

SECTION 206

GRADING OF CUTS

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206.01 DESCRIPTION

This work shall include all labour and materials required to carry out all excavation to complete road cuts, roadside ditches, bench excavations and sub-excavations and shall include hauling up to 1 kilometre, handling and incorporation of all suitable materials into fill construction in accordance with Section 204. The work shall also include the hauling up to 1 kilometre, and handling of the unsuitable materials and the trimming of such unsuitable materials along the embankment slopes or elsewhere, all as directed by the Owner's Representative.

The Contractor shall excavate cuts to the grade required by the Owner's Representative. The width and side slopes of all cuts together with roadside ditches shall be constructed to the required cross sections and trimmed to the satisfaction of the Owner's Representative.

No undercutting of slopes within the limits of the theoretical slope lines will be permitted unless all material above the theoretical slope lines is also removed.

Where the quantity of excavation exceeds that required to construct the fills, the surplus material shall be used to widen the fills or otherwise disposed of as directed by the Owner's Representative. Surplus materials not able to be incorporated into the Work shall become the property of the Contractor and disposed of accordingly outside the project limits.

206.02 GENERAL REQUIREMENTS FOR OTHER MATERIAL CUTS

Surface soil and vegetable mold shall be removed when so directed by the Owner's Representative.

The Contractor shall remove stones larger than 150 millimetres in greatest dimension from the top 300 millimetres of subgrade.

206.03 GENERAL REQUIREMENTS FOR ROCK CUTS

All rock cuts shall be excavated and mucked out fully to 300 millimetres below subgrade.

In rock cuts, where pockets which will not drain are formed below the subgrade by blasting, the Contractor shall, at their own expense, provide drainage by ditching to a free outlet and then backfill and compact to 95% of Proctor Density both the pockets and the trench to an elevation 300 millimetres below subgrade. Backfill material shall be broken rock or coarse gravel.

Back slopes shall be carefully scaled down and all rocks and fragments, liable to slide or roll down the slopes, shall be removed to the satisfaction of the Owner's Representative.

Overbreak

Overbreak shall be defined as that portion of rock excavated, displaced or loosened outside and beyond the slopes or grades as established by the Owner's Representative. The exception being such material which occurs as slides, regardless of whether any such overbreak is due to blasting, to the inherent character of any formation encountered, or to any other cause.

All overbreak as so defined shall be removed by the Contractor at their own expense, at the direction of the Owner's Representative. However, at the discretion of the Owner's Representative, overbreak may be used to replace material that would otherwise have to be borrowed. In which case payment to the Contractor for such overbreak used will be the contract price bid per cubic metre for material which would otherwise have to be borrowed.

Excepting that, if in the opinion of the Owner's Representative, the Contractor has exercised due care in the performance of their work, and due to circumstances beyond their control, overbreak has occurred, overbreak within 500 millimetres of the lines of the theoretical cross section will be paid for as solid rock excavation.

Large Blasts

The use of explosives in large blasts, as in seams, drifts, shafts, or pits, is prohibited unless written authority is provided by the Owner's Representative.

When the Department requires that a pole line be moved in order to safeguard it against damage from blasting operations, the Contractor will be required to pay fifty per cent of the labour cost. An estimate of costs will be obtained by the Department before any relocation or moving is done. This clause in no way relieves the Contractor from responsibility for damages.

The Contractor will be responsible for all damages to utility lines and to adjoining property caused by blasting or from any cause whatsoever resulting from any of their operations in connection with their work.

206.04 MATERIAL CLASSIFICATION

Excavated materials will be classified in accordance with Section 205.

206.05 MEASUREMENT FOR PAYMENT

Volumes of all classes of excavation described in Section 206.04 will be measured in excavation and computed in cubic metres rounded to the nearest whole number. Measurements shall be of the actual amount of material moved only, except as otherwise provided in this specification.

The quantity to be measured shall be the number of cubic metres of excavated material as shown on the cross section sheets between the original position of the ground lines as cross sectioned after grubbing operations have been completed (or when grubbing is to be removed as part of Other Material Excavation, or Unsuitable Material Excavation, the original position of the ground lies on top of the grubbing), and the completed and accepted excavation lines. The volume of this excavation is to be computed by the average end area method of computation or as wedges or pyramids, as the case may be, when terminating at grade points.

For boulders present in Other Material, the three maximum rectilinear dimensions of boulders, actually moved, will be measured and the volume of each so determined. Only individual boulders which are 0.5 cubic metres or greater in volume will be included for payment as "Solid Rock".

During excavation operations whenever the character of material changes from one type to another, as classified in Section 205, then the Contractor shall strip the area, within the

slopes, of all overlying material, and notify the Owner's Representative in order that proper measurements or cross sections may be made. No allowance will be made for material excavated before such measurements or cross sections have been made.

Where the Owner's Representative instructs that cuts be widened for the purposes of providing borrow, then the demarcation between quantities measured as "Other Material" and "Other Material Borrow", or "Solid Rock" and "Quarried Rock", as the case may be, shall be the theoretical face of cut line given by the cross sections. For rock cuts widened to provide "Quarried Rock", there will be no overbreak allowed for in the measurement of "Solid Rock".

Large rock fragments which are too large to be incorporated into the fill shall be measured and their volumes subtracted from the cross section volumes. Calculations for volume of large rock fragments shall be the product of the three maximum rectilinear dimensions of the fragments.

206.06 BASIS OF PAYMENT

Payment shall be at the contract unit price per cubic metre for either "Solid Rock", "Other Material", or "Unsuitable Material", as the case may be, hauled 1 kilometre or under, except as otherwise provided in Section 206.03.

However should the contract not include quantities for "Muskeg or Bog", then all required excavation of Muskeg or Bog will be paid for at the contract price for "Unsuitable Material".

Should the contract not include quantities for "Unsuitable Material" then all required excavation for Muskeg or Bog will be paid for at the contract price for "Other Material".

Should the contract not include quantities for "Other Material", then all required excavation for Other Material will be paid for at the contract price for "Unsuitable Material".

Should the contract not include quantities for "Ditching Solid Rock", then all required excavation for Ditching Solid Rock will be paid for at the contract price for "Solid Rock", and vice versa.

Should the contract not include quantities for "Ditching Other Material", then all required excavation of Ditching Other Material will be paid for at the contract price for "Other Material", or vice versa.

Such payment shall be full compensation for all work herein described together with the labour and materials required for excavating, handling, hauling up to 1 kilometre and

placing and compacting in a fill as described in Section 204, or placing and shaping up in a disposal area as required.

Where the Owner's Representative requires that excavation material be hauled in excess of 1 kilometre, additional payment for overhaul will be made in accordance with Section 215.