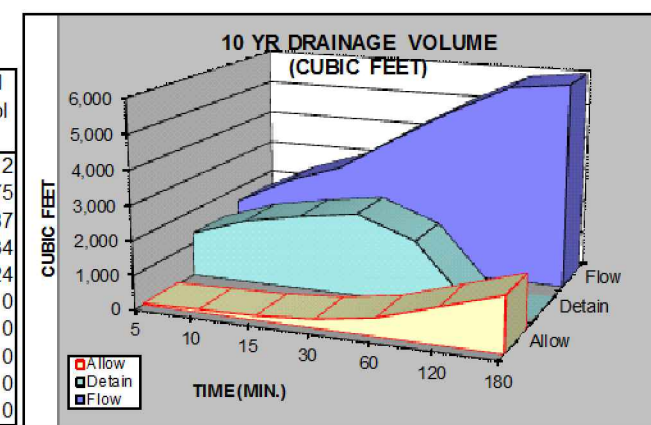




Lat: 41.3061 Long: -111.8281

Areas	Sq. Ft.	Area	C	Infiltration Rate (MPI)	Allow Release Rate (cfs/acre)	Q Allowable (cfs)
Hard Surface	25,122	0.5767	0.85	40.00	0.1	
Building	6,968	0.1600	0.90			
Landscape	20,831	0.4782	0.10			
Total/Weighted	52,921	1.2149	0.56			

MIN	Release Vol (cf) Allowable	Inch / Hr	Total Vol (cf) 100 YEAR	Detain Vol (cf) Difference	Landscape Infiltration (cf)	Adjusted Detain Vol (cf)
5	44	7.69	1,573	1,529	217	1,312
10	89	5.88	2,398	2,309	434	1,875
15	133	4.84	2,971	2,838	651	2,187
30	266	3.26	4,023	3,757	1,302	2,434
60	531	2.02	4,959	4,428	2,604	1,824
120	1,063	1.18	5,794	4,732	5,208	0
180	1,594	0.81	5,991	4,397	7,812	0
360	3,188	0.46	6,801	3,613	15,623	0
720	6,376	0.30	8,691	2,315	31,247	0
1440	10,287	0.17	10,287	0	62,493	0



