Appendix E.
Water Quality Management Plan

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Water Quality Management Plan (WQMP)

For:

SEASHORE VILLAGE, 5515 RIVER AVENUE, NEWPORT BEACH,CA.
LOT 104, TRACT 3813, City of Newport beach

INSERT GRADING PERMIT NO., BUILDING PERMIT NO., TRACT NUMBER, CUP, SUP AND/OR APN (SPECIFY LOT NUMBERS IF SITE IS A PORTION OF A TRACT)- THEN TAB TO NEXT FIELD.

Prepared for:
Seashore Village, LLC
1550 North 40th Street,#10
Mesa, AZ. 85205
(480)218-6966

Prepared by:
Todd Schooler & Assoc. inc.
301 E. 17th Street # 204
Costa Mesa, CA. 92627
(949) 646-8805

05/03/07

OWNER'S CERTIFICATION

WATER QUALITY MANAGEMENT PLAN
FOR PERMIT/PLANNING APPLICATION NUMBER _____
& TRACT/PARCEL MAP NUMBER _____

This Water Quality Management Plan (WQMP) for SEASHORE VILLAGE has been prepared for Seashore Village, LLC by Todd Schooler & Assoc inc. This WQMP is intended to comply with the requirements of the City of Newport Beach, Planning & Public Works Dept., Tract/Parcel Map No. Tract/Parcel Map number, Condition Number(s) Condition Numbers, and/or Site Development Permit/Application Number Enter number, Condition Number(s) Condition Numbers requiring the preparation of a Water Quality Management Plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP), and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region Stormwater Runoff Management Program. A copy of this WQMP will be maintained at the project site or project office.
This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party having responsibility for implementing portions of this Water Quality Management Plan. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Signed:

Name: Todd Schooler

Title: President

Company: Todd Schooler &Associates inc.

Address: 301 E. 17th # 204 Costa Mesa, CA. 92627

Telephone #: 949-646-8805

Date: 05/03/07

Contents

Section I Tract or Discretionary Permit Number(s), Water Quality Condition(s) Number(s) and Conditions

CLICK AND TYPE DISCRETIONARY PERMIT(S) AND WATER QUALITY CONDITIONS HERE

Section II Project Description

The proposed plan residential development consisting of 12 single family homes and 6 duplex condominiums (12 units) totaling 24 units with attached garages. The on site areas consist of private patios, driveway access to private garages and guest parking. These paved areas will be constructed with a combination of 1. asphalt paving at driveways with areas of groutless paver systems to allow filtering of first flush of the driveways 2. Patios & walks shall be concrete that flows to an under ground drainage system equiped with an in line perforated drain trench allowing the pollutants to filter through the gravel bed back into the soil. The landscape areas consist of small on grade planter along with two larger area adjacent to the guest parking all designed to allow flow on th them inorder to absorb the pollutants of the first flush. All overflow shll be drained through the underground system with the attached in line filters. All private patios shall drain through the underground system. The list of potential runoff pollutants are as follows.

1. Fertiliersand pesticides
2. Household hazardous waste such as paints, cleaning agents etc
3. Pet waste
4.Outside building & cleaning
5. Landscape maintenance debris
6. Vehicle washing & repair

Section III Site Description

The project is located on a 65,108sq. ft.lot that has an existing 54 unit appartment building on it. It is situated in a nieghborhood that consist single family residents and duplexes. The current zoning is MFR. The drainage from the development will flow out to a storm drain and make its way to the Pacific Ocean which is currently 303(d) listed by the state as impaired for bacteria. The coverage of impervious surface is 27.326sq.ft.-42%. The current development is95% covered by building and parking with no water quality measures. Our project will create less polution because of the lower density and has a filter system design to mitigate any potential problems.

Section IV Best Management Practices (BMPs)

Source Control BMPs

The following tables show source control BMPs (routine non-structural and routine structural) included in this project and those that were not included.

