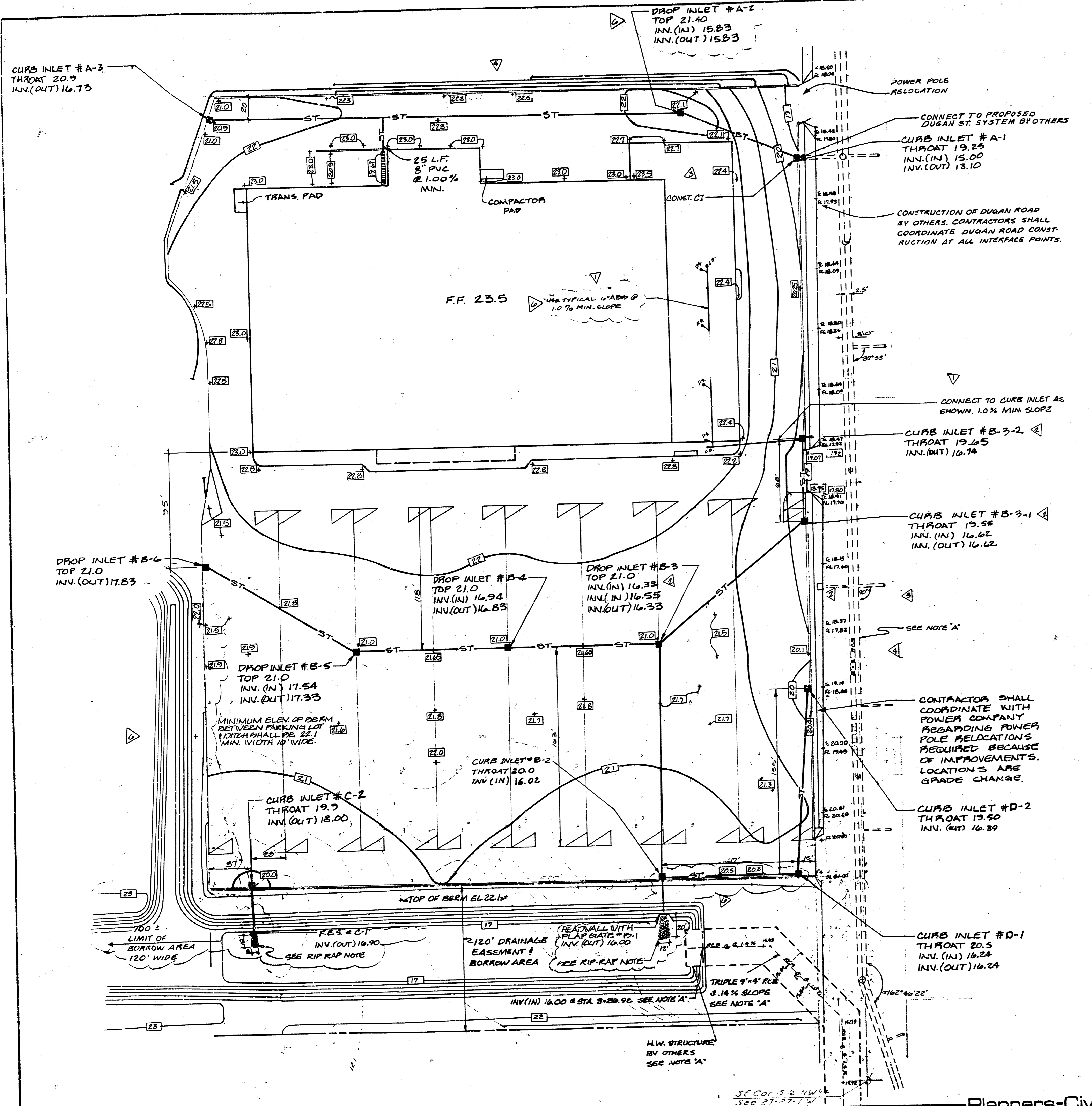




- GRADING AND DRAINAGE PLAN NOTES**
- Existing topography, utilities, and roadway configurations shown are based upon a topographic survey prepared by:
 Baughman Company, P.A.
 330 Laura Street
 Wichita, Kansas 67211
 (316) 262-7271
 Dated: May 1986
 - Contractor shall verify existing topographic data, locations of existing utilities, and other site conditions prior to construction.
 - For site dimensional layout, see Drawing C-1, Staking Plan.
 - For utility information, see Drawing C-4, Utility Plan.
 - All construction within the Dugan Road and highway rights-of-way shall be coordinated with Dugan Road improvement plans prepared by Baughman Company.
 - All disturbed areas that are not proposed to be covered by blacktop or asphalt shall be grassed as soon as grading operations are completed. Areas shall be seeded with a mix of Kentucky 31 tall fescue and adelphi bluegrass. The mix shall be 90% fescue and 10% bluegrass by volume, sown at a rate of 5 lb/1000 s.f.
 - Borrow material will be required in order to bring the project site to the elevations shown. Borrow can be obtained from the 120' Ditch Easement at the South property line of the project. Limits