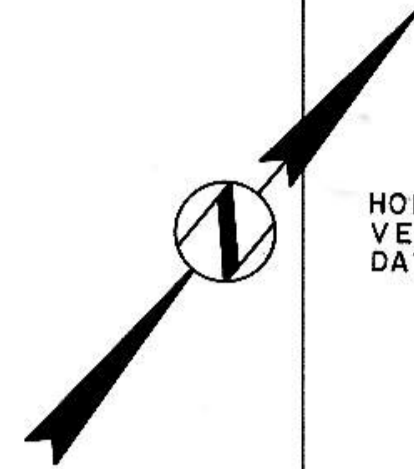


PLAN  
 NOTE BOOK  
 No. \_\_\_\_\_  
 DATE \_\_\_\_\_

SWENSON HAGEN & CO. P.C.  
 CONSULTING ENGINEERS  
 309 BASTARD ST. P.O. BOX 1115  
 BISMARCK, N.D. 58103  
 Phone: 224-2601

PROFILE  
 NOTE BOOK  
 No. \_\_\_\_\_  
 DATE \_\_\_\_\_

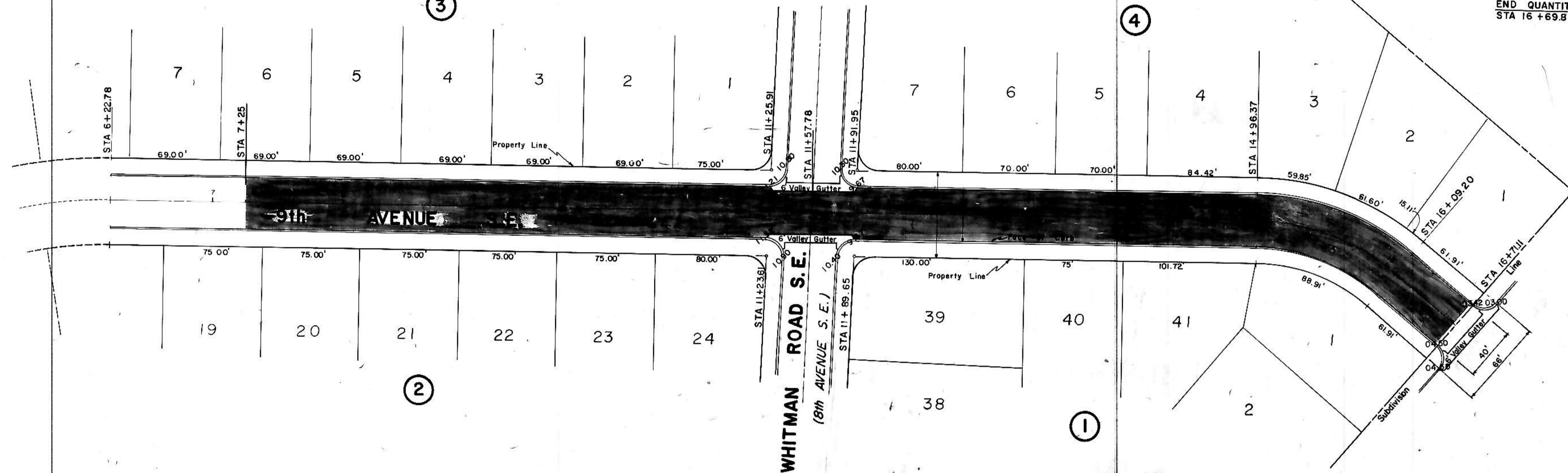
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HORIZONTAL SCALE: 1"=50'  
 VERTICAL SCALE: 1"=10'  
 DATE: JULY, 1977

