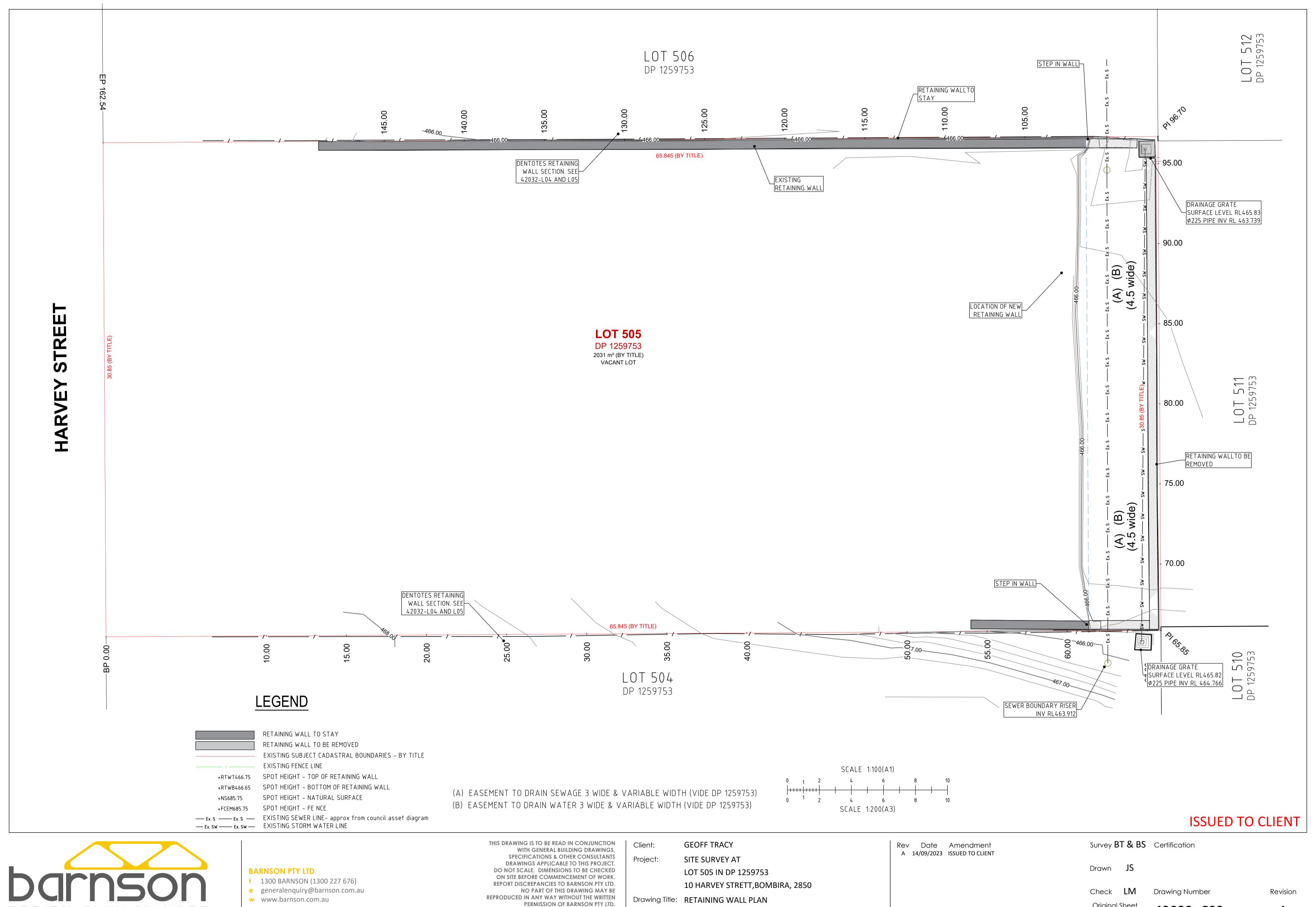




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# SITEWORKS NOTES

- 1. ORIGIN OF LEVELS :- AHD
- 2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.
- 3. ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS. THE SPECIFICATIONS AND THE DIRECTIONS OF THE SUPERINTENDENT.
- 4.EXISTING SERVICES HAVE BEEN OBTAINED FROM SURFACE INSPECTION ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY
- 5. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- 6. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A QUALIFIED SURVEYOR.
- 7. CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER TELECOM OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
- 8. ON COMPLETION OF CONSTRUCTION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS.
- 9. MAKE SMOOTH TRANSITION TO EXISTING AREAS.
- 10. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS. ALL WORK TO BE UNDERTAKEN WITH ADHERENCE TO THE REQUIREMENTS OF THE SOIL AND WATER MANAGEMENT PLAN.
- 11. THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS.

