

# Storm Water Pollution Prevention Plan

## For:

Snowbasin  
3925 East Snowbasin Road  
Huntsville, UT 84317  
Canyon Rim & Maples Parking Lots Phase 1-A

## Operator(s):

Staker Parson Companies  
Ray Nelson  
2350 South 1900 West  
Ogden, UT 84401  
435-279-7432  
Ray.nelson@stakerparson.com

## SWPPP Contact(s):

Staker Parson Companies  
Bryan Jorgensen  
2350 South 1900 West  
Ogden, UT 84401  
801-648-5483  
Bryan.jorgensen@stakerparson.com

## SWPPP Preparation Date:

07/15/2021

*Estimated Project Dates:*

**Project Start Date:** 07/15/2021

**Project Completion Date:** 11/02/2021

# UTRC03162

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## SECTION 1: CONTACT INFORMATION/ RESPONSIBLE PARTIES

### **1.1 Owner(s) & Contractors**

**Owner(s):**

Snowbasin  
Eric Ahern  
3925 East Snowbasin Road  
Huntsville, UT 84317  
801-425-3110

**Project Manager(s):**

Staker Parson Companies  
Ray Nelson  
2350 South 1900 West  
Ogden, UT 84401  
435-279-7432  
[ray.nelson@stakerparson.com](mailto:ray.nelson@stakerparson.com)  
Project Manager/Estimator

**Site Supervisor(s):**

Staker Parson Companies  
Robert Wright  
2350 South 1900 West  
Ogden, UT 84401  
385-245-8653  
[robert.wright@stakerparson.com](mailto:robert.wright@stakerparson.com)  
Superintendent

**SWPPP Contact(s):**

Staker Parson Companies  
Bryan Jorgensen  
2350 South 1900 West  
Ogden, UT 84401  
801-648-5483  
[Bryan.jorgensen@stakerparson.com](mailto:Bryan.jorgensen@stakerparson.com)  
Environmental Specialist



**This SWPPP was Prepared by:**

Staker Parson Companies  
Bryan Jorgensen  
2350 South 1900 West  
Ogden, UT 84401  
801-648-5483  
Bryan.jorgensen@stakerparson.com

**Subcontractor(s):**

**Emergency 24-Hour Contact:**

Staker Parson Companies  
Bryan Jorgensen  
801-648-5483

## **1.2 Storm Water Team**

Oversee project environmental compliance. Weekly inspections of environmental controls.

Environmental Specialist

Bryan Jorgensen

801-648-5483

Bryan.jorgensen@stakerparson.com

Oversee all site activities. Coordinate with on-site foreman and sub-contractors for overall compliance.

Project Manager

Ray Nelson

435-279-7432

Ray.nelson@stakerparson.com

Oversee all site activities. Daily site inspections on all BMP's. Help repair and maintain bmp failures.

Project Foreman

Robert Wright

385-245-8653

Robert.wright@stakerparson.com

## SECTION 2: SITE EVALUATION, ASSESSMENT, & PLANNING

### 2.1 Project/Site Information

Project/Site Name: Canyon Rim & Maple Parking Lots – Phase 1-A

Project Street/Location: 3925 East Snowbasin Road

City: Huntsville State: UT ZIP Code: 84317

County or Similar Subdivision: Weber

Latitude/Longitude (Use **one** of three possible formats, and specify method)

Latitude:

Longitude:

1. 41.221320 ° N (decimal)

2. -111.855218 ° W (decimal)

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: \_\_\_\_\_)

☐ EPA Web site

☐ GPS

☒ Other (please specify): Google Earth

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." \_\_\_\_\_

Is this project considered a federal facility? ☐ Yes ☒ No

UPDES project or permit tracking number\*: UTRC03162

*\*(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate National Pollutant Discharge Elimination System (UPDES) construction general permit.)*

## 2.2 Nature of Construction Activity

Describe the general scope of the work for the project, major phases of construction, etc:

Tree removal and clear & grubbing will be done around the existing parking lot. Existing asphalt will be pulverized and used for subgrade. Roadbase will be hauled in for the widening of the parking lot. New detention pond to be installed on west side. Riprap Drainages to be installed. New drainage structures to be installed. Asphalt to be paved to finish parking lot. Broadcast seeding/ turf to final stabilize project.

What is the function of the construction activity?

☐ Residential    ☒ Commercial    ☐ Industrial    ☐ Road Construction    ☒ Linear Utility

☐ Other (please specify):

Estimated Project Start Date: 09/18/2017

Estimated Project Completion Date: 11/02/2017

## 2.3 Construction Site Estimates

The following are estimates of the construction site.

Total project area:	3.1 acres
Construction site area to be disturbed:	3.1 acres
Percentage impervious area before construction:	90%
Runoff coefficient before construction:	74
Percentage impervious area after construction:	94%
Runoff coefficient after construction	77

## 2.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s): Sandy lome, Clay lome, Granular borrow.

Slopes (describe current slopes and note any changes due to grading or fill activities): Existing slopes will change with the addition of the detention pond and widening of the parking lot.

Drainage Patterns (describe current drainage patterns and note any changes dues to grading or fill activities): Storm waters coming off of the new parking lot will now flow to the newly installed detention pond.

Vegetation: Naturally occurring grasses and vegetation

## **2.5 Emergency Related Projects**

Emergency-Related Project?

☐ Yes

☒ No

## **2.6 Phase/Sequence of Construction Activity**

### **Phase I**

- Clear and grubbing of existing land.
- Existing asphalt to be pulverized.
- Cut and fills to establish subgrade of widened parking lot
- Any extra material to be removed from the parking lot will be stockpiled on Snowbasin property.
- Rock socks or filter fabric will be installed around drain boxes for this phase. Silt fence to be installed on the north and west ends of the construction boundaries. Water trucks will be used for dust control.

### **Phase II**

- Structural fill to be hauled in for widening of parking lot
- Installation of new storm drain.
- Structural fill and road base to be fine graded.
- New asphalt to be installed on parking lot.
- Concrete, asphalt, broadcast seeding and landscaping to be installed to final stabilize the project.
- Rock socks, filter fabric, silt fence, and water truck will be used for sediment barrier and dust control.

## **2.7 Site Features and Sensitive Areas to be Protected**

Construction to stay within the construction boundary limits. Existing storm drain inlets to be preserved.

## 2.8 Maps





# CANYON RIM & MAPLES PARKING LOTS - PHASE 1A

## SNOWBASIN RESORT COMPANY

3925 SNOW BASIN RD, HUNTSVILLE, UT 84317

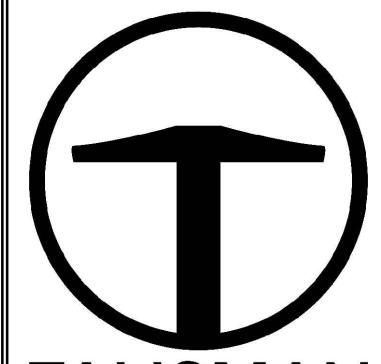


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SITE PLAN MAPLES PARKING LOT P6A	C201
GRADING PLAN CANYON RIM PARKING LOT P9A	C300
GRADING PLAN MAPLES PARKING LOT P6A	C301
UTILITY PLAN CANYON RIM PARKING LOT P9A	C400
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EROSION CONTROL CANYON RIM PARKING LOT P9	C600
EROSION CONTROL MAPLES PARKING LOT P6A	C601
DETAILS	C700

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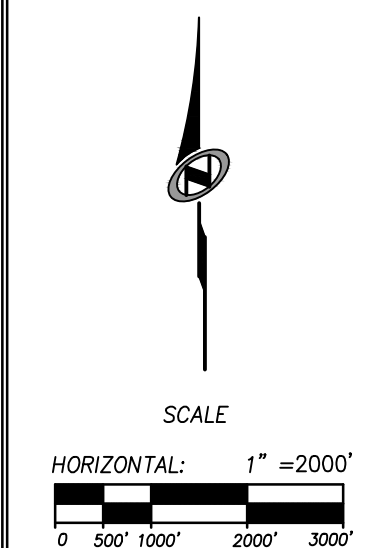


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SUITE 200  
SALT LAKE CITY, UT 84115  
801.743.1300

**SNOWBASIN RESORT**  
**CANYON RIM & MAPLES PARKING LOTS**  
**COVER SHEET**

DATE: 05.21.2021

TCC JOB NUMBER: 19-300.04

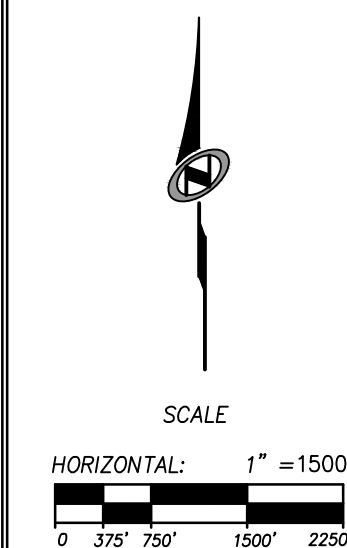


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C001

2 OF 12

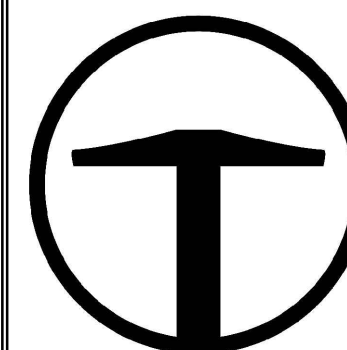
# SNOWBASIN RESORT

## CANYON RIM & MAPLES

### KEY MAP

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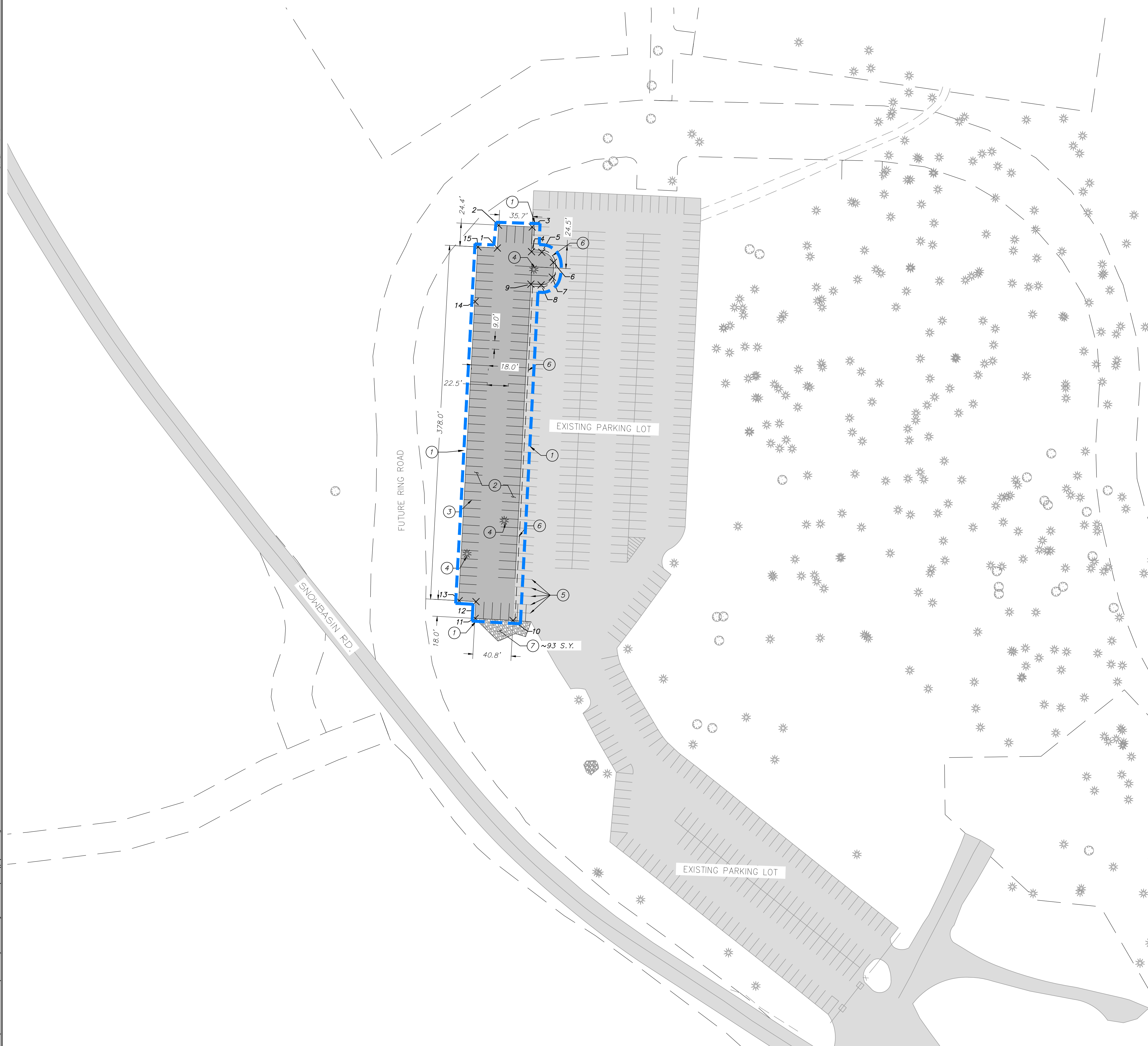
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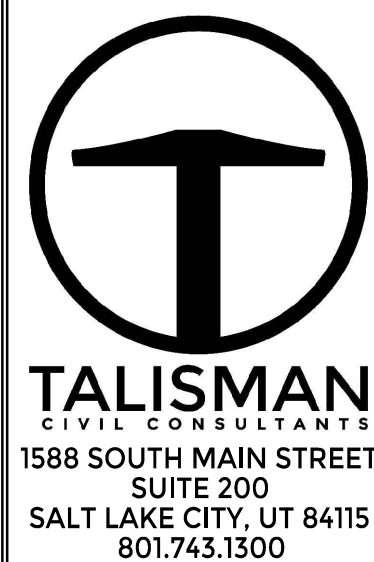
1. SEE GRADING DRAWINGS FOR ADDITIONAL DESIGN INFORMATION.
2. ALL SIGNS AND MARKINGS SHALL CONFORM TO THE LATEST EDITION ON THE M.U.T.C.D.
3. ALL SITE IMPROVEMENTS SHALL CONFORM TO THE PUBLIC WORKS STANDARDS WEBER COUNTY.

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS  
GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE  
CONSTRUCTION DRAWINGS:

- ① LIMIT OF DISTURBANCE.
- ② INSTALL ASPHALT PAVEMENT, PER DETAIL A1 SEE SHEET C700.
- ③ 4" WIDE WHITE PARKING STALL STRIPE PER LATEST VERSION OF M.U.T.C.D.
- ④ REMOVE EXISTING TREE(S), COORDINATE WITH OWNER.
- ⑤ REMOVE EXISTING PARKING STALL STRIPE.
- ⑥ SAWCUT TO PROVIDE SMOOTH CLEAN EDGE FOR PROPOSED IMPROVEMENTS.
- ⑦ INSTALL D<sub>50</sub>-8" RIPRAP.

Point Table		
Point #	Northing	Easting
1	3605291.95	1542365.62
2	3605316.27	1542366.91
3	3605314.37	1542402.86
4	3605288.02	1542402.04
5	3605287.44	1542413.08
6	3605276.62	1542425.37
7	3605260.73	1542424.28
8	3605252.54	1542412.34
9	3605253.30	1542401.37
10	3604894.51	1542382.34
11	3604896.65	1542341.89
12	3604914.62	1542342.85
13	3604915.58	1542324.87
14	3605234.76	1542341.80
15	3605293.05	1542344.89

<i>CANYON RIM PARKING LOT</i>	
<i>EXISTING PARKING SPOTS</i>	<i>410</i>
<i>PARKING SPOTS ADDED</i>	<i>91</i>
<i>PARKING SPOTS REMOVED</i>	<i>5</i>
<i>NEW TOTAL FOR ALL PARKING SPOTS</i>	<i>496</i>

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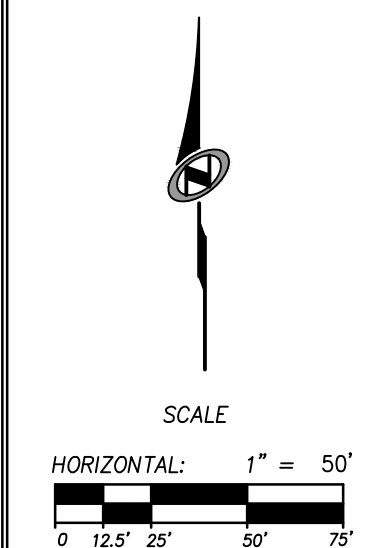
# SNOWBASIN RESORT

## CANYON RIM

### SITE PLAN

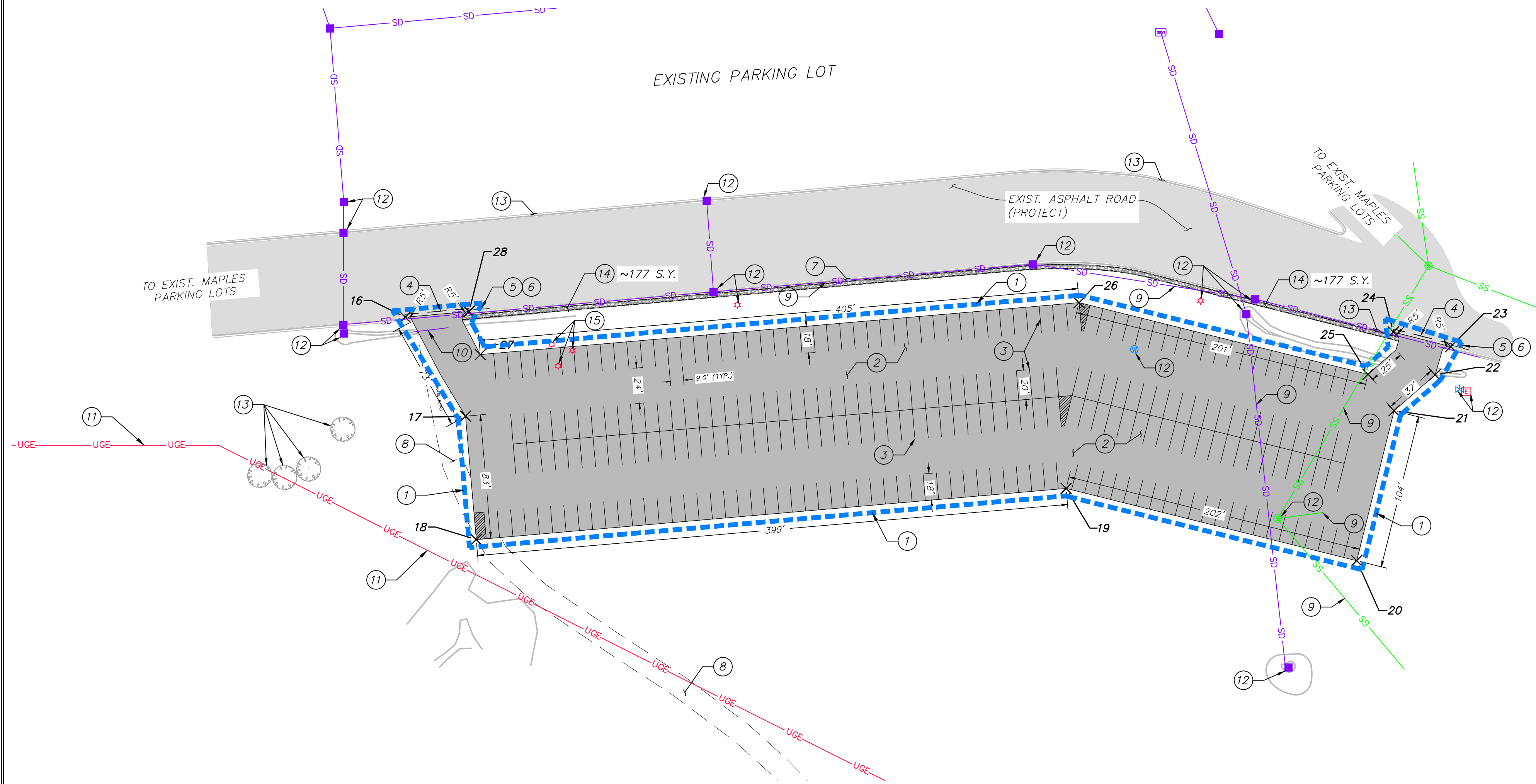
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**C200**  
4 OF 12





**SITE GENERAL NOTES:**

1. SEE GRADING DRAWINGS FOR ADDITIONAL DESIGN INFORMATION.
2. ALL SIGNS AND MARKINGS SHALL CONFORM TO THE LATEST EDITION ON THE M.U.T.C.D.
3. ALL SITE IMPROVEMENTS SHALL CONFORM TO THE PUBLIC WORKS STANDARDS OF WEBER COUNTY.

**SITE SCOPE OF WORK:**

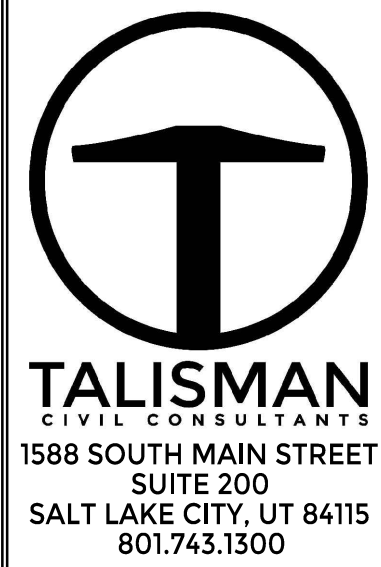
PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- 1 LIMIT OF DISTURBANCE.
- 2 INSTALL ASPHALT PAVEMENT, PER DETAIL A2 SEE SHEET C700.
- 3 4" WIDE WHITE PARKING STALL STRIPE PER LATEST VERSION OF M.U.T.C.D.
- 4 SAWCUT TO PROVIDE SMOOTH CLEAN EDGE FOR PROPOSED IMPROVEMENTS.
- 5 INSTALL M.U.T.C.D. R1-1 STOP SIGN, PER DETAIL B SHEET C700.
- 6 INSTALL M.U.T.C.D. R3-5R RIGHT TURN ONLY SIGN, PER DETAIL C SHEET C700.
- 7 PROTECT EXISTING 2.5' WATERWAY..
- 8 PROTECT EXISTING DIRT ROAD. CONTRACTOR TO COORDINATE WITH OWNER.
- 9 PROTECT EXISTING UTILITY.
- 10 REMOVE AND PROPERLY DISPOSE OF EXISTING UTILITY.
- 11 PROTECT EXISTING UNDERGROUND ELECTRICAL UTILITY. CONTRACTOR TO COORDINATE WITH OWNER TO LOCATE.
- 12 PROTECT EXISTING STRUCTURE.
- 13 PROTECT EXISTING TREE. CONTRACTOR TO COORDINATE WITH OWNER TO LOCATE.
- 14 INSTALL D<sub>90</sub>-8" RIPRAP.
- 15 PROTECT EXISTING LIGHT POLE. CONTRACTOR TO COORDINATE WITH OWNER FOR RELOCATION.

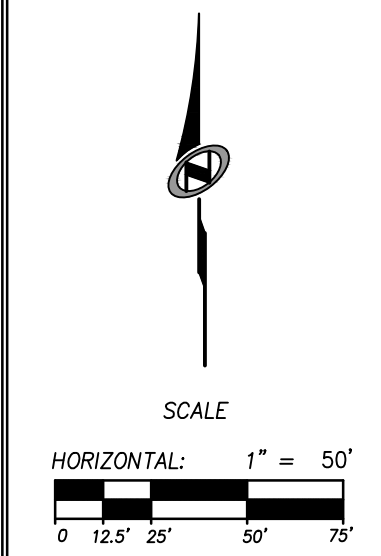
**HORIZONTAL CONTROL**

Point Table		
Point #	Northing	Easting
16	3602984.47	1540681.77
17	3602917.73	1540722.42
18	3602834.54	1540729.64
19	3602869.02	1541127.14
20	3602820.30	1541322.93
21	3602921.41	1541348.09
22	3602945.58	1541375.75
23	3602964.63	1541386.27
24	3602974.46	1541347.60
25	3602945.95	1541330.58
26	3602994.24	1541135.86
27	3602959.24	1540732.37
28	3602988.27	1540724.83

MAPLES PARKING LOT	
EXISTING PARKING SPOTS	660
PARKING SPOTS ADDED	255
PARKING SPOTS REMOVED	0
NEW TOTAL FOR ALL PARKING SPOTS	915



**SNOWBASIN RESORT  
MAPLES PARKING LOT  
SITE PLAN**



NOT FOR CONSTRUCTION





- GRADING GENERAL NOTES:**
1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING THEM WITH SUITABLE MATERIALS. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM TEST D-1557. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED REGISTERED GEOTECHNICAL ENGINEER, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS.
  2. CONTRACTOR SHALL BECOME FAMILIAR WITH EXISTING SOIL CONDITIONS.
  3. THE CONTRACTOR IS TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL AND DUST SUPPRESSION FOR CONSTRUCTION OF THIS PROJECT.
  4. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.
  5. LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS TO VERIFY CONNECTION POINTS WITH EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE TO REMAIN.
  6. ALL SURFACE IMPROVEMENTS DISTURBED BY CONSTRUCTION SHALL BE RESTORED OR REPLACED, INCLUDING TREES, DECORATIVE SHRUBS, SOD, FENCES, WALLS AND STRUCTURES, WHETHER OR NOT THEY ARE SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
  7. SEE DRAINAGE REPORT FOR STORM DRAIN CALCULATIONS.

**LEGEND:**

----- XXXX ----- EXISTING ELEVATION CONTOURS  
----- XXXX ----- PROPOSED ELEVATION CONTOURS  
----- XXXX ----- GRADE BREAK  
----- XXXX ----- DRAINAGE SWALE

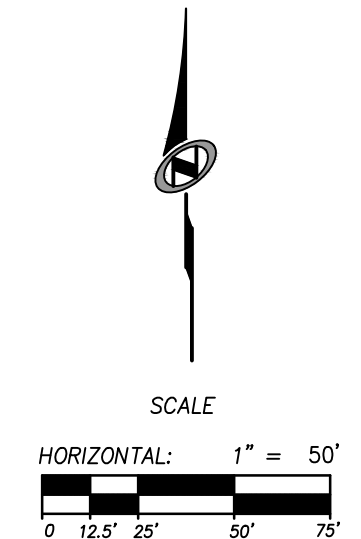
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**SNOWBASIN RESORT  
CANYON RIM PARKING LOT  
GRADING PLAN**

DATE: 05.21.2021

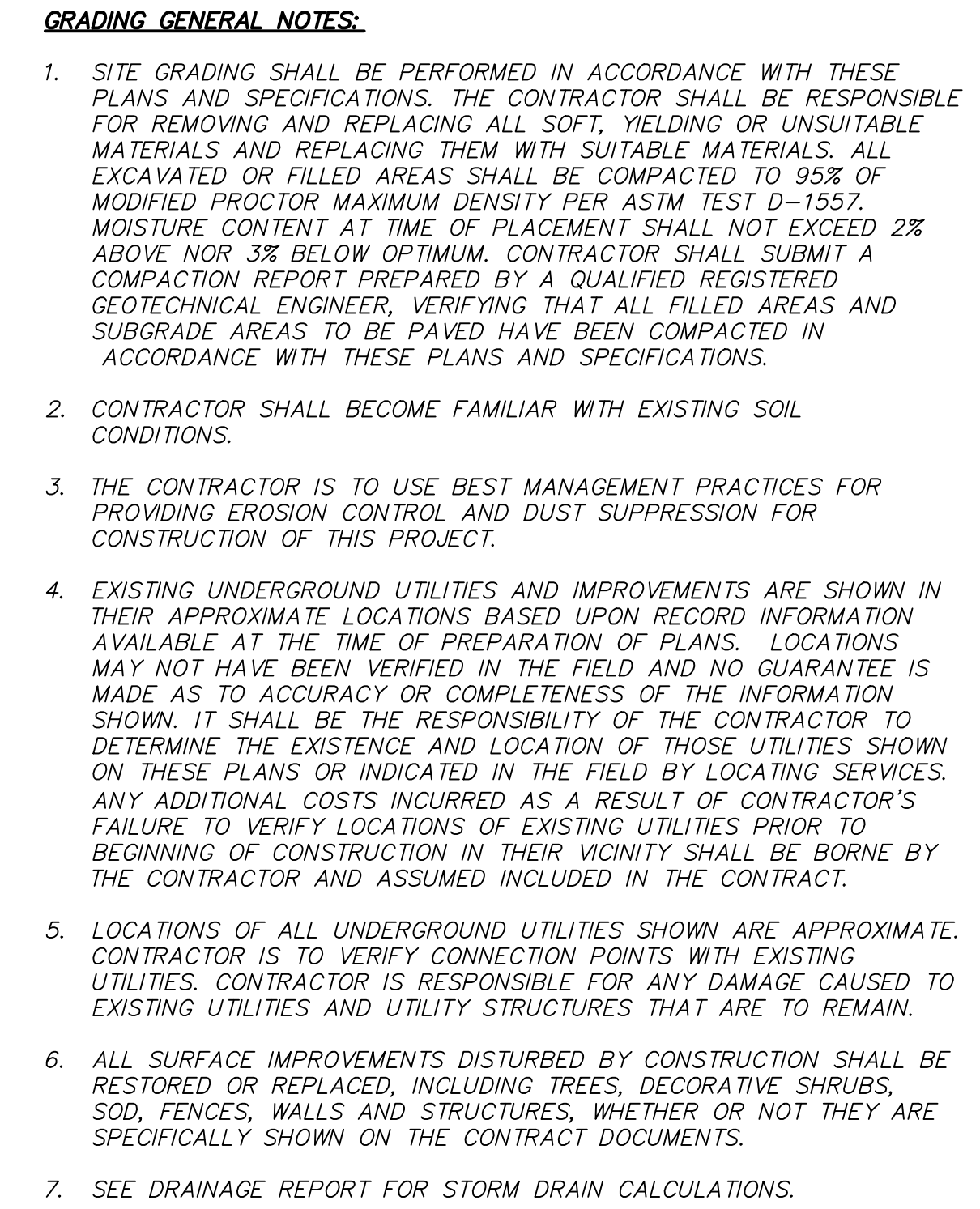
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XXXX ——— EXISTING ELEVATION CONTOURS  
 XXXX ——— PROPOSED ELEVATION CONTOURS  
 - - - - - GRADE BREAK  
 ← ← ← DRAINAGE SWALE



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# SNOWBASIN RESORT

## MAPLES PARKING LOT

### GRADING PLAN

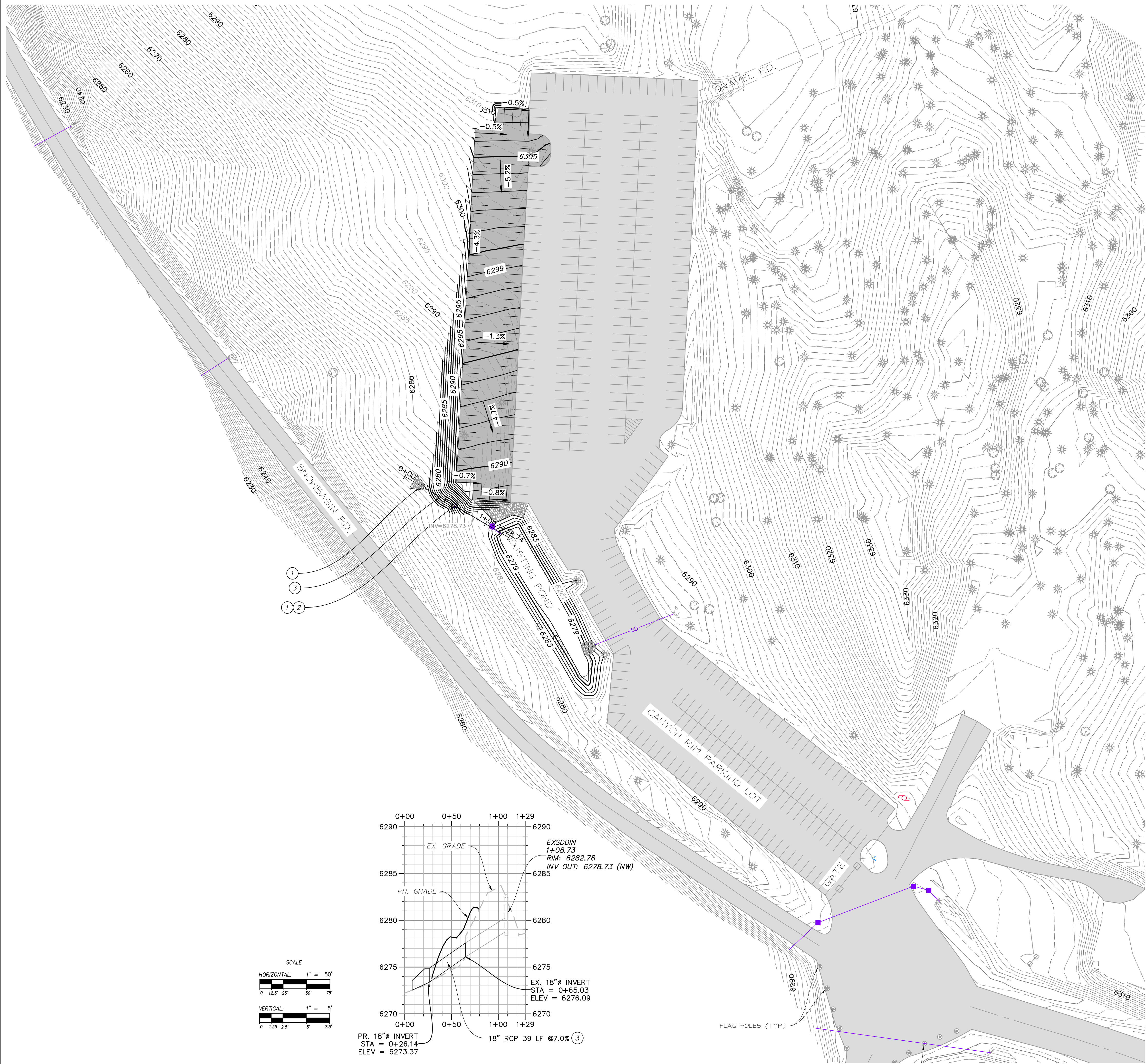


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UTILITY GENERAL NOTES:

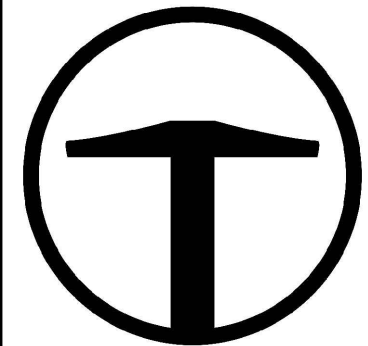
1. SEE GRADING DRAWINGS FOR ADDITIONAL DESIGN INFORMATION.
2. ALL SITE IMPROVEMENTS SHALL CONFORM TO THE PUBLIC WORKS STANDARDS OF WEBER COUNTY.
3. CONTRACTOR SHALL SALVAGE EXISTING STORM DRAIN INFRASTRUCTURE FOR RE-USE WITH THIS PROJECT.

SITE SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. REMOVE EXISTING FLARED END SECTION (F.E.S.) FOR REUSE, IF EXISTING F.E.S. NOT SALVAGEABLE-INSTALL 18" FLARED END SECTION PER APWA PLAN #323.1.
2. CONNECT PROPOSED 18" RCP STORM DRAIN TO EXISTING 18" STORM DRAIN.
3. INSTALL 18" RCP STORM DRAIN PER APWA NO. 381 & 382.