Routine Non-Structural BMPs

Identifier	Name	Check One		If not applicable, state brief reason
		Included	Not Applicable	
N1	Education for Property Owners, Tenants and Occupants	☒	☐	
N2	Activity Restrictions	☒	☐	
N3	Common Area Landscape Management	☒	☒	
N4	BMP Maintenance	☒	☐	
N5	Title 22 CCR Compliance (How development will comply)	☒	☐	
N6	Local Industrial Permit Compliance	☐	☒	
N7	Spill Contingency Plan	☐	☒	Small SFD developement
N8	Underground Storage Tank Compliance	☐	☒	
N9	Hazardous Materials Disclosure Compliance	☐	☒	
N10	Uniform Fire Code Implementation	☒	☒	
N11	Common Area Litter Control	☐	☒	common areas minimal and mantained by individual home owners
N12	Employee Training	☐	☒	
N13	Housekeeping of Loading Docks	☐	☒	
N14	Common Area Catch Basin Inspection	☒	☐	
N15	Street Sweeping Private Streets and Parking Lots	☒	☐	
N16	Commercial Vehicle Washing	☐	☒	

A copy of the WQMP will be distributed to the new owners of the property in order to alert them of the water quality issues regarding there site. The educational materials included in the WQMP will help the owner assess a plan of action for any future water quality management problem. This projects BMP's are designed to have any future pollutants be filtered directly into the ground as discribed in the site description section. This will allow the BMP's to work naturally and not have a need of regular maintenance to BMP's.

Routine Structural BMPs

Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	
Provide storm drain system stenciling and signage	☐	☒	
Design and construct outdoor material storage areas to reduce pollution introduction	☐	☒	
Design and construct trash and waste storage areas to reduce pollution introduction	☐	☒	
Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	☒	☐	
Protect slopes and channels and provide energy dissipation	☒	☐	
Incorporate requirements applicable to individual project features	☐	☐	
a. Dock areas	☐	☒	
b. Maintenance bays	☐	☒	
c. Vehicle wash areas	☐	☒	
d. Outdoor processing areas	☐	☒	
e. Equipment wash areas	☐	☒	
f. Fueling areas	☐	☒	
g. Hillside landscaping	☐	☒	erosion resistant plants shall be used
h. Wash water control for food preparation areas	☐	☒	
i. Community car wash racks	☐	☒	

Site Design BMPs

The following table shows site design BMPs that are included in this project. A description of each BMPs follows:

Site Design BMPs

Technique	Included?		Brief Description of Method
	Yes	No	
Minimize Impervious Area/Maximize Permeability (C-Factor Reduction)	☒	☐	Interlocking paver system & gravel side yard, erosion resistant landscaping
Minimize Directly Connected Impervious Areas (DCIAs) (C-Factor Reduction)	☒	☐	All underground drainage shall be through a gravel filter system
Create Reduced or "Zero Discharge" Areas (Runoff Volume Reduction)	☒	☐	Drainage through paver system and into planters
Conserve Natural Areas (C-Factor Reduction)	☒	☐	

Interlocking paver systems shall be constructed as part of the driveway to filter polutants. Additionally any water run through an underground drainage system shall be filtered through a gravel filter.

Treatment BMPs

The following table shows treatment BMPs that are included in this project. A description of each BMP follows:

Treatment BMPs

Name	Included?		If not applicable, state brief reason
	Yes	No	
Vegetated (Grass) Strips	☐	☒	
Vegetated (Grass) Swales	☐	☒	
Proprietary Control Measures	☐	☒	
Dry Detention Basin	☐	☒	
Wet Detention Basin	☐	☒	
Constructed Wetland	☐	☒	
Detention Basin/Sand Filter	☐	☒	
Porous Pavement Detention	☒	☐	
Porous Landscape Detention	☒	☐	
Infiltration Basin	☐	☒	
Infiltration Trench	☒	☐	
Media Filter	☐	☒	
Proprietary Control Measures	☐	☒	

The proposed BMP's are designd to filter pollutants naturally back in the ground on site. The combination of paver system, erosion resistant plants that absorb water better, gravel side yards, and gravel trench drain all contribute to this goal and will not require any special maintenance program for an owner besides general property maintenance.

