

01/02/2024

Proposed Palisade Wall  
 2/7 Masefield Avenue  
 Herne Bay Auckland 1011



Drawing List Project No. 24647-1

Drawing No.	Drawing Title	Rev	Date
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G01	Site Plan & Location Plan	1	06/12/23
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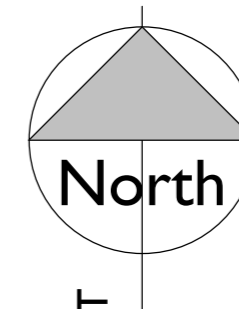
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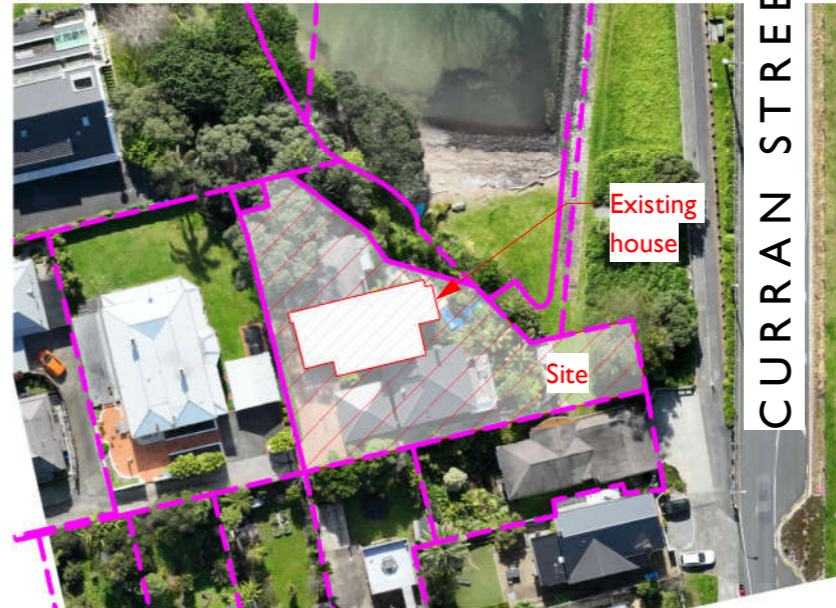


01/02/2024



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- NZS 1170:2002**
- Building Importance Level 2
- NZS 3604:2011**
- Site Subsoil Class C
  - Wind Region A
  - Exposure Zone B
  - Earthquake Zone 2
  - Ground Bearing
  - Refer to Geotechnical Report



**Location Plan**  
1 : 1000



**Site Plan**  
1 : 300

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160766 8/12/2023  
Auckland Council Author # 122443

Issue	Date	Issued by	Reason for Issue
1	06/12/23	ZPI	Issued for Building Consent

Client:  
**James and Kay Judson**

Project:  
**Proposed Palisade Wall  
2/7 Masfield Avenue Herne  
Bay Auckland 1011**

Drawing Title:  
**Site Plan & Location Plan**

Engineer:	P. Grobler	Drawn:	ZPI
Date:	December 2023	A3 Scale:	As indicated
Project No.	24647-1	Drawing No.	G01
		Issue	1



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Construction Methodology for Palisade Wall

- Due to proposed retaining wall being located at drive way or near boundary; it is advisable to have public liability and construction insurance for construction of palisade wall and associated earthworks.
- The property boundary should be surveyed and pegged, identifying the legal boundary.
- It is advisable to take photos or videos of the neighbour's driveway and property on its condition before commencing any works for future comparison and monitoring any ground movement.
- If any damages to neighbouring property due to construction of retaining walls, then Contractor will need to notify supervising engineer and Council Inspectors and consult immediately for remedial solution. Also affected neighbour must be notified.
- It should be noted that all care and safety measures must be undertaken by Contractor to maintain the safety of neighbouring properties during construction of retaining walls.
- All works must be carried out in accordance with approved building consent drawings and engineering calculations. If there are any significant issues, Contractor must raise with Council building inspectors and consulting engineers immediately.
- Remove vegetation and topsoil as required.
- Drill holes for piles from existing ground level after top soil removal.
- Place reinforcement cage and pour concrete.
- Continuously monitor for any ground movement or concrete piles while earth filling and cracks on ground in neighbouring properties.

