

LEGEND



GRANULAR FILL



MINIMUM WIDTH OF REINFORCING STRIP

METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN



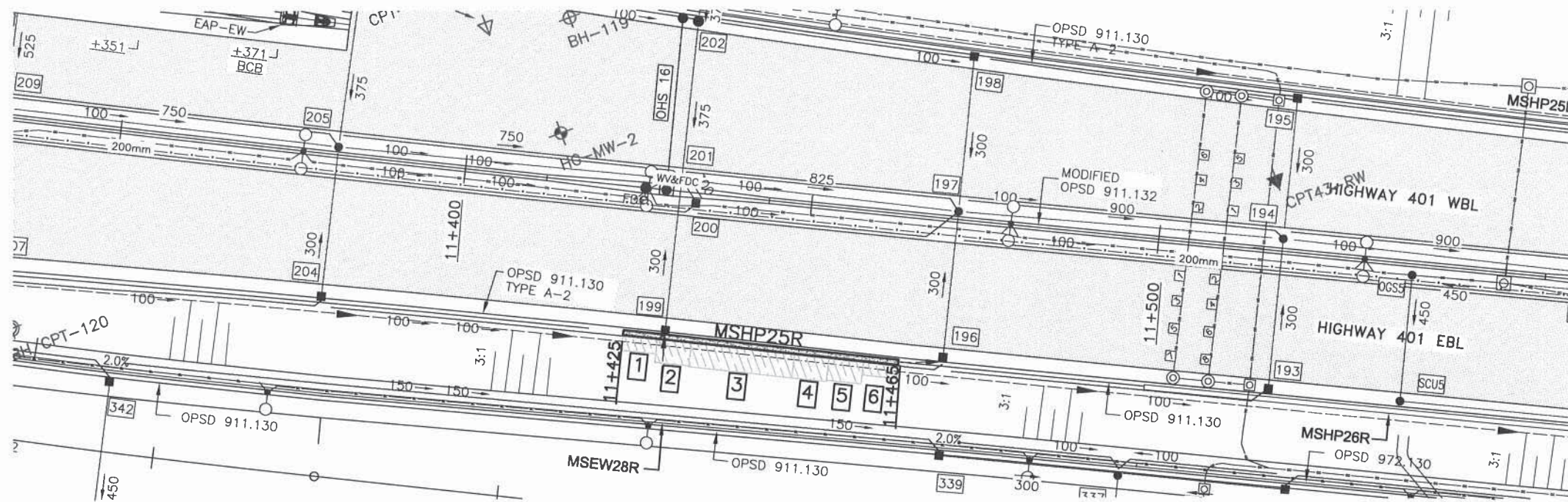
Windsor-Essex
Parkway Project
RFP No. 09-54-1007



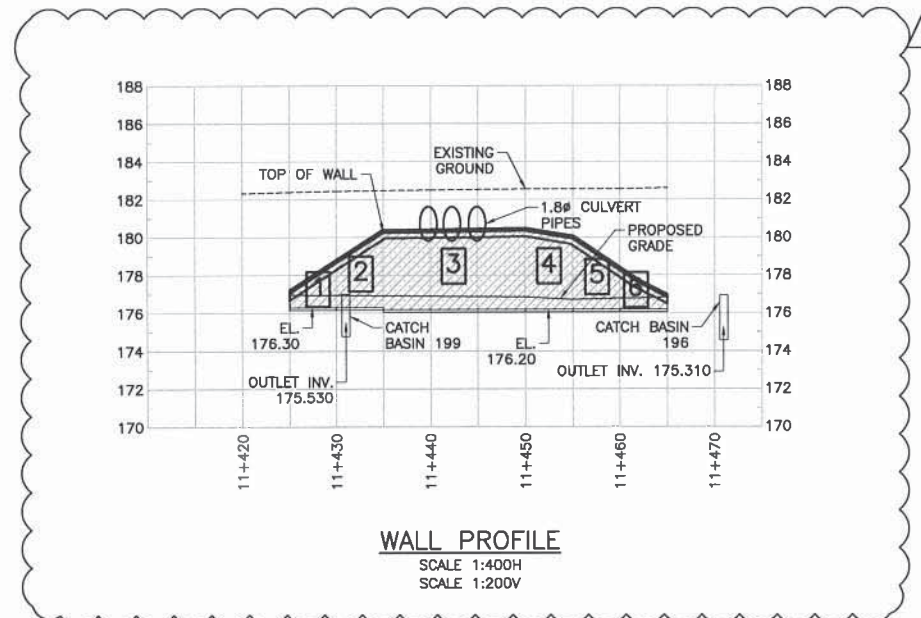
NEW CONSTRUCTION
HWY 401 - STA 11+425 TO 11+465
RETAINING WALL MSHP25R
GENERAL ARRANGEMENT

