| Title: Hwy 2 & Hwy 587 Bowden Interchange |
| --- |

Memorandum (or Approval) Date: February 2, 2012
Design Exception Request Date: January 26, 2012
Region: Central
Approval Status: Approved

| Highway | Control Section | From km | To km | Existing AADT |
| --- | --- | --- | --- | --- |
| 2 | 22 | 14.5 | 17.1 | 26 920 |
| 587 | 02-03 | 43.0 | 1.0 | 820 |

| Project Type (Mark all that apply with an X) | | | |
| --- | --- | --- | --- |
| Functional Planning: | New Construction: | Reconstruction: | Paving/Surfacing:        **X** |
| Bridge: | Operations: | Geotechnical: | Environmental: |
| Shoulder Widening: | Preliminary Design: | | |

| Summary |
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| A design exception is requested to eliminate the requirement to accommodate for the Reactor Transporter at the roundabouts at Hwy 2/Hwy 587 interchange ramp terminals for all movements. This project must be completed in order to address the existing substandard ramp geometry, the short weaving section of Hwy 2 northbound to the gas station, as well as access management safety concerns with respect to the existing Rest Area access off the current southbound on-ramp alignment. |

| Rationale for Approval/Rejection |
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| Accommodation for the Reactor Transporter at the roundabouts at Hwy2/Hwy587 interchange should be eliminated as Reactor Transporters would not be using this roundabout for the following reasons: <ul><li>Reactor Transporter travelling at low speeds and wide loads on Highway 2 between Calgary and Edmonton would be a potential safety and operation concern due to high daily traffic volumes and high operating speeds along this corridor</li><li>Existing underpass structure (BF76406) vertical clearance height of 5.0 m is a physical constraint on the east and west movement for the Reactor Transporter vehicle. The current height of the Reactor Transporter is 7.62m.</li><li>Existing infrastructure on Highway 2 such as interchanges, sign bridge structures, etc, between Calgary and Edmonton would be considered as constraints for Reactor Transporter vehicles.</li></ul> |

| Additional Mitigation Required |
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| None. |

| Key Words |
|---|
| Roundabouts, accommodation, interchange ramp terminals, Reactor Transporter, clearance height |

**Photograph/Diagram**



SITE CONTEXT
HWY 2/587 INTERCHANGE
BOWDEN, ALBERTA

24A ST
TOWN OF BOWDEN
CLOSE
TO CALGARY

EXISTING LOOPS AND RAMPS TO BE REMOVED

NEARBY INTERSECTION TO BE SIGNALIZED

OUTER TRUCK APRONS ACCOMMODATE OVERSIZE DESIGN VEHICLES WITH COUNTER-FLOW LEFT TURNS

PROPERTY CONSTRAINT

HWY 2 PLANNED FOR WIDENING TO 6-LANE CROSS-SECTION AND REMOVAL OF BYPASS ROAD

HWY 2
HWY 2 UNDERPASS

PROPERTY CONSTRAINT

TO RED DEER

SINGLE-LANE DESIGN UNDERSTOOD TO BE TEMPORARY UNTIL HWY 587 IS REALIGNED WITH NEW LOCATION OF HWY 2 CROSSING

HWY 587

| DATE | PROJECT NO. |
|------|-------------|
| DEC. 9, 2011 | 11425 |
| SCALE | DRAWING NO. |
| 1:2000 | 1 |

R/P Date - DEC. 9, 2011    File: 11425.PD02.dwg