

SECTION 18 – ORIGINAL & FINAL CROSS SECTIONS

18.1 ORIGINAL CROSS SECTIONS *(Rev. 09-29-09)*

Original cross sections must be checked to verify that the plans accurately reflect the existing ground at the time the contract starts. Section 3 of these instructions includes remarks about obtaining original check sections, depending on whether or not the contract has an item for construction engineering. The PE/S should check the original cross sections as outlined in the SS and Section 3.5.

18.2 FINAL CROSS SECTIONS *(Rev. 09-29-09)*

Taking, checking and plotting of final cross sections should, as nearly as possible, keep pace with the finishing of shoulders, ditches and backslopes. Data collection for final cross sections should be obtained by Department personnel or consultants working for the Department. The contractor's data may not be used for determining final pay quantities for earthwork.

When taking final cross sections record information such as edge of surface, flow line of pipes, where final section crosses original ground line and any other information that will be needed to give a clear picture after plotting the final cross section.

Start from a benchmark that was established on the original survey and then tie into all original benchmarks which can be located. Record in your notes the elevation computed for the benchmark, also the original elevation. Do not carry elevations ahead, but start at each benchmark by using the original established elevation.

If an error is made in the fieldbook while taking notes, do not erase the error. Instead, cross out the incorrect figure by putting a line through it and place the correct figure above. Check all your notes and make sure they are correct. Take complete sections at all stations and plus stations at which sections were taken on the original survey.

If the last reading out from centerline does not correspond with the elevation by ± 0.2 ft of the original ground as shown by original sections, find the reason and correct it. This will require checking in the field after final cross sections have been plotted. All sections, when plotted on the original sections, must form a closed area. When field checking is needed to close a section make a note on original sections that the section was closed in the field.

Much care should be used in sectioning and plotting final cross sections.

If there has been a line change made, record the offsets from the original line in the notes so that it can be taken into consideration in plotting the final sections.

All notes should be complete, legible and self-explanatory. Each day's set of notes should indicate the date, weather and names of the crewmembers and their assigned duties.

Remember that your field notes constitute the basis for payment and are permanent official public records for the contract.

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