

SECTIONS



PROVINCE OF NEWFOUNDLAND
PERMIT HOLDER
CLASS "A"
This Permit Allows
Harbourside Transportation Consultants
Signature: [Signature]
Date: Mar. 14/17
To practice Professional Engineering
in Newfoundland and Labrador.
Permit No. as issued by PECON, N0763
which is valid for the year 2017.



1	ISSUED FOR ADDENDUM	MAR. 14 2017
0	ISSUED FOR TENDER	FEB. 10 2017
revisions		date

project DEER ARM BRIDGE REPLACEMENT
project GROS MORNE NATIONAL PARK

drawing CROSS SECTIONS (SHEET 1 OF 3)
dessin

designed	TIM JORDAN	conçu
date	NOVEMBER 2016	
drawn	CORY BAKER	dessiné
date	NOVEMBER 2016	
approved	MICHAEL MACDONALD	approuvé
date	NOVEMBER 2016	
Tender		Soumission
PWSC Project Manager	Administrateur de projets TPSGC	
project number	1117	no. du projet
drawing no.	C09	no. du dessin

NOTES:

PROVINCE OF NEWFOUNDLAND PERMIT HOLDER CLASS "A" This Permit Allows Harbourside Transportation Consultants to practice Professional Engineering in Newfoundland and Labrador. Permit No. as issued by PEGNL N0763 which is valid for the year 2017.

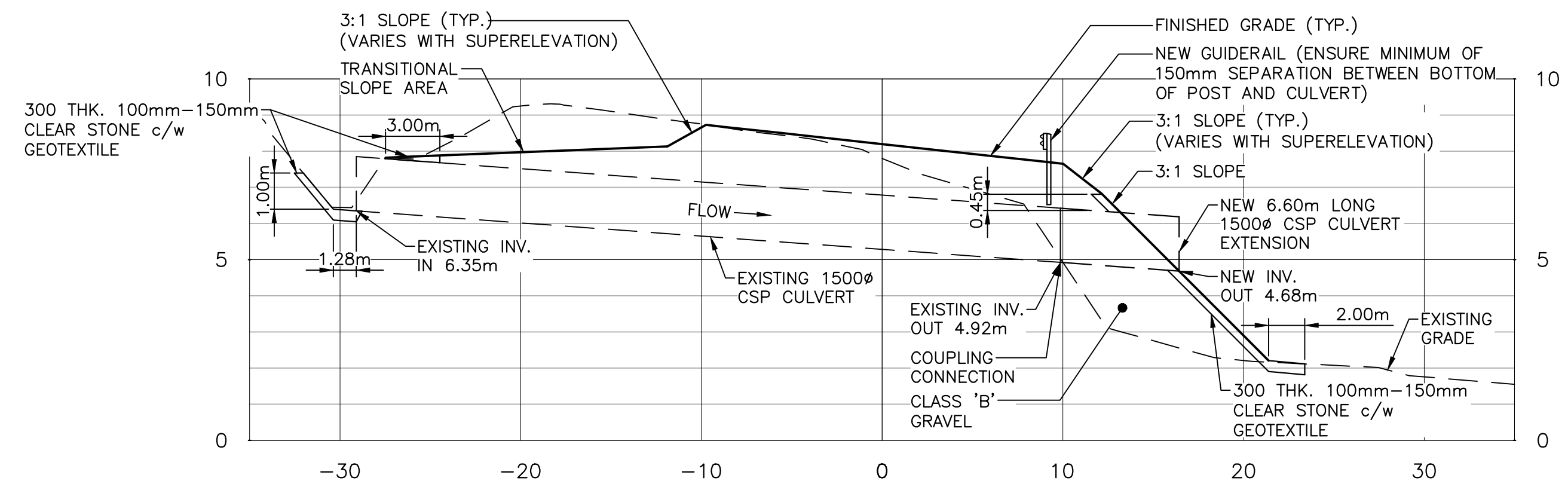


1	ISSUED FOR ADDENDUM	MR. 14 2017
0	ISSUED FOR TENDER	FEB. 10 2017

DEER ARM BRIDGE REPLACEMENT
GROS MORNE NATIONAL PARK

CROSS SECTIONS (SHEET 3 OF 3)

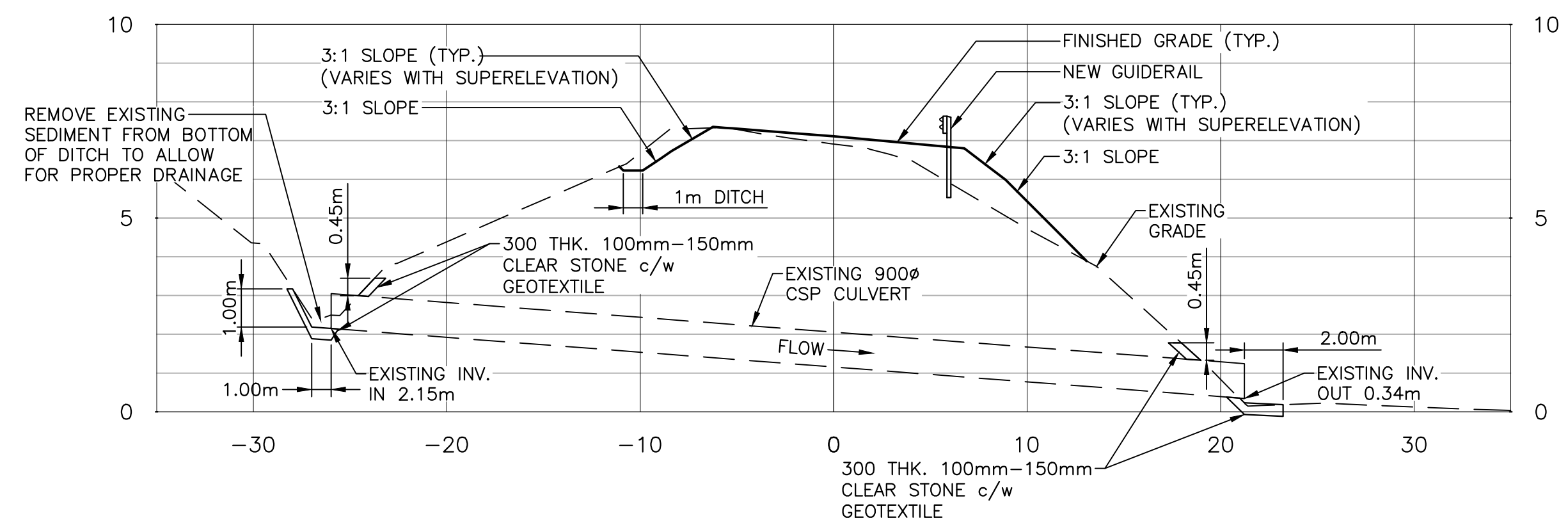
designed	TIM JORDAN	conçu
date	NOVEMBER 2016	
drawn	CORY BAKER	dessiné
date	NOVEMBER 2016	
approved	MICHAEL MACDONALD	approuvé
date	NOVEMBER 2016	
Tender	<i>Debra Coleby</i>	Soumission
PWSC Project Manager	Administrateur de projets TPSGC	
project number	1117	no. du projet
drawing no.	C11	no. du dessin



SECTION - CULVERT EXTENSION (STA. 0+755m)



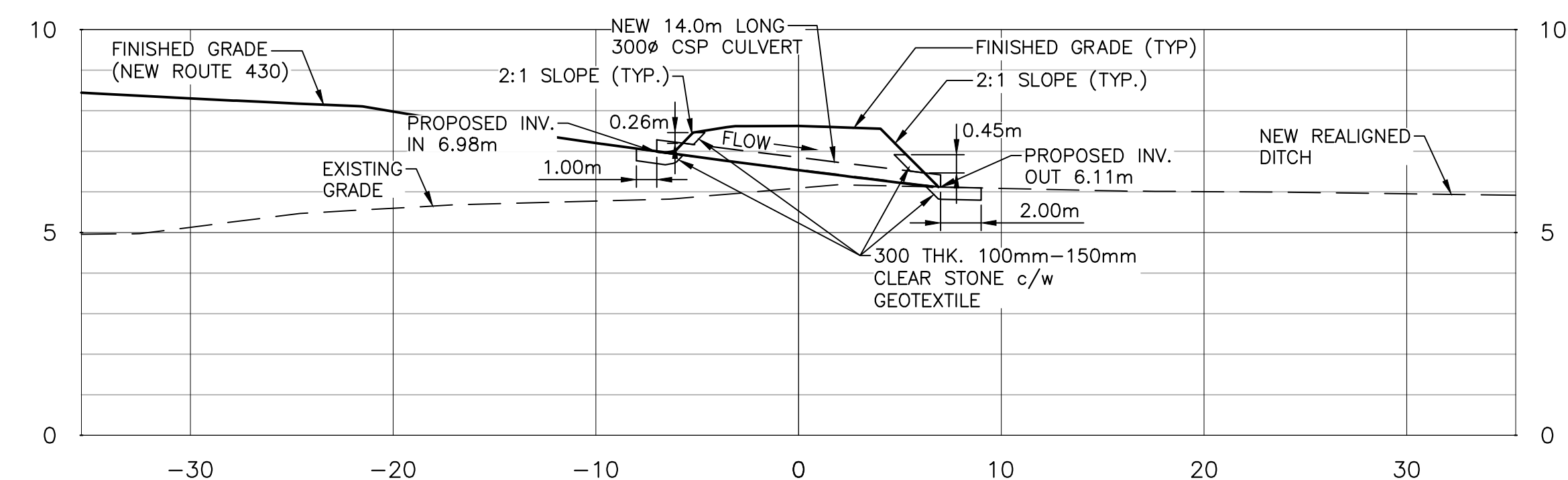
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C05



SECTION - EXISTING CULVERT (STA. 0+997m)



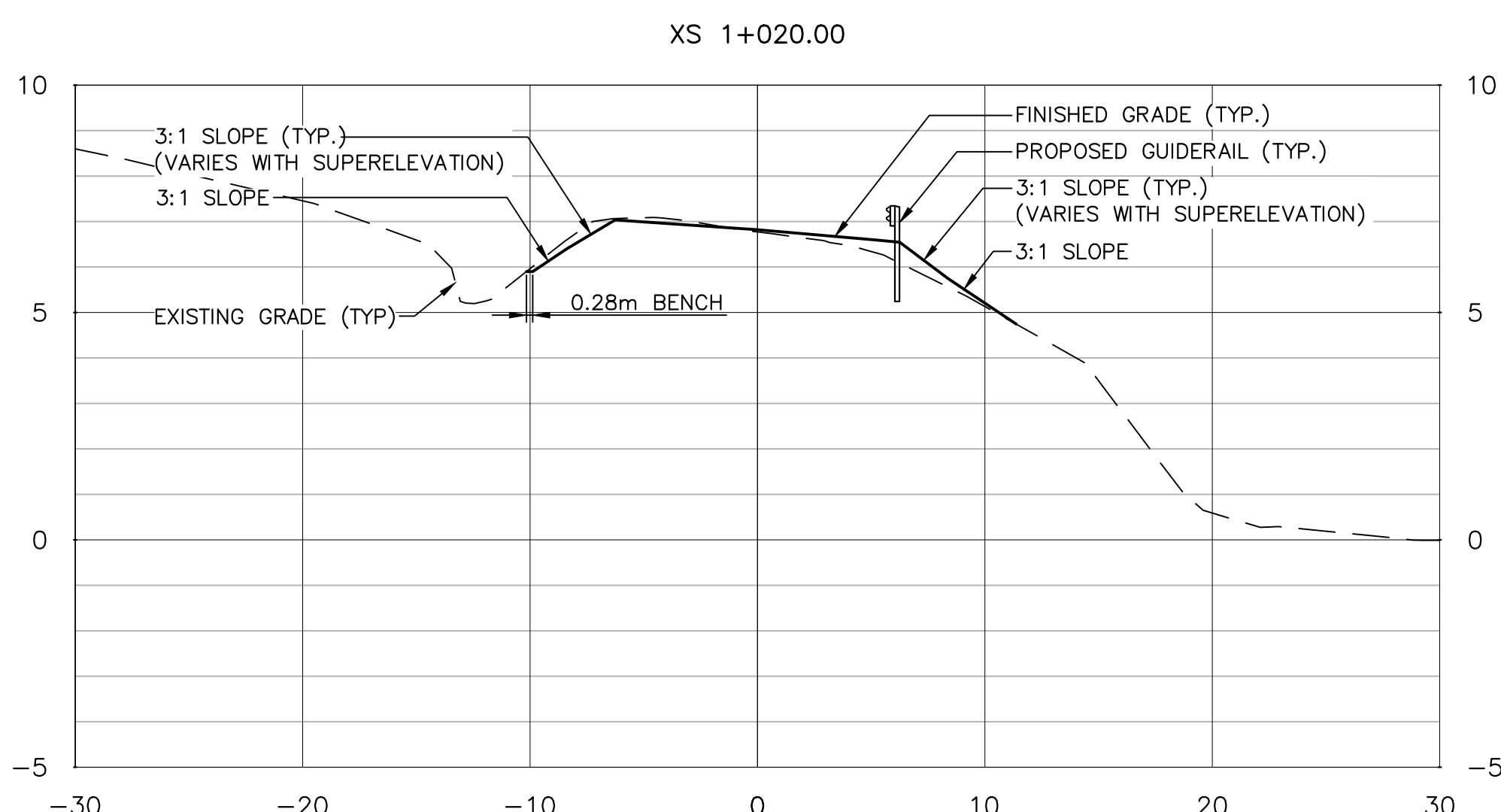
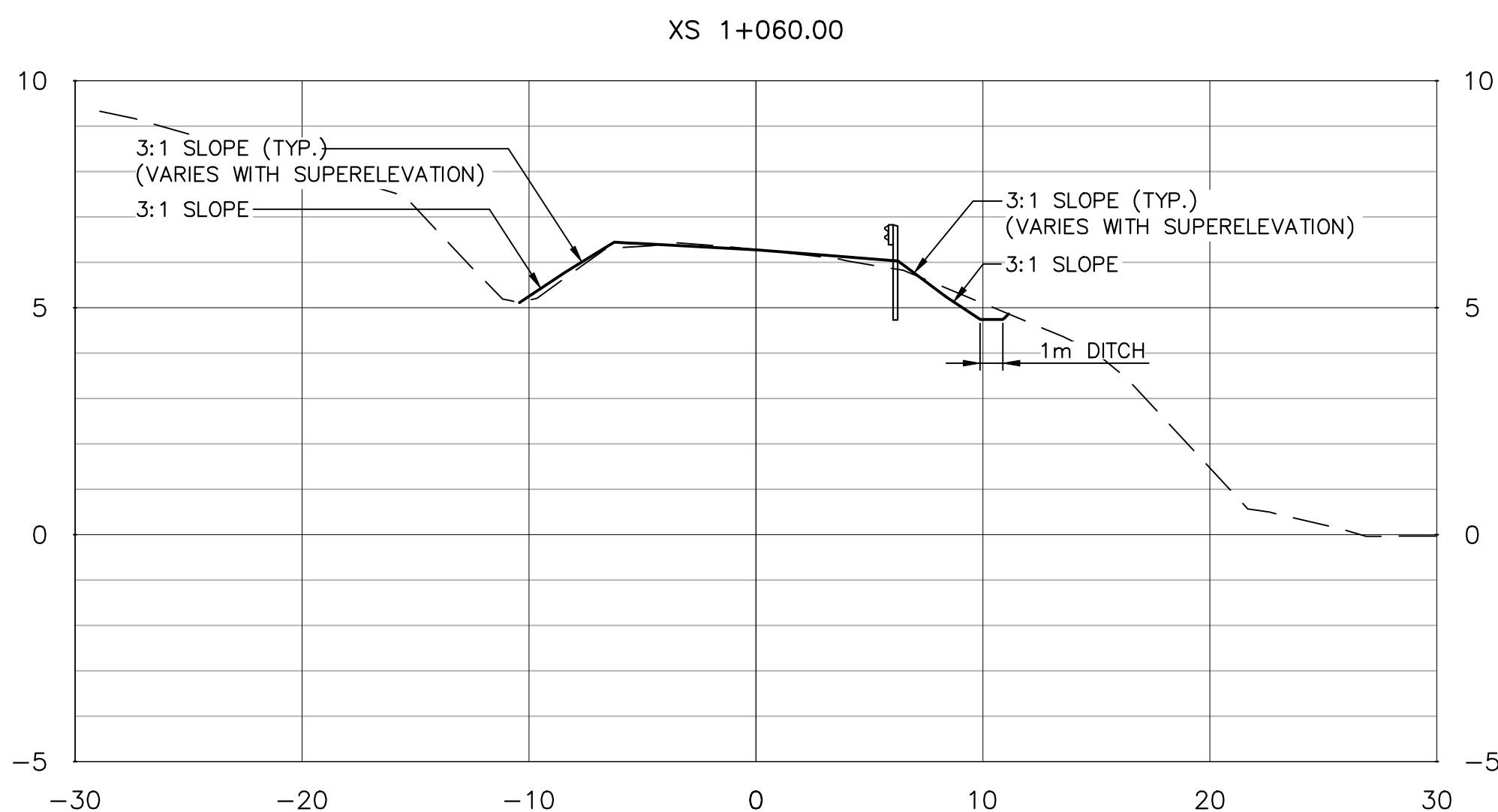
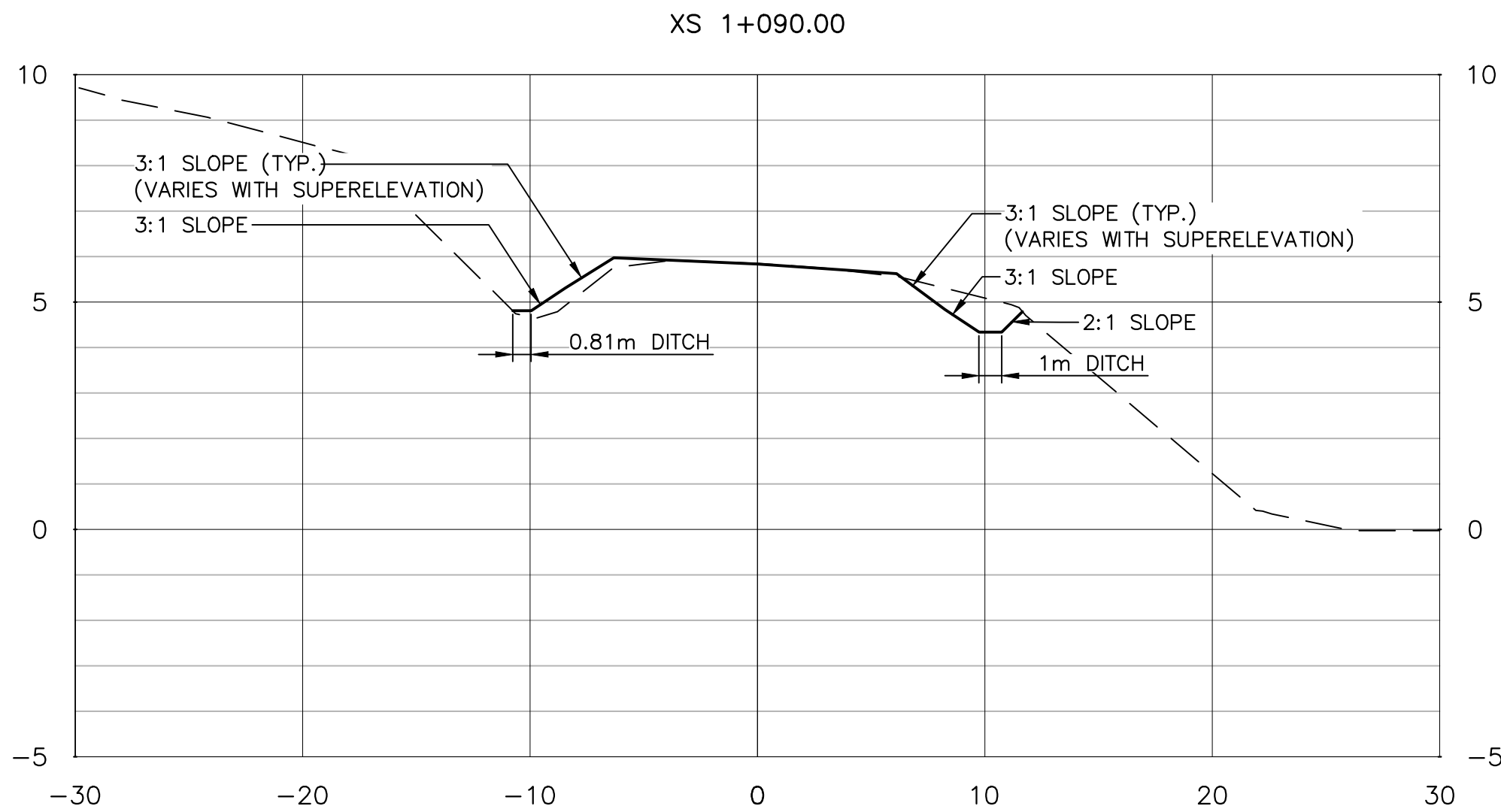
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C06