of borrow will be Dugan Street to the east and 1300' to the west. The section and elevation of the drainage ditch in the easement shall be left as close as possible to the design of that ditch by:
 Baughman Company, P.A.
 330 Laura Street
 Wichita, Kansas 67211
 (316) 262-7271
 Dated: May 1986
 - Entire site shall be stripped of topsoil and organic matter prior to commencing filling operations. All fill should be placed in 8" maximum lifts at a minimum compaction of 98% of the modified proctor test. (ASTM)



NOTE A
 SEE BAUGHMAN COMPANY STORM WATER SEWER PLAN PROJ. # 468-76-245-81589-000-000-001 FOR STORM & SANITARY SEWER SEE PROJ. # 472-76-245-81488-000-000-001 FOR DUGAN ROAD & TRIPLE 9" x 4" BOX CULVERT.

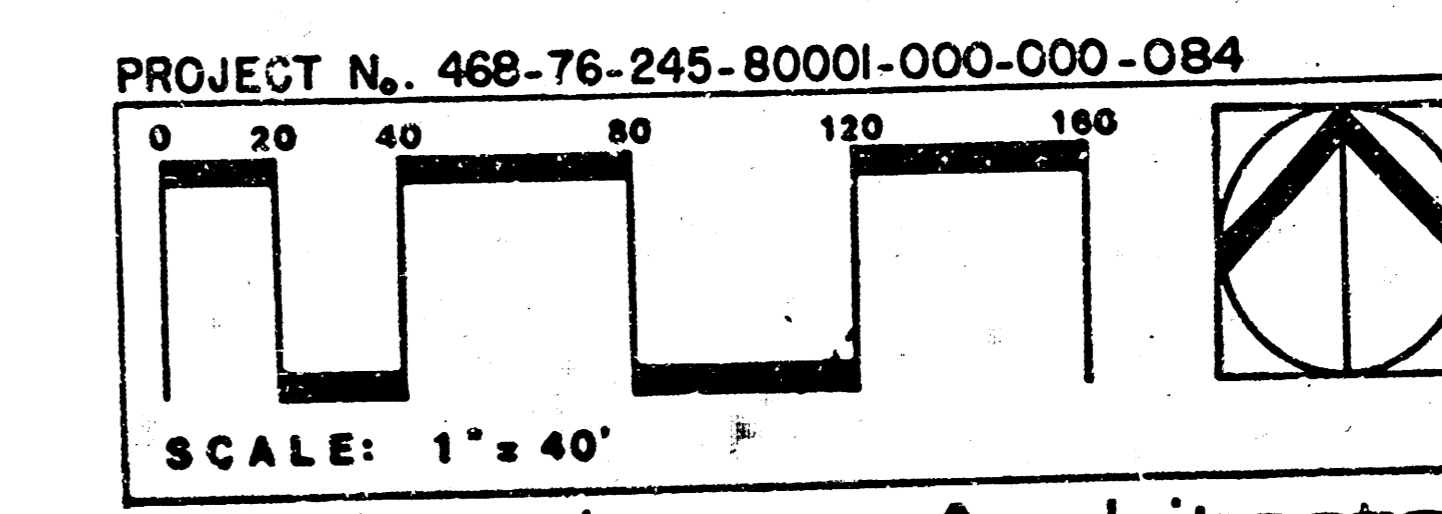
RIP RAP NOTE
 USE MINI 450-10" MINI THICKNESS OF THE RIP RAP - 12". USE PLASTIC FILTER CLOTH UNDER THE RIP RAP TO CONFORM TO ASTM D-1777 & ASTM D-1682 SEE DETAIL ON DRAWING C-5

NOTE TO CONTRACTOR
 This project will be constructed under the supervision of the CITY ENGINEER and conforming to the SPECIFICATIONS of the CITY OF WICHITA. THE CONTRACTOR WILL PAY THE CITY OF WICHITA FOR ALL COSTS OF PLAN REVIEW, INSPECTION AND BOOKING PER CONTRACT.

