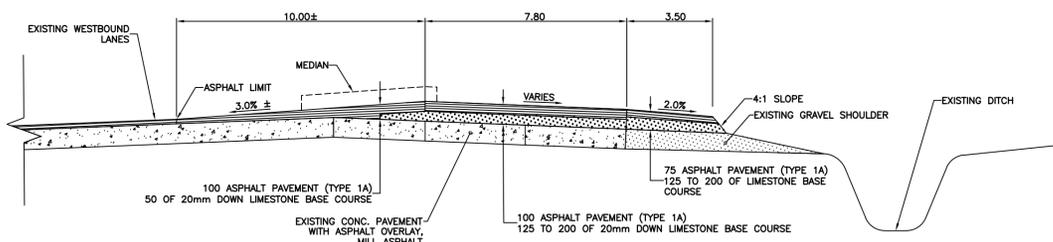


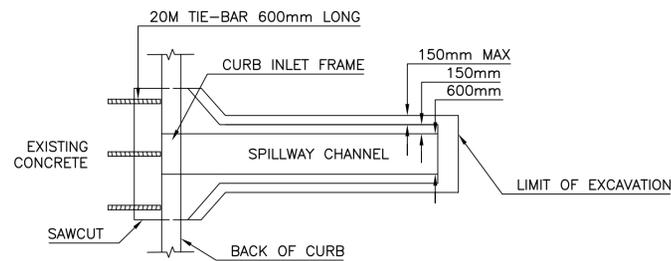
SECTION A - A

N.T.S.



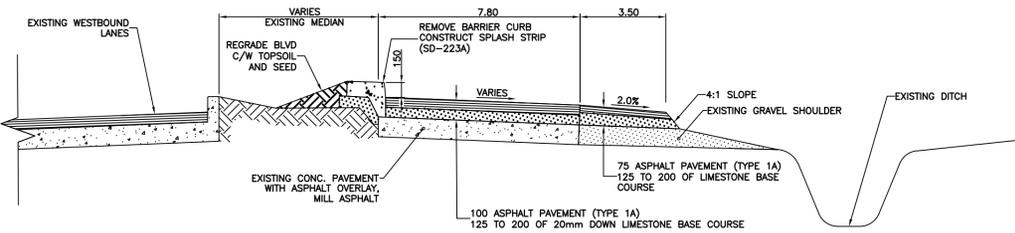
SECTION B - B

N.T.S.



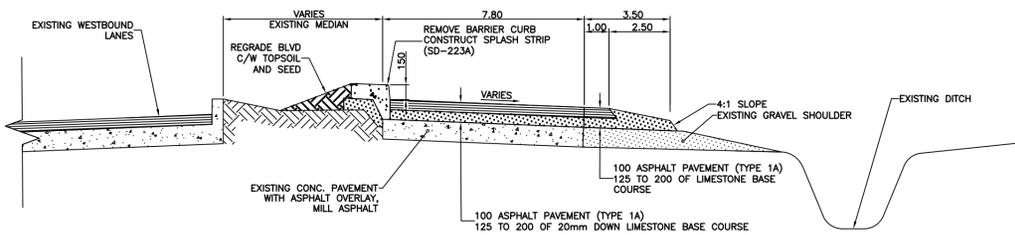
SPILLWAY CHANNEL DETAIL

REFER TO E10. INSTALL CURB INLET FRAME WITH CONCRETE SPILLWAY  
N.T.S.



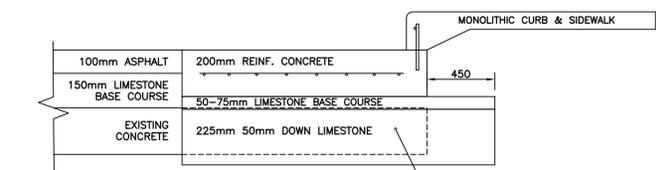
SECTION C - C

N.T.S.



SECTION D - D

N.T.S.



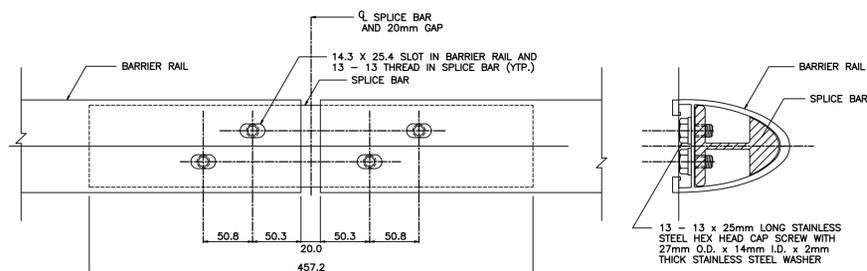
BUS PAD DETAIL

N.T.S.