SECTION - NEW CULVERT (STA. 20+020m) AT LOOK-OFF PARKING AREA

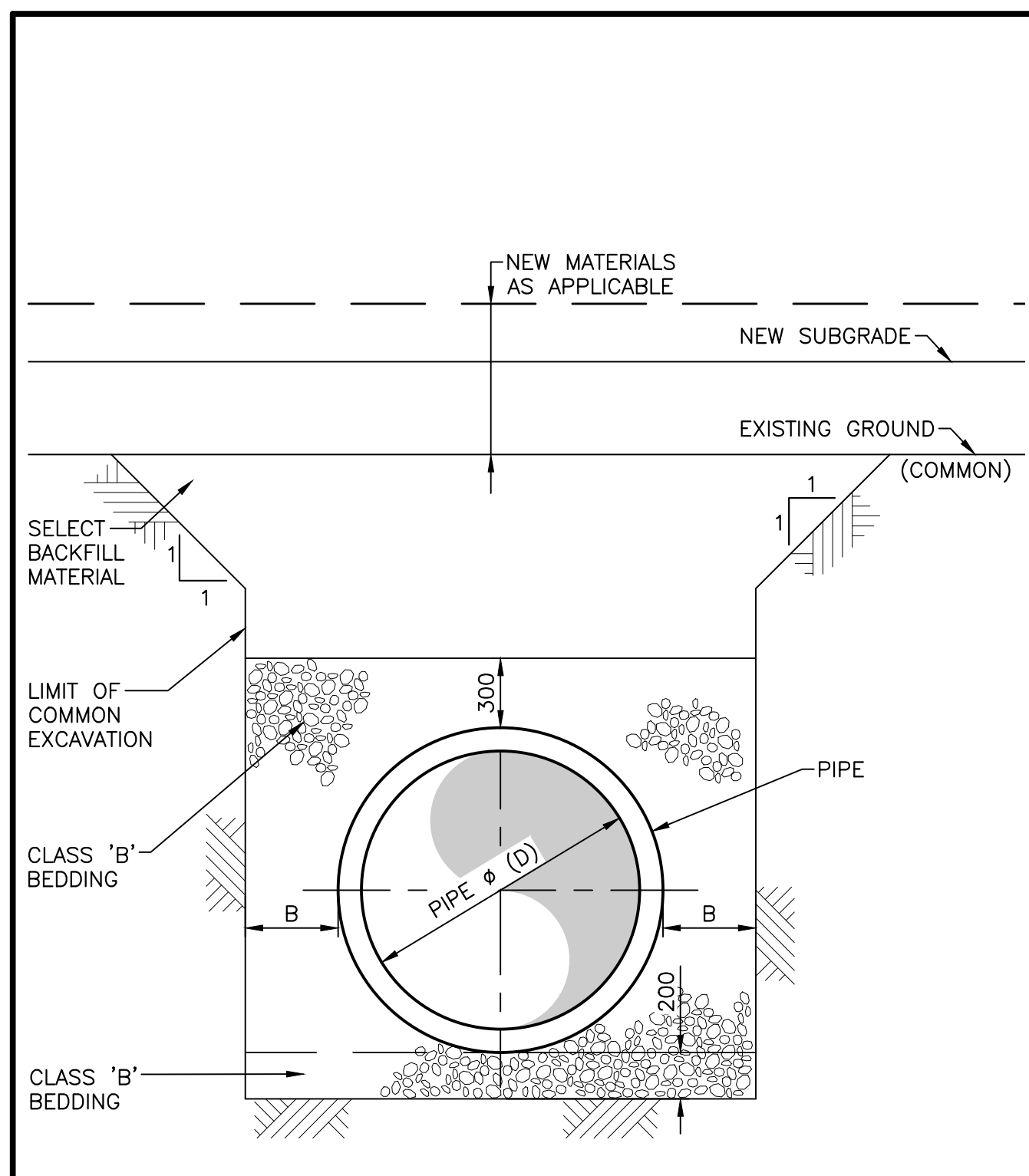


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C03



SECTIONS

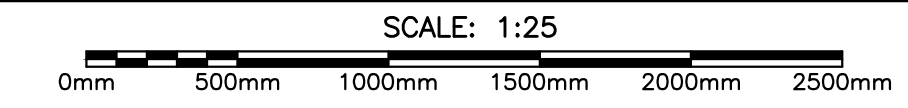




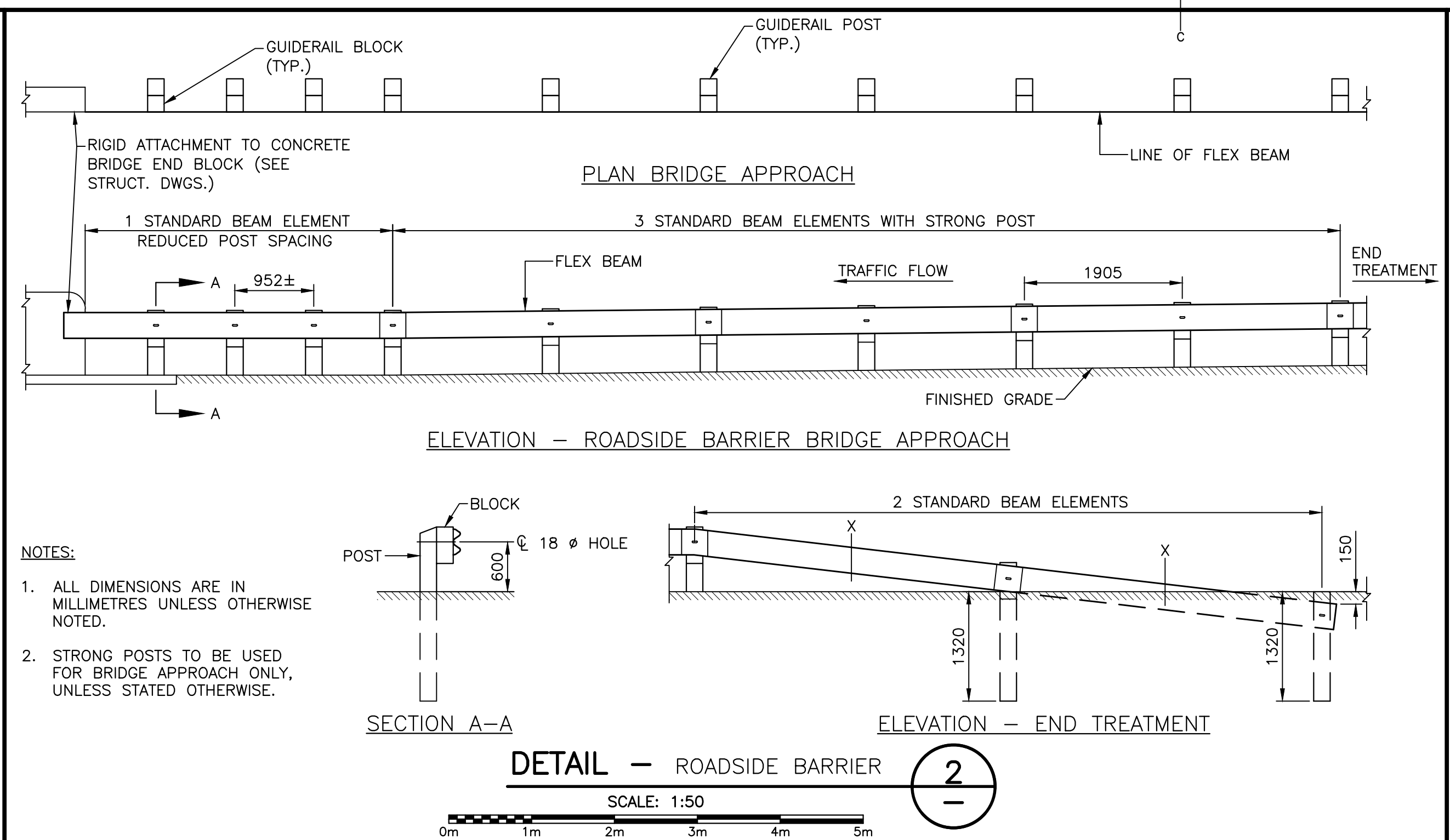
NOTES:

- THE CROSS SECTION REPRESENTS MAXIMUM PAY LIMITS FOR EXCAVATION.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.

TYPICAL DETAIL - EXCAVATION LIMITS FOR CULVERTS



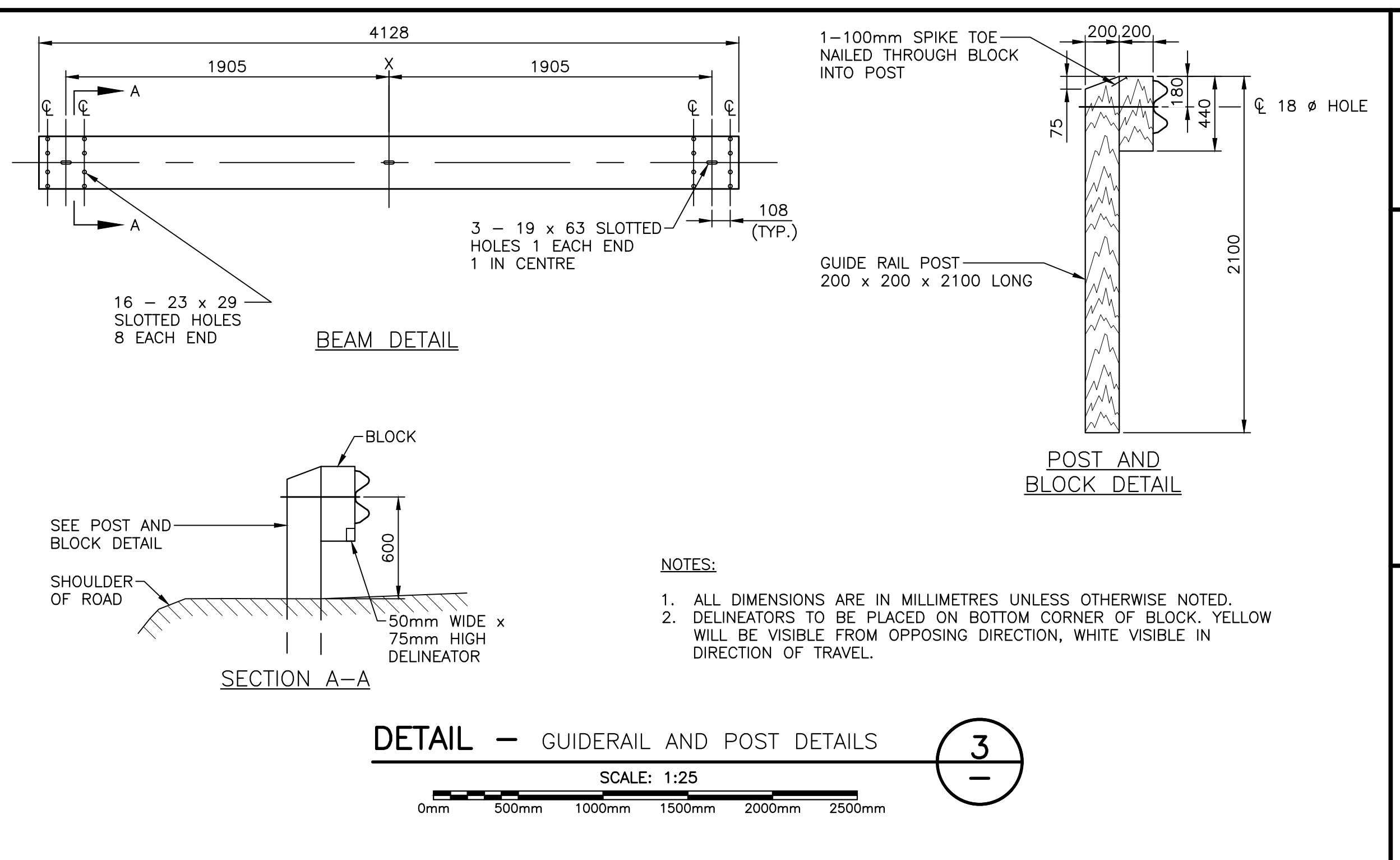
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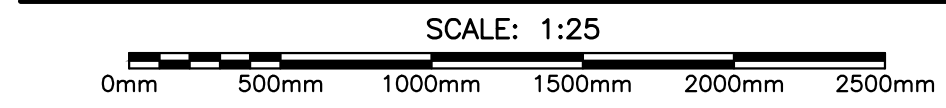
DETAIL - ROADSIDE BARRIER



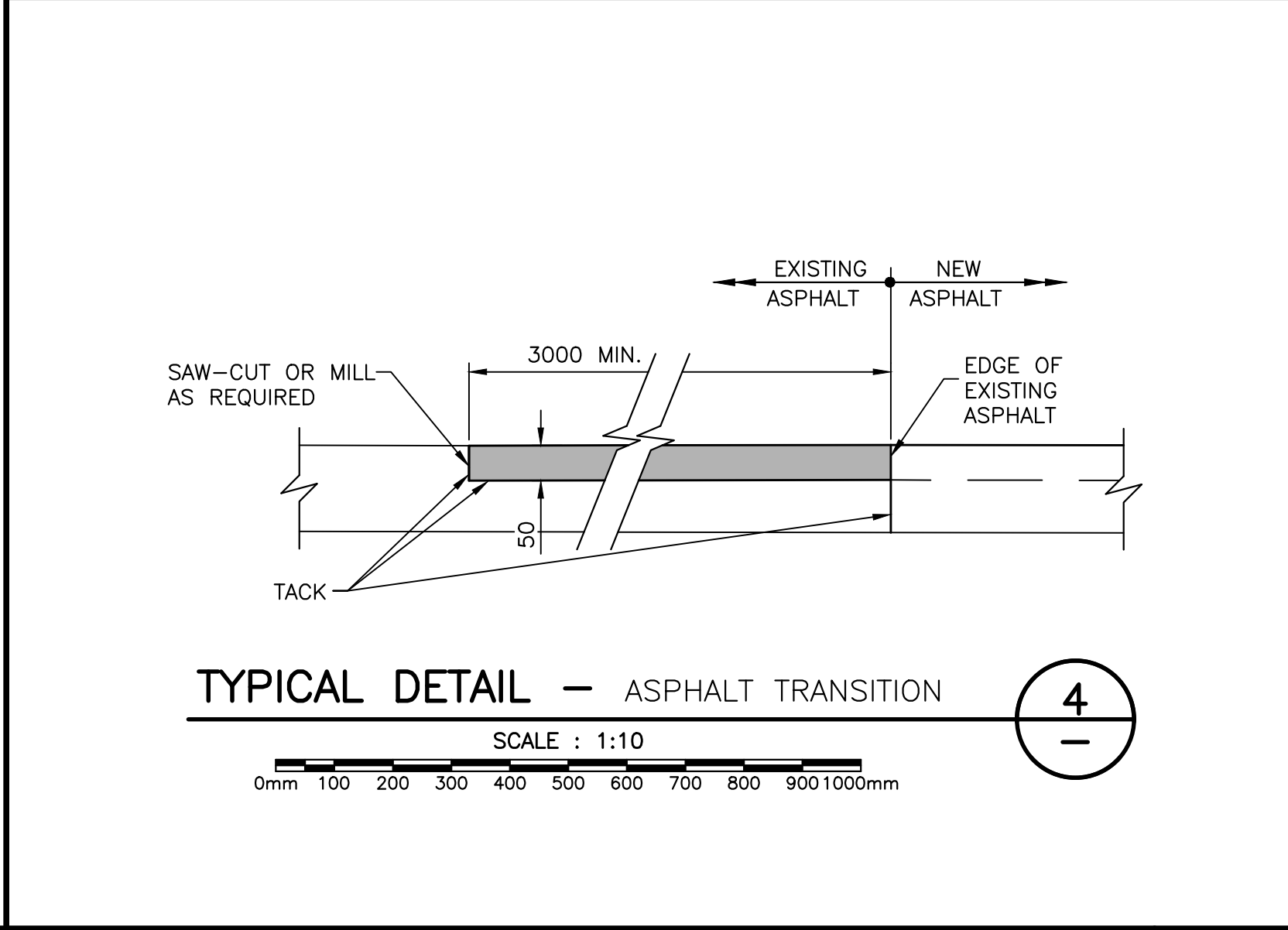
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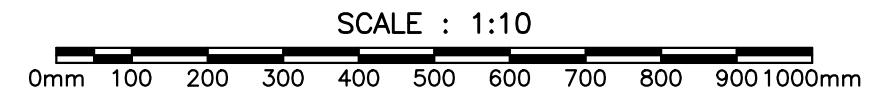
DETAIL - GUIDEWAY AND POST DETAILS



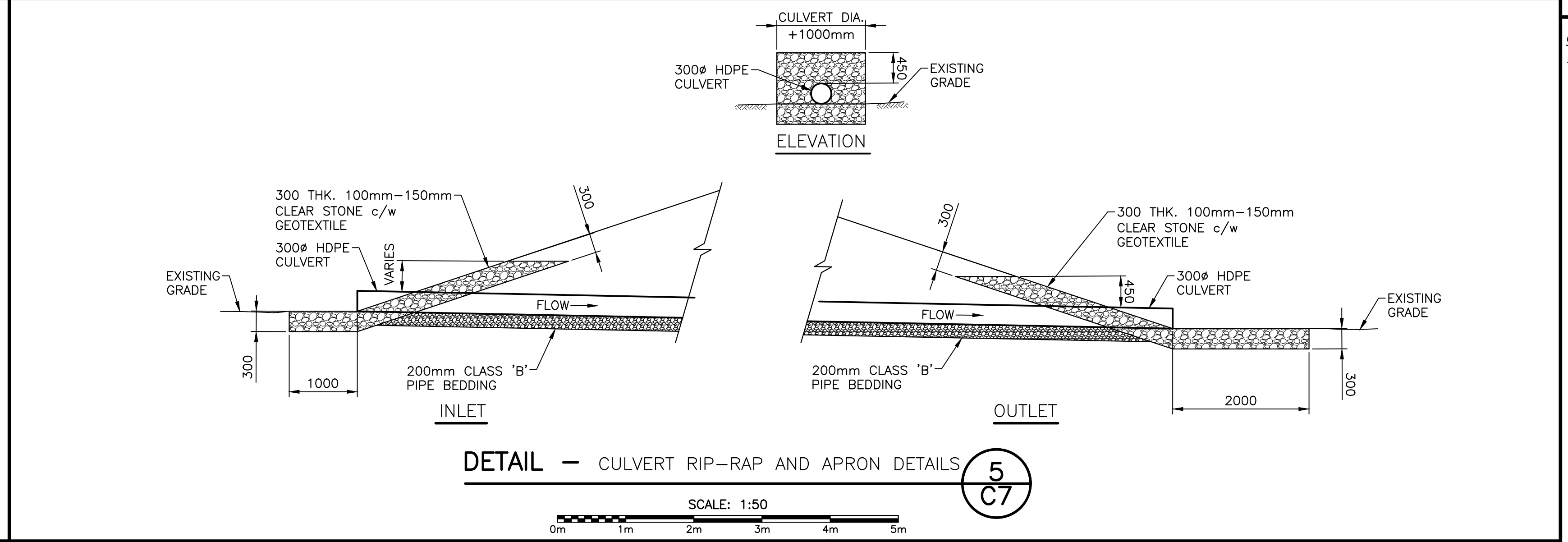
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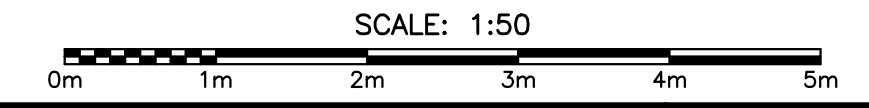
TYPICAL DETAIL - ASPHALT TRANSITION