NOT FOR CONSTRUCTION

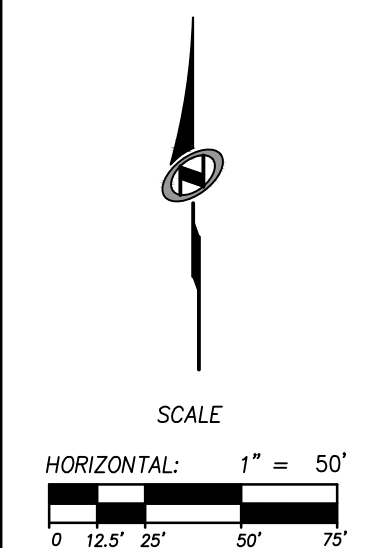


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**SNOWBASIN RESORT**  
**CANYON RIM PARKING LOT**  
**UTILITY PLAN**

DATE: 05.21.2021

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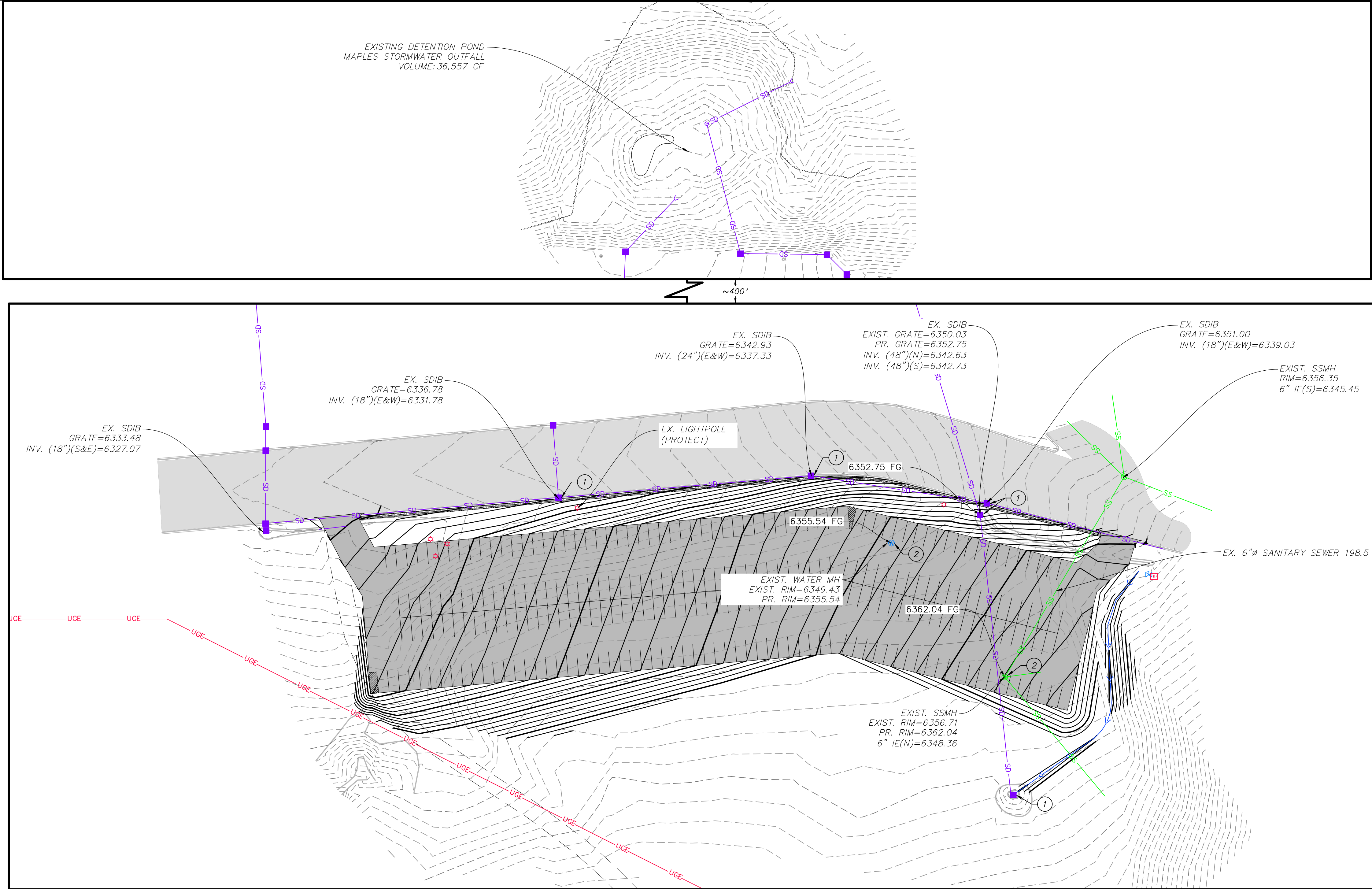
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UTILITY GENERAL NOTES:

1. SEE GRADING DRAWINGS FOR ADDITIONAL DESIGN INFORMATION.
2. ALL SITE IMPROVEMENTS SHALL CONFORM TO THE PUBLIC WORKS STANDARDS OF WEBER COUNTY.
3. CONTRACTOR SHALL SALVAGE EXISTING STORM DRAIN INFRASTRUCTURE FOR RE-USE WITH THIS PROJECT.

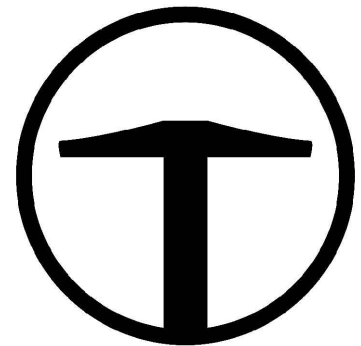
SITE SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

1. ADJUST GRATE TO FINISHED GRADE.
2. ADJUST RIM TO FINISHED GRADE.

SEE DRAINAGE REPORT FOR DRAINAGE CALCULATIONS & DESIGN.

NOT FOR CONSTRUCTION



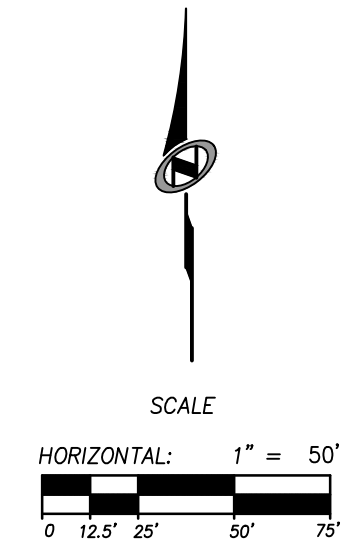
TALISMAN  
CIVIL CONSULTANTS  
1588 SOUTH MAIN STREET  
SUITE 200  
SALT LAKE CITY, UT 84115  
801.743.1300

REVISED	DATE	BY	NO.

SNOWBASIN RESORT  
MAPLES PARKING LOT  
UTILITY PLAN

DATE: 05.21.2021

TCC JOB NUMBER: 19-300.04

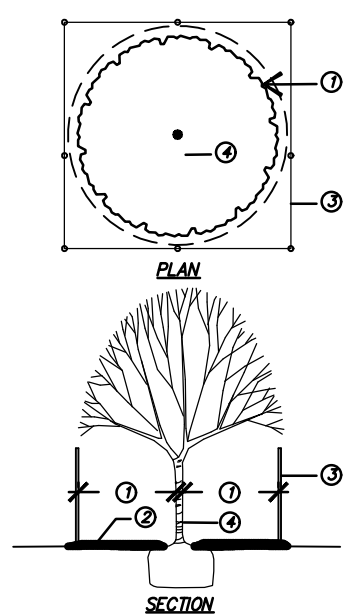


SHEET NUMBER

C401

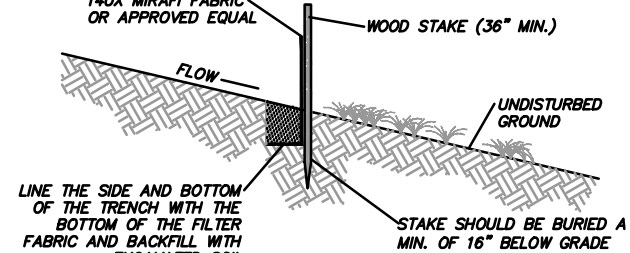
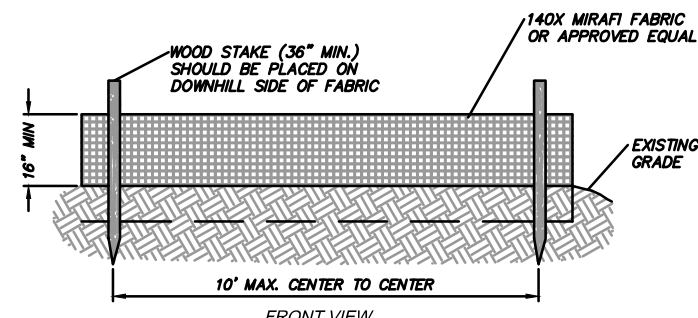
9 OF 12



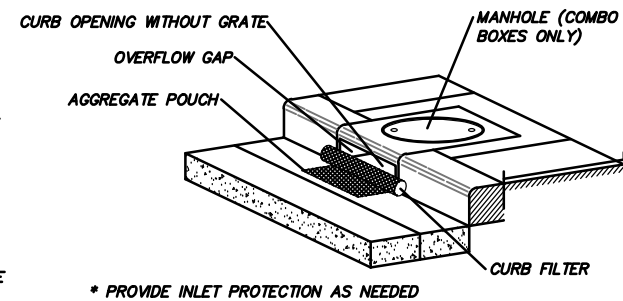


- PROTECTIVE ROOT ZONE (PRZ)** - TO CALCULATE CRITICAL ROOT RADIUS, MEASURE THE TREE'S DIAMETER (DBH) 4.5 FEET ABOVE THE GROUND. MEASURE IN INCHES. FOR EACH INCH, ALLOW FOR 1 TO 1.5 FEET OF CRITICAL ROOT RADIUS. IF A TREE'S DBH IS TEN INCHES ITS CRITICAL ROOT RADIUS IS 10 TO 15 FEET.
- ② CONTRACTOR TO INSTALL AND MAINTAIN 6" OF TEMPORARY BARK MULCH WITHIN THE PRZ FOR PROPOSED TREES TO BE PROTECTED. PRIOR TO FINAL INSTALLATION OF PROPOSED MULCHES AND SURFACING.
- ③ TREE PROTECTION BARRIER - SEE SPECIFICATIONS. REVIEW DESIGN WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- ④ TREE TRUNK
- NOTES:**
1. IF THERE IS TRENCHING WITHIN THE PRZ, TRENCHES SHALL ONLY BE DUG ON ONE SIDE OF THE TREE AND SHALL BE DONE ONLY WITH APPROVAL FROM THE OWNER'S REPRESENTATIVE. HAND EXCAVATION ONLY.
2. DO NOT STOCKPILE ANY MATERIALS OR LOCATE ANY HEAVY MACHINERY WITHIN THE PRZ. THERE SHALL BE NO TRAFFIC ALLOWED WITHIN THE PRZ.
3. ONLY MOVE BARRIER WITH THE PERMISSION OF THE OWNER'S REPRESENTATIVE.

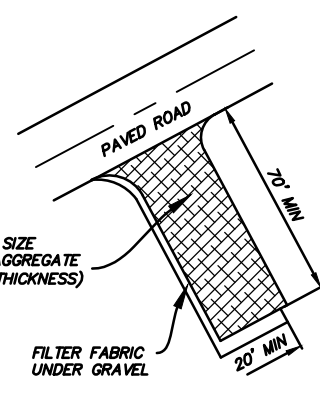
**TREE PROTECTION**  
NOT TO SCALE



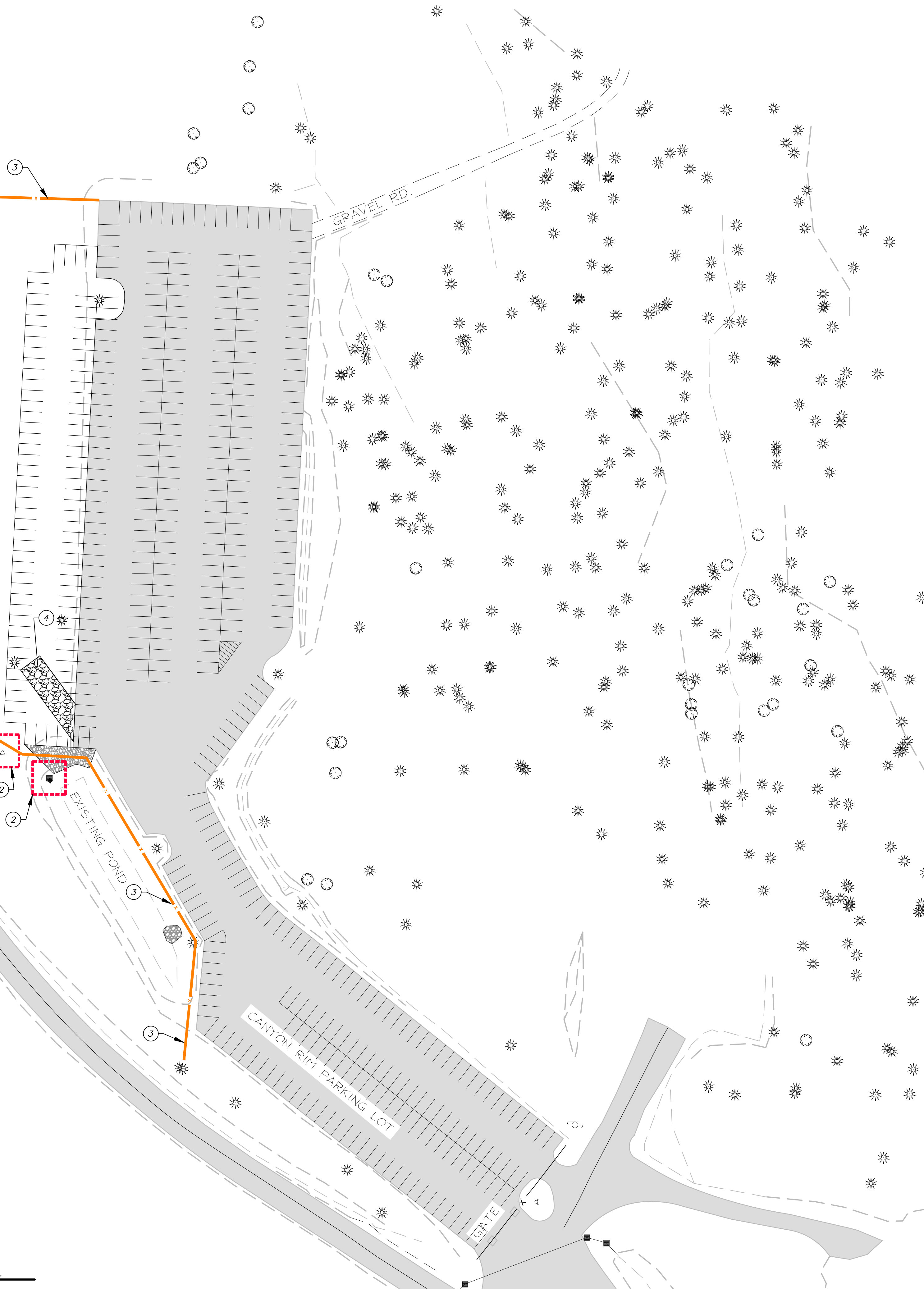
**SILT FENCE**  
NOT TO SCALE



**INLET PROTECTION**  
NOT TO SCALE



**STABILIZED ROADWAY ENTRANCE DETAIL**  
NOT TO SCALE



**GENERAL NOTES:**

1. THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. SPECIFIC DETAILS SHOWN ON 601 SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.
2. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE UDOT EROSION CONTROL STANDARDS AND SPECIFICATIONS AND ALL WORK SHALL BE SUBJECT TO INSPECTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION OF ALL EXISTING UTILITIES. IF CONFLICTS OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
4. THE CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL.
5. WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 30 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.
6. THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.
7. ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED.
8. ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.

**MAINTENANCE:**

1. THE OWNER'S RESPONSIBILITY SHALL INCLUDE MAKING ROUTINE CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE MADE BASED ON CONDITIONS THAT MAY ARISE IN THE FIELD OR ADDITIONAL CONTROL AS DEEMED NECESSARY.
2. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF BARRIER.
3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF FIBER ROLL SHALL BE ACCOMPLISHED PROMPTLY.
4. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED FIBER ROLL, END RUNS, AND UNDERCUTTING BENEATH FIBER ROLL.
5. FIBER ROLL BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

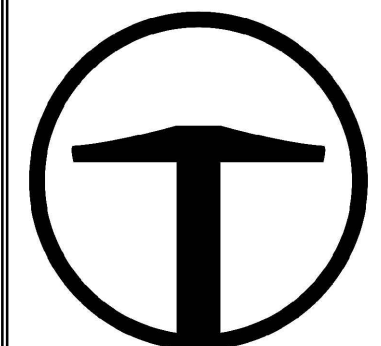
**SCOPE OF WORK:**

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

- ① INSTALL TREE PROTECTION PER DETAIL 1, THIS SHEET.
- ② INSTALL INLET PROTECTION AROUND EXISTING OR NEW STORM DRAIN CATCH BASINS OR INLETS, PER DETAIL 2, THIS SHEET.
- ③ INSTALL SILT FENCE PER DETAIL 3, THIS SHEET.
- ④ INSTALL STABILIZED CONSTRUCTION ENTRANCE/TRACK OUT AREA PER DETAIL 4, THIS SHEET.

**LEGEND:**

- SILT FENCE
- INLET PROTECTION
- TREE PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE

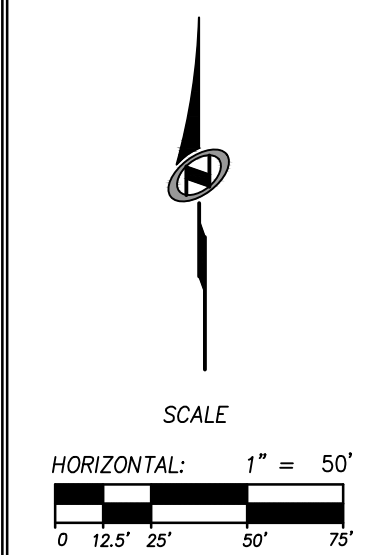


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SUITE 200  
SALT LAKE CITY, UT 84115  
801.743.1300

**SNOWBASIN RESORT**  
**CANYON RIM PARKING LOT**  
**EROSION CONTROL**

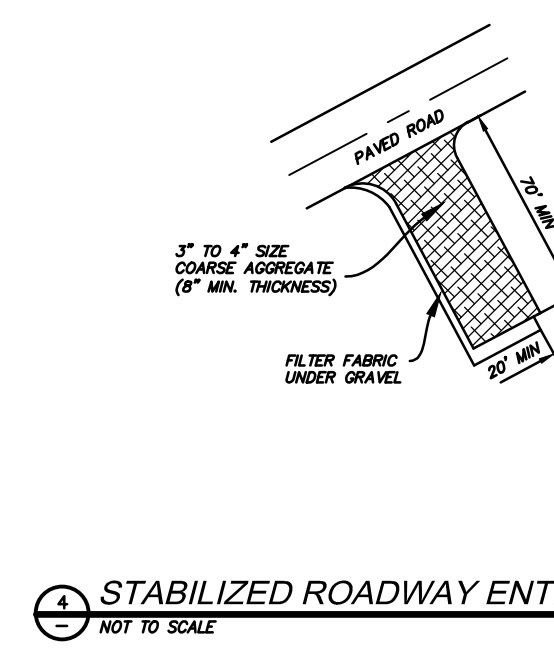
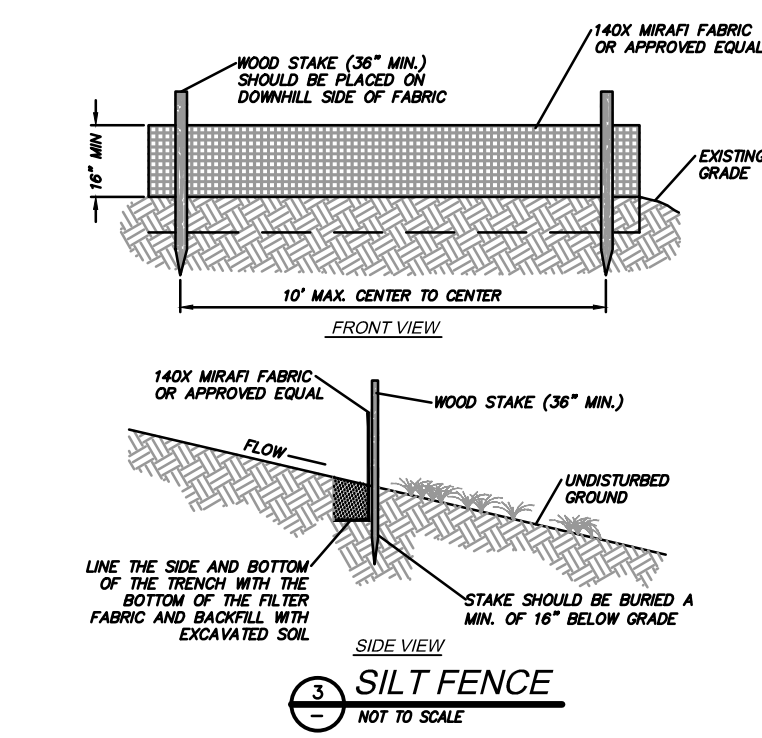
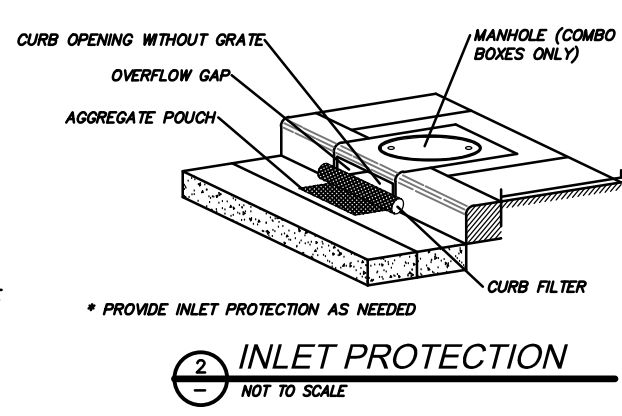
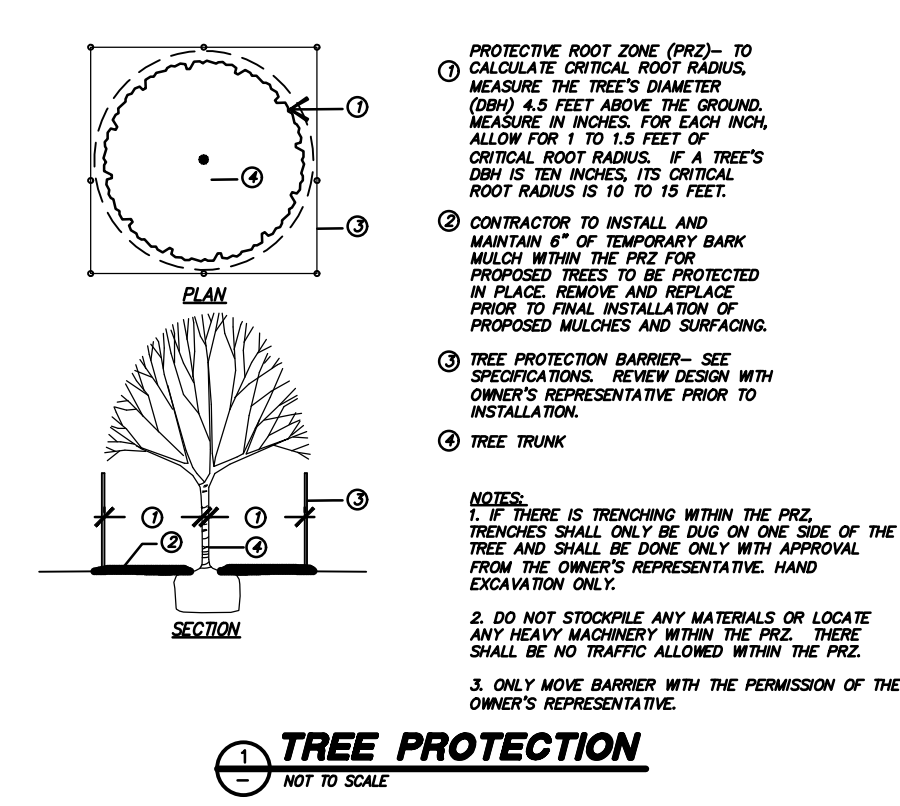
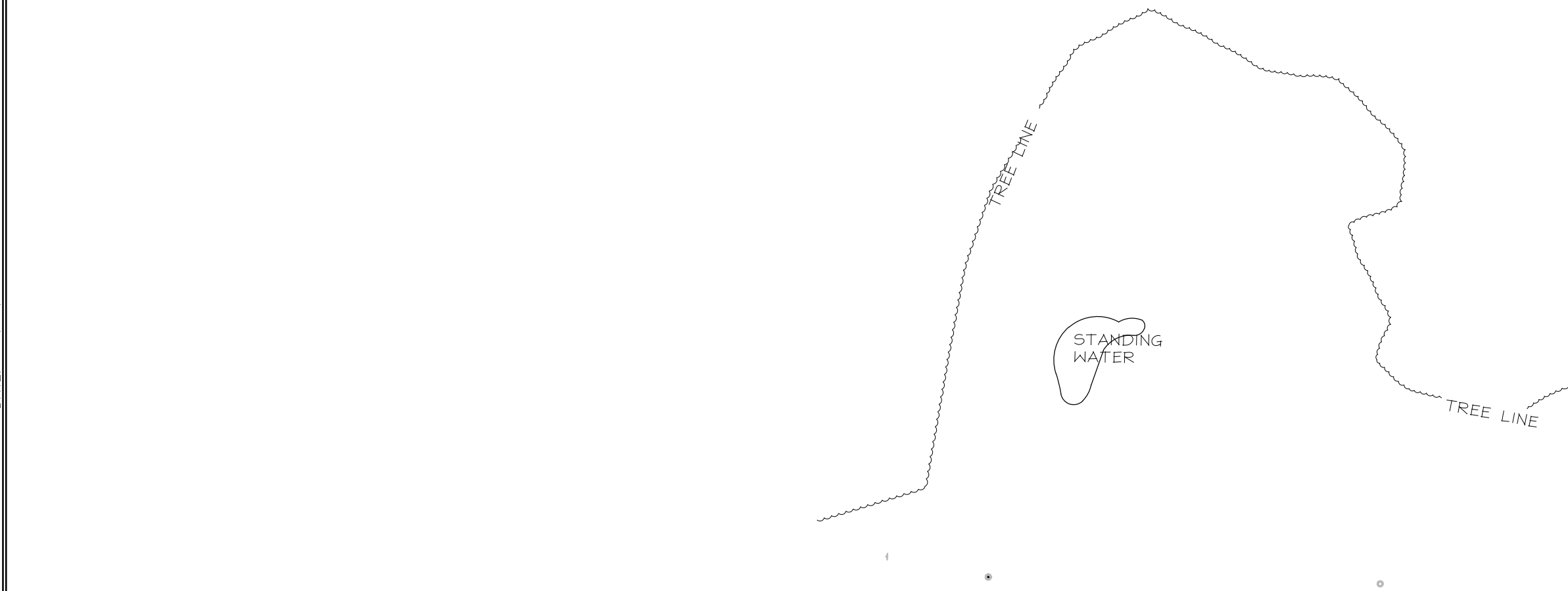
DATE: 05.21.2021

TCC JOB NUMBER: 19-300.04



SHEET NUMBER  
**C600**  
10 OF 12





**GENERAL NOTES:**

1. THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. SPECIFIC DETAILS SHOWN ON 601 SHALL BE USED IN COMBINATION WITH OTHER ACCEPTED LOCAL PRACTICES.
2. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE UDOT EROSION CONTROL STANDARDS AND SPECIFICATIONS AND ALL WORK SHALL BE SUBJECT TO INSPECTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION OF ALL EXISTING UTILITIES. IF CONFLICTS OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE IF ANY FIELD ADJUSTMENTS SHOULD BE MADE.
4. THE CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL.
5. WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 30 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.
6. THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.
7. ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED.
8. ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.

**MAINTENANCE:**

1. THE OWNER'S RESPONSIBILITY SHALL INCLUDE MAKING ROUTINE CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE MADE BASED ON CONDITIONS THAT MAY ARISE IN THE FIELD OR ADDITIONAL CONTROL AS DEEMED NECESSARY.
2. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF BARRIER.
3. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF FIBER ROLL SHALL BE ACCOMPLISHED PROMPTLY.
4. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED FIBER ROLL, END RUNS, AND UNDERCUTTING BENEATH FIBER ROLL.
5. FIBER ROLL BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

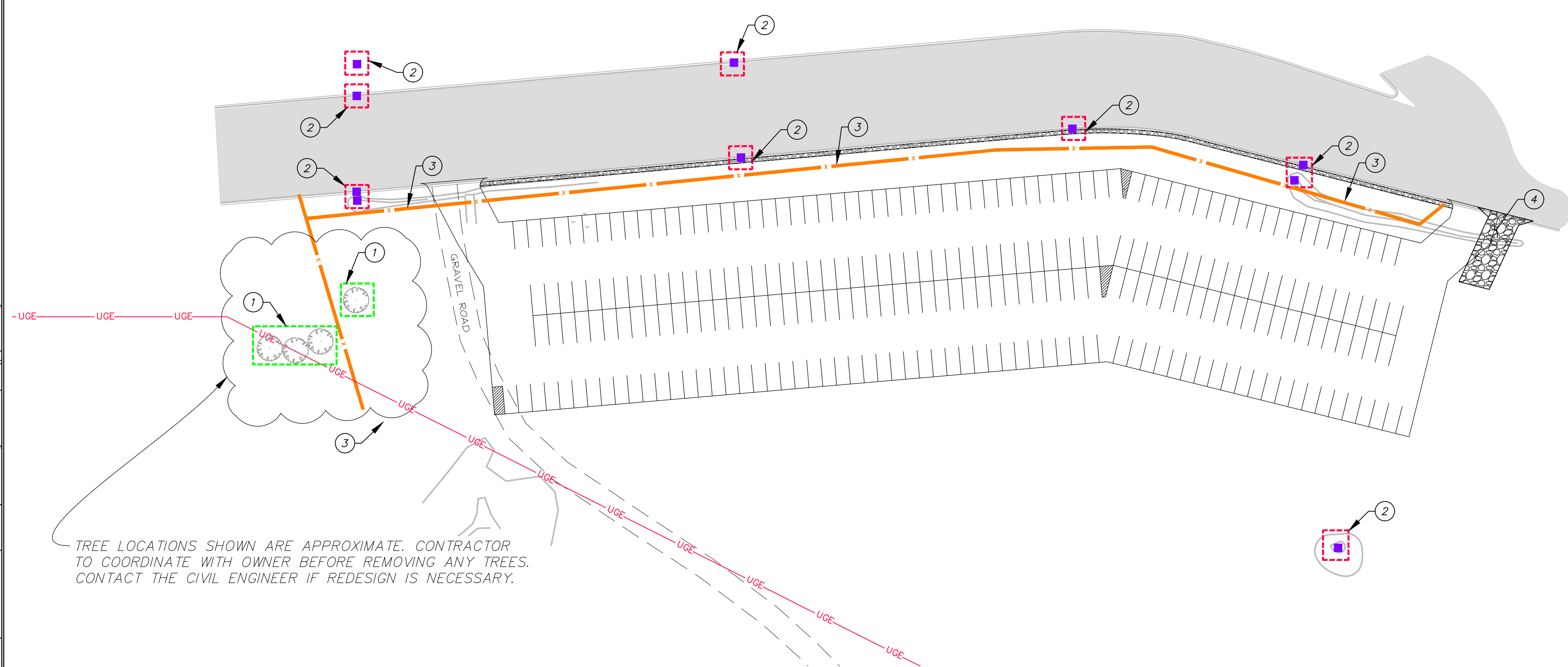
**SCOPE OF WORK:**

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

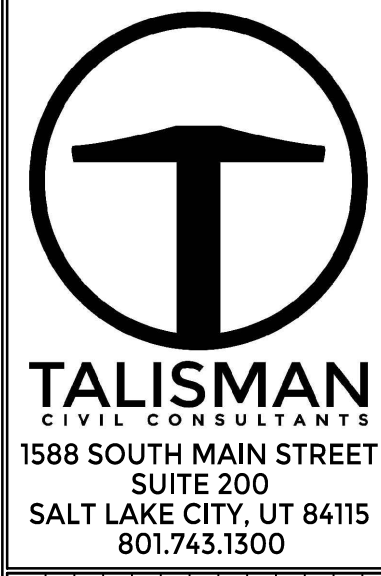
1. INSTALL TREE PROTECTION PER DETAIL 1, THIS SHEET.
2. INSTALL INLET PROTECTION AROUND EXISTING OR NEW STORM DRAIN CATCH BASINS OR INLETS, PER DETAIL 2, THIS SHEET.
3. INSTALL SILT FENCE PER DETAIL 3, THIS SHEET.
4. INSTALL STABILIZED CONSTRUCTION ENTRANCE/TRACK OUT AREA PER DETAIL 4, THIS SHEET.

**LEGEND:**

- SILT FENCE
- INLET PROTECTION
- TREE PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE



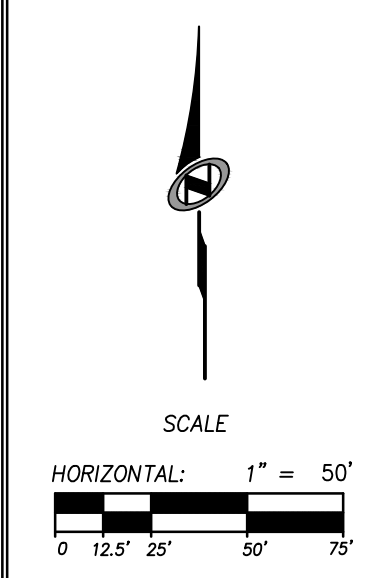
NOT FOR CONSTRUCTION



**SNOWBASIN RESORT**  
**MAPLES PARKING LOT**  
**EROSION CONTROL**

DATE: 05.21.2021

TCC JOB NUMBER: 19-300.04



SHEET NUMBER  
**C601**  
11 OF 12





## SECTION 3: WATER QUALITY

### **3.1 UIC Class 5 Injection Wells**

- ☐ French Drain
- ☐ Commercially Manufactured pre-cast or pre-built subsurface infiltration system
- ☐ Drywell(s), seepage pit(s), improved sinkhole(s)

Description of your Class V Injection Well:

DWQ contact information:

Name:

Date:

Additional information:

Local Requirements:

### **3.2 Discharge Information**

Does your project/site discharge storm water into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☒ No

List the MS4 that receives the discharge from the construction project:

Are there any surface waters that are located within 50 feet of your construction disturbances?

