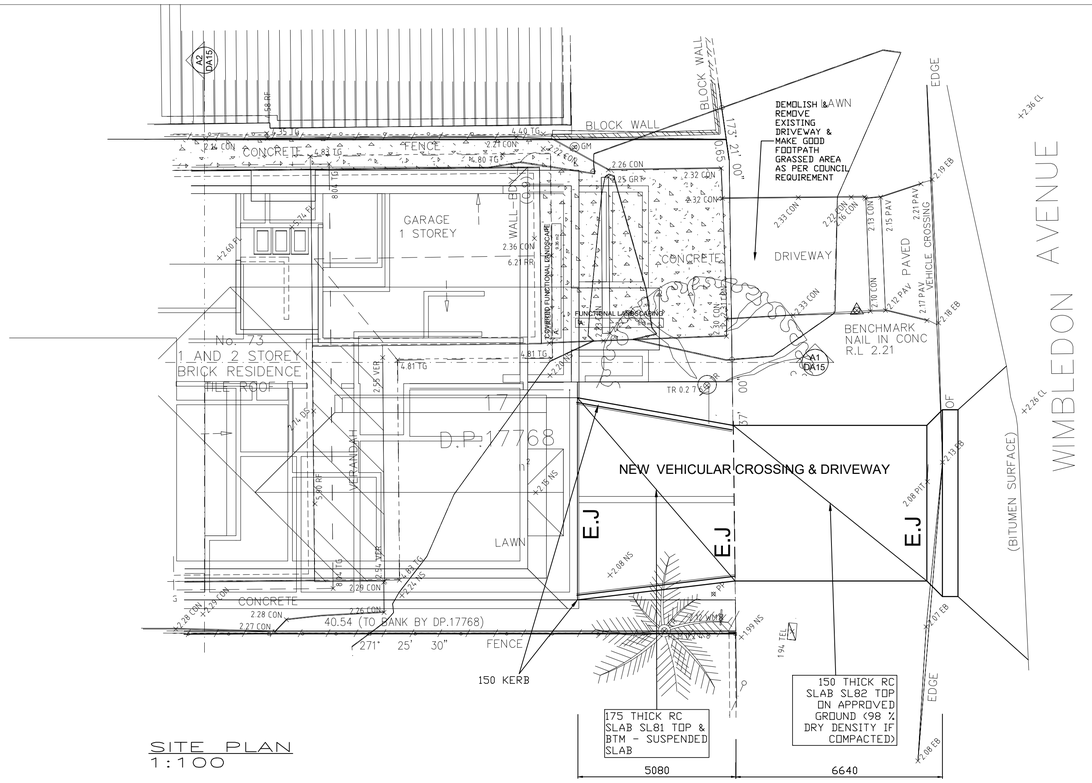
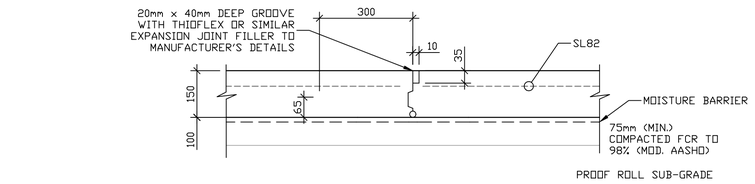
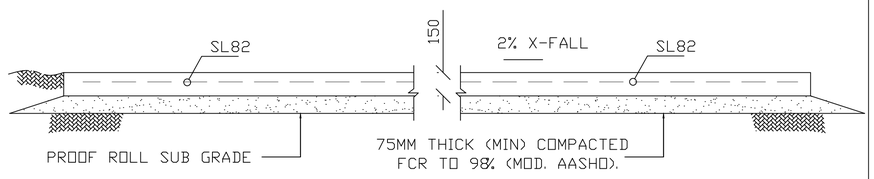


SITE PLAN
1:100



TYPICAL EXPANSION JOINT (EJ)
1:10



TYPICAL DRIVEWAY SLAB
1:20

GENERAL NOTES

G.1 THESE NOTES SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTION AS ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERED TO THE ARCHITECT OR ENGINEER BEFORE PROCEEDING WITH THE WORK.

G.2 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.

G.3 SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY ON-SITE MEASUREMENT.

G.4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.

G.5 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE SAA CODE AND THE BY-LAWS AND ORDINANCES OF THE RELATIVE BUILDING AUTHORITY.