Notes:

- The CTP-RW is recommended to be located between the existing dwelling and downslope landslip with the exact location to be discussed with the client prior to finalisation.
- Wall to be designed as recommended above.
- Fill any tension cracks in the ground with bentonite.
- Divert surface flow away from the slope
- Check via CCTV all downpipes and site drainage for integrity, and repair as indicated.
- Re-vegetate any slopes.
- Consider trimming of larger trees from time to time to reduce the 'windage' effect.

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- NZS 1170:2002**
- Building Importance Level 2
- NZS 3604:2011**
- Site Subsoil Class C
  - Wind Region A
  - Exposure Zone B
  - Earthquake Zone 2
  - Ground Bearing
  - Refer to Geotechnical Report

Issue	Date	Issued by	Reason for Issue
I	06/12/23	ZPI	Issued for Building Consent

Client:  
**James and Kay Judson**

Project:  
**Proposed Palisade Wall  
2/7 Masfield Avenue Herne  
Bay Auckland 1011**

Drawing Title:  
**Construction Methodology  
for Palisade Wall**

Engineer: P. Grobler      Drawn: ZPI  
Date: December 2023      A3 Scale: As indicated

Project No. Drawing No. Issue  
**24647-1 G02 I**



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- C1 All workmanship and materials shall be in accordance with NZS 3101 and NZS 3109, current edition, with amendments, except where varied by the contract documents.
- C2 Concrete and formwork shall comply with the requirements of NZS 3109.
- C3 All concrete shall be high or special grade in accordance with NZS 3109 to the following 28 day strengths:
 

Foundation screed	10 MPa
Foundations	30 MPa
- C4 Concrete quality control testing shall be in accordance with NZS 3109, Section 9.
- C5 Sizes of concrete elements do not include thickness of applied finishes.
- C6 Construction joints where not shown shall be located to the approval of the Engineer.
- C7 Beam depths are written second and include slab thickness, if any.
- C8 No holes or chases other than those shown on the structural drawings shall be made in concrete members without the prior approval of the Engineer.
- C9 Reinforcement is represented diagrammatically. It is not necessarily shown in true projection.
- C10 Splices in reinforcement shall be made only in the positions shown. The written approval of the Engineer shall be obtained for any other splices where the lap length is not shown.
- C11 Welding of reinforcement will not be permitted unless shown on the structural drawings.
- C12 Pipes or conduits shall not be placed within the concrete cover to reinforcement without the approval of the Engineer.
- C13 All reinforcement fabric shall comply with NZS 3422, and shall be supplied as flat sheets.
- C14 At splices, fabric shall be lapped as follows:

- C15 Minimum concrete cover, to all reinforcement unless noted otherwise:
 

Exposure classification	Concrete f'c (MPa)				
	20	25	30	35	40
A1 - Interior: Dry	25	25	20	20	20
A2 - Exterior: Inland	40	35	30	30	25
B1 - Exterior: Coastal Perimeter	50	40	35	35	30
B1 - Interior: Wet	50	40	35	35	30
B2 - Exterior: Coastal Frontage	-	-	45	40	35
Cast against ground	75	75	75	75	75
- C16 Reinforcing lap lengths, shall be staggered unless noted otherwise:
 

