

BRIDGE INVENTORY INFORMATION



Technical Standards Branch
Class B Bridge Inspection
Course



Inventory Information

- On inspection forms to assist inspector
- Sources
 - Transportation Infrastructure Management System (TIMS)
 - Inspectors add new data, verify existing or revise as required
 - future pick lists for addition or revision



Technical Standards Branch
Class B Bridge Inspection
Course



How Are Bridges Identified?

- **Bridge File Number** (99999) assigned to each bridge site
 - 5 digit number
 - leading zeros, eg. **00987**
 - assigned in sequence
 - example: 75555
- **Structure Number** (99) assigned to each bridge at site
 - example: **1, 2, 3, etc.**



Technical Standards Branch
Class B Bridge Inspection
Course



How Are Bridges Identified? continued

- **Visual Identifiers**
 - Travel Direction
 - Structure Type
 - blank = Two Way Traffic
 - N = Northbound Structure
 - EC = Eastbound Collector
 - ZNC = Sign Structure on Northbound Collector
 - example: **75555-ZNC-3**
- **Year Built**
 - First year substructure or barrel built
 - Second year superstructure fabricated



Technical Standards Branch
Class B Bridge Inspection
Course



Where is the Bridge?

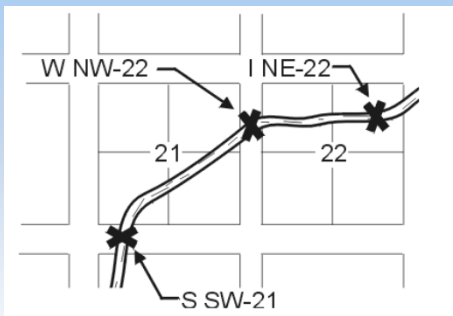
- Bridge Name or Nearest Town
 - bridge official name
 - nearest town on road map
- Located Over
 - Watercourse, Road, Railway, etc.
- Located On
 - Highway or Local Road
 - Includes Control Section (2.03)
- Contract Maintenance Area
 - Highways

Watercourse Designations

- Water Body Class & Year
 - future
 - water class of the watercourse
 - year designated by Environment
- Navigable Waters Class & Year
 - future
 - Navigable Class of Stream
 - Year Classified

Where is the Bridge?

- Legal Land Location
 - ie WNW 22 - 028 - 03 - 5

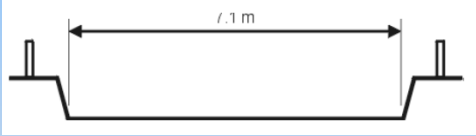


- Prefix is always W, S or I
- Longitude Latitude - Future

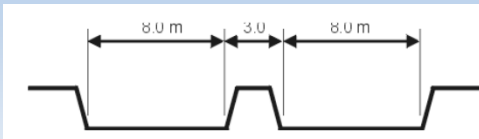
Road Authority

- Alberta Transportation (AT)
- County or Municipal District (C01 or M36)
- Town or Village (T or V)
- City (USA stands for Urban St Albert)
- Municipal Affairs (MA)
- Federal Government Departments (FIA)
- Private (P)

What is Clear Roadway?



