City of Loveland

DEVELOPMENT SERVICES
Current Planning

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FINAL STATEMENT OF FINDINGS AND PROPOSED DETERMINATION

POSTED January 31, 2012

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TITLE:	**KUM & GO GAS STATION w/ CONVENIENCE STORE**
LOCATION:	Southwest corner of E. Eisenhower Blvd N. Boise Ave.
APPLICANT:	Kum and Go, LC 6400 Westown Parkway West Des Moines, IA
STAFF CONTACT:	Troy Bliss, Current Planning Sean Kellar, Engineering Melissa Morin, Water/wastewater Kevin Gingery, Stormwater Kathleen Porter, Power Carie Dann, Fire Tom Hawkinson, Building
APPLICATION TYPE:	**Special Review # 896**
STAFF RECOMMENDATION:	Staff recommends that the Current Planning Manager approve a Type 2 Zoning Permit for Kum and Go Gas Station, as described in the application on file with the City and subject to the conditions and technical corrections listed in this report dated January 31, 2012.

ATTACHMENT 9

I. ATTACHMENTS

1. Site Plan sheet (for easy reference)
2. Special Review #896 and Site Development Plan, sheets 1-25, including, site plan, landscape plan, lighting plan, and building elevations.
3. Public Improvement Construction Plans, sheets 1-12, including demolition plan, paving and striping plans, sewer plan, grading plan, and utility plan.
4. Technical Memorandum, 1/19/2012, (Summary of Revised Noise Analysis) prepared by Olsson Associates
5. Sound Limitations, Chapter 7.32, known as the City's Noise Ordinance

II. SITE DATA

ACREAGE OF SITE - GROSS.....53,157 SQ. FT.
ACREAGE OF SITE - NET.....53, 157 SQ. FT.
ACREAGE OF SITE - RIGHT-OF-WAY .....0.0 AC
PERCENT(%) OPEN SPACE PROPOSED 24.8%
EXISTING ZONING AREA (ACRES) .....B- Developing Business District;
.....53,157 SQ. FT.
PROPOSED ZONING AREA (ACRES) .....NO CHANGE
EXISTING USE.....VACANT/VEHICLE SALES AND SERVICE
PROPOSED USE.....GAS STATION w/ CONVENIENCE
EXIST ADJ ZONING & USE - EAST.....B; RESTAURANT/ PROFESSIONAL OFFICES
EXIST ADJ ZONING & USE - NORTH.....B; HWY 34 AND GAS STATION
EXIST ADJ ZONING & USE - SOUTH .....R3; MOBILE HOME PARK
EXIST ADJ ZONING & USE - WEST.....B, VEHICLE SERVICE
NON-RES FLOOR AREA RATIO 0.19
NON-RES BLDG AREA(SF) PROPOSED.....4,958 SF
TOTAL NUMBER OF PARKING SPACES.....28
UTILITY SERVICE - SEWER .....CITY OF LOVELAND
UTILITY SERVICE - ELECTRIC.....CITY OF LOVELAND
UTILITY SERVICE - WATER.....CITY OF LOVELAND

III. PROJECT DESCRIPTION

The application proposes to redevelop the property at the southwest corner of E. Eisenhower Blvd and N. Boise Avenue, aka 1620 E. Eisenhower Blvd., as a Kum and Go Gas Station w/ convenience store. The property is zoned B-Developing Business, and had been used most recently for vehicle sales and service for RV sales and service as well as auto glass repair and service. Pursuant to the provisions of Section 18.28.020.F., a gas station is a use allowed only through special review if the site is within 300 feet of a residential use or zone district. The

properties adjacent to the south are zoned and used as mobile home parks, under existing zoning of R-3, Developing High-density Residential, thus prompting the need for a special review.

The proposed re-development will include demolition of the existing building formerly used for auto glass repair and service site, and subsequent construction of a new gas station with primary building and gas canopy. The former RV sales and service use has vacated the property; and recently, the auto glass business has been moved to the existing building formerly occupied by the RV sales and service building, directly east of the proposed gas station. The redeveloped site would be limited to the proposed gas station and convenience store. Vehicular access from E. Eisenhower will be improved, and located on the property to the immediate west that is now occupied by the auto glass repair and service. The Eisenhower access will provide shared access for both businesses.

The proposed gas station will comply with most current City standards for gas stations, including re-located/consolidated access drive, public sidewalks, architecture, landscape, screening, and undergrounding of overhead power lines and surface stormwater facilities. The underground fuel tanks will also be as far away from the adjacent mobile home park as possible. If the special review is approved, the City will also approve an accompanying amended plat to be known as "Amended Plat of Lots 10 and 11, Block 1, Browns' Corner Addition to the City of Loveland, Larimer County, Colorado." This amended plat will move the existing lot line further west to a new location that is compatible with the overall site plan for the gas station.

IV. KEY ISSUES

Staff and the Applicant have worked to identify and resolve a number of important issues, including: undergrounding of overhead power lines along the E. Eisenhower frontage; undergrounding an open stormwater channel along the E. Eisenhower frontage into a buried pipe; providing new public sidewalks along both street frontages; locating the gas islands and gas canopy as far as possible from the adjacent residential properties; installation of landscape bufferyards and screening of the use from the adjacent streets and residential properties; mitigation of noise from the various types and levels of noise that are likely to occur on the site; design of all exterior illumination on the site to mitigate negative impacts to residential properties and the general public; limitation of sign area and colors to be in compliance with City standards for gas stations; and, the use of quality architecture for the primary building and gas-island canopy.

Staff and the Applicant have worked to achieve the best possible design to mitigate as many of the site impacts as possible. The property owner and residents of the adjacent mobile home park are especially concerned about the impacts of noise. A noise mitigation wall will be installed along/near the common property line between the two properties. At the neighborhood meeting held on November 17, 2011, a workable consensus was reached between the Applicant, the mobile home park owner and residents, and City staff that by placing the noise mitigation wall on/near the common property line. It was also agreed that the noise wall could be extended southward along the east property line of the mobile home park to help protect the park residents

from the initial noise of vehicles leaving the east access drive from the Kum & Go site onto Boise Avenue.

Following the neighborhood meeting, City staff did not immediately issue final findings associated with the project, primarily due to the proposed 12-foot noise wall. While a general consensus was reached at the neighborhood meeting on November 17, 2011 as to a basic location and design for the wall, staff determined that the height and length of the wall represented such a significant deviation from standard code limitations (6-foot wall height) that it would be inappropriate to approve this design administratively. Furthermore, staff believed that a wall of this height and length could create an undesired precedent, resulting in pressure to approve similar structures between commercial and residential uses. These concerns were subsequently communicated to Kum & Go representatives and final findings were placed on hold. Kum & Go subsequently presented a solution to City staff in which the noise study was adjusted to reflect reduced on-site vehicle traffic volumes in the night-time hours (9:00 PM to 7:00 AM). With this adjustment, the noise mitigation wall was reduced in height to 8 feet. With this arrangement, the proposed noise wall effectively mitigated projected noise levels to achieve compliance with the City's noise ordinance. Kum & Go representatives presented and described this adjustment to the Noise Study to the Sylmar Mobile Home Park owner and a concerned park resident, along with Current Planning staff, at an informal meeting held at the Loveland Library on January 19, 2012.

V. BACKGROUND

December 1985 - Annexation of Brown's Corner Addition (as existing county development)

October 4, 1977 - Annexation of Sylmar Addition (as existing mobile home park)

May 23, 1985 - Approval of Sylmar 3rd Subdivision

VI. STAFF, APPLICANT, AND NEIGHBORHOOD INTERACTION

A. Notification

An affidavit was received from Olsson Associates certifying that on November 3, 2011 written notice was mailed to all property owners within the neighborhood, as defined by Section 18.40.010.C., and public notice signs were posted on the site, both giving notice of the neighborhood meeting to be held on November 17, 2011.

B. Neighborhood Response

An informal/informational neighborhood meeting was initially held at 6:30 pm on January 17, 2011. The purpose of the meeting was to provide early information to the neighborhood and allow the Applicant to evaluate the types and level of concerns from the neighborhood. The

attendance sheet indicates that 17 persons attended the meeting, in addition to City staff and the Applicant's team. Concerns raised at the meeting included: location and hours of deliveries, noise impacts, hours of operation, sale of alcohol on the site, the effects on existing utilities along the common property between the site and the adjacent mobile home park, drainage, traffic impacts, whether cooking would occur in the building, and peak number of employees on the site. The meeting was adjourned at approximately 7:25 pm.

The formal neighborhood meeting (as required by the Special Review process) was held on November 17, 2011 at 6:30 p.m. in the Parks and Recreation Large Conference Room, 500 E. 3rd St, Loveland CO. The attendance sheet indicates that 14 persons attended the meeting, in addition to City staff and the Applicant's team. Issues and concerns voice included increase in traffic impacts, especially from vehicles using the east access onto Boise Avenue; access and circulation of gas-supply tankers; increased noise impacts to the adjacent residential properties; impacts of demolition and re-development of the site upon the residential neighborhood; days/hours of operation; height and intensity of exterior lighting, especially along the rear of the property adjacent to residential properties; adequacy of the noise wall along the rear property line regarding both screening and noise mitigation; whether cooking would be done on the site; and sale of alcohol. The meeting was adjourned at approximately 8:05 p. m.

Subsequent to the neighborhood meeting, further inquiry was received by City staff from a resident of the mobile home park.

Another informal neighborhood meeting was held on January 19, 2012 in the Erion Room of the Loveland Public Library at 5:30 p.m. Two neighbors (including the park owner) who reside in the Sylmar Addition were in attendance. Concerns were raised with respect to the change made regarding the 12-foot wall along the south boundary of the project site. The proposal to reduce the wall height to 8 feet prompted concerns relative to an increase in noise and light, indicating that the 12-foot wall was an agreed upon solution from the neighborhood. Additionally, concerns regarding the location of the full movement vehicular access onto Boise Avenue continued to be of issue to the neighbors given the proximity to the Sylmar Addition.

C. Project Schedule

1. An initial informal neighborhood meeting was held on January 17, 2011 at 6:30 P.M. in the City Council Hearing Room at 500 E. 3rd Street, Loveland, CO.

2. Type 2 Special Review application was formally filed with the Current Planning Department on July 13, 2011.

3. The application was first distributed for DRT review on July 15, 2011.

4. The formal (Code-required) neighborhood meeting was held on November 17, 2011 at 6:30 P.M. in the Parks and Recreation Large Conference Room at the City of Loveland.

5. Preliminary Findings and Proposed Determination were issued by City staff on November 22, 2011.

6. The public review and comment period for the preliminary findings and proposed determination was from November 22, 2011 to December 5, 2011.

7. The Final Statement of Findings and the Notice of Intent to Issue a Type 2 Permit was to be issued on December 12, 2011. This did not occur as a result of concerns raised by the City with respect to a proposed 12-foot wall.

8. Following discussions between City staff and Kum & Go representatives, a revised plan and noise study were submitted to the Current Planning office in support a noise mitigation wall of 8-feet. The revised noise study indicated full compliance with the City noise ordinance. The Final Statement of Findings and Notice of Intent to issue a Type 2 Permit was issued on January 31, 2012. Notice of the Final Statement of Findings was provided to all neighbors who received prior notice of the formal neighborhood meeting on November 17, 2011. As specified in the Municipal Code, any Appeal of this action must be filed with the Development Center (Current Planning office) by no later than 5:00 p.m. on ~~February 6,~~ 2012.
FEBRUARY 10,

9. If no appeal is filed, the Applicant can proceed with submittal of final corrections and documents, and the City will issue the Type 2 Permit and Site Development Plan. If a timely and valid appeal is filed, the staff determination will be suspended and the application will be scheduled for a Planning Commission public hearing at the next available meeting.

VII. FINDINGS AND ANALYSIS

Finding 1. *That the proposed special review use meets the purposes set forth in Section 18.04.010 of the Loveland Municipal Code.*

Current Planning: Staff believes that, subject to the recommended conditions and technical corrections, the proposed use will meet the purposes set forth in Section 18.04.010 of the Loveland Municipal Code, will not create unsafe or unhealthy conditions, and would generally promote the health and welfare of Loveland citizens. The proposed use is appropriate for the zoning district in which it lies. City staff believes that this project would be consistent with sound planning practices and the provision of current and future public infrastructure requirements. The purpose of Chapter 18.40 is to allow consideration of whether restrictions greater or lesser than normal should be approved. Use of the special review process is an appropriate manner in which to consider and allow the proposed non-conformances.

Finding 2. *That the effects of the proposed special review use on the surrounding neighborhood and the public in general will be ameliorated and agreement has been reached between the applicant and the City as to the location, extent, and nature of*

improvements that must be made and the conditions, restrictions, and modifications that have been deemed as necessary by the City to insure that impacts of the project on the neighborhood and the general public are adequately mitigated and to insure that the proposed use will be made compatible with the surrounding uses of property.

Current Planning: Staff believes that, subject to the recommended conditions and technical corrections, all identified negative effects that may result upon the surrounding neighborhood and the public in general from the proposed re-development and operation of the use will be adequately ameliorated within the context of what is possible with this site.

The Applicant has been provided with a copy of the preliminary findings, analysis, and recommended conditions for approval of the application. A few practical and legal matters must be finalized in regard the location and configuration of the proposed noise wall. Staff believes that consensus has been reached and the Applicant is willing to comply with the conditions, restrictions, and modifications that have been deemed as necessary by the City, and to install and complete the required improvements in the manner described in this report.

Finding 3. *That in assessing the potential effects of the proposed special review use, at a minimum, the following matters have been considered:*

3a. *Type, size, amount, and placement of landscaping;*

Current Planning: The type, size, amount, and placement of landscaping is appropriate to the proposed site, locational context, and the general area within the City. The type and placement of landscape will not obstruct any safe sight-distance triangles for the access drives. Special attention has been given to accomplishing the best landscape enhancements and screening possible under the circumstances.

3b. *Height, size, placement, and number of signs;*

Current Planning: Staff believes that the height, size, placement, and number of signs are appropriate to the proposed site and the neighborhood, and the general area within the City. Special attention has been given to appearance of signs as seen from Hwy 34 and the adjacent residential areas. The freestanding sign will not be visible to the residential properties to the south, and will comply with the normal sign area limitations for gas stations. The proposed canopy signs will be consistent with the limitations for such signs as set forth in the gas station standards. The wall signs proposed for the primary building will also not be significantly visible to the residential area to the south, and will be in keeping with the proportion of the building on which it is mounted. All signs will be designed to meet the requirements of a Planned Sign Program for this premise.

3c. *Use, location, number, height, size, architectural design, materials, and colors of buildings;*

Current Planning: Use, location, number, height, size, architectural design, materials, and colors of buildings are appropriate to the proposed site, the neighborhood, and the general area within the City. Special attention has been given to appearance of buildings and architecture as seen from Hwy. 34 and Boise Avenue, and the adjacent residential areas. The building is low in profile and scale and includes quality and consistent features which will establish a pattern of architecture to be followed by other new development in this stretch of the corridor.

3d. Configuration and placement of vehicular and pedestrian access and circulation;

Transportation Engineering:

Primary access to the site will be from a right-turns only access to US 34 and a full-movement access to Boise Avenue. A Traffic Impact Study, prepared by Michael Piernicky, P.E., has been submitted with the application which demonstrates that the existing transportation system, can adequately serve the land uses proposed.

3e. Amount and configuration of parking;

Current Planning: Staff believes that the proposed parking will be adequate for the size and character of the site. Based on normal City standards, a total of twenty-five (25) spaces would be required. The application proposes to provide twenty-eight (28) spaces, along with two (2) bicycle spaces and rack. Many gasoline purchases are paid for at the pump by credit/debit card reader built into the pump shell, making it unnecessary for the vehicle to leave the gas island to make payment or purchase other goods within the building. The parking spaces on the east end of the building which are most impactful to the adjacent mobile home park have been designated for employees, limiting the noise impacts to the neighbors.

The length of the parking spaces in front of the building is a full 19 feet with a 10 foot wide sidewalk, giving a greater since of openness and security for customers. Although certain product dispensers are planned to be located on portions of this sidewalk, 6 feet in width will remain open and useable, which exceeds City standards.

3.f. Amount, placement, and intensity of lighting;

Current Planning: Amount, placement, and intensity of lighting are appropriate to the proposed site and the neighborhood, and the general area within the City. Pole mounted lights are proposed for only 16.0 ft. above grade. Special attention has been given to preventing glare and direct light from being visible off the site, especially for the residential properties to the south.

Lighting on the under-side of the gas-island canopy will be fully recessed, meeting City standards for such lighting and further assuring that direct light and glare will not be seen off the site.

3g. Hours of operation;

Current Planning: The application proposes to operate the business 24 hours, 7 days a week. At the neighborhood meeting, some attendees expressed an interest in limiting the hours of operation since it is adjacent to the residential properties to the south. However, City staff sees no overwhelming need for this limitation since all noise and visual impacts will be mitigated by the noise wall and building. Staff cannot discover any basis in City code or routine practice in the area to support recommending it as a condition.

3h. *Emissions of noise, dust, fumes, glare, and other pollutants.*

Current Planning: Emission of noise, dust, fumes, glare, and other pollutants will not exceed inappropriate levels, based on the plans and reports submitted by the applicant. A Noise Impact Analysis, prepared by Olsson Associates, was submitted with the Application, and subsequently revised with a Technical Memorandum dated January 19, 2012 (See **Attachment # 3**). The report (including the Memorandum) indicates that all sources of noise generated by the proposed use of the site will be in compliance with City standards. The January 19, 2012 Technical Memorandum recalibrated noise levels generated from the site to reflect lower on-site traffic volumes occurring during evening hours (9:00 p.m. to 7:00 a.m.). Off peak hour vehicle traffic counts reflected a 40% reduction from the on-site peak hour counts that had been used in previous versions of the noise study. The modification to the noise study resulted in a logical decrease in projected vehicle traffic during evening hours; the corresponding reduction in projected on-site noise made it possible for an 8 foot-high wall to provide adequate noise mitigation in order to achieve compliance with the City's Noise Ordinance. Table 1 of the Technical Memorandum indicates the noise levels at various locations within the Sylmar Park for daytime and nighttime periods. Readers should note that the City's Noise Ordinance (Section 7.32.060) allows for 10 dba exceptions to the 55 dba daytime noise level limits for periods not exceeding 15 minutes within any one hour period. In Table 1, the columns denoted as Total 1 for the 6-foot, 8-foot and 10-foot noise barriers all indicate some level of daytime noise occurring above the 55 dba level. Nonetheless, projected noise levels occurring within the adjacent Sylmar mobile home park will be reduced from the current levels due to the noise wall and the placement of the convenience store building. Essentially and effectively, the current condition relating to noise will be improved for these residents.

Finding 4. *Except as may be varied in accordance with this special review permit, the special review site plan conforms to the restrictions and regulations set forth in the Loveland Municipal Code for the zoning district in which the special review use is located.*

Current Planning: The special review process includes the authority to approve requirements and restrictions greater or lesser than normal. As indicated in other portions of this report, one aspect of site design does not comply with the normal requirement, that being the minimum distance between gas islands and drive lanes for the northern-most drive lane on the site. Staff supports this reduction so that the gas island canopy can be as far as possible from the adjacent residential neighborhood and the normal 15 ft. wide landscape buffer can be provided along the Eisenhower frontage. Additionally, the proposed 8-foot wall is a deviation from a maximum 6-

foot 3-inch wall height allowed by code. This increase in wall height is supported to mitigate noise onto abutting residential properties. With these exceptions, staff believes that the proposed use and development will comply with all normal restrictions and regulations set forth in the Loveland Municipal Code for the zoning district in which the special review use is located.

Finding 5. *The special review site plan meets the requirements set forth in Section 16. 41 - Adequate Community Services - of the Loveland Municipal Code.*

Transportation Engineering:

1. A Traffic Impact Study has been submitted with the Kum & Go Special Review which demonstrates that the existing transportation system, can adequately serve the land uses proposed.

2. Primary access to the site will be from a full-movement access to Boise Avenue and a right-turns only access to US 34.

3. The Applicant's traffic engineer, Michael Piernicky, P.E., has submitted a Traffic Impact Study (TIS) that indicates that the traffic associated with the proposed development will meet the City's standards. The proposed use is estimated to generate approximately 8,362 daily trips, 265 weekday AM peak hour trips, and 305 weekday PM peak hour trips.

4. A positive determination of adequacy for transportation facilities for the proposed Special Review has been made.

Fire: The site will comply with the requirements in the ACF Ordinance for response distance requirements from the first due Engine Company (Station 1).

Water/Wastewater: This development is situated within the City's current service area for both water and wastewater. The Department finds that the Development will be compliant to ACF for the following reasons:

1. The proposed development will not negatively impact City water and wastewater facilities.

2. The proposed public facilities and services are adequate and consistent with the City's utility planning and provides for efficient and cost-effective delivery of City water and wastewater service.

Stormwater: Staff believes that this finding can be met, due to the following:

1. This project complies with the Adequate Community Services ordinance outlined in the Loveland Municipal Code, Section 16.41.140.

VIII. RECOMMENDED CONDITIONS

City staff recommends the following conditions:

Current Planning:

1. Before issuance of any Certificate of Occupancy, the Developer shall install all paving, striping and signage, as shown on the approved special review plans, unless financial security is filed by the Developer with the City to assure installation at a later date acceptable to the City.

2. Before issuance of any Certificate of Occupancy, the Developer shall install all landscape as shown on the approved landscape plans, unless financial security is filed by the Developer with the City to assure installation at a later date acceptable to the City.

3. Before issuance of any Certificate of Occupancy, the Developer shall install all fences and/or walls, as shown and described on the special review plans, unless financial security is filed by the Developer with the City to assure installation at a later date acceptable to the City.

4. All external architecture, including design, materials and colors, shall be in compliance with those depicted and described on the approved special review plans. Minor adjustments or refinements may be approved by the Current Planning Manager as part of the City review of the building permit.

5. For purposes of implementation of the City sign code for this property, the entire site, as depicted and described on the special review, shall be deemed as a single premise.

6. All signs shall be consistent with those shown and described on the special review plans. The signs depicted and described in the Special Review application shall constitute a Planned Sign Program approved by the City. Minor adjustments or refinements may be approved by the Current Planning Manager as part of the City review of the sign permit. No signs shall be installed or modified on the premise until a sign permit, approving such installation or modification, has been approved by the City.

7. All external illumination shall fully comply with the City of Loveland lighting standards as set forth in Section 3.09.02 of the City of Loveland Site Development Performance Standards and Guidelines, and shall be consistent with the lighting depicted and described on the approved special review plans. If changes are proposed to the lighting, the City shall have the authority to require a complete, updated point-by-point photometric plan, prepared by a qualified professional.

8. Approval of this special review does not constitute City agreement or approval that the development and use of the site, as shown and described in said special review, meets the requirements and limitations of the City of Loveland Sound Limitations, as set forth in Chapter 7.32 of the Municipal Code. All noise emanating from the site shall at all times fully comply with the City of Loveland Sound Limitations, as set forth in Chapter 7.32 of the Municipal Code.

The City shall have the authority to compel or approve any subsequent modifications to the site, as deemed necessary in order to assure said compliance.

9. Since the north-south shared access drive easement is essential to the function of this site, this easement shall not be altered or vacated by the lot owners without written consent of the City.

10. No part of the canopy fascia shall be illuminated, other than what is allowed for the fascia-mounted logo, as depicted and described in the Special Review application.

11. The owner shall be solely responsible for repair or replacement of all landscape that may be disturbed, removed or damaged as a result of installation, maintenance or removal of utilities in the 14 foot wide utility easements along the north and east property lines. All landscape shall be replaced with equivalent plants or other improvements which satisfy the same intent, and in a manner that is approved by the Current Planning Manager.

12. Delivery and vendor vehicles, including fuel delivery trucks, shall be on site only during the hours of 9 am to 5 pm.

13. Trash trucks shall service the site only during the hours of 9 am to 5 pm.

14. The noise mitigation wall proposed along/near the south property line shall be located on or near the common property line with the mobile home park adjacent to the south, and shall constructed to a height of 8 feet above finished grade. Since dedicated utility easements lie in this same area, this location and configuration must be approved by all City and non-City providers of utilities before finalization of the plans. If further investigation determines that this location will not meet City requirements for structures in a utility easement, an alternate location and configuration may be determined by agreement between Kum and Go, the City of Loveland, and the owner of the mobile home park to the south. If temporary or permanent easements are necessary, the parties shall work together in good faith to agree upon terms of such easements. At no time shall the City compel the owner of the mobile home park to convey or agree to such alternative location if it is located upon his property, or any portion thereof.