G.6 EXCAVATIONS SHALL NOT BE PERMITTED WITHIN 2 METRES OF AN EXISTING STRUCTURE WITHOUT PRIOR APPROVAL OR RECOMMENDATIONS FOR SHORING OR UNDERPINNING PROVIDED BY ENGINEER.

FOUNDATIONS AND FOOTINGS

F.1 FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE INTENSITY OF BEARING PRESSURE OF 150kPa. THE BUILDER SHALL OBTAIN APPROVAL OF THE FOUNDATION MATERIAL BEFORE PLACING CONCRETE.

F.2 FOOTINGS SHALL BE PLACED UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED.

SUB-GRADE

SG.1 UNDER ALL SLABS ON GRADE, WHETHER ON CUT OR FILL, REMOVE SOFT SPOTS AND REFILL BY COMPACTING CUT SURFACES OR FILL SURFACES IN LAYERS NOT EXCEEDING 200 mm TO 95% DRY DENSITY, ENSURING MINIMUM SETTLEMENT TO SLABS.

CONCRETE WORK

C.1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.

C.2 CONCRETE QUALITY SHALL BE AS TABULATED AND SHALL BE VERIFIED BY TESTS.

ELEMENT	SLUMP	MAX. SIZE AGG.	CEMENT TYPE	ADMIXTURE	mPa CONCRETE GRADE
ALL	80	20	A	NIL	32

C.3 CLEAR CONCRETE COVERS TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN.

CAST IN FORMS COMPLYING WITH AS 1509			
ELEMENT	CONDITION 1 NOT TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 2 TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 3 CAST AGAINST OTHER FORMWORK OR THE GROUND
PAD FOOTINGS & PILE CAPS	-	65	75
STRIP FOOTINGS	-	50	65
SORE OR CAST PIERS	-	50	75
COLUMNS	40	50	75
WALLS, INCLUDING RETAINING WALLS	20	30	65
BEAMS	25	40	65
SLABS, INCLUDING JOISTS & HOLLOW BLOCK CONSTRUCTION	20	30	65
REINFORCEMENT ADJACENT TO HOLLOW BLOCKS INTEGRAL WITH STRUCTURE	5	-	-

NOTE: 1. SLABS POURED OVER A MEMBRANE ON THE GROUND ARE INCLUDED AS CONDITION 2.
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED OR NOT LESS THAN AS REQUIRED FOR CONDITION 3.

C.4 SIZES OF ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

C.5 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER.

C.6 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY, UNO.

C.7 NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT PRIOR APPROVAL OF THE ENGINEER.

C.8 REINFORCEMENT IS REPRESENTED DIAGRAMATICALLY. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.

C.9 SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.

C.10 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

C.11 PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.

C.12 ALL REINFORCING BARS SHALL COMPLY WITH AS 1302. ALL FABRIC SHALL COMPLY WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED IN FLAT SHEETS.

C.13 REINFORCING SYMBOLS

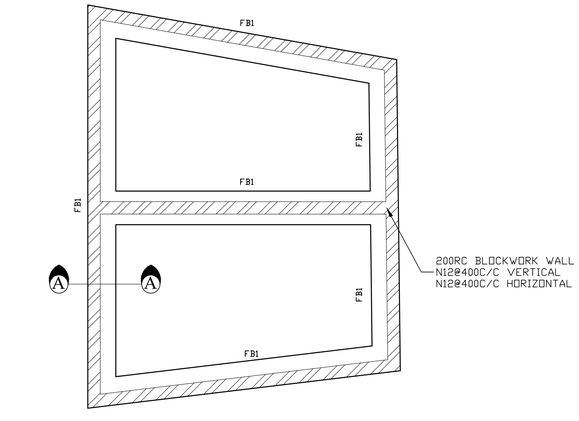
S GRADE 230S	DEFORMED BAR
C GRADE 410C	COLD WORKED DEFORMED BAR
Y GRADE 410R	DEFORMED BAR
R GRADE 230R	PLAIN BAR
F GRADE 450	WELDED WIRE FABRIC
N GRADE 500	DEFORMED BAR

THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE BAR DIAMETER IN MILLIMETRES

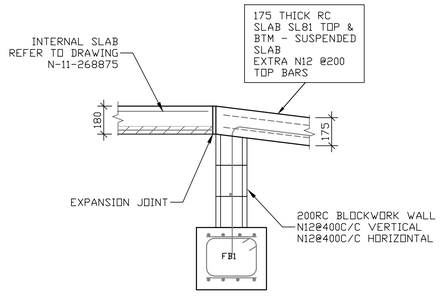
C.14 FABRIC REINFORCEMENTTO BE LAPPED 300 MINIMUM AT ENDS AND SIDES UNO. LAPS IN POSITION OF MAXIMUM MOMENTARE NOT PERMITTED.