NOTE: IF EXISTING CONCRETE IS FOUND BELOW PROPOSED BUS PAD THEN LEAVE IT IN PLACE, AND PLACE REQUIRED BASE COURSE & 200mm REINFORCED CONCRETE BUS PAD TO FINISHED GRADE

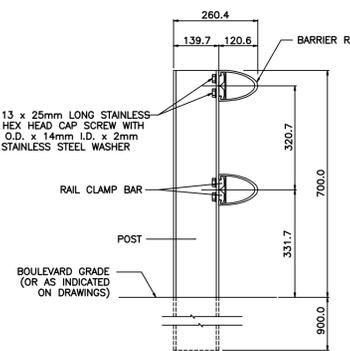
MATERIAL SPECIFICATION

1. ALUMINUM RAILS, POSTS, SPLICE BARS, AND RAIL END CAPS SHALL CONFORM TO ASTM B221, ALLOY 6061 - T6, OR ALLOY 6351 - T6.
2. TYPE 316. STAINLESS STEEL WASHERS SHALL CONFORM TO ASTM A296, TYPE 316.
3. CAP SCREWS SHALL CONFORM TO ASTM A276, TYPE 316 STAINLESS STEEL.
4. ANTI-SEIZE COATING TO BE APPLIED TO ALL THREADED COMPONENTS WHEN BEING ASSEMBLED.  
i.e. LPS-3-MANUFACTURED BY HOLT LLOYD (CANADA) LTD., MARKHAM, ONTARIO L3R 2Z3
5. TWO COATS, EACH 1mm IN THICKNESS OF ALKALI-RESISTANT BITUMINOUS PAINT SHALL BE APPLIED ON THE SURFACES OF POSTS AND RAILS THAT ARE IN CONTACT WITH THE GROUND.



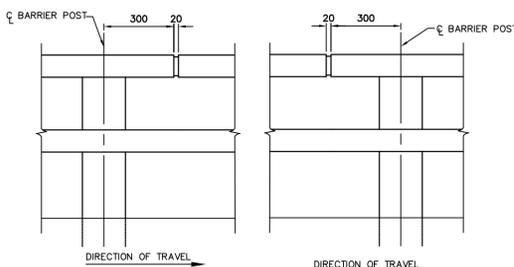
SPLICE BAR TO RAIL ASSEMBLY DETAIL

N.T.S.



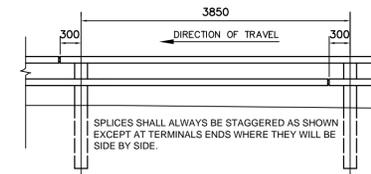
RAIL TO POST ASSEMBLY DETAIL

N.T.S.



RAIL SPLICE LOCATION

N.T.S.



ALUMINUM RAIL SPLICE STAGGER

N.T.S.

CONSTRUCTION NOTES

- 1) CURB REPLACEMENT AS DIRECTED BY THE CONTRACT ADMINISTRATOR
- 2) ALL STREET RADIUS CURB UNDER 15M RADIUS SHALL BE REPLACED AS MODIFIED OR AS DIRECTED BY THE CONTRACT ADMINISTRATOR
- 3) PAVEMENT REPAIRS SHOWN ARE ONLY A REPRESENTATIVE SAMPLE OF THE TENDERED QUANTITIES
- 4) ASPHALT TIE-INS ON APPROACHES TO BE DETERMINED IN THE FIELD BY THE CONTRACT ADMINISTRATOR.
- 5) ALL BULLNOSES TO HAVE SLOPED FACE.

WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:  
1) OBTAIN CLEARANCE FROM THE GAS UTILITY PRIOR TO EXCAVATION.  
2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS UTILITY INSTALLATIONS.

SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

METRIC  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

BID OPPORTUNITY NO. 6-2009

EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PROFILE	PROPOSED
---	GUARD RAIL	---	---	LDS/WWS	---	---	---	---
○	O.L.S.	●	---	WATERMAIN	---	---	---	---
○	MANHOLE	●	---	GAS	---	---	---	---
□	CATCH BASIN	■	231.000	ELEVATIONS	231.000	---	---	---
△	CURB INLET	▲	---	PROPERTY LINE	---	---	---	---
☆	HYDRO POLE	⊕	---	SURVEY BAR	⊕	---	---	---
○→	TRAFFIC SIGNAL POLE	●→	---	GEODETIC BENCH MARK	---	---	---	---
---	DITCH FLOW	---	---	RAMP CURB	---	---	---	---
---	CONCRETE	---	---	ASPHALT/GRAVEL PAV.	---	---	NORTH GUTTER	---
---	CURB RENEWAL	---	---	ASPHALT OVERLAY	---	---	CENTER LINE	---
---	MTS	---	---	PAVED SHOULDER (TYP)	---	---	SOUTH GUTTER	---

LOCATION APPROVED UNDERGROUND STRUCTURES

NO. REVISIONS      DATE      BY

DATE      2009/02/26

DESIGNED BY R.M.

CHECKED BY G.C./D.K.

DRAWN BY R.M.

APPROVED BY F.W.C.

HOR. SCALE: N.T.S.

VERTICAL: N.T.S.

ENGINEERING DIVISION  
TECHNOLOGY SERVICES BRANCH  
106 - 1155 PACIFIC AVE

ORIGINAL SIGNED BY F.W.C. MARCH 26/09

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
F.W. COREY  
REGISTERED ENGINEER

THE CITY OF WINNIPEG  
PUBLIC WORKS DEPARTMENT

DUGALD ROAD EAST BOUND  
FROM CNR OVERPASS TO PLESSIS ROAD  
ASPHALT OVERLAY AND ASSOCIATED WORKS  
MISC. DETAILS

CITY DRAWING NUMBER SE-09-29  
SHEET 21 OF 21

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