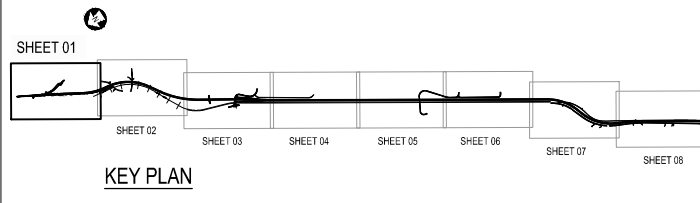
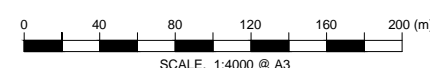




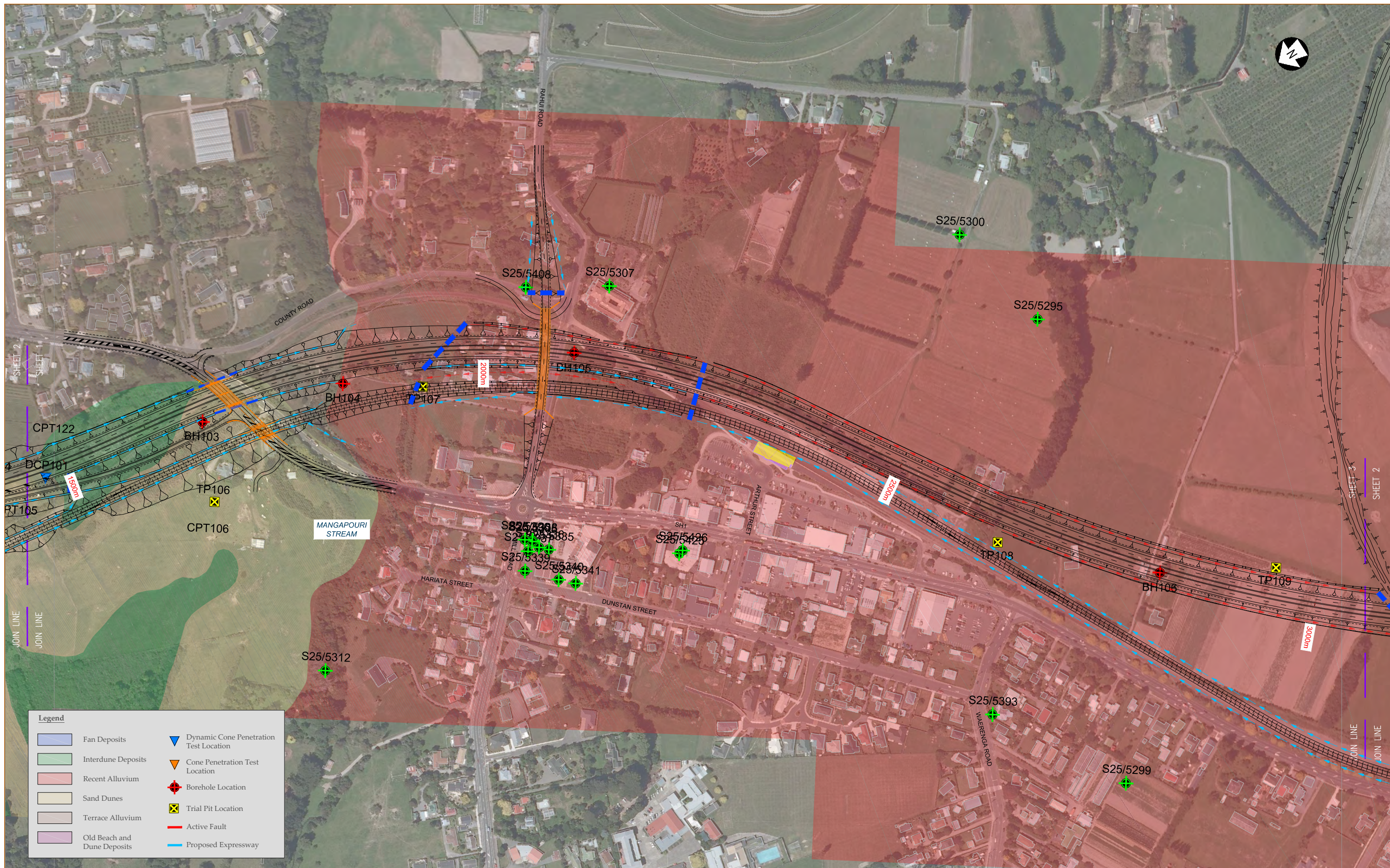
| Legend | |
|--------|--|
| | Fan Deposits |
| | Interdune Deposits |
| | Recent Alluvium |
| | Sand Dunes |
| | Terrace Alluvium |
| | Old Beach and Dune Deposits |
| | Dynamic Cone Penetration Test Location |
| | Cone Penetration Test Location |
| | Borehole Location |
| | Trial Pit Location |
| | Active Fault |
| | Proposed Expressway |



