

Stormwater Pollution Prevention Plan (SWPPP)

For Construction Activities At:

Kum & Go Store #943
3365 Diagonal Highway
Boulder, Colorado 80301
Lot 1, Kum & Go Store 943 Subdivision
Project/Site Telephone Number: _____

SWPPP Prepared For:

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SWPPP Preparation Date:

5/19/2014

Estimated Project Dates:

Project Start Date: 4/13/2015
Project Completion Date: 8/14/2015

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SECTION 1: INTRODUCTION

1.1 Overview

In 1972, Congress passed the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), to restore and maintain the quality of the nation's waterways. The ultimate goal was to ensure that rivers and streams were fishable, swimmable, and drinkable. In 1987, the Water Quality Act (WQA) added provisions to the CWA that allowed the EPA to govern stormwater discharges from construction sites.

The Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre, where those discharges enter surface waters of the United States or a municipal separate storm sewer system (MS4) leading to surface waters of the United States subject to the conditions set forth in the permit. The permit replaces two permits issued in 1998 (63 FR 7858, February 17, 1998 for EPA Regions 1, 2, 3, 7, 8, 9, and 10 and 63 FR 36489, July 6, 1998 for EPA Region 6).

The National Pollutant Discharge Elimination System (NPDES) Stormwater Program regulates stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. Most stormwater discharges are considered point sources, and operators of these sources may be required to receive an NPDES permit before they can discharge. This permitting mechanism is designed to prevent stormwater runoff from washing harmful pollutants into local surface waters such as streams, rivers, lakes or coastal waters.

The EPA has delegated authority to the State of Colorado to manage their own National Pollutant Discharge Elimination System (NPDES) in all areas of the state excluding Indian country and Federal Facilities as defined in the State's Construction General Permit.

1.2 Purpose

The Storm Water Pollution Prevention Plan (SWPPP) includes, but is not limited to, this SWPPP with appendices, the Erosion and Sedimentation Control Plan included in the Construction Drawings (Site Maps) with the Detail Sheet, the Notice of Intent, Transfer forms, Permit Authorization, General Permit, Notice of Termination (NOT), all records of inspections and activities which are created during the course of the project, and other documents as may be included by reference to this SWPPP. Changes, modifications, revisions, additions, or deletions shall become part of this SWPPP as they occur.

The goal of pollution prevention efforts during project construction is to control soil and pollutants that originate on the site and prevent them from flowing to surface waters. The purpose of this SWPPP is to provide guidelines for achieving that goal. A successful pollution prevention program also relies upon careful inspection and adjustments during the construction process in order to enhance its effectiveness.

The Contractor's participation in this program is mandatory and its non-compliance is subject to various remedies, including without limitation, monetary set-offs, withholding payments; reimbursement for costs, expenses (including reasonable attorney's fees), fines, and civil penalties incurred by Kum & Go; and/or liquidated damages as set forth in the Contractor's contract with Kum & Go. The Owner referred to in this SWPPP is Kum & Go, L.C. The General Contractor shall construct the site development improvements while working under contract with the Owner.

1.3 Scope

This SWPPP, including the applicable General Permit, includes the elements necessary to comply with the General Permit for construction activities administered by the U.S. Environmental Protection Agency (EPA) under the National Pollutant Discharge Elimination System (NPDES) program and all state and local governing agency requirements. This SWPPP must be implemented at the start of construction.

Construction phase pollutant sources anticipated at the site are disturbed (bare) soil, vehicle fuels and lubricants, chemicals and coatings associated with site or building construction and pavement installation, construction-generated litter and debris, and building materials. Without adequate control there is a potential for each type of pollutant to be transported by storm water.

The General Contractor and all subcontractors involved with a construction activity that disturbs site soil or who implement a pollutant control measure identified in the SWPPP, or otherwise required, must comply with the following requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit per the delegated governing agency having jurisdiction concerning NPDES, storm water, erosion, and sedimentation control:

- A. NOTICE OF INTENT:** The Operator will petition the Colorado Department of Health for storm water discharges during construction at this site to be covered by the Water Quality Control Division Construction General Permit for the State of Colorado following completion of this SWPPP. An NOI (using the form required by the federal, state, and/or local permitting agency), to be covered under this permit, will be filed by the Operator, if required. Authorization to discharge storm water from Construction Activities is effective at least ten calendar days after acknowledgement of receipt of a complete NOI is given by the state environmental agency. The SWPPP must be prepared prior to submittal of the NOI. It is the Contractor's obligation to verify with the state agency if it will be authorized under the Operator's permit or if a separate permit will be required.
- B. RESPONSIBILITIES OF CONTRACTOR REGARDING THE CONSTRUCTION GENERAL PERMIT:** The Contractor shall manage the discharge of storm water from the site in accordance with the Colorado Discharge Permit System (CDPS) Stormwater Discharge Associated with Construction Activities Construction General Permit for Construction Activities conditions and the following provisions:
1. The Contractor shall be responsible for conducting the Storm Water Management practices in accordance with the permit.
 2. The Contractor shall be responsible for providing Qualified Inspectors (See Section 1.1 (E) for description) to conduct the inspections required by the SWPPP.
 3. The Contractor shall be responsible for any enforcement action taken or imposed by federal, state, or local agencies, including the cost of fines, construction delays, and remedial actions resulting from the Contractor's failure to comply with the permit provisions.
 4. It shall be the responsibility of the Contractor to make any changes to the SWPPP necessary in order to comply with applicable laws and regulations or with any updating and modification requirements discussed in this SWPPP when the Contractor or any of his subcontractors elects to use borrow or fill or material storage sites, either contiguous to or remote from the construction site, when such sites are used solely for the Project. Such sites are not considered to be part of the Project covered by the permit and this SWPPP. Off-site borrow and/or fill sites which are used for the Project must be operating under an approved permit from the jurisdictional entity. The Contractor must provide location and permit number of approved off-site borrow/fill sites in the SWPPP Ledger. The Contractor should consider this requirement in negotiating with earthwork subcontractors, since the choice of an off-site borrow, fill, or material storage site may impact their duty to implement, make changes to, and perform inspections required by the SWPPP for the site.
 5. This SWPPP intends to control water-borne and liquid pollutant discharges by some combination of interception, sedimentation, filtration, and containment. The General Contractor and subcontractors implementing this SWPPP must remain alert to the need to periodically refine and update the SWPPP in order to accomplish the intended goals. The General Contractor is ultimately responsible for all site conditions and permit compliance.
- C. PUBLIC POSTING (Including SWPPP Information Sign)**
Install the Construction Site Notice at the Construction Site entrance and in the job trailer. The following information must be readily available, upon request, near the SWPPP Information Sign within the job trailer: current Site Maps, Detail Sheets, and the SWPPP Ledger for public view until termination of permit coverage has been obtained by filing the Notice of Termination (NOT) or once the Project has reached

Final Stabilization, as required by the state and local agencies. Reference the Construction Site Notice (See **Appendix D**) detail for proper posting of documents.

D. SWPPP LEDGER

One (1) copy shall be provided to the Kum & Go SDM. A copy of the SWPPP Ledger with all required certifications and record keeping forms will be e-mailed or uploaded, as required, by the Operator's Engineer to the SDM, when available. SWPPP Ledgers shall be tabbed and indexed per the Table of Contents. The SWPPP Ledger is meant to be a working document that shall be maintained by the Contractor at the site of the Construction Activities at all times throughout the Project and readily available for review by the Owner, federal, state, or local officials.

The General Contractor must update the SWPPP and Site Maps bi-weekly to reflect the progress of construction activities and general changes to the project site. SWPPP contact, contractor information, and the record of site stabilization activities log must be maintained by the General Contractor throughout the project.

BMPs that do not impact the hydraulic design of the site may be modified or added by the General Contractor and reflected on site maps accordingly, as needs arise. Examples of BMPs that do not typically impact the hydraulic design of the site include silt fence, silt dike, wattles, construction exit, and various forms of temporary and permanent erosion controls (blankets, nets, seed, sod, etc.). Examples of BMPs that commonly impact hydraulic design include storm water basins, diversions, check dams, inlet protection or any product, process or system that changes the storm water flow path or storm water storage capacity of the site or is located in an area of concentrated flow.

The General Contractor must submit a Request for Information (RFI) to the Owner's Engineer and obtain written approval before modifying or adding sediment controls that may impact the hydraulic design of the site.

Substitution of any erosion or sediment control BMP, beyond those specified in the SWPPP, must first be approved in writing by the Owner's Engineer. Substitutions are typically only approved if specified materials are not available or there is a valid reason the specified BMP will not work.

Amending the SWPPP does not mean that it has to be reprinted. It is acceptable to add addenda, sketches, new sections, details, and/or revised drawings that are initialed and dated.

A complete copy of the SWPPP Ledger, including copies of all inspection reports, plan revisions, etc., must be retained for at least **three (3) years** following submission of the Notice of Termination (NOT) or once the Project has reached Final Stabilization, as required by the state and local agencies.

E. SWPPP CERTIFICATION REQUIREMENTS FOR THE CONTRACTOR AND SUBCONTRACTOR(S):

The General Contractor must provide names and addresses of all subcontractors working on this project who will be involved with the major construction activities that disturb site soil or otherwise affect BMP implementation. This information must be kept in the SWPPP Ledger.

The SWPPP Ledger shall provide forms for both the Contractor and Subcontractor(s) identifying the Company Name, Business Address, and Telephone Number along with the Responsible Person for the Contractor and all Subcontractors who will implement, maintain, impact the pollution control measures identified in the SWPPP, and/or are involved in ground-disturbing activities on the site.

The General Contractor shall sign "Contractor's Certification" (See Section 2.1) and all Subcontractors shall sign "Subcontractor's Certification" (See **Appendix I**), verifying they have been instructed on how to comply with and fully understand the requirements of the Colorado Discharge Permit System (CDPS) Stormwater Discharge Associated with Construction Activities General Construction Permit and SWPPP. These certifications must be signed, by a responsible corporate officer or other party meeting the Signatory Requirements or "cognizant official" as defined by the Colorado Discharge Permit System

(CDPS) Stormwater Discharge Associated with Construction Activities, Part I, Section F, Paragraph 1, on behalf of each entity, prior to the beginning of any Construction Activities and shall be filed in the SWPPP Ledger.

- F. INSPECTIONS:** Inspections shall begin within seven (7) calendar days of the start of construction (Project Start Date) and shall be performed at the frequency required by this Section and shall continue until the Notice of Termination (NOT) is filed and the site has reached Final Stabilization.
- Frequency: Inspections must be conducted at least once every seven (7) calendar days (Weekly Inspections) and within 24 hours of the end of a storm event of 0.25 inches or greater precipitation in a 24-hour period or a snow melt that causes surface erosion. Weekly Inspections shall be conducted on the same day of each week in addition to any required Rain Event Inspection. A rain gauge shall be maintained onsite with a record of rainfall (per 0.10") and snowfall (per 1") recorded every 24 hours.
 - Procedures: Inspect all disturbed areas of the site, areas for material and equipment storage, waste and borrow areas, locations where vehicles enter or exit the site, all of the erosion and sediment controls that were identified as part of the plan, areas where stormwater flows within the site, stabilized areas, and accessible discharge locations must be inspected. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable.

Inspect to see if erosion and sediment controls require maintenance, corrective action, or new control measures are required; for the presence of conditions that could lead to spills, leaks, or other pollutant accumulations and discharges; for visible signs of erosion and sediment accumulation at points of discharge and to the channels and stream banks that are in the immediate vicinity of the discharge; if stormwater discharge is occurring at the time of the inspection, whether obvious, look for visual signs of pollutant discharges and note if any permit violations have occurred on the site. Controls must be in good operating condition until the construction activity is complete and final stabilization has been reached.

- Repair and/or Maintenance: Any measure found to be damaged or in need of maintenance shall be initiated within 24 hours of reporting and completed within 48 hours.
 - Silt Fence shall be inspected for tears, depth of sediment, location with respect to drainage, secured to posts, and that the posts are in place.
 - All sediment control measures including silt fence, inlet protection, sediment traps and sediment basins, if present, shall be inspected for depth of sediment, and built up sediment will be removed when it reaches 25 percent of the design capacity.
 - Temporary and permanent seeding and all other stabilization measures will be inspected for bare spots, washouts, and healthy growth.
 - Locations where vehicles enter or exit the site must be inspected for evidence of off-site tracking and any off-site tracking cleaned up.
 - Disturbed Areas and materials storage areas will be inspected for evidence of or potential for pollutants entering stormwater systems.

The SWPPP, including the best management practices implemented on the jobsite, shall be modified as needed to reduce or prevent pollutants from discharging from the site. Modifications to BMPs that change a hydraulic design component (diversions, basins, etc.) must first be approved by the Owner's Engineer.

- Agency Storm Water Inspections: The General Contractor must walk the site with the regulatory inspector and document any deficiencies noted during the inspection. Deficiencies of any type, field or documentation-related, identified during the regulatory inspection, must be noted on the weekly report as a deficiency and resolved within 24 or 48-hours, as appropriate. A second report must be submitted if the agency inspection occurs after the first weekly report was submitted and the inspector identifies any deficiencies.

The General Contractor must call the Owner's Engineer to report the agency inspection immediately, but no later than 1-hour after the inspector has left the jobsite. All storm water or erosion and sediment (E&S) agency visits to the jobsite, whether an official inspection occurred or not, must be reported to the Owner's Engineer. Any agency inspector, including OSHA and utility inspectors, that comment on storm water BMPs (inlet protection, track out, etc.) must be reported to the Owner's Engineer.

A log of all inspections by Federal, State, or local storm water or other environmental agencies shall be kept in the General Contractor SWPPP Ledger. The log form can be found in **Appendix E** and must include the date and time of the visit and whether a report was issued or will be issued as a result of the inspection.

- Inspector: Inspections must be conducted by a "Qualified" Inspector. "Qualified" is defined in **Appendix P**. The inspector must be a person familiar with the site, the nature of the major construction activities, and qualified to evaluate both overall system performance and individual component performance. The inspector must either be someone empowered to implement BMPs in order to increase effectiveness to an acceptable level or someone with the authority to cause such things to happen. Additionally, the inspector shall be properly authorized in accordance with the applicable General Permit to conduct the certified site storm water inspections.
- Recordkeeping: It is imperative that documentation of the inspection and maintenance of all erosion and sediment control measures be completed as soon as possible after the inspection and/or maintenance is concluded but no more than 2 hours after conclusion of any inspection or maintenance activity. The inspection reports shall include the date and time of inspection, the inspector, a summary of the inspection, rain gauge readings, and identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the Project is in compliance with the SWPPP and the Construction General Permit or other applicable State Permit. The report must be signed in accordance with Colorado Discharge Permit System (CDPS) Stormwater Discharge Associated with Construction Activities, Part I, Section F, Paragraph 1. These records are used to prove that the required inspection and maintenance were performed and shall be printed and placed in the SWPPP Ledger. In addition to inspection and maintenance reports, records should be kept of the Construction Activities that occur on the site. The Contractor shall retain copies of the SWPPP, all reports and data in paper and CD format for a minimum of **three (3) years** after the Project is complete.

The forms found in this SWPPP shall be used by the Qualified Inspector(s) to inventory and report the condition of each measure to assist in maintaining the erosion and sediment control measures in good working order.

- Construction Activity
A record of dates must be maintained when:
 - major ground-disturbing activities including earthwork or grubbing occur;
 - installation of structural controls;
 - construction activities temporarily or permanently cease on a portion of the site;
 - stabilization measures are initiated or completed;
 - descriptions of the character and amount of any spills of Hazardous Substances or Oil
 - reports filed with regulatory agencies if reportable quantities of Hazardous Substances or Oil spilled
 - an area is stabilized either temporarily or permanently; and
 - BMPs are installed or permanently removed.This log must be maintained in the SWPPP until the NOT is filed.

A Record of Stabilization and Construction Activity Dates (Stabilization) log for documenting such activities is included in **Appendix J**. The General Contractor shall complete, at a minimum, 1-page of Stabilization log entries for each month of active construction.

Controls must be in place down gradient of any ground-disturbing activities prior to the commencement of grading construction activities and noted on the Site Maps and the Stabilization log. Site Map and Stabilization log comments and entries must complement one another with greater detail provided in the Stabilization log, as needed.

- G. SPILLS OR RELEASES OF HAZARDOUS SUBSTANCES:** Discharge of petroleum products or other hazardous substances into storm water or the storm water (storm sewer) system is subject to reporting and clean up requirements. Spills in excess of reportable quantities (as established under 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302) must be reported. Refer to the Construction General Permit for additional information. A copy of the Spill Report Form is located in **Appendix F** and the Construction General Permit is located in **Appendix B**.
- H. TRAINING:** The Contractor shall provide training sessions bi-weekly or every fourteen (14) days for all entities and subcontractors involved with installing, applying, performing, maintaining, and inspection of the SWPPP. Logs of each bi-weekly training shall be completed by the Contractor on the "Training Log" located in **Appendix L**, and placed in the SWPPP Ledger. Training shall educate the attendees on construction requirements and inspection, recordkeeping, and maintenance procedures for, and location and type of erosion and sediment control measures.
- I. SWPPP MODIFICATIONS:** The inspection report should also identify if any revisions to the SWPPP are warranted due to unexpected conditions. The SWPPP is meant to be a dynamic working guide that is to be kept current and amended by the Qualified Inspector (or other party if so specified below) whenever:
1. There is a change in design, construction, operation, or maintenance at the construction site that has or could have a significant effect on the discharge of pollutants to the Waters of the United States that has not been previously addressed in the SWPPP. In addition to modifying the SWPPP, the Site Map may also require an amendment. Modifications to the SWPPP and/or Site Map in relation to any change in design, construction, operation, or maintenance at the construction site must be made within 48 hours of such change.
 2. Inspections or investigations by site staff, or by local, state or federal officials, determine that the SWPPP is ineffective in eliminating or significantly minimizing pollutants in storm water discharges from the construction site. Modifications resulting relation to SWPPP ineffectiveness resulting from an inspection must be initiated within 48 hours.
 3. BMPs are modified or additional BMPs are designed to correct problems identified during an inspection. Revisions to the SWPPP related to additional or modified BMPs must be completed within 48 hours following the inspection.
 4. There is a release involving a Hazardous Substance or Oil in an amount equal or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302. Revisions to the SWPPP must be completed within seven (7) calendar days of knowledge of the release.
 5. A change in design, construction, operation or maintenance materially affects the site's spill potential per 40 CFR Part 112. Modifications to the SWPPP in relation to such change must be made within 48 hours of the change.
 6. There is an off-site borrow or fill area that is used solely for the Project. The modification will be made by the Contractor and will include, at a minimum, a revision to the SWPPP and site maps and may impact the Contractor's duty to implement and conduct inspections. Any modification will also be made within 48 hours. The Contractor's failure to modify the SWPPP to include off-site borrow or fill

areas used solely for the Project or to monitor or report deficiencies to the Operator will result in the Contractor being liable for fines and construction delays resulting from any federal, state, or local agency enforcement action.

7. Modifications or changes in locations of materials management BMPs shown on the Site Map. Documentation of such modifications or changes must be documented on **Appendix H** and depicted on the Site Map within 48 hours of the change.
8. Any such changes to the SWPPP must be made in writing on the SWPPP Amendment Log within 48 hours of the date such modification or amendment is made to the SWPPP. Changes must also be drawn on the Site Map within 48 hours of any modification or amendment is made to the SWPPP.

J. TERMINATION OF PERMIT COVERAGE: A site can be considered finally stabilized when all soil disturbing activities have been completed and:

1. A uniform perennial vegetative cover, as defined by Final Stabilization, of native background vegetation (of a natural undisturbed reference site) for the unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been established
2. The facility no longer discharges storm water associated with Construction Activities
3. A Notice of Termination (NOT) form is filed by the Operator(s) with the Colorado Water Quality Control Division. The NOT must be submitted within 30 days of Final Stabilization. The Construction Manager will contact the Owner's Engineer to complete a site inspection and report. Upon approval by the Construction Manager, the Owner's Engineer, and General Contractor, as applicable, the NOT must be completed and submitted. A copy of the NOT is included in **Appendix K**.

NOTE: Stabilization requirements include all areas covered by applicable permits, including outlots and utility easements, unless the new Owner and/or Operator have submitted a NOT(s) to the applicable agency and a copy of the NOT(s) has been put in the SWPPP Ledger.

4. The NOT must be signed by the same signatory who signed the NOI (or by a person with an equivalent position to the NOI signatory) and subsequently submitted to the appropriate agency.
5. Where discharging to an MS4, the signatory must also submit a copy of the NOT to the MS4 except where the Project is permitted solely by the MS4 in which case the Contractor will comply with appropriate MS4 termination requirements.
6. The Operator's Project Manager will provide a completed copy of the NOT to the Contractor for inclusion in the SWPPP, which will then be digitally scanned into the final SWPPP document as required. The requirements of the SWPPP, including periodic inspections, must be continued until the NOT is filed. Once the NOT is filed, coverage under the Construction General Permit is terminated and the Contractor's responsibility to implement the SWPPP is completed.
7. Prior to the application of the NOT, the Pre-NOT Inspection and Pre-NOT Inspection Checklist must be completed in conjunction with the Engineer of Record and the Kum & Go Project Manager.