If this location for the wall can be agreed upon by all parties, Kum and Go shall also extend the wall southward from the southeast corner of the Kum and Go site, extending to a point southward which is agreed upon by the parties. This is for the purpose of providing additional noise mitigation from vehicles leaving the site southbound upon Boise Avenue. If the wall is to be greater in height than 6-foot 3-inches, application for a variance application shall be submitted to and approved by the City prior to construction of this portion of the wall.

15. Before submitting the Special Review and Site Development Plan mylars for City signatures, the plans shall be further revised to completely depict and note all required signage for handicap parking, as set forth in the published ADA standards and the City of Loveland Performance Standards and Guidelines (SDPSG).

16. Before submitting the Special Review and Site Development Plan mylars for City

signatures, the plans shall be further revised to completely depict and note all required landscape irrigation, as set forth in the City of Loveland Performance Standards and Guidelines (SDPSG).

17. All HVAC and other mechanical equipment located on the roof of the building shall be screened from view of all adjacent public streets and the residential property to the south, in a manner that meets the applicable City standards and to the satisfaction of the Current Planning Manager, as finally determined at time of building permit review.

Transportation Engineering:

18. Notwithstanding any information presented in the Special Review or accompanying construction plan documents (text or graphical depictions), all public improvements shall conform to the Larimer County Urban Area Street Standards (LCUASS) as amended, unless specific variances are requested and approved in writing.

19. Prior to the issuance of any building permits within this Special Review, unless otherwise approved by the Director pursuant to the provisions in Section 16.40.010.B of the Loveland Municipal Code, the following public improvements shall be designed and constructed by the Developer unless designed and constructed by others. A cash-in-lieu payment for all or part of these improvements may be accepted if approved in writing by the City Engineer:

a. Ultimate roadway improvements to US 34 adjacent to the property, including curb, gutter, and sidewalk as shown on the City approved Public Improvement Construction Plans.

b. The northbound left-turn lane striping at Boise Avenue and the site access as shown on the City approved Public Improvement Construction Plans.

20. Prior to the issuance of any building permits within this Special Review, written concurrence from CDOT needs to be provided to the City for the proposed improvements within CDOT right-of-way.

21. Prior to submittal of the Final Special Review mylars, the applicant shall provide the City with a copy of the approved CDOT access permit for the proposed access to US 34.

IX. TECHNICAL CORRECTIONS

Before issuance of a Type 2 or Type 3 Permit by the City, the Applicant shall make the following final revisions, corrections or clarifications to the plans to the full satisfaction of the City.

Current Planning:

1. The irrigation plans shall be further revised to clarify whether the 2 rows of rotary sprinklers along Eisenhower, are truly full circle rotation heads, and if they will spray water onto the public sidewalk and into the street.

2. Once the final location and configuration of the noise mitigation wall is determined, all appropriate plan sheets will be revised to depict and note the final location, configuration, dimensions and materials used for this wall.

3. The photometric pan sheets shall be further revised to clarify that all ceiling mounted lights on the under-side of the gas canopy roof will be fully recessed, as stipulated by City standards.

Transportation Engineering:

4. Provide a special curb ramp detail for the directional curb ramps at the access points, demonstrating full compliance with the adopted LCUASS standards.

5. Relocate the two "Right Lane Must Turn Right" signs to Sta 2+60 and Sta 0+75.

6. Submit a copy of the written CDOT concurrence for the proposed access to US 34 prior to submittal of the final mylars.

7. Submit the final "Opinion of Probable Public Improvement Construction Cost Estimate", with PE Stamp, to Sean Kellar.

Water/Wastewater:

8. A note shall be added to the on-site landscape plan addressing the inadequacy of the required separation distances between the trees and the wastewater main on the south side of the building and sound wall within the existing utility easement. The note should be similar to the note regarding the sound wall that you added to the On-Site Utility Plan.

Stormwater:

9. Please return a signed/stamped original of the Final Drainage Report for our document retention program.

X. STANDARD REQUIREMENTS

(Standard requirements are not conditions of approval, and are not a complete statement of applicable codes and standards. They are instead a good faith effort of City staff to bring to the Applicant's attention those requirements already specifically set forth in the Loveland Municipal Code, or related adopted standards, which would normally apply to all development such as proposed in this application.)

FIRE:

1. The requirements of the Fire Code, Building Code (with regards to fire and life safety issues), and NFPA standards currently adopted at the time of building construction will have to be met.

2. Water mains supplying hydrants must be looped whenever possible and be a minimum size of 8-inch.

3. All hydrants shall be in place and operational prior to any combustible material being brought on site.
4. Hydrant placement shall meet the following criteria with distances measured by vehicular travel path: Commercial/Multifamily -- 400-ft to all parts of a structure with 350-ft spacing

5. The minimum fire flow and flow duration for buildings other than one and two family dwellings shall be as specified in the adopted fire code. A reduction in required fire flow of up to 50% is allowed when building is provided with an approved automatic sprinkler system. However, the resulting fire flow shall not be less than 1500 GPM.

6. Turning radius must meet the B40 template.

7. A minimum of two points of access must be provided to the development prior to any combustible materials being brought on site. These temporary access points must have an all - weather surface capable of supporting the weight of emergency apparatus and remain passable throughout the construction process.

8. Approved address numbers are required on all new buildings in such a position as to be plainly visible and legible from the street or road fronting the property and shall contrast with their background.

9. Guard posts or other approved means shall be provided to protect hydrants; gas meters; storage tanks and connected piping, valves and fittings; dispensing area; and use areas subject to vehicular damage.

10. Access roadways within the City and UGA shall be finished by an application of an all-weather driving surface of hot mix asphaltic concrete or concrete pavement over a flexible base capable of supporting a design wheel load of 18,000 pounds (GVM 80,000 pounds minimum). This applies to all types of access roadways (emergency access, 2nd access, etc.)

Special Review #896 and Site Development Plan for

KUM & GO STATION #995

LOVELAND, COLORADO

OWNER/DEVELOPER/APPLICANT:
KUM & GO L.C.
6400 WESTOWN PARKWAY
WEST DES MOINES, IA 50266
ATTN: RYAN HALDER
PH:(515)457.6232

ENGINEER:
OLSSON ASSOCIATES
4690 TABLE MOUNTAIN DRIVE,
SUITE 200
GOLDEN, CO 80403
CONTACT: JOSH ERRAMOUSPE
PH:(303)237.2072

LANDSCAPE ARCHITECT:
OLSSON ASSOCIATES
4690 TABLE MOUNTAIN DRIVE,
SUITE 200
GOLDEN, CO 80403
CONTACT: ERNEST RODRIGUEZ, L.A.
PH:(303)237.2072

GEOTECHNICAL ENGINEER:
OLSSON ASSOCIATES
1802 EAST 123TH ST
OLATHE, KS 66061
CONTACT: JAMES LANDRUM, P.E.
PH:(913)829.0078

WATER:
CITY OF LOVELAND DEPT. OF
WATER AND POWER
200 N. WILSON AVE
LOVELAND, CO 80537
CONTACT: MELISSA MORIN
PH:(970) 962-3000

ELECTRIC:
CITY OF LOVELAND DEPT. OF
WATER AND POWER
200 N. WILSON AVE
LOVELAND, CO 80537
CONTACT: KATHLEEN PORTER
PH:(970) 962-3561

TELEPHONE:
QWEST
CONTACT: JASON GARCIA
2505 1ST AVE.
GREELEY, CO 80631
PH:(970) 392-4838

LIENHOLDERS:
NONE

PLAN SHEET LEGEND

PROPERTY LINE
EXISTING PROPERTY CORNER
EXISTING RIGHT-OF-WAY LINE
PROPOSED RIGHT-OF-WAY LINE
BUFFERYARD/SETBACK LINE
EASEMENT LINE
ROADWAY CENTERLINE
LIMITS OF DISTURBANCE
EXISTING FENCE LINE
PROPOSED FENCELINE
EXISTING BUILDING OUTLINE
PROPOSED BUILDING OUTLINE
EXISTING GUARD RAIL
EXISTING STORM SEWER
EXISTING STORM SEWER (SIZE AS NOTED)
EXISTING GRATE INLET
EXISTING CURB INLET
EXISTING AREA INLET
PROPOSED STORM SEWER (A)
PROPOSED CURB INLET (TYPE I, II, & III)
PROPOSED SINGLE CURB INTAKE, M-A
PROPOSED AREA INTAKE, M-K
PROPOSED FLARED-END SECTION
RIP-RAP
PROPOSED 2' WIDE LOW FLOW LINER
EXISTING SANITARY SEWER
EXISTING SANITARY SEWER (SIZE AS NOTED)
PROPOSED SANITARY SEWER
EXISTING WATER PIPE
EXISTING WATER PIPE (SIZE AS NOTED)
EXISTING FIRE HYDRANT
EXISTING POST INDICATOR VALVE
PROPOSED WATER PIPE W/ VALVE
PROPOSED FIRE HYDRANT
PROPOSED WATER SERVICE METER
EXISTING OVERHEAD POWER
EXISTING UNDERGROUND POWER
EXISTING POWER POLE W/ GUY WIRE
EXISTING LIGHT POLE
EXISTING TRAFFIC SIGNAL
PROPOSED UNDERGROUND POWER
EXISTING GAS PIPE W/ VALVE
PROPOSED GAS PIPE
EXISTING CABLE T.V.
PROPOSED CABLE T.V.
PROPOSED FIBER OPTIC
PROPOSED SPOT ELEVATION
PROPOSED FLOW DIRECTION

TS	TOP OF SLAB
BOC	BACK OF CURB
ME	MATCH EXISTING
BLDG	BUILDING
HP	HIGH POINT
LP	LOW POINT
PC	POINT OF CURVATURE
PT	POINT OF TANGENCY

VICINITY MAP
SCALE: 1"=300'

SITE DATA TABLE	
Existing Zoning District	B - Developing Business
Proposed Use	Gas Satation with Convenience
Property Area (acres)	53,157 SF
Max Building Height	35'
Building Occupancy - per IBC	M. MERCANTILE
Type of Building Construction	V-B
Building Sprinklered	No
Area Covered by Building	4,958 Sq. ft.
% of Site Covered by Building	9.3%
Area Covered by Building and Canopy	10,238 Sq. ft.
% of Site Covered by Building and Canopy	19.3%
F.A.R.	0.19
Area Covered by Impervious Surface	34,915 Sq. ft.
% Covered by Impervious Surface	65.7%
Area Covered by Landscape	13,428Sq ft.
% of Site Covered by Landscape	25.1%
Area Covered by Interior Landscape	2,501 Sq ft.
% of Site Covered by Interior Landscape	4.7%
Area of Site Covered by Open Space	13,428 Sq ft.
% of Site Covered by Open Space	25.1%
Off-street Standard employee parking	5 Stalls
Off-street Standard customer parking	20 stalls
ADA Parking	2 stalls
Total Parking	27 stalls
Bicycle Parking	2 stalls
Parking Stalls Required	25 stalls (1Stall per 200 Sq ft.)
FEMA Flood Zone	No Special Flood Hazard Area

	SHEET INDEX	
1	COVER SHEET	C0.0
2	NOTES SHEET	C0.1
3	EXISTING CONDITIONS	C1.1
4	DEMOLITION PLAN	C1.2
5	SITE PLAN	C1.3
6	GRADING AND DRAINAGE PLAN	C2.1
7	EROSION CONTROL PLAN	C2.2
8	EROSION CONTROL NOTES	C2.3
9	EROSION CONTROL DETAILS	C2.4
10	UTILITY PLAN	C3.1
11	PAVING, GEOMETRICS AND SPOT ELEVATION PLAN	C4.1
12	CONSTRUCTION DETAILS	C5.1
13	CONSTRUCTION DETAILS	C5.2
14	LANDSCAPE PLAN	L1.1
15	LANDSCAPE DETAILS AND NOTES	L1.2
16	LANDSCAPE SPECIFICATIONS	L1.3
17	IRRIGATION PLAN	L2.1
18	IRRIGATION DETAILS & NOTES	L2.2
19	IRRIGATION DETAILS	L2.3
20	BUILDING ELEVATIONS	A1.1
21	CANOPY ELEVATIONS	A1.2
22	NOISE WALL/TRASH ENCLOSURE ELEVATIONS	A1.3
23	BUILDING SITE LINES	A1.4
24	SIGN ELEVATIONS AND EXTERIOR FINISH SCHEDULE	A1.5
25	SITE LIGHTING PLAN	SL1.1

CONDITIONS OF APPROVAL

PROPERTY OWNER

THE UNDERSIGNED AGREE THAT THE REAL PROPERTY DESCRIBED IN THE APPLICATION FOR SPECIAL REVIEW AND SITE DEVELOPMENT PLAN FILED HEREWITH, AND AS SHOWN HEREON, SHALL BE SUBJECT TO THE REQUIREMENTS OF CHAPTER 18.40 AND 18.48 OF THE MUNICIPAL CODE OF THE CITY OF LOVELAND, COLORADO, AND ANY OTHER ORDINANCES OF THE CITY OF LOVELAND THERETO. THE UNDERSIGNED ALSO UNDERSTANDS THAT IF CONSTRUCTION OF ALL IMPROVEMENTS IS NOT COMPLETED AND IF THE SPECIAL REVIEW USES ARE NOT ESTABLISHED WITHIN THREE YEARS OF THE DATE OF APPROVAL, OR OTHER COMPLETIONS DATE OR DATES ESTABLISHED IN A DEVELOPMENT AGREEMENT APPROVED BY THE CITY, THE CITY MAY TAKE AN ACTION TO DECLARE THE SPECIAL REVIEW PLANS AND SITE DEVELOPMENT PLANS ABANDONED AND NULL AND VOID.

____
(SIGNATURE)

____
(PRINTED NAME)

STATE OF ________)
)SS.
COUNTY OF ______)

THE FOREGOING AGREEMENT WAS ACKNOWLEDGED BEFORE ME THIS ______ DAY OF __________, 2011

BY ______________________

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES ______________________

NOTARY PUBLIC, ______________________

"THIS SPECIAL REVIEW AND SITE DEVELOPMENT PLAN IS APPROVED, SUBJECT TO ALL CONDITIONS SET FORTH HEREON, BY THE CURRENT PLANNING MANAGER OF THE CITY OF LOVELAND, LARIMER COUNTY, COLORADO, THIS ______________ DAY OF ________ 20____.

____
CURRENT PLANNING MANAGER

BASIS OF BEARING

BEARINGS ARE BASED ON THE INVERSE OF THE PUBLISHED VALUES OF NGS CONTROL POINTS "G 402" AND "LOVELAND RESET", NAD83 COLORADO STATE PLANE-NORTH ZONE. PROJECT COORDINATES HAVE BEEN MODIFIED BY A SCALE FACTOR OF 0.99972483 TO PRODUCE GROUND DISTANCES.

BENCHMARKS

1. THE PUBLISHED VALUES OF NGS CONTROL STATION "G 402". EL=4971.98 (NAVD88)
2. A 3.25" ALUMINUM CAP, CDOT CONTROL POINT IN THE SIDEWALK AT THE SOUTHWEST QUADRANT OF THE INTERSECTION OF EAST EISENHOWER BLVD. AND NORTH BOISE AVE., EL=4980.91 (NAVD88)

COLORADO 811

NOTE:
THIS DOCUMENT HAS BEEN

OLSSON ASSOCIATES

KUM & GO, L.C.
6400 Westown Parkway,
West Des Moines, Iowa 50266
PH-515-226-0128
FAX-515-223-5873

Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado
DRAWING INFORMATION

COVER SHEET

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: R LANG

ATTACHMENT 10

DWG. F:\Projects\010-2390_LDVP\Final_Plans\102390_COV.dwg USER: blang
DATE: Jan 18, 2012 1:29pm XREFS:

GENERAL NOTES:

1. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE LARIMER COUNTY URBAN AREA STREET STANDARDS AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS, THE MOST RESTRICTIVE STANDARD SHALL APPLY. ALL WORK SHALL BE INSPECTED AND APPROVED BY THE LOCAL ENTITY.
2. THE DEVELOPER IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE ENGINEER SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC) AT 1-800-922-1987, AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING, TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH / IRRIGATION COMPANY) ARE TO BE LOCATED BY CONTACTING THE RESPECTIVE REPRESENTATIVE. UTILITY SERVICE LATERALS ARE ALSO TO BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
3. NO WORK MAY COMMENCE WITHIN ANY IMPROVED PUBLIC RIGHT-OF-WAY UNTIL A RIGHT-OF-WAY PERMIT OR DEVELOPMENT CONSTRUCTION PERMIT IS OBTAINED, IF APPLICABLE. THE DEVELOPER SHALL SUBMIT A CONSTRUCTION TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH MUTCD, TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY, (LOCAL ENTITY, COUNTY OR STATE), FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
4. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR ALL APPLICABLE AGENCIES. THE DEVELOPER SHALL NOTIFY THE LOCAL ENTITY ENGINEER AT LEAST 2 WORKING DAYS PRIOR TO THE START OF ANY EARTH DISTURBING ACTIVITY, OR CONSTRUCTION ON ANY AND ALL PUBLIC IMPROVEMENTS. IF THE LOCAL ENTITY ENGINEER IS NOT AVAILABLE AFTER PROPER NOTICE OF CONSTRUCTION ACTIVITY HAS BEEN PROVIDED, THE DEVELOPER MAY COMMENCE WORK IN THE ENGINEER ABSENCE. HOWEVER, THE LOCAL ENTITY RESERVES THE RIGHT NOT TO ACCEPT THE IMPROVEMENT IF SUBSEQUENT TESTING REVEALS AN IMPROPER INSTALLATION.
5. THE ENGINEER WHO HAS PREPARED THESE PLANS, BY EXECUTION AND/OR SEAL HEREOF, DOES HEREBY AFFIRM RESPONSIBILITY TO THE CITY OF LOVELAND, AS BENEFICIARY OF SAID ENGINEER'S WORK, FOR ANY ERRORS AND OMISSIONS CONTAINED IN THESE PLANS, AND APPROVAL OF THESE PLANS BY THE CITY ENGINEER SHALL NOT RELIEVE THE ENGINEER WHO HAS PREPARED THESE PLANS OF ALL SUCH RESPONSIBILITY. FURTHER, TO THE EXTENT PERMITTED BY LAW, THE ENGINEER HEREBY AGREES TO HOLD HARMLESS AND INDEMNIFY THE CITY, AND ITS OFFICERS AND EMPLOYEES, FROM AND AGAINST ALL LIABILITIES, CLAIMS, AND DEMANDS WHICH MAY ARISE FROM ANY ERRORS AND OMISSIONS CONTAINED IN THESE PLANS.
6. ALL UTILITY INSTALLATIONS WITHIN OR ACROSS THE ROADBED OF NEW RESIDENTIAL ROADS MUST BE COMPLETED PRIOR TO THE FINAL STAGES OF ROAD CONSTRUCTION. FOR THE PURPOSES OF THESE STANDARDS, ANY WORK EXCEPT C/G ABOVE THE SUBGRADE IS CONSIDERED FINAL STAGE WORK. ALL SERVICE LINES MUST BE STUBBED TO THE PROPERTY LINES AND MARKED SO AS TO REDUCE THE EXCAVATION NECESSARY FOR BUILDING CONNECTIONS.
7. THE DEVELOPER SHALL COORDINATE AND COOPERATE WITH THE LOCAL ENTITY, AND ALL UTILITY COMPANIES INVOLVED, WITH REGARD TO RELOCATIONS, ADJUSTMENTS, EXTENSIONS AND REARRANGEMENTS OF EXISTING UTILITIES DURING CONSTRUCTION, AND TO ASSURE THAT THE WORK IS ACCOMPLISHED IN A TIMELY FASHION AND WITH A MINIMUM DISRUPTION OF SERVICE. THE DEVELOPER SHALL BE RESPONSIBLE FOR CONTACTING, IN ADVANCE, ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE AS WELL AS THE UTILITY COMPANIES.
8. NO WORK MAY COMMENCE WITHIN ANY PUBLIC STORM WATER, SANITARY SEWER OR POTABLE WATER SYSTEM UNTIL THE DEVELOPER NOTIFIES THE UTILITY PROVIDER. NOTIFICATION SHALL BE A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF ANY WORK. AT THE DISCRETION OF THE WATER UTILITY PROVIDER, A PRE-CONSTRUCTION MEETING MAY BE REQUIRED PRIOR TO COMMENCEMENT OF ANY WORK.
9. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES DURING CONSTRUCTION AND FOR COORDINATING WITH THE APPROPRIATE UTILITY COMPANY FOR ANY UTILITY CROSSINGS REQUIRED.
10. THE TYPE, SIZE, LOCATION AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK BEFORE COMMENCING NEW CONSTRUCTION. THE DEVELOPER SHALL BE RESPONSIBLE FOR UNKNOWN UNDERGROUND UTILITIES.
11. WHEN APPLICABLE, THE DEVELOPER SHALL HAVE ONSITE AT ALL TIMES, EACH OF THE FOLLOWING:
    - THE NOTICE OF INTENT (NOI)
    - BEST MANAGEMENT PRACTICES (BMP) MAINTENANCE FOLDER
    - UP TO DATE STORMWATER MANGEMENT PLAN (SWMP) THAT ACCURATELY REPRESENTS CURRENT FIELD CONDITIONS
    - ONE (1) SIGNED COPY OF THE APPROVED PLANS
    - ONE (1) COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS
    - A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB.
12. THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY. REFER TO OSHA PUBLICATION 2226, EXCAVATING AND TRENCHING.
13. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE DEVELOPER SHALL CONTACT THE DESIGNER AND THE LOCAL ENTITY ENGINEER IMMEDIATELY.
14. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
15. THE DEVELOPER SHALL SUBMIT A CONSTRUCTION TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH MUTCD, TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY. (LOCAL ENTITY, COUNTY OR STATE), FOR APPROVAL, PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN, OR AFFECTING, THE RIGHT-OF-WAY. THE DEVELOPER SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
16. THE DEVELOPER IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS, SHOWN ON THESE DRAWINGS, OR DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED, UNLESS SPECIFICALLY NOTED OTHERWISE.
17. THE DEVELOPER SHALL BE RESPONSIBLE FOR INSURING THAT NO MUD OR DEBRIS SHALL BE TRACKED ONTO THE EXISTING PUBLIC STREET SYSTEM. MUD AND DEBRIS MUST BE REMOVED BY THE END OF EACH WORKING DAY BY AN APPROPRIATE MECHANICAL METHOD (I.E. MACHINE BROOM SWEEP, LIGHT DUTY FRONT-END LOADER, ETC.) OR AS APPROVED BY THE LOCAL ENTITY STREET INSPECTOR.
18. THE DEVELOPER SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE, AND AVAILABLE TO THE LOCAL ENTITY'S INSPECTOR AT ALL TIMES.
19. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE DESIGNER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
20. THE DEVELOPER SHALL COMPLY WITH ALL TERMS AND CONDITIONS OF THE COLORADO PERMIT FOR STORM WATER DISCHARGE, THE STORM WATER MANAGEMENT PLAN, AND THE EROSION CONTROL PLAN.
21. ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AT THE LIMITS OF CONSTRUCTION AND AT AREAS WITH DISTURBED SOIL, ON- OR OFF-SITE, PRIOR TO ANY OTHER GROUND-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE DEVELOPER, UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREAS IS STABILIZED WITH HARD SURFACE OR LANDSCAPING. TO MITIGATE EROSION, THE DEVELOPER SHALL USE STANDARD EROSION CONTROL TECHNIQUES DESCRIBED IN THE URBAN STORM DRAINAGE CRITERIA MANUAL, VOLUME 3 - BEST MANAGEMENT PRACTICES, AS PUBLISHED BY THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT (UDFCD).
22. THE DEVELOPER SHALL SEQUENCE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO MINIMIZE POTENTIAL UTILITY CONFLICTS. IN GENERAL, STORM SEWER AND SANITARY SEWER SHOULD BE CONSTRUCTED PRIOR TO INSTALLATION OF THE WATER LINES AND DRY UTILITIES.
23. THERE SHALL BE NO SITE CONSTRUCTION ACTIVITIES ON SATURDAYS, UNLESS SPECIFICALLY APPROVED BY THE LOCAL ENTITY ENGINEER, AND NO SITE CONSTRUCTION ACTIVITIES ON SUNDAYS OR HOLIDAYS, UNLESS THERE IS PRIOR WRITTEN APPROVAL BY THE LOCAL ENTITY.
24. THE DESIGNER SHALL PROVIDE, IN THIS LOCATION ON THE PLAN, THE LOCATION AND DESCRIPTION OF THE NEAREST SURVEY BENCHMARK FOR THE PROJECT AS WELL AS THE BASIS OF BEARINGS. THE INFORMATION SHALL BE AS FOLLOWS:
25. BENCHMARK--LOVELAND'S 1995 LEVEL NET SURVEY.
26. B.M.NUMBER "G 402" ELEV.= 4969.11
27. DESCRIPTION :STAINLESS STEEL ROD ENCASED IN PIPE WITH 5" LOGO CAP, 66.3' N. OF THE CENTERLINE OF 1ST ST., 39.0' E. OF THE NEAR RAIL OF THE COLORADO AND SOUTHERN RAILROAD, 37.1' W. OF CENTERLINE OF RAILROAD AVE. AND 3.6' S. OF UTILITY POLE MARKED "33-25-45".
28. UPON COMPLETION OF CONSTRUCTION, THE SITE SHALL BE CLEANED AND RESTORED TO A CONDITION EQUAL TO, OR BETTER THAN, THAT WHICH EXISTED BEFORE CONSTRUCTION, OR TO THE GRADES AND CONDITION AS REQUIRED BY THESE PLANS.
29. EXISTING FENCES, TREES, STREETS, SIDEWALKS, CURBS AND GUTTERS, LANDSCAPING, STRUCTURES, AND IMPROVEMENTS DESTROYED, DAMAGED OR REMOVED DUE TO CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED OR RESTORED IN LIKE KIND AT THE DEVELOPER'S EXPENSE, UNLESS OTHERWISE INDICATED ON THESE PLANS.
30. OVERLOT GRADING CONSTRUCTION MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." CONTACT THE COLORADO DEPARTMENT OF PUBLIC HEALTH & ENVIRONMENT, WATER QUALITY CONTROL DIVISION, PHONE (303) 692-3500.
31. A STATE CONSTRUCTION DEWATERING WASTEWATER DISCHARGE PERMIT IS REQUIRED IF DEWATERING IS REQUIRED IN ORDER TO INSTALL UTILITIES OR BEFORE WATER IS DISCHARGED INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH OR ANY WATERS OF THE UNITED STATES.
32. THE DEVELOPER IS RESPONSIBLE FOR FIELD LOCATING AND VERIFYING ELEVATIONS OF ALL EXISTING SEWER MAINS, WATER MAINS, CURBS, GUTTERS AND OTHER UTILITIES AT THE POINTS OF CONNECTION SHOWN ON THE PLANS, AND AT ANY UTILITY CROSSINGS PRIOR TO INSTALLING ANY OF THE NEW IMPROVEMENTS. IF A CONFLICT EXISTS AND/OR A DESIGN MODIFICATION IS REQUIRED, THE DEVELOPER SHALL COORDINATE WITH THE ENGINEER TO MODIFY THE DESIGN. DESIGN MODIFICATION(S) MUST BE APPROVED BY THE LOCAL ENTITY PRIOR TO BEGINNING CONSTRUCTION.
33. AFTER ACCEPTANCE BY THE LOCAL ENTITY, PUBLIC IMPROVEMENTS DEPICTED IN THESE PLANS SHALL BE GUARANTEED TO BE FREE FROM MATERIAL AND WORKMANSHIP DEFECTS FOR A PERIOD OF TWO YEARS FROM THE DATE OF ACCEPTANCE.
34. THESE PUBLIC IMPROVEMENT CONSTRUCTION PLANS SHALL BE VALID FOR A PERIOD OF THREE YEARS FROM THE DATE OF APPROVAL BY THE LOCAL ENTITY ENGINEER. USE OF THESE PLANS AFTER THE EXPIRATION DATE WILL REQUIRE A NEW REVIEW AND APPROVAL PROCESS BY THE LOCAL ENTITY PRIOR TO COMMENCEMENT OF ANY WORK SHOWN IN THESE PLANS.
35. PAVING SHALL NOT START UNTIL A SOILS REPORT AND PAVEMENT DESIGN IS ACCEPTED BY THE LOCAL ENTITY ENGINEER AND SUBGRADE COMPACTION TESTS ARE TAKEN AND ACCEPTED BY THE LOCAL ENTITY ENGINEER.
36. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING SOILS TESTS WITHIN THE PUBLIC RIGHT-OF-WAY AFTER RIGHT OF WAY GRADING AND ALL UTILITY TRENCH WORK IS COMPLETE. IF THE FINAL SOILS/PAVEMENT DESIGN REPORT DOES NOT CORRESPOND WITH THE RESULTS OF THE ORIGINAL GEOTECHNICAL REPORT, THE DEVELOPER SHALL BE RESPONSIBLE FOR A RE-DESIGN OF THE SUBJECT PAVEMENT SECTION OR, THE DEVELOPER MAY USE THE LOCAL ENTITY'S DEFAULT PAVEMENT THICKNESS SECTION(S). REGARDLESS OF THE OPTION USED, ALL FINAL SOILS/PAVEMENT DESIGN REPORTS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER. THE FINAL REPORT SHALL BE SUBMITTED TO THE INSPECTOR A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO PLACEMENT OF BASE AND ASPHALT. PLACEMENT OF BASE AND ASPHALT SHALL NOT OCCUR UNTIL THE ENGINEERING DIVISION APPROVES THE FINAL REPORT.
37. ALL ROAD CONSTRUCTION IN AREAS DESIGNATED AS WILD FIRE HAZARD AREAS SHALL BE DONE IN ACCORDANCE WITH THE CONSTRUCTION CRITERIA AS ESTABLISHED IN THE WILD FIRE HAZARD AREA MITIGATION REGULATIONS IN FORCE AT THE TIME OF FINAL PLAT APPROVAL.
38. PORTIONS OF LARIMER COUNTY ARE WITHIN OVERLAY DISTRICTS. THE LARIMER COUNTY FLOODPLAIN RESOLUTION SHOULD BE REFERRED TO FOR ADDITIONAL CRITERIA FOR ROADS WITHIN THESE DISTRICTS.
39. STANDARD HANDICAP RAMPS ARE TO BE CONSTRUCTED AT ALL CURB RETURNS AND AT ALL "T" INTERSECTIONS.
40. ALL STATIONING IS BASED ON CENTERLINE OF ROADWAYS UNLESS OTHERWISE NOTED.
41. THE LOCAL ENTITY SHALL NOT BE RESPONSIBLE FOR THE MAINTENANCE OF ROADWAY AND APPURTENANT IMPROVEMENTS, INCLUDING STORM DRAINAGE STRUCTURES AND PIPES, FOR THE FOLLOWING PRIVATE STREETS:N/A.
42. APPROVED VARIANCES ARE LISTED AS FOLLOWS: NONE
43. A MINIMUM OF TWO POINTS OF ACCESS MUST BE PROVIDED TO THE DEVELOPMENT PRIOR TO ANY COMBUSTIBLE MATERIALS BEING BROUGHT ON SITE. THESE TEMPORARY ACCESS POINTS MUST HAVE AN ALL-WEATHER SURFACE CAPABLE OF SUPPORTING THE WEIGHT OF EMERGENCY APPARATUS AND REMAIN PASSABLE THROUGH OUT THE CONSTRUCTION PROCESS.