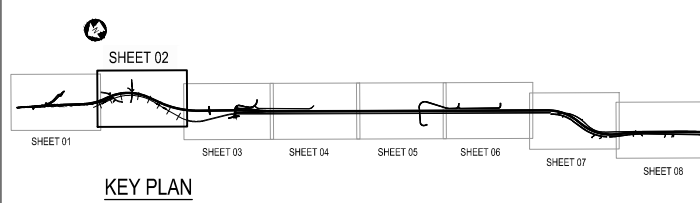
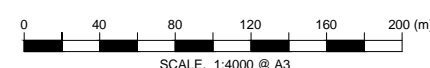
| Revision | Amendment | Approved | Revision Date |
|----------|-------------------|----------|---------------|
| R1 | REVISION FOR SARA | GM | 15/03/12 |
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| Project | | | |
| NEW ZEALAND TRANSPORT AGENCY PEKA PEKA TO NORTH OTAKI EXPRESSWAY SCHEME ASSESSMENT | | | |
| Sheet | | | |
| ENGINEERING GEOLOGICAL MAP 1 OF 8 | | | |
| Drawn | Designed | Approved | Revision Date |
| L.H. | . | T.COULMAN | 09/2011 |
| Project No. | Scale | Drawing No. | Sheet No. |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | 5/2664/1/5504 | G101 |
| | | | Revision |
| | | | R1 |



| Legend | |
|--------|--|
| | Fan Deposits |
| | Interdune Deposits |
| | Recent Alluvium |
| | Sand Dunes |
| | Terrace Alluvium |
| | Old Beach and Dune Deposits |
| | Dynamic Cone Penetration Test Location |
| | Cone Penetration Test Location |
| | Borehole Location |
| | Trial Pit Location |
| | Active Fault |
| | Proposed Expressway |