## BULK EARTHWORKS APPROVALS

- 1. APPROVAL IS REQUIRED BY ALL RELEVANT AUTHORITIES PRIOR TO COMMENCEMENT OF WORKS ON SITE.
- 2. THE BULK EARTHWORKS PLANS AND ALL SUPPORTING INFORMATION INCLUDING ALL EROSION AND SEDIMENT CONTROL PLANS SHALL REMAIN ON SITE AT ALL TIMES.

#### EXISTING SERVICES

1. EXACT LOCATION OF ALL SERVICES SHALL BE LOCATED PRIOR TO THE COMMENCEMENT OF WORK. IT IS THE BUILDERS RESPONSIBILITY TO CONFIRM THE DEPTH AND LOCATION OF SERVICES AND BARNSON PTY LTD ACCEPTS NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THE SERVICES SHOWN.

# ADJOINING PROPERTY

- 1. IT IS THE SUB-CONTRACTOR'S RESPONSIBILITY TO ENSURE THE EFFECTS OF THE EARTHWORKS DO NOT HAVE AN IMPACT TO THE NEIGHBOURING PROPERTIES. SHOULD AN ISSUE ARISE ON SITE. THE SUB-CONTRACTOR SHALL INFORM THE SUPERINTENDENT IMMEDIATELY
- 2. THE SUB-CONTRACTOR IS TO RECEIVE WRITTEN PERMISSION PRIOR TO ENTERING OR COMMENCING WORK OUTSIDE THE DEVELOPMENT SITE AND SHALL RECEIVE PERMISSION FROM EASEMENT HOLDERS AND LOCAL AUTHORITY PRIOR TO WORK COMMENCING.

#### **AUTHORITY REGULATIONS**

- 1. HAUL ROUTES FROM SITE IS TO BE AS FOLLOWS: SITE > TO BE CONFIRMED, STAY ON MAIN ROADS.
- 2. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO WORK COMMENCING AS REQUIRED BY THE COUNCIL APPROVED SEDIMENT & EROSION CONTROL PLAN.
- 3. ALL VEGETATION PROTECTION AND PRESERVATION MEASURES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF WORK.

1. ANY SUSPECTED GROUND OR GROUND WATER CONTAMINATION SHALL BE INVESTIGATED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.

## CONSTRUCTION RECORDS

- 1. ADEQUATE RECORDS SHALL BE KEPT THROUGHOUT CONSTRUCTION
- INCLUDING, BUT NOT LIMITED TO;
- 1.1. LOCATION AND QUANTITY OF EXCESS CUT (DUMP SITE);
- 1.2. LOCATION AND QUANTITY OF EXCESS CUT (DUMP SITE):
- 1.3. LEVELS OF STRIPPED SURFACE;
- 1.4. LOCATION OF ANY VEGETATION REMOVED;
- 1.5. LOCATION OF SITE CONTAMINATION/UNSUITABLE MATERIAL;
- 1.6. LEVELS AT COMPLETION OF BULK EARTHWORKS WORK;
- 1.7. DETAILS OF SUB-GRADE TEST ROLLING (PROOF ROLLING);
- 1.8. TYPES/SOURCE OF FILL MATERIAL;
- 1.9. LOCATION LEVEL AND RESULT OF EACH COMPACTION TEST: 1.10.RECORD OF ALL ACTIONS TAKEN ON SITE.

# UNSUITABLE MATERIALS

- 1. REFER TO GEOTECHNICAL ENGINEER. AS REQUIRED, FOR DETERMINATION OF SUITABILITY OF MATERIAL WON ON SITE. OR BORROW PIT TO BE USED AS FILL MATERIAL
- 2.ALL UNSUITABLE FILL SHALL BE EITHER REMOVED OR USED ORGANIC MATTER FROM BUILDING AND PAVEMENT AREAS.
- 3. PRIOR TO ANY EARTHWORKS STRIP TOPSOIL, CONTAINING AS PER THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. APPROXIMATE DEPTH OF 0.10M, SPOIL MATERIAL AS DIRECTED BY THE MANAGER. REMOVE RUBBLE, OVER SATURATED MATERIALS AND ALL ORGANIC MATTER.

