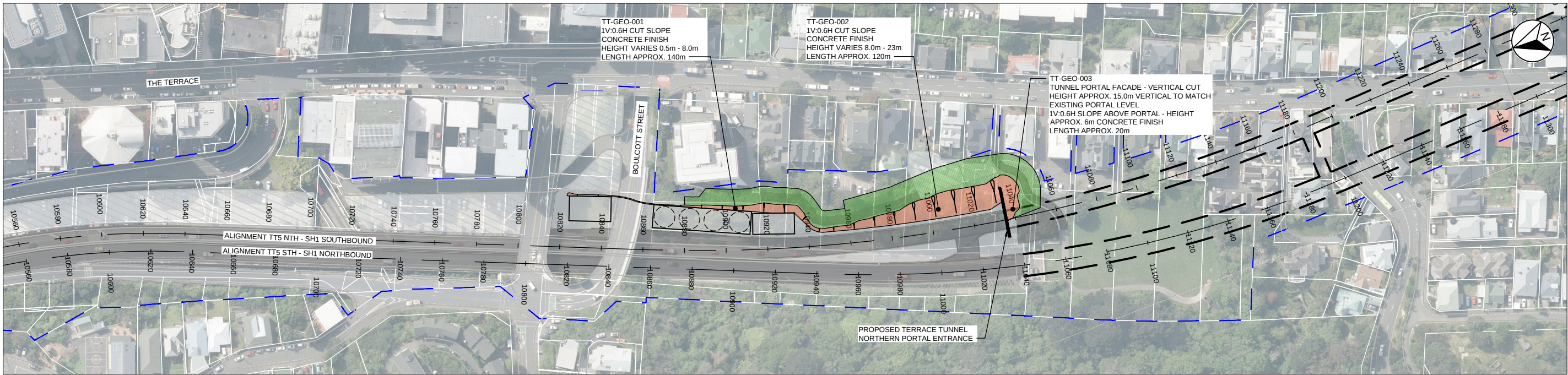
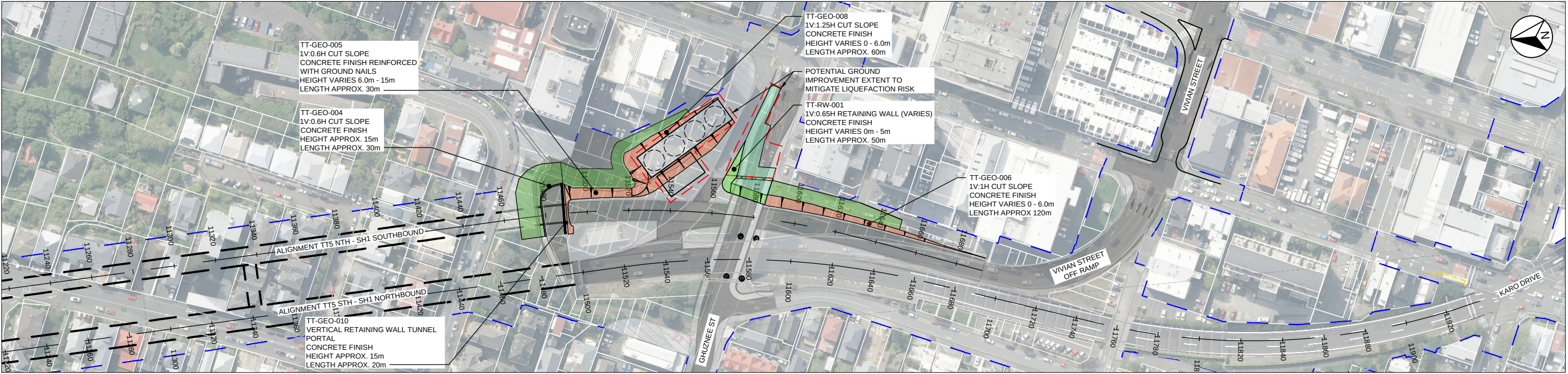




TERRACE TUNNEL NORTH PORTAL - SLOPE AND RETAINING STRUCTURES PLAN

SCALE: 1:1000



TERRACE TUNNEL SOUTH PORTAL - SLOPE AND RETAINING STRUCTURES PLAN

SCALE: 1:1000

- LEGEND:
- PROPERTY BOUNDARIES
 - MSE RETAINING WALL
 - EXTENT OF GEOGRID
 - CONCRETE FINISH CUT SLOPE
 - EXTENT OF GROUND NAILS
 - EXTENT OF GROUND IMPROVEMENT
 - PROJECT AREA

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:1000 @ A1
1:2000 @ A3

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



GEOTECHNICAL

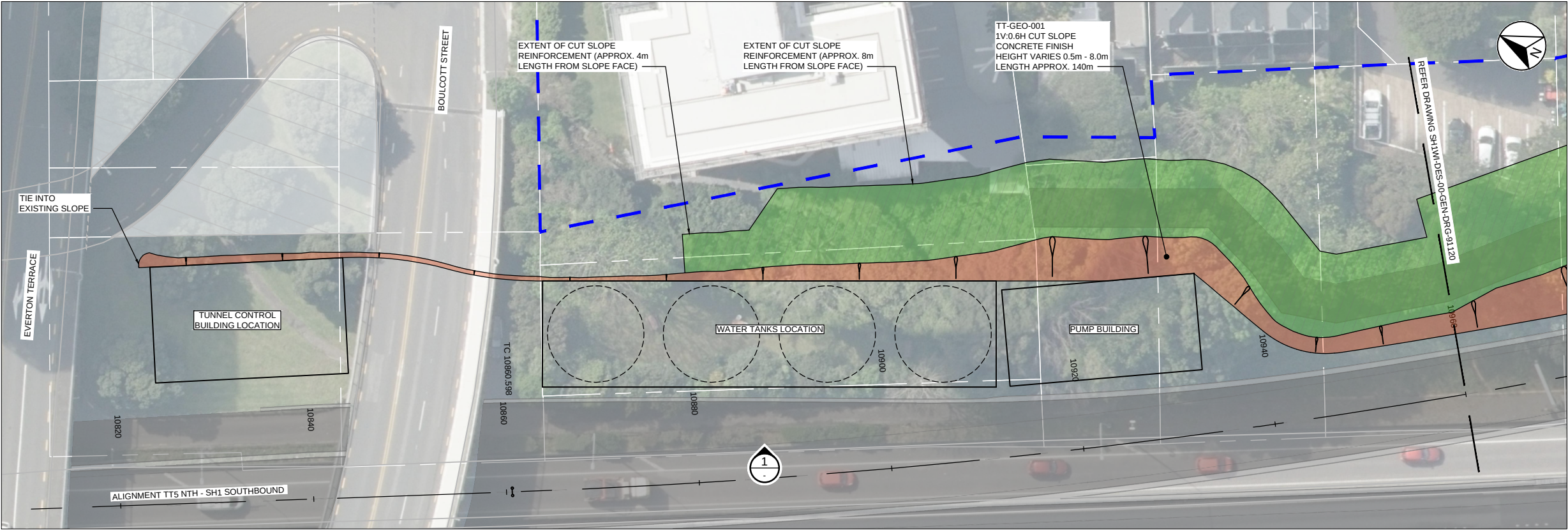
SCALES		ORIGINAL SIZE
1:1000 (A1)		A1
DRAWN	DESIGNED	APPROVED
H. TIONGCO	A. GARCIA	E. SUTTON
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09
CONSENT DESIGN		