Section V Inspection/Maintenance Responsibility for BMPs

The individual owners will be responsible to maintain the project irrigation system & planters to be able to properly impliment the BMP's.

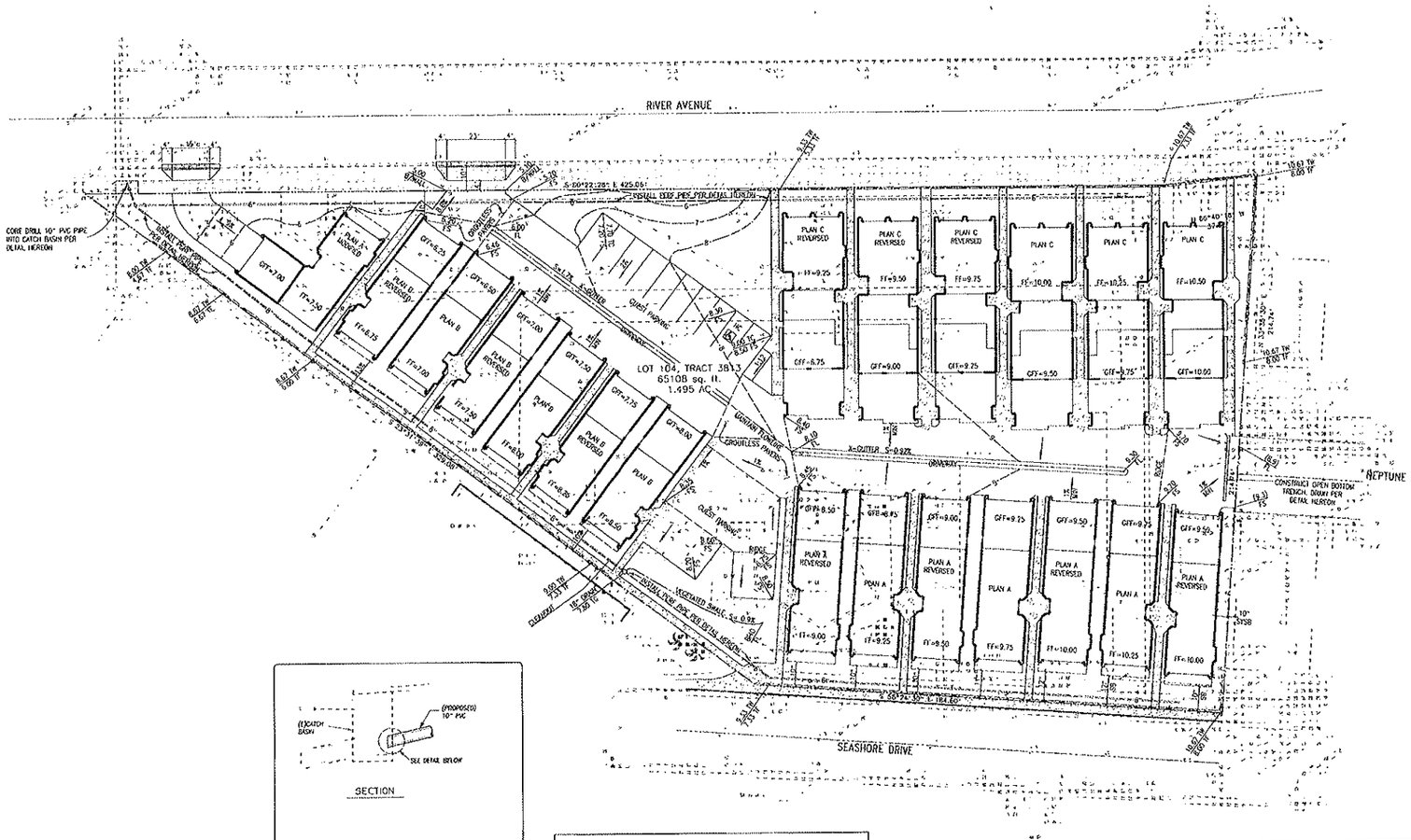
Section VI Location Map, Plot Plan & BMP Details

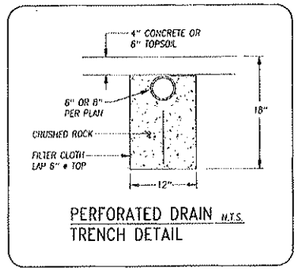
Section VII Educational Materials Included

The following is a list of educational materials included in this WQMP.