- Typical Bridge Clear Roadway = 7.1 m

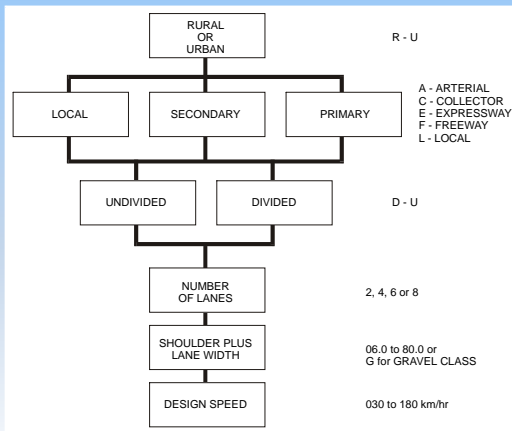


- Bridge with Median Clear Roadway = 16.0 m
- No curbs, measure inside rails

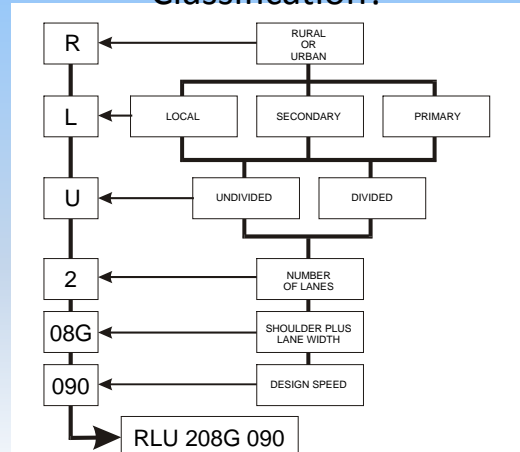
Average Annual Daily Traffic

- Field is three parts ie.150/2005 (E)
- Traffic Volume 150
 - Count adjusted for time of day & month
- Year 2012
 - year count taken
- Type of Traffic Count (E) or (A)
 - “A” is actual from inventory
 - “E” is estimate by inspector

What is the Road Classification?



What is the Road Classification?



Bridge Inventory Information

What is the Road Classification?

RURAL OR URBAN → R
 LOCAL, SECONDARY, PRIMARY → A
 UNDIVIDED, DIVIDED → D
 NUMBER OF LANES → 4
 SHOULDER PLUS LANE WIDTH → 12.5
 DESIGN SPEED → 120
 4, 12.5, 120 → RAD 412.5 120

Technical Standards Branch
Class B Bridge Inspection
Course
Page 12

Bridge Inspection and Maintenance

Bridge Inventory Information

Standard Road Classifications

- Local Roads (gravelled)
 - RLU-207G-60
 - RLU-208G-60
 - RLU-208G-90
 - RLU-209G-90
 - RLU-210G-90
- Local Roads (paved)
 - RLU-208-100
 - RLU-208-110
- Provincial Highways
 - RCU-208G-090
 - RCU-209G-090
 - RCU-208-110
 - RCU-209-110
 - RCU-210-110

Technical Standards Branch
Class B Bridge Inspection
Course
Page 13

Bridge Inspection and Maintenance

Bridge Inventory Information

What is the Detour Length?

4.8 km
 ORIGINAL ROUTE
 DETOUR ROUTE
 4.8 km

Detour length is extra distance traveled = 9.6 km

Technical Standards Branch
Class B Bridge Inspection
Course
Page 14

Bridge Inspection and Maintenance

Bridge Inventory Information

What is the Detour Length?

40 km
 DETOUR ROUTE
 30 km
 ORIGINAL ROUTE
 50 km

Detour length is the extra distance traveled = 40 km + 30 km - 50 km = 20 km

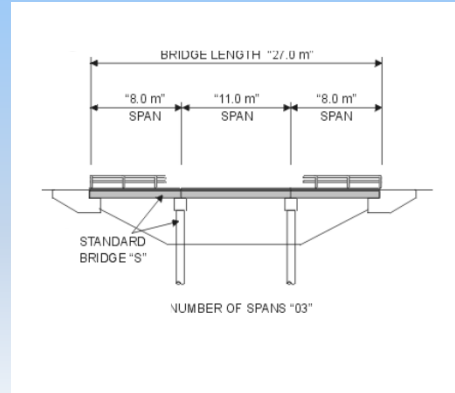
Technical Standards Branch
Class B Bridge Inspection
Course
Page 15

Bridge Inspection and Maintenance

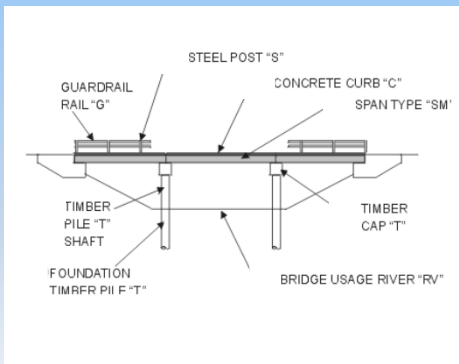
What is Posted Clearance?

- Only on:
 - grade separation
 - pedestrian overpass
 - through truss
- Lowest measured clearance between road and bridge less tolerance
- Calculation
 - Minimum measured clearance = 4.88 m
 - Tolerance = 0.10 m
 - 4.78 m
 - Round down to nearest decimeter = 4.7 m (1/10th of a metre)
 - BIM Required Vert. Clearance Posting = 4.7 m
 - TIMS Data = 4.8 m

Bridge Details



Bridge Components



Bridge Components