APPROVED AS NOTED
 BY CITY ENGINEER OF WICHITA

Sanitary Sewers _____
 Storm Sewers V.R.H. 10/22/86
 Driveway Approaches _____
 Water Mains _____
 Paving _____

Booked 8/87 MCG



Project
 U.S. HWY. 54 & DUGAN STREET

Developer
 TERRA VENTURE INC.
 OVERLAND PARK, KANSAS

Location
 WICHITA, KANSAS

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Approved for construction
 Not approved for construction

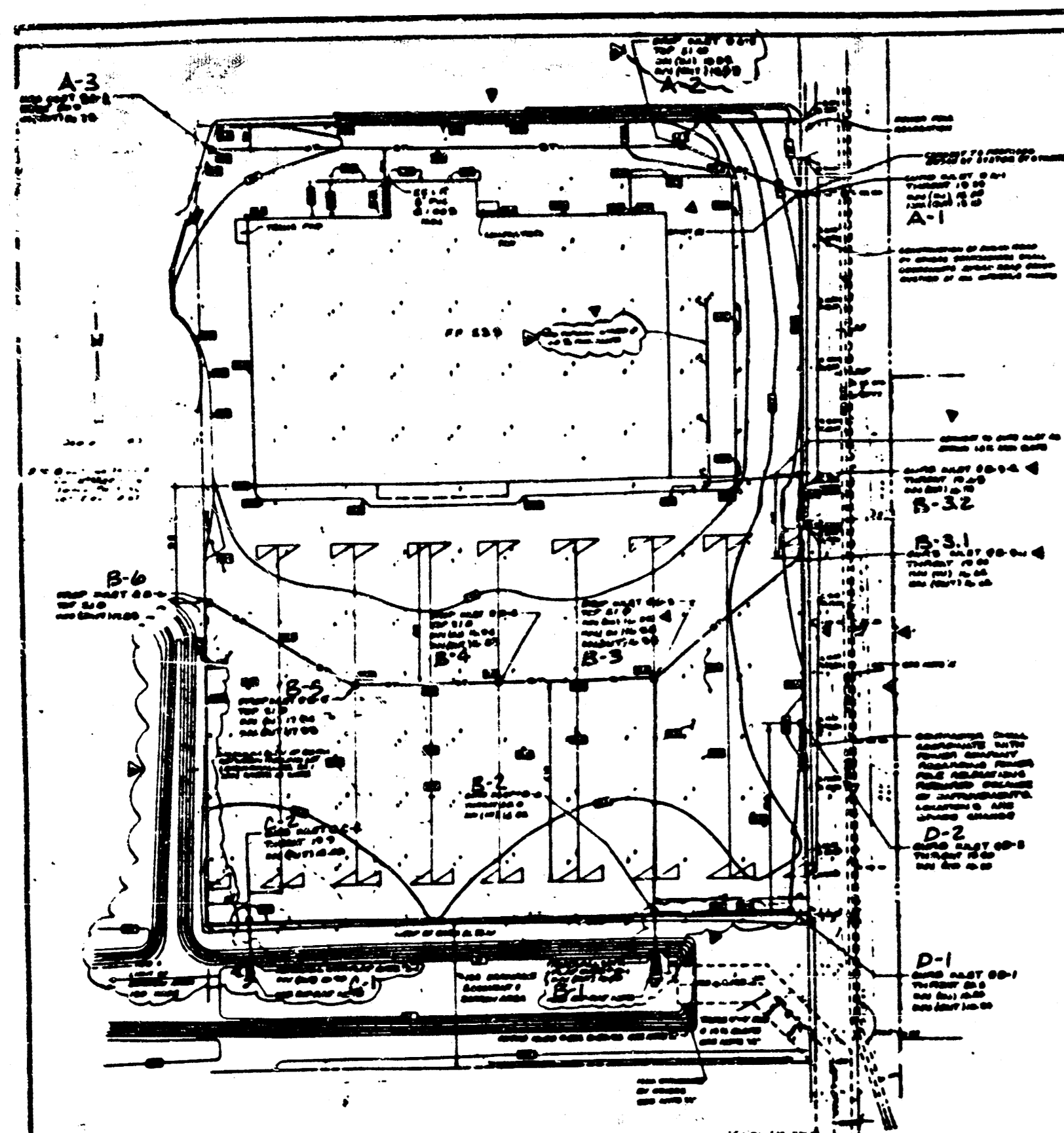
Revisions	Date
15' PLAT SHOULDER DITCH GRADING	7-22-86
DUGAN RD GRADING	
LINE B-3 TO B-1	7-20-86
GARDEN SHOP DS	8-25-86
PIPE LENGTH B-2 TO B-1	9-11-86
GRADING & CT & B-1	
ALL ALL ELEVATIONS	9-12-86
ROAD ELEV REVISIONS	9-30-86
GRADING BETWEEN A-1 & A-2	
ROAD CHANNELS AND STORM	10-3-86
STRIPPLES THE DOWN	
NOTE A & PIPE LENGTHS	
C-2 TO C-1 B-2 TO B-1	
PIPE LENGTHS & DIMENSIONS OF THE DITCH & TOP OF A-2	10-19-86