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
GEOTECHNICAL PLAN			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91000	A

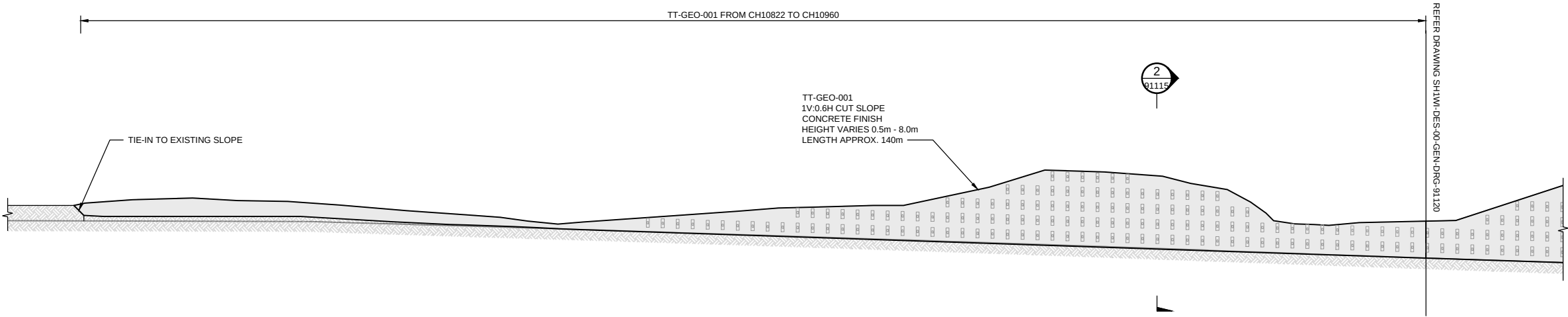
- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 4. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.

LEGEND:

- PROPERTY BOUNDARIES
- CONCRETE FINISH CUT SLOPE
- EXTENT OF GROUND NAILS
- PROJECT AREA



TT-GEO-001 PLAN
SCALE: 1:250



1 TT-GEO-001 ELEVATION
SCALE: 1:250

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:250 @ A1
1:500 @ A3

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



SCALES			ORIGINAL SIZE
1:250 (A1)			A1
DRAWN	DESIGNED	APPROVED	
H. TIONGCO	A. GARCIA	E. SUTTON	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09	
CONSENT DESIGN			

PROJECT NZ TRANSPORT AGENCY WELLINGTON STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE TERRACE TUNNEL TO WILLIS STREET TT-GEO-001 - PLAN AND ELEVATION			
WSP PROJECT NO. 5-C4434.01	PROJ-ORIG-VOL-LOC-TYPE SH1WI-DES-TT-GEO-DRG	SHEET NO. 91110	REVISION A

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.

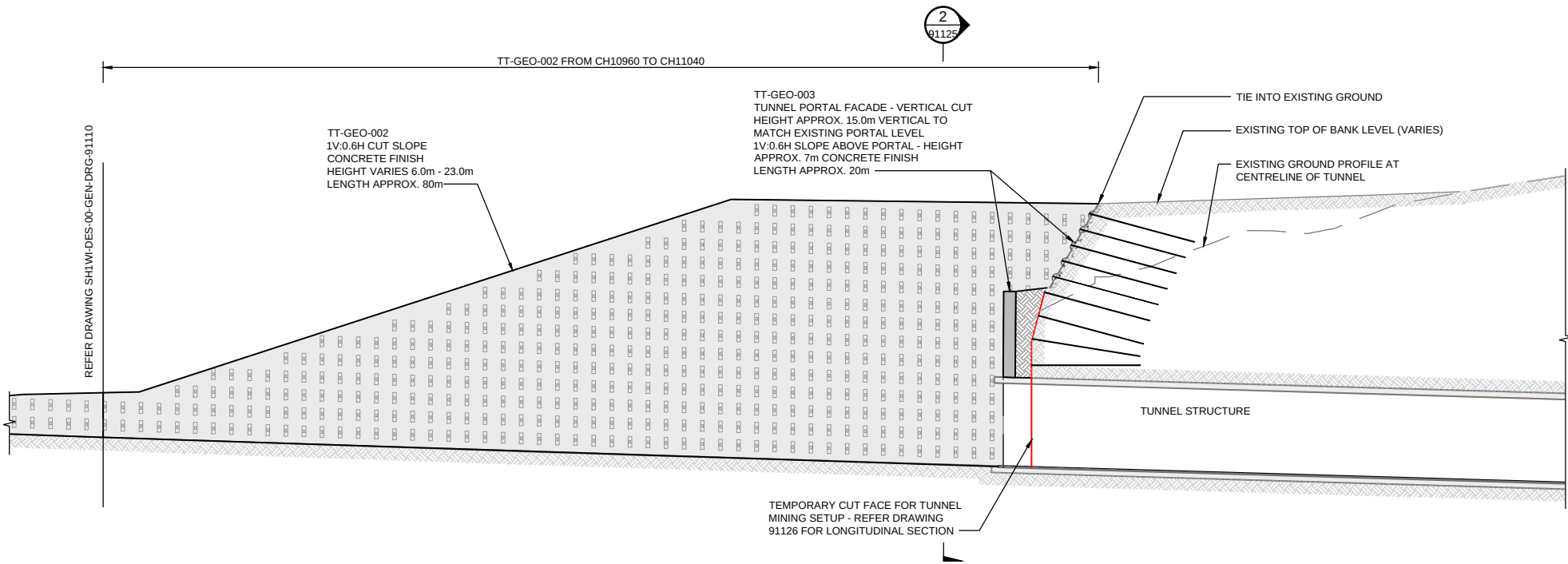
LEGEND:

- PROPERTY BOUNDARIES
- CONCRETE FINISH CUT SLOPE
- EXTENT OF GROUND NAILS
- PROJECT AREA



TT-GEO-002 PLAN

SCALE: 1:250



TT-GEO-002 ELEVATION

SCALE: 1:250

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:250 @ A1
1:500 @ A3

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



GEOTECHNICAL

SCALES	DESIGNED	APPROVED
1:250 (A1)	A. GARCIA	E. SUTTON
DRAWN	H. TIONGCO	
DRAWING VERIFIED	Q. O'SHAUGHNESSY	
DESIGN VERIFIED	R. RAMILO	
APPROVED DATE	2026-07-09	