OLSSON ASSOCIATES
4690 Table Mountain Drive, Suite 200
Golden, CO 80403
TEL: 303.237.2072
FAX: 303.237.2659

KUM & GO, L.C.
6400 Westown Parkway,
West Des Moines, Iowa 50266
PH-515-226-0128
FAX-515-223-9873

Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado
DRAWING INFORMATION:

NOTES SHEET

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: B. LANG
SCALE: N/A
DATE: 1.18.12
DRAWING SHEET: 2 OF 25
C0.1

BENCHMARKS:

1. PROJECT BENCHMARK: THE PUBLISHED VALUES OF NGS CONTROL STATION "G 402", EL=4971.98 (NAVD88)
2. SITE BENCHMARK: A 3.25" ALUMINUM CAP, CDOT CONTROL POINT IN THE SIDEWALK AT THE SOUTHWEST QUADRANT OF THE INTERSECTION OF EAST EISENHOWER BLVD. AND NORTH BOISE AVE., EL=4980.91 (NAVD88)

BASIS OF BEARING

BEARINGS ARE BASED ON THE INVERSE OF THE PUBLISHED VALUES OF NGS CONTROL POINTS "G 402" AND "LOVELAND RESET", NAD83 COLORADO STATE PLANE–NORTH ZONE. PROJECT COORDINATES HAVE BEEN MODIFIED BY A SCALE FACTOR OF 0.99972483 TO PRODUCE GROUND DISTANCES.

CONTROL POINTS:

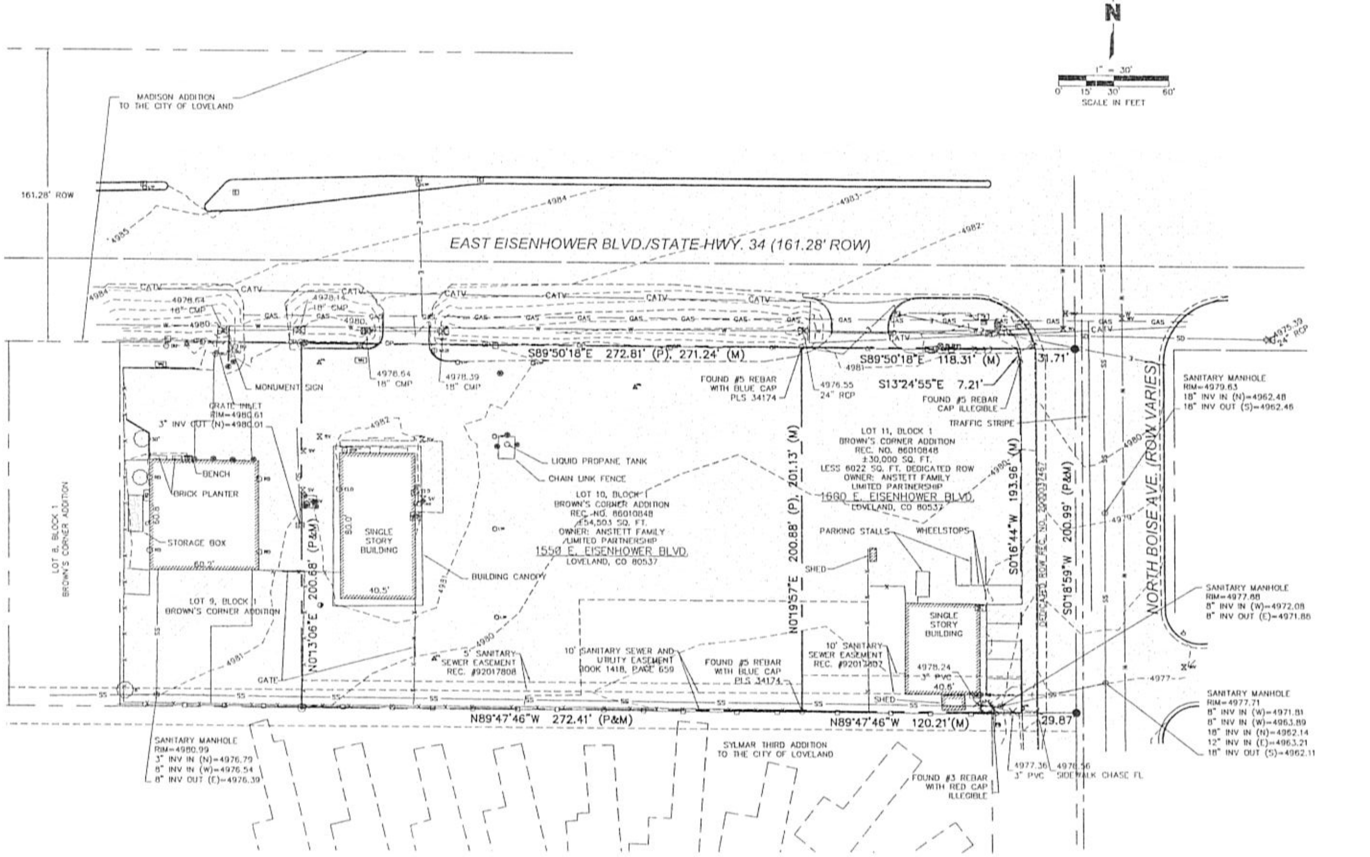
PNT.	NORTHING	EASTING	ELEV.	DESC.
100	1386635.84	3118901.13	4971.98	PROJECT BENCHMARK: NGS CONTROL POINT "G 402"
101	1393152.19	3119422.24	5035.83	NGS CONTROL POINT "LOVELAND RESET"
102	1391873.69	3125109.87	4980.91	SITE BENCHMARK: 3.25" ALUMINUM CAP CDOT CONTROL POINT
103	1391872.81	3124983.70	4980.11	PROPERTY CORNER: FOUND #5 REBAR, BLUE CAP PLS 34174
104	1391873.66	3124712.46	4981.54	PROPERTY CORNER: FOUND IRON PIPE
105	1391671.69	3124982.53	4979.13	PROPERTY CORNER: FOUND #5 REBAR, BLUE CAP PLS 34174
106	1391671.16	3125088.35	4978.68	PROPERTY CORNER: FOUND #3 REBAR, CAP ILLEGIBLE
107	1391673.87	3125103.54	4977.23	CONTROL POINT: SET CHISELED "X"
109	1391863.05	3124720.67	4981.52	CONTROL POINT: SET PK NAIL
110	1391865.12	3125103.49	4980.91	PROPERTY CORNER: FOUND #5 REBAR, CAP ILLEGIBLE
111	1391872.93	3124647.70	4983.08	3.25" ALUMINUM CAP CDOT CONTROL POINT

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 POTHOLING 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 WERE ORDERED TO BE LOCATED PER ONE-CALL TICKET NUMBER A0328243-00A. THE UTILITIES LISTED ON THIS TICKET ARE: COMCAST, NORTHERN COLORADO, CITY OF LOVELAND ELECTRIC AND WATER, LEVEL 3 COMMUNICATIONS, XCEL ENERGY, PLATTE RIVER POWER AUTHORITY, QWEST LOCAL NETWORK, AND RELIANCE GLOBAL COMMUNICATIONS.

FLOOD ZONE:

THIS PROPERTY IS IN A "NO SPECIAL FLOOD HAZARD AREA", ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08069C1200F, A NON-PRINTED PANEL.



LEGEND

- AREA INLET
- HOSE BIB
- BILLBOARD
- BUSH
- CONTROL POINT
- GUY WIRE
- FIBER OPTIC PEDESTAL
- BOLLARD
- FLARED END SECTION
- ELECTRIC BOX
- ELECTRIC PANEL
- ELECTRIC OUTLET
- ELECTRIC METER
- FIRE HYDRANT
- DECIDUOUS TREE
- CONIFEROUS TREE
- SPEAKER BOX
- GRATE INLET
- GAS METER
- LIGHT POLE
- WATER VALVE
- FOUND MONUMENT AS DESCRIBED
- SET PK NAIL AND WASHER STAMPED PLS 38012
- SET #5 REBAR STAMPED PLS 38012
- STEEL POST
- MAILBOX
- POWER POLE
- SIGN
- SANITARY MANHOLE
- ROOF DRAIN
- TRANSFORMER
- TRAFFIC SIGNAL WITH MAST ARM
- SEWER VALVE
- STORM SEWER MANHOLE
- SEWER CLEANOUT
- TRAFFIC CONTROL BOX
- TRAFFIC SIGNAL BOX
- TRAFFIC SIGNAL CABINET
- WOOD POST
- TELEVISION RISER
- WATER METER
- YARD HYDRANT
- (P), (M) PLATTED, MEASURED DISTANCES
- 5280 CONTOUR LINE
- SECTION LINE
- PROPERTY LINE
- CENTER LINE
- PROPERTY BOUNDARY
- EASEMENT LINE
- CATV UNDERGROUND CABLE TV LINE
- CHAIN LINK FENCE
- WOODEN FENCE
- GAS UNDERGROUND GAS MAIN
- SS SANITARY SEWER LINE
- SD STORM DRAIN LINE
- E UNDERGROUND ELECTRIC
- OP OVERHEAD ELECTRIC
- W WATER LINE
- SIDEWALK
- CONCRETE
- ASPHALT
- BUILDING

TITLE COMMITMENT LEGAL DESCRIPTION

LEGAL DESCRIPTION PER CHICAGO TITLE INSURANCE COMPANY, COMMITMENT NO. A-1323506, EFFECTIVE DATE: NOVEMBER 4, 2010 AT 08:00 AM.

PARCEL A: 1550 E EISENHOWER BLVD.
LOT 10, BLOCK 1 BROWN'S CORNER ADDITION, CITY OF LOVELAND, LARIMER COUNTY, STATE OF COLORADO.

PARCEL B: 1600 E EISENHOWER BLVD.
LOT 11, BLOCK 1, BROWN'S CORNER ADDITION, CITY OF LOVELAND, LARIMER COUNTY, LESS ROAD RIGHT-OF-WAY PER 2000037467.

OLSSON ASSOCIATES

Kum & Go

KUM & GO, L.C.

6400 Westown Parkway,
West Des Moines, Iowa 50266
PH-515-226-0128
FAX-515-223-9873

Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:

EXISTING CONDITIONS

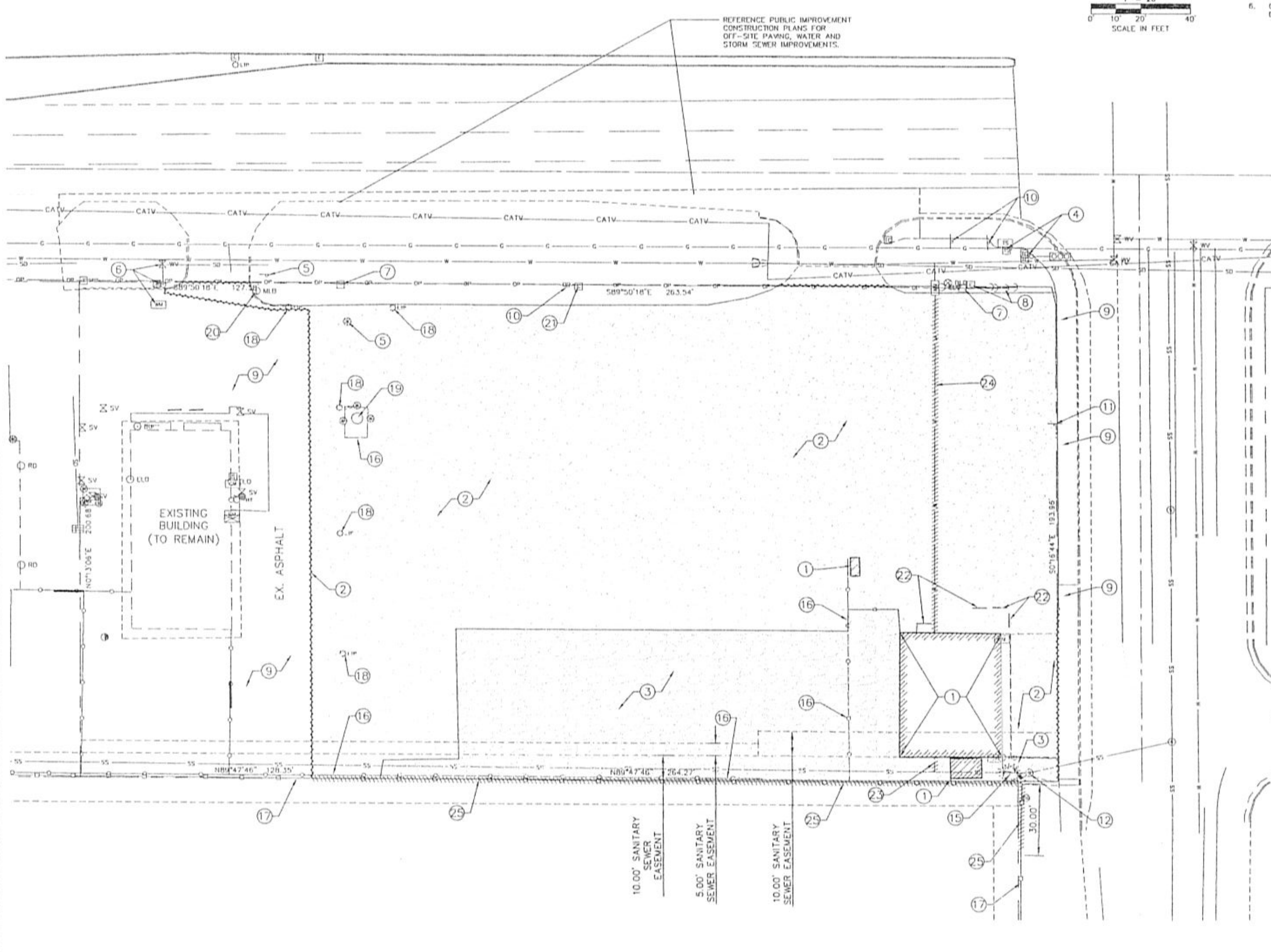
REVISIONS

DEPARTMENT	STORE DEVELOPMENT
CONSTRUCTION	R. HALDER
DRAWN BY	B. KIELY
SCALE	1"=30'
DATE	11/5/10
DRAWING SHEET	3 OF 25 C1.1

DWG. F:\Projects\010-2390_LDVP\Final_Plans\102390_EX_COND.dwg USER: blong
DATE Dec 08, 2011 10:23am XREFS

BENCHMARKS

1. THE PUBLISHED VALUES OF NGS CONTROL STATION "G 402". EL=4971.98 (NAVD88)
2. A 3.25" ALUMINUM CAP, CDOT CONTROL POINT IN THE SIDEWALK AT THE SOUTHWEST QUADRANT OF THE INTERSECTION OF EAST EISENHOWER BLVD. AND NORTH BOISE AVE., EL=4980.91 (NAVD88)



DEMOLITION NOTES:

1. CONTRACTOR TO PROTECT ALL UTILITY, PAVING, BUILDINGS, ETC. OUTSIDE OF LIMITS OF PROPOSED CONSTRUCTION.
2. UTILITY VAULTS, TRAFFIC LIGHTS AND STREETLIGHT TO REMAIN IN PLACE. CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGE TO THESE STRUCTURES AND ALL BURIED LINES (UNLESS OTHERWISE NOTED).
3. THE CONTRACTOR SHALL VERIFY THE EXISTING CONDITIONS PRIOR TO THE START OF CONSTRUCTION AND NOTIFY THE SITE DEVELOPER OF ANY DISCREPANCIES.
4. PROTECT ALL PAVEMENT ONSITE UNLESS OTHERWISE MARKED.
5. ALL DEMOLITION WORK ON THIS CONSTRUCTION SITE SHALL BE IN CONFORMANCE WITH THE GUIDELINES SET FORTH IN THE CITY OF LOVELAND ZONING ORDINANCE.
6. CONTRACTOR SHALL SEE PAVING PLAN FOR DETAILS ON LIMITS OF PAVING DEMOLITION.

FLAG NOTES

(1) REMOVAL OF ENTIRE EXISTING BUILDING STRUCTURE, ROOF, FLOORS, WALLS, STAIRS, FOOTINGS AND STRUCTURAL COLUMNS IN THEIR ENTIRETY. REMOVE ALL PAVEMENT, SIDEWALKS, TREES, GRAVEL, CLOTHES LINES, WATER SERVICE LINES AND CURB STOPS, SANITARY SEWER SERVICE LINES AND CLEAN-OUTS, AND MAILBOXES. REMOVE ALL APPURTENANCES AND UTILITIES FOUND WITHIN THE BUILDING AREA. UTILITIES SHALL BE REMOVED PER RESPECTIVE UTILITY COMPANIES REQUIREMENTS. REMOVE ALL BUILDING CONTENTS, DEBRIS, ETC. WITHIN BUILDING. CONTRACTOR TO COORDINATE UTILITY REMOVALS WITH RESPECTIVE UTILITY COMPANIES TO ENSURE A CORRECT REMOVAL AND SHUTOFF. ALL MATERIAL SHALL BE REMOVED FROM SITE AND LEGALLY DISPOSED PER LOCAL CODES & REGULATIONS.

(2) SAWCUT AND REMOVE EXISTING CONCRETE/ASPHALT PAVEMENT INCLUDING CURB AND GUTTER.

(3) EXISTING ROCK SURFACING TO BE REMOVED.

(4) EXISTING TRAFFIC SIGNAL BOX, PROTECT IN PLACE

(5) EXISTING SIGN TO BE REMOVED.

(6) EXISTING FIRE HYDRANT, WATER VALVE, AND METER TO BE REMAIN. PROTECT IN PLACE.

(7) EXISTING UTILITY POLE, TO BE REMOVED. COORDINATE WITH THE CITY OF LOVELAND DEPARTMENT OF WATER AND POWER. (DESIGN BY CITY)

(8) EXISTING UTILITY RISER / GUY WIRE TO BE REMOVED. COORDINATE WITH THE CITY OF LOVELAND DEPARTMENT OF WATER AND POWER. (DESIGN BY CITY)

(9) EXISTING CURB/PAVEMENT, PROTECT IN PLACE.