C.15 ALL REINFORCEMENT SHALL BE FULLY SUPORTED ON INSULATED STEEL, PLASTIC OR CONCRETE CHAIRS SPACED AT 900 AND 750 CENTRES BOTH WAYS UNDER ROD AND FABRIC REINFORCEMENT RESPECTIVELY. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS.

C.16 MINIMUM STRIPPING TIMES FOR FORMWORK SHALL BE AS RECOMMENDED IN AS 1509 OR AS DIRECTED BY ENGINEER.



SUSPENDED SLAB FOOTING PLAN
1:50



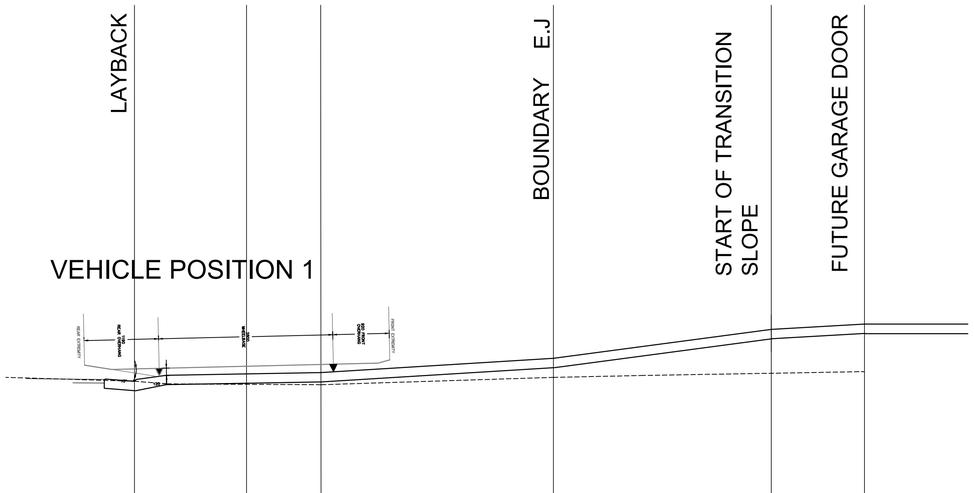
TYP. SECTION SLAB/FOOTING
1:20

CIVIL & STRUCTURAL ENGINEERING
DESIGN SERVICES PTY. LTD ACN 051 307 852
CONSULTING STRUCTURAL, CIVIL, GEOTECHNICAL & ENVIRONMENTAL ENGINEERS
3 Wanniti Road BELROSE 2085
PHONE 61-02 9975 3899
FAX 61-02 9975 1943
MOBILE 0407 753 899
EMAIL hited@bigpond.net.au

CLIENT: NM HOLDINGS NSW PTY LTD
PROJECT: DRIVEWAY VEHICULAR CROSSING AND DETAILS AT 73 WIMBLEDON AVENUE, NORTH NARRABEEN, NSW, 2101

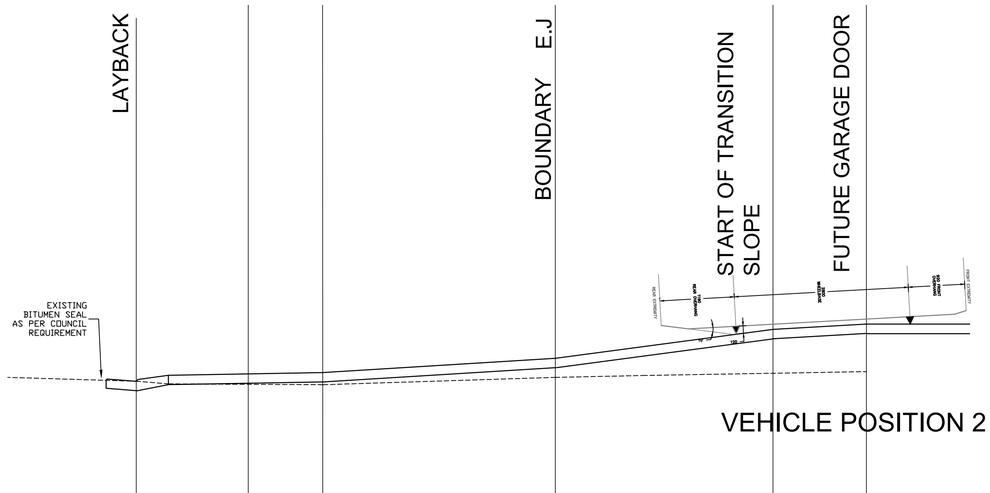
Drawn By: BP	Scale: AS SHOWN
Checked By: E. A. BENNETT M.I.E. Aust.	Drawing No.: N-21-0326-1D
Date: 08/03/2022	Amendment 22/07/2022