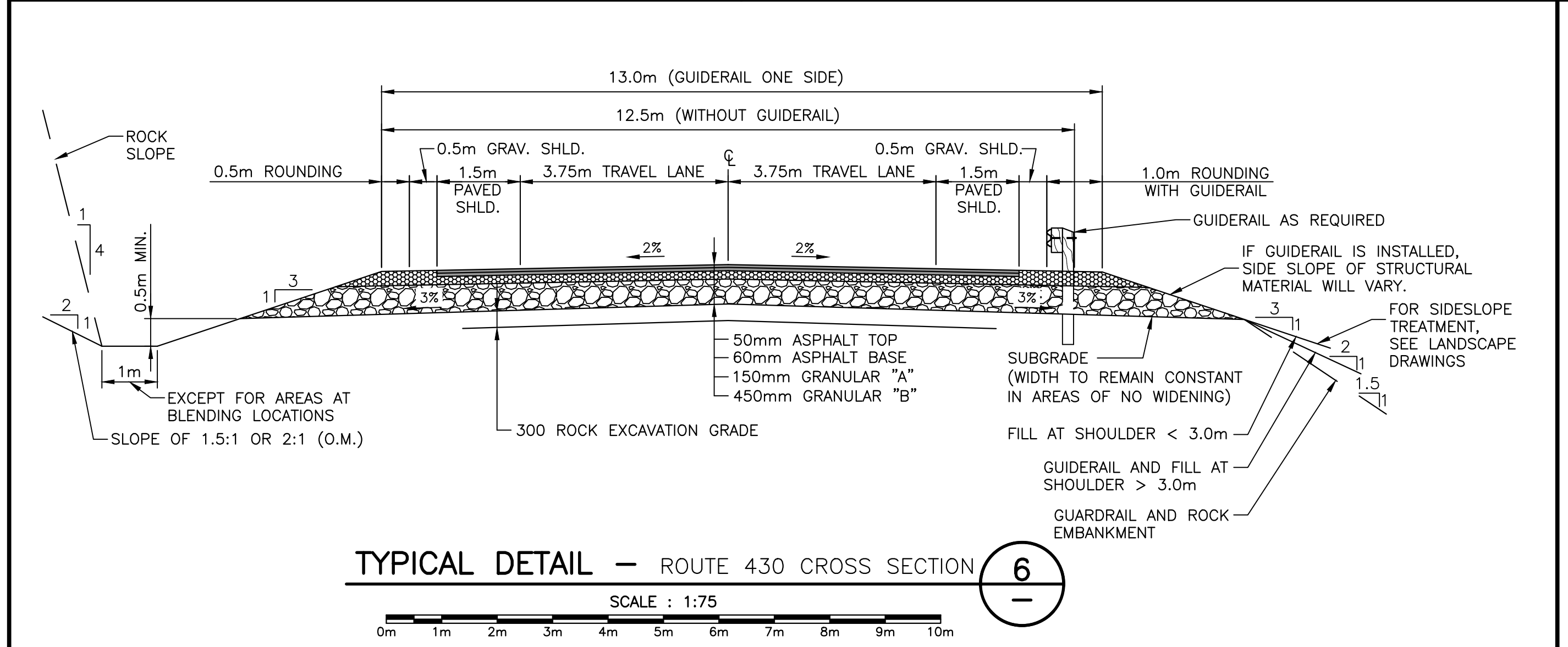
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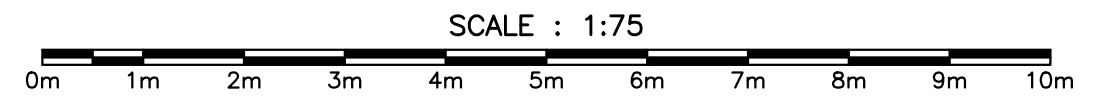
DETAIL - CULVERT RIP-RAP AND APRON DETAILS



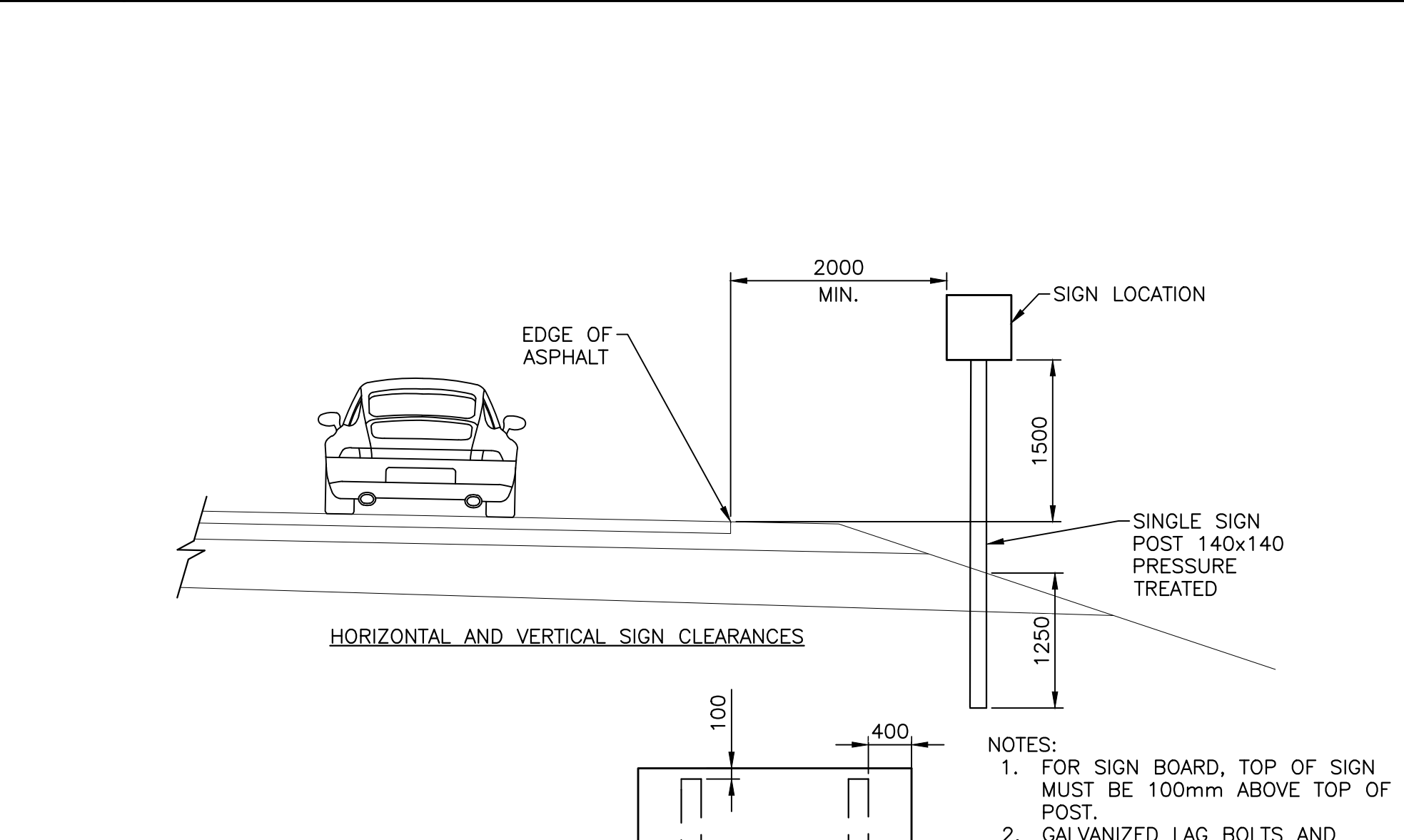
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C7



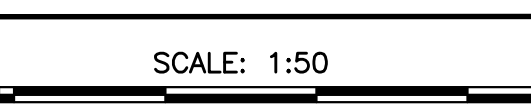
TYPICAL DETAIL - ROUTE 430 CROSS SECTION



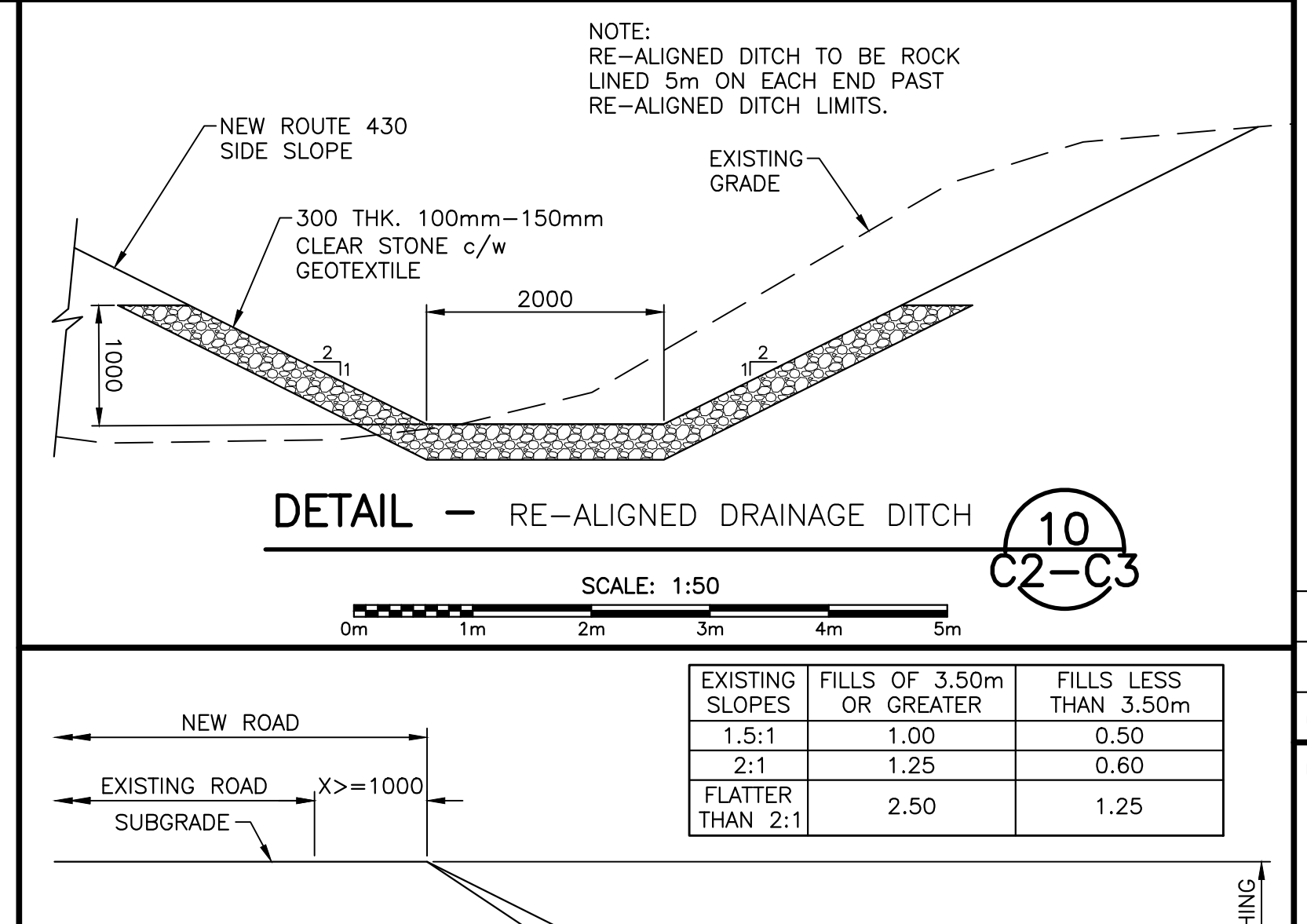
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DETAIL - SIGNAGE



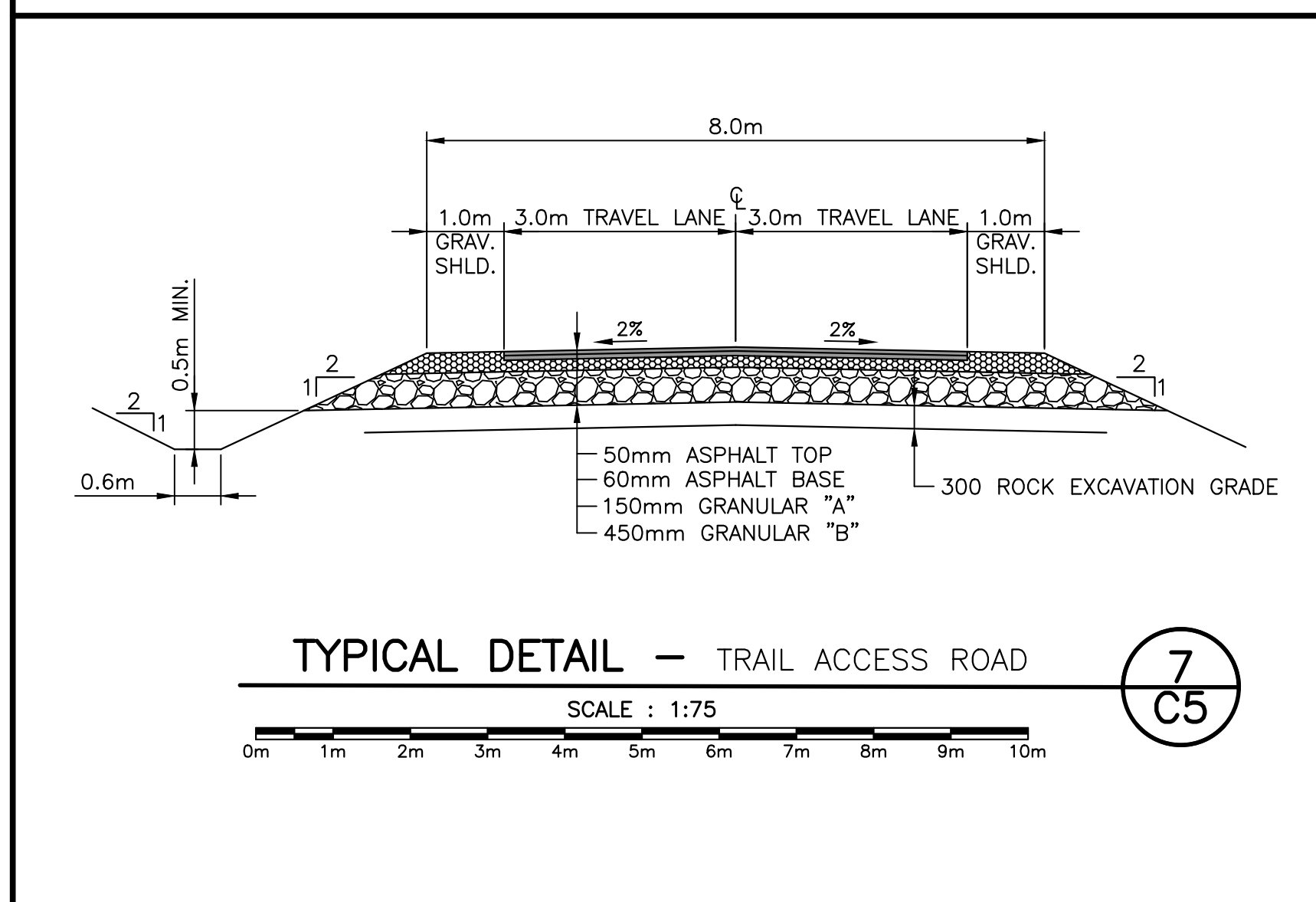
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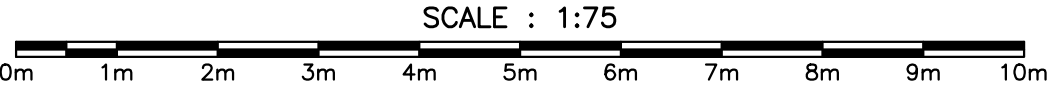
DETAIL - RE-ALIGNED DRAINAGE DITCH



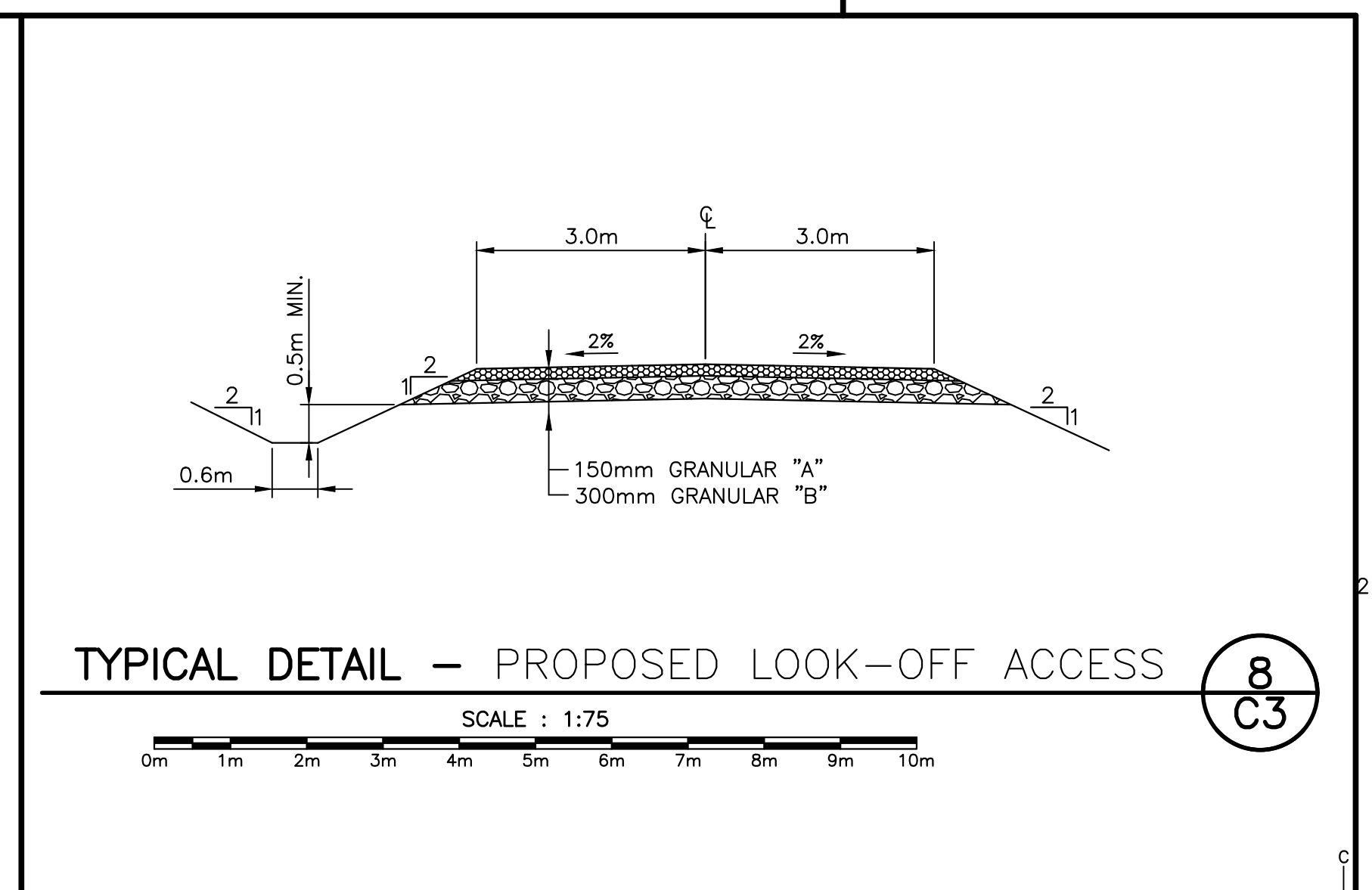
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C2-C3



