

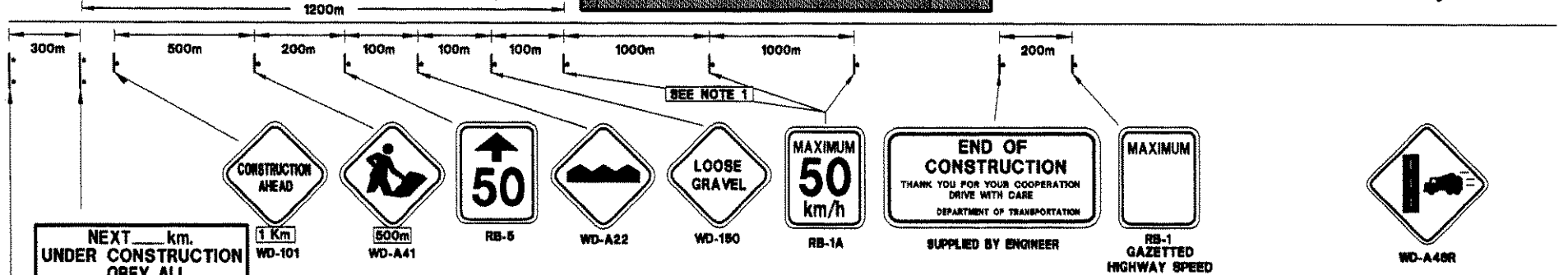
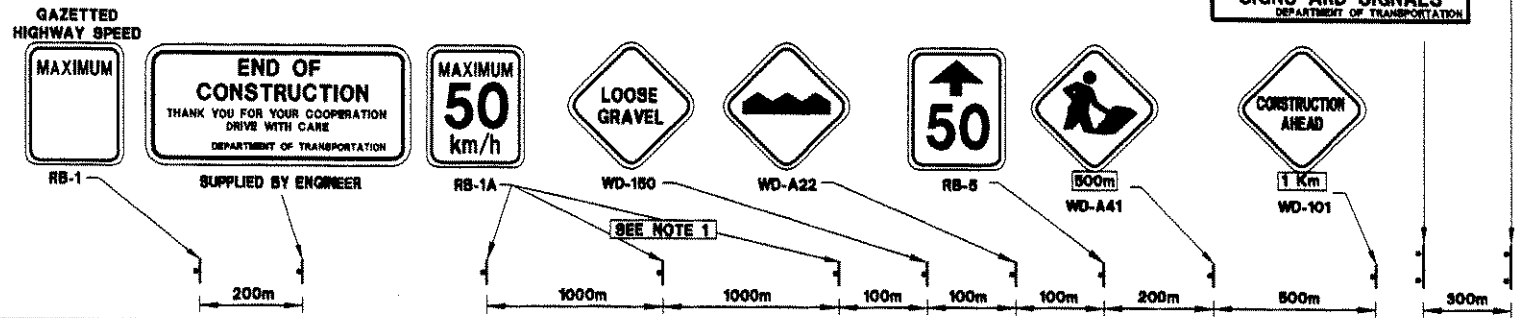


WD-A45

THIS SIGN (WD-A45) SHALL BE USED ON ALL CONSTRUCTION AND MAINTENANCE WORKS WHERE FLAGMEN ARE EMPLOYED.

PROJECT SIGN
 SUPPLIED BY ENGINEER
 NEXT ____ km.
 UNDER CONSTRUCTION
 OBEY ALL
 SIGNS AND SIGNALS
 DEPARTMENT OF TRANSPORTATION

NOTE:
 1. SPEED LIMIT SIGNS SHALL BE POSTED EVERY 1000 METRES THROUGHOUT THE WORK AREA WHERE THERE IS A RESTRICTED SPEED ZONE.

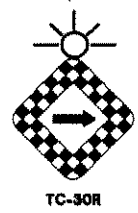
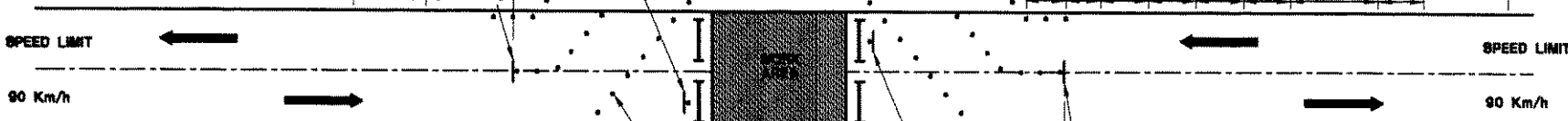
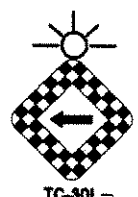
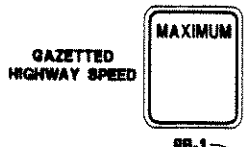
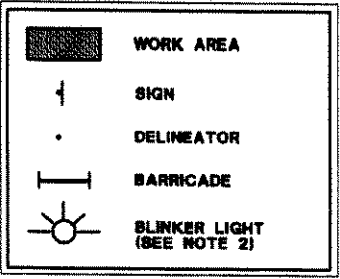


THIS SIGN (WD-A45) SHALL BE POSTED 200 METRES BACK FROM THE ENTRANCE FOR APPROACHING TRAFFIC FROM EITHER DIRECTION. ENSURE THE PROPER ENTRANCE DIRECTION IS SHOWN (EITHER LEFT OR RIGHT. SEE DRAWING NO. SD-200-02-08.)



SD-200-02-01
TYPICAL SIGNING WHERE TRAFFIC IS MAINTAINED
 Date: DEC 1995 Revised: APRIL 2005

Approved
K. H. [Signature]
 Director
 Highways Division
 APR 21 2005
 Date

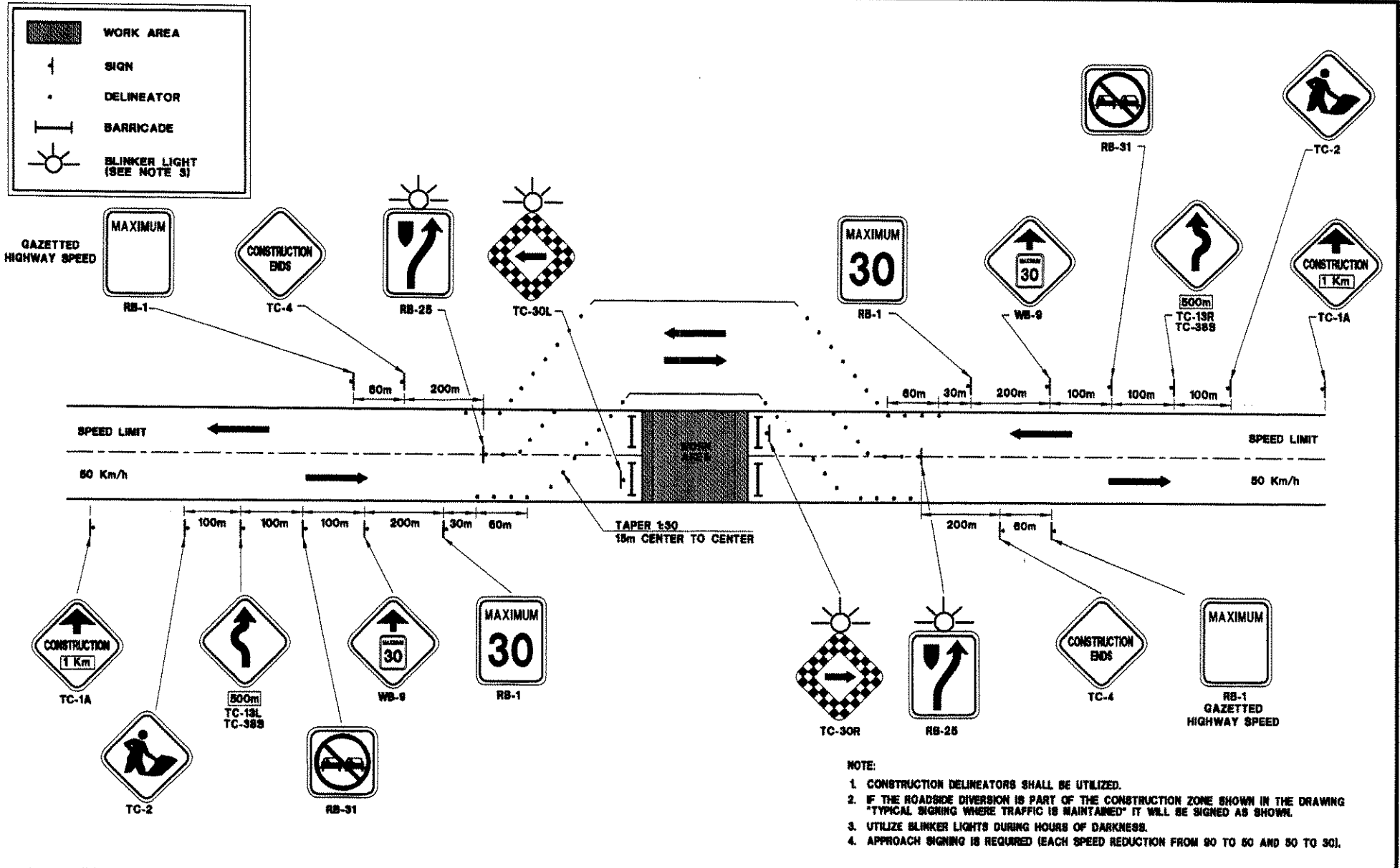


NOTE:
 1. CONSTRUCTION DELINEATORS SHALL BE UTILIZED.
 2. UTILIZE BLINKER LIGHTS DURING HOURS OF DARKNESS.



SD-200-02-02
ROADSIDE DIVERSION
APPROACH SPEED ≥ 90 Km/h
 Date: DEC 1995 Revised: APRIL 2005

Approved
KCMhuwef
 Director
 Highways Division
 APR 21 2005
 Date



- NOTE:
1. CONSTRUCTION DELINEATORS SHALL BE UTILIZED.
 2. IF THE ROADSIDE DIVERSION IS PART OF THE CONSTRUCTION ZONE SHOWN IN THE DRAWING "TYPICAL SIGNING WHERE TRAFFIC IS MAINTAINED" IT WILL BE SIGNED AS SHOWN.
 3. UTILIZE BLINKER LIGHTS DURING HOURS OF DARKNESS.
 4. APPROACH SIGNING IS REQUIRED (EACH SPEED REDUCTION FROM 90 TO 50 AND 50 TO 30).



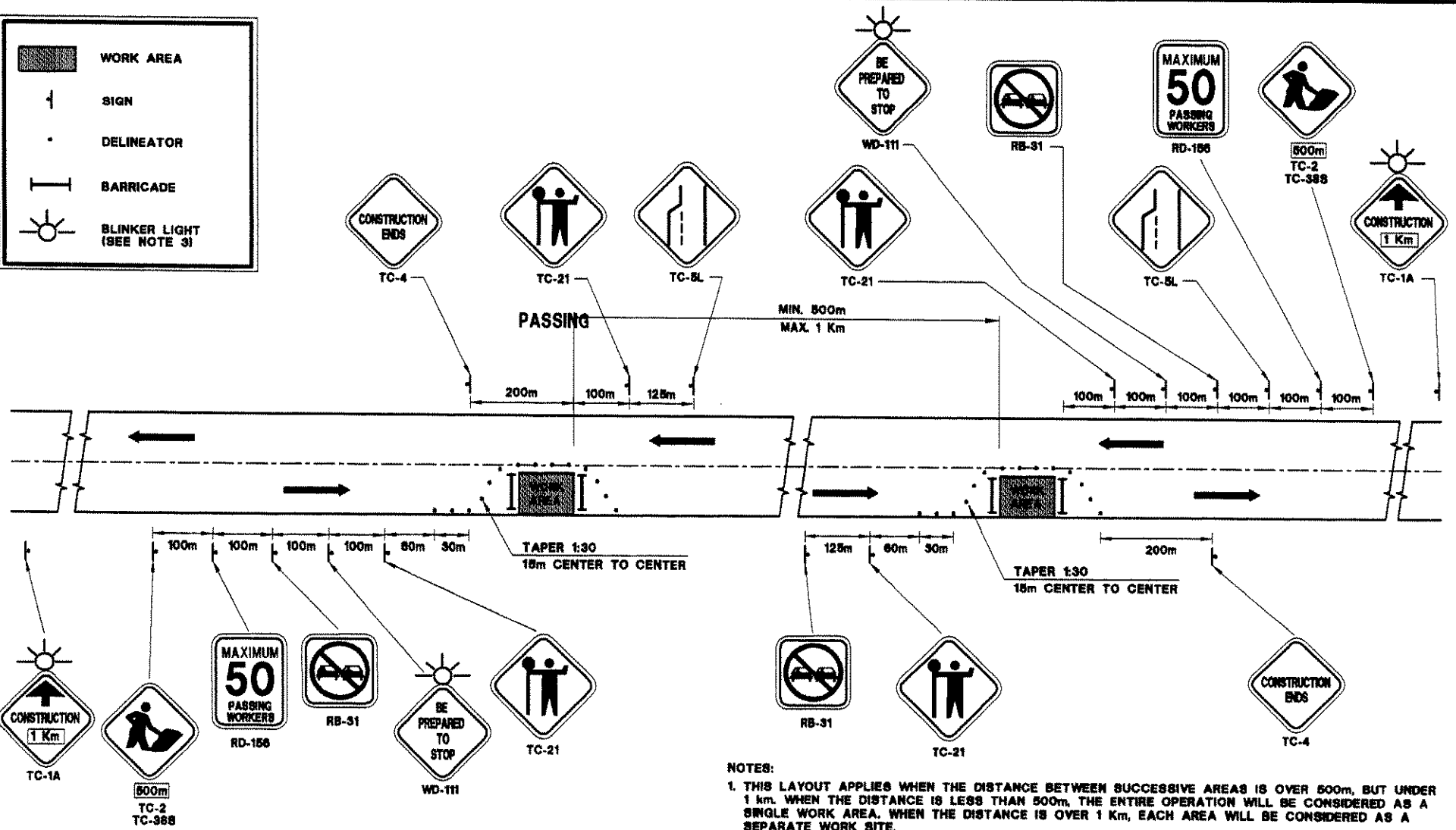
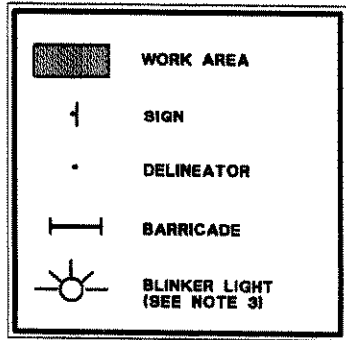
SD-200-02-03

ROADSIDE DIVERSION
APPROACH SPEED ≤ 50 Km/h

Date: **DEC 1995** Revised: **APRIL 2005**

Approved
K. Chrusiel
Director
Highways Division

APR 21 2005
Date

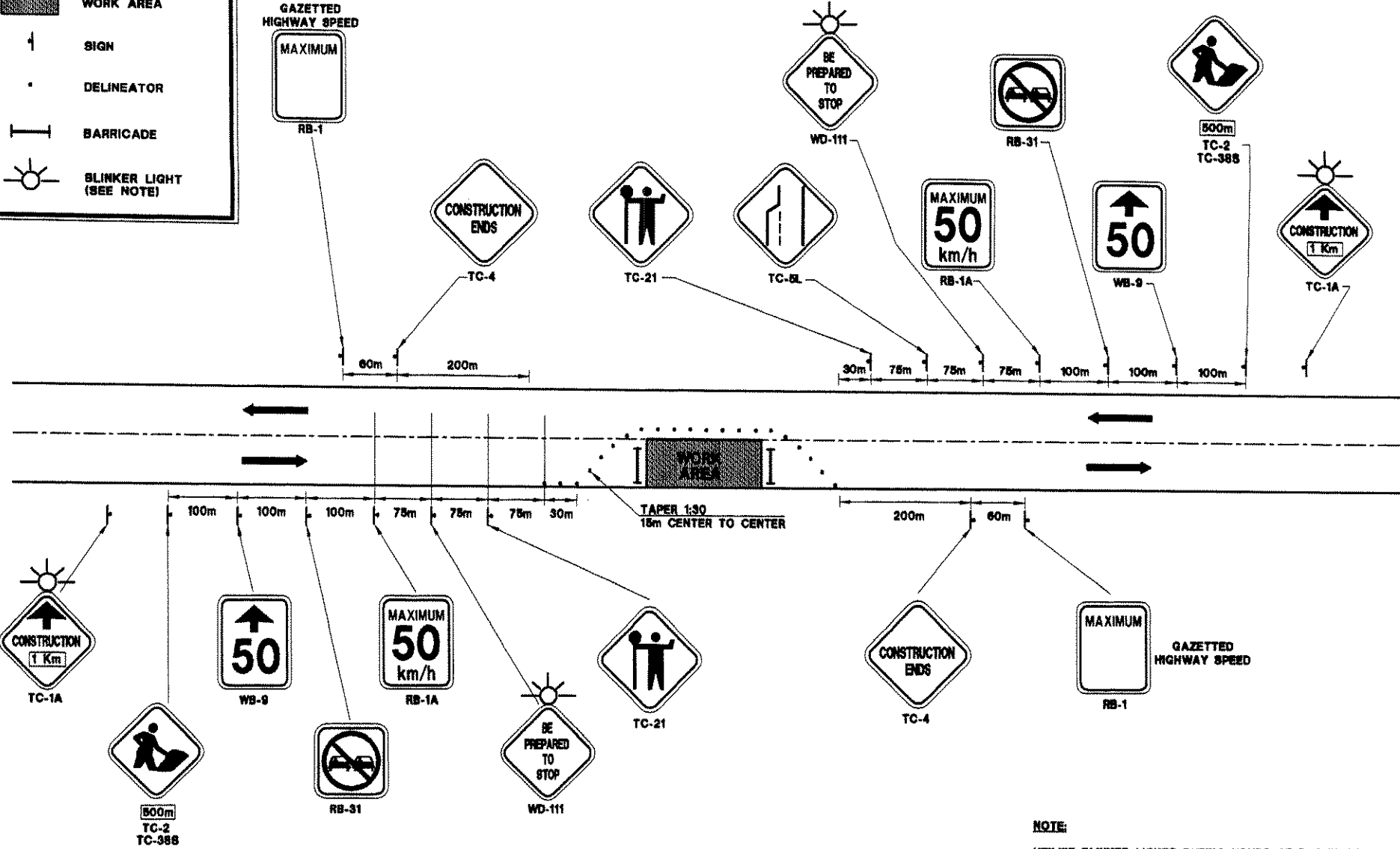
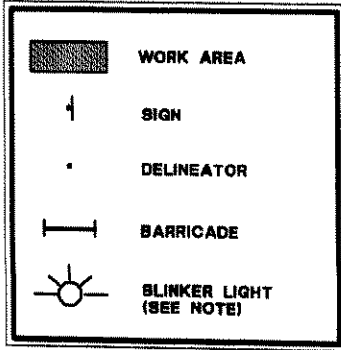


- NOTES:**
1. THIS LAYOUT APPLIES WHEN THE DISTANCE BETWEEN SUCCESSIVE AREAS IS OVER 500m, BUT UNDER 1 km. WHEN THE DISTANCE IS LESS THAN 500m, THE ENTIRE OPERATION WILL BE CONSIDERED AS A SINGLE WORK AREA. WHEN THE DISTANCE IS OVER 1 Km, EACH AREA WILL BE CONSIDERED AS A SEPARATE WORK SITE.
 2. USE OF 700mm TRAFFIC CONES DURING DAYLIGHT OPERATIONS FOR DELINEATION DEVICES FOR TEMPORARY WORK AREAS IS ACCEPTABLE. IF OPERATIONS WILL EXTEND INTO HOURS OF DARKNESS, CONSTRUCTION DELINEATORS SHALL BE USED.
 3. UTILIZE BLINKER LIGHTS DURING HOURS OF DARKNESS.



SD-200-02-04
TYPICAL SIGNING FOR SUCCESSIVE WORK AREAS
 Date: DEC. 1995
 Revised: MARCH 2003

Approved
K. Chiu
 Director
 Highways Division
 APR 21 2005
 Date



NOTE:
 UTILIZE BLINKER LIGHTS DURING HOURS OF DARKNESS.