BEGIN QUANTITIES  
 STA 7+25

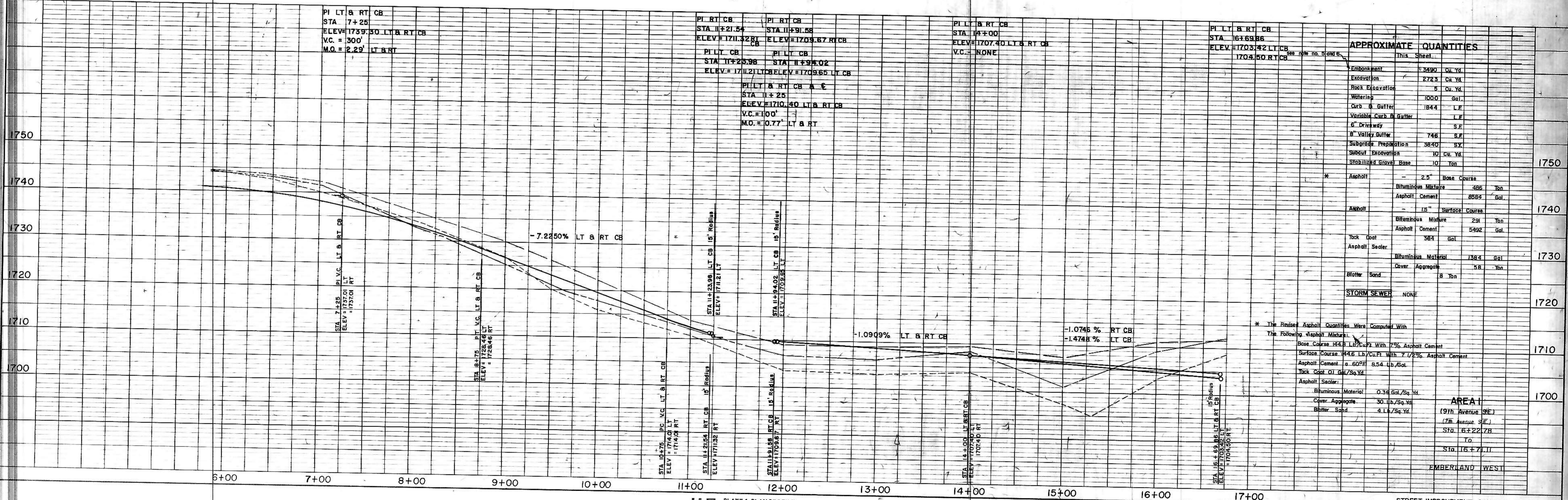
END QUANTITIES  
 STA 16+69.86



- NOTES:
- Proposed Sewer and Water Improvements on 9th Avenue SE are shown on plans for "Consolidated Sewer and Water Improvement District No. 25." Said Sewer and Water Improvements shall be installed prior to any street improvements and contractor shall be responsible for the preservation of said Sewer and Water Improvements during construction.
  - Sewer and Water Improvements as shown on plans are existing as per date of street improvement plans. Existing Sewer and Water as per "Consolidated Water and Sewer Improvement District No. 23".
  - Proposed grades are to top of curb unless otherwise stated.
  - All curb and gutter radii are 15 feet or face of curb unless otherwise stated.
  - Embankment quantities shown include an assumed 30% shrinkage factor.
  - Any fill needed in excess of that available in Emberland West Addition shall be obtained from excess excavation obtained from Rippel's Second Subdivision. The additional haul distance shall be incidental to the cost of excavation in Rippel's Second Subdivision.

LEGEND

---	EXISTING
---	50' LT
---	50' RT
---	EXISTING WATERMAIN
---	EXISTING HYDRANTS
---	GATE VALVES
---	TEE
---	PLUG
---	SANITARY SEWER
---	SAN. SEWER MH



APPROXIMATE QUANTITIES

Item	Quantity	Unit
Embankment	3490	Cu. Yd.
Excavation	2723	Cu. Yd.
Rock Excavation	5	Cu. Yd.
Watering	1000	Gal.
Curb & Gutter	1844	L.F.
Variable Curb & Gutter		L.F.
6" Driveway		S.F.
8" Valley Gutter	746	S.F.
Subgrade Preparation	3840	Sq. Yd.
Subcut Excavation	10	Cu. Yd.
Stabilized Gravel Base	10	Ton
Asphalt	2.5	Base Course
Bimimous Mixture	486	Ton
Asphalt Cement	8584	Gal.
Asphalt	15	Surface Course
Bimimous Mixture	291	Ton
Asphalt Cement	5992	Gal.
Tack Coat	384	Gal.
Asphalt Sealer		
Bimimous Material	7384	Gal.
Cover Aggregate	58	Ton
Blotter Sand	8	Ton
STORM SEWER	NONE	

\* The Revised Asphalt Quantities Were Computed With The Following Asphalt Mixture:  
 Base Course: 14.8 Lb./Cu.Ft. With 7% Asphalt Cement  
 Surface Course: 14.6 Lb./Cu.Ft. With 7.7% Asphalt Cement  
 Asphalt Cement @ 60°F: 8.54 Lb./Gal.  
 Tack Coat: 0.1 Gal./Sq.Yd.  
 Asphalt Sealer:  
 Bimimous Material: 0.36 Gal./Sq.Yd.  
 Cover Aggregate: 30 Lb./Sq.Yd.  
 Blotter Sand: 4 Lb./Sq.Yd.