# TESTING/INSPECTIONS

- 1. ALL TESTING OF EARTHWORKS SHALL BE DONE AT THE SUB-CONTRACTOR'S EXPENSE, UNLESS NOTED OTHERWISE, SHALL A
- SUB-GRADE OR PROOF ROLL INSPECTION FAIL, OR
- 2. ADDITIONAL INSPECTIONS BE REQUIRED FOR ANY REASON OUTSIDE, THE SUB-CONTRACTOR WILL WEAR THE COSTS OF ANY SUBSEQUENT RE-INSPECTIONS UNLESS NOTED OTHERWISE.

# EARTHWORKS SEQUENCE

- 1. INSTALL ALL VEGETATION PROTECTION, EROSION AND SEDIMENT CONTROL, AND SITE-SPECIFIC MEASURES PRIOR TO THE COMMENCEMENT OF ANY WORK.
- 2.STRIP ALL TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCKPILE AS DIRECTED BY THE SUPERINTENDENT.
- 3.EXCAVATE MATERIAL AS INDICATED ON THE BULK EARTHWORKS PLAN.
- 4.PRIOR TO PLACING FILL. PROOF ROLL EXPOSED SUB-GRADE WITH AN 8 TONNE (MINIMUM) ROLLER OR WATER TRUCK TO DETECT THEN REMOVE SOFT SPOTS, REPLACE UNSUITABLE MATERIAL WITH SUITABLE GRANULAR MATERIAL AND COMPACT TO THE MINIMUM COMPACTION REQUIREMENTS LISTED. (TO BE UNDERTAKEN IN THE PRESENCE OF A CIVIL/GEOTECHNICAL ENGINEER)
- 5. GEOTECHNICAL ENGINEER TO UNDERTAKE SUB-GRADE COMPACTION TESTING TO LEVEL 1, AS PER AS 3798 (2007) AND PROVIDE CBR VALUES FOR ADJUSTMENT TO PAVEMENT DESIGN.
- 6. FILLING IS TO BE PLACED AND COMPACTED IN MAXIMUM 150MM LAYERS AND TO THE MINIMUM COMPACTION REQUIREMENTS LISTED.
- 7. AFTER ALL BULK EARTHWORKS HAVE OCCURRED, PROOF ROLL THE FINISHED PAD LEVEL WITH AN 8 TONNE (MINIMUM) ROLLER OR WATER TRUCK TO DETECT. THEN REMOVE SOFT SPOTS, REPLACE UNSUITABLE MATERIAL WITH SUITABLE GRANULAR MATERIAL AND COMPACT TO THE MINIMUM COMPACTION REQUIREMENTS LISTED.

#### TYPICAL EARTHWORKS EMBANKMENT NOTES

- 1. IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT THE SITE WORKS DO NOT COMPROMISE/UNDERMINE OR PLACE ADDITIONAL SURCHARGE ON ANY EXISTING STRUCTURES.
- 2.BATTER ANGLES MUST COMPLY WITH LOCAL AUTHORITY REQUIREMENTS AND ARE TO CONFORM TO THE ABOVE DIAGRAM.
- 3. ALL BATTERS SHALL BE PROTECTED FROM EROSION, AND ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES IN PLACE PRIOR TO THE COMMENCEMENT OF WORK.
- 4. SHOULD THE ABOVE CONDITIONS NOT BE ACHIEVED, BARNSON MUST BE CONTACTED PRIOR TO ANY SITE WORKS BEING UNDERTAKEN.