10 YEAR STORM RECOMMENDED MIN. VOLUME DETAINED **2,434** 90

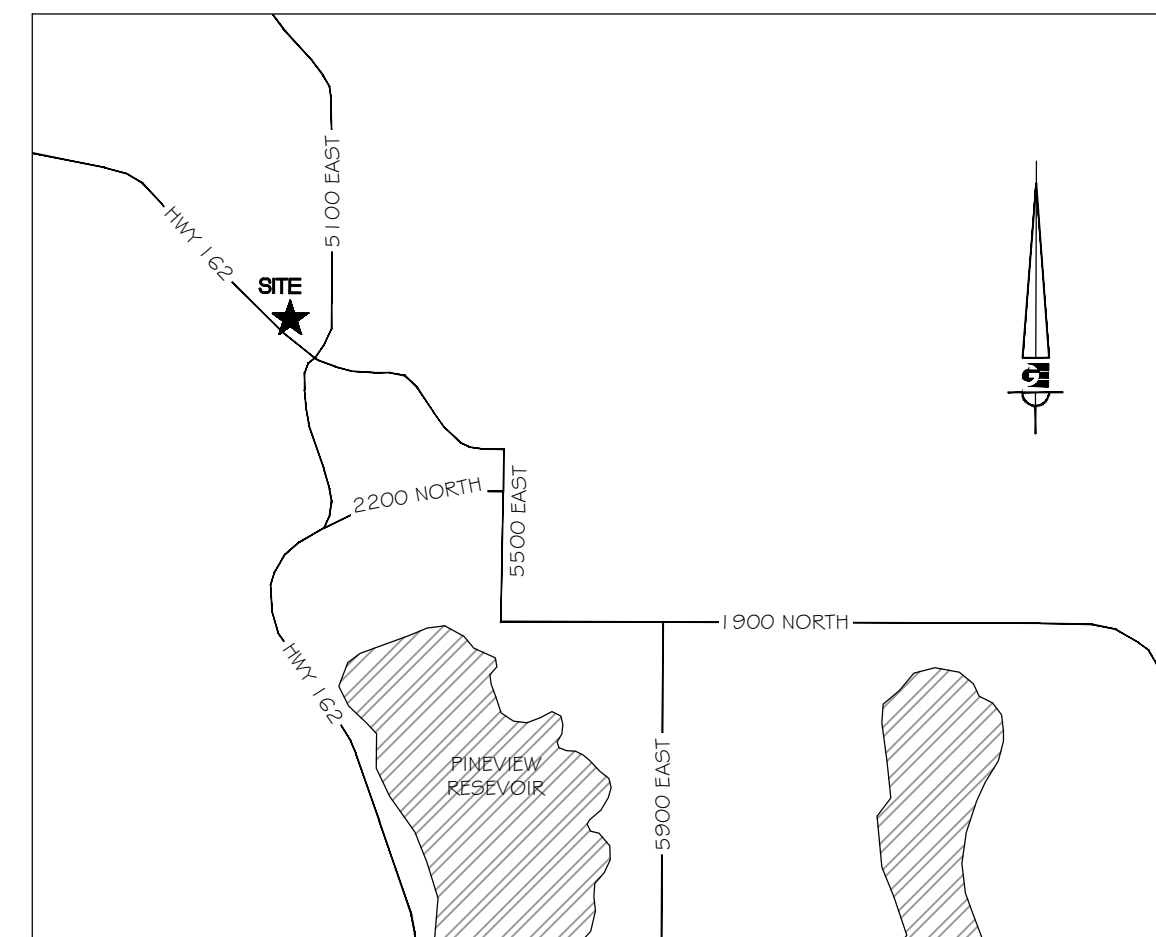
Orifice Calculation

- H = 2 Maximum water height to center of orifice (ft)
- Q = 0.12 Flowrate out of orifice (cfs)
- Cc = 0.62 Coefficient of Contraction
- Cv = 0.98 Coefficient of Velocity
- Area = 0.018 Orifice Area (ft²)
- Tt = 3.14
- g = 32.17 Gravitational Constant
- d = 2 Orifice Diameter (in)

GRADING & DRAINAGE PLAN

EDEN CENTER

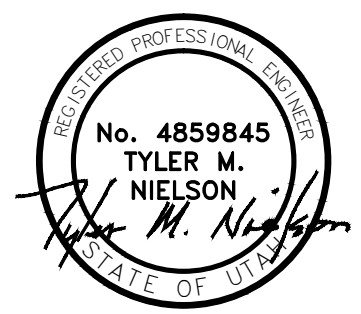
PART OF THE NORTHWEST QUARTER OF SECTION 34 T7N, R1E, SLB & M, U.S. SURVEY
EDEN CITY, WEBER COUNTY, UTAH
JUNE 2012



