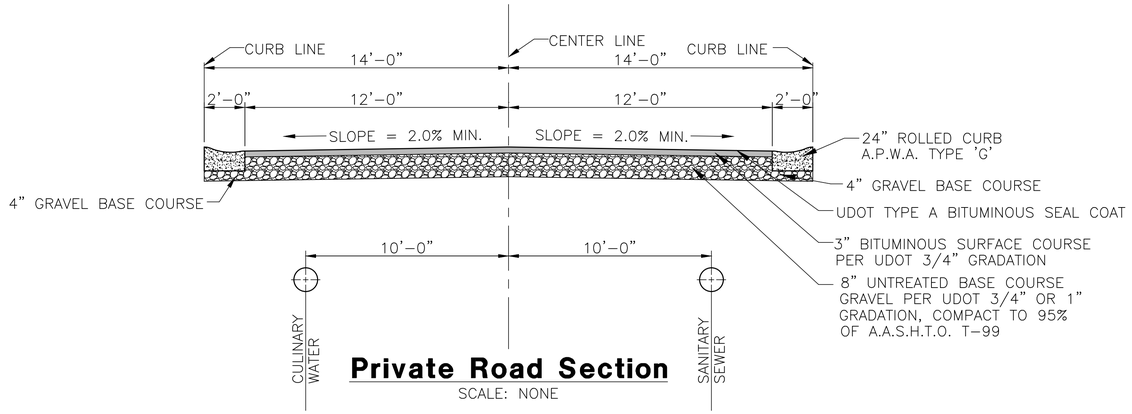
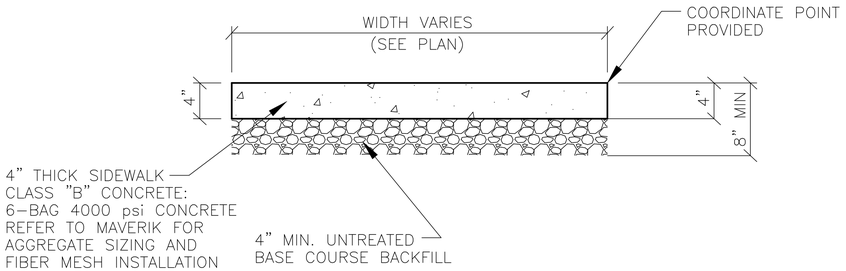


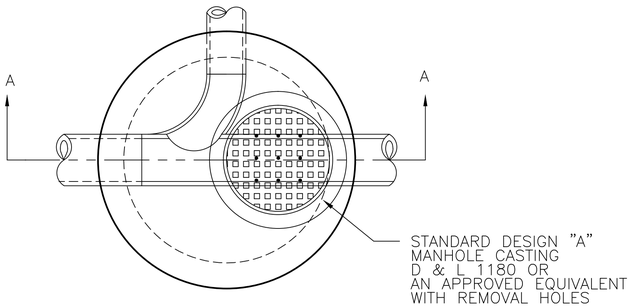
Private Road Section

SCALE: NONE

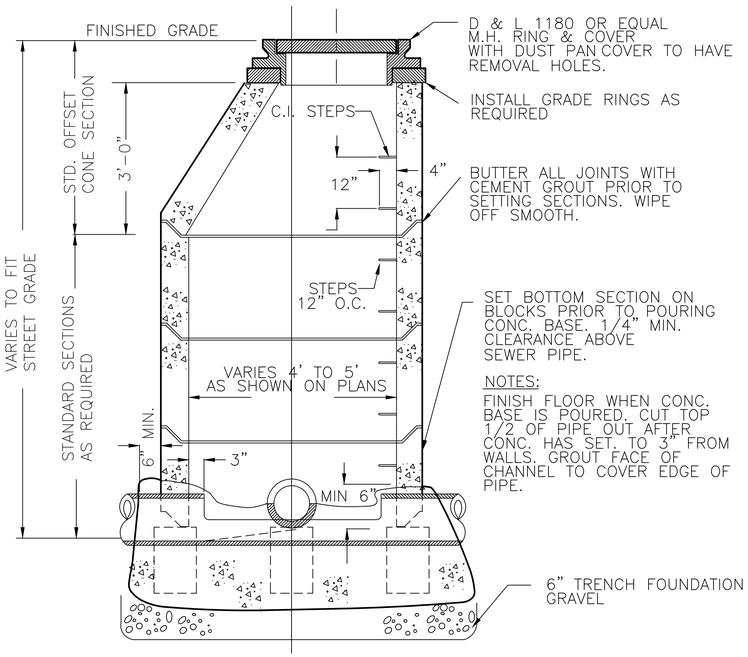


Walkway Detail

SCALE: NONE
(REFER TO SITE SPECIFIC GEOTECHNICAL REPORT)