| Revision | Amendment | Approved | Revision Date |
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| R1 | REVISION FOR SARA | GM | 15/03/12 |
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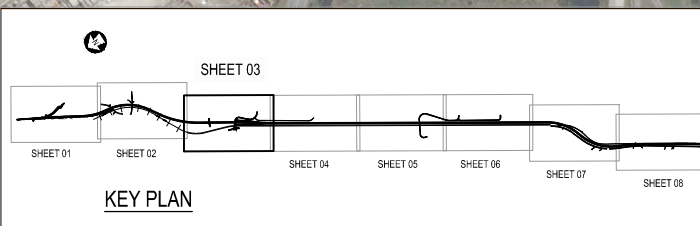
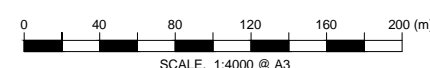
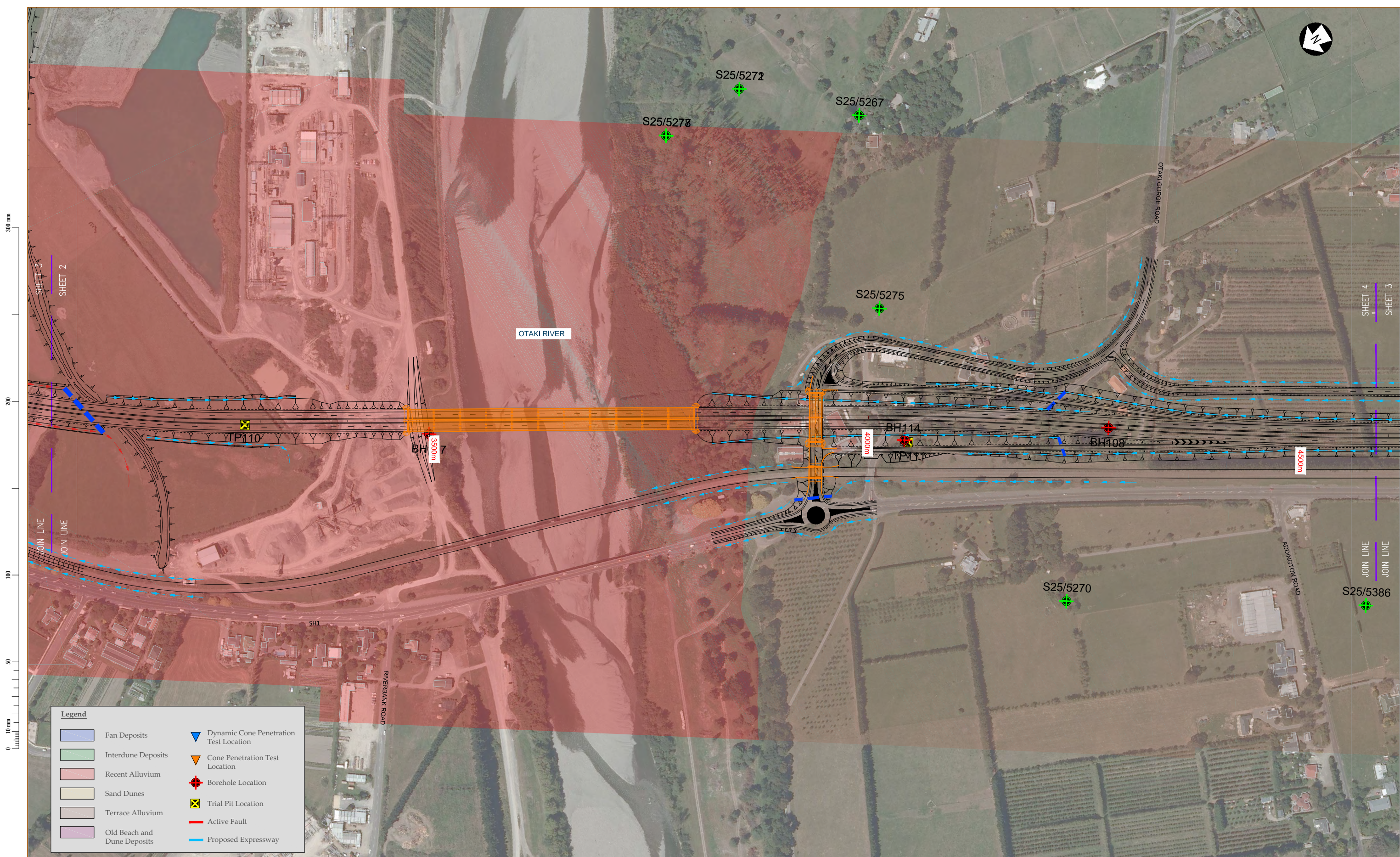


Project
 NEW ZEALAND TRANSPORT AGENCY
 PEKA PEKA TO NORTH OTAKI EXPRESSWAY
 SCHEME ASSESSMENT

| Drawn | Designed | Approved | Revision Date |
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| L.H. | | T.COULMAN | 09/2011 |
| Project No. | Scale | | |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | | |

Sheet
 ENGINEERING GEOLOGICAL MAP
 2 OF 8

| Sheet No. | Revision |
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| G102 | R1 |



