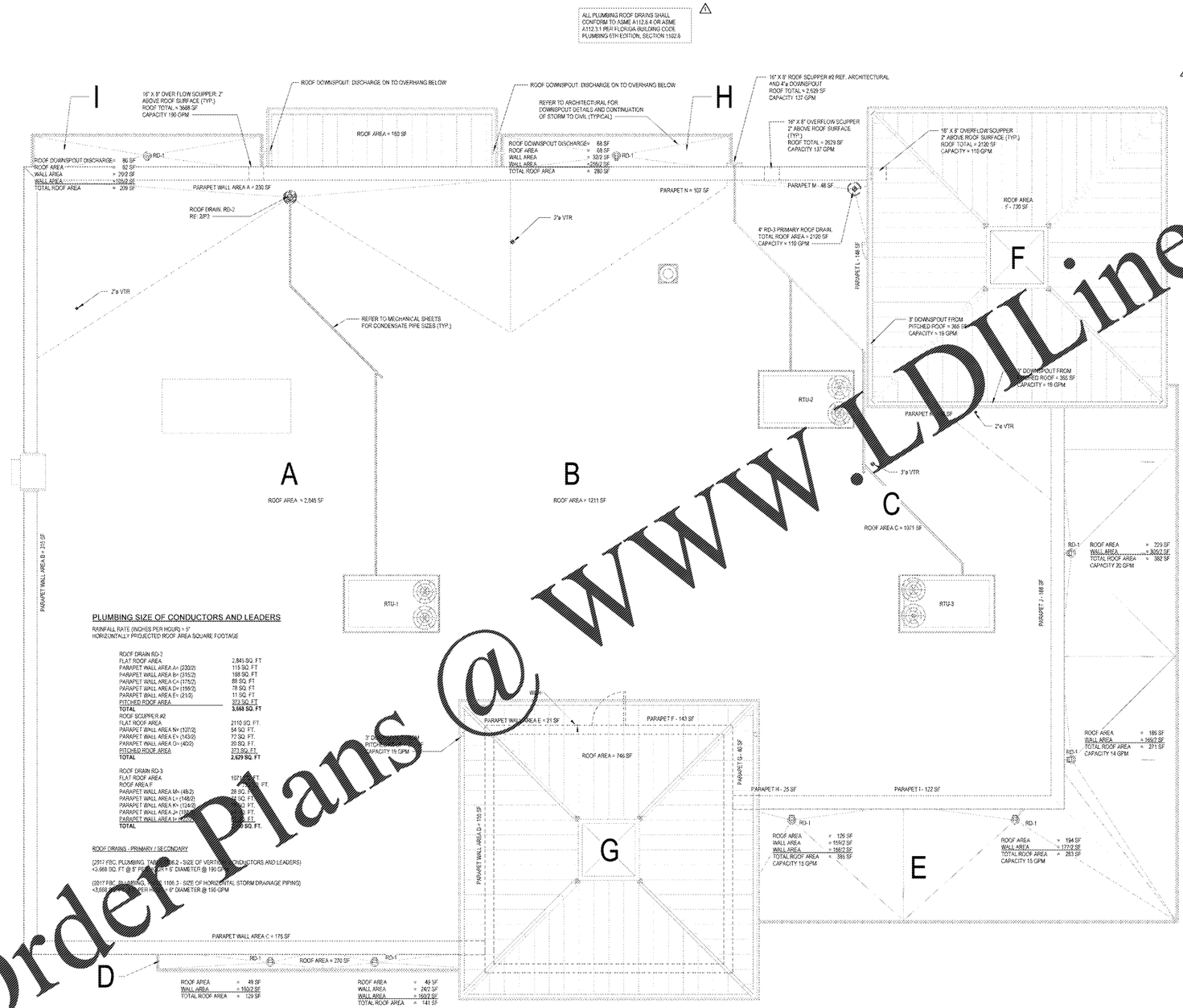

PLUMBING SIZE OF CONDUCTORS AND LEADERS

RAINFALL RATE (INCHES PER HOUR) = 5"
HORIZONTALLY PROJECTED ROOF AREA SQUARE FOOTAGE

ROOF DRAIN RD-2	
FLAT ROOF AREA	2,845 SQ. FT
PARAPET WALL AREA A= (230/2)	115 SQ. FT.
PARAPET WALL AREA B= (315/2)	158 SQ. FT.
PARAPET WALL AREA C= (175/2)	88 SQ. FT.
PARAPET WALL AREA D= (155/2)	78 SQ. FT.
PARAPET WALL AREA E= (21/2)	11 SQ. FT.
PITCHED ROOF AREA	373 SQ. FT.
TOTAL	**3,668 SQ. FT**
ROOF SCUPPER #2	
FLAT ROOF AREA	2110 SQ. FT.
PARAPET WALL AREA N= (107/2)	54 SQ. FT.
PARAPET WALL AREA E= (143/2)	72 SQ. FT.
PARAPET WALL AREA G= (40/2)	20 SQ. FT.
PITCHED ROOF AREA	373 SQ. FT.
TOTAL	**2,629 SQ. FT**
ROOF DRAIN RD-3	
FLAT ROOF AREA	1071 SQ. FT.
ROOF AREA F	730 SQ. FT.
PARAPET WALL AREA M= (48/2)	28 SQ. FT.
PARAPET WALL AREA L= (146/2)	73 SQ. FT.
PARAPET WALL AREA K= (124/2)	62 SQ. FT.
PARAPET WALL AREA J= (188/2)	94 SQ. FT.
PARAPET WALL AREA I= (209/2)	105 SQ. FT.
TOTAL	**2,163 SQ. FT**

ROOF DRAINS - PRIMARY / SECONDARY

(2017 FBC, PLUMBING, TABLE 1106.2 - SIZE OF VERTICAL CONDUCTORS AND LEADERS)
<3,668 SQ. FT @ 5" FLOW RATE = 5" DIAMETER @ 190 GPM

(2017 FBC, PLUMBING, TABLE 1106.3 - SIZE OF HORIZONTAL STORM DRAINAGE PIPING)
<3,668 SQ. FT @ 1/4" PER FT = 5" DIAMETER @ 190 GPM

1 P3 PLUMBING ROOF PLAN
1/4" = 1'-0"

ROOF DRAIN TECHNICAL DATA: 100 YEAR, 1 HR RAINFALL = 4.0" (ROUND UP TO 5")
TOTAL ROOF AREA = HORIZONTAL PROJECTED AREA + HALF THE AREA OF VERTICAL WALLS THAT DIVERT WATER TO THE ROOF