Registered Professional Engineer 198230
Mr Edward A. Bennett
MIEAust CPEng
Signature..... Date 08/03/2022
Register on the NPER in the Category of
Civil/Environmental/Structural/Geotechnical
National Professional Engineers Register



DATUM 0.00 (m)						
GRADIENT	1:60	1:60	1:16	1:7.5	1:17	
CUT/FILL (m)	-0.15	0.02	0.04	0.19	0.46	0.57
NEW LEVEL (m)	2.13	2.25	2.27	2.25	2.56	3.05
EXISTING (m)	2.13	2.08	2.08	2.06	2.10	2.13
CHAINAGE (m)	0.00	1.80	3.00	6.73	10.23	11.73

LONGITUDINAL SECTION WITH VEHICULAR CROSSING & DRIVEWAY
1:50



DATUM 0.00 (m)						
GRADIENT	1:60	1:60	1:16	1:7.5	1:17	
CUT/FILL (m)	-0.15	0.02	0.04	0.19	0.46	0.57
NEW LEVEL (m)	2.13	2.25	2.27	2.25	2.56	3.05
EXISTING (m)	2.13	2.08	2.08	2.06	2.10	2.13
CHAINAGE (m)	0.00	1.80	3.00	6.73	10.23	11.73

LONGITUDINAL SECTION WITH VEHICULAR CROSSING & DRIVEWAY
1:50

GENERAL NOTES

G.1 THESE NOTES SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTION AS ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERED TO THE ARCHITECT OR ENGINEER BEFORE PROCEEDING WITH THE WORK.

G.2 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.

G.3 SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY ON-SITE MEASUREMENT.

G.4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.

G.5 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE SAA CODE AND THE BY-LAWS AND ORDINANCES OF THE RELATIVE BUILDING AUTHORITY.

G.6 EXCAVATIONS SHALL NOT BE PERMITTED WITHIN 2 METRES OF AN EXISTING STRUCTURE WITHOUT PRIOR APPROVAL OR RECOMMENDATIONS FOR SHORING OR UNDERPINNING PROVIDED BY ENGINEER.

FOUNDATIONS AND FOOTINGS

F.1 FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE INTENSITY OF BEARING PRESSURE OF 150kPa. THE BUILDER SHALL OBTAIN APPROVAL OF THE FOUNDATION MATERIAL BEFORE PLACING CONCRETE.

F.2 FOOTINGS SHALL BE PLACED UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED.

SUB-GRADE

SG.1 UNDER ALL SLABS ON GRADE, WHETHER ON CUT OR FILL, REMOVE SOFT SPOTS AND REFILL BY COMPACTING CUT SURFACES OR FILL SURFACES IN LAYERS NOT EXCEEDING 200 mm TO 95% DRY DENSITY, ENSURING MINIMUM SETTLEMENT TO SLABS.

CONCRETE WORK

C.1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.

C.2 CONCRETE QUALITY SHALL BE AS TABULATED AND SHALL BE VERIFIED BY TESTS.

ELEMENT	SLUMP	MAX. SIZE AGG.	CEMENT TYPE	ADMIXTURE	mPa CONCRETE GRADE
ALL	80	20	A	NIL	32

C.3 CLEAR CONCRETE COVERS TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN.