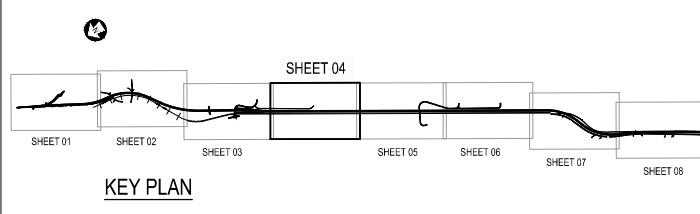
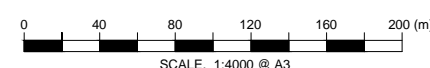
| Revision | Amendment | Approved | Revision Date |
|----------|-------------------|----------|---------------|
| R1 | REVISION FOR SARA | GM | 15/03/12 |
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| Project | | | |
| NEW ZEALAND TRANSPORT AGENCY PEKA PEKA TO NORTH OTAKI EXPRESSWAY SCHEME ASSESSMENT | | | |
| Sheet | | | |
| ENGINEERING GEOLOGICAL MAP 3 OF 8 | | | |
| Drawn | Designed | Approved | Revision Date |
| I.H. | . | T.COULMAN | 09/2011 |
| Project No. | Scale | Drawing No. | Sheet No. / Revision |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | 5/2664/1/5504 | GI03 / R1 |



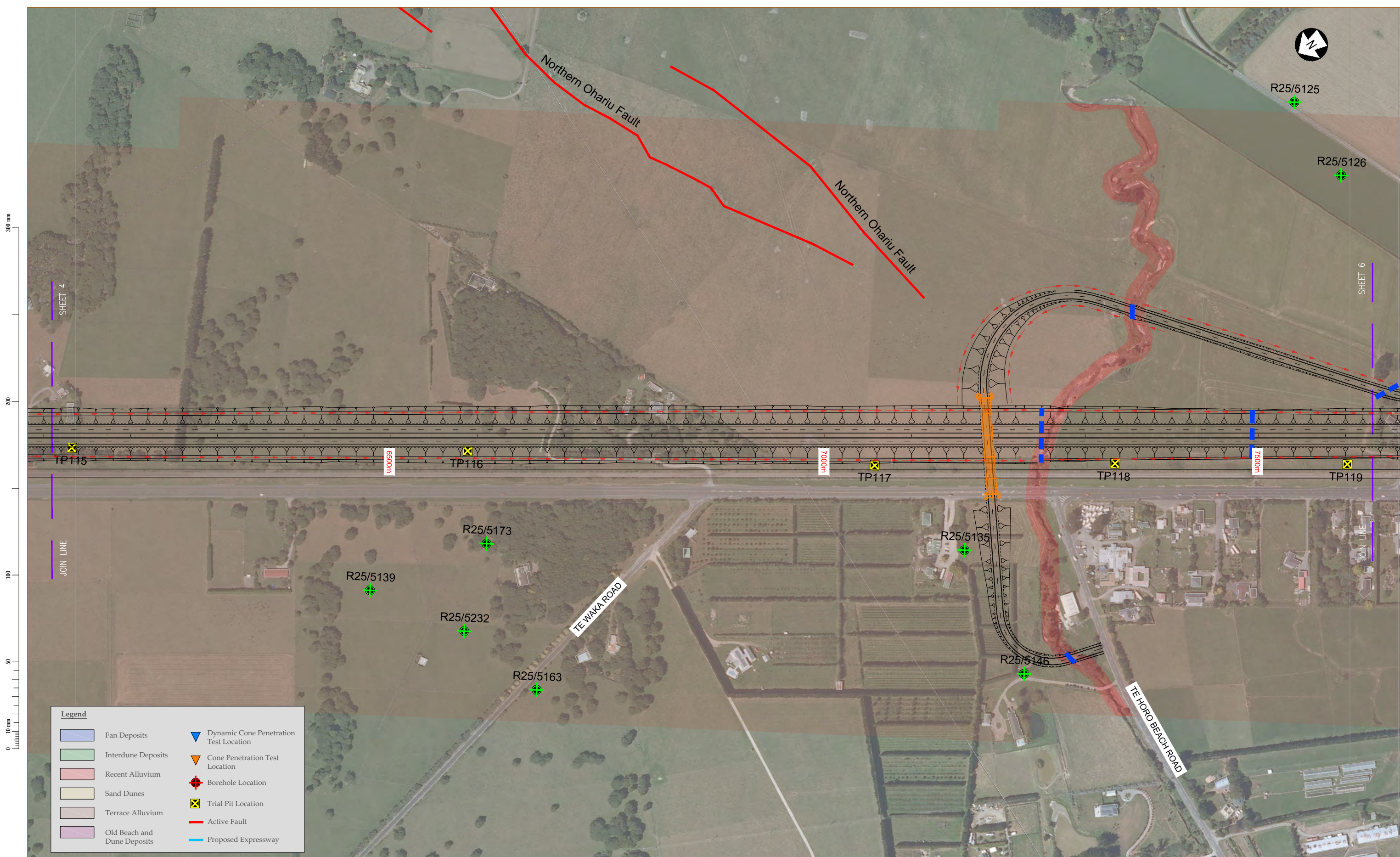
| Legend | |
|--------|--|
| | Fan Deposits |
| | Interdune Deposits |
| | Recent Alluvium |
| | Sand Dunes |
| | Terrace Alluvium |
| | Old Beach and Dune Deposits |
| | Dynamic Cone Penetration Test Location |
| | Cone Penetration Test Location |
| | Borehole Location |
| | Trial Pit Location |
| | Active Fault |
| | Proposed Expressway |