OVERFLOW LOW DRAINAGE: CALCULATED FROM FBC TABLE 1106.2 AS MODIFIED BY SECTION 1108.3

LABEL	ROOF TOTAL AREA	ROOF LARGEST TRIB. AREA	VERTICAL PIPING REQUIRED QTY.	REQUIRED DIAMETER REQ'D	PROVIDED QTY.	PROVIDED DIAMETER PRV'D
A	3,668 SF	3,668 SF	1	5"	1	6"
B	2,629 SF	2,629 SF	1	4"	1	4"
C	2,120 SF	2,120 SF	1	4"	1	4"
D	279 SF	141 SF	2	2"	2	2"
E	1,221 SF	382 SF	4	2"	4	2"
F	730 SF	365 SF	2	3"	2	3"
G	746 SF	373 SF	2	3"	2	3"
H	209 SF	209 SF	1	2"	1	2"
I	209 SF	209 SF	1	2"	1	2"

STORM DRAIN PIPE SIZING

DIAMETER OF LEADER (INCHES)	CAPACITY (GPM) VERTICAL RAIN	SLOPE OF HORIZONTAL DRAIN 1/8 IN PER FT	1/8 IN PER FT	1/4 IN PER FT	1/2 IN PER FT
2	9	15	22	31	44
3	87	39	55	79	111
4	180	81	115	163	231
5	311	117	165	234	331
6	539	243	344 @	487	689
8	1,117	502	714	1010	1,429

5 P3 ROOF AREA CALCULATIONS
NOT TO SCALE

4 P3 ROOF DRAIN RD-3 RISER
NOT TO SCALE

3 P3 ROOF DRAIN RD-1 RISER
NOT TO SCALE

2 P3 ROOF DRAIN RD-2 RISER
NOT TO SCALE

Order Plans @ WWW.LDLine.com

1925 Prospect Ave.
Orlando, FL 32814
P (407) 661-9100
F (407) 661-9101
www.c-p.com
Cabrai & Peterson
Architects Engineers Planners

CLIENT NAME
WAWA
260 WEST BALTIMORE PIKE
WAWA, PENNSYLVANIA 19063

PROJECT NAME
WAWA F85FB 2019.01 STORE #5357-DOR
NW 87TH AVE. & NW 33RD ST.
DORAL, FLORIDA

SHEET TITLE
PLUMBING ROOF PLAN

Revision Schedule		
No.	Description	Date
1	PERMIT SET	09/07/2018
2	PERMIT COMMENTS	10/31/2018
3	PRE-BID REVIEW SET	04/17/2019
4	BID SET	05/08/2019

PROJECT NO. 2171038
DATE 08.03.2018
DRAWN DJS
CHECKED LG

P3