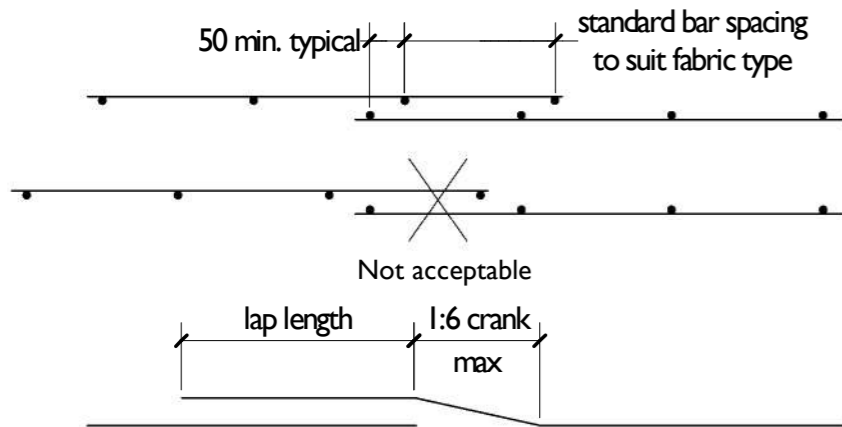
Bar size	10	12	16	20	25	32
D - Grade 300E	400	500	650	800	1000	1250
HD - Grade 500E	650	800	1050	1300	1650	2100
- C17 Lapped at random bars: Where laps are not specifically shown, bars may be lapped at random in a staggered pattern. Bars shall be 3.0m minimum length but where accurate placing is critical, bars longer than 3.0m may incorporate one lap complying with the above tables.
- C18 Epoxy grouting for reinforcing bars into concrete:
 

Bar size	10	12	16	20	25
Hole diameter	16	18	22	26	30
D	160	200	270	350	500
HD	210	270	380	490	640
- C19 Topping concrete and slab on grade reinforcement unless noted otherwise:
 

Thickness	Reinforcing mesh
75 - 125	665
125 - 150	663
- C20 Slab reinforcement shall be supported on stools or other approved methods. Starters shall be tied in place.

Some Common Abbreviations:

- R denotes grade 300E hot rolled round bar to AS/NZS 4671.
- D denotes grade 300E hot rolled deformed bar to AS/NZS 4671.
- HD denotes grade 500E hot rolled deformed bar to AS/NZS 4671.
- ABS alternate bar staggered
- B bottom
- BOF bottom of footing
- C central
- CAR cover all round
- CRS centres
- CJ construction/control joint
- CVR cover
- DIA diameter
- EF each face
- EW each way
- EXTG existing
- FF far face
- FFL finished floor level
- FGL finished ground level
- FJ free joint
- GL ground level
- H horizontal
- HD holding down bolts
- LCJ lintel control joint
- NF near face
- NTS not to scale
- PC precast concrete
- R radius
- RC reinforced concrete
- SC sawcut
- SED specific engineering design
- STR stirrup
- T top
- TBA to be advised
- TBC to be confirmed
- Thk thick
- TJ tied joint
- TOF top of footing
- TOS top of steel
- TYP typical
- UNO unless noted otherwise
- U/S underside
- V vertical



All beams and columns main reinforcement splices shall have cranked laps unless noted otherwise.

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- NZS 1170:2002
- Building Importance Level 2
- NZS 3604:2011
- Site Subsoil Class C
  - Wind Region A
  - Exposure Zone B
  - Earthquake Zone 2
  - Ground Bearing
  - Refer to Geotechnical Report

Issue	Date	Issued by	Reason for Issue
I	06/12/23	ZPI	Issued for Building Consent

Client:  
**James and Kay Judson**

Project:  
**Proposed Palisade Wall  
2/7 Masfield Avenue Herne  
Bay Auckland 1011**

