



CLIENT: PALM BEACH SHORES APARTMENTS PAGE 1 OF 2
PROJECT NAME: PALM BEACH SHORES CONDO. ACRC#16-0350
PROJECT ADDRESS: 33 SOUTH OCEAN BLVD DATE: 8/15/2016
PALM BEACH SHORES, FLORIDA 33404

DRAINAGE CALCULATIONS 6TH FLOOR DECK

EFFECTIVE DRAINAGE AREA:

7586 SF

PRIMARY DRAINAGE:

PRIMARY DRAINAGE CONSIST OF ONE 3" DRAIN AND TWO 2" DRAINS

$I = 5''/\text{HR}; H_d = 2.5'' (2)(575 \text{ SF}) + (1)(1760 \text{ SF}) = 2910 \text{ SF} < A_e \rightarrow \text{NOT GOOD}$

CONSTRUCT FOUR 6" X 4" MIN. SCUPPERS; INVERTS AT GRADE

CHECK: $(4)(1346 \text{ SF}) + 2910 \text{ SF} = 8294 \text{ SF} > A_e \rightarrow \text{OK}$

SECONDARY DRAINAGE:

CONSISTS OF SEVEN 12" X 3" SCUPPERS

$H = 2.5''; I = 5''/\text{HR}$

CHECK: $(7)(1923 \text{ SF}) = 13461 \text{ SF} > A_e \rightarrow \text{OK}$

ENLARGE SECONDARY SCUPPERS TO 12" X 4" MIN. INVERTS TO BE 2.5" ABOVE GRADE

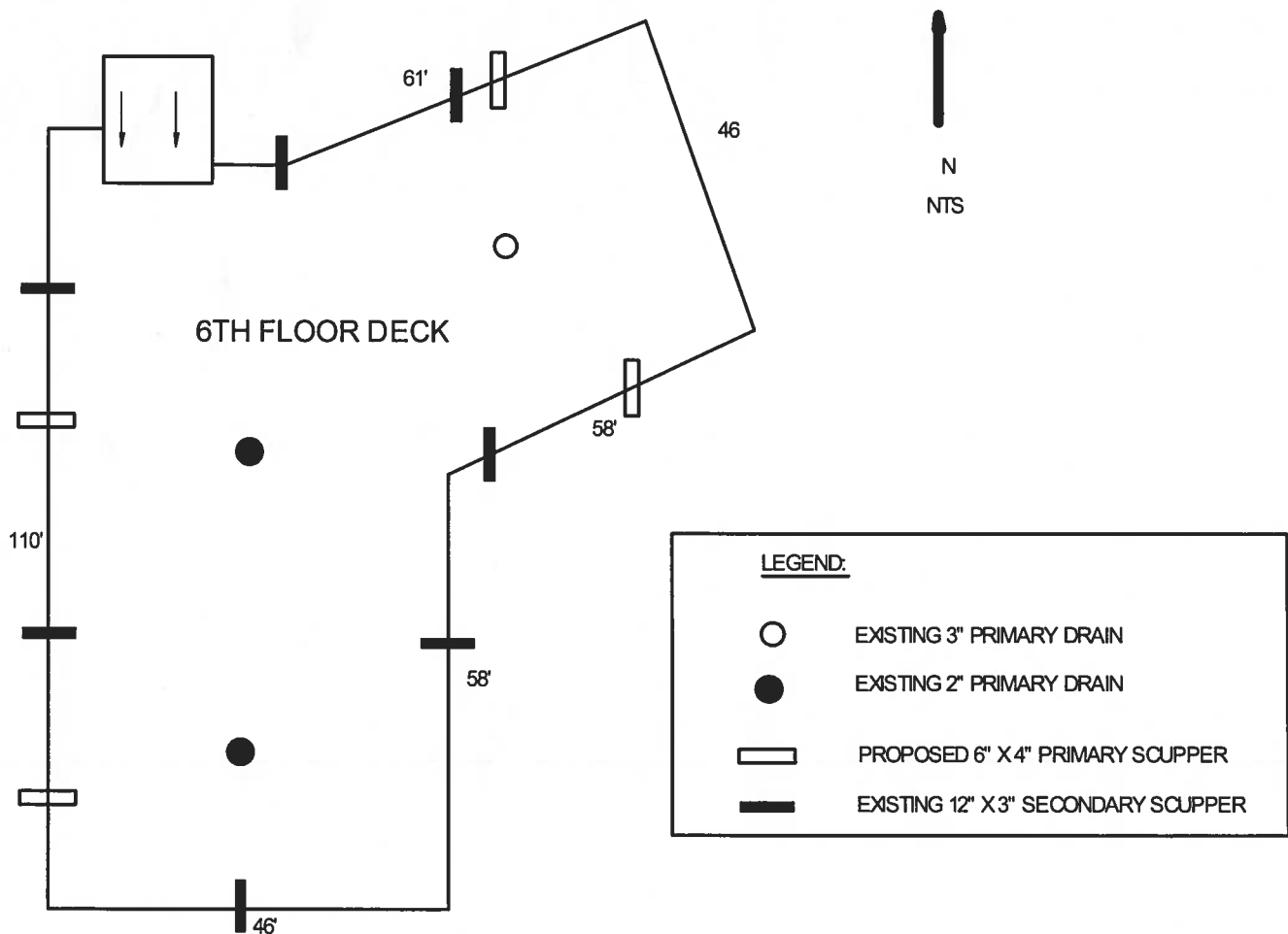
CALCULATIONS BY:
RANDALL FOWLER, P.E.
NO. 51156



