

5/28/19



Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606
Tel. (919) 851-6866
Fax. (919) 851-7024
www.stantec.com
License No. F-0672

PROJECT REFERENCE NO. U-3334B	SHEET NO. 18
ROADWAY DESIGN ENGINEER SEAL 022037 STEPHEN T. SMALLWOOD	HYDRAULICS ENGINEER SEAL 032581 BROOK E. ANDERSON
11/28/2017	11/28/2017

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

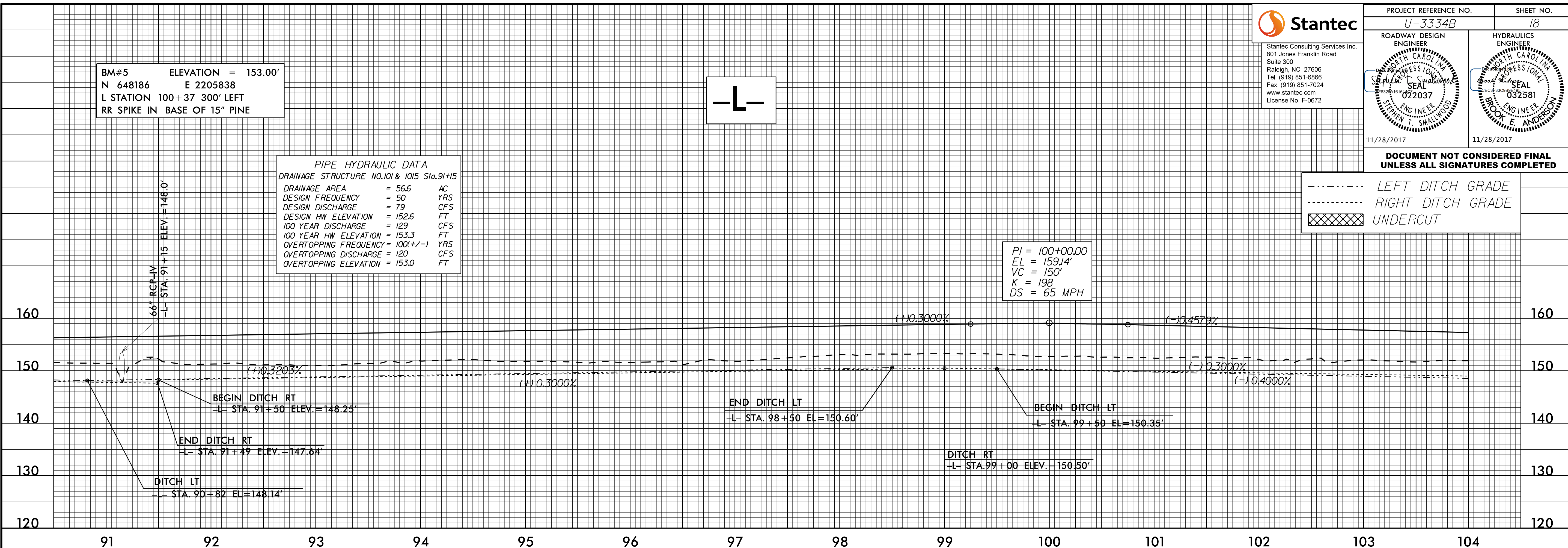
BM#5 ELEVATION = 153.00'
N 648186 E 2205838
L STATION 100+37' 300' LEFT
RR SPIKE IN BASE OF 15" PINE

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.101 & 1015 Sta.91+15

DRAINAGE AREA	= 56.6	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 79	CFS
DESIGN HW ELEVATION	= 152.6	FT
100 YEAR DISCHARGE	= 129	CFS
100 YEAR HW ELEVATION	= 153.3	FT
OVERTOPPING FREQUENCY	= 100(+/-)	YRS
OVERTOPPING DISCHARGE	= 120	CFS
OVERTOPPING ELEVATION	= 153.0	FT