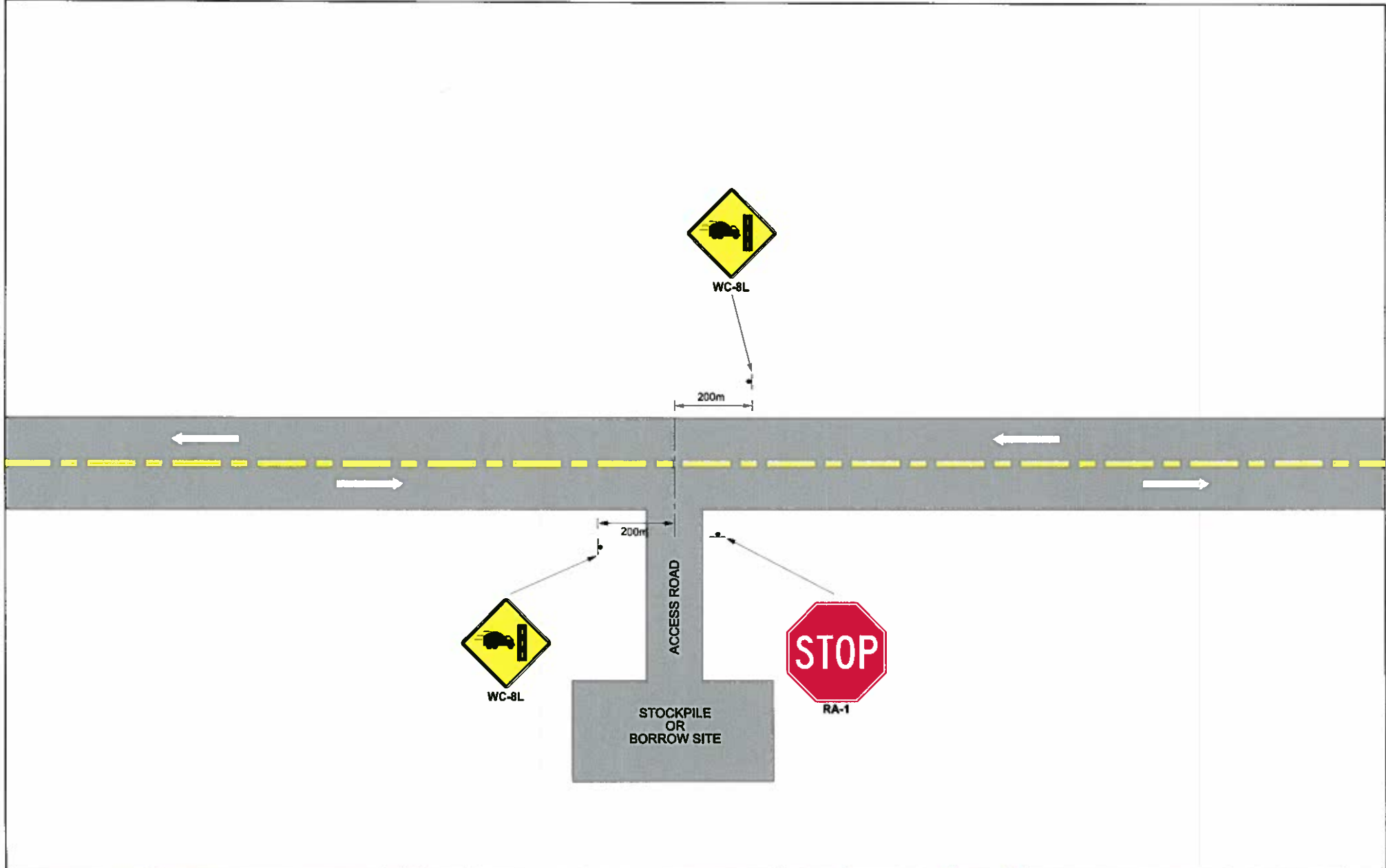


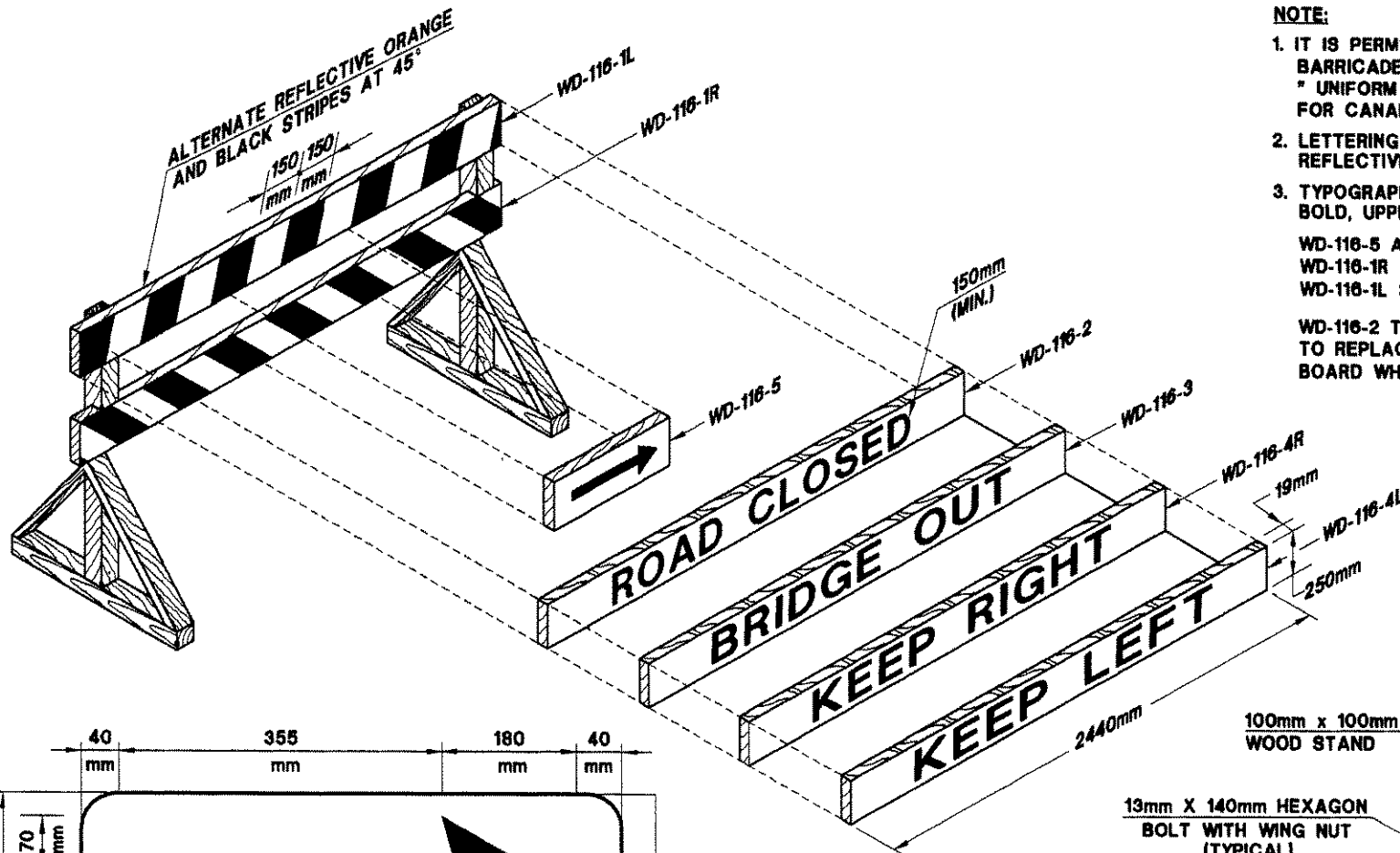
SD-200-02-05
ONE LANE CLOSED

Date: DEC. 1995 Revised: APRIL 2005

Approved
Kcmhuoel
 Director
 Highways Division

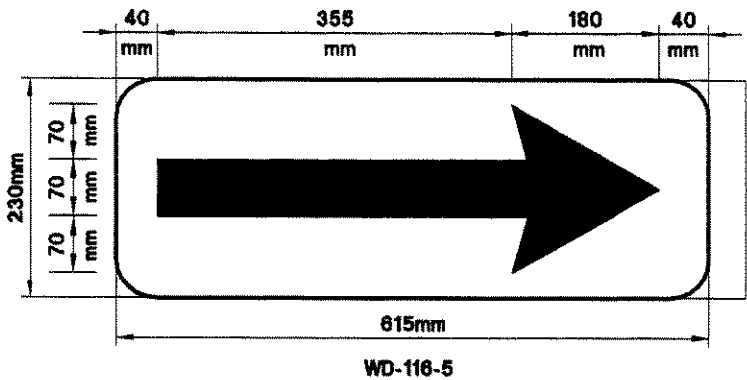
APR 21 2005
 Date



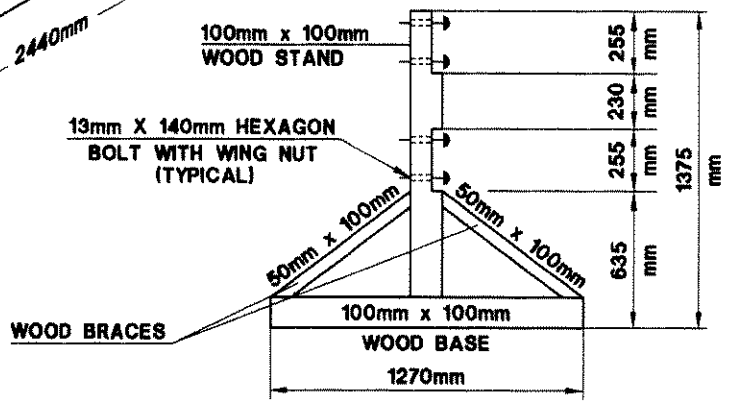


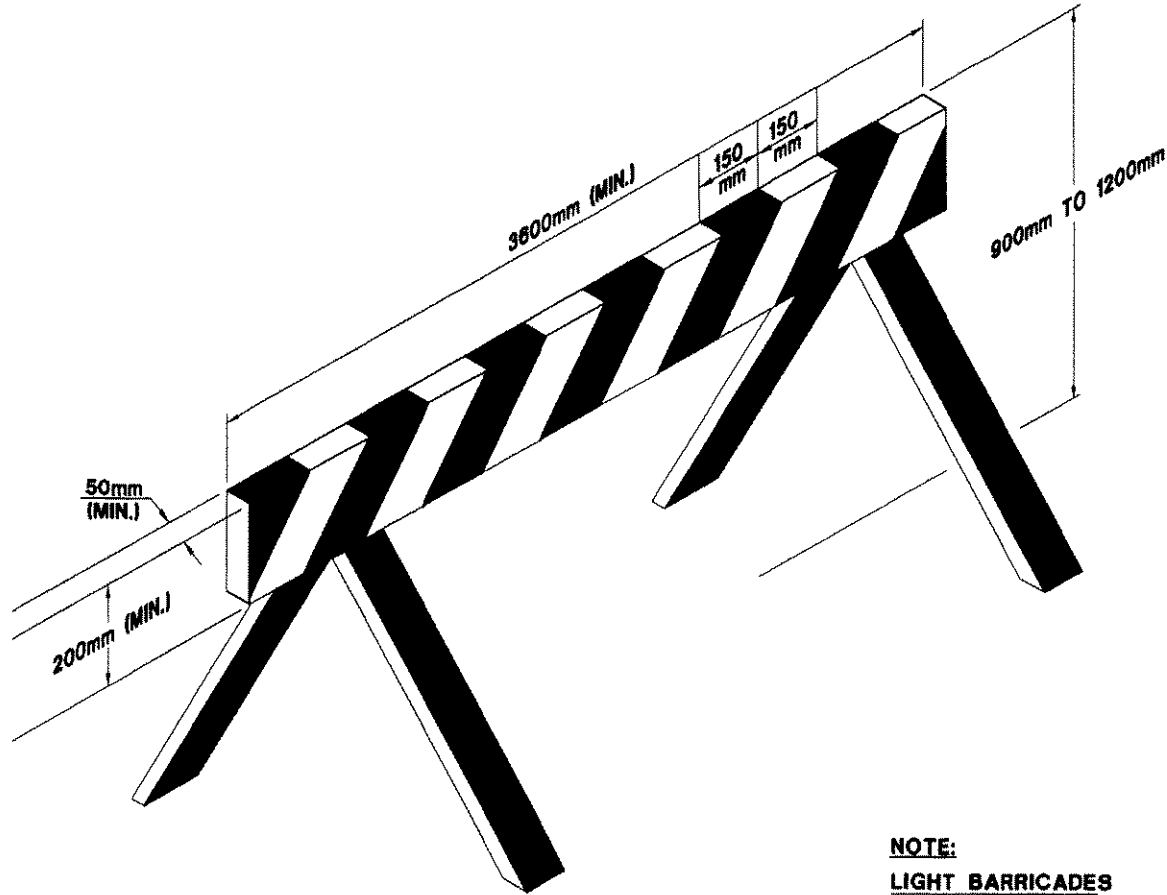
NOTE:

1. IT IS PERMISSIBLE TO USE TYPE OF BARRICADES AS INDICATED IN THE MANUAL "UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA - JANUARY 1978."
 2. LETTERING - BLACK ON AN ORANGE REFLECTIVE BACKGROUND
 3. TYPOGRAPHY - ALL TEXT - HELVETICA BOLD, UPPER CASE
- WD-116-5 ARROW
 WD-116-1R STRIPES RIGHT DIAGONAL
 WD-116-1L STRIPES LEFT DIAGONAL
- WD-116-2 TO 4 MAY BE USED TO REPLACE ONE DIAGONAL STRIPE BOARD WHERE APPROPRIATE.



ARROW - BLACK
 BACKGROUND - REFLECTIVE ORANGE





NOTE:

LIGHT BARRICADES

LIGHT BARRICADES MAY BE USED FOR WORKS OF SHORT DURATION TO PROVIDE THE CLOSURE OF A TRAFFIC LANE OR ROADWAY. THIS TYPE OF BARRICADE SHALL HAVE ALTERNATE ORANGE AND BLACK STRIPES AT 45°. ALL STRIPES SHALL BE 150mm IN WIDTH AND SHALL BE REFLECTORIZED OR ILLUMINATED TO INDICATE THE SAME COLOR AND SHAPE BY NIGHT AS BY DAY.



SD-200-02-08

LIGHT BARRICADE

Date: DEC. 1995

Revised: MARCH 2001

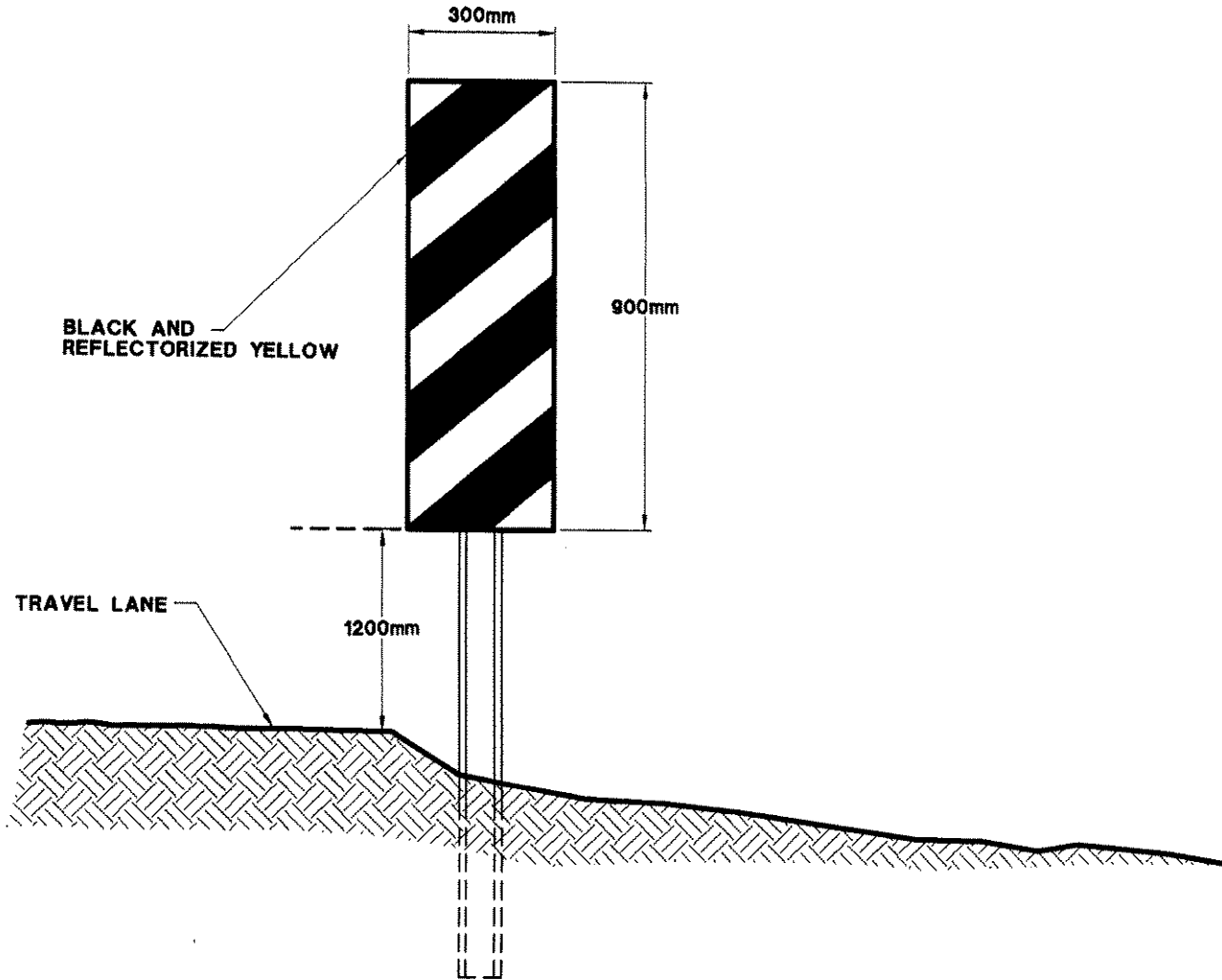
Approved

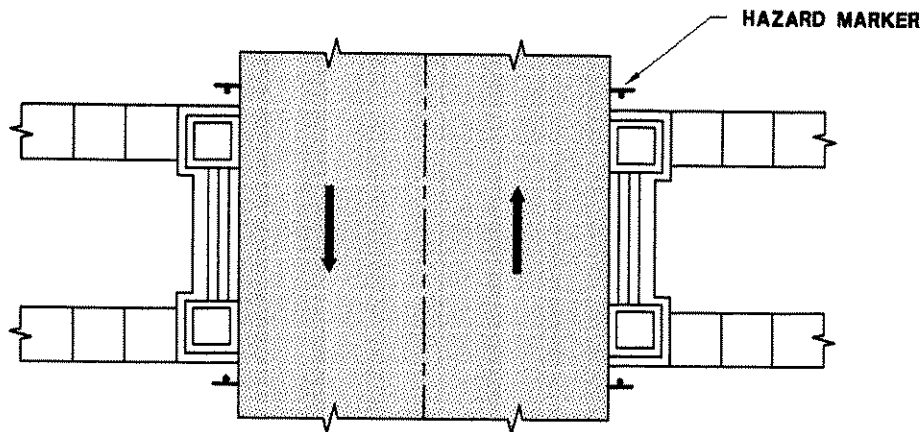
K. M. Hood

Director
Highways Division

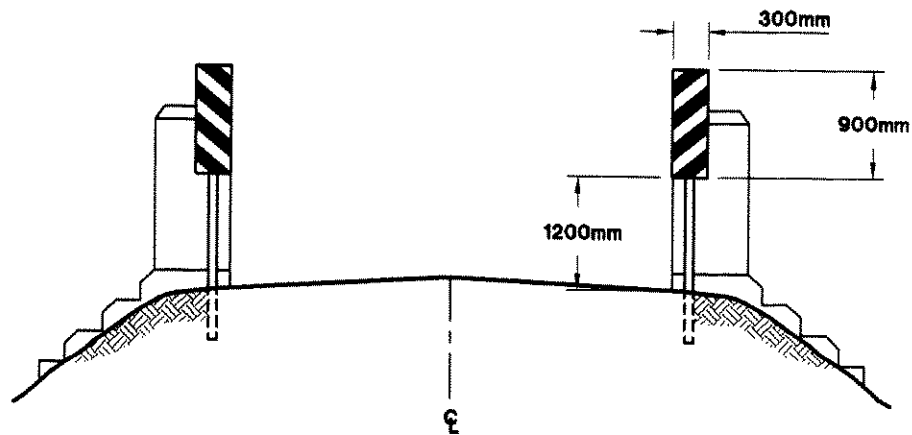
APR 21 2005

Date

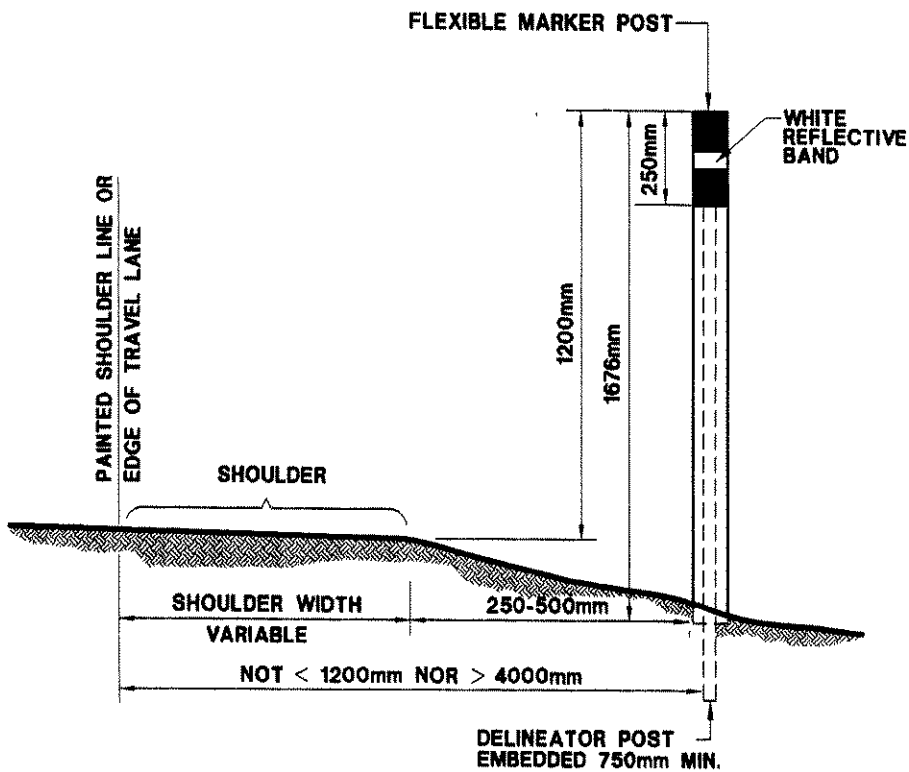




PLAN

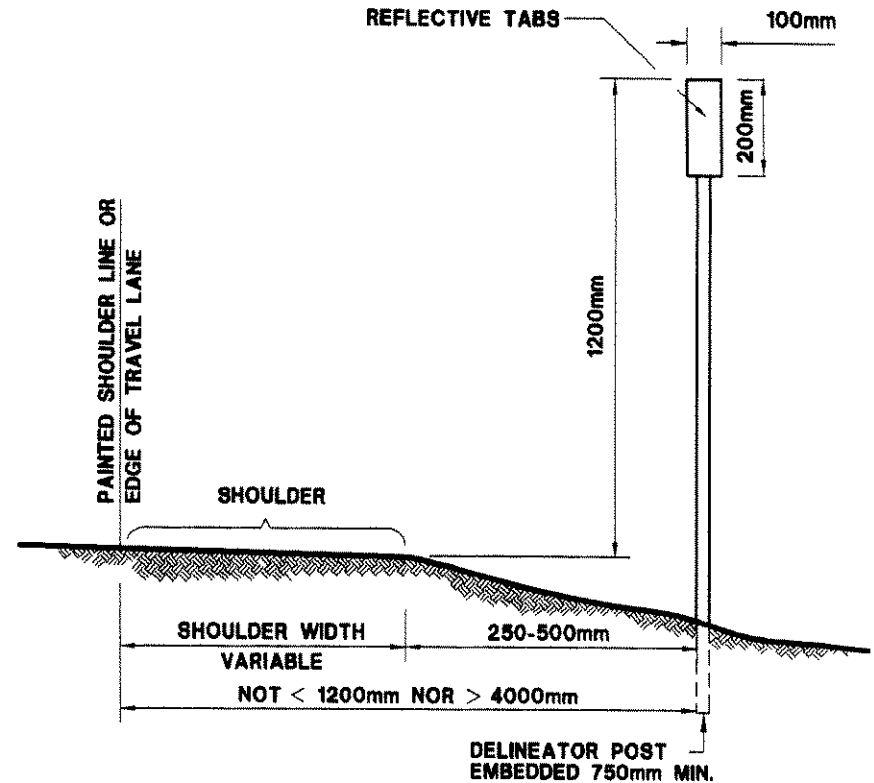


CROSS SECTION



NOTE:

1. DELINEATOR POSTS SHALL BE STANDARD STEEL HAT SECTION WEIGHING AT LEAST 2.0 lb./ft. BEFORE PUNCHING.
2. FLEXIBLE MARKER POST SHALL HAVE A NOMINAL OUTSIDE DIAMETER OF 89mm AND A MINIMUM WALL THICKNESS OF 3.81mm.



NOTE:

1. COLOUR OF REFLECTIVE TABS SHALL BE WHITE ON RIGHT OF ROAD, YELLOW ON LEFT SIDE.
2. DELINEATORS SHALL BE HIGH INTENSITY REFLECTIVE MATERIAL MOUNTED ON 2mm ALUMINUM SUBSTRATE - 2 BOLTS REQ'D
3. INSTALLATION WARRANTS AS PER UTCD MANUAL.



SD-200-02-11

DELINEATORS

Date: DEC. 1995

Revised: MARCH 2001

Approved

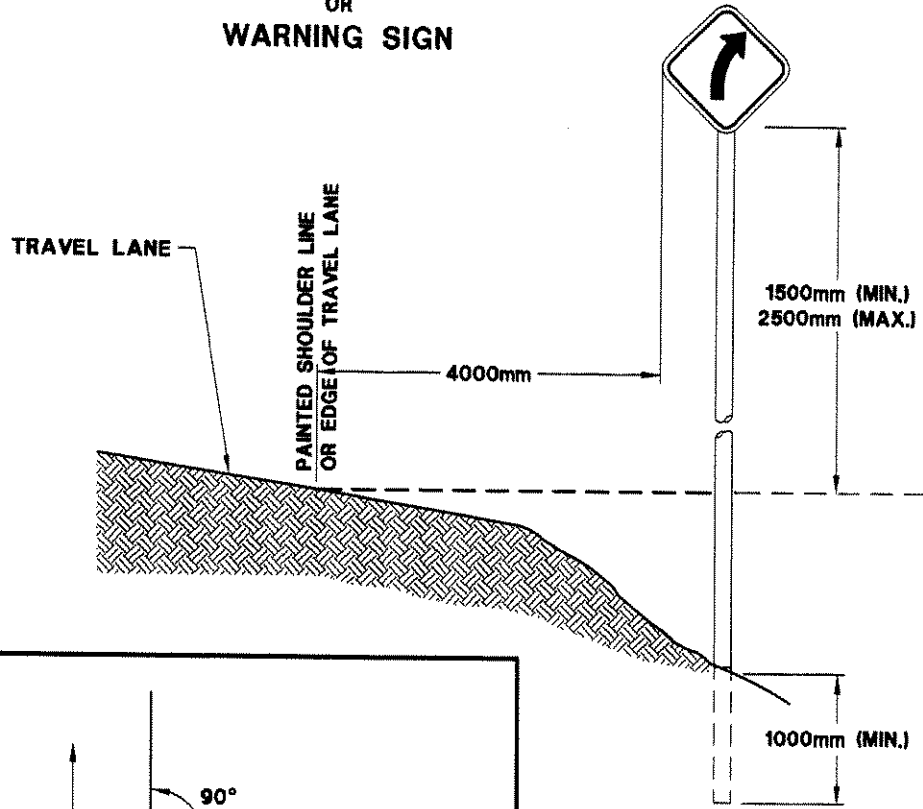
K. M. Wool

Director
Highways Division

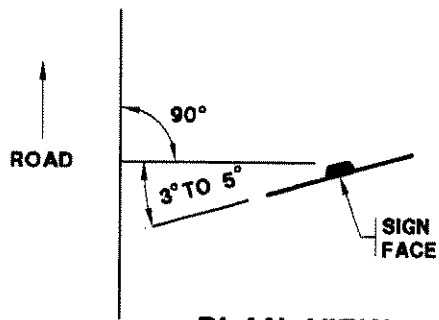
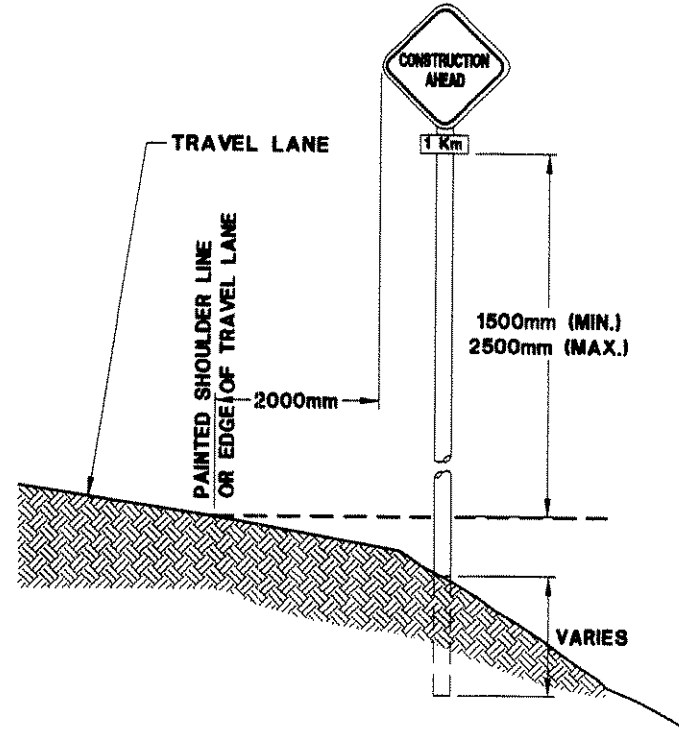
APR 21 2005