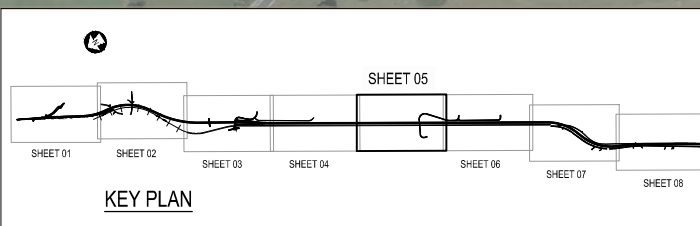
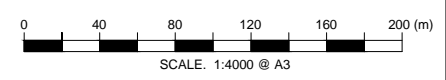
| Revision | Amendment | Approved | Revision Date |
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| R1 | REVISION FOR SARA | GM | 15/03/12 |
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| Project | | | |
| NEW ZEALAND TRANSPORT AGENCY PEKA PEKA TO NORTH OTAKI EXPRESSWAY SCHEME ASSESSMENT | | | |
| Sheet | | | |
| ENGINEERING GEOLOGICAL MAP 4 OF 8 | | | |
| Drawn | Designed | Approved | Revision Date |
| I.H. | . | T.COULMAN | 09/2011 |
| Project No. | Scale | Drawing No. | Sheet No. |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | 5/2664/1/5504 | GI04 |
| Plot Date | 16/03/12 @ 15:08 | Revision | R1 |



| Legend | |
|--------|--|
| | Fan Deposits |
| | Interdune Deposits |
| | Recent Alluvium |
| | Sand Dunes |
| | Terrace Alluvium |
| | Old Beach and Dune Deposits |
| | Dynamic Cone Penetration Test Location |
| | Cone Penetration Test Location |
| | Borehole Location |
| | Trial Pit Location |
| | Active Fault |
| | Proposed Expressway |



| Revision | Amendment | Approved | Revision Date |
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| R1 | REVISION FOR SARA | GM | 15/03/12 |
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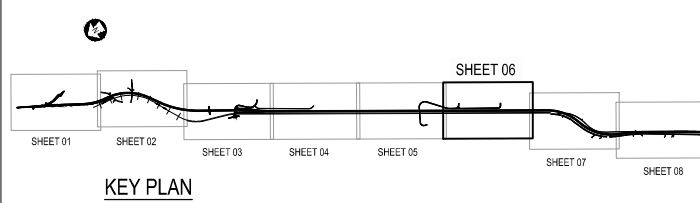
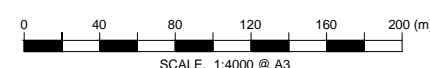


| Drawn | Designed | Approved | Revision Date |
|-------------|------------------------|---------------|---------------|
| I.H. | . | T.COULMAN | 09/2011 |
| Project No. | Scale | Drawing No. | |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | 5/2664/1/5504 | |