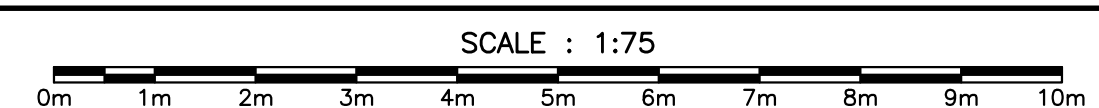
TYPICAL DETAIL - TRAIL ACCESS ROAD



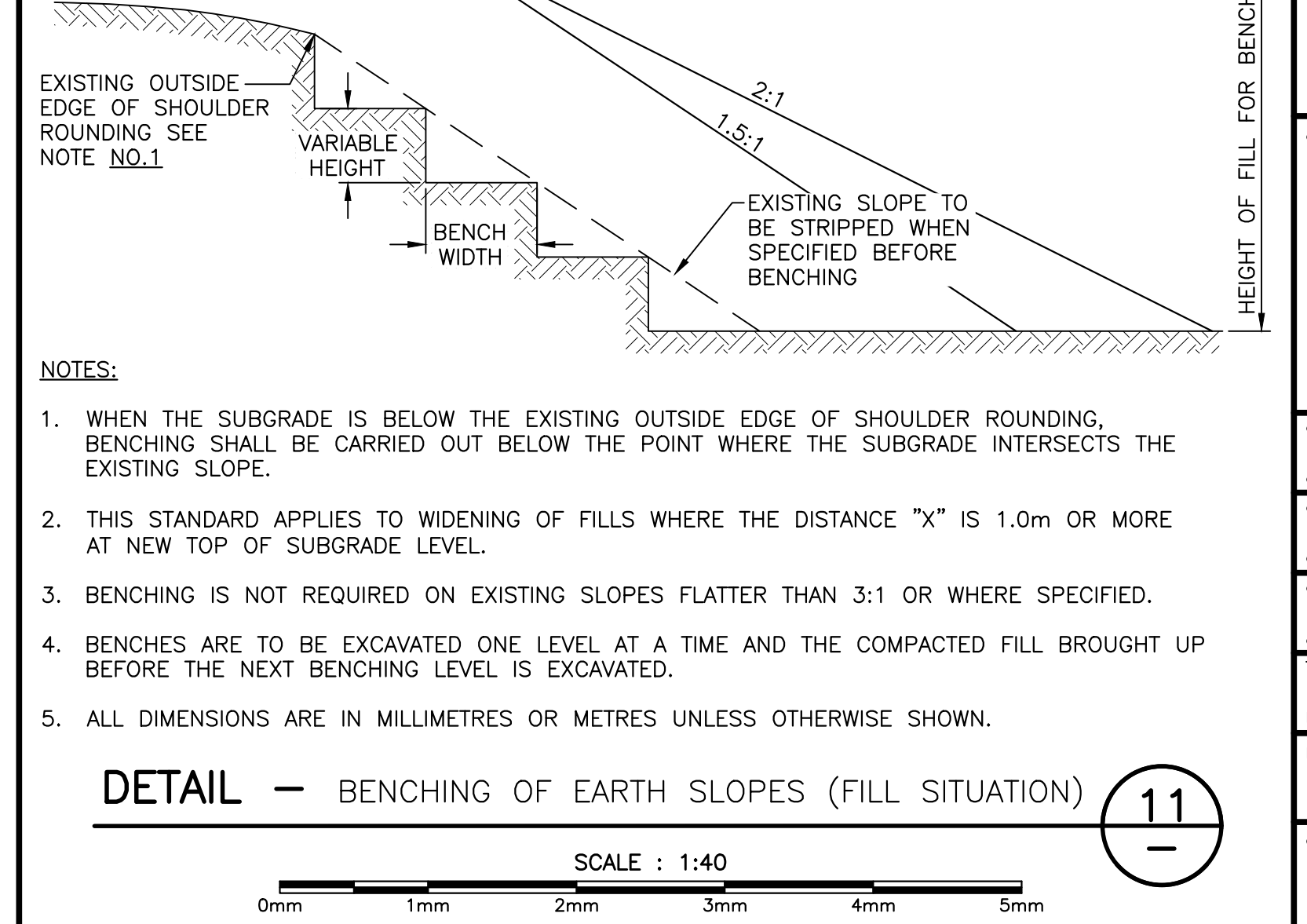
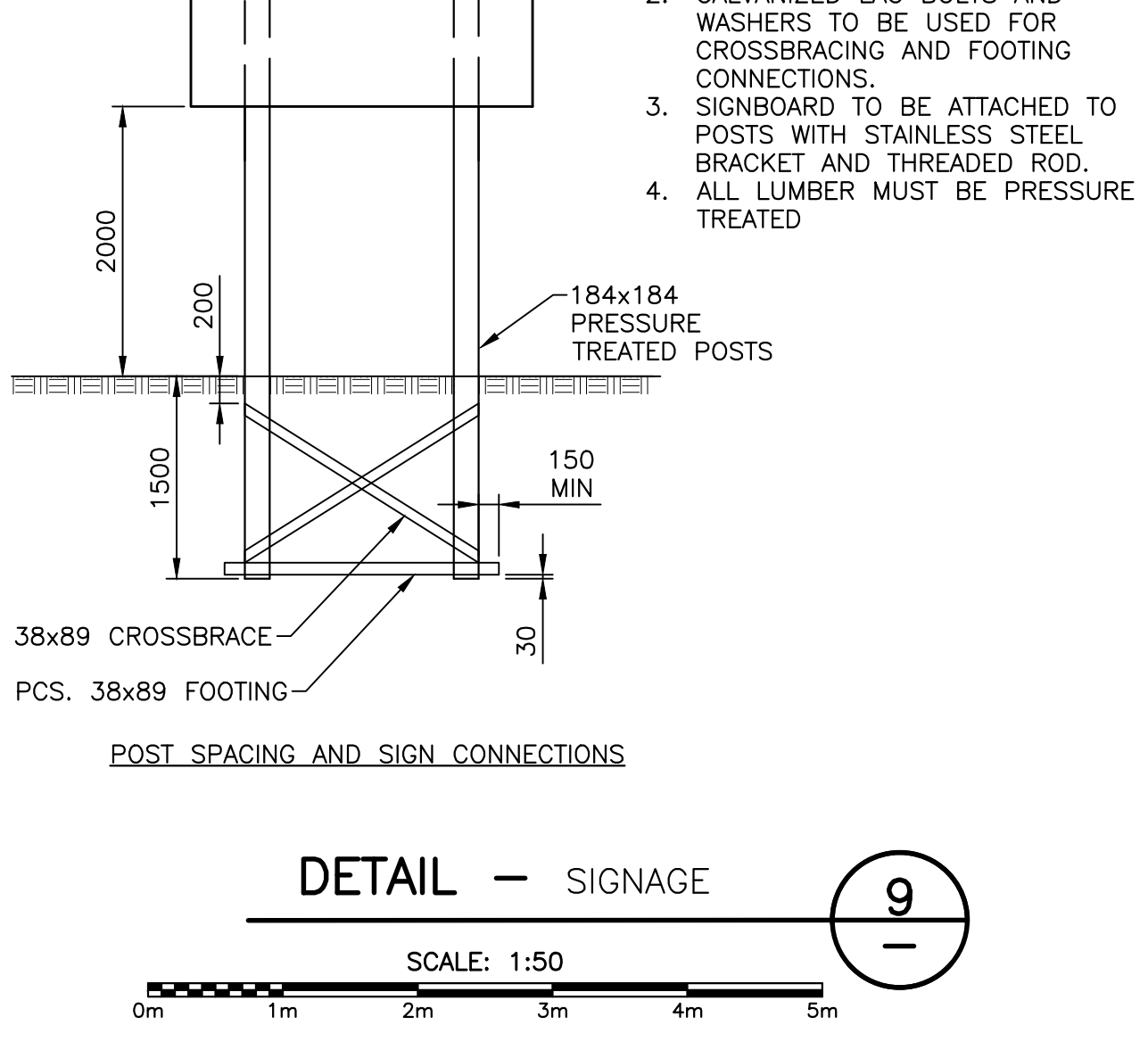
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C5



TYPICAL DETAIL - PROPOSED LOOK-OFF ACCESS



8
C3



DETAIL - BENCHING OF EARTH SLOPES (FILL SITUATION)



11

Parcs Canada Parks Canada

HARBOURSIDE Engineering Consultants

HARBOURSIDE Transportation Consultants

GENERAL NOTES:

- FOR GENERAL NOTES SEE DRAWING C01.

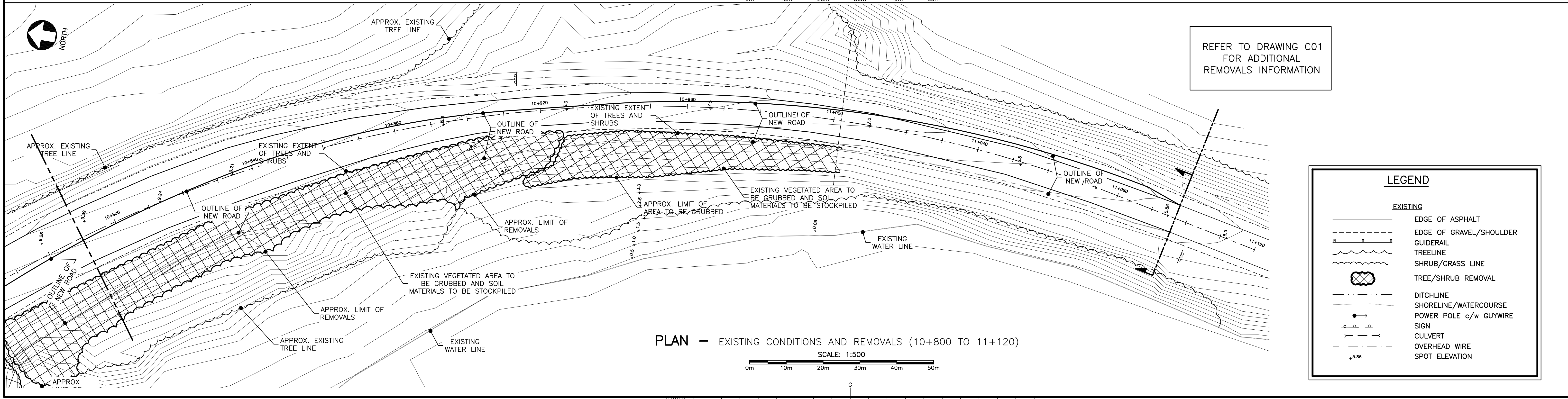
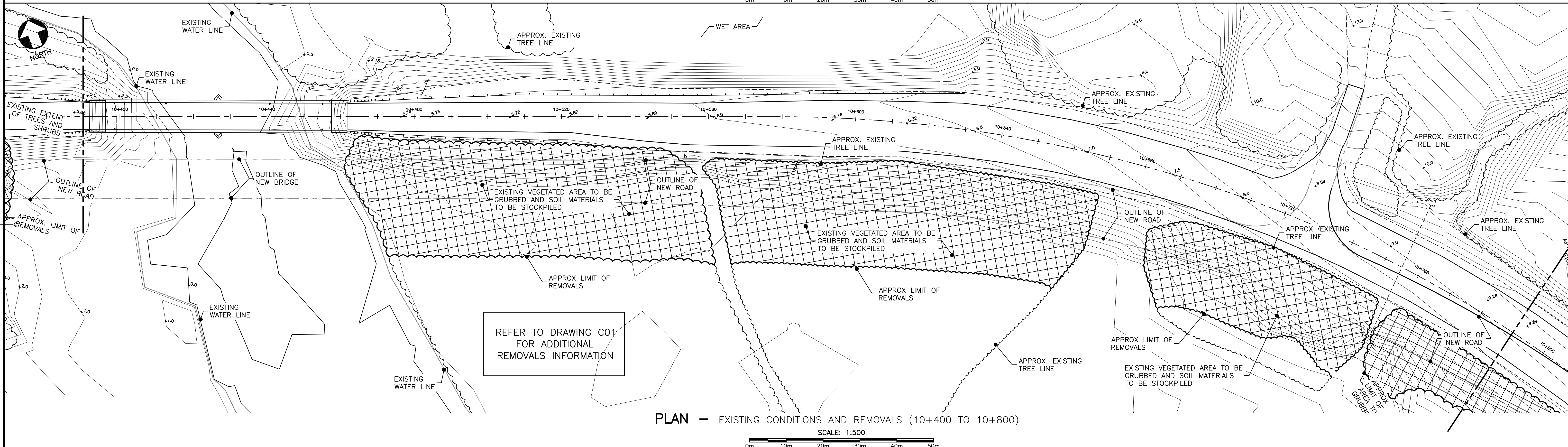
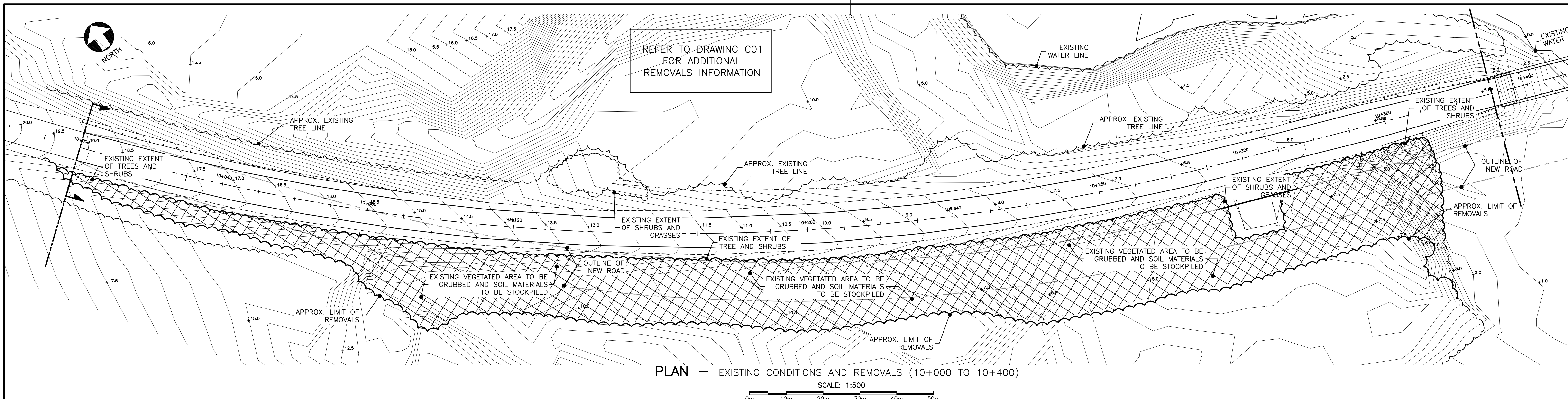
PROVINCE OF NEWFOUNDLAND PERMIT HOLDER CLASS "A"

Signature: Michael S. Macdonald

Date: Mar. 14/17

Professional Engineer

1	ISSUED FOR ADDENDUM	MR. 14 2017
0	ISSUED FOR TENDER	FEB. 10 2017
revisions		date
project	DEER ARM BROOK BRIDGE REPLACEMENT	project
drawing	GROS MORNE NATIONAL PARK	design
MISCELLANEOUS SECTIONS AND DETAILS		
designed	TIM JORDAN	congru
date	NOVEMBER 2016	
drown	KEVIN MACDONALD	dessiné
date	NOVEMBER 2016	
approved	MICHAEL MACDONALD	approuvé
date	NOVEMBER 2016	
Tender	Signature: Kevin Macdonald	Soumission
PCA Project Manager	Signature: Kevin Macdonald	no. du projet
project number	1117	no. du projet
drawing no.	C12	no. du dessin

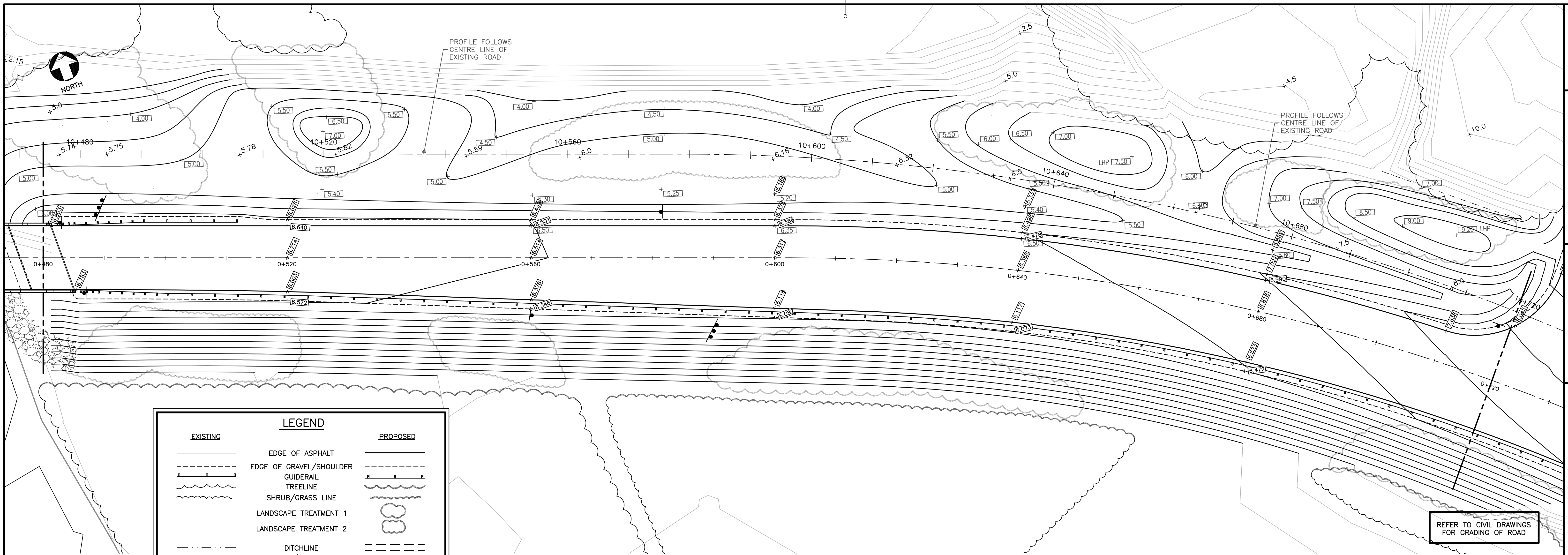


Parcs Canada / Parks Canada

HARBOURSIDE
Engineering Consultants

Vollick McKee Petersmann
ASSOCIATES LTD.
LANDSCAPE ARCHITECTURE
SITE PLANNING PROJECT MANAGEMENT

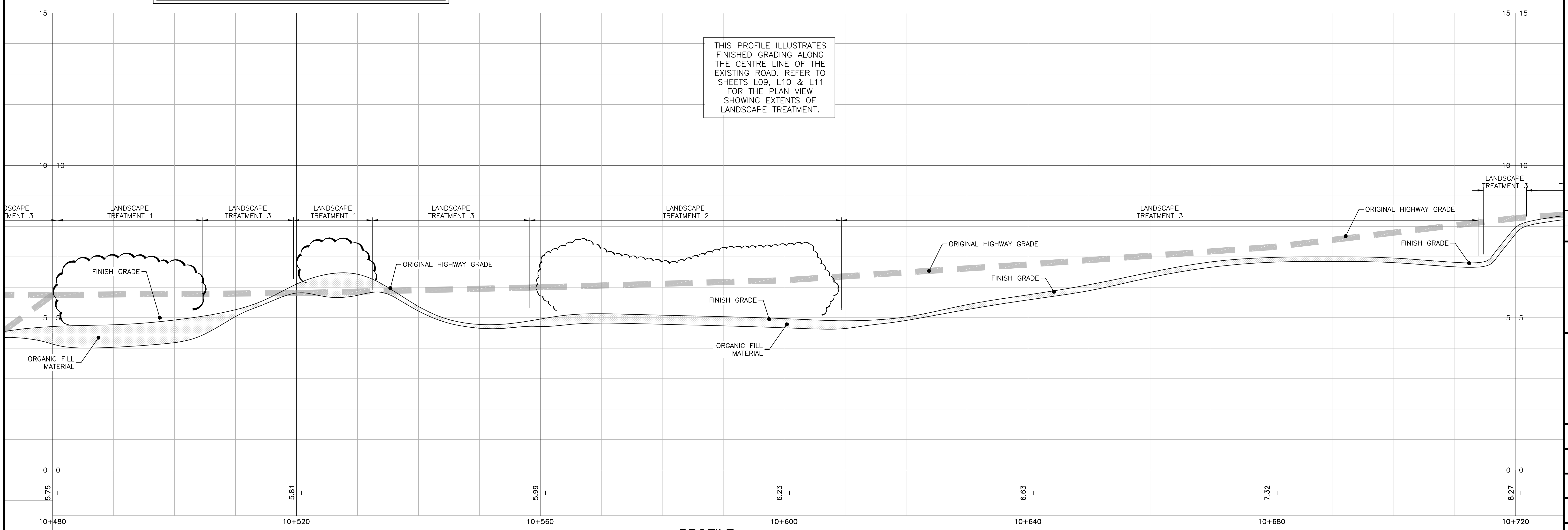
0	ISSUED FOR ADDENDUM	MAR 14 2017
revisions		date
project	DEER ARM BROOK BRIDGE REPLACEMENT	
project	GROS MORNE NATIONAL PARK	
drawing	design	
EXISTING CONDITIONS AND REMOVALS PLAN		
designed	JAMES MCKEE	congr
date	MARCH 2017	
drawn	ANDI LO / JAMES MCKEE	dessin
date	MARCH 2017	
approved		approuvé
date		
Tender		Soumission
PWSC Project Manager	Administrateur de projets TPSGC	
project number	1117	no. du projet
drawing no.	L01	no. du dessin



LEGEND		
EXISTING		PROPOSED
	EDGE OF ASPHALT	
	EDGE OF GRAVEL/SHOULDER	
	GUIDERAIL	
	TREELINE	
	SHRUB/GRASS LINE	
	LANDSCAPE TREATMENT 1	
	LANDSCAPE TREATMENT 2	
	DITCHLINE	
	SHORELINE/WATERCOURSE	
	POWER POLE c/w GUYWIRE	
	SIGN	
	CULVERT	
	OVERHEAD WIRE	
	SPOT ELEVATION	

PLAN — PROPOSED ROUTE 430 (0+480 TO 0+720)
SCALE : 1:300

THIS PROFILE ILLUSTRATES FINISHED GRADING ALONG THE CENTRE LINE OF THE EXISTING ROAD. REFER TO SHEETS L09, L10 & L11 FOR THE PLAN VIEW SHOWING EXTENTS OF LANDSCAPE TREATMENT.