(10) EXISTING SIGN TO REMAIN, PROTECT IN PLACE.

(11) REMOVE AND REPLACE EXISTING SIGN.

(12) EXISTING SANITARY SEWER MANHOLE, PROTECT IN PLACE

(15) EXISTING TREE TO BE REMOVED

(16) REMOVE EXISTING CHAIN LINK FENCE WITHIN LIMITS OF DISTURBANCE.

(17) EXISTING WOOD PRIVACY FENCE TO REMAIN, PROTECT IN PLACE.

(18) EXISTING LIGHT POLE TO BE REMOVED. ELECTRICAL SERVICE TO BE ABANDONED IN PLACE.

(19) REMOVE AND DISPOSE OF EXISTING LIQUID PROPANE TANK AND PROTECTIVE BOLLARDS PER ALL LOCAL, STATE AND FEDERAL REGULATIONS. COORDINATE REMOVAL WITH OWNER.

(20) REMOVE AND RELOCATE EXISTING MAILBOXES. COORDINATE RELOCATION WITH OWNER AND LOCAL MAIL COURIER.

(21) EXISTING CABLE RISER TO REMAIN, PROTECT IN PLACE.

(22) REMOVE EXISTING CONCRETE WHEEL STOPS.

(23) APPROXIMATE LOCATION OF EXISTING SEWER SERVICE, CONTRACTOR SHALL VERIFY LOCATION REMOVE/ABANDON PER CITY/COUNTY STANDARDS AND SPECIFICATIONS.

(24) APPROXIMATE LOCATION OF EXISTING WATER SERVICE, CONTRACTOR SHALL VERIFY LOCATION REMOVE/ABANDON PER CITY/COUNTY STANDARDS AND SPECIFICATIONS.

(25) REMOVE EXISTING WOOD PRIVACY FENCE, COORDINATE REMOVAL WITH OWNER

LEGEND

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- ROADWAY CENTERLINE
- EXISTING CHAIN LINK FENCE LINE
- EXISTING WOOD FENCE LINE
- EXISTING BUILDING OUTLINE
- EXISTING STORM SEWER
- EXISTING GRATE INLET
- EXISTING SANITARY SEWER
- EXISTING WATER PIPE
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- EXISTING OVERHEAD POWER
- EXISTING UNDERGROUND POWER
- EXISTING POWER POLE W/ GUY WIRE
- EXISTING LIGHT POLE
- EXISTING TRAFFIC SIGNAL
- EXISTING GAS PIPE W/ VALVE
- EXISTING CABLE T.V.
- CONCRETE/ASPHALT PAVEMENT REMOVAL
- EXISTING ROCK SURFACING REMOVAL
- SAW CUT

NOTE:
THIS DOCUMENT HAS BEEN RELEASED BY OLSSON ASSOCIATES FOR REVIEW BY REGULATORY AGENCIES AND OTHER PROFESSIONALS, AND IS SUBJECT TO CHANGE. THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION.

COLORADO 811

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FAX-515-223-9873

Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:

DEMOLITION PLAN

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: B. LANG
SCALE: 1" = 20'
DATE: 1.18.12
DRAWING SHEET: 4 OF 25 C1.2

DWG: F:\Projects\010-2390_LDV\Final_Plans\102390_DEMO.dwg USER: blang
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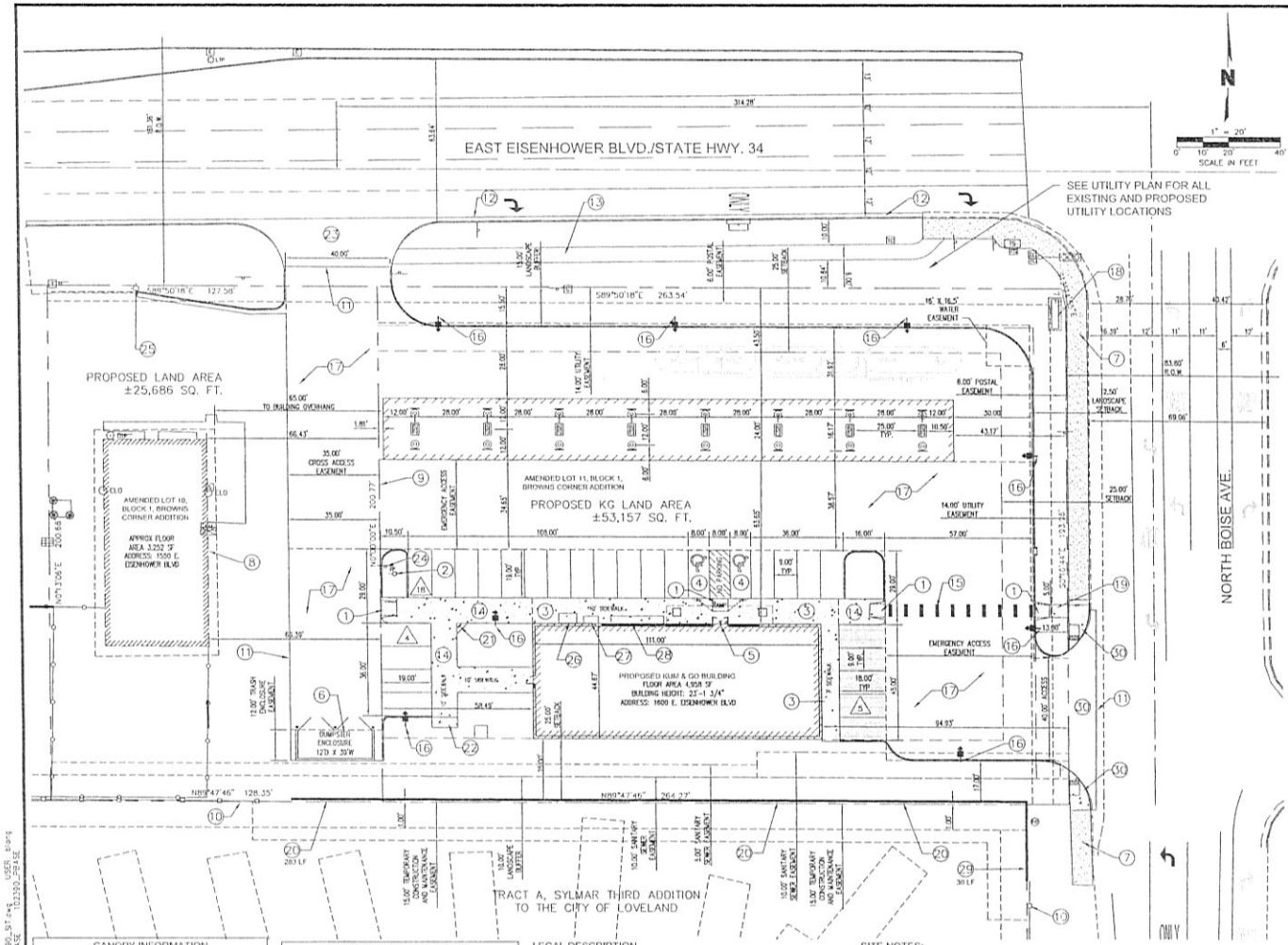

GENERAL NOTES:

1. CONTRACTOR TO PRESERVE ALL SURVEY CONTROL.
2. PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO CONDUCT THE FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.
3. LOCATION AND ELEVATIONS OF IMPROVEMENTS TO BE MET (OR AVOIDED) BY WORK TO BE DONE SHALL BE CONFIRMED BY THE CONTRACTOR THROUGH FIELD EXPLORATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REPORT TO THE ENGINEER OR CITY INSPECTOR ANY DISCREPANCIES BETWEEN HIS MEASUREMENTS AND THESE PLANS.
4. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS AND, TO THE BEST OF OUR KNOWLEDGE, CONSTITUTES ALL KNOWN FACILITIES. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT COLORADO ONE-CALL IN ADVANCE OF ANY EXCAVATION FOR THE MARK-OUT OF THE LOCATION OF UTILITIES AND NOTIFICATION OF COMMENCEMENT OF WORK.
5. BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
6. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

FLAG NOTES

1. PROPOSED ADA CURB RAMP (PER LCUASS DRAWING #1606, SEE DETAIL SHEET)
2. PROPOSED FLAGPOLE
3. CONSTRUCT 6" THICK CONCRETE SIDEWALK (1% MAX. CROSS SLOPE) REFERENCE DETAIL ON STRUCTURAL PLANS
4. PROPOSED VAN ACCESSIBLE PARKING SPACE AND SIGNAGE (PER LCUASS DRAWING #1407, ADA STANDARDS, AND HANDICAP SIGN DETAIL, SEE DETAIL SHEET)
5. FRONT ENTRY, REF. ARCH. PLANS
6. PROPOSED TRASH ENCLOSURE, REF. ARCH. PLANS
7. EXISTING SIDEWALK
8. EXISTING BUILDING TO REMAIN
9. PROPOSED PROPERTY LINE
10. EXISTING WOOD FENCE TO REMAIN
11. EDGE OF PROPOSED ON-SITE PAVEMENT
12. CONSTRUCT CURB AND GUTTER (REFERENCE PUBLIC IMPROVEMENT CONSTRUCTION PLANS)
13. CONSTRUCT 6' WIDE SIDEWALK (REFERENCE PUBLIC IMPROVEMENT CONSTRUCTION PLANS)
14. CONSTRUCT 6" THICK CONCRETE SIDEWALK (2% MAX. CROSS SLOPE) REFERENCE DETAIL ON DETAIL SHEET
15. 9-FEET LONG X 18-INCH WIDE WHITE "CONTINENTAL" OR "DENVER" STYLE BARS
16. LIGHT FIXTURE (SEE PHOTOMETRIC PLANS)
17. PROPOSED 8" CONCRETE PAVEMENT WITH INTEGRAL CURB
18. PROPOSED KUM & GO MONUMENT SIGN
19. PROPOSE 4" THICK P.C. CONCRETE SIDEWALK (2% MAX. CROSS SLOPE)
20. PROPOSED 8' TALL NOISE WALL, SEE ARCHITECTURAL PLANS FOR MATERIAL TYPE AND CONSTRUCTION DETAILS.
21. PROPOSED BICYCLE PARKING BOLLARD
22. DESIGNATED SMOKING AREA
23. CONCRETE DRIVEWAY (PER LCUASS DRAWING #707, SEE DETAIL SHEET)
24. "NO MOTORCYCLES BEYOND THIS POINT" SIGN
25. EXISTING FIRE HYDRANT
26. PROPOSED PROPANE
27. PROPOSED REDBOX VENDING MACHINE
28. PROPOSED MISC. MERCHANDISE
29. PROPOSED 8' TALL NOISE WALL, SEE ARCHITECTURAL PLANS FOR MATERIAL TYPE AND CONSTRUCTION DETAILS.
30. CONSTRUCT CONCRETE DRIVE AND CURB RAMPS PER DRIVEWAY APPROACH DETAIL (SEE DETAIL SHEET)

LEGEND

BOUNDARY LINE	ELECTRIC BOX
ROAD CENTERLINE	CABLE VAULT
GAS LINE	TELEVISION BOX
SANITARY SEWER LINE	TELEPHONE CABINET
STORM SEWER LINE	TELEPHONE RISER
OVERHEAD POWER	TRANSFORMER
UNDERGROUND POWER	STORM SEWER MANHOLE
WATER LINE	FIRE HYDRANT
UNDERGROUND COMMUNICATION LINE	WATER VALVE
CONCRETE CURB & GUTTER	GAS VALVE
CONCRETE PAVEMENT	PULL BOX
ASPHALT PAVEMENT	SIGN
CONCRETE SIDEWALK	BOLLARD
BUILDING ENVELOPE	GUY WIRE
MAJOR CONTOUR	WATER SERVICE VALVE
MINOR CONTOUR	TRAFFIC SIGNAL MANHOLE
LIGHT POLE	
POWER POLE	
POWER POLE WITH LIGHT	
SANITARY SEWER MANHOLE	
SANITARY SEWER CLEANOUT	
PARKING COUNT	
EXISTING CONCRETE SIDEWALK	
PROPOSED SIDEWALK	
EMPLOYEE PARKING	

NOTE:
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CANOPY INFORMATION	
HEIGHT TO BOTTOM OF CANOPY	14'-6"
HEIGHT TO TOP OF CANOPY	17'-6"
CANOPY SQUARE FOOTAGE	5,280 SF
SEE ELEVATIONS FOR MORE INFORMATION	

BUILDING HEIGHT INFORMATION	
MAXIMUM HEIGHT	35'-0"
PROPOSED HEIGHT AS MEASURED PER 18.04.113.2	23'-1 3/4"

* PER 18.54.04, MAXIMUM HEIGHT FOR A NON RESIDENTIAL USE WITHIN 50' FROM RESIDENTIAL PROPERTY USE SHALL BE LIMITED TO A HEIGHT ALLOWED FOR SINGLE FAMILY RESIDENTIAL USE.

LEGAL DESCRIPTION

LOTS 10 AND 11 BROWN'S CORNER ADDITION TO THE CITY OF LOVELAND, COUNTY OF LARIMER, STATE OF COLORADO, AS RECORDED IN THE RECORDS OF THE LARIMER COUNTY CLERK AND RECORDER AT RECEPTION NUMBER 86010848, CONTAINING 78,843 SQUARE FEET MORE OR LESS, AND IS SUBJECT TO ALL EASEMENTS AND RIGHTS-OF-WAY ON RECORD OR EXISTING, DO HEREBY SUBDIVIDE THE SAME IN LOTS, BLOCKS, TRACTS, OUTLOTS, RIGHTS-OF-WAY AND EASEMENTS, AS SHOWN ON THIS PLAT; AND DO HEREBY DESIGNATE AND DEDICATE: (I) ALL SUCH RIGHTS-OF-WAY AND EASEMENTS, OTHER THAN UTILITY EASEMENTS AND PRIVATE EASEMENTS, TO AND FOR PUBLIC USE, EXCEPT WHERE INDICATED OTHERWISE ON THIS PLAT; AND (II) ALL SUCH UTILITY EASEMENTS TO AND FOR PUBLIC USE FOR THE INSTALLATION AND MAINTENANCE OF UTILITY, IRRIGATION AND DRAINAGE FACILITIES; AND DO HEREBY DESIGNATE THE SAME AS AMENDED PLAT OF LOTS 10 AND 11, BLOCK 1, BROWN'S CORNER ADDITION TO THE CITY OF LOVELAND, COLORADO.

SITE NOTES:

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. ALL DIMENSIONS AND RADII ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
3. A SEPARATE SIGN APPLICATION TO THE CITY IS REQUIRED FOR ALL MONUMENT /POLE SIGNS.
4. IN THE INTEREST OF COMPATIBILITY WITH SURROUNDING LAND USES, ILLUMINATION OF ANY KIND ON PRIVATE PROPERTY SHALL BE DIRECTED AND CONTROLLED IN SUCH A MANNER SUCH THAT THERE ARE NO DIRECT RAYS OF LIGHT WHICH EXTEND BEYOND THE BOUNDARIES OF THE PROPERTY FROM WHICH THEY ORIGINATE.
5. CONTRACTOR TO VERIFY BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
6. PROJECT TO BE COMPLETED IN ONE (1) PHASE.

BENCHMARKS

1. THE PUBLISHED VALUES OF NGS CONTROL STATION "G 402", EL=4971.98 (NAVD88)
2. A 3.25" ALUMINUM CAP, CDOT CONTROL POINT IN THE SIDEWALK AT THE SOUTHWEST QUADRANT OF THE INTERSECTION OF EAST EISENHOWER BLVD. AND NORTH BOISE AVE., EL=4980.91 (NAVD88)

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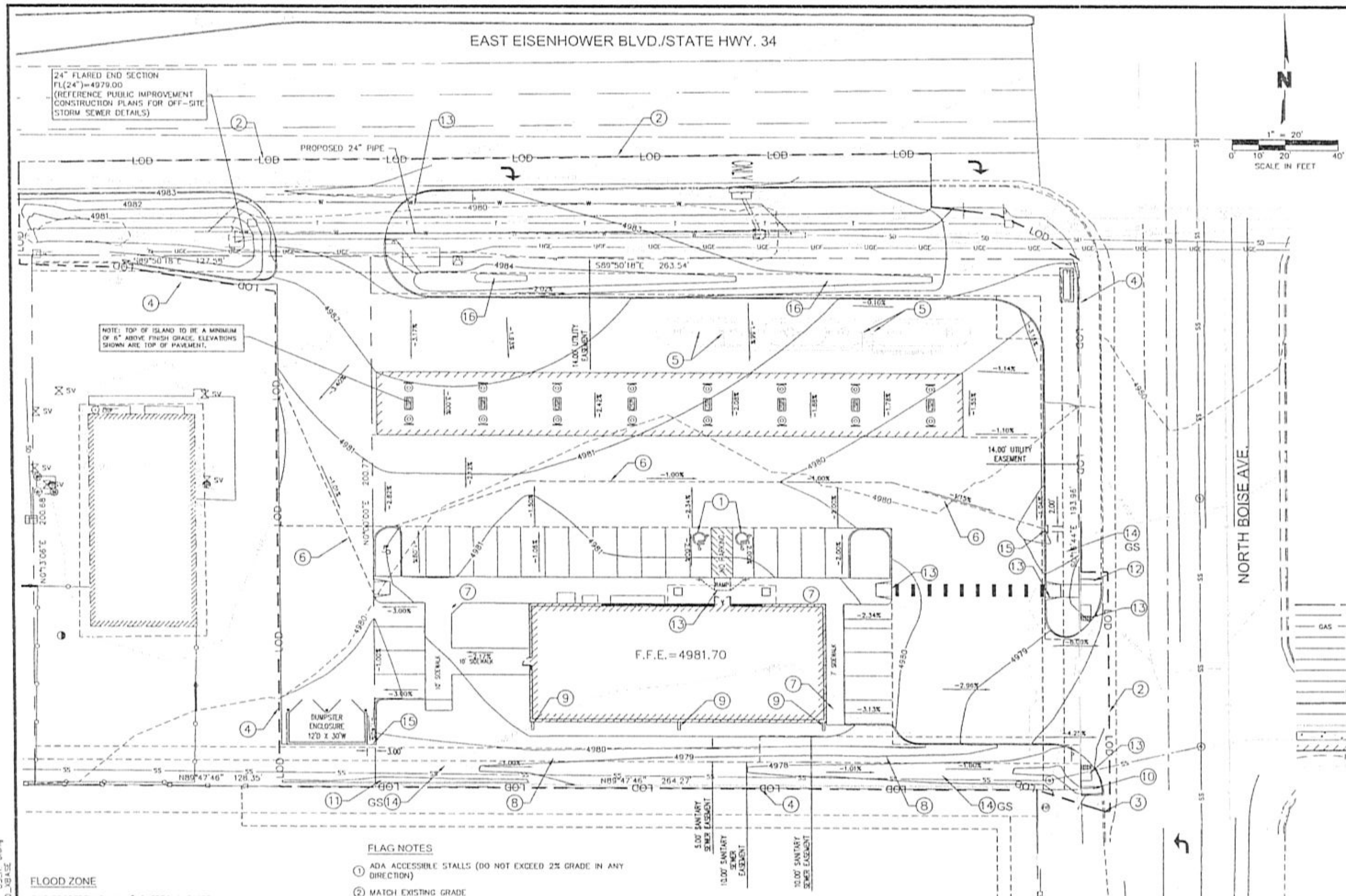
Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING/REPRESENTATION

SITE PLAN

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONTRACTOR: R. HALDER
DRAWN BY: B. LANG
SCALE: 1" = 20'
DATE: 1.18.12
DRAWING SHEET: 5 OF 25
C1.3



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 HERBACEOUS VEGETATION SHALL BE REMOVED FROM WITHIN THE LIMITS OF THE GRADING AND REDISTRIBUTED WITH THE TOPSOIL.
3. ALL EXISTING PAVEMENT, UTILITIES, BURIED DEBRIS, RUBBLE, AND/OR STRUCTURES/FOUNDATIONS ENCOUNTERED WITHIN AREAS OF DISTURBANCE SHALL BE COMPLETELY REMOVED PRIOR TO OR DURING EARTHWORK OPERATIONS.
4. PRIOR TO NEW STRUCTURAL FILL PLACEMENT, THE CONTRACTORS SHALL SCARIFY 8 INCHES OF RESULTANT SUBGRADE, MOISTURE CONDITION AS NECESSARY, AND RECOMPACT THE SUBGRADE AS RECOMMENDED IN THE GEOTECHNICAL REPORT. FOLLOWING RECOMPACTION, AREAS TO RECEIVE STRUCTURAL FILL SHALL BE PROOF ROLLED AS PER THE GEOTECHNICAL REPORT.
5. FOR PROPER COMPACTION OF FILL MATERIAL, BUILDING PAD PREPARATION, AND PAVING SUBGRADE, SEE GEOTECHNICAL REPORT, PREPARED BY OLSSON ASSOCIATES, MARCH 18, 2011.
6. ALL ADA ACCESSIBLE STALLS/ROUTES TO BE CONSTRUCTED PER ADA STANDARDS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL GRADING AND NPDES PERMITS FOR THE BORROW SITE.
8. NEW FILL MATERIAL SHALL CONSIST OF EITHER A LOW PLASTICITY CLAY THE EXHIBITS A LIQUID LIMIT LESS THAN 45 AND A PLASTICITY INDEX LESS THAN 25. ON-SITE SOILS ARE SUITABLE FOR REUSE AS STRUCTURAL FILL IF CLEAN AND PROPERLY MOISTURE CONDITIONED PRIOR TO COMPACTION.
9. THE UPPER 24" OF ALL UTILITY TRENCHES SHALL BE BACKFILLED WITH COMPACTED COHESIVE SOILS. SEE GEOTECHNICAL REPORT FOR COMPACTION AND MOISTURE RECOMMENDATIONS.
10. FINAL PAVEMENT SUBGRADES SHALL BE PROOFROLLED IMMEDIATELY PRIOR TO THE PLACEMENT OF THE PAVEMENT TO DETECT LOCALIZED AREAS OF INSTABILITY. PROOFROLLING IS NOT RECOMMENDED IN THE AREAS OF THE NEW FUEL TANKS OR DELIVERY LINE INSTALLATION.

NOTE: THE BUILDING FLOOR SLAB (BELOW THE GRANULAR LAYER, IF UTILIZED) SHALL BE SUPPORTED BY A MINIMUM OF 12 INCHES OF COMPACTED SOIL SUBGRADES AS RECOMMENDED IN THE GEOTECHNICAL REPORT. PREPARATION OF SUBGRADE SHALL EXTEND A MINIMUM 5 FEET HORIZONTALLY BEYOND THE BUILDING PERIMETER.

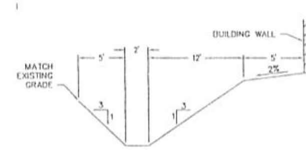
NOTE: THE PAVEMENT SUBGRADE SHALL BE SUPPORTED BY A MINIMUM OF 12 INCHES OF COMPACTED SOIL SUBGRADES AS RECOMMENDED IN THE GEOTECHNICAL REPORT. PREPARATION OF SUBGRADE SHALL EXTEND A MINIMUM OF 2 FEET BEYOND PAVEMENT EDGES.

NOTE: SIDEWALKS SHALL BE SUPPORTED BY A MINIMUM OF 6 INCHES OF COMPACTED SOIL SUBGRADES RECOMMENDED IN THE GEOTECHNICAL REPORT. PREPARATION OF SUBGRADE SHALL EXTEND A MINIMUM OF 1 FEET BEYOND SIDEWALK EDGES.

LEGEND

BOUNDARY LINE
ROAD CENTERLINE
GAS LINE
SANITARY SEWER LINE
STORM SEWER LINE
OVERHEAD POWER
UNDERGROUND POWER
WATER LINE
UNDERGROUND COMMUNICATION LINE
CONCRETE CURB & GUTTER
CONCRETE PAVEMENT
PROPOSED NOISE WALL
CONCRETE SIDEWALK
BUILDING ENVELOPE
MAJOR CONTOUR
MINOR CONTOUR
TRAFFIC SIGNAL PSG
TRAFFIC SIGNAL MANHOLE
LIGHT POLE
POWER POLE
POWER POLE WITH LIGHT
GAS MANHOLE
GAS RISER
SANITARY SEWER CLEANOUT
SANITARY SEWER MANHOLE
ELECTRICAL MANHOLE

ELECTRIC BOX
ELECTRIC VAULT
ELECTRIC METER
ELECTRIC RISER
AIR CONDITIONER UNIT
CABLE VAULT
TELEVISION BOX
TELEPHONE RISER
SPRINKLER BOX
TELEPHONE CABINET
TELEPHONE RISER
TRANSFORMER
STORM SEWER MANHOLE
STORM CURB INLETS
STORM AREA INLETS
WATER MANHOLE
FIRE HYDRANT
WATER VALVE
GAS VALVE
VENT PIPE
MONITORING WELL
PULL BOX
SIGN
BOLLARD
GUY WIRE
WATER SERVICE VALVE



TYPICAL GRASS SWALE DETAIL
NOT TO SCALE

FLOOD ZONE

THIS PROPERTY IS IN A "NO SPECIAL FLOOD HAZARD AREA", ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08069C1200F, A NON-PRINTED PANEL.