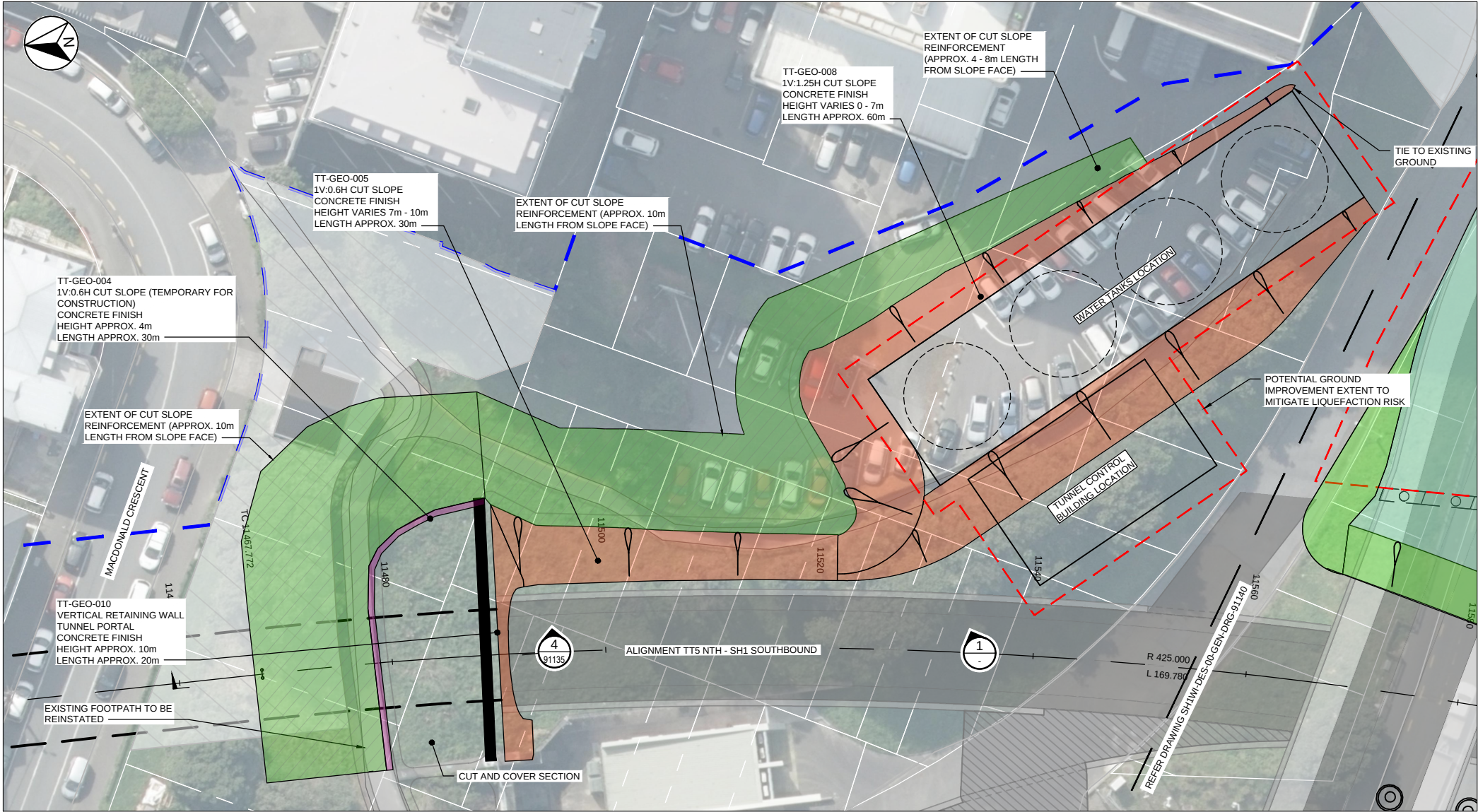
CONSSENT DESIGN

PROJECT	NZ TRANSPORT AGENCY WELLINGTON STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS
TITLE	TERRACE TUNNEL TO WILLIS STREET TT-GEO-002 & 003 - PLAN AND ELEVATION
WSP PROJECT NO.	5-C4434.01
PROJ-ORIG-VOL-LOC-TYPE	SH1WI-DES-TT-GEO-DRG
SHEET NO.	91120
REVISION	A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.

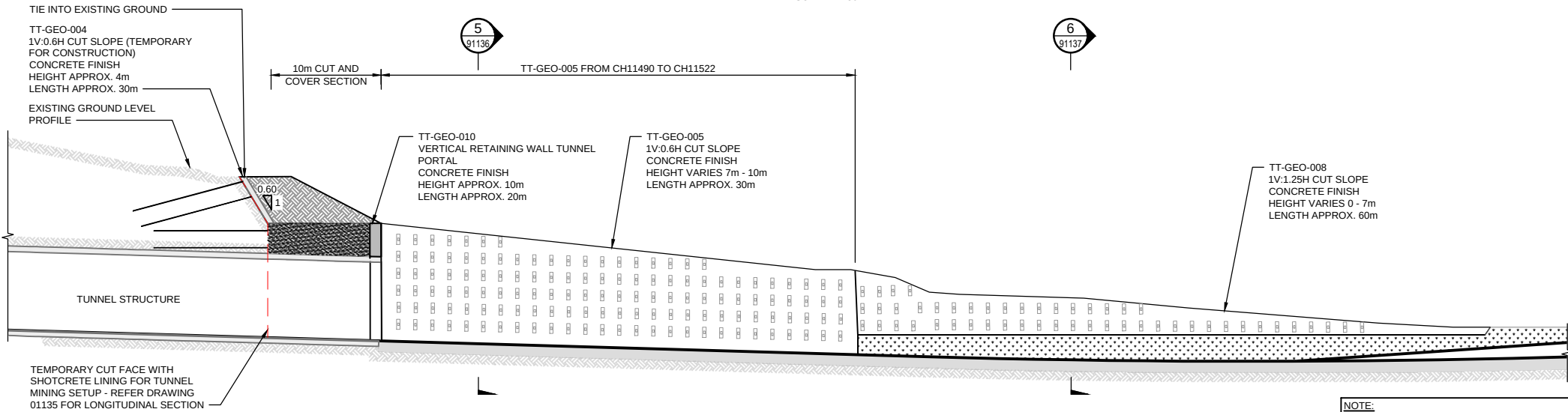
LEGEND:

- PROPERTY BOUNDARIES
- MSE RETAINING WALL
- EXTENT OF GEOGRID
- LOCALISED CUT/FILL
- CONCRETE FINISH CUT SLOPE
- EXTENT OF GROUND NAILS
- TEMPORARY SHOTCRETE WALL WITH ROCK ANCHORS
- EXTENT OF GROUND IMPROVEMENT
- PROJECT AREA



TT-GEO-005 PLAN

SCALE: 1:250



TT-GEO-005 ELEVATION

SCALE: 1:250

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



GEOTECHNICAL

SCALES		ORIGINAL SIZE
1:250 (A1)		A1
DRAWN	DESIGNED	APPROVED
H. TIONGCO	A. GARCIA	E. SUTTON
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09

