

N89°53'52"W 2569.42'

300.0

16' WIDE ROAD (D.G.) RD

(P) OUTDOOR CULTIVATION HOOP HOUSES
NO GRADING IN THIS AREA

(N) UNDERGROUND IRRIGATION SERVICE

FENCE/TOP OF BANK

(E) FLOWLINE

BASIN OVERFLOW

RETENTION BASIN 1
AREA=8,000 SF
DEPTH=3.0
VOLUME=24,000 CF

UNDERGROUND STORM DRAIN PIPE
TO COLLECT ROOF RUNOFF
FROM ALL PROPOSED ROOFS IN DMA 1

RETENTION BASIN 1
COLLECTS ALL DRAINAGE FROM DMA 1
TOTAL ROOF AREA (INCREASED
RUNOFF)=45,800 SF = 1.05 ACS
50 YEAR STORM 10 HR INTENSITY FOR 10 HOUR DURATION
Q=CIA
C=0.98 A=1.05 I=0.47
Q50=(0.98)(0.47)(1.05) = 0.484 CFS
0.484 CFS (10 HR) = 17,424 CUBIC FEET
15% FREEBOARD=2,614 CF
TOTAL VOLUME REQUIRED=20,040 CF
TOTAL VOLUME PROVIDED=24,000 CF

N1°36'07"E 906.77'

2 FDRBC5571
91.42

3 FDRBC5145
100.02

SYMBOL LEGEND:

- FENCE LINE
- S SEWER MAIN
- W WATER MAIN
- G GAS MAIN
- ETC ELEC/TELEPHONE/CABLE
- OH OVERHEAD UTILITIES
- DI DROP INLET AT CURB
- DI DROP INLET
- SM STORM DRAIN MANHOLE
- FH FIRE HYDRANT
- WW WATER WELL
- WV WATER VALVE
- WM WATER METER
- SM SEWER MANHOLE
- loCO SEWER CLEANOUT

- RETAINING WALL/CMU WALL
- PG&E BOX
- GAS METER
- TELEPHONE BOX
- SIGNAL BOX
- CABLE T.V. BOX
- ELECTRIC BOX
- TELEPHONE MANHOLE
- STREET LIGHT
- JOINT POLE
- POWER POLE
- GUY WIRE

ABBREVIATIONS:

- AC ASPHALT CONCRETE
- BM BENCH MARK
- BLDG BUILDING
- BSW BACK OF SIDEWALK
- CO CLEAN OUT
- DW DRIVE WAY
- EG EXISTING GRADE
- EP EDGE OF PAVEMENT
- ETW EDGE OF TRAVELED WAY
- FD FOUND
- FE FENCE EXISTING
- FL FLOWLINE
- FF FINISHED FLOOR
- FSW FRONT OF SIDEWALK
- GR GRASS

- GRE EDGE OF GRASS
- GRV GRAVEL
- GM GAS METER
- IP IRON PIPE
- GB GRADE BREAK
- LT LIGHT
- MH MAN HOLE
- PP POWER POLE
- SNF SEARCH FOR, NOT FOUND
- TC TOP OF CURB
- TG TOP OF GRATE
- TW TOP OF WALL
- WM WATER METER
- WV WATER VALVE
- (E) EXISTING

PRELIMINARY EARTHWORK QUANTITIES:

5,000 CY CUT
5,000 CY FILL

10,000 CY TOTAL GRADING

NET: BALANCE

AREA OF DISTURBANCE = 270,800 SQUARE FEET = 6.2 ACRES

MAXIMUM CUT: 3.0 FT
MAXIMUM FILL: 3.0 FT

EARTHWORK QUANTITIES ARE FOR BONDING AND PERMITTING PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES FOR CONSTRUCTION PURPOSES.

RETENTION BASIN 2
COLLECTS ALL DRAINAGE FROM DMA2
TOTAL ROOF AREA (INCREASED
RUNOFF)=24,000 SF = 0.55 AC
50 YEAR STORM 10 HR INTENSITY FOR 10 HOUR DURATION
Q=CIA
C=0.98 A=0.55 I=0.47
Q50=(0.98)(0.47)(0.55) = 0.25 CFS
0.25 CFS (10 HR) = 9,150 CUBIC FEET
15% FREEBOARD=2,614 CF
TOTAL VOLUME REQUIRED=10,600 CF
TOTAL VOLUME PROVIDED=11,000 CF

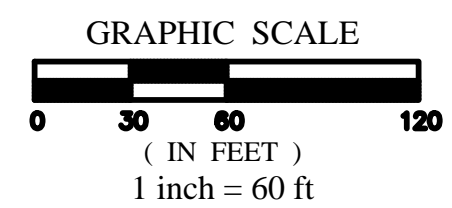
DRAINAGE MANAGEMENT AREA (DMA) 2

MAP DISCLAIMERS:

1. ONLY THE SURFACE EVIDENCE OF UNDERGROUND UTILITIES HAVE BEEN MEASURED IN THE FIELD ON THIS SURVEY. IF APPROXIMATE UNDERGROUND ALIGNMENTS ARE SHOWN, I MAKE NO GUARANTEE AS TO THE ACTUAL LOCATION, TYPE, OR DEPTH OF THOSE UNDERGROUND UTILITIES. CALL UNDERGROUND SERVICE ALERT (USA) AT 1-800-642-2444 TO VERIFY THE ACTUAL LOCATION OF UTILITIES PRIOR TO ANY EXCAVATION. THE SURVEYOR ALSO HAS MADE NO INVESTIGATION AS TO SUBSURFACE ENVIRONMENTAL CONDITIONS THAT WOULD AFFECT THE USE OR DEVELOPMENT OF THIS PROPERTY.
2. IT WILL BE THE ARCHITECT'S RESPONSIBILITY TO VERIFY SETBACK AND HEIGHT RESTRICTIONS WITH THE LOCAL GOVERNING AGENCY.
3. CDS WILL NOT BE LIABLE FOR ELECTRONIC VERSIONS OF THIS MAP PROVIDED TO OTHER PARTIES.
4. THE BOUNDARY LINES SHOWN HEREON ARE BASED ON A PARTIAL BOUNDARY SURVEY PERFORMED UNDER THE DIRECTION OF DENNIS SCHMIDT LS 8408. THESE LINES WERE COMPILED FROM RECORD INFORMATION AND FOUND MONUMENTS AS SHOWN. BOUNDARY LINES BASED ON RECORD INFORMATION SHOWN ARE APPROXIMATE AND WILL NEED TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION OF ANY FOUNDATION BASED ON SPECIFIC AGENCY SETBACK REQUIREMENTS.
5. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED IN MARCH, 2019 AND DEPICT THE ON SITE CONDITIONS ON THAT DATE.

OWNER:
TIFFANY MCCOMMON
415-837-3957

APN:
020-161-009



CIVIL DESIGN SOLUTIONS
PRELIMINARY GRADING & DRAINAGE PLAN
1255 PENMAN SPRINGS ROAD

JUNE 16, 2019