SECTION 2: CONTACT INFORMATION/RESPONSIBLE PARTIES

2.1 Operator(s) / Subcontractor(s)

Operator(s):

Company Name:
Name:
Address:
City, State, Zip Code:
Telephone Number:
Fax/Email:
Area of Control (if more than one operator at site):
[Attach additional contacts as necessary]

Subcontractor(s):

Company Name:
Name:
Address:
City, State, Zip Code:
Telephone Number:
Fax/Email:
Area of Control (if more than one operator at site):

Company Name:
Name:
Address:
City, State, Zip Code:
Telephone Number:
Fax/Email:
Area of Control (if more than one operator at site):

Company Name:
Name:
Address:
City, State, Zip Code:
Telephone Number:
Fax/Email:
Area of Control (if more than one operator at site):
[Attach additional contacts as necessary]

Emergency 24-Hour Contact:

Company Name:
Name:
Telephone Number(s):

See Appendix I for Subcontractor agreement(s)/certification(s).

Owner SWPPP Certification

Date: _____

RE: Kum & Go Store #943
3365 Diagonal Highway
Boulder, Colorado 80301

Mailing Address:
6400 Westown Parkway
West Des Moines, IA 50266

**CERTIFICATION OF THE
STORM WATER POLLUTION PREVENTION PLAN
GENERAL PERMIT FOR STORM WATER DISCHARGES
FROM CONSTRUCTION ACTIVITIES**

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 qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this 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.

Sincerely,

Signature

Printed Name

Title

General Contractor's SWPPP Certification

Date: _____

RE: Kum & Go Store #943
3365 Diagonal Highway
Boulder, Colorado 80301

Mailing Address:

**CERTIFICATION OF THE
STORM WATER POLLUTION PREVENTION PLAN
GENERAL PERMIT FOR STORM WATER DISCHARGES
FROM CONSTRUCTION ACTIVITIES**

I certify under penalty of law that all revisions, modifications, deletions, or additions to this document, and all attachments created during construction were prepared under my direction or supervision in accordance with a system designed to assure qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage this 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.

Sincerely,

Signature

Printed Name

Title

Company

SECTION 3: SITE EVALUATION, ASSESSMENT, AND PLANNING

3.1 Project/Site Information

Project Name and Address

Project/Site Name: Kum & Go Store #943

Project Street/Location: 3365 Diagonal Highway

City: Boulder

State: Colorado

ZIP Code: 80301

County or Similar Subdivision: Boulder County

Quarter Section, Section, Township, Range: Northwest ¼ of Section 21, Township 1 North, Range
70 West of the Sixth Principal Meridian

Project Latitude/Longitude

Latitude: 40.040 °

Longitude: -105.244 °

1. 40 ° 02 ' 22 " N (degrees, minutes, seconds)

1. 105 ° 14 ' 37 " W (degrees, minutes, seconds)

Method for determining latitude/longitude: www.usgs.gov

USGS topographic map (specify scale: 1:24,000)

Horizontal Reference Datum:

NAD 27 NAD 83 or WGS 84 Unknown

Additional Project Information

Is the project/site located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe? Yes No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including the name of Indian reservation if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property: **N/A**

If you are conducting earth-disturbing activities in response to a public emergency, document the cause of the public emergency (*e.g., natural disaster, extreme flooding conditions*), information substantiating its occurrence (*e.g., state disaster declaration*), and a description of the construction necessary to reestablish effective public services: **N/A**

If yes, provide details on any additional permits or authorizations that are required: N/A

Are you applying for permit coverage as a "federal operator" as defined in Appendix A of the CGP?

Yes No

1. Total Site Acres: 3.22 ac

Total Off-Site Acres Disturbed: 1.48 ac

Total Site Acres to be Disturbed: 1.74 ac

Approx. Excavation (Cut): 1,593 CY

Approx. Fill: 7,221 CY

Approx. Net: 5,628 CY (Fill)

The earthwork cut and fill quantities are based on the difference between finished and existing surfaces and are unadjusted and should not be used for bidding purposes.

2. Existing Land Use (include description of existing structures, topography, vegetation and current drainage patterns and reference physical site survey showing same):

A site visit was conducted by Olsson Associates prior to the development of the SWPPP. During the site visit, the following conditions were observed:

The project site consists of a lot containing an existing fueling station, auto repair shop, mobile taco stand, towing services, landscaping business, and pizza oven rental. Access is provided to the site from multiple driveways from each adjacent roadway. The site consists of 2.275 acres± which will be subdivided into two smaller lots. Lot 1 contains 1.80 acres± and will include the development of a 4,992-sf Kum & Go convenience store with associated parking and utilities. Lot 2 contains 0.48 acres± available for future development. Currently, the site is covered by buildings, gravel, asphalt pavement and native vegetation. The vegetation on site varies from 0-25%, consisting of native grasses, weeds, trees, and small shrubs. Two separate septic leach fields are located along the north property line and the southwest property corner. The buildings, gravel, asphalt pavement, and septic leach fields will be removed during construction.

Stormwater runoff generated on the existing site sheet flows from the northwest to the southeast at slopes ranging from 0%-25%. A roadside ditch along Diagonal Highway collects the site's stormwater runoff before being released under Diagonal Highway by an existing 22"x13" CMP. All stormwater runoff generated pre-construction leaves the site un-detained.

Reference Sheets C1.3 and C1.4 of the Kum & Go #943, Site Construction Documents for the existing conditions and demolition plans, respectively.

The following photos show pre-construction conditions at the site:



3. Soils Information		
Soil Type(s)	Description	
Nederland very Cobbly Sandy Loam	Nederland very Cobbly Sandy Loam soils have a k factor of 0.05, and thus exhibit a minimal risk for sheet and rill erosion. These soils are classified as Hydrologic Group B. A Wind Erodibility Group rating of 8 gives them a low susceptibility to wind erosion.	
4. Estimated Native Background Vegetation Cover Density: 0-25%		
5. Estimated Native Topsoil Depth: 6 inches		
6. The site is located in <u>Boulder</u> County Annual Rainfall**= <u>20.72</u> inches Month(s) of highest rainfall: <u>April</u>		
7. Data Table		
2 yr/24 hour storm rainfall = <u>2.2</u> inches	Pre-Construction	Post Construction
Percent Impervious Surface (%)	28%	42%
Weighted Runoff Coefficient*	0.68	0.68
Peak discharge rate (cubic feet per second)	15.6	8.1
** Information usually available in county soils report and from National Climate Data Center at http://www.ncdc.noaa.gov/regionalclimatecenters.html		

3.2 Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)?

Yes No

Are Dewatering operations anticipated?

Yes No

Are Waters of the U.S. on the project area?

Yes No If Yes Acres and/or Linear Feet: _____

Are Wetland and/or Surface Waters proposed to be impacted on the project area?

Yes No If Yes provide Acres and/or Linear Feet _____

Describe Impact (see note below):

Contractor shall immediately notify the owner and engineer if work is proposed within any waterway.

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

Yes No

If yes, refer to **Section 5.1** of this SWPPP for separation requirements.

Table 1 – Names of Receiving Waters

Name(s) of the first surface water that receives stormwater directly from your site and/or from the MS4 (note: multiple rows provided where your site has more than one point of discharge that flows to different surface waters)	Distance to receiving water(s).
1. Roadside Ditch along Diagonal Highway	On-site
2. Boulder Creek (Ultimate)	1.8 miles E
3.	

Table 2 – Impaired Waters / TMDLs (Answer the following for each surface water listed in Table 1 above)

	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?	Title of the TMDL document	Pollutant(s) for which there is a TMDL
1.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	N/A	N/A
2.	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Escherichia Coli (E. Coli)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Boulder Creek, Colorado Segment 2b: From 13th Street to the Confluence with South Boulder Creek	Escherichia Coli (E. Coli)
3.	<input type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> YES <input type="checkbox"/> NO		

Describe the method(s) you used to determine whether or not your project/site discharges to an impaired water:

Impaired waters were found using the EPA MyWater Mapper website.

<http://cfpub.epa.gov/npdes/stormwater/tmdl.cfm>

Table 3 – Tier 2, 2.5, or 3 Waters (Answer the following for each surface water listed in Table 1 above)

	Is this surface water designated as a Tier 2, Tier 2.5, or Tier 3 water?	If you answered yes, specify which Tier (2, 2.5, or 3) the surface water is designated as?
1.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
2.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
3.	<input type="checkbox"/> YES <input type="checkbox"/> NO	

3.3 Nature of the Construction Activity

General Description of Project

This Project will consist of demolition of existing building structures, clearing land, and constructing a convenience store with associated utilities, drives, and parking areas. The property contains an existing fueling station, auto repair shop, mobile taco stand, towing services, landscaping business, and pizza oven rental which will all be removed. The lot shall be subdivided into two lots. A 4,992 square foot convenience store with fuel pumps will be constructed within Lot 1, Kum & Go Store 943 Subdivision. The two existing access drives off of Diagonal Highway will be combined into a single right-in right-out access. The access along the north side of property will be constructed as a 35' wide full-movement access onto Independence Road. All other existing access points to public right-of-way shall be removed. A public water main extension will be installed from the existing stub along the north side of Independence Road. The public water main will run south down the center of 47th Street providing service to the Kum & Go Store 943 Subdivision. A public sanitary sewer main extension will be installed from the existing stub along the south side of Diagonal Highway. The public sanitary sewer main will run north

within 47th Street providing service to the Kum & Go Store 943 Subdivision. Utility service lines will be installed providing wet and dry service from existing transmission mains within the right-of-way of either 47th Street or Independence Road. A storm sewer collection system with associated roof/canopy downspouts will be installed to convey stormwater drainage through the site to a proposed above ground detention basin east of the fuel pump canopy. The pavement and landscape areas shall be graded to direct stormwater runoff to the detention pond. Once final grades have been achieved, landscaping including but not limited to native seed, fiber mulch, trees, and shrubs will be installed. The project will provide permanent stabilization through vegetation and concrete pavement on all disturbed areas.

Adjacent areas include 47th Street along the west side of the property, Independence Road along the north side of the property, and Diagonal Highway along the southeast side of the property. Due to traffic volumes, a new southbound left turn lane at 47th Street and Independence Road will be installed. This will include widening 47th Street to the west and daylight grading from the edge of the proposed sidewalk down to existing grades. The roadway work will provide permanent stabilization through vegetation, asphalt pavement and concrete pavement

The Limits of Disturbance (LOD) for the work has been established on the Site Map located in Appendix A of this SWPPP. The estimated time for completion of the construction on the Project is 123 calendar days. General soil disturbing activities will include:

- Construction of temporary construction exit points
 - Installation of vehicle tracking control measures
- Installation of temporary erosion and sediment control measures along the perimeter of the site (i.e. inlet protection, silt fence, etc.)
- Existing building demolition and removal
- Removal of existing gravel and asphalt pavement
- Removal of existing septic leach
- Clearing and grubbing
- Excavation/Fill building foundation and underground utility trenches
- Installation of building foundation
- Installation of storm sewer pipes
- Installation of water, sewer, electric, and all other underground utilities
- Backfill operations for building foundation and utility trenches
- Construction of temporary sediment basin
- Construction of permanent detention facility including water quality outlet structure
- Construction of a convenience store above ground
- Installation of USTs
- Overlot grading
- Construction of curb and gutter, drives, and parking areas
- Construction of 47th Street improvements
- Installation of erosion control blanket in areas as shown on plans
- Installation of new concrete pavement for parking areas and access drives
- Installation of new asphalt pavement for left turn lane in 47th Street
- Final grading
- Re-vegetation in disturbed areas for final stabilization
- Remove temporary BMPs that are no longer required

Construction Support Activities (only provide if applicable)

Describe any construction support activities for the project (e.g., equipment staging yards, material storage areas, excavated material disposal areas, borrow areas)

Equipment staging and material storage areas shall all be located on-site. Excavated material disposal areas and borrow areas shall not be covered under this CDPS permit. If import/export of material is required, all off-site facilities shall be covered under separate CDPS permit as needed.

SWPPP Administrator shall continually update and monitor the construction support activities list and ensure that each construction support activity if covered under this permit has the required BMPs installed to eliminate pollutant discharge.

3.4 Sequence and Estimated Dates of Construction Activities

Phase I (04/13/2015)

1. Install SWPPP Information Sign onsite.
2. Install stabilized construction exit(s).
3. Install silt fence(s) on the site (clear only those areas necessary to install silt fence).
4. Prepare temporary parking and storage area. Construct and stabilize sediment basin(s) and sediment trap(s) with appropriate outfall structures (clear only those areas necessary to install basins and traps).
5. Install and stabilize hydraulic control structures (dikes, swales, check dams, etc.).
6. Begin clearing and grubbing the site.
7. Begin demolition of existing buildings and site features (i.e. underground fuel tanks, septic fields, etc.)
8. Begin grading the site.
9. Start construction of building pad and structures.

Phase II (Date _____) – Contractor to provide schedule

1. Temporarily seed, throughout construction, denuded areas that will be **inactive for 14 days or more**.
2. Construct 47th Street improvements.
3. Install utilities, underdrains, storm sewers, curbs, and gutters.
4. Install rip-rap around outlet structures as each outlet structure is installed.
5. Install inlet protection at all storm sewer structures as each inlet structure is installed.
6. Permanently stabilize areas to be vegetated as they are brought to final grade.
7. Prepare site for paving.
8. Pave site.
9. Install appropriate inlet protection devices for paved areas as work progresses.
10. Complete grading and *installation of permanent stabilization* over all areas including outlots.
11. Obtain concurrence with the Construction Manager that the site has been fully stabilized, then:
 - a. Remove all remaining temporary erosion and sediment control devices,
 - b. Stabilize any areas disturbed by the removal of BMPs, and
 - c. Ask the Construction Manager to contact the Owner's Engineer to complete the site inspection and report.
 - d. Continue weekly Inspection Reports until the Final inspection is signed off by the Construction Manager that the site is fully stabilized and the permit may be discontinued.

The actual schedule for implementing pollutant control measures will be determined by project construction progress and recorded by the General Contractor on the Soil Erosion/Sedimentation Control Operation Time Schedule on the Erosion and Sedimentation Control plans (Site Maps). Down slope protective measures must always be in place before soil is disturbed.

3.5 Allowable Non-Stormwater Discharges

Only specifically authorized non-stormwater discharges are allowed and all allowed non-stormwater discharges shall be eliminated or reduced to the extent practicable.

Type of Allowable Non-Stormwater Discharge	Likely to be Present at Your Site?
Discharges from emergency firefighting activities	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Fire hydrant flushing	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Landscape irrigation	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Waters used to wash vehicles and equipment; no soaps, solvents, or detergents used	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Water used to control dust	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Potable water including uncontaminated water line flushing	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Routine external building wash down; no soaps, solvents, or detergents used	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Pavement wash waters; provided no spills, leaks of toxic or hazardous materials have occurred and detergents are not used.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Uncontaminated air conditioning or compressor condensate	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Uncontaminated, non-turbid discharges of ground water or spring water	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Foundation or footing drains where flows are not contaminated	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Construction dewatering water that has been treated by an appropriate control	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

Best Management Practices (BMPs) must be implemented for the allowable foreseeable discharges, as listed above, for the duration of the permit. Each non-storm water discharge should be noted in the SWPPP and have proper erosion and sedimentation controls in place, with the exception of discharges from firefighting activities.

SWPPP Administrator shall continually update and monitor the allowable non-stormwater discharge inventory list and ensure BMPs are installed as needed to control and regulate soil erosion and discharge from the site as allowed by the permit.

SECTION 4: DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

4.1 Threatened and Endangered Species Protection

Are there any species that area listed as endangered or threatened (“endangered species”) under the Endangered Species Act (ESA) or under separate state endangered species act on or near (“near” is defined as within the same county or township) the project area?

Yes No

If Yes, describe the endangered or threatened species:

N/A

Describe how this determination was made:

N/A

Will discharges associated with the construction of the Project jeopardize the continued existence of any species that are federally listed as endangered or threatened under the Endangered Species Act or state listed under a separate state endangered species act? (See Note Below)

Yes No

If yes, describe or refer to documentation that determines the likelihood of an impact on identified species and/or habitat and the steps taken to address that impact. (Note: if species are on or near your project site, you must work closely with the appropriate field office of the U.S. Fish and Wildlife Service or National Marine Fisheries Service. Reference a consultation number with the USFWS or NMFS if available)

N/A

Are there any habitats that are listed as critical (“critical habitats”) under the ESA or under a separate state ESA on or near (“near” is defined as within the same county or township) the project area?

Yes No

Describe the critical habitat:

N/A

Describe how this determination was made:

N/A

Will discharges associated with the construction of the Project result in the adverse modification or destruction of habitat that is federally listed as critical under the Endangered Species Act ("critical habitat") or state listed under a separate state endangered species act? (See Note Below)

Yes No

If yes, describe or refer to documentation that determines the likelihood of an impact on identified species and/or habitat and the steps taken to address that impact. (If species are on or near your project site, you must work closely with the appropriate field office of the U.S. Fish and Wildlife Service or National Marine Fisheries Service. Reference a consultation number with the USFWS or NMFS if available)

N/A

Include all applicable documentation in **Appendix N**. Note: Additional information on Endangered Species Act (ESA) provisions for EPA's Construction General Permit is at www.epa.gov/npdes/stormwater/esa. Additional information on the Critical Habitat designations and associated requirements may also be found at 50 CFR Parts 17 and 226. Use <http://criticalhabitat.fws.gov/crithab/> to find site specific information.

4.2 Historic Preservation

Is the site located on or near sites with historical, archeological, or cultural significance?

Yes No

Describe site with historical, archeological, or cultural significance:

N/A

Describe how this determination was made:

N/A

If yes, indicate if Project will have a potential effect on a property that is listed, or is eligible for listing in the National Register of Historic Places. (Reference a consultation with the State Historical Preservation Office or equivalent – see note below)

N/A

Include all applicable documentation in **Appendix O**. To contact your applicable state or tribal historic preservation office, information is available at www.achp.gov/programs/html.

4.3 Safe Drinking Water Act Underground Injection Control Requirements

Do you plan to install any of the following controls? Check all that apply below.

- Infiltration trenches (if stormwater 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)
- Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow
- Drywells, seepage pits, or improved sinkholes (if stormwater 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)

If yes, **N/A**

For state UIC program contacts, refer to the following EPA website:

<http://water.epa.gov/type/groundwater/uic/whereyoulive.cfm>.

SECTION 5: EROSION AND SEDIMENT CONTROLS

Potential sources of sediment to stormwater runoff include:

- Clearing, grading, and excavating activities, primarily un-stabilized areas, paving operations, demolition and debris disposal, dewatering operations, drilling and blasting, material delivery, storage and use, and landscaping operations.

See Site Maps and Construction Documents for BMP installation locations and details.

5.1 *Natural Buffers or Equivalent Sediment Controls*

For construction projects where clearing and grading activities occur, a minimum of twenty-five (25) feet must be provided of natural buffer zone, measured horizontally from the top of the bank to the disturbed area, from any name or unnamed stream, creek, river, lake, or other water body. Additional buffer zones may be required dependent on the adjacent water body as determined by the governing body.

Will any trees be preserved during construction?

- Yes, this project will practice tree preservation as a non-structural BMP. (Indicate preserved trees on the site map.)
- No, no trees will be preserved during this project.

Silt fence shall be installed along the limits of disturbance as shown on the Site Map. See "Landscape Plan" Sheet L1.1 and "Plant Schedule and Specifications" Sheet L1.2 of the Site Construction Drawings, Store #943, Boulder, CO.

5.2 *Perimeter Controls*

1. **Silt Fence** – Silt fence is a temporary sediment barrier consisting of a synthetic fabric stretched across and attached to supporting posts and entrenched or sliced in place. Silt fence can be used in the following applications:

- Intercepting and detaining small amounts of sediment from disturbed areas during construction operations in order to prevent sediment from leaving the construction site,
- decreasing the velocity of sheet flows,
- in high-risk areas, such as those adjacent to streams, wetlands, reservoirs, lawns, etc.,
- in short lengths at the toe of fill where ground slopes toward the fill,
- behind curb and gutter to prevent silting of the pavement.

Prior to the start of construction, silt fence placement should be designed by a qualified professional. Plans and specifications should be referred to by field personnel throughout the construction process. Use limitations include:

- If the size of the drainage areas is more than 1/4-acre per 100 feet of silt fence length, a different sediment and erosion control strategy should be investigated. The maximum gradient behind the barrier should be no more than 50% (2H:1V).
- Under no circumstances should silt fence be constructed in live streams, in swales, or ditch lines where flows are likely to exceed 1 cubic foot per second.
- On steep slopes, care should be given to placing the alignment of fence perpendicular to the general direction of the flow.