Drawing Title
GRADING AND DRAINAGE PLAN 1/3

Drawn By: J.H.
 Date: 6-12-86
 Project No: 1065

Drawing No: **C-2**

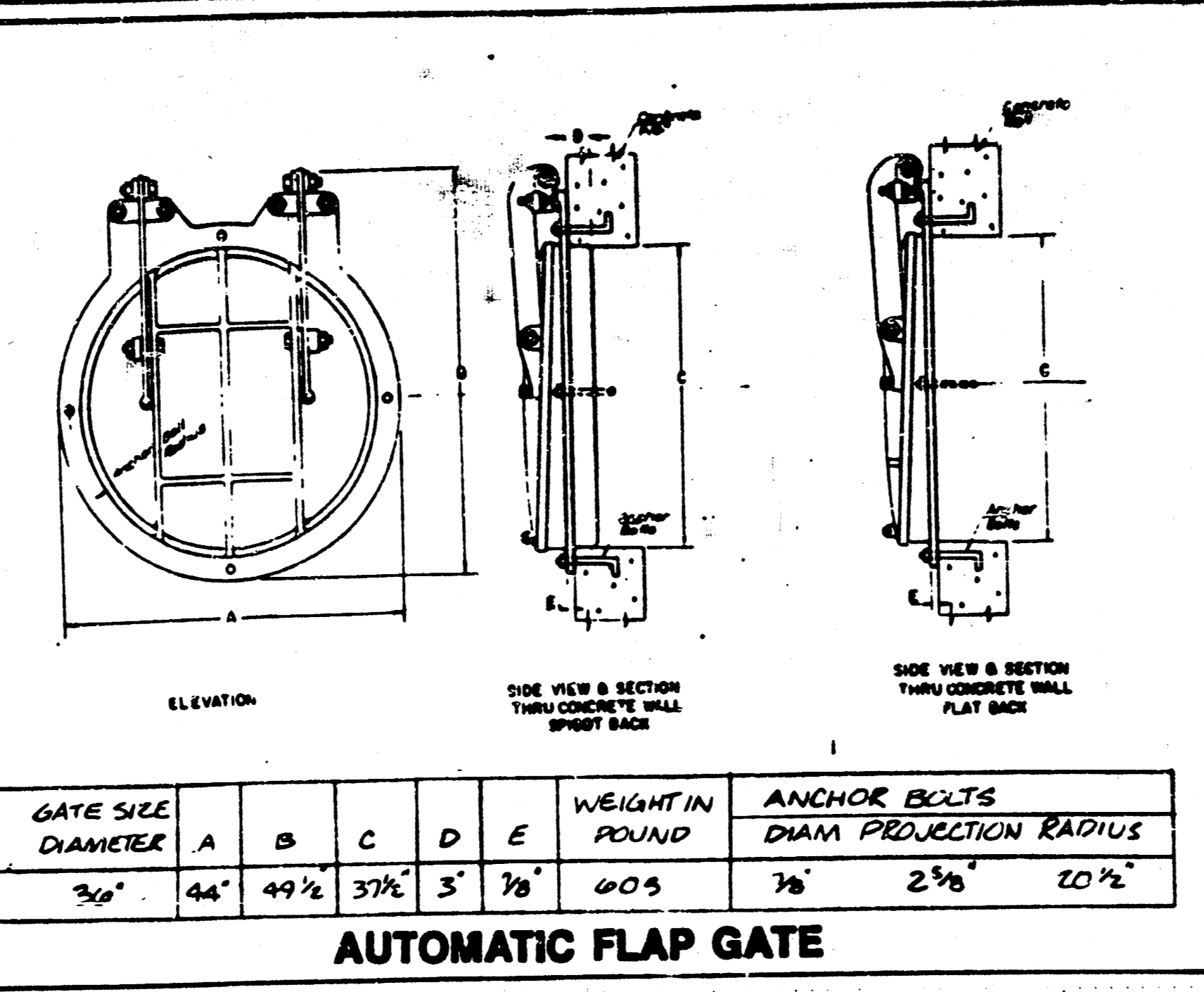
Columbia Engineering & Services, Inc.
 5775A GlennCye Drive
 Suite 202
 Atlanta Georgia 30328
 404 258-9088



