose Creek | 065 | Peace River |
| 023 | Calgary-Shaw | 066 | Pincher Creek-MacLeod |
| 024 | Calgary-Varsity | 067 | Ponoka-Rimbey |
| 025 | Calgary-West | 068 | Red Deer-North |
| 026 | Cardston-Chief Mountain | 069 | Red Deer-South |
| 027 | Chinook | 070 | Redwater |
| 028 | Clover Bar-Fort Saskatchewan | 071 | Rocky Mountain House |
| 029 | Cypress-Medicine Hat | 072 | City of St. Albert |
| 030 | Drayton Valley-Calmar | 073 | Sherwood Park |
| 031 | Drumheller | 074 | Spruce Grove-Sturgeon-St. Albert |
| 032 | Dunvegan | 075 | Stony Plain |
| 033 | Edmonton-Avonmore | 076 | Taber-Warner |
| 034 | Edmonton-Beverly-Belmont | 077 | Three Hills-Airdrie |
| 035 | Edmonton-Centre | 078 | Vegreville-Viking |
| 036 | Edmonton-Ellerslie | 079 | Vermilion-Lloydminster |

| Code | Electoral District | Code | Electoral District |
|---|---|---|---|
| 037 | Edmonton-Glengarry | 080 | Wainwright |
| 038 | Edmonton-Glenora | 081 | West Yellowhead |
| 039 | Edmonton-Gold Bar | 082 | Wetaskiwin-Camrose |
| 040 | Edmonton-Highlands | 083 | Whitecourt-Ste. Anne |
| 041 | Edmonton-Manning | | |
| 042 | Edmonton-Mayfield | | |

The above Electoral Districts came into effect on June 15, 1993, superseding the ones established in 1986.

## 9.0 Region Number (*)

( 9 ) _

The valid codes are 1, 3, 5 and 6. The code for region 2 "Airdrie" is used for the BIM Libraries. These numbers are officially in use throughout the Province. This code must appear. Coding for Regions are as follows:

| REGION | NAME | DESCRIPTION | DISTRICTS |
|---|---|---|---|
| 1 | Lethbridge | Southern Region | Districts 01, 02, 04 |
| 3 | Red Deer | Central Region | Districts 03, 06, 10 |
| 5 | Barrhead | North-Central Region | Districts 07, 08, 09 |
| 6 | Peace River | Peace Region | Districts 13, 14, 15 |
| 2 | Airdrie | South-Central Region | (Ceased to exist after April 1, 1993) |
| 4 | St. Paul | North-East Region | (Ceased to exist after November 1, 1993) |

## 10.0 Highway District Number (*)

( 99 ) _ _

The valid codes are 02 to 04, 06 to 10 and 13 to 15. Districts 08 and 15 are now sub-offices but remain valid codes. These numbers are officially in use throughout the Province. This code must appear.

| Code | District | Code | District | Code | District |
|---|---|---|---|---|---|
| 01 | | 06 | Red Deer | 11 | |
| 02 | Lethbridge | 07 | Edmonton | 12 | |
| 03 | Hanna | 08 | Edson | 13 | Grande Prairie |

| Code | District | Code | District | Code | District |
|---|---|---|---|---|---|
| 04 | Calgary | 09 | Athabasca | 14 | Peace River |
| 05 | | 10 | Vermilion | 15 | High Level |

# 11.0 Highway Number (The Facility Which "Goes Over") (*)

( X99X ) _ _ _ _

This is a *four character code*, which **cannot** be left all blank and takes varying forms depending on what the facility is. In the codes below "x" is a numerical digit, "A" is an "A" or a blank or an 'X", "a" is an alphabetic character, and 'b" is a blank. The variations and some examples are:

| Type of Road | Code | Examples of Codes |
|---|---|---|
| Primary Highway | MxxA | M01A, M01, M16, M16X |
| Secondary Highway | Sxxx | S947, S539 |
| Approach Roads | Axxx | A046, A197 |
| Provincial Park Road | Pxxx | P109, P127 (Approaches belong to Local Municipal Area |
| Forestry Road | Fbbb | F, FT |
| Indian Reserve Road | Rbbb | R |
| Local Road | Lbbb | L |
| Railroad (over) | aaab | CPR, CNR, LRT |
| None of Above | Xbbb | X (for instance, an Urban Street) |
| | XxxA | X02, X16A (a Service Road paralleling a highway) |
| | Xaaa | XP - Private Road, XL - Local Access Road, etc. |

For Sign Bridges the code for the highway number is the same as the associated grade separation (i.e.: bridge with the same five character file number - direction code differs).

- **NOTE**: Forestry Roads specifically designated as "*Forest Roads*" should be coded as "**F**". All other roads in the Forestry system shall be coded according to normal conventions.
- **NOTE**: That *east-west* Secondary Highways are basically numbered with 500 and 600 series, beginning at the U.S. Border. *North-South highways* are numbered in the 700 and 800 series beginning with 899 at the Saskatchewan Border and working backwards. The numbering system increases from south to north, west to east.
- **NOTE**: The 900 series is reserved for highways that are destined to be given Primary Highway status (i.e. provisional highways).

# 12.0 Highway Control Section

( 999 ) _ _ _

This item **MUST** be coded for **ALL** Numbered highways. This is a three digit number which describes a site's relative position along a certain portion of a Primary or Secondary Highway. This is known as a Highway Control Section and must agree with that established by Programs Services Branch. If a Control Section starts in the middle of a Bridge, the Bridge will be coded as the **FIRST** Bridge in the higher Control Section Number.

# 13.0 Bridge Sequence Number Within Control Section (*) (Km)

( 99.999 ) _ _ . _ _ _

The Bridge Sequence Number is given in kilometres, rounded to the nearest metre, and is the distance from the start of the Control Section (refer to Item 12.0 Highway Control Sections) for Primary Highways and Secondary Highways and describes a site's relative position along a Primary or a Secondary Highway. Presently this number is arbitrarily assigned. **Ultimately this number will come from the Highway Inventory System (HIS)**. For a new site this number is chosen to lie between the numbers previously assigned to the two neighbouring sites. This sequence number will permit the production of reports giving all sites on highways in sequential order. Only sites on Primary Highways and Secondary Highways require this number.

For a multi-structured site at a Primary Highway Interchange, Structures carrying traffic in the direction of **increasing** Control Section Number are numbered **First**, starting with the Structure on Main Highway (where the first structure has the correct metre distance), then proceeding to the others in the same direction incrementing the metre distance in the smallest amount possible for each subsequent structure. Next, the Structures in the opposing traffic direction are numbered in a similar fashion, but continuing the metre distance increments. In other words if there are 4 structures at a site at a Primary Highway Interchange and they are all on the Primary Highway then all 4 structures will have different metre distances. The first structure will have the correct metre distance and the last structure will have the highest metre distance, although in reality the metre distance could be the same for all four Structures. This rule ONLY applies for a SQUARE Crossing.

For a SKEWED Crossing the ACTUAL metre distance for each structure is used.

The measured reference point on the bridge is the intersection of the two theoretical lines:

1. Centreline of Roadway

   and

2. Centreline of Bearing of Abutment #1 (usually)

(Always the first Abutment of the bridge in the direction of increasing Control Section).

**NOTE**: A sequence number is coded on the coding form only if "Highway Number field" (see Item 11.0 Highway Number) is Primary Highway or Secondary Highway.

# 14.0 Local Municipal Area (*)

( XXX ) _ _ _

This describes the municipal authority which has **GEOGRAPHICAL** jurisdiction at the given site. The code consists of a letter, followed by a two-digit number or alphabetic index of the area. For towns and villages the last two digits are left blank.

When a boundary between municipalities follows a river or stream, that boundary follows the right bank when looking downstream. Therefore the municipality on the left bank has geographic authority over those bridges.

When the boundary between municipalities follows a grid road, the municipality has jurisdiction over those roads that belong to sections within their boundaries. Boundaries are drawn on the west side and on the south side of grid roads. Bridges are under the geographic authority of the municipality on the east side or the north side of the road.

Differences in legislated responsibilities between municipal districts and counties were eliminated in 1995. The original county codes have been retained and name changes, where applicable, are recorded in Appendix A. Refer to Appendix A for a complete list of Current Municipal areas. The codes are:

| Code | Description | Comments |
|---|---|---|
| C | County | |
| I | Improvement District | |
| MCP | Municipality of Crowsnest Pass | |
| M | Municipality | |
| P | Private Bridges | |
| N | Metis Settlements | |
| S | Special Area | |
| T | Town | (If RRA is somebody else) |
| U | Urban (Cities) | |
| V | Village | (If RRA is somebody else) |
| 125 | Indian Reservation Number | (All 3 digits are numeric) |

To represent certain Municipal Districts which have a three digit numbers, use the following:

| Municipality / Code | Municipality / Code |
|---|---|
| M124 is coded as M24 | M125 is coded as M25 |
| M130 is coded as M30 | M131 is coded as M13 |

| | |
|---|---|
| M133 is coded as M33 | M135 is coded as M35 |
| M136 is coded as M36 | M143 is coded as M43 |

Coding for Cities are as follows:

| Number | Code | Name of City |
|---|---|---|
| 1 | UA | Airdrie |
| 2 | UC | Calgary |
| 3 | UCM | Camrose |
| 4 | UD | Drumheller |
| 5 | UE | Edmonton |
| 6 | UFM | Fort McMurray |
| 7 | UFS | Fort Saskatchewan |
| 8 | UGP | Grande Prairie |
| 9 | ULD | Leduc |
| 10 | ULB | Lethbridge |
| 11 | ULM | Lloydminster |
| 12 | UM | Medicine Hat |
| 13 | UR | Red Deer |
| 14 | USA | St. Albert |
| 15 | USG | Spruce Grove |
| 16 | UW | Wetaskiwin |

**Municipality** means City, Town, Village, County or Municipal District. According to the Municipal Government Act of August 1, 1984 section 172, the following observations are made:

- A City is treated differently in that the ownership of bridges within the City is vested in the City except where excluded by special agreement. Ownership of bridges within other municipalities is vested in the Province of Alberta.
- The Municipality of Wood Buffalo has an urban area in which bridges are treated as city structures and also has a rural area in which bridges are treated in the same manner as other municipalities. The local authority code (i.e.: geographic authority) is coded as "M43" for both the rural and urban areas of this jurisdiction.
- Control and management of bridges subject to other agreements or acts, is under the control of the municipality (i.e. City, Town, Village, County or Municipal District). Refer to Item 55.0 "Responsible Road Authority (*)".

# 15.0 Bridge Category (*)

( X ) _

This one character code must be given. Double categories are not allowed, for instance if a site consisted of both a culvert and a bridge, the bridge file should be separated into two file numbers. Note that the **CATEGORY** must basically agree with the information given under Item 17.0, "Principal and Secondary Span Types". The codes are:

| CODES | EXPLANATION OF CODES |
|---|---|
| C | Culvert(s) - Must be one of the Culverts defined in "Span Types" |
| M | Major Structure. |
| N | Non-existent, i.e.. a structure does not exist at the site. |
| P | Provisional, a structure is being **planned**, but not yet built. If the structure is never built, this code should eventually be replaced by an "N". |
| S | Standard Bridge. |
| W | Watercourse - Bank Protection or River Training works only. |
| X | Closed, i.e.. a structure exists at the site but is not being used. |
| Z | Sign Structure. |

Any structure not defined as a Culvert or a Standard Bridge or a Sign Structure is defined as a Major structure (by default).