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DRAINAGE PLAN 6TH FLOOR DECK





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DRAINAGE CALCULATIONS WEST DECK

EFFECTIVE DRAINAGE AREA:

2239 SF

PRIMARY DRAINAGE:

PRIMARY DRAINAGE CONSIST OF ONE 3" DRAIN

$I = 5''/\text{HR}; H_d = 2.5'' (1)(1760 \text{ SF}) = 1760 \text{ SF} < A_e \rightarrow \text{NOT GOOD}$

CONSTRUCT TWO 4" X 4" MIN. SCUPPERS; INVERTS AT GRADE

CHECK: $(2)(3680 \text{ SF}) = 7360 \text{ SF} > A_e \rightarrow \text{OK}$

SECONDARY DRAINAGE:

CONSISTS OF TWO 11" X 1.5" SCUPPERS

$H = 2.5''; I = 5''/\text{HR}$

CHECK: $(2)(2468 \text{ SF}) = 4936 \text{ SF} > A_e \rightarrow \text{OK}$

ENLARGE SECONDARY SCUPPERS TO 11" X 4" MIN. INVERTS TO BE 2.5"

ABOVE PRIMARY DRAIN INVERT

CALCULATIONS BY:
RANDALL FOWLER, P.E.
NO. 51155



CLIENT:

PALM BEACH SHORES APARTMENTS

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PROJECT NAME:

PALM BEACH SHORES CONDO.