PROFILE — EXISTING ROUTE 430 (10+480 TO 10+720)
HORIZONTAL SCALE : 1:300 VERTICAL SCALE: 1:60

17-MAR-14
JAMES W. D. MCKEE

0	ISSUED FOR ADDENDUM	MAR 14 2017
revisions	date	date

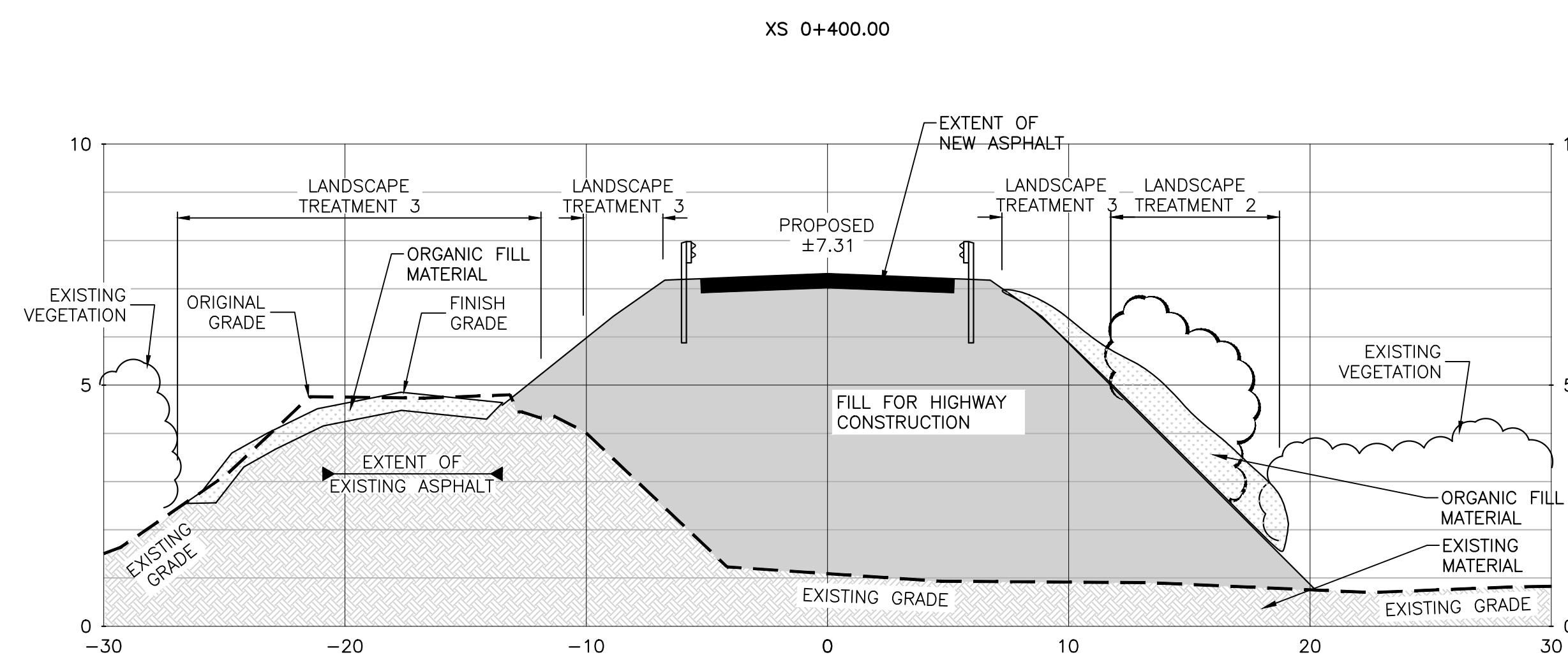
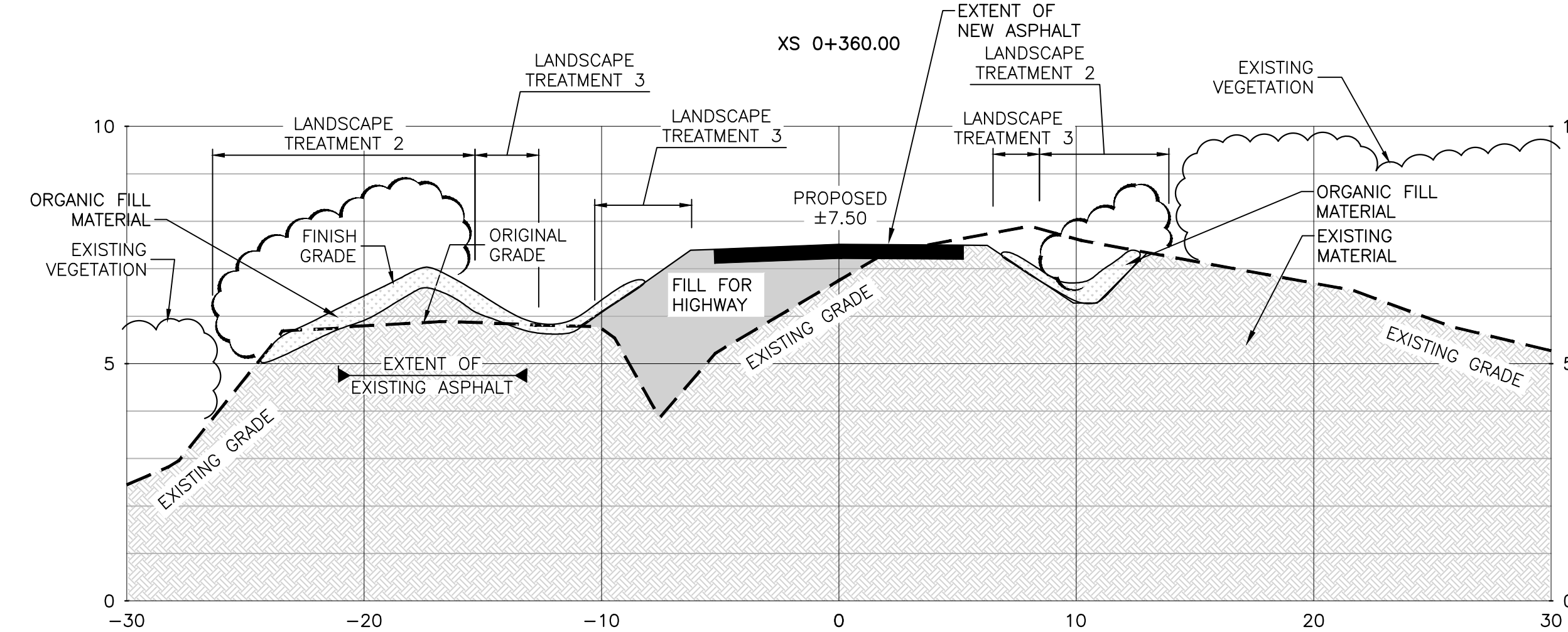
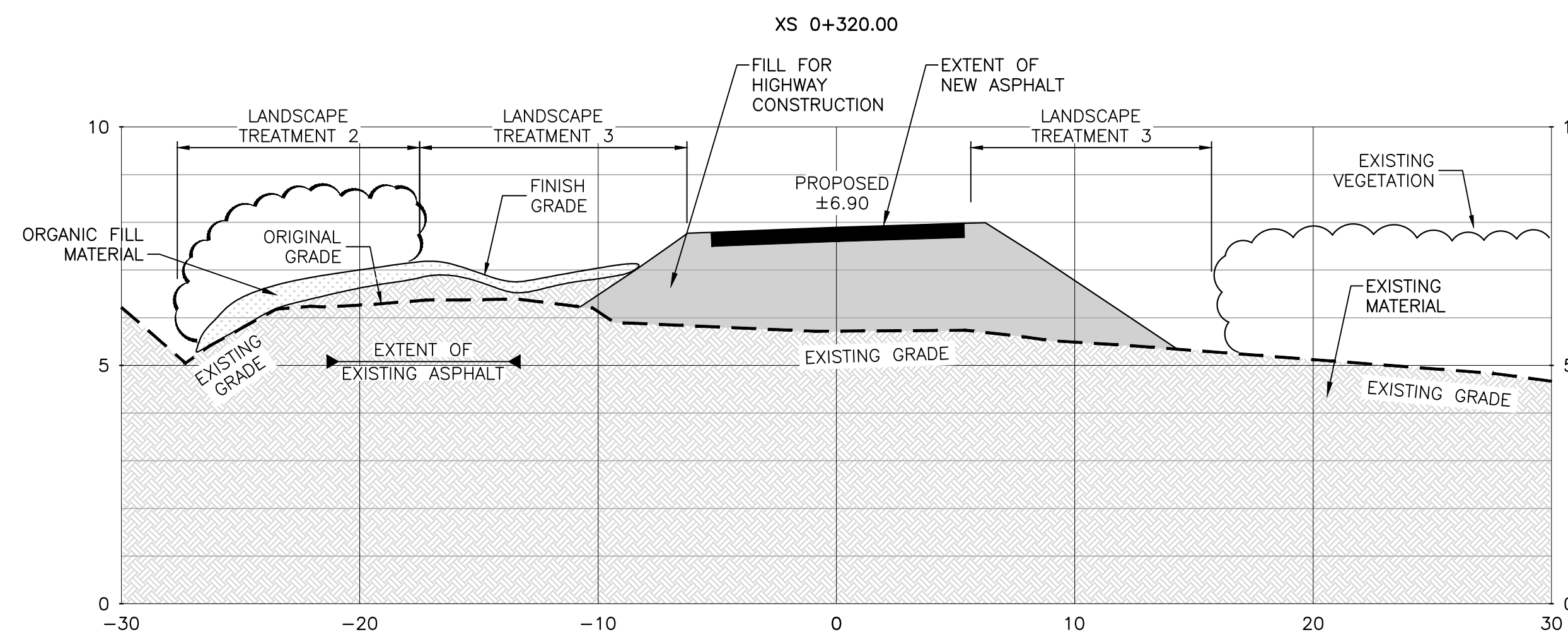
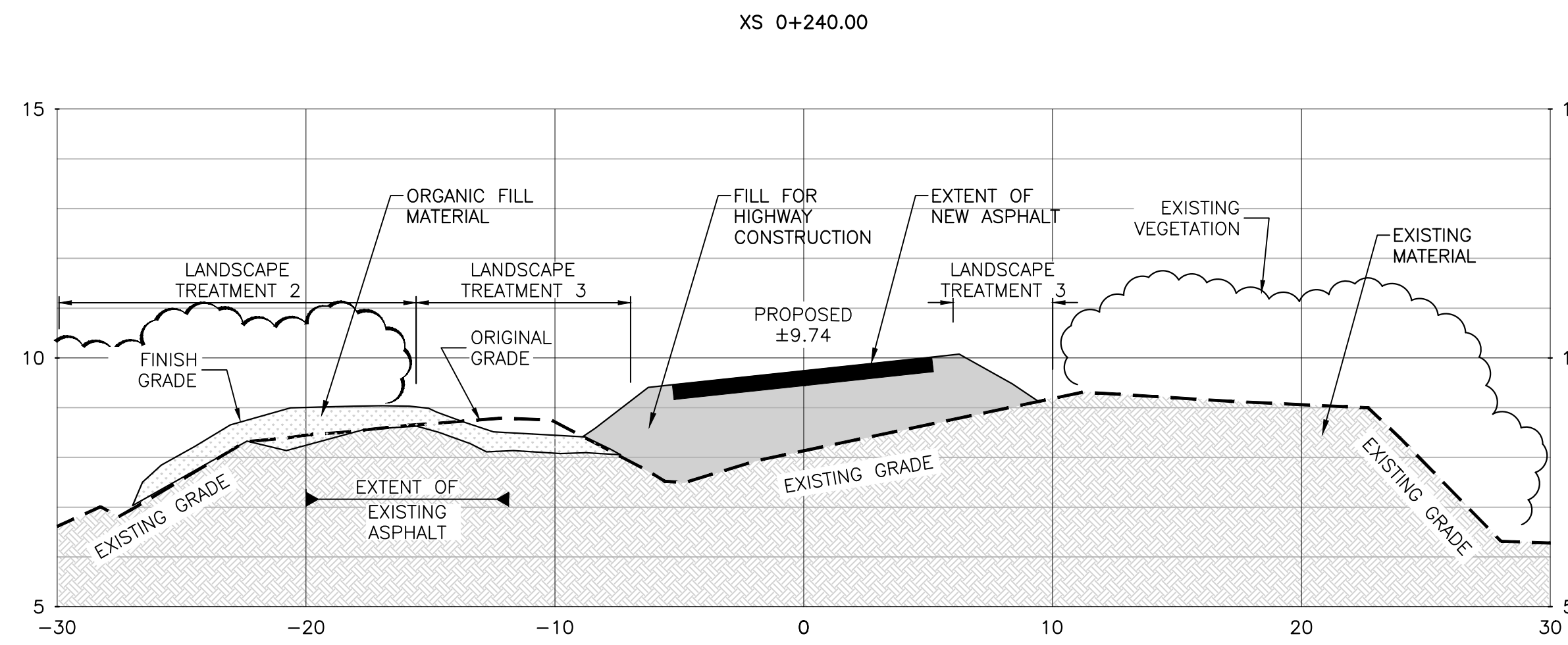
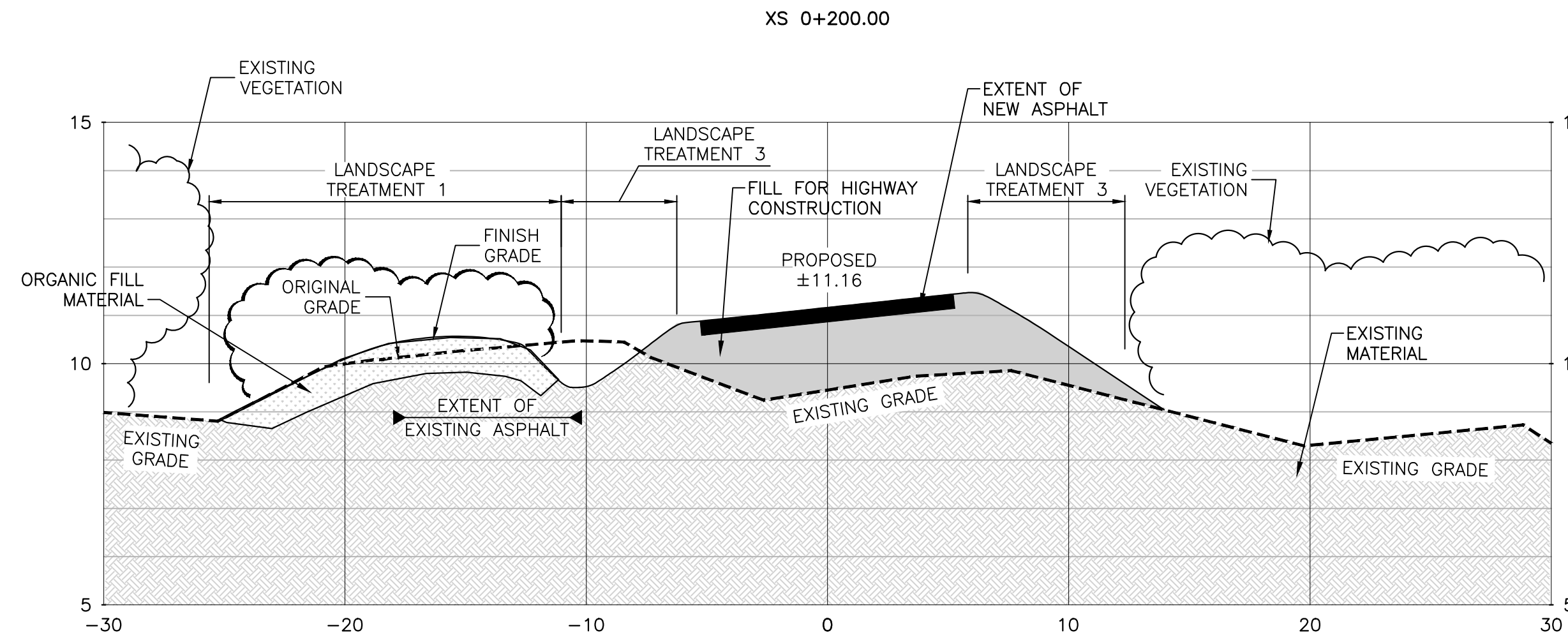
DEER ARM BROOK BRIDGE REPLACEMENT
GROS MORNE NATIONAL PARK

LANDSCAPE GRADING
ROUTE 430
STA. 0+480 TO 0+720

designed	JAMES MCKEE	conçu
date	MARCH 2017	date
drawn	ANDI LO / JAMES MCKEE	dessiné
date	MARCH 2017	date

approved		approuvé
date		date
Tender		Soumission
PWSC Project Manager	Administrateur de projets TPSGC	no. du projet

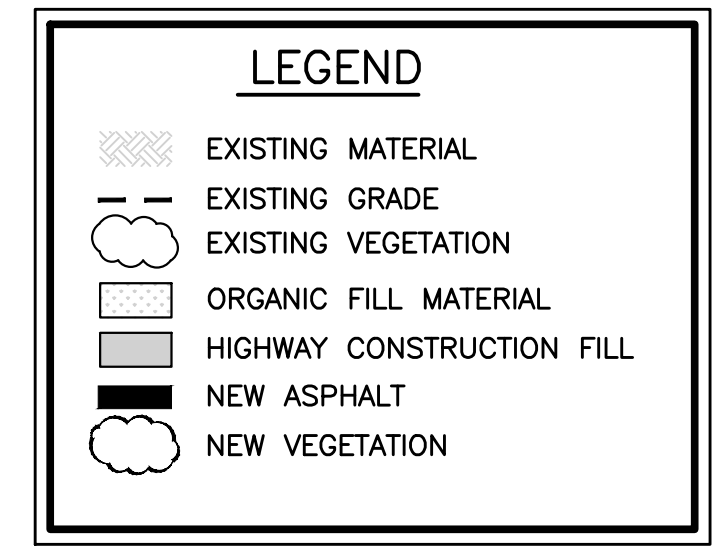
1117
drawing no. no. du dessin
L04



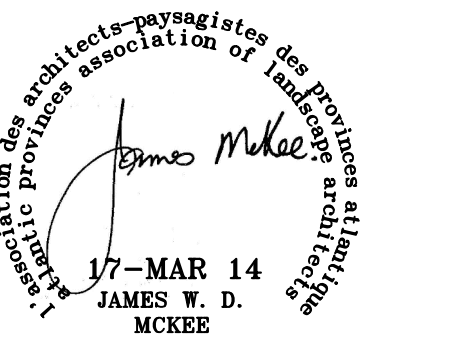
LANDSCAPE TREATMENT 1 – REINSTITATED TREE PLANTING
PLACE MINIMUM OF 750MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
PLANT TREES IN PLANTING HOLES WITH NEW PLANTING SOIL. PLANT TREES RANDOMLY FOLLOWING ROUGH SPACING INDICATED IN TABLE.
HYDROSEED EXPOSED SURFACE.