| Project | |
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| NEW ZEALAND TRANSPORT AGENCY PEKA PEKA TO NORTH OTAKI EXPRESSWAY SCHEME ASSESSMENT | |
| Sheet | |
| ENGINEERING GEOLOGICAL MAP 5 OF 8 | |
| Sheet No. | Revision |
| G105 | R1 |



| Legend | |
|--------|--|
| | Fan Deposits |
| | Interdune Deposits |
| | Recent Alluvium |
| | Sand Dunes |
| | Terrace Alluvium |
| | Old Beach and Dune Deposits |
| | Dynamic Cone Penetration Test Location |
| | Cone Penetration Test Location |
| | Borehole Location |
| | Trial Pit Location |
| | Active Fault |
| | Proposed Expressway |



| Revision | Amendment | Approved | Revision Date |
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| R1 | REVISION FOR SARA | GM | 15/03/12 |
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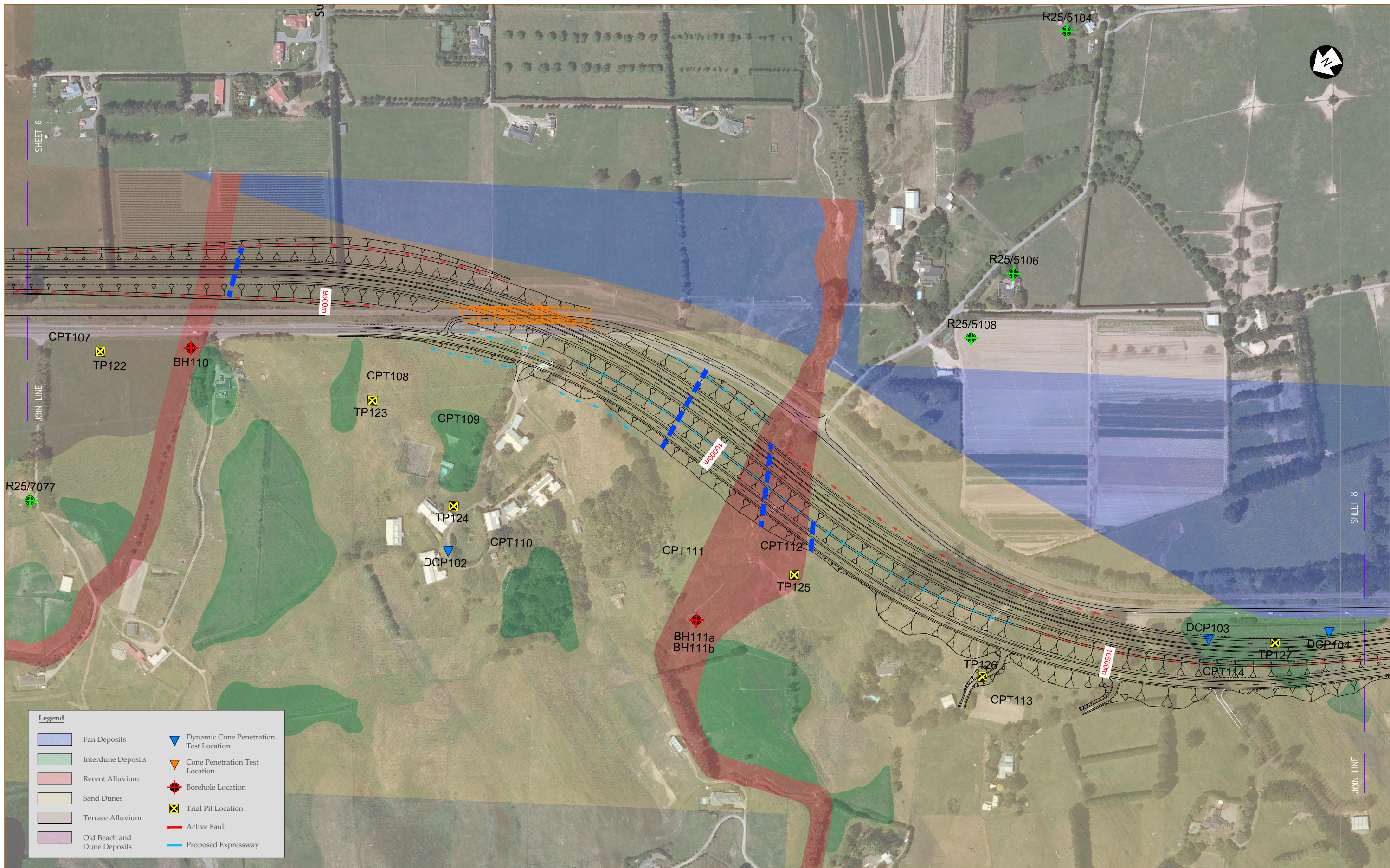