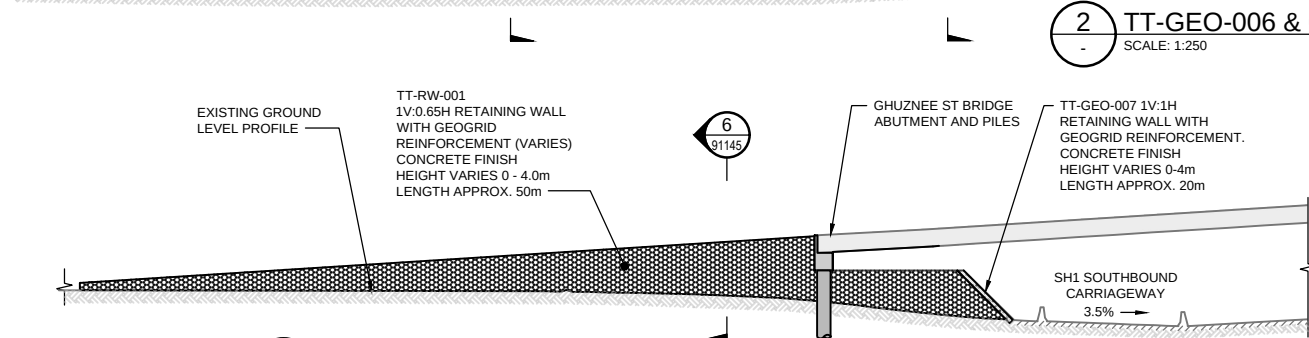
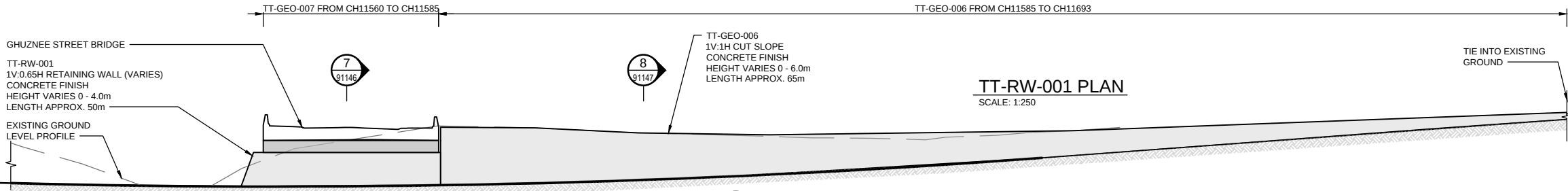
CONSSENT DESIGN

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
TT-GEO-004 & 005 - PLAN AND ELEVATION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91130	A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.

LEGEND:

- PROPERTY BOUNDARIES
- MSE RETAINING WALL
- EXTENT OF GEOGRID
- CONCRETE FINISH CUT SLOPE
- EXTENT OF GROUND NAILS
- EXTENT OF GROUND IMPROVEMENT
- PROJECT AREA



NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

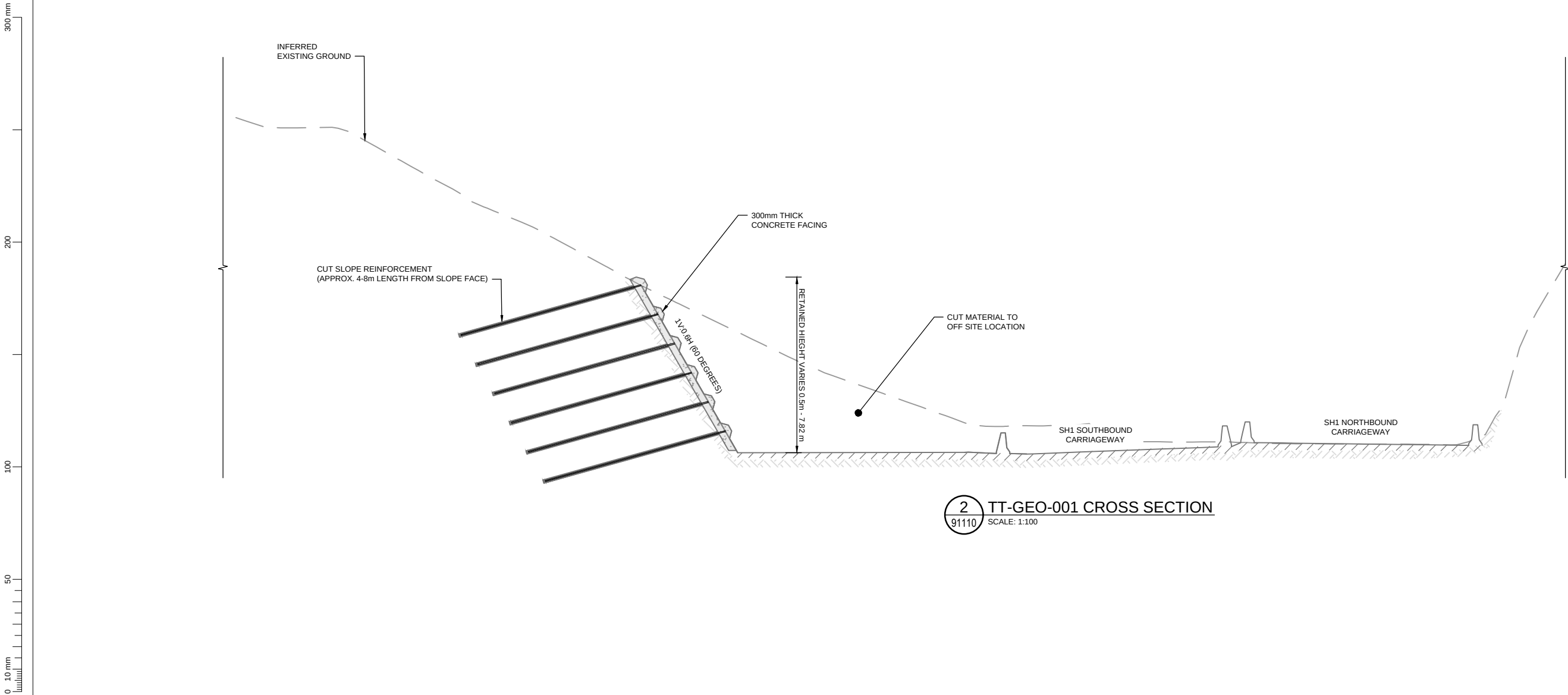
REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



SCALES			ORIGINAL SIZE
1:250 (A1)			A1
DRAWN	DESIGNED	APPROVED	
H. TIONGCO	T. LAM	E. SUTTON	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09	
CONSENT DESIGN			

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
TT-RW-001 - PLAN AND ELEVATION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91140	A

- NOTES:
- 1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 - 2. ALL PERMANENT GROUND NAILS TO HAVE DOUBLE CORROSION PROTECTION AND THERMAL ZINC SPRAY COAT APPLIED.
 - 3. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 - 4. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 - 5. PROPERTY BOUNDARIES VARIES - REFER PLAN DRAWINGS.
 - 6. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.