CAST IN FORMS COMPLYING WITH AS 1509			
ELEMENT	CONDITION 1 NOT TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 2 TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 3 CAST AGAINST OTHER FORMWORK OR THE GROUND
PAD FOOTINGS & PILE CAPS	-	65	75
STRIP FOOTINGS	-	50	65
SORE OR CAST PIERS	-	50	75
COLUMNS	40	50	75
WALLS, INCLUDING RETAINING WALLS	20	30	65
BEAMS	25	40	65
SLABS, INCLUDING JOISTS & HOLLOW BLOCK CONSTRUCTION	20	30	65
REINFORCEMENT ADJACENT TO HOLLOW BLOCKS INTEGRAL WITH STRUCTURE	5	-	-

NOTE: 1. SLABS POURED OVER A MEMBRANE ON THE GROUND ARE INCLUDED AS CONDITION 2.
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED OR NOT LESS THAN AS REQUIRED FOR CONDITION 3.

C.4 SIZES OF ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

C.5 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER.

C.6 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY, UNO.

C.7 NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT PRIOR APPROVAL OF THE ENGINEER.

C.8 REINFORCEMENT IS REPRESENTED DIAGRAMATICALLY. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.

C.9 SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.

C.10 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

C.11 PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.

C.12 ALL REINFORCING BARS SHALL COMPLY WITH AS 1302. ALL FABRIC SHALL COMPLY WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED IN FLAT SHEETS.

C.13 REINFORCING SYMBOLS

S GRADE 230S	DEFORMED BAR
C GRADE 410C	COLD WORKED DEFORMED BAR
Y GRADE 410R	DEFORMED BAR
R GRADE 230R	PLAIN BAR
F GRADE 450	WELDED WIRE FABRIC
N GRADE 500	DEFORMED BAR

THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE BAR DIAMETER IN MILLIMETRES

C.14 FABRIC REINFORCEMENTTO BE LAPPED 300 MINIMUM AT ENDS AND SIDES UNO. LAPS IN POSITION OF MAXIMUM MOMENTARE NOT PERMITTED.

C.15 ALL REINFORCEMENT SHALL BE FULLY SUPORTED ON INSULATED STEEL, PLASTIC OR CONCRETE CHAIRS SPACED AT 900 AND 750 CENTRES BOTH WAYS UNDER ROD AND FABRIC REINFORCEMENT RESPECTIVELY. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS.

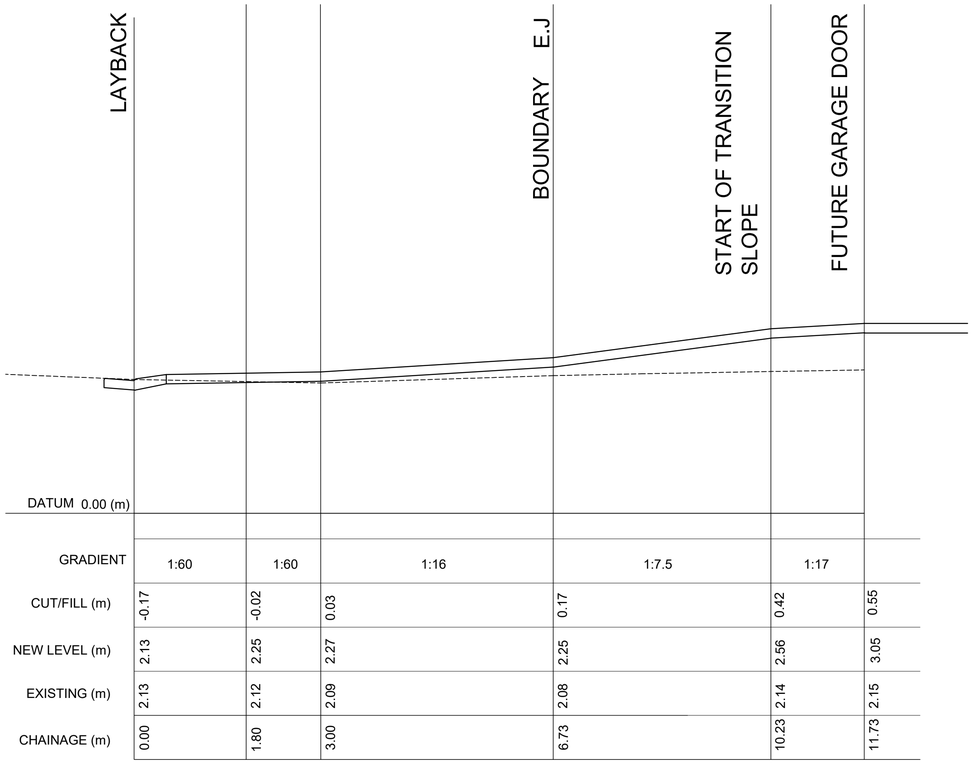
C.16 MINIMUM STRIPPING TIMES FOR FORMWORK SHALL BE AS RECOMMENDED IN AS 1509 OR AS DIRECTED BY ENGINEER.