LANDSCAPE TREATMENT 2 – REINSTITATED SHRUB PLANTING
PLACE MINIMUM OF 300MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
PLANT TREES/SHRUBS IN PLANTING HOLES WITH NEW PLANTING SOIL. PLANT TREES/SHRUBS IN GROUPS OF 5 – 9 FOLLOWING ROUGH SPACING INDICATED IN TABLE.
HYDROSEED EXPOSED SURFACE.

LANDSCAPE TREATMENT 3 – HYDROSEEDING ONLY
PLACE MINIMUM OF 150MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
HYDROSEED EXPOSED SURFACE.



SECTIONS

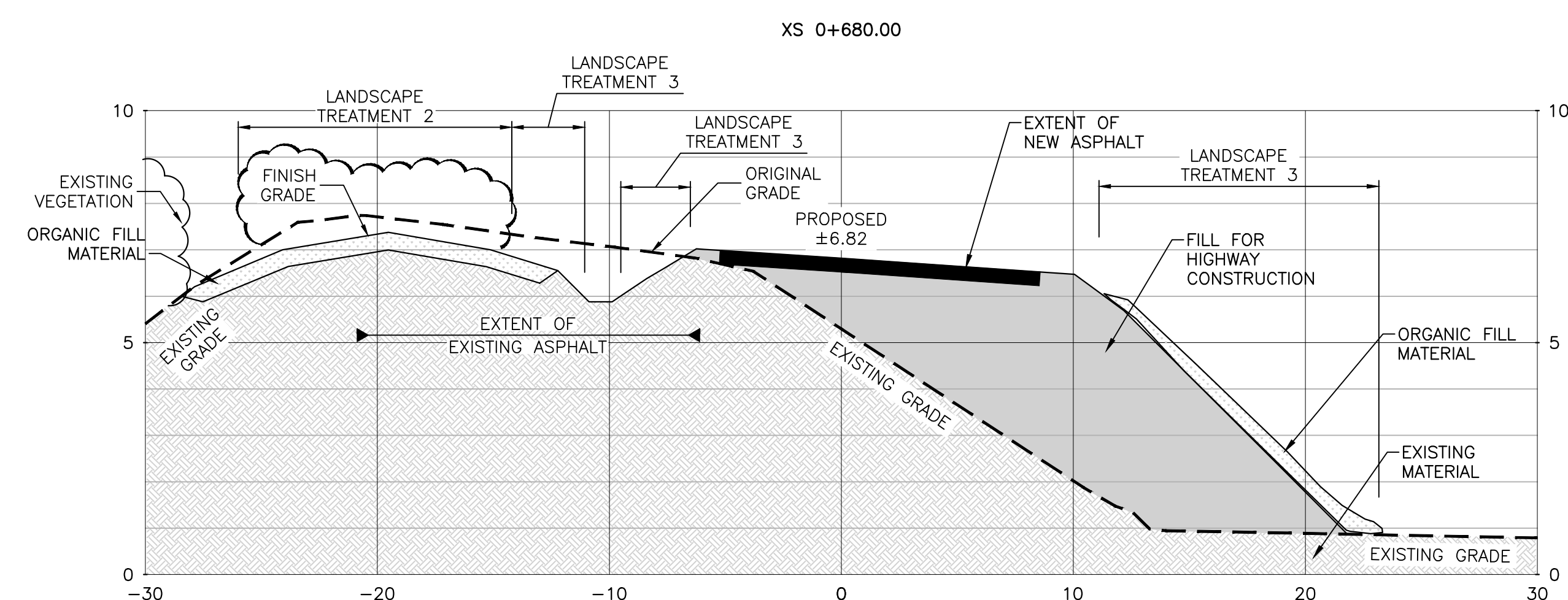
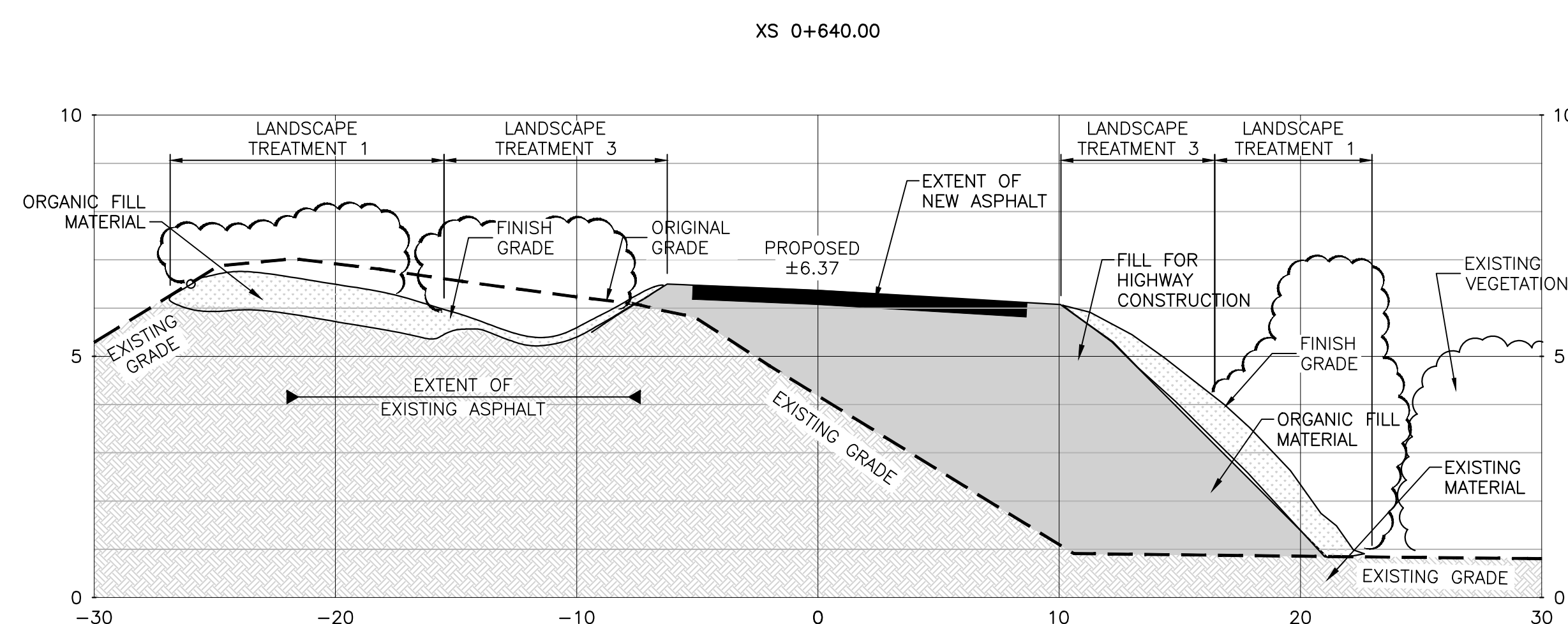
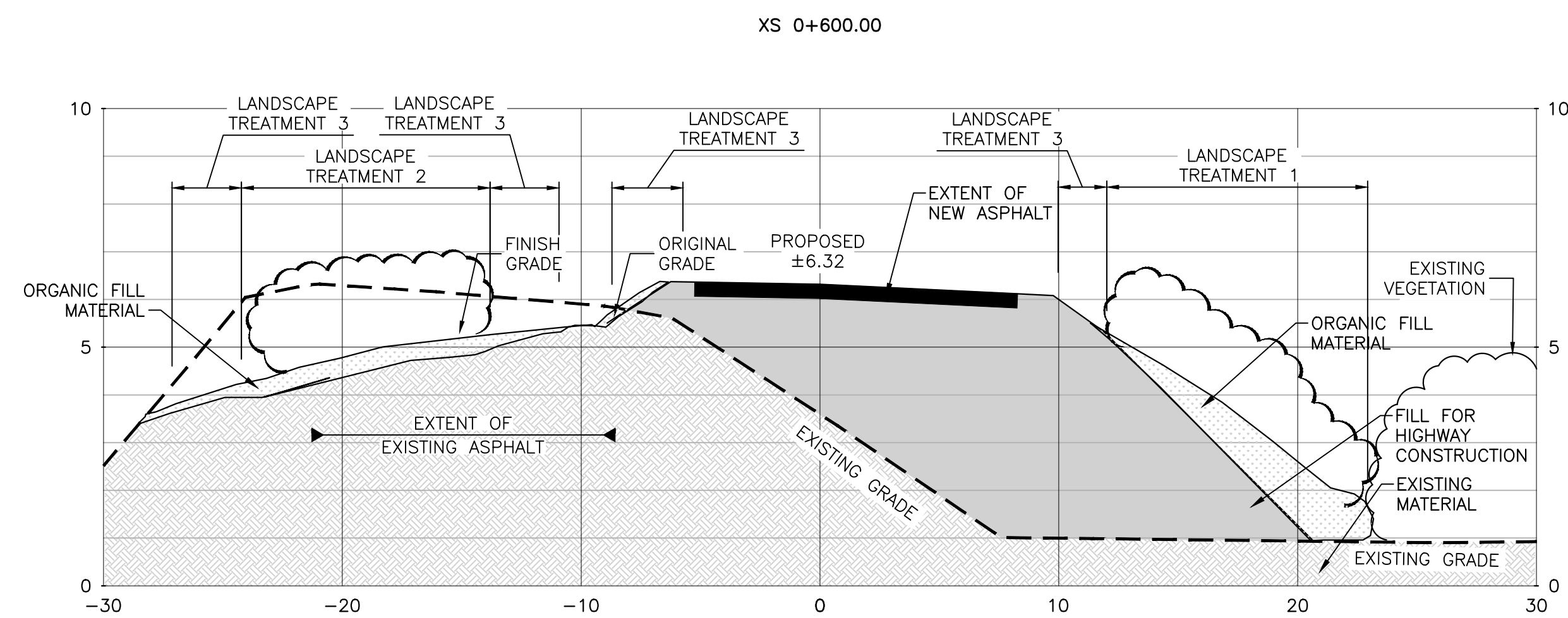
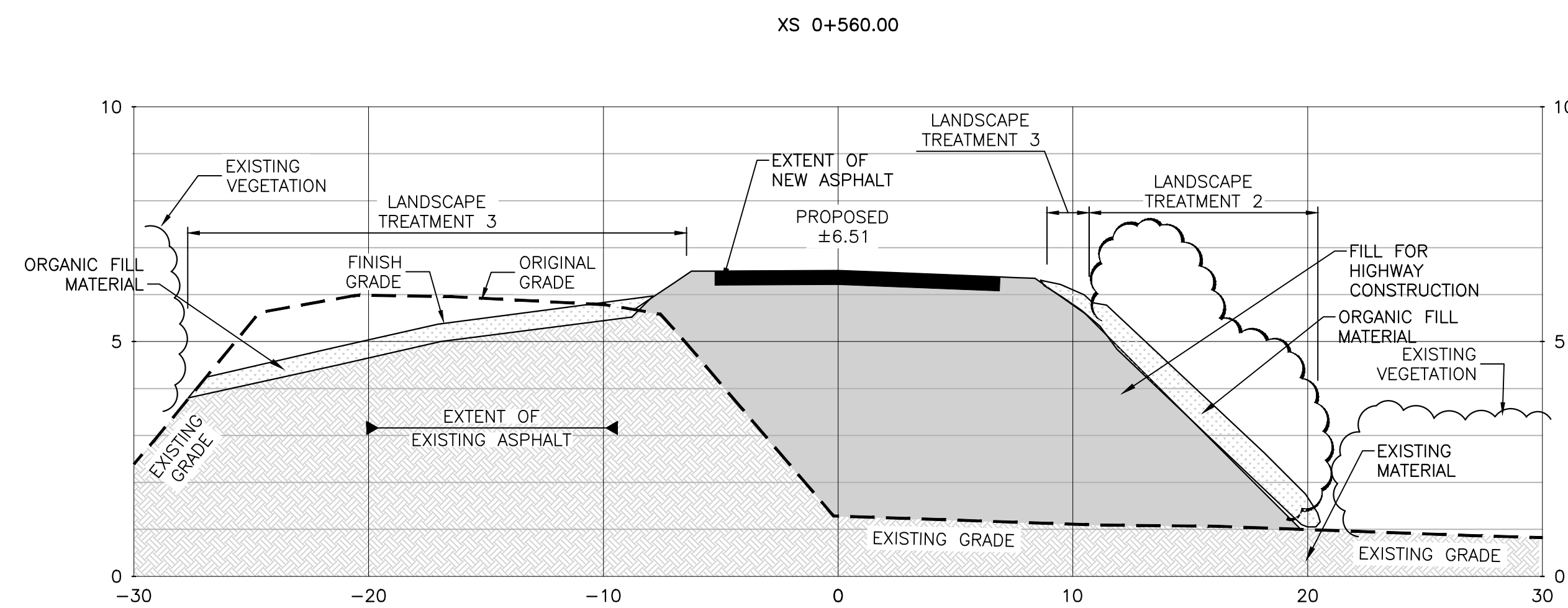
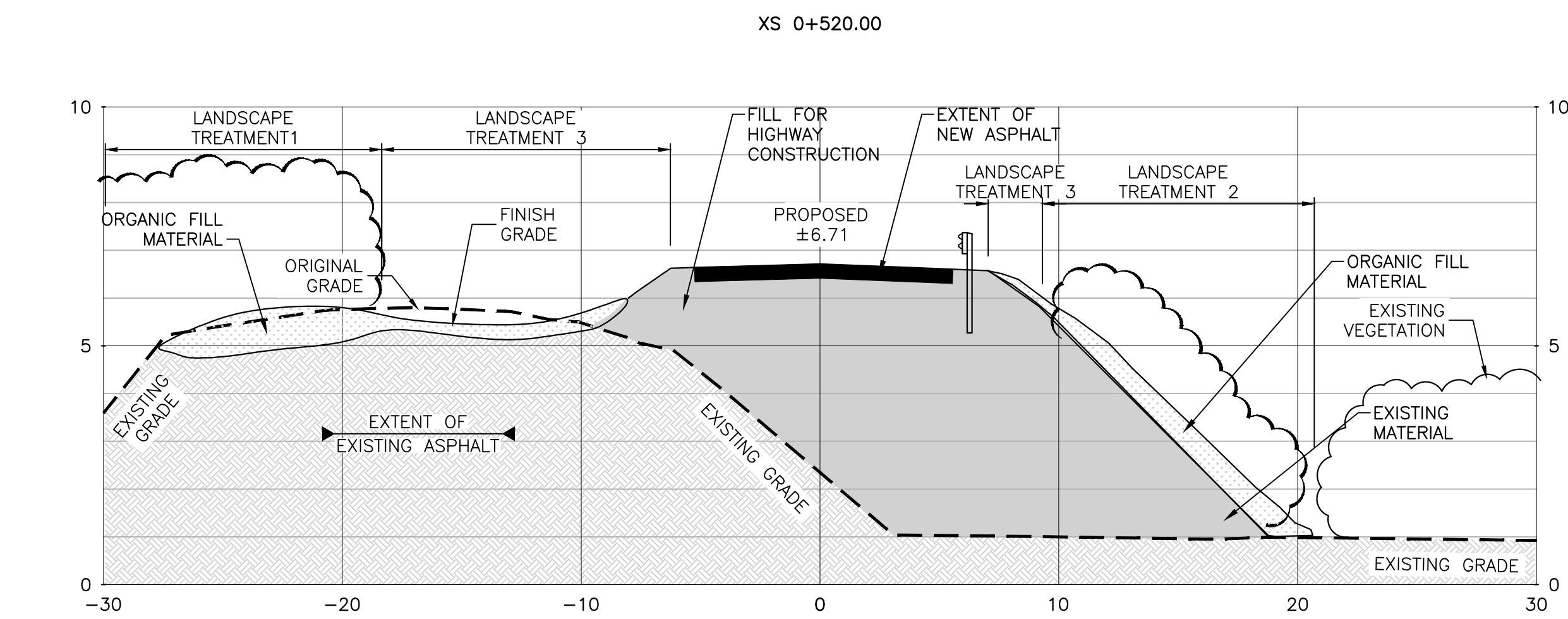
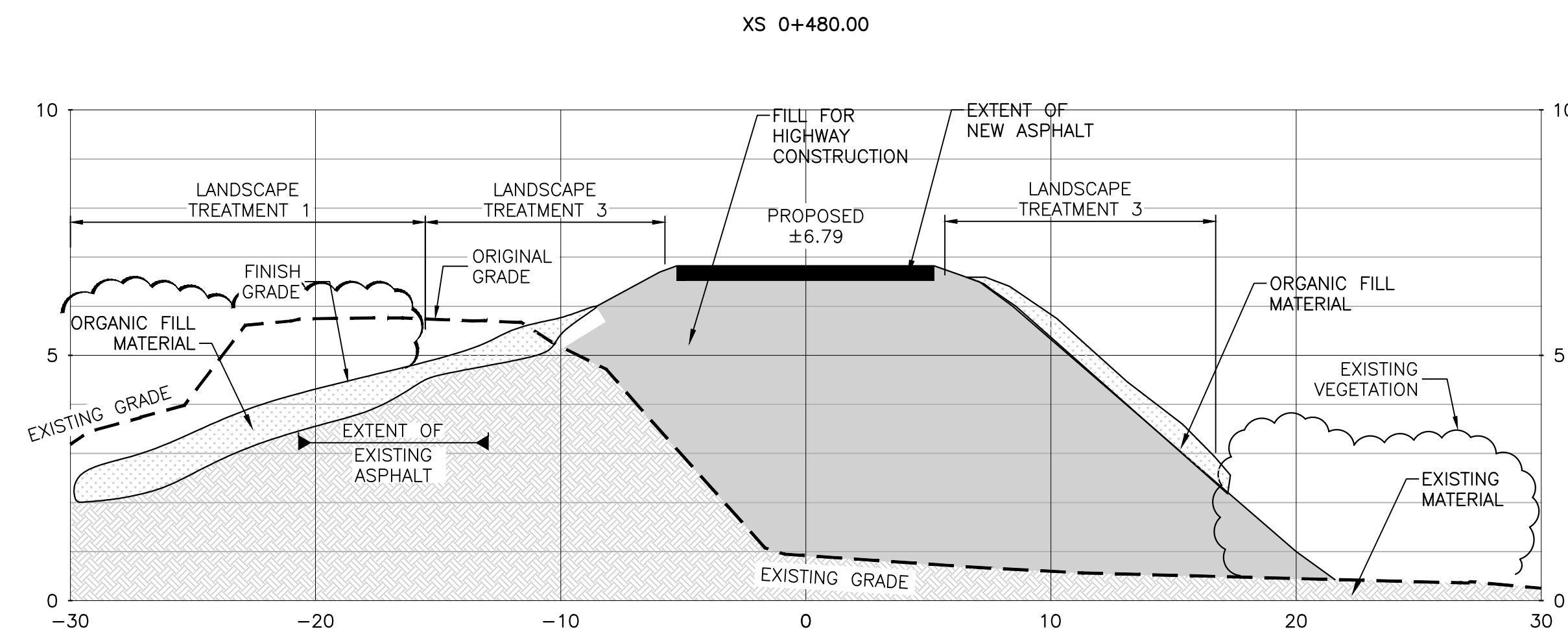


0	ISSUED FOR ADDENDUM	MAR 14 2017
revisions		date

project DEER ARM BROOK BRIDGE REPLACEMENT
project GROS MORNE NATIONAL PARK

drawing CROSS SECTIONS (SHEET 1 OF 3)
design

designed	JAMES MCKEE	conçu
date	MARCH 2017	
drawn	ANDI LO / JAMES MCKEE	dessiné
date	MARCH 2017	
approved		approuvé
date		
Tender		Soumission
PWSC Project Manager	Administrateur de projets TPSGC	
project number	1117	no. du projet
drawing no.	L06	no. du dessin



LANDSCAPE TREATMENT 1 – REINSTATED TREE PLANTING
PLACE MINIMUM OF 750MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
PLANT TREES IN PLANTING HOLES WITH NEW PLANTING SOIL.
PLANT TREES RANDOMLY FOLLOWING ROUGH SPACING INDICATED IN TABLE.
HYDROSEED EXPOSED SURFACE.