Sediment barriers, traps, and basins must be inspected and they must be cleaned out at such time as their original capacity has been reduced by 50 percent. All material excavated from behind sediment barriers, in traps, and/or basins shall be incorporated into on-site soils or spread out on an upland portion of the site and stabilized. To minimize the potential for sediment releases from the project site, perimeter control devices shall be inspected with consideration given to changing up-gradient conditions.

2. **Construction Entrance** – A construction entrance is a stabilized stone pad with a filter fabric underliner located at any point where vehicular traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, and sidewalk or parking area. Its purpose is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets. It should be used wherever traffic will be leaving a construction site and move directly onto a public road or other paved area.

Exits shall be maintained or supplemented with additional rock, as necessary, to prevent the release of sediment from vehicles leaving the site. Any sediment deposited onto the surface of off-site streets, paved areas, and sidewalks shall be swept, shoveled, or vacuumed, as necessary, throughout the day or at the end of every day and disposed of in an appropriate manner. Sediment shall **NOT** be swept or washed directly into storm sewer system(s).

3. **Check Dams** – Check dams are small temporary dams constructed across a swale or drainage ditch for the purpose of reducing the velocity of concentrated storm water flows, thereby reducing erosion of the swale or ditch. Check dams also trap small amounts of sediment generated in the ditch itself; however, these are not sediment trapping practices and should not be used as such. Some specific applications include the following:

- Temporary ditches or swales which, because of their short length of service, cannot receive a non-erodible lining but still need some protection to reduce erosion.
- Permanent ditches or swales which cannot receive a permanent non-erodible lining for an extended period of time.
- Temporary or permanent ditches or swales which need protection during the establishment of grass linings.

Use limitations include:

- Use limited to small open channels which drain 10 acres or less.
- Should not be used in an active stream.
- Should not to be used where high flows or high velocities are expected.
- In locating the check dam, consideration should be given to the effects and the reach of the impounded water and sediment.
- Storm flows across a deteriorated check dam can result in the loss of the structure and the washout of accumulated sediment.

4. **Diversions** – A diversion is a channel constructed across a slope with a supporting ridge on the lower side for the purpose of reducing the slope length and intercepting and diverting storm water runoff to stabilized outlets at non-erosive velocities. Diversions are used where:

- a. Runoff from higher areas may damage property, cause erosion, or interfere with the establishment of vegetation on lower areas;
- b. Surface and/or shallow subsurface flow is damaging upland slopes; or
- c. Slope length needs reduction to minimize soil loss.

5. **Wattle Barrier** – Wattle Barriers are elongated tubes of compacted straw and or other fibers that are installed along contours or at the base of slopes to help reduce soil erosion and retain sediment. They function by shortening slope lengths; reducing runoff water velocity thus trapping dislodged soil particles. They can work as check dams to prevent sheet, rill, and gully erosion.

5.3 **Dust Control**

Construction traffic must enter and exit the site at the stabilized construction exit. The purpose is to trap dust and mud that would otherwise be carried off-site by construction traffic. Large areas of soil that are denuded of vegetation and have no protection from particles being picked up and carried by wind should be protected with a temporary cover or kept under control with water or other soil adhering products to limit wind transported particles exiting the site perimeter.

Water trucks or other dust control agents will be used, as needed, during construction to reduce dust generated on the site. Dust control must be provided by the General Contractor to a degree that is in compliance with applicable local and state dust control regulations.

5.4 Slope Controls

1. **Slope Tracking** – Slope Tracking is the technique used for surface roughening or scarification by means of mechanical equipment. Slope Tracking creates grooves that are perpendicular to the slope. The primary functions for Slope Tracking are to reduce erosion potential by decreasing runoff velocities, trap sediment, increase the chances for water infiltration, and aid in the establishment of vegetative cover.
2. **Rolled Erosion Control Products** – Rolled erosion control products are protective covering netting, blankets, or turf reinforcement mats (TRMs) installed on a prepared planting area of a steep slope, channel, or shoreline. They aid in controlling erosion on critical areas by absorbing the energy from raindrop impacts and providing a microclimate which protects young vegetation and promotes its establishment. TRMs are also used to raise the maximum permissible velocity and shear stress of turf grass stands in channelized areas by enabling the turf to resist the forces of erosion during storm events.

Rolled erosion control products (nets, blankets, turf reinforcement mats) and marginally vegetated areas (areas not meeting required vegetative densities for final stabilization) must be inspected weekly. Rilling, rutting, and other signs of erosion indicate the erosion control device is not functioning properly and additional erosion control devices are warranted.

5.5 Storm Drain Inlets

Storm Sewer Inlet Protection – Storm sewer inlet protection is a sediment filter or an excavated impounding area around a storm drain drop inlet or curb inlet. Its purpose is to prevent sediment from entering storm drainage systems prior to permanent stabilization of the disturbed area. This practice shall be used where the drainage area to an inlet is disturbed, it is not possible to temporarily divert the storm drain outfall into a trapping device, and watertight blocking of the inlets is not advisable. It is not to be used in place of sediment trapping devices.

Note to General Contractor: All inlet protection devices create ponding of storm water that can result in flooding or by-pass conditions. Clean or remove and replace the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where evidence of sedimentation exists adjacent to the inlet projection device, remove the deposited sedimentation by the end of the same work day that it is found.

5.6 Top Soil

A minimum of 4" of topsoil is required in all areas not covered by asphalt, concrete, gravel, or other materials. Compliance with this measure is required at the time of Final Stabilization. Topsoil preservation can be achieved with the assistance of the following measures.

1. **Temporary Seeding** – Temporary seeding is the establishment of a temporary vegetative cover on disturbed areas by seeding with appropriate rapidly growing annual plants. Its purpose is to reduce erosion and sedimentation by stabilizing disturbed areas that will not be brought to final grade for a period of thirty days or more, reduce damage from sediment and runoff to downstream or off-site areas, and to provide protection to bare soils exposed during construction until permanent vegetation or other erosion control measures can be established. It should be used on exposed soil surfaces. Such areas include denuded areas, soil stockpiles, dikes, dams, sides of sediment basins, temporary road banks, etc., permanent vegetative cover shall be applied to areas that will be left dormant for a period of more than 1 year.

Note to General Contractor: Temporary stabilization is not achieved simply through seeding. In order for an area or stockpile to be sufficiently stabilized via temporary vegetation, seed must germinate, grow, and provide adequate vegetative density.

2. **Permanent Seeding** – Permanent vegetation is the establishment of perennial vegetative cover on disturbed areas by planting seed. Its purpose is to reduce erosion and sediment yield from disturbed areas, to permanently stabilize disturbed areas in a manner that is economical, adaptable to site conditions, and allows selection of the most appropriate plant materials to improve wildlife habitat and to enhance natural beauty. It may be used on disturbed areas where permanent, long-lived vegetative cover is needed to stabilize the soil and rough-graded areas that will not be brought to final grade for a year or more.
3. **Hydroseeding/Hydromulching** – Hydroseeding/Hydromulching is a grass planting process. The process begins by mixing mulch, seed, tackifier, fertilizer, and water into the tank of a hydromulching machine. The material is often called slurry. Once applied to the soil, the material enhances initial growth.

Consideration must be given to anticipated climate and seasonal conditions when specifying and planting seed. Seed shall be free of weedy species and appropriate for site soils and regional climate. Seed and mulch per the construction drawings and the planting specification immediately after topsoil is applied and final grade is reached. Grassed areas shall be inspected to confirm that a healthy stand of grass is maintained. Vegetated areas must be watered, fertilized, and reseeded, as needed, to achieve this requirement. The vegetative density must be maintained through project completion to be considered stabilized. Areas protected by erosion control blankets are not permanently stabilized until the applicable General Permit requirement for final vegetative density is achieved.

4. **Mulching** – Mulching is the application of organic material over soil that is bare or immediately over soil that has been seeded. Mulch prevents erosion by preventing the detachment of soil particles, slows runoff velocity, and retains moisture to improve germination and establishment of vegetative cover.

Rip-rap, mulch, gravel, decomposed granite, or other equivalent permanent stabilization measures may be employed in lieu of vegetation based on site-specific conditions and governing authority approval.

5.7 Dewatering Practices

Verify discharges from dewatering activities are allowed non-storm water discharges under the General Permit. Obtain a dewatering permit according to the regulations if discharges from dewatering activities are not allowed under the General Permit. Discharges from dewatering operations must be directed through an appropriate pollution prevention/treatment measure, such as a pump discharge filter bag, sediment trap, or sediment basin prior to being discharged from the site. Under no circumstances are discharges from dewatering operations to be discharged directly into streams, rivers, lakes, or other areas off-site. Likewise, discharges into storm sewer systems that do not drain to a suitable on-site treatment facility, such as a basin, are also prohibited. Discharges from dewatering operations must also be conducted in a manner sufficient to prevent erosion from the discharge runoff.

5.8 Post Construction BMPs – Operations and Maintenance

An Operations and Maintenance Plan is included to address the post construction inspection, operation and maintenance of all post construction BMPs identified in this plan. Identify the entity responsible for operation and maintenance of each practice if other than the owner. The Contractor is responsible for proper installation, maintenance and functioning of all best management practices shown on the drawings until final stabilization is achieved. A copy of the Post Construction Stormwater BMP Operations and Maintenance Plan is included in **Appendix Q** of this document.

5.9 Other Stormwater Controls

SWPPP Administrator shall continually update and monitor the stormwater controls list and ensure that each stormwater control BMP description and detail is added to the SWPPP.

5.10 Site Stabilization

Site Stabilization Practice (only use this if you are not located in an arid, semi-arid, or drought-stricken area)

- Vegetative* *Non-Vegetative*
 Temporary *Permanent*

Description of Practice

- **N/A**

Installation

- **N/A**

Maintenance Requirements

N/A

Site Stabilization Practice (only use this if you are located in an arid, semi-arid, or drought-stricken area)

- Vegetative* *Non-Vegetative*
 Temporary *Permanent*

Description of Practice

- Temporary/Permanent Seeding
- Native Seeding
- Trees/Shrubs and Fiber Mulch
- Concrete/asphalt pavement
- See Kum & Go #943, Site Construction Documents for pavement and landscaping requirements

Installation

- Planting of trees, shrubs, sodded and seeded turf grass shall be commenced during either the Spring (March 15 – June 15) or Fall (September 1 – October 15) planting season and with water available for irrigation purposes.
- Seeding shall be preferentially conducted as late Fall dormant seeding (after November 1) or in early Spring (as soon as the soil is free of frost and in a workable condition but no later than June 15).
- Date of Installation ()
- Date of Completion ()

Maintenance Requirements

- Inspect at least once per 7 calendar days or within 48 hours of a rainfall event which causes surface runoff until adequate vegetation is established. Protect from vehicular and foot traffic. Reseed and mulch areas that have not sprouted within 21 days of planting. Do not mow until 4 inches of growth has occurred. Seeded areas should be maintained for one year following seeding.

Site Stabilization Practice (only use this if uncontrollable circumstances have delayed the initiation or completion of stabilization)

- Vegetative* *Non-Vegetative*
 Temporary *Permanent*

Justification

- **N/A**

Description of Practice

- **N/A**

Installation
▪ N/A

Maintenance Requirements
N/A

SECTION 6: POLLUTION PREVENTION STANDARDS

6.1 Potential Sources of Pollution

Potential pollutants other than sediment include the following materials and substances that could be expected to be present on-site during construction:

- Heavy Metals – from concrete additives, concrete washout, material delivery, storage and use, and hazardous substance/waste spills
- pH (Acids and Bases) – from concrete washout, painting and cleaning, drilling and blasting operations, material delivery, storage and use, hazardous waste spills, and sanitary/septic waste.
- Paints and Solvents – from concrete washout and waste, painting, concrete polishing, cleaning products, material delivery and use, hazardous waste spills, and sanitary/septic waste
- Trash, Debris and Solids – from clearing and grading, paving, concrete wash waste, construction painting and cleaning, demolition, drilling and blasting, material delivery storage and use, landscaping, and general construction
- Petroleum Based Products – from material delivery storage and use, hazardous waste spills, vehicle and equipment use on site, and vehicle and equipment fueling and maintenance and storage
- Pesticides/Herbicides – from material delivery, storage and use, hazardous waste spills, vehicle use, storage, service and maintenance
- Fertilizers/Nutrients – from painting, cleaning products, dewatering, material delivery and storage, spills during landscaping operation, sanitary/septic waste

Construction Site Pollutants

Pollutant-Generating Activity	Pollutants or Pollutant Constituents (that could be discharged if exposed to stormwater)	Location on Site (or reference SWPPP site map where this is shown)
Building Demolition	Asbestos; oil; grease; hydraulic fluid; fuel; gross pollutants (trash and debris)	Existing buildings
Clearing and Grubbing Operations	Sediment; oil; grease; hydraulic fluid; fuel	Existing landscaped areas around existing buildings
Grading Operations	Sediment (including dust particles); oil; grease; hydraulic fluid; fuel	Entire Site
Soil Import Operations	Sediment; oil; grease; hydraulic fluid; nutrients	Areas of fill
Utility Excavation Operations	Sediment; oil; grease; hydraulic fluid; fuel	All locations of dry and wet utility installation
Landscaping Operations	Sediment; oil; grease; hydraulic fluid; nutrients	All areas not covered by pavement
Soil Stockpiling Operations	Sediment; oil; grease; hydraulic fluid; nutrients; organics	Areas for soil import; landscape material import areas; utility trenches
Building Operations	Sediment; oil; grease; hydraulic fluid; gross pollutants (trash and	Convenience store and pump canopy

Pollutant-Generating Activity	Pollutants or Pollutant Constituents (that could be discharged if exposed to stormwater)	Location on Site (or reference SWPPP site map where this is shown)
	debris); chemicals; pesticides; concrete waste; organics	
Entry and Exit Points to Site	Sediment (including dust particles)	Access point along North 30 th Street
Loading and Unloading Operations	Sediment (including dust particles); damage to structural BMPs	Staging areas

SWPPP Administrator shall continually update and monitor the Pollutant-Generating Activity inventory list and ensure that each potential pollutant has a BMP installed to eliminate their discharge possibility.

6.2 *Spill Prevention and Response*

Any hazardous or potentially hazardous material that is brought onto the construction site will be handled properly in order to reduce the potential for storm water pollution. All materials used on this construction site will be properly stored, handled, dispensed, and disposed of following all applicable label directions. Flammable and combustible liquids will be stored and handled according to 29 CFR 1926.152. Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids.

Material Safety Data Sheets (MSDS) information will be kept on site for any and all applicable materials.

In the event of an accidental spill, immediate action will be undertaken by the General Contractor to contain and remove the spilled material. All hazardous materials will be disposed of by the General Contractor in the manner specified by federal, state, and local regulations and by the manufacturer of such products. As soon as possible, the spill will be reported to the appropriate agencies. As required under the provisions of the Clean Water Act, any spill or discharge entering waters of the United States will be properly reported. The General Contractor will prepare a written record of any spill of petroleum products or hazardous materials in excess of 1 gallon or reportable quantities, whichever is less. The General Contractor will provide notice to the Owner immediately upon identification of a reportable spill. A Spill Report Form is located in **Appendix F**.

Any spills of petroleum products or hazardous materials in excess of Reportable Quantities as defined by EPA, the state, or local agency regulations, shall be immediately reported to the EPA National Response Center (1-800-424-8802) and Colorado Department of Public Health and Environment (CDPHE) 24-hr Spill and Emergency Assistance Hotline (1-877-518-5608).

In order to minimize the potential for a spill of petroleum products or hazardous materials to come in contact with storm water, the following steps will be implemented:

- a) All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, additives for soil stabilization, concrete, curing compounds and additives, etc.) will be stored in a secure location, under cover, when not in use.
- b) The minimum practical quantity of all such materials will be kept on the job site and scheduled for delivery as close to time of use as practical.
- c) A **spill control and containment kit** (containing for example, absorbent material such as kitty litter or sawdust, acid neutralizing agent, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided on the construction site and location(s) shown on Site Maps.
- d) All of the product in a container will be used before the container is disposed of. All such containers will be triple rinsed, with water, prior to disposal. The rinse water used in these containers will be

disposed of in a manner in compliance with state and federal regulations and will not be allowed to mix with storm water discharges.

- e) All products will be stored in and used from the original container with the original product label.
- f) All products will be used in strict compliance with instructions on the product label.
- g) The disposal of excess or used products will be in strict compliance with instructions on the products label.

6.3 Fueling and Maintenance of Equipment or Vehicles

Temporary on-site fuel tanks for construction vehicles shall meet all state and federal regulations. Tanks shall have approved spill containment with the capacity required by the applicable regulations. From NFPA 30: All tanks shall be provided with secondary containment (i.e. containment external to and separate from primary containment). Secondary containment shall be constructed of materials of sufficient thickness, density, and composition such that the materials used will not be structurally weakened as a result of contact with the fuel stored and capable of containing discharged fuel for a period of time equal to or longer than the maximum anticipated time sufficient to allow recovery of discharged fuel. It shall be capable of containing 110% of the volume of the primary tank, if a single tank is used, or in the case of multiple tanks, 150% of the largest tank or 110% of the aggregate, whichever is larger.

The tanks shall be in sound condition, free of rust or other damage which might compromise containment. Fuel storage areas will meet all EPA, OSHA, and other regulatory requirements for signage, fire extinguisher, etc. Hoses, valves, fittings, caps, filler nozzles, and associated hardware shall be maintained in proper working condition at all times. The location of fuel tanks shall be shown on the Site Maps and shall be located to minimize exposure to weather and surface water drainage features.

A Spill Prevention, Control, and Countermeasure (SPCC) Plan must be developed if aboveground oil storage *capacity* at the construction site exceeds 1,320-gallons or as specified by state. Containers with a storage capacity of 55-gallons or less are not included when calculating site storage capacity. The General Contractor shall work with the Owner's Engineer to develop and implement a SPCC Plan in accordance with the Oil Pollution Prevention regulation at Title 40 of the Code of Federal Regulations, Part 112, 6.4

6.4 Mason's Area

The General Contractor shall identify the mason's area on the site and indicate the location on the Site Map. To the extent practical, all masonry tools, material, including sand and sacked cement or mortar materials, and equipment shall be located within the area identified. Runoff control, such as berms or diversion ditches, silt fence, straw wattles, or other means of containment shall be provided to prevent the migration of storm water pollutants in runoff from the mason's area. Receptacles for debris and trash disposal shall also be provided.

6.5 Concrete Waste from Concrete Ready-Mix Trucks

Discharge of excess or waste concrete and/or wash water from concrete trucks will be allowed on the construction site, but only in specifically designated lined and diked areas prepared to prevent contact between the concrete and/or wash water and storm water that will be discharged from the site. Alternatively, waste concrete can be placed into forms to make rip-rap or other useful concrete products. The cured residue from the concrete washout diked areas shall be disposed in accordance with applicable state and federal regulations. The project construction manager is responsible for assuring that these procedures are followed. The location of concrete washout areas shall be shown on the Site Maps. All applicable environmental regulations for concrete wash out pits must be adhered to.

6.6 Construction and Domestic Waste

No solid materials, including building materials, are allowed to be discharged from the site with storm water. All solid waste, including disposable materials incidental to the major construction activities, must be collected and placed in containers. The containers will be emptied, as necessary, by a contract trash disposal service and hauled away from the site. Covers for the containers will be provided, as necessary, to meet state and local requirements. The location of solid waste receptacles shall be shown on the Site Maps.

Substances that have the potential for polluting surface and/or groundwater must be controlled by all means necessary in order to ensure that they do not discharge from the site. As an example, special care must be exercised during equipment fueling and servicing operations. If a spill occurs, it must be contained and disposed of such that it will not flow from the site or enter groundwater, even if this requires removal, treatment, and disposal of soil. In this regard, potentially polluting substances should be handled in a manner consistent with the impact they represent.

6.7 Sanitary Waste

All personnel involved with construction activities must comply with state and local sanitary or septic system regulations. Temporary sanitary facilities will be provided at the site throughout the construction phase. They must be utilized by all construction personnel and will be serviced by a commercial operator. The location of sanitary facilities shall be shown on the Site Maps. Portable toilets must be securely anchored and are not allowed within 30' of storm water inlets or permitted limit of disturbance or within 50' of a water of the State.

6.8 Material Storage Area

Inspections shall evaluate disturbed areas and areas used for storing materials that are exposed to rainfall for evidence of, or the potential for, pollutants entering the drainage system or discharging from the site. If necessary, the materials must be covered or original covers must be repaired or supplemented. Also, protective berms must be constructed, if needed, in order to contain runoff from material storage areas. All state and local regulations, pertaining to material storage areas, will be adhered to.

6.9 Non-Storm Water Discharges

Non-storm water components of site discharges must be clean water. Water used for construction, which discharges from the site, must originate from a public water supply or private well approved by the State Health Department. Water used for construction, which does not originate from an approved public supply, must not discharge from the site. It can be retained in the ponds until it infiltrates and evaporates. Other non-storm water discharges would include ground water. Only uncontaminated ground water can be discharged from the site, as allowed by and in accordance with applicable local ground water dewatering permits/regulations. When non-storm water is discharged from the site, it must be done in a manner such that it does not cause erosion of the soil during discharge.