PI = 100+00.00
EL = 159.14'
VC = 150'
K = 198
DS = 65 MPH

----- LEFT DITCH GRADE
----- RIGHT DITCH GRADE
XXXXX UNDERCUT

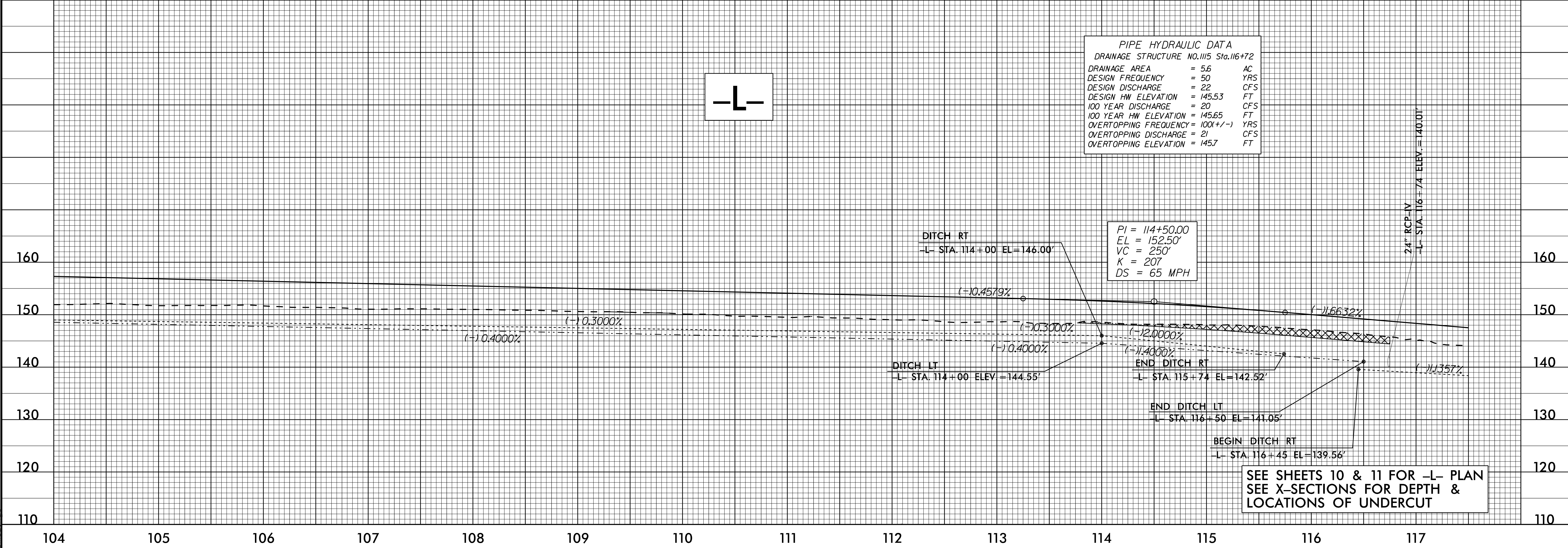


PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.115 Sta.116+72

DRAINAGE AREA	= 5.6	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 22	CFS
DESIGN HW ELEVATION	= 145.53	FT
100 YEAR DISCHARGE	= 20	CFS
100 YEAR HW ELEVATION	= 145.65	FT
OVERTOPPING FREQUENCY	= 100(+/-)	YRS
OVERTOPPING DISCHARGE	= 21	CFS
OVERTOPPING ELEVATION	= 145.7	FT

PI = 114+50.00
EL = 152.50'
VC = 250'
K = 207
DS = 65 MPH

SEE SHEETS 10 & 11 FOR -L- PLAN
SEE X-SECTIONS FOR DEPTH &
LOCATIONS OF UNDERCUT



11/27/2017
U:\Roadway\Projs\U3334B_r\dj\18.dgn