Date

**PERMANENT
REGULATORY
OR
WARNING SIGN**



**TEMPORARY
CONSTRUCTION
WARNING SIGN**



PLAN VIEW



SD-200-02-12

**TYPICAL SIGN INSTALLATION HEIGHT
AND LATERAL LOCATIONS**

Date: DEC. 1995

Revised: APRIL 2005

Approved

Kem Hood

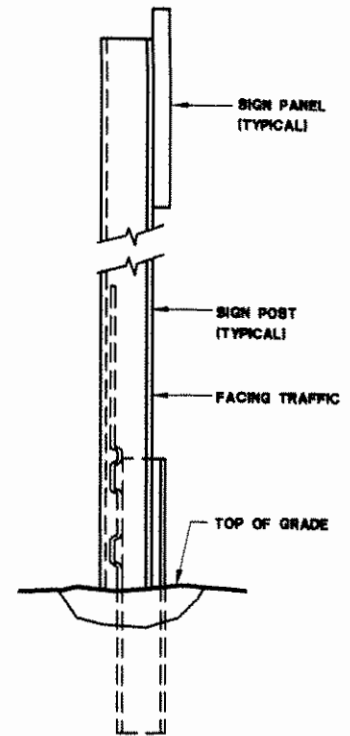
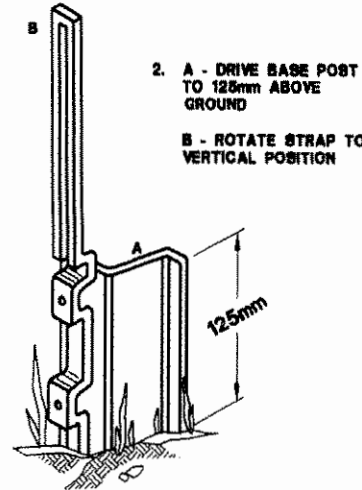
Director
Highways Division

APR 21 2005

Date

SPECIFICATIONS

1. **MATERIALS** POSTS SHALL BE PRODUCED FROM HIGH STRENGTH RAIL STEEL ACCORDING TO CSA STANDARD SPECIFICATION G30.12, GRADE 400.
 2. **FINISH** BASE POST AND SIGN POST SHALL BE GALVANIZED, AS PER CSA STANDARD SPECIFICATION G164M.
 3. **BASE POST** THE WEIGHT OF EACH BASE POST BEFORE PUNCHING SHALL BE 2.50 lb/l. BASE POST IS TO BE PUNCHED WITH EIGHTEEN 0.438" DIAMETER HOLES ON A 1.0" CENTER, EXCEPT FOR THE FIRST AND FIFTH HOLES WHICH ARE TO BE 0.438" x 0.500" SLOTS, WITH THE HOLE BEING 1.0" FROM TOP. BASE SHALL BE POINTED AND 1.0 METRE IN LENGTH.
 4. **SIGN POST** THE WEIGHT OF EACH SIGN POST BEFORE PUNCHING SHALL BE 2.50 lb/l. SIGN POST IS TO BE PUNCHED WITH 0.438" DIAMETER HOLES ON A 1.0" CENTER, FULL LENGTH. FIRST AND LAST HOLES SHALL BE 1.0" FROM THE ENDS.
 5. **RETAINER (SPACER STRAP)** MATERIAL SHALL BE AISI 1020 STEEL GALVANIZED TO CSA STANDARD SPECIFICATION G164M, DIMENSIONS ARE AS FOLLOWS: 17.0"(L) x 1.0" (W) x 0.25"(T)
 6. **HARDWARE** BOLTS 3/8" x 16 UNC x 2.00"(L), HEX HEAD, INTEGRAL FLANGE, CONFORMING TO ASTM SPECIFICATION NUMBER A354, GRADE BD
NUTS 3/8" x 16 UNC, HEX HEAD INTEGRAL FLANGE, CONFORMING TO ASTM SPECIFICATION NUMBER A563, GRADE DH
LOCKWASHERS 3/8" EXTRA DUTY HELICAL SPRING
- NOTE: BOLTS, NUTS, AND LOCKWASHERS SHALL BE MECHANICALLY GALVANIZED.

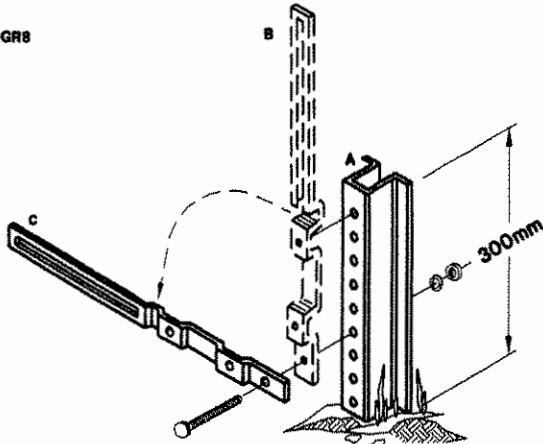


ALL BOLTS 3/8" - 16UNC x 2" - GR8

1. A - DRIVE BASE POST TO WITHIN 300mm OF GROUND LEVEL

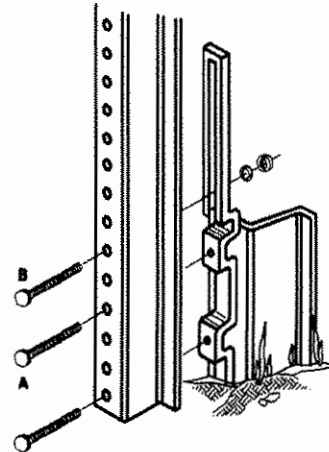
B-ATTACH RETAINER-SPACER STRAP WITH ONE 3/8" - 16 UNC x 2.0" BOLT, NUT AND LOCKWASHER THROUGH BOTTOM HOLE OF STRAP AND SIXTH HOLE OF BASE POST. SMALL TOP SLOT OF STRAP SHOULD LINE UP WITH TOP HOLE IN BASE POST

C-ROTATE STRAP 90° TO LEFT



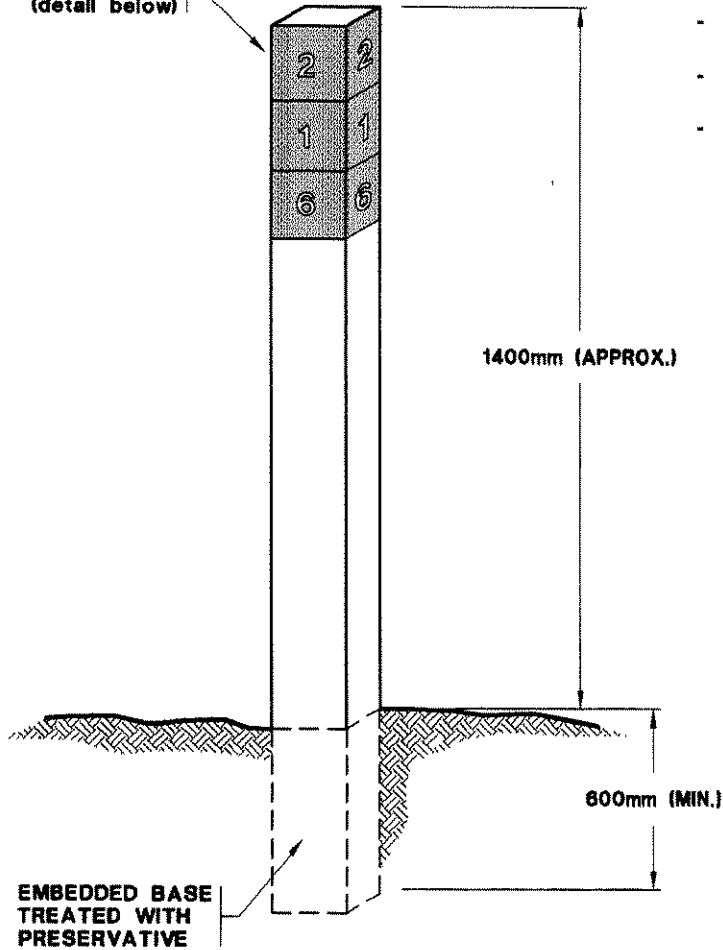
3. A - ATTACH SIGN POST WITH TWO 3/8" - 16 UNC x 2.0" BOLTS, NUTS, AND LOCKWASHERS IN BOTTOM AND FIFTH HOLES. (THESE CORRESPOND WITH SMALL SLOTS IN STRAP.)

B - INSERT ONE 3/8" - 16 UNC x 2.0" BOLT THROUGH SIGN POST AND BOTTOM ON LONG SLOT IN STRAP. TIGHTEN NUT AND LOCKWASHER SNUGLY BEFORE COMPLETELY TIGHTENING MIDDLE BOLTS.

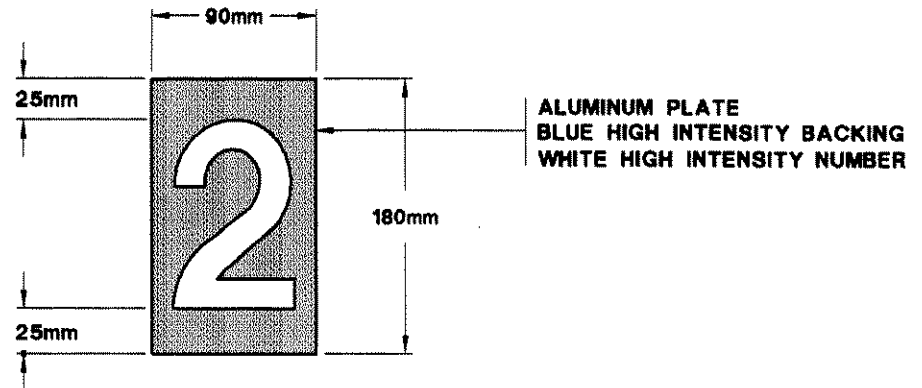
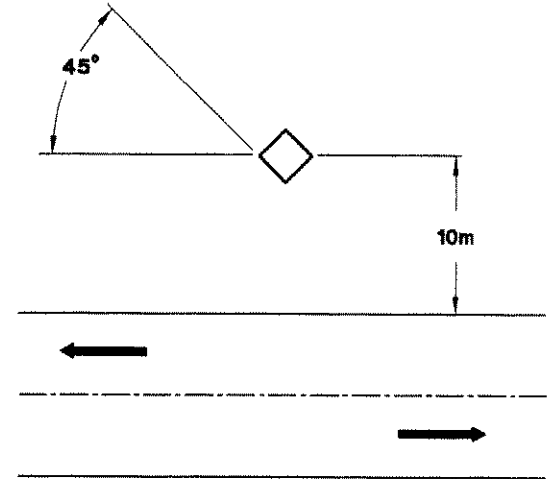


KILOMETRE POST

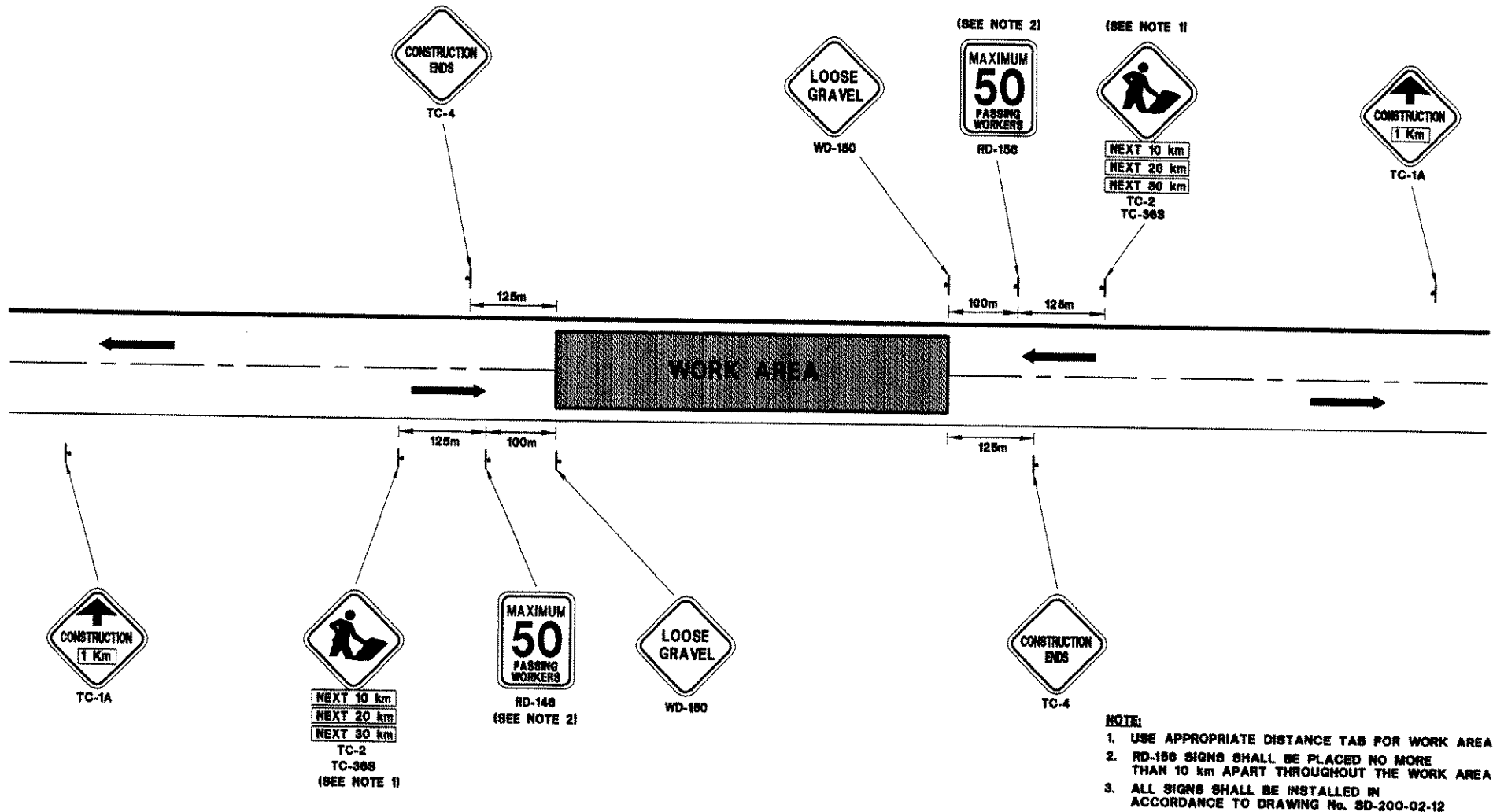
TABS
(detail below)



- POST: 100mm x 100mm x 2000mm (APPROX.)
- PAINT: WHITE, 2 COATS.
- ANGLE POST 45 DEGREES TO ROAD SURFACE AND 10m FROM EDGE OF TRAVELLED PORTION, OR AS SPECIFIED BY THE ENGINEER.



TAB DETAILS
(2 each)



- NOTE:**
1. USE APPROPRIATE DISTANCE TAB FOR WORK AREA
 2. RD-150 SIGNS SHALL BE PLACED NO MORE THAN 10 km APART THROUGHOUT THE WORK AREA
 3. ALL SIGNS SHALL BE INSTALLED IN ACCORDANCE TO DRAWING No. 8D-200-02-12



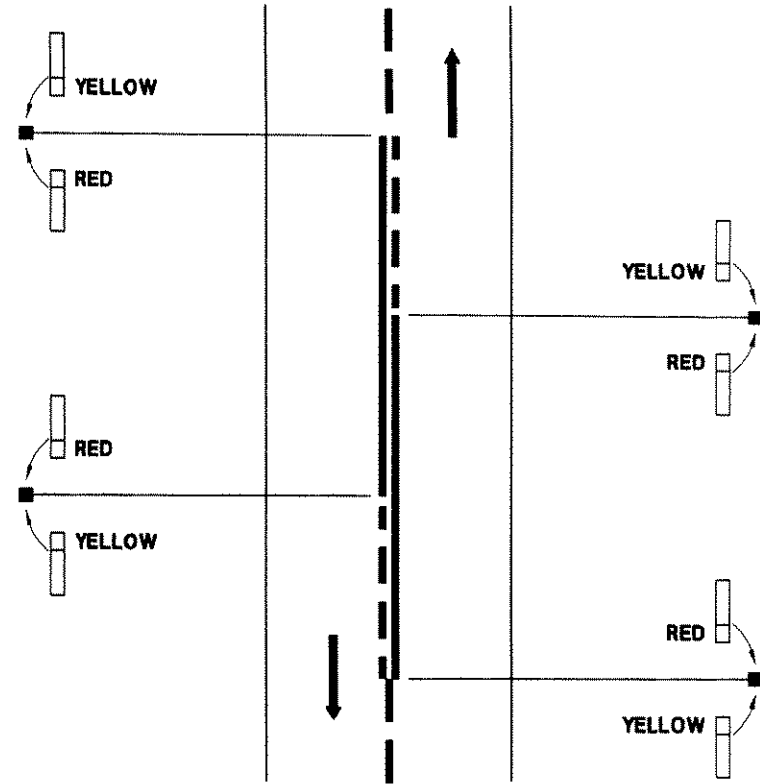
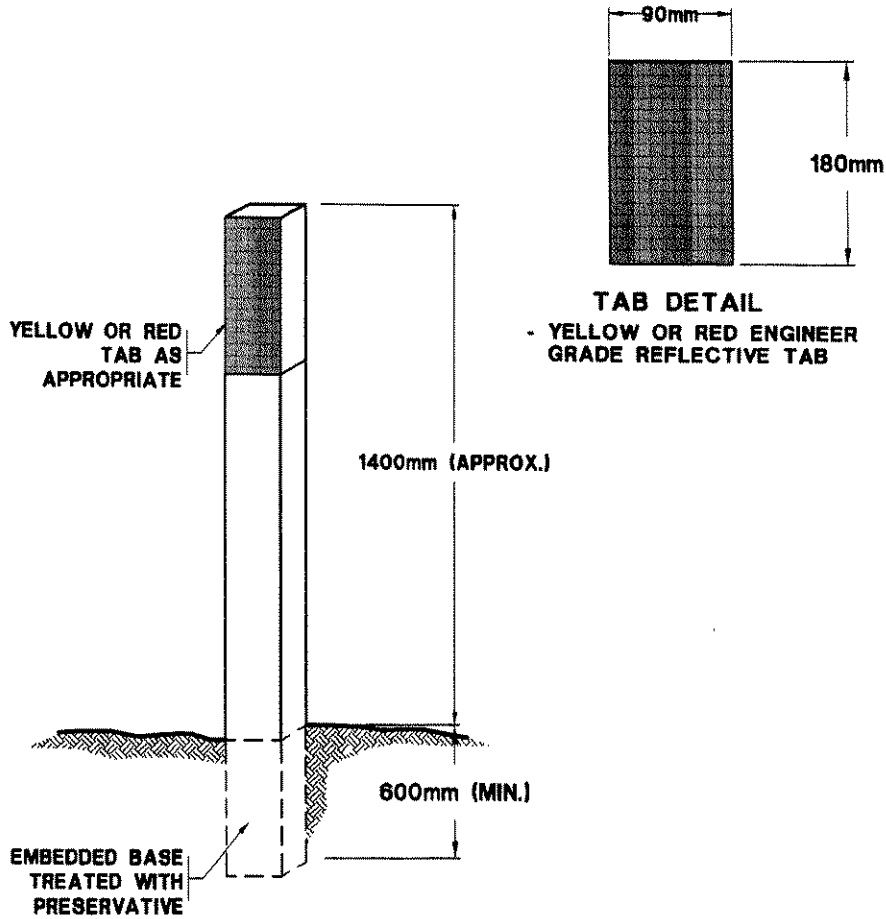
SD-200-02-16

**TYPICAL SIGNING ON HIGHWAY
REGRAVELING PROJECTS**

Date: FEB 1996 Revised: MARCH 2003

Approved
R. K. [Signature]
Director
Highways Division

APR 21 2005
Date



YELLOW - MARKS BEGINNING OF RESTRICTION
RED - MARKS END OF RESTRICTION

POST

- POST: 100mm x 100mm x 2000mm (APPROX.)
- PAINT: WHITE, 2 COATS.
- INSTALL POST PARALLEL TO ROAD SURFACE AND 15m FROM SHOULDER LINE, OR AS SPECIFIED BY THE ENGINEER.



SD-200-02-17

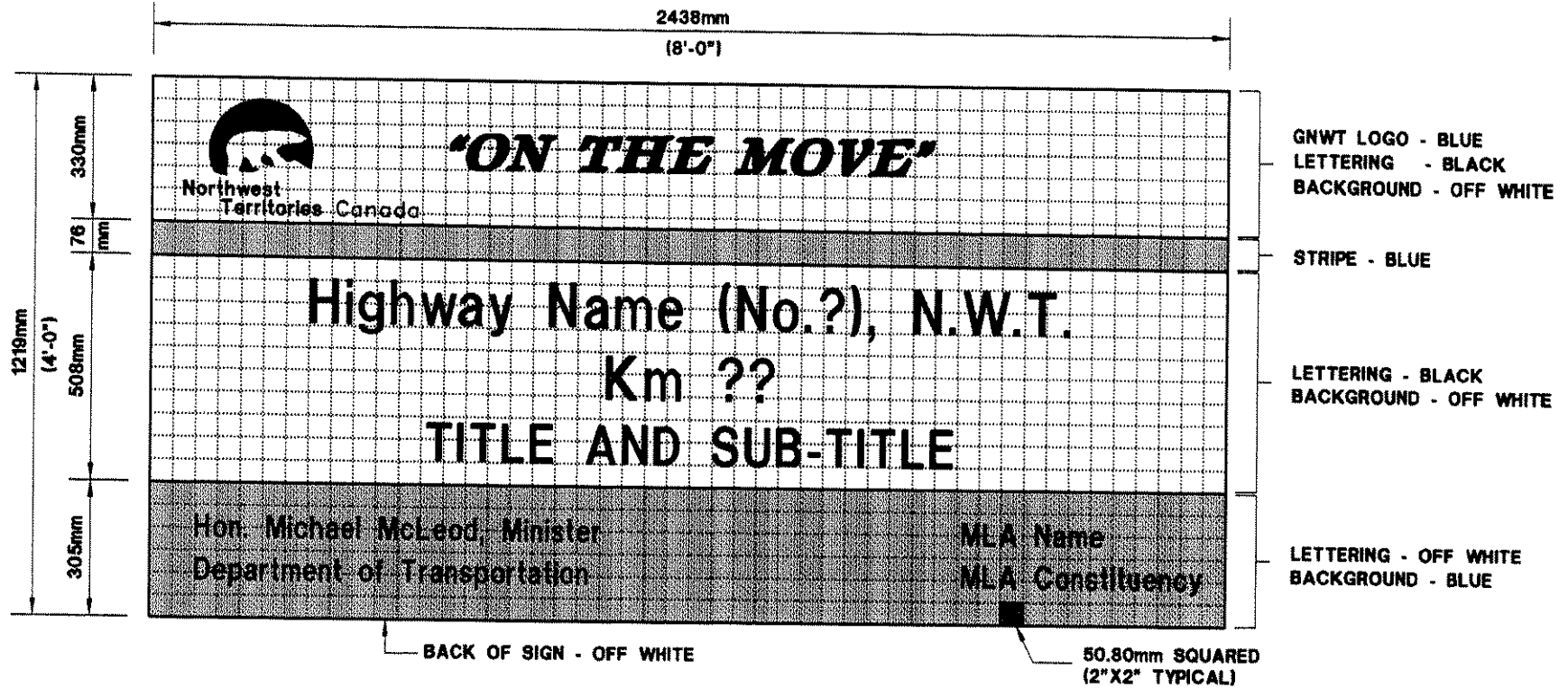
ASPHALTIC SURFACE PAVEMENT MARKINGS - PREMARKING POSTS

Date: FEB 2003

Revised:

Approved
K. Chiu
Director
Highways Division

APR 21 2005
Date



NOTES:

1. **SIGNBOARD:**
19mm THICK 1219mm x 2438mm DOUGLAS FIR PLYWOOD TO CSA-0121 STANDARD CONSTRUCTION MEDIUM DENSITY OVERLAY ONE SIDE.
2. **WEATHERTIGHT SEAL ON SIGNBOARD EDGES**
WOOD FILLER AND PAINT.
3. **TEXT INFORMATION:**
SILKSCREEN OR ADHESIVE TYPE LETTERING MATERIALS WITH APPROVAL.
4. **PAINT:**
THREE COAT ALKYD TYPE WITHOUT SILICONE ADDITIVES, 1st COAT: ALKYD PRIMER, 2nd & 3rd COATS: ALKYD GLOSS.
5. **COLOURS:**
BLUE: GENERAL PAINT 436D OR BENJAMIN MOORE 9-8 OR PANTONE No. 299
OFF-WHITE: GENERAL PAINT 4598W OR BENJAMIN MOORE 16-11.
BLACK: ANY BLACK STANDARD.
6. **TYPOGRAPHY:**
"ON THE MOVE" - CHALLENGE BOLD, UPPER CASE;
OTHER - AVANT GARDE MEDIUM-UPPER & LOWER CASE.
7. **SPACING:**
MAXIMUM OF FOUR DEPT. SIGNATURES PLACED 229mm APART.