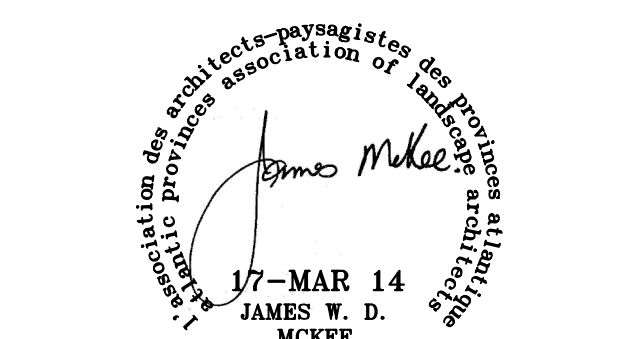
LANDSCAPE TREATMENT 2 – REINSTATED SHRUB PLANTING
PLACE MINIMUM OF 300MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
PLANT TREES/SHRUBS IN PLANTING HOLES WITH NEW PLANTING SOIL. PLANT TREES/SHRUBS IN GROUPS OF 5 – 9 FOLLOWING ROUGH SPACING INDICATED IN TABLE.
HYDROSEED EXPOSED SURFACE.

LANDSCAPE TREATMENT 3 – HYDROSEEDING ONLY
PLACE MINIMUM OF 150MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
HYDROSEED EXPOSED SURFACE.

LEGEND

	EXISTING MATERIAL
	EXISTING GRADE
	EXISTING VEGETATION
	ORGANIC FILL MATERIAL
	HIGHWAY CONSTRUCTION FILL
	NEW ASPHALT
	NEW VEGETATION

SECTIONS



0	ISSUED FOR ADDENDUM	MAR 14 2017
revisions		date

project **DEER ARM BROOK BRIDGE REPLACEMENT**

GROS MORNE NATIONAL PARK

drawing **CROSS SECTIONS (SHEET 2 OF 3)** design

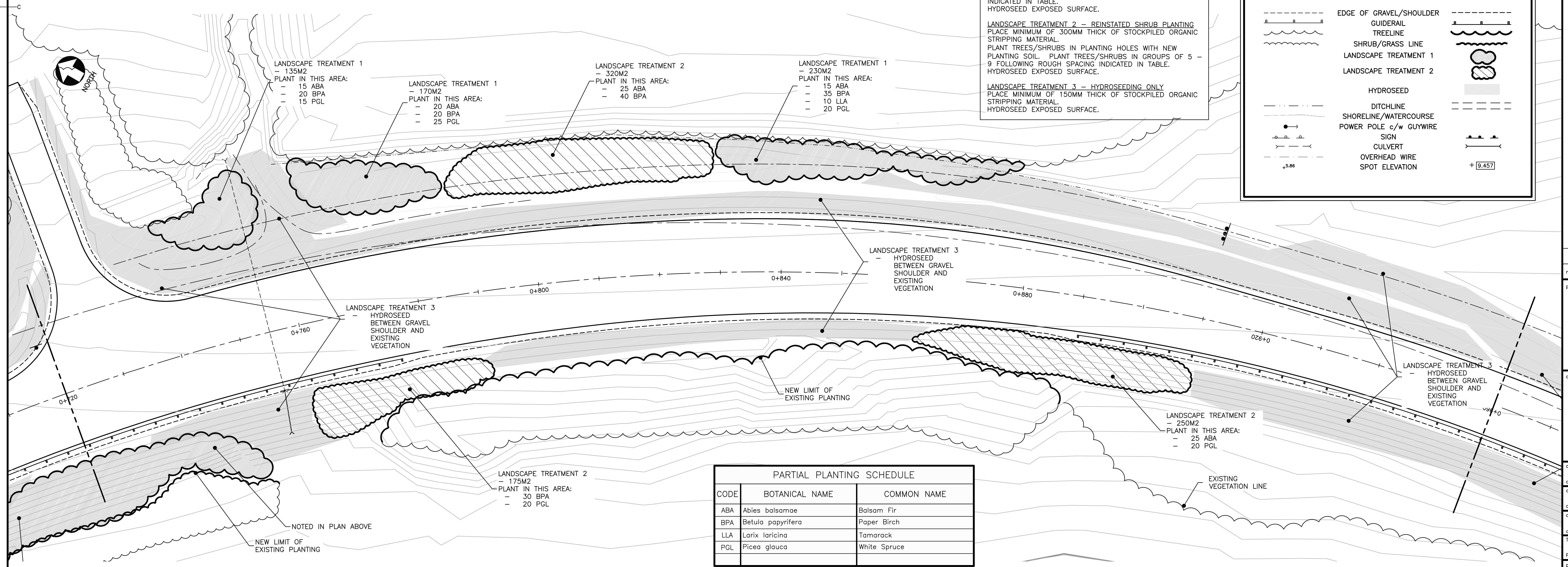
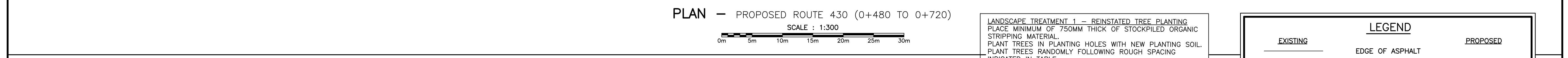
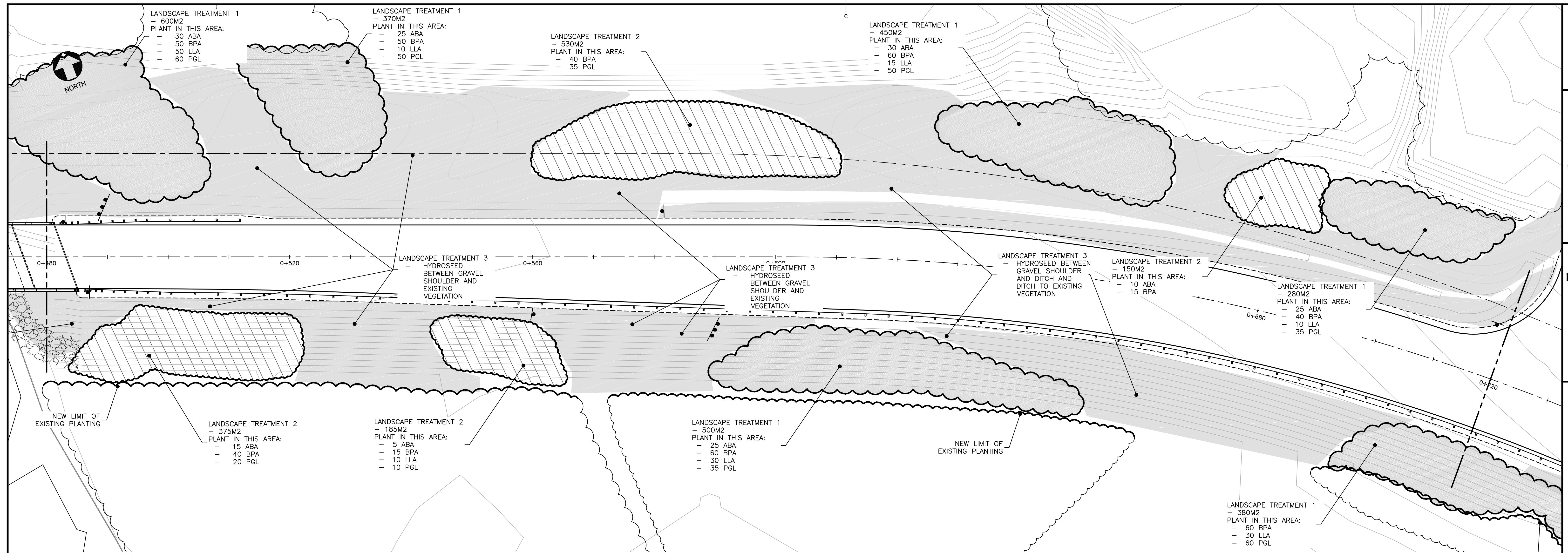
designed **JAMES MCKEE** conçu
date **MARCH 2017**
drawn **ANDI LO / JAMES MCKEE** dessiné
date **MARCH 2017**

approved _____ approuvé
date _____

Tender **Andi Lo** Soumission
PWSC Project Manager **Administrateur de projets TPSGC**
project number **1117** no. du projet

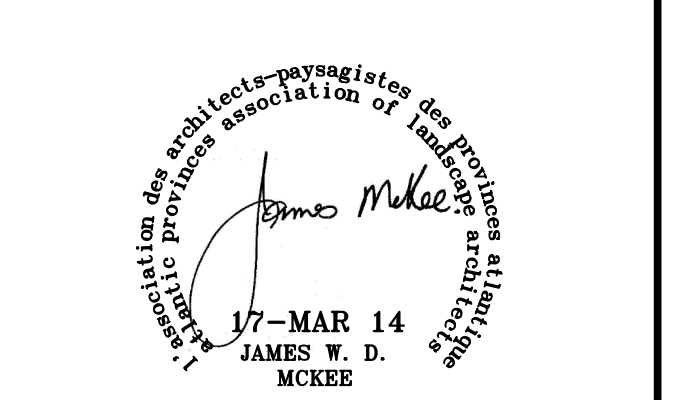
drawing no. **L07** no. du dessin

E-DRM/gdb-E



PARTIAL PLANTING SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME
ABA	Abies balsamiae	Balsam Fir
BPA	Betula papyrifera	Paper Birch
LLA	Larix laricina	Tamarack
PGL	Picea glauca	White Spruce



0	ISSUED FOR ADDENDUM	MAR 14 2017
revisions		date
project	DEER ARM BROOK BRIDGE REPLACEMENT	project
	GROS MORNE NATIONAL PARK	
drawing	LANDSCAPE FINISH TREATMENT PLAN STA. 0+480 TO 0+960	design
designed	JAMES MCKEE	congr
date	MARCH 2017	
drawn	ANDI LO / JAMES MCKEE	dessiné
date	MARCH 2017	
approved		approuvé
date		
Tender		Soumission
PWOSC Project Manager	Administrateur de projets TPSGC	
project number	1117	no. du projet
drawing no.	L10	no. du dessin

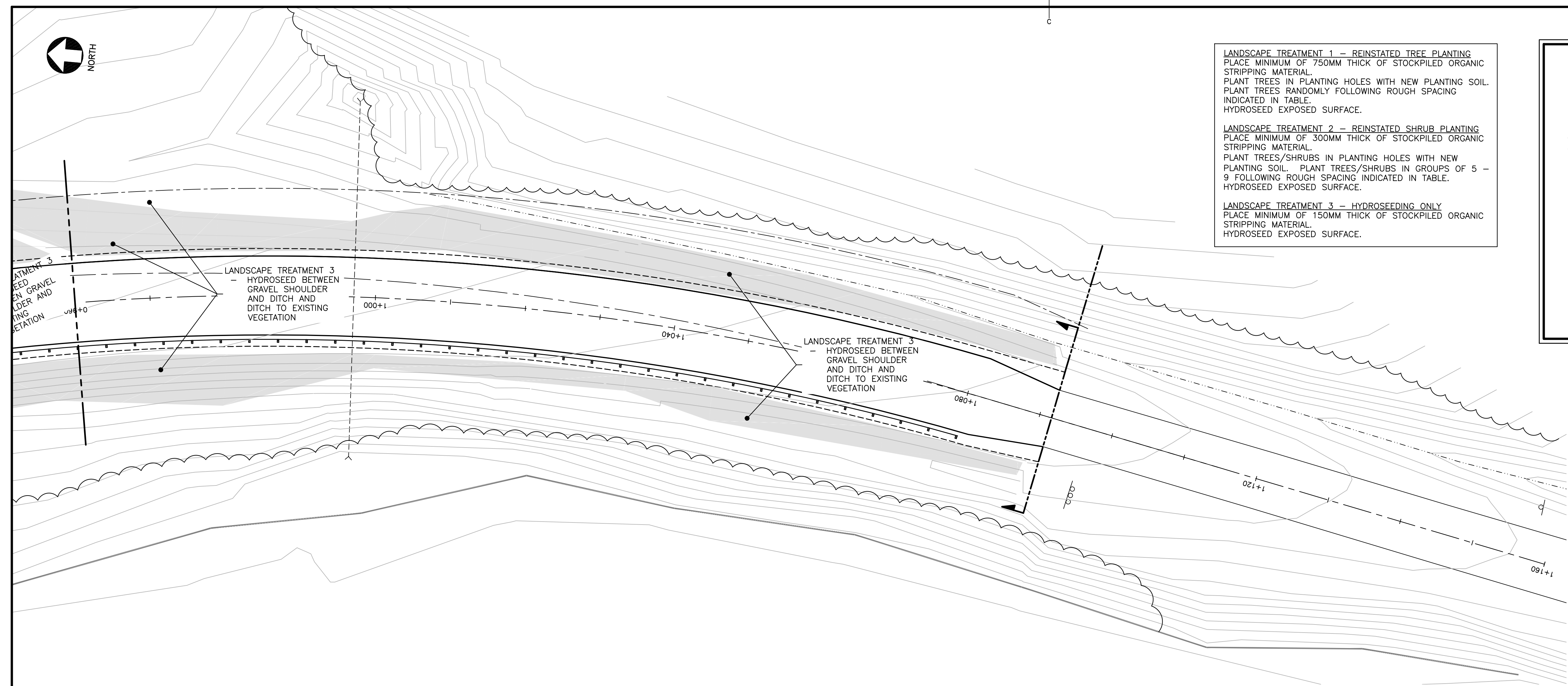


LANDSCAPE TREATMENT 1 — REINSTATED TREE PLANTING
 PLACE MINIMUM OF 750MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
 PLANT TREES IN PLANTING HOLES WITH NEW PLANTING SOIL. PLANT TREES RANDOMLY FOLLOWING ROUGH SPACING INDICATED IN TABLE.
 HYDROSEED EXPOSED SURFACE.

LANDSCAPE TREATMENT 2 — REINSTATED SHRUB PLANTING
 PLACE MINIMUM OF 300MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
 PLANT TREES/SHRUBS IN PLANTING HOLES WITH NEW PLANTING SOIL. PLANT TREES/SHRUBS IN GROUPS OF 5 — 9 FOLLOWING ROUGH SPACING INDICATED IN TABLE.
 HYDROSEED EXPOSED SURFACE.

LANDSCAPE TREATMENT 3 — HYDROSEEDING ONLY
 PLACE MINIMUM OF 150MM THICK OF STOCKPILED ORGANIC STRIPPING MATERIAL.
 HYDROSEED EXPOSED SURFACE.

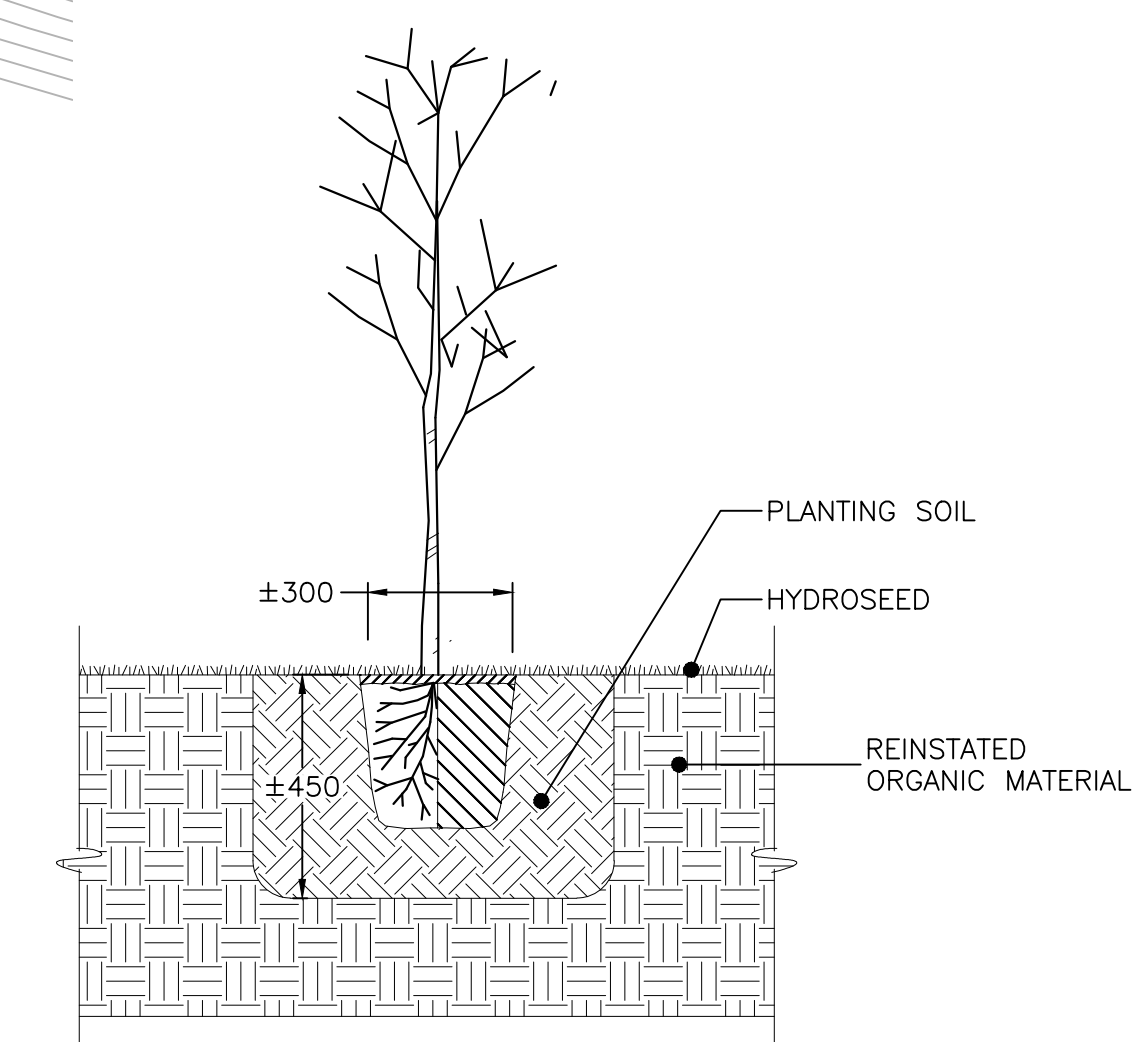
EXISTING		LEGEND		PROPOSED	
---	EDGE OF ASPHALT	---	EDGE OF ASPHALT	---	EDGE OF ASPHALT
---	EDGE OF GRAVEL/SHOULDER	---	EDGE OF GRAVEL/SHOULDER	---	EDGE OF GRAVEL/SHOULDER
---	GUIDERAIL	---	GUIDERAIL	---	GUIDERAIL
---	TREELINE	---	TREELINE	---	TREELINE
---	SHRUB/GRASS LINE	---	SHRUB/GRASS LINE	---	SHRUB/GRASS LINE
---	LANDSCAPE TREATMENT 1	---	LANDSCAPE TREATMENT 1	---	LANDSCAPE TREATMENT 1
---	LANDSCAPE TREATMENT 2	---	LANDSCAPE TREATMENT 2	---	LANDSCAPE TREATMENT 2
---	HYDROSEED	---	HYDROSEED	---	HYDROSEED
---	DITCHLINE	---	DITCHLINE	---	DITCHLINE
---	SHORELINE/WATERCOURSE	---	SHORELINE/WATERCOURSE	---	SHORELINE/WATERCOURSE
---	POWER POLE c/w GUYWIRE	---	POWER POLE c/w GUYWIRE	---	POWER POLE c/w GUYWIRE
---	SIGN	---	SIGN	---	SIGN
---	CULVERT	---	CULVERT	---	CULVERT
---	OVERHEAD WIRE	---	OVERHEAD WIRE	---	OVERHEAD WIRE
---	SPOT ELEVATION	---	SPOT ELEVATION	---	SPOT ELEVATION