## PAD AND FINISHED LEVEL NOTES

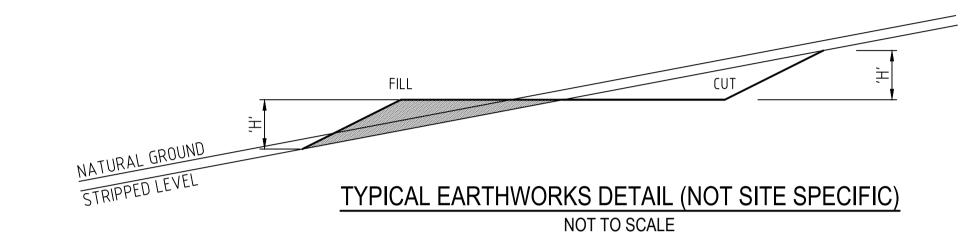
1. ACTUAL FINISHED LEVELS SHOWN ON THIS PLAN ARE FOR THE SUB-CONTRACTOR'S GUIDANCE ONLY. ACTUAL FINISHED LEVELS SHALL BE SET-OUT IN ACCORDANCE WITH ARCHITECTURAL PLANS (REPORT ANY DISCREPANCIES TO BARNSON IMMEDIATELY).

# SCOUR PROTECTION NOTES

1. SCOUR PROTECTION IS TO BE PROVIDED AS A 3000mm WIDE DISTRIBUTION x 300mm DEEP Dso 100mm RIP RAP PLACED ON A SINGLE LAYER OF GEOTEXTILE (BIDIM A34 OR EQUIVALENT) 2. GRADING TO BE AS PER TABLE BELOW

EQUIVALENT SPHERICAL DIAMETER ##	PERCENT (BY WEIGHT) OF RIP RAP OF SMALLER SIZE			
1.5 - 2.0 TIMES D50 ++	100%			
D 50	50%			
0.3 Dso	10 - 20%			

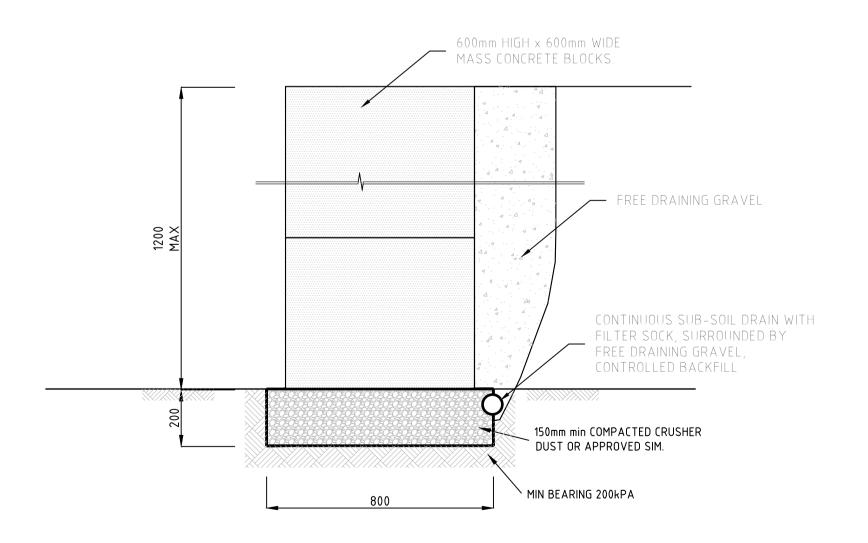
- ## THE DIAMETER OF A SPHERE WITH AN EQUIVALENT VOLUME TO THE INDIVIDUAL ROCK.
- ++ D<sub>50</sub> IS THE MEDIAN RIP RAP DIAMETER OF THE ROCK MIX. (i.e. 50% (BY WEIGHT) IS SMALLER AND 50% (BY WEIGHT) IS LARGER).



# BATTER ANGLES - SHORT TERM

SLOPE = H:L H	MA	TERIAL TYP	PE (REFER GEOTECHNICAL REPORT)			
H<2m ∠	STABLE ROCK	SAND	SILT	FIRM CLAY	SOFT CLAY	SOFT SOILS
COMPACTED FILL	1:1	1:3	1:4	1:2	N/A	N/A
CUTTING	N/A	1:3	1:4	1:2	1:3	N/A

N/A = REFER TO GEOTECHNICAL REPORT FOR TREATMENT OF UNSUITABLE MATERIAL ALL BATTER ANGLES ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED BY A GEOTECHNICAL ENGINEER.