OWNER/DEVELOPER/APPLICANT:

KUM & GO L.C.
6400 WESTOWN PARKWAY
WEST DES MOINES, IA 50266
CONTACT: RYAN HALDER

BENCHMARKS

1. THE PUBLISHED VALUES OF NGS CONTROL STATION "G 402". EL=4971.98 (NAVD88)
2. A 3.25" ALUMINUM CAP, CDOT CONTROL POINT IN THE SIDEWALK AT THE SOUTHWEST QUADRANT OF THE INTERSECTION OF EAST EISENHOWER BLVD. AND NORTH BOISE AVE., EL=4980.91 (NAVD88)

FLAG NOTES

1. ADA ACCESSIBLE STALLS (DO NOT EXCEED 2% GRADE IN ANY DIRECTION)
2. MATCH EXISTING GRADE
3. LOWEST SITE ELEVATION
4. LIMITS OF DISTURBANCE
5. ALL FILL LIDS FOR UNDERGROUND TANKS TO BE 1" ABOVE FINISHED PAVEMENT GRADE
6. PROPOSED VALLEY/SWALE
7. PROPOSED BUILDING SIDEWALK
8. GRADE SHALL NOT TO EXCEED 3:1
9. INSTALL SPLASH BLOCK (SEE ARCHITECTURAL PLANS)
10. EXISTING CURB CHASE DRAIN UNDER SIDEWALK
11. CONTRACTOR SHALL BUILD BERM AS NECESSARY TO PREVENT DRAINAGE FROM LEAVING THE PROPERTY TO THE SOUTH.
12. DROP CURB AND INSTALL CURB CHASE DRAIN UNDER SIDEWALK TO ALLOW DRAINAGE INTO INLET PER LCUASS DRAWING 709
13. PROPOSED ADA SIDEWALK RAMP
14. GRASS SWALE (GS) (SEE DETAIL THIS SHEET)
15. DROP CURB TO ALLOW DRAINAGE INTO SWALE (WIDTH PER PLAN)
16. 2' TALL LANDSCAPE SCREENING BERM

NOTE:
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COLORADO 811

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Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:
GRADING AND DRAINAGE PLAN

REVISIONS

DEPARTMENT	STORE DEVELOPMENT
CONSTRUCTION	R. HALDER
DRAWN BY	B. LANG
SCALE	1" = 20'
DATE	1.18.12
DRAWING SHEET	6 OF 25
	C2.1

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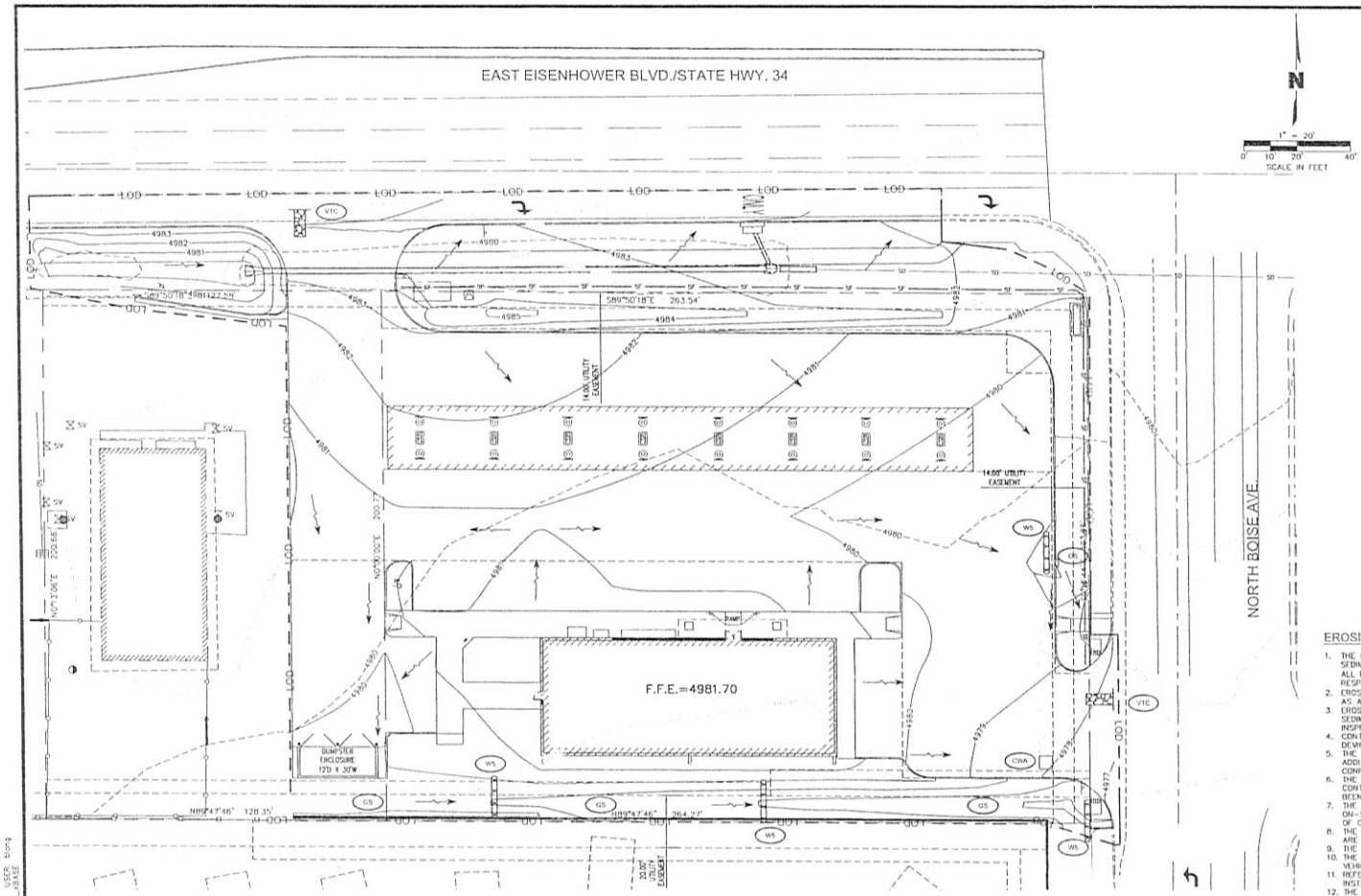
DATE Jan 18, 2012 1:32pm XREFS: 102390_PBASE 102390_XBASE



OWNER / SWMP ADMINISTRATOR
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RYAN HALDER

ENGINEER
OLSSON ASSOCIATES
4690 TABLE MOUNTAIN DRIVE,
SUITE 200
GOLDEN, CO 80403
CONTACT:
JOSH EBRAMOUSPE-(303)237.2072
VU NGUYEN-(515)331.6517

SITE INFORMATION	
TOTAL DISTURBED AREA	1.89 AC
TOTAL SITE AREA	1.36 AC
RECEIVING WATERS	HOUTS RESERVOIR VIA PUBLIC STORM SEWER/DRAINAGE DITCH
RUNOFF COEFFICIENT (PRIOR TO CONSTRUCTION)	0.95
RUNOFF COEFFICIENT (AFTER TO CONSTRUCTION)	0.89

LEGEND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED STORM SEWER
- SF — SILT FENCE
- VTC — VEHICLE TRACKING CONTROL PAD
- CWA — CONCRETE WASHOUT AREA
- WS — CONCRETE CHASE WATTLE
- WI — CURB INLET WATTLE PROTECTION
- GS — GRASS SWALE
- DRAINAGE ARROWS
- LOD — LIMITS OF DISTURBANCE

EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL EROSION & SEDIMENT CONTROL MEASURES AND PRACTICES THROUGHOUT THE PROJECT. ANY AND ALL FINES ASSOCIATED WITH EROSION CONTROL VIOLATIONS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
2. EROSION CONTROL IS THE CONTRACTOR'S RESPONSIBILITY. THIS PLAN SHOULD BE USED AS A GUIDE AND REPRESENTS THE MINIMUM EROSION CONTROL DEVICES REQUIRED.
3. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION & SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
4. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL EROSION & SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL EVENT.
5. THE CONTRACTOR SHALL PROVIDE ANY FURTHER EROSION CONTROL MEASURES IN ADDITION TO THOSE LISTED TO ENSURE THAT SILT WILL NOT LEAVE THE PROJECT CONFINES.
6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION & SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED WITH A HEALTHY STAND OF PERMANENT VEGETATION.
7. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AT COMPLETION OF CONSTRUCTION.
8. THE CONTRACTOR SHALL ENSURE THAT ALL DRAINAGE STRUCTURES, FLUMES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
9. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY STABILIZATION AS REQUIRED.
10. THE CONTRACTOR SHALL PROVIDE A TEMPORARY CONSTRUCTION ENTRANCE FOR VEHICULAR TRAFFIC AT LOCATION SHOWN.
11. REFERENCE DETAILS ON THIS SHEET FOR TYPICAL EROSION CONTROL DEVICE INSTALLATION.
12. THE CONTRACTOR WILL BE REQUIRED TO CLEAN THE STREETS OF DEPOSITED MUD AS FREQUENTLY AS NEEDED AS DETERMINED BY THE ENGINEER IN ORDER TO KEEP THEM USABLE AND TO CONTROL DUST.
13. CONTRACTOR IS RESPONSIBLE FOR PHASED INSTALLATION OF EROSION CONTROL BMP'S IN ORDER TO PREVENT SEDIMENT FROM BREACHING THE LIMITS OF DISTURBANCE.
14. INSPECTIONS SHALL BE PERFORMED ONCE WEEKLY OR AFTER 1/2" OF RAINFALL.

FLOOD ZONE

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BENCHMARKS

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Special Review #996 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:
EROSION CONTROL PLAN

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONTRACTOR: R. HALDER
DRAWN BY: B. LANG
SCALE: 1" = 20'
DATE: 12.08.11
DRAWING SHEET: 7 OF 25
C2.2

CITY OF LOVELAND - EROSION CONTROL CONSTRUCTION NOTES

1. THE EROSION CONTROL INSPECTOR MUST BE NOTIFIED AT LEAST TWENTY-FOUR (24) HOURS PRIOR TO ANY CONSTRUCTION ON THIS SITE.
2. THERE SHALL BE NO EARTH-DISTURBING ACTIVITY OUTSIDE THE LIMITS DESIGNATED ON THE ACCEPTED PLANS.
3. ALL REQUIRED PERIMETER SILT AND CONSTRUCTION FENCING SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY (STOCKPILING, STRIPPING, GRADING, ETC). ALL OTHER REQUIRED EROSION CONTROL MEASURES SHALL BE INSTALLED AT THE APPROPRIATE TIME IN THE CONSTRUCTION SEQUENCE AS INDICATED IN THE APPROVED PROJECT SCHEDULE, CONSTRUCTION PLANS, AND EROSION CONTROL REPORT.
4. AT ALL TIMES DURING CONSTRUCTION, THE DEVELOPER SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING ON-SITE EROSION INCLUDING KEEPING THE PROPERTY SUFFICIENTLY WATERED SO AS TO MINIMIZE WIND BLOWN SEDIMENT. THE DEVELOPER SHALL ALSO BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL EROSION CONTROL FACILITIES SHOWN HEREIN.
5. PRE-DISTURBANCE VEGETATION SHALL BE PROTECTED AND RETAINED WHEREVER POSSIBLE. REMOVAL OR DISTURBANCE OF EXISTING VEGETATION SHALL BE LIMITED TO THE AREA(S) REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS, AND FOR THE SHORTEST PRACTICAL PERIOD OF TIME.
6. ALL SOILS EXPOSED DURING LAND DISTURBING ACTIVITY (STRIPPING, GRADING, UTILITY INSTALLATIONS, STOCKPILING, FILLING, ETC.) SHALL BE KEPT IN A ROUGHENED CONDITION BY RIPPING OR DISKING ALONG LAND CONTOURS UNTIL MULCH, VEGETATION, OR OTHER PERMANENT EROSION CONTROL BMPS ARE INSTALLED. NO SOILS IN AREAS OUTSIDE PROJECT STREET RIGHTS-OF-WAY SHALL REMAIN EXPOSED BY LAND DISTURBING ACTIVITY FOR MORE THAN THIRTY (30) DAYS BEFORE REQUIRED TEMPORARY OR PERMANENT EROSION CONTROL (E.G. SEED/MULCH, LANDSCAPING, ETC.) IS INSTALLED, UNLESS OTHERWISE APPROVED BY THE LOCAL ENTITY.
7. IN ORDER TO MINIMIZE EROSION POTENTIAL, ALL TEMPORARY (STRUCTURAL) EROSION CONTROL MEASURES SHALL:
   - A. BE INSPECTED AT A MINIMUM OF ONCE EVERY TWO (2) WEEKS AND AFTER EACH SIGNIFICANT STORM EVENT AND REPAIRED OR RECONSTRUCTED AS NECESSARY IN ORDER TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
   - B. REMAIN IN PLACE UNTIL SUCH TIME AS ALL THE SURROUNDING DISTURBED AREAS ARE SUFFICIENTLY STABILIZED AS DETERMINED BY THE EROSION CONTROL INSPECTOR.
   - C. BE REMOVED AFTER THE SITE HAS BEEN SUFFICIENTLY STABILIZED AS DETERMINED BY THE EROSION CONTROL INSPECTOR.
8. WHEN TEMPORARY EROSION CONTROL MEASURES ARE REMOVED, THE DEVELOPER SHALL BE RESPONSIBLE FOR THE CLEAN UP AND REMOVAL OF ALL SEDIMENT AND DEBRIS FROM ALL DRAINAGE INFRASTRUCTURE AND OTHER PUBLIC FACILITIES.
9. THE CONTRACTOR SHALL CLEAN UP ANY INADVERTENT DEPOSITED MATERIAL IMMEDIATELY AND MAKE SURE STREETS ARE FREE OF ALL MATERIALS BY THE END OF EACH WORKING DAY.
10. ALL RETAINED SEDIMENTS, PARTICULARLY THOSE ON PAVED ROADWAY SURFACES, SHALL BE REMOVED AND DISPOSED OF IN A MANNER AND LOCATION SO AS NOT TO CAUSE THEIR RELEASE INTO ANY WATERS OF THE UNITED STATES.
11. NO SOIL STOCKPILE SHALL EXCEED TEN (10) FEET IN HEIGHT. ALL SOIL STOCKPILES SHALL BE PROTECTED FROM SEDIMENT TRANSPORT BY SURFACE ROUGHENING, WATERING, AND PERIMETER SILT FENCING. ANY SOIL STOCKPILE REMAINING AFTER THIRTY (30) DAYS SHALL BE SEEDED AND MULCHED.
12. THE STORMWATER VOLUME CAPACITY OF DETENTION PONDS WILL BE RESTORED AND STORM SEWER LINES WILL BE CLEANED UPON COMPLETION OF THE PROJECT AND BEFORE TURNING THE MAINTENANCE OVER TO THE LOCAL ENTITY OR HOMEOWNERS ASSOCIATION (HOA).
13. CITY ORDINANCE AND COLORADO DISCHARGE PERMIT SYSTEM (CDPS) REQUIREMENTS MAKE IT UNLAWFUL TO DISCHARGE OR ALLOW THE DISCHARGE OF ANY POLLUTANT OR CONTAMINATED WATER FROM CONSTRUCTION SITES. POLLUTANTS INCLUDE, BUT ARE NOT LIMITED TO DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, OIL AND GAS PRODUCTS, LITTER, AND SANITARY WASTE. THE DEVELOPER SHALL AT ALL TIMES TAKE WHATEVER MEASURES ARE NECESSARY TO ASSURE THE PROPER CONTAINMENT AND DISPOSAL OF POLLUTANTS ON THE SITE IN ACCORDANCE WITH ANY AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
14. A DESIGNATED AREA SHALL BE PROVIDED ON SITE FOR CONCRETE TRUCK CHUTE WASHOUT. THE AREA SHALL BE CONSTRUCTED SO AS TO CONTAIN WASHOUT MATERIAL AND LOCATED AT LEAST FIFTY (50) FEET AWAY FROM ANY WATERWAY DURING CONSTRUCTION. UPON COMPLETION OF CONSTRUCTION ACTIVITIES THE CONCRETE WASHOUT MATERIAL WILL BE REMOVED AND PROPERLY DISPOSED OF PRIOR TO THE AREA BEING RESTORED.
15. TO ENSURE THAT SEDIMENT DOES NOT MOVE OFF OF INDIVIDUAL LOTS ONE OR MORE OF THE FOLLOWING SEDIMENT/EROSION CONTROL BMPS SHALL BE INSTALLED AND MAINTAINED UNTIL THE LOTS ARE SUFFICIENTLY STABILIZED, AS DETERMINED BY THE EROSION CONTROL INSPECTOR. (WITHIN LOVELAND GMA AND CITY LIMITS ONLY).
   - A. BELOW ALL GUTTER DOWNSPOUTS.
   - B. OUT TO DRAINAGE SWALES.
   - C. ALONG LOT PERIMETER.
   - D. OTHER LOCATIONS, IF NEEDED.
16. CONDITIONS IN THE FIELD MAY WARRANT EROSION CONTROL MEASURES IN ADDITION TO WHAT IS SHOWN ON THESE PLANS. THE DEVELOPER SHALL IMPLEMENT WHATEVER MEASURES ARE DETERMINED NECESSARY, AS DIRECTED BY THE CITY/COUNTY.
17. A VEHICLE TRACKING CONTROL PAD SHALL BE INSTALLED WHEN NEEDED FOR CONSTRUCTION EQUIPMENT, INCLUDING BUT NOT LIMITED TO PERSONAL VEHICLES EXITING EXISTING ROADWAYS. NO EARTHEN MATERIALS, I.E. STONE, DIRT, ETC. SHALL BE PLACED IN THE CURB & GUTTER OR ROADWAY AS A RAMP TO ACCESS TEMPORARY STOCKPILES, STAGING AREAS, CONSTRUCTION MATERIALS, CONCRETE WASHOUT AREAS, AND/OR BUILDING SITES.
18. ADD NOTES TO REFLECT THE STORMWATER RUNOFF CONTROL PLAN OF THE INDIVIDUAL DEVELOPMENT.

CITY OF LOVELAND - STORMWATER QUALITY ENFORCEMENT POLICY

INSPECTIONS

SITE INSPECTIONS ARE TO BE PERFORMED BY THE DEVELOPER'S DESIGNATED STORMWATER MANAGEMENT PLAN (SWMP) ADMINISTRATOR HEREINAFTER REFERRED TO AS THE SWMP ADMINISTRATOR' AT A MINIMUM OF ONCE EVERY FOURTEEN (14) CALENDAR DAYS ON ACTIVE CONSTRUCTION SITES; AFTER A SIGNIFICANT STORM EVENT; AND MONTHLY TO MONITOR REVEGETATION.

THESE INSPECTIONS DO NOT NEED TO BE CALLED IN FOR SCHEDULING, AS WITH BUILDING INSPECTIONS. IT IS REQUIRED THAT THE SWMP ADMINISTRATOR ALSO PERFORMS ROUTINE INSPECTIONS TO EFFECTIVELY ADDRESS MAINTENANCE AND REPAIR OF BEST MANAGEMENT PRACTICES (BMPS). AS PART OF THE SITE INSPECTIONS THE SWMP ADMINISTRATOR WILL FILL OUT AN EROSION AND SEDIMENT CONTROL INSPECTION LIST (ESCIL) AND SUBMIT IT TO THE CITY OF LOVELAND.

TO ENABLE EFFECTIVE COMMUNICATION AND QUICK RESPONSE TO ANY STORMWATER QUALITY CONTROL DEFICIENCIES, THE CITY ENCOURAGES THE SWMP ADMINISTRATOR TO PARTICIPATE IN INSPECTIONS WITH THE CITY'S INSPECTOR WHENEVER THE CITY INSPECTOR PERFORMS AN INSPECTION OF THE DEVELOPMENT SITE.

COMPLIANCE

ANY MAINTENANCE, REPAIR OR INSTALLATIONS OF BMPS THAT ARE NOTED DURING THE INSPECTIONS BY THE SWMP ADMINISTRATOR AND/OR CITY INSPECTOR MUST BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS FROM THE DATE OF THE INSPECTION.

THE FOLLOWING OUTLINES TYPICAL NON-COMPLIANCE ISSUES AND POSSIBLE ENFORCEMENT ACTIONS. FOR MORE DETAILED INFORMATION, PLEASE REFER TO MUNICIPAL CODE CHAPTER 13.20.

NON-COMPLIANCE ISSUES

- FAILURE TO OBTAIN A CITY OF LOVELAND (COL) STORMWATER QUALITY PERMIT.
- FAILURE TO OBTAIN A STATE STORMWATER DISCHARGE PERMIT (SDP) FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH & ENVIRONMENT (CDPHE) WATER QUALITY CONTROL DIVISION IF THE PROJECT IS GREATER THAN OR EQUAL TO ONE (1) ACRE (OR IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE THAT WILL DISTURB AT LEAST ONE (1) ACRE).
- FAILURE TO OBTAIN A STATE FUGITIVE DUST CONTROL PERMIT IF THE PROJECT IS GREATER THAN OR EQUAL TO TWENTY-FIVE (25) ACRES OR TAKES MORE THAN SIX (6) MONTHS TO COMPLETE.
- FAILURE TO OBTAIN A STATE FUGITIVE DUST CONTROL PERMIT IF REQUIRED BY THE STATE FOR A PROJECT THAT IS LESS THAN TWENTY-FIVE (25) ACRES, AND LESS THAN SIX (6) MONTHS IN DURATION BUT MORE THAN ONE (1) ACRE IN NON-ATTAINMENT AREAS OR MORE THAN FIVE (5) ACRES IN ATTAINMENT AREAS.
- FAILURE TO OBTAIN A STATE ARMY CORPS OF ENGINEERS (COE) 401/404 PERMIT IF REQUIRED.
- FAILURE TO OBTAIN A STATE CONSTRUCTION DEWATERING INDUSTRIAL WASTEWATER DISCHARGE PERMIT IF REQUIRED.
- FAILURE TO ABIDE BY THE CONDITIONS OF THE CITY OF LOVELAND STORMWATER QUALITY, CDPHE FUGITIVE DUST, COE 401/404, CDPHE DEWATERING OR CDPHE STORMWATER DISCHARGE PERMITS.
- FAILURE TO PROPERLY INSTALL, MAINTAIN, AND/OR REPLACE TEMPORARY BMPS WITHIN SEVEN (7) CALENDAR DAYS OF SUCH ITEMS BEING NOTED DURING AN INSPECTION.
- FAILURE TO REMOVE TEMPORARY BMPS WITHIN FOURTEEN (14) CALENDAR DAYS OF SUCH ITEMS BEING NOTED DURING AN INSPECTION.
- FAILURE TO IMPLEMENT THE CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN (CSSMP).
- FAILURE TO MODIFY THE CSSMP TO REFLECT FIELD CHANGES.
- DIRECT DISCHARGE OF POLLUTANT(S) INTO A WATERWAY, JURISDICTIONAL WETLAND OR A STORM SEWER SYSTEM.
- WORK BEYOND LIMIT(S) OF PERMIT AREA.

ENFORCEMENT ACTIONS

- IF SITE CONDITIONS ARE FOUND TO BE IN VIOLATION OF THE STORMWATER QUALITY PERMIT OR ANY OTHER REQUIREMENTS SET FOURTH IN CHAPTER 13.20 OF THE MUNICIPAL CODE DURING AN INSPECTION BY THE CITY INSPECTOR, ONE OR ALL OF THE FOLLOWING ACTIONS MAY BE TAKEN:
- VERBAL WARNING.
- WRITTEN COMPLIANCE ORDER.
- REVOCATION OF PERMIT(S).
- DENIAL OF FURTHER REVIEW OR FUTURE INSPECTIONS AND/OR PERMITS.
- STOP WORK ORDER.
- HIRING A PRIVATE CONTRACTOR AND/OR CITY CREW TO PERFORM WORK - COST OF WORK WILL BE DEDUCTED FROM THE PERFORMANCE SECURITY COLLECTED AT PERMIT ISSUANCE.

