## SCHOOL OF ENGINEERING AND ARCHITECTURE UNIVERSITY OF KANSAS LAWRENCE

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Deer Dr. Allent

GRAT FAT AUGUSTON

As requested some time ago I have had one of my C.S.E.P. students working on a survey, plans and estimate for the grading and draining of the two athletic fields at the southwest corner of the campus. By putting in a considerable time on this project myself we have been able to get together a tracing which I will present to you townrow, and if desired we can make from this a required number of blueprints.

As you will note on this plan I have divided the estimate in the north field and the south field; the north field being the tract about 400 by 1100 feet at the southwest corner of the campus, and the south field being a field purchased by the R.O.T.C. and turned over to the university for its use. This field is approximately 300 feet wide by 700 feet long.

In regard to the drainage ditch going through the north field, I have considered this matter rather carefully and decided that it would be impractical to attempt to use any water way having an area of cross section less than the culvert which now goes under the road about the middle on the north line of the field and about the middle east and west.

This culvert drains a considerable area, there being water coming down the ditch from the east from the power plant and from outless from down-spouts from various university buildings, and to the north of the culvert there is cared for the drainage of the entire field south of the auditorium together with downspout drains from several of these buildings.

I have taken occasion to observe the run-off through this culvert at times of heavy rains and have seen the culvert running entirely full. This, of course, does not happen often but since it does happen, if a smaller area were used it would mean the entire field would be flooded and washed quite badly.

I have therefore shown a cross section of a drainage box, side walls built up of rough stone setting on concrete footings, having a concrete floor and reinforced concrete top. The grade of this box is set so that the fill in the field would entirely cover it so that it would offer no obstruction in the playing field.