A bridge is classified as **STANDARD** if it is built according to Standard Plans (P-Drawings may also be included). The superstructure criteria includes any standard precast or prestressed units which have been upgraded through placement of a reinforced concrete overlay. A Standard bridge must satisfy one of the Superstructure and one of the Substructure criteria **simultaneously**:

Superstructure Criterion:

| Girders | Span Types | Maximum Span Length |
|---|---|---|
| Precast | GR, HH, HHO, MM, PA, PG, PGO, VH, PX, HC, HCO, PES | 11.6<br>12.9 |
| Prestressed | SM, SMO, VS, VSO, SC, SCO | 13.8 |
| Timber | TT, UT | 8.5 |

Substructure Criterion:

Substructure must be one of the following:

1. Timber Piles with Timber, Steel or Concrete Caps

2. H-Pile Bent (both cap & columns) per substructure unit
3. Pipe Piles with a Concrete Cap, per substructure unit
4. H Piles with a Concrete Cap, per substructure unit
5. Precast concrete Pile bent

**NOTE:** Any Substructure with a Spread footing is **NOT** a Standard Bridge.

## 16.0 Bridge Usage (*)

( XX ) _ _

This two character code must be given. The codes are:

| Code | Description of Bridge Usage |
|---|---|
| BP | Bank Protection |
| DS | Drop Structure |
| RV | River or stream crossing |
| FB | Pedestrian River or stream crossing |
| FY | Ferry |
| GS | Grade separations (Railways not involved). |
| IC | Irrigation canal crossing |
| PS | Pedestrian grade separation |
| RO | Railway overpass (the road goes **over** the railway) |
| RU | Railway underpass (the road goes **under** the railway) |
| SB | Sign Bridge |
| SD | Stream Diversion |
| SP | Stockpass or Cattlepass |
| TR | Trail |
| LK | Lake |
| UT | Utility |
| XX | None of the above (for exceptional usage) |
| blank | Only if there is no structure and the site is not a stream crossing. |

**NOTE:** For Railway Overpasses (RO): A railway name must be coded in the "Stream Name" (eg. for the Bickerdike overpass, the "Stream" is given as **CNR**).

For Railway Underpasses (RU): Here the "stream" is in reality a highway, and the "Highway No" is in fact the railway name. For instance, at the Blackfalds underpass, (File 73548) the stream is coded as "M02A" and the highway is coded as "CNR".

# 17.0 Principal and Secondary Span Types

( XXX XXX ) _ _ _ _ _ _

These two 3-character codes, the "Principal" span type and the "next most important" span type, should always be given unless there is no structure or the span types are unknown. Code always **LEFT JUSTIFIED**.

These codes are a simplification for classifying a structure without going to the extent of defining every individual span. Only the two most important span types may be recorded. These codes describe the structural type, material, class, and construction method where possible.

The principal type is given first. If there is only one span type, code only the one type. If two types are present, code them by number in the following hierarchical order. Span types within the same group are coded in order of span length or diameter.

| Number | Codes | Description |
|---|---|---|
| 1 | TH, PT, DT, SS, SSB | Steel Trusses First |
| 2 | WG, RG, RB, FR, RC | Steel Beams Second |
| 3 | CBC, DBC, CBT, DBT, FC, FM, LF, NU, OM, PB, PJ, PM, PMO, PO, PQ, RD, RM, SC, SCC, SM, SMC, SMO, VF, VM, VS, VSO | Prestressed Third |
| 4 | GR, HC, HCO, HH, HHO, MM, PA, PE, PEF, PES, PG, PGO, PS, PX, VH | Precast Fourth |
| 5 | CA, CB, CC, CF, CS, CT, CV, CX,CXP | Cast-in-place concrete Fifth |
| 6 | XT, TT, UT | Timber Sixth |
| 7 | AP, APX, BP, BPL, BPX, CP, CPA, CPE, CPX, FP, MP, MPE, MPB, MPL, MPX, PCB, RP, RPA, RPE, RPB, RPP, RPX, SP, SPE, SPL, TP, TPL, WP, XP,BPR, SSX | Culverts Seventh |

The hierarchical order is helpful in sorting data for various purposes. Refer to the following tables for a complete list of Span Type codes.

**TABLE OF SPAN TYPE CODES**

| STEEL BEAMS | Code | STEEL TRUSSES (ETC) | Code | TIMBER | Code |
|---|---|---|---|---|---|
| Rigid Frame | FR | Deck-Truss | DT | Treated-Beam | TT |

| STEEL BEAMS | Code | STEEL TRUSSES (ETC) | Code | TIMBER | Code |
|---|---|---|---|---|---|
| Rolled Beams | RB | Pony-Truss | PT | Untreated-Beam | UT |
| Rivetted Plate Girder | RG | Other Types ( Do Not USE. Temporary Holding Area Only) | SS | Other Types | XT |
| Welded Girder | WG | Bailey Bridge | SSB | | |
| | | Steel Arch | SSA | | |
| | | Suspension | SSS | | |
| RailCar,Other Beams | RC | Through Truss | TH | | |

| PRESTRESSED | Code | PRECAST | Code | CIP-CONCRETE | Code |
|---|---|---|---|---|---|
| (CBT) for CS750 | CBC | Type HC Overlaid | HCO | Concrete-Arch | CA |
| (DBT) for CS750 | DBC | GR Stringer | GR | Beam-and-Slab | CB |
| Composite Bulb-T | CBT | HC Stringer | HC | Others | CC |
| Decked Bulb-T | DBT | H Stringer | HH | Concrete-Frame | CF |
| Type-FC | FC | Type H Overlaid | HHO | Flat Slab | CS |
| Metric (LF) | FM | Old M Type | MM | Concrete-Tee | CT |
| Latest Fenrich | LF | A Stringer | PA | Voided-Slab | CV |
| Type - NU | NU | | | | |
| Metric (PO) | OM | E Stringer | PE | Box | CX |
| Box Girder (Precast) | PB | E Short Stringer | PES | Box (Prestressed) | CXP |
| Others | PJ | G Stringer | PG | | |
| Type-M | PM | Type G Overlaid | PGO | | |
| Type-M Overlaid | PMO | Precast Slab | PS | | |
| Type-O | PO | Special | PX | | |
| Tee Girder | PQ | (HC) for HS25 | VH | | |
| Type-RD | RD | E Stringer (First) | PEF | | |
| Metric (RD) | RM | | | | |
| (SM) for CS750 | SC | | | | |
| (SMC) for CS750 | SCC | | | | |

| PRESTRESSED | Code | PRECAST | Code | CIP-CONCRETE | Code |
|---|---|---|---|---|---|
| Metric (VS) | SM | | | | |
| SM Composite | SMC | | | | |
| SM Overlaid | SMO | | | | |
| (FC) for HS25 | VF | | | | |
| (PM) for HS25 | VM | | | **OTHERS** | |
| Type VS | VS | | | Ferry | FY |
| Type VS Overlaid | VSO | | | Nothing | Blank |

## BANK PROTECTION AND RIVER TRAINING

| Description | Code | Description | Code | Description | Code |
|---|---|---|---|---|---|
| Rock Ripraps | BRR | Rock With Wire Mesh | BRW | Gaibons | BG |
| CIP Conc. Slab | BCI | Precast Conc. Blocks | BCP | | |
| Embankment Spur | BES | Timber Spur | BTS | | |

## CULVERTS

| Description | Code | Description | Code |
|---|---|---|---|
| CIP Arch | AP | Precast Box, Cell | PCB |
| CIP Arch Extended | APX | SPCSP or SPCMP Arch | RP |
| CIP Box, Cell | BP | SPCSP Arch Beams (ABC) | RPA |
| CIP Box, Cell w/Liner | BPL | SPCSP Ellipse | RPE |
| CIP Box, Cell Extended | BPX | SPCSP Integral w/Bridge | RPB |
| Precast-Pipe | CP | SPCSP Arch Pipe | RPP |
| Precast –Pipe Ellipsed | CPE | Any SPCSP Extended | RPX |
| Precast-Pipe Extended | CPX | SPCSP or SPCMP Round | SP |
| CSP or CMP Arch | FP | SPCSP or SPCMP Ellipsed | SPE |
| ARCH CSP Lined | FPL | | |
| ARCH CSP Extended | FPX | SPCSP with Liner | SPL |
| CSP or CMP Round | MP | Timber-Pile or Timber-Box | TP |
| CSP or CMP Ellipsed | MPE | Timber (Pile or Box) with Liner | TPL |
| CSP Integral w/Bridge | MPB | Wood-Stave | WP |
| CSP with Liners | MPL | Smooth Steel Pipe | SSP |
| | | Smooth Steel Pipe Extended | SSX |
| CSP Extended | MPX | Corrugated Plastic Pipe | CPP |
| Structural Culvert – Arch(Super Cor) | SCA | Smooth Plastic Pipe | SPP |
| Structural Culvert - Round | SCR | Stone Rock Arch | SRA |
| Precast Arch Culvert | CPA | Other Culverts | XP |
| Low Level Crossing | LLC | Cast in place Box Culvert | BPR |

## 18.0 Principal Span - Type Continuous?

( X ) _

This "Span-Type" is coded C, or H, or S to indicate whether the Principal Span is "Continuous", "Hinged" or "Simply Supported" for Live Load considerations. The code "P" may be used for "Partial" which indicates the deck is continuous at the support but the bridge remains simply supported for Live Load consideration.

## 19.0 Construction Years - Prime & Last (*)

( 99 99 ) _ _ _ _

This item and Item 46.0 have caused confusion as to coding since they were first introduced. In the interim, this guide will revert to the original definition of **PRIME** and **LAST**.

The **PRIME** year is the earliest year of fabrication or construction of the more important part of the structure in existence at the time of coding. In many cases, if different from the **LAST** year, it will refer to the superstructure, as in the case of an old truss that has been re-used at a new site.

The **LAST** year is the date of the last construction or re-construction of the structure. Repairs, unless of a major nature and essentially bringing the structure into a “new” condition, such as driving of new piles, will not be indicated.

Both fields should be given if possible, even if it requires research to obtain the PRIME Year. In most cases the two fields will be the same.

If a structure has been removed, The **LAST** date should be the date of removal. This “removal” date should be coded for the site that it is removed from.

## 20.0 Edge Element (Curb)

( X ) _

The same codes are used for both the primary span type as well as the secondary span type and are:

| | |
|---|---|
| C | Concrete Curb |
| N | None |
| P | Parapet |
| S | Steel Curb |
| T | Timber Curb |
| blank | Not applicable, as for culverts |

## 21.0 Edge Element (Railing Posts)

( X ) _

The same codes are used for both the primary span type as well as the secondary span type and are:

| | |
|---|---|
| A | Aluminium |
| C | Concrete |
| N | None |
| S | Steel |
| T | Timber |
| blank | Not applicable, as for culverts |

## 22.0 Edge Element (Railing Type)

( X ) _

The same codes are used for both the primary span type as well as the secondary span type and are:

| | |
|---|---|
| A | Aluminium |
| C | Concrete |
| G | Steel Guardrail |
| H | Steel Continuous ---- S-986 or S-1400 Type |
| L | Steel Lattice |
| N | None |
| P | Steel Panel |
| T | Timber |
| blank | Not applicable, as for culverts |

## 23.0 Edge Element (Sidewalk Type)

( X ) _

This refers to the Sidewalk material if there is a Sidewalk present on the Bridge. The same codes are used for both the primary span type as well as the secondary span type and are:

| | |
|---|---|
| C | Concrete |
| T | Timber |
| S | Steel |
| N | No Sidewalk on the bridge |
| X | Other types |
| blank | Not applicable, as for culverts |

## 24.0 Wearing Surface

( X ) _

The code in this field indicates the extra material placed on the deck surface strictly for the purpose of being used as a wearing surface. In the case of concrete and precast subdecks this field must be read with Item 58.0 " Deck Protection System". The same codes are used for both the primary span type as well as the secondary span type and are:

| | |
|---|---|
| A | Asphalt |
| C | Concrete |
| E | Polymer (Epoxy) wearing surface |
| F | Fibre Reinforced Concrete Overlays |
| H | High Density Concrete |
| I | Silica Fume Concrete |
| J | -- Silica Fume and Steel Fibre Concrete |
| K | -- EKKI Wood |
| L | -- Latex modified concrete overlay |
| N | -- No Wearing Surface (None designated, Subdeck is being used) |
| P | -- Asphalt plank |
| R | -- Chip coat |
| S | -- Steel (grating, battle-deck) |
| T | -- Timber |
| X | -- Other types |
| Y | -- Pyrament Concrete |
| Z | -- Pyrament Concrete and Steel Fibre |
| blank | -- Not applicable, as for culverts |