Plan



Standard Sewer Manhole

SCALE: NONE

Storm Runoff Calculations

Edgewater Estates-Phase 1

7/31/2012 swr

The following runoff calculations are based on the Rainfall - Intensity - Duration Frequency Curve for the Huntsville, UT area taken from data compiled by NOAA Atlas14, using a 100 year storm.

Runoff storm water has been calculated for two different sets of conditions, one being the existing undeveloped land and the other with land fully improved. The difference between the two quantities will be detained in a holding pond. All water that runs off and over the property at present will be diverted into the holding pond and released at a reduced rate into the existing drainage system.

The calculations are as follows:

1. Runoff from the undeveloped existing land.
   - Runoff Coefficient C = 0.2
   - Rainfall Intensity i = 3.20 IN./HR.
   - Runoff Quantity Q = CiA
   - Acreage A = 3.80 ACRES

   Q(out) = C*i*A = 2.43 CFS

2. Runoff from developed land
   - Runoff Coefficients
     - Paved Area 39,774 C = 0.9
     - Landscaped Area 97,776 C = 0.2
     - Roof 28,173 C = 0.8
   - Weighted Runoff Coefficient C = 0.47
   - Rainfall Intensity i = varies with time
   - Runoff Quantity Q = CiA

3. Detention Basin
   - Volume in Q * t
   - Volume out 2.43 * t

The capacity of the detention basin is calculated as the maximum difference between the volume flowing in and the volume flowing out.

The outflow from the detention basin is limited to outflow if undeveloped.
Use 2.43 cfs for Q outflow

The required volume of the detention basin is 5,917 cubic feet

USE A 7.2 INCH DIAMETER ORIFICE AT OUTLET

Storm Runoff Calculations

Edgewater Estates-Full

7/31/2012 swr

The following runoff calculations are based on the Rainfall - Intensity - Duration Frequency Curve for the Huntsville, UT area taken from data compiled by NOAA Atlas14, using a 100 year storm.

Runoff storm water has been calculated for two different sets of conditions, one being the existing undeveloped land and the other with land fully improved. The difference between the two quantities will be detained in a holding pond. All water that runs off and over the property at present will be diverted into the holding pond and released at a reduced rate into the existing drainage system.

The calculations are as follows:

1. Runoff from the undeveloped existing land.
   - Runoff Coefficient C = 0.2
   - Rainfall Intensity i = 3.20 IN./HR.
   - Runoff Quantity Q = CiA
   - Acreage A = 13.02 ACRES

   Q(out) = C*i*A = 8.34 CFS

2. Runoff from developed land
   - Runoff Coefficients
     - Paved Area 135,807 C = 0.9
     - Landscaped Area 334,282 C = 0.2
     - Roof 97,276 C = 0.8
   - Weighted Runoff Coefficient C = 0.47
   - Rainfall Intensity i = varies with time
   - Runoff Quantity Q = CiA

3. Detention Basin
   - Volume in Q * t
   - Volume out 8.34 * t

The capacity of the detention basin is calculated as the maximum difference between the volume flowing in and the volume flowing out.

The outflow from the detention basin is limited to outflow if undeveloped.
Use 8.34 cfs for Q outflow

The required volume of the detention basin is 20,288 cubic feet

USE A 13.3 INCH DIAMETER ORIFICE AT OUTLET

Reeve & Associates, Inc.
920 CHAMBERS STREET, SUITE 14, OGDEN, UTAH 84403
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LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION
7-20-12 RH	Utility Changes
7-31-12 RH	Design Complete

Edgewater Beach Resort Phase-1
WEBER COUNTY, UTAH

Civil Details

REGISTERED PROFESSIONAL ENGINEER
375328
J. NATE REEVE
STATE OF UTAH

Project Info.
Engineer: J. NATE REEVE, P.E.
Drafter: R. HANSEN
Begin Date: JULY 09, 2012
Name: EDGEWATER ESTATES PHASE-1
Number: 5917-15

Sheet 3 of 3 Sheets