PRIORITY VIOLATIONS

MAY INCLUDE: WORKING WITHOUT A PERMIT; WORKING BEYOND THE LIMITS OF THE PERMITTED AREA; THE DISCHARGE OF CONTAMINATED WATER INTO THE STORM SEWER SYSTEM; THE DISCHARGE OF CONTAMINATED WATER INTO A WATERWAY; THE WASHING OF A ROADWAY INTO A STORM DRAIN INLET; THE WASHING OF CONCRETE TRUCKS IN UNAPPROVED LOCATIONS, AND; THE FAILURE TO CORRECT ROUTINE VIOLATIONS.

THE FAILURE TO MEET THE COMPLIANCE DEADLINE ISSUED FOR PRIORITY VIOLATIONS WILL RESULT IN: A WRITTEN NOTICE DETAILING NON-COMPLIANT ITEMS AND A COMPLIANCE DATE PROVIDED TO THE OWNER; THE REVOCATION OF PERMIT(S); THE DENIAL OF FURTHER REVIEW OR FUTURE BUILDING INSPECTIONS AND/OR PERMITS; THE ISSUANCE OF A STOP WORK ORDER, OR; THE HIRING OF A PRIVATE CONTRACTOR AND/OR CITY CREW TO PERFORM THE WORK.

ROUTINE VIOLATIONS

MAY INCLUDE: THE FAILURE TO ABIDE BY THE CONDITIONS OF THE STORMWATER QUALITY PERMIT; THE FAILURE TO PROPERLY INSTALL, MAINTAIN AND/OR REPLACE TEMPORARY SEDIMENT/EROSION CONTROL BMP'S, AND; THE FAILURE TO REMOVE AND PROPERLY DISPOSE OF TEMPORARY SEDIMENT/EROSION CONTROL BMPS WHEN THEY ARE NO LONGER NEEDED.

THE FAILURE TO MEET THE COMPLIANCE DEADLINE ISSUED FOR ROUTINE VIOLATIONS WILL RESULT IN: A WRITTEN NOTICE DETAILING NON-COMPLIANT ITEMS AND A COMPLIANCE DATE PROVIDED TO THE OWNER; THE REVOCATION OF PERMITS; THE DENIAL OF FURTHER REVIEW OR FUTURE BUILDING INSPECTIONS AND/OR PERMITS; THE ISSUANCE OF A STOP WORK ORDER, OR; THE HIRING OF A PRIVATE CONTRACTOR AND/OR CITY CREW TO PERFORM THE WORK.

RIGHT OF ENTRY

THE CITY INSPECTOR MAY, WHERE REASONABLE CAUSE EXISTS, WITH OR WITHOUT A WARRANT ISSUED BY A COURT OF COMPETENT JURISDICTION AND WHERE THE CITY HAS GIVEN VERBAL NOTICE TO THE LANDOWNER(S), OR SUCH OWNER'S AGENT(S) OR REPRESENTATIVE(S) IS/ARE IMMEDIATELY ACCESSIBLE, ENTER UPON ANY PROPERTY OR SITE FOR EXAMINATION OF THE SAME TO ASCERTAIN WHETHER A VIOLATION OF THE REQUIREMENTS OF THIS CHAPTER EXISTS, AND SHALL BE EXEMPT FROM ANY LEGAL ACTION OR LIABILITY ON ACCOUNT THEREOF. THE CITY WILL VERBALLY COMMUNICATE A FINDINGS SUMMARY OF SUCH INSPECTION AT THE CONCLUSION OF THE INSPECTION TO THE SWMP ADMINISTRATOR AND/OR OPERATOR. THE CITY WILL PROVIDE WRITTEN COMMUNICATION OF A FINDINGS SUMMARY OF SUCH INSPECTION WITHIN THIRTY (30) DAYS OF SUCH INSPECTION TO THE LEGAL ADDRESS OF THE NON-COMPLIANT SITE.

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Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:

EROSION CONTROL NOTES

REVISIONS

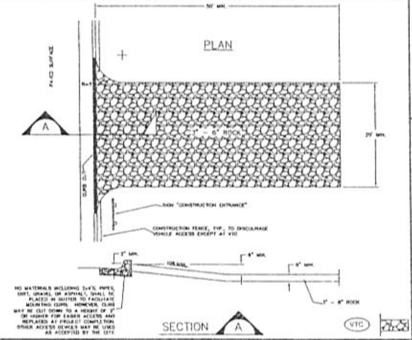
DEPARTMENT:	STORE DEVELOPMENT
CONSTRUCTION:	R. HALDER
DRAWN BY:	B. LANG
SCALE:	1" = 20'
DATE:	1.18.12
DRAWING SHEET:	8 OF 25
	C2.3

INSTALLATION NOTES:

1. VEHICLE TRACKING CONTROL PAD SHALL BE LOCATED AT EVERY ACCESS POINT TO THE CONSTRUCTION SITE.
2. A SIGN SHALL BE PLACED NEXT TO THE VEHICLE TRACKING CONTROL PAD TO DESIGNATE THE LOCATION AS THE CONSTRUCTION ENTRANCE/EXIT.
3. VEHICLE TRACKING CONTROL PADS SHALL CONSIST OF HARD, DENSE, DURABLE STONE, ANGULAR IN SHAPE AND RESISTANT TO WEATHERING. ROUNDED STONE (I.e. RIVER ROCK AND COBBLES) SHALL NOT BE USED. THE STONES SHALL BE A MINIMUM OF 3" AND A MAXIMUM OF 6" DIAMETER. THE STONES SHALL HAVE A SPECIFIC GRAVITY OF AT LEAST 2.6. CONTROL OF GRADATION WILL BE BY VISUAL INSPECTION.
4. ANY CRACKED OR DAMAGED CURB AND GUTTER AND SIDEWALK SHALL BE REPLACED BY CONTRACTOR.
5. ALTHOUGH NOT NORMALLY USED, THE CITY RESERVES THE RIGHT TO REQUIRE VEHICLE TRACKING CONTROL WITH A TEMPORARY CATTLE GUARD AND/OR WHEEL WASH FACILITIES AT SITES WHERE TRACKING ONTO PAVED AREAS BECOMES A SIGNIFICANT PROBLEM AS DETERMINED BY THE CITY INSPECTOR.
6. IF VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES ARE REQUIRED, ALL WHEELS ON EVERY VEHICLE LEAVING THE SITE SHALL BE CLEANED OF MUD USING A PRESSURE-WASHER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A WATER SOURCE AND CONSTRUCTING A WASHWATER SEDIMENT TRAP.

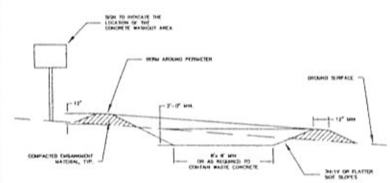
MAINTENANCE NOTES:

1. CONTRACTOR SHALL INSPECT VEHICLE TRACKING CONTROL PAD DAILY. ROCK SURFACE SHALL BE CLEAN AND LOOSE ENOUGH TO RUT SLIGHTLY UNDER WHEEL LOADS AND CAUSE LOOSE ROCK TO DISLODGE MUD FROM TIRES. WHEN ROCK BECOMES COMPACTED OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONTRACTOR SHALL RIP, TURN OVER, OR OTHERWISE LOOSEN ROCK, PLACE ADDITIONAL NEW ROCK, OR REPLACE WITH NEW ROCK AS NECESSARY TO RESTORE EFFECTIVENESS.
2. SEDIMENT AND OTHER MATERIAL SPILLED, DROPPED OR TRACKED ONTO PAVED SURFACES SHALL BE REMOVED IMMEDIATELY OR BY THE END OF EACH WORKING DAY.
3. VEHICLE TRACKING CONTROL PAD SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE AREA SHOULD BE TOPSOILED, SEEDED, CRIMPED, AND MULCHED OR OTHERWISE STABILIZED.
4. IF VEHICLE WHEEL WASH FACILITIES ARE REQUIRED, CONTRACTOR SHALL INSPECT VEHICLE TRACKING CONTROL AND WHEEL WASH FACILITIES DAILY. ACCUMULATED SEDIMENTS SHALL BE REMOVED FROM THE PAD SURFACE.
5. ACCUMULATED SEDIMENT IN THE WASHWATER/SEDIMENT TRAP SHALL BE REMOVED WHEN THE SEDIMENT REACHES AN AVERAGE DEPTH OF 12-INCHES.



VEHICLE TRACKING CONTROL PAD (VTC)

CITY OF LOVELAND PUBLIC WORKS DEPT. STORMWATER	STORMWATER CONSTRUCTION DRAWINGS	APPROVED: KWG DATE: 8/17/07 DRAWN BY: TBK	DRAWING SW-15



NOTES:

1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. VEHICLE TRACKING CONTROL (DETAIL SW-14) IS REQUIRED IF ACCESS TO CONCRETE WASHOUT AREA IS OFF PAVEMENT.
3. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
4. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
5. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN ACCEPTED WASTE SITE.
6. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, THE DISTURBED AREA SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.

CONCRETE WASHOUT AREA (CWA)

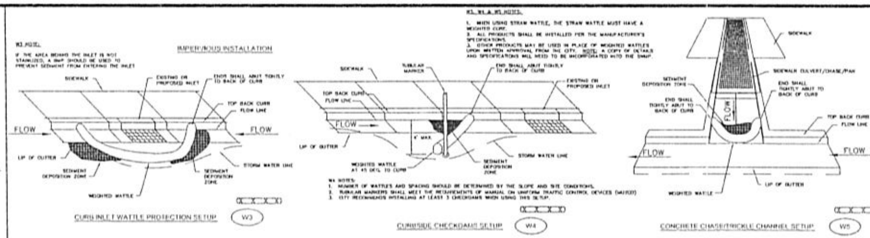
CITY OF LOVELAND PUBLIC WORKS DEPT. STORMWATER	STORMWATER CONSTRUCTION DRAWINGS	APPROVED: KWG DATE: 8/17/07 DRAWN BY: TBK	DRAWING SW-17

W3 NOTE:

IF THE AREA BEHIND THE INLET IS NOT STABILIZED, A BMP SHOULD BE USED TO PREVENT SEDIMENT FROM ENTERING THE INLET.

W3, W4 & W5 NOTES:

1. WHEN USING STRAW WATTLE, THE STRAW WATTLE MUST HAVE A WEIGHTED CORE.
2. ALL PRODUCTS SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
3. OTHER PRODUCTS MAY BE USED IN PLACE OF WEIGHTED WATTLES UPON WRITTEN APPROVAL FROM THE CITY. NOTE: A COPY OF DETAILS AND SPECIFICATIONS WILL NEED TO BE INCORPORATED INTO THE SWMP.



W4 NOTES:

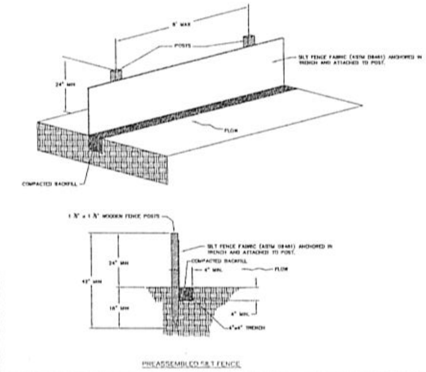
1. NUMBER OF WATTLES AND SPACING SHOULD BE DETERMINED BY THE SLOPE AND SITE CONDITIONS.
2. TUBULAR MARKERS SHALL MEET THE REQUIREMENTS OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
3. CITY RECOMMENDS INSTALLING AT LEAST 3 CHECKDAMS WHEN USING THIS SETUP.

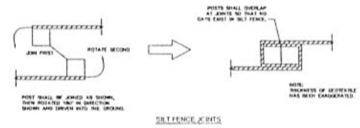
WATTLE MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL INSPECT WATTLES EVERY TWO WEEKS AND AFTER ANY SIGNIFICANT STORM EVENT AND MAKE REPAIRS OR REMOVE SEDIMENT ACCUMULATED BEHIND WATTLE AS NECESSARY.
2. SEDIMENT ACCUMULATED BEHIND WATTLE SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DIAMETER OF THE WATTLE.
3. WATTLES SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND IS ACCEPTED BY THE CITY.

WATTLE INSTALLATION (W)

CITY OF LOVELAND PUBLIC WORKS DEPT. STORMWATER	STORMWATER CONSTRUCTION DRAWINGS	APPROVED: KWG DATE: 4/23/09 DRAWN BY: TBK	DRAWING SW-13





POST SHALL BE JOINED AS SHOWN, THEN ROTATED 180° IN DIRECTION SHOWN AND DRIVEN INTO THE GROUND.

NOTE: THICKNESS OF GEOTEXTILE HAS BEEN EXAGGERATED.

SILT FENCE JOINTS

INSTALLATION NOTES:

1. DRIVE POSTS VERTICALLY INTO THE GROUND TO A MINIMUM DEPTH OF 18".
2. EXCAVATE A TRENCH APPROXIMATELY 4" WIDE AND 4" DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
3. ANCHOR TRENCH SHALL BE EXCAVATED BY HAND, WITH TRENCHER, OR WITH SILT FENCE INSTALLATION MACHINE. NO ROAD GRADERS, BACKHOES, ETC. SHALL BE USED.
4. NOT LESS THAN THE BOTTOM 1' OF THE SILT FENCE FABRIC SHALL BE BURIED IN THE TRENCH.
5. THE TRENCH SHALL BE COMPACTED BY HAND, WITH "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT THE SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
6. SILT FENCE INDICATED IN THE PLANS SHALL BE INSTALLED PRIOR TO ANY LAND-DISTURBING ACTIVITIES.
7. USE WOOD POSTS OR OTHER MATERIAL AS ACCEPTED BY THE CITY.

MAINTENANCE NOTES:

1. THE CONTRACTOR SHALL INSPECT SILT FENCE EVERY TWO WEEKS AND AFTER SIGNIFICANT STORM EVENTS AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM SEDIMENT REACHES A DEPTH OF 6".
3. SILT FENCE SHALL BE REMOVED WHEN THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE CITY. IF ANY DISTURBED AREA EXISTS AFTER REMOVAL, IT SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER ACCEPTED BY THE CITY.

SILT FENCE (SF)

CITY OF LOVELAND PUBLIC WORKS DEPT. STORMWATER	STORMWATER CONSTRUCTION DRAWINGS	APPROVED: KWG DATE: 8/17/07 DRAWN BY: TBK	DRAWING SW-10

OLSSON ASSOCIATES
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KUM & GO, L.C.

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FAX-515-223-9873

Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:

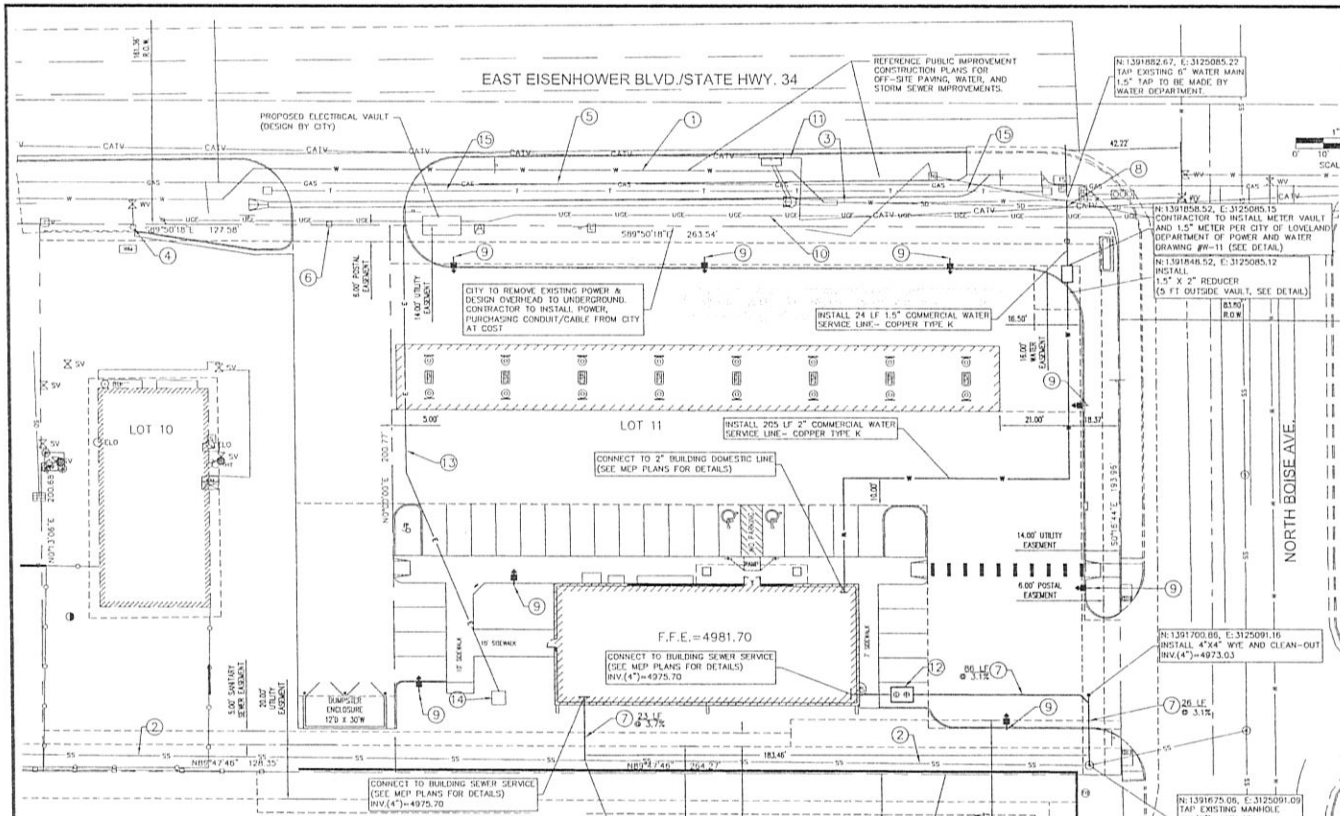
EROSION CONTROL DETAILS

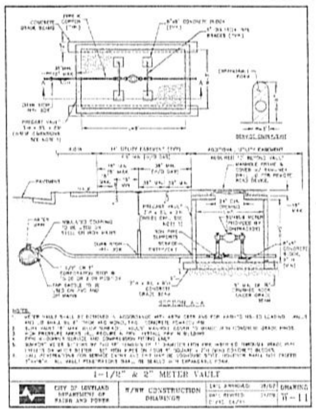
REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: B. LANG
SCALE: N/A
DATE: 1.18.12
DRAWING SHEET: 9 OF 25
C2.4

NOTE:
THIS DOCUMENT HAS BEEN RELEASED BY OLSSON ASSOCIATES FOR REVIEW BY REGULATORY AGENCIES AND OTHER PROFESSIONALS, AND IS SUBJECT TO CHANGE. THIS DOCUMENT IS NOT TO BE USED FOR CONSTRUCTION.

DWG: F:\Projects\010-2390_LDWP\Final_Plans\102390_EROS.dwg USER: blang
DATE: Jan 18, 2012 1:32pm XREFS: 102390_PBASE 102390_XBASE





FIRE FLOW DATA	
EXISTING HYDRANT LOCATED AT 1805 TOPAZ DR.	
STATIC PRESSURE	92 PSI
RESIDUAL PRESSURE	78 PSI @ 1404 GPM
FIRE FLOW*	3400 GPM @ 20 PSI

* THE RESULTING FIRE FLOW SHALL NOT BE LESS THAN 1500 GPM

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1" = 20'
0' 10' 20' 40'
SCALE IN FEET

GENERAL NOTES:

1. BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES AT POINTS OF CONNECTION PRIOR TO BEGINNING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE OWNER'S AGENT IMMEDIATELY. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
2. ALL UTILITIES DESIGNED ON THIS PLAN SHALL CONCLUDE 5 FEET FROM BUILDING FACE, SEE MEP PLANS FOR CONTINUATION, VERIFY ELEVATIONS PRIOR TO CONSTRUCTION.
3. A REASONABLE EFFORT HAS BEEN MADE TO PROVIDE THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CALL COLORADO ONE CALL 811 OR (800.922.1987). CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
4. THE OWNER SHALL BE SOLELY RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL LANDSCAPE THAT MAY BE DISTURBED, REMOVED, OR DAMAGED AS A RESULT OF INSTALLATION, MAINTENANCE, OR REMOVAL OF UTILITIES IN THE EXISTING CITY OF LOVELAND SANITARY SEWER EASEMENTS ALONG THE SOUTH PROPERTY LINE. ALL LANDSCAPE SHALL BE REPLACED WITH EQUIVALENT PLANTS OR OTHER IMPROVEMENTS WHICH SATISFY THE SAME INTENT, AND IN A MANNER THAT IS APPROVED BY THE CURRENT PLANNING MANAGER

WATER SERVICE NOTES:

1. WATER SERVICE CONSTRUCTION SHALL COMPLY WITH LOCAL STANDARDS.
2. THE MINIMUM DEPTH FOR ALL WATER PIPE SHALL BE FIVE (5) FEET AS MEASURED FROM TOP OF PIPE TO GROUND LINE.
3. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE DEVELOPER SHALL NOTIFY THE DEPARTMENT OF WATER AND POWER (970-962-3000) AT LEAST 2 WORKING DAYS PRIOR TO THE START OF ANY WATER AND/OR WASTEWATER SYSTEM IMPROVEMENT.

SANITARY SEWER SERVICE NOTES

1. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM ALL APPLICABLE AGENCIES. THE DEVELOPER SHALL NOTIFY THE DEPARTMENT OF WATER AND POWER (970-962-3000) AT LEAST 2 WORKING DAYS PRIOR TO THE START OF ANY WATER AND/OR WASTEWATER SYSTEM IMPROVEMENT.
2. CONTRACTOR TO FIELD VERIFY SANITARY SERVICE SIZE AND ELEVATION. IF CONTRACTOR IS UNABLE TO OBTAIN A 2% SLOPE MINIMUM FOR SANITARY, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. CONTRACTOR SHALL NOT EXCEED 10% SLOPE UNLESS APPROVED BY JURISDICTIONAL ENGINEER.