SD-200-02-51
PROJECT SIGN

Date: DEC 1995

Revised: APRIL 2005

Approved

Director
Highways Division

APR 21 2005

Date



LETTERING - BLACK
 BACKGROUND - ORANGE
 HIGH INTENSITY
 REFLECTIVE
 SHEETING

BACK OF SIGN - OFF WHITE

NOTES:

1. **SIGNBOARD:**
 19mm THICK 1219mm x 2438mm DOUGLAS FIR PLYWOOD TO CSA-0121 STANDARD CONSTRUCTION MEDIUM DENSITY OVERLAY ONE SIDE.
2. SIGN FACE COATING TO BE HIGH INTENSITY GRADE REFLECTIVE SHEETING.
3. WEATHERTIGHT SEAL ON SIGNBOARD EDGES WOOD FILLER AND PAINT.
4. **TEXT INFORMATION:**
 SILKSCREEN OR ADHESIVE TYPE LETTERING MATERIALS WITH APPROVAL.
5. **PAINT:**
 THREE COAT ALKYD TYPE WITHOUT SILICONE ADDITIVES, 1st COAT: ALKYD PRIMER, 2nd & 3rd COATS: ALKYD GLOSS.
6. **COLOURS:**
 OFF-WHITE: GENERAL PAINT 4598W OR BENJAMIN MOORE 16-11.
 BLACK: ANY BLACK STANDARD.
7. **TYPOGRAPHY:**
 ALL TEXT - HELVETICA BOLD, UPPER CASE. "DEPARTMENT OF TRANSPORTATION" - HELVETICA LIGHT.



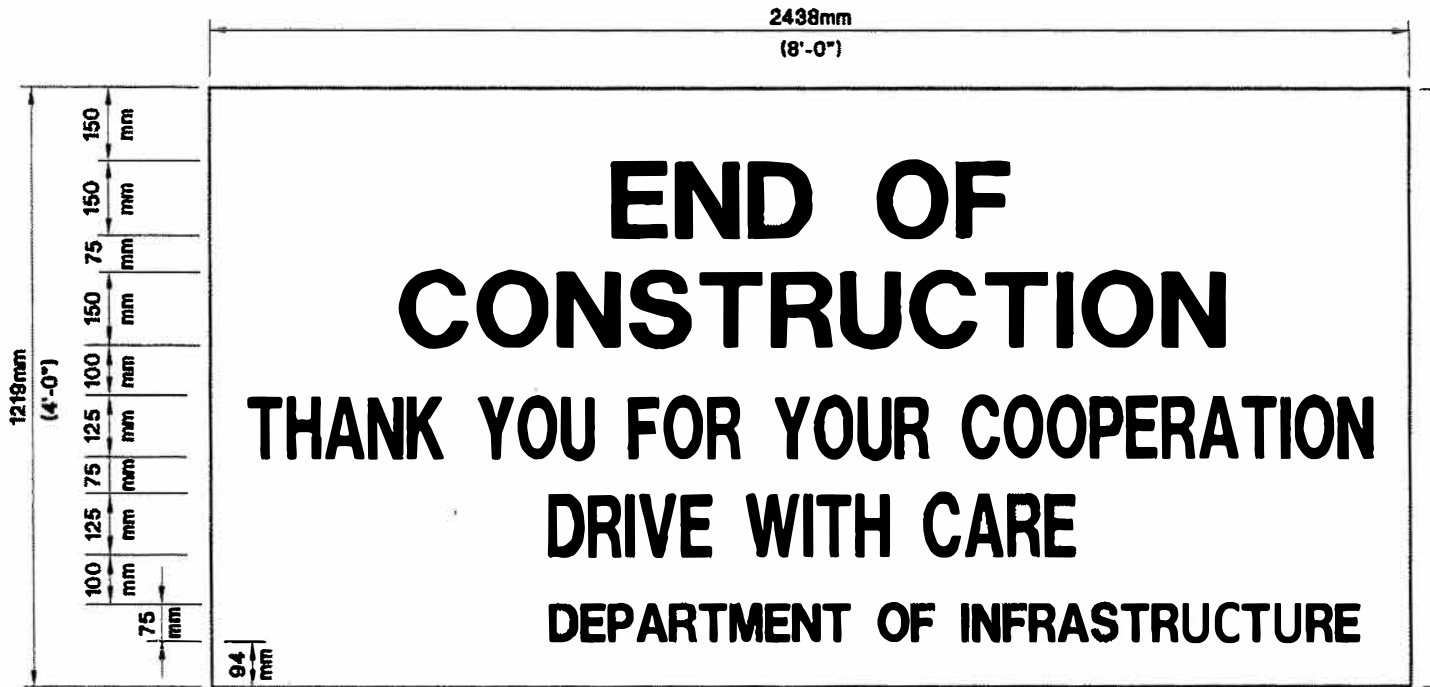
SD-200-02-52
 WARNING SIGN
 CONSTRUCTION

Date: DEC 1995

Revised: MARCH 2002

Approved
Kehkeol
 Director
 Highways Division

APR 21 2005
 Date



LETTERING - BLACK
BACKGROUND - OFF WHITE

BACK OF SIGN - OFF WHITE

NOTES:

1. **SIGNBOARD:**
19mm THICK 1219mm x 2438mm DOUGLAS FIR PLYWOOD TO CSA-0121 STANDARD CONSTRUCTION MEDIUM DENSITY OVERLAY ONE SIDE.
2. **WEATHERTIGHT SEAL ON SIGNBOARD EDGES**
WOOD FILLER AND PAINT.
3. **TEXT INFORMATION:**
SILKSCREEN OR ADHESIVE TYPE LETTERING MATERIALS WITH APPROVAL.
4. **PAINT:**
THREE COAT ALKYD TYPE WITHOUT SILICONE ADDITIVES, 1st COAT: ALKYD PRIMER, 2nd & 3rd COATS: ALKYD GLOSS.
5. **COLOURS:**
OFF-WHITE: GENERAL PAINT 4598W OR BENJAMIN MOORE 16-11.
BLACK: ANY BLACK STANDARD.
6. **TYPOGRAPHY:**
ALL TEXT - HELVETICA, UPPER CASE
"END OF CONSTRUCTION" - BOLD
"THANK YOU...WITH CARE" - BOLD, CONDENSED
"DEPARTMENT OF TRANSPORTATION" - LIGHT



SD-200-02-53

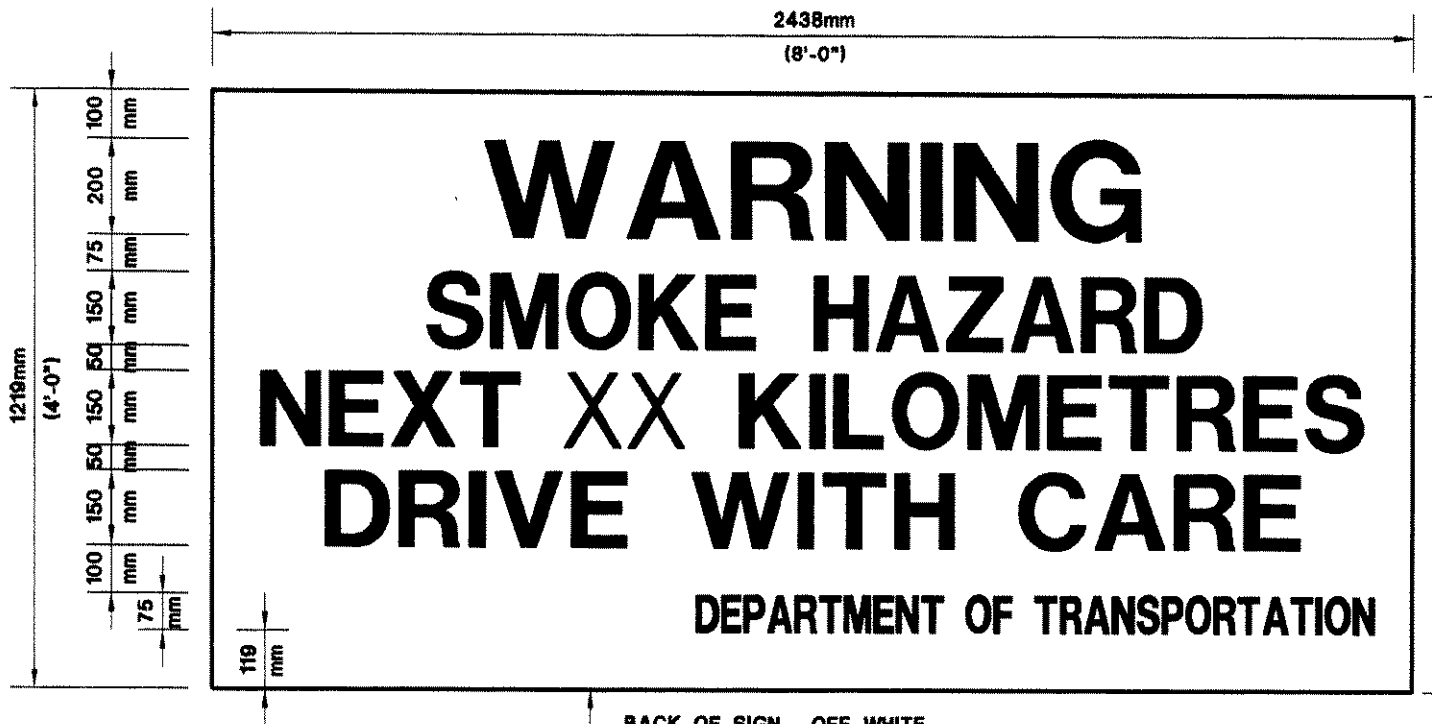
END OF
CONSTRUCTION

Date: DEC 1995

Revised: MARCH 2002

Approved
K. [Signature]
Director
Roadways Division

APR 21 2005
Date



LETTERING - BLACK
 BACKGROUND - ORANGE
 HIGH INTENSITY
 REFLECTIVE
 SHEETING

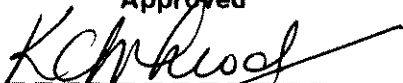
BACK OF SIGN - OFF WHITE

NOTES:

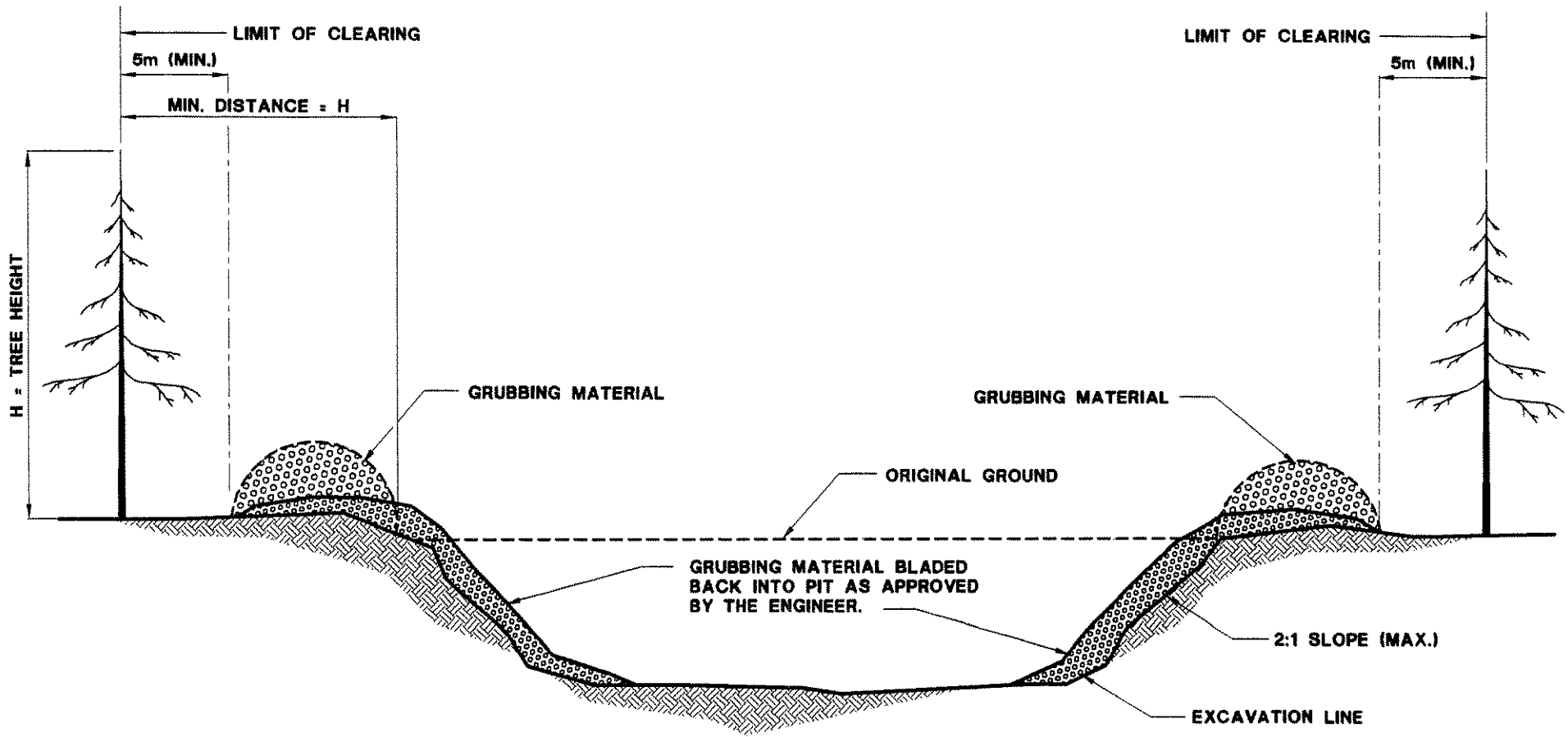
1. SIGNBOARD:
19mm THICK 1219mm x 2438mm DOUGLAS FIR PLYWOOD TO CSA-0121 STANDARD CONSTRUCTION MEDIUM DENSITY OVERLAY ONE SIDE.
2. SIGN FACE COATING TO BE HIGH INTENSITY GRADE REFLECTIVE SHEETING.
3. WEATHERTIGHT SEAL ON SIGNBOARD EDGES WOOD FILLER AND PAINT.
4. TEXT INFORMATION:
SILKSCREEN OR ADHESIVE TYPE LETTERING MATERIALS WITH APPROVAL.
5. PAINT:
THREE COAT ALKYD TYPE WITHOUT SILICONE ADDITIVES, 1st COAT: ALKYD PRIMER, 2nd & 3rd COATS: ALKYD GLOSS.
6. COLOURS:
OFF-WHITE: GENERAL PAINT 4598W OR BENJAMIN MOORE 16-11.
BLACK: ANY BLACK STANDARD.
7. TYPOGRAPHY:
ALL TEXT - HELVETICA BOLD, UPPER CASE. "DEPARTMENT OF TRANSPORTATION" - HELVETICA LIGHT.



SD-200-02-54	
WARNING SIGN SMOKE	
Date: DEC 1995	Revised: MARCH 2002

Approved

 Director
 Highways Division

APR 21 2005
 Date



NOTE:
 EXCAVATION AND RESTORATION SHALL BE CARRIED
 OUT IN ACCORDANCE WITH THE PROVISIONS OF
 THE TERRITORIAL LANDS ACT.



SD-300-04-01

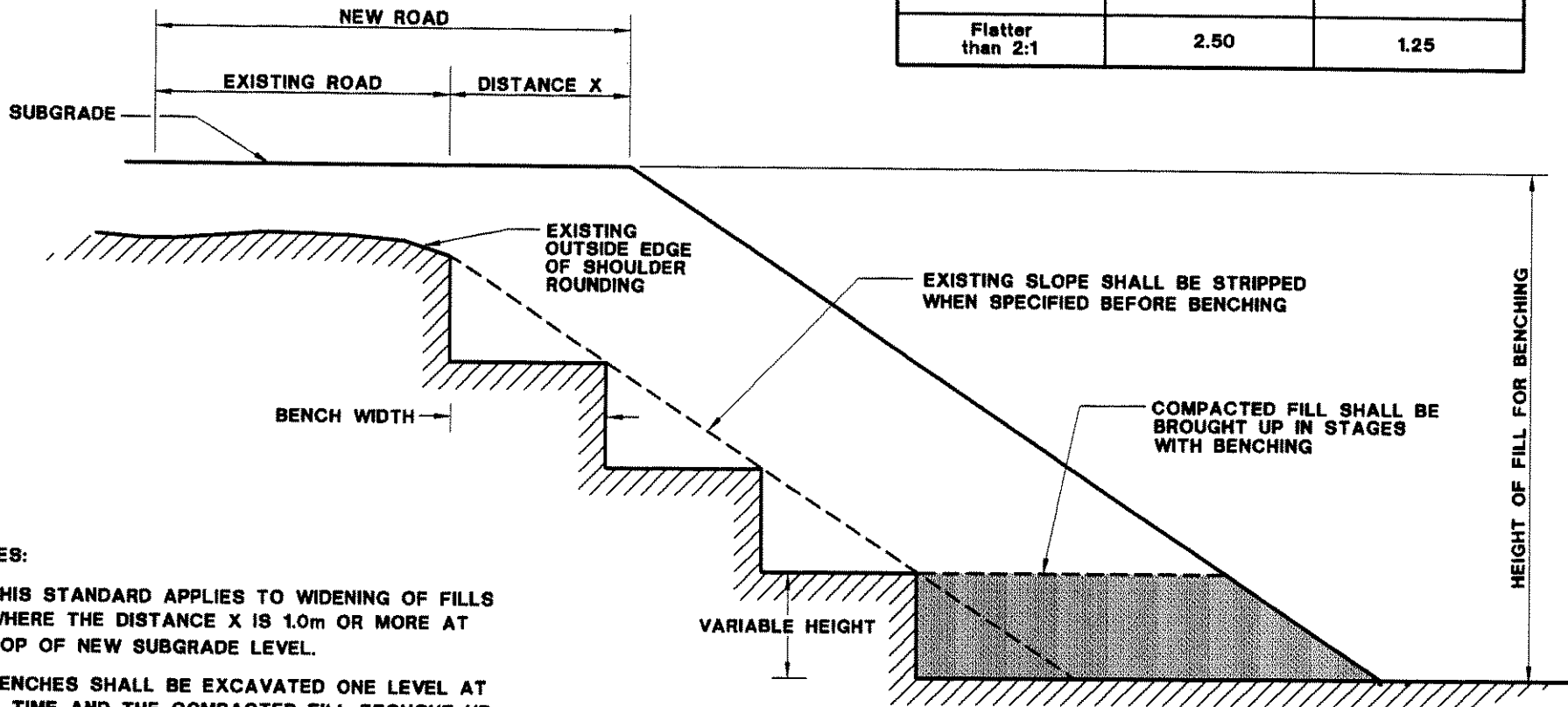
BORROW PIT CROSS-SECTION

Date: DEC. 1995 Revised: MARCH 2001

Approved
K. Chiu
 Director
 Highways Division

APR 21 2005
 Date

WIDTH OF BENCHES (m)		
EXISTING SLOPES	FILLS OF 3.5m OR GREATER	FILLS LESS THAN 3.5m
2:1	1.25	0.80
Flatter than 2:1	2.50	1.25



NOTES:

- A) THIS STANDARD APPLIES TO WIDENING OF FILLS WHERE THE DISTANCE X IS 1.0m OR MORE AT TOP OF NEW SUBGRADE LEVEL.
- B) BENCHES SHALL BE EXCAVATED ONE LEVEL AT A TIME AND THE COMPACTED FILL BROUGHT UP BEFORE THE NEXT BENCHING LEVEL IS EXCAVATED.
- C) ALL DIMENSIONS ARE SHOWN IN METRES UNLESS OTHERWISE SHOWN.



SD-300-06-01

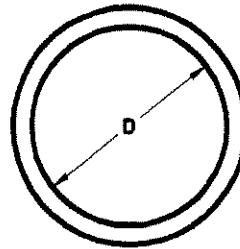
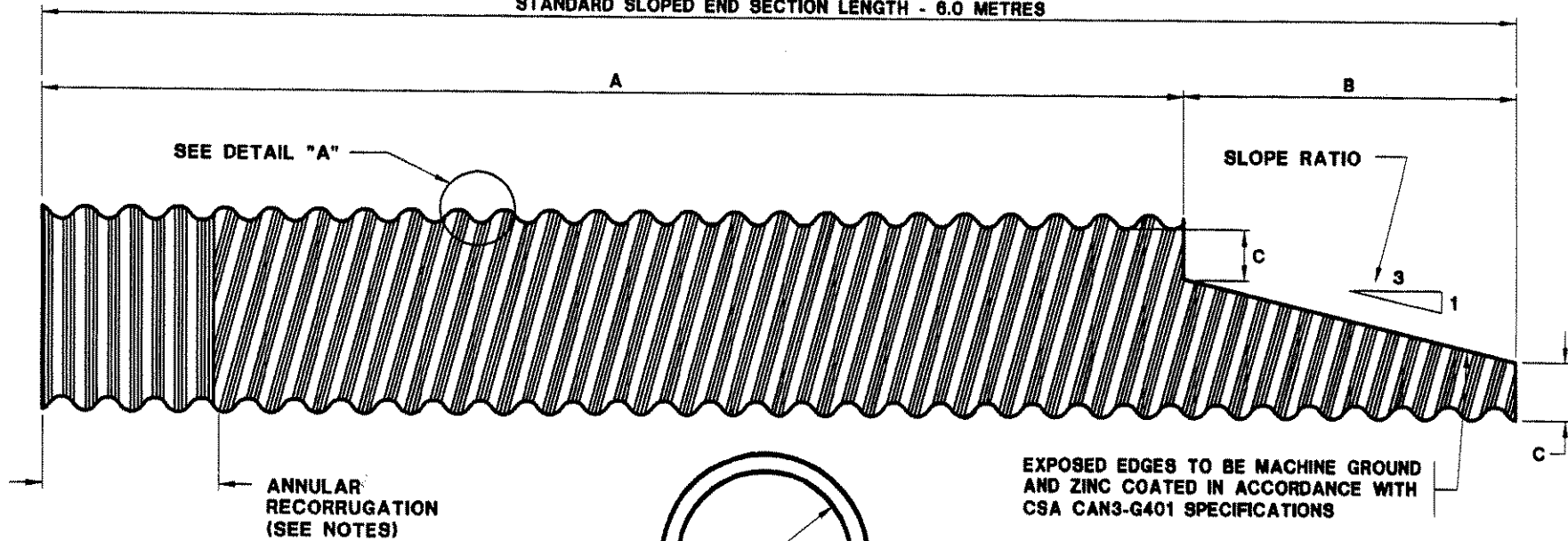
BENCHING FOR EMBANKMENT WIDENING

Date: DEC 1995 Revised: APRIL 2005

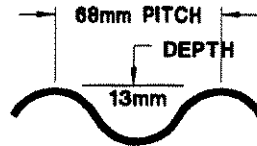
Approved
K. A. Wood
Director
Highways Division