Process water, such as power washing and concrete cutting, must be collected for treatment and disposal. It is not to be flushed into the site storm drain system.

SECTION 7: INSPECTION AND CORRECTIVE ACTION

7.1 *Inspection Personnel and Procedures*

Personnel Responsible for Inspections

SWPPP Administrator:

Name:
Title:
Address:
Phone:
Email:

SWPPP Inspector:

Name:
Title:
Address:
Phone:
Email:

Note: All personnel conducting inspections must be considered a “qualified” per Section 1.1 (E) of this SWPPP.

Inspection Schedule

Specific Inspection Frequency

Part I.C.6.a of the CDPS Stormwater Construction Permit requires that a minimum inspection schedule of the stormwater management system be performed and documented at least every 14 days, and within 24 hours of any precipitation or snowmelt event that causes surface erosion. The permittee must maintain a record of the inspection results and SWMP for a period no less than 3 years following inactivation or expiration of permit coverage. These records must be made available upon request to the EPA and Water Quality Control Division (WQCD) of the CDPHE.

The City of Boulder requires the site BMPs to be inspected every 14 calendar days and post-precipitation events to ensure compliance with the approved Erosion Control Plan. Effective March 30, 2005, inspections of BMPs shall be conducted by an individual who has successfully completed formal training in erosion and sediment control by an organization acceptable to the Director of Public Works. A certification of successful completion of such training shall be provided upon request.

Rain Gauge Location (if applicable)

Contractor shall provide a rain gauge to be used for determining whether a rain event of 0.10 inches or greater has occurred. The location of the rain gauge shall be shown on the erosion control plan and updated as conditions change.

Reductions in Inspection Frequency (if applicable)

- For the reduction in inspections resulting from stabilization or temporarily idle sites:
 - For sites where no construction activities will occur, post storm event or snow melt event, inspections shall be conducted prior to re-commencing construction activities but no later than 72 hours after the storm event occurred. Documentation in the SWPPP must be made as why the delay occurred.
 - Sites or portions of sites that meet the following criteria, but final stabilization has not been achieved, the permittee shall make a thorough inspection of their stormwater management

system at least once every calendar month, post-storm event inspections are not required. The following describes site eligibility to a reduced inspection frequency:

1. All construction activities that will result in ground disturbance are completed.
 2. All activities required for final stabilization, in accordance with SWPPP, have been completed, with exception of the seed application due to seasonal conditions or the necessity for additional seed application to augment previous efforts.
 3. The SWPPP has been amended to indicate those areas that will be inspected in accordance with the reduced schedule allowed in the CDPS Stormwater Construction Permit.
- For the reduction in inspections in arid, semi-arid, or drought-stricken areas:
 - Not applicable for Colorado Sites.
 - For reduction in inspections due to frozen conditions:
 - Inspections are not required at sites where construction activities are temporarily halted, snow cover exists over the entire site for an extended period, and melting conditions posing risk of soil erosion do not exist. This temporary exclusion is application only during the period where melting conditions do not exist, and applies to routine 14-day, monthly, post storm event inspections. Inspection records must document the following information when this exclusion is used:
 1. Date(s) when snow cover occurred.
 2. Date when construction activities temporarily ceased.
 3. Date melting conditions began.

See Appendix E for Inspection Report Forms.

7.2 Corrective Action

Personnel Responsible for Corrective Actions

Project Foreman:

Name:
Title:
Address:
Phone:
Email:

BMP Implementation:

Name:
Title:
Address:
Phone:
Email:

Corrective Action Forms

Adequate site assessment will be performed as part of comprehensive inspection and maintenance procedures, to assess the adequacy of BMPs at the site, and the necessity of changes to those BMPs to ensure continued effective performance. Where site assessment results in the determination that new or replacement BMPs are necessary, the BMPs will be installed or maintained in accordance with this SWPPP. Where BMPs have failed, resulting in noncompliance, they will be addressed as soon as possible, immediately in most cases, to minimize the discharge of pollutants. Modifications to the control measures in the field must also be implemented in a

timely manner; implementation to occur within not more than seven (7) calendar days after the inspection. When new BMPs are installed or BMPs are replaced, the SWPPP will be updated.

Updates to the SWPPP required as a result of deficiencies in the SWPPP identified during site inspections shall be made in accordance with part I.D.5.c of the CDPS Stormwater Construction Permit. A copy of any Corrective Action Form shall be placed in Appendix G.

7.3 Delegation of Authority

Duly Authorized Representative(s) or Position(s):

Company:

Name:

Title:

Address:

City, State, Zip Code:

Phone:

Fax:

Email:

SECTION 9: CERTIFICATION AND NOTIFICATION

This certification must be re-signed in the event of a SWPPP Modification.

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: _____ Title: _____

Signature: _____ Date: _____

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

- Appendix A – Site Maps and BMP Details
- Appendix B – Governing Jurisdiction’s General Permit
- Appendix C – NOI and Authorization Letter
- Appendix D – Construction Site Notice
- Appendix E – Inspection Form
- Appendix F – Spill Report Form
- Appendix G – Corrective Action Form
- Appendix H – SWPPP Amendment Log
- Appendix I – Subcontractor Certifications/Agreements
- Appendix J – Grading and Stabilization Activities Log
- Appendix K – Pre – NOT Inspection Checklist and NOT
- Appendix L – SWPPP Training Log
- Appendix M – Delegation of Authority Form
- Appendix N – Threatened and Endangered Species Documentation
- Appendix O – Historic Properties Documentation
- Appendix P – Definitions
- Appendix Q – Post Construction Operations and Maintenance

Appendix A – Site Maps and BMP Details

- **VICINITY MAP**
- **EXISTING CONDITIONS & DEMOLITION PLAN**
- **GRADING & DRAINAGE PLAN**
- **EROSION CONTROL PLAN**
- **EROSION CONTROL DETAILS**

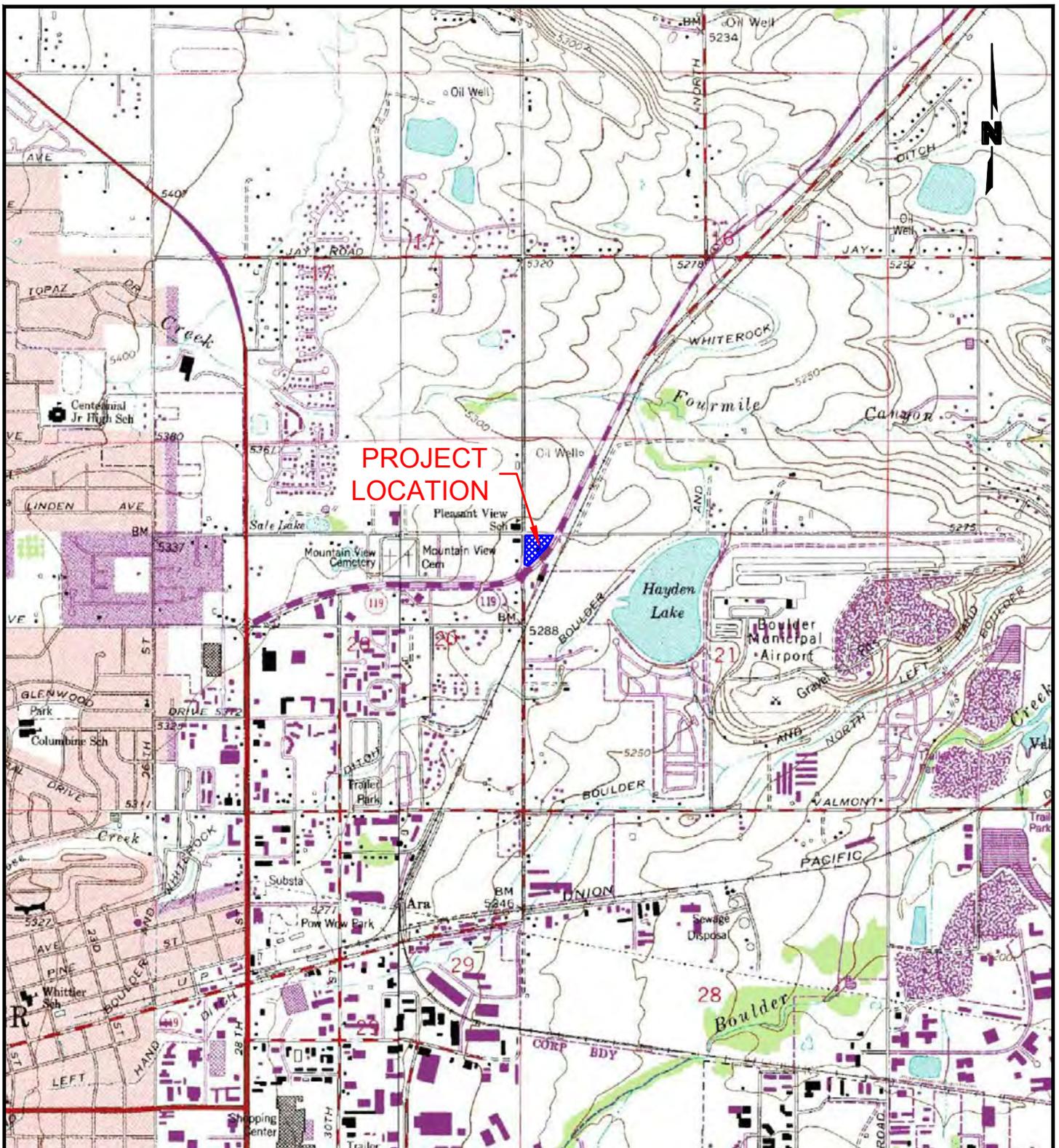
NOTE TO OPERATOR'S ENGINEER:

The following items shall be included on the Site Maps:

- Locations of any area of earth disturbance, topography, site slopes (specifically note any slopes of 3:1 or greater than 3% and greater than 150' in length), proposed stockpile location(s), construction entrance/exit, stormwater control measures, drainage inlets, allowable discharge location(s), location(s) of all potential pollutant-generating activities, surface waters, wetlands, Indian reservation, federal land, critical habitat for endangered or threatened species, and/or natural buffers.

NOTE TO GENERAL CONTRACTOR SUPERINTENDENT AND QUALIFIED INSPECTOR:

All plan amendments and modifications, areas of the site where stabilization has been accomplished, remaining disturbed areas, locations of job-site trailer, all fixed petroleum tanks, concrete washout, all sanitary facilities, all solid waste facilities, and equipment service area shall be marked on these plans by the Qualified Inspector. The location of all un-named and named surface waters (stream/lake/wetland) and the location of all points of discharge must be shown on this plan.



**PROJECT
LOCATION**

SCALE: NTS

PROJECT: 012-1417
DRAWN BY: BLM
DATE: 09.16.2013

KUM & GO #943
3365 DIAGONAL HIGHWAY
BOULDER, COLORADO

OLSSON
 ASSOCIATES

4690 TABLE MOUNTAIN DRIVE
 SUITE 200
 GOLDEN, CO 80403
 TEL 303.237.2072
 FAX 303.237.2659

FIGURE
A

NOTE:

OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD MAKE NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. IF ANY UNDERGROUND UTILITY LOCATIONS ARE REQUIRED, THEY WILL HAVE TO BE VERIFIED BY FIELD POT-HOLING THE UTILITIES. OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD SHALL NOT BE LIABLE FOR THE LOCATION OF OR THE FAILURE TO NOTE THE LOCATION OF NON-VISIBLE UTILITIES. UTILITIES SHOWN ARE BY OBSERVABLE EVIDENCE AND MARKED UTILITIES PER THE UNCC LOCATE REQUEST TICKET NUMBER B219500100-00B. THE COMPANIES LISTED ON THE TICKET ARE: CITY OF BOULDER, CITY OF BOULDER - FIBER, BOULDER VALLEY SCHOOL DISTRICT, COMCAST, LEVEL 3 COMMUNICATIONS, MCI, PAETEC, XCEL ENERGY, XCEL ENERGY - NORTH DENVER, QWEST LOCAL NETWORK AND TIER 2 MEMBER LEFT HAND WATER DISTRICT.

BENCHMARKS:

- PROJECT BENCHMARK: THE PUBLISHED VALUES OF BOULDER COUNTY PRIMARY MONUMENT CONTROL STATION "B 322 RESET". EL=5508.90' (NAVD88), N:1272428.69, E:3061900.56
- SITE BENCHMARK: 3" ALUMINUM CAP LOCATED IN THE INTERSECTION OF 47TH STREET AND INDEPENDENCE ROAD. EL=5304.38' (NAVD88), N:1257929.36, E:3072507.66

BASIS OF BEARING:

BASIS OF BEARINGS: BEARINGS ARE BASED ON THE WEST LINE OF THE NW1/4 OF SECTION 21 AS HAVING A BEARING OF N00°06'56"W FROM THE W1/4 CORNER BEING MONUMENTED WITH A 3" ALUMINUM CAP TO THE W-N1/16 CORNER BEING ALSO MONUMENTED WITH A 3" ALUMINUM CAP AS SHOWN HEREON.

FLOOD ZONE:

THE SUBJECT PROPERTY FALLS WITHIN ZONE "X" DESCRIBED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN; ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08013C0411J WITH AN EFFECTIVE DATE OF MAY 6, 1996.

LEGAL DESCRIPTION:

LOT 1, KUM & GO 943 SUBDIVISION, A TRACT OF LAND IN THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 1 NORTH, RANGE 70 WEST OF THE 6TH PRINCIPAL MERIDIAN.

LEGEND

	5300	EXISTING CONTOUR
		SECTION LINE
		CURB & GUTTER
		EDGE OF ASPHALT
		PROPERTY BOUNDARY
		PROPERTY LINE
	FO	UNDERGROUND FIBER OPTIC LINES
	OP	OVERHEAD POWER
	SD	STORM SEWER PIPE
	W	WATER LINES
	GAS	GAS LINES
	X	BARB WIRE FENCE
	W	WOOD FENCE
	CL	CHAINLINK FENCE
	B	BOLLARD
	D	CONTROL POINT
	E	ELECTRIC BOX
	EMH	ELECTRIC MANHOLE
	ER	ELECTRIC RISER
	EV	ELECTRIC VAULT
	FV	FIBER OPTIC VAULT
	FH	FIRE HYDRANT
	GV	GAS VALVE
	LTP	LIGHT POLE
	P	PROPERTY MONUMENT, FOUND
	SSMH	PROPERTY MONUMENT, SET
	SSMH	SANITARY SEWER MANHOLE
	SSMH	SIGN, AS DESCRIBED
	SSMH	STEEL POST
	SSMH	STORM SEWER MANHOLE
	TC	TELEPHONE CABINET
	TP	TELEPHONE PEDESTAL
	TLP	TRAFFIC LIGHT POLE
	TSB	TRAFFIC SIGNAL BOX
	TR	TRANSFORMER
	WV	WATER VALVE
	T	TREE, DECIDUOUS
	G	EXISTING GRAVEL
	A	EXISTING ASPHALT

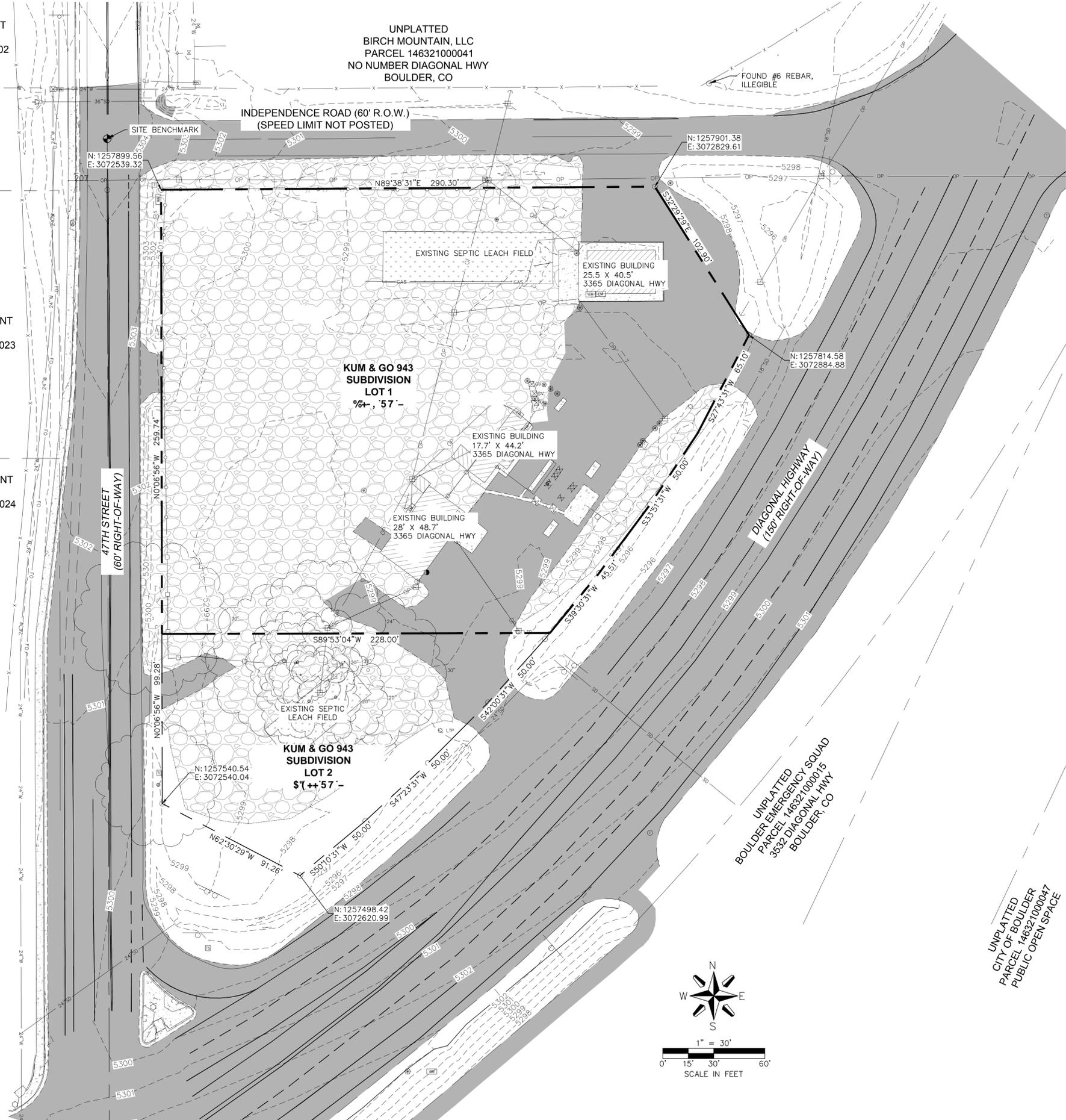
UNPLATTED
STATE DEPARTMENT
OF HIGHWAYS
PARCEL 146320100002
4685 KALMIA AVE
BOULDER, CO

UNPLATTED
BIRCH MOUNTAIN, LLC
PARCEL 146321000041
NO NUMBER DIAGONAL HWY
BOULDER, CO

UNPLATTED
STATE DEPARTMENT
OF HIGHWAYS
PARCEL 146320100023
3587 N 47TH ST
BOULDER, CO

UNPLATTED
STATE DEPARTMENT
OF HIGHWAYS
PARCEL 146320100024
3547 N 47TH ST
BOULDER, CO

FOUND #6 REBAR,
ILLEGIBLE



OLSSON ASSOCIATES
4680 Table Mountain Drive
GOLDEN, CO 80403
TEL: 303.237.9272
FAX: 303.237.2659
www.olssonassociates.com



6400 Westown Parkway
West Des Moines, Iowa
50266
P: 515-226-0128
F: 515-223-9873

#943 - BOULDER, COLORADO
3365 DIAGONAL HWY.
EXISTING CONDITIONS PLAN

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

DATE	REVISION DESCRIPTION	REVISIONS

DATE: 06-20-2014
SHEET NUMBER:
C1.3
04 OF 32

DWG: F:\Projects\012-1417_LDVP\Final_Plans\121417_EXC.dwg
DATE: Jul 01, 2014 2:40pm
USER: sbower
XREFS: 121417_XBASE 121417_PBASE 121417_TBLK_CD

UNPLATTED
CITY OF BOULDER
PARCEL 146321000047
PUBLIC OPEN SPACE

UNPLATTED
BOULDER EMERGENCY SQUAD
PARCEL 146321000015
BOULDER, CO

NOTE:
 OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD MAKE NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD HAVE NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. IF ANY UNDERGROUND UTILITY LOCATIONS ARE REQUIRED, THEY WILL HAVE TO BE VERIFIED BY FIELD POT-HOING THE UTILITIES. OLSSON ASSOCIATES AND THE SURVEYOR OF RECORD SHALL NOT BE LIABLE FOR THE LOCATION OF OR THE FAILURE TO NOTE THE LOCATION OF NON-VISIBLE UTILITIES. UTILITIES SHOWN ARE BY OBSERVABLE EVIDENCE AND MARKED UTILITIES PER THE PRIVATE UTILITY LOCATE PERFORMED BY UTILITY LOCATING AND MAPPING CONSULTANTS ON 02-20-2013.