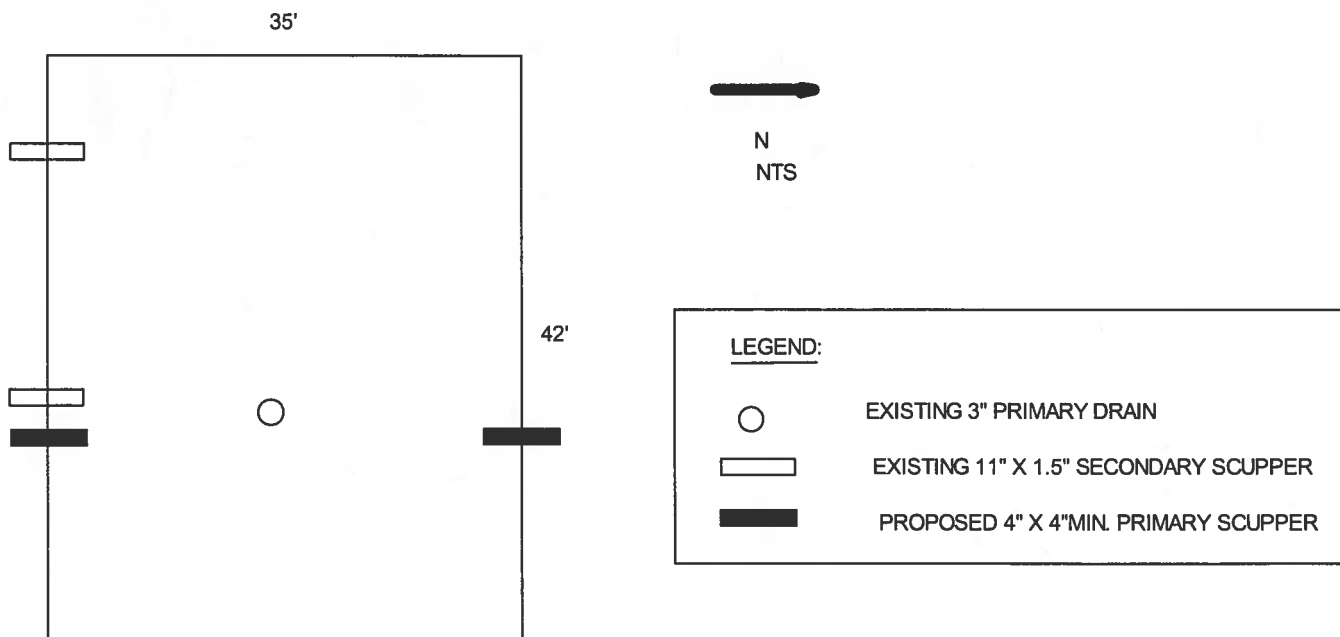
ACRC#16-0350

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**33 SOUTH OCEAN BLVD
PALM BEACH SHORES, FLORIDA 33404**

DATE: 8/15/2016

DRAINAGE PLAN WEST DECK





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DRAINAGE CALCULATIONS ONE STORY DECK

EFFECTIVE DRAINAGE AREA:

1750 SF

PRIMARY DRAINAGE:

PRIMARY DRAINAGE CONSIST OF ONE 3" DRAIN

$I = 5''/\text{HR}; (1)(1760 \text{ SF}) = 1760 \text{ SF} > A_e \rightarrow \text{OK}$

SECONDARY DRAINAGE:

CONSISTS OF SIX 11" X 1.5" SCUPPERS

$H = 2.5''; I = 5''/\text{HR}$

CHECK: $(6)(2468 \text{ SF}) = 14808 \text{ SF} > A_e \rightarrow \text{OK}$

ENLARGE ALL SECONDARY SCUPPERS TO 11" X4" MIN.

INVERTS TO BE 2.5" ABOVE PRIMARY DRAIN INVERTS

ALL EXISTING SECONDARY SCUPPERS WHICH ARE COVERED TO BE UNCOVERED

CALCULATIONS BY:
RANDALL FOWLER, P.E.
NO. 51156

Handwritten signature and date: 8/15/16



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DRAINAGE CALCULATIONS SOUTH DECK

EFFECTIVE DRAINAGE AREA:

1850 SF

PRIMARY DRAINAGE:

PRIMARY DRAINAGE CONSIST OF ONE 4" DRAIN

$I = 5''/\text{HR}; (1)(3680 \text{ SF}) = 3680 \text{ SF} > A_e \rightarrow \text{OK}$

SECONDARY DRAINAGE:

CONSISTS OF SIX 10" X 1.5" SCUPPERS

$H = 2.5''; I = 5''/\text{HR}$

CHECK: $(10)(2468 \text{ SF}) = 24680 \text{ SF} > A_e \rightarrow \text{OK}$

ENLARGE ALL SECONDARY SCUPPERS TO 11" X 4" MIN.

INVERTS TO BE 2.5" ABOVE PRIMARY DRAIN INVERTS

ALL EXISTING SECONDARY SCUPPERS WHICH ARE COVERED TO BE UNCOVERED

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DRAINAGE CALCULATIONS EAST DECK

EFFECTIVE DRAINAGE AREA:

4164 SF

PRIMARY DRAINAGE:

PRIMARY DRAINAGE CONSIST OF TWO 4" DRAINS

$I = 5''/\text{HR}; (2)(3680 \text{ SF}) = 7360 \text{ SF} > A_e \rightarrow \text{OK}$

SECONDARY DRAINAGE:

CONSISTS OF SIX 11" X 1.5" SCUPPERS

$H = 2.5''; I = 5''/\text{HR}$

CHECK: $(6)(2468 \text{ SF}) = 14808 \text{ SF} > A_e \rightarrow \text{OK}$

ENLARGE ALL SECONDARY SCUPPERS TO 11" X4" MIN.

INVERTS TO BE 2.5" ABOVE PRIMARY DRAIN INVERTS

CALCULATIONS BY:
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18/10/16