## 25.0 Deck Joints

( X X X ) _ _ _

This refers to the type of Deck Joints present on a Bridge. A maximum of three different types are allowed for coding on a Bridge. The **FIRST** field is for **EXPANSION** Joint, and the **SECOND** field is for **FIXED** Joint. If there is more than one type of EXPANSION Joint then code it in the third field. The Codes in hierarchical order are:

Expansion joints:

| | |
|---|---|
| 1) F | Finger Plates |
| 2) P | Sliding Plates |

| | |
|---|---|
| 3) A | Armoured Gland ---- (Wabo under Sliding Plates) |
| 4) G | Gland Type ---- (Wabo-Maurer, Transflex) |
| 5) H | Gland Type ---- (Silicon Seal) |
| 6) T | Thermoplastic polymer |
| 7) O | Other |

Fixed Joints:

| | |
|---|---|
| 1) C | Compression Seal -- (Acme Seals) |
| 2) S | Water Stop |
| 3) B | Buffer Angles |
| 4) G | Gland Type ---- (Wabo-Maurer, Transflex) |
| 5) H | Gland Type ---- (Silicon Seal) |
| 6) T | Thermoplastic polymer |
| 7) O | Other |

**blank** - Not applicable, as for culverts

## 26.0 Subdeck Type

( X ) _

This refers to the structural element in the deck that transfers loads to the stringers and beams. The same codes are used for both the primary span type as well as the secondary span type and are:

| | |
|---|---|
| C | Concrete-cast-in-place |
| P | Precast or prestressed concrete |
| S | Steel |
| T | Treated timber - planks |
| U | Untreated timber |
| X | Other types |
| blank | Not applicable, as for culverts |

## 27.0 Bearing Category And Type (Expansion & Fixed)

( XXX XXX ) _ _ _ _ _ _

This refers to the Bearing Types that are present on a Bridge. The *first character indicates* the Category of Bearing, and the *remaining two characters describe the Type*. There are TWO 3 character fields assigned. The **FIRST** field is for **EXPANSION** Bearing, and the **SECOND** field is for **FIXED** Bearing. Code "X" in the Category if there is more than one kind of Bearing present in the Bridge for either Expansion or Fixed Type in the appropriate place. The Codes are:

| CATEGORY | | | TYPE | |
|---|---|---|---|---|
| E | Elastomeric | ---------- | P | Pots |
| | | | D | Discs |
| | | | NR | Reinforced Neoprene Pads |
| | | | NT | NR + Teflon & Stainless Steel |
| | | | NS | Neoprene Strip |
| | | | O | Others |
| S | Steel | ---------- | RK | Rocker |
| | | | RL | Roller |
| | | | PF | Pinned (Pinned, fixed brg) |
| | | | RN | Roller Nest |
| | | | SP | Steel Sliding Plates |
| | | | SB | SP + Bronze Plate in between |
| | | | DD | Disc and Dome |
| | | | O | Others |

**X** More than ONE kind of Bearing in Expansion or Fixed Type.

**blank** Not applicable, as for culverts

## 28.0 Substructure Type

( XXX XXX XXX ) _ _ _ _ _ _ _ _ _

There are **THREE** *3-character fields* assigned so as to provide information for three different kinds of Substructure. The first 3-character field always refers to the Abutment(s). The second and third 3-character fields always refer to the Pier(s). BIS is permitted to contain information on only two different types of piers and one type of abutment. Each 3-digit field must contain information as noted below:

| | |
|---|---|
| **FIRST** character | Foundation |
| **SECOND** character | Pier Shaft / Column **OR** Abutment backwall |
| **THIRD** character | Pier Cap **OR** Abutment Seat |

The Codes are:

| **FOUNDATION:** | | **SHAFT:/BACKWALL** | | **CAPS:BACKWALL** | |
|---|---|---|---|---|---|
| T | Treated Timber Piles. | T | Timber with only I row of piles | T | Timber Cap |
| U | Untreated Timber Piles | | | G | Glulam Timber Cap |

| | | | | | |
|---|---|---|---|---|---|
| S | Spread Footing (Concrete) | B | Timber with more than l row of piles | C | Concrete Cap (Cast-in-place) |
| E | Precast Concrete Piles. | C | Concrete (A "massive" unit) | E | Precast Concrete Caps |
| P | Pipe Piles | Q | Concrete Columns | S | Steel Caps |
| H | H - Piles | E | Precast Concrete Pile Columns | X | Other types |
| D | Drilled Piles. | P | Pipe Pile Columns | blank | Not applicable, as for culverts |
| R | Reinforced Earth - with spread footing | H | H - Pile Columns | | |
| X | Other types | S | Structural Steel bent (as in truss approaches) | | |
| blank | Not applicable, as for culverts | X | Other types | | |
| | | blank | Not applicable, as for culverts | | |

## 29.0 Number of Spans OR Number of Culverts

( 99 ) _ _

If a structure is present, this number would be coded and has values from 0l to 99.

## 30.0 Span Lengths or Culvert Diameters (M)

( 999.9 999.9 999.9 999.9 999.9 ) _ _ _._ _ _ _._ _ _ _._ _ _ _._ _ _ _._

These fields are coded with leading zeroes. The number of entries must correspond to the number of spans or culverts as given in Item 29, up to a maximum of five.

The span length is given in metres and rounded to the nearest decimetre. The order should be, if possible, from left to right when looking downstream for river bridges, and in the direction of increasing chainage (i.e.. South to North and West to East) for all other Structures. Try to list every variation in length if there are more than five spans.

Culvert diameters are given in metres, rounded to the nearest decimetre. For timber pile culverts, box culverts and concrete arch shapes **use the formula "(Span+Rise)/2**" for the **diameter**. For arch culverts, use the equivalent diameter as given in the table. If not in the table, a calculated average diameter to the nearest decimetre, is used. In all cases of culverts, code them in order of larger diameter to smaller diameter.

| ARCH SIZE & TYPE | EQUIVALENT DIAMETER |
|---|---|
| 1420 mm x 940 mm CSP | 1.2 m |
| 1660 mm x 1090 mm CSP | 1.4 m |
| 1900 mm x 1240 mm CSP | 1.6 m |
| 2130 mm x 1410 mm CSP | 1.8 m |

| ARCH SIZE & TYPE | EQUIVALENT DIAMETER |
|---|---|
| 1420 mm x 940 mm SPCSP | 1.2 m |
| 1660 mm x 1090 mm SPCSP | 1.4 m |
| 1900 mm x 1240 mm SPCSP | 1.6 m |
| 2130 mm x 1410 mm SPCSP | 1.8 m |

## 31.0 Nominal Bridge or Culvert Length (M)

( 999.9 ) _ _ _._

For a bridge, this is the combined length of all the spans, and must agree with the summation of items (30) unless there are more than five spans. If the bridge length is over 999 m, code as 999.

For a culvert site, the length of only the "most important" culvert can be given. The length of Culvert is "invert" length.

## 32.0 Theoretical Bridge Length (M)

( 999.9 ) _ _ _._

This figure, if available, is the top-of-fill to top-of-fill length of bridges, given in metres to the nearest decimetre.

## 33.0 Skew Of The Structure (Degrees)

( X99 ) _ _ _

It is given in degrees, with a leading sign, in which (+) is RHF and (-) is LHF. It is to be left blank if the structure is unskewed (i.e.. square to the roadway). This information is required for all structures including Culverts.

## 34.0 Clear Roadway (M)

( 99.9 ) _ _ . _

Given in metres to the nearest decimetre.

The minimum curb-to-curb distance is to be used for bridges. This minimum width applies for tapered roadways. For bridges with a median, use the total clear width of the lanes that are continuous across the bridge. This means that turning lanes located on the bridge are not part of the clear roadway. Use the measured clear roadway between curbs or wheelguards for trusses.

When the bridge use is "RU" code the clear roadway for the road that passes under the railroad bridge.

Culverts will be coded as having a "Clear Roadway" rather than gross "Deck Width" field.

## 35.0 Gross Deck Width (M)

( 99.9 ) _ _ . _

This is given in metres to the nearest decimetre. For bridges (eg. includes deck trusses), it is the lateral width, including medians, of the structure. For other trusses, the clear steel-to-steel distance is to be used.

For culverts blank refer to “Clear Roadway".

## 36.0 Vertical Clearance (M)

( 9.9 9.9 ) _ . _ _ . _

This field applies only to structures having limited vertical clearance. It consists of two 2-digit fields.

| Item | Description of Clearance | Application |
|---|---|---|
| a) | Vertical Clearance **OVER** the Structure. | (Through Truss) |
| b) | Vertical Clearance **UNDER** the Structure. | (Grade Separation) |

The numbers used are in metres rounded down to the nearest decimetre, but the decimal point is not coded. The **minimum** vertical clearance must be given, and will be the theoretical value. If the clearance exceeds 9.9m then code 99.

## 37.0 Roadway Surface Above Streambed (M)

( 99.9 ) _ _ . _

This is the nominal distance in metres to the nearest decimetre, of the driving surface above the streambed. For Culverts, the streambed is measured at the Culvert "invert".

## 38.0 Water Control Authority

( XXX ) _ _ _

Presently this is used only for those sites, which are partly or totally under the jurisdiction of one of the Irrigation Districts. Note that the site would not necessarily be in the District, but could be on a canal leading to the District. These codes are:

| Name of Irrigation District | Code |
|---|---|
| Mountain View Irrigation District | MVI |
| Aetna-Leavitt Irrigation District | ALI |
| United Irrigation District | UID |
| Magrath Irrigation District | MID |
| Raymond Irrigation District | RID |

| Name of Irrigation District | Code |
|---|---|
| Lethbridge Northern Irrigation District | LNI |
| Taber Irrigation District | TID |
| St. Mary and Milk Rivers Development | SMR |
| Ross Creek Irrigation District | RCI |
| Bow River Development (Provincial) | BRP |
| Bow River Development (Federal) | BRF |
| Western Irrigation District | WID |
| Eastern Irrigation District | EID |
| PFRA | PFR |
| None | blank |

## 39.0 Drainage Area (KM2)

( 99999 ) _ _ _ _ _

Given in square kilometres, this figure gives the area of the drainage basin served by the bridge or culvert.

## 40.0 Design Flow (M3/Sec)

( 99999 ) _ _ _ _ _

Given in cubic metre per second, this number represents the flow for which the structure was designed.

## 41.0 Frequency (Years)

( 999 ) _ _ _

This is the flood frequency (i.e.: return period in years) corresponding to the "Design Flow".

## 42.0 Total Cost

( 99999 ) _ _ _ _ _

This is the Total Capital Cost of the completed Structure, given in thousands of dollars. This is obtained from "D" estimate or from Mr. B. Spencer's office or from reconciled costs in the Project Management System.