REMOVAL OF ENTIRE EXISTING BUILDING/CANOPY STRUCTURE, ROOF, FLOORS, WALLS, STAIRS, FOOTINGS, BOLLARDS, AND STRUCTURAL COLUMNS IN THEIR ENTIRETY. REMOVE ALL PAVEMENT, SIDEWALKS, TREES, WATER SERVICE LINES, CURB STOPS, SANITARY SEWER SERVICE LINES, CLEANOUTS, AND MAILBOXES. REMOVE ALL APPURTENANCES AND UTILITIES FOUND WITHIN THE EXISTING AND PROPOSED BUILDING AREAS. UTILITIES SHALL BE REMOVED PER RESPECTIVE UTILITY COMPANY'S REQUIREMENTS. REMOVE ALL BUILDING CONTENTS, DEBRIS, ETC. WITHIN BUILDING. CONTRACTOR TO COORDINATE UTILITY REMOVALS WITH RESPECTIVE UTILITY COMPANIES TO ENSURE CORRECT REMOVAL AND SHUTOFF. ALL MATERIAL SHALL BE REMOVED FROM SITE AND LEGALLY DISPOSED PER LOCAL CODES AND REGULATIONS.

- 1 SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT
- 2 COORDINATE EXISTING GAS SERVICE/METER REMOVAL WITH BOULDER UTILITIES
- 3 REMOVE EXISTING ASPHALT MARKINGS
- 4 REMOVE EXISTING CONCRETE PAVEMENT
- 5 REMOVE EXISTING LIGHT/UTILITY POLE, GUY WIRES, ELECTRICAL BOXES, AND LINES, COORDINATE WITH BOULDER UTILITIES
- 6 REMOVE EXISTING SANITARY SERVICE
- 7 REMOVE EXISTING BOLLARD
- 8 REMOVE EXISTING GRAVEL
- 9 REMOVE EXISTING FENCE
- 10 REMOVE EXISTING SIGN
- 11 REMOVE EXISTING STORM, COORDINATE REMOVAL WITH BOULDER UTILITIES
- 12 COORDINATE EXISTING WATER SERVICE/METER AND VALVE REMOVAL WITH BOULDER UTILITIES
- 13 REMOVE EXISTING CURB AND GUTTER
- 14 PROTECT EXISTING UTILITIES
- 15 PROTECT EXISTING SIGN
- 16 CONTRACTOR TO COMPLETELY REMOVE SEPTIC TANKS, DRAIN LINES AND DRAIN FIELDS
- 17 REMOVE EXISTING TREES WITHIN LIMITS OF DISTURBANCE

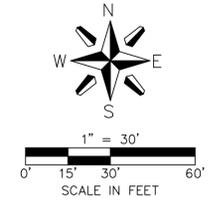
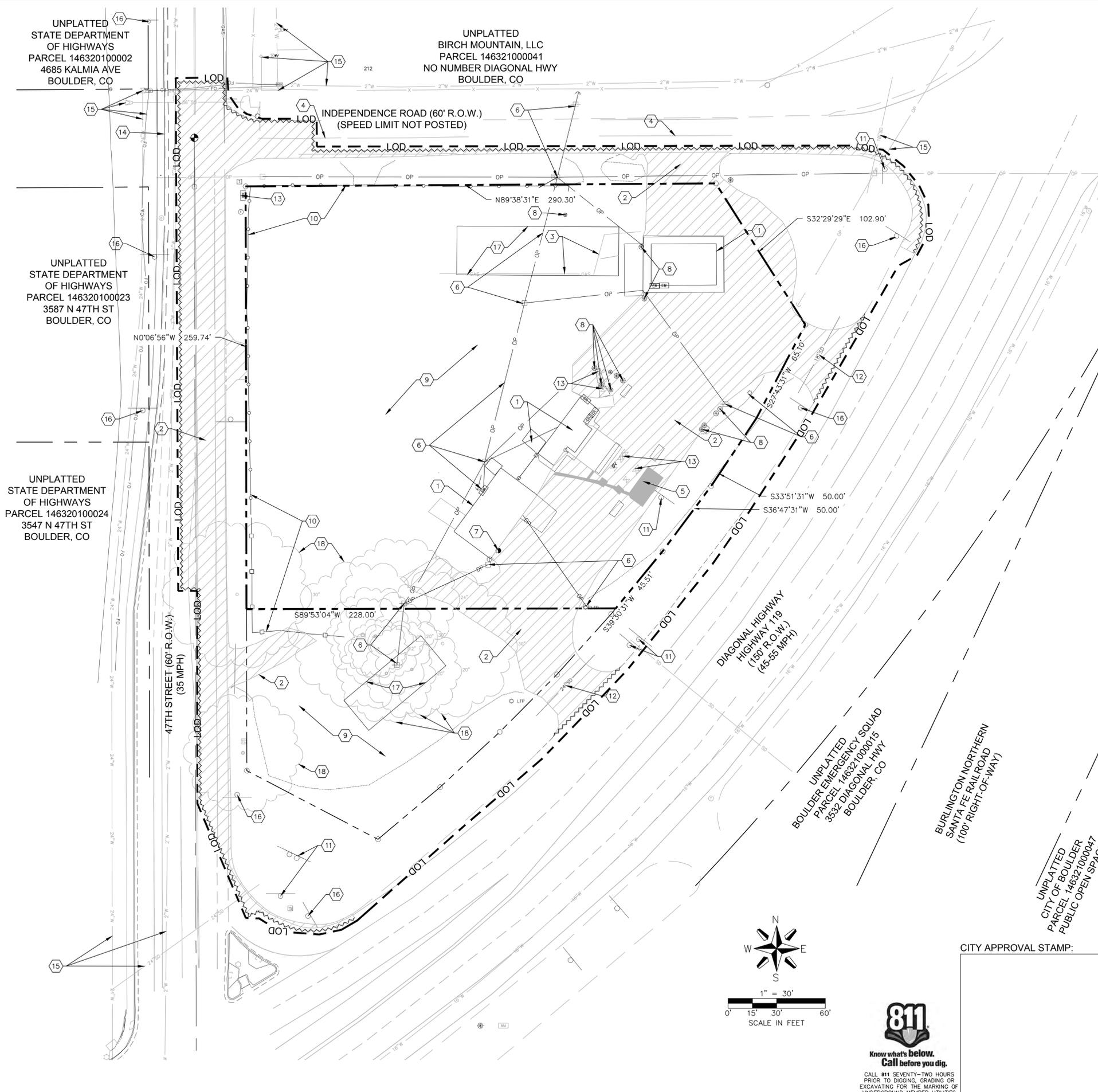
NOTES:
 1. SOME STRUCTURES SHOWN ON PLAN MAY HAVE ALREADY BEEN REMOVED. CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
 2. UNUSED SERVICE CONNECTIONS TO BE ABANDONED AT THE UTILITY MAIN PER CITY OF BOULDER DESIGN & CONSTRUCTION STANDARDS.

BENCHMARKS:
 1. PROJECT BENCHMARK: THE PUBLISHED VALUES OF BOULDER COUNTY PRIMARY MONUMENT CONTROL STATION "B 322 RESET". EL=5508.90' (NAVD88), N:1272428.69, E:3061900.56
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LEGEND

	LOD	LIMITS OF DISTURBANCE
	SAWCUT LINE	
	CURB & GUTTER	
	PROPERTY BOUNDARY	
	PROPERTY LINE	
	FD	UNDERGROUND FIBER OPTIC LINES
	OP	OVERHEAD POWER
	SD	STORM SEWER PIPE
	W	WATER LINES
	GAS	GAS LINES
	X	BARB WIRE FENCE
		WOOD FENCE
		CHAINLINK FENCE
		BOLLARD
	DESCRIPTION	CONTROL POINT
		ELECTRIC BOX
	EMH	ELECTRIC MANHOLE
	ER	ELECTRIC RISER
	EV	ELECTRIC VAULT
	FV	FIBER OPTIC VAULT
	FH	FIRE HYDRANT
	GV	GAS VALVE
	LTP	LIGHT POLE
	PM	PROPERTY MONUMENT, FOUND
	PSM	PROPERTY MONUMENT, SET
	SSMH	SANITARY SEWER MANHOLE
	S	SIGN, AS DESCRIBED
	SP	STEEL POST
	SDMH	STORM SEWER MANHOLE
	TC	TELEPHONE CABINET
	TP	TELEPHONE PEDESTAL
	TLP	TRAFFIC LIGHT POLE
	TSB	TRAFFIC SIGNAL BOX
	TR	TRANSFORMER
	WV	WATER VALVE
	T	TREE, DECIDUOUS



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 PUBLIC OPEN SPACE

4690 Table Mountain Drive
 Golden, CO 80403
 TEL: 303.237.9379
 FAX: 303.237.2659
 www.olssonassociates.com

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6400 Westown Parkway
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 P: 515-226-0128
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#943 - BOULDER, COLORADO

3365 DIAGONAL HWY.

DEMOLITION PLAN

KG PROJECT TEAM:
 RDR: JXH
 SDM: RJH
 CPM: TLK

REVISIONS

DATE	REVISION DESCRIPTION

DATE: 06-20-2014
 SHEET NUMBER:

C1.4

05 OF 32

DWG: F:\Projects\012-1417_LDW\Final_Plans\121417_DEM.dwg
 DATE: Jul 01, 2014 2:41pm
 USER: sbower
 XREFS: 121417_XBASE 121417_TBLK_CD

GRADING NOTES:

1. THE PROPOSED CONTOURS REPRESENT TOP OF SLAB IN PAVEMENT & BUILDING. IN ALL OTHER AREAS, THEY REPRESENT THE FINISHED GROUND SURFACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE PAVEMENT CROSS-SECTION DEPTH AND SHALL ADJUST THE SUBGRADE ELEVATION AND QUANTITIES ACCORDINGLY PRIOR TO BEGINNING GRADING OPERATIONS.
2. ALL SPOT ELEVATIONS ARE FLOWLINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL HERBACEOUS VEGETATION SHALL BE REMOVED FROM WITHIN THE LIMITS OF THE GRADING AND REDISTRIBUTED WITH THE TOPSOIL.
4. FOR PROPER COMPACTION OF FILL MATERIAL, BUILDING PAD PREPARATION, AND PAVING SUBGRADE, SEE GEOTECHNICAL REPORT PREPARED BY OLSSON ASSOCIATES, DATED NOVEMBER 15, 2012.
5. ALL ADA ACCESSIBLE STALLS/ROUTES TO BE CONSTRUCTED PER ADA STANDARDS.
6. REFERENCE POINTS FOR STRUCTURES AREA AS FOLLOWS:
 - CENTER OF MANHOLES/CLEANOUTS
 - CENTER OF INLET FACE AT TOP OF CURB FOR CURB INLETS
 - CENTER OF INLET FOR GRATE INLETS
7. STORM SEWER PIPE LENGTHS ARE MEASURED AS FOLLOWS:
 - CENTER OF MANHOLES/CLEANOUTS
 - INSIDE WALL OF CURB INLET
 - CENTER OF GRATE INLET
 - LENGTHS LISTED ARE 2D MEASUREMENTS

FLAG NOTES:

- ① ADA ACCESSIBLE STALL (DO NOT EXCEED 2% GRADE IN ANY DIRECTION)
- ② MATCH EXISTING GRADE (CONTRACTOR TO VERIFY)
- ③ PROPOSED 6" STRUCTURAL CURB/SIDEWALK, SEE STRUCTURAL PLANS
- ④ PROPOSED 6" STANDARD CURB, SEE SHEET C5.1
- ⑤ ALL FILL LIDS FOR UNDERGROUND TANKS TO BE 1" ABOVE FINISHED GRADE
- ⑥ CONNECT TO BUILDING DOWNSPOUT, SEE ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATION AND DETAIL ON SHEET C5.2
- ⑦ CONNECT TO CANOPY DOWNSPOUT, MAINTAIN MINIMUM COVER OF 1' MEASURED FROM TOP OF PAVEMENT, SEE SHEET C5.2
- ⑧ INSTALL STORM SEWER PIPE EXTENSION
- ⑨ INSTALL STORM SEWER PIPE; LENGTH, SIZE, AND SLOPE PER PLAN
- ⑩ EXISTING STORM SEWER PIPE, SIZE PER PLAN
- ⑪ GRADE BREAK, SEE SHEET C4.1
- ⑫ PROPOSED CURB CUT, SEE SHEET C4.1, WIDTH PER PLAN
- ⑬ INSTALL STORM SEWER WYE AND CLEANOUT WITH WATERTIGHT TRAFFIC RATED LID, SEE SHEET C5.2
- ⑭ INSTALL DETENTION AND WATER QUALITY POND REQUIRED VOLUME: 0.039 AC-FT, PROPOSED VOLUME 0.201 AC-FT, SEE SHEET C5.2 FOR ADDITIONAL DETAIL
- ⑮ OUTLET STRUCTURE, SEE SHEET C2.6 FOR DETAIL
- ⑯ INSTALL RIPRAP PROTECTION, SEE SHEET C2.5 FOR DETAIL
- ⑰ INSTALL FLARED END SECTION WITH RIPRAP PAD, SEE SHEET C2.5 FOR DETAIL
- ⑱ PROPOSED CITY OF BOULDER STANDARD 6" CURB AND GUTTER
- ⑲ CONNECT TO EXISTING STORM SEWER PIPE
- ⑳ PROPOSED CURB CUT FOR DRAINAGE POND MAINTENANCE ACCESS, WIDTH PER PLAN
- ㉑ INSTALL STORM SEWER WYE
- ㉒ INSTALL CLEANOUT WITH WATERTIGHT TRAFFIC RATED LID, SEE SHEET C5.2

STORM SEWER STRUCTURE TABLE					
ID	NORTHING	EASTING	RIM / GRATE	INVERT	NOTES
A	1257687.45	3072560.62	5303.84 RIM	10": 5299.02	⑬
B	1257687.62	3072646.10	5301.56 RIM	10": 5298.31	⑫
C	1257687.73	3072697.96	5300.13 RIM	15": 5297.88	⑬
D	1257862.33	3072697.61	5300.58 RIM	15": 5297.31	⑬
E	1257863.90	3072783.18	5299.00 RIM	15": 5297.02	⑬
F	1257848.37	3072798.78	5296.94 RIM	15": 5296.94	⑰
G	1257866.21	3072916.60	5294.62 RIM	18": 5294.62	⑰
H	1257740.58	3072809.58	5297.69 GRATE	12": 5295.00	⑮
I	1257701.16	3072828.72	5294.66 RIM	12": 5294.66	⑰
J	1257695.13	3072825.20	5294.51 RIM	18": 5294.51	⑰
K	1257628.27	3072768.75	5294.07 RIM	18": 5294.07	⑰
L	1257626.59	3072770.04	5294.02 RIM	22": 5294.02	⑰
M	1257482.19	3072563.97	5296.30 RIM	24": 5296.30	⑰
N	1257770.44	3072697.79	5301.00 RIM	15": 5297.61	⑫

LEGEND

	LIMITS OF DISTURBANCE		BOLLARD
	PROPERTY LINE		BENCHMARK/CONTROL POINT
	PROPOSED BOUNDARY LINE		POWER POLE
	PROPOSED EASEMENT LINE		GUY WIRE
	PROPOSED GRADE BREAK		TELEPHONE PEDESTAL
	PROPOSED MAJOR CONTOUR		TELEPHONE RISER
	PROPOSED MINOR CONTOUR		TELEPHONE MANHOLE
	EXISTING MAJOR CONTOUR		TRAFFIC SIGNAL BOX
	EXISTING MINOR CONTOUR		TRAFFIC SIGNAL POLE
	EXISTING EDGE OF ASPHALT		STORM SEWER MANHOLE
	PROPOSED CONCRETE CURB AND GUTTER		EXISTING CURB INLET
	EXISTING OVERHEAD POWER		FIRE HYDRANT
	EXISTING STORM SEWER		WATER VALVE
	PROPOSED STORM SEWER		WATER METER
	SECTION CORNER		EXISTING DECIDUOUS TREE
	LIGHT POLE		CLEANOUT
	TRANSFORMER		GREASE INTERCEPTOR LID
	ELECTRIC VAULT		SANITARY SEWER MANHOLE
	SIGN		FLARED END SECTION
			RIPRAP

BENCHMARKS:

1. PROJECT BENCHMARK: THE PUBLISHED VALUES OF BOULDER COUNTY PRIMARY MONUMENT CONTROL STATION "B 322 RESET". EL=5508.90" (NAVD88), N:1272428.69, E:3061900.56
2. SITE BENCHMARK: 3" ALUMINUM CAP LOCATED IN THE INTERSECTION OF 47TH STREET AND INDEPENDENCE ROAD. EL=5304.38" (NAVD88), N:1257929.36, E:3072507.66

BASIS OF BEARINGS:

BEARINGS ARE BASED ON THE WEST LINE OF THE NW1/4 OF SECTION 21 AS HAVING A BEARING OF N00°06'56"W FROM THE W1/4 CORNER BEING MONUMENTED WITH A 3" ALUMINUM CAP TO THE W-N1/16 CORNER BEING ALSO MONUMENTED WITH A 3" ALUMINUM CAP AS SHOWN HEREON.

FLOOD ZONE:

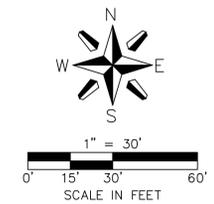
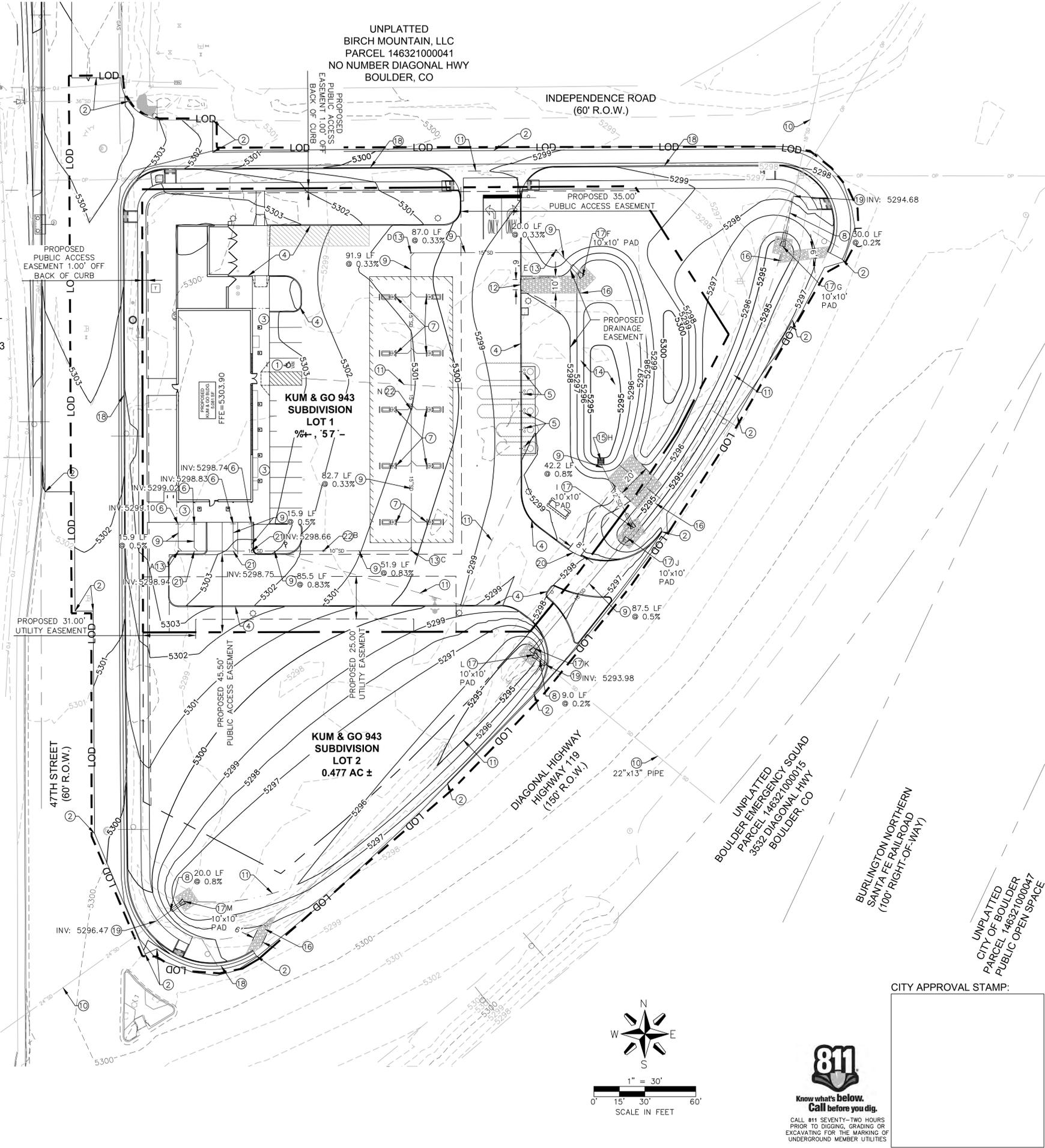
THE SUBJECT PROPERTY FALLS WITHIN ZONE "X" DESCRIBED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN; ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08013C0415F WITH AN EFFECTIVE DATE OF JUNE 2, 1995.

