## TENTATIVE TRACT NO. 20148

IN THE CITY RANCHO CUCAMONGA, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

BEING A SUBDIVISION OF LOT 9 OF BLOCK "Y" OF M.B. 2, PAGE 24, OFFICIAL RECORDS.

NOVEMBER, 2018 APN 1100-191-04

11.44 ACRES GROSS 5.74 ACRES NET

#### **NOTES:**

TOTAL WATER QUALITY TREATMENT AREA = 268,160 SF (6.2 AC) EXISTING SITE IMPERVIOUS AREA = 0 SF (0 %) PROPOSED SITE IMPERVIOUS AREA = 214,528 SF (80%)  $P_{2YR-1HR} = 0.552 IN$ 

### LIST OF LID BMPS

STORM DRAIN STENCIL: "NO DUMPING WE LIVE DOWNSTREAM" OR CITY APPROVED EQUAL TO DISCOURAGE HARMFUL AND ILLEGAL DUMPING.

FLOGARD CATCH BASIN FILTER: THE CATCH BASIN FILTER WILL REMOVE A MAJORITY OF TRASH AND DEBRIS FROM THE STORM WATER RUNOFF BEFORE IT REACHES THE PROPOSED UNDERGROUND STORM DRAIN SYSTEM.

MAXWELL PLUS PRIMARY SETTLING CHAMBER: THE DESIGN CAPTURE VOLUME WILL INITIALLY ENTER THE PRETREATMENT CHAMBER. THE CHAMBER WILL HAVE A 10.0' SUMP DEPTH WHERE TRASH, DEBRIS, AND SEDIMENTS WILL SETTLE AT THE BOTTOM. FLOATING SPONGE WILL REMOVE POLLUTANTS FROM THE WATER'S SURFACE. INTAKE SCREENS WILL FURTHER FILTER THE WATER BEFORE IT ENTERS THE CONNECTION PIPE TO THE ADJACENT INJECTION WELL.

MAXWELL PLUS INJECTION WELL: THE INJECTION WELL WILL DRAIN AND INFILTRATE WATER QUALITY RUNOFF THROUGH A VERTICAL GRAVEL PIT. THE DEPTH OF THE GRAVEL PIT WILL VARY PER SYSTEM BASED ON VOLUME TO BE INFILTRATED (SEE DETAIL HEREON).

#### WATER QUALITY MITIGATION SUMMARY

STORM WATER RUNOFF AND NUISANCE FLOWS FROM THE PROJECT SITE WILL BE INTERCEPTED BY AREA DRAINS AND CATCH BASINS THROUGHOUT THE SITE. BEFORE THE WATER LEAVES THE PROJECT SITE A DIVERSION MANHOLE WILL INTERCEPT THE LOW FLOW WATER QUALITY RUNOFF AND ROUTE IT INTO TWO TORRENT RESOURCES MAXWELL PLUS DRAINAGE SYSTEMS. THE SYSTEM'S PRIMARY SETTLING CHAMBER WILL REMOVE DEBRIS, TRASH, OILS, AND POLLUTANTS FROM THE RUNOFF BEFORE ROUTING CLEAN WATER INTO ADJACENT VERTICAL INJECTION WELL EACH INJECTION WELL WILL HAVE 45 VERTICAL FEET OF INFILTRATION IN ORDER TO MITIGATE THE SITE'S DESIGN CAPTURE VOLUME. STORMWATER RUNOFF AND NUISANCE FLOWS FROM THE EXISTING SOUTHERN CALIFORNIA GAS CO. EASEMENT, WHICH WILL BE OVERLAID WITH A PARKING LOT, WILL BE DIRECTED TO VARIOUS DROP INLETS AND CATCH BASINS BEFORE BEING ROUTED INTO THE PROPOSED INFILTRATION SYSTEMS. THE DROP INLETS AND CATCH BASINS WILL CONTAIN FILTERS FOR TRASH AND DEBRIS.

2. PRELIMINARY DESIGN OF INFILTRATION SYSTEMS ARE SUBJECT TO CHANGE UPON RESULTS OF FINAL GEOTECHNICAL REPORT AND RECOMMENDATIONS.

## - MAXWELL INJECTION WELL - MAXWELL PRIMARY SETTLING CHAMBER PROP. FIRE WATER -PROP. DOMESTIC WATER-PROP. "V" GUTTER PROP. STORM DRAIN - $^{ackslash}$ 8" PVC CONNECTOR PIPE @ S=0.010 PROP. SEWER DIVERSION MANHOLE WITH LOW FLOW INVERT TO WQ SYSTEM SYSTEM 1: SCALE: 1"=20'

# PROP. FIRE WATER-PROP. STORM DRAIN MAXWELL INJECTION WELL PROP. SEWER-- MAXWELL PRIMARY SETTLING CHAMBER -8" PVC CONNECTOR PIPE @ S=0.010

## SYSTEM 2:

### DEVELOPER/OWNER:

STRATHAM HOMES IRVINE, CA 92612 CONTACT:

MADOLE AND ASSOCIATES, INC. RANCHO CUCAMONGA, CA 91730 CONTACT: MARK BERTONE PHONE: (909) 481-6322

#### PROJECT BENCHMARK

1 LETTERED LOT

ELEVATIONS SHOWN HEREON ARE BASED ON THE CITY OF RANCHO CUCAMONGA OFFICIAL BENCHMARKS. DATUM PER THE FOLLOWING CITY BENCHMARK: #10046. A 2" BRASS DISK IN SOUTHERN CALIFORNIA EDISON CONC. TOWER BASE STAMPED "CITY OF RANCHO CUCAMONGA BM 10046 1987" ON EASTERLY SIDE OF EAST AVENUE 0.25 MILES NORTH OF FOOTHILL BOULEVARD, AT MOST WESTERLY TOWER BASE OF MIRA LOMA TOWER NO. 223.

#### BASIS OF BEARINGS:

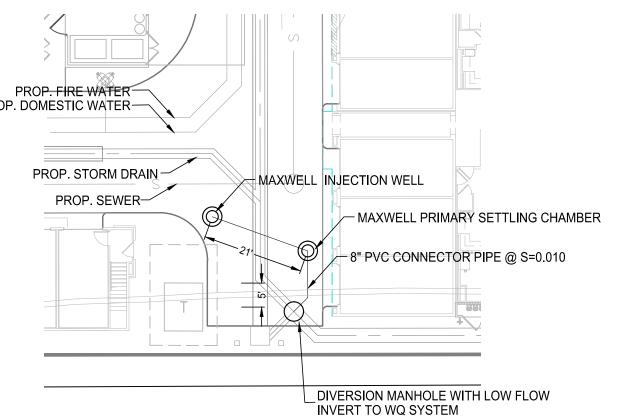
THE BEARING OF N 89°11'35" E ALONG FOOTHILL BLVD. AS SHOWN ON MAP OF TR. 15711-2, M.B. 279/1-5.

APN: 1100-191-04

WATER QUALITY BMP MAINTENANCE SCHEDULE		
BMP	MAINTENANCE	FREQUENCY
MAXWELL PLUS DRAINAGE SYSTEMS	CLEARING AND VACUUMING OF SEDIMENT AND DEBRIS WITHIN STORAGE AREA PER MANUFACTURER'S RECOMMENDATIONS	2x/YEAR AND AFTER MAJOR RAIN EVENTS
CATCH BASIN FILTERS	REMOVAL OF SEDIMENT AND DEBRIS FROM FILTER PER MANUFACTURER'S RECOMMENDATIONS	2x/YEAR AND AFTER MAJOR RAIN EVENTS

#### **RESPONSIBLE PARTY** FOR MAINTENANCE & INSPECTIONS:

STRATHAM HOMES 2201 DUPONT DRIVE SUITE 300 **IRVINE. CA 92612** 



## SCALE: 1"=20'

2201 DUPONT DRIVE SUITE 300 PHONE: (949) 883-1554

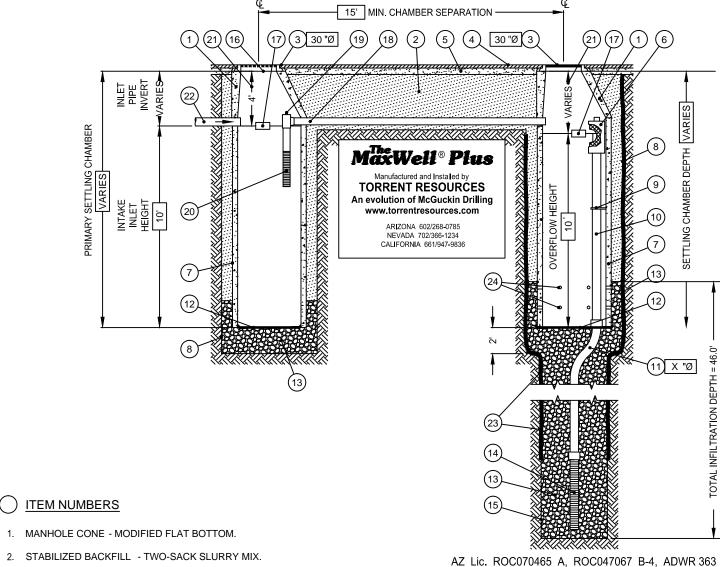
### **CIVIL ENGINEER:**

9302 PITTSBURGH AVENUE, SUITE 230

Modified MaxWell® Plus Drainage System Detail And Specifications

FOOTHILL BLVD

METROLINK



#### 

- 1. MANHOLE CONE MODIFIED FLAT BOTTOM.
- 3. BOLTED RING & GRATE/COVER DIAMETER AS SHOWN. CLEAN CAST IRON WITH WORDING "STORM WATER ONLY" IN RAISED LETTERS. BOLTED IN 2 LOCATIONS AND SECURED TO CONE WITH MORTAR. RIM ELEVATION ±0.02' OF PLANS.
- 4. GRADED BASIN OR PAVING (BY OTHERS).
- 5. COMPACTED BASE MATERIAL (BY OTHERS) 6. PUREFLO® DEBRIS SHIELD - ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL .265" MAX. SWO FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. FUSION BONDED EPOXY
- 7. PRE-CAST LINER 4000 PSI CONCRETE 48" ID. X 54" OD. CENTER IN HOLE AND ALIGN SECTIONS TO MAXIMIZE BEARING SURFACE.
- 8. MIN. 6' Ø DRILLED SHAFT.
- 9. SUPPORT BRACKET FORMED 12 GA. STEEL. FUSION BONDED EPOXY
- 10. OVERFLOW PIPE SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE
- SUSPEND PIPE DURING BACKFILL OPERATIONS TO PREVENT BUCKLING
- 12. BASE SEAL GEOTEXTILE, POLY LINER OR CONCRETE SLURRY