CIVIL & STRUCTURAL ENGINEERING DESIGN SERVICES PTY. LTD ACN 051 307 852
CONSULTING STRUCTURAL, CIVIL, GEOTECHNICAL & ENVIRONMENTAL ENGINEERS
3 Wanniti Road BELROSE 2085
PHONE 61-02 9975 3899
FAX 61-02 9975 1943
MOBILE 0407 753 899
EMAIL hited@bigpond.net.au

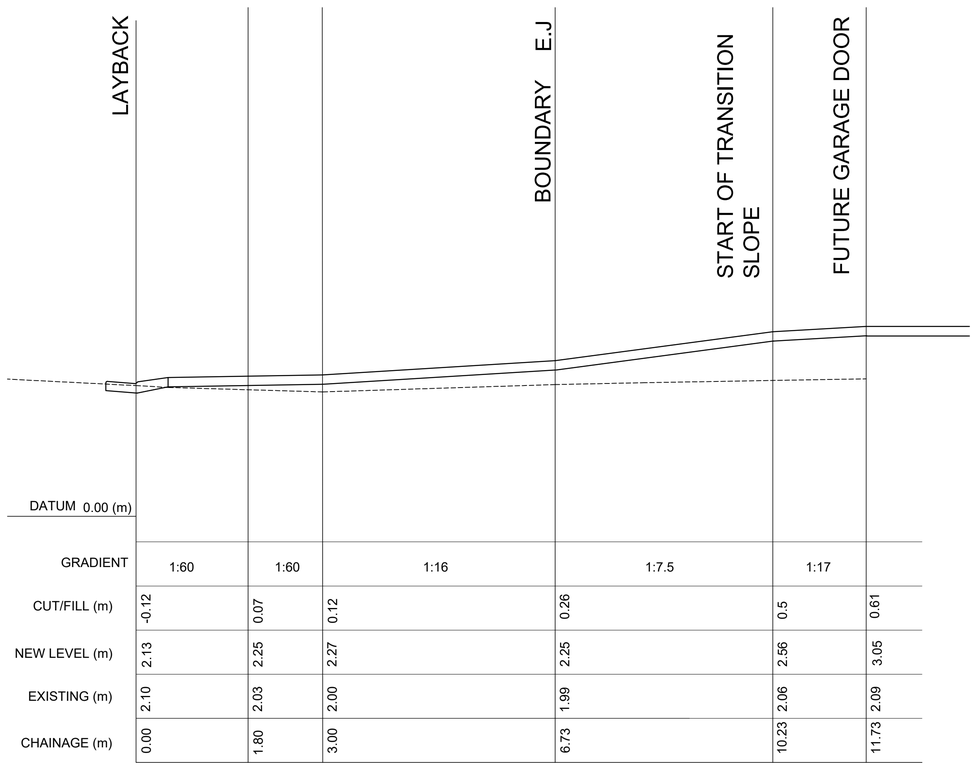
CLIENT: NM HOLDINGS NSW PTY LTD
PROJECT: DRIVEWAY VEHICULAR CROSSING AND DETAILS AT 73 WIMBLEDON AVENUE, NORTH NARRABEEN, NSW, 2101

Drawn By: BP	Scale: AS SHOWN
Checked By: E. A. BENNETT M.I.E. Aust.	Drawing No.: N-21-0326-2D
Date: 08/03/2022	Amendment 22/07/2022