UNPLATTED
STATE DEPARTMENT
OF HIGHWAYS
PARCEL 146320100002
4685 KALMIA AVE
BOULDER, CO

UNPLATTED
STATE DEPARTMENT
OF HIGHWAYS
PARCEL 1463201000023
3587 N 47TH ST
BOULDER, CO

UNPLATTED
STATE DEPARTMENT
OF HIGHWAYS
PARCEL 1463201000024
3547 N 47TH ST
BOULDER, CO

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BIRCH MOUNTAIN, LLC
PARCEL 146321000041
NO NUMBER DIAGONAL HWY
BOULDER, CO



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DATE	
DATE: 06-20-2014	
SHEET NUMBER:	
C2.1	
06 OF 32	

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GOLDEN, CO 80403
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FAX: 303.237.2659
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CA # 012-1417



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50266
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F: 515-223-9873

#943 - BOULDER, COLORADO
3365 DIAGONAL HWY.
GRADING AND DRAINAGE PLAN

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

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CITY OF BOULDER
PARCEL 146321000047
PUBLIC OPEN SPACE

DWC: F:\Projects\012-1417_LDW\Final_Plans\121417_GRD.dwg
DATE: Jul 01, 2014 2:41pm
USER: sbower
XREFS: 121417_XBASE
121417_TBLK_CD

- NOTES:**
- ALL DISTURBED AREAS NOT COVER BY PAVEMENT OR SEED/MULCH SHALL BE PERMANENTLY LANDSCAPED ACCORDING TO THE LANDSCAPE PLAN.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PLAN THROUGHOUT CONSTRUCTION AND PERFORMING INSPECTIONS/MAINTANCE PER THE CDPHE PERMIT, UNTIL SUCH TIME THE PERMIT IS CLOSED.
 - THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THIS INCLUDES PRIVATE AND PUBLIC UTILITIES.
 - NO WETLANDS WERE OBSERVED WITHIN THE LIMITS OF CONSTRUCTION FOR THE PROJECT.
 - IF REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL LOCAL AND STATE PERMITS AND AUTHORIZATION TO DISCHARGE DEWATERING ACTIVITIES. GROUNDWATER SHALL BE SAMPLED AND SENT TO AN APPROVED LABORATORY FOR TESTING PRIOR TO BEING DISCHARGED. TESTING SHALL BE IN ACCORDANCE WITH PERMIT FOR STORMWATER DISCHARGE.
 - DEDICATED ASPHALT OR CONCRETE BATCH PLANTS ARE NOT ANTICIPATED TO BE LOCATED ON THIS PROJECT SITE.
 - ALL EROSION CONTROL MEASURES TO BE INSTALLED PER DETAILS AND SPECIFICATIONS SHOWN WITHIN THESE PLANS OR THE STORMWATER MANAGEMENT PLAN (SWMP) REPORT.

- EROSION CONTROL LEGEND**
- SF — SF — INSTALL SILT FENCE, SEE SHEET C2.5
 - VTC [Symbol] — INSTALL VEHICLE TRACKING PAD, SEE SHEET C2.5
 - SSA [Symbol] — INSTALL STABILIZED STAGING AREA PER URBAN DRAINAGE DETAIL SM-6, SEE SHEET C2.6
 - CWA [Symbol] — INSTALL CONCRETE WASHOUT AREA PER TEMPORARY CONCRETE WASHOUT DETAIL, SEE SHEET C2.6
 - IP [Symbol] — INSTALL INLET PROTECTION, SEE SHEET C2.4
 - ECB [Symbol] — INSTALL EROSION CONTROL BLANKET, SEE SHEET C2.4
 - SB [Symbol] — INSTALL TEMPORARY SEDIMENT BASIN, SEE SHEET C2.4
 - CD [Symbol] — INSTALL 18" TALL CHECK DAM, SEE SHEET C2.3
 - CS [Symbol] — INSTALL CURB SOCK, SEE SHEET C2.4

CITY STANDARD EROSION CONTROL NOTES:

- ALL TEMPORARY EROSION CONTROL FACILITIES SHALL BE INSTALLED BEFORE ANY CONSTRUCTION ACTIVITIES TAKE PLACE.
- SOLID WASTE, INDUSTRIAL WASTE, YARD WASTE AND ANY OTHER POLLUTANTS OR WASTE ON ANY CONSTRUCTION SITE SHALL BE CONTROLLED THROUGH THE USE OF BMP'S. WASTE AND/OR RECYCLING CONTAINERS SHALL BE PROVIDED AND MAINTAINED BY THE OWNER OR CONTRACTOR ON CONSTRUCTION SITES WHERE THERE IS THE POTENTIAL FOR RELEASE OF WASTE. UN-CONTAINED WASTE THAT MAY BLOW, WASH OR OTHERWISE BE RELEASED FROM THE SITE IS PROHIBITED. SANITARY WASTE FACILITIES SHALL BE PROVIDED AND MAINTAINED BY THE OWNER OR CONTRACTOR.
- READY-MIXED CONCRETE, OR ANY MATERIALS RESULTING FROM THE CLEANING OF VEHICLES OR EQUIPMENT CONTAINING OR USED IN TRANSPORTING OR APPLYING IT, SHALL BE CONTAINED ON CONSTRUCTION SITES FOR PROPER DISPOSAL. RELEASE OF THESE MATERIALS IS PROHIBITED.
- COVER SHALL BE APPLIED WITHIN 14 DAYS TO INACTIVE SOIL STOCKPILES, AND SHALL BE MAINTAINED FOR STOCKPILES THAT ARE PROPOSED TO REMAIN IN PLACE LONGER THAN 30 CALENDAR DAYS.
- BMP'S SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF SEDIMENT FROM CONSTRUCTION SITES. VEHICLE TRACKING OF MUD SHALL NOT BE ALLOWED TO ENTER THE STORM WATER SYSTEM OR WATERS OF THE STATE. SEDIMENT TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED.
- TECHNIQUES SHALL BE USED TO PREVENT DUST, SEDIMENT OR DEBRIS BLOWING FROM THE SITE.
- STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION OR DEGRADATION OF WATERS OF THE STATE.
- ALL EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED AND COMPLETED TO LIMIT THE EXPOSED AREA OF ANY DISTURBED LAND TO THE SHORTEST POSSIBLE PERIOD OF TIME.
- BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING THE STORM WATER SYSTEM OR WATERS OF THE STATE.
- ANY DISTURBANCE TO TEMPORARY AND PERMANENT BMP'S SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS.
- THE PROPERTY OWNER AND SUBSEQUENT PROPERTY OWNERS WILL BE RESPONSIBLE FOR CONTINUED COMPLIANCE WITH THE REQUIREMENTS OF THIS SECTION, DURING CONSTRUCTION ACTIVITY ON THE SITE.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AND DISPOSED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED, OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, WHICHEVER OCCURS FIRST.

ENGINEER'S STATEMENT

THIS EROSION AND STORMWATER QUALITY CONTROL/GRADING PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. IF SUCH WORK IS PERFORMED IN ACCORDANCE WITH THE GRADING AND EROSION CONTROL PLAN, THE WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY, OR ADVERSELY AFFECT THE SAFETY, USE, OR STABILITY OF A PUBLIC WAY, DRAINAGE CHANNEL, OR OTHER PROPERTY.

SIGNATURE: _____ DATE: _____
 PRINTED NAME: _____ JOSH ERRAMOUSPE

DEVELOPER/OWNER'S STATEMENT

THE OWNER WILL COMPLY WITH THE REQUIREMENTS OF THE EROSION AND STORMWATER QUALITY CONTROL PLAN INCLUDING TEMPORARY BMP INSPECTION REQUIREMENTS AND FINAL STABILIZATION REQUIREMENTS. I ACKNOWLEDGE THE RESPONSIBILITY TO DETERMINE WHETHER THE CONSTRUCTION ACTIVITIES ON THESE PLANS REQUIRE COLORADO DISCHARGE PERMIT SYSTEM (CDPS) PERMITTING FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.

DEVELOPER/OWNER SIGNATURE: _____
 NAME OF DEVELOPER/OWNER: RYAN HALDER DATE: _____
 DBA: KUM & GO, L.C. PHONE: 515.457.6232
 TITLE: SITE DEVELOPMENT MANAGER EMAIL: RJH@KUMANDGO.COM
 ADDRESS: 6400 WESTOWN PARKWAY, WEST DES MOINES, IA 50266 FAX: 515.226.1595

LEGEND:

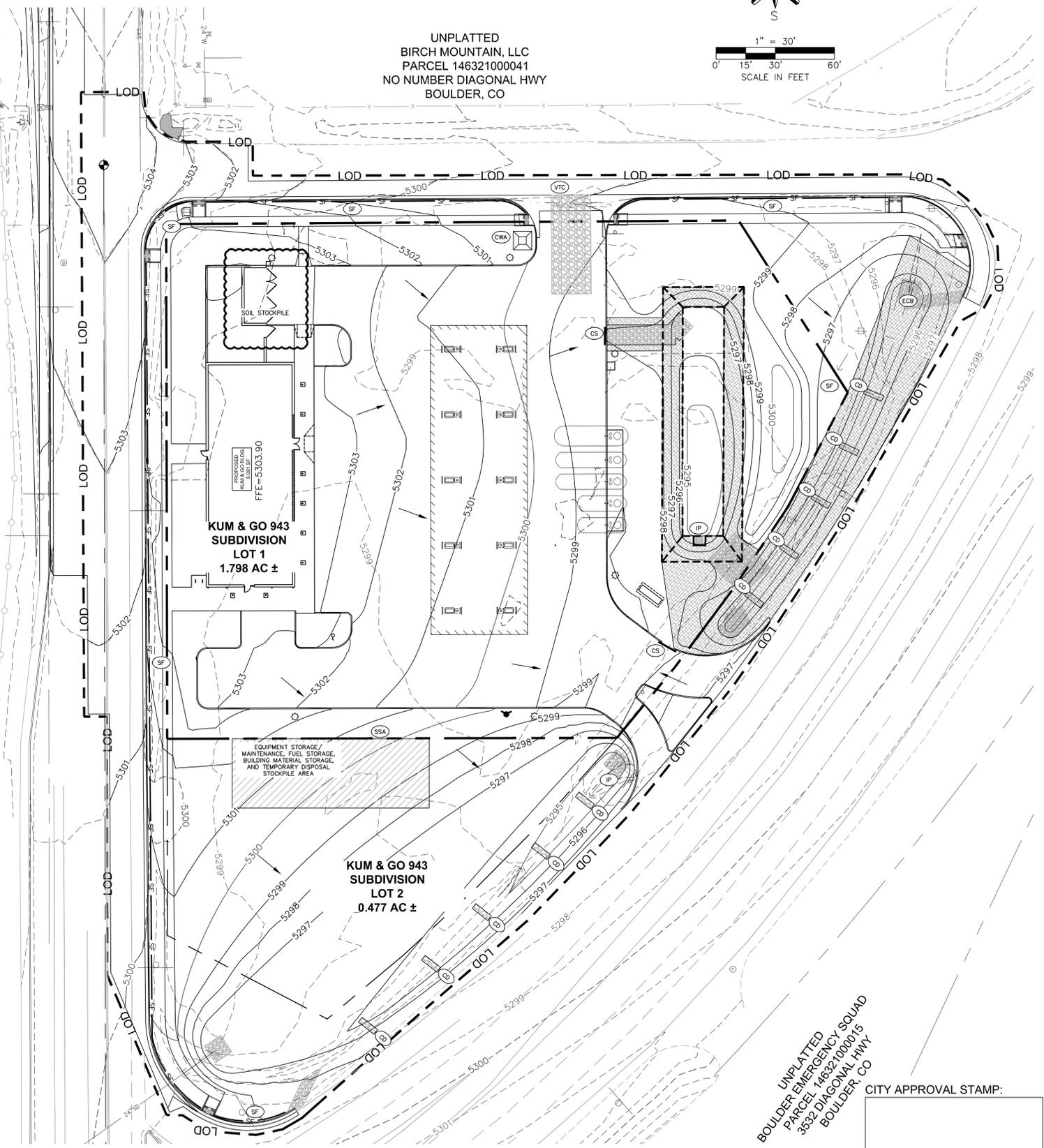
- [Symbol] PROPOSED BOUNDARY LINE
- [Symbol] PROPERTY LINE
- [Symbol] PROPOSED MAJOR CONTOUR
- [Symbol] PROPOSED MINOR CONTOUR
- [Symbol] EXISTING MAJOR CONTOUR
- [Symbol] EXISTING MINOR CONTOUR
- [Symbol] LOD — LIMITS OF DISTURBANCE
- [Symbol] PROPOSED CURB AND GUTTER
- [Symbol] PROPOSED CURB
- [Symbol] EXISTING CURB AND GUTTER
- [Symbol] EXISTING WIRE FENCE
- [Symbol] EXISTING BOLLARD FENCE
- [Symbol] LIGHT POLE
- [Symbol] TRANSFORMER
- [Symbol] DRAINAGE ARROW
- [Symbol] ELECTRIC BOX
- [Symbol] ELECTRIC OUTLET
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- [Symbol] SIGN
- [Symbol] TELEPHONE PEDESTAL
- [Symbol] TELEVISION PEDESTAL
- [Symbol] TELEPHONE CABINET
- [Symbol] CLEANOUT
- [Symbol] GREASE INTERCEPTOR LID
- [Symbol] SANITARY SEWER MANHOLE
- [Symbol] FLARED END SECTION
- [Symbol] GUY WIRE
- [Symbol] UTILITY POLE
- [Symbol] BOLLARD
- [Symbol] DECIDUOUS TREE
- [Symbol] CONIFEROUS TREE
- [Symbol] RIPRAP

UNPLATTED STATE DEPARTMENT OF HIGHWAYS
 PARCEL 146320100002
 4685 KALMIA AVE
 BOULDER, CO

UNPLATTED STATE DEPARTMENT OF HIGHWAYS
 PARCEL 146320100023
 3587 N 47TH ST
 BOULDER, CO

UNPLATTED STATE DEPARTMENT OF HIGHWAYS
 PARCEL 146320100024
 3547 N 47TH ST
 BOULDER, CO

UNPLATTED BIRCH MOUNTAIN, LLC
 PARCEL 146321000041
 NO NUMBER DIAGONAL HWY
 BOULDER, CO



- BENCHMARKS:**
- PROJECT BENCHMARK: THE PUBLISHED VALUES OF BOULDER COUNTY PRIMARY MONUMENT CONTROL STATION "B 322 RESET". EL=5508.90' (NAVD88), N:1272428.69, E:3061900.56
 - SITE BENCHMARK: 3" ALUMINUM CAP LOCATED IN THE INTERSECTION OF 47TH STREET AND INDEPENDENCE ROAD. EL=5304.38' (NAVD88), N:1257929.36, E:3072507.66

FLOOD ZONE:
 THE SUBJECT PROPERTY FALLS WITHIN ZONE "X" DESCRIBED AS AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN, ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08013C0411J WITH AN EFFECTIVE DATE OF MAY 6, 1996.

UNPLATTED BOULDER EMERGENCY SQUAD
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 BOULDER, CO

CITY APPROVAL STAMP:

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 4680 Table Mountain Drive
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 TEL: 303.937.0979
 FAX: 303.237.2659
 CA # 012-1417
 www.molssonassociates.com



6400 Westown Parkway
 West Des Moines, Iowa 50266
 P: 515-226-0128
 F: 515-223-9873

#943 - BOULDER, COLORADO
 3365 DIAGONAL HWY.
 EROSION CONTROL PLAN

KG PROJECT TEAM:
 RDR: JXH
 SDM: RJH
 CPM: TLK

DATE	REVISION DESCRIPTION

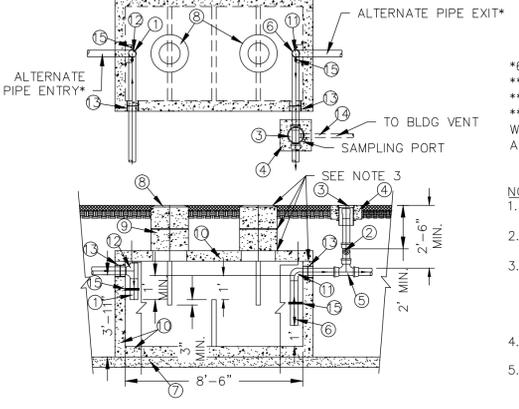
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 SHEET NUMBER: C2.2 OF 32

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 DATE: Jul 01, 2014 2:45pm
 USER: sbower
 604
 121417_XBASE
 517d
 517b
 517c
 121417_LPBASE
 121417_XBASE
 517d
 517b
 517c

ITEM	DESCRIPTION
1	4" ABS INLET PIPE*
2	4"x4"x2" TEE WITH 2" PIPE TO BUILDING VENT*
3	THREADED C/O CAP JOSAM 58860 OR APP EQUAL**
4	CONCRETE PAD
5	4"x4"x4" TWO-WAY CLEANOUT TEE*
6	4" ABS OUTLET*
7	4" - 6" GRAVEL BEDDING
8	HEAVY-DUTY CAST IRON FRAME AND COVER ***
9	CONCRETE ADJUSTMENT RINGS
10	REINFORCE AS REQUIRED FOR SERVICE CONDITIONS
11	4" ABS 90° ELBOW*
12	4" ABS TEE*
13	A-LOK OR PRESS SEAL PSX PIPE/WALL CONNECTOR
14	2" VENT PIPE (IDENTIFY PIPE TYPE, CLASS & JOINT AS REQUIRED FOR PROJECT)
15	STAINLESS STEEL PIPE SUPPORT CLAMP ****

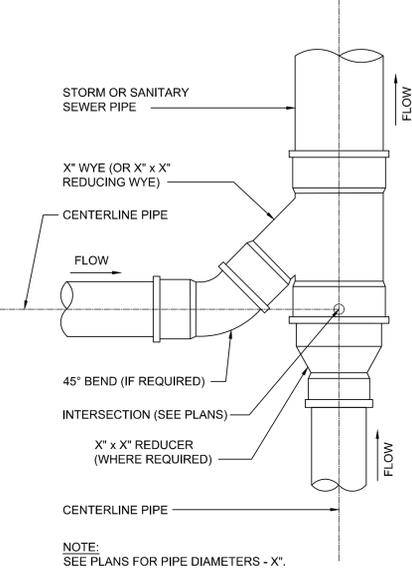
* SHOW ONLY PIPE ARRANGEMENT REQUIRED FOR SPECIFIC PROJECT INSTALLATION.



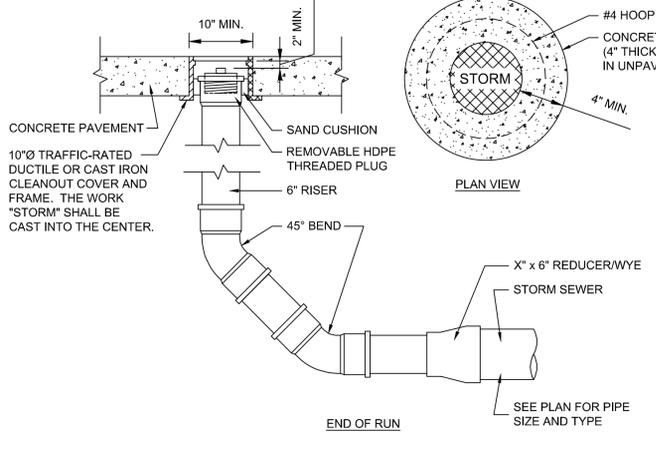
GREASE INTERCEPTOR
NOT TO SCALE

*6" PIPE MAY BE SUBSTITUTED TO MATCH UPSTREAM PIPE DIAMETER.
 **REFER TO CLEAN OUT DETAIL(S) ON STANDARD DETAIL SHEET.
 ***CLAY & BAILEY 2008 BV OR EQUAL (FROST PROOF COVERS OPTIONAL)
 ****FM STAINLESS FASTENERS #63 OR EQUAL. 1/2"x2-1/2" SS BRACKET W/ 1/2"x1-1/2" FULLY THREADED SS HEX BOLT WITH 1/2" SS WASHER AND 1/2"x1-3/4" SS ANCHORS. CLAMP TO BE FACTORY INSTALLED.