2 TT-GEO-001 CROSS SECTION
91110 SCALE: 1:100

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100 @ A1
1:200 @ A3

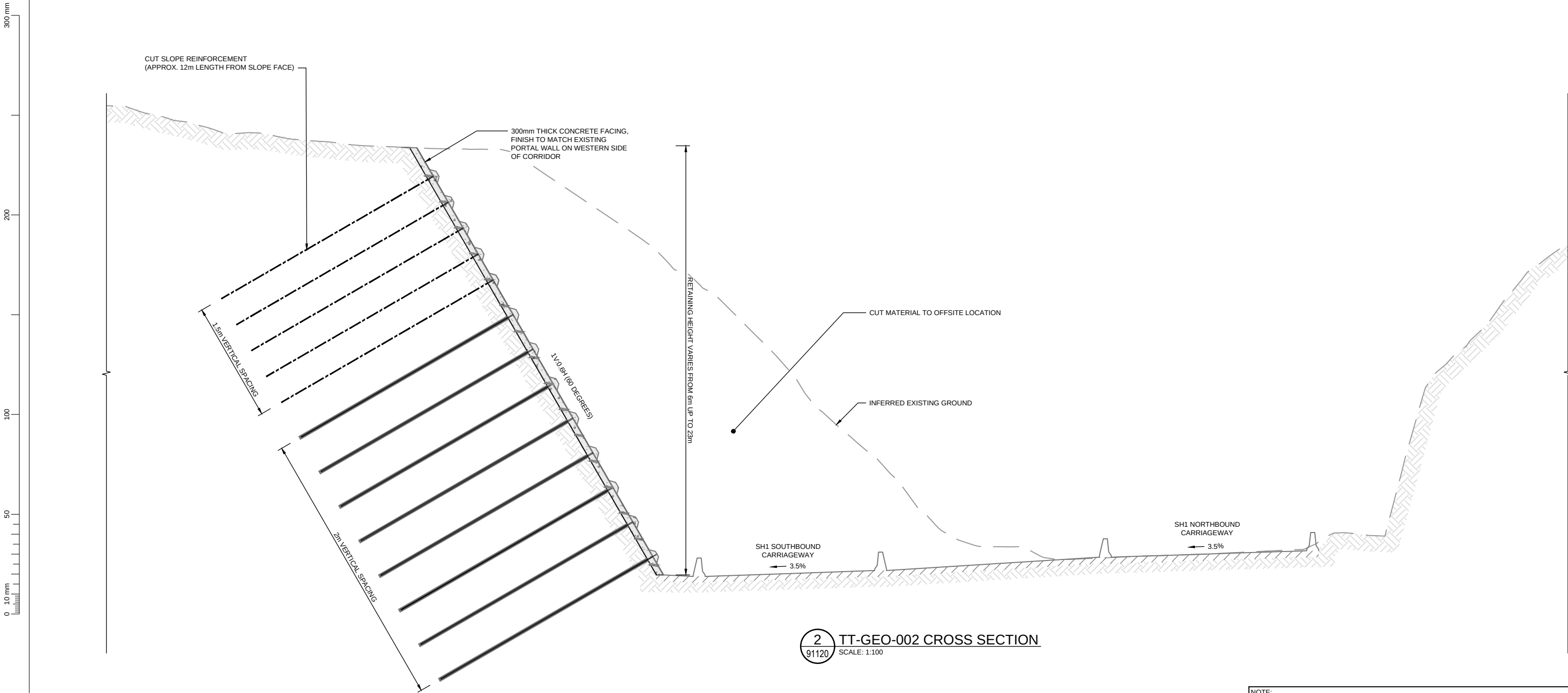
REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



SCALES		ORIGINAL SIZE
1:100(A1)		A1
DRAWN	DESIGNED	APPROVED
H. TIONGCO	A. GARCIA	E. SUTTON
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09
CONSENT DESIGN		

PROJECT NZ TRANSPORT AGENCY WELLINGTON STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE TERRACE TUNNEL TO WILLIS STREET TT-GEO-001 - CROSS SECTION			
WSP PROJECT NO. 5-C4434.01	PROJ-ORIG-VOL-LOC-TYPE SH1WI-DES-TT-GEO-DRG	SHEET NO. 91115	REVISION A

- NOTES:
- 1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 - 2. ALL PERMANENT GROUND NAILS TO HAVE DOUBLE CORROSION PROTECTION AND THERMAL ZINC SPRAY COAT APPLIED.
 - 3. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 - 4. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 - 5. PROPERTY BOUNDARIES VARIES - REFER PLAN DRAWINGS.
 - 6. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.



2 TT-GEO-002 CROSS SECTION
91120 SCALE: 1:100

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100 @ A1 1:200 @ A3 0 1 2 3 4 5 6 7 8 9 10 m 1:25 @ A1 1:50 @ A3 0 400 800 1200 1600 2000 2400 mm