Drawing Title:  
**Concrete Notes**

Engineer: P. Grobler  
Date: December 2023  
Drawn: ZPI  
A3 Scale: 1 : 10

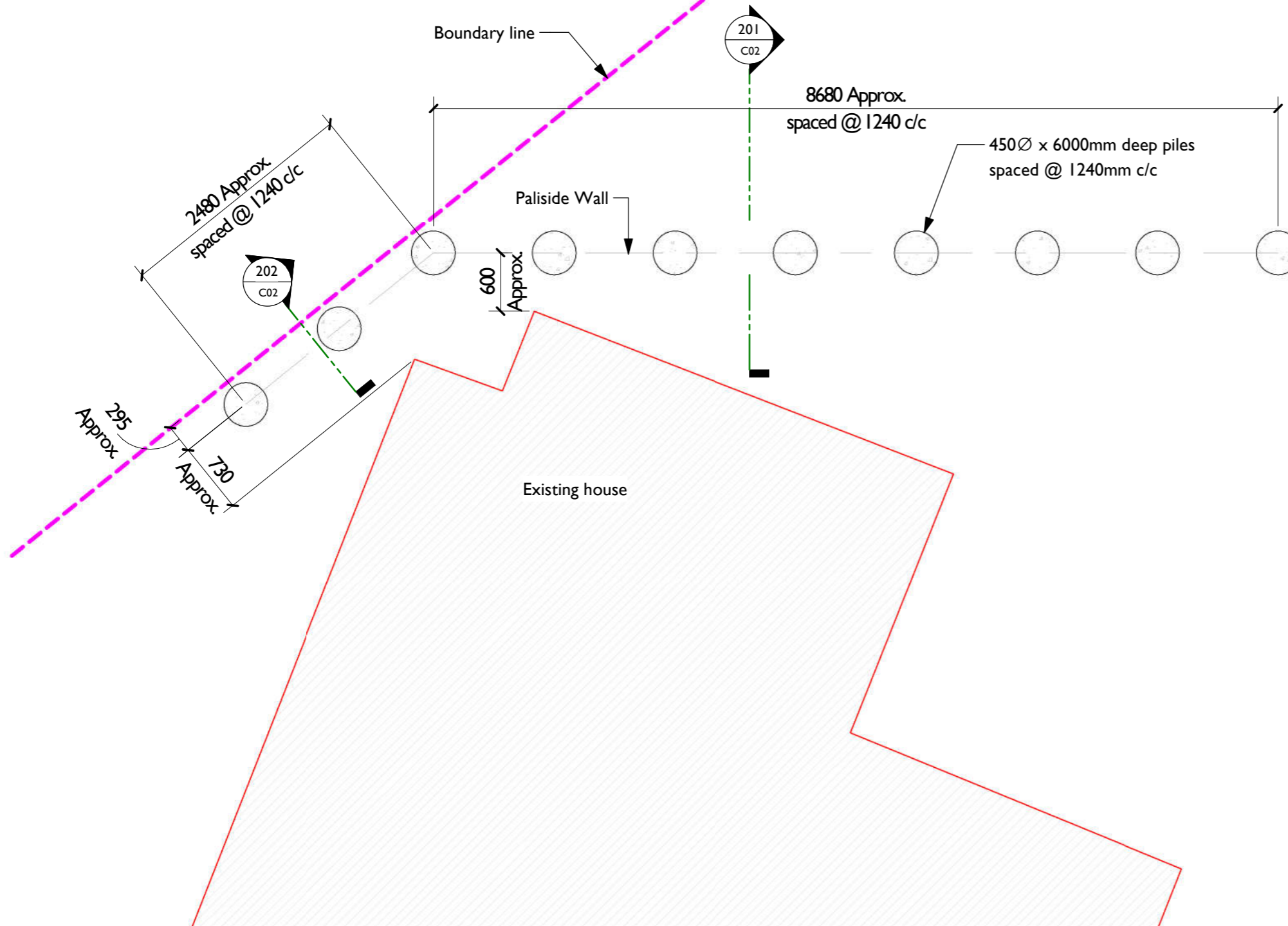
Project No. **24647-1**  
Drawing No. **C00**  
Issue **I**

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- NZS 3604:2011**
- Site Subsoil Class C
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  - Exposure Zone B
  - Earthquake Zone 2
  - Ground Bearing
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Issue	Date	Issued by	Reason for Issue
I	06/12/23	ZPI	Issued for Building Consent

Client:  
**James and Kay Judson**

Project:  
**Proposed Palisade Wall  
2/7 Masfield Avenue Herne  
Bay Auckland 1011**

Drawing Title:  
**Palisade Wall Pile Plan**

Engineer:	Drawn:	
P. Grobler	ZPI	
Date:	A3 Scale:	
December 2023	1 : 50	
Project No.	Drawing No.	Issue
<b>24647-1</b>	<b>C01</b>	<b>I</b>



