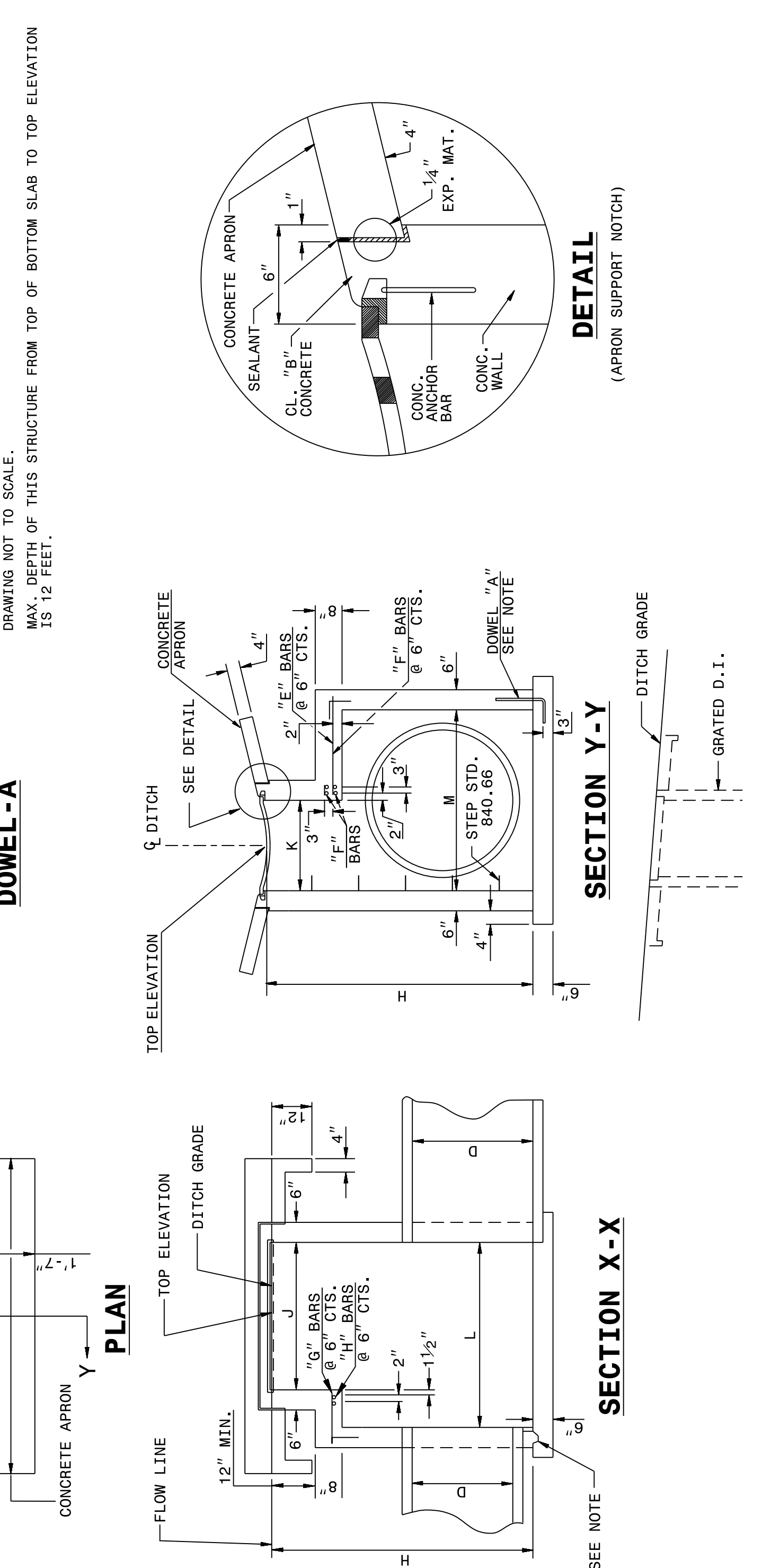


STATE OF
NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
CONCRETE GRATED DROP INLET TYPE 'A'
MINIMUM DEPTH
12" THRU 72" PIPE

SHEET 1 OF 2
840d17

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL GRATED DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CROWNS MATCHING.
USE STANDARD FRAMES AND GRATES 840.22 (SHOWN), 840.24 (SHOWN), 840.20 (NOT SHOWN) OR 840.29 (NOT SHOWN).
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.
MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.