FLAG NOTES

(1) PROPOSED 6" PVC WATER MAIN
(2) EXISTING 8" SANITARY SEWER
(3) EXISTING STORM SEWER
(4) EXISTING FIRE HYDRANT
(5) EXISTING GAS LINE
(6) POWER POLE TO BE REMOVED CONTRACTOR TO COORDINATE WITH APPROPRIATE UTILITY COMPANY. (DESIGN BY CITY)
(7) PROPOSED 4" PVC SANITARY SERVICE
(8) PROPOSED UTILITY CROSSING
(9) PROPOSED LIGHT POLE LOCATION (SEE ELECTRICAL DRAWINGS FOR LINE ROUTING)
(10) RELOCATED UNDER GROUND ELECTRICAL LINES, (SEE CITY OF LOVELAND DEPT. OF WATER AND POWER PLANS)
(11) EXISTING UNDERGROUND CABLE LINE
(12) PROPOSED 1000 GALLON GREASE INTERCEPTOR WITH SAMPLE PORT
(13) PROPOSED ELECTRICAL SERVICE. CONTRACTOR TO COORDINATE WITH APPROPRIATE UTILITY COMPANY.
(14) PROPOSED TRANSFORMER LOCATION. CONTRACTOR TO COORDINATE EXACT SIZE AND LOCATION WITH APPROPRIATE UTILITY COMPANY. (SEE ELECTRICAL PLAN FOR SECONDARY ELECTRICAL SERVICE ROUTING)
(15) PROPOSED OFF SITE TRAFFIC CONTROL CONDUIT. (SEE PUBLIC IMPROVEMENT CONSTRUCTION PLANS FOR DETAILS)

LEGEND

BOUNDARY LINE
ROAD CENTERLINE
GAS LINE
SANITARY SEWER LINE
STORM SEWER LINE
OVERHEAD POWER
UNDERGROUND POWER
WATER LINE
UNDERGROUND COMMUNICATION LINE
CONCRETE CURB & GUTTER
CONCRETE PAVEMENT
ASPHALT PAVEMENT
CONCRETE SIDEWALK
BUILDING ENVELOPE
MAJOR CONTOUR
MINOR CONTOUR
TRAFFIC SIGNAL PSB
TRAFFIC SIGNAL MANHOLE
LIGHT POLE
POWER POLE
POWER POLE WITH LIGHT
GAS MANHOLE
GAS RISER
SANITARY SEWER CLEANOUT
SANITARY SEWER MANHOLE
ELECTRICAL MANHOLE

ELECTRIC BOX
ELECTRIC VAULT
ELECTRIC METER
ELECTRIC RISER
AIR CONDITIONER UNIT
CABLE VAULT
TELEVISION BOX
TELEPHONE RISER
SPRINKLER BOX
TELEPHONE CABINET
TELEPHONE RISER
TRANSFORMER
STORM SEWER MANHOLE
STORM CURB INLETS
STORM AREA INLETS
WATER MANHOLE
FIRE HYDRANT
WATER VALVE
GAS VALVE
VENT PIPE
MONITORING WELL
PULL BOX
SIGN
BOLLARD
GUY WIRE
WATER SERVICE VALVE

OLSSON ASSOCIATES

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FAX-515-223-9873

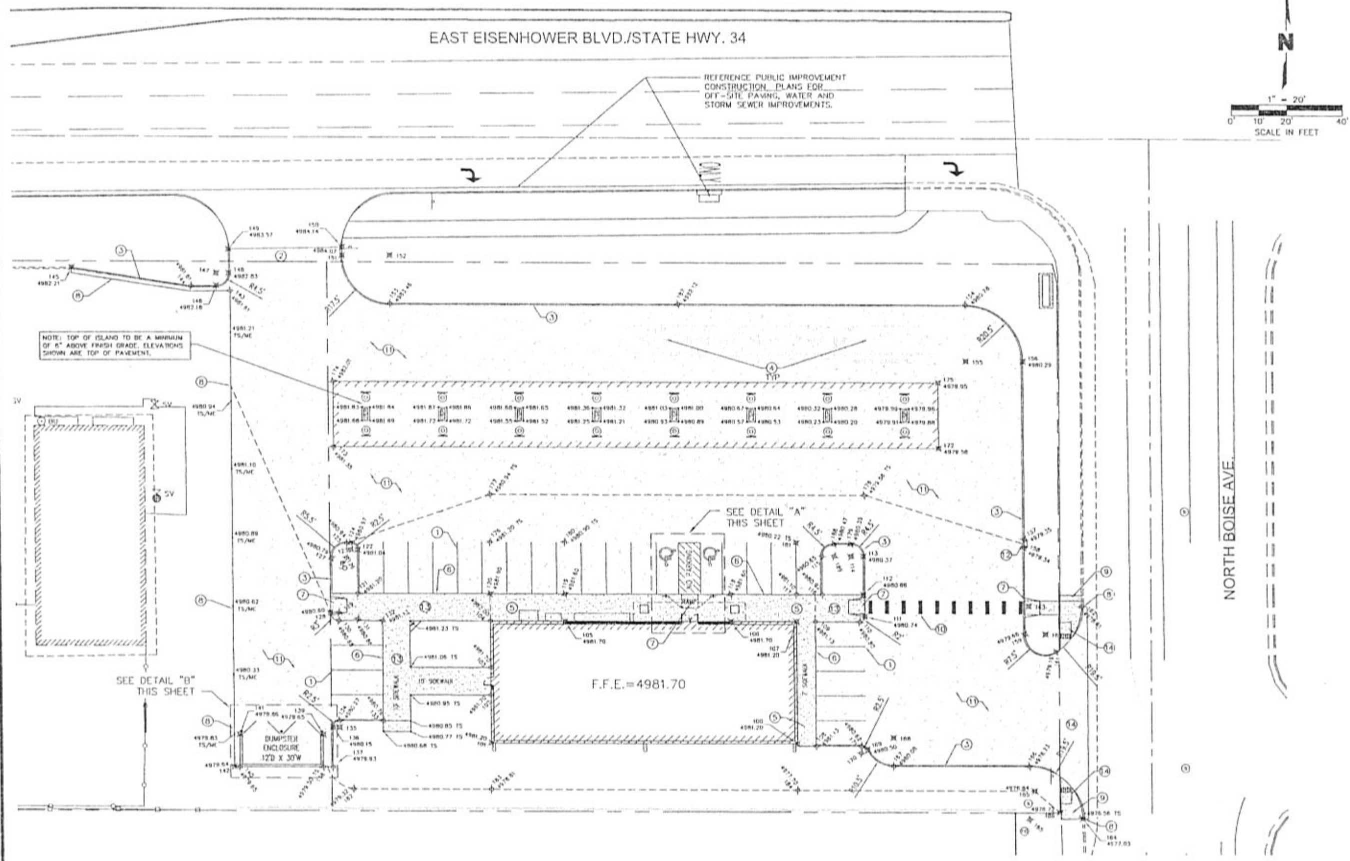
Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

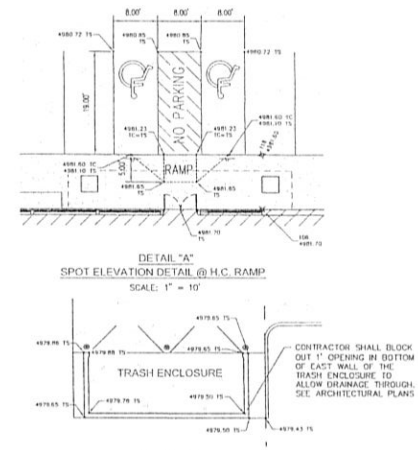
DRAWING INFORMATION:

UTILITY PLAN

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: B. LANG
SCALE: 1" = 20'
DATE: 1.18.12
DRAWING SHEET: 10 OF 25 C3.1





DETAIL "A"
SPOT ELEVATION DETAIL @ H.C. RAMP
SCALE: 1" = 10'

DETAIL "B"
SPOT ELEVATION @ TRASH ENCLOSURE
SCALE: 1" = 10'

POINT COORDINATE TABLE

PT. NO.	NORTHING	EASTING	DESC
100	1391698.92	3125007.93	BLDG
101	1391697.24	3124896.93	BLDG
102	1391714.90	3124896.98	BLDG
103	1391724.90	3124897.01	BLDG
104	1391741.90	3124897.06	BLDG
105	1391741.83	3124924.06	BLDG
106	1391741.66	3124984.06	BLDG
107	1391741.59	3125008.06	BLDG
108	1391698.07	3125014.93	BOC
109	1391741.57	3125015.06	BOC
110	1391741.53	3125031.06	PC
111	1391743.52	3125033.06	PT
112	1391751.52	3125032.59	BOC
113	1391765.52	3125032.63	PC
114	1391765.53	3125028.13	R3.0'
115	1391765.56	3125017.63	PT
116	1391751.56	3125017.59	BOC
117	1391751.59	3125008.09	BOC
118	1391751.66	3124984.09	BOC
119	1391751.83	3124924.09	BOC
120	1391751.90	3124897.09	BOC/HP
121	1391752.04	3124848.59	BOC
122	1391768.04	3124848.64	PC
123	1391768.05	3124846.14	R2.5'
124	1391770.55	3124846.14	PT
125	1391770.55	3124844.64	PC
126	1391765.05	3124844.63	R5.5'
127	1391765.07	3124839.13	PT
128	1391745.07	3124838.57	PC
129	1391745.06	3124841.57	R2.5'
130	1391742.06	3124841.56	PT
131	1391742.54	3124848.56	BOC
132	1391742.02	3124857.56	BOC
133	1391705.52	3124857.46	BOC
134	1391705.56	3124841.46	PC
135	1391703.06	3124841.45	R2.5'
136	1391703.07	3124838.95	PT
137	1391688.47	3124838.91	BOC/LP
138	1391688.48	3124835.41	BLDG
139	1391700.48	3124835.44	BLDG
140	1391688.56	3124805.40	BLDG
141	1391700.56	3124805.44	BLDG
142	1391688.57	3124803.47	EOP
143	1391862.65	3124803.47	EOP/ME
144	1391864.42	3124789.36	BOC
145	1391871.11	3124745.90	BOC/ME

POINT COORDINATE TABLE

PT. NO.	NORTHING	EASTING	DESC
146	1391864.57	3124798.54	PC
147	1391869.07	3124798.47	R4.5'
148	1391869.07	3124802.97	PT
149	1391877.86	3124802.97	BOC
150	1391878.64	3124843.97	BOC
151	1391875.65	3124843.97	PC
152	1391875.65	3124861.47	R17.5'
153	1391858.15	3124861.42	PT
154	1391857.56	3125070.39	PC
155	1391837.06	3125070.33	R20.5'
156	1391837.01	3125090.83	PT
157	1391771.66	3125090.65	BOC/LP
158	1391768.88	3125090.64	BOC/LP
159	1391737.05	3125090.55	PC
160	1391737.03	3125098.05	R7.5'
161	1391730.55	3125101.82	PT/PC
162	1391747.28	3125111.50	BC/ME
163	1391747.40	3125092.00	R19.5'
164	1391669.40	3125111.14	BOC/ME
165	1391669.05	3125091.64	R19.5'
166	1391688.55	3125091.70	PT
167	1391688.68	3125042.91	PC
168	1391699.18	3125042.94	R10.5'
169	1391694.61	3125033.49	PT/PC
170	1391693.53	3125031.24	R2.5'
171	1391696.03	3125031.24	PT
172	1391805.09	3125060.24	CANOPY
173	1391805.71	3124840.24	CANOPY
174	1391829.71	3124840.31	CANOPY
175	1391829.09	3125060.31	CANOPY
176	1391770.90	3124897.14	TS/HP
177	1391788.23	3124897.29	TS/HP
178	1391787.64	3125033.19	TS
179	1391770.03	3125028.14	MP
180	1391770.63	3124924.14	TS
181	1391770.59	3125008.14	TS
182	1391680.43	3124846.39	FL/FG
183	1391680.25	3124898.88	FL/FG
184	1391679.85	3125007.88	FL/FG
185	1391679.55	3125093.48	FL/FG
186	1391671.67	3125102.67	FL/FG
187	1391857.86	3124965.90	MP
188	1391770.05	3125022.14	PC
189	1391765.55	3125022.13	R5'

ALL POINT COORDINATES ARE TO BACK OF CURB UNLESS OTHERWISE NOTED

BENCHMARKS

1. THE PUBLISHED VALUES OF NGS CONTROL STATION "G 402". EL=4971.98 (NAVD88)
2. A 3.25" ALUMINUM CAP, CDOT CONTROL POINT IN THE SIDEWALK AT THE SOUTHWEST QUADRANT OF THE INTERSECTION OF EAST EISENHOWER BLVD. AND NORTH BOISE AVE., EL=4980.91 (NAVD88)

LEGEND

- BOUNDARY LINE
- LOT LINES
- ROAD CENTERLINE
- CONCRETE CURB & GUTTER
- PROPOSED CONCRETE CURB AND GUTTER
- PROPOSED SIDEWALK
- BREAK IN GRADE
- PROPOSED SOUND WALL
- PROPOSED CONCRETE PAVEMENT

FLAG NOTES

1. 4" WHITE PAVEMENT MARKING, TYPICAL
2. CONSTRUCT CONCRETE DRIVE PER LCUASS DRAWING #707 (SEE DETAIL SHEET)
3. CONSTRUCT 6" CURB AND GUTTER (SEE DETAIL SHEET)
4. ALL FILL LIDS FOR UNDERGROUND TANKS SHALL BE 1" ABOVE FINISH GROUND. ELEVATIONS SHOWN ARE TOP OF PAVEMENT.
5. CONSTRUCT 6" CONCRETE SIDEWALK (1% MAX. CROSS SLOPE) REFERENCE DETAIL ON STRUCTURAL PLANS
6. 6" SIDEWALK CURB (SEE DETAIL SHEET)
7. BUILD CURB RAMP PER LOCAL CODES AND ADA STANDARDS, (SEE DRAWING #1606 ON DETAIL SHEET)
8. MATCH EXISTING PAVEMENT
9. CONSTRUCT CURB CHASE TO ALLOW DRAINAGE UNDER SIDEWALK PER LCUASS DRAWING #709 (SEE DETAIL SHEET)
10. 9-FEET LONG X 18-INCH WIDE WHITE "CONTINENTAL" OR "DENVER" STYLE BARS
11. CONSTRUCT 8" CONCRETE PAVING (SEE DETAIL SHEET)
12. 2' WIDE CURB DROP
13. CONSTRUCT 6" CONCRETE SIDEWALK (2% MAX. CROSS SLOPE) REFERENCE DETAIL SHEET
14. CONSTRUCT CONCRETE DRIVE AND CURB RAMPS PER DRIVEWAY APROACE DETAIL (SEE DETAIL SHEET)

PAVING NOTES:

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. FOR DETAILS OF PAVEMENT CONSTRUCTION, SEE L.C.U.A.S.S. CHAPTER 10, AND GEOTECHNICAL REPORT PREPARED BY OLSSON ASSOCIATES, MARCH 18, 2011. ALL STANDARD SPECIFICATIONS AND ADDENDA SHALL APPLY.
3. PUBLIC SIDEWALK AND CURB RAMP CONSTRUCTION, IN RIGHT OF WAY, SEE L.C.U.A.S.S. CHAPTER 16,
4. ALL RADIUS DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
5. ALL CURB SHALL BE 6" CURB AND GUTTER UNLESS OTHERWISE NOTED. (SEE DETAIL SHEET).
6. PAVEMENT MUST HAVE A SOLAR REFLECTANCE INDEX (SRI) OF 29 OR HIGHER
7. UNLESS DETAILED OR NOTED OTHERWISE, PROVIDE 1" PRE-MOLDED EXPANSION JOINT MATERIAL WHERE CONCRETE IS POURED AGAINST BUILDING. PROVIDE 1" EXPANSION MATERIAL WHERE CONCRETE IS POURED AGAINST EXISTING CONCRETE. SET PRE-MOLDED MATERIAL TIGHT AGAINST BUILDING AND/OR CONCRETE TO ELIMINATE VOIDS.

NOTE:
ALL ELEVATIONS ARE TO TOP BACK OF CURB UNLESS OTHERWISE NOTED. DEDUCT 0.5' TO GET TOP OF SLAB ELEVATIONS.

NOTE:
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BOC = BACK OF CURB
PC = POINT OF CURVATURE
PT = POINT OF TANGENT
ME = MATCH EXISTING
HP = HIGH POINT
LP = LOW POINT
FL = FLOWLINE @ CENTERLINE
SW = SIDEWALK
BLDG = OUTSIDE BUILDING FACE

OLSSON ASSOCIATES

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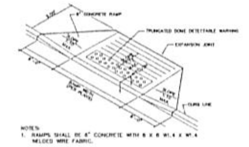
Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

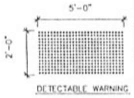
DRAWING INFORMATION:
PAVING, GEOMETRICS AND
SPOT ELEVATION PLAN

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: B. LANG
SCALE: 1" = 20'
DATE: 1.18.12
DRAWING SHEET: 11 OF 25 C4.1

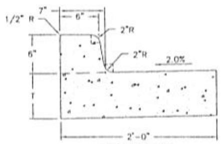


FRONT ADA CURB RAMP DETAIL
N.T.S.

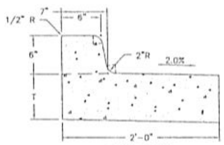


DETECTABLE WARNING

DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN(23MM), A HEIGHT OF NOMINAL 0.2 IN(5MM) AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN(60MM) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. THE COLORING SHALL BE "SAFETY YELLOW" AND HOMOGENEOUS AND MADE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE.



CATCH CURB



SPILL CURB

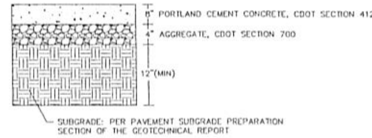
NOTE:

1. EXPANSION JOINTS SHALL BE FORMED BY A ONE-HALF (1/2) INCH THICK PREFORMED JOINT FILLER, CUT TO THE CONFIGURATION OF THE FULL SIZE OF THE CURB AND GUTTER SECTION AND BEING SECURED SO THAT THEY ARE NOT MOVED BY DEPOSITING AND COMPACTING THE CONCRETE AT THESE JOINTS. THE EDGES OF THESE JOINTS SHALL BE ROUNDED WITH AN EDGING TOOL ONE-EIGTH (1/8) INCH IN RADIUS.

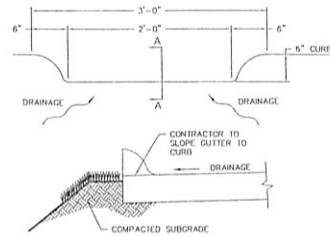
2. EXPANSION JOINTS SHALL BE PLACED WHERE CURB AND GUTTER ABUTS OTHER STRUCTURES AND AT ALL TANGENT POINTS TO CURBS. EXPANSION JOINTS SHALL NOT BE SPACED MORE THAN 50 FEET APART ON STRAIGHT RUNS FOR HAND LAID CURB AND GUTTER AND NOT MORE THAN 100 FEET APART FOR MACHINE LAID CURB AND GUTTER PROVIDED 1/2 INCH THICK JOINT FILLER IS USED. ALL JOINTS SHALL BE FORMED AT RIGHT ANGLES TO THE ALIGNMENT OF THE CURB AND GUTTER.

3. CONTRACTION JOINTS SHALL BE CONSTRUCTED BY SAWING THROUGH THE CURB AND GUTTER TO A DEPTH OF NOT LESS THAN 1 AND ONE-FOURTH (1 1/4) INCHES BELOW THE SURFACE AND TO A WIDTH NOT TO EXCEED THREE-EIGHTS (3/8) OR THEY MAY BE FORMED BY INSERTING A REMOVABLE METAL TEMPLATE IN THE FRESH CONCRETE, OR BY OTHER METHODS APPROVED BY THE ENGINEER. SEALING OF JOINTS IS NOT REQUIRED. CONTRACTION OR CONSTRUCTION JOINTS SHALL BE LOCATED APPROXIMATELY 10 FEET APART.

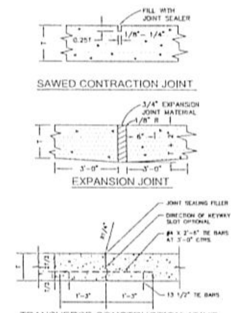
STANDARD CURB DETAIL
N.T.S.



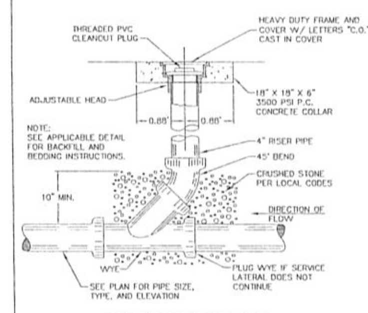
CONCRETE PAVEMENT SECTION
NOT TO SCALE



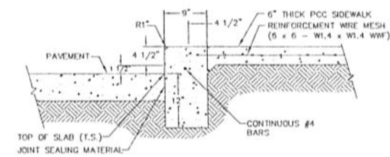
DRAINAGE CURB DROP DETAIL
NOT TO SCALE



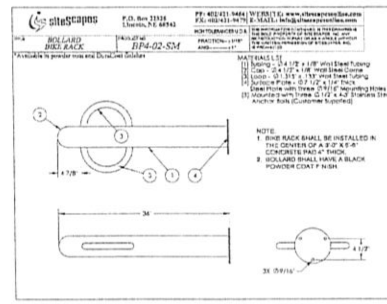
CONCRETE JOINT DETAIL
N.T.S.



SANITARY SEWER CLEAN-OUT
NOT TO SCALE



6" HIGH SIDEWALK CURB DETAIL
NOT TO SCALE



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OLSSON ASSOCIATES

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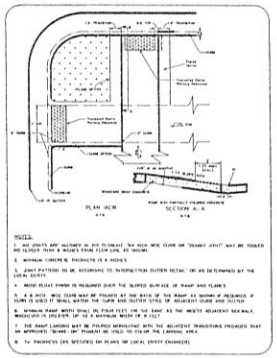
6400 Westown Parkway, West Des Moines, Iowa 50266
PH-515-226-0128
FAX-515-223-9873

Special Review #896 and Site Development Plan for Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:
CONSTRUCTION DETAILS

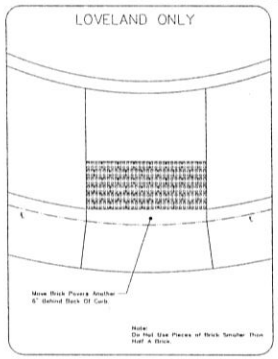
REVISIONS

DEPARTMENT	STORE DEVELOPMENT
CONSTRUCTION	R. HALDER
DRAWN BY	B. LANG
SCALE	N/A
DATE	1.18.12
DRAWING SHEET	12 OF 25 C5.1



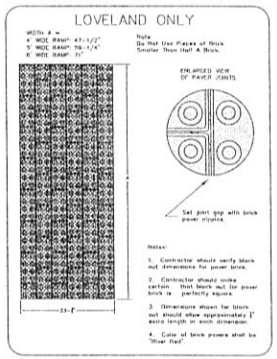
PEDESTRIAN RAMP DETAIL (For New Const. & Alterations)

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 1 DATE: 04/01/07	DRAWING 1606



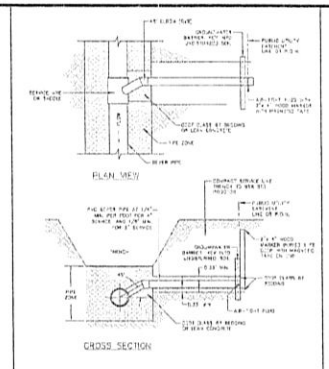
TRUNCATED DOME - MONOLITHIC CURB

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: DATE: 04/01/07	FIGURE 1616



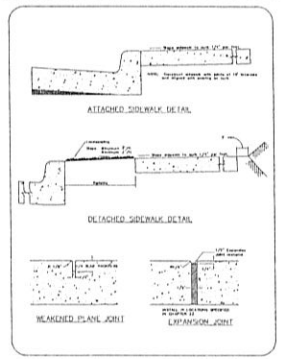
TRUNCATED DOME

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: DATE: 04/01/07	FIGURE 1614



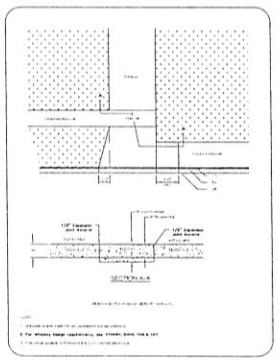
STANDARD WASTEWATER SERVICE CONNECTION

CITY OF LOVELAND DEPARTMENT OF WATER AND POWER	W/WW CONSTRUCTION DRAWINGS	DATE APPROVED: DATE REVISED:	DRAWING W-27



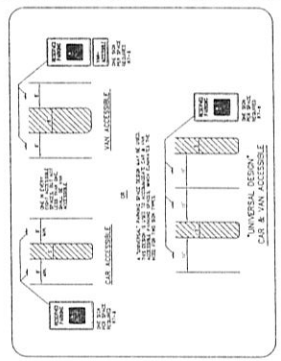
SIDEWALK DETAIL

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 2 DATE: 04/01/07	DRAWING 1602



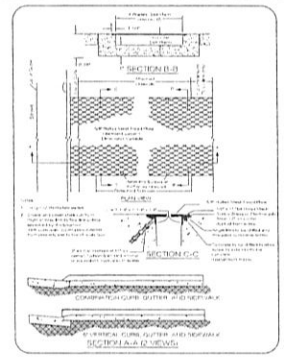
STANDARD SIDEWALK

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 1 DATE: 04/01/07	DRAWING 1601



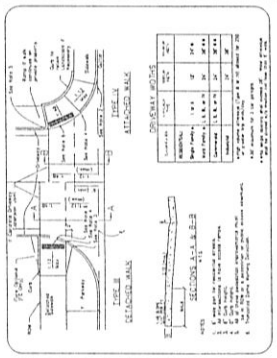
HANDICAP PARKING REQUIREMENTS (AS PER "ADA")

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 1 DATE: 03/01/02	DRAWING 1407



STANDARD DETAILS FOR DRAINAGE UNDER SIDEWALK

LARIMER COUNTY URBAN AREA STREET STANDARDS	CONSTRUCTION DRAWINGS	REVISION NO: 1 DATE: 04/01/07	DRAWING 700



STANDARD DRIVEWAY APPROACH (HIGH VOLUME DRIVE TYPES III & IV)

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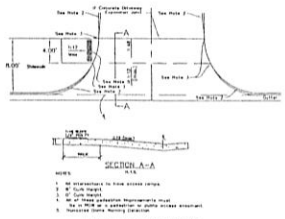
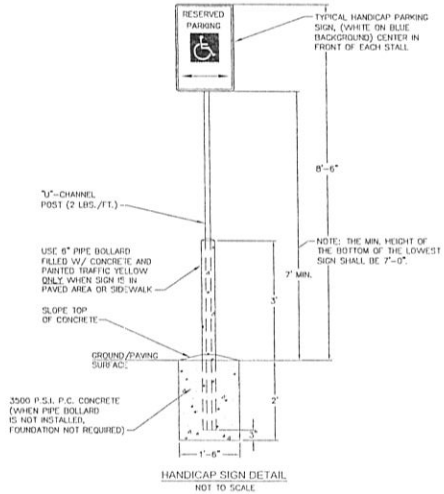


DRIVEWAY APPROACH DETAIL
N.T.S.