Project
**NEW ZEALAND TRANSPORT AGENCY
 PEKA PEKA TO NORTH OTAKI EXPRESSWAY
 SCHEME ASSESSMENT**

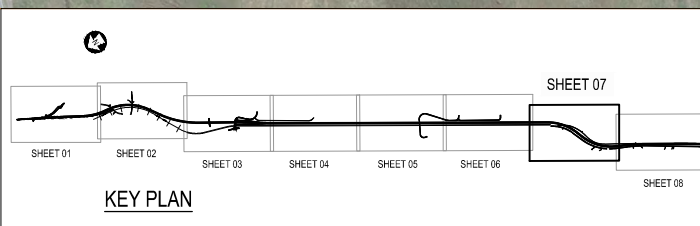
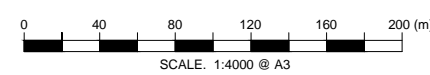
| Drawn | Designed | Approved | Revision Date |
|-------------|------------------------|---------------|---------------|
| I.H. | | T.COULMAN | 09/2011 |
| Project No. | Scale | Drawing No. | |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | 5/2664/1/5504 | |

Sheet
**ENGINEERING GEOLOGICAL MAP
 6 OF 8**

| Sheet No. | Revision |
|-----------|----------|
| G106 | R1 |



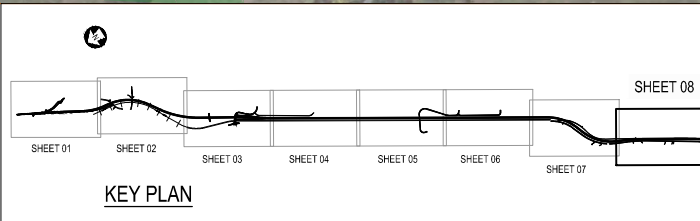
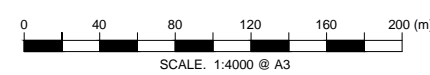
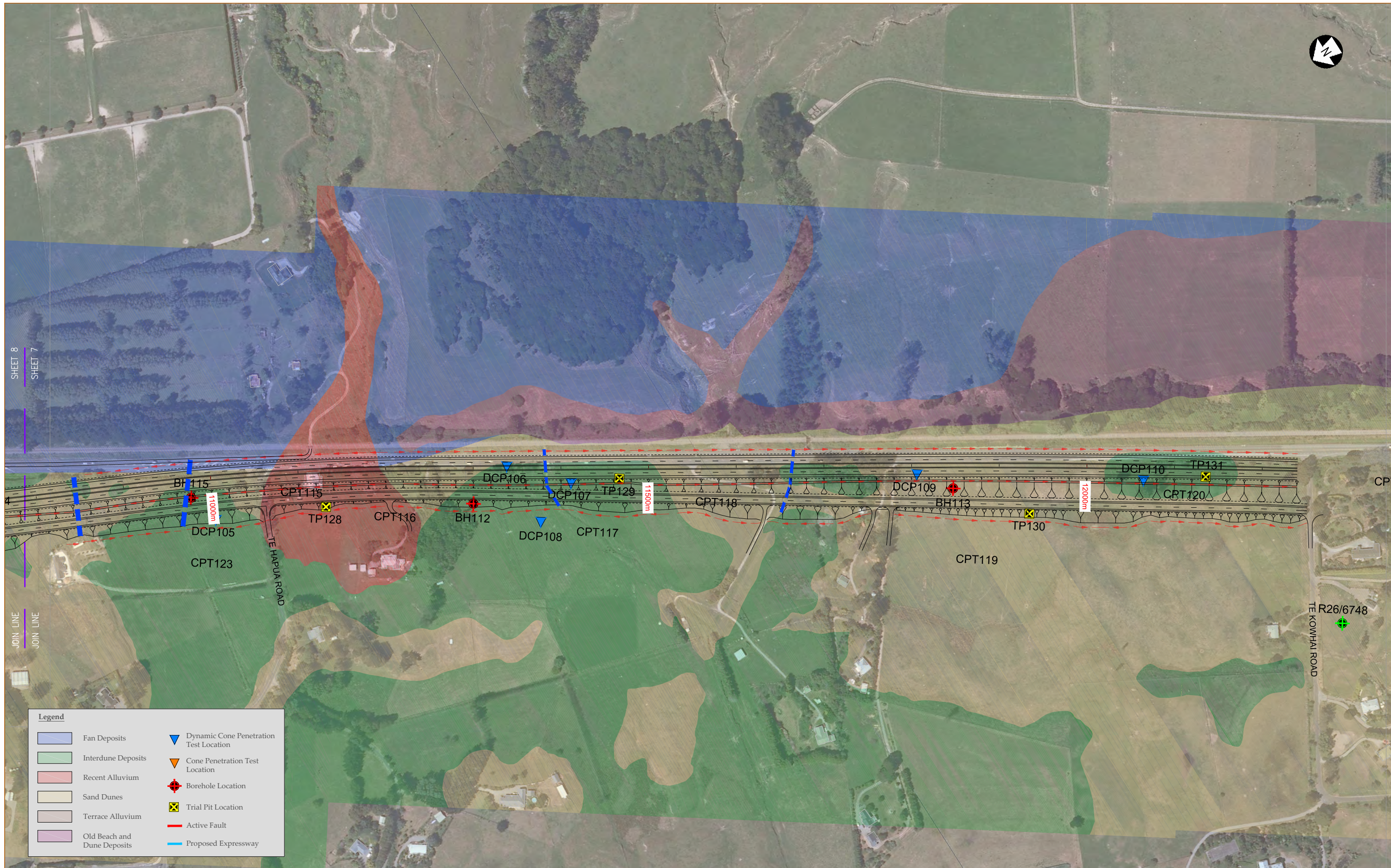
| Legend | |
|--------|--|
| | Fan Deposits |
| | Interdune Deposits |
| | Recent Alluvium |
| | Sand Dunes |
| | Terrace Alluvium |
| | Old Beach and Dune Deposits |
| | Dynamic Cone Penetration Test Location |
| | Cone Penetration Test Location |
| | Borehole Location |
| | Trial Pit Location |
| | Active Fault |
| | Proposed Expressway |



| Revision | Amendment | Approved | Revision Date |
|----------|-------------------|----------|---------------|