REVISIONS

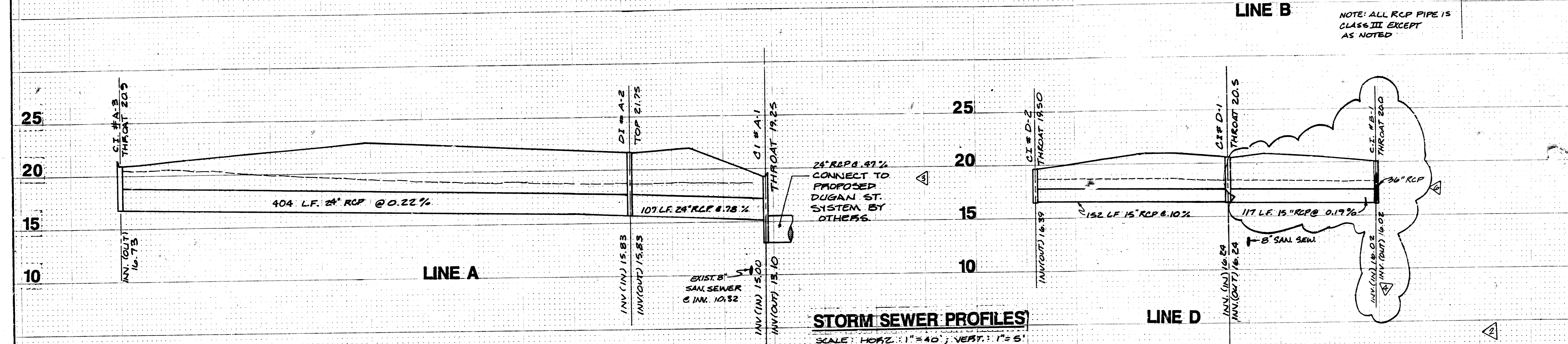
No.	Date	Description
1	7-22-86	CONNECTION TO BOX
2	7-30-86	PIPE MATERIAL FROM C-2 TO C-1
3	9-18-86	PIPE LENGTH 15' TO 15'-1
4	9-25-86	NEW THROAT ELEV. @ B-3-1
5	9-30-86	LINE A-2 TO A-1
6	9-30-86	SAN SEWER REMOVAL
7	10-3-86	LINE B, C, D REVISIONS
8	10-3-86	LINE B, C, D REVISIONS
9	10-12-86	LINE D REV. CONNECT D-1 TO D-2, 175' REV. TO HW ON B-1-1 C-1

GRADING AND DRAINAGE PLAN



NOTE:
 Automatic flap gates shall conform to the dimensions and approximate weights shown in the table. The gate shall be installed in accordance with the manufacturer's recommendation.
 When no water is against the face of the gate, the flap shall rest on the finished frame. Starting surface of both frame and flap shall be cast iron and machined to a close fit.
 The gate flap, frame and links shall be cast iron. Anchor bolts, assembly bolts and nuts shall be galvanized steel.
 The gate is designed to withstand a maximum operating head of ten (10) feet on the check side, measured from the center line of the gate to the high water level.
 The illustrations, notes and table of dimensions shown are for the Armo Model 20C. However, a standard Waterman Model F-10 Flap Gate or equal may be used.

Columbia Engineering & Services, Inc. Planners-Civil Engineers-Landscape Architects



Project
 U.S. HWY. 54 & DUGAN STREET
 WICHITA, KANSAS

Developer
 TERRA VENTURE INC.
 OVERLAND PARK, KANSAS

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Approved for construction
 Not approved for construction

Revisions - Date

LINES C-2 TO C-1 TO BOX CONNECTION	7-22-86
LINE B, C, D, REV. SAN SEWER INFO.	7-30-86
PIPE MATERIAL FROM C-2 TO C-1	9-11-86
PIPE LENGTH 15' TO 15'-1	
NEW THROAT ELEV. @ B-3-1	
LINE A-2 TO A-1	9-18-86
SAN SEWER REMOVAL	9-25-86
LINE B, C, D REVISIONS	9-30-86
LINE B, C, D REVISIONS	10-3-86
LINE D REV. CONNECT D-1 TO D-2, 175' REV. TO HW ON B-1-1 C-1	10-12-86

Drawing Title
PROFILES

2/3

Drawn By: A.M.
 Date: 6-12-86
 Project No: 1065

Drawing No: C-4