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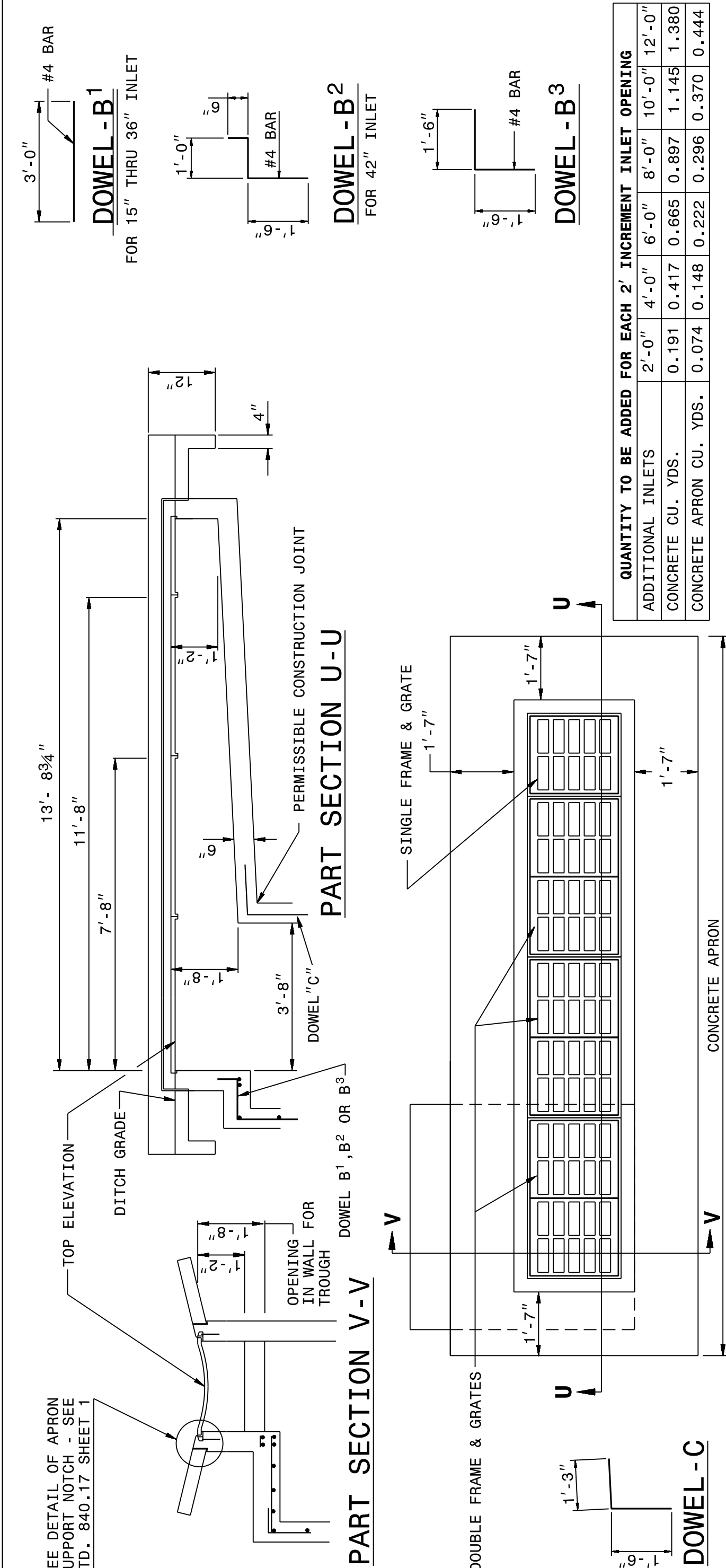
ENGLISH DETAIL DRAWING FOR
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SHEET 1 OF 2
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ENGLISH DETAIL DRAWING FOR
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SHEET 2 OF 2
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ENGLISH DETAIL DRAWING FOR
CONCRETE GRATED DROP INLET TYPE 'A'
MINIMUM DEPTH
12" THRU 72" PIPE

SHEET 2 OF 2
840d17

PIPE	DIMENSIONS OF BOX AND PIPE		REINFORCING STEEL - NO. 4 BARS										MIN. DIMENSIONS AND QUANTITIES FOR CONCRETE GRATED DROP INLET (BASED ON MIN. HEIGHT, H)		DEDUCTIONS FOR ONE PIPE						
	SPAN	WIDTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	APRON	TOTAL	C.S.	R.C.	
12"	3'-8"	2'-0"	2'-0"	2'-3"	—	—	—	—	—	—	—	—	—	—	—	—	0.395	1.745	0.015	0.024	
15"	3'-8"	2'-0"	2'-0"	2'-5"	—	—	—	—	—	—	—	—	—	—	—	—	0.395	1.745	0.015	0.024	
18"	—	—	2'-0"	2'-8"	—	—	—	—	—	—	—	—	—	—	—	—	0.395	1.745	0.015	0.024	
24"	—	—	2'-0"	3'-3"	8	1'-5"	6	4'-9"	—	—	—	—	—	—	—	—	1.807	0.033	0.049	0.085	
30"	—	—	3'-8"	3'-10"	8	2'-0"	7	4'-9"	—	—	—	—	—	—	—	—	2.201	0.059	0.085	0.127	
36"	—	—	4'-0"	4'-4"	8	2'-5"	8	4'-11"	4	0'-9"	2	4'-11"	47	0.560	1.931	0.321	2.920	0.132	0.178	0.243	
42"	—	—	4'-10"	5'-0"	10	3'-1"	9	5'-7"	10	3'-1"	9	5'-7"	67	0.704	2.500	0.370	3.677	0.180	0.243	0.317	
48"	—	—	5'-4"	5'-6"	11	3'-7"	10	6'-1"	11	1'-11"	4	6'-1"	87	0.823	3.013	0.407	4.315	0.285	0.317	0.401	
54"	—	—	6'-0"	6'-0"	12	4'-1"	11	6'-7"	12	2'-5"	5	6'-7"	107	0.951	3.589	0.444	5.072	0.287	0.401	0.495	
60"	—	—	6'-6"	6'-7"	13	4'-9"	12	7'-3"	13	3'-1"	6	7'-3"	135	1.311	4.539	0.494	6.170	0.367	0.495	0.599	
66"	—	—	7'-2"	7'-1"	14	5'-4"	14	7'-10"	14	7'-10"	7	7'-10"	168	1.136	5.061	0.537	6.901	0.444	0.599	0.713	
72"	—	—	7'-8"	7'-8"	15	5'-11"	15	8'-5"	4	4'-3"	8	8'-5"	199	1.500	5.860	0.580	0.395	7.868	0.528	0.713	0.713

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