TYPICAL RETAINING WALL SECTION NOT TO SCALE

**ISSUED TO CLIENT** 

# DESIGN. PLAN. MANAGE

# **BARNSON PTY LTD**

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**GEOFF TRACY** Client: Project: SITE SURVEY AT

LOT 505 IN DP 1259753

Drawing Title: BULK EARTHWORKS SPECIFICATIONS

10 HARVEY STRETT, BOMBIRA, 2850

Rev Date Amendment A 14/09/2023 ISSUED TO CLIENT

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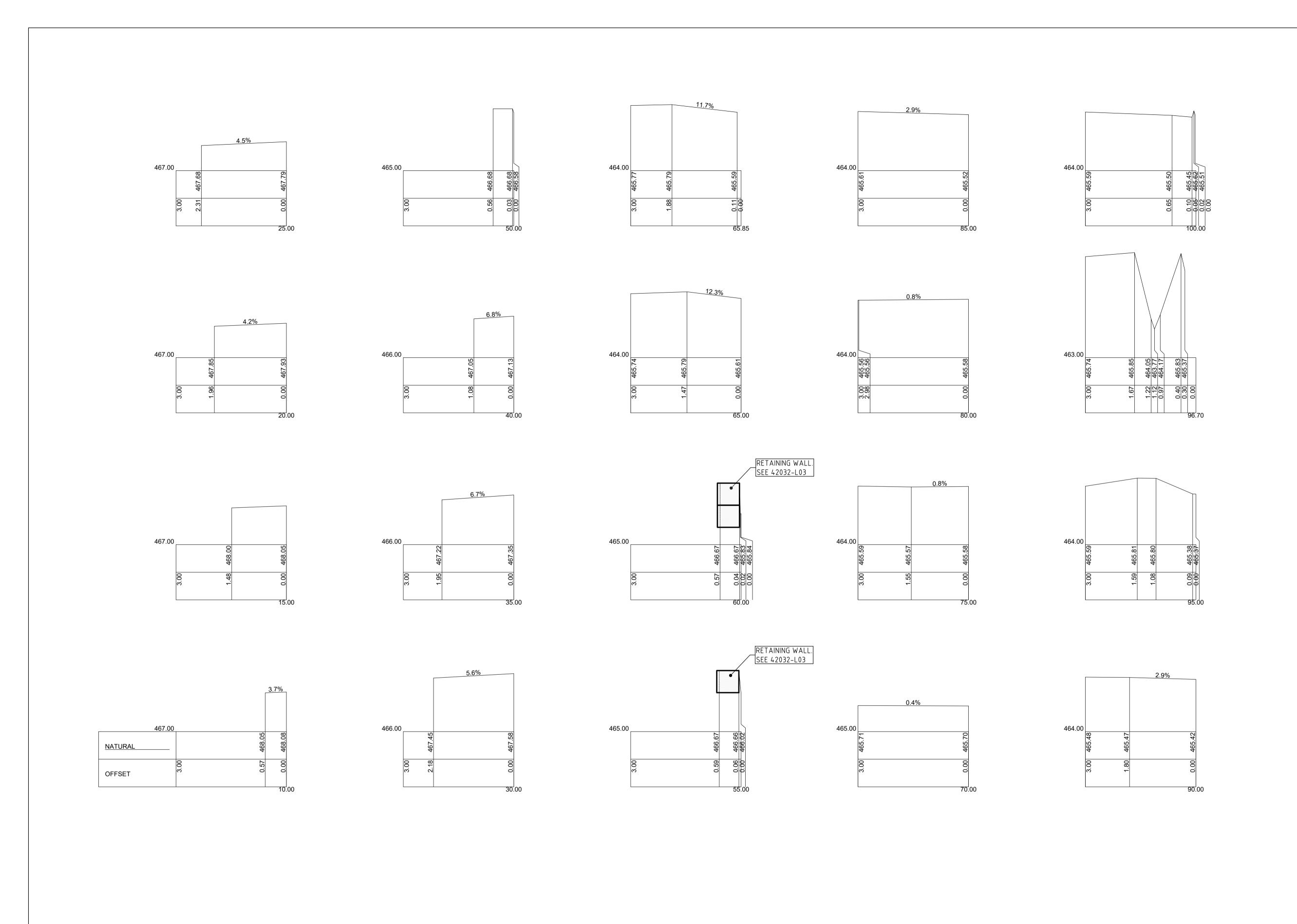
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Drawing Number

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LOT 505 IN DP 1259753

10 HARVEY STRETT, BOMBIRA, 2850

Drawing Title: **RETAINING WALL** CROSS-SECTIONS Ch:10m-100m Rev Date Amendment A 14/09/2023 ISSUED TO CLIENT