## 43.0 Total Cost Code

(X) _

This code describes the type of project associated with the costs which are coded in Item "Total Cost". Improvements to existing structures are only coded when the cost of the original construction is not available.

| Code | Description | Source of Information |
|---|---|---|
| N | New structure constructed at a new site. | Reconciled data from PMS is reasonably supported by information on the bridge file.<br><br>Information obtained from a file review reasonably represents the actual (total) cost of construction. |
| R | Replacement. New Structure Constructed at an old Site | Reconciled data from PMS is reasonably supported by information on the bridge file.<br><br>Information obtained from a file review reasonably represents the actual (total) cost of construction. |
| S | Salvage. Actual (total) costs for a Salvage Structure. Costs represent the total construction costs.<br><br>The year prime and year last will often differ for salvage structures (see item 19). | Reconciled data from PMS is reasonably supported by information on the bridge file.<br><br>Information obtained from a file review reasonably represents the actual (total) cost of construction. |
| D | Estimated (D-Estimate) costs for a new or a replacement or a salvage structure. Costs represent the total construction costs. | This represents the cost estimate when tender documents are opened. If a "Final D-Estimate" exists, which has been reconciled with FRACS, use the code for new, replacement, salvage upgrade or widen as appropriate. |
| E | Estimated (total) costs for a new or a replacement or a salvage Structure. Costs represent the total construction costs. | The information available represents estimated rather than actual cost. Data may be obtained from the authorisation or any reasonable source.<br><br>Reconciled "PMS Data" is not reasonably supported by information on the bridge file. |
| P | Partial costs for New Structure. Cost represent expenditures by Department when cost sharing occurs with others. | The most common example is the purchase of material and payment of installation grants for culverts. This code is also used when the original construction costs are captured and the bridge subsequently is widened. In such cases, unit construction costs can no longer be derived from the data. |
| U | Code applies when a structure is | Reconciled data from PMS is reasonably supported |

| Code | Description | Source of Information |
|---|---|---|
| | upgraded. Replacement of the entire substructure or the entire superstructure are examples.<br><br>Strengthening, reinforced overlays or other capital works which add value beyond the original design are other examples. | by information on the bridge file.<br><br>Information obtained from a file review reasonably represents the actual (total) cost of the upgrade construction.<br><br>Revise the year last (see item 19) if the superstructure or substructure is upgraded to "new" condition. |
| W | Code applies when structure is widened but load bearing members are not replaced or strengthened. | Reconciled data from PMS is reasonably supported by information on the bridge file. |

The Bridge Statistician will update BIS data annually using reconciled cost information from PMS, FRACS and the bridge files. "N or R or S or P or U or W" cost estimates shall be coded for all projects. Code and capture costs for upgrades or widening only when the original construction costs are missing.

## 44.0 Structural Steel Weight (T)

( 99999 ) _ _ _ _ _

The Structural Steel Weight of a Steel Superstructure, given in Tonnes (Metric). Trusses include Stringers & Floor Beams.

## 45.0 Design Load

( XXXXX ) _ _ _ _ _

This is the Design Load of the Bridge. This a 5 digit alpha-numeric Field of which the first 2 digits are for Alphabets and the last 3 digits are for Numbers or combinations of Numbers and Characters. The normal codes are:

| CODES | EXAMPLE | DESCRIPTION |
|---|---|---|
| Elnnb | El20, El15 | Engineering Institute of Canada Loading |
| Hnnbb | H20, H15 | AASHTO Single Axle Loading |
| HSnnb | HS25, HS20, HS15 | AASHTO Semi Trailer Loading |
| MSnnb | MS23, CSA | Semi Trailer Loading (in Mass Units - Tonnes) |
| MSnnn | MS230 | CSA Semi Trailer Loading (in Force Units - kilo Newtons) |
| CSnnn | CS750 | CSA-S6-88 CS-W Loading (in Force Units - kilo |

| CODES | EXAMPLE | DESCRIPTION |
|---|---|---|
| | | Newtons) |
| SPnnn | SP150 | Special Loading (nnn is GVW in tonnes) |
| PLaaa | PL4KN | Pedestrian Loading (aaa is Uniform Surface Load and its units (e.g. 4KN -- 4kN / sq.m ; 85# -- 85lbs / sq.ft.) |
| bbbbb | | Culverts and Unknown |

( NOTE: b -- Blank; n -- number; aaa -- alpha-numeric )

## 46.0 Construction Years - Substructure And Upgrade

( 99 99 ) _ _ _ _

This item and Item 46.0 have caused confusion as to coding since they were first introduced. In the interim, this guide will revert to the original definition of **PRIME** and **LAST** as detailed under Item 19 Construction Years- Superstructure and Construction. Do not code anything for Item 46-Construction Years-substructure and Upgrade in the interim.

## 47.0 Utilities

( X X X X X X ) _ _ _ _ _ _

This seven character field contains a series of single character Alphabetic Codes to indicate which of the following Utilities are present on the Bridge:

| Name of Utility | Code |
|---|---|
| Telephone | T |
| Gas | G |
| Power | P |
| Light | L |
| Others | |
| Oil | O |
| Sewer | S |
| Water | W |
| More than one of above | X |
| None | N |
| Unknown (blank all columns) | b |

## 48.0 Information Status Code and Date (*)

( X 9999 ) _ _ _ _ _

The status code provides information on the completeness of the data in the record. This code must be present, and consists of one of the following subjective choices:

| CODES | EXPLANATION OF CODES |
|---|---|
| C | The record is to be considered complete, even though non-essential data is missing. |
| M | The minimum required data has been coded. This is the most commonly used code. |
| L | Important data is lacking and should be obtained sometime in the future. This code should be used only when necessary. |

The Date here is the date on which the record was last updated on the master file and should not be confused with the date when the actual change occurred. It is a measure of the currency of the record. It is coded as month and year, eg. 0473 being April of l973. This date will be automatically updated by the update program whenever the record is processed for updating the master file and the user has no control over this date. This procedure became effective on 24 January, 1991.

## 49.0 Units of Original Structure (*)

( X ) _

This is a one digit alphabetic code to indicate whether the Bridge was built in Imperial or Metric units.

| | |
|---|---|
| **I** | Imperial Units |
| **M** | Metric Units |

## 50.0 Transaction Code and Card Number (*)

( 99 ) _ _

This Code is used for data processing purposes. There are 4 Card images for 1 Bridge Record. The first card must be coded as 11, the second as 12, the third as 13 and the fourth as 14.

## 51.0 Bridge Co-ordinates

( 9999 99999999999 ) _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
( 9999 99999999999 ) _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

The 30 digit Bridge Co-ordinate field starting in column 251 is divided and used as follows:

| | |
|---|---|
| **251 - 254** | Offset WEST (metres) from the North East corner of the Section |
| **255 - 265** | Actual X co-ordinate derived from ATS File |
| **266 - 269** | Offset SOUTH (metres) from the North East corner of the Section |
| **270 - 280** | Actual Y co-ordinate derived from ATS File |

The Alberta Township Survey (ATS) performed by Alberta Bureau of Surveying and Mapping (ABSM) has the co-ordinates of the **NORTH-EAST** corner of every township in Alberta. The values of these co-ordinates change every time a refinement is done. To minimize the impact of these changes on BIS, only the offsets from the North-East corner of the township in which the bridge is located will be maintained by the Bridge Statistician for the particular Bridge. The actual Bridge co-ordinates can be generated by using these offsets against the Alberta Township Survey File, which is supplied to our Department by ABSM whenever updates occur.

To accommodate this, the X co-ordinate and the Y co-ordinate are split into two parts of 4 digits and 11 digits each. The first four digits are always in metres, positive and contain numbers that are right justified. These numbers indicate offset **WEST** in the X co-ordinate field and offset **SOUTH** in the Y co-ordinate field.

## 52.0 Detour Length (KM)

( 999 ) _ _ _

The detour length is defined as the minimum extra distance in kilometres to be travelled if the bridge on the route is removed. In general, the detour bridge is the nearest bridge on the same stream that has about the same load capacity, or one that can be temporarily strengthened on short notice. The detour length is 0 km for bridges on roads with 4 or more lanes, 1 km for bridges on divided highways and 999 km for bridges on dead ended roads (like access roads).

## 53.0 Road Classification Code

( XXX - 999.9 - 999) _ _ _ _ _ _._ _ _ _

This describes the Highway Standard of the facility in which the bridge is a part of. There are 3 character fields and 6 numeric fields. The character fields are designated with a "X" and the numeric fields are designated with a "9". The possible contents of the fields with their values or ranges are given below.

| Location of Codes | Codes | Explanation of Codes |
|---|---|---|
| The First Character | R or U | Rural or Urban |
| The Second Character | A, C, E, F, or L | Arterial, Collector, Expressway, Freeway or Local |
| The Third Character | D, U or G | Divided, Undivided or Gravel |
| **OR:** First 3 Characters | OTH | Used as OTHER Unknown Classification |
| The next Number | 2, 4, 6 or 8 | Number of Lanes |
| The next 3 Numbers | 06.0 to 80.0 | Roadway width in metres |
| The last 3 Numbers | 030 to 180 | Design Speed in km/h |

## 54.0 Average Annual Daily Traffic (AADT)

( X 999999 99 ) _ _ _ _ _ _ _ _ _

This is a 9 digit field which consists of 3 aspects of AADT data.

1. The first part consisting of 1 character is the type of data:

| | |
|---|---|
| **A** | Actual traffic count from a Traffic Counter. |
| **E** | Estimated traffic count by an Inspector. |

2. The second part consisting of 6 digits is the traffic count. The numbers should be right justified.
3. The third part consisting of 2 digits is the year in which the traffic count was obtained.

The actual traffic counts are obtained from Corporate Planning Branch's traffic counting system (Traffic Information System for Primary Highways and Secondary Highways) and updates BIS through a program. The estimated traffic counts will be input into BIS by the Bridge Statistician.

# 55.0 Responsible Road Authority (*)

( XXX ) _ _ _

This describes the **Government** organisation that is responsible for the construction and maintenance of the structure and the site. In majority of the cases the Local Municipal Area or the Municipality (For definition of Municipality refer to "Item 14.0, Local Municipal Area) is also the Responsible Road Authority. Exceptions to these are noted as follows:

| Item | Details of Responsible Road Authorities |
|---|---|
| 1. | Alberta Transportation and Utilities is responsible for the structures that have the following characteristics: |
| | a) Structures on all Primary Highways. ( Highway Type code is "M" ). |
| | b) Structures on all 900 series Secondary Highways. ( Highway Type code is "S" and Highway Number code is "9xx" ). |
| | c) Structures on all Approach Roads. ( Highway Type code is "A" ). |
| | d) Structures on all Secondary Highways in Indian Reserves. ( Highway Type code is "S" ). |
| | e) All Grade Separations, where the structure goes over the above-mentioned 4 categories of Roads. |
| | f) Structures in those Improvement Districts where Municipal Affairs or the ID Council have not become the Responsible Road Authority. ( Local Municipal Area code is "Ixx" ). This excludes Improvement Districts that are National Parks. |
| | g) Any Structure where Alberta Transportation and Utilities has entered into a Special Agreement with a Municipality, Corporation or an Individual. |
| | h) Structures on primary highways, secondary highways and other identified roads in Metis Settlements. In other respects Metis Settlements are treated as cities and have have ownership, control and management of their roads and bridges. |

| Item | Details of Responsible Road Authorities |
|---|---|
| 2. | The Department of Municipal Affairs is responsible for all structures in Special Areas. ( Local Municipal Area code is "Sxx" ) and for structures in Improvement District ( Local Municipal Area code is "Ixx" ) on an interim basis. |
| 3. | The Federal Department of Indian Affairs is responsible for structures in Indian Reserves other than those for which Alberta Transportation is responsible. ( Highway Type code is "R" ). |
| 4. | Private Individuals or Organisations are responsible for the appropriate Private Bridges in their areas, ( Local Municipal Area code is "Pox" ), except where there is special agreement. |

The coding for the Responsible Road Authority is the same as that for the "Item 14.0, Local Municipal Area (*)"for a complete list of Current Municipal Areas. Coding for additional agencies, over and above the Local Municipal Area coding, are as follows:

| Number | Codes | Explanation of Codes |
|---|---|---|
| 1. | AT | Alberta Transportation |
| 2. | ENV | Alberta Environment (includes former Alberta Parks) |
| 3. | MA | Alberta Municipal Affairs |
| 4. | FIA | Federal Indian Affairs |
| 5. | RLY | Railways -- CNR, CPR |
| 6. | PKC | Parks Canada |
| 7. | V | Villages |
| 8. | | Appropriate Water Control Authorities. (For codes refer to Item 38.0 "Water Control Authority") |

## 56.0 Highway Subsystem

( XX ) _ _

This is a functional classification of all roads in the Province. This information is obtained from the Computerised Highway Network in Corporate Planning.