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09

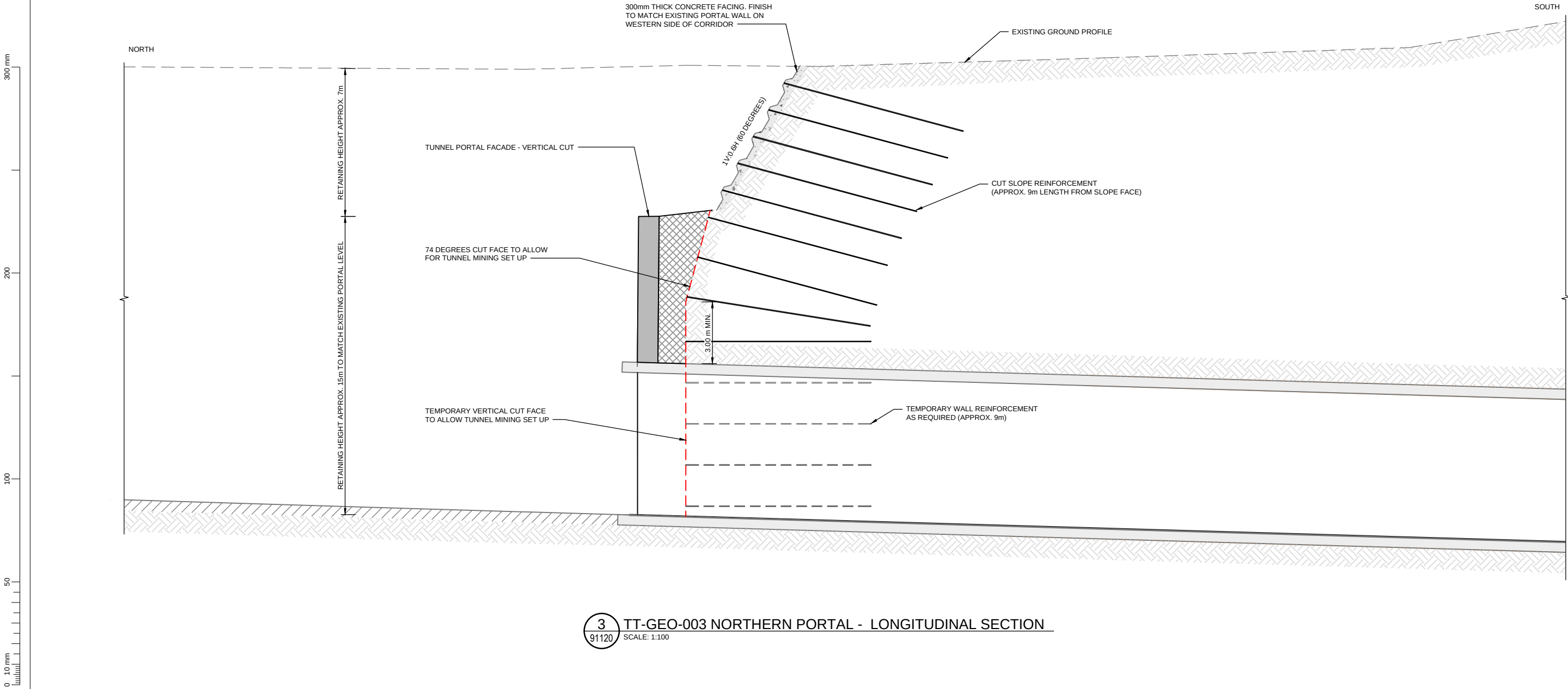


SCALES			ORIGINAL SIZE
1:100(A1)			A1
DRAWN	DESIGNED	APPROVED	
H. TIONGCO	A. GARCIA	E. SUTTON	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09	
CONSENT DESIGN			

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
TT-GEO-002 - CROSS SECTION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91125	A

NOTES:

1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY.
3. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
4. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
5. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.



3 TT-GEO-003 NORTHERN PORTAL - LONGITUDINAL SECTION
91120 SCALE: 1:100

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100 @ A1
1:200 @ A3
0 1 2 3 4 5 6 7 8 9 10 m

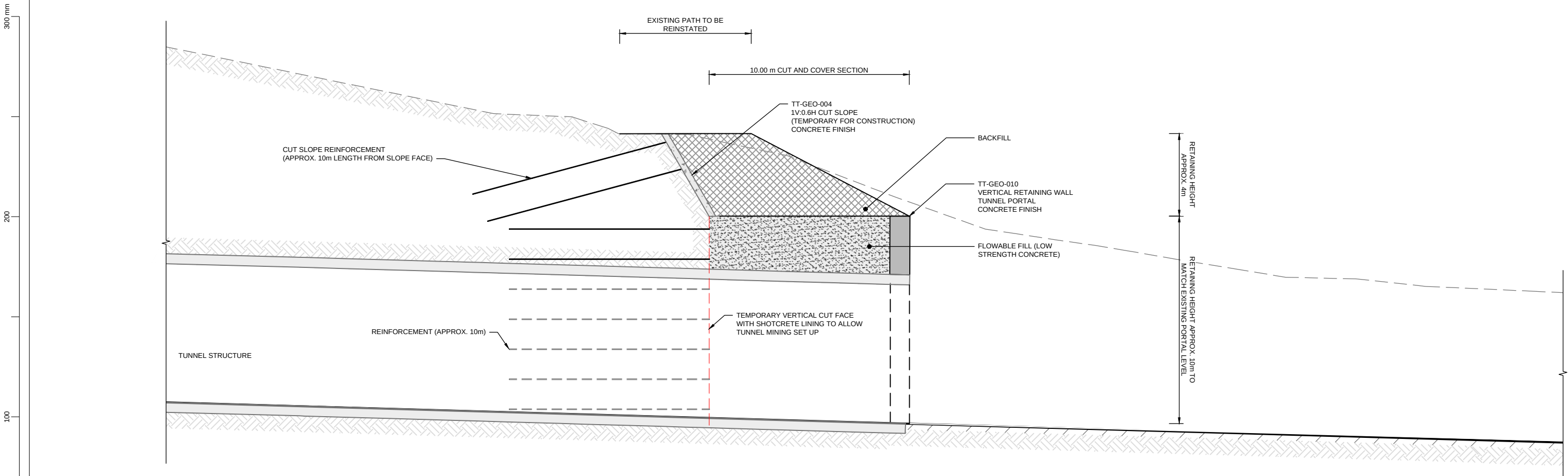
REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



SCALES			ORIGINAL SIZE
1:100(A1)			A1
DRAWN	DESIGNED	APPROVED	
H. TIONGCO	A. GARCIA	E. SUTTON	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09	
CONSENT DESIGN			

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
TT-GEO- 003 - CROSS SECTION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91126	A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 4. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.



4 TTE-GEO-004 AND TT-GEO-010 SOUTHERN PORTAL - LONGITUDINAL SECTION
91130 SCALE: 1:100

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100@ A1
1:200@ A3
0 1 2 3 4 5 6 7 8 9 10 m

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09

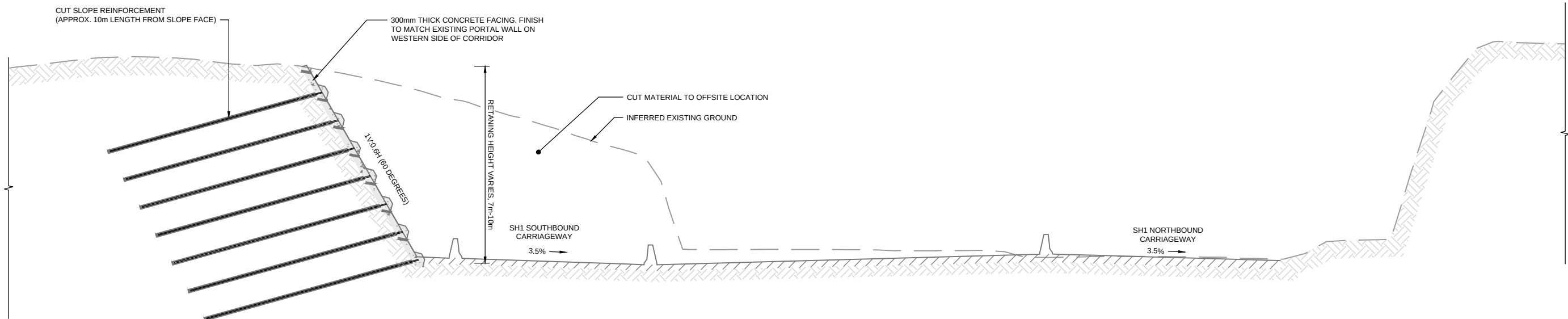


SCALES		ORIGINAL SIZE
1:100(A1)		A1
DRAWN	DESIGNED	APPROVED
H. TIONGCO	A. GARCIA	E. SUTTON
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09
CONSENT DESIGN		

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
TT-GEO-004 - CROSS SECTION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91135	A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 4. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.