APR 21 2005
Date

STANDARD SLOPED END SECTION LENGTH - 6.0 METRES



END SECTION



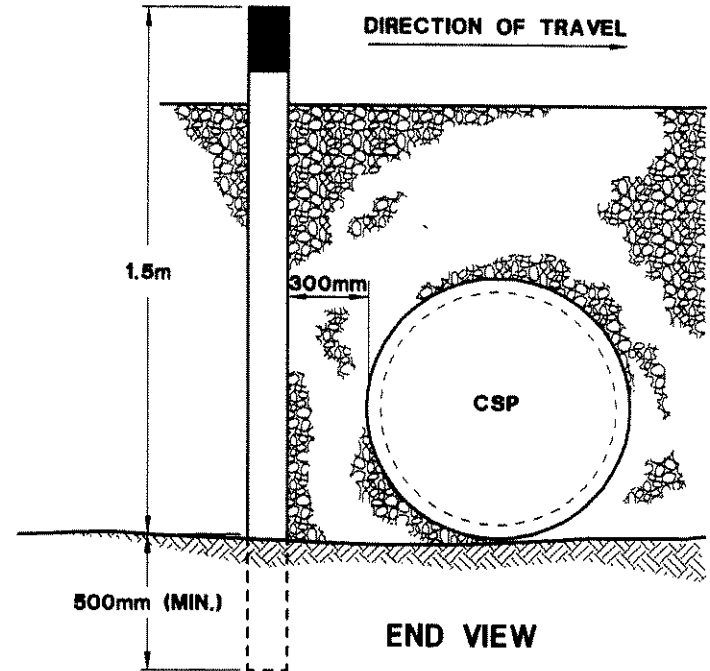
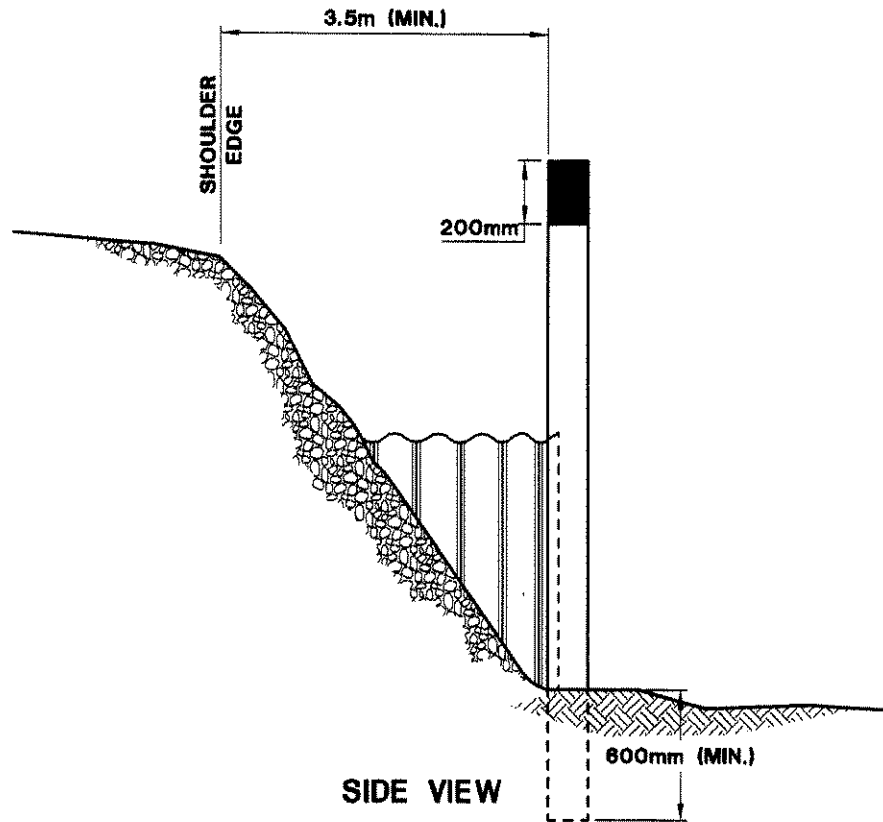
DETAIL "A"
CORRUGATION PROFILE

INSIDE DIAMETER 'd' mm	SLOPE RATIO X:Y	"A" Metre	"B" Metre	"C" mm	WALL THICKNESS mm
600	3:1	5.10	0.90	150	2.8
700	3:1	4.80	1.20	150	2.8
800	3:1	4.80	1.20	200	2.8
900	3:1	4.50	1.50	200	2.8
1000	3:1	4.35	1.65	225	2.8
1100	3:1	4.05	1.95	225	2.8
1200	3:1	3.75	2.25	225	2.8
≥1500	3:1	3.00	3.00	250	3.5

EXPOSED EDGES TO BE MACHINE GROUND AND ZINC COATED IN ACCORDANCE WITH CSA CAN3-G401 SPECIFICATIONS

NOTES:

- 1) THE SUPPLY AND FABRICATION OF ALL GALVANIZED CORRUGATED STEEL PIPE (C.S.P.) SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF CANADIAN STANDARDS ASSOCIATION CAN3-G401 SPECIFICATIONS.
- 2) ON PIPE DIAMETERS OF 1000mm OR GREATER, LOCK SEAMS TERMINATING AT THE CUT EDGES OF SLOPES OR SQUARE ENDED SECTIONS SHALL HAVE A 50mm LENGTH FILLET WELD RUN ALONG THE LOCK SEAM AT EACH CUT EDGE.
- 3) THE HELICALLY CORRUGATED PIPE SHALL HAVE THE PIPE ENDS RECORRUGATED TO PROVIDE ANNULAR CORRUGATIONS FOR COUPLING PURPOSES (AS SHOWN). THE MINIMUM LENGTH WITH ANNULAR CORRUGATIONS SHALL BE 300mm FOR PIPE DIAMETERS OF 900mm OR LESS AND 600mm FOR PIPE DIAMETERS GREATER THAN 900mm.
- 4) THE COUPLER SHALL BE AN ANNULAR CORRUGATED BAND TYPE WITH A MINIMUM OF 3 BOLTS PER COUPLER FOR PIPE DIAMETERS OF 800mm OR GREATER.



NOTE:

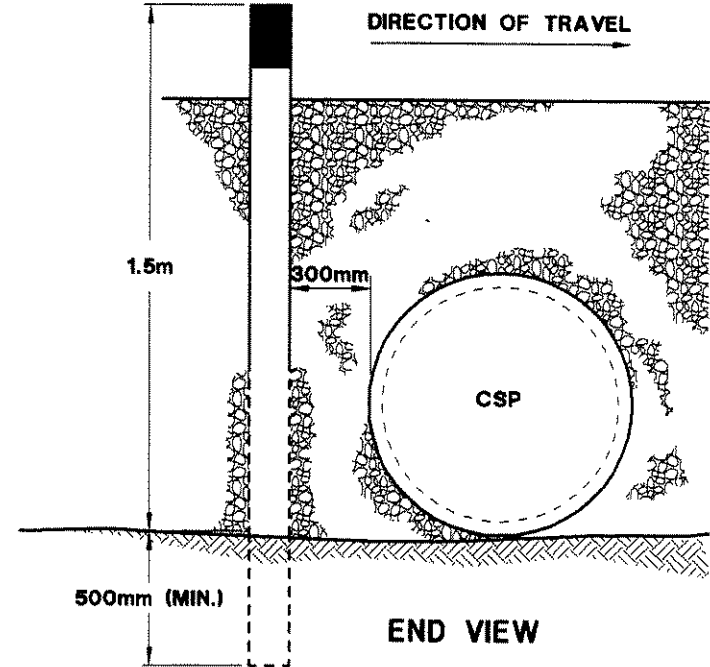
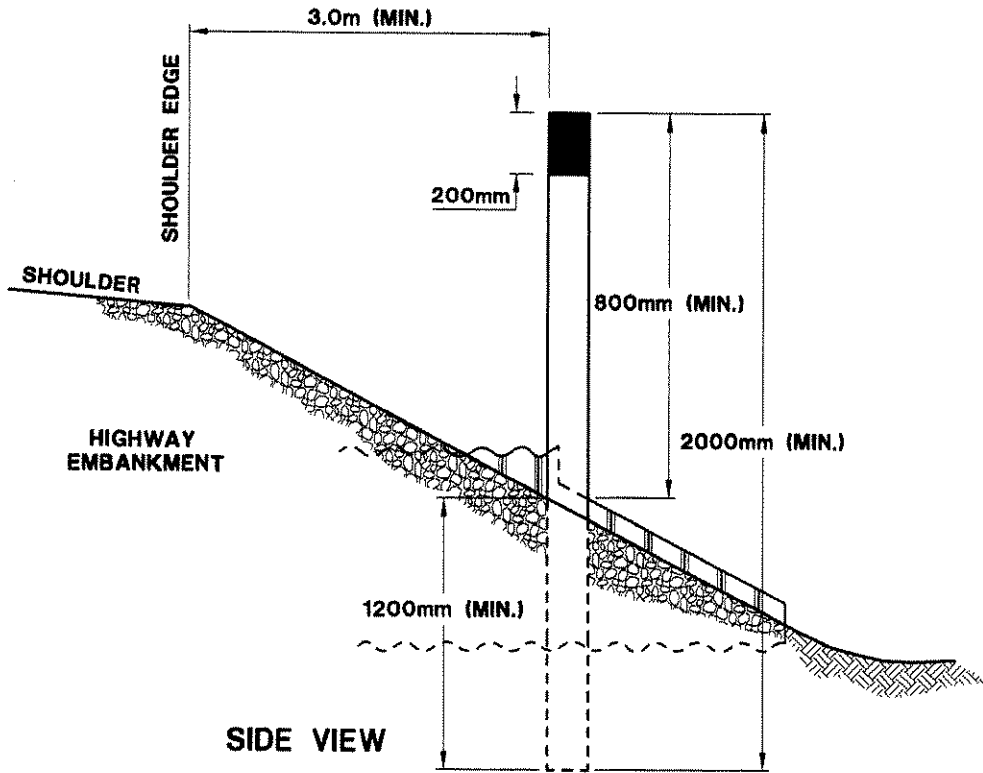
- MARKER POSTS SHALL BE 100mm(4") x 100mm(4") x 2000mm (MIN.) LONG.
- COLOR: WHITE WITH BLACK TOP (200mm).
- MARK ALL THROUGH GRADE STRUCTURES THAT HAVE A VERTICAL HEIGHT OF 2 METRES OR LESS.
- PLACE MARKER 300mm FROM THE CULVERT ON THE LEFT SIDE (WHEN FACING END OF CULVERT) EVEN WITH THE END OF CULVERT.
- MARKER MUST BE AT LEAST 3.5m FROM SHOULDER EDGE.



SD-400-01-52	
TYPICAL CULVERT MARKER INSTALLATION	
Date: DEC 1995	Revised: APRIL 2005

Approved
K. K. Wood
 Director
 Highways Division

APR 21 2005
 Date



NOTE:

- MARKER POSTS SHALL BE 100mm(4") x 100mm(4") x 2000mm (MIN.) LONG.
- COLOR: WHITE WITH BLACK TOP (200mm).
- MARK ALL THROUGH GRADE STRUCTURES THAT HAVE A VERTICAL HEIGHT OF 2 METRES OR LESS.
- PLACE MARKER 300mm FROM THE CULVERT ON THE LEFT SIDE (WHEN FACING END OF CULVERT).
- MARKER MUST BE AT LEAST 3.0m FROM SHOULDER EDGE.



Northwest Territories Transportation

SD-400-01-53

TYPICAL SLOPED END CULVERT MARKER INSTALLATION

Date: DEC. 1995

Revised: MARCH 2001

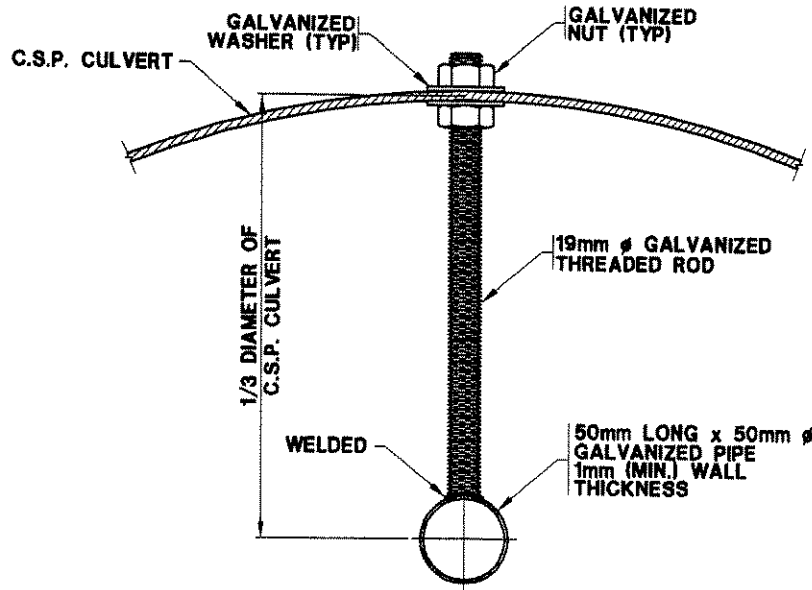
Approved

K. Chiodo

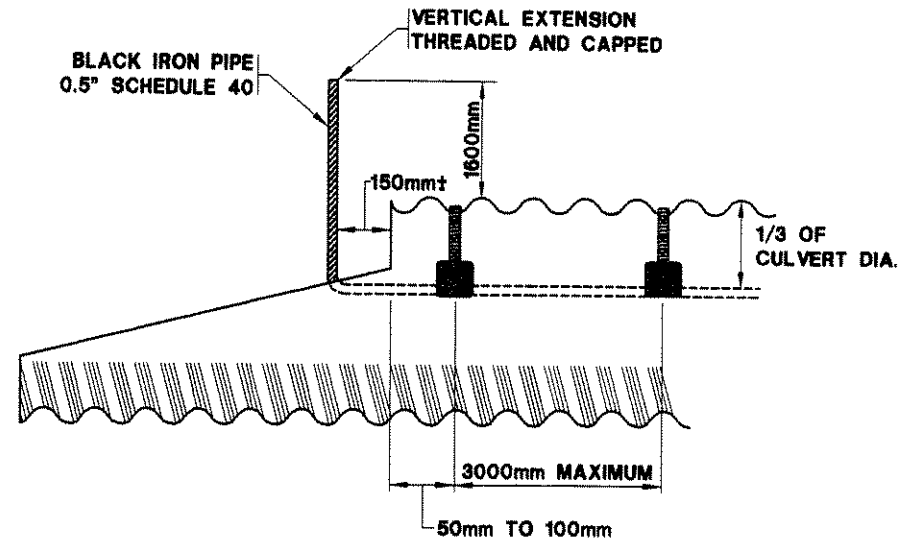
Director
Highways Division

APR 21 2005

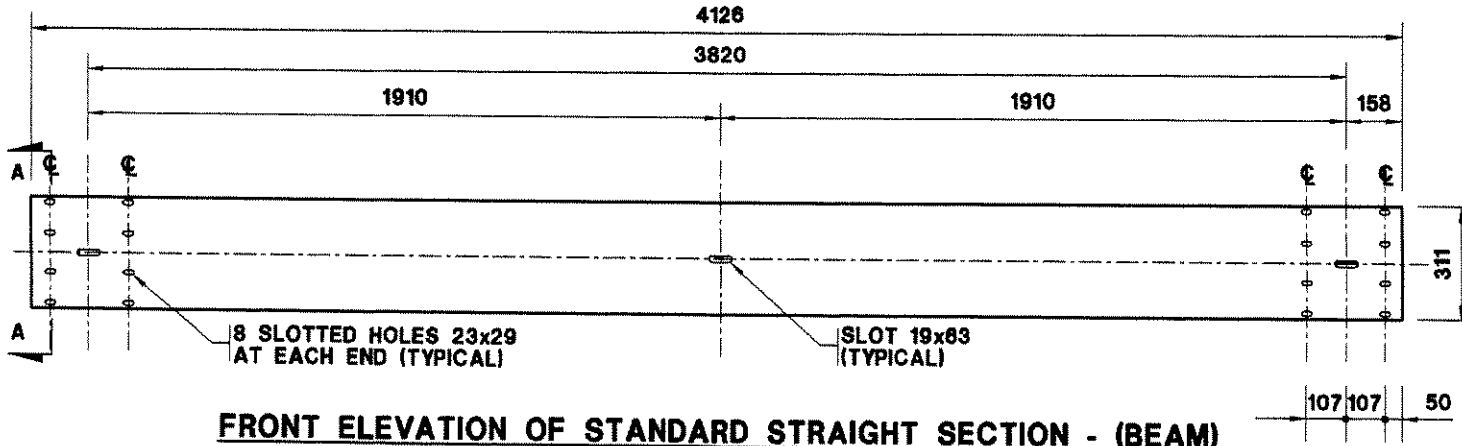
Date



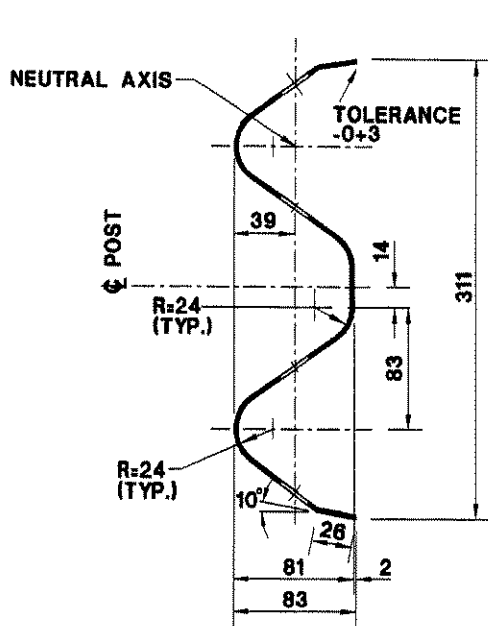
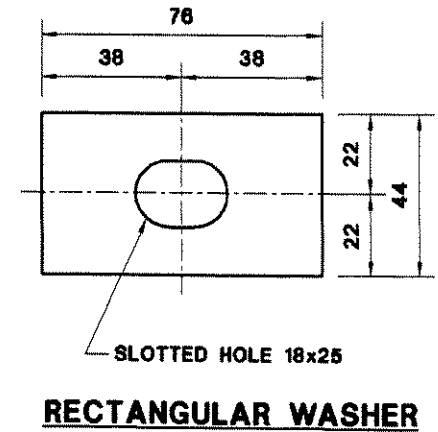
CROSS-SECTION VIEW



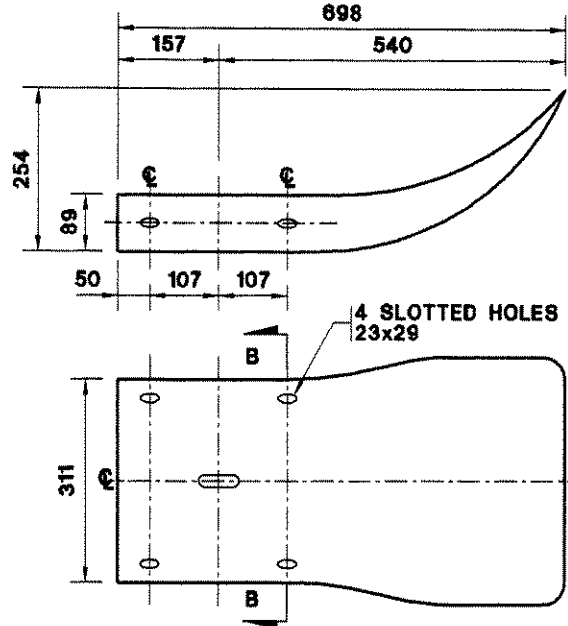
LONGITUDINAL SECTION VIEW



FRONT ELEVATION OF STANDARD STRAIGHT SECTION - (BEAM)

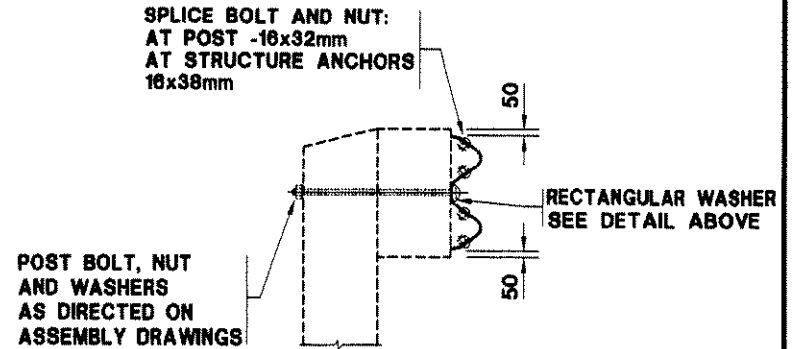


ENLARGED SECTION A-A
(SECTION B-B, SIMILAR)



STANDARD WING TERMINAL SECTION

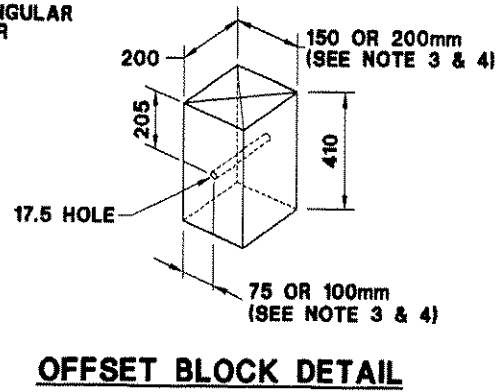
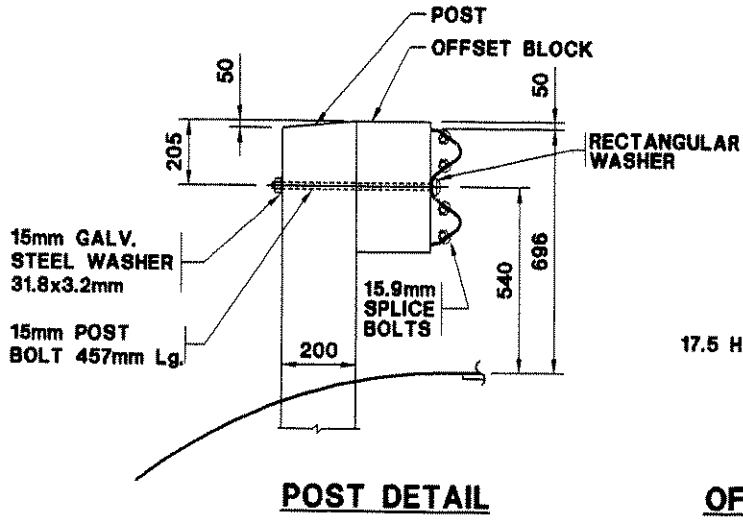
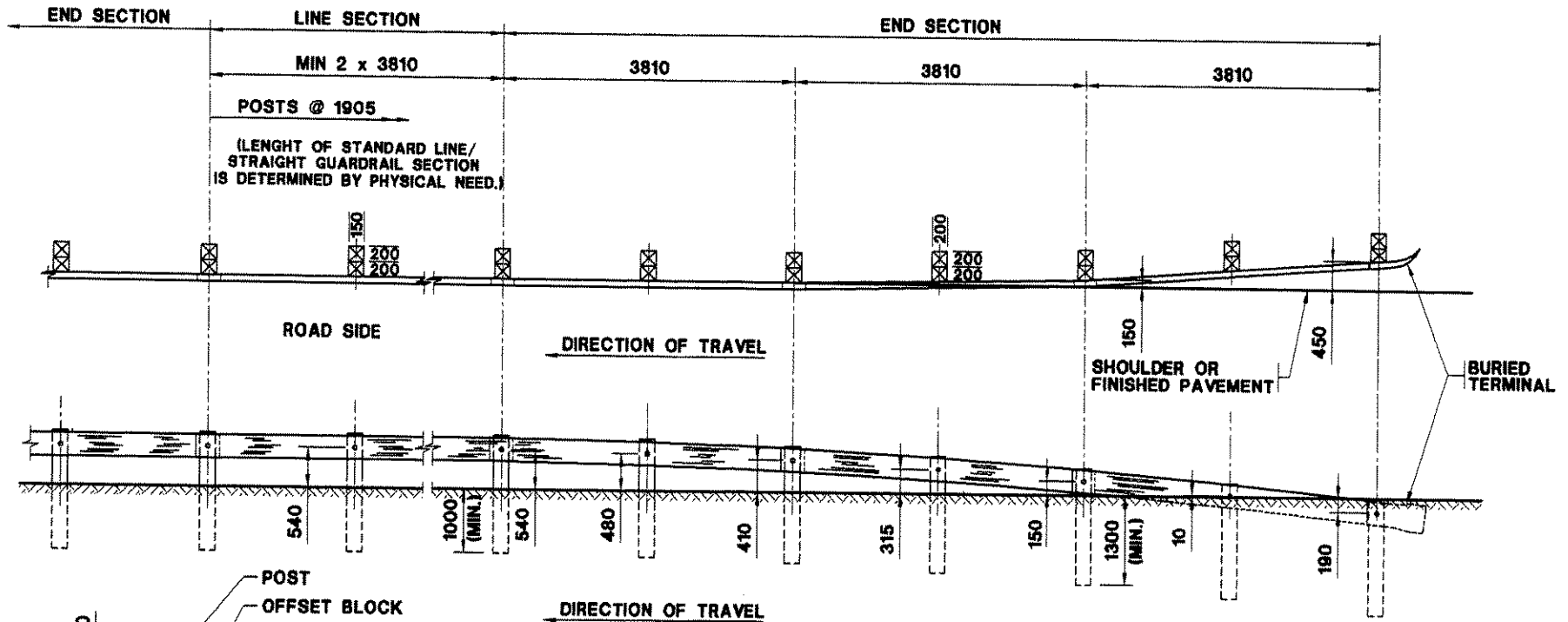
SPLICE BOLT AND NUT:
AT POST -16x32mm
AT STRUCTURE ANCHORS
16x38mm



ARRANGEMENT AT POST

NOTE:


1. THICKNESS OF RAIL TO BE 2.8mm, THICKNESS OF RECTANGULAR WASHER TO BE 4.0mm.
2. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES UNLESS OTHERWISE INDICATED.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.



