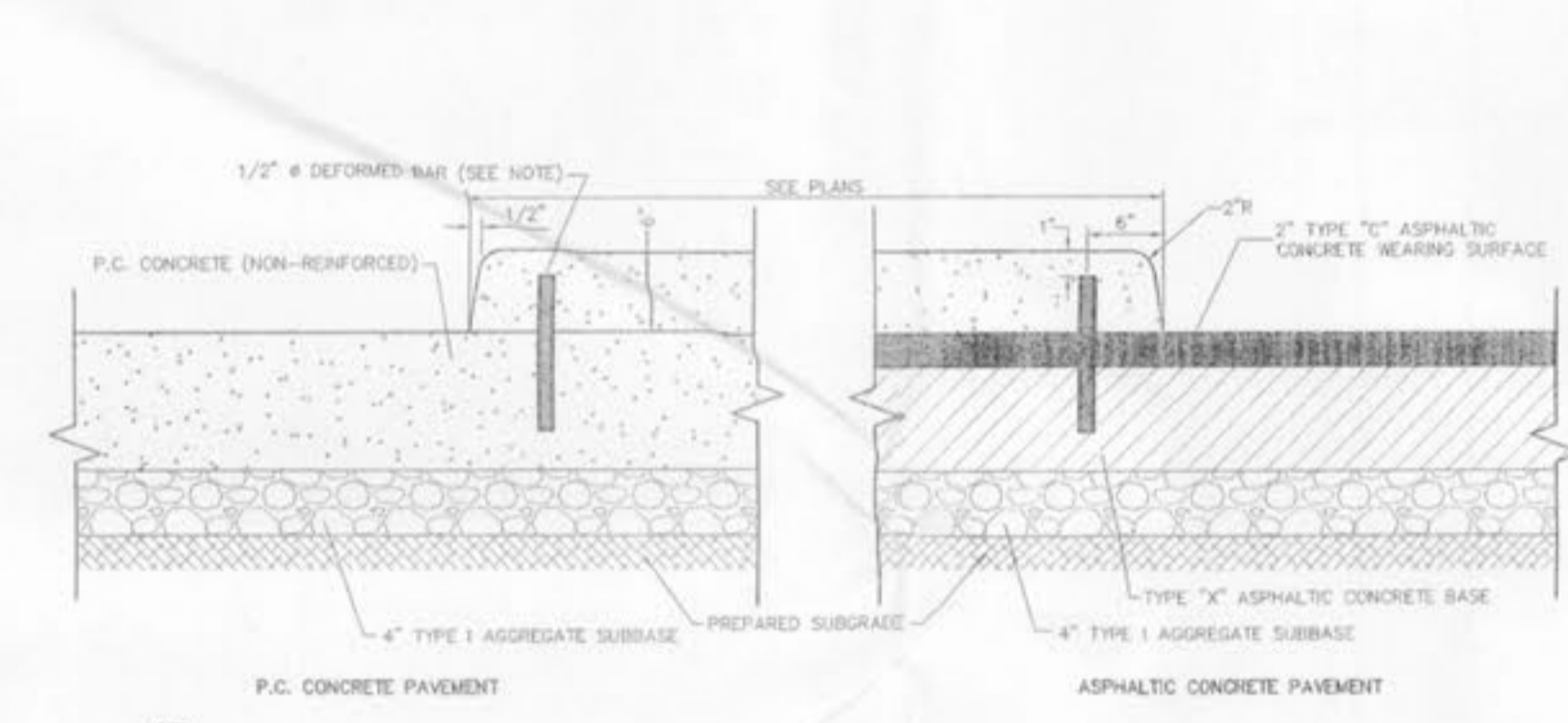
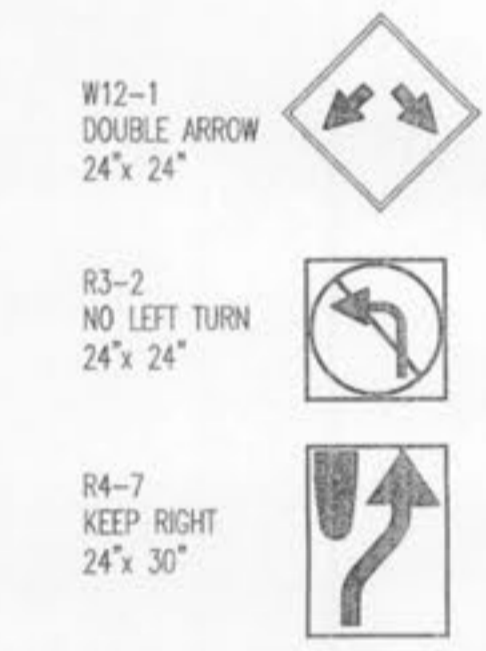