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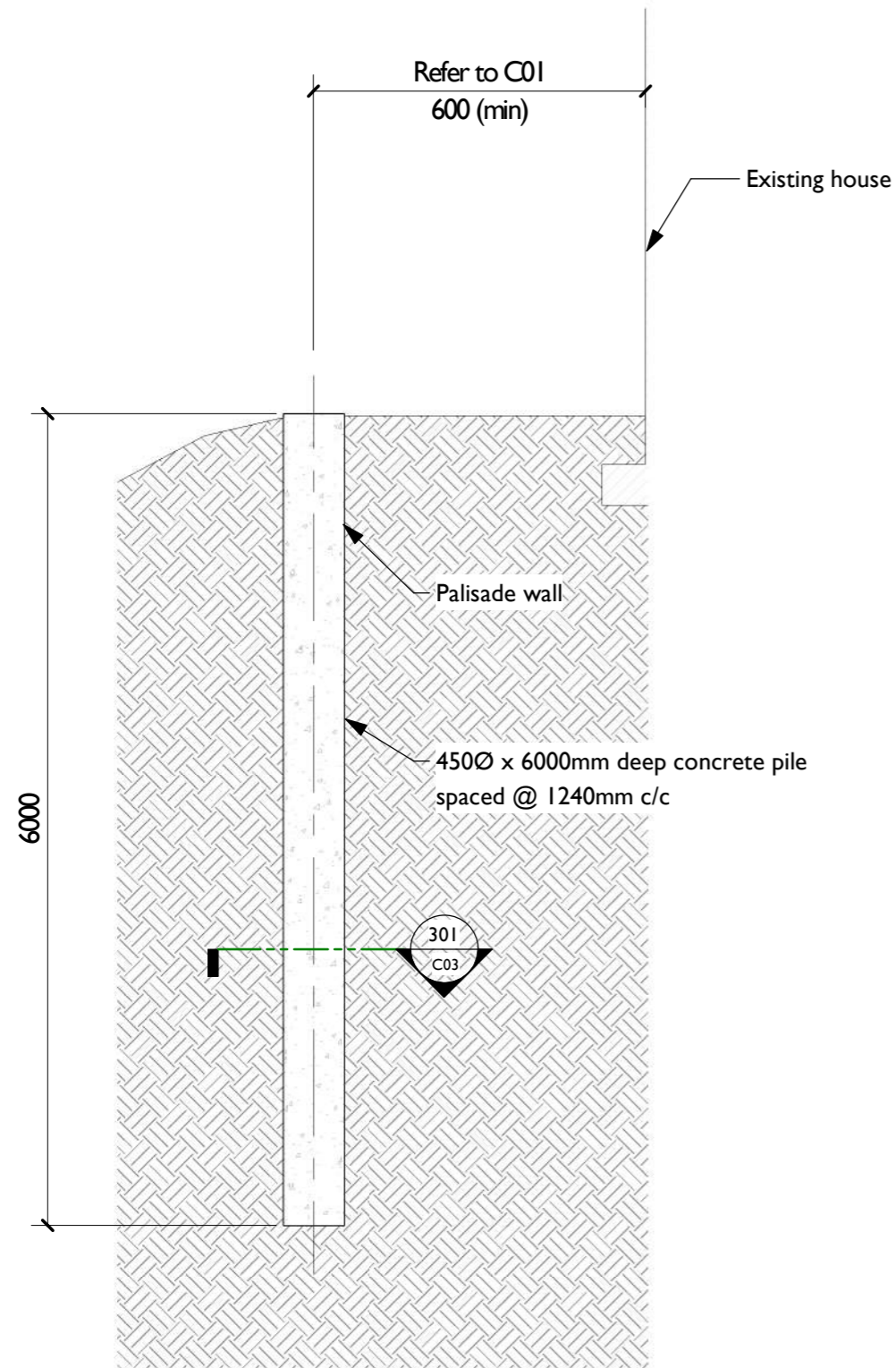
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**Palisade Wall Pile Plan**  
1 : 50