☐ Yes ☒ No

List the water body:

### 3.3 Receiving Waters

**Table 1 – Names of Receiving Waters** (see <http://wq.deq.utah.gov>)

<b>1. Detention pond connected to the parking lot</b>
<b>2.</b>
<b>3.</b>
<b>4.</b>
<b>5.</b>
<b>6.</b>

### 3.4 Impaired Waters

**Table 2. - Impaired Waters** (Answer the following for each surface water listed in Table 1 above) (see <http://wq.deq.utah.gov> look in the bottom half of the left hand column)

	Is this surface water listed as "impaired"?	If you answered yes, then answer the following:		
		What pollutant(s) are causing the impairment?	Has a TMDL been completed?	Pollutant(s) for which there is a TMDL
1.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3.	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
4.	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
5.	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	
6.	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No	

### 3.5 High Water Quality

**Table 3 – High Water Quality** (Answer the following for each surface water listed in Table 1 above) (see <http://wq.deq.utah.gov> look in the bottom half of the left hand column)

	Is this surface water designated as High Water Quality? (see Appendix C)	If you answered yes, specify which category the surface water is designated as?
1.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2
2.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2
3.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2
4.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2
5.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2
6.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Category 1 <input type="checkbox"/> Category 2

### 3.6 Dewatering Practices

---

***BMP Description: Water truck***

<b><i>Installation Schedule:</i></b>	
<b><i>Maintenance and Inspection:</i></b>	If needed. Water will be pumped into a water truck and used as dust suppression
<b><i>Responsible Staff:</i></b>	

---

***BMP Description:***

<b><i>Installation Schedule:</i></b>	
<b><i>Maintenance and Inspection:</i></b>	
<b><i>Responsible Staff:</i></b>	

### 3.7 Control Storm Water Flowing onto and through the Project

---

***BMP Description: Silt Fence***

<b><i>Installation Schedule:</i></b>	After Tree Removal
<b><i>Maintenance and Inspection:</i></b>	Daily and weekly visual inspections. Silt fence will be fixed as needed. Sediment will be cleaned at 50%
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

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***BMP Description: Earthen Berms***

<b><i>Installation Schedule:</i></b>	As needed.
<b><i>Maintenance and Inspection:</i></b>	Daily visual inspection. Weekly inspection
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

### 3.8 Protect Storm Drain Inlets

---

***BMP Description:*** Rock socks

<b><i>Installation Schedule:</i></b>	07/15/2021
<b><i>Maintenance and Inspection:</i></b>	Daily and weekly visual inspections. Rock socks will be replaced when worn out or broken.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

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***BMP Description:*** Filter Fabric

<b><i>Installation Schedule:</i></b>	07/15/2021
<b><i>Maintenance and Inspection:</i></b>	Daily visual inspection. Weekly inspection
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

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## SECTION 4: POLLUTION PREVENTION STANDARDS

### 4.1 Potential Sources of Pollution

<b>Pollutant-Generating Activity</b>	<b>Pollutants or Pollutant Constituents</b> (that could be discharged if exposed to stormwater)	<b>Location on Site</b> (or reference SWPPP site map where this is shown)
Diesel Fuel	Petroleum Product	In equipment/fuel truck
Engine Oil	Petroleum Product	In equipment/fuel truck
Transmission Fluid	Petroleum Product	In equipment/fuel truck
Hydraulic Fluid	Petroleum Product	In equipment/fuel truck
Ac 10 Oil	Petroleum Product	In equipment/fuel truck
Gasoline	Petroleum Product	In equipment
Emulsified Asphalt	Petroleum Product	Distributor truck

### 4.2 Non-Storm Water Discharges

<b>Authorized Non-Storm Water Discharges</b>	<b>Comments</b>
Water used for dust abatement	Water will be applied as to not discharge from the site
Equipment Washing	No detergents will be used. Water will remain on site
De-watering	If needed, water will be retained on site or used for dust control

---

#### ***BMP Description: Water truck***

<b><i>Installation Schedule:</i></b>	As needed
<b><i>Maintenance and Inspection:</i></b>	
<b><i>Responsible Staff:</i></b>	

### 4.3 Natural Buffers or Equivalent Sediment Controls

#### Buffer Compliance Alternatives

Are there any surface waters within 50 feet of your project's earth disturbances? ☐ YES ☒ NO

Check the compliance alternative that you have chosen:

- ☐ I will provide and maintain a 50-foot undisturbed natural buffer.  
*(Note (1): You must show the 50-foot boundary line of the natural buffer on your site map.)*  
*(Note (2): You must show on your site map how all discharges from your construction disturbances through the natural buffer area will first be treated by the site's erosion and sediment controls. Also, show on the site map any velocity dissipation devices used to prevent erosion within the natural buffer area.)*
- ☐ I will provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.
- ☐ It is infeasible to provide and maintain an undisturbed natural buffer of any size, therefore I will implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.
- *Roadway goes directly over canal crossing. Bmp's will be placed to catch any runoff from the roadway.*
- ☐ I qualify for one of the exceptions in Part 2.1.2.a.v. (If you have checked this box, provide information on the applicable buffer exception that applies, below.)

#### Buffer Exceptions

Which of the following exceptions to the buffer requirements applies to your site?

- ☐ There is no discharge of storm water to the surface water that is located 50 feet from my construction disturbances.  
*(Note: If this exception applies, no further documentation is required for Section 4.1 of the Template.)*
- ☐ No natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for this project.  
*(Note (1): If this exception applies, no further documentation is required for Section 2.2 of the Template.)*

*(Note (2): Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you must still comply with the one of the CGP Part 2.1.2.a compliance alternatives.)*

- ☐ For a “linear project” (defined in Appendix A), site constraints (e.g., limited right-of-way) make it infeasible for me to meet any of the CGP Part 2.1.2.a.v.3 compliance alternatives. Include documentation here of the following:

*(1) Why it is infeasible for you to meet one of the buffer compliance alternative, and (2) Buffer width retained and/or supplemental erosion and sediment controls to treat discharges to the surface water.*

- ☐ The project qualifies as “small residential lot” construction (defined in Part 2.1.2.a.v.3 and in Appendix D).

For Alternative 1 (see Appendix D, Part 2.3.a):

- INSERT WIDTH OF NATURAL BUFFER TO BE RETAINED
- INSERT APPLICABLE REQUIREMENTS BASED ON TABLE D-1
- INSERT DESCRIPTION OF HOW YOU WILL COMPLY WITH THESE REQUIREMENTS

For Alternative 2 (see Appendix D, Part 2.3.b):

- INSERT (1) THE ASSIGNED RISK LEVEL BASED ON APPLICABLE TABLE IN APP. D, PART 2.3.2.b, AND (2) THE PREDOMINANT SOIL TYPE AND AVERAGE SLOPE AT YOUR SITE
- INSERT APPLICABLE REQUIREMENTS BASED ON APP. D, TABLE D-2
- INSERT DESCRIPTION OF HOW YOU WILL COMPLY WITH THESE REQUIREMENTS

- ☐ Buffer disturbances are authorized under a CWA Section 404 permit.  
INSERT DESCRIPTION OF ANY EARTH DISTURBANCES THAT WILL OCCUR WITHIN THE BUFFER AREA

*(Note (1): If this exception applies, no further documentation is required for Section 2.2 of the Template.)*

*(Note (2): This exception only applies to the limits of disturbance authorized under the Section 404 permit, and does not apply to any upland portion of the construction project.)*

- ☐ Buffer disturbances will occur for the construction of a water-dependent structure or water access area (e.g., pier, boat ramp, and trail). INSERT DESCRIPTION OF ANY EARTH DISTURBANCES THAT WILL OCCUR WITHIN THE BUFFER AREA

*(Note (1): If this exception applies, no further documentation is required for Section 2.2 of the Template.)*

---

***BMP Description: Rock socks***

<b><i>Installation Schedule:</i></b>	07/15/2021
<b><i>Maintenance and Inspection:</i></b>	Daily and weekly visual inspections. Rock socks will be replaced when worn out or broken.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies.

## SECTION 5: EROSION AND SEDIMENT CONTROLS

### 5.1 Minimize Disturbed Area and Protect Natural Features and Soil

---

#### *BMP Description: Earthen Berms*

<i>Installation Schedule:</i>	<i>As needed</i>
<i>Maintenance and Inspection:</i>	<i>Daily and weekly visual inspections. Berms will be repaired if driven over.</i>
<i>Responsible Staff:</i>	<i>Staker Parson Companies</i>

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#### *BMP Description: Minimizing disturbances outside of the work boundary*

<i>Installation Schedule:</i>	<i>Duration of project</i>
<i>Maintenance and Inspection:</i>	<i>Repair or maintain areas disturbed outside of the work area.</i>
<i>Responsible Staff:</i>	<i>Staker Parson Companies</i>

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### 5.2 Establish Perimeter Controls and Sediment Barriers

---

#### *BMP Description: Training*

<i>Installation Schedule:</i>	Beginning of project
<i>Maintenance and Inspection:</i>	Employees shall receive direction on where the project boundaries are, and to keep all construction activities in those boundaries.
<i>Responsible Staff:</i>	Staker Parson Companies

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#### *BMP Description: Silt Fence*

<i>Installation Schedule:</i>	07/15/2021
<i>Maintenance and Inspection:</i>	Daily and weekly inspections. Silt fence will be repaired at 50% detainment or if fence is damaged.
<i>Responsible Staff:</i>	Staker Parson Companies

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### 5.3 Retain Sediment On-Site

---

***BMP Description: Earthen Berms***

<b><i>Installation Schedule:</i></b>	As Needed.
<b><i>Maintenance and Inspection:</i></b>	Daily and weekly visual inspection. Earthen berms will be repaired as needed
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

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***BMP Description: Silt Fence***

<b><i>Installation Schedule:</i></b>	07/15/2021
<b><i>Maintenance and Inspection:</i></b>	Daily and weekly inspections. Silt fence will be repaired at 50% detainment or if fence is damaged.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

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### 5.4 Establish Stabilized Construction Exits

---

***BMP Description: Track out Pads***

<b><i>Installation Schedule:</i></b>	As Needed.
<b><i>Maintenance and Inspection:</i></b>	Track out pads will be constructed with 3-6'' rock to help control sediment track out.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

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### 5.5 Protect Slopes

---

***BMP Description: Track rolling***

<b><i>Installation Schedule:</i></b>	As Slope Work Begins
<b><i>Maintenance and Inspection:</i></b>	After storm events to check for erosion
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

---

## 5.6 Stockpiled Soil or Other Erodible Material

### *BMP Description: Water*

<i>Installation Schedule:</i>	As needed
<i>Maintenance and Inspection:</i>	Water will be sprayed on stockpiled materials to form a crust.
<i>Responsible Staff:</i>	Staker Parson Companies

### *BMP Description: Stockpile height*

<i>Installation Schedule:</i>	As needed
<i>Maintenance and Inspection:</i>	Stockpiles will be kept to a minimum height to avoid wind blowing material, and velocity of storm water runoff.
<i>Responsible Staff:</i>	

## 5.7 Minimize Dust

### *BMP Description: Water truck*

<i>Installation Schedule:</i>	Duration of project
<i>Maintenance and Inspection:</i>	Water truck will apply water for dust suppression, and as to not cause runoff.
<i>Responsible Staff:</i>	Staker Parson Companies

### *BMP Description: Vacuum Broom/Street Sweeper*

<i>Installation Schedule:</i>	Duration of project
<i>Maintenance and Inspection:</i>	Daily and visual inspection on track out areas of asphalt. Track out will be cleaned as needed
<i>Responsible Staff:</i>	Staker Parson Companies

## 5.8 Topsoil

### *BMP Description: Stockpile heights*

<i>Installation Schedule:</i>	Duration of project
<i>Maintenance and Inspection:</i>	Topsoil stockpiles will be kept to a minimum height and within the project boundaries
<i>Responsible Staff:</i>	Staker Parson Companies

## 5.9 Soil Compaction

**BMP Description:** Vehicle traffic limited to project boundaries

<b>Installation Schedule:</b>	Duration of project
<b>Maintenance and Inspection:</b>	Vehicle traffic is to operate inside project boundaries as to not disturb surrounding vegetation
<b>Responsible Staff:</b>	Staker Parson Companies

## 5.10 High Altitude/Heavy Snows

Date Snow is Expected	Date of High Altitude/Heavy Snow Conditions BMPs to be Installed	Date of First Heavy Snow
Late October	Scheduled:	
	Actual:	

**BMP Description:**

<b>Installation Schedule:</b>	
<b>Maintenance and Inspection:</b>	Project should be finished by snowfall.
<b>Responsible Staff:</b>	

## 5.11 Chemical Treatment

N/A

### Soil Types

List all the soil types (including soil types expected to be found in fill material) that are expected to be exposed during construction and that will be discharged to locations where chemicals will be applied: N/A

### Treatment Chemicals

List all treatment chemicals that will be used at the site and explain why these chemicals are suited to the soil characteristics: N/A

Describe the dosage of all treatment chemicals you will use at the site or the methodology you will use to determine dosage: N/A

Provide information from any applicable Material Safety Data Sheets (MSDS):

Describe how each of the chemicals will be stored: N/A

Include references to applicable state or local requirements affecting the use of treatment chemicals, and copies of applicable manufacturer's specifications regarding the use of your specific treatment chemicals and/or chemical treatment systems: N/A

***Special Controls for Cationic Treatment Chemicals (if applicable)***

If you have been authorized by your applicable Regional Office to use cationic treatment chemicals, include the official EPA authorization letter or other communication, and identify the specific controls and implementation procedures you are required to implement to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards:

***Schematic Drawings of Storm Water Controls/Chemical Treatment Systems***

Provide schematic drawings of any chemically-enhanced storm water controls or chemical treatment systems to be used for application of treatment chemicals:

***Training***

Describe the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to the use of treatment chemicals:

## 5.12 Stabilize Soils

<b><i>BMP Description: Track rolling</i></b>	
<input type="checkbox"/> <b><i>Permanent</i></b>	<input checked="" type="checkbox"/> <b><i>Temporary</i></b>
<b><i>Installation Schedule:</i></b>	As needed
<b><i>Maintenance and Inspection:</i></b>	Impacted soils that are not covered by roadway will be track rolled or rolled to minimize erosion
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

## 5.13 Final Stabilization

<b><i>BMP Description: Asphalt, concrete, broadcast seeding and turf</i></b>	
<b><i>Installation Schedule:</i></b>	End of project
<b><i>Maintenance and Inspection:</i></b>	Majority of project will be covered with asphalt parking lot. New slopes and disturbed areas will be seeded.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

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***BMP Description: Broadcast seeding, mulching, and landscaping***

---

<b><i>Installation Schedule:</i></b>	October
<b><i>Maintenance and Inspection:</i></b>	Broadcast seeding and landscaping will final stabilize and disturbed soils that aren't covered by the parking lot.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

## SECTION 6: POLLUTION PREVENTION

### **6.1 *Spill Prevention and Response***

All storage, handling and use of fuel shall be posted with flammable and other appropriate signage. (No Smoking or Open Flame)

- 1- Fueling equipment will be equipped with adequate fire suppression equipment (rated at no less 20-B:C)
- 2- Equipment will be fueled at the end of the shift.
- 3- Fueling of equipment will be performed by trained and qualified service engineers.
- 4- Fuel will be reported to the nearest 1/10<sup>th</sup> of a gallon by equipment number on "Daily Service Reports."
- 5- Fuel to be treated for prevailing ambient air temperatures for pour point and cloud point.
- 6- If any spills occur they will be reported to the local Equipment Manager and Environmental Manager.

#### Daily Servicing

- 1- Equipment will have all fluid levels checked and topped of at the end of each shift.
- 2- Lubrication points will be serviced at recommended intervals.
- 3- Machines equipped with auto-lube systems will be topped of at appropriate intervals.
- 4- Lubrication points will be inspected during daily servicing for proper operation.

#### PM Intervals

- 1- Filters will be changed at manufactures recommendations.
- 2- Oils will be sampled and drained at recommended PM intervals.
- 3- Filters and oils to be contained and disposed of at approved sites. Any leaks or deficiencies will be reported to local Shop Foreman or Equipment Manager.

Any discharges in 24 hours equal to or in excess of the reportable quantities listed in 40 CFR 117, 40 CFR 110, and 40 CFR 302 will be reported to the National Response Center and the Division of Water Quality (DWQ) as soon as practical after knowledge of the spill is known to the permittees. The permittee shall submit within 14 calendar days of knowledge of the release a written description of: the release (including the type and estimate of the amount of material released), the date that such release occurred, the circumstances leading to the release, and measures taken and/or planned to be taken to the Division of Water Quality (DWQ), 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870. The Storm Water Pollution Prevention Plan must be modified within 14 calendar days of knowledge of the release to provide a description of the release, the circumstances leading to the release, and the date of the release. In addition, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

<b>Agency</b>	<b>Phone Number</b>
National Response Center	(800) 424-8802
Division of Water Quality ( DWQ) 24-Hr Reporting	(801)-231-1769 (801) 536-4123
Utah Department of Health Emergency Response	(801) 580-6681

<b>Material</b>	<b>Media Released To</b>	<b>Reportable Quantity</b>
Engine oil, fuel, hydraulic & brake fluid	Land	25 gallons
Paints, solvents, thinners	Land	100 lbs (13 gallons)
Engine oil, fuel, hydraulic & brake fluid	Water	Visible Sheen
Antifreeze, battery acid, gasoline, engine degreasers	Air, Land, Water	100 lbs (13 gallons)
Refrigerant	Air	1 lb

## 6.2 Construction and Domestic Waste

<b>BMP Description: Garbage Containers</b>	
<b>Installation Schedule:</b>	<i>As needed</i>
<b>Maintenance and Inspection:</b>	<i>Containers will be provided by a 3<sup>rd</sup> party company. Routine scheduled maintenance and pickup.</i>
<b>Responsible Staff:</b>	<i>Staker Parson Companies</i>

<b>BMP Description: Chemical toilets</b>	
<b>Installation Schedule:</b>	<i>Duration of project</i>
<b>Maintenance and Inspection:</b>	<i>Toilets will be provided by 3<sup>rd</sup> party company. Daily inspections. Routine clean up and services.</i>
<b>Responsible Staff:</b>	<i>Staker Parson Companies</i>

### **6.3 Washing of Applicators and Containers used for Concrete, Paint or Other Materials**

<b><i>BMP Description: Washout bins</i></b>	
<b><i>Installation Schedule:</i></b>	As needed
<b><i>Maintenance and Inspection:</i></b>	Concrete washout bins will be provided. Bins will be swapped out or emptied at 75% retention. Daily and weekly inspections.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

### **6.4 Establish Proper Building Material Staging Areas**

<b><i>BMP Description: Housekeeping</i></b>	
<b><i>Installation Schedule:</i></b>	Duration of project
<b><i>Maintenance and Inspection:</i></b>	Each contractor will be responsible for the cleanliness of their staging areas.
<b><i>Responsible Staff:</i></b>	All contractors on project.

### **6.5 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices**

<b><i>BMP Description: Certified fueling technicians</i></b>	
<b><i>Installation Schedule:</i></b>	Duration of project
<b><i>Maintenance and Inspection:</i></b>	Fueling technicians will be responsible to service all equipment professionally, and to report all spills as they happen.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies

<b><i>BMP Description: Environmental Specialist/Advisor</i></b>	
<b><i>Installation Schedule:</i></b>	Duration of project
<b><i>Maintenance and Inspection:</i></b>	Access to Company Environmental Specialist or Company Environmental Advisor for any environmental issues.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies.



## 6.6 Control Equipment/Vehicle Washing

<b><i>BMP Description: Non-use of soaps</i></b>	
<b><i>Installation Schedule:</i></b>	Duration of project
<b><i>Maintenance and Inspection:</i></b>	Dust may be sprayed off of equipment as to not cause runoff to storm drains or waters nearby. Any heavy cleaning must be done off site at a designated local facility.
<b><i>Responsible Staff:</i></b>	Staker Parson Companies.

## 6.7 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

N/A

## 6.8 Other Pollution Prevention Practices

<b><i>BMP Description:</i></b>	
<b><i>Installation Schedule:</i></b>	
<b><i>Maintenance and Inspection:</i></b>	
<b><i>Responsible Staff:</i></b>	

## SECTION 7: INSPECTIONS & CORRECTIVE ACTIONS

### **7.1 Inspections**

1. **Inspection Personnel:** Identify the person(s) who will be responsible for conducting inspections and describe their qualifications:

[Accena Group will perform weekly inspections.](#)

2. **Inspection Schedule: Weekly**

Minimum Inspection Requirements:

☒ At least once every 7 calendar days; or

☐ At least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

Inspection Reports are filed in Appendix E

### **7.2 Corrective Actions**

Correction Action Log is filed in Appendix F

### **7.3 Delegation of Authority**

SEE ATTACHED

See the signed delegation of authority forms in Appendix K.

Utah Division of Water Quality  
Executive Secretary  
P.O. Box 144870  
Salt Lake City, Utah  
84114-4870

Patrick Clark  
Staker Parson Companies  
2350 S 1900 W Suite 100  
Ogden, UT 84401

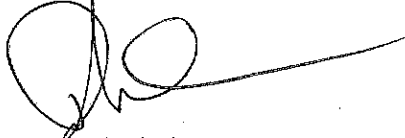
March 17, 2016

Re: Delegation of Authority List

Dear Executive Secretary:

Please see attached updated Delegation of Authority for Staker Parson Companies. If you have any questions or need more information please feel free to contact the undersigned.

Sincerely,

A handwritten signature in black ink, appearing to be 'Patrick Clark', with a long horizontal line extending to the right.

Patrick Clark  
Environmental Advisor

Randy Anderson  
Staker Parson Companies  
P.O. Box 3429  
Ogden, UT 84409

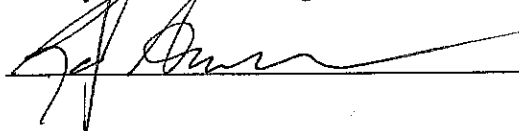
March 17, 2016

Re: Due Authorization of Storm Water Plan and Report Signatories

I, Randy Anderson, Corporate Officer of Staker Parson Companies authorize the individuals / positions (as attached in Exhibit A to this document) having responsibility for the operation of the regulated facilities to sign storm water plans, storm water plan changes, corrective action reports and all reports submitted to the US Environmental Protection Agency or State Department of Environmental Quality.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a systems designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Randy Anderson, Region President



---

Due Authorization of Storm Water Plan and Report Signatories Exhibit A

17-Mar-16

Location	Manager	Manager	Team Lead
South Weber	Brad Hansen	Heath Earley	John Bramwell, Layne Reynolds or Site Manager
Mountain Green	Brad Hansen	Heath Earley	Site Manager
Ogden RMC	Jon Groves	Site Manager	Bob Clark or Site Manager
Ogden HMA	Brad Hansen	Greg Gordon	Jeremy Summers or Site Manager
Tremonton	Jon Groves	Site Manager	Melany Roundy or Site Manager
Maguire	Brad Hansen	Brian Bennett	Site Manager
Willard	Brad Hansen	Brian Bennett	Site Manager
Cook	Brad Hansen	Brian Bennett	Site Manager
Rocky Point	Brad Hansen	Site Manager	Site Manager
Backus	Jake Goodliffe	Site Manager	Site Manager
Holdaway	Jake Goodliffe	Site Manager	Site Manager
Trenton	Jake Goodliffe	Site Manager	Sammy Locascio or Site Manager
Smithfield Pit	Jake Goodliffe	Greg Gordon	Scott Lowe or Site Manager
Smithfield	Jake Goodliffe	Brian Boyak	Owne Thornley or Site Manager
Brigham North	Jake Goodliffe	Brooks Hess	Matt Keys, Site Manager, Plant leads
Brigham RMC	Jon Groves	Site Manager	Steve Belmer or Site Manager
Brigham South	Jake Goodliffe	Brooks Hess	Site Manager
Beck Street	Travis Canfield	Carl Quick	Wade Pullham, Kim Brooks, Duane Evans, Matt Wilson, Dave Parault or Site Manager
Beck RMC	Jerry Grantham	Site Manager	Jared Smith or Site Manager
Kaysville	Jon Groves	Site Manager	Site Manager
California	Jerry Grantham	Site Manager	Greg Slaugh or Site Manager
Park City	Jason Bingelli	Site Manager	Chris Bonner or Site Manager
Heber City	Jason Bingelli	Roger Crandall	Jamie Serrano or Site Manager
Keigly	Travis Canfield	Justin Harmer	David Madson, Blaine Smith or Site Manager
Pt East	Travis Canfield	Site Manager	Jason Knighton, Sam Miles, or Site Manager
Pt South	Jerry Grantham	Site Manager	Jerry Grantham or Site Manager
Pt West	Travis Canfield	Site Manager	Travis Hager, Sam Miles or Site Manager
Pt West RMC	Jerry Grantham	Site Manager	Jerry Grantham or Site Manager
Spanish Fork	Jerry Grantham	Site Manager	Art Talbot or Site Manager
Gomex	Travis Canfield	Site Manager	Sam Miles or Site Manager
Bauer	Travis Canfield	Site Manager	Jerry Bolinder, Kelly Rockwell, Art Custer or Site Manager
Bauer RMC	Jerry Grantham	Site Manager	Kelly Rockwell or Site Manager
Mt Nebo	Travis Canfield	Site Manager	Robert Winter or Site Manager
Redmond	Jeff Collard	Brock Rasmussen	Rick LaCrue or Site Manager
Centerfield	Jeff Collard	Brock Rasmussen	Shane Straton or Site Manager

[illegible]

## **SECTION 8: TRAINING AND RECORDKEEPING**

### **8.1    *Training***

Training documentation and log are filed in Appendix J.

### **8.2    *Recordkeeping***

Maintain all records in Appendices A-M

### **8.3    *Log of Changes to the SWPPP***

Amendments to the SWPPP are filed in Appendix G


## SECTION 9: CERTIFICATION

### *Professional/SWPPP Author*

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Bryan Jorgensen

Title: Environmental Specialist

Signature: 

Date: 07/15/2021



STATE OF UTAH, DEPARTMENT OF ENVIRONMENTAL QUALITY, DIVISION OF WATER QUALITY  
195 North 1950 West, P.O Box 144870, Salt Lake City, UT 84114-4870 (801)536-4300



Notice of Intent (NOI) for Storm Water Discharges Associated with Construction  
Activity Under the Construction General Permit (CGP) UPDES General Permit  
No. UTRC00000

# NOI

## Permit Information

Master Permit Number: UTRC00000

UPDES ID: UTRC03162

State/Territory to which your project/site is discharging: UT

Is your project/site located on federally recognized Indian Country Lands? No

Which type of form would you like to submit? Notice of Intent (NOI)

Have stormwater discharges from your project/site been covered previously under an UPDES permit? No

Has a Stormwater Pollution Prevention Plan (SWPPP) been prepared in advance of filling this NOI, as required? Yes

## Owner/Operator Information

### Owner Information

Owner: Snowbasin Resort

Status of Owner: Private

Owner Mailing Address:

Address Line 1: 3925 East Snowbasin Road

Address Line 2:

City: Huntsville

ZIP/Postal Code: 84317

State: UT

### Owner Point of Contact Information

First Name Middle Initial Last Name: Eric . Ahern

Title: Project Manager

Phone: 801-425-3110

Ext.:

Email: eahern@snowbasin.com

### Operator Information

Is the Operator Information the same as the Owner Information? No

Operator: Staker Parson Companies

Operator Mailing Address:

Address Line 1: 2350 South 1900 West

Address Line 2:

City: OgdenZIP/Postal Code: 84401State: UT

## Operator Point of Contact Information

First Name Middle Initial Last Name: Bryan JorgensenTitle: Environmental SpecialistPhone: 801-648-5483

Ext.:

Email: bryan.jorgensen@stakerparson.com

## NOI Preparer Information

☐ This NOI is being prepared by someone other than the certifier.

Project/Site Information

Project/Site Name: Canyon Rim & Maple Parking Lots

Project Number:

Project/Site Address

Address Line 1: 3925 East Snowbasin Road

Address Line 2:

City: HuntsvilleZIP/Postal Code: 84317State: UTCounty or Similar Division: WeberHave you submitted a Fugitive Dust Control Plan to UT Division of Air Quality? Yes

## Latitude/Longitude for the Project/Site

Coordinate System: Decimal DegreesLatitude/Longitude: 41.22132°N, 111.855218°WEstimated Project Start Date: 07/15/2021Estimated Project End Date: 11/02/2021Total Area of Plot (in Acres): 3.1

Estimated Area to be Disturbed (in Acres):

3.1

## Proposed Best Management Practices

☒ Silt Fence/Straw Wattle/Perimeter Controls☒ Structural Controls (Berms, Ditches, etc.)

## Proposed Good Housekeeping Practices


☒ Sanitary/Portable Toilet☒ Non-Storm Water☒ Track Out Controls

☒ **Spill Control Measures**

## Site Construction Types

☒ **Road**

### Site Activity Information

**Municipal Separate Storm Sewer System (MS4) Operator Name:** Weber County (Unincorporated Areas)**Receiving Water Body:** Pineview Reservoir This is a guess**What is the estimated distance to the nearest water body?** 3.7**Unit:** Miles**Is the receiving water designated as impaired?** No**Does this project site have any other UPDES permits?** No

### Subdivision Information

**Is this project involved in the development of a subdivision?** No

### Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Signing an electronic document on behalf of another person is subject to criminal, civil, administrative, or other lawful action.

**Certified By:** Bryan K. Jorgensen**Certifier Title:** Environmental Specialist**Certifier Email:** bryan.jorgensen@stakerparson.com**Certified On:** 07/15/2021 10:01 PM ET

STATE OF UTAH  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER QUALITY  
Utah Pollutant Discharge Elimination System (UPDES)  
General Permit for Storm Water Discharges from Construction Activities  
UPDES Permit No. UTRC00000

This Permit is issued in compliance with the provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 2004, as amended (the "Act") and the federal Water Pollution Control Act (33 U.S.c. §§ 1251 et. seq., as amended by the Water Quality Act of 1987, P.L. 100-4), and the rules and Regulations made pursuant to those statutes. This permit authorizes "owners/operators" of construction activities (defined in Part 1.1.1 and Part 10) that meet the requirements of Part 1. of this Utah Pollutant Discharge Elimination System (UPDES) general permit, to discharge pollutants in accordance with the effluent limitations and conditions set forth herein. Permit coverage is required from the "commencement of earth-disturbing activities" (see Part 10) until "final stabilization" (see Part 2.2.14).

This permit becomes effective on July 1, 2019.

This permit and the authorization to discharge expire at midnight on June 30, 2024.

Signed this 18<sup>th</sup> day of June, 2019



Erica Brown Gaddis, PhD  
Director

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## **Appendix A – BUFFER REQUIREMENTS**

## 1. COVERAGE UNDER THIS PERMIT

To be covered under this permit you must meet the eligibility conditions and follow the requirements for applying for permit coverage in this Part.

### 1.1. ELIGIBILITY CONDITIONS

**1.1.1. All “operators”** of a construction site must sign on the notice of intent or NOI (see part 1.4 for NOI). Owners (or lessee’s) and general contractors are both considered “operators” for the purposes of this permit (see definition of “operator” in Part 10). Except for areas listed in part 1.2.2, this permit does not cover area that is not legally owned or leased by the operator defined in Part 10, that has operational control over construction plans and specifications.

#### 1.1.2. The Project:

- a. A project covered by this permit will **disturb 1 or more acres** of land, or will disturb less than 1 acre of land but be part of a common plan of development or sale<sup>1</sup> that will ultimately disturb 1 or more acres of land; or
- b. A project’s **discharges have been designated** by the Director as needing a permit under UAC 317-8-3.9(1)(a)5. or UAC 317-8-3.9(6)(e)2.
- c. **Single lot residential projects** that disturb **less than 1 acre** of land and are part of a common plan of development or sale may be covered under the Common Plan Permit (UTRH00000) in lieu of this permit. Information on this permit can be found on the DWQ construction storm water web site at <https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/storm-water-general-construction.htm>.
- d. Projects **less than five acres** with a **rainfall erosivity factor** (“R” in the revised universal soil loss equation, or RUSLE) value of **less than five** during the period of construction activity may waive the requirements of this permit by submitting an **Erosivity Waiver Certification**. Information on the Erosivity Waiver can be found on the DWQ construction storm water web site at <https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/storm-water-general-construction.htm>.

**1.1.3. A project is located** within the state of Utah, except for Indian Country (Storm water permits for Indian Country within the State must be acquired through EPA Region VIII, except for facilities on the Navajo Reservation or on the Goshute Reservation which must acquire storm water permits through EPA Region IX).

#### 1.1.4. Discharges from a project cannot;

- a. **already have coverage** under the UPDES CGP or any other UPDES permit for a storm water discharge associated with construction activity (UPDES wastewater and industrial permit coverage for separate discharges associated with the site is allowed) or,

---

<sup>1</sup> See definition for common plan of development or sale in Part 10



- b. **be in the process of receiving coverage** under a different UPDES permit for a storm water discharge from construction activities that has been denied, terminated, or revoked<sup>2</sup>,
- c. **be treated with “cationic treatment chemicals”** (see Definitions) unless and until you notify DWQ in advance of receiving permit coverage and have received written approval. To be able to use “cationic treatment chemicals” you must demonstrate to DWQ that appropriate controls and implementation procedures are used to ensure that your use of cationic treatment chemicals will not lead to discharges that cause an exceedance of water quality standards or harm fish populations.

**1.1.5. Eligibility for Emergency-Related Construction Activities.** If you are conducting earth-disturbing activities in response to a public emergency (e.g., natural disaster, widespread disruption in essential public services), and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish public services, your requirements are:

- a. If the emergency related activity is accomplished within 30-days you are waived from the normal requirements to submit an NOI and prepare a SWPPP, but you must submit a report to DWQ within 45-days and show:
  - (1) the nature of the emergency work performed,
  - (2) a description of earth disturbances that occurred,
  - (3) the proximity of the work to waters of the State, and what was done to protect water quality during the emergency work, and
  - (4) the occurrence of the public emergency must be substantiated.
- b. If the emergency activity continues longer than 30-days you are authorized to discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing earth-disturbing activities establishing that you are eligible under this permit. You are also required to provide emergency documentation in your SWPPP to substantiate the occurrence of the public emergency.

**1.1.6. Water Quality Standards – Eligibility for New Sources.** If you are a “new source” (as defined in Part 10), you are not eligible for coverage under this permit for discharges that have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made, adjustments must be made to storm water controls to bring the discharge into compliance with water quality standards immediately or permit coverage will be rescinded. DWQ expects that compliance with the storm water control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

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<sup>2</sup> Projects having been denied, terminated, or revoked must resolve the problem causing the ineligibility before the same or other coverage will be restored.

- 1.1.7. Discharging to Waters with High Water Quality – Eligibility for New Sources.** If you are a “new source” (as defined in Part 10), you are eligible to discharge to a Category 1 water if your discharge is temporary and limited and where best management practices will be employed to minimize pollution effects, to a Category 2 water only if your discharge will not lower the water quality of the applicable water body. In the absence of information demonstrating otherwise, DWQ expects that compliance with the storm water control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not lower the water quality of the applicable water.

Your project will be considered to discharge to a Category 1 or 2 water if the first surface water to which you discharge is identified by the state as a Category 1 or 2 water. For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the water body that receives the storm water discharge from the storm sewer system. Please refer to water quality information at <http://mapserv.utah.gov/surfacewaterquality/>

- 1.2. DISCHARGES AUTHORIZED UNDER THIS PERMIT.** The following is a list of discharges that are allowed under this permit provided that appropriate storm water controls are designed, installed, and maintained:

- 1.2.1.** Storm water discharges, including **storm water, snowmelt, and surface water runoff and drainage**, associated with construction activity under UAC R317-8-3.9(6)(d)10. or UAC R317-8-3.9(6)(e)1.;

- 1.2.2.** Storm water discharges from **construction support activities** (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:

- a. The support **activity is directly related to the construction site** required to have permit coverage for storm water discharges;
- b. The support activity **does not serve multiple unrelated construction projects**;
- c. The support activity **does not continue to operate beyond the completion of the construction activity** at the project it supports; and
- d. Storm water controls are implemented in accordance with Part 2 and, if applicable, Part 3, for discharges from the support activity areas.