| R1 | REVISION FOR SARA | GM | 15/03/12 |
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| Project | | | |
| NEW ZEALAND TRANSPORT AGENCY PEKA PEKA TO NORTH OTAKI EXPRESSWAY SCHEME ASSESSMENT | | | |
| Sheet | | | |
| ENGINEERING GEOLOGICAL MAP 7 OF 8 | | | |
| Drawn | Designed | Approved | Revision Date |
| I.H. | . | T.COULMAN | 09/2011 |
| Project No. | Scale | Drawing No. | |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | 5/2664/1/5504 | |
| Sheet No. | Revision | | |
| GI07 | R1 | | |



| Revision | Amendment | Approved | Revision Date |
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| R1 | REVISION FOR SARA | GM | 15/03/12 |
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| Project | | | |
| NEW ZEALAND TRANSPORT AGENCY PEKA PEKA TO NORTH OTAKI EXPRESSWAY SCHEME ASSESSMENT | | | |
| Sheet | | | |
| ENGINEERING GEOLOGICAL MAP 8 OF 8 | | | |
| Drawn | Designed | Approved | Revision Date |
| I.H. | . | T.COULMAN | 09/2011 |
| Project No. | Scale | Drawing No. | |
| 5C1814.00 | 1:2000(A1), 1:4000(A3) | 5/2664/1/5504 | |
| Sheet No. | Revision | | |
| GI08 | R1 | | |