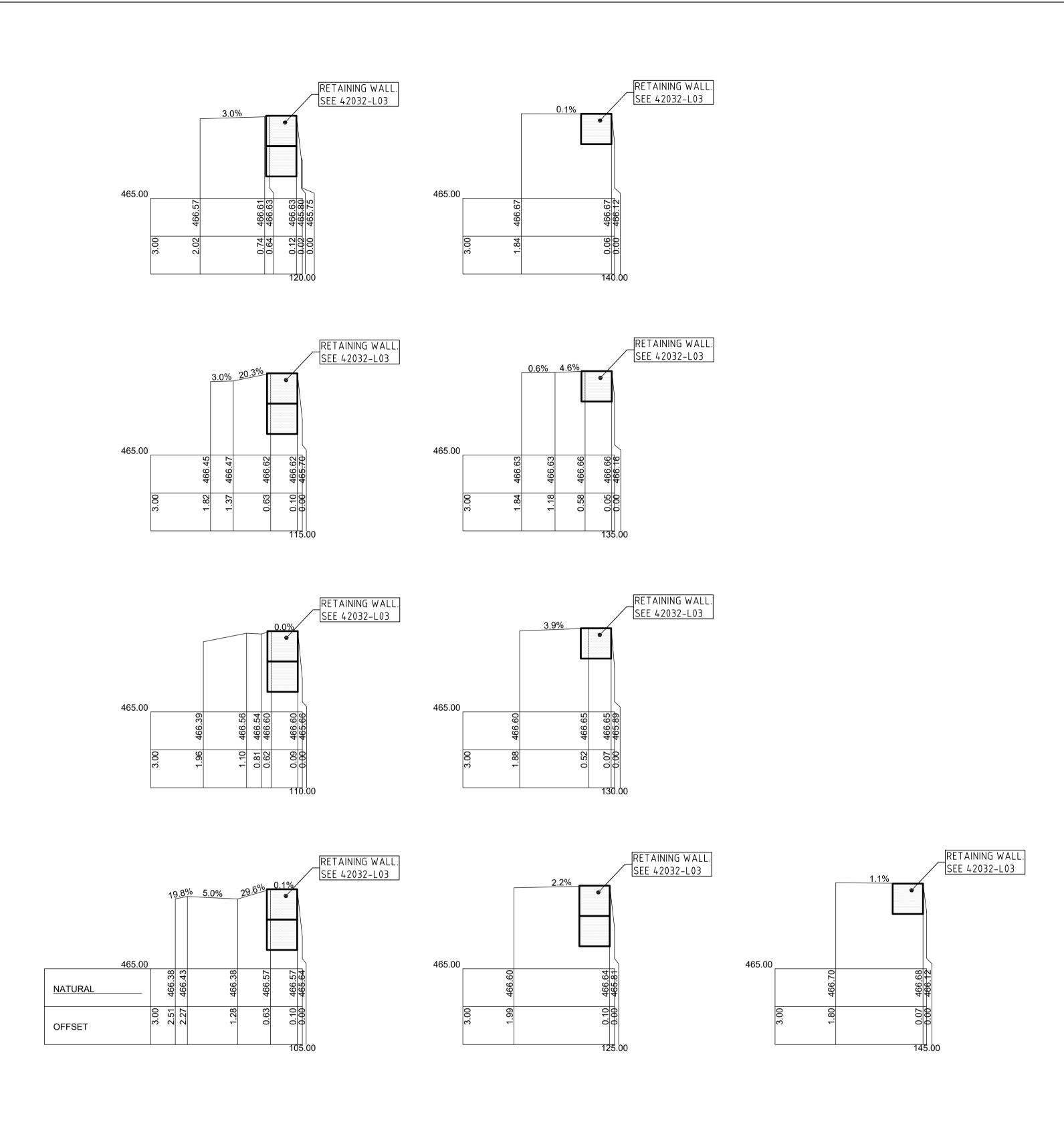
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LOT 505 IN DP 1259753

10 HARVEY STRETT, BOMBIRA, 2850

Drawing Title: **RETAINING WALL** 

CROSS-SECTIONS Ch:105m-145m

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Drawn **JS** 

Rev Date Amendment A 14/09/2023 ISSUED TO CLIENT

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