- 1.2.3. The following non-storm water discharges** from your construction activity are allowed under this permit, provided that you comply with all applicable requirements for these discharges in Part 2:

- a. Discharges from emergency fire-fighting activities;
- b. Fire hydrant flushings;
- c. Properly managed landscape irrigation;
- d. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
- e. Water used to control dust;

- f. Potable water including uncontaminated water line flushings;
  - g. External building washdown, provided soaps, solvents, and detergents are not used, and external surfaces do not contain hazardous substances;
  - h. Pavement wash waters, provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents (including biodegradable soy bean oils and biodegradable detergents) are not used. You are prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or storm water conveyance unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control for the pollutants present. Per 2.2.5.d., hosing of accumulated sediments on pavement into any storm water conveyance is prohibited;
  - i. Uncontaminated air conditioning or compressor condensate;
  - j. Uncontaminated, non-turbid discharges of ground water (from natural sources) or spring water; and,
  - k. Foundation or footing drains where flows are not contaminated with process materials such as solvents, contaminated ground water, or sediment from construction activity.
- 1.2.4.** Comingling of the non-storm water discharges above with other permitted discharges is also authorized.
- 1.2.5. Discharging of construction dewatering** (groundwater that intersects with excavation) must be permitted under UTG070000 (Construction Dewatering and Hydrostatic Test Permit), and the Municipal Separate Storm Sewer System (MS4) (of jurisdiction) notified of the discharge. Permitting is not required under UTG070000 if the construction dewatering does not leave the site (it is percolated into the ground on site).

### **1.3. PROHIBITED DISCHARGES.**

- 1.3.1.** Wastewater from washing tools and vehicles after pouring, prepping, or finishing concrete.
- 1.3.2.** Wastewater from washing and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials;
- 1.3.3.** Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
- 1.3.4.** Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown; and
- 1.3.5.** Toxic or hazardous substances from a spill or other release.

To prevent the above-listed prohibited non-storm water discharges, operators must comply with the applicable pollution prevention requirements in Part 2.3.

- 1.4. NOTICE OF INTENT (NOI).** To be covered under this permit, you must develop a SWPPP (see part 7.1), submit a complete and accurate NOI, and remit the permit fee. The permit fee covers a year of permit coverage. If a project extends more than a year the permit must be renewed and the permit fee must be remitted again.

There is a 60-day grace period after the permit expiration date where projects may be completed or the permit renewed.

All NOI applications and project storm water compliance plans must also be submitted to regulated MS4s (see the list of municipalities on the DWQ municipal storm water web site <https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/storm-water-municipal.htm>). Not all municipalities are regulated MS4s (see definitions Part 10).

- 1.4.1. How to Submit Your NOI.** NOIs and permit fees may be submitted online at <https://secure.utah.gov/stormwater>. A paper copy of the NOI form may be downloaded from the DWQ construction storm water web site at <https://deq.utah.gov/legacy/permits/water-quality/utah-pollutant-discharge-elimination-system/storm-water-general-construction.htm>, of which the NOI form and permit fee may be mailed to:

Division of Water Quality  
PO Box 144870  
Salt Lake City, Utah 84114-4870

- 1.4.2. Start and End of Permit Coverage and Deadlines.** Coverage under a permit must be obtained before soil disturbing activities begin. The permit is effective immediately after the NOI has been successfully entered into the storm water database and the permit fee is paid. Active coverage may be affected by the following conditions:

- a. a notice of termination (NOT) is submitted.
- b. the yearly permit fee is kept current and renewed year by year for the period of construction activity,
- c. when this general permit (UTRC00000) expires, if no arrangement has been made for continuing coverage, NOIs may need to be submitted for continuing coverage under a new or reissued replacement permit,
- d. coverage under the CGP is rescinded or revoked for the project site for administrative reasons for which the permittee will be notified in writing, or
- e. if all storm water discharges for the site are permitted under a different general or individual UPDES permit, this permit is terminated on the day the other permit coverage begins.

- 1.4.3. Exception to NOI Deadline for “Existing Permits”.** Existing permits are construction projects with soil disturbances that require coverage under a UPDES construction storm water permit, and which had active coverage under UTRC00000 at the time of expiration of that general permit, or that received coverage before this permit was issued. Existing projects may be automatically covered under this permit. Permittees will be contacted with the email address listed on their NOI if further action is needed. **Existing projects have 3 months** from the issuance of this permit to update site storm water controls and the site SWPPP to meet requirements in this permit.

- 1.4.4. Continuation of Coverage After this Permit Expires.** If this permit is not reissued or replaced by the expiration date, it will be administratively extended by the Director and remain in force and effect until issuance of a comparable CGP. Permit coverage will continue under this permit until the earliest of:

- a. authorization of, and an application process, is provided for coverage under a reissued or replacement version of this permit; or
- b. the permittee's submittal of a Notice of Termination; or
- c. the issuance of an individual permit or denial of coverage (see part 1.4.4 below) for the project's discharges.

DWQ reserves the right to modify or revoke and reissue this permit under UAC317-8-5.6, in which case you will be notified of any relevant changes to which you may be subject.

**1.4.5. Procedures for Denial of Coverage.** Following a submittal of a complete and accurate NOI, you may be notified in writing by DWQ that you are not covered, and that you must either apply for and/or obtain coverage under an individual UPDES permit or an alternate general UPDES permit. This notification will include a brief statement of the reasons for this decision and will provide application information. Any interested person may request that DWQ consider requiring an individual permit under this paragraph.

If you are already a permittee with coverage under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual UPDES permit or alternate general UPDES permit, as it applies to you, coverage under this general permit will terminate. DWQ may grant additional time to submit the application if requested. If you are covered under this permit and fail to submit an individual UPDES permit application or an NOI for an alternate general UPDES permit as required by DWQ, then the applicability of this permit to your site is terminated at the end of the day specified by DWQ as the deadline for application submittal. DWQ may take appropriate enforcement action for any unpermitted discharge. If you submit a timely permit application, then when an individual UPDES permit is issued to you or you are provided with coverage under an alternate general UPDES permit, your coverage under this permit is terminated on the effective date of the individual permit or date of coverage under the alternate general permit.

**1.5. REQUIREMENT TO POST A NOTICE OF YOUR PERMIT COVERAGE** All permitted sites must have a sign posted in a conspicuous, safe, publically accessible place and near the entrance to the project. The font on the sign must large enough for normal corrected vision to easily read the sign contents from a public right-of-way. At a minimum, the notice must include:

- 1.5.1.** the UPDES Permit tracking number,
- 1.5.2.** the name of a contact person for questions, SWPPP requests, or information about the project,
  - a. the contact phone number (must be available during business hours) or
  - b. an email address (must be checked and responded to within 24-hours on week days).

**2. TECHNOLOGY-BASED EFFLUENT LIMITATIONS.** You must comply with the following technology-based effluent limitations in this Part.

**2.1. GENERAL STORM WATER CONTROL DESIGN, INSTALLATION, AND MAINTENANCE REQUIREMENTS.** You must design, install, and maintain storm water controls required in Parts 2.2 and 2.3 to minimize the discharge of pollutants in storm water from construction activities. To meet this requirement, you must:

**2.1.1. Account for the following factors in designing your storm water controls:**

- a. The expected amount, frequency, intensity, and duration of precipitation;
- b. The nature of storm water runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. You must design storm water controls to control storm water volume, velocity, and peak flow rates to minimize discharges of pollutants in storm water and to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points; and
- c. The soil type and range of soil particle sizes expected to be present on the site.

**2.1.2. Design and install all storm water controls** in accordance with good engineering practices, including applicable design specifications (see manufacturer specifications and/or applicable erosion and sediment control manuals or ordinances – departures from such specifications must reflect good engineering practices and must be explained in your SWPPP).

**2.1.3. Complete installation of storm water controls** by the time each phase of construction activities has begun.

- a. Before construction activity in any given portion of the site begins, install and make operational any downgradient sediment controls (e.g., buffers, perimeter controls, exit point controls, storm drain inlet protection).
- b. Following the installation of storm water controls for the initial construction activities (e.g., clearing, grading, excavating), adjust storm water control and management strategies throughout the project to meet and match the needs for each phase of construction, if applicable, as the project progresses towards completion.

**2.1.4. Ensure that all storm water controls are maintained, remain in effective operating condition during permit coverage, and are protected from activities that would reduce their effectiveness.**

- a. Comply with any specific maintenance requirements for the storm water controls listed in this permit. Regular maintenance is expected and is not limited to response actions from inspections or identified problems.
- b. Follow maintenance recommendations from the manufacturer or utilize good engineering practices based on site conditions and document deviations from manufacture recommendations.
- c. Any time maintenance issues are discovered in storm water controls, make repairs immediately if practical, prior to weather or activities utilizing the control, or within seven business days, whichever comes first.

- d. Any time you find that a storm water control needs to be installed (where none had previously been), replaced, or removed, you must record the corrective action as required in Part 5.

**2.2. EROSION AND SEDIMENT CONTROL REQUIREMENTS.** You must implement erosion and sediment controls in accordance with the following requirements to minimize the discharge of pollutants in storm water from construction activities.

**2.2.1. Provide and maintain natural buffers and/or equivalent** erosion and sediment controls when a water of the state is located within 50 feet of the site's earth disturbances. Additional guidance for buffers is provided in Appendix A.

- a. Compliance Alternatives. For any discharges to waters of the State located within 50 feet of your site's earth disturbances, you must comply with one of the following alternatives:
  - (1) Provide and maintain a 50-foot undisturbed natural buffer; or
  - (2) Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve, in combination, the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or
  - (3) If infeasible to provide and maintain an undisturbed natural buffer of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

- b. See Appendix A, Part A.2.2. for exceptions to the compliance alternatives.

**2.2.2. Preserve naturally vegetated areas where possible and, if feasible, direct storm water to these areas to maximize storm water infiltration and filtering to reduce pollutant discharges.**

**2.2.3. Install sediment controls along any perimeter areas of the site that will receive pollutant discharges.**

- a. Remove sediment before it has accumulated to the point where the control has become ineffective. Often that is one-half of the above-ground height of any perimeter control.
- b. **Exception.** For areas at "linear construction sites" (as defined in Part 10) where perimeter controls are infeasible (e.g., due to a limited or restricted right-of-way), implement other practices as necessary to minimize pollutant discharges to perimeter areas of the site.

**2.2.4. Minimize sediment track-out.**

- a. **Restrict vehicle use to properly designated exit points;**
- b. Use appropriate stabilization techniques at all points that exit onto paved roads<sup>3</sup>.
  - (1) **Exception:** Stabilization is not required for exit points at linear utility construction sites that are used only episodically and for very short durations over the life of the project, provided other exit point controls<sup>4</sup> are implemented to minimize sediment track-out;

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<sup>3</sup> An example of appropriate stabilization techniques is the use of aggregate stone with an underlying geotextile or non-woven filter fabric, and turf mats.



- c. Implement additional track-out controls<sup>5</sup> as necessary to ensure that sediment removal occurs prior to vehicle exit; and
- d. Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, you must remove deposited sediment before it accumulates significantly and is tracked beyond the immediate vicinity of the project. Frequency of removal is dependent on site conditions, whatever is necessary to control off site tracking. . Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any storm water conveyance, storm drain inlet, or water of the state<sup>6</sup>.

**2.2.5. Manage stockpiles or land clearing debris piles composed, in whole or in part, of sediment and/or soil:**

- a. Locate the piles outside of any natural buffers established under Part 2.2.1 and away from any storm water conveyances, drain inlets, and areas where storm water flow is concentrated;
- b. Install a sediment barrier along all downgradient perimeter areas;<sup>7</sup>
- c. For piles that will be unused for 14 or more days and are stored in areas that are being inspected at a reduced frequency due to temporary stabilization or frozen conditions (Part 4.4.1. and 4.4.3.), provide cover<sup>8</sup> or appropriate temporary stabilization (consistent with Part 2.2.14);
- d. You are prohibited from hosing down or sweeping soil or sediment accumulated on pavement or other impervious surfaces into any storm water conveyance, storm drain inlet, or water of the state.
- e. Where practicable, contain and securely protect from wind.

**2.2.6. Minimize dust.** On areas of exposed soil, minimize the generation of dust through the appropriate application of water or other dust suppression techniques.

**2.2.7. Minimize steep slope disturbances.** Minimize the disturbance of “steep slopes” (as defined in Part 10).

**2.2.8. Preserve native topsoil,<sup>9</sup> unless infeasible.**

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<sup>4</sup> Examples of other exit point controls include preventing the use of exit points during wet periods; minimizing exit point use by keeping vehicles on site to the extent possible; limiting exit point size to the width needed for vehicle and equipment usage; using scarifying and compaction techniques on the soil; and avoiding establishing exit points in environmentally sensitive areas (e.g., karst areas; steep slopes).

<sup>5</sup> Examples of additional track-out controls include the use of wheel washing, rumble strips, and rattle plates.

<sup>6</sup> Fine grains that remain visible (i.e., staining) on the surfaces of off-site streets, other paved areas, and sidewalks after you have implemented sediment removal practices are not a violation of Part 2.2.4.

<sup>7</sup> Examples of sediment barriers include berms, dikes, fiber rolls, silt fences, sandbags, gravel bags, or straw bale.

<sup>8</sup> Examples of cover include tarps, blown straw and hydromulching.

<sup>9</sup> Stockpiling topsoil at off-site locations, or transferring topsoil to other locations, is an example of a practice that is consistent with the requirements in Part 2.2.8. Preserving native topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed. For example, some sites may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain, or may not have space to stockpile native topsoil on site for later use, in which case, it may not be feasible to preserve topsoil.



**2.2.9. Minimize soil compaction<sup>10</sup>** in areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed:

- a. Restrict vehicle and equipment use in these locations to avoid soil compaction; and
- b. Before seeding or planting areas of exposed soil that have been compacted, use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.

**2.2.10. Protect storm drain inlets.**

- a. Install inlet protection measures that remove sediment from discharges prior to entry into any storm drain inlet that carries storm water flow from your site to a surface water of the state, provided you have authority to access the storm drain inlet;<sup>11</sup> and
- b. Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found.

**2.2.11. Minimize erosion of storm water conveyance channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters.** Use erosion controls and velocity dissipation devices<sup>12</sup> within and along the length of any storm water conveyance channel and at any outlet to slow down runoff to minimize erosion.

**2.2.12. If you install a sediment basin or similar impoundment:**

- a. Situate the basin or impoundment outside of any water of the state and any natural buffers established under Part 2.2.1;
- b. Design the basin or impoundment to avoid collecting water from wetlands;
- c. Design the basin or impoundment to provide storage for either:
  - (1) The calculated volume of runoff from a 2-year, 24-hour storm; or
  - (2) 3,600 cubic feet per acre drained.
- d. Utilize outlet structures that withdraw water from near the surface of the sediment basin or similar impoundment, unless infeasible;<sup>13</sup>
- e. Use erosion controls and velocity dissipation devices to prevent erosion at inlets and outlets; and
- f. Remove accumulated sediment to maintain at least one-half of the design capacity and conduct all other appropriate maintenance to ensure the basin or impoundment remains in effective operating condition.

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<sup>10</sup> Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.

<sup>11</sup> Inlet protection measures can be removed in the event of flood conditions or to prevent erosion

<sup>12</sup> Examples of velocity dissipation devices include check dams, sediment traps, riprap, and grouted riprap at outlets.

<sup>13</sup> The circumstances in which it is infeasible to design outlet structures in this manner are rare. A possible exception is dealing with or treating for temperature, but there may be other reasons. If you determine that it is infeasible to meet this requirement, you must provide documentation in your SWPPP to support your determination, including the specific conditions or time periods when this exception will apply.

**2.2.13. If using treatment chemicals (e.g., polymers, flocculants, coagulants):**

- a. **Use conventional erosion and sediment controls before and after the application of treatment chemicals.** Chemicals may only be applied where treated storm water is directed to a sediment control (e.g., sediment basin, perimeter control) before discharge.
- b. **Select appropriate treatment chemicals.** Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated (i.e., the expected turbidity, pH, and flow rate of storm water flowing into the chemical treatment system or area).
- c. **Minimize discharge risk from stored chemicals.** Store all treatment chemicals in leak- proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), or provide equivalent measures designed and maintained to minimize the potential discharge of treatment chemicals in storm water or by any other means (e.g., storing chemicals in a covered area, having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill).
- d. **Comply with state/local requirements.** Comply with applicable state and local requirements regarding the use of treatment chemicals.
- e. **Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier.** Use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document in your SWPPP specific departures from these specifications and how they reflect good engineering practice. Consider changing site conditions that may affect dosing levels such as temperature.
- f. **Ensure proper training.** Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.
- g. **Perform additional measures specified by DWQ for the authorized use of cationic chemicals.** If you have been authorized to use cationic chemicals at your site pursuant to Part 1.1.4.c, you must perform all additional measures as conditioned by your authorization to ensure that the use of such chemicals will not cause an exceedance of water quality standards or harm fish populations.

**2.2.14. Stabilize exposed portions of the site.** Implement and maintain stabilization measures (e.g., seeding protected by erosion controls until vegetation is established, sodding, mulching, erosion control blankets, hydromulch, gravel) that minimize erosion from exposed portions of the site in accordance with Parts 2.2.14.a and 2.2.14.b.

**a. Stabilization Deadlines:**

- (1) Initiate the installation of stabilization measures in any areas of exposed soil where construction activities have permanently ceased or will be temporarily inactive for 14 or more calendar days as soon as possible and prior to the end of the 14<sup>th</sup> day of inactivity; and

- (2) Complete the installation of stabilization measures as soon as practicable, but no later than 14 calendar days after stabilization has been initiated.<sup>14</sup>

(3) **Exceptions:**

- (i) Arid, semi-arid, and drought-stricken areas<sup>15</sup> (as defined in Part 10). Where a project is an arid, semi-arid, or a seasonally dry period or a period in which drought is occurring, and vegetative stabilization measures are being used:

- (1) Initiate as soon as practicable and, within 14 calendar days of a temporary or permanent cessation of work in any portion of your site, complete the installation of temporary non-vegetative stabilization measures to the extent necessary to prevent erosion;<sup>16</sup>
- (2) As soon as practicable, given conditions or circumstances on the site, complete all activities necessary to seed or plant the area to be stabilized; and
- (3) If construction is occurring during the seasonally dry period<sup>17</sup>, indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions. Also include the schedule you will follow for initiating and completing vegetative stabilization.

- (ii) **Discharges to a sediment- or nutrient-impaired water** (a water having a TMDL identifying sediment or nutrients as the cause of impairment) or to a water that is high quality for antidegradation purposes (see part 3). Complete stabilization as soon as practicable, but no later than seven (7) calendar days after stabilization has been initiated.

b. **Final Stabilization Criteria** (for any areas not covered by permanent structures):

- (i) Establish uniform, perennial vegetation (i.e., evenly distributed, without large bare areas) that provides 70 percent or more of the vegetative cover that was provided by vegetation prior to commencing earth-disturbing activities; and/or
- (ii) Implement permanent non-vegetative stabilization measures<sup>18</sup> to provide effective cover.
- (iii) **Exceptions:**
  - (1) **Arid, semi-arid, and drought-stricken areas** (as defined in Part 10). Final stabilization is met if the area has been seeded or planted in a manner that vegetation is expected to be

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<sup>14</sup> If vegetative stabilization measures are being implemented, stabilization is considered “installed” when all activities necessary to seed or plant the area are completed. If non-vegetative stabilization measures are being implemented, stabilization is considered “installed” when all such measures are implemented or applied.

<sup>15</sup> If you are in an area receiving more than 20 inches of average annual precipitation that is in a drought (as determined by the NOAA drought predictor <http://www.cpc.ncep.noaa.gov/products/Drought/>) and a seasonal dry period, to comply with drought conditions you must identify the normal seasonal dry period in the SWPPP.

<sup>16</sup> The extent necessary to prevent erosion in arid and semi-arid areas means for visually flat areas, stabilization is not required (roughly from 0 percent up to 5 percent) unless an erosion concern exists. Areas with slopes roughly 5 percent to 20 percent must have, at minimum, controls to reduce storm water velocities to a point that erosion is controlled. Over a 20 percent slope requires soil surface stabilization. The amount of stabilization provided must increase commensurately with increasingly steeper slopes.

<sup>17</sup> The lower elevations of the Wasatch Front are semi-arid, the seasonal dry period for the Wasatch Front is June, July, and August.

<sup>18</sup> Examples of permanent non-vegetative stabilization measures include riprap, gravel, gabions, and geotextiles.

established within three (3) years which provides 70 percent or more of the cover that was provided by vegetation prior to commencing earth disturbing activities and, to the extent necessary to prevent erosion on the seeded or planted area, non-vegetative erosion controls meet standards in footnote 16.

- (2) Disturbed areas on agricultural land that are restored to their preconstruction agricultural use. The Part 2.2.14b final stabilization criteria does not apply.
- (3) Areas that need to remain disturbed. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed, and only the minimum area needed remains disturbed (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, materials).

**2.3. POLLUTION PREVENTION REQUIREMENTS:** Implement pollution prevention controls in accordance with the following requirements to minimize the discharge of pollutants in storm water and to prevent the discharge of pollutants from spilled or leaked materials from construction activities.

**2.3.1. For equipment and vehicle fueling and maintenance:**

- a. Provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, from these activities;<sup>19</sup>
- b. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR part 112 and Section 311 of the CWA;
- c. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;
- d. Use drip pans and absorbents under or around leaky vehicles;
- e. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements; and
- f. Clean up spills or contaminated surfaces immediately, using dry clean up measures (do not clean contaminated surfaces by hosing the area down), and eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

**2.3.2. For equipment and vehicle washing:**

- a. Provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash waters;<sup>20</sup>

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<sup>19</sup> Examples of effective means include:

- Locating activities away from waters of the state and storm water inlets or conveyances so that storm water coming into contact with these activities cannot reach waters of the state;
- Providing secondary containment (e.g., spill berms, decks, spill containment pallets) and cover where appropriate; and
- Having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill.

- b. Ensure there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water; and
- c. For storage of soaps, detergents, or solvents, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these detergents to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas.

**2.3.3. For storage, handling, and disposal of building products and materials:**

- a. For building materials and building products<sup>21</sup> that have the potential to mobilize or release pollutants, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these products to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas.
- b. **For pesticides, herbicides, insecticides, fertilizers, and landscape materials:**
  - (1) In storage areas, provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these chemicals to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas; and
  - (2) Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label (see also Part 2.3.5).
- c. **For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:**
  - (1) Store chemicals in water-tight containers, and provide either (1) cover (e.g., plastic sheeting, temporary roofs) to minimize the exposure of these containers to precipitation and to storm water, or (2) a similarly effective means designed to minimize the discharge of pollutants from these areas (e.g., having a spill kit available on site and ensuring personnel are available to respond expeditiously in the event of a leak or spill), or provide secondary containment (e.g., spill berms, decks, spill containment pallets); and
  - (2) Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. You are prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.
- d. **For hazardous or toxic wastes:**<sup>22</sup>
  - (1) Separate hazardous or toxic waste from construction and domestic waste;
  - (2) Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource

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<sup>20</sup> Examples of effective means include locating activities away from waters of the state and storm water inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.

<sup>21</sup> Examples of building materials and building products typically present at construction sites include asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures, and gravel and mulch stockpiles.

<sup>22</sup> Examples of hazardous or toxic waste that may be present at construction sites include paints, caulks, sealants, fluorescent light ballasts, solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids.

Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;

- (3) Store all outside containers within appropriately-sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in a covered area, having a spill kit available on site);
- (4) Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements;
- (5) Clean up spills immediately, using dry clean-up methods, and dispose of used materials properly. You are prohibited from hosing the area down to clean surfaces or spills. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and
- (6) Follow all other federal, state, tribal, and local requirements regarding hazardous or toxic waste.

**e. For construction and domestic wastes:**<sup>23</sup>

- (1) Provide waste containers (e.g., dumpster, trash receptacle) of sufficient size and number to contain construction and domestic wastes;
- (2) Provide containment or cover for waste that is blowable or that can leach nutrients, metals, pesticides, herbicides, oil, grease, bacteria, or other pollutants;
- (3) On business days, clean up and dispose of waste in designated waste containers; and
- (4) Clean up immediately if containers overflow.

**f. For sanitary waste,** position portable toilets so that they are secure and will not be tipped or knocked over. Locate them away from waters of the state and, when possible, at least 10 feet from any storm water conveyance, inlet, curb and gutter, or conduit to a waterway. If it is not possible to maintain at least 10 feet of separation, evaluate the need for additional controls such as secondary containment, additional surface preparation, or berms and implement as appropriate.

**2.3.4. For washing applicators and containers used for stucco, paint, concrete, form release oils, curing compounds, or other materials:**

- a. Direct wash water into a leak-proof container or leak-proof and lined pit designed so that no overflows can occur due to inadequate sizing or precipitation;
- b. Handle washout or cleanout wastes as follows:
  - (1) Do not dump liquid wastes in storm sewers or waters of the state;
  - (2) Dispose of liquid wastes properly<sup>24</sup>; and

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<sup>23</sup> Examples of construction and domestic waste include packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, demolition debris; and other trash or building materials.

- (3) Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part 2.3.3; and
- c. Locate any washout or cleanout activities as far away as possible from waters of the state and storm water inlets or conveyances, and, to the extent feasible, determine areas to be used for these activities and conduct such activities only in these areas.

**2.3.5. For the application of fertilizers:**

- a. Apply at a rate and in amounts consistent with manufacturer's specifications, or document in the SWPPP departures from the manufacturer specifications where appropriate in accordance with Part 7.3.5.b.(5)(ix);
- b. Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;
- c. Avoid applying before heavy rains that could cause excess nutrients to be discharged;
- d. Never apply to frozen ground;
- e. Never apply to storm water conveyance channels; and
- f. Follow all other federal, state, tribal, and local requirements regarding fertilizer application.

**2.3.6. Emergency Spill Notification Requirements:** Discharges of toxic or hazardous substances from a spill or other release are prohibited (see Part 1.3). Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 as soon as you have knowledge of the release. You must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

**2.3.7. Construction Dewatering Requirements:** Water or accumulated storm water that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation must be permitted by UPDES permit UTG070000 (UPDES Construction Dewatering and Hydrostatic Test Permit) in accordance with Part 1.2.5., unless it can be managed on site. An option for on site management is percolation of the water back into the ground (assuming it is uncontaminated).

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<sup>24</sup> Proper disposal of liquid waste: 1) evaporate the waste and dispose of the residual solids with other solid waste, 2) have a liquid waste hauler for wash water haul it off and dispose of it, 3) settle it and pretreat it if necessary with arrangements to discharge the liquid waste to a treatment plant that has the ability to treat it and dispose of it.



### **3. WATER QUALITY-BASED EFFLUENT LIMITATIONS.**

#### **3.1. GENERAL EFFLUENT LIMITATION TO MEET APPLICABLE WATER QUALITY STANDARDS.**

Discharges must be controlled as necessary to meet applicable water quality standards. DWQ expects that compliance with the conditions in this permit will result in storm water discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, or DWQ determines, that discharges are not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Parts 5.1 and 5.2, and document the corrective actions as required in Part 5.4.

DWQ may insist that you install additional controls on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA-established or approved TMDL.

The NOI process requires that you determine if the watershed that you discharge into is impaired or if it is considered high quality. Only the first surface water you discharge to is used when determining if your discharge enters an impaired or high quality waterbody. For discharges that enter a storm water system prior to discharge, the first water of the state to which you discharge is the waterbody that receives the storm water discharge from the storm sewer system. Please refer to water quality information at <http://mapserv.utah.gov/surfacewaterquality/>

Each of these cases, impaired or high quality, may require an extra effort to maintain water quality standards. An impaired water body can have an approved TMDL (see Part 10 for definitions) or it can be on the list waiting a TMDL study. An EPA-approved TMDL is a water quality standard. If your project is in an area covered by an EPA-approved TMDL that has sediment or nutrients (particularly phosphorus) identified as the pollutant(s) of concern, you must provide an extra effort to prevent sediment from leaving the site. Nutrients are a component in topsoil from natural biotic systems. Nitrogen (a nutrient) is infused into the soil from biotic systems but also at times from the atmosphere during certain weather conditions. Some soils have phosphorus (a nutrient) from geologic formations in addition to biotic sources. Special efforts including site controls and management efforts must be employed for impaired or high quality waters, but especially for areas with TMDLs identifying sediment or nutrients as the pollutants of concern. Your SWPPP must show the special efforts you are taking for sensitive water bodies.

#### **3.2. DISCHARGE LIMITATIONS FOR SITES DISCHARGING TO SENSITIVE WATERS<sup>25</sup>**

For any portion of the site that discharges to a sediment or nutrient-impaired water or to a water that is identified as impaired or high quality you must comply with the inspection frequency specified in 4.3 and you must comply with the stabilization deadline specified in Part 2.2.14.<sup>26</sup>

<sup>25</sup> Your construction site will be considered to discharge to an impaired or high quality water if the first water to which you discharge is an impaired or high quality water for the pollutants contained in the discharge from your site. For discharges that enter a storm sewer system prior to discharge, the first water to which you discharge is the waterbody that receives the storm water discharge from the storm sewer system.



If you discharge to a water that is impaired for a parameter other than sediment or nutrients, you must address that parameter in your SWPPP if that pollutant has a presence in the construction process for your site. If the impaired parameter is naturally occurring in soils, it is assumed that the erosion control BMPs required by this permit will address the concern and it does not need to be addressed in the SWPPP as a pollutant source. You must deploy whatever control mechanisms that's needed to limit the discharge of that pollutant to meet water quality standards. This includes, if requested by DWQ, comparing the load discharged from the site for that pollutant to ensure it does not exceed a wasteload allocation for that pollutant in the applicable TMDL for the watershed.

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<sup>26</sup> If you qualify for any of the reduced inspection frequencies in Part 4.4, you may conduct inspections in accordance with Part 4.4 for any portion of your site that discharges to a sensitive water.

#### 4. SITE INSPECTION REQUIREMENTS.

**4.1. PERSON(S) RESPONSIBLE FOR INSPECTING THE SITE.** The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a “qualified person” and currently certified.

a. A “qualified person” is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact storm water quality, and the skills to assess the effectiveness of any storm water controls selected and installed to meet the requirements of this permit, such as but not limited to the following:

- (1) Utah Registered Storm Water Inspector (RSI)
- (2) Certified Professional in Erosion and Sediment Control (CPESC)
- (3) Certified Professional in Storm Water Quality (CPSWQ)
- (4) Certified Erosion, Sediment, and Storm Water Inspector (CESSWI)
- (5) Certified Inspector of Sediment and Erosion Control (CISEC)
- (6) National Institute for Certification in Engineering Technologies, Erosion and Sediment Control, Level 3 (NICET)
- (7) Utah Department of Transportation Environmental Control Supervisor (ECS)

**4.2. FREQUENCY OF INSPECTIONS.**<sup>27</sup> At a minimum, you must conduct a site inspection in accordance with one of the two schedules listed below, unless you are subject to the Part 4.3 site inspection frequency for discharges to sensitive waters or qualify for a Part 4.4 reduction in the inspection frequency:

**4.2.1.** At least once every seven (7) calendar days; or

**4.2.2.** Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.50 inches or greater, or the occurrence of runoff from snowmelt sufficient to cause a discharge.<sup>28</sup> To determine if a storm event of 0.50 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.50 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.7.1.d.

**4.3. INCREASE IN INSPECTION FREQUENCY FOR SITES DISCHARGING TO SENSITIVE WATERS.** For any portion of the site that discharges to a sediment or nutrient-

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<sup>27</sup> Inspections are only required during the site’s normal working hours.

<sup>28</sup> “Within 24 hours of the occurrence of a storm event” means that you must conduct an inspection within 24 hours once a storm event has produced 0.50 inches within a 24-hour period, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in accordance with Part 4.2.2 and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.50 inches or more of rain, you must conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

impaired water or to a high quality water (see Part 3), instead of the inspection frequency specified in Part 4.2, you must conduct inspections in accordance with the following inspection frequencies:

Once every seven (7) calendar days and within 24 hours of the occurrence of a storm event of 0.50 inches or greater, or the occurrence of runoff from snowmelt sufficient to cause a discharge. To determine if a storm event of 0.50 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.50 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.7.1d.

#### **4.4. REDUCTIONS IN INSPECTION FREQUENCY.**

##### **4.4.1. STABILIZED AREAS.**

- a. **Temporarily Stabilized Areas.** You may reduce the frequency of inspections to twice per month for the first month, no more than 14 calendar days apart, then once per month in any area of your site where the stabilization steps in part 2.2.14.a. have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to that required in Parts 4.2 and 4.3, as applicable. You must document the beginning and ending dates of this period in your SWPPP.
- b. **Permanently Stabilized Areas.** Inspections requirements are suspended.
- c. **Exception For “Linear Construction Sites”** (as defined in Part 10) where disturbed portions have undergone final stabilization at the same time active construction continues on others, you may reduce the frequency of inspections to twice per month for the first month, no more than 14 calendar days apart, in any area of your site where the stabilization steps in 2.2.14.a have been completed. After the first month, inspect once more within 24 hours of the occurrence of a storm event of 0.50 inches or greater. If there are no issues or evidence of stabilization problems, you may suspend further inspections. If “wash-out” of stabilization materials and/or sediment is observed, following re-stabilization, inspections must resume at the inspection frequency required in Part 4.4.1.a. Inspections must continue until final stabilization is visually confirmed following a storm event of 0.50 inches or greater.

##### **4.4.2. ARID, SEMI-ARID** (as defined in Part 10). For inspection frequencies (shown below) where it is required to inspect after a storm event, to determine if a storm event of 0.50 inches or greater has occurred on your site you must either keep a properly maintained rain gauge on your site or obtain the storm event information from a weather station that is representative of your location.

- a. **Arid Areas:** Inspections are required once a month and within 24 hours of the occurrence of a storm event of 0.50 inches or greater.
- b. **Semi-Arid Areas:** Inspections are the same as in parts 4.2.1 and 4.2.2 except for the seasonally dry times of the year where they go to once a month and within 24 hours of the occurrence of a

storm event of 0.50 inches or greater.<sup>29</sup> Where the inspection frequency changes to once a month the SWPPP must show the reference for the seasonally dry time period.

#### **4.4.3. Frozen conditions**

- a. If you are suspending construction activities due to frozen conditions, you may temporarily suspend inspections on your site until thawing conditions (as defined in Part 10) begin to occur if:
  - (1) Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least three (3) months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.2 and 4.3, as applicable;
  - (2) Land disturbances have been suspended; and
  - (3) Disturbed areas of the site have been stabilized, where possible, in accordance with Part 2.2.14.a.
- b. If you are still conducting construction activities during frozen conditions, you may reduce your inspection frequency to once per month if:
  - (1) Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least three (3) months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.2 and 4.3, as applicable; and
  - (2) Except for areas in which you are actively conducting construction activities, disturbed areas of the site have been stabilized in accordance with Part 2.2.14.a.

You must document the beginning and ending dates of this period in your SWPPP.

#### **4.5. AREAS THAT MUST BE INSPECTED:** During your site inspection, you must at a minimum inspect the following areas of your site:

- 4.5.1.** All areas that have been cleared, graded, or excavated and that have not yet completed stabilization consistent with Part 2.2.14.a;
- 4.5.2.** All storm water controls (including pollution prevention controls) installed at the site to comply with this permit;<sup>30</sup>
- 4.5.3.** Material, waste, borrow, and equipment storage and maintenance areas that are covered by this permit;
- 4.5.4.** All areas where storm water typically flows within the site, including drainage ways designed to divert, convey, and/or treat storm water;

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<sup>29</sup> The Seasonally dry period for the semi-arid areas on the Wasatch Front is June, July, and August. For other areas there are a few internet sites where it is possible to look up the annual rainfall for an area.