SHEET
S7255

Phase 1
IFD



PLAN
SCALE 1:400



WALL PROFILE
SCALE 1:400H
SCALE 1:200V

PARKWAY
INFRASTRUCTURE CONSTRUCTORS
Apr 03, 2013
PROCESSED
PROJECT DOCUMENT AND DATA MANAGEMENT

NOTES:

- THE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE GEOTECHNICAL REPORT (285380-04-119-0120) AND MEMO (285380-04-126-0087)
- THE EMBEDMENT DEPTH OF RSS WALL AND THE LENGTH OF EACH RSS WALL BLOCK SHOWN ARE GENERAL-ARRANGEMENT DESIGN. FOR RSS WALL DESIGN, THE MINIMUM EMBEDMENT DEPTH OF RSS WALL SHALL BE 0.6m. THE LENGTH OF EACH RSS WALL BLOCK CAN BE MODIFIED PROVIDED THAT THE MINIMUM EMBEDMENT DEPTH IS 0.6m
- THE MINIMUM REINFORCING STRIP WIDTH SHALL BE 0.9 TIMES THE TOTAL RSS WALL HEIGHT FOR BLOCK 1, 0.95 TIMES FOR BLOCK 6, 0.85 TIMES FOR BLOCKS 2 TO 4 AND 0.87 TIMES FOR BLOCK 5 UNLESS SPECIFIED.
- THE SLOPE IN FRONT OF THE RSS WALL SHALL BE MAINTAINED WITHOUT ANY SLOUGHING/EROSION AT ALL TIMES.
- REFER TO HWY DRAWINGS FOR ALL HIGHWAY INFORMATION INCLUDING THE LOCATION OF DRAINS AND CATCH BASINS.
- THE FACTOR OF SAFETY AGAINST EXTERNAL MODES OF FAILURE FOR RSS WALLS SHALL BE AS PER CANADIAN FOUNDATION ENGINEERING MANUAL (CFEM).
- APPROVED RSS WALL SUPPLIER TO REFER TO UTILITIES NEW CONSTRUCTION DRAWINGS AND CONFIRM LOCATION OF ALL UTILITIES. RSS WALL DESIGN SHALL ACCOUNT FOR ALL INTERFERENCE WITH UTILITIES.
- FOR INFORMATION ON EXISTING PAVEMENT AND INFRASTRUCTURE REFER TO HIGHWAYS REMOVAL DRAWINGS AND GENERAL NOTES PROVIDED WITHIN HIGHWAY REMOVALS DRAWING PACKAGE.
- CONTRACTOR AND WALL MANUFACTURER TO CONFIRM ALL LOADS FOR OVERHEAD SIGN AND LIGHT STANDARD.
- REFER TO GENERAL SOIL NOTES (SHEET S7101).
- REFER TO THE TRAILS PACKAGE FOR NOISE WALL DETAILS.
- BENCHING OF EARTH SLOPES TO BE AS PER OPSD 208.010.
- UNLESS REGULAR BACKFILL IS FILTER GRADE WITH RESPECT TO THE ADJACENT NATIVE CLAY DEPOSIT, A GEOTEXTILE LAYER (TERRAFIX 360R OR EQUIVALENT) SHALL BE PLACED ALONG THE BENCHING INTERFACE.
- WITHIN THE RSS REINFORCING STRIPS, GRANULAR FILL IS TO BE SPECIFIED BY THE RSS SUPPLIER, UNLESS NOTED OTHERWISE.
- FOR BACKFILL OUTSIDE OF RSS REINFORCING STRIPS, REGULAR FILL INDICATES APPROVED MATERIAL, INCLUDING SILTY CLAY, THAT MEETS THE PARAMETERS SPECIFIED IN THE GEOTECHNICAL REPORT, TO BE CONFIRMED BY THE RSS SUPPLIER AND SPECIFIED ON THE RSS SHOP DRAWINGS.
- RSS REINFORCING STRIP LENGTH SHOWN IS THE MINIMUM LENGTH TO MEET GLOBAL STABILITY REQUIREMENT FOR THE SHORT AND LONG TERM CONDITIONS. THE RSS REINFORCING STRIP LENGTH SHOWN HAS ALSO MET THE EXTERNAL WALL STABILITY REQUIREMENTS (I.E., SLIDING, OVERTURNING AND BEARING CAPACITY) FOR DRAINED CONDITIONS.
- THE FOUNDATION/INSTALLATION OF STRUCTURES BEHIND RSS WALL (LIGHT POLE, CATCH BASIN, SIGN STRUCTURES, ETC.) HAVE TO BE INCORPORATED IN THE WALL DESIGN BY RSS WALL SUPPLIER.