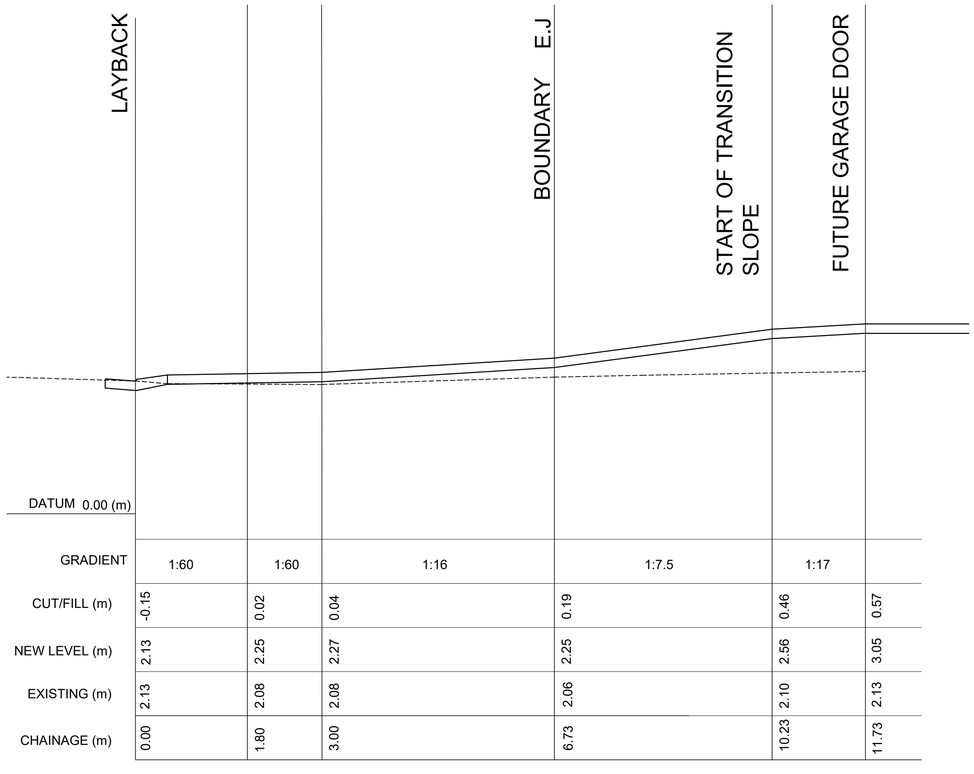
Registered Professional Engineer 198230
Mr Edward A. Bennett
MIEAust CPEng
Signature..... Date 08/03/2022
Register on the NPER in the Category of
Civil/Environmental/Structural/Geotechnical
National Professional Engineers Register



LONGITUDINAL SECTION WITH VEHICULAR CROSSING & DRIVEWAY NORTH
1:50



LONGITUDINAL SECTION WITH VEHICULAR CROSSING & DRIVEWAY SOUTH
1:50



LONGITUDINAL SECTION WITH VEHICULAR CROSSING & DRIVEWAY CENTERLINE
1:50

GENERAL NOTES

G.1 THESE NOTES SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTION AS ISSUED DURING THE COURSE OF THE CONTRACT. ALL DISCREPANCIES SHALL BE REFERED TO THE ARCHITECT OR ENGINEER BEFORE PROCEEDING WITH THE WORK.

G.2 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.

G.3 SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY ON-SITE MEASUREMENT.

G.4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED.

G.5 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITIONS OF THE SAA CODE AND THE BY-LAWS AND ORDINANCES OF THE RELATIVE BUILDING AUTHORITY.

G.6 EXCAVATIONS SHALL NOT BE PERMITTED WITHIN 2 METRES OF AN EXISTING STRUCTURE WITHOUT PRIOR APPROVAL OR RECOMMENDATIONS FOR SHORING OR UNDERPINNING PROVIDED BY ENGINEER.

FOUNDATIONS AND FOOTINGS

F.1 FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE INTENSITY OF BEARING PRESSURE OF 150kPa. THE BUILDER SHALL OBTAIN APPROVAL OF THE FOUNDATION MATERIAL BEFORE PLACING CONCRETE.

F.2 FOOTINGS SHALL BE PLACED UNDER WALLS AND COLUMNS UNLESS OTHERWISE NOTED.

SUB-GRADE

SG.1 UNDER ALL SLABS ON GRADE, WHETHER ON CUT OR FILL, REMOVE SOFT SPOTS AND REFILL BY COMPACTING CUT SURFACES OR FILL SURFACES IN LAYERS NOT EXCEEDING 200 mm TO 95% DRY DENSITY, ENSURING MINIMUM SETTLEMENT TO SLABS.

CONCRETE WORK

C.1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600.

C.2 CONCRETE QUALITY SHALL BE AS TABULATED AND SHALL BE VERIFIED BY TESTS.

ELEMENT	SLUMP	MAX. SIZE AGG.	CEMENT TYPE	ADMIXTURE	mPa CONCRETE GRADE
ALL	80	20	A	NIL	32

C.3 CLEAR CONCRETE COVERS TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN.