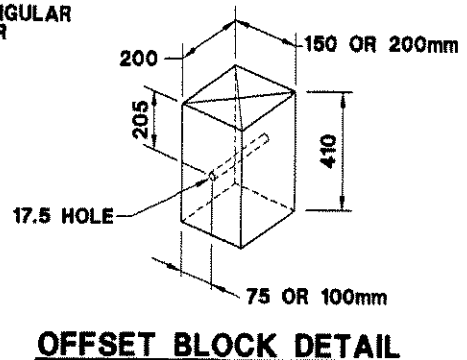
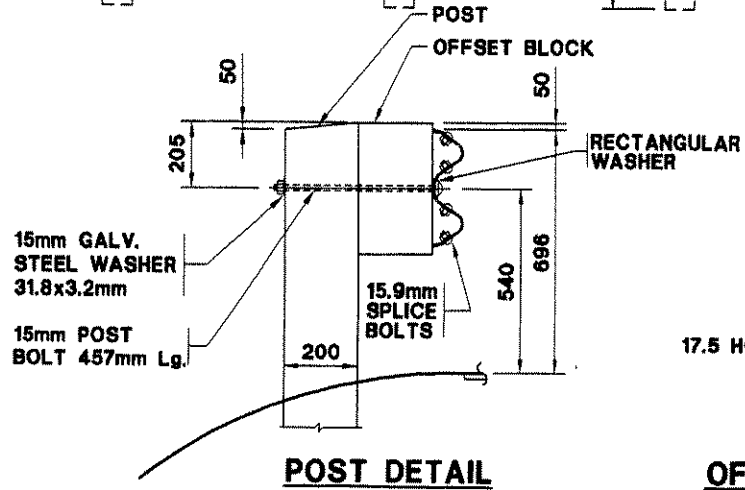
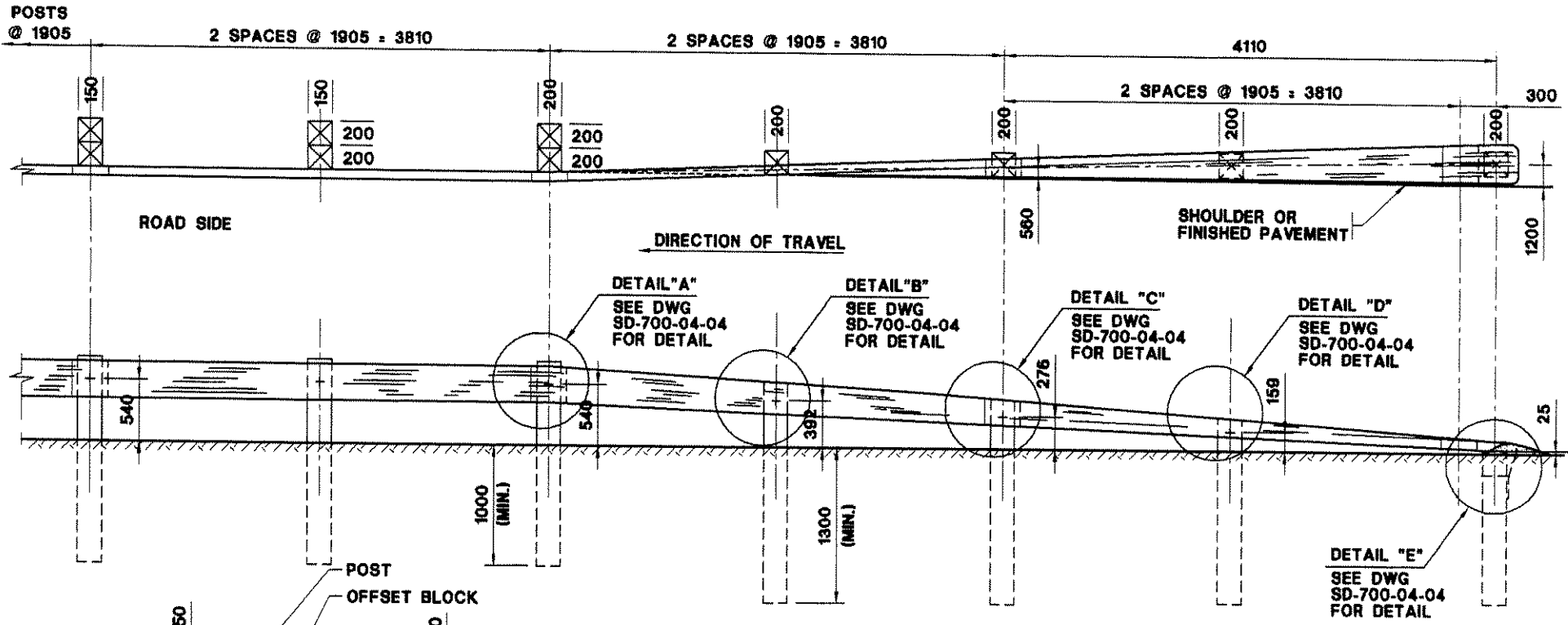
- NOTES:**
1. END POSTS 200mm x 200mm
 2. LINE POSTS 150mm x 200mm
 3. OFFSET BLOCKS FOR END POSTS 200mm x 200mm x 410mm
 4. OFFSET BLOCKS FOR LINE POSTS 150mm x 200mm x 410mm
 5. ALL MEASUREMENTS IN MILLIMETRES
 6. ALL JOINTS TO BE LAPPED IN THE DIRECTION OF TRAFFIC
 7. BURIED TERMINALS ARE TO BE USED AT BOTH ENDS OF GUARDRAIL



SD-700-04-02	
STEEL W-BEAM GUARDRAIL BURIED TERMINALS INSTALLATION DETAIL	
Date: JULY 1994	Revised: MARCH 2002

Approved

 Director
 Highways Division

APR 21 2005
 Date



- NOTES:**
1. ALL TIMBERS ARE 200 x 200 x 1800 EXCEPT AS NOTED
 2. ALL LAPS TO BE MADE IN DIRECTION OF TRAFFIC
 3. ALL MEASUREMENTS IN MILLIMETRES
 4. ALL JOINTS TO BE LAPPED IN THE DIRECTION OF TRAFFIC
 5. TURNED DOWN TERMINALS ARE TO BE USED AT BOTH ENDS OF GUARDRAIL



SD-700-04-03	
STEEL W-BEAM GUARDRAIL TURNED DOWN TERMINAL INSTALLATION DETAIL	
Date: JULY 1996	Revised: MARCH 2002

Approved
K. Chiodo
 Director
 Highways Division

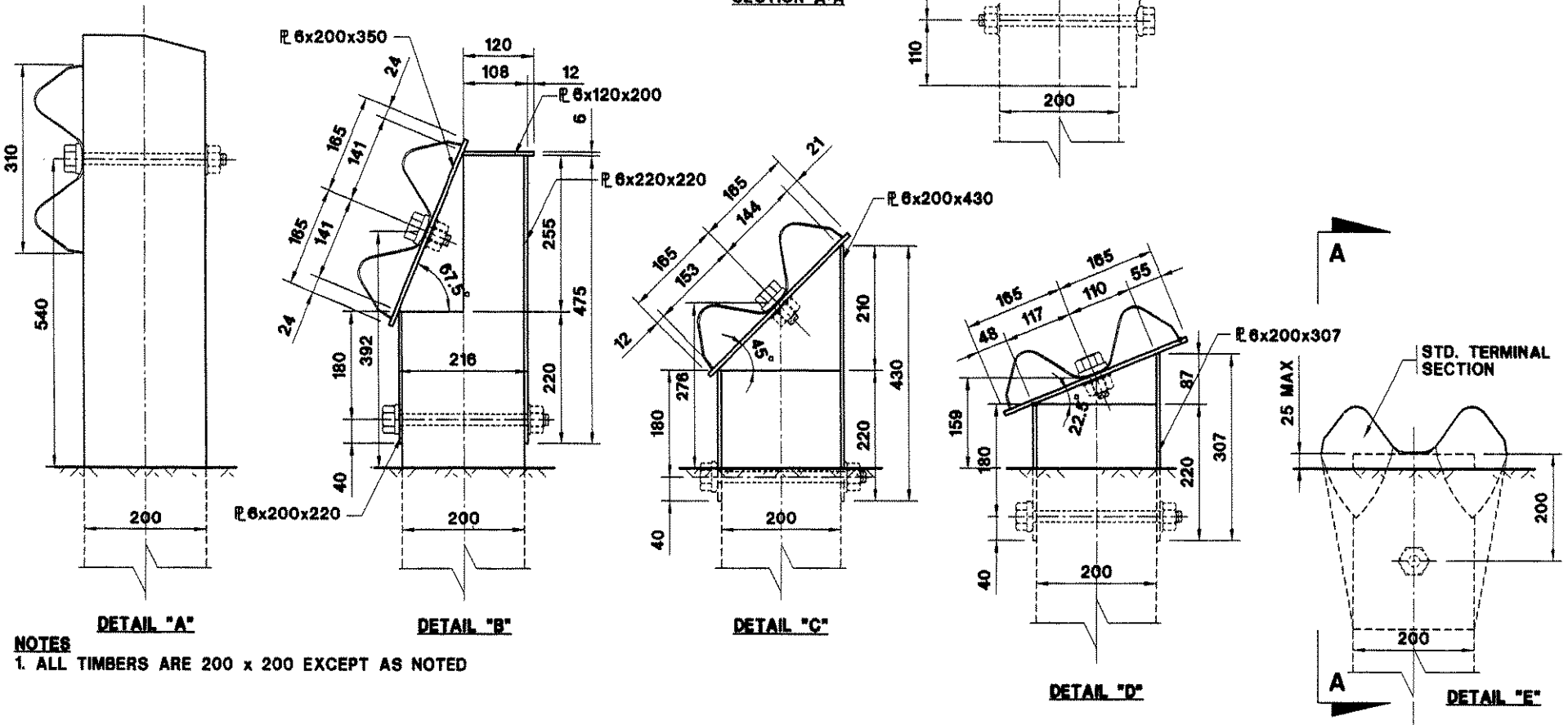
APR 21 2005
 Date

STEEL BEAM GUARDRAIL

STD. TERMINAL SECTION

PLACE NATIVE/
GRANULAR BACKFILL

SECTION A-A



DETAIL "A"

DETAIL "B"

DETAIL "C"

DETAIL "D"

DETAIL "E"

NOTES

1. ALL TIMBERS ARE 200 x 200 EXCEPT AS NOTED



SD-700-04-04

STEEL W-BEAM GUARDRAIL
POST CAP DETAILS

Date: JULY 1998

Revised: MARCH 2002

Approved

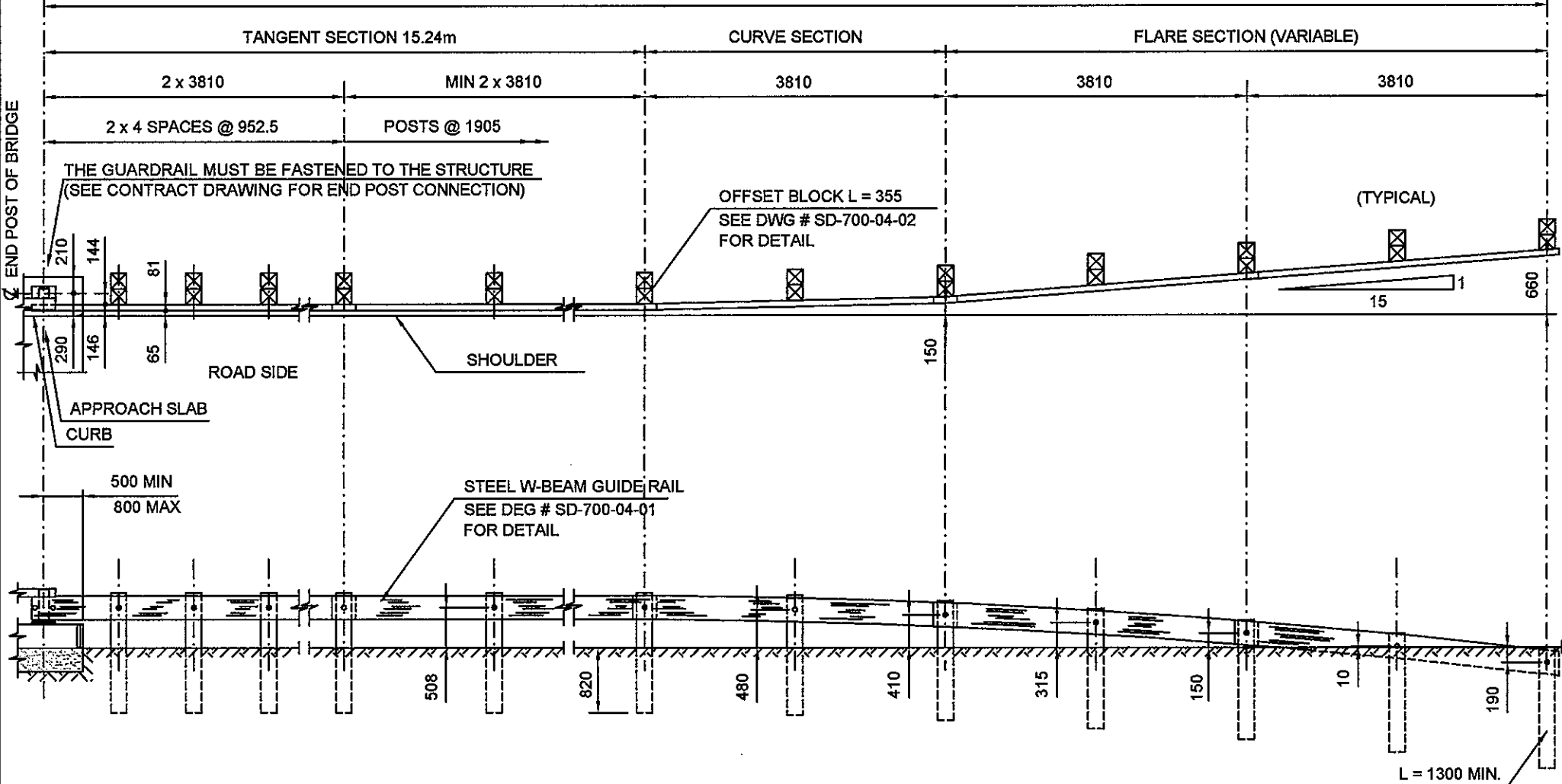
K. K. K.

Director
Highways Division

APR 21 2005

Date

APPROACH GUIDE RAIL SYSTEM - MIN 26.67m LONG



- NOTES**
1. ALL TIMBERS ARE 150 x 200 x 1500 EXCEPT AS NOTED
 2. ALL LAPS TO BE MADE IN DIRECTION OF TRAFFIC
 3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

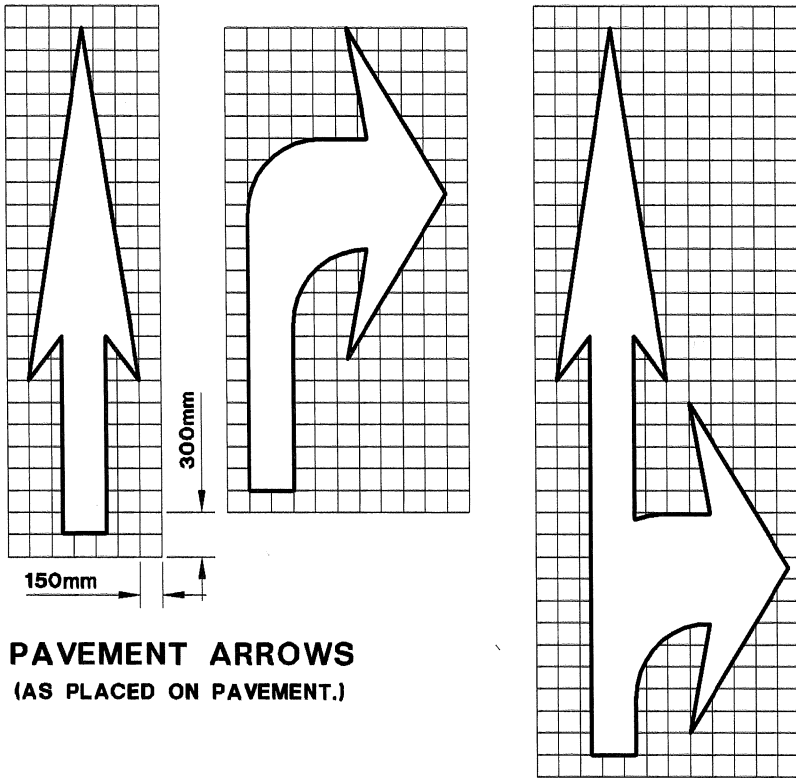


SD-700-04-05
 STEEL W-BEAM GUARDRAIL
 PLACEMENT AT BRIDGE APPROACHES
 (TWO-LANE TRAFFIC)

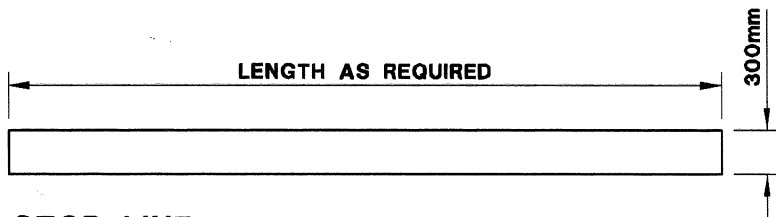
Date: APRIL 2007 Revised:

Approved
K. Powell
 Director
 Highways Division

21/11/07
 Date



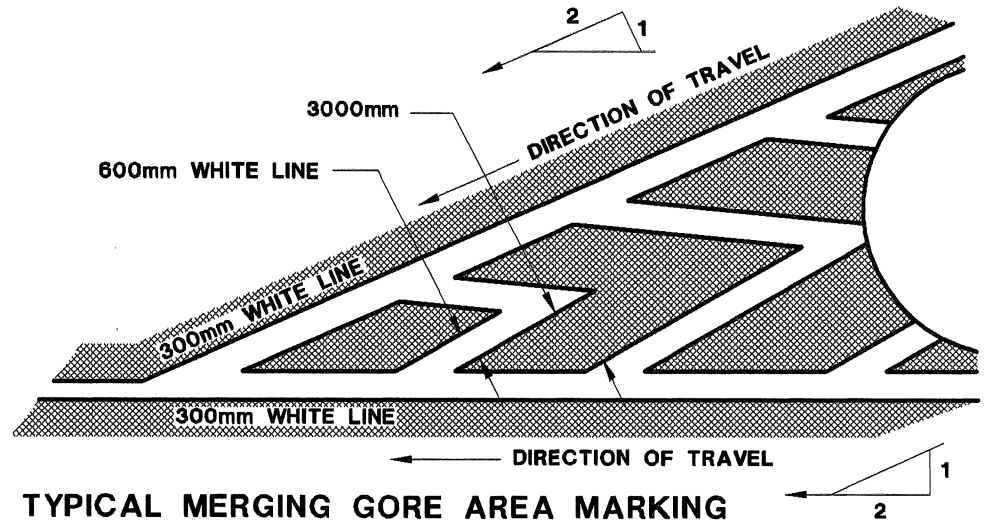
PAVEMENT ARROWS
(AS PLACED ON PAVEMENT.)



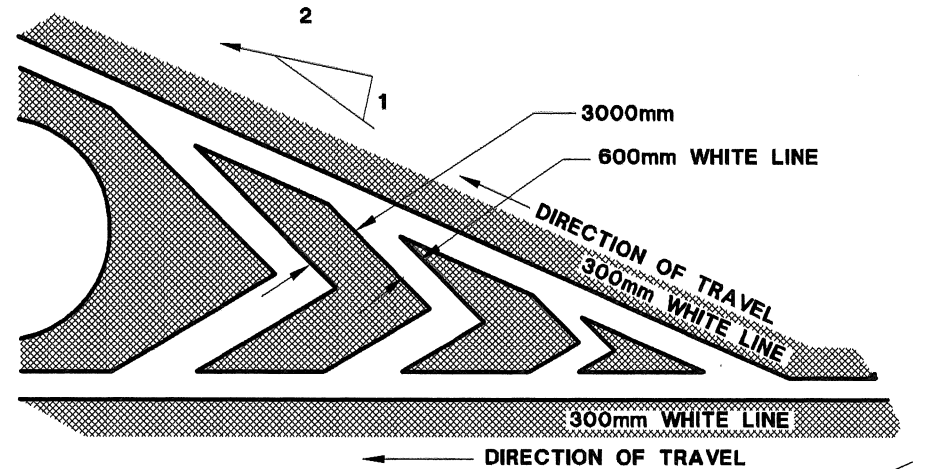
STOP LINE

NOTE:

ALL MISCELLANEOUS PAINTED ROADWAY MARKINGS SHALL BE WHITE UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



TYPICAL MERGING GORE AREA MARKING



TYPICAL DIVERGING GORE AREA MARKING



SD-800-01-01

MISCELLANEOUS PAINTED
ROADWAY MARKINGS

Date: DEC 1995

Revised: MARCH 2002

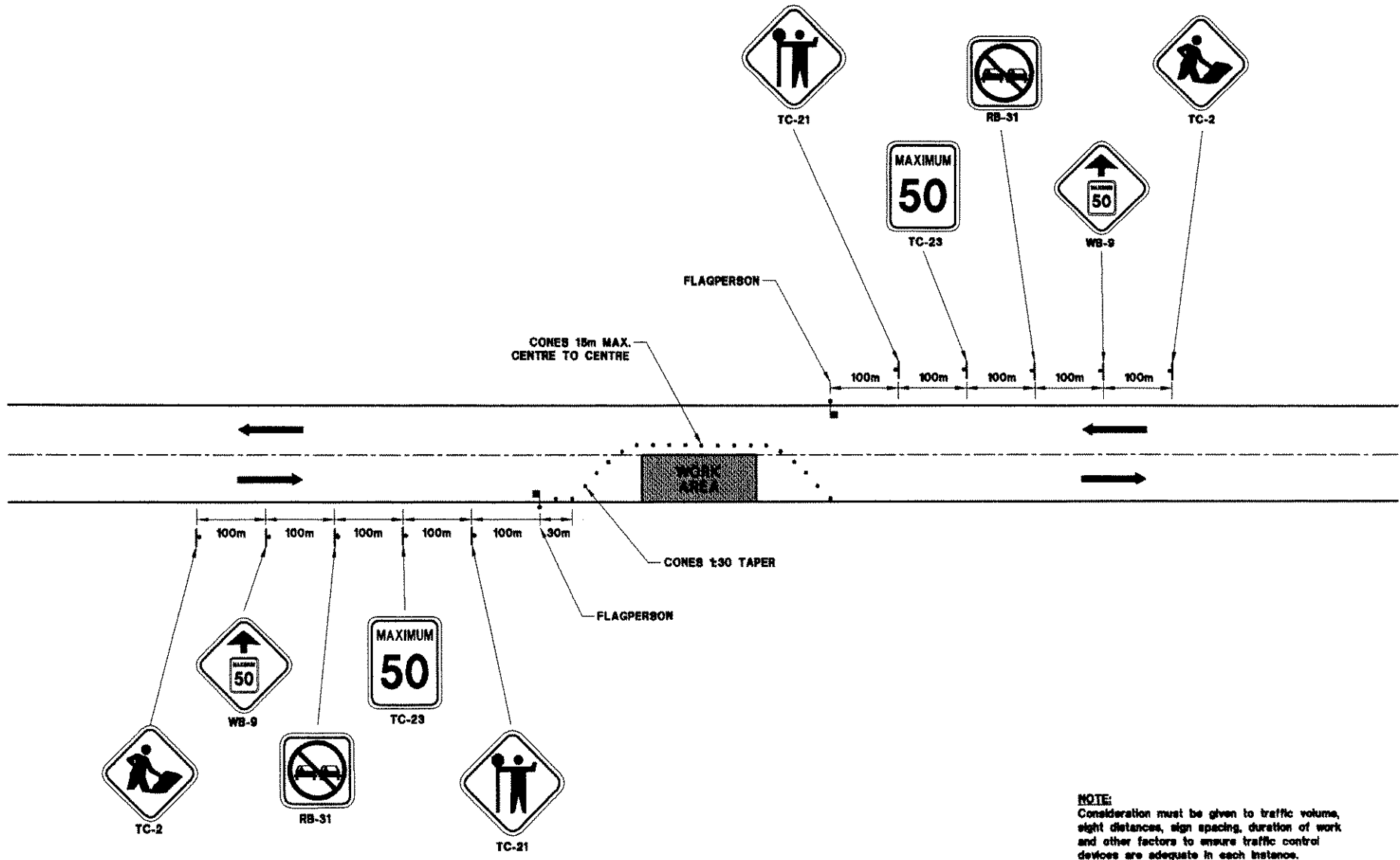
Approved

Kehweg

Director
Highways Division

APR 21 2005

Date



NOTE:
 Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.