<sup>30</sup> This includes the requirement to inspect for sediment that has been tracked out from the site onto paved roads, sidewalks, or other paved areas consistent with Part 2.2.4.

- 4.5.5. All points of discharge from the site; and
- 4.5.6. All locations where stabilization measures have been implemented.
- 4.5.7. You are not required to inspect areas that, at the time of the inspection, are considered unsafe to your inspection personnel.
- 4.6. **REQUIREMENTS FOR INSPECTIONS;** During your site inspection, you must at a minimum:
  - 4.6.1. Check whether all storm water controls (i.e., erosion and sediment controls and pollution prevention controls) are properly installed, appear to be operational, and are working as intended to minimize pollutant discharges. Consider what has caused a BMP's failure if it is not operational;
  - 4.6.2. Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;
  - 4.6.3. Identify any locations where new or modified storm water controls are necessary to meet the requirements of Parts 2 and/or 3;
  - 4.6.4. Check for signs of visible erosion and sedimentation (i.e., sediment deposits) that have occurred and are attributable to your discharge at points of discharge and, if applicable, the banks of any waters of the state flowing within or immediately adjacent to the site;
  - 4.6.5. Identify any incidents of noncompliance observed;
  - 4.6.6. If a discharge is occurring during your inspection:
    - a. Identify all discharge points at the site; and
    - b. Observe and document the visual quality of the discharge, and take note of the characteristics of the storm water discharge, including color; odor; floating, settled, or suspended solids; foam; oil sheen; and other indicators of storm water pollutants.
  - 4.6.7. Based on the results of your inspection, complete any necessary maintenance under Part 2.1.4 and corrective action under Part 5.
- 4.7. **INSPECTION REPORT**<sup>31</sup>
  - 4.7.1. You must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:
    - a. The inspection date;
    - b. The UPDES CGP permit tracking number;
    - c. Names and titles of personnel making the inspection;
    - d. A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part 4.6, including any necessary maintenance or corrective actions;
    - e. If you are inspecting your site at the frequency specified in Part 4.2.2, Part 4.3, Part 4.4.1.c, Part 4.4.2.a, or Part 4.4.2.b and you conducted an inspection because of rainfall measuring 0.50

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<sup>31</sup> See DWQ construction storm water web page for ideas and examples of self-inspection forms.

inches or greater, you must include the applicable rain gauge or weather station readings that triggered the inspection; and

- f. If you determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations to which this condition applies.

**4.7.2.** Each inspection report must be signed in accordance with 9.16(1)b. of this permit.

**4.7.3.** You must keep a copy, in paper or electronic form, of all inspection reports at the site or at an easily accessible location, so that it can be made available at the time of an on-site inspection or upon request by DWQ, a local municipality of jurisdiction, or by the EPA.

**4.7.4.** You must retain all inspection reports completed for this Part for at least three (3) years from the date that your permit coverage expires or is terminated.

**4.8. INSPECTIONS BY DWQ MS4 OR EPA:** You must allow an authorized representative of DWQ, the MS4 of jurisdiction or the EPA to conduct the following activities at reasonable times. To the extent that you are utilizing shared controls that are not on site to comply with this permit, you must make arrangements for DWQ to have access at all reasonable times to those areas where the shared controls are located.

**4.8.1.** Enter onto all areas of the site, including any construction support activity areas covered by this permit, any off-site areas where shared controls are utilized to comply with this permit, discharge locations, adjoining waterbodies, and locations where records are kept under the conditions of this permit;

**4.8.2.** Access and copy any records that must be kept under the conditions of this permit;

**4.8.3.** Inspect your construction site, including any construction support activity areas covered by this permit (see Part 1.2.2), any storm water controls installed and maintained at the site, and any off-site shared controls utilized to comply with this permit; and

**4.8.4.** Sample or monitor for the purpose of ensuring compliance.

## 5. CORRECTIVE ACTIONS

**5.1. CONDITIONS TRIGGERING CORRECTIVE ACTION:** You must take corrective action to address any of the following conditions identified at your site:

- 5.1.1.** A storm water control needs repair or replacement (beyond routine maintenance required under Part 2.1.4); or
- 5.1.2.** A storm water control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or
- 5.1.3.** Your discharges are causing an exceedance of applicable water quality standards; or
- 5.1.4.** A prohibited discharge has occurred (see Part 1.3).

**5.2. CORRECTIVE ACTION DEADLINES:** For any corrective action triggering conditions in Part 5.1, you must:

- 5.2.1.** When site conditions warrant immediate attention, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution for the problem is installed and made operational;
- 5.2.2.** When the problem does not require a new or replacement control or significant repair, the corrective action must be completed by the close of the next business day;
- 5.2.3.** When the problem requires a new or replacement control or significant repair, the corrective action must be completed no later than seven (7) calendar days from the time of discovery. If it is infeasible to complete the installation or repair within seven (7) calendar days (e.g., due to availability of materials, excessive costs to expedite shipping or activities, or lengthy installation times) you must document in your records why it is infeasible and provide a reasonable correction schedule.

**5.3. CORRECTIVE ACTION REQUIRED BY DWQ:** You must comply with any corrective actions required by DWQ as a result of permit violations found during an inspection carried out under Part 4.8.

**5.4. CORRECTIVE ACTION REPORT:** For each corrective action taken in accordance with this Part, you must complete a report in accordance with the following:

- 5.4.1.** Within 24 hours of identifying the corrective action condition, document the specific condition and the date and time it was identified.
- 5.4.2.** Within 24 hours of the observed completion of a corrective action and in accordance with the deadlines in Part 5.2, document the actions taken to address the condition, including the date and whether any SWPPP modifications are required.
- 5.4.3.** Where these actions result in changes to any of the storm water controls or procedures documented in your SWPPP, you must modify your SWPPP (and SWPPP map) accordingly within seven (7) calendar days of completing this work.
- 5.4.4.** You must keep a copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an on-site inspection or upon request by

DWQ. Corrective action reports may be maintained and made available in paper or electronically.

- 5.4.5.** You must retain all corrective action reports completed for this Part for at least three (3) years from the date that your permit coverage expires or is terminated.



## 6. STAFF TRAINING REQUIREMENTS

Each operator, or group of multiple operators, must assemble a “storm water team” to carry out compliance activities associated with the requirements in this permit.

**6.1. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES**, you must ensure that the following personnel<sup>32</sup> on the storm water team understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- 6.1.1.** Personnel who are responsible for the design, installation, maintenance, and/or repair of storm water controls (including pollution prevention controls);
- 6.1.2.** Personnel responsible for the application and storage of treatment chemicals (if applicable);
- 6.1.3.** Personnel who are responsible for conducting inspections as required in Part 4.1; and
- 6.1.4.** Personnel who are responsible for taking corrective actions as required in Part 5.

**6.2. YOU ARE RESPONSIBLE FOR ENSURING THAT ALL ACTIVITIES ON THE SITE COMPLY** with the requirements of this permit. You are not required to provide formal training for subcontractors or other outside service providers, but you must ensure that such personnel understand any requirements of this permit that may be affected by the work they are subcontracted to perform. You should document that you have explained or have given subcontractors information about how to perform their work in compliance with the SWPPP.

**6.3. AT A MINIMUM, MEMBERS OF THE STORM WATER TEAM MUST BE TRAINED** to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- 6.3.1.** The permit deadlines associated with installation, maintenance, and removal of storm water controls and with stabilization;
- 6.3.2.** The location of all storm water controls on the site required by this permit and how they are to be maintained;
- 6.3.3.** The proper procedures to follow with respect to the permit’s pollution prevention requirements; and
- 6.3.4.** When and how to conduct inspections, record applicable findings, and take corrective actions.

**6.4. EACH MEMBER OF THE STORM WATER TEAM MUST HAVE EASY ACCESS TO AN ELECTRONIC OR PAPER COPY** of applicable portions of this permit, the most updated copy of your SWPPP, and other relevant documents or information that must be kept with the SWPPP.

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<sup>32</sup> If the person requiring training is a new employee who starts after you commence construction activities, you must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit.

## **7. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)**

### **7.1. GENERAL REQUIREMENTS**

All operators associated with a construction site under this permit must develop a SWPPP consistent with the requirements in Part 7 prior to their submittal of the NOI.<sup>33</sup> The SWPPP must be kept up-to-date throughout coverage under this permit.

If a SWPPP was prepared under a previous version of this permit, the operator must review and update the SWPPP to ensure that this permit's requirements are addressed prior to submitting an NOI for coverage under this permit.

**7.2. SWPPP WRITER/REVIEWER CERTIFICATION REQUIREMENT** Beginning January 1, 2021, a "qualified" SWPPP writer must write or certify SWPPPs for all projects disturbing greater than 5 acres, including small construction projects (1 to 5 acres) that have a perennial surface water within 50 feet of the project, or having a steep slope (70% or 35 degrees or more) with an elevation change from the slope of 10 feet or more (at any point during the time of construction – not including stock piles). A "qualified" SWPPP writer is knowledgeable in the principles and practices that must be considered in the development of a SWPPP. Acceptable qualifications include but are not limited to:

- a. Utah Registered SWPPP Writer (RSW)
- b. Licensed Professional Engineer (PE) in a related field or Professional Geologist (PG)
- c. Certified Professional in Erosion and Sediment Control (CPESC)
- d. Certified Professional in Storm Water Quality (CPSWQ)
- e. National Institute for Certification in Engineering Technologies, Erosion and Sediment Control, Level 3 (NICET)

**7.3. SWPPP CONTENTS.** At a minimum, the SWPPP must include the information specified in this Part and as specified in other parts of this permit.

**7.3.1. Storm Water Team.** Identify the personnel (by name or position) that are part of the storm water team, as well as their individual responsibilities, including which members are responsible for conducting inspections.

**7.3.2. Nature of Construction Activities.**<sup>34</sup> Include the following:

- a. A description of the nature of your construction activities, including the age or dates of past renovations for structures that are undergoing demolition;
- b. The size of the property (in acres or length in miles if a linear construction site);

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<sup>33</sup> The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts 2 and 3.

<sup>34</sup> If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant to "lock in" the operator to meeting these dates. When departures from initial projections are necessary, this should be documented in the SWPPP itself, or in associated records, as appropriate.

- c. The total area expected to be disturbed by the construction activities including on-site and off-site construction support activity areas (to the nearest quarter acre or nearest quarter mile if a linear construction site);
- d. A description of any on-site and off-site construction support activity areas covered by this permit (see Part 1.2.2);
- e. A description and projected schedule for the following:
  - (1) Commencement of construction activities in each portion of the site, including clearing and grubbing, mass grading, demolition activities, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
  - (2) Temporary or permanent cessation of construction activities in each portion of the site;
  - (3) Temporary or final stabilization of exposed areas for each portion of the site; and
  - (4) Removal of temporary storm water controls and construction equipment or vehicles, and the cessation of construction-related pollutant-generating activities.
- f. A list and description of all pollutant-generating activities<sup>35</sup> on the site. For each pollutant-generating activity, include an inventory of pollutants or pollutant constituents (e.g., sediment, fertilizers, pesticides, paints, caulks, sealants, fluorescent light ballasts, contaminated substrates, solvents, fuels) associated with that activity, which could be discharged in storm water from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to storm water discharges, and any known hazardous or toxic substances, such as PCBs and asbestos, that will be disturbed or removed during construction;
- g. Business days and hours for the project;

**7.3.3. Site Map.** Include a legible map, or series of maps, showing the following features of the site:

- a. Boundaries of the property;
- b. Locations where construction activities will occur, including:
  - (1) Locations where earth-disturbing activities will occur (note any phasing), including any demolition activities;
  - (2) Approximate slopes before and after major grading activities (note any steep slopes (as defined in Part 10));
  - (3) Locations where sediment, soil, or other construction materials will be stockpiled;
  - (4) Any water of the state crossings;
  - (5) Designated points where vehicles will exit onto paved roads;
  - (6) Locations of structures and other impervious surfaces upon completion of construction; and
  - (7) Locations of on-site and off-site construction support activity areas covered by this permit (see Part 1.2.2).

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<sup>35</sup> Examples of pollutant-generating activities include paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations

- c. Locations of all waters of the state within one mile downstream of the site's discharge point. Also identify if any are listed as impaired or high quality water;
- d. Type and extent of pre-construction cover on the site (e.g., vegetative cover, forest, pasture, pavement, structures);
- e. Drainage patterns of storm water and authorized non-storm water before and after major grading activities;
- f. Storm water and authorized non-storm water discharge locations, including:
  - (1) Locations where storm water and/or authorized non-storm water will be discharged to storm drain inlets;<sup>36</sup> and
  - (2) Locations where storm water or authorized non-storm water will be discharged directly to waters of the state.
- g. Locations of all potential pollutant-generating activities identified in Part 7.3.2.g;
- h. Locations of storm water controls, including natural buffer areas and any shared controls utilized to comply with this permit; and
- i. Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

**7.3.4. Non-Storm water Discharges.** Identify all authorized non-storm water discharges in Part 1.2.3 that will or may occur.

**7.3.5. Description of Storm water Controls.**

- a. For each of the Part 2.2 erosion and sediment control effluent limits, Part 2.3 pollution prevention effluent limits as applicable to your site, you must include the following:
  - (1) A description of the specific control(s) to be implemented to meet the effluent limit;
  - (2) Any applicable storm water control design specifications (including references to any manufacturer specifications and/or erosion and sediment control manuals/ordinances relied upon);<sup>37</sup>
  - (3) Routine storm water control maintenance specifications; and
  - (4) The projected schedule for storm water control installation/implementation.
- b. You must also include any of the following additional information as applicable.
  - (1) **Natural buffers** and/or equivalent sediment controls (see Part 2.2.1 and Part 10). You must include the following:
    - (i) The compliance alternative to be implemented;

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<sup>36</sup> The requirement to show storm drain inlets in the immediate vicinity of the site on your site map only applies to those inlets that are easily identifiable from your site or from a publicly accessible area immediately adjacent to your site.

<sup>37</sup> Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or ordinances. Any departures from such specifications must reflect good engineering practice and must be explained in the SWPPP.

- (ii) If complying with alternative 2, the width of natural buffer retained;
  - (iii) If complying with alternative 2 or 3, the erosion and sediment control(s) you will use to achieve an equivalent sediment reduction, and any information you relied upon to demonstrate the equivalency;
  - (iv) If complying with alternative 3, a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size;
  - (v) For “linear construction sites” where it is infeasible to implement compliance alternative 1, 2, or 3, a rationale for this determination, and a description of any buffer width retained and/or supplemental erosion and sediment controls installed; and
  - (vi) A description of any disturbances that are exempt under Part 2.2.1 that occur within 50 feet of a water of the state.
- (2) **Perimeter controls for a “linear construction site”** (see Part 2.2.3). For areas where perimeter controls are not feasible, include documentation to support this determination and a description of the other practices that will be implemented to minimize discharges of pollutants in storm water associated with construction activities.

Note: Routine maintenance specifications for perimeter controls documented in the SWPPP must include the Part 2.2.3.a requirement that sediment be removed before it has accumulated to one-half of the above-ground height of any perimeter control.

- (3) **Sediment track-out controls** (see Parts 2.2.4.b and 2.2.4.c). Document the specific stabilization techniques and/or controls that will be implemented to remove sediment prior to vehicle exit.
- (4) **Sediment basins** (see Part 2.2.12). In circumstances where it is infeasible to utilize outlet structures that withdraw water from the surface, include documentation to support this determination, including the specific conditions or time periods when this exception will apply.
- (5) **Treatment chemicals** (see Part 2.2.13), you must include the following:
- (i) A listing of the soil types that are expected to be exposed during construction in areas of the project that will drain to chemical treatment systems. Also include a listing of soil types expected to be found in fill material to be used in these same areas, to the extent you have this information prior to construction;
  - (ii) A listing of all treatment chemicals to be used at the site and why the selection of these chemicals is suited to the soil characteristics of your site;
  - (iii) If DWQ authorized you to use cationic treatment chemicals for sediment control, include the specific controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to an exceedance of water quality standards, or harm to aquatic life;
  - (iv) The dosage of all treatment chemicals to be used at the site or the methodology to be used to determine dosage;

- (v) Information from any applicable Safety Data Sheet (SDS);
  - (vi) Schematic drawings of any chemically enhanced storm water controls or chemical treatment systems to be used for application of the treatment chemicals;
  - (vii) A description of how chemicals will be stored consistent with Part 2.2.13.c;
  - (viii) References to applicable local requirements affecting the use of treatment chemicals, and copies of applicable manufacturer's specifications regarding the use of your specific treatment chemicals and/or chemical treatment systems; and
  - (ix) A description of the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to use of the treatment chemicals at your site.
- (6) **Stabilization measures** (see Part 2.2.14). You must include the following:
- (i) The specific vegetative and/or non-vegetative practices that will be used;
  - (ii) The stabilization deadline that will be met in accordance with Part 2.2.14.a(1)-(2);
  - (iii) It is important to meet the deadlines during the wet times of the year (if the area has a wet time of the year). During the dry times of the year the significance of stabilization deadlines is less important.
- (7) **Spill prevention and response procedures** (see Part 1.3.5 and Part 2.3). You must include the following:
- (i) Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and
  - (ii) Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.6 and established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available to all employees.
  - (iii) You may also reference the existence of Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an UPDES permit for the construction activity, provided that you keep a copy of that other plan on site or electronically available.<sup>38</sup>
- (8) **Waste management procedures** (see Part 2.3.3). Describe the procedures you will follow for handling, storing and disposing of all wastes generated at your site consistent with state and local requirements, including clearing and demolition debris, removal of spoil (excess dirt) from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

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<sup>38</sup> Even if you already have an SPCC or other spill prevention plan in existence, your plans will only be considered adequate if they meet all of the requirements of this Part, either as part of your existing plan or supplemented as part of the SWPPP

- (9) **Application of fertilizers** (see Part 2.3.5). Document any departures from the manufacturer specifications where appropriate.

**7.3.6. Procedures for Inspection, Maintenance, and Corrective Action.** Describe the procedures you will follow for maintaining your storm water controls, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part 2.1.4, Part 4, and Part 5 of this permit. Also include:

- a. Personnel responsible for conducting inspections;
- b. The inspection schedule you will follow, which is based on whether your site is subject to Part 4.2 or Part 4.3, or whether your site qualifies for any of the reduced inspection frequencies in Part 4.4;
- c. If you will be conducting inspections in accordance with the inspection schedule in Part 4.2.2, or Part 4.3, the location of the rain gauge or the address of the weather station you will be using to obtain rainfall data;
- d. If you will be reducing your inspection frequency in accordance with Part 4.4.3, the beginning and ending dates of frozen conditions on your site; and
- e. Any maintenance or inspection checklists or other forms that will be used.

**7.3.7. Staff Training.** Include documentation that the required personnel were, or will be, trained in accordance with Part 6.

**7.3.8. Compliance with Other Requirements.**

- a. **Utah Water Quality Act Underground Injection Control (UIC) Program Requirements for Certain Subsurface Storm Water Controls.** If you are using any of the following storm water controls at your site, as they are described below, you must document any contact you have had with DWQ for implementing the requirements for underground injection wells in the Safe Drinking Water Act and DEQ's implementing regulations at UAC R317-7. In addition there may be local requirements related to such structures. Such controls (below) would generally be considered Class V UIC wells and all Class V UIC wells must be reported to DWQ for an inventory:
  - b. Infiltration trenches (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);
  - c. Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate storm water flow; and
  - d. Drywells, seepage pits, or improved sinkholes (if storm water is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

**7.3.9. SWPPP Certification.** You must sign and date your SWPPP in accordance with 9.16(1)a.

**7.3.10. Post-Authorization Additions to the SWPPP.** Once you are authorized for coverage under this permit, you must include the following documents as part of your SWPPP:



- a. A copy of your NOI submitted to DWQ along with any correspondence exchanged between you and DWQ related to coverage under this permit;
- b. A copy of this permit (an electronic copy easily available to the storm water team is also acceptable).

#### **7.4. ON-SITE AVAILABILITY OF YOUR SWPPP**

- 7.4.1.** You must keep a current copy of your SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by DWQ, the EPA, or an MS4. The SWPPP can be stored electronically as long as personnel on-site can access it and make it available for inspector review.

#### **7.5. SWPPP MODIFICATIONS.**

- 7.5.1.** You must modify your SWPPP, including the site map(s), within seven (7) days of any of the following conditions:
- a. Whenever you make changes to your construction plans, storm water controls, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.3.2.f change during the course of construction;
  - b. To reflect areas on your site map where operational control has been transferred (e.g., new general contractor or owner), note the change and the date of transfer since initiating permit coverage;
  - c. If inspections or investigations by DWQ or its authorized representatives determine that SWPPP modifications are necessary for compliance with this permit;
  - d. Where DWQ determines it is necessary to install and/or implement additional controls at your site in order to meet the requirements of this permit, the following must be included in your SWPPP:
    - (1) A copy of any correspondence describing such measures and requirements; and
    - (2) A description of the controls that will be used to meet such requirements.
  - e. To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the storm water controls implemented at the site; and
  - f. If applicable, if a change in chemical treatment systems or chemically enhanced storm water control is made, including use of a different treatment chemical, different dosage rate, or different area of application.
- 7.5.2.** You must maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part 7.5.1 above) and a brief summary of all changes.
- 7.5.3.** All modifications made to the SWPPP consistent with Part 7.5 must be authorized by a person identified in 9.16.(1)b.
- 7.5.4.** Upon determining that a modification to your SWPPP is required, you must notify any persons or subcontractors that may be impacted by the change to the SWPPP.



**8. HOW TO TERMINATE COVERAGE.** Until you terminate coverage under this permit, you must comply with all conditions and effluent limitations in the permit. To terminate permit coverage, you must submit to DWQ a complete and accurate Notice of Termination (NOT, the NOT can be done online in the same account that the NOI was taken out in), which certifies that you have met the requirements for terminating in Part 8.

**8.1. MINIMUM INFORMATION REQUIRED IN NOT.**

**8.1.1.** UPDES ID (i.e., permit tracking number) provided by DWQ when you received coverage under this permit;

**8.1.2.** Basis for submission of the NOT (see Part 8.2);

**8.1.3.** Operator contact information;

**8.1.4.** Name of site and address (or a description of location if no street address is available); and

**8.1.5.** NOT certification.

**8.2. CONDITIONS FOR TERMINATING CGP COVERAGE.** You must terminate CGP coverage only if one or more of the following conditions has occurred:

**8.2.1.** You have completed all construction activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.2.2.c), and you have met the following requirements:

- a. You have met the requirements for final vegetative or non-vegetative stabilization in Part 2.2.14.b for any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities.;
- b. You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;
- c. You have removed all storm water controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and
- d. You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or

**8.2.2.** You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted a new NOI and obtained coverage under this permit. This only applies if the new operator obtains a new NOI. Termination is not required if a transfer form has been signed by both the previous operator and the new one to move the existing coverage; or

**8.2.3.** Coverage under an individual or alternative general UPDES permit has been obtained.

**8.2.4.** Completed homes that are occupied by home owners where at least temporary sediment and erosion controls are in place are allowed to be terminated without final stabilization. If a home owner buys a newly completed house the permit can be terminated while the property is being transferred to the home owner. The home owner should not be involved in the permit process. If

a home owner builds his/her house, they must terminate when the house is approved for occupancy where temporary storm water controls are in place on the site.

**8.3. HOW TO SUBMIT YOUR NOT.**

**8.3.1.** It is preferred that the DWQ “on-line” NOI system be used to submit an electronic NOT.

Access to the DWQ online storm water database found at the DWQ webpage at <https://secure.utah.gov/stormwater>. You must logon to the account created when the NOI was submitted and find the “Terminate” (or NOT) button for the permit tracking number when you wish to terminate a coverage. In the case where the permittee does not have access to the account for which the NOI was submitted the permittee must either contact DWQ and request account access or fill out and submit to DWQ a paper copy of the NOT form, which can be downloaded from the same DWQ website.

**8.4. DEADLINE FOR SUBMITTING THE NOT.** You must submit your NOT within 30 calendar days after any one of the conditions in Part 8.2 occurs.

**8.5. PARTIAL NOT REQUIREMENTS.** A partial NOT must be filed if a portion of the permitted site is sold to a new owner prior to completion of construction. You must notify the new owner of the requirement to obtain a storm water permit unless the new owner is the home owner. Prior to releasing a residential lot to a home owner the site must be temporarily stabilized as required in 8.2.4. You must notify DWQ of the change in ownership and provide the name, address, and telephone number of the new owner.

**8.6. EFFECTIVE DATE OF TERMINATION OF COVERAGE.** Your authorization to discharge under this permit terminates at midnight of the calendar day that a complete NOT is submitted to DWQ.

**9. STANDARD PERMIT CONDITIONS.**

**9.1. DUTY TO COMPLY.**

- (1) The permittee must comply with all conditions of the UPDES permit. Any permit noncompliance is a violation of the Utah Water Quality Act, as amended and is grounds for enforcement action; permit termination, revocation and reissuance or modification; or denial of a permit renewal application.
- (2) Penalties for Violations of Permit Conditions. The Utah Water Quality Act, in 19-5-115, provides that any person who violates the Act, or any permit, rule, or order adopted under it is subject to a civil penalty not to exceed \$10,000 per day of such violation.
- (3) Willful Non-Compliance or Negligence. Any person who willfully or with gross negligence violates the Act, or any permit, rule or order adopted under it is subject to a fine of not more than \$25,000 per day of violation. Any person convicted under 19-5-115 a second time shall be punished by a fine not exceeding \$50,000 per day.
- (4) False Statements. The Act provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act, the rules, or this Permit, or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for 6 months, or by both. Utah Code Ann. § 19-5-115(4).

**9.2. DUTY TO REAPPLY.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of the permit, the permittee shall apply for and obtain a new permit as required in R317-8-3.1

**9.3. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Upon reduction, loss, or failure of the treatment facility, the permittee, to the extent necessary to maintain compliance with the permit, shall control production of all discharges until the facility is restored or an alternative method of treatment is provided.)

**9.4. DUTY TO MITIGATE.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of the UPDES permit which has a reasonable likelihood of adversely affecting human health or the environment.

**9.5. DUTY TO PROVIDE INFORMATION.** The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by the permit.

**9.6. OTHER INFORMATION.** When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Director, he or she shall promptly submit such facts or information.

**9.7. OIL AND HAZARDOUS SUBSTANCE LIABILITY.** Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject under the "Act".

**9.8. PROPERTY RIGHTS.** The issuance of this Permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

**9.9. SEVERABILITY.** The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Permit shall not be affected thereby.

**9.10. RECORDS RETENTION.**

- (1) The Permittee shall retain copies of SWPPPs and all reports required by this Permit, and records of all data used to complete the Notice of Intent to be covered by this Permit, for a period of at least three years from the date that the site is finally stabilized. This period may be extended by request of the Director at any time.
- (2) After final stabilization of the construction site is complete, the SWPPP is no longer required to be maintained on site, but may be maintained by the Permittee(s) at its primary headquarters. However, you must continue to allow DWQ access to the SWPPP as described in paragraph B.10(1) (above).

**9.11. ADDRESSES.** All written correspondence under this permit shall be directed to the Division of Water Quality at the following address:

Department of Environmental Quality  
Division of Water Quality  
195 North 1950 West  
PO Box 144870  
Salt Lake City, Utah 84114-4870

**9.12. STATE LAWS.**

- (1) Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Utah Code Ann. § 19-5-117.
- (2) No condition of this Permit shall release the Permittee from any responsibility or requirements under other environmental statutes or regulations.

**9.13. PROPER OPERATION AND MAINTENANCE.** The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit and with the requirements of SWPPPs. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary

facilities or similar systems, installed by a Permittee only when necessary to achieve compliance with the conditions of the Permit.

**9.14. INSPECTION AND ENTRY.** The Permittee shall allow, upon presentation of credentials, the Director or an authorized representative:

- (1) To enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;
- (2) Have access to and copy at reasonable times, any records that must be kept under the conditions of this Permit;
- (3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and
- (4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by law, any substances or parameters at any location.

**9.15. REOPENER CLAUSE.**

- (1) Reopener Due to Water Quality Impacts. If there is evidence indicating that the storm water discharges authorized by this Permit cause, have the reasonable potential to cause or contribute to, a violation of a water quality standard, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part 1.4.4 of this Permit or the Permit may be modified to include different limitations and/or requirements.
- (2) Reopener Guidelines. Permit modification or revocation will be conducted according to UAC R317-8-5.6 and UAC R317-8-6.2.
- (3) Permit Actions. This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Permit condition.

**9.16. SIGNATORY REQUIREMENTS.**

- (1) All Notices of Intent, SWPPPs, reports, certifications or information submitted to the Director, or that this Permit requires to be maintained by the Permittee, shall be signed as follows:
  - a. All notice of intent (NOIs), notices of termination (NOTs), and SWPPPs shall be signed as follows:
    - i. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars) if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

- ii. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - iii. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g. Regional Administrators of EPA).
- b. All reports required by the Permit and other information requested by the Director or by an authorized representative of the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- i. The authorization is made in writing by a person described above and kept with the SWPPP; and
  - ii. The authorization specifies either an individual or a position having responsibility for overall operation of the regulated site, facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
- c. Certification. Any person signing documents under this Part B.16 shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations

## 10. DEFINITIONS AND ACRONYMS

“Act” – is a reference to the Utah Water Quality Act, or Utah Code Annotated Title 19, Chapter 5.

“Agricultural Land” - cropland, grassland, rangeland, pasture, and other agricultural land, on which agricultural and forest-related products or livestock are produced and resource concerns may be addressed. Agricultural lands include cropped woodland, marshes, incidental areas included in the agricultural operation, and other types of agricultural land used for the production of livestock.

“Antidegradation Policy” or “Antidegradation Requirements” - the water quality standards regulation that requires maintenance of water quality:

Waters whose existing quality is better than the established standards for the designated uses will be maintained at high quality unless it is determined by the Board, after appropriate intergovernmental coordination and public participation in concert with the Utah continuing planning process, allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. However, existing instream water uses shall be maintained and protected. No water quality degradation is allowable which would interfere with or become injurious to existing instream water uses.

In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Federal Clean Water Act.

Category 1 Waters: Waters which have been determined by the Board to be of exceptional recreational or ecological significance or have been determined to be a State or National resource requiring protection, shall be maintained at existing high quality through designation, by the Board after public hearing, as Category 1 Waters. New point source discharges of wastewater, treated or otherwise, are prohibited in such segments after the effective date of designation. Protection of such segments from pathogens in diffuse, underground sources is covered in R317-5 and R317-7 and the Regulations for Individual Wastewater Disposal Systems (R317-501 through R317-515). Other diffuse sources (nonpoint sources) of wastes shall be controlled to the extent feasible through implementation of best management practices or regulatory programs.

Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in R317-2-3.5.b.4., and where best management practices will be employed to minimize pollution effects.

Waters of the state designated as Category 1 Waters are listed in UAC R317-2-12.1.

Category 2 Waters: Category 2 Waters are designated surface water segments which are treated as Category 1 Waters except that a point source discharge may be permitted provided that the discharge does not degrade existing water quality. Discharges may be allowed where pollution will be temporary and limited after consideration of the factors in UAC R317-2-3.5.b.4., and where best management practices will be employed to minimize



pollution effects. Waters of the state designated as Category 2 Waters are listed in UAC R317-2-12.2.

Category 3 Waters: For all other waters of the state, point source discharges are allowed and degradation may occur, pursuant to the conditions and review procedures outlined in the paragraph below (Antidegradation Review).

Antidegradation Review (ADR): An antidegradation review will determine whether the proposed activity complies with the applicable antidegradation requirements for receiving waters that may be affected.

An antidegradation review (ADR) may consist of two parts or levels. A Level I review is conducted to insure that existing uses will be maintained and protected.

Both Level I and Level II reviews will be conducted on a parameter-by-parameter basis. A decision to move to a Level II review for one parameter does not require a Level II review for other parameters. Discussion of parameters of concern is those expected to be affected by the proposed activity.

Antidegradation reviews shall include opportunities for public participation, as described in UAC R317-2-3.5e.

“Arid Areas” – areas with an average annual rainfall of 0 to 10 inches.

“Bank” (e.g., stream bank or river bank) – the rising ground bordering the channel of a water of the State of Utah.

“Best Management Practices (BMPs)” – schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce pollution of waters of the State. BMPs include treatment requirements, operating procedures, and practices to control storm water associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

“Bluff” – a steep headland, promontory, riverbank, or cliff.

“Borrow Areas” – the areas where materials are dug for use as fill, either onsite or off-site.

“Category 1, 2, and/or 3 Waters” – see “Antidegradation Policy” or “Antidegradation Requirements”.

“Cationic Treatment Chemical” – polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in storm water discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.

“Commencement of Earth-Disturbing Activities” - the initial disturbance of soils (or ‘breaking ground’) associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material).

“Commencement of Pollutant-Generating Activities” – at construction sites (for the purposes of this permit) occurs in any of the following circumstances:

- Clearing, grubbing, grading, and excavation has begun;



- Raw materials related to your construction activity, such as building materials or products, landscape materials, fertilizers, pesticides, herbicides, detergents, fuels, oils, or other chemicals have been placed at your site;
- Use of authorized non-storm water for washout activities, or dewatering activities, have begun; or
- Any other activity has begun that causes the generation of or the potential generation of pollutants.

“Common Plan of Development or Sale” –is a plan to subdivide a parcel of land into separate parts for separate sale. This can be for a residential, commercial, or industrial development. The plan originates as a single parcel that is separated into parts. This usually goes through an approval process by a local governmental unit, but in some cases, it may not require that process. The original plan is considered the “common plan of development or sale” whether phased or completed in steps.

Additional information related to Common Plan of Development for Permit Purposes:

For UPDES storm water permit purposes, a common plan must have been initiated after October, 1992. A common plan of development or sale remains so until each lot or section of the development has fulfilled its planned purposes (e.g. in a residential development as homes are completed, stabilized, and sold or occupied). As lots or separated sections of the development are completed, the lot or section is stabilized, and the plan purposes are fulfilled for that area, lot, or section, it is no longer part of the common plan of development or sale (e.g. if a home is sold in a development and the owner decides to add a garage somewhere on the lot, that garage project is not part of the common plan of development or sale. In this process a common plan of development or sale may become reduced in size and/or separated by completed areas which are no longer part of the common plan of development or sale, but all unfinished lots remain part of the same common plan of development or sale until they are completed, stabilized, and fulfilled according to the purposes of the plan.

“Construction Activities” – earth-disturbing activities, such as the clearing, grading, and excavation of land.

“Construction and Development Point Source Category” (C&D Rule) – as published in 40 CFR § 450 is the regulation requiring effluent limitations guidelines (ELG’s) and new source performance standards (NSPS) for controlling the discharge of pollutants from construction sites.

“Construction Site” – the land or water area where construction activities will occur and where storm water controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether. The construction site is often a smaller subset of the lot or parcel within which the project is taking place.