VICINITY MAP

SCALE: 1" = 20'
DATE: AUGUST 2012
DESIGN: TMN/RC/JSC
DRAWN: RC
CHECKED: TMN

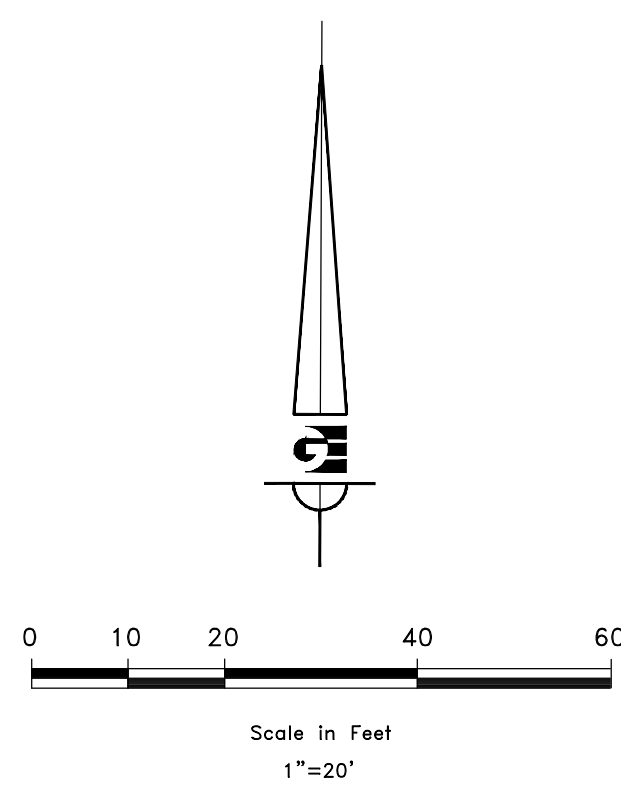
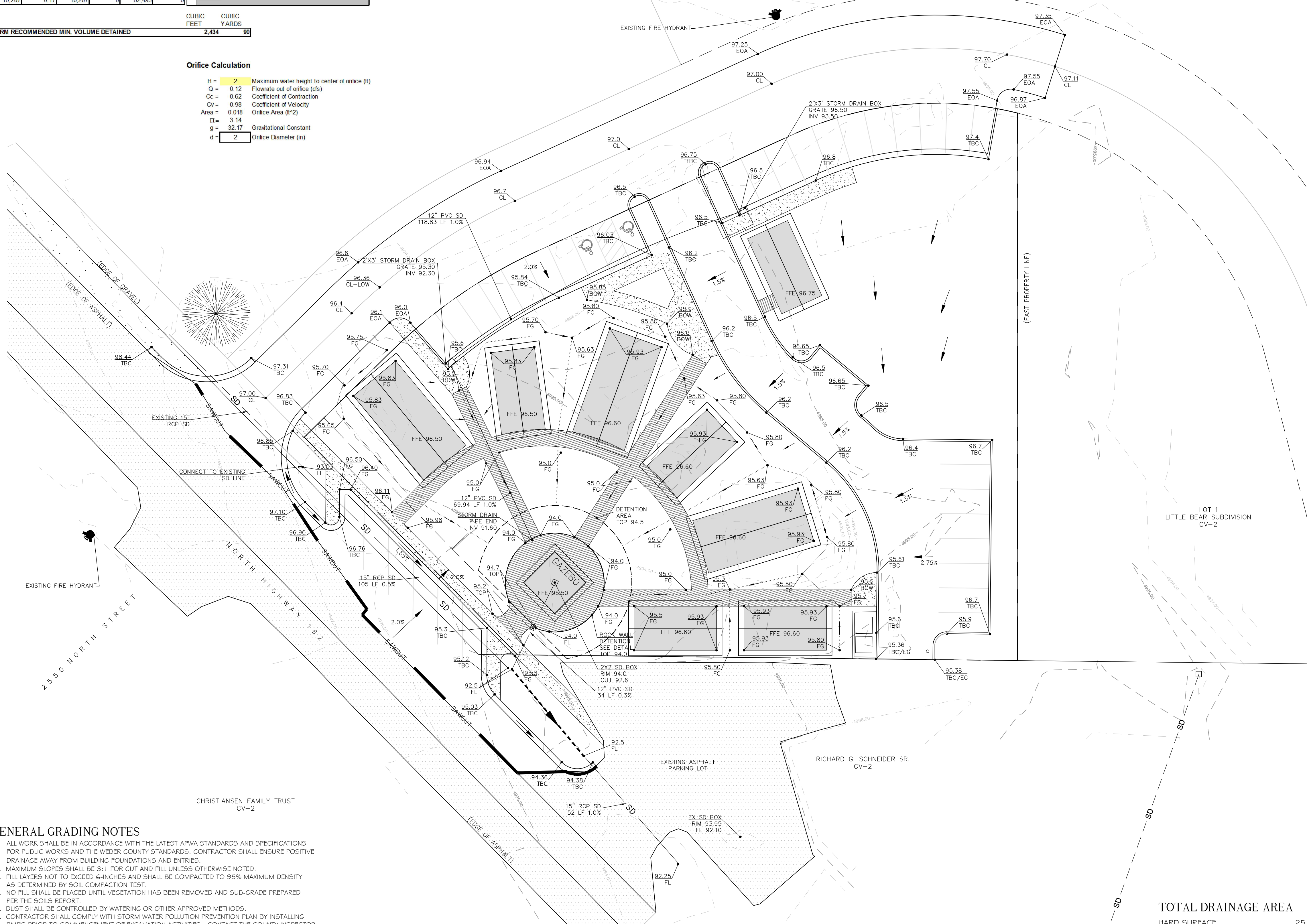
REVISIONS	DESCRIPTION