- When it rains, it drains
- Do you know where the water in your storm drain goes ?
- "The ocean begins at your front door"
- Stormwater best management practices (BMPs)
- a) Home repair and remodeling
- b) Heavy equipment and earth moving activities
- c) Painting
- d) Landscaping, gardening and pest control
- f) Fresh concrete and mortor control
-
- Before you stop...stop!, drop!, and swap
- Disposal of household waste
-

INSERT ADDITIONAL NARRATIVE TEXT HERE OR DELETE THIS LINE (Use the "FORMAT OPTIONS" button to insert subtitles and/or paragraphs)





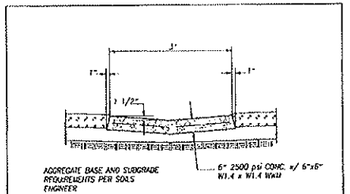
PERFORATED DRAIN H.T.S.
TRENCH DETAIL

SCALE: 1" = 20'

LEGEND

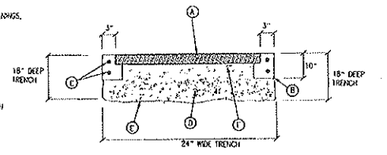
- EXISTING CONTOUR
- 100 PROPOSED CONTOUR
- 100.00 SPOT ELEVATION
- PROPOSED CONCRETE PAVING
- 6" PROPOSED STORM DRAIN
- SUB PROPOSED SUBDRAIN
- PERF PIPE PER DETAIL HEREON
- DEEPENED FOOTING
- PROPOSED BEARING/RETAINING WALL
- EXISTING SCREEN WALL
- PROPOSED SCREEN WALL
- PROPOSED RETAINING WALL
- PROPOSED PLANTER WALL
- DS DOWNSPOUTS
- FF PROPOSED FINISHED FLOOR
- PAD PROPOSED PAD ELEVATION
- FS PROPOSED FINISHED SURFACE
- FG PROPOSED FINISHED GROUND
- TG TOP OF GRATE
- INV INVERT OF PIPE
- TC TOP OF CURB
- P.L. PROPERTY LINE
- TW TOP OF WALL
- TF TOP OF FOOTING
- TP TOP OF PILASTER
- L.A. LANDSCAPE AREA

DETAIL N.T.S.
STORM DRAIN CONNECTION TO EXIST. CURB INLET



DETAIL N.T.S.
CONCRETE X-GUTTER

(A) INSTALL 6" WIDE TRAFFIC RATED FRAME AND GRATE WITH 3/8" SLOT OPENINGS, NDS TYPE 837 OR EQUIV. PH. 800-726-1934
(B) - FORM AND POUR PERIMETER CONCRETE CURB 10" DEEP BY 6" WIDE
(C) - INSTALL #4 REBAR TOP AND BOTTOM(TYP.)
(D) - INSTALL CRUSHED ROCK 3/4" TO 1" DIA.
(E) - INSTALL MIRAFI FABRIC TYPE 140 N OR EQUIV. AROUND GRAVEL
(F) FILL REST OF TRENCH WITH CRUSHED ROCK TO 4" FROM TOP OF TRENCH



TRENCH DRAIN CROSS SECTION DETAIL AT DRIVEWAY

PRELIMINARY GRADING PLAN

LOT 104, TRACT 3813
NEWPORT, CA

PREPARED FOR: NEWS NEWPORT, LLC

NO.	REVISIONS	APP.	DATE
		DES.	
		DR.	
		CHK.	
		DATE OF SURVEY	
		H. SCALE	
		V. SCALE	
		PLOT DATE	

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SHEET 1 OF 1
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