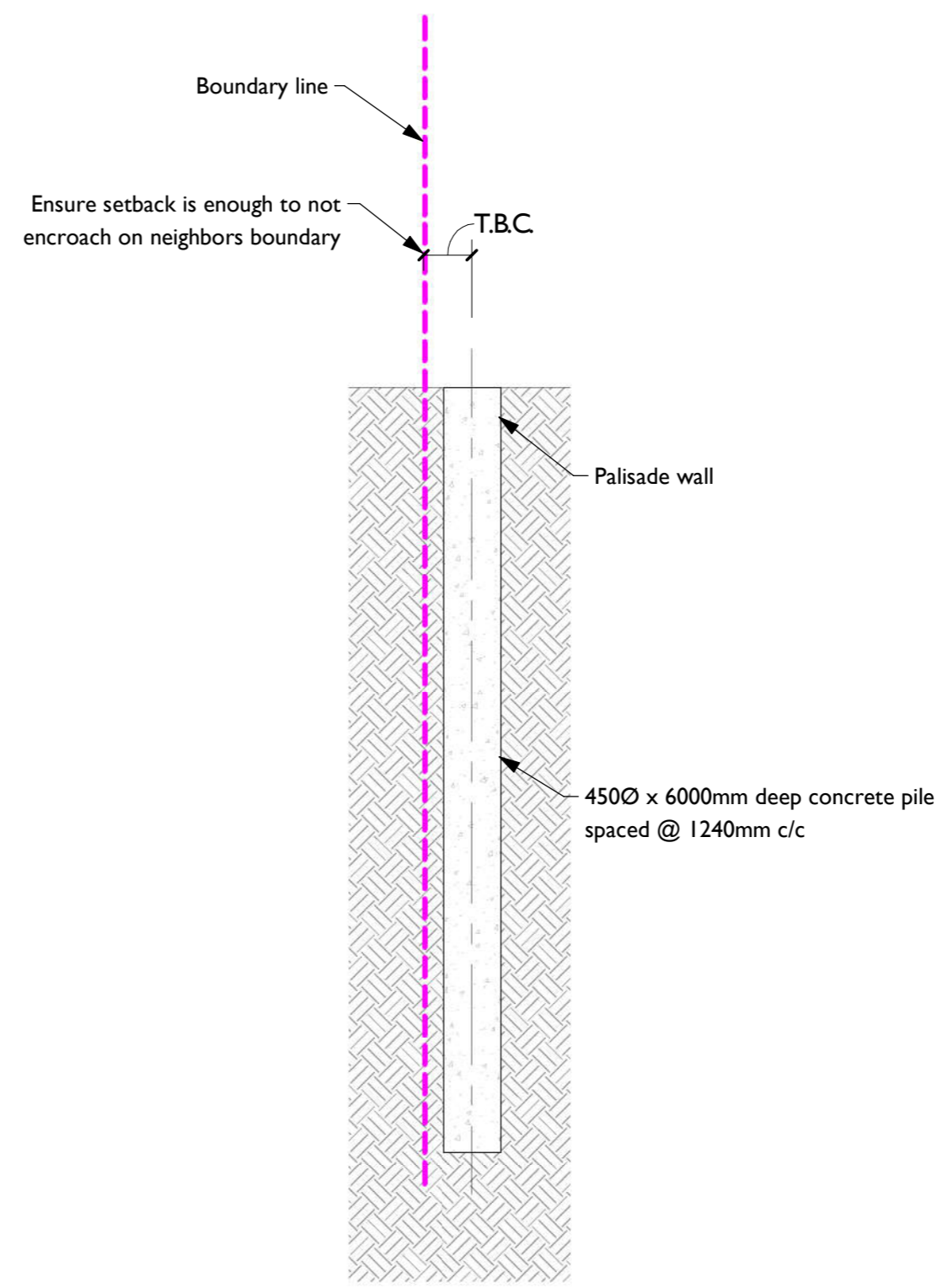
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201 Section Detail  
C01 1 : 50



202 Section Detail  
C01 1 : 50

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- NZS 3604:2011**
- Site Subsoil Class C
  - Wind Region A
  - Exposure Zone B
  - Earthquake Zone 2
  - Ground Bearing
  - Refer to Geotechnical Report

Issue	Date	Issued by	Reason for Issue
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Client:  
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Project:  
**Proposed Palisade Wall  
2/7 Masefield Avenue Herne  
Bay Auckland 1011**