DRAINAGE:

- REFER TO DRAINAGE DRAWINGS FOR ALL DRAINS, CATCH BASINS & CONNECTION FOR RETAINING WALL RELATED DRAINS.
- REFER TO UTILITY PLANS PRIOR TO COMMENCING CONSTRUCTION.
- LOCATION OF CATCH BASIN AND MANHOLES AS SHOWN ARE INDICATIVE ONLY. REFER TO DRAINAGE SUPPLEMENTAL INFORMATION.
- CONNECT RSS SUBDRAIN(S) AND PROVIDE A POSITIVE OUTLET TO THE SEWER AT INTERVALS NO FURTHER THAN EVERY 80m. PROVIDE HIGH-POINTS APPROXIMATELY MID-WAY BETWEEN OUTLETS.

UTILITIES:

- REFER TO ELECTRICAL AND ATMS DRAWINGS FOR LOCATION, SITE & CONNECTION DETAILS FOR LIGHTING, POWER AND TRAFFIC MANAGEMENT.
- INSTALLATION OF ELECTRICAL MANHOLE TO BE COORDINATED WITH THE WALL MANUFACTURE AND TO BE INSTALLED DURING THE WALL INSTALLATION NOT EXCAVATED AFTERWARDS.

LANDSCAPING:

- FOR AESTHETIC TREATMENTS ON RETAINING WALLS SEE LANDSCAPING AND URBAN DESIGN TEAM SUBMISSION SHEET 7104 THE AESTHETIC FINISHES WESTERN PORTION, SHEET 7105 AESTHETIC FINISHES EASTERN PORTION AND SHEET 7106 PATTERN DETAILS - TREE TRUNK.

RETAINED SOIL SYSTEM:

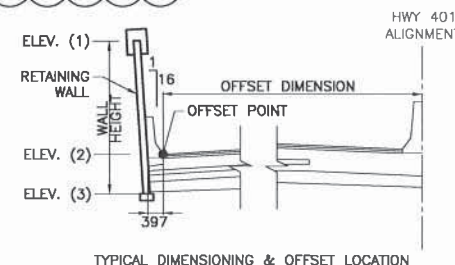
- RSS WALL SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE 'MTO RSS DESIGN GUIDELINES' AND SPECIAL PROVISIONS SP599S22 AND SP599S23.
- REFER TO RSS CONSTRUCTION NOTES-BACKFILL AT STRUCTURES (SHEET S7102).
- RSS WALLS SHALL HAVE FOLLOWING ATTRIBUTES:
APPLICATION: RETAINING WALL
PERFORMANCE: HIGH
APPEARANCE: HIGH
- EPOXY COATED REINFORCEMENT SHALL BE USED IN THE FRONT SURFACE OF RSS PANELS AND ALL RSS COPING FOR ANY WALL WITHIN THE SPLASH ZONE. THIS INCLUDES PANEL SURFACES AND COPING WITHIN 10m OF AN EXISTING OR FUTURE ROADWAY, MEASURED HORIZONTAL FROM THE EDGE OF PAVEMENT UNLESS THE SURFACE IS MORE THAN 5m ABOVE THE ROADWAY.
- LIMIT OF EXCAVATION AND TEMPORARY WORK TO BE CONFIRMED AND DESIGNED BY THE CONTRACTOR.

WALL SUMMARY

EXPOSED WALL FACE AREA.....100.35m²
TOTAL WALL FACE AREA.....125.17m²
TOTAL WALL LENGTH (MEASURED).....39.78m
TOTAL WALL LENGTH (STATION).....40.0m
AVERAGE TOTAL WALL HEIGHT.....3.15m

STATION	OFFSET FROM HWY 401 ALIGNMENT	WALL ELEVATION		
		TOP (1)	FINISHED GRADE (2)	BOTTOM (3)
11+425	20.35	177.84	176.96	176.3
11+430	20.35	178.64	176.94	176.3
11+435	20.36	178.24	176.91	176.3
11+450	20.45	180.34	176.83	176.2
11+455	20.50	179.92	176.80	176.2
11+460	20.56	178.24	176.77	176.2
11+465	20.63	176.82	176.82	176.2

OFFSETS TAKEN FROM HIGHWAY 401 CONTROL LINE
*WALL DIRECTION CHANGE



TYPICAL DIMENSIONING & OFFSET LOCATION

DRAWING NOT TO BE SCALED
100mm ON ORIGINAL DRAWING



REVISIONS	DATE	REV.	BY	DESCRIPTION
27-MAR-13	2	AM	RFI288	PROFILE UPDATE
07-MAR-13	1	AM	RFI288	WALL OPTIMIZATION
07-SEP-12	0	DM	ISSUED	FOR RSS WALL DESIGN
DESIGN	AM	CHK	DM	CODE CHBDC S6-06 LOAD CL-625-ONT
DRAWN	LB	CHK	AM	SITE MSHP25R DATE 30-JUN-11

DOC: 285380-03-060-SEG1-7255