The first position contains the function code. ( N - National )

The second position contains the subsystem number.

| Function Code | Sub-System Number | Explanation of Code | Type of Road |
|---|---|---|---|
| | 1 | Inter-Provincial / Inter Centre Routes | Major Arterials |
| | 2 | Inter-Regional Routes | Minor Arterials |

| Function Code | Sub-System Number | Explanation of Code | Type of Road |
|---|---|---|---|
| | 3 | Major Intra-Regional Routes | Collectors |
| | 4 | Minor Intra-Regional Routes | Locals |

# 57.0 Inspection Requirements

( X ) _

This indicates whether the structure is to be inspected. The valid codes are:

- Y - Yes, Required
- N - No, Not required (also blank)

| Codes | Explanation of Codes |
|---|---|
| Y | All structures in Bridge categories 'M', 'S' and 'Z'. |
| Y | All Culverts (Bridge category 'C') with diameters greater than 1.5 m. |
| Y or N | Other Culverts carrying large flows (multiple small pipes) will be coded 'Y' **ONLY** if the Regional office indicates in writing that the structure will be inspected as a bridge sized culvert. |
| N or blank | The remainder will be coded 'N' or left blank. |

# 58.0 Deck Protection System

( XX ) _ _

This is a two character code which describes the system which protects the concrete deck from deterioration and corrosion process. The first character indicates the Category of Protection, and the second character describes the Type of Protection. This field cannot be left blank if the "Subdeck Type is **'C'** or **'P'**. The valid Codes are:

| CATEGORY | | TYPE | |
|---|---|---|---|
| **CODE** | **EXPLANATION** | **CODE** | **EXPLANATION** |
| **C** | Cathodic Protection | **U** | Underside of Deck System |
| | | **O** | Concrete Overlay System |
| **E** | Polymer Wearing Surface | **C** | On Concrete |
| | | **F** | On Steel Fibre Concrete Overlay |
| | | **H** | On High Density Overlay |
| | | **L** | On Latex Modified Concrete Overlay |
| | | **Z** | On Pyrament Concrete Overlay |

| | | | |
|---|---|---|---|
| **M** | Membrane Below Asphalt | **P**<br><br>**R**<br><br>**S** | Liquid Applied Polymer Membrane and 50 mm Asphalt<br>Hot Applied Rubberized With Protection Board<br>Hot Applied Sheet Membrane and 50 mm Asphalt |
| **N** | No Protection System is Present | | |
| **R** | Chip Coat | **F**<br><br>**H**<br>**C** | On Fibre Concrete Overlay<br><br>On High Density Overlay<br>On Concrete |

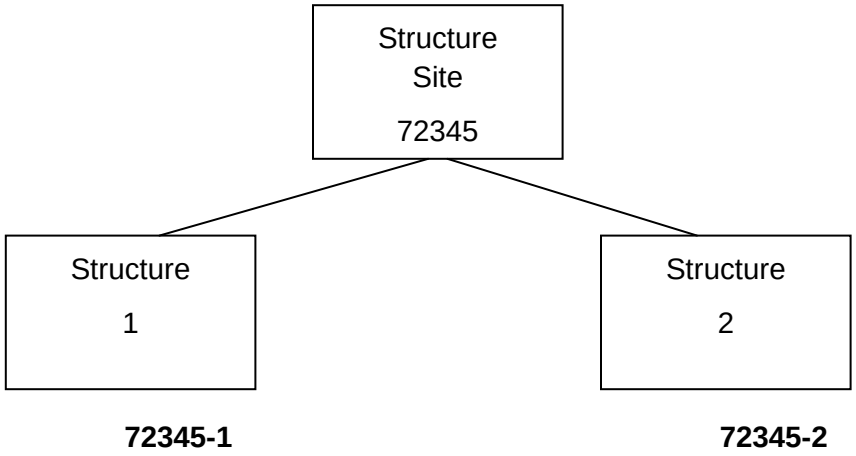
# 59.0 Structure Number

(99 ) _ _

This is a two-digit number that uniquely identifies a particular structure at a bridge site. It stays with the structure forever. A structure number is forced whenever a Bridge File Number is created. The structure number starts with 1 and is incremented by 1 for every subsequent structure that is added or replaced at that site. Typically structure numbers are chronological in the order they are built, except when historical structures are created (as they are discovered) and entered in TIMS. In this situation you can have Structure Numbers 3 and 4 in existence at the site before Structure Numbers 1 and 2. To obtain the order of the existence of structures at a Site, sort by the “Structure Status Date” for all Structures at the Site.

**Hierarchical Model**

Structures are dependents of Structure Sites. For every Structure Site, there must be one or more Structures.




Relationship of a structure to a structure site.

# 60.0 Structure Status

( XX ) _ _

A Structure Status is Mandatory when a structure is created. It is a 2 character Field and is always coded Left justified. The Date associated with the Status is also *mandatory*. This will be an Input Item in TIMS. In BIS it is the Year Prime and Year Last Fields (see item 19).

The structure status changes within the life cycle of the structure. It starts off with “Proposed” (P), and moves to “Under Construction” (UC), then to “In Service” (IS), followed by “Closed” (C) or “Removed” (R). When a structure is proposed and is not built within 10 years or the construction is delayed indefinitely, the status changes from “Proposed”(P) to “Cancelled” (CA). This may revert back to “Proposed” (P), when the project is resurrected.

The Structure Status may change from “In Service” (IS) to “Restricted Service” (RS) or “Closed” (C) back to “In Service” (IS), several times in the life of the Structure. This typical happens when there is Repair or Rehabilitation work being performed on the Structure, or when there is collision or condition that imposes this type of Structure Status

It is not essential that the data has to move through all the sequential Structure Status. It can go directly from “Proposed” to ”In Service” but it can never go from ”In Service” to “Proposed”.

# APPENDIX A. LIST OF CURRENT MUNICIPAL AREAS

| TYPE/ENTITY | | | TYPE/ENTITY | | |
|---|---|---|---|---|---|
| **MD** | **MUNICIPAL DISTRICT OF:** | **CODE** | **MD** | **MUNICIPAL DISTRICT OF:** | **CODE** |
| 000 | Crowsnest Pass | MCP | 092 | Westlock | M92 |
| 001 | Cypress | M01 | 094 | Yellowhead | M94 |
| 006 | Cardston | M06 | 125 | Big Lakes | M25 |
| 007 | Badlands | M07 | 130 | Smoky River | M30 |
| 008 | Big Horn | M08 | 131 | East Peace | M13 |
| 009 | Pincher Creek | M09 | 133 | Spirit River | M33 |
| 014 | Taber | M14 | 135 | Peace | M35 |
| 015 | Woodlands | M15 | 136 | Fairview | M36 |
| 016 | Greenview | M16 | 143 | Municipality of Wood Buffalo | M43 |
| 017 | Opportunity | M17 | | | |
| 019 | Birch Hills | M19 | | | |
| 020 | Saddle Hills | M20 | | | |
| 021 | Clear Hills | M21 | | | |
| 022 | Northern Lights | M22 | | | |
| 023 | Mackenzie | M23 | | | |
| 026 | Willow Creek | M26 | | | |
| 031 | Foothills | M31 | | | |
| 034 | Acadia | M34 | | | |
| 044 | Rocky View | M44 | | | |
| 047 | Starland | M47 | | | |
| 048 | Kneehill | M48 | | | |
| 052 | Provost | M52 | | | |
| 061 | Wainwright | M61 | | | |
| 066 | Ranchland | M66 | | | |

| TYPE/ENTITY | | | TYPE/ENTITY |
|---|---|---|---|
| 077 | Brazeau | M77 | |
| 087 | Bonnyville | M87 | |
| 090 | Sturgeon | M90 | |

| TYPE/ENTITY<br>* indicates name reversed (ie:Parkland County) | | |
|---|---|---|
| **CO** | **COUNTY OF:** | **CODE** |
| 001 | Grande Prairie | C01 |
| 002 | Vulcan | C02 |
| 003 | Ponoka | C03 |
| 004 | Newell | C04 |
| 005 | Warner | C05 |
| 006 | Stettler | C06 |
| 007 | Thorhild | C07 |
| 008 | Forty Mile | C08 |
| 009 | Beaver | C09 |
| 010 | Wetaskiwin | C10 |
| 011 | Barrhead | C11 |
| 012 | Athabasca | C12 |
| 013 | Smoky Lake | C13 |
| 014 | Lacombe * | C14 |
| 016 | Wheatland | C16 |
| 017 | Mountain View | C17 |
| 018 | Paintearth | C18 |
| 019 | St. Paul | C19 |
| 020 | Strathcona * | C20 |
| 021 | Two Hills | C21 |
| 022 | Camrose | C22 |
| 023 | Red Deer | C23 |
| 024 | Vermilion River | C24 |
| 025 | Leduc | C25 |
| 026 | Lethbridge | C26 |

| TYPE/ENTITY<br>* indicates name reversed (ie:Parkland County) | | |
|---|---|---|
| 027 | Minburn | C27 |
| 028 | Lac Ste. Anne * | C28 |
| 029 | Flagstaff | C29 |
| 030 | Lamont | C30 |
| **CO** | **COUNTY OF:** | **CODE** |
| 031 | Parkland * | C31 |
| 032 | Lakeland | C32 |

## EXISTING IMPROVEMENT DISTRICTS AND CODES

| TYPE/ENTITY | | |
|---|---|---|
| **ID** | **IMPROVEMENT DISTRICT** | **CODE** |
| 004 | Waterton Lakes National Park | I04 |
| 005 | Kananaskis Country | I05 |
| 009 | Banff National Park | I09 |
| 012 | Jasper National Park | I12 |
| 013 | Elk Island National Park | I13 |
| 024 | Wood Buffalo National Park | I24 |
| 025 | Willmore Wilderness Park | I25 |

| CHANGES AND PRESENT STATUS OF IMPROVEMENTS DISTRICTS | | |
|---|---|---|
| **ID** | | **ROAD AUTHORITY** |
| 004 | | FD Federal Jurisdiction |
| 005 | May become specialised municipality with administration shared by the Minister of Environmental Protection. | Road Authority & Incorporate some time in 1996 pending interdepartmental decision on administration of ID. |
| 006 | Portion of former ID06 annexed by MD09 on December 31, 1994.<br><br>North incorporated as M.D. of Ranchland No. 66 on January 1, 1995.<br><br>Splits into two ID's effective December 31, 1995. The northern portion remains ID06 and the southern portion becomes ID40.<br><br>Remainder of ID006 amalgamates with the Municipality of Crowsnest Pass on January 1, 1996. | Included area between the Carbondale River and the MD09, Pincher Creek Boundary.<br><br>Portion became M66 which assumed status as Road Authority & Incorporated January 01, 1995.<br><br>No change concerning incorporation or road authority status.<br><br>Road authority becomes Municipality of Crowsnest Pass. BIS code is "MCP". |