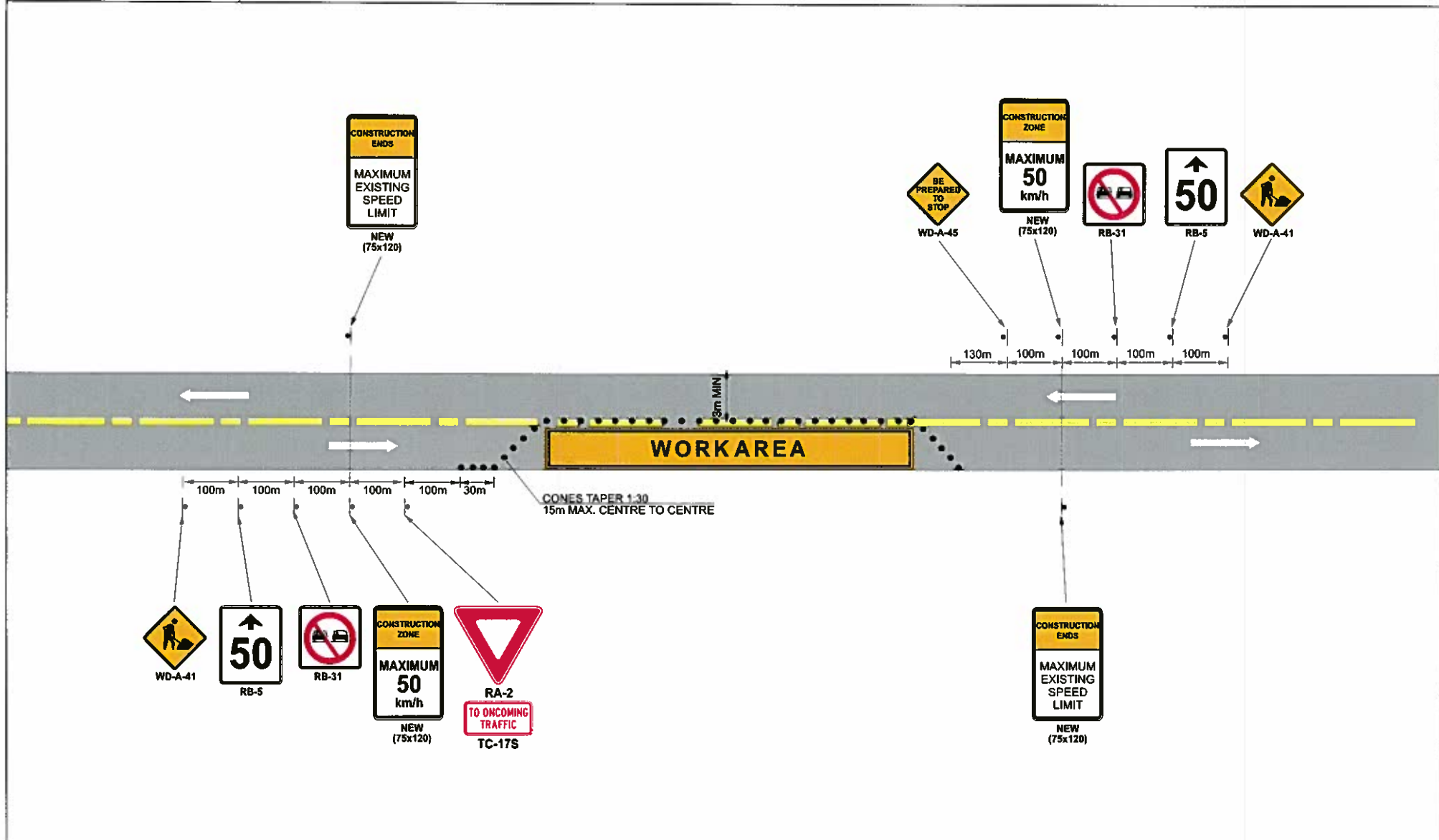


SD-1000-01-01
TYPICAL SIGNING
TEMPORARY ONE LANE CLOSURE
(ONE LANE ALTERNATING TRAFFIC)

Date: **MARCH 2003** Revised: **APRIL 2005**

Approved
K. O. Hood
 Director
 Highways Division

APR 21 2005
 Date



NOTE:
 1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
 2. For AADT>100 use SD-1000-01-08.

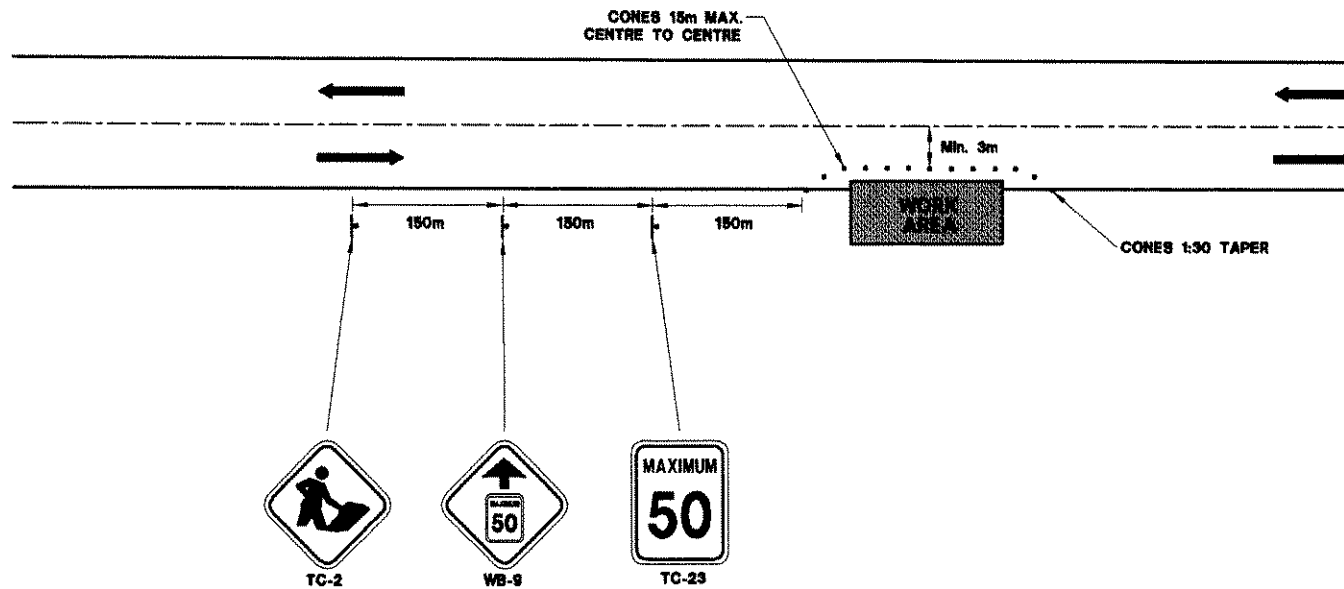


SD-1000-01-02
 TYPICAL SIGNING SHORT DURATION (MAX 100 AADT)
 TEMPORARY ONE LANE CLOSURE
 (ONE LANE ALTERNATING TRAFFIC)

DATE: AUGUST 2009 REVISED DATE: APRIL 2013

Approved
Kuhwed
 Director
 Highways & Marine Division

MAY 06 2013
 Date



NOTE:
 This application to be used only if a minimum of 3 metres of the travel lane remains open for traffic. If less than 3 metres, signage for one lane closure are to applied.

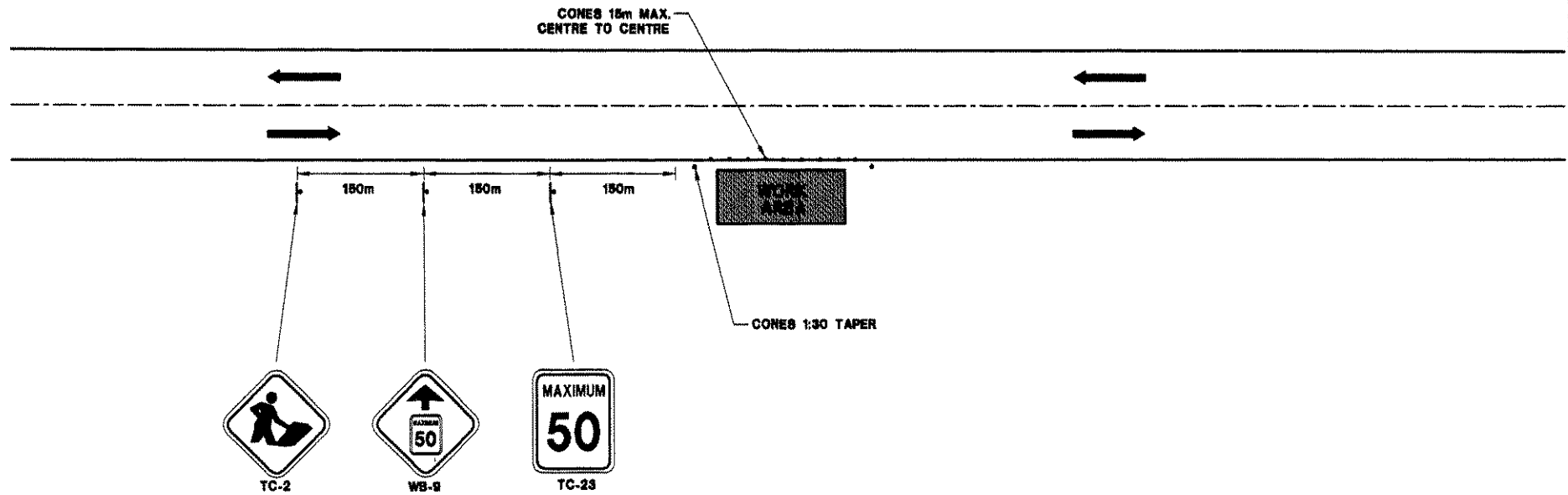


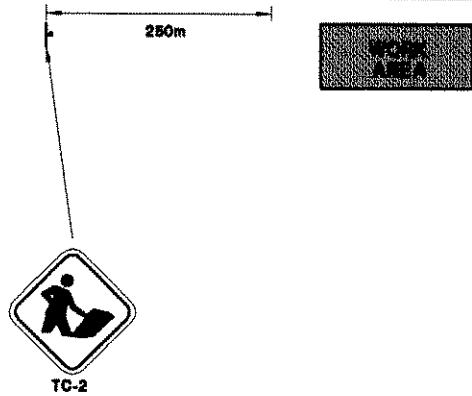
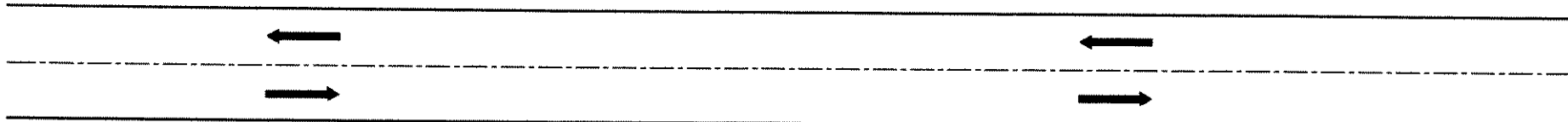
SD-1000-01-03
TYPICAL SIGNING
TEMPORARY CONDITION
ENCROACHMENT IN RIGHT LANE

Date: **MARCH 2003** Revised: **APRIL 2005**

Approved
K. A. [Signature]
 Director
 Highways Division

APR 21 2005
 Date



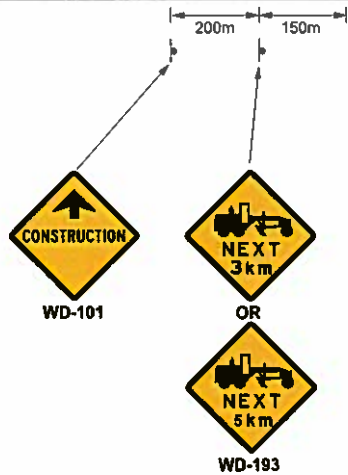
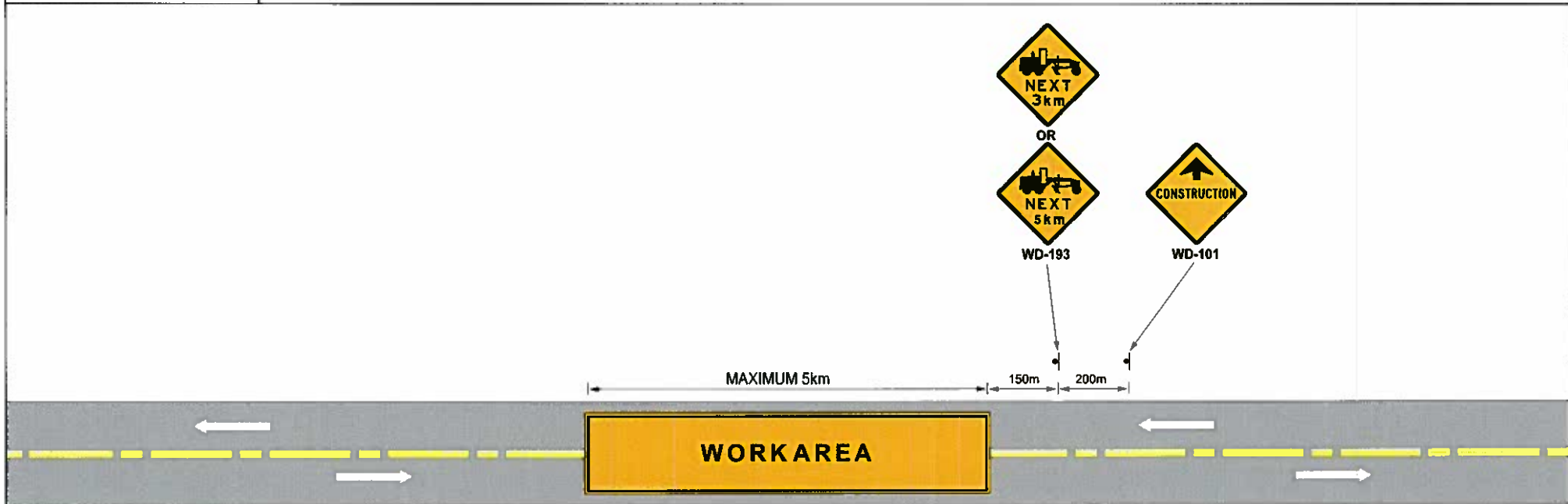


SD-1000-01-05
TYPICAL SIGNING
TEMPORARY CONDITION
WORK OFF ROAD IN RIGHT LANE

Date: **MARCH 2003** Revised: **APRIL 2004**

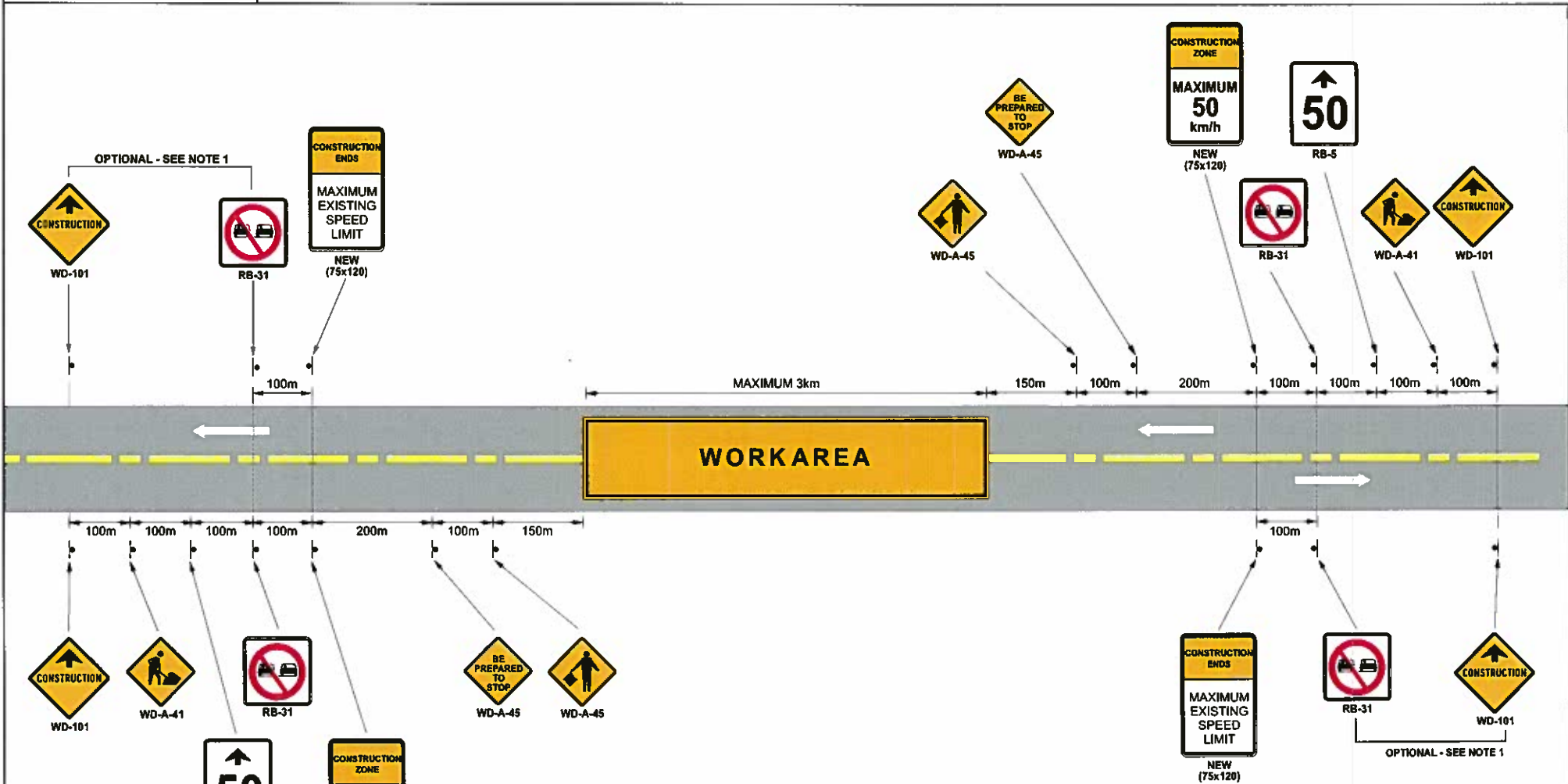
Approved
K. Kluos
Director
Highways Division

APR 21 2005
Date



NOTE:

1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
2. All sign spacing shall be as indicated.
3. All signboard dimensions are shown in centimeters.



- NOTE:
1. Posting of these signs is optional and shall be visible to traffic in opposite lane. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
 2. Minimum sign spacing as indicated.
 3. Examples of additional warning signs that may be required are as below or use of pilot vehicle is an option.



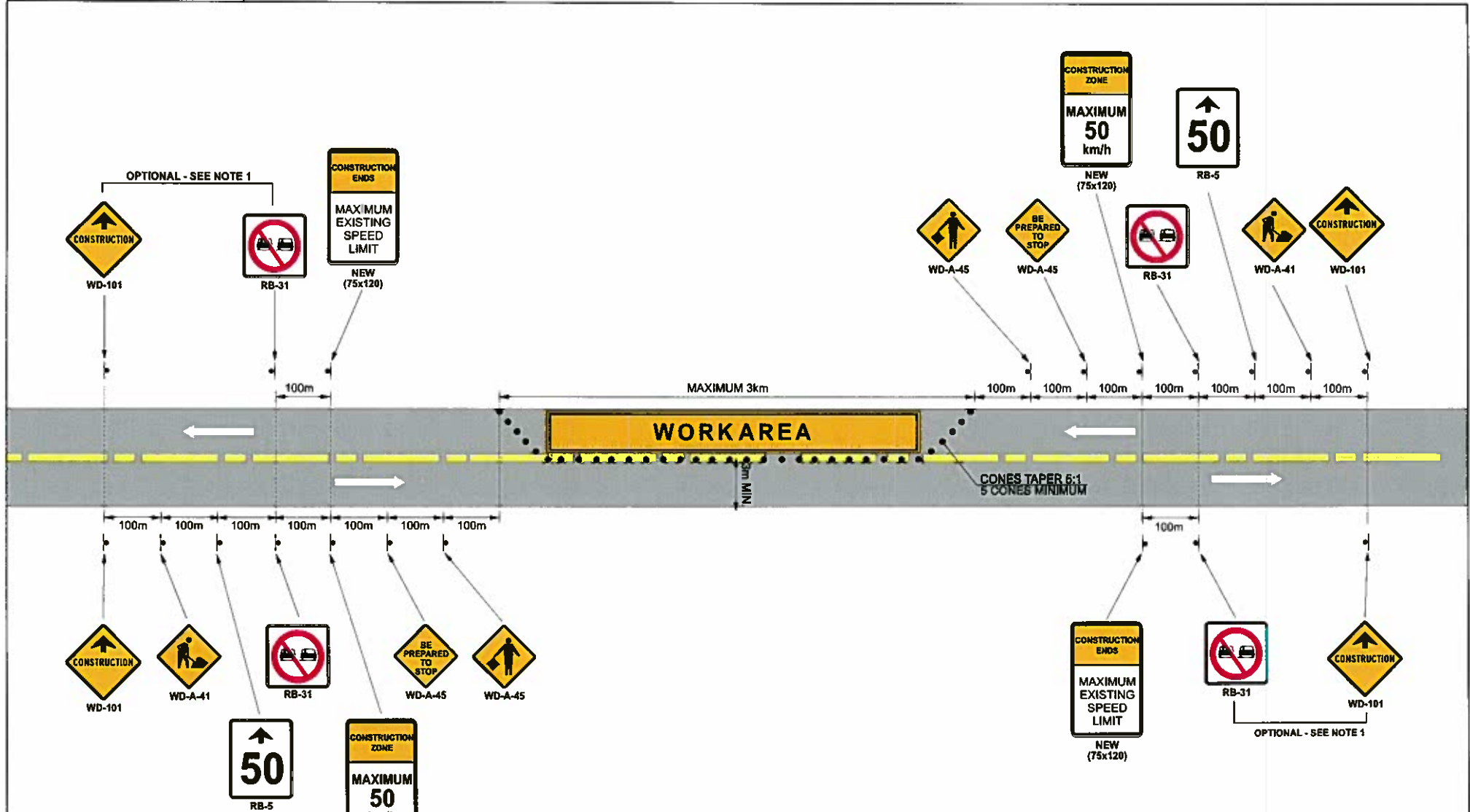
SD-1000-01-07

**TYPICAL SIGNING SHORT DURATION
GRAVEL/OIL/ROAD MAINTENANCE**

DATE: AUGUST 2009 REVISED DATE: MARCH 2011

Approved
Karlwood
Director
Highways & Marine Division

MAY 06 2013
Date

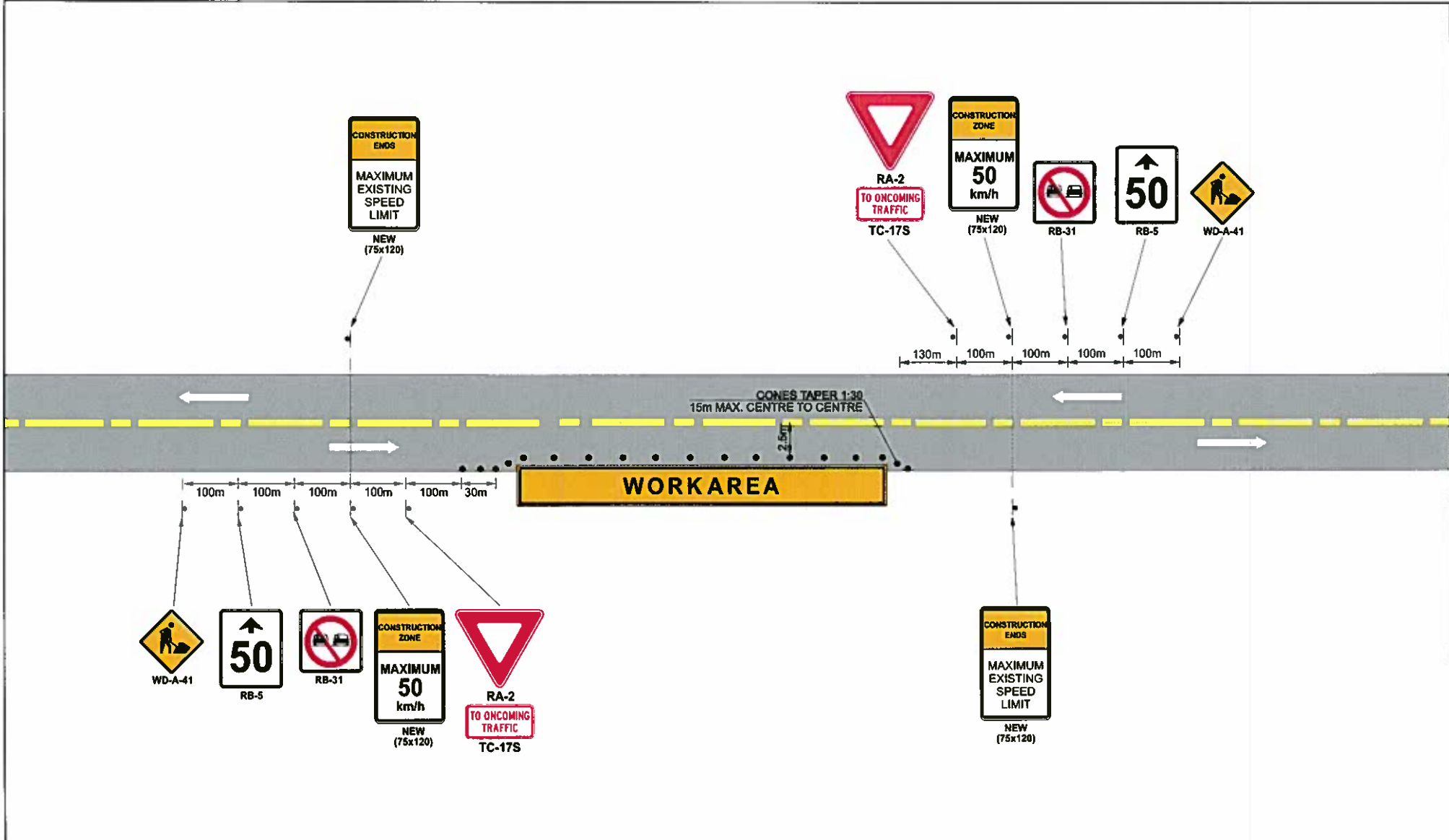


NOTE:
 1. Posting of these signs is optional and shall be visible to traffic in opposite lane. Consideration must be given to traffic volume, sight distances, sign spacing duration of work and other factors to ensure traffic control devices are adequate in each instance.
 2. Minimum sign spacing as indicated.
 3. For mobile operation, cones may not be required.