- “Construction Support Activities” – a construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own. This can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.
- “Construction Waste” – discarded material (such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and styrofoam).
- “Conveyance Channel” – a temporary or permanent waterway designed and installed to safely convey storm water flow within and out of a construction site.
- “Corrective Action” – for the purposes of the permit, any action taken to (1) repair, modify, or replace any storm water control used at the site; (2) clean up and dispose of spills, releases, or other deposits found on the site; and (3) remedy a permit violation.
- “CWA” – the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.
- “Dewatering” – the act of draining rainwater and/or groundwater from building foundations, vaults, and trenches.
- “Director” – the director of the Division of Water Quality, otherwise known as the Executive Secretary of the Utah Water Quality Board.
- “Discharge” – discharge of storm water or “discharge of a pollutant.”
- “Discharge of a Pollutant” – the addition of any “pollutant” or combination of pollutants to “waters of the State” from any “point source,” or any addition of any pollutant or combination of pollutants to the waters of the State. This includes additions of pollutants into waters of the State from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.
- “Discharge Point” – for the purposes of this permit, the location where collected and concentrated storm water flows are discharged from the construction site.
- “Discharge-Related Activity” – activities that cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction, and operation of storm water controls to control, reduce, or prevent pollutants from being discharged.
- “Discharge to an Impaired Water” – for the purposes of this permit, a discharge to an impaired water occurs if the first water of the State to which you discharge is identified by DWQ or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting an applicable water quality standard, or is included in an EPA-approved or DWQ established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the water of the State to which you discharge is the first water of the State that receives the storm water discharge from the storm sewer system.
- “Domestic Waste” – for the purposes of this permit, typical household trash, garbage or rubbish items generated by construction activities.

- “Drought-Stricken Area” – for the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration’s U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) “Drought to persist or intensify”, (2) “Drought ongoing, some improvement”, (3) “Drought likely to improve, impacts ease”, or (4) “Drought development likely”. See [http://www.cpc.ncep.noaa.gov/products/expert\\_assessment/sdo\\_summary.php](http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php)
- “Earth-Disturbing Activity” or “Land-Disturbing Activity” – actions taken to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, cutting, and filling), soil compaction, and movement and stockpiling of top soils.
- “Effective Operating Condition” – for the purposes of this permit, a storm water control is kept in effective operating condition if it has been implemented and maintained in such a manner that it is working as designed to minimize pollutant discharges.
- “Effluent Limitations” – for the purposes of this permit, any of the Part 2 or Part 3 requirements.
- “Electronic Notice of Intent” – DWQ’s online system for submitting electronic Construction General Permit forms. Can be accessed at <https://secure.utah.gov/stormwater>.
- “Emergency-Related Project” – a project initiated in response to a public emergency (e.g., natural disaster, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services.
- “Excursion” – a violation of a standard or limit.
- “Existing Project” – a construction project that commenced construction activities prior to the issuance date of this permit.
- “Existing Permit Coverage” – means that the permittee had permit coverage under a previous permit prior to the issuance of this permit.
- “Exit Points” – any points of egress from the construction site to be used by vehicles and equipment during construction activities.
- “Exposed Soils” – for the purposes of this permit, soils that as a result of earth-disturbing activities are disturbed and exposed to the elements of weather.
- “Final Stabilization” – All disturbed areas must be covered by permanent structures such as pavement, concrete slab, building, etc., or for areas not covered by permanent structures but that are receiving 20 inches or more of average annual precipitation, vegetation has been established with a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover equivalent to 70 percent of the natural background vegetative cover. In the case of areas that are not covered by permanent structures, but that are receiving less than 20 inches of average annual precipitation (arid areas, 0-10 inches; semi-arid areas, 10-20 inches), final stabilization is equivalent to the requirements of 2.2.2.b of this permit, including the provisions for permanent stabilization.

“Groundwater” – water in the voids and interstitial spaces around soil particles beneath the surface of the ground, even if it is only temporary.

“Hazardous Materials” or “Hazardous Substances” or “Hazardous or Toxic Waste” – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

“Impaired Water” or “Water Quality Impaired Water” or “Water Quality Limited Segment” – for the purposes of this permit, waters identified as impaired on the CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first water of the state to which you discharge is identified by DWQ pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or DWQ established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the state to which you discharge is the water body that receives the storm water discharge from the storm sewer system.

“Impervious Surface” – for the purpose of this permit, any land surface with a low or no capacity for soil infiltration including, but not limited to, pavement, sidewalks, parking areas and driveways, packed gravel or soil, or rooftops.

“Indian Country” or “Indian Country Lands” – defined at 40 CFR §122.2 as:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
2. All dependent Indian communities within the borders of the United States whether within the originally or subsequently acquired territory thereof; and
3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

“Infeasible” – for the purpose of this permit, infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. DWQ notes that it does not intend for any permit requirement to conflict with state water rights law.

“Install” or “Installation” – when used in connection with storm water controls, to connect or set in position storm water controls to make them operational.

“Intermittent (or Seasonal) Stream” – one which flows at certain times of the year when ground water provides water for stream flow, or during and immediately after some precipitation events or snowmelt.

“Landward” – positioned or located away from a water body, and towards the land.

“Level Spreader” – a temporary storm water control used to spread storm water flow uniformly over the ground surface as sheet flow to prevent concentrated, erosive flows from occurring.

“Linear Construction Project” – includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

“Minimize” – to reduce and/or eliminate to the extent achievable using storm water controls that are technologically available and economically practicable and achievable in light of best industry practices.

“Municipal Separate Storm Sewer System” or “MS4” – defined at 40 CFR §122.26(b)(8) as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the State;
2. Designed or used for collecting or conveying storm water;
3. Which is not a combined sewer; and
4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

“Native Topsoil” – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

“Native Vegetation” – the species of plants that have developed for a particular region or ecosystem and are considered endemic to that area.

“Natural Buffer” – for the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

“Natural Vegetation” – vegetation that occurs spontaneously without regular management, maintenance or species introductions, removals, and that generally has a strong component of native species.

“New Operator of a New or Existing Project” – an operator that through transfer and/or operation replaces the operator of an already permitted construction project.

“New Project” – a construction project that commenced construction activities on or the issuance date of this permit.

“New Source” – for the purpose of this permit, a construction project that commenced construction activities on or after the issuance date of this permit.

“New Source Performance Standards (NSPS)” – for the purposes of this permit, NSPS are technology-based standards that apply to construction sites that are new sources under 40 CFR 450.24.

“Non-Storm Water Discharges” – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, noncontact

cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

“Non-Turbid” – is a term used in this permit to describe water that appears visually clear and there appears to be no evidence of silt or sediment present in the water.

“Notice of Intent” (NOI) – the form (electronic or paper) required for authorization of coverage under the Construction General Permit.

“Notice of Termination” (NOT) – the form (electronic or paper) required for terminating coverage under the Construction General Permit.

“Operational” – for the purpose of this permit, storm water controls are made “operational” when they have been installed and implemented, are functioning as designed, and are properly maintained.

“Operator” – for the purposes of this permit and in the context of storm water discharges associated with construction activity, any party associated with a construction project that meets either of the following two criteria:

1. The party which has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications (e.g. in most cases this is the owner of the site, sometimes it is a lessor); or
2. The party which has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit; in most cases this is the general contractor of the project).

“Ordinary High Water Mark” – the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris.

“Outfall” – see “Discharge Point.”

“Owner” – for the purpose of this permit an owner has legal ownership of property on which construction activity is taking place. Except in the case of leased property, an owner is the party that has ultimate control over the destiny of a project. This is the lessor in the case of leased property.

“Permittee” – is the owner and/or operator named in the NOI for the project.

“Point(s) of Discharge” – see “Discharge Point.”

“Point Source” – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, or vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

“Pollutant” – defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

“Pollutant-Generating Activities” – at construction sites (for the purposes of this permit), those activities that lead to or could lead to the generation of pollutants, either as a result of earth disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are:

- sediment;
- nutrients;
- heavy metals;
- pesticides and herbicides;
- oil and grease;
- bacteria and viruses;
- trash, debris, and solids;
- treatment polymers; and
- any other toxic chemicals.

“Pollution Prevention Measures” – storm water controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

“Polymers” – for the purposes of this permit, coagulants and flocculants used to control erosion on soil or to enhance the sediment removal capabilities of sediment traps or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum.

“Prohibited Discharges” – discharges that are not allowed under this permit, including:

1. Wastewater from washout of concrete;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
4. Soaps or solvents used in vehicle and equipment washing;
5. Toxic or hazardous substances from a spill or other release; and
6. Waste, garbage, floatable debris, construction debris, and sanitary waste from pollutant generating activities.

“Provisionally Covered Under this Permit” – for the purposes of this permit, DWQ provides temporary coverage under this permit for emergency-related projects prior to receipt of a complete and



accurate NOI. Discharges from earth-disturbing activities associated with the emergency-related projects are subject to the terms and conditions of the permit during the period of temporary coverage.

“Receiving Water” – a “Water of the State into which the regulated storm water discharges. If the discharge is to a storm sewer system, the receiving water is the waterbody to which the storm system discharges.

“Regulatory Authority” – as it pertains to this permit means EPA, DWQ, or a local MS4 that oversees construction activity.

“Run-On” – sources of storm water that drain from land located upslope or upstream from the regulated site in question.

“Semi-Arid Areas” – areas with an average annual rainfall of over 10 to 20 inches.

“Site” – for construction activities, the land or water area where earth-disturbing activities take place, including construction support activities.

“Small Construction Activity” – defined at Utah Administrative Code R317-8-3.9(6)(e)1. and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

“Small Residential Lot” – for the purpose of this permit, a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

“Snowmelt” – the conversion of snow into overland storm water and groundwater flow as a result of warmer temperatures.

“Spill” – for the purpose of this permit, the release of a hazardous or toxic substance from its container or containment.

“Stabilization” – the use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas of disturbed soil exposed from the construction process.

“Steep Slopes” –for this permit steep slopes are defined as those that are 70 percent or greater in grade.

“Storm Event” – a precipitation event that results in a measurable amount of precipitation.

“Storm Sewer” – a system of pipes (separate from sanitary sewers) that carries storm water runoff from buildings and land surfaces.

“Storm Sewer System” – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying storm water.



“Storm Water” – storm water runoff from precipitation, snow melt runoff, and surface runoff and drainage.

“Storm Water Control Measure” - refers to any storm water control, BMP, or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the state.

“Storm Water Controls” – see “Storm Water Control measure.”

“Storm Water Discharge Associated with Construction Activity” – as used in this permit, a discharge of pollutants in storm water to waters of the state from areas where land disturbing activities (e.g., clearing, grading, or excavation) occur, or where construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute wash down, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants), are located.

“Storm Water Inlet” or “Storm Drain Inlet” – an entrance or opening to a storm water conveyance system, generally placed below grade so as to receive storm water drainage from the surrounding area.

“Storm Water Team” – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the “Storm water Team” must be identified in the SWPPP.

“Subcontractor” – for the purposes of this permit, an individual or company that takes a portion of a contract from the general contractor or from another subcontractor.

“Surface Water” – for this permit a surface water is defined all open water bodies, streams, lakes, ponds, marshes, wetlands, watercourses, waterways, springs, drainage systems, and all other bodies or accumulations of water on the surface only. Surface water is visible water, standing or flowing, above the surface of the ground.

“SWPPP” (Storm Water Pollution Prevention Plan) – a site-specific, written document that, among other things: (1) identifies potential sources of storm water pollution at the construction site; (2) describes storm water control measures to reduce or eliminate pollutants in storm water discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

“Temporary Stabilization” – a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

“Thawing Conditions” – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32°F. This date can be determined by looking at historical weather data. The estimation of thawing conditions is for planning purposes only. During construction the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur

sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

“Total Maximum Daily Load” or “TMDL” – the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If a receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

“Toxic Waste” – see “Hazardous Materials.”

“Turbidity” – when the term is used in a narrative it means a condition of water quality characterized by the presence of cloudiness usually caused by suspended solids and/or organic material. It refers to the visual clarity in water and is measured in a test passing light through a sample of water and quantifying the amount of light passing. The measurement is not directly proportional to the quantity of sediment in the water sample it is directly related to the quantity of light that passes through the sample. Particulate size and other factors can affect the amount of light that passes through the sample. This measurement is called nephelometric turbidity units or ntu.

“Uncontaminated Discharge” – a discharge that does not cause or contribute to an exceedance of applicable water quality standards.

“Upland” - the dry land area above and ‘landward’ of the ordinary high water mark.

“Utah Pollutant Discharge Elimination System (UPDES)” – The State of Utah’s program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 102, 318, and 405 of the Clean water Act (CWA) for the “discharge” of “pollutants” to “Waters of the State”. This program is specifically designed to be compatible with the federal National Pollutant Discharge Elimination System (NPDES) program established and administered by the EPA.

“Water-Dependent Structures” – structures or facilities that are required to be located directly adjacent to a waterbody or wetland, such as a marina, pier, boat ramp, etc.

“Water Quality Standards” –are provisions of State law which consist of a designated use or uses for the waters of the United States, water quality criteria for such waters based upon such uses, and an antidegradation policy to protect high quality waters. Water quality standards protect the public health or welfare, enhance the quality of water and serve the purposes of the Utah Water Quality Act.

“Waters of the State” – means all streams, lakes, ponds, marshes, water-courses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof, except that bodies of water confined to and retained within the limits of private property, and which do not develop into or constitute a nuisance, or a public health hazard, or a menace to fish and

wildlife, shall not be considered to be "waters of the state" under this definition (Section 19-5-102).

“Wetland” – those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. On-site evaluations are typically required to confirm the presence and boundaries of wetlands.

“Work day” – for the purposes of this permit, a work day is a calendar day on which construction activities will take place.

#### Acronyms

C&D – Construction & Development

CGP – Construction General Permit

CFR – Code of Federal Regulations

CPoD – Common Plan of Development or Sale

CWA – Clean Water Act

DEQ – Department of Environmental Quality

DDW – Division of Drinking Water

DWQ – Division of Water Quality

EPA – United States Environmental Protection Agency

MS4 – Municipal Separate Storm Sewer System

NMFS – United States National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NRCS – National Resources Conservation Service

POTW – Publicly Owned Treatment Works

SPCC – Spill Prevention Control and Countermeasure

SW – Storm Water

SWMP – Storm Water Management Plan

SWPPP – Storm Water Pollution Prevention Plan

TMDL – Total Maximum Daily Load

UAC – Utah Administrative Code

UCA – Utah Code Annotated

UPDES – Utah Pollution Discharge Elimination System

UWQA – Utah Water Quality Act

WQS – Water Quality Standard

## Appendix A

### Buffer Requirements

The purpose of this appendix is to assist you in complying with the requirements in Part 2.2.1 of the permit regarding the establishment of natural buffers and/or equivalent sediment controls. This appendix is organized as follows:

A.1. SITES THAT ARE REQUIRED TO PROVIDE AND MAINTAIN NATURAL BUFFERS AND/OR EQUIVALENT EROSION AND SEDIMENT CONTROLS .....	A-2
A.2. COMPLIANCE ALTERNATIVES AND EXCEPTIONS .....	A-2
A.2.1. Compliance Alternatives .....	A-2
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## A.1 SITES THAT ARE REQUIRED TO PROVIDE AND MAINTAIN NATURAL BUFFERS AND/OR EQUIVALENT EROSION AND SEDIMENT CONTROLS

The requirement in Part 2.2.1 to provide and maintain natural buffers and/or equivalent erosion and sediment controls applies for any discharges to waters of the state located within 50 feet of your site's earth disturbances. If the water of the state is not located within 50 feet of earth-disturbing activities, Part 2.2.1 does not apply. See Figure A-1.

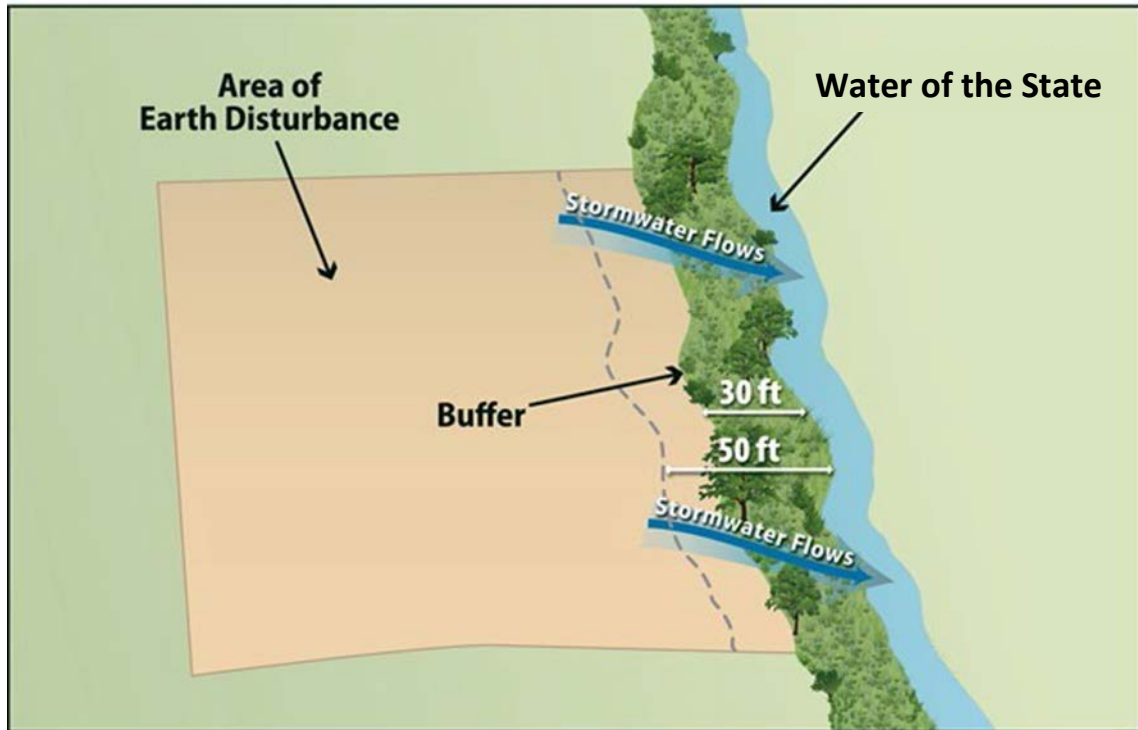


Figure A-1 Example of earth-disturbing activities within 50 feet of a water of the state.

## A.2 COMPLIANCE ALTERNATIVES AND EXCEPTIONS

### A.2.1. Compliance Alternatives

If Part 2.2.1 applies to your site, you have three compliance alternatives from which you can choose, unless you qualify for any of the exceptions (see below and Part 2.2.1.a):

1. Provide and maintain a 50-foot undisturbed natural buffer; or
2. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or
3. If infeasible to provide and maintain an undisturbed natural buffer of any size, implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

The compliance alternative selected must be maintained throughout the duration of permit coverage.

See Part A.2.2 below for exceptions to the compliance alternatives.

See Part A.2.3 for requirements applicable to providing and maintaining natural buffers under compliance alternatives 1 and 2 above.

See Part A.2.4 for requirements applicable to providing erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer under compliance alternatives 2 and 3 above.

#### **A.2.2. Exceptions to the Compliance Alternatives**

The following exceptions apply to the requirement to implement one of the Part 2.2.1.a compliance alternatives (see also Part 2.2.1.b):

- The following disturbances within 50 feet of a water of the state are exempt from the requirements Part 2.2.1 and this Appendix:
  - Construction approved under a CWA Section 404 permit; or
  - Construction of a water-dependent structure or water access areas (e.g., pier, boat ramp, trail).
- If there is no discharge of storm water to waters of the state through the area between the disturbed portions of the site and any waters of the state located within 50 feet of your site, you are not required to comply with the requirements in Part 2.2.1 and this Appendix. This includes situations where you have implemented controls measures, such as a berm or other barrier that will prevent such discharges.
- Where no natural buffer exists due to preexisting development disturbances (e.g., structures, impervious surfaces) that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in Part 2.2.1 and this Appendix.

Where some natural buffer exists but portions of the area within 50 feet of the water of the state are occupied by preexisting development disturbances, you are required to comply with the requirements in Part 2.2.1 and this Appendix. For the purposes of calculating the sediment load reduction for either compliance alternative 2 or 3, you are not expected to compensate for the reduction in buffer function that would have resulted from the area covered by these preexisting disturbances. Clarity about how to implement the compliance alternatives for these situations is provided in A.2.3 and A.2.4 below.

If during your project, you will disturb any portion of these preexisting disturbances, the area removed will be deducted from the area treated as a “natural buffer.”

- For “linear construction sites” (see Definitions), you are not required to comply with this requirement if site constraints (e.g., limited right-of-way) make it infeasible to implement one of the Part 2.2.1.a compliance alternatives, provided that, to the extent feasible, you limit disturbances within 50 feet of any waters of the state and/or you provide supplemental erosion and sediment controls to treat storm water discharges from earth

disturbances within 50 feet of the water of the state. You must also document in your SWPPP your rationale for why it is infeasible for you to implement one of the Part 2.2.1.a compliance alternatives, and describe any buffer width retained and supplemental erosion and sediment controls installed.

- For “small residential lot” construction (i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre), you have the option of complying with one of the “small residential lot” compliance alternatives in Part A.3 of this appendix.

Note that you must document in your SWPPP if any disturbances related to any of the above exceptions occurs within the buffer area on your site.

### **A.2.3. Requirements for Providing and Maintaining Natural Buffers**

This part applies to you if you choose compliance alternative 1 (50-foot buffer), compliance alternative 2 (a buffer of < 50 feet supplemented by additional erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), or if you are providing a buffer in compliance with one of the “small residential lot” compliance alternatives in Part A.3.

#### **Buffer Width Measurement**

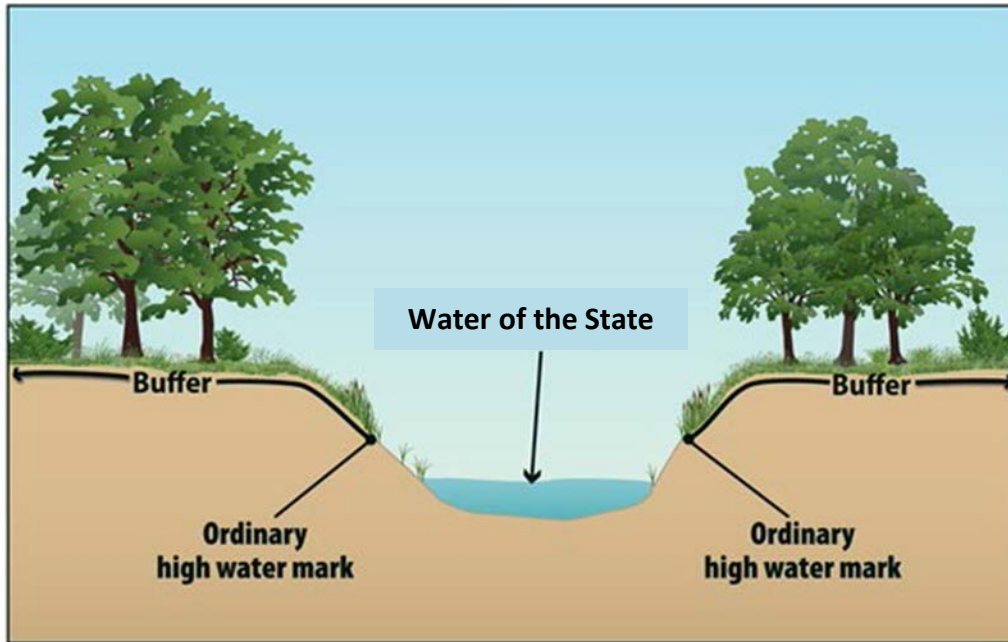
Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:

4. The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
5. The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

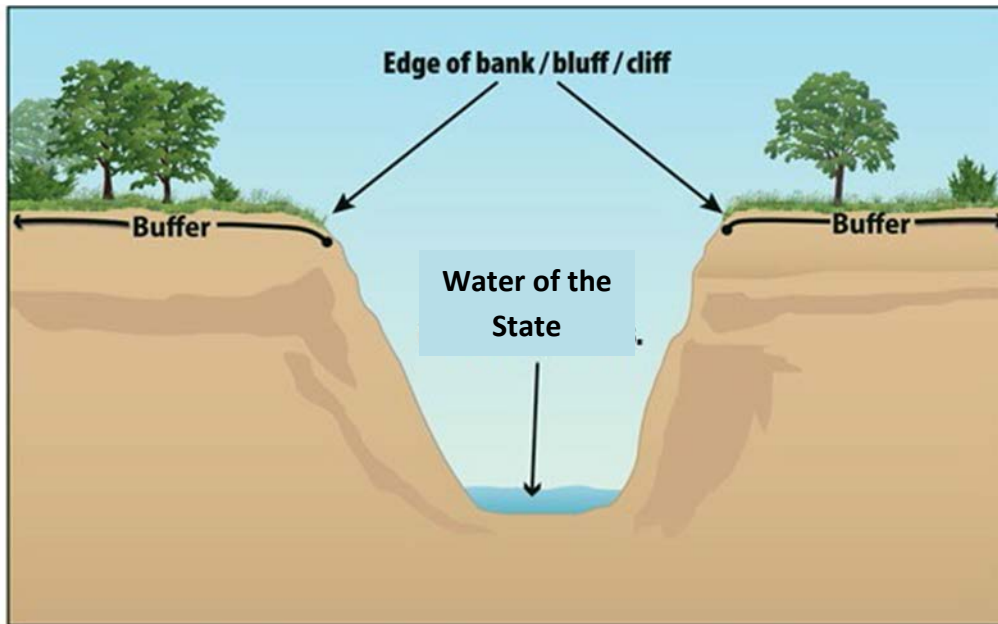
Refer to Figure A-2 and Figure A-3. You may find that specifically measuring these points is challenging if the flow path of the water of the state changes frequently, thereby causing the measurement line for the buffer to fluctuate continuously along the path of the waterbody. Where this is the case, DWQ suggests that rather than measuring each change or deviation along the water’s edge, it may be easier to select regular intervals from which to conduct your measurement. For instance, you may elect to conduct your buffer measurement every 5 to 10 feet along the length of the water.

Additionally, note that if earth-disturbing activities will take place on both sides of a water of the state that flows through your site, to the extent that you are establishing a buffer around this water, it must be established on both sides. For example, if you choose compliance alternative 1, and your project calls for disturbances on both sides of a small stream, you would need to retain the full 50 feet of buffer on both sides of the water. However, if your construction activities will only occur on one side of the stream, you would only need to retain the 50-foot buffer on the side of the stream where the earth- disturbance will occur.





**Figure A-2 Buffer measurement from the ordinary high water mark of the water body, as indicated by a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter/debris.**



**Figure A-3 Buffer measurement from the edge of the bank, bluff, or cliff, whichever is applicable.**

#### **Limits to Disturbance Within the Buffer**

You are considered to be in compliance with the requirement to provide and maintain a natural buffer if you retain and protect from construction activities the natural buffer that existed prior to the commencement of construction. If the buffer area contains no vegetation prior to the



commencement of construction (e.g., sand or rocky surface), you are not required to plant vegetation. As noted above, any preexisting structures or impervious surfaces may occur in the natural buffer provided you retain and protect from disturbance the buffer areas outside of the preexisting disturbance.

To ensure that the water quality protection benefits of the buffer are retained during construction, you are prohibited from conducting any earth-disturbing activities within the buffer during permit coverage. In furtherance of this requirement, **prior to commencing earth-disturbing activities on your site, you must delineate, and clearly mark off, with flags, tape, or a similar marking device, the buffer area on your site.** The purpose of this requirement is to make the buffer area clearly visible to the people working on your site so that unintended disturbances are avoided.

While you are not required to enhance the quality of the vegetation that already exists within the buffer, you are encouraged to do so where such improvements will enhance the water quality protection benefits of the buffer. (Note that any disturbances within the buffer related to buffer enhancement are permitted and do not constitute construction disturbances.) For instance, you may want to target plantings where limited vegetation exists, or replace existing vegetation where invasive or noxious plant species (see <http://plants.usda.gov/java/noxiousDriver>) have taken over. In the case of invasive or noxious species, you may want to remove and replace them with a diversity of native trees, shrubs, and herbaceous plants that are well-adapted to the climatic, soil, and hydrologic conditions on the site. You are also encouraged to limit the removal of naturally deposited leaf litter, woody debris, and other biomass, as this material contributes to the ability of the buffer to retain water and filter pollutants.

If a portion of the buffer area adjacent to the water of the state is owned by another party and is not under your control, you are only required to retain and protect from construction activities the portion of the buffer area that is under your control. For example, if you comply with compliance alternative 1 (provide and maintain a 50-foot buffer), but 10 feet of land immediately adjacent to the water of the U.S. is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you must only retain and protect from construction activities the 40-foot buffer area that occurs adjacent to the property on which your construction activities are taking place. DWQ would consider you to be in compliance with this requirement regardless of the activities that are taking place in the 10-foot area that is owned by a different party than the land on which your construction activities are taking place that you have no control over.

### **Discharges to the Buffer**

**You must ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls** (for example, you must comply with the Part 2.2.3 requirement to install sediment controls along any perimeter areas of the site that will receive pollutant discharges), **and if necessary to prevent erosion caused by storm water flows within the buffer, you must use velocity dissipation devices.** The purpose of this requirement is to decrease the rate of storm water flow and encourage infiltration so that the pollutant filtering functions of the buffer will be achieved. To comply with this requirement,

construction operators typically will use devices that physically dissipate storm water flows so that the discharge entering the buffer is spread out and slowed down.

#### **SWPPP Documentation**

You are required to document in your SWPPP the natural buffer width that is retained. For example, if you are complying with alternative 1, you must specify in your SWPPP that you are providing a 50-foot buffer. Or, if you will be complying with alternative 2, you must document the reduced width of the buffer you will be retaining (and you must also describe the erosion and sediment controls you will use to achieve an equivalent sediment reduction, as required in Part A.2.4 below). Note that you must also show any buffers on your site map in your SWPPP consistent with Part 7.3.3.h. Additionally, if any disturbances related to the exceptions in Part A.2.2 occur within the buffer area, you must document this in the SWPPP.

#### **A.2.4 Guidance for Providing the Equivalent Sediment Reduction as a 50-foot Buffer**

This part applies to you if you choose compliance alternative 2 (provide and maintain a buffer that is less than 50 feet that is supplemented by erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot buffer) or compliance alternative 3 (implement erosion and sediment controls to achieve the sediment load reduction equivalent to a 50-foot buffer).

##### **Determine Whether it is Feasible to Provide a Reduced Buffer**

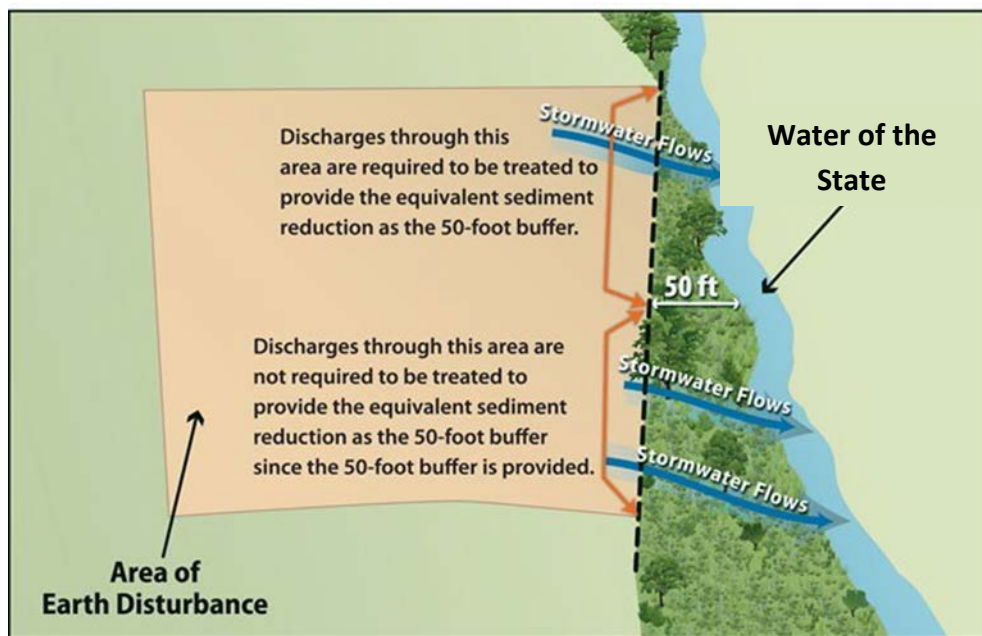
EPA recognizes that there will be a number of situations in which it will be infeasible to provide and maintain a buffer of any width. While some of these situations may exempt you from the buffer requirement entirely (see A.2.2), if you do not qualify for one of these exemptions, there still may be conditions or circumstances at your site that make it infeasible to provide a natural buffer. For example, there may be sites where a significant portion of the property on which the earth-disturbing activities will occur is located within the buffer area, thereby precluding the retention of natural buffer areas.

Therefore, you should choose compliance alternative 2 if it is feasible for you to retain some natural buffer on your site. (Note: For any buffer width retained, you are required to comply with the requirements in Part A.2.3, above, concerning the retention of vegetation and restricting earth disturbances.) Similarly, if you determine that it is infeasible to provide a natural buffer of any size during construction, you should choose alternative 3.

##### **Design Controls That Provide Equivalent Sediment Reduction as 50-foot Buffer**

You must next determine what additional controls must be implemented on your site that, alone or in combination with any retained natural buffer, achieve a reduction in sediment equivalent to that achieved by a 50-foot buffer.

Note that if only a portion of the natural buffer is less than 50 feet, you are only required to implement erosion and sediment controls that achieve the sediment load reduction equivalent to the 50-foot buffer for discharges through that area. You would not be required to provide additional treatment of storm water discharges that flow through 50 feet or more of natural buffer. See Figure A-4.



**Figure A-4 Example of how to comply with the requirement to provide the equivalent sediment reduction when only a portion of your earth-disturbances discharge to a buffer of less than 50- feet.**

Steps to help you meet compliance alternative 2 and 3 requirements are provided below.

#### **Step 1 - Estimate the Sediment Reduction from the 50-foot Buffer**

In order to design controls that match the sediment removal efficiency of a 50-foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of erosion and sediment controls used to reduce the discharge of sediment prior to the buffer. EPA has simplified this calculation by developing buffer performance tables covering a range of vegetation and soil types for the areas covered by the CGP. See Attachment 1 of this Appendix, Tables A-8 and A-9. Note: buffer performance values in Tables A-8 and A-9 represent the percent of sediment captured through the use of perimeter controls (e.g., silt fences) and 50-foot buffers at disturbed sites of fixed proportions and slopes.<sup>39</sup> The number of tables has been reduced since many were irrelevant and

<sup>39</sup> EPA used the following when developing the buffer performance tables:

- The sediment removal efficiencies are based on the U.S. Department of Agriculture's RUSLE2 ("Revised Universal Soil Loss Equation 2") model for slope profiles using a 100-foot long denuded slopes.
- Sediment removal was defined as the annual sediment delivered at the downstream end of the 50-foot natural buffer (tons/yr/acre) divided by the annual yield from denuded area (tons/yr/acre).
- As perimeter controls are also required by the CGP, sediment removal is in part a function of the reduction due to a perimeter control (i.e., silt fence) located between the disturbed portion of the site and the upstream edge of the natural buffer and flow traveling through a 50-foot buffer of undisturbed natural vegetation.
- It was assumed that construction sites have a relatively uniform slope without topographic features that accelerate the concentration for erosive flows. (footnote continues on next page)

Table A-8 for Idaho most closely represents northern Utah, and Table A-9 for New Mexico most closely represents southern Utah.

Using Table A-8 for northern Utah or A-9 for southern Utah (see Attachment 1 of this Appendix), you can determine the sediment removal efficiency of a 50-foot buffer for your geographic area by matching the vegetative cover type that best describes your buffer area and the type of soils that predominate at your site. For example, if your site is located in Idaho (northern Utah --Table A-8), and your buffer vegetation corresponds most closely with that of tall fescue grass, and the soil type at your site is best typified as sand, your site's sediment removal efficiency would be 44 percent.