| CHANGES AND PRESENT STATUS OF IMPROVEMENTS DISTRICTS | | |
|---|---|---|
| **ID** | | **ROAD AUTHORITY** |
| 007 | Became MD 007 "Badlands" | Incorporated |
| 008 | Portion became MD 008 "Bighorn" | Incorporated |
| 008 | Remainder became MD 008 "Bighorn" | Incorporated January 01, 1994 (AT&U as RA) |
| 009 | | FD Federal Jurisdiction. |
| 010 | Incorporated as MD99, Clearwater on _____. | Municipal District of Clearwater, No. 99 becomes road authority on May 01, 1995. |
| 012 | | FD Federal Jurisdiction. |
| 013 | | FD Federal Jurisdiction. |
| 014 | Portion became MD 094 "Yellowhead" | Incorporated and became road authority January 01, 1994 |
| 014 & 016 | Portions Became ID 025 | Changed on January 01, 1994 |
| 015 | Became of Woodlands No. 15 (MD 015) | Became Road Authority July 01, 1993 and Incorporated January 01, 1994 |
| 016 | Portion Became MD 016 "Greenview" | Road Authority & Incorporated January 01, 1994 |
| 017 | Absorbed small portion of ID 143 on January 1, 1995.<br><br>Designation changed from ID17 to Municipal District of Opportunity, M17 on August 1, 1995. | Expected to incorporate and become road authority on April 01, 1995. ID017 is planning to annex a small portion of ID 143 (ID18N).<br><br>Road authority and incorporated as MD17, Opportunity on August 01, 1995. |
| 017W | Became MD 131 "East Peace" | Road Authority & Incorporated April 01, 1994 |
| 017EN | Became ID 017 | Expected to incorporate and become R.A. April 01, 1995. |
| 017ES | Became ID 124 | Road Authority July 01, 1994 |
| 017C | Became ID of Big Lakes, No. 125 | Became Road Authority on July 01, 1994. |
| 018 | | |
| 018C | Combined with ID 018N to form revised ID 018N. | Possible Road Authority January 01, 1995. (ID 018) |
| 018N | Combined with ID 018C to form revised ID | Notified of name change from ID 018N to ID 143 on |

| CHANGES AND PRESENT STATUS OF IMPROVEMENTS DISTRICTS | | |
|---|---|---|
| **ID** | | **ROAD AUTHORITY** |
| | 018N. New south boundary set in October of 1994. | January 20, 1995. Road Authority and amalgamate with City of Fort McMurray to form specialised municipality on April 01, 1995. |
| 018S | Boundary with new ID 018N established in October of 1994. | ID 018S was annexed by MD 087, CO 012, CO 013 and CO 024. Road authority and incorporation on January 01, 1995. |
| 019 | I.D. of Birch Hills, No. 019 | Became Road Authority August 01, 1994. Incorporated as M.D. of Birch Hills No. 19 on January 01, 1995. |
| 020 | I.D. of Saddle Hills, No. 020 | Became Road Authority April 01, 1994. Incorporated as M.D. of Saddle Hills No. 20 on January 01, 1995. |
| 021 | | Became Road Authority July 01, 1994. Incorporated as M.D. of Clear Hills No. 21 on January 01, 1995. |
| 022 | Incorporated as Municipal District of Northern Lights, M22, on April 1, 1995. | I22 became Road Authority July 01, 1994. |
| 023 | | Became Road Authority December 01, 1993. Incorporated as M.D. of Mackenzie, No. 23 on January 01, 1995. |
| 024 | | FD Federal Jurisdiction. |
| 025 | | No plans to become Road Authority. |
| 040 | Formed from the southern portion of ID06 on December 31, 1995.<br><br>Amalgamates with MD09, Pincher Creek on January 01, 1996. | No change to road authority. Remains Alberta Transportation and Utilities.<br><br>MD09, Pincher Creek becomes the road authority on January 01, 1996.. |
| 124 | Formed from ID 017ES and became Road Authority July 01, 1994. | Incorporated as M.D. of Lesser Slave River NO. 124 on January 1, 1995. (MD 124) |
| 125 | Became Road Authority as I.D. of Big Lakes No. 125 on July 01, 1994. | Incorporated as M.D. of Big Lakes on January 01, 1995. (MD 125) |
| 143 | New designation for ID 018 as advised on January 20, 1995. Portion of ID 143 was amalgamated with ID 017 on January 1, 1995. | Amalgamated with the City of Fort McMurray to form Municipality of Wood Buffalo. Incorporated and became road authority on April 1, 1995 (MD 143). |

| TYPE | DESCRIPTION | CODE |
|---|---|---|
| PV | Private | P |
| TN | Town | T |
| CI | Urban | U |
| VI | Village | V |

| TYPE/ENTITY | | |
|---|---|---|
| SA | SPECIAL AREA | CODE |
| 002 | Special Area 2 | S02 |
| 003 | Special Area 3 | S03 |
| 004 | Special Area 4 | S04 |

| TYPE/ENTITY | | |
|---|---|---|
| CI | CITY OF: | CODE |
| 001 | Airdrie | UA |
| 002 | Calgary | UC |
| 003 | Camrose | UCM |
| 004 | Drumheller | UD |
| 005 | Edmonton | UE |
| 006 | Fort McMurray | UFM |
| 007 | Fort Saskatchewan | UFS |
| 008 | Grande Prairie | UGP |
| 009 | Leduc | ULD |
| 010 | Lethbridge | ULB |
| 011 | Lloydminster | ULM |
| 012 | Medicine Hat | UM |
| 013 | Red Deer | UR |
| 014 | Spruce Grove | USG |
| 015 | St. Albert | USA |
| 016 | Wetaskiwin | UW |

| TYPE/ENTITY | | |
|---|---|---|
| MS | METIS SETTLEMENT OF: | CODE |
| 001 | Paddle Prairie | N01 |
| 002 | Peavine | N02 |
| 003 | Gift Lake | N03 |
| 004 | East Prairie | N04 |

| TYPE/ENTITY | | |
|---|---|---|
| MS | METIS SETTLEMENT OF: | CODE |
| 006 | Buffalo Lake | N06 |
| 007 | Kikino | N07 |
| 009 | Elizabeth | N09 |
| 010 | Fishing Lake | N10 |

| TYPE/ENTITY | |
|---|---|
| **IR** | **INDIAN RESERVATION OF:** |
| 120 | Makaoo |
| 121 | Unipouheos |
| 122 | Pushkiakiwenin |
| 123 | Kehewin |
| 125 | Saddle Lake |
| 128 | Whitefish Lake |
| 131 | Beaver Lake |
| 133 | Alexis |
| 133A | Wabamun |
| 133B | Wabamun |
| 133C | Buck Lake |
| 134 | Alexander |
| 135 | Stony Plain |
| 137 | Samson |
| 137A | Samson |
| 138 | Ermineskin |
| 138A | Pigeon Lake |
| 138B | Louis Bull |
| 139 | Montana (Bobtail) |
| 142 | Stony |
| 142B | Stony |
| 143 | Stony (Stony Reserves, DB2) |
| 144 | Stony (Stony Reserves, DB2) |
| 144A | Big Horn |
| 144B | Stony (Does Not Exist!) |
| 145 | Sarcee |
| 146 | Siksika Nation |
| 147 | Peigan |
| 147B | Peigan |
| 148 | Blood |
| 148A | Blood |

| TYPE/ENTITY | |
|---|---|
| **IR** | **INDIAN RESERVATION OF:** |
| 154A | Sturgeon Lake |
| 154B | Sturgeon Lake |
| 155 | Utikoomak Lake |
| 155A | Utikoomak Lake |
| 155B | Utikoomak Lake |
| 162 | Fox Lake |
| 163 | Beaver Ranch |
| 164 | Boyer |
| 164A | Child Lake |
| 166 | Wabasca |
| 166A | Wabasca |
| 166B | Wabasca |
| 166C | Wabasca |
| 166D | Wabasca |
| 167 | Heart Lake |
| 173 | Tall Cree |
| 173A | Tall Cree |
| 174 | Fort MacKay |
| 174A | Namur River |
| 174B | Namur Lake |
| 175 | Clearwater |
| 176 | Gregoire Lake |
| 176A | Gregoire Lake |
| 176B | Gregoire Lake |
| 178 | Horse River Cemetery |
| 183 | Jean Baptiste Gambler |
| 187 | Carcajou Settlement |
| 194 | Janvier |
| 201 | Chipewyan |
| 201A | Chipewyan |
| 201B | Chipewyan |

| TYPE/ENTITY | |
|---|---|
| **IR** | **INDIAN RESERVATION OF:** |
| 149 | Cold Lake |
| 149A | Cold Lake |
| 149B | Cold Lake |
| 150 | Drift Pile River |
| 150A | Sucker Creek |
| 150B | Freeman |
| 150C | Halcro |
| 150D | Pakashan |
| 150E | Swan River |
| 150F | Assineau River |
| 150G | Sawridge |
| 150H | Sawridge |
| 151A | Duncans |
| 151K | William McKenzie |
| 152B | Horse Lakes |
| 152C | Clear Hills |
| 154 | Sturgeon Lake |
| | |
| | |
| | |
| | |

| TYPE/ENTITY | |
|---|---|
| **IR** | **INDIAN RESERVATION OF:** |
| 201C | Chipewyan |
| 201D | Chipewyan |
| IR | INDIAN RESERVATION OF: |
| 201D | Chipewyan |
| 201E | Chipewyan |
| 201F | Chipewyan |
| 201G | Chipewyan |
| 202 | Sunchild |
| 203 | O'Chiese |
| 203A | O'Chiese Cemetery |
| 207 | Bushe River |
| 209 | Hay Lake |
| 210 | Zama Lake |
| 211 | Amber River |
| 212 | Upper Hay River |
| 213 | Bistcho Lake |
| 214 | Jackfish Point |
| 215 | Jean D'Or Prairie |
| 216 | Eden Valley |
| 222 | Peace Point (Proposed) |
| 235 | Loon River First Nation |
| | |

# APPENDIX B. LIST OF PRIMARY HIGHWAYS

| PRINCIPAL TRAVEL DIRECTIONS OF PRIMARY HIGHWAYS | | | |
|---|---|---|---|
| **CODE** | **DESCRIPTION** | **CODE** | **DESCRIPTION** |
| M01 | West-East | M28 | West-East |
| M01A | West-East | M28A | South-North |
| M01X | West-East | | |
| M02 | South-North | | |
| M02A | South-North | M32 | South-North |
| M03 | West-East | M33 | South-North |
| M03A | West-East | M34 | West-East |
| M03X | West-East | M35 | South-North |
| M04 | South-North | M36 | South-North |
| M05 | West-East | M37 | West-East |
| M06 | South-North | M38 | West-East |
| M07 | West-East | M39 | West-East |
| M08 | West-East | M40 | South-North |
| M09 | West-East | M41 | South-North |
| M10 | South-North | M41A | West-East |
| M10X | South-North | M42 | West-East |
| M11 | West-East | M43 | West-East |
| M11A | West-East | M44 | South-North |
| M12 | West-East | M45 | West-East |
| M13 | West-East | M47 | South-North |
| M13A | West-East | M49 | West-East |
| M14 | West-East | M50 | West-East |
| M14X | West-East | | |
| M15 | West-East | M52 | West-East |
| M16 | West-East | M53 | West-East |
| M16A | West-East | M54 | West-East |

| PRINCIPAL TRAVEL DIRECTIONS OF PRIMARY HIGHWAYS | | | |
|---|---|---|---|
| **CODE** | **DESCRIPTION** | **CODE** | **DESCRIPTION** |
| M16X | West-East | M55 | West-East |
| M17 | South-North | M56 | South-North |
| M18 | West-East | M58 | West-East |
| M19 | West-East | M59 | West-East |
| M20 | South-North | M60 | South-North |
| M20A | South-North | M61 | West-East |
| M21 | South-North | M62 | South-North |
| M22 | South-North | M63 | South-North |
| M22X | South-North | M64 | West-East |
| M23 | South-North | M64A | West-East |
| M24 | South-North | M66 | West-East |
| M25 | South-North | M68 | West-East |
| M26 | West-East | M69 | West-East |
| M27 | West-East | M72 | West-East |
| M27 | West-East | M88 | South-North |
| | | M216 | City Edmonton Ring Road |

Revised this appendix on March 29, 1995. Added highways M13A and M20A. Deleted highways M11X, M20, M21A, M30, M31 and M51. Data was reconciled using the summary report of highway control sections "THCSO1OC" which is maintained by the Design Engineering Branch.