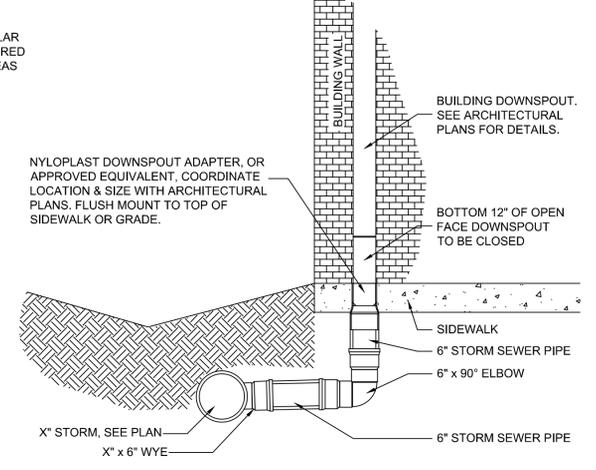
NOTES:
 1. THREE COVERS AND RISERS SHOWN. TWO COVERS AND RISERS CENTERED OVER UPPER TWO BAFFLES ARE OPTIONAL.
 2. INTERCEPTOR SIZE - 1000 GAL MINIMUM (REVISE THE SIZE DIMENSIONS, AS NEEDED, FOR LARGER CAPACITY INTERCEPTORS)
 3. ALL JOINTS AT THE FRAME & COVER*, CONCRETE ADJUSTMENT RINGS AND THE LID OF THE INTERCEPTOR SHALL BE SEALED WITH A MINIMUM OF TWO (2) ROWS OF 3/4 TO 1 INCH PREFORMED BUTYL JOINT SEALER AND A 6" BUTYL JOINT WRAP AROUND SLEEVE (EZ WRAP). THE ENDS OF THE 6" EZ WRAP SHALL OVERLAP BY 12".
 4. PIPING ON THE INTERIOR OF THE INTERCEPTOR SHALL BE ABS WITH SOLVENT-CEMENTED JOINTS.
 5. GREASE INTERCEPTOR INCLUDING ADJUSTMENT RINGS AND CASTINGS SHALL BE VACUUM TESTED FOR WATER TIGHTNESS AFTER THE BACKFILL OPERATIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH JCW TECHNICAL SPECIFICATIONS. A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN AND WITH THE VACUUM PUMP SHUT OFF THE MERCURY SHALL NOT DROP BELOW 9 INCHES WITHIN 1 MINUTE OR BELOW 5 INCHES WITHIN 5 MINUTES.



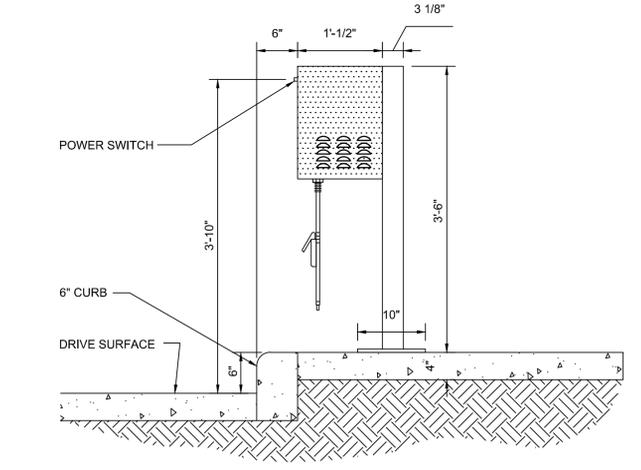
WYE CONNECTION
NOT TO SCALE



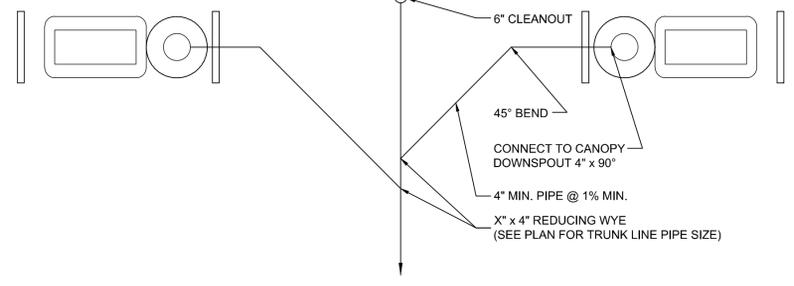
STORM SEWER CLEANOUT
NOT TO SCALE



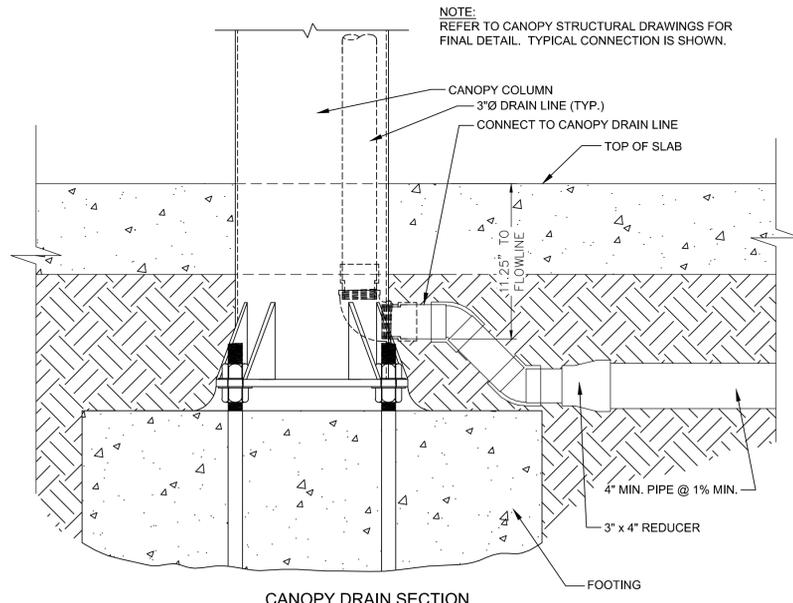
BUILDING DOWNSPOUT CONNECTION DETAIL
NOT TO SCALE



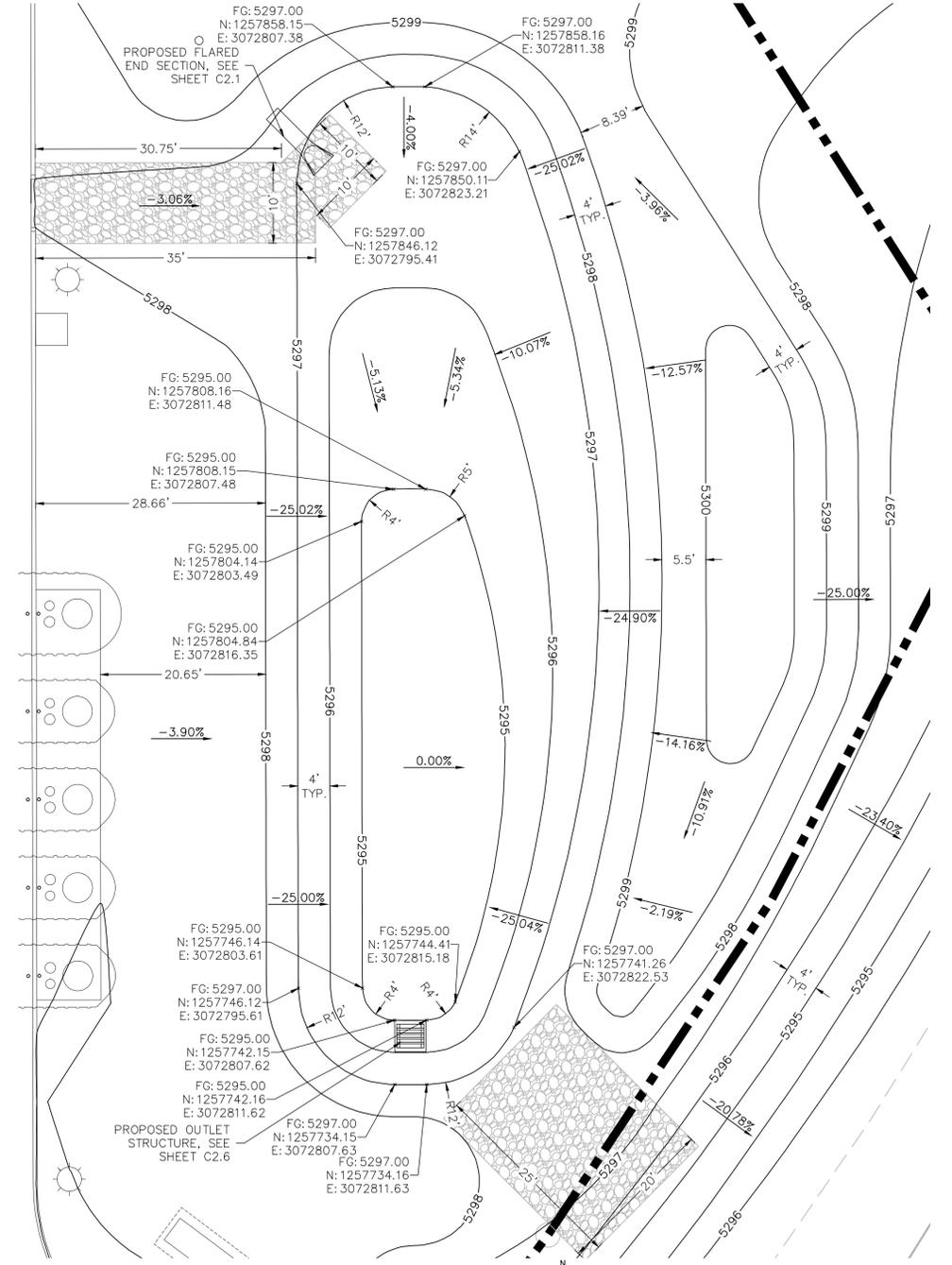
PEDESTAL-MOUNTED AIR MACHINE
NOT TO SCALE



CANOPY DRAIN CONNECTION
NOT TO SCALE



CANOPY DRAIN SECTION
NOT TO SCALE



POND DETAIL
SCALE: 1"=10'

MOLSSON ASSOCIATES
 4690 Table Mountain Drive
 Golden, CO 80403
 TEL: 303.937.0979
 FAX: 303.237.2659
 www.molsson.com



6400 Westown Parkway
 West Des Moines, Iowa
 50266
 P: 515-226-0128
 F: 515-223-9873

#943 - BOULDER, COLORADO
 3365 DIAGONAL HWY.
CONSTRUCTION DETAILS

KG PROJECT TEAM:
 RDR: JXH
 SDM: RJH
 CPM: TLK

REVISION DESCRIPTION	DATE

DATE: 06-20-2014

SHEET NUMBER:

C5.2
22 OF 32

Appendix B – Governing Jurisdiction’s General Permit

Appendix C – NOI and Authorization Letter

NOTES to General Contractor:

If instructed above, the General Contractor must complete, sign, and submit a Notice of Intent or similar storm water permit application, to the applicable governing agency within 7 days of Project Award.

Signed NOIs must be posted on the SWPPP Sign near the job-site entrance within view of the public.

Signed NOIs cannot be modified or revised in the field.

Appendix D – Construction Site Notice

STORM WATER POLLUTION PREVENTION PLAN

CONSTRUCTION SITE NOTICE

FOR THE
NPDES GENERAL PERMIT

Contractor Firm:	
Contractor Address:	
Contact Name & Number:	Name _____ Phone Number _____
Project Description:	
SWPPP Location:	

Notes:

The Construction Site Notice must be posted on the SWPPP Information Sign located near the construction exit along with the NOI, GC permit authorization(s), and the above described location of the SWPPP on the jobsite.

A Storm Water Pollution Prevention Plan (SWPPP) has been developed and implemented according to Permit requirements.

This permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that permittee allow members of the public access to a construction site.

Appendix E – Inspection Form

Appendix F – Spill Report Form

Spill Report Form

General Information	
Project Name	Kum & Go Store #943
Date of Inspection	
Inspector's Name(s)	
Was there a spill in excess of 5 gallons, but less than a reportable quantity, at your facility during the previous month? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was there a spill in excess of a reportable quantity at your facility in the last month? <input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If the answer is yes to the first question complete Part A; If the answer is yes to the second question complete Part B.</i>	
PART A – INTERNAL REPORTABLE SPILL/RELEASE	
Date and Time spill occurred: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	
Weather conditions? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: _____ Temperature: _____	
Type of product spilled: <input type="checkbox"/> Diesel Fuel <input type="checkbox"/> Gasoline <input type="checkbox"/> Paint <input type="checkbox"/> Solvent <input type="checkbox"/> Used Oil <input type="checkbox"/> Hazardous Waste <input type="checkbox"/> Other: _____	
Attach MSDS for spilled product and/or profile for waste	
Estimated amount of spilled material (gallons):	
Was the spill reported to CDPHE Environmental Department? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date and time: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM	
Was it determined by CDPHE Environmental Department that the spill event did not require reporting to a regulatory agency? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If no, why was spill not reported for status determination by CDPHE Environmental Department?	
Provide a detailed description of the spill circumstances and the area where the spill occurred on the property:	
On what type of surface did spill occur? Check all that apply: <input type="checkbox"/> Soil <input type="checkbox"/> Concrete <input type="checkbox"/> Black Top <input type="checkbox"/> Vegetated Area <input type="checkbox"/> Gravel <input type="checkbox"/> Drainage Ditch <input type="checkbox"/> Other: _____	
Were environmental media impacted by the spill? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list the affected media: _____	
Were on-site personnel able to satisfactorily clean up the spill? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide a detailed description of how the spill was cleaned up including the disposition of affected media (i.e., were contaminated soils contained in a drum, etc.), method utilized for disposal of affected media, need for further action and/or verification sampling.	
If an off-site contractor was utilized for clean-up activities, provide information requested below. In addition, attach a report from the contractor detailing all clean-up activities including sample locations, disposal methods, amount of material affected, etc.	

Company Name:
Contact Name:
Address:
Phone Number: Fax Number:
Report Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No
Was a Corrective and Preventive Action Form completed? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date completed:
PART B – REGULATORY REPORTABLE SPILL/RELEASE
Date and Time spill occurred: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM
Weather conditions? <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds <input type="checkbox"/> Other: _____ Temperature: _____
Type of product spilled: <input type="checkbox"/> Diesel Fuel <input type="checkbox"/> Gasoline <input type="checkbox"/> Paint <input type="checkbox"/> Solvent <input type="checkbox"/> Used Oil <input type="checkbox"/> Hazardous Waste <input type="checkbox"/> Other: _____
Attach MSDS for spilled product and/or profile for waste
Estimated amount of spilled material (gallons):
Was the spill reported to CDPHE Environmental Department? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide date and time: _____ <input type="checkbox"/> AM <input type="checkbox"/> PM
Did CDPHE Environmental Department determine that the spill required reporting to Regulatory agencies? <input type="checkbox"/> Yes <input type="checkbox"/> No
Did CDPHE Environmental Department report the event to the Regulatory agencies? <input type="checkbox"/> Yes <input type="checkbox"/> No
What agencies were contacted?
If not, why was spill not reported for status determination by CDPHE Environmental Department?
Provide a detailed description of the spill circumstances and the area where the spill occurred on the property:
On what type of surface did spill occur? Check all that apply: <input type="checkbox"/> Soil <input type="checkbox"/> Concrete <input type="checkbox"/> Black Top <input type="checkbox"/> Vegetated Area <input type="checkbox"/> Gravel <input type="checkbox"/> Drainage Ditch <input type="checkbox"/> Other: _____
Were environmental media impacted by the spill? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, list the affected media: _____
Was an environmental or health risk posed by the spill? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide a detailed description: _____
Was evacuation necessary? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide a detailed description: _____

Were on-site personnel able to satisfactorily clean up the spill? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide a detailed description of how the spill was cleaned up including the disposition of affected media (i.e., were contaminated soils contained in a drum, etc.), method utilized for disposal of affected media, need for further action and/or verification sampling.
If an off-site contractor was utilized for clean-up activities, provide information requested below. In addition, attach a report from the contractor detailing all clean-up activities including sample locations, disposal methods, amount of material affected, etc.
Company Name:
Contact Name:
Address:
Phone Number: Fax Number:
Report Attached? <input type="checkbox"/> Yes <input type="checkbox"/> No
Was a Corrective and Preventive Action Form completed? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date completed:

Appendix G – Corrective Action Form

Corrective Action Form

Section A – Initial Report

(Complete this section within 24 hours of discovering the condition that triggered corrective action)

Date problem first discovered:

Time discovered:

Name and contact information of individual completing this form:

What site conditions triggered the requirement to conduct corrective action (*check the box that applies*):

- A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements.
- The stormwater controls that have been installed and maintained are not effective enough for the discharge to meet applicable water quality standards or applicable requirements of the permit.
- A prohibited discharge has occurred or is occurring.
- State Agency/EPA requires corrective action as a result of permit violations found during a(n) State/EPA inspection.

Provide a description of the problem:

Deadline for completing corrective action:

If your estimated date of completion falls after the 7-day deadline, explain (1) why you believe it is infeasible to complete work within 7 days, and (2) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe:

Section B – Corrective Action Progress

(Complete this section no later than 7 calendar days after discovering the condition that triggered corrective action)

Section B.1 – Why the Problem Occurred

Cause(s) of Problem (insert additional rows if applicable)	How This Was Determined and the Date You Determined the Cause
1.	
2.	

Section B.2 – Stormwater Control Modifications to be Implemented to Correct the Problem

List of Stormwater Control Modification(s) Needed to Correct Problem (insert additional rows if applicable)	Date of Completion	SWPPP Update Necessary?	Notes
1.		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2.		<input type="checkbox"/> Yes <input type="checkbox"/> No	

Appendix H – SWPPP Amendment Log

Appendix I – 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 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 J – Grading and Stabilization Activities Log

Appendix K – Pre – NOT Inspection Checklist and NOT

STORM WATER POLLUTION PREVENTION PLAN

Pre-NOT Inspection Checklist

Inspections and Report Must Be Completed Prior to Filing the Notice of Termination

Instructions:

1. Kum & Go's Project Manager will schedule the Pre-NOT site inspection with the Civil Engineer of Record and General Contractor two weeks in advance of the inspection.
2. Both the Civil Engineer and the Stormwater Maintenance Contractor will complete the inspection and forward a report to the Kum & Go Construction Manager
3. When all items on the checklist/punch list are corrected or completed the Kum & Go Construction Manager will sign and certify the report. Notice of the completed report will be sent to the Engineer of Record and to the Stormwater Maintenance Contractor for signature.

Complete ALL of the Following Questions:

1. Are all soil-disturbing activities complete and does the facility no longer discharges stormwater associated with construction activities?
2. Is all site construction activity complete and have temporary sediment control measures been removed?
3. Has a uniform perennial vegetative cover (with a density of native background vegetation meeting the CGP requirement) for the unpaved areas and areas not covered by permanent structures been established? If answers to #1, #2, and #3 are YES, proceed with filing NOT.
4. Are there any temporary measures that must be removed before N.O.T. filing?
If YES, please list: _____
5. Have the pavement and curb been cleaned of sediment?
If NO, please list areas that must be cleaned: _____
6. Has the storm drainage system been cleaned of sediment?
If NO, please list structures and/or lines that must be cleaned: _____
7. Do all slopes appear to be stable?
If NO, please list all slopes where stability is in question: _____
8. Do all Stormwater channels appear to be stable?
If NO, please list all channels that appear to be unstable (i.e. evidence of shear stress and / or erosion): _____
9. Please list all permanent Stormwater BMPs constructed for this site: _____
10. Are there special maintenance requirements, responsibilities or agreements for any Stormwater BMPs provided for this site?
If YES, please provide to Kum & Go's Project Manager.
11. Were any proprietary systems installed?
If YES, please list all and provide maintenance manuals and instructions: _____
12. Is there any special maintenance contractor training required to maintain the Stormwater BMPs built on this site?
If YES, please describe: _____
13. Has 'Notice of Completion' been submitted to the state or USACOE for wetland work authorized by permit?
If YES, please provide to Kum & Go's Project Manager.
14. Have you observed any other Stormwater deficiencies?
If YES, please describe: _____
15. Are there any State-Specific NOT requirements?
If YES, please describe: _____

Notice of Termination may not be filed until this inspection is complete and signed by Kum & Go's Project Manager, the Civil Engineer of Record, and the Stormwater Maintenance Contractor.

Pre-NOT Inspection Checklist

NOTE: This form may be used by the Civil Engineer of Record and the Stormwater Maintenance Contractor to complete their inspection reports. When complete forward to the Kum & Go Project Manager who will complete the final report.