In this step, you should choose the vegetation type in the tables that most closely matches the vegetation that would exist naturally in the buffer area on your site regardless of the condition of the buffer. However, because you are not required to plant any additional vegetation in the buffer area, in determining what controls are necessary to meet this sediment removal equivalency in Step 2 below, you will be able to take credit for this area as a fully vegetated "natural buffer."

Similarly, if a portion of the buffer area adjacent to the water of the state is owned by another party and is not under your control, you can treat the area of land not under your control as having the equivalent vegetative cover and soil type that predominates on the portion of the property on which your construction activities are occurring.

*For example, if your earth-disturbances occur within 50 feet of a water of the state, but the 10 feet of land immediately adjacent to the water of the state is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10 foot area adjacent to the stream as having the equivalent soil and vegetation type that predominates in the 40 foot area under your control. You would then make the same assumption in Step 2 for purposes of determining the equivalent sediment removal (which would be 44% in this case).*

Alternatively, you may do your own calculation of the effectiveness of the 50-foot buffer based upon your site-specific conditions, and may use this number as your sediment removal equivalency standard to meet instead of using Tables A-8 and A-9. This calculation must be documented in your SWPPP.

## **Step 2 - Design Controls That Match the Sediment Removal Efficiency of the 50-foot Buffer**

- 
- It was assumed that vegetation has been removed from the disturbed portion of the site and a combination of cuts and fills have resulted in a smooth soil surface with limited retention of near-surface root mass.

To represent the influence of soil, EPA analyzed 11 general soil texture classifications in its evaluation of buffer performance. To represent different types of buffer vegetation, EPA evaluated 4 or more common vegetative types for each state/territory covered under the permit. For each vegetation type evaluated, EPA considered only permanent, non-grazed, and non-harvested vegetation, on the assumption that a natural buffer adjacent to the water of the U.S. will typically be undisturbed. EPA also evaluated slope steepness and found that sediment removal efficiencies present in Tables A-8 and A-9 are achievable for slopes that are less than nine percent.

Once you determine the estimated sediment removal efficiency of a 50-foot buffer for your site in Step 1, you must next select storm water controls that will provide an equivalent sediment load reduction. These controls can include the installation of a single control, such as a sediment pond or additional perimeter controls, or a combination of storm water controls. Whichever control(s) you select, you must demonstrate in your SWPPP that the controls will provide at a minimum the same sediment removal capabilities as a 50-foot natural buffer (Step 1). You may take credit for the removal efficiencies of your required perimeter controls in your calculation of equivalency, because these were included in calculating the buffer removal efficiencies in Tables C-8 through C-9. (Note: You are reminded that the controls must be kept in effective operating condition until you complete final stabilization on the disturbed portions of the site discharging to the water of the state)

To make the determination that your controls and/or buffer area achieve an equivalent sediment load reduction as a 50-foot buffer, you should use a model or other type of calculation. As mentioned above, there are a variety of models available that can be used to support your calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other models. An example is provided in Attachment 3 to help illustrate how this determination could be made.

If you retain a buffer of less than 50 feet, you may take credit for the removal that will occur from the reduced buffer and only need to provide additional controls to make up the difference between the removal efficiency of a 50 foot buffer and the removal efficiency of the narrower buffer. For example, if you retain a 30 foot buffer, you can account for the sediment removal provided by the 30 foot buffer retained, and you will only need to design controls to make up for the additional removal provided by the 20 feet of buffer that is not being provided. To do this, you would plug the width of the buffer that is retained into RUSLE or another model, along with other storm water controls that will together achieve a sediment reduction equivalent to a natural 50-foot buffer.

As described in Step 1 above, you can take credit for the area you retained as a "natural buffer" as being fully vegetated, regardless of the condition of the buffer area.

*For example, if your earth-disturbances occur 30 feet from a water of the state, but the 10 feet of land immediately adjacent to the water of the U.S. is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area as a natural buffer, regardless of the activities that are taking place in the area. Therefore, you can assume (for purposes of your equivalency calculation) that your site is providing the sediment removal equivalent of a 30-foot buffer, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided.*

### **Step 3 - Document How Site-Specific Controls Will Achieve the Sediment Removal Efficiency of the 50-foot Buffer**

In Steps 1 and 2, you determined both the expected sediment removal efficiency of a 50-foot buffer at your site, and you used this number as a performance standard to design controls to be installed at your site, which alone or in combination with any retained natural buffer, achieves

the expected sediment removal efficiency of a 50-foot buffer at your site. The final step is to document in your SWPPP the information you relied on to calculate the equivalent sediment reduction as an undisturbed natural buffer.

DWQ will consider your documentation to be sufficient if it generally meets the following:

- For Step 1, refer to the table in Attachment 1 that you used to derive your estimated 50-foot buffer sediment removal efficiency performance. Include information about the buffer vegetation and soil type that predominate at your site, which you used to select the sediment load reduction value in Tables A-8 and A-9. Or, if you conducted a site-specific calculation for sediment removal efficiency, provide the specific removal efficiency, and the information you relied on to make your site-specific calculation.
- For Step 2, (1) Specify the model you used to estimate sediment load reductions from your site; and (2) the results of calculations showing how your controls will meet or exceed the sediment removal efficiency from Step 1.

If you choose compliance alternative 3, you must also include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

### A.3 SMALL RESIDENTIAL LOT COMPLIANCE ALTERNATIVES

EPA has developed two additional compliance alternatives applicable only to “small residential lots” that are unable to provide and maintain a 50 foot buffer.

The following steps describe how a small residential lot operator would achieve compliance with one these 2 alternatives.

A small residential lot (Common Plan Lot) is a lot or grouping of lots being developed for residential purposes that will disturb less than 1 acre of land, but that is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

#### A.3.1 Small Residential Lot Compliance Alternative Eligibility

In order to be eligible for the small residential lot compliance alternatives, the following conditions must be met:

6. The lot or grouping of lots meets the definition of “small residential lot”; and
7. The operator must follow the guidance for providing and maintaining a natural buffer in Part A.2.3 of this Appendix, including:
  - Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site’s erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by storm water within the buffer;
  - Document in the SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and



- Delineate, and clearly mark off, with flags, tape, or other similar marking device, all natural buffer areas.

### A.3.2. Small Residential Lot Compliance Alternatives

You must next choose from one of two small residential lot compliance alternatives and implement the storm water control practices associated with that alternative.

*Note: The compliance alternatives provided below are not mandatory. Operators of small residential lots can alternatively choose to comply with the any of the options that are available to other sites in Part 2.2.1.a and A.2.1 of this Appendix.*

#### Small Residential Lot Compliance Alternative 1

Alternative 1 is a straightforward tiered-technology approach that specifies the controls that a small residential lot must implement based on the buffer width retained. To meet the requirements of small residential lot compliance alternative 1, you must implement the controls specified in Table A-1 based on the buffer width to be retained. See footnote 40, below, for a description of the controls you must implement.

*For example, if you are an operator of a small residential lot that will be retaining a 35-foot buffer and you choose Small Residential Lot Compliance Alternative 1, you must implement double perimeter controls between earth disturbances and the water of the state.*

In addition to implementing the applicable control, you must also document in your SWPPP how you will comply with small residential lot compliance alternative 1.

**Table A-1 Alternative 1 Requirements<sup>40</sup>**

Retain 50 foot Buffer	Retain <50 and >30 Buffer	Retain ≤30 foot Buffer
No Additional Requirements	Double Perimeter Controls	Double Perimeter Controls and 7-Day Site Stabilization

#### Small Residential Lot Compliance Alternative 2

Alternative 2 specifies the controls that a builder of a small residential lot must implement based on both the buffer width retained and the site's sediment discharge risk. By incorporating the

<sup>40</sup>Description of Additional Controls Applicable to Small Residential Lot Compliance Alternatives 1 and 2:

- **No Additional Requirements:** If you implement a buffer of 50 feet or greater, then you are not subject to any additional requirements. Note that you are required to install perimeter controls between the disturbed portions of your site and the buffer in accordance with Part 2.2.3.
- **Double Perimeter Control:** In addition to the reduced buffer width retained on your site, you must provide a double row of perimeter controls between the disturbed portion of your site and the water of the U.S. spaced a minimum of 5 feet apart.
- **Double Perimeter Control and 7-Day Site Stabilization:** In addition to the reduced buffer width retained on your site and the perimeter control implemented in accordance with Part 2.2.3, you must provide a double row of perimeter controls between the disturbed portion of your site and the water of the U.S. spaced a minimum of 5 feet apart, and you are required to complete the stabilization activities specified in Parts 2.2.14 within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities.

sediment risk, this approach may result in the implementation of controls that are more appropriate for the site's specific conditions.

### Step 1 – Determine Your Site's Sediment Risk Level

To meet the requirements of Alternative 2, you must first determine your site's sediment discharge "risk level" based on the site's slope, location, and soil type. To help you to determine your site's sediment risk level, EPA developed five different tables for different slope conditions. You should select the table that most closely corresponds to your site's average slope.

*For example, if your site's average slope is 7 percent, you should use Table C-4 to determine your site's sediment risk.*

After you determine which table applies to your site, you must then use the table to determine the "risk level" (e.g., "low", "moderate", or "high") that corresponds to your site's location and predominant soil type.<sup>41</sup>

*For example, based on Table C-3, a site located in Northern Utah with a 4 percent average slope and with predominately sandy clay loam soils would fall into the "low" risk level.*

**Table A-2 Risk Levels for Sites with Average Slopes of  $\leq 3$  Percent**

Soil Type Location	Clay	Silty Clay Loam or Clay- Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Low	Low	Low	Low

**Table A-3 Risk Levels for Sites with Average Slopes of  $> 3$  Percent and  $\leq 6$  Percent**

Soil Type Location	Clay	Silty Clay Loam or Clay- Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Low	Low	Low	Moderate

<sup>41</sup> One source for determining your site's predominant soil type is the USDA's Web Soil Survey located at <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.



**Table A-4 Risk Levels for Sites with Average Slopes of > 6 Percent and ≤ 9 Percent**

Soil Type Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Low	Low	Low	Moderate

**Table A-5 Risk Levels for Sites with Average Slopes of > 9 Percent and ≤ 15 Percent**

Soil Type Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Low
New Mexico (Southern Utah)	Low	Moderate	Low	Moderate	Moderate

**Table A-6 Risk Levels for Sites with Average Slopes of > 15 Percent**

Soil Type Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Idaho (Northern Utah)	Low	Low	Low	Low	Moderate
New Mexico (Southern Utah)	Moderate	Moderate	Moderate	Moderate	High

## Step 2 – Determine Which Additional Controls Apply

Once you determine your site’s “risk level”, you must next determine the additional controls you need to implement on your site, based on the width of buffer you plan to retain. Table A-7

specifies the requirements that apply based on the “risk level” and buffer width retained. See footnote 40, above, for a description of the additional controls that are required.

*For example, if you are the operator of a small residential lot that falls into the “moderate” risk level, and you decide to retain a 20-foot buffer, using Table A-7 you would determine that you need to implement double perimeter controls to achieve compliance with small residential lot compliance alternative 2.*

You must also document in your SWPPP your compliance with small residential lot compliance alternative 2.

Table A-7. Alternative 2 Requirements

Risk Level Based on Estimated Soil Erosion	Retain $\geq 50'$ Buffer	Retain $<50'$ and $>30'$ Buffer	Retain $\leq 30'$ and $>10'$ Buffer	Retain $\leq 10'$ Buffer
Low Risk	No Additional Requirements	No Additional Requirements	Double Perimeter Control	Double Perimeter Control
Moderate Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization
High Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization	Double Perimeter Control and 7-Day Site Stabilization

ATTACHMENT 1

Sediment Removal Efficiency Tables<sup>42</sup>

EPA recognizes that very high removal efficiencies, even where theoretically achievable by a 50-foot buffer, may be very difficult to achieve in practice using alternative controls. Therefore in the tables below, EPA has limited the removal efficiencies to a maximum of 90%. Efficiencies that were calculated at greater than 90% are shown as 90%, and this is the minimum percent removal that must be achieved by alternative controls.

For the Utah CGP only the tables for Idaho and New Mexico are shown. The table for Idaho substitutes for northern Utah and the table for New Mexico substitutes for southern Utah.

Table A-8 Estimated 50-foot Buffer Performance in Idaho\* (Northern Utah)

Type of Buffer Vegetation**	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Tall Fescue Grass	42	52	44	48	85
Medium-density Weeds	28	30	28	26	60
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	25	26	24	24	55
Northern Mixed Prairie Grass	28	30	28	26	50
Northern Range Cold Desert Shrubs	28	28	24	26	50

\* Applicable for sites with less than nine percent slope

\*\* Characterization focuses on the under-story vegetation

Table A-9 Estimated 50-foot Buffer Performance in New Mexico\* (Southern Utah)

Type of Buffer Vegetation **	Estimated % Sediment Removal				
	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Tall Fescue grass	71	85	80	86	90

<sup>42</sup> The buffer performances were calculated based on a denuded slope upgradient of a 50-foot buffer and a perimeter controls, as perimeter controls are a standard requirement (see Part 2.2.3).

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**CONSTRUCTION GENERAL STORM WATER PERMIT (CGP)**

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Medium-density Weeds	56	73	55	66	78
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	53	70	51	62	67
Southern Mixed Prairie Grass	53	71	52	63	50
Southern Range Cold Desert Shrubs	56	73	55	65	53

\* Applicable for sites with less than nine percent slope

\*\* Characterization focuses on the under-story vegetation

ATTACHMENT 2

Using the Sediment Removal Efficiency Tables – Questions and Answers

- **What if my specific buffer vegetation is not represented in Tables A-8 and A-9?** Tables A-8 and A-9 provide a range of factors affecting buffer performance; however, there are likely instances where the specific buffer vegetation type on your site is not listed. If you do not see a description of the type of vegetation present at your site, you should choose the vegetation type that most closely matches the vegetation type on your site. You can contact your local Cooperative Extension Service Office (<http://nifa.usda.gov/partners-and-extension-map>) for assistance in determining the vegetation type in Tables C-8 through C-9 that most closely matches your site-specific vegetation.
- **What if there is high variability in local soils?** EPA recognizes that there may be a number of different soil type(s) on any given construction site. General soil information can be obtained from USDA soil survey reports (<http://websoilsurvey.nrcs.usda.gov>) or from individual site assessments performed by a certified soil expert. Tables A-8 and A-9 present eleven generic soil texture classes, grouping individual textures where EPA has determined that performance is similar. If your site contains different soil texture classes, you should use the soil type that best approximates the predominant soil type at your site.
- **What if my site slope is greater than 9 percent after final grade is reached?** As indicated in the buffer performance tables, the estimated sediment removal efficiencies are associated with disturbed slopes of up to 9 percent grade. Where your graded site has an average slope of greater than 9 percent, you should calculate a site-specific buffer performance.
- **How do I calculate my own estimates for sediment reduction at my specific site?** If you determine that it is necessary to calculate your own sediment removal efficiency using site-specific conditions (e.g., slopes at your site are greater than 9 percent), you can use a range of available models that are available to facilitate this calculation, including USDA's RUSLE- series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other equivalent models.
- **What is my estimated buffer performance if my site location is not represented by Tables A-8 and A-9?** If your site is located in an area not represented by Tables A-8 and A-9, you should use the table that most closely approximates conditions at your site (Table A-8 generally represents northern Utah, Table A-9 generally represents southern Utah). You may instead choose to conduct a site-specific calculation of the buffer performance.
- **What if only a portion of my site drains to the buffer area?** If only a portion of your site drains to a water of the State, where that water is within 50 feet of your earth disturbances, you are only required to meet the equivalency requirement for the storm water flows corresponding to those portions of the site. See Attachment 3 for an example of how this is expected to work.



## ATTACHMENT 3

## Example of How to Use the Sediment Removal Efficiency Tables

Arid Location With Pre-existing Disturbances in the Natural Buffer (6.5 acre site located in southern Utah)

An operator of a site in southern Utah determines that it is not feasible to provide a 50-foot buffer, but a 28-foot buffer can be provided. Because the operator will provide a buffer that is less than 50 feet, the operator must determine which controls, in combination with the 28-foot buffer, achieve a sediment load reduction equivalent to the 50-foot buffer. In this example, the project will disturb 6.5 acres of land, but only 1.5 acres of the total disturbed area drains to the buffer area. Within the 28-foot buffer area is a preexisting concrete walkway. The equivalence analysis starts with Step 1 in Part A.2.4 of this Appendix with a review of the southern Utah buffer performance (Table A-9). The operator determines that the predominate vegetation type in the buffer area is prairie grass, the soil type is similar to silt, and the site is of a uniform, shallow slope (e.g., 3 percent grade). Although the operator will take credit for the disturbance caused by the concrete walkway as a natural buffer in Step 2, here the operator can treat the entire buffer area as being naturally vegetated with prairie grass. Based on this information, the operator refers to Table A-9 to estimate that the 50-foot buffer would retain 50 percent of eroded soil.

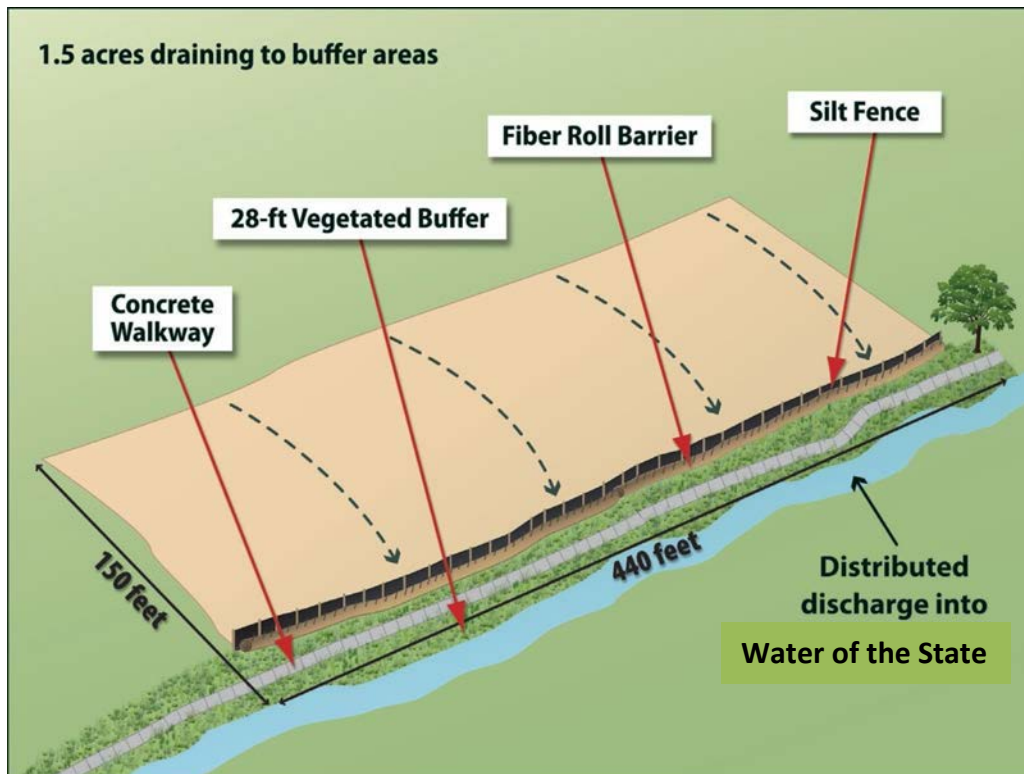


Figure A-5 Example – Equivalent Sediment Load Reductions at a 6.5 ac Site in Southern Utah.

The second step is to determine, based on the 50 percent sediment removal efficiency found in Table A-9, what sediment controls, in combination with the 28-foot buffer area, can be implemented to reduce

sediment loads by 50 percent or more. The operator does not have to account the reduction in buffer function caused by the preexisting walkway, and can take credit for the entire 28-foot buffer being fully vegetated in the analysis. For this example, using the RUSLE2 profile model, the operator determined that installing a fiber roll barrier between the silt fence (already required by Part 2.2.3) and the 28-foot buffer will achieve an estimated 84 percent sediment removal efficiency. See Figure A-5. Note that this operator is subject to the requirement in Part A.2.3 of this Appendix to ensure that discharges through the silt fence, fiber roll barrier, and 28-foot buffer do not cause erosion within the buffer. The estimated sediment reduction is greater than the required 50 percent; therefore the operator will have met the buffer alternative requirement.

## Review Plan

### Applicant Information

[EDIT](#)

<b>Applicant Type</b>	Prime Contractor
<b>Name</b>	Staker Parson Companies
<b>Mailing Address</b>	2350 South 1900 West
<b>City</b>	Ogden
<b>State</b>	Utah
<b>Zip</b>	84401
<b>Phone</b>	801-648-5483
<b>Email</b>	bryan.jorgensen@stakerparson.com

### Project Information

[EDIT](#)

<b>Project Name</b>	Canyon Rim & Maple Parking Lots
<b>Address</b>	3925 East Snowbasin Road
<b>City</b>	Huntsville
<b>State</b>	Utah
<b>Zip</b>	84317
<b>Site Directions</b>	I-15 to exit 339 east. to I-84 east. take exit 92 Mountain

green exit. east to Trappers Loop. North to Snowbasin road. West to project.

**County** Weber

**Acreage** 3.1

#### Point of Contact

[EDIT](#)

**Name** Ray Nelson

**Company** Staker Parson Companies

**Address** 2350 South 1900 West

**City** Ogden

**State** Utah

**Zip** 84401

**Phone** 435-279-7432

#### BMP 06 Selections

[EDIT](#)

**06-01. Pre-water and maintain surface soils in a stabilized condition.**

06-01. Pre-water and maintain surface soils in a stabilized condition.

**06-02. Apply and maintain a chemical stabilizer to surface soils.**

false

**06-03. Dig a test hole to depth of cut or equipment penetration to determine if soils are moist at depth. Continue**

06-03. Dig a test hole to depth of cut or equipment penetration to determine if soils are moist at depth. Continue to pre-water if not moist to depth of cut. \*

to pre-water if not moist  
to depth of cut.

**06-04. Apply water to  
depth of cut prior to  
subsequent cuts.**

06-04. Apply water to depth of cut prior to subsequent  
cuts. \*

**06-05. Water disturbed  
soils to maintain  
moisture.**

06-05. Water disturbed soils to maintain moisture.

**06-06. Apply and  
maintain a chemical  
stabilizer on disturbed  
soils to form crust  
following fill and  
compaction.**

false

**06-07. Apply cover  
(natural or synthetic).**

false

#### BMP 09 Selections

[EDIT](#)

**09-01. Limit disturbance  
of soils with the use of  
fencing, barriers,  
barricades, and/or wind  
barriers.**

false

**09-02. Limit vehicle  
mileage and reduce  
speed.**

09-02. Limit vehicle mileage and reduce speed.

**09-03. Apply water to  
stabilize disturbed soils.  
Soil moisture must be  
maintained such that  
soils can be worked  
without generating  
fugitive dust.**

09-03. Apply water to stabilize disturbed soils. Soil  
moisture must be maintained such that soils can be  
worked without generating fugitive dust.



**09-04. Apply and maintain a chemical stabilizer.** false

**09-05. Use wind breaks.** false

**09-06. Apply cover (natural or synthetic).** false

#### BMP 11 Selections

[EDIT](#)

**11-01. Apply and maintain water/chemical suppressant to operational areas and haul routes.** 11-01. Apply and maintain water/chemical suppressant to operational areas and haul routes.

**11-02. Limit vehicle mileage and speed.** 11-02. Limit vehicle mileage and speed.

**11-03. Use tarps or other suitable enclosures on haul trucks.** 11-03. Use tarps or other suitable enclosures on haul trucks.

**11-04. Apply water prior to transport** false

**11-05. Clean wheels.** false

**11-06. Sweep or water haul road.** 11-06. Sweep or water haul road.

#### BMP 12 Selections

[EDIT](#)

**12-01. Apply and maintain water on disturbed soils.** 12-01. Apply and maintain water on disturbed soils.

**12-02. Apply and maintain chemical stabilizer on disturbed soils.**

false

**12-03. Stabilize disturbed soils with vegetation or hydroseeding.**

false

**12-04. Apply synthetic cover to disturbed soils.**

false

**12-05. There are no soils adjacent to paving activities.**

false

#### BMP 13 Selections

[EDIT](#)

**13-01. Use water control to dust.**

13-01. Use water control to dust.

**13-02. Use a vacuum to collect dust.**

false

#### BMP 15 Selections

[EDIT](#)

**15-01. Limit vehicle mileage and speed limit.**

15-01. Limit vehicle mileage and speed limit.

**15-02. Apply water on all vehicle traffic areas in the staging areas and unpaved access routes.**

15-02. Apply water on all vehicle traffic areas in the staging areas and unpaved access routes.

**15-03. Pre-water and maintain surface soils in a stabilized condition.**

15-03. Pre-water and maintain surface soils in a stabilized condition.

15-04. Apply and maintain a chemical stabilizer to surface soils.	false
15-05. Apply a chemical stabilizer.	false
15-06. Apply screened or washed aggregate.	false
15-07. Use wind breaks.	false
15-08. Pave.	false
15-09. Completed project will cover staging area with buildings, paving, and/or landscaping.	15-09. Completed project will cover staging area with buildings, paving, and/or landscaping.
15-10. Apply water to form adequate crust and prevent access.	false

## BMP 16 Selections

[EDIT](#)

16-01. Pre-water and maintain surface soils in a stabilized condition.	16-01. Pre-water and maintain surface soils in a stabilized condition.
16-02. Apply and maintain a chemical stabilizer on surface soils.	false
16-03. Pave area.	false
16-04. Remove material from the downwind side of the stockpile, when safe to do so.	16-04. Remove material from the downwind side of the stockpile, when safe to do so.

16-05. Reduce height.	16-05. Reduce height.
16-06. Create wind screen	false
16-07. Water stockpiles to form a crust immediately.	16-07. Water stockpiles to form a crust immediately.
16-08. Apply and maintain a chemical stabilizer to all outer surfaces of the stockpiles.	false
16-09. Provide and maintain wind barriers on 3 sides of the pile.	false
16-10. Apply a cover (natural or synthetic)	false
16-11. Wind screen.	false
16-12. Avoid steep sides to prevent material sloughing.	false
16-13. Reduce height.	16-13. Reduce height.

## BMP 18 Selections

[EDIT](#)

18-01. Clean trackout at the end of the work shift from paved surfaces to maintain dust control	false
18-02. Maintain dust control during working hours and clean trackout from paved surfaces at the end of the work	18-02. Maintain dust control during working hours and clean trackout from paved surfaces at the end of the work shift/day.

shift/day.

18-03. Install gravel pad(s), clean, well-graded gravel or crushed rock. Minimum dimensions must be 30 feet wide by 3 inches deep, and, at minimum, 50' or the length of the longest haul truck, whichever is greater. Re-screen, wash or apply additional rock in gravel pad to maintain effectiveness.

false

18-04. Install wheel shakers. Clean wheel shakers on a regular basis to maintain effectiveness.

false

18-05. Install wheel washers. Maintain wheel washers on a regular basis to maintain effectiveness.

false

18-06. Motorized vehicles will only operate on paved surfaces.

false

18-07. Install cattle guard before paved road entrance.

false

18-08. Clearly establish and enforce traffic patterns to route traffic over selected trackout control device(s).

18-08. Clearly establish and enforce traffic patterns to route traffic over selected trackout control device(s).

18-09. Limit site accessibility to routes

false

with trackout control devices in place by installing effective barriers on unprotected routes.

#### BMP 19 Selections

[EDIT](#)

**19-01. Limit vehicle mileage and speeds.**

19-01. Limit vehicle mileage and speeds.

**19-02. Apply and maintain water on surface soils.**

19-02. Apply and maintain water on surface soils.

**19-03. Apply and maintain chemical stabilizers on surface soils.**

false

**19-04. Apply and maintain gravel on surface soils.**

false

**19-05. Supplement chemical stabilizers, water or aggregate applications as necessary.**

false

**19-06. Apply recycled asphalt (RAP) to surface soils.**

false

#### BMP 21 Selections

[EDIT](#)

**21-01. Pre-water and**

21-01. Pre-water and maintain surface soils in a



**maintain surface soils in a stabilized condition where loaders, support equipment and vehicles will operate.**

stabilized condition where loaders, support equipment and vehicles will operate.

**21-02. Apply and maintain a chemical stabilizer on surface soils where loaders, support equipment and vehicles will operate.**

false

**21-03. Empty loader bucket slowly and keep loader bucket close to the truck to minimize the drop height while dumping.**

21-03. Empty loader bucket slowly and keep loader bucket close to the truck to minimize the drop height while dumping.

Print this page for your records or save it as a PDF as specified by your browser or operating system.

**By submitting this plan I agree to the following terms:**

A. I am authorized, on behalf of the individual or company listed in Section 1, as Applicant, to apply for a Fugitive Dust Control Plan and to commit to all of the terms and conditions of the requested plan.

B. Construction activities will be limited to lands that the applicant either owns or is authorized to use for construction activities.

C. The applicant accepts responsibility for assuring that all contractors, subcontractors,

and all other persons on the construction site covered by this plan, comply with the terms and conditions of the Fugitive Dust Control Plan.

D. I understand that any false material statement, representation or certification made in this application may invalidate the plan or cause me to be subject to enforcement action pursuant to Utah Code Ann. 19-2-115. E. Failure to comply with fugitive dust rules may result in compliance action and penalties up to \$10,000 per violation/day.

☐ My plan is ready to be submitted. \*



PREVIOUS

SUBMIT PLAN



[UTAH.GOV HOME](#)

[UTAH.GOV TERMS OF USE](#)

[UTAH.GOV PRIVACY POLICY](#)

[TRANSLATE UTAH.GOV](#)

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Owner Certification: See documents filed in Appendix H.

Operator Certification: See documents filed in Appendix H.

Delegation of Authority: If used, include documents and reference their file in Appendix H.

Subcontractor Certification: If used include documents and reference their file in Appendix H.

Notice of Permit Transfer Requirements: If used include documents and reference their file in Appendix H.

{There are forms for these actions provided in EXHIBIT H of this SWPPP template. File all certification and delegation documents there.}

## **SWPPP APPENDICES**

Attach the following documentation to the SWPPP:

***Appendix A – General Location Map***

***Appendix B – Site Maps***

***Appendix C – Construction General Permit***

***Appendix D – NOI, Local, County and other State Permits. and  
Acknowledgement Letter from EPA/State/MS4***

***Appendix E – Inspection Reports***

***Appendix F – Corrective Action Log (see CGP 5.4)***

***Appendix G – SWPPP Amendment Log (see CGP 7.4.3)***

***Appendix H – Subcontractor  
Certifications/Agreements/Delegation of  
Authority (see CGP Appendix G16.1.2)***

***Appendix I – Grading and Stabilization Activities Log (see CGP  
7.2.4.b)***

***Appendix J – Training Log (see CGP 6)***

***Appendix K – Construction Plans***

***Appendix L – Additional Information (i.e., Other permits such as  
dewatering, stream alteration, wetland; and out of  
date swppp documents)***

***Appendix M – BMP Instruction and Detail Specifications***



## Storm Drain Inlet Protection

**Minimum Measure:** Construction Site Stormwater Runoff Control

**Subcategory:** Sediment Control

### Description

Storm drain inlet protection measures prevent soil and debris from entering storm drain drop inlets. These measures are usually temporary and are implemented before a site is disturbed.

There are several types of inlet protection:

*Excavation around the perimeter of the drop inlet:* Excavating a small area around an inlet creates a settling pool that removes sediments as water is released slowly into the inlet through small holes protected by gravel and filter fabric.

*Fabric barriers around inlet entrances:* Erecting a barrier made of porous fabric around an inlet creates a shield against sediment while allowing water to flow into the drain. This barrier slows runoff while catching soil and other debris at the drain inlet.

*Block and gravel protection:* Standard concrete blocks and gravel can be used to form a barrier to sediments that permits water runoff to flow through select blocks laid sideways.



Sandbags can also be used to create temporary sediment barriers at inlets. For permanent inlet protection after the surrounding area has been stabilized, sod can be installed. This permanent measure is an aesthetically pleasing way to slow stormwater near drop inlet entrances and to remove sediments and other pollutants from runoff.

## **Applicability**

All temporary inlet protection should have a drainage area no greater than 1 acre per inlet. Temporary controls should be constructed before the surrounding landscape is disturbed. Excavated drop inlet protection and block and gravel inlet protection are applicable to areas of high flow, where drain overflow is expected. Fabric barriers are recommended for smaller, flatter drainage areas (slopes less than 5 percent leading to the drain). Temporary drop inlet control measures are often used in sequence or with other erosion control techniques.

## **Siting and Design Applicability**

With the exception of sod drop inlet protection, install these controls before any soil disturbance in the drainage area. Excavate around drop inlets at least 1 foot deep (2 feet maximum), excavating a volume of at least 35 yd<sup>3</sup> per acre disturbed. Side slopes leading to the inlet should be no steeper than 2:1. Design the shape of the excavated area such that the dimensions fit the area from which stormwater is expected to drain. For example, the longest side of an excavated area should be along the side of the inlet expected to drain the largest area.

Stake fabric inlet protection close to the inlet to prevent overflow onto unprotected soils. Stakes should be at least 3 feet long and spaced no more than 3 feet apart. Construct a frame for fabric support during overflow periods, and bury it at least 1 foot below the soil surface. It should rise to a height no greater than 1.5 feet above the ground. The top of the frame and fabric should be below the downslope ground elevation to keep runoff from bypassing the inlet.

Block and gravel inlet barriers should be at least 1 foot high (2 feet maximum). Do not use mortar. Lay the bottom row of blocks at least 2 inches below the soil surface, flush against the drain for stability. Place one block in the bottom row on each side of the inlet on its side to allow drainage. Place 1/2-inch wire mesh over all block openings to prevent gravel from entering the inlet. Place gravel (3/4 to 1/2 inch in diameter) outside the block structure at a slope no greater than 2:1.

Do not consider sod inlet protection until the entire surrounding drainage area is stabilized. Lay the sod so that it extends at least 4 feet from the inlet in each direction to form a continuous mat around the inlet. Lay the sod strips perpendicular to the direction of flows. Stagger them so that the strip ends are not aligned. The slope of the sodded area should not be steeper than 4:1 approaching the drop inlet.

## **Limitations**

To increase the effectiveness of these practices, use them with other measures, such as small impoundments or sediment traps (USEPA, 1992). In general, stormwater inlet protection measures are practical for areas receiving relatively clean runoff that is not heavily laden with sediment. They are designed to handle drainage from areas less than 1 acre (CASQA, 2003). To prevent clogging, storm drain control structures must be maintained frequently. If sediment and other debris clog the water intake, drop inlet control measures can actually cause erosion in unprotected areas.

## **Maintenance Considerations**

Check all temporary control measures after each storm event. To maintain the capacity of the settling pools, remove accumulated sediment from the area around the drop inlet (excavated area, area around fabric barrier or block structure) when the capacity is reduced by half. Remove additional debris from the shallow pools periodically. The weep holes in excavated areas around inlets can become clogged, preventing water from draining out of the pools. If that happens, it might be difficult and costly to unclog the intake.

## **Effectiveness**

Check all temporary control measures after each storm event. To maintain the capacity of the settling pools, remove accumulated sediment from the area around the drop inlet (excavated area, area around fabric barrier or block structure) when the capacity is reduced by half. Remove additional debris from the shallow pools periodically. The weep holes in excavated areas around inlets can become clogged, preventing water from draining out of the pools. If that happens, it might be difficult and costly to unclog the intake.