# APPENDIX C. DOCUMENT HISTORY

| DATE | DESCRIPTION |
|---|---|
| 1982-03-09 | Original document created by Dilip K. Dasmohapatra in IEBROT format. |
| 1987-05-25 | The document was published as Version 1.00. AADT and Responsible Road Authority was added. |
| 1987-09-29 | The document was published as Version 1.10. Detour Length, Road Classification and Document History was added. |
| 1988-01-21 | The document was published as Version 1.20. Indian Reservation numbers were added to Appendix "A". Appendix "B" was used for Primary Highways which also was added. A new span type "SSB" for Bailey Bridge was created and added. a new Bridge Category of "X" for Bridges that exist but are closed was created and added. The rules for coding substructures was modified. Please see "Item 28, Substructure Type" on page **Error! Bookmark not defined.** for details. |
| 1989-02-16 | New span types "HHO" and "PES" were created and added. Please see "Item 17, Principal and Secondary Span Types" on page **Error! Bookmark not defined.** for details. |
| 1989-06-23 | New span types "RPO" and "MPL" were created and added. Please see "Item 17, Principal and Secondary Span Types" on page **Error! Bookmark not defined.** for details. Secondary Roads were changed to Secondary Highways as per Mr. Alton's directive. Wearing Surface Code "L" was created and added. Highway district descriptions were added. Codes for inspection requirements for small culverts and highway subsystem were created and added. |
| 1990-03-14 | Item 58 - Deck Protection System on Page **Error! Bookmark not defined.** was added, resulting in the removal of "D" and "M" from the Wearing Surface type. Road authority "PKA" was added. "OTH" was added to the Road Classification. The document was publish as Version 2.00. |
| 1990-06-25 | Electoral Districts 80 and 81 were interchanged. The error was corrected. |
| 1990-10-25 | New span types "SC" and "SCC" were created and added. Please see "Item 17, Principal and Secondary Span Types" on Page **Error! Bookmark not defined.** for details.<br><br>Definition of update date revised. It is no longer associated with the status code. Please see "Item 48, Information Status Code and Date (*)" on page **Error! Bookmark not defined.** for details. |
| 1991-10-18 | A new Bridge Category of "W" for Bank Protection and River Training works was created and added. Please see "Item 15, Bridge Category (*)" on page **Error! Bookmark not defined.** for details. |

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| | New Bridge Usages of "BP", "DS", "SD" was created and added. Please see "Item 16, Bridge Usage (*)" on page **Error! Bookmark not defined.** for details.<br><br>New span types "CBC" and "CBT" were created and added. Bank Protection Span Types created and added. Please see "Item 17, Principal and Secondary Span Types" on page **Error! Bookmark not defined.** for details.<br><br>New Local Municipal Area code of "N" was created and added for bridge sites in Metis Settlements. Metis Settlements numbers were added to Appendix "A". Please see "Item 14, Local Municipal Area (*)" on page **Error! Bookmark not defined.** for details.<br><br>New Direction type "A" was created and added. Please see "Item 02, Direction" on page **Error! Bookmark not defined.** for details. |
| 1993-05-06 | A new Bridge Category of "Z" for Sign structures was created and added. Please see "Item 15, Bridge Category (*)" on page **Error! Bookmark not defined.** for details.<br><br>Local Municipal Area code of "P" was deleted. This will be indicated in the responsible road authority only. The LMA code will indicate the geographical location. Please see "Item 14, Local Municipal Area (*)" on page **Error! Bookmark not defined.** for details.<br><br>New Direction type "Z" was created and added. Please see "Item 02, Direction" on page **Error! Bookmark not defined.** for details.<br><br>New bridge Usages of "SB" was created and added. Please see "Item 16, Bridge Usage (*)" on page **Error! Bookmark not defined.** for details.<br><br>New span types "HCO", "SMO", "VSO", "MPB", and "PCB" were created and added. "RPO" was changed to "RPB". Please see "Item 17, Principal and Secondary Span Types" on page **Error! Bookmark not defined.** for details. |
| 1993-12-15 | New Electoral Districts were incorporated. Please see "Item 08, Electoral District Number (*)" on page **Error! Bookmark not defined.** for details. |
| 1994-01-20 | New Highway District boundaries were incorporated. Highway Districts 05 and 12 do not exist as of 1 September 1993. Please see "Item 10, Highway District Number (*)" |

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| | on page **Error! Bookmark not defined.** for details.<br><br>ID 14 changed to MD 94, ID 15 changed to MD 15 and ID 16 changed to MD 16. Parts of ID 14 and ID 16 became ID 25 (new) but there are no bridges in ID 25. Please see "Appendix A. List of Current Municipal Areas" on page **Error! Bookmark not defined.** for details. |
| 1994-04-27 | Road authority for ID 20 change to ID 20. ID 17 was split into 4 municipal areas as ID 17, ID 124, ID 125, and MD 131. These are coded as I17, M24, M25, and M13 respectively. As of this date M13 is the only one that became its road authority. The codes M24 and M25 anticipate the future incorporation of ID 124 as MD 124 and ID 125 as MD 125. These changes became effective 1 April, 1994. Please see "Appendix A. List of Current Municipal Areas" on page **Error! Bookmark not defined.** for details. |
| 1994-06-02 | Road Authority for ID 23 becomes ID 23. This change became effective on December 1, 1993. Please see "Appendix A. List of Current Municipal Areas on page **Error! Bookmark not defined.** for details. |
| 1994-11-01 | Remainder of ID 08 annexed by MD 08 but At&U remains the road authority in the green area. This change became effective January 1, 1994. Please see "Appendix A. List of Current Municipal Areas on page **Error! Bookmark not defined.** for details. |
| 1994-07-27 | Road Authority for ID 21 becomes ID 21. Road Authority for ID 22 becomes ID 22. Road Authority for ID 124 becomes ID 124. Road Authority for ID 125 becomes ID 125. This change became effective on July 1, 1994. Please see "Appendix A. List of Current Municipal Areas on page **Error! Bookmark not defined.** for details. |
| 1994-11-01 | Road Authority for ID 19 becomes ID 19. This change became effective on August 1, 1994. Please see "Appendix A. List of Current Municipal Areas on page **Error! Bookmark not defined.** for details. |
| 1994-11-01 | SH 686 was changed to SH986 with AT&U the responsible road authority for that section of road between Highways 35 an 88. |
| 1994-10-24 | Electoral Districts listed in BIS were reconciled with the Departments DB2 Tables. Added a category for "Not Applicable" which is coded "00". Added the prefix "City of" to several names. Refer to "Item 8.0, Electoral Districts" on Page **Error! Bookmark not defined.** for details. |
| 1994-10-24 | Revised definition of "Major Structure" to exclude "Sign Structures". Please refer to "Item 15, Bridge Category" on page **Error! Bookmark not defined.** for details. |
| 1994-10-24 | Added span types of "Timber Box with Liner" and "Precast Arch Culvert" to span tables. Refer to "Item 17, Principal and Secondary Span Types" on page **Error! Bookmark not defined.** for details. |

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| 1994-10-24 | Revised the definitions used for "Total Cost Codes" and introduced a new code for partial costs. Described a process for the Bridge Statistician to update the "Total Cost" and "Total Cost Codes" for new capital projects on an annual basis. Please refer to "Item 43, Total Cost Codes" on page **Error! Bookmark not defined.** for details. |
| 1994-10-24 | Revised the definition concerning the responsible road authority for Improvement Districts. AT&U is responsible only where transfer has not occurred. Municipal Affairs may be responsible on an interim basis pending transfer to the individual Improvement Districts. Please refer to "Item 55, Responsible Road Authority" on page **Error! Bookmark not defined.** for more details. |
| 1994-10-24 | Added sign structures as a category of bridge structures that does require inspection. Please refer to "Item 57, Inspection Requirement" on page **Error! Bookmark not defined.** for details. |
| 1994-10-24 | Identified data items that must be revised to accommodate conversion to the four digit year. This includes:<br>Item 19, Construction Years Prime and Last on Page **Error! Bookmark not defined.**.<br>Item 48, Inspection Status Code and Date on Page **Error! Bookmark not defined.**.<br>Item 54, Average Annual Daily Traffic on Page **Error! Bookmark not defined.**. |
| | ID 18 was divided into three separate improvement districts. Designations became ID 18C, ID 18N and ID 18S. BIS code remained I18 for all three areas. |
| 1994-10-24 | Expanded section on Improvement Districts in "Appendix A, List of Current Municipal Areas" on page **Error! Bookmark not defined.** to include a history of changes, tentative schedules for incorporation and to document transfers of road authority responsibilities. |
| 1994-10-24 | Consulted Bruce Wyley and the DB2 Tables which support CPMS to reconcile information in Appendix A on Page **Error! Bookmark not defined.**. Revisions needed to properly describe Metis settlements and Indian reservations included:<br>N05 becomes N07, Kikino<br>N07 becomes N09, Elizabeth<br>N08 becomes N10, Fishing Lake<br>128 White Fish Lake becomes Whitefish Lake<br>143 Stony becomes Stony Reserves<br>144 Stony becomes Stony Reserves |

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| | 144A Big Horn (Stony) becomes Big Horn<br>144B Stony does not exist. Deleted from BIS.<br>146 Blackfoot becomes Siksika Nation<br>147B Peigan (Timber Limit) becomes Peigan<br>150A Sucker Lake becomes Sucker Creek<br>150D Pakasham becomes Pakashan<br>151A Peace River Crossing Duncans becomes Duncans<br>174A Namur Lake becomes Namur River<br>174B Namur River becomes Namur Lake<br>176 Gregiore Lake becomes Gregoire Lake<br>176A Gregiore Lake becomes Gregoire Lake<br>176B Gregiore Lake becomes Gregoire Lake<br>187 Carcajou becomes Carcajou Settlement<br>222 Peace Point (Name and Number proposed at this time)<br><br>Please refer to "Appendix A, List of Current Municipal Areas" on Page **Error! Bookmark not defined.** for details. |
| 1994-12-12 | Combined ID 018C and ID 018N and adjusted the south boundary to form a new ID 018N (BIS code remains I18). Adjusted ID 018S boundary with ID 018N (BIS code changes from I18 to I81). Please refer to "Appendix A, List of Current Municipal Areas" on page **Error! Bookmark not defined.** for details. |
| 1995-01-12 | Portion of ID 006 becomes road authority and incorporates as M.D of Ranchlands, No.66 on January 01, 1995. BIS code changes from I06 to M66. ID 124 incorporates and becomes M.D. of Lesser Slave River, No. 124 on January 01, 1995. BIS code remains M24. Please refer to "Appendix A, List of Current Municipal Areas" on page **Error! Bookmark not defined.** for details. |
| 1995-01-26 | Moved the code used to describe gravel surfaces to the third character in the Road Classification Code. This was previously shown after the decimal point in the roadway width portion of the code. Please refer to "Item 53, Roadway Classification Code" on page **Error! Bookmark not defined.** for more details. |
| 1995-01-26 | ID 019, ID 020, ID 021, ID 023 AND ID 125 incorporated as municipal districts on January 01, 1995. New designations become MD 019, MD 020, MD 021, MD 023 and MD 125. New BIS codes become M19, M20, M21, M23. Coding for MD 125 remains |