OR BREAKAGE. DIAMETER AS NOTED.

- 13. ROCK CLEAN AND WASHED 3/8" TO 1-1/2" AGGREGATE.
- 14. FLOFAST® DRAINAGE SCREEN SCH. 40 PVC 0.120" SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. DIAMETER VARIES 96" OVERALL

NOTE: DRAWING NOT TO SCALE 15. MIN. 4' Ø SHAFT - DRILLED TO MAINTAIN PERMEABILITY OF DRAINAGE

CA Lic. 528080, C-42, HAZ.

NV Lic. 0035350 A - NM Lic. 90504 GF04

U.S. Patent No. 4,923,330 - Trademark 1974, 1990,

- 16. FABRIC SEAL U.V. RESISTANT GEOTEXTILE TO BE REMOVED BY CUSTOMER AT PROJECT COMPLETION.
- 17. ABSORBENT HYDROPHOBIC PETROCHEMICAL SPONGE. MIN. 128 OZ.
- CAPACITY. TYPICAL, TWO (2) PER CHAMBER.
- 19. VENTED ANTI-SIPHON INTAKE WITH FLOW REGULATOR.
- 20. INTAKE SCREEN 4" Ø SCH. 40 PVC 0.120" MODIFIED SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. 48" OVERALL LENGTH WITH TRI-C
- 21. FREEBOARD DEPTH VARIES WITH INLET PIPE ELEVATION. INCREASE PRIMARY/SECONDARY SETTLING CHAMBER DEPTHS AS NEEDED TO MAINTAIN ALL INLET PIPE ELEVATIONS ABOVE CONNECTOR PIPE
- 22. 8" PVC INLET PIPE (BY OTHERS)
- 23. NON-WOVEN GEOTEXTILE SLEEVE, MIRAFI 140 NL. MIN. 6 FT Ø, HELD APPROX. 10 FEET OFF THE BOTTOM OF EXCAVATION.
- 24. EIGHT (8) 1.25" DIAMETER HOLES PER FOOT WHERE NOTED.



BASELINE ROAD

**ARROW ROUTE** 

WHITTRAM

**VICINITY MAP** 

FONTANA MOTOR SPEEDWAY

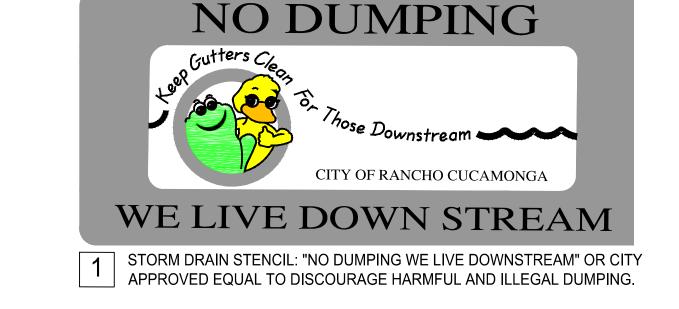


RANCHO CUCAMONGA, CA. 91730 PHONE: 909.481.6322 FAX: 909.481.6320

DATE: 05-11-2018

JOB NO.: 2016-371





LEGEND:

DRAINAGE AREA BOUNDARY

DCV DESIGN CAPTURE VOLUME

Qbmp WATER QUALITY FLOW RATE

TREATMENT AREA = 268,160 SF (6.2 AC.) IMPERVIOUSNESS = 0.80 (80%)

DESIGN CAPTURE VOLUME = 21,487 CF (0.49 AC-FT)

TREATMENT AREA BOUNDARY

EXIST. 1.0' CONTOURS

DA DRAINAGE AREA SF SQUARE FEET

IMP IMPERVIOUS RATIO

SO. CAL. GAS EASEMENT

CF CUBIC FEET

SCALE: 1"=80'

MAXWELL IV INJECTION WELL

### WQMP BMP AS-BUILT CERTIFICATE

I HEREBY CERTIFY THAT THE NECESSARY WATER QUALITY MANAGEMENT PLAN BEST MANAGEMENT PRACTICE DEVICES HAVE BEEN CONSTRUCTED UNDER MY SUPERVISION AND ARE FUNCTIONAL TO THE BEST OF MY KNOWLEDGE AS OF THE DATE BELOW.

**SIGNATURE** DATE

WESTBURY

RANCHO CUCAMONGA, CALIFORNIA

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