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement	Inside Diameter of Pipe (Inches)	Payline Width of Trench (Inches)	Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.86				
12	28	2.33	3.98				
15	32	2.67	4.89				
18	35	2.92	5.63	14 X 23	41	3.42	5.94
21	39	3.25	6.51				
24	42	3.50	7.39	19 X 30	49	4.08	7.68
27	45	3.75	8.18	22 X 34	53	4.42	8.61

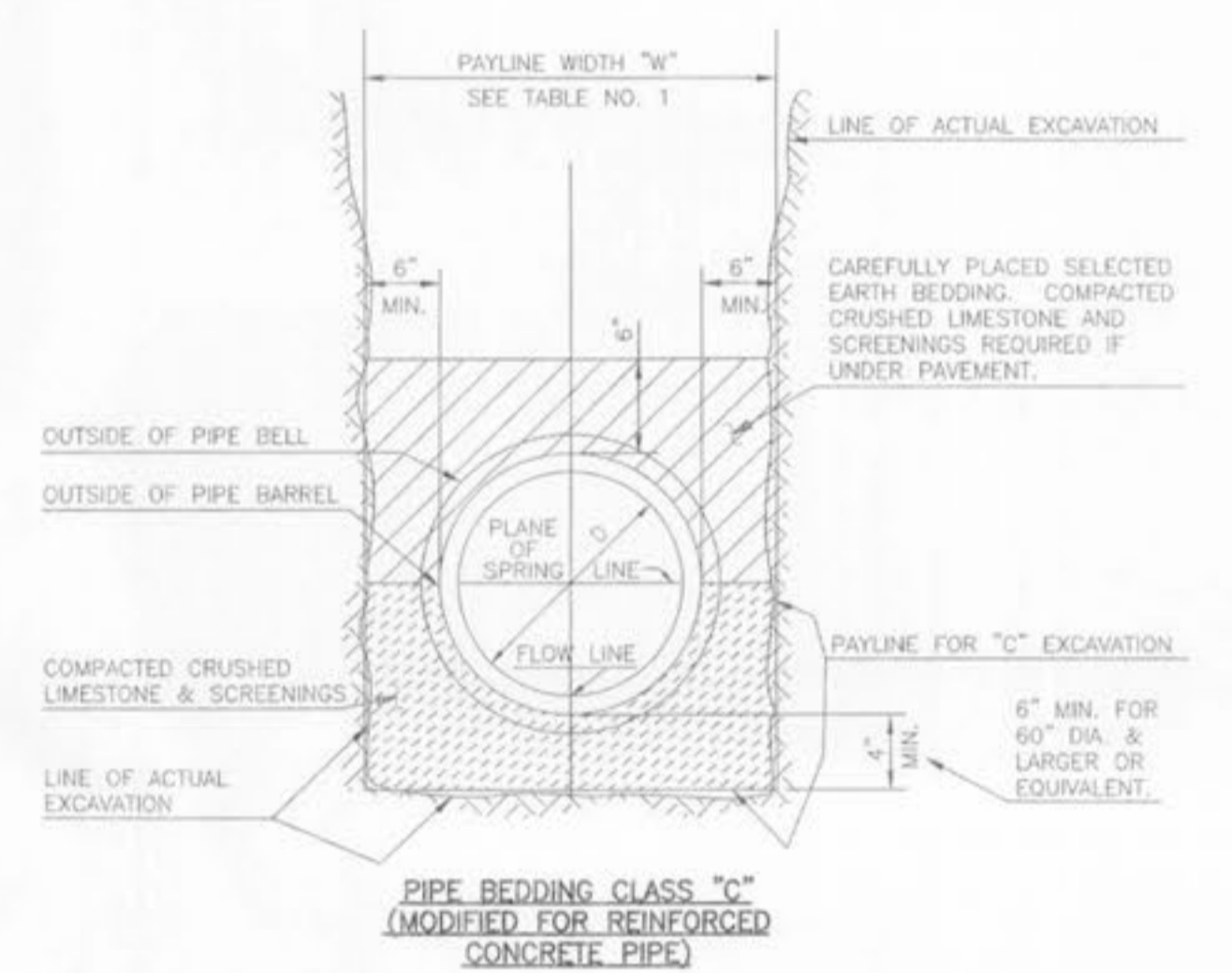
TABLE NO. 1
PAYLINE WIDTHS OF TRENCH AND
PAY-QUANTITIES OF CONCRETE



RAISED CONCRETE ISLAND
NOT TO SCALE



Signs shall be installed in compliance to Mdot standard 903.03AY PAGE 3. SHALL BE MULTI-DIRECTIONAL BREAKAWAY DESIGN. SIGNAGE TO BE INSTALLED ON PERFORATED SQUARE POST WITH MULTI-DIRECTIONAL MOUNTS WITH THE EXCEPTION OF THE YIELD SIGNS BEING INSTALLED ON 4x4 WOOD POSTS. ALL SIGNING SHALL BE INSTALLED 7 FOOT FROM THE BOTTOM OF THE SIGN TO THE DRIVING SURFACE.