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| | M25. |
| 1995-01-26 | ID018N is renamed as ID 143 on January 1, 1995. A portion of ID 143 was amalgamated with ID 017 at that time but no bridges were involved. BIS code becomes I43. Refer to "Appendix A, List of Current Municipal Areas" on page **Error! Bookmark not defined.** for details. |
| 1995-02-10 | Modified data definition to include numbering conventions for bridge files in cities. Some of these contain letters in combination with numbers. Refer to "Item 3, Associated File Numbers " on page **Error! Bookmark not defined.** for details. |
| 1995-02-13 | ID 18S annexed by MD 087, CO 012, CO 013 AND CO 024 on January 01, 1995. BIS codes became M87, C12, C13 and C24 respectively. |
| 1995-03-29 | Added highways M13A and M20A. Deleted highways M11X, M21A, M30, M31 and M51. Highway numbers in BIS reconciled with summary report of highway control sections "THCSO1OC" which is maintained by Design Engineering Branch. Refer to "Appendix B, List of Primary Highways on Page **Error! Bookmark not defined.** for details. |
| 1995-03-31 | Added "Rail Car" with BIS code of RC as new span type. This also used to code other types of steel beams that do not fit with other types of beams. The hierarchical order of span types, which is used to sort data, was reconciled with the table of span type codes. Refer to "Item 17.0, Principal and Secondary Span Types" on page **Error! Bookmark not defined.** for details. |
| 1995-04-04 | Clarified descriptions for construction years. Refer to "Item 19, Construction Years - Prime and Last" on page **Error! Bookmark not defined.** for details. |
| 1995-04-05 | Revised codes and definitions used to describe total cost of construction. Used code "N" in lieu of "A" to describe costs for new structure at new site. Added code "S" to capture actual costs for salvage structures. Added codes "U" and "W" to capture costs of upgrades or widening when original construction costs are unavailable. Extended explanation of "P" code to include structures where original construction costs are captured but the area of the bridge structure changes at some future date (i.e.: widen, extend, added culverts, added spans, removed spans, etc). Refer to "Item 43, Total Cost Code" on page **Error! Bookmark not defined.** for details. |
| 1995-04-05 | District 11, Lac La Biche eliminated on April 01, 1995 and is absorbed by District 9. District no longer shown as part of Barrhead Region. Refer to "Item 10, Highway District Number" on page **Error! Bookmark not defined.** and to "Item 9, Region Number" on page **Error! Bookmark not defined.** for details. |
| 1995-04-20 | ID 143 combined with the City of Fort McMurray, became the road authority and incorporated to form the Municipality of Wood Buffalo, No 143. ID 022 incorporated as Municipal District of Northern Lights, No 22. Changes took effect April 01, 1995 and the BIS codes are M43 and M22 respectively. Please refer to "Appendix A, List of Current Municipal Areas" on page **Error! Bookmark not defined.** for details. |

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| 1995-05-23 | Modified superstructure criteria for standard bridges to include all standard precast and prestressed units which have reinforced concrete overlays. This does not include composite overlays. Specific types added were PGO, HHO, HCO, SMO, VSO and SCO. Refer to "Item 15.0, Bridge Category (8)" on Page **Error! Bookmark not defined.** for details. |
| 1995-05-23 | Added span types to steel beam, prestressed and culvert categories in table which describes hierarchical order span codes. This was reconciled with the table of span type codes. Refer to "Item 17, Principal and Secondary Span Types" on Page **Error! Bookmark not defined.** for details. |
| 1995-08-02 | Updated road authority designations for bridges located on the forestry trunk roads. Bridges within MD66 updated as per agreement of January 01/95, MD94 updated as per agreement of January 01/94 and MD99 updated as per agreement of May 01/95. The local municipal areas now serve as road authorities instead of Alberta Transportation and Utilities. |
| 1995-08-18 | Added description of municipality that has geographic authority when boundary between jurisdictions follows grid roads or rivers. Added comment that legislated differences between municipal districts and counties was eliminated in 1995. Explained differences between rural and urban portions for the Municipality of Wood Buffalo. Refer to "Item 14.0, Local Municipal Area on Page **Error! Bookmark not defined.** for details. |
| 1995-08-18 | Modified definition of clear roadway for bridges with medians to include only lanes that are continuous across the structure. This requires a review bridges that serve as grade separations since previous coding included turning lanes that were on the bridge. Explained that clear roadway is coded for the road under railway bridges (i.e.: bridge use is "RU"). Refer to "Item 34.0, Clear Roadway" on Page **Error! Bookmark not defined.** for details. |
| 1995-08-18 | Described name changes C14, C20, C28 and C31. ID 017 became road authority on April 1, 1995 and incorporated as Municipal District of Opportunity, No 17 on August 1, 1995. The BIS code of M17 replaced the old BIS code of I17. Refer to "Appendix A, List of Current Municipal Areas" on Page **Error! Bookmark not defined.** for details. |
| 1995-11-09 | Reviewed bridge sites in all Metis Settlements and corrected codes for responsible road authorities. Generally AT&U remains the road authority for bridges on primary, secondary highways and specific local roads while the Metis Settlements are responsible for bridges on other roads. Apparently this change in status took place on November 1, 1990 but bridge data was finally corrected in November of 1995. Refer to "Item 55.0, Responsible Road Authority" on Page **Error! Bookmark not defined.** for details. |
| 1995-11-14 | Removed GSL as code for railways used as stream names. Added LRT as acceptable code for railway for use as stream name or highway number. Asked Wayne Krause to confirm the ARR and NAR designations still apply since six bridges |

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| | cross these facilities. Refer to "Item 6.0, Stream Name" on Page **Error! Bookmark not defined.** and to "Item 11.0, Highway Number" on Page **Error! Bookmark not defined.** for details. |
| 1995-11-14 | Described the culvert diameter for box shaped and arch shaped culverts with the equation "(Span+Rise)/2". The previous document indicated that the culvert diameter of box culverts and timber pile culverts would be the height. Culvert diameters have actually been coded as "(Span+Rise)/2" so this change will not affect the data. Refer to "Item 30.0, Span Lengths or Culvert Diameters (m)" on Page **Error! Bookmark not defined.** for details. |
| 1995-11-14 | Added the code "Z" to describe a pyrament concrete overlay which is protected with a polymer wearing surface (Bridge File 00756N). Refer to "Item 55.0, Deck Protection System" on Page **Error! Bookmark not defined.** for details. |
| 1995-11-27 | Added the code "P" to describe spans where the deck is continuous across the joint but is simply supported for Live Load considerations. Please refer to "Item 18.0, Principal Span Type Continuous ?" on Page **Error! Bookmark not defined.** for details. |
| 1995-12-01 | The highway district number "01" for the district sub-office in Medicine Hat was eliminated on December 01, 1995. BIS information was corrected on December __ , 1995. The designation of offices in Edson and in High River was changed from sub-district to full district offices. Refer to "Item 10, Highway District Number" for details of active codes. |
| 1995-12-13 | References to the Alberta Resource Railroad and the Northern Alberta Railroad (Codes ARR & NAR) were removed from the document. The ARR was always leased from the CNR and was formally transferred to them around 1990. The NAR was taken over by CNR between 1980 and 1982. The BIS codes for six sites were changed to CNR on December 13, 1995. Refer to Items 6, 11 and 55 which describe the Stream Name, Highway Number and Responsible Road Authority on pages **Error! Bookmark not defined.**, **Error! Bookmark not defined.** and **Error! Bookmark not defined.** respectively for further details. |
| 1996-01-03 | Described construction years as "superstructure and construction" years. This replaces the construction years that were described as "prime and last" years in earlier documents. Roughly 16,000 records were corrected in BIS and the remaining records are under review. Refer to "Item 19.0, Construction Years - Superstructure and Construction" on Page **Error! Bookmark not defined.** for details. |
| 1996-01-03 | Removed section on "Rated Load (T)". These fields were no longer in use. Added definitions for construction years for "substructure and upgrade" year. Roughly 16,000 record were corrected in BIS and the remaining records are under review. Refer to "Item 46.0, Construction Years - Substructure and Upgrade" on Page **Error! Bookmark not defined.** for details. |

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| 1996-01-03 | Removed commentary and table that mapped the cost codes into the construction years "Prime and Last". These codes no longer exist (see above). Refer to "Item 43.0, Total Cost Code" on Page **Error! Bookmark not defined.** for details. |
| 1996-01-03 | Added code for the shear deficient, single stirrup E-Stringers. The code is PEF which stands for "E-Stringer (First)". This was also added to the list of precast in the span group. Changed spelling of the description of type LF prestressed girders from "Latst Fenrich" to "Latest Fenrich". Refer to "Item 17.0, Principal and Secondary Span Types" on Page **Error! Bookmark not defined.** for details. |
| 1996-01-03 | Changed description for region #3 from Red Deer Region to Central Region. Refer to "Item 9.0, Region Number ( *)" on Page **Error! Bookmark not defined.** for details. |
| 1996-01-16 | Noted that transfer of road authority for ID06 delayed until 1996.<br><br>Added note that indicates portion of ID06 was incorporated by M09, Municipal District of Pincher Creek on December 31, 1994.<br><br>Show ID06 split between ID06 and ID40 on December 31, 1995. The revised ID06 was then amalgamated by the Municipality of Crowsnest Pass (i.e.: BIS code MCP) and ID40 was amalgamated by the Municipal District of Pincher Creek (ie:BIS code M09) on January 01, 1996. These municipalities became the responsible road authorities on that date.<br><br>Added description of Improvement District, No. 10 and included comment that MD99 became the road authority for the former ID10 on May 01, 1995.<br><br>Corrected notes on ID17. This now shows the Municipal District of Opportunity, No. 17 was incorporated and became the road authority on August 01, 1995 (i.e.: corrected from April 01, 1995).<br><br>Refer to "Appendix A, List of Current Municipal Areas" on page **Error! Bookmark not defined.** for details. |
| 1996-01-16 | Document in file history that transfer of the responsibility for "Forestry Roads" to the local authorities is underway. Municipal District of Clearwater, No. 99 assumes road authority status for forestry roads in the Rocky Mountain Forest reserve (i.e.: include this portion of Municipal District of Bighorn, No. 08. |
| 1996-01-16 | Municipal District of Bighorn, No 08 to assume road authority status for roads in their |

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| | area by March 31, 1996. |
| 1996-01-18 | Added the code "P" for private bridges outside the boundaries of other municipal jurisdictions. This reconciles codes with the BIS Legend and the data. Refer to "Item 14.0, Local Municipal Area" on page **Error! Bookmark not defined.** for details. |
| 1996-02-01 | Clarified coding conventions for the highway and stream at name sign bridges. The highway and stream name codes echo the codes used on the associated grade separation. Character 6 to 9 indicate the actual road that passes under the sign bridge. Refer to "Item 06, Stream Name (facility being crossed)" on page **Error! Bookmark not defined.** and to "Item 11, Highway Number (facility which goes over)" on page **Error! Bookmark not defined.** for details. |
| | ID 05 will become road authority and incorporate as a Specialised Municipality some time in the summer of 1995 pending an inter-departmental decision on administration of the ID.<br><br>Remainder of ID 06 will be amalgamated by Municipal District of Pincher Creek and by Municipality of Crowsnest Pass by April 01, 1995.<br><br>ID 17 will become road authority and incorporate on April 1, 1995.<br><br>Road Authority responsibility for roads and associated bridges, within the Rocky Mountain Forest Reserve, transferred to MD 08 and MD 99. |
| | Added codes for specific towns and villages. Pending revisions to the data structure of BIS only those urban centres with suffixes "00 through 99" will be coded in BIS. The prefixes used during the interim period are "T" for Towns and "V" for Villages. |
| | Eliminated the code "03" as an acceptable code for the "Medicine Hat - District Sub Office. This district was eliminated when the branch was restructured. Refer to "Item 10.0, Highway District Number (*)" on Page **Error! Bookmark not defined.** for details. |
| Nov 24, 2003 – Jan 27 2004 | Roberta Baker -Fixed tables as they were not displaying properly. Rebuilt the Indian Reservation of table to include a middle column. Changed the formatting of the TOC, built styles to format document quickly. Fixed Bookmark references and added hyperlinks to the titles referenced in the bookmarks. Page breaks have been put in using the Format Paragraph, Line and Page breaks, Page break before. This fixes problems with TOC page numbers. |