Drawing Title:  
**Section**

Engineer: P. Grobler	Drawn: ZPI
Date: December 2023	A3 Scale: 1 : 50

Project No. <b>24647-1</b>	Drawing No. <b>C02</b>	Issue <b>I</b>
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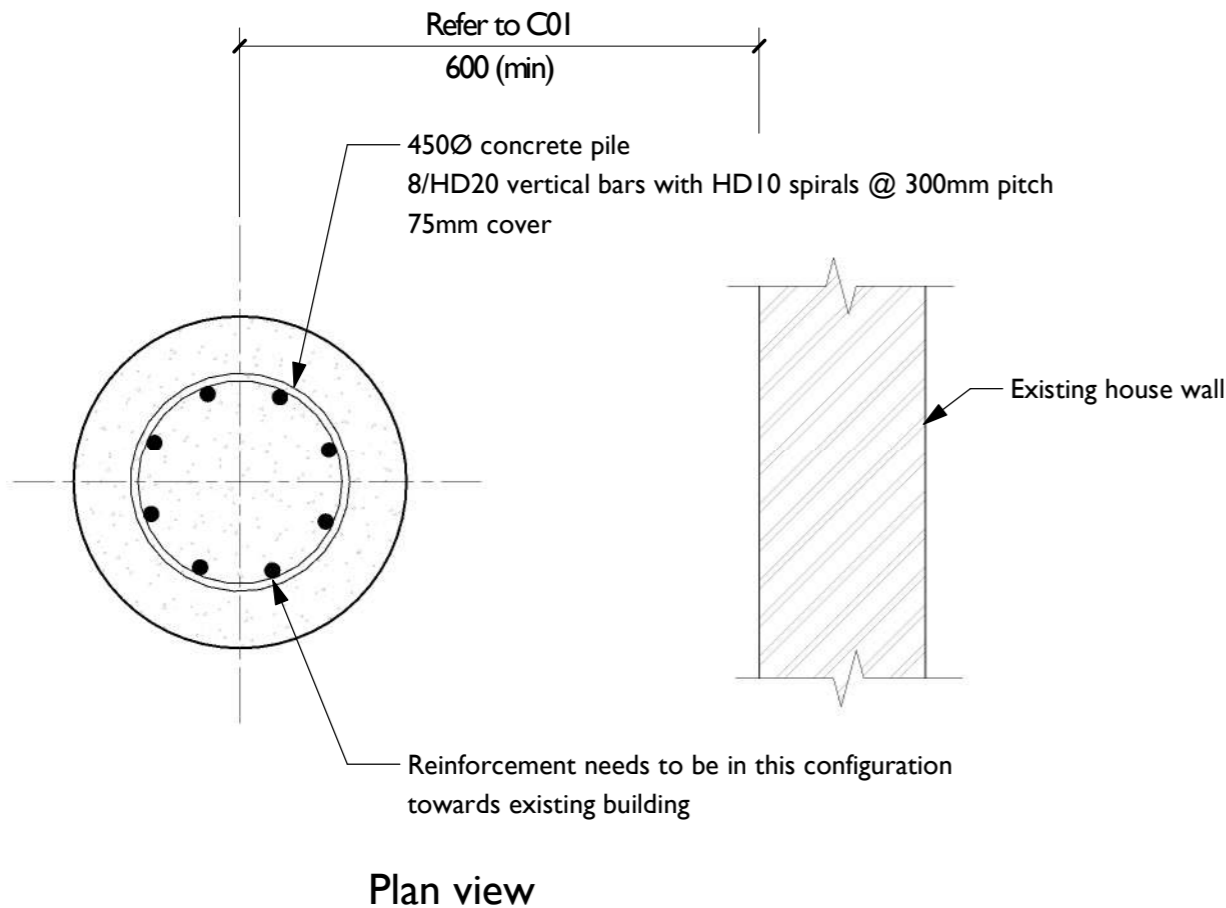
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301 Typical 450Ø Concrete Pile Detail  
C02 1 : 10

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  - Exposure Zone B
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Client:  
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Project:  
**Proposed Palisade Wall  
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Bay Auckland 1011**

Drawing Title:  
**Detail**

Engineer: P. Grobler  
Date: December 2023  
Drawn: ZPI  
A3 Scale: 1 : 10

Project No. **24647-1**  
Drawing No. **C03**  
Issue **I**



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