300 mm
200
100
50
0 10 mm



5 TT-GEO-005 CROSS SECTION
91130 SCALE: 1:100

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100@ A1
1:200@ A3
0 1 2 3 4 5 6 7 8 9 10 m

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



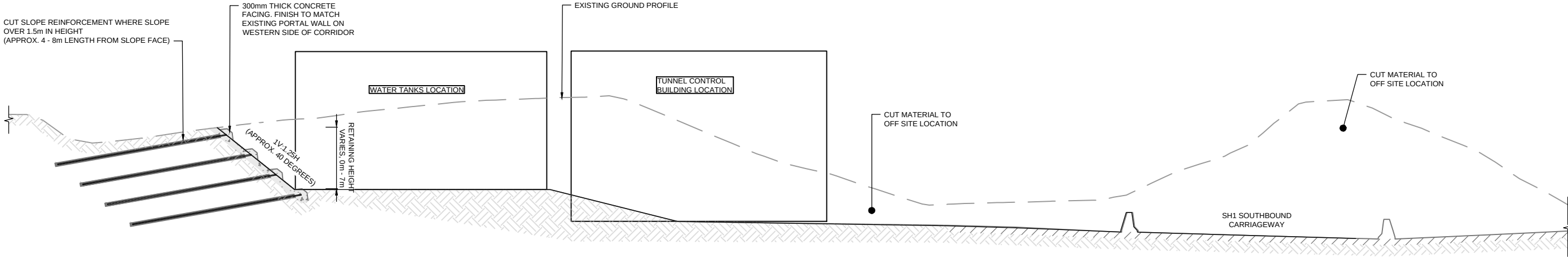
SCALES		ORIGINAL SIZE
1:100(A1)		A1
DRAWN	DESIGNED	APPROVED
H. TIONGCO	A. GARCIA	E. SUTTON
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09
CONSENT DESIGN		

PROJECT NZ TRANSPORT AGENCY WELLINGTON STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE TERRACE TUNNEL TO WILLIS STREET TT-GEO-005 - CROSS SECTION			
WSP PROJECT NO. 5-C4434.01	PROJ-ORIG-VOL+LOC+TYPE SH1WI-DES-TT-GEO-DRG	SHEET NO. 91136	REVISION A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 4. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.

300 mm
200
100
50
0 10 mm

TT-GEO-008 TABLE 1	
RETAINING HEIGHT	LENGTH OF GROUND NAILS
0m - 1.5m	NO GROUND NAILS REQUIRED
1.5m - 3m	4m
3m - 7m	8m



6 TT-GEO-008 CROSS SECTION
91130 SCALE: 1:100

1:100@ A1
1:200@ A3

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



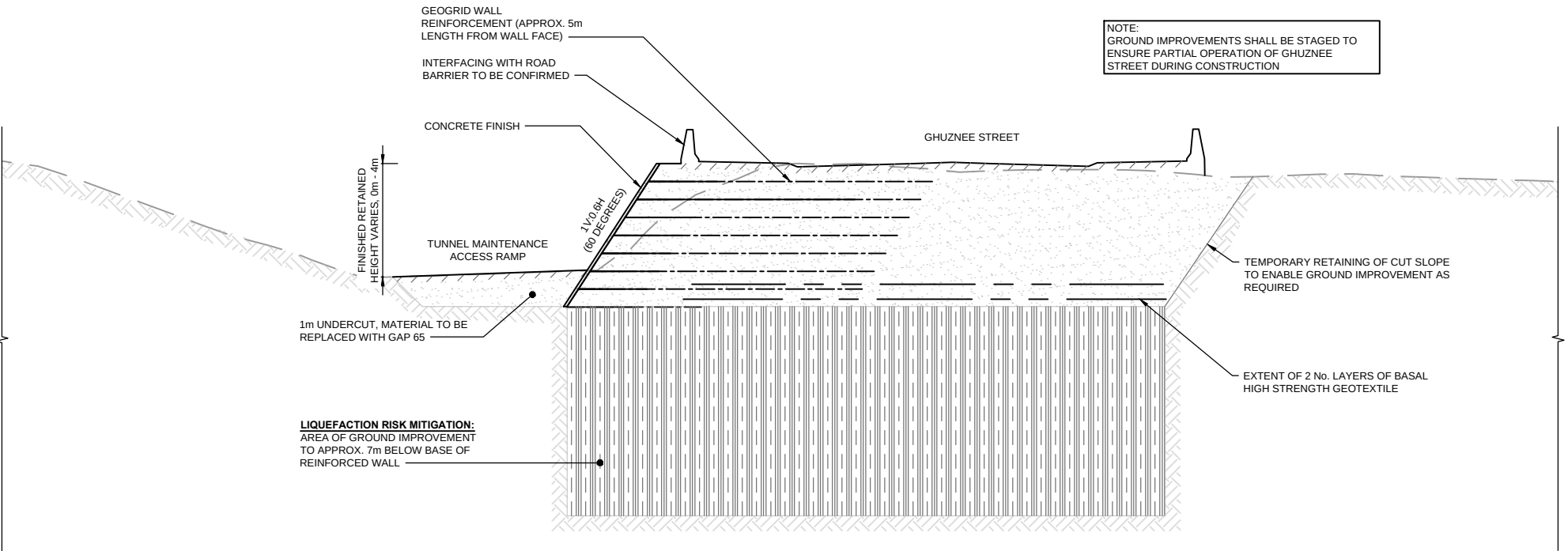
SCALES			ORIGINAL SIZE
1:100(A1)			A1
DRAWN	DESIGNED	APPROVED	
H. TIONGCO	T. LAM	E. SUTTON	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09	
CONSENT DESIGN			

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

PROJECT NZ TRANSPORT AGENCY WELLINGTON STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE TERRACE TUNNEL TO WILLIS STREET TT-GEO-008 & 009 - CROSS SECTION			
WSP PROJECT NO. 5-C4434.01	PROJ-ORIG-VOL-LOC-TYPE SH1WI-DES-TT-GEO-DRG	SHEET NO. 91137	REVISION A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 4. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.

300 mm
200
100
50
0 10 mm



6 TT-RW-001 CROSS SECTION
91140 SCALE: 1:100

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100 @ A1
1:200 @ A3
0 1 2 3 4 5 6 7 8 9 10 m