## **Cost Considerations**

The cost of implementing storm drain inlet protection measures varies depending on the control measure used. Initial installation costs range from \$50 to \$150 per inlet depending on the materials used, with an average cost of \$100 (USEPA, 1993). Maintenance costs can be high (up to 100 percent of the initial construction cost annually) because of the frequent inspection and repair needs. The Southeastern Wisconsin Regional Planning Commission has estimated the cost of installing inlet protection devices at \$106 to \$154 per inlet (SEWRPC, 1991).

## **References**

California Stormwater Quality Association (CASQA). 2003. Stormwater Best Management Practice Handbook: Construction. [<http://www.cabmphandbooks.com/Construction.asp>]. Accessed May 8, 2006.

SEWRPC (Southeastern Wisconsin Regional Planning Commission). 1991. *Costs of Urban Nonpoint Source Water Pollution Control Measures*. Technical report no. 31. Southeastern Wisconsin Regional Planning Commission, Waukesha, WI.

Smolen, M.D., D.W. Miller, L.C. Wyatt, J. Lichthardt, and A.L. Lanier. 1988. *Erosion and Sediment Control Planning and Design Manual*. North Carolina Sedimentation Control Commission; North Carolina Department of Environment, Health, and Natural Resources; and Division of Land Resources, Land Quality Section, Raleigh, NC.

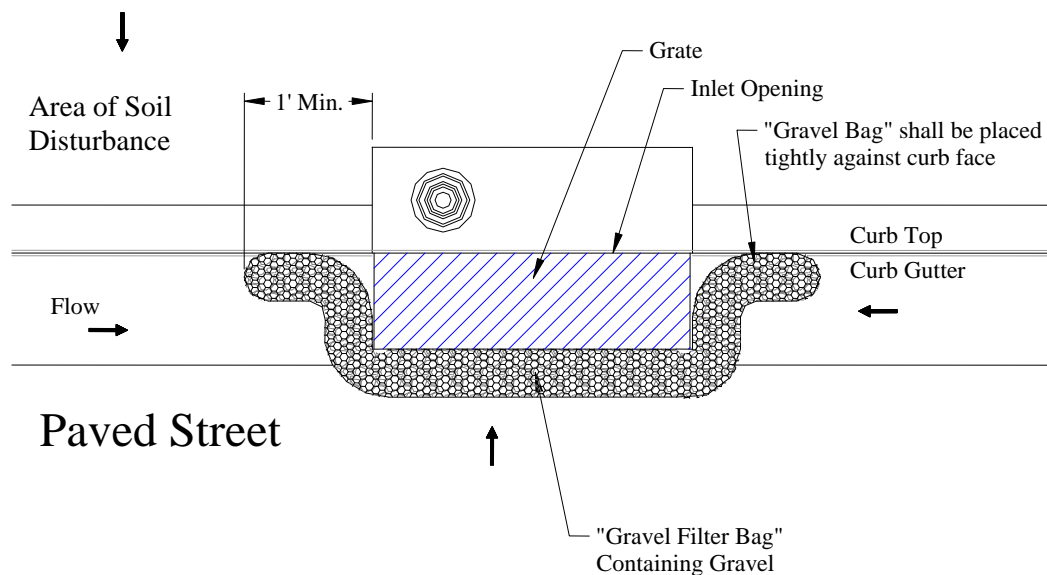
USEPA (U.S. Environmental Protection Agency). 1992. *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices*. EPA 832-R-92-006. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

USEPA (U.S. Environmental Protection Agency). 1993. *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*. EPA 840-B-92-002. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

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# Gravel Bag

## Curb Storm Drain Inlet Protection



### **Description**

The inlet protection consists of a continuous gravel bag filter constructed around a storm drain curb inlet. The bag is made of high UV mono-filament weave for strength and durability and is heat sealed to prevent rupture. Many varying types of bags exist, contact local supplier for details.

### **Application**

Storm drain inlet protection is used to filter sediment laden runoff before it enters the storm drain system.

### **Conditions Where the Practice Applies**

Inlets should be protected with this BMP when storm water from construction areas having earth disturbing activities has the potential to reach existing curb inlets after streets have been paved but lots have not been stabilized.

### **Design/Installation**

Pour  $\frac{3}{4}$ " maximum graded gravel into the bags on site. It is not necessary to fill the bags completely. Overfilling could damage the bag and limit the ability to reuse the bags on future sites. The filter shall be effective in retaining the desired soil particle size. Follow

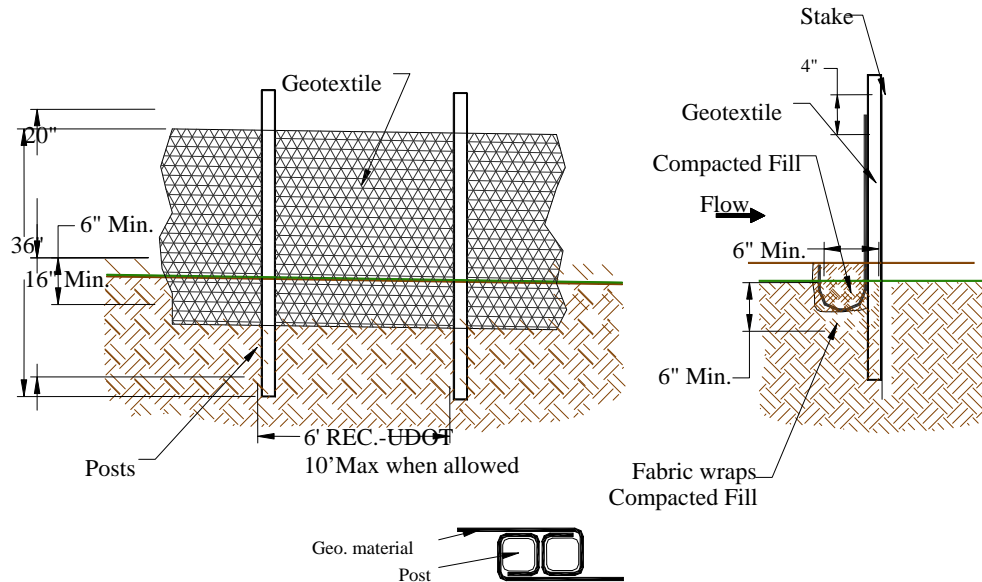
manufacturer's recommendations with respect to the bag requirements. Bags with gravel may be 4", 6", or 8" in diameter depending on the job requirements. The standard bags are 10" X 42". If bags are butted together, they must form a tight seal to prevent sediment from bypassing the filter. It may be necessary to special order longer lengths and cut to the desired length. Twist galvanized wire at least 1" from the open end to retain the gravel in the bag. If grates exist in front of the curb opening, the bag must be outside of the grate in order to prevent unfiltered water from entering the grate. Do not place the filter inside the curb opening. A special product is used for inside the opening applications. The "snake" must be out from the opening far enough to allow overflow during intense rain events.

### **Maintenance**

Bags can be reused provided they are clean and undamaged. Discard damaged bag material in a solid waste facility. The operator shall inspect inlet protection as required by applicable regulations and make repairs or clean out as necessary. More frequent inspections and repairs shall be required during winter conditions due to freeze/thaw problems. Sediment accumulated upstream of the inlet shall be removed when the sediment depth upstream of the device has reached ½ the bag height. Inlet protection is to remain in place until the upstream disturbed area is stabilized and grass cover is approved, unless the local entity approves earlier removal of inlet protection in streets.



# Silt Fence



## **Description**

A temporary barrier of Geotextile used to intercept sediment laden runoff from small drainage areas.

## **Application**

The purpose of silt fence is to reduce velocity and allow the deposition of transported sediment to occur. Limits imposed by ultraviolet light on the stability of the fabric will dictate the maximum period that the silt fence may be used.

1. Silt fence provides a barrier that can collect and hold debris and soil, preventing the material from entering critical areas, streams, streets, etc.
2. Silt fence can be used where the installation of a dike or other control would destroy sensitive areas, woods, wetlands, etc.

## **Conditions where the Practice Applies**

Silt fence is limited to intercepting sheet flow runoff from limited distances according to slope. It provides filtering and velocity dissipation to promote gravity settling of sediment.

## **Design/Installation**

The posts must be a minimum of 16" into the ground and at least to the top of the fabric. The fabric should extend 16"-24" above the ground. Wood or steel posts may be used in certain instances. Silt fence should be placed as close to the contour as possible-following the swppp map recommendations. Use 36" wide cloth. Where ends of the geotextile fabric meet, they shall be overlapped. Roll the fabric ends around each

end post, overlap, and butt posts together tightly. Fasten with wire, staples, or other durable ties.

- If wood posts are to be used they must meet the following specifications:  
1½" X 1½" minimum square posts, or 1¾" minimum diameter round post
- If metal posts are to be used, they must be standard "T" or "U" post weighing not less than 1 lb. per linear foot. The length of the flow contributing to silt fence shall conform to the following limitations. For slopes less than 2% and sandy soils, maximum slope and silt fence lengths will be unlimited. Always check local requirements.

Slope (%)	Slope Steepness	Slope Length (Ft.) (Maximum)	Silt Fence Length (Ft.) (Maximum)
2	0-50:1	Unlimited	Unlimited
2-10	50:1-10:1	125	1,000
10-20	10:1-5:1	100	750
20-33	5:1-3:1	60	500
33-50	3:1-2:1	40	250
50 +	> 2:1	20	125

### **Maintenance**

Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulations reach 50% of the fabric height. The silt fence will be inspected daily for damage by construction equipment.



## **General Construction Site Waste Management**

**Minimum Measure:** Construction Site Stormwater Runoff Control

**Subcategory:** Good Housekeeping/Materials Management

### **Description**

Building materials and other construction site wastes must be properly managed and disposed of to reduce the risk of pollution from materials such as surplus or refuse building materials or hazardous wastes. Practices such as trash disposal, recycling, proper material handling, and spill prevention and cleanup measures can reduce the potential for stormwater runoff to mobilize construction site wastes and contaminate surface or ground water.

### **Applicability**

The proper management and disposal of wastes should be practiced at every construction site to reduce stormwater runoff. Use waste management practices to properly locate refuse piles, to cover materials that might be displaced by rainfall or stormwater runoff, and to prevent spills and leaks from hazardous materials that were improperly stored.

### **Siting and Design Considerations**

#### *Solid Wastes:*

Designate a waste collection area on the site that does not receive a substantial amount of runoff from upland areas and does not drain directly to a waterbody.

Ensure that containers have lids so they can be covered before periods of rain, and keep containers in a covered area whenever possible.

Schedule waste collection to prevent the containers from overfilling.

Clean up spills immediately. For hazardous materials, follow cleanup instructions on the package. Use an absorbent material such as sawdust or kitty litter to contain the spill.

During the demolition phase of construction, provide extra containers and schedule more frequent pickups.

Collect, remove, and dispose of all construction site wastes at authorized disposal areas. Contact a local environmental agency to identify these disposal sites.

#### *Hazardous Materials and Wastes:*

Consult with local waste management authorities about the requirements for disposing of hazardous materials.

To prevent leaks, empty and clean hazardous waste containers before disposing of them.

Never remove the original product label from the container because it contains important safety information. Follow the manufacturer's recommended method of disposal, which should be printed on the label.



Never mix excess products when disposing of them, unless specifically recommended by the manufacturer.

To ensure the proper disposal of contaminated soils that have been exposed to and still contain hazardous substances, consult with state or local solid waste regulatory agencies or private firms. Some landfills might accept contaminated soils, but they require laboratory tests first.

Paint and dirt are often removed from surfaces by sandblasting. Sandblasting grits are the byproducts of this procedure and consist of the sand used and the paint and dirt particles that are removed from the surface. These materials are considered hazardous if they are removed from older structures because they are more likely to contain lead-, cadmium-, or chrome-based paints. To ensure proper disposal of sandblasting grits, contract with a licensed waste management or transport and disposal firm.

#### *Pesticides and fertilizers:*

Follow all federal, state, and local regulations that apply to the use, handling, or disposal of pesticides and fertilizers.

Do not handle the materials any more than necessary.

Store pesticides and fertilizers in a dry, covered area.

Construct berms or dikes to contain stored pesticides and fertilizers in case of spillage.

Follow the recommended application rates and methods.

Have equipment and absorbent materials available in storage and application areas to contain and clean up any spills that occur.

#### *Petroleum Products:*

Store new and used petroleum products for vehicles in covered areas with berms or dikes in place to contain any spills.

Immediately contain and clean up any spills with absorbent materials.

Have equipment available in fuel storage areas and in vehicles to contain and clean up any spills that occur.

#### *Detergents:*

Phosphorous- and nitrogen-containing detergents are used in wash water for cleaning vehicles. Excesses of these nutrients can be a major source of water pollution. Use detergents only as recommended, and limit their use on the site. Do not dump wash water containing detergents into the storm drain system; direct it to a sanitary sewer or contain it so that it can be treated at a wastewater treatment plant.

### **Limitations**

An effective waste management system requires training and signage to promote awareness of the hazards of improper storage, handling, and disposal of wastes. The only way to be sure that waste management practices are being followed is to be aware of worker habits and to inspect storage areas regularly. Extra management time may be required to ensure that all workers are following the proper procedures.

### **Maintenance Considerations**



Inspect storage and use areas and identify containers or equipment that could malfunction and cause leaks or spills. Check equipment and containers for leaks, corrosion, support or foundation failure, or other signs of deterioration, and test them for soundness. Immediately repair or replace any that are found to be defective.

### **Effectiveness**

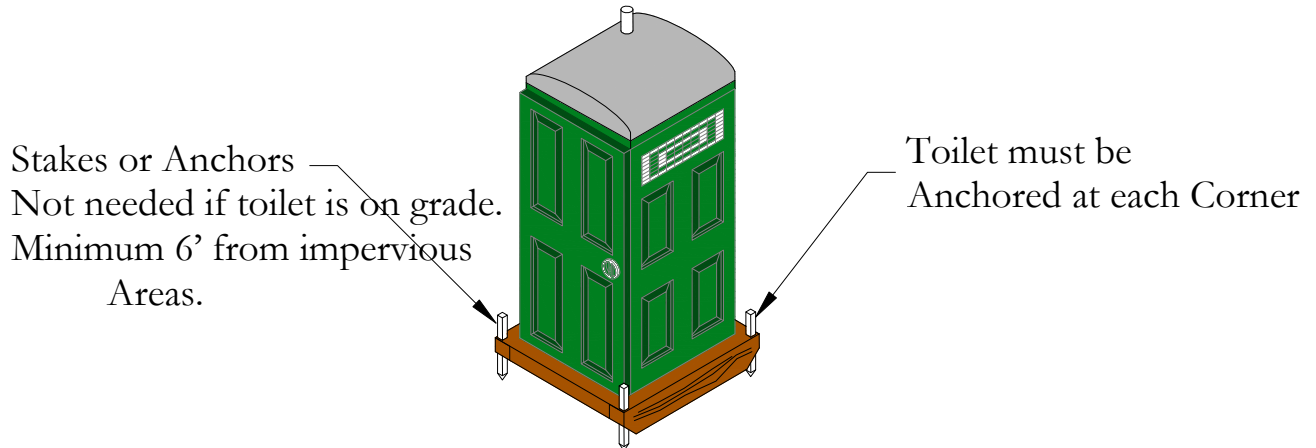
Waste management practices are effective only when they are regularly practiced at a construction site. In storage and use areas, post the guidelines for proper handling, storage, and disposal of construction site wastes; train workers in these practices to ensure that everyone is knowledgeable enough to participate.

### **Cost Considerations**

The costs associated with construction site waste management are mainly attributed to purchasing and posting signs, increased management time for oversight, additional labor required for special handling of wastes, transportation costs for waste hauling, and fees charged by disposal facilities to take the wastes.



# Sanitary Waste Management



## **Description**

Contained sanitary and septic waste management prevent the discharge of pollutants to storm water from sanitary and septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

## **Application**

Sanitary septic waste management practices are suitable for use at all construction sites that use temporary or portable sanitary and septic waste systems.

## **Installation**

Sanitary or septic wastes should be treated or disposed of in accordance with state and local requirements by reputable, licensed sanitary and septic waste haulers. If using an onsite disposal system, such as a septic system, local health agency requirements must be followed.

## **Procedures**

- Sanitary facilities must be provided on the site in close proximity to areas where people are working.
- Locate portable toilets a minimum of 20 feet away from storm drain inlets, conveyance channels, or surface waters. If unable to meet 20-foot distance requirement, provide containment for portable toilets.
- Temporary sanitary facilities should be located away from drainage facilities, watercourses and from traffic circulation.
- Untreated raw wastewater should never be discharged or buried.
- Temporary septic systems should treat wastes to appropriate levels before discharging.
- Temporary sanitary facilities that discharge to the sanitary sewer system should be properly connected to avoid illicit discharges.

- Sanitary and septic facilities should be maintained in good working order by a licensed service.
- Regular waste collection by a licensed hauler should be arranged before facilities overflow.
- Portable toilets must be secured to the ground by stakes or other suitable means to prevent them from turning over during high winds or by accident.

## Parking Lot and Street Cleaning

**Minimum Measure:** Pollution Prevention/Good Housekeeping for Municipal Operations

**Subcategory:** Municipal Activities



### Description

Streets, roads, highways and parking lots accumulate significant amounts of pollutants that contribute to stormwater pollutant runoff to surface waters. Pollutants, including sediment, debris, trash, road salt, and trace metals can be minimized by street sweeping. Street sweeping can also improve the aesthetics of municipal roadways, control dust and decrease the accumulation of pollutants in catch basins. An effective municipal street sweeping program can meet regulatory requirements, assess street sweeping effectiveness, and minimize pollutants in roadways.

### Street Sweepers

Municipalities can choose between the three different types of street sweepers (mechanical, regenerative air and vacuum filter) keeping in mind the targeted pollutants, pollutant type (large debris to particles less than 10 microns in diameter (PM10)), types of surfaces, travel distances, noise ordinances, and costs. Municipals often find it useful to have a complement of each type of street sweeper in their fleet (CASQA, 2003).

Each type of street sweeper has its advantages and disadvantages concerning pollutant removal effectiveness, traveling speed, and noise generated by the street sweeper. With the different types of modern street sweepers capable of removing PM10 particles, price and personal preference are the primary selection criteria for most users (Keating, no date). No definitive independent studies have yet

been staged to determine "the best" sweeping system. Anecdotal data has also been inconclusive (Keating, no date).

## **Applicability**

Street sweeping is practiced in most urban areas, often as an aesthetic practice to remove trash, sediment buildup, and large debris from curb gutters (RIPDES, no date). Effective street sweeping programs can remove several tons of debris a year from city streets minimizing pollutants in stormwater runoff. In colder climates, street sweeping can be used during the spring snowmelt to reduce pollutants in stormwater runoff from road salt, sand and grit.

## **Implementation**

An effective municipal street sweeping program should address at a minimum the following components:

**Street Sweeping Schedule:** Designing and maintaining a street sweeping schedule can increase the efficiency of a program. A successful program will need to be flexible to accommodate climate conditions and areas of concern. Areas of concern should be based on traffic volume, land use, field observations of sediment and trash accumulation and proximity to surface waters (CASQA, 2003). Street sweeping in these areas may need to be increased and the schedule amended. It is recommended that schedules include minimum street sweeping frequencies of at least once a year. In cold climates prone to snowfall the Connecticut Department of Environmental Protection recommends that municipalities conduct street sweeping as soon as possible after the snow melts (McCarthy, 2005). Removal of the accumulated sand, grit, and debris from roads after the snow melts reduces the amount of pollutants entering surface waters.

To evaluate the effectiveness of a street sweeping program, municipalities should maintain accurate logs of the number of curb-miles swept and the amount of waste collected (CASQA, 2003). Monthly or yearly intakes (per ton) can be measured per district, road, season, or mile. This information can be used to develop a written plan, schedule, and periodic re-evaluation for street sweeping that would target the following:

1. those roadways with contributing land uses (high level of imperviousness, high level of industrial activity) that would be expected to show high pollutant concentrations and
2. those roadways that have consistently accumulated proportionately greater amounts of materials (pounds per mile swept) between currently scheduled sweeps (Curtis, 2002).

Gross intake amounts can be presented to regulatory agencies and to finance directors to measure performance. The City of Dana Point, California reported that when sweeping was conducted twice a month, the monthly debris intake was 23 tons. Dana Point then increased street sweeping frequency to a weekly basis and the monthly total increased to 46 tons of debris (City of Dana Point, 2003).

**Street Sweepings Storage and Disposal:** Street sweeping material often includes sand, salt, leaves, and debris removed from roads. Often the collected sweepings contain pollutants and must be tested prior to disposal to determine if the material is hazardous. Municipals should adhere to all federal and state regulations that apply to the disposal and reuse of sweepings.

Municipalities are encouraged to develop comprehensive management plans for the handling of sweepings. A critical aspect of a management plan is selecting a location for storing and processing street sweepings (McCarthy, 2005). Storage locations should be equipped with secondary containment and possibly overhead coverage to prevent stormwater runoff from contacting the piles of sweepings. It is also recommended to cover the piles of sweepings with tarps to prevent the generation of excessive dust. Storage locations should be sized accordingly to completely contain the volume of the disposed sweepings. To estimate the size of the storage location, estimate the volume of sweepings either on a ton-per-street mile or on pounds-per-capita basis (McCarthy, 2005). An average figure for urban areas is 20.25 tons-per street-mile (McCarthy, 2005).

Street Sweepings Reuse Practices: Although sweepings may contain pollutants, federal and state regulations may allow the reuse of sweepings for general fill, parks, road shoulders and other applications as long as the material is not a threat to surface waters. Prior to reuse, trash, leaves, and other debris from sweepings should be removed by screening or other methods (MPCA, 1997). Trash and debris removed should be disposed of by recycling or sent to a landfill (MPCA, 1997).

Parking Policy: Established parking policies increases the effectiveness of a street sweeping program. Parking policies can be established as city ordinance and incorporate the following:

1. Institute a parking policy to restrict parking in problematic areas during periods of street sweeping.
2. Post permanent street sweeping signs in problematic areas; use temporary signs if installation of permanent signs is not possible.
3. Develop and distribute flyers notifying residents of street sweeping schedules (CASQA, 2003).

Operation and Maintenance Program: A municipality should dedicate time for daily and weekly equipment maintenance. Regular maintenance and daily start up inspections insures that street sweepers are kept in good working condition (City of Greeley, 1998). It is vital for municipals to inventory and properly stock parts to prevent downtime and decrease productivity. Old sweepers should be replaced with new technologically- advanced sweepers, preferably modern sweepers that maximize pollutant removal (CASQA, 2003).

## **Limitations and Cost Considerations**

Street sweeping programs are limited by costs. The largest expenditures include staffing and equipment (CASQA, 2003). The capital cost for a conventional street sweeper is between \$60,000 and \$120,000 with newer technologies approaching \$180,000 (CASQA, 2003). Street sweepers have an average life span of 4 years yet more modern street sweepers have been reported to surpass the 4 year average, therefore programs must budget for equipment replacement. The following table shows cost estimates compared to equipment life span and operation and maintenance for two types of sweepers: mechanical and vacuum.



**Table 1. Estimated costs for two types of street sweepers**

Sweeper Type	Purchase Price (\$)	Life (Years)	O&M Cost (\$/curb mile)	Sources
Mechanical	75,000	5	30	Finley, 1996 SWRPC, 1991
Vacuum-assisted	150,000	8	15	Finley, 1996 Satterfield, 1991

**Table 2. The cost of street cleaning for two cities in Michigan**

City	Labor	Equipment	Material and Services	Total
Livonia	\$23,840	\$85,630	\$5,210	\$114,680
Plymouth Township	\$18,050	\$14,550	\$280	\$32,880

## Effectiveness

Street sweeping can be an effective measure in reducing pollutants in stormwater runoff. During the year 2000, the Department of Highway Services and Bethesda Urban Partnership in Montgomery County, Maryland swept approximately 14,373 miles of roadways and removed 2,464 tons of materials (Curtis, 2002). Decreasing the amount of pollutants in roads before they are picked up by stormwater runoff reduces pollutants in surface waters.

Using modern efficient street sweepers may reduce the need for other structural stormwater controls. Municipal stormwater managers should compare potential benefits and costs of street sweeping. Street sweeping may prove to be more cost-effective than certain structural controls, especially in more urbanized areas with greater areas of pavement (SMRC, Rhode Island).

## References

- California Stormwater Quality Association (CASQA). 2003. *Best Management Practices (BMP) Handbook, Municipal*. [<http://www.cabmphandbooks.com/Documents/Municipal/SC-70.pdf>] [PDF - 132 KB - 9 pp]. Accessed May 3, 2006
- Caraco, D. and R. Claytor. 1997. *Stormwater BMP Design Supplement for Cold Climates*. Center for Watershed Protection, Ellicott City, MD.
- City of Dana Point, California. No date. *Working Together To Be The Pollution Solution: Street sweeping will make a clean sweep to protect the ocean*. [<http://secure.purposemedia.com/dpstreetcleaning/streetsearch.html>]. Accessed May 3, 2006.
- City of Greeley, Colorado. 1998. *Street Sweeping Plan*.

Curtis, M. 2002. *Street Sweeping for Pollutant Removal*. Department of Environmental Protection, Montgomery County Maryland.

Ferguson et.al. 1997. *Cost Estimating Guidelines: Best Management Practices and Engineered Controls*. Rouge River National Wet Weather Demonstration Project, Wayne County, MI.

Finley, S. 1996. Sweeping Works. *Pavement Maintenance and Reconstruction*. October/November. pp. 16 and 17.

Keating, Janis. No date. *Street Sweeper, Picking up Speed and Quieting Down*. [[http://www.forester.net/sw\\_0207\\_street.html](http://www.forester.net/sw_0207_street.html) ]. Accessed May 4, 2006.

McCarthy, G. 2005. Connecticut Department of Environmental Protection. *Guidelines for Municipal Management Practices for Street Sweepings and Catch Basin Cleanings*.

Minnesota Pollution Control Agency (MPCA).1997. *Managing Street Sweepings*.

RIPDES Storm Water Program Guidance Page. No date. *Pollution Prevention: Parking Lot and Street Cleaning*. [<http://www.dem.ri.gov/programs/benviron/water/permits/ripdes/stwater/t4guide/fact10a.htm> ] Accessed May 3, 2006

Satterfield, C. 1996. Enviro Whirl 1 PM-10 Efficiency Study Removing Reentrained Road Dust. June Lake, CA.

SWRPC. 1991. Costs of Urban Nonpoint Source Water Pollution Control Measures. Southeastern Wisconsin Regional Planning Commission. Waukesha, WI.

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location


Weber County, Utah



## Local office

Utah Ecological Services Field Office

☎ (801) 975-3330

 (801) 975-3331

2369 West Orton Circle, Suite 50  
West Valley City, UT 84119-7603

<http://www.fws.gov>

<http://www.fws.gov/utahfieldoffice/>

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
  2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an



office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Canada Lynx <i>Lynx canadensis</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. <a href="https://ecos.fws.gov/ecp/species/3652">https://ecos.fws.gov/ecp/species/3652</a>	Threatened

## Flowering Plants

NAME	STATUS
Ute Ladies'-tresses <i>Spiranthes diluvialis</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/2159">https://ecos.fws.gov/ecp/species/2159</a>	Threatened

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

## Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A  
BREEDING SEASON IS  
INDICATED FOR A BIRD ON  
YOUR LIST, THE BIRD MAY  
BREED IN YOUR PROJECT  
AREA SOMETIME WITHIN THE  
TIMEFRAME SPECIFIED,  
WHICH IS A VERY LIBERAL  
ESTIMATE OF THE DATES  
INSIDE WHICH THE BIRD  
BREEDS ACROSS ITS ENTIRE  
RANGE. "BREEDS ELSEWHERE"  
INDICATES THAT THE BIRD  
DOES NOT LIKELY BREED IN  
YOUR PROJECT AREA.)

**Brewer's Sparrow** *Spizella breweri*

Breeds May 15 to Aug 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9291>

**Golden Eagle** *Aquila chrysaetos*

Breeds Jan 1 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/1680>

**Lewis's Woodpecker** *Melanerpes lewis*

Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

**Olive-sided Flycatcher** *Contopus cooperi*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/3914>

**Rufous Hummingbird** *elasphorus rufus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

**Virginia's Warbler** *Vermivora virginiae*

Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9441>

**Willow Flycatcher** *Empidonax traillii*

Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/3482>

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

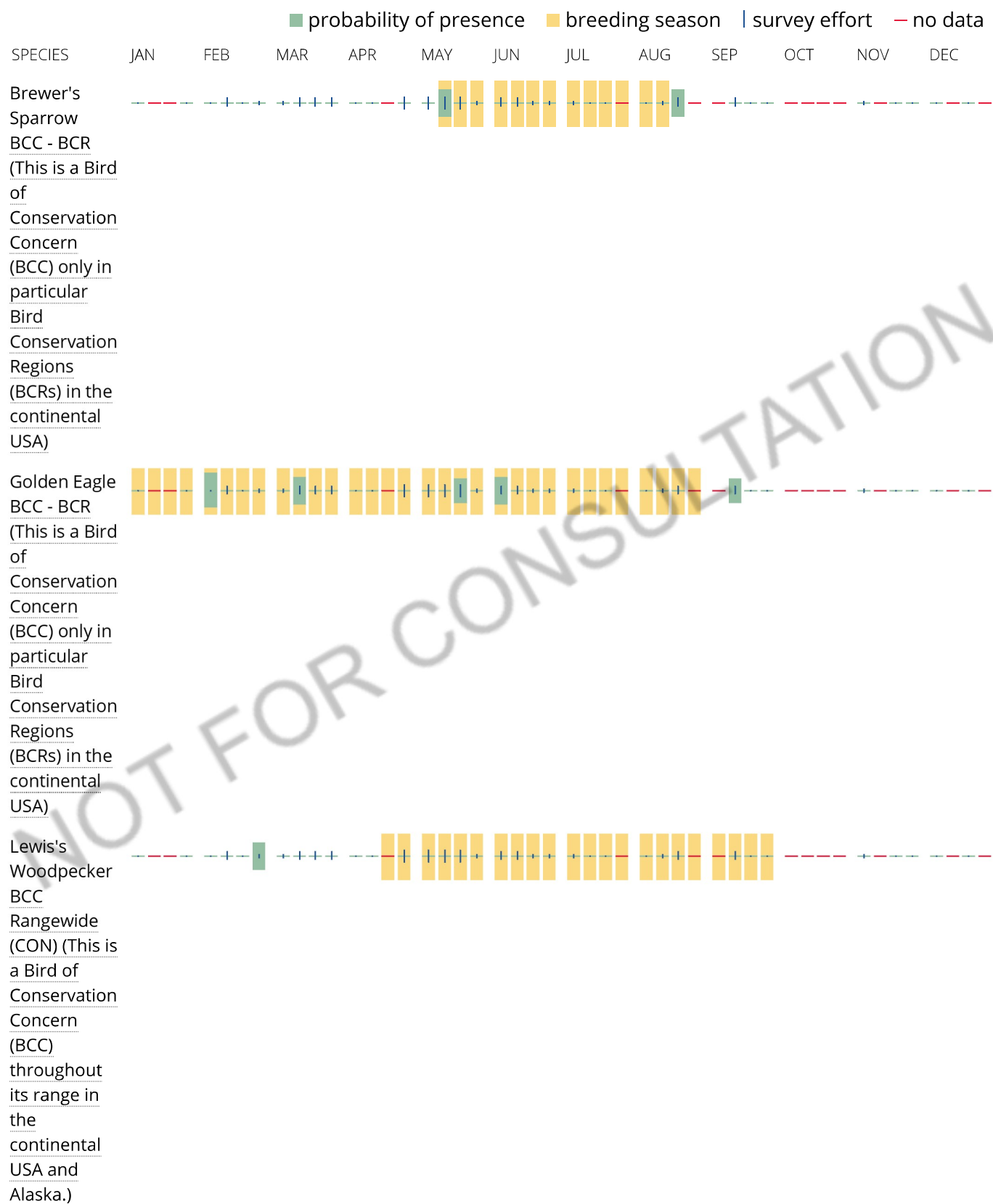
## No Data (—)

A week is marked as having no data if there were no survey events for that week.

## Survey Timeframe

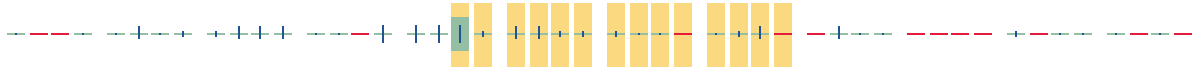
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird

returns are based on all years of available data, since data in these areas is currently much more sparse.





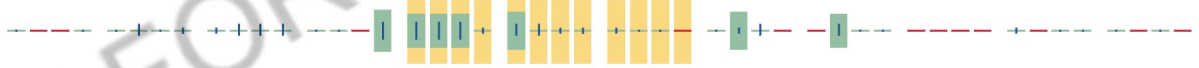
Olive-sided  
Flycatcher  
BCC  
Rangewide  
(CON) (This is  
a Bird of  
Conservation  
Concern  
(BCC)  
throughout  
its range in  
the  
continental  
USA and  
Alaska.)



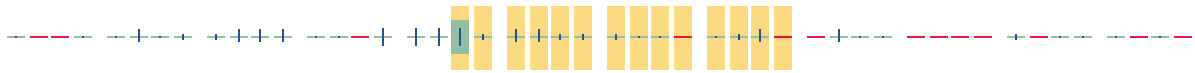
Rufous  
Hummingbird  
BCC  
Rangewide  
(CON) (This is  
a Bird of  
Conservation  
Concern  
(BCC)  
throughout  
its range in  
the  
continental  
USA and  
Alaska.)



Virginia's  
Warbler  
BCC  
Rangewide  
(CON) (This is  
a Bird of  
Conservation  
Concern  
(BCC)  
throughout  
its range in  
the  
continental  
USA and  
Alaska.)



Willow  
Flycatcher  
BCC - BCR  
(This is a Bird  
of  
Conservation  
Concern  
(BCC) only in  
particular  
Bird  
Conservation  
Regions  
(BCRs) in the  
continental  
USA)



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the migratory birds potentially occurring in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

### Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

# Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R5UBH](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

## Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

## Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial



imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

## Appendix F – Corrective Action Log

Project Name:

SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

## Appendix G – SWPPP Amendment Log

Project Name:  
SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

## Appendix H – Subcontractor Certifications/Agreements

### SUBCONTRACTOR CERTIFICATION STORMWATER POLLUTION PREVENTION PLAN

Project Number: \_\_\_\_\_

Project Title: \_\_\_\_\_

Operator(s): \_\_\_\_\_

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

**I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.**

This certification is hereby signed in reference to the above named project:

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Type of construction service to be provided: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix I – Grading and Stabilization Activities Log

Project Name:  
SWPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location



## Appendix J – SWPPP Training Log

### Stormwater Pollution Prevention Training Log

Project Name: \_\_\_\_\_

Project Location: \_\_\_\_\_

Instructor's Name(s): \_\_\_\_\_

Instructor's Title(s): \_\_\_\_\_

Course Location: \_\_\_\_\_ Date: \_\_\_\_\_

Course Length (hours): \_\_\_\_\_

Stormwater Training Topic: *(check as appropriate)*

- ☐ Erosion Control BMPs      ☐ Emergency Procedures  
☐ Sediment Control BMPs      ☐ Good Housekeeping BMPs  
☐ Non-Stormwater BMPs

Specific Training Objective: \_\_\_\_\_

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

## Appendix K – Delegation of Authority Form

### Delegation of Authority

I, \_\_\_\_\_ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the \_\_\_\_\_ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(name of person or position)  
(company)  
(address)  
(city, state, zip)  
(phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in \_\_\_\_\_ (Reference State Permit), and that the designee above meets the definition of a “duly authorized representative” as set forth in \_\_\_\_\_ (Reference State Permit).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Name:** \_\_\_\_\_

**Company:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_