DITCH CALCULATIONS
05-12618B

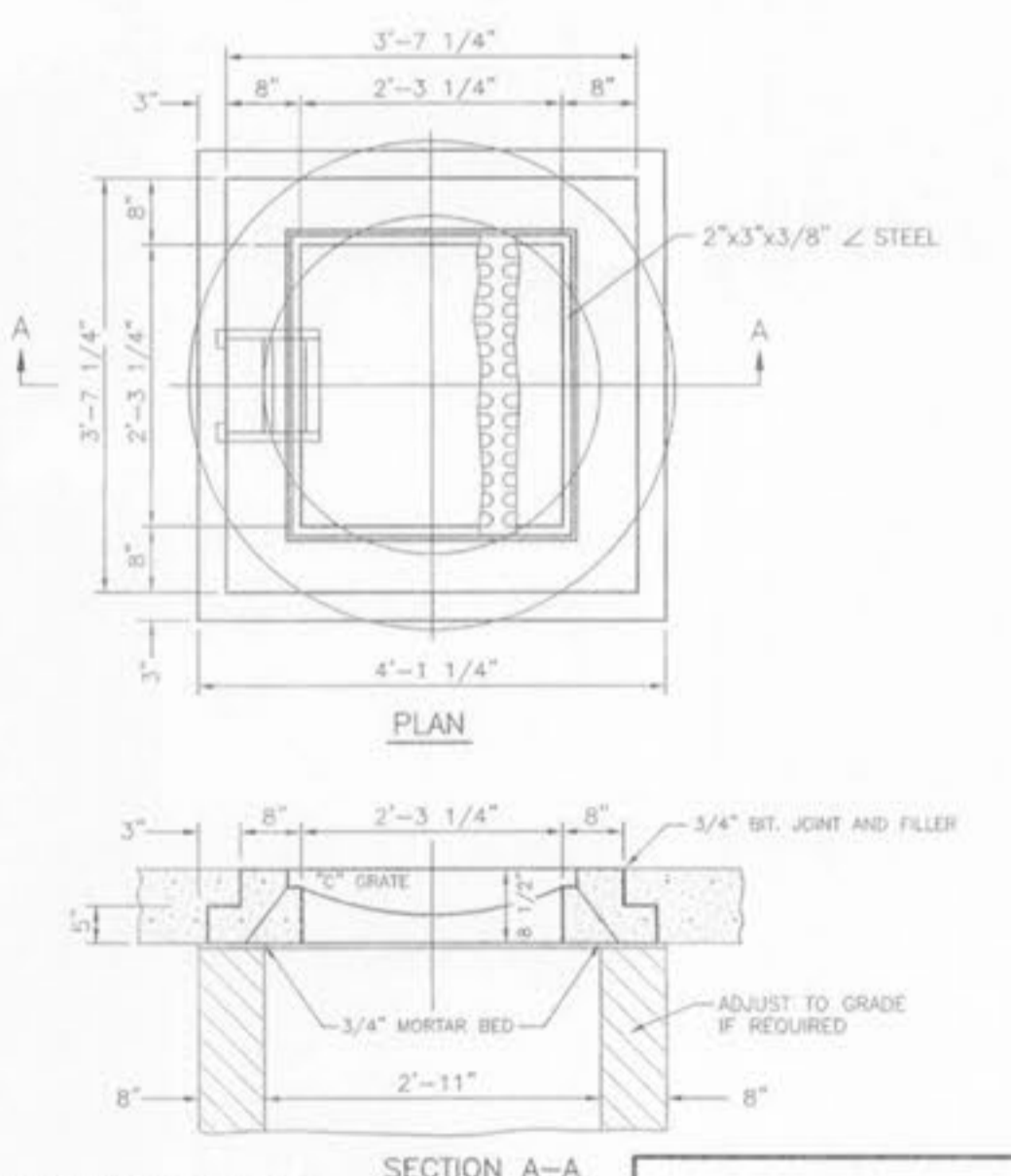
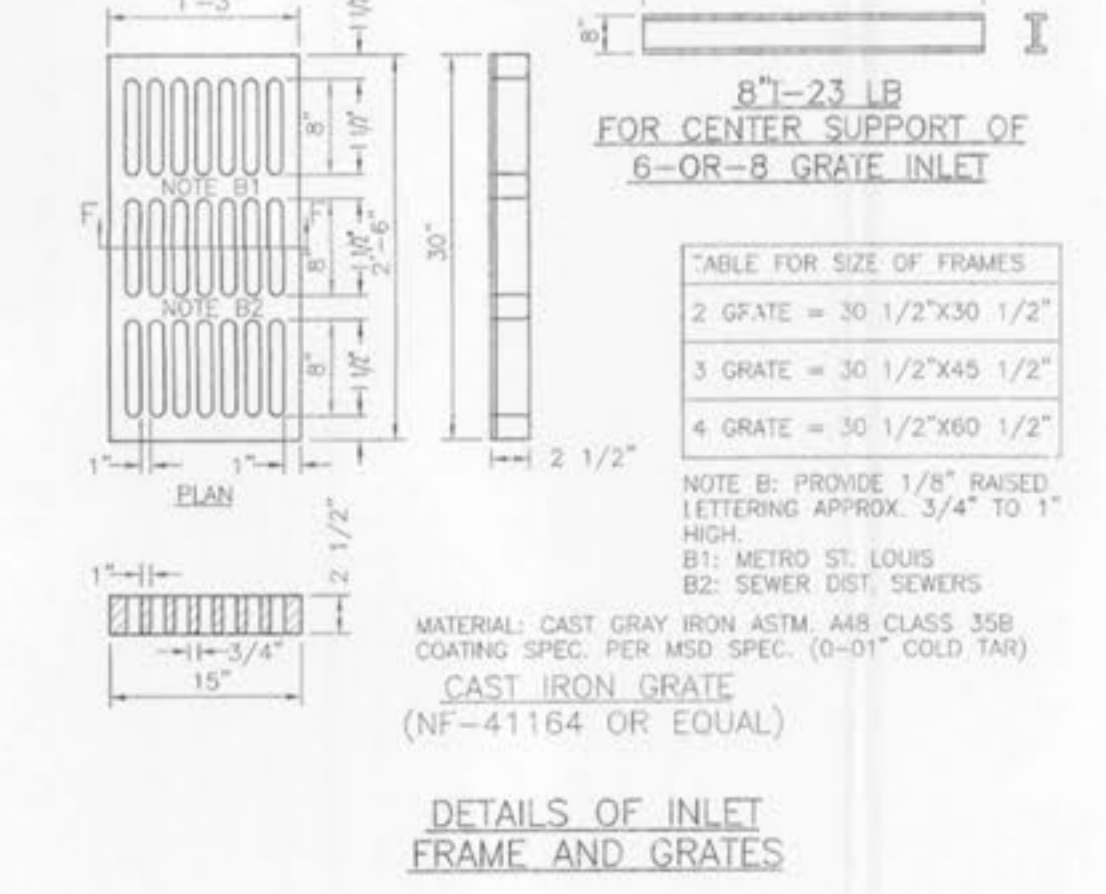
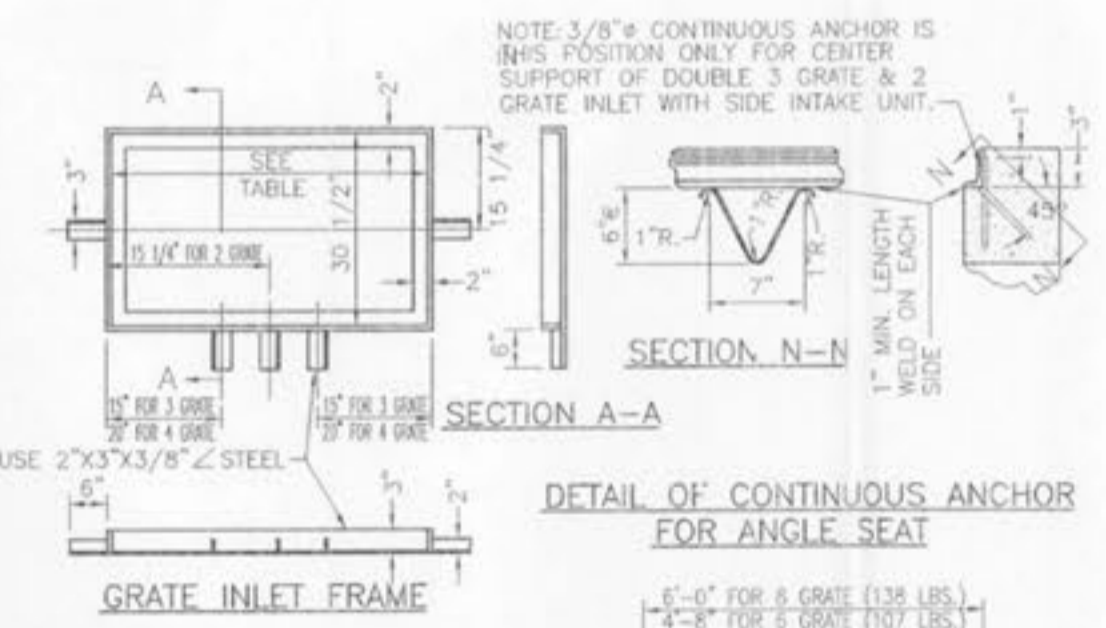
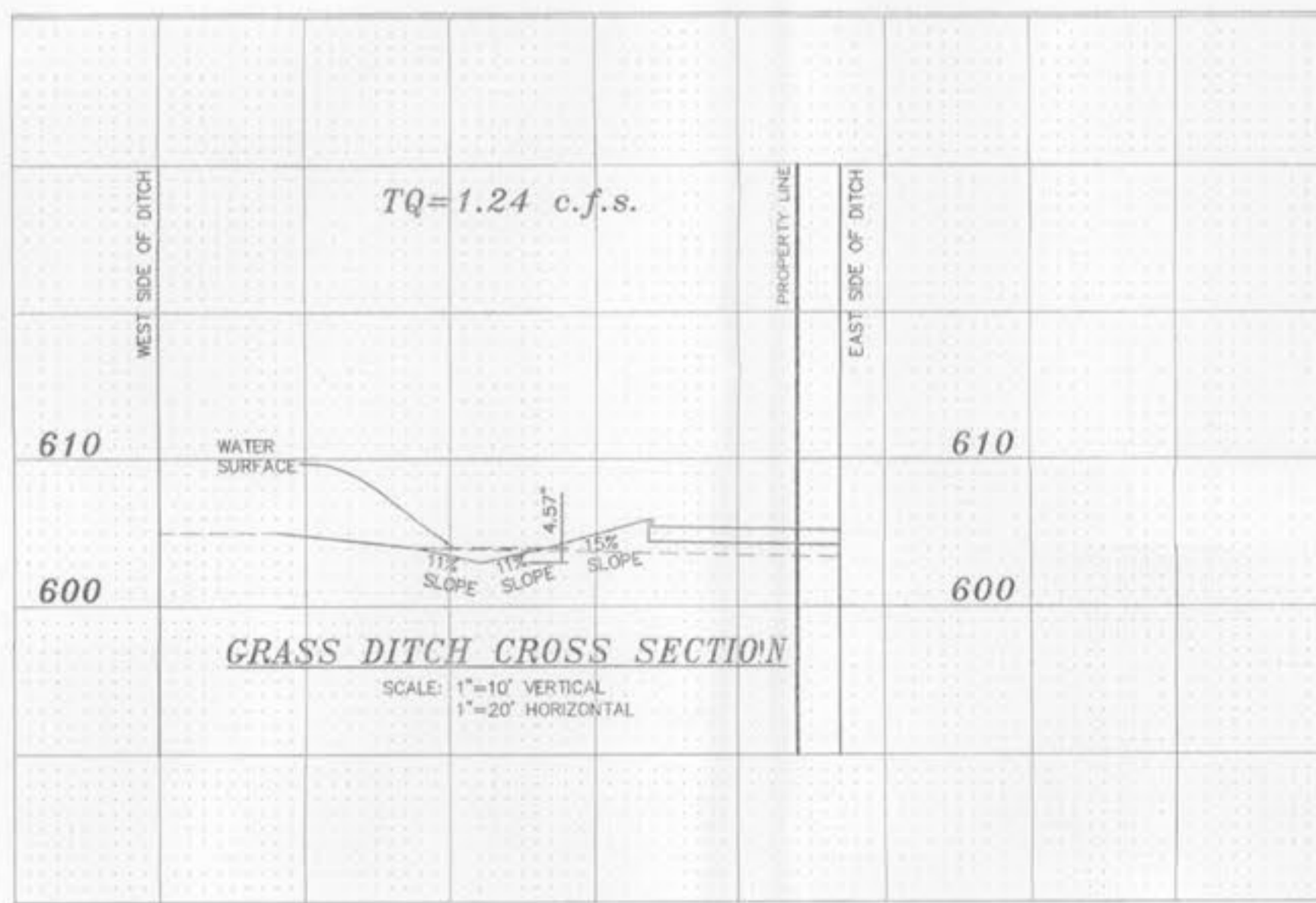
Channel Calculator

Given Input Data:

- Shape: Trapezoidal
- Solving for: Depth of Flow
- Flowrate: 1.2400 cfs
- Slope: 0.0132 ft/ft
- Manning's n: 0.0600
- Height: 12.0000 in
- Bottom width: 0.0000 in
- Left slope: 0.1100 ft/ft (V/H)
- Right slope: 0.1100 ft/ft (V/H)

Computed Results:

- Depth: 4.5745 in
- Velocity: 0.9386 fps
- Full Flowrate: 16.2306 cfs
- Flow area: 1.3211 ft²
- Flow perimeter: 83.6735 in
- Hydraulic radius: 2.2725 in
- Top width: 83.1719 in
- Area: 9.0909 ft²
- Perimeter: 218.4978 in
- Percent full: 38.1204 %



NOTE: INLETS ON THIS SHEET ARE TO BE USED IN LOCATIONS WHERE STANDARD OPEN THROAT INLETS CAN NOT BE USED, IN PAVED TRAFFIC WAY, AND IN LIMITED EASEMENTS.

2 GRATE INLET