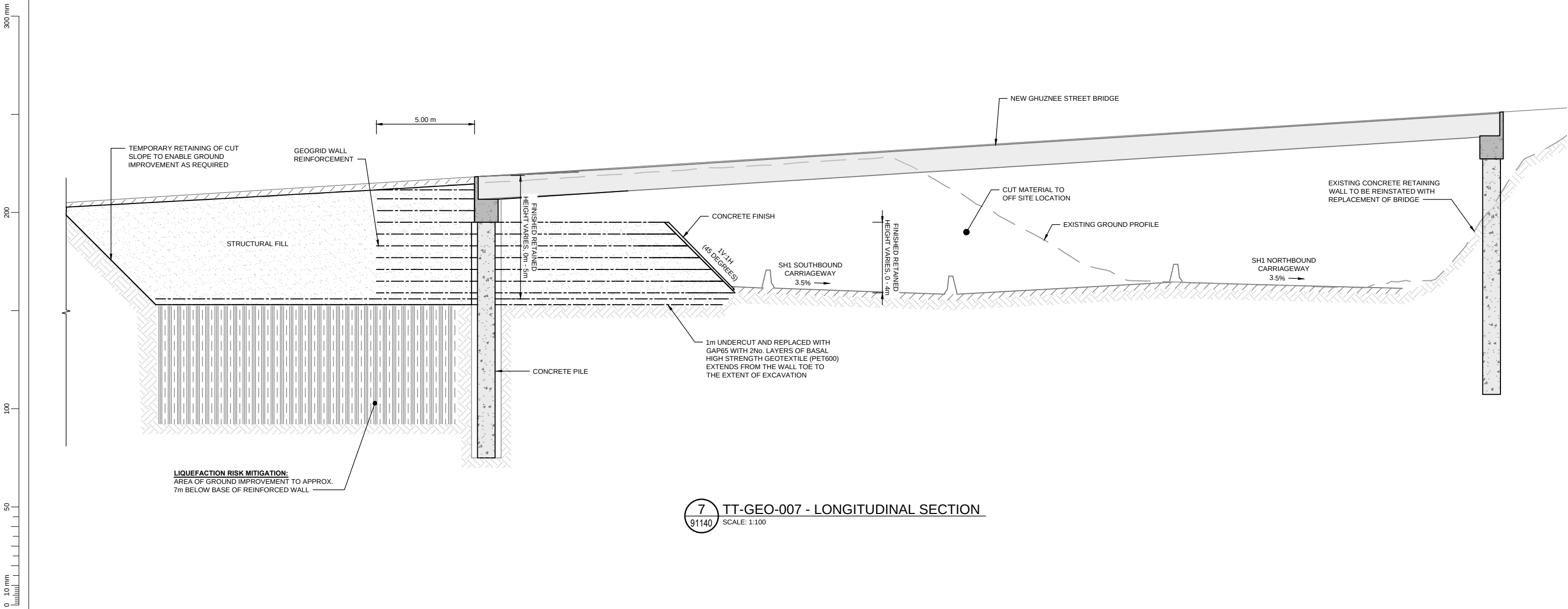
REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



SCALES			ORIGINAL SIZE
1:100(A1)			A1
DRAWN	DESIGNED	APPROVED	
H. TIONGCO	T. LAM	E. SUTTON	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09	
CONSENT DESIGN			

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
TT-RW-001 - CROSS SECTION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91145	A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 3. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 4. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.



NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100 @ A1
1:200 @ A3

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09

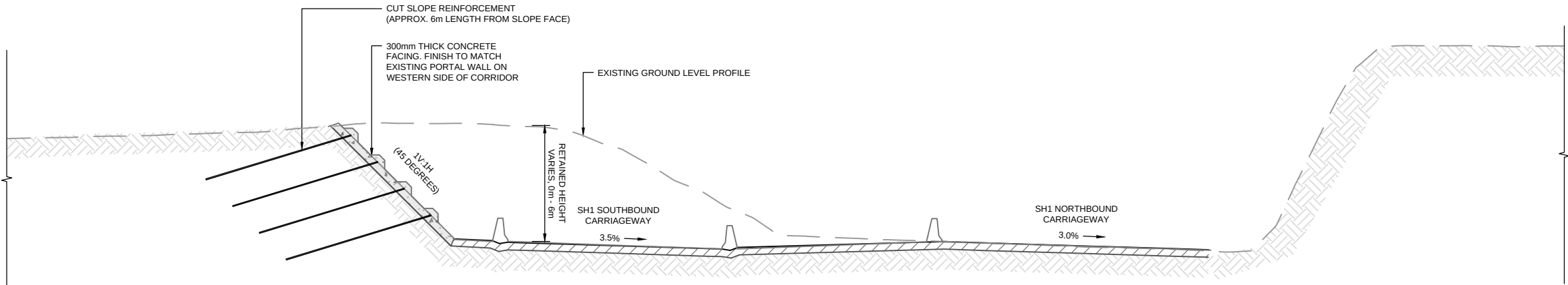


SCALES		ORIGINAL SIZE
1:100(A1)		A1
DRAWN	DESIGNED	APPROVED
H. TIONGCO	T. LAM	E. SUTTON
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09
CONSENT DESIGN		

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
TERRACE TUNNEL TO WILLIS STREET			
TT-GEO-007 - CROSS SECTION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91146	A

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. ALL PERMANENT GROUND NAILS TO HAVE DOUBLE CORROSION PROTECTION AND THERMAL ZINC SPRAY COAT APPLIED.
 3. EXISTING GROUND PROFILE IS INFERRED AND INDICATIVE ONLY. UPDATED TOPOGRAPHIC SURVEY IS REQUIRED FOR NEXT STAGES OF DESIGN TO CONFIRM HEIGHT OF CUT SLOPE.
 4. EXISTING SERVICES SURVEY REQUIRED FOR NEXT STAGES OF DESIGN.
 5. PROPERTY BOUNDARIES VARIES - REFER PLAN DRAWINGS.
 6. UNDERGROUND SERVICES NOT SHOWN AND ASSUMED TO BE RELOCATED FOR CONSTRUCTION OF THE WALL, IF REQUIRED.

300 mm
200
100
50
0 10 mm



8 TT-GEO-006 CROSS SECTION
91140 SCALE: 1:100

NOTE:
THE GEOTECHNICAL INFORMATION PROVIDED ON THESE DRAWINGS FOR RETAINING WALLS, CUT SLOPES, GROUND IMPROVEMENT, AND FILL STRUCTURES IS INDICATIVE ONLY AND ALTERNATIVE SOLUTIONS COULD BE CONSIDERED. THIS INCLUDES WALL TYPE, CUT SLOPE ANGLE, FINISHED SURFACE, ANCHOR DEPTH AND TYPE, AND GROUND IMPROVEMENT METHODOLOGY

1:100 @ A1
1:200 @ A3
0 2000 4000 6000 8000 10000 mm

REVISION	AMENDMENT	APPROVED	DATE
A	CONSENT DESIGN	ES	2026-07-09



SCALES			ORIGINAL SIZE
1:100(A1)			A1
DRAWN	DESIGNED	APPROVED	
H. TIONGCO	A. GARCIA	E. SUTTON	
DRAWING VERIFIED	DESIGN VERIFIED	APPROVED DATE	
Q. O'SHAUGHNESSY	R. RAMILO	2026-07-09	
CONSENT DESIGN			

PROJECT			
NZ TRANSPORT AGENCY			
WELLINGTON			
STATE HIGHWAY 1 WELLINGTON IMPROVEMENTS			
TITLE			
VIVIAN STREET APPROACH			
TT-GEO-006 - CROSS SECTION			
WSP PROJECT NO.	PROJ-ORIG-VOL-LOC-TYPE	SHEET NO.	REVISION
5-C4434.01	SH1WI-DES-TT-GEO-DRG	91147	A