	Kum & Go Store #943	Date of Inspection:
<u>Instructions</u>		
<ol style="list-style-type: none"> 1. Kum & Go's Project Manager will schedule the Pre-NOT site inspection with the Civil Engineer of Record and General Contractor two weeks in advance of the inspection. 2. Both the Civil Engineer and the Stormwater Maintenance Contractor will complete the inspection and forward a report to the Kum & Go Construction Manager 3. When all items on the checklist/punch list are corrected or completed the Kum & Go Construction Manager will sign and certify the report. Notice of the completed report will be sent to the Engineer of Record and to the Stormwater Maintenance Contractor for signature. 		
A.	All soil disturbing activities are complete and the facility no longer discharges stormwater associated with construction activities.	<input type="checkbox"/> Yes <input type="checkbox"/> No
B.	All site construction activity is complete and temporary sediment control measures have been removed.	<input type="checkbox"/> Yes <input type="checkbox"/> No
C.	A uniform perennial vegetative cover of native background vegetation for the unpaved areas and areas not covered by permanent structures has been established in accordance with the SWPPP and CGP.	<input type="checkbox"/> Yes <input type="checkbox"/> No
NOTE: IF ALL ABOVE ARE MARKED YES THE SITE QUALIFIES FOR NOT FILING.		
D.	The following temporary measures must be removed before NOT filing :	
E.	Pavement and curb have been cleaned of sediment	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
The following areas must be cleaned:		
F.	Storm drainage system have been cleaned of sediment	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
The following structures and/or lines must be cleaned:		
G.	Slopes appear stable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
List all slopes where stability is in question:		
H.	All stormwater channels appear to be stable:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
List all channels that appear to be unstable (evidence of shear stress and erosion):		
I.	List all permanent stormwater BMPs constructed for this site:	

J.	Are there any special maintenance requirements for any stormwater BMPs provided for this site? If yes please provide to Kum & Go's Project Manager.	<input type="checkbox"/> Yes <input type="checkbox"/> No
	List any proprietary systems installed and provide maintenance manuals and instructions:	
	List any special maintenance contractor training required to maintain stormwater BMPs built on this site:	
K.	Are there any permanent stormwater operation and maintenance responsibility agreements? If yes please provide to Kum & Go's Project Manager.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
P.	Notice of completion has been submitted to the state or USACOE for wetland work authorized by permit? If yes please provide to Kum & Go's Project Manager.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
R.	List all other stormwater deficiencies observed:	
S.	List any particular State NOT requirements:	
T.	Civil Engineer of Record: Signature _____ <i>Engineer to complete form and submit form to Kum & Go's Construction Manager to merge with Stormwater Maintenance Contractor notes.</i>	
U.	Stormwater Maintenance Contractor: Signature _____ <i>Stormwater Maintenance Contractor to complete form and submit to Kum & Go's Construction Manager to merge with Engineer notes.</i>	
V.	<i>Kum & Go's Construction Manager:</i> <i>"Kum & Go's Construction Manager Certifies all work is complete, the project no longer discharges stormwater associated with construction activities and all temporary sediment control measures have been removed from the site. The Construction Manager further certifies all items reported on this checklist have been satisfied and the General Contractor has completed, signed and submitted for submittal of the Notice of Termination (NOT)"</i> Signature _____	

Appendix L – SWPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name: **Kum & Go Store #943**

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- Sediment and Erosion Controls**
- Stabilization Controls**
- Pollution Prevention Measures**
- Emergency Procedures**
- Inspections/Corrective Actions**

Specific Training Objective: _____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Signature of Attendee	Company
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Appendix M – 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 the Construction General Permit (CGP), and that the designee above meets the definition of a "cognizant official".

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: _____

Appendix N – Threatened and Endangered Species Documentation

NOTE TO OPERATOR'S ENGINEER:

- Attached all necessary documents as required per **Section 4.1** of this SWPPP.

Appendix O – Historic Properties Documentation

NOTE TO OPERATOR'S ENGINEER:

- Attached all necessary documents as required per **Section 4.2** of this SWPPP.

Appendix P – Definitions

Best Management Practice (BMP): Any program, technology, process, practice, operating method, measure or device which controls, prevents, removes, or reduces pollution including measures implemented to protect water quality and reduce the potential for pollution associated with storm water runoff.

Check Dam: A small dam generally placed in steep ditches for the purpose of reducing Velocity in the Ditch.

Clean Water Act (CWA): The Federal Water Pollution Prevention Control Act enacted in 1972 by Public Law 92-500 and amended by the Water Quality Act of 1987. The Clean Water Act prohibits the discharge of pollutants to Waters of the United States unless said discharge is in accordance with an NPDES permit. The 1987 amendments include guidelines for regulating municipal, industrial, and construction storm water discharges under the NPDES program.

Construction Activity: Includes clearing, grading, or excavation and contractor activities that result in soil disturbance.

Construction General Permit: A permit issued by EPA or an authorized state under the NPDES stormwater regulations to cover the discharge from the construction site of stormwater associated with Construction Activity. In order to be covered by a General Permit, the Operator must file a Notice of Intent (NOI), if required. For coverage under a Construction General Permit, where either the EPA or a state is the NPDES authority, the Project is validly covered by the Construction General Permit 14 days after EPA or state agency receipt of a completed NOI, receipt of authorization letter, or EPA or the state agency does not request the Operator to apply for an individual permit. Some states may require that the applicant first receive a plan approval or certificate of coverage which confirms coverage for the Project under the Construction General Permit. In some states general permits are issued as regulations and are applicable to projects in accordance with the terms of the regulation.

Contractor: Shall be that person or entity identified as such in the construction contract with the Operator. The term "Contractor" shall also include the Contractor's authorized representative, as well as any and all subcontractors retained by the Contractor.

Contractor's Project Manager: The Contractor's employee or authorized representative identified by the Contractor as the project manager for the Project. In some instances, this individual may also serve as the Contractor's Superintendent.

Contractor's Superintendent: The Contractor's employee who has oversight and management of the construction process at the Project.

Detention: The process of temporarily collecting and holding back storm water for later release to receiving waters.

Detention Storage: Surface water moving over the land is in Detention Storage. Surface water allowed to temporarily accumulate in ponds, basins, reservoirs or other types of holding facility and that is ultimately returned to a Watercourse or other drainage system as runoff is in Detention Storage.

Dike: (1) Usually an earthen bank alongside and parallel with a river or open channel to restrict overflow (**See Levee**). (2) An asphalt concrete berm along the edge of a shoulder.

Dissipate: Expend or scatter harmlessly, for example reducing the energy of moving water to a non-harmful flow rate.

Disturbed Areas: Areas that have been purposefully cleared, grubbed, excavated, or graded by the Contractor; ground surface that has been disrupted by Construction Activities, including construction access/roads, staging, and storage sites producing significant areas of exposed soil and soil piles.

Ditch: Small man-made channel, usually unlined.

Diversion: (1) The change in character, location, direction, or quantity of flow of a natural drainage course (a deflection of flood water is not a Diversion). (2) Draft of water from one channel to another. (3) Interception of runoff by works that discharge it through man-made channels.

Drainage Area (Drainage Basin): An area of the earth's surface upon which falling precipitation flows to a given point.

Energy Dissipator: A structure for the purpose of slowing the flow of water and reducing the erosive forces present in any rapidly flowing body of water.

Environmental Protection Agency (EPA): Federal agency that issued the regulations to control pollutants in storm water runoff discharges (The Clean Water Act and NPDES permit requirements).

Erosion and Sediment Control Plan: A plan designed to control erosion by providing BMPs that protect the soil surface and prevent soil particles from being detached by wind or water, manages runoff by diverting sediment laden water to sediment control BMPs, provides sediment control BMPs that trap soil particles after they have been detached and transported by wind or water and prevents those particles from being discharged from the site, and manages potential pollutants found in construction materials from being discharged from the site via storm water discharges.

Erosion Control: Any practice that protects the soil surface and prevents the soil particles from becoming detached by rainfall or wind. This includes vegetation, such as grasses, and other materials, such as straw, fiber, stabilizing emulsion, protective blankets, etc., placed to stabilize areas disturbed by grading and operations intended to reduce loss of soil due to the action of water or wind, and prevent water pollution.

Filter Fabric: An engineering fabric (geotextile) placed between the backfill and supporting or underlying soil through which water will pass and soil particles will be retained.

Final Stabilization: On areas not covered by permanent structures, either (1) vegetation has been established, or for arid or semi-arid areas, will be established that provides a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of **80 percent** of the natural background vegetative cover, or (2) non-vegetative stabilization methods have been implemented to provide effective cover for exposed portions of the site. When background native vegetation will cover less than 100 percent of the ground (e.g., arid areas), the 80% coverage criteria is adjusted as follows: if the native vegetation covers 50 percent of the ground, 80% of 50 percent is ($0.80 \times 0.50 = 0.40$) would require 40% total cover for final stabilization.

Hazardous Substances: For purposes of Section 311 of the CWA, the EPA identifies Hazardous Substances by specific listings in the federal implementing regulations (currently found at 40 C.F.R. part 116). There are approximately 300 chemicals currently identified as Hazardous Substances by the EPA.

Hazardous Waste: Wastes (which includes materials, products, and substances that have been discarded or disposed of) which are classified as Hazardous Wastes by the EPA or the appropriate state environmental agency, typically by being listed as a Hazardous Waste, or being shown to be hazardous by characteristic, pursuant to the Hazardous Waste Standards.

Hazardous Waste Standards: The federal Resource Conservation and Recovery Act, as amended (RCRA), which is codified as a part of the federal Solid Waste Disposal Act, 42 U.S.C. 6901 et seq., and rules promulgated by EPA pursuant to RCRA, and similar and comparable laws, rules and other standards regulating Hazardous Wastes and promulgated by state, regional, and local environmental authorities having jurisdiction over Hazardous Wastes.

Kum & Go's Site Development Manager: The Kum & Go employee or authorized representative identified by Kum & Go as the project manager for the Project.

Mulch: A natural or artificial layer of plant residue or other material that covers the land surface and conserves moisture, holds soil in place, aids in establishing vegetation, and reduces temperature fluctuations.

MS4 or Municipal Separate Storm Sewer System: Any conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, Ditches, manmade channels, or storm drains) that (i) is owned and operated by a state or local government entity (ii) is designed or used for collecting or conveying public storm water (iii) is not used as a combined sewer (i.e., a system that combines municipal sewage with storm water runoff) and/or (iv) is not part of a publicly owned treatment works.

National Pollutant Discharge Elimination System (NPDES): EPA's program to control the discharge of pollutants to waters of United States. NPDES is a part of the federal CWA, which requires point and non-point source discharges to obtain permits. These permits are referred to as NPDES permits.

Notice of Intent (NOI): A formal notice to the EPA or a state agency having delegated NPDES authority that a construction project seeking coverage under a Construction General Permit is about to begin. The NOI provides information on the owner, location, and type of project, and certifies that the permittee will comply with conditions of the Construction General Permit. Unlike a permit application, the NOI is a notice provided to the regulatory agency within a specified time prior to initiation of Construction Activity and no approval is required. Some local permits may require submittal of a Notice of Registration or Authorization (NOR, NOA) or a plan approval application in lieu of filing a NOI with the state or EPA.

Notice of Termination (NOT): A formal notice to the EPA or authorized state agency for General Permit site terminating coverage under the permit. This may also be known as Notice of Discontinuation (NOD).

Off-Site Drainage: Flow of water that originates outside the property.

On-Site: Flow of water that originates inside the property.

Oil: For purposes of Section 311 of the CWA, the EPA defines Oil to include not only petroleum-based products (such as fuel oil, gasoline, motor oil, oil refuse, and sludge) but also mineral and vegetable oils.

Operator: Shall be any party (or parties) that have either (a) operational control over construction plans and specifications, including the ability to make modification to those plans and specifications or (b) day-to-day operational control of those activities at a Project which are necessary to ensure compliance with the SWPPP for the site or other permit conditions. There may be occasions during the course of a Project in which there are multiple Operators, all of which will need to file and maintain the appropriate SWPPP documents and plans, including without limitation, the NOI and NOT.

Operator's Engineer: Shall be that person or entity retained by an Operator to design and oversee the implementation of the SWPPP.

Operator's Project Manager: This project manager designation is intended to be a generic term that describes the role of (i) the Kum & Go Site Development Manager, (ii) the Contractor's Project Manager, and/or (iii) any developer's project manager(s), as the context requires. Where a provision refers to an "Operator's Project Manager", the intent is to make the provision applicable to the project managers for all Operators associated with the Project

Project: Any construction site in the United States where Kum & Go has a contract (as defined in the SDA Contract) for the construction of a convenience store, fuel dispensing canopy, or other facilities.

Qualified Inspector: A person knowledgeable in the principles and practices of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any erosion and sediment control measures selected to control the quality of storm water discharges from the Construction Activity. An individual shall be deemed a Qualified Inspector if the

individual is certified by one of the following: (i) CPSEC, Inc. under the Certified Professional in Erosion & Sediment Control program; (ii) any certification or training program approved, sponsored or identified in storm water program outreach materials provided by a state authorized to implement the storm water program pursuant to the NPDES program of Section 402 of the CWA; or (iii) a storm water certification program provided by any other organization approved by the EPA.

Retention: The holding of runoff in a basin without release except by means of evaporation, infiltration, or emergency bypass.

Sediment Control: Any practice that traps soil particles after they have been eroded and moved by wind or water.

Site Map: The Site Map usually consists of the Phase I and Phase II Erosion and Sediment Control Drawings and include 1) direction of stormwater flow and approximate slopes anticipated after major grading activities, 2) limits of disturbed area and areas that will not be disturbed, 3) locations where structural and non-structural BMPs will be used, 3) locations and types of stabilization practices that will be used, 4) locations of off-site material, waste, borrow and equipment storage areas, 5) locations and names of all Waters of the United States including Wetlands, 6) locations where stormwater will discharge to surface waters or MS4, 7) areas where Final Stabilization has been accomplished and no further construction phase permit conditions or requirements apply, and 8) natural features to be preserved. The Site Map will be used to record the locations of the Job Trailer, Sanitary Waste Facilities, Solid Waste Facilities, Fuel Storage Areas, Equipment Service Areas, and Concrete Washout. The Site Map will be used to identify previous and present locations of these items. The Site Map will be used to record and document any plan amendments or modifications and will be used visually depict all amendments identified on SWPPP Amendment Log, **Appendix G**. The Site Map will be updated daily to record where Final Stabilization has occurred.

Storm Water Management: The recognition of adverse drainage resulting from altered runoff and the solutions resulting from the cooperative efforts of public agencies and the private sector to mitigate, abate, or reverse those adverse results.

Storm Water Pollution Prevention Plan (SWPPP): A plan document prepared in accordance with good engineering practices that identifies all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site, that describes practices used to reduce pollutants in storm water discharges, and that assures compliance with the terms and conditions of the Construction General Permit. The SWPPP must be implemented as written from commencement of the Construction Activity until Final Stabilization is complete.

SWPPP Ledger: The Ledger is where all SWPPP information is stored including reports and records as accumulated during construction of the project. The Ledger must always be up-to-date with the latest plans and criteria including all records developed during the construction activity. The Ledger must be available during normal business hours for viewing by the governmental agencies having jurisdiction and any Kum & Go's personnel.

Swale: A shallow, gentle depression in the earth's surface. This tends to collect the waters to some extent and is considered, in a sense, as a drainage course, although waters in a Swale are not considered stream waters.

Terrace: Berm or bench-like earth embankment, with a nearly level plain bounded by rising and falling slopes.

Topsoil: The fertile, uppermost part of the soil containing significant organic matter largely devoid of debris and rock and often disturbed in cultivation.

Total Maximum Daily Load (TMDL): A process established by the CWA guiding the application of state water quality standards to individual water bodies and watersheds where these water bodies have been previously established as impaired (303(d) Impaired Waterway) by defining the amount of a particular pollutant that a water body can absorb on a daily basis without violating applicable water quality standards. Once this load is

determined, the regulatory agency allocates a portion to each source of that pollutant within a particular watershed.

Total Suspended Solids (TSS): Particles that are suspended in water. Suspended solids in water reduce light penetration in the water column, can clog the gills of fish and invertebrates, and are often associated with toxic contaminants because organics and metals tend to bind to particles.

Velocity: The rate of motion of objects or particles, or of a stream of particles.

Watercourse: A defined channel with bed and banks within which water flows, either continuously or in season. A Watercourse is continuous in the direction of the flow and may extend laterally beyond the definite banks to include overflow channels contiguous to the ordinary channel. The term does not include artificial channels such as canals and drains, except natural channels trained or restrained by the works of man. Neither does it include depressions or Swales through which surface nor errant waters pass.

Water of the United States: (a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate Wetlands; (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, Wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) that are or could be used by interstate or foreign travelers for recreational or other purposes; (2) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or (3) that are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters identified in paragraphs (a) through (d) of this definition; (e) The territorial sea; and (f) Wetlands adjacent to waters (other than waters that are themselves Wetlands) identified in paragraphs (a) through (e) of this definition. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11 (m) that also meet the criteria of this definition) are not Waters of the United States. This exclusion applies only to manmade bodies of water that neither were originally created in Waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of Waters of the United States.

Wetland: Wetlands are areas that may be inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that, under normal circumstances, do support, a prevalence of vegetation typically adapted to saturated conditions. Functionally, a Wetland must demonstrate the characteristics of Wetland Hydrology, hydric soils, and hydrophytic vegetation, in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual. In order to ensure compliance with federal and state requirements for disturbance of Wetlands, it is advisable to have the site inspected by a Wetlands expert to identify and delineate potential Wetlands. Wetlands on a site should be delineated, surveyed, and depicted on a map approved by staff of the Corps of Engineers. A signed map is called a jurisdictional determination and is valid for a period of time, typically 3 to 5 years. Wetlands do not all appear to be swampy or marshy all the time and, in many cases, will never appear swampy or marshy.

303(d) Impaired Waterway: A waterway listed by the state with the EPA under Section 303(d) of the CWA as a water failing to meet water quality standards in spite of full compliance by dischargers with all conditions and limitations in NPDES permits and all applicable non-point source controls.

Appendix Q – Post Construction Operations and Maintenance

1. Local Jurisdiction, Stormwater Authority, or MS4 is: **City of Boulder**
2. There **is not** an active NPDES Post Construction Permit for this facility.
3. If there is/will be a Post Construction NPDES permit for this facility, indicate whether or not renewal or re-permitting is required and the frequency.
4. Immediate receiving water or MS4 for facility is (See Section 3.2 of this SWPPP).
5. Immediate receiving water **is** on the list of 303(d) Impaired Waterways.
6. If discharge is to 303(d) Impaired Waterway indicate whether TMDL has been developed and attach to this plan if applicable.
7. Name and Contact information for Design Engineer:
 - Name: **Josh Erramouspe**
 - Company: **Olsson Associates**
 - Address: **4690 Table Mountain Drive, Suite 200, Golden, CO 80403**
 - Telephone: **303.237.2072**
 - Email: **jerramouspe@olssonassociates.com**
8. Applicable Plans and Reports for this facility:
 - a. **Kum & Go #943, Site Construction Documents**
 - b. **Final Drainage Report for Kum & Go #943, Lot 1, Kum & Go Store 943 Subdivision, Boulder, Colorado**
9. Applicable Maintenance Agreements for this facility: **A maintenance agreement with the City of Boulder shall be completed by the owner prior to grading permit issuance.**
10. *Complete the following schedule:*

Non-Structural BMPs	(1) Description of the Practice	(2) Performance and Management Requirements	(3) Inspection Frequency	(4) Inspection Personnel Qualification Requirement	(5) Inspection Action Required	(6) Submittal Requirements and Records Retention

Structural BMPs	(1) Description of the Practice	(2) Performance and Management Requirements	(3) Inspection Frequency	(4) Inspection Personnel Qualification Requirement	(5) Inspection Action Required	(6) Submittal Requirements and Records Retention
Extended Detention Basin (EDB) with Water Quality Outlet Structure	An above ground EDB is a water quality feature designed to separate sediment from stormwater runoff and provide storage of sediment. One EDB is located along the E side of the property adjacent to Diagonal Highway.	Mowing	Twice annually	None	4"-6" grass height	Refer to Drainage Maintenance Agreement for City of Boulder submittal requirements. Inspection reports shall be provided to the owner and retained for owner records.
		Trash/Debris Removal	Twice annually	None	Remove and dispose of trash/debris	
		Outlet Works Cleaning	As needed – after significant rain events – Twice annually min.	None	Remove and dispose of trash/debris/sediment to allow outlet to function properly	
		Woody growth control / Weed removal	Twice annually min.	Local Weed Inspector	Treat w/herbicide or hand pull	
		Mosquito Treatment	As needed	Approved professional to apply chemicals	Treat w/EPA approved chemicals	
Algae Treatment	As needed	Approved professional to apply chemicals	Treat w/EPA approved chemicals			

- 1) Describe BMP practice in narrative form by type and provide number of items/locations.
- 2) Provide performance and design criteria such as specifications, expected life span and general nature of maintenance requirements. Identify the responsible party for providing inspections.
- 3) List inspection frequency needed such as after each storm, weekly, monthly, quarterly, semi-annual, annual, or long term. Distinguish between required and desired inspections.
- 4) List required qualifications of inspection personnel
- 5) Describe specific inspection action required such as excess sediment, structural/mechanical, erosion, vegetation management, soil testing for fertility, etc.
- 6) Indicate if and when inspection reports are to be submitted to local jurisdiction and if time period, if any, records are to be retained.