WOP WOM LLC
EDEN CENTER
GRADING PLAN
EDEN CITY, WEBER COUNTY, UTAH

Gardner Engineering
PLANNING & DESIGN
CIVIL ENGINEERING
LAND SURVEYING
ALTERNATIVE ENERGY

5875 South Adams Ave, Parkway, Suite 200 • Ogden, UT 84405
Phone (801) 476-0202 • Fax (801) 476-0066



LEGEND

- EASEMENT LINE
- PROPERTY LINE
- PROPOSED STORM DRAIN
- EXISTING STORM DRAIN
- DRAINAGE DIRECTION
- DRAINAGE SWALE
- STORAGE SWALE
- TOP BACK OF CURB
- EXISTING GROUND
- FINISH GROUND
- BACK OF WALK
- EDGE OF ASPHALT
- FLOW LINE
- CENTERLINE

GENERAL GRADING NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST APWA STANDARDS AND SPECIFICATIONS FOR PUBLIC WORKS AND THE WEBER COUNTY STANDARDS. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATIONS AND ENTRIES.
- MAXIMUM SLOPES SHALL BE 3:1 FOR CUT AND FILL UNLESS OTHERWISE NOTED.
- FILL LAYERS NOT TO EXCEED 6-INCHES AND SHALL BE COMPACTED TO 95% MAXIMUM DENSITY AS DETERMINED BY SOIL COMPACTION TEST.
- NO FILL SHALL BE PLACED UNTIL VEGETATION HAS BEEN REMOVED AND SUB-GRADE PREPARED PER THE SOILS REPORT.
- DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS.
- CONTRACTOR SHALL COMPLY WITH STORM WATER POLLUTION PREVENTION PLAN BY INSTALLING BMP'S PRIOR TO COMMENCEMENT OF EXCAVATION ACTIVITIES. CONTACT THE COUNTY INSPECTOR FOR INSPECTION.
- ALL RECOMMENDATIONS OF THE GEOTECHNICAL REPORT AND ALL SUBSEQUENT REPORTS, ADDENDUM ETC. SHALL BE CONSIDERED A PART OF THIS GRADING PLAN AND SHALL BE COMPLIED WITH.
- THE CONTRACTOR SHALL CONTACT BLUE STAKES FOR LOCATION MARKING PRIOR TO COMMENCING EXCAVATION ACTIVITIES.
- WEBER COUNTY MAY REQUIRE A PRE-CONSTRUCTION MEETING BEFORE A PERMIT IS ISSUED.
- STREETS ADJACENT TO THE PROJECT SHALL BE CLEAN AT ALL TIMES.
- CONTRACTOR IS RESPONSIBLE FOR ARRANGING FOR ALL REQUIRED INSPECTIONS.
- PRIOR TO TAKING WATER FROM A FIRE HYDRANT, THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH WATER UTILITY TO OBTAIN A WATER METER.
- ELEVATIONS SHOWN ON BUILDINGS ARE FINISHED FLOOR LOWEST LEVEL.
- SAWCUT 12" OFF OF EXISTING ASPHALT PRIOR TO NEW INSTALLING NEW PAVEMENT.

NOTE: ALL CONSTRUCTION TO CONFORM TO WEBER COUNTY STANDARDS AND SPECIFICATIONS.

TOTAL DRAINAGE AREA

HARD SURFACE	25,122 SF
BUILDING	6,968 SF
LANDSCAPE	20,831 SF

RELEASE RATE	0.10 CFS/ACRE
INFILTRATION RATE	1.51 CFS/ACRE
REQUIRED DETENTION	2,434 CF
CAPACITY	3,551 CF

NOTICE:
EXISTING UTILITIES ARE SHOWN ON PLANS FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES. THE ENGINEER BEARS NO RESPONSIBILITY FOR THE UTILITIES NOT SHOWN OR SHOWN INCORRECTLY.

Call BLUE STAKES BEFORE YOU Dig
1-800-662-4111
UTAH PROFESSIONAL ENGINEERING BOARD

DEVELOPER

WOP WOM, LLC.
ERIC SMITH
212 MERCHANT ST., #330
HONOLULU, HI 96813
PHONE: (808) 524-3551
FAX: (808) 524-8803