CAST IN FORMS COMPLYING WITH AS 1509			
ELEMENT	CONDITION 1 NOT TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 2 TO BE EXPOSED TO WEATHER GROUND WATER OR FRESH WATER	CONDITION 3 CAST AGAINST OTHER FORMWORK OR THE GROUND
PAD FOOTINGS & PILE CAPS	-	65	75
STRIP FOOTINGS	-	50	65
SORE OR CAST PIERS	-	50	75
COLUMNS	40	50	75
WALLS, INCLUDING RETAINING WALLS	20	30	65
BEAMS	25	40	65
SLABS, INCLUDING JOISTS & HOLLOW BLOCK CONSTRUCTION	20	30	65
REINFORCEMENT ADJACENT TO HOLLOW BLOCKS INTEGRAL WITH STRUCTURE	5	-	-

NOTE: 1. SLABS POURED OVER A MEMBRANE ON THE GROUND ARE INCLUDED AS CONDITION 2.
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED OR NOT LESS THAN AS REQUIRED FOR CONDITION 3.

C.4 SIZES OF ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

C.5 CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER.

C.6 BEAM DEPTHS ARE WRITTEN FIRST AND INCLUDE SLAB THICKNESS, IF ANY, UNO.

C.7 NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE ELEMENTS WITHOUT PRIOR APPROVAL OF THE ENGINEER.

C.8 REINFORCEMENT IS REPRESENTED DIAGRAMATICALLY. IT IS NOT NECESSARILY SHOWN IN TRUE PROJECTION.

C.9 SPLICES IN REINFORCEMENT MADE IN POSITIONS OTHER THAN SHOWN SHALL BE TO THE APPROVAL OF THE ENGINEER. WHERE THE LAP LENGTH IS NOT SHOWN IT SHALL BE SUFFICIENT TO DEVELOP THE FULL STRENGTH OF THE REINFORCEMENT.

C.10 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

C.11 PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF THE ENGINEER.

C.12 ALL REINFORCING BARS SHALL COMPLY WITH AS 1302. ALL FABRIC SHALL COMPLY WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED IN FLAT SHEETS.

C.13 REINFORCING SYMBOLS

S GRADE 230S	DEFORMED BAR
C GRADE 410C	COLD WORKED DEFORMED BAR
Y GRADE 410R	DEFORMED BAR
R GRADE 230R	PLAIN BAR
F GRADE 450	WELDED WIRE FABRIC
N GRADE 500	DEFORMED BAR

THE NUMBER IMMEDIATELY FOLLOWING THESE SYMBOLS IS THE BAR DIAMETER IN MILLIMETRES

C.14 FABRIC REINFORCEMENTTO BE LAPPED 300 MINIMUM AT ENDS AND SIDES UNO. LAPS IN POSITION OF MAXIMUM MOMENTARE NOT PERMITTED.

C.15 ALL REINFORCEMENT SHALL BE FULLY SUPORTED ON INSULATED STEEL, PLASTIC OR CONCRETE CHAIRS SPACED AT 900 AND 750 CENTRES BOTH WAYS UNDER RIOD AND FABRIC REINFORCEMENT RESPECTIVELY. RODS SHALL BE TIED AT ALTERNATE INTERSECTIONS.

C.16 MINIMUM STRIPPING TIMES FOR FORMWORK SHALL BE AS RECOMMENDED IN AS 1509 OR AS DIRECTED BY ENGINEER.

CIVIL & STRUCTURAL ENGINEERING DESIGN SERVICES PTY. LTD ACN. 051 307 852
CONSULTING STRUCTURAL, CIVIL, GEOTECHNICAL & ENVIRONMENTAL ENGINEERS
3 Wanniti Road BELROSE 2085
PHONE 61-02 9975 3899
FAX 61-02 9975 1943
MOBILE 0407 753 899
EMAIL hited@bigpond.net.au

CLIENT: NM HOLDINGS NSW PTY LTD
PROJECT: DRIVEWAY VEHICULAR CROSSING AND DETAILS AT 73 WIMBLEDON AVENUE, NORTH NARRABEEN, NSW, 2101

Drawn By: BP	Scale: AS SHOWN
Checked By: E. A. BENNETT M.I.E. Aust.	Drawing No.: N-21-0326-3D
Date: 08/03/2022	Amendment 22/07/2022

Registered Professional Engineer 198230
Mr Edward A. Bennett
MIEAust CPEng
Signature..... Date 08/03/2022
Register on the NPER in the Category of
Civil/Environmental/Structural/Geotechnical
National Professional Engineers Register