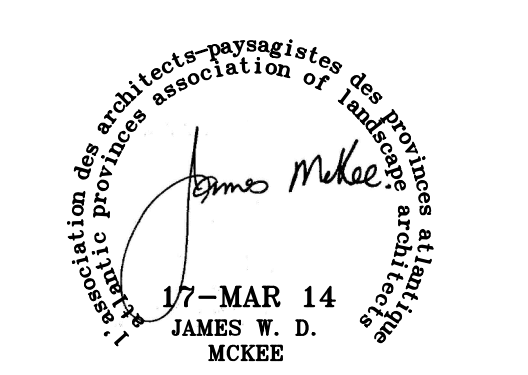
PLAN — PROPOSED ROUTE 430 (0+960 TO 1+160)
 SCALE : 1:300

FULL PLANTING SCHEDULE								
CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	COND.	SPACING	STAKING	REMARKS
ABA	510	Abies balsamea	Balsam Fir	80cm	CG#3	1000 O.C.	—	Spaced randomly
BPA	975	Betula papyrifera	Paper Birch	100cm	CG#3	1000 o.c.	—	Spaced randomly
LLA	315	Larix laricina	Tamarack	100cm	CG#3	1000 o.c.	—	Spaced randomly
PGL	690	Picea glauca	White Spruce	80cm	CG#3	1000 o.c.	—	Spaced randomly

NOTE: SUBSTITUTIONS TO PLANTS AS SPECIFIED ABOVE ARE NOT ACCEPTABLE UNLESS WRITTEN PERMISSION HAS BEEN OBTAINED FOR SPECIES / VARIETY, SIZE, QUANTITY &/OR CONDITION FROM DEPARTMENTAL REPRESENTATIVE



SCALE : NTS
TREE PLANTING DETAIL

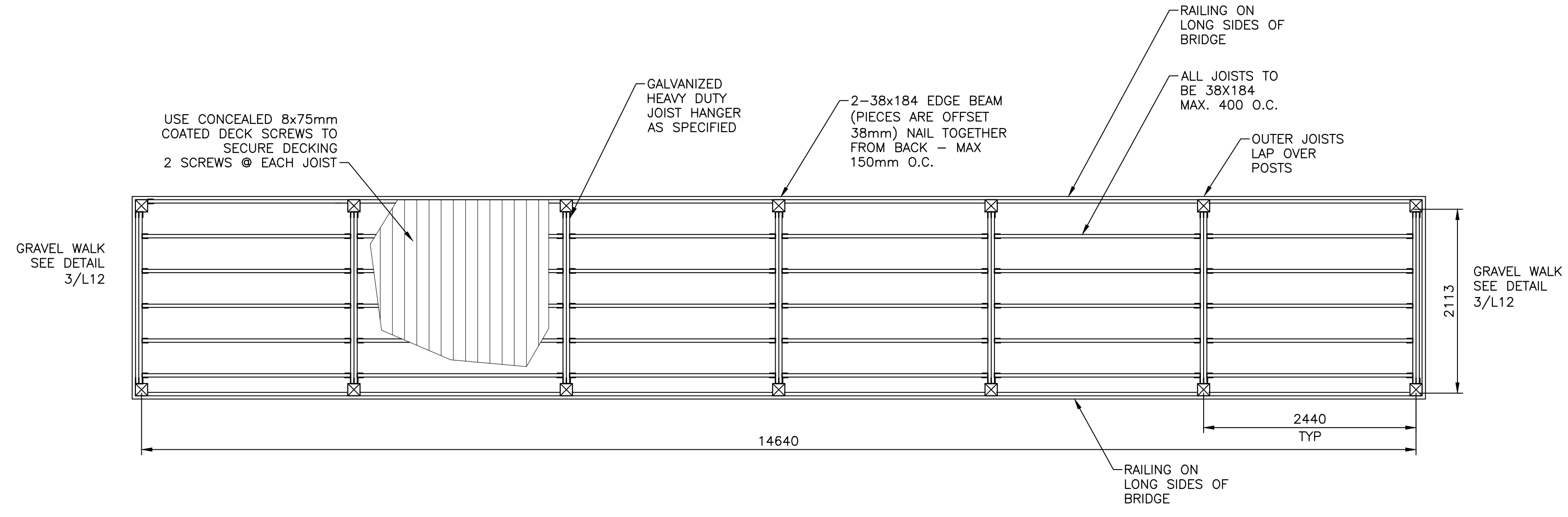


0	ISSUED FOR ADDENDUM	MAR 14 2017
revisions		date
project	DEER ARM BROOK BRIDGE REPLACEMENT	
	GROS MORNE NATIONAL PARK	

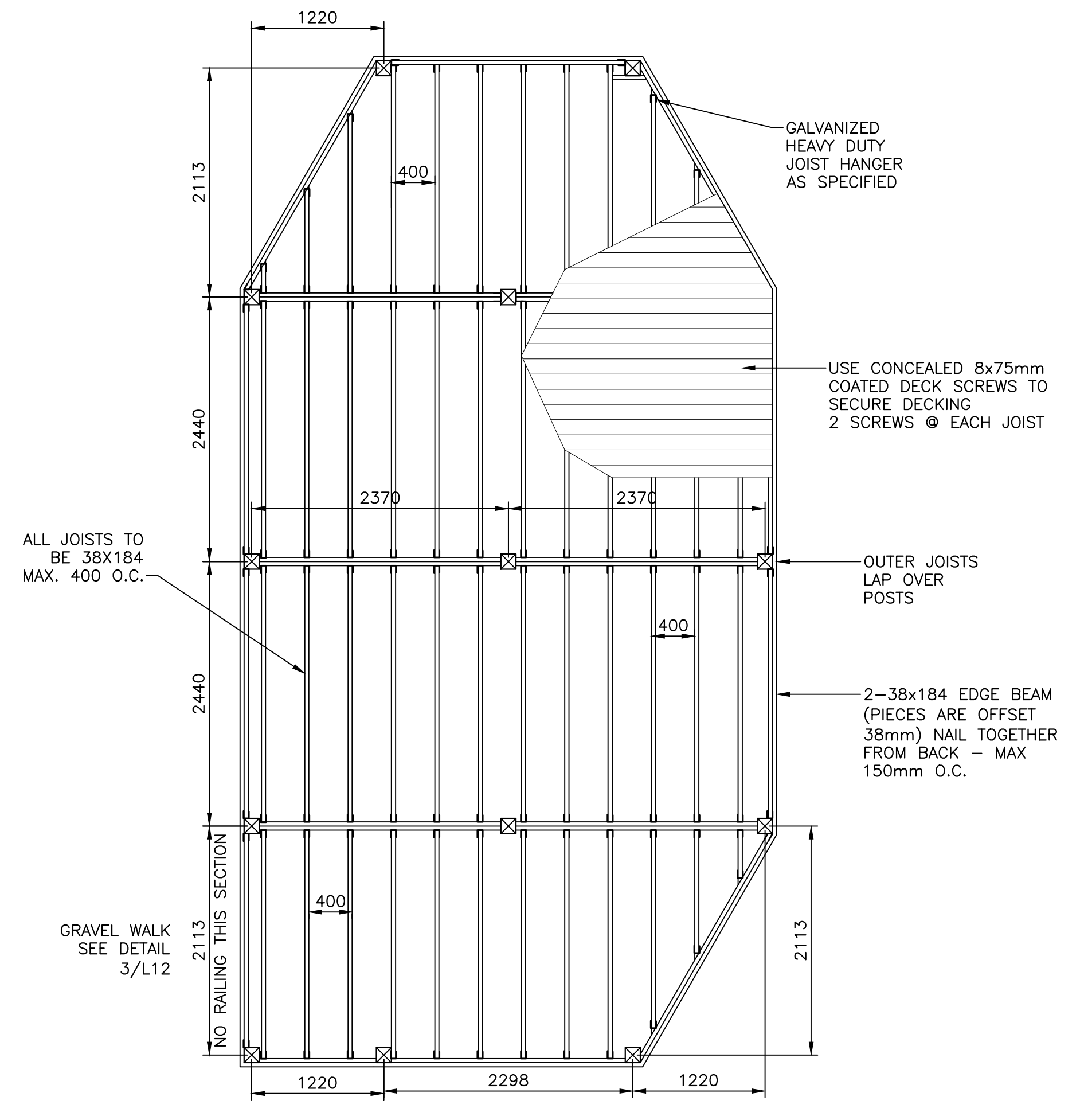
LANDSCAPE FINISH TREATMENT PLAN STA. 0+960 TO 1+160

designed	JAMES MCKEE	conçu
date	MARCH 2017	
drawn	ANDI LO / JAMES MCKEE	dessiné
date	MARCH 2017	
approved		approuvé
date		
Tender		Submission
PWSC Project Manager	Administrateur de projets TPSGC	
project number	1117	no. du projet
drawing no.	L11	no. du dessin

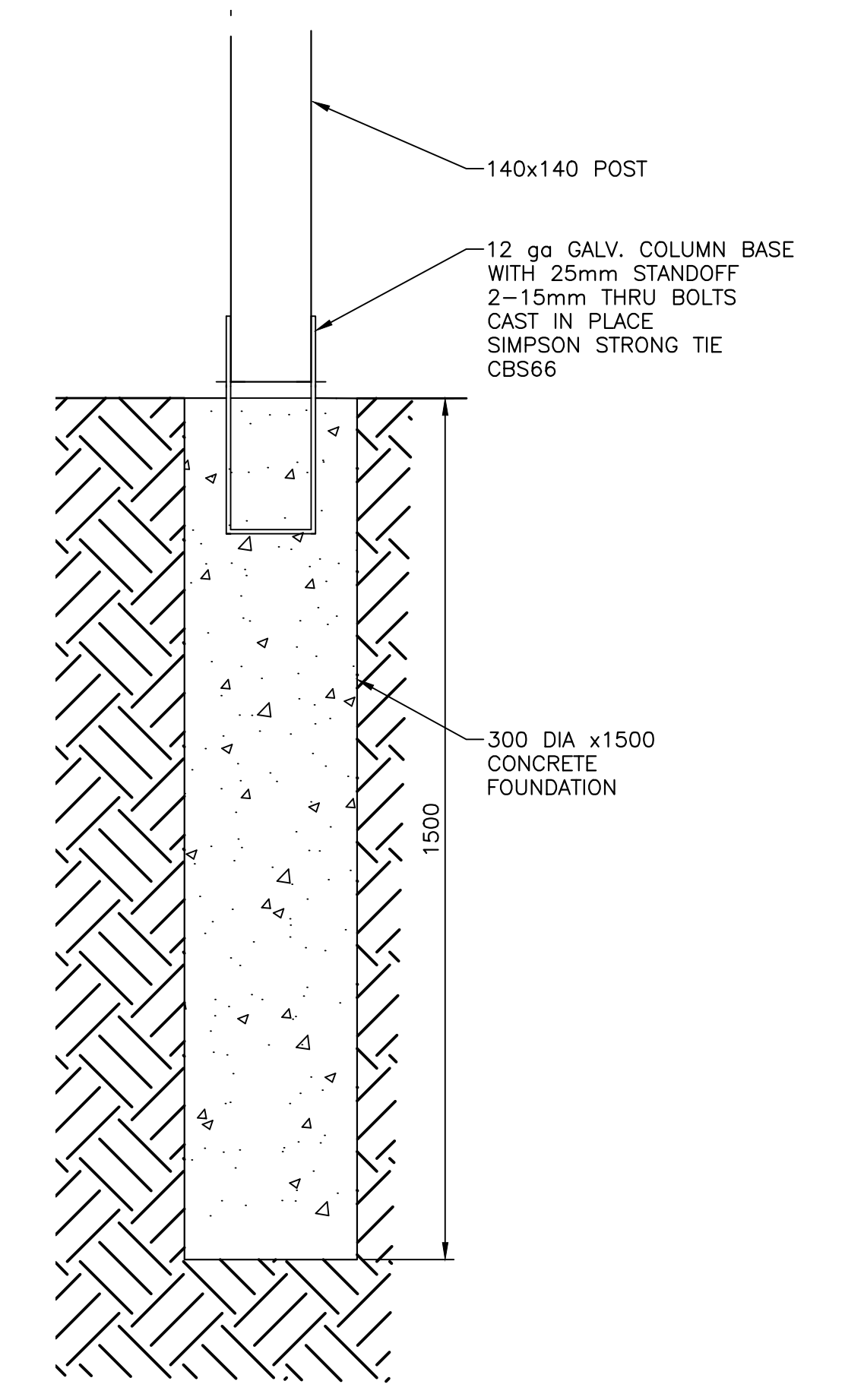
1. ALL TIMBER TO BE PRESSURE TREATED S-P-F#2 OR BETTER. SEE SPECIFICATION
2. BUILD TO THE NATIONAL BUILDING CODE OF CANADA, 2015 EDITION
3. LOCATE DECKS AS SHOWN ON PLAN SHEET L12



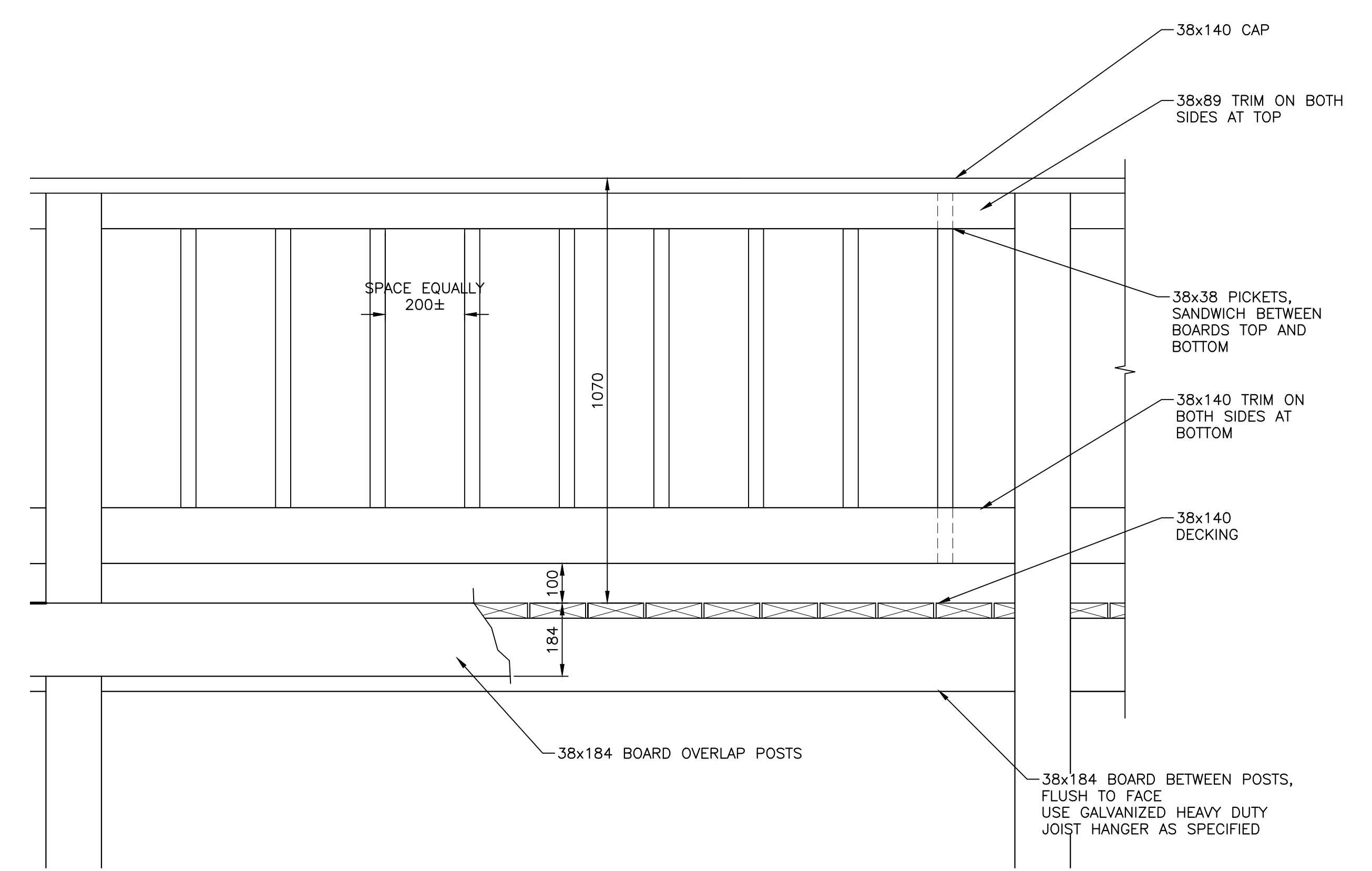
DECK AND BRIDGE FRAMING PLAN 1
SCALE: 1:40



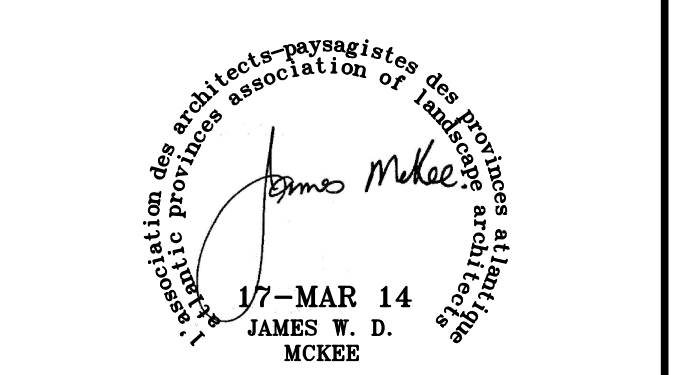
BRIDGE RAILING ELEVATION 3
SCALE: 1:10



DECK AND BRIDGE FOUNDATION SECTION 2
SCALE: 1:10



BRIDGE SECTION 4
SCALE: 1:10



0	ISSUED FOR ADDENDUM	MAR 14 2017
revisions		date

project
DEER ARM BROOK BRIDGE REPLACEMENT
GROS MORNE NATIONAL PARK

drawing
LOOKOUT PLAN AND SECTION (SHEET 2 OF 2)

designed	JAMES MCKEE	conçu
date	MARCH 2017	
drawn	ANDI LO / JAMES MCKEE	dessiné
date	MARCH 2017	
approved		approuvé
date		
Tender	Administrateur de projets TPSGC	Soumission
PWSC Project Manager	Administrateur de projets TPSGC	
project number	1117	no. du projet
drawing no.	L13	no. du dessin