SD-1000-01-08
 TYPICAL SIGNING SHORT DURATION
 ONE LANE CLOSURE
 (ONE LANE ALTERNATING TRAFFIC)
 DATE: AUGUST 2009 REVISED DATE: APRIL 2013

Approved
K. Kuroki
 Director
 Highways & Marine Division
 Date
 MAY 06 2013

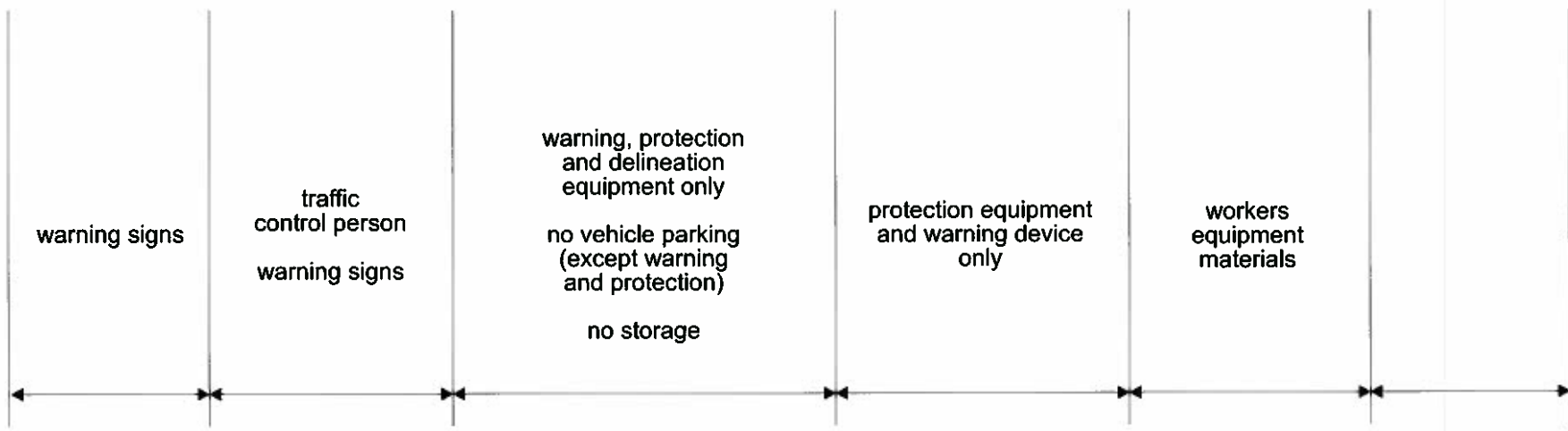
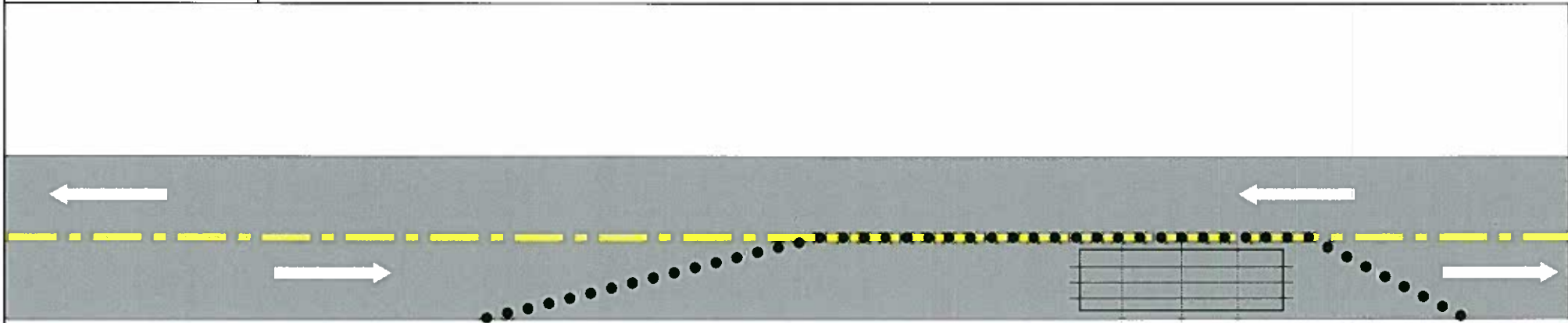


NOTE:
 1. Consideration must be given to traffic volume, sight distances, sign spacing, duration of work and other factors to ensure traffic control devices are adequate in each instance.
 2. If clear lane width is less than 2.5m use SD-1000-01-08.



SD-1000-01-09
 TYPICAL SIGNING
 TEMPORARY CONDITION
 ENCROACHMENT ONTO TRAVEL LANE
 DATE: JULY 2011 REVISED DATE: APRIL 2013

Approved
K. Kuroki
 Director
 Highways & Marine Division
 MAY 06 2013
 Date



ADVANCED WARNING AREA
Inform drivers to expect work area

APPROACH AREA
Informs drivers of required action

TRANSITION AREA
Moves traffic away from work area

BUFFER AREA
Provides protection for workers

WORK AREA
Workers and/or equipment on road

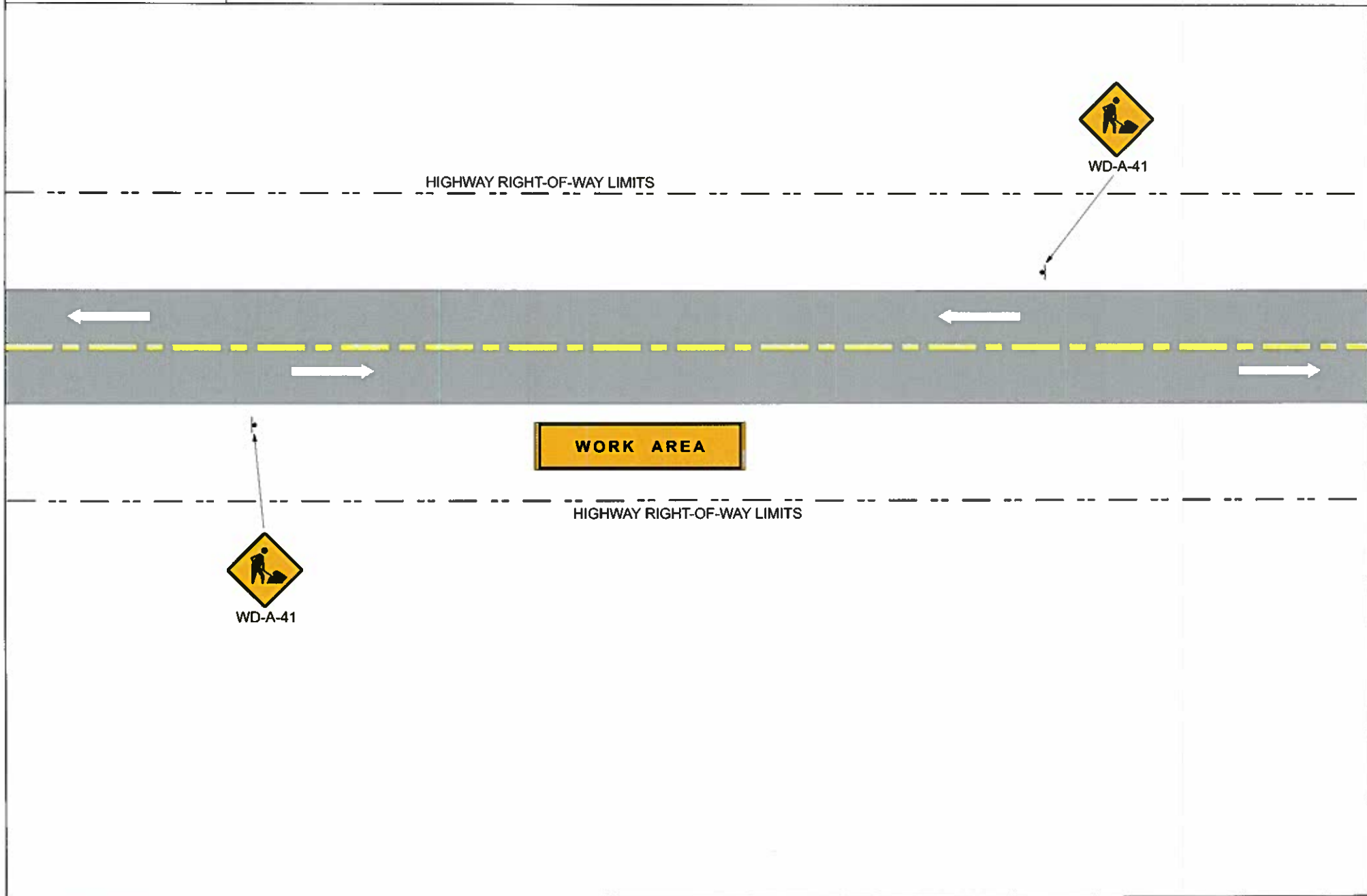
TERMINATION AREA
Traffic returns to normal



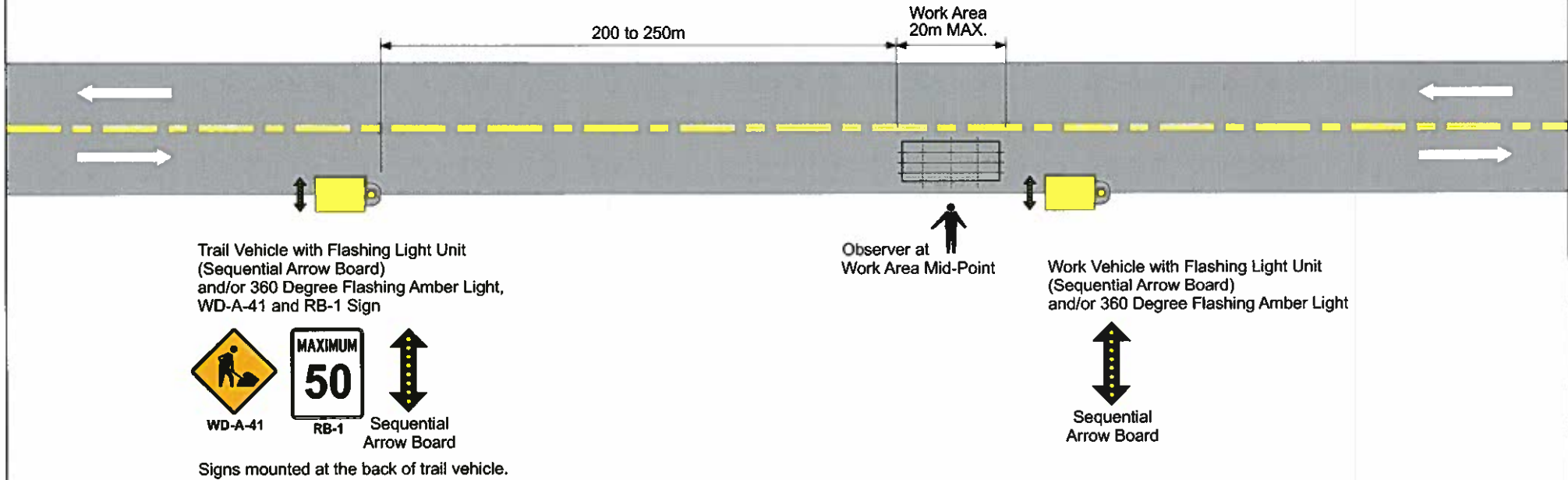
SD-1000-01-10
COMPONENTS OF A TEMPORARY WORKPLACE
 DATE: JULY 2011 REVISED DATE: April 2013

Approved
Karhuod
 Director
 Highways & Marine Division

MAY 06 2013
 Date

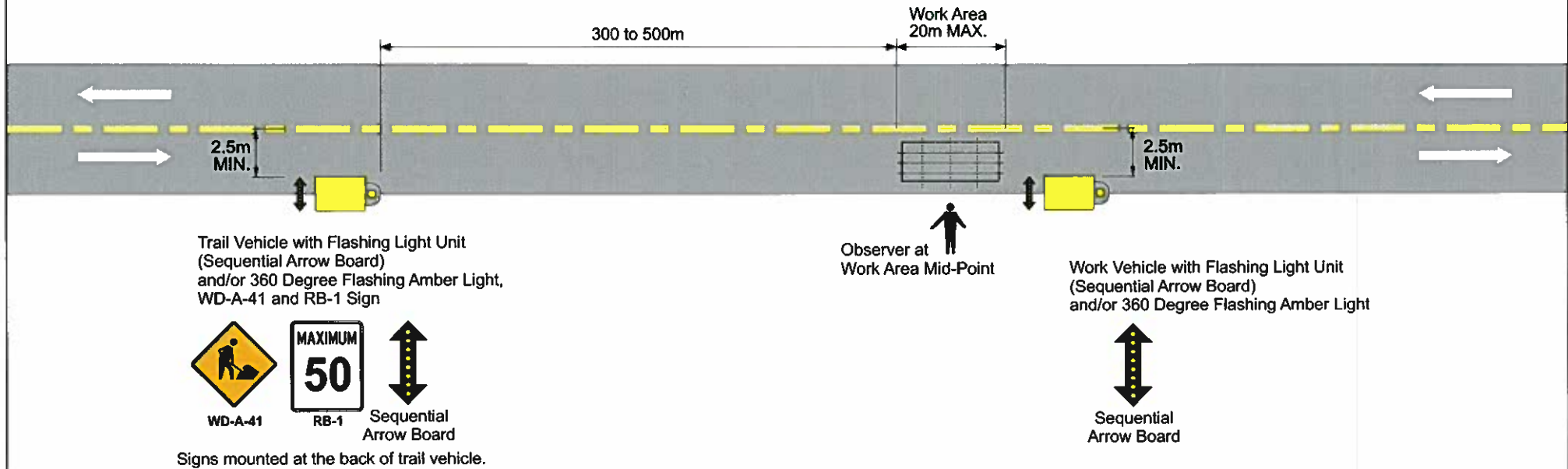


- This Figure accompanies the written procedure found in the Isolated Pothole Patching code of practice.
- Position Work and Trail Vehicle off travel lane to greatest extent practical.
- Position vehicles so that Flashing Light Units (Sequential Arrow Board) are aimed to provide the best visibility for approaching traffic.

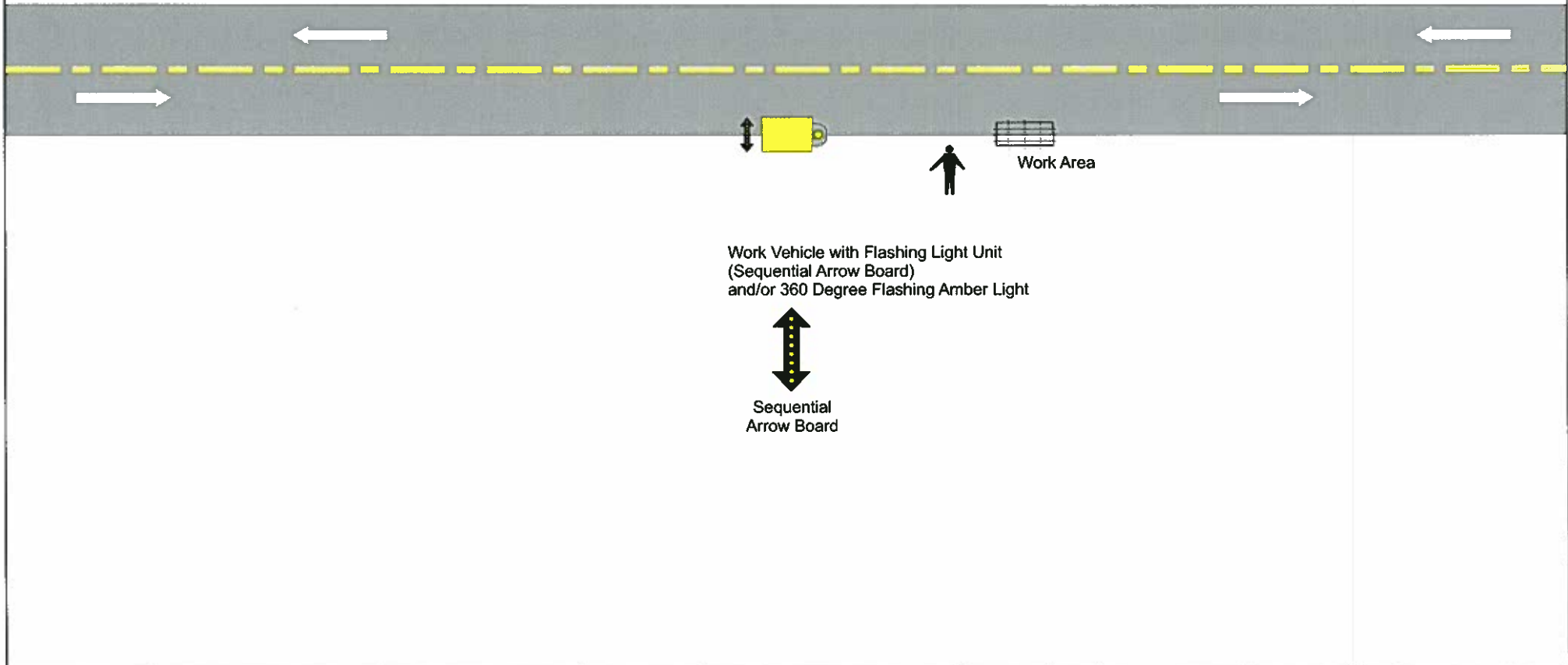


Posted Speed (km/h)	Initial Landmark (m)
100	361
90	325
80	289
70	253
60	217
50	181

- This Figure accompanies the written procedure found in the Isolated Pothole Patching code of practice.
- Position Work and Trail Vehicle off travel lane to greatest extent practical.
- Position vehicles so that Flashing Light Units (Sequential Arrow Board) are aimed to provide the best visibility for approaching traffic.



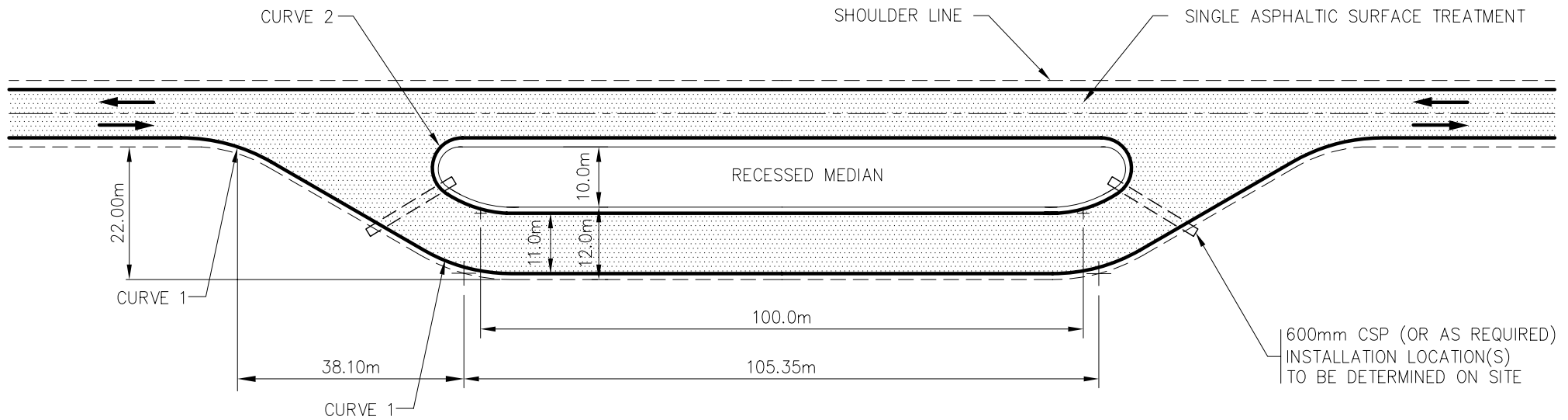
Posted Speed (km/h)	Initial Landmark (m)
70	253
60	217
50	181
40	140
30	100



SD-1000-01-14	
WORK 10 MINUTES OR LESS	
DATE: APRIL 2013	REVISED DATE:

Approved <i>Korhonen</i> Director Highways & Marine Division	MAY 06 2013 Date
---	---------------------

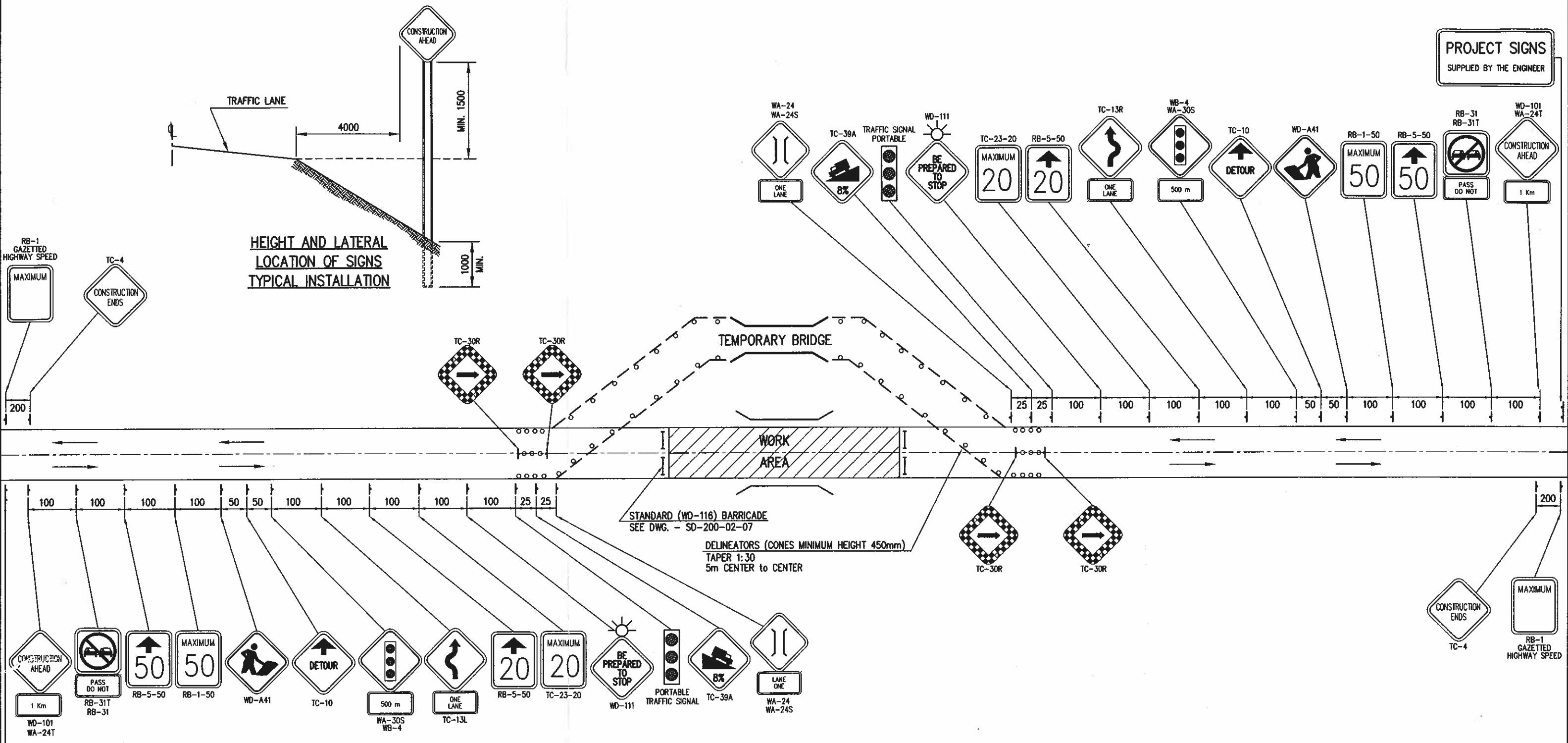
	CURVE 1	CURVE 2
△	30° 00' 00"	150° 00' 00"
R	30m	5m
TANGENT	8.038m	18.660m



NOTE:

1. DIMENSIONS SHOWN ARE FINISHED SURFACE PAVEMENT AND GRANULAR SHOULDER WIDTHS.





NOTES:
 1. NOT TO SCALE
 2. CONSTRUCTION DELINEATORS SHALL BE UTILIZED.



BRIDGE CONSTRUCTION - TRAFFIC CONTROL
ROADSIDE DIVERSION - ONE LANE

Date: JULY 2005 Revised:

Approved: *K. M. [Signature]*
 Director
 Highways Division

Date: 14/07/05