HANDICAP SIGN DETAIL
NOT TO SCALE

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OLSSON ASSOCIATES
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FAX:515-223-8873

Special Review #696 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:
CONSTRUCTION DETAILS

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: B. LANG
SCALE: N/A
DATE: 1.18.12
DRAWING SHEET: 13 OF 25
C5.2

DWG: F:\Projects\010-2360\LDR\Site Plans\02360_DTL.dwg USER: blang
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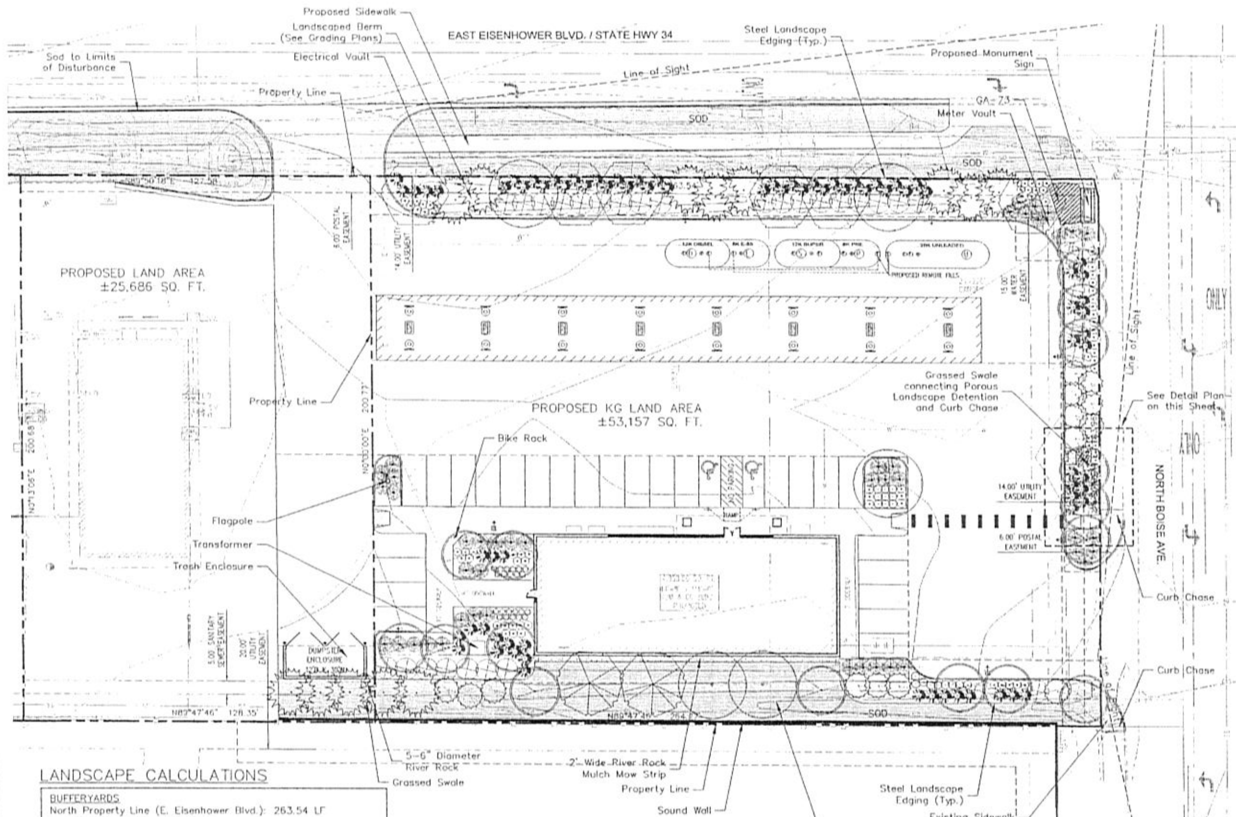


PLANT LIST

QTY.	Symbol	Common/Scientific Name	Size	Notes
SHADE TREES				
6		Shademaster Honeylocust *Gleditsia triacanthos*	2" Cal.	
5		Crimson King Norway Maple *Acer platanoides 'Crimson King'*	2" Cal.	
2		Expresso Kentucky Coffeetree *Gymnocladus dioicus 'Expresso'*	2" Cal.	
17		Armstrong Maple *Acer x freemanii 'Armstrong'*	2" Cal.	
EVERGREEN TREES				
13		Colorado Green Spruce *Picea pungens*	Min. 6' Tall	
14		Concerti Juniper *Juniperus 'Concerti'*	Min. 6' Tall	
EVERGREEN SHRUBS				
44		Buffalo Juniper *Juniperus sabina 'Buffalo'*	5 Gal.	
77		Sea Green Juniper *Juniperus chinensis 'Sea Green'*	5 Gal.	
DECIDUOUS SHRUBS				
74		Bush Cinquefoil *Potentilla fruticosa*	5 Gal.	
18		Dwarf European Cranberrybush *Viburnum opulus 'Nanum'*	5 Gal.	
30		Pragense Viburnum *Viburnum x pragense*	5 Gal.	
ORNAMENTAL GRASSES				
22		Dwarf Fountain Grass *Pennisetum alopecuroides 'Hameln'*	1 Gal.	
19		Karl Foerster Feather Reed Grass *Calamagrostis acutiflora 'Karl Foerster'*	1 Gal.	
PERENNIALS				
73	GA	Blanket Flower – 15" Spacing *Gaillardia aristata 'Goblin'*	1 Gal.	

Turf-Type Tall Fescue Sod

LANDSCAPE CALCULATIONS

BUFFERYARDS
North Property Line (E. Eisenhower Blvd.): 263.54 LF
Type C Buffer – 15' Width
Canopy Trees: 8 Required / 8 Provided
Evergreen Trees: 8 Required / 8 Provided
Flowering Tree/Large Shrub: 6 Required / 6 Provided
Shrubs: 40 Required / 61 Provided

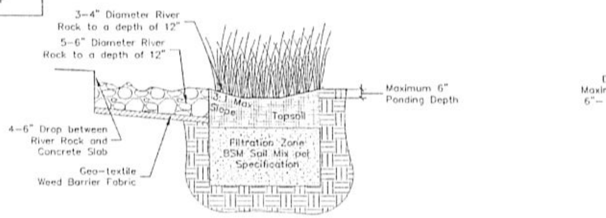
East Property Line (North Boise Ave.): 193.96 LF
Type C Buffer – 12' Width
Canopy Trees: 8 Required / 8 Provided
Evergreen Trees: 8 Required / 8 Provided
Flowering Tree/Large Shrub: 5 Required / 5 Provided
Shrubs: 37 Required / 39 Provided

South Property Line (Adjacent to R-3): 264.27 LF
Type C Buffer – 25' Width (192.63') / 15' Width (71.64')
Canopy Trees: 8 Required / 8 Provided
Evergreen Trees: 8 Required / 8 Provided
Flowering Tree/Large Shrub: 5 Required / 5 Provided
Shrubs: 35 Required / 43 Provided

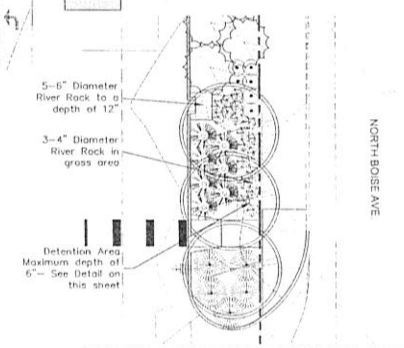
PARKING LOT
1 Tree and 5 Shrubs per 15 Stalls
28 Parking Stalls Provided
2 Trees and 10 Shrubs Required
2 Trees and 12 Shrubs Provided

BUILDING AREA IMPROVEMENTS
1 Tree and 10 Shrubs per 500 SF of Interior Landscape Area
1,252 SF Landscape Area
3 Trees and 26 Shrubs Required
3 Trees and 31 Shrubs Provided

LANDSCAPE OPEN SPACE
Overall Open Space – 13,257 SF (24.8% of Site)
Interior Parking Lot Open Space – 436.7 SF



1 Porous Landscape Detention Section Detail
not to scale



POROUS LANDSCAPE DETENTION AREA
1" = 10'

1" = 20'
0 10' 20' 40'
SCALE IN FEET

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COLORADO 811

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Kum & Go

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Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado
DRAWING INFORMATION

LANDSCAPE PLAN

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: J. MERKLEIN
SCALE: 1" = 20'
DATE: 01.19.12
DRAWING SHEET: 14 OF 25 L1.1

GENERAL NOTES

1. All work shall be coordinated with the work of other trades.

2. Locate and flag all underground utilities prior to any construction. Contractor shall protect existing overhead and underground utilities. Any damage to such shall be repaired by the Contractor at no expense to the Owner.

3. Plants and other materials are quantified and summarized for the convenience of the city and local governing bodies. Confirm and install sufficient quantities to complete the work as drawn.

4. Plan is subject to changes based on plant size and material availability. All changes or substitutions must be approved by the City of Loveland, Colorado and the Landscape Architect.

5. All plant material shall be nursery grown to meet minimum size as specified in the American Standard for Nursery Stock established by the American Nursery & Landscape Association (ANLA). The Landscape Architect or owner's representative reserves the right to reject any plant material not meeting specifications.

6. All trees shall be calipered and any undersized trees shall be rejected. Specified caliper measurement for trees shall be measured at 12" above the grade.

7. Planting of trees, shrubs, sodded and seeded turfgrass 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.

8. The Landscape Contractor shall remove all construction debris and materials injurious to plant growth from planting pits and beds prior to backfilling with planting mix.

9. A pre-emergent herbicide shall be applied to all shrub beds prior to the installation of any plant material.

10. Unless called out as otherwise, all landscape planting areas, excluding turf areas and tree areas shall be mulched a minimum of 3–4" deep with 1"–2" diameter Round River Rock, or approved equal.

11. All areas specified to contain river rock mulch shall include a geotextile weed barrier fabric.

12. Steel landscape edging is to be used on all landscape beds abutting sodded areas as noted on landscape plans.

13. All landscape areas and sod areas shall be irrigated with a high-efficiency, automatic irrigation system achieving 100% even coverage of all landscape areas. Irrigation system shall be prepared and signed by a Professional Engineer, Landscape Architect, or a designer certified CLT-E or CID to meet all city requirements in Section 4.02.06.A. Irrigation shall be drip in landscape beds and spray in sodded areas.

14. Landscape contractor is to be responsible for watering all plant materials until the time the permanent irrigation system is fully functional and acceptance of the project has taken place. Any material which dies, or defoliates (prior to acceptance of the work) will be promptly removed and replaced.

15. The contractor will completely guarantee all work for a period of one year beginning at the date of acceptance, or store opening, whichever is greater. Contractor will make all replacements promptly (as per direction of owner).

SODDING NOTES

1. All disturbed areas shall be sodded with Turf-Type Tall Fescue Sod with a minimum of 3 cultivars.

2. All lawn areas shall receive a minimum 6-inch depth of topsoil compacted to 85% maximum density at optimum moisture content.

3. The entire surface to be sodded shall be reasonably smooth and free from stones, roots, or other debris.

4. Sod shall be machine stripped at a uniform soil thickness of approximately one inch (plus or minus 1/4-inch). The measurement for thickness shall exclude top growth and thatch, and shall be determined at the time of cutting in the field. Precautions shall be taken to prevent drying and heating. Sod damaged by heat and dry conditions, and sod cut more than 18 hours before being incorporated into the work shall not be used.

5. Handling of sod shall be done in a manner that will prevent tearing, breaking, drying and other damage. Protect exposed roots from dehydration. Do not deliver more sod than can be laid within 24 hours.

6. Moisten prepared surface immediately prior to laying sod. Water thoroughly and allow surface to dry before installing sod. Fertilize, harrow or rake fertilizer in the top 1-1/2-inches of topsoil, at a uniform rate of one pound of Nitrogen per 1000 S.F.

7. Sod shall be carefully placed in the direction parallel with the slope of the area to be sodded. Sod strips shall be butted together but not overlapped with the seams staggered on each row.

8. Fertilizer shall be 20-10-5 commercial fertilizer of the grade, type, and form specified and shall comply with the rules of the State of Colorado Dept. of Agriculture. Fertilizer shall be identified according to the percent N, P, K, in that order.

9. All Sod on slopes greater than 5:1 and within detention areas shall be staked.

10. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of four inches below sod.

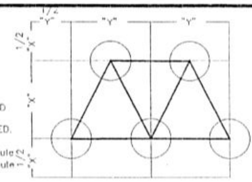
11. Contractor shall provide full maintenance for sodded turf grass for a period of 30 days after the date of Final Acceptance, or store opening, whichever is greater. At the end of the maintenance period, a healthy, well-rooted, even-colored, viable turf must be established. The turf grass shall be free of weeds, open joints, bare areas, and surface irregularities.

SOIL AMENDMENTS

Backfill all planting beds to a minimum 12-inch depth with planting soil mix. Planting soil mix shall consist of one (1) part perlite, one (1) part peat moss, and two (2) parts clean loam topsoil. Thoroughly till planting soil components prior to placement. City minimum soil amendment requirements per 1000 square feet of landscape area:

High water plantings– 3 Cu Yards
Moderate to Low water plantings– 2 Cu Yards
Very Low water plantings– 1 Cu Yards
Dryland and Native establishment areas– None Required.

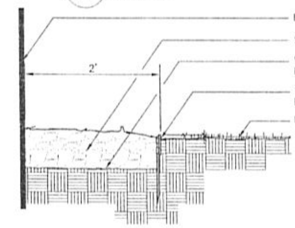
The Landscape Installer must certify that the soil amendments have been installed in accordance with the requirements of this Chapter and in accordance with the submitted plans.



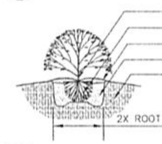
NOTE:
SPACING PATTERN APPLIES TO ALL PERENNIALS, GROUNDCOVERS AND BULBS UNLESS OTHERWISE SPECIFIED.

X=See Plant Schedule
Y=See Plant Schedule

3 Groundcover Layout Detail
not to scale

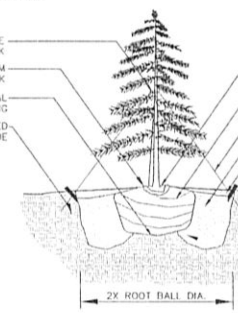


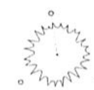
4 Mow Strip Detail
not to scale



NOTES:
1. MINIMUM ROOT SPREAD TO BE IN ACCORDANCE WITH ANLA STANDARDS
2. PRUNE DAMAGED LIMBS OR ROOTS AFTER INSTALLATION
3. MAKE SURE ROOTS DO NOT DRY OUT DURING INSTALLATION
4. SOAK GENEROUSLY TO COMPACT AND SETTLE

5 Shrub Planting Detail
not to scale

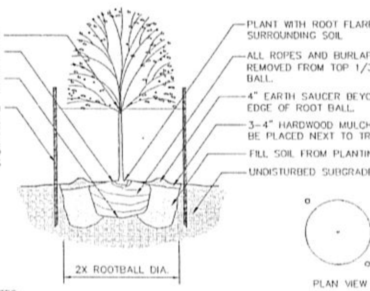




NOTES:
1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
2. IN AREAS OF TURF, SURROUND BED WITH 6' DIAMETER OF MULCH

6 Evergreen Tree Planting Detail
not to scale

1 Steel Landscape Edging Detail
not to scale



NOTES:
1. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING
2. IN AREAS OF TURF, SURROUND BED WITH 6' DIAMETER OF MULCH
3. STAKES SHALL BE ORIENTED WITH REGARDS TO PREVAILING WINDS

2 Deciduous Tree Planting Detail
not to scale

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COLORADO 811

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West Des Moines, Iowa 50266
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Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado
DRAWING INFORMATION:

LANDSCAPE DETAILS / NOTES

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: J. MERKLEIN
SCALE: N/A
DATE: 01.19.12
DRAWING SHEET: 15 OF 25 L1.2

DWG: F:\PROJECTS\010-2390_LD\P\Preliminary_Plans\102390_LSC.dwg USER: jmerklein
DATE: Jan 16, 2012 1:13pm XREFS: 102390_TBLK 102390_PBASE 102390_IBASE

S-200 POROUS LANDSCAPE DETENTION CONSTRUCTION

S-200.1 General
This work shall consist of the construction of a stormwater porous landscape detention, and includes excavation and embankment, erosion control, and furnishing and placing materials at those locations indicated on the plans or as designated by the Engineer, including landscape plantings, and special construction of features as shown on the Drawings. This work includes the furnishing of all labor, equipment, and materials for construction of the porous landscape detention as specified, including successful establishment of all vegetation.

METHOD OF CONSTRUCTION

1. The porous landscape detention area shall be excavated and graded to the dimensions, elevations, and side slopes specified on the design plans
2. Excavated spoils from the porous landscape detention area will be used as fill material at nearby facilities as directed by the Owner and/or A/E, or disposed of at the nearest landfill.
3. The bottom of the excavation shall be roto-tilled to a minimum depth of 6 inches to alleviate any compaction of the facility bottom. Any substitute method for roto-tilling must be approved by the Engineer prior to use. Any ponded water shall be removed from the bottom of the facility and the soil shall be friable before roto-tilling.
4. Minimize compaction of both the base and the backfill to assure proper function of the system.
5. Native soils within the porous landscape detention shall be graded to elevations and slopes as indicated in final designs, less six (6) inches to account for placement of topsoil. Porous landscape detention topsoil requirements are provided in S-205. Any necessary modifications to the final grade must be approved by the on-site engineer.
6. Prior to placement of topsoil in the porous landscape detention area, native, graded soil will be scarified to a depth of two inches to remove compacted surfaces. Topsoil will be placed where specified on plan sheets to a depth such that the final surface equals the surface elevations on the plan sheets. Topsoil must be placed and lightly compacted to approximately 80 percent compaction.
7. Planting areas within the porous landscape detention must be free of turf grass and/or other invasive weeds.
8. Metal landscape borders will separate native plantings from existing turf grass plantings. See planting plans and quantities.
9. Vegetation shall be established where and as specified in the final landscape/planting plans.
10. After the work is complete, submit to the Owner "as-built" plans including a listing of all species installed, and quantities installed. Mark in red ink on the original planting plan any field changes or deviations from the original plans.

S-201 Excavation and Removals
S-201.1 General
Work under this item shall consist of all necessary excavation for structures including the removal and disposal of all excess excavated materials that is not suitable as or used for the embankment around the completed porous landscape detention and cover of the extended drainage pipes. Excavated material which is unsuitable for the embankment and excess material not required for cover shall be disposed of off-site at an approved disposal site in compliance with local, federal and state regulations.

S-202 Embankment
S-202.1 Construction
Embankment of the porous landscape detention will be completed to the finished grades as specified on the plan sheets. Embankments will be constructed from materials excavated on site for the construction of the Porous Landscape Detention. Materials will be comprised of on-site soils, free of foreign matter and/or clumps larger than three (3) inches in any dimension. Embankments will be constructed to the finished grade less six (6) inches for the placement of topsoil on the finished structure. Finished grade shall be achieved with topsoil placement as specified in S-104.

S-203 Compaction of Earthwork
S-203.1 Compaction
All subgrade shall be uniformly compacted as indicated on the plans and in accordance with the geotechnical report. The Contractor shall have available adequate hand or mechanical compaction equipment to accomplish the compaction as set forth in these Specifications. Compaction acceptance shall be based on visual observation and testing by the Engineer or City.

S-204 Bioretention Soil Mix (BSM)
S-204.1 Bioretention Soil Mix Content and Quality.
BSM shall be furnished and placed at the locations shown on the plans, or as directed by the Engineer. BSM shall consist of 50 percent fine sand (0.050 to 0.10 mm AASHTO T88 Test Method) and 50 percent compost. Compost shall consist of thermophilic-prepared organic matter with not more than 1 percent foreign matter or non-decomposed plant matter in excess of 12.5 mm in any dimension. The BSM shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches excluding mulch. No other materials or substances shall be mixed or dumped within the porous landscape detention that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. BSM will be thoroughly homogenized before delivery to the site as accepted by the site engineer.

S-205 Rain Garden Topsoil
S-205.1 Topsoil Quality and Placement
Topsoil shall be furnished and placed at the locations shown on the plans, or as directed by the Engineer. Topsoil shall consist of loam or silt loam as classified by the USDA Soil Textural Triangle, consisting 35 – 50 percent sand, 30 – 40 percent silt, and 10 – 25 percent clay), with no less than 3.5 percent organic matter, and friable structure.

Topsoils shall be placed to a depth of 6 inches compacted, and not have a measured compaction greater than five pounds per square inch, based on Lang or Cone penetrometer measurements, at the time of seeding or planting unless otherwise stated on the plans or in the specifications. If ten percent or more of penetrometer readings are greater than five pounds per square inch, disc, rotovate, and/or chisel plow said areas as necessary to reduce compaction. The Contractor shall submit a report including test locations and penetrometer readings to the Owner. The Contractor shall Remove all foreign matter larger than one inch in any dimension from the areas to be seeded and/or planted.

S-206 Porous Landscape Detention
S-206.1 Porous Landscape Detention, Live Herbaceous and Grass Plants
Live Herbaceous Plants: All live herbaceous perennial plants, tubers, bulbs, plugs and dormant rootstocks of herbaceous perennial plants shall be free from insects and disease. Prior to delivery of any materials to the site, submit to the Owner a complete list of all live herbaceous perennial plants, tubers, bulbs, plugs and dormant rootstocks of herbaceous perennial plants and grasses to be used during this portion of the work.

S-206.3 Quality Assurance
Qualifications of workmen: Provide at least one person who shall be present at all times during execution of this portion of the work who shall be thoroughly familiar with planting of live native plants and seeding native vegetation. Said person shall direct all work performed under this section.

S-206.4 Planting Season
Planting of all live herbaceous perennial plants, tubers, bulbs, and dormant rootstocks of herbaceous perennial plants and sowing of native plant seed shall be completed after April 15 but no later than June 15.

S-206.5 Plant Installation
Live Plant Materials (Herbaceous and Grass plants). Plant materials specified for Porous Landscape Detention shall be planted as specified in the plans and applicable landscaping standards with the exception that pesticides, herbicides, and fertilizer shall not be applied during planting under any circumstances. Furthermore, pesticides, fertilizer, and any other soil amendments shall not be applied to the Porous Landscape Detention during landscape construction, plant establishment, or maintenance. During the first season of growth, removal of dead/failed vegetation and replacement with the same species and location is required to achieve BMP construction completion. Pesticides, herbicides, and/or fertilizers shall not, under any circumstances, be applied during landscape construction, plant establishment, or for a minimum period of 2 months after initial planting.

S-206.6 Watering of Plants
New vegetation will be watered once per week in the absence of rainfall. The equivalent of one-half inch of water per week over the Porous Landscape Detention area will be provided to establish vegetation weekly for the first two months in the absence of rainfall will be required to establish plants, and bi-weekly after the first two months in the absence of rainfall until October 1. The payment will be full compensation for all labor, equipment, tools, and incidentals necessary to complete the work. No compensation will be allowed for water wasted or excess watering as determined by the Engineer.

S-206.7 Final Acceptance
After completion of seeding and planting of live stock, the Contractor shall schedule with Owner a provisional acceptance inspection of the work.

Provisional acceptance: The work shall be considered 80% complete after all seed and live plants have been installed and the Contractor has completed all required clean up, removal, and repair of site conditions.

Final acceptance: The work shall be considered 100% complete after the Contractor has met or exceeded the performance standards of this section, and completed all required clean up, removal, and repair of plant materials after site establishment.

S-206.8 Repair and Maintenance
Contractor shall be responsible for inspection, maintenance, and repair of native vegetation during the first year after installation. Contractor will remove invasive weeds as necessary, either by mowing, pulling, or application of select herbicides applied to the invasive plant only. During the one-year maintenance period, between May 15 and September 15, hand seed all previously seeded areas which show bare ground patches larger than 36"x36". Contractor shall be responsible for consistent and adequate water application throughout the growing season. Contractor shall correct erosion and drainage problems as specified on the Temporary Sediment and Erosion Control Plan throughout the one-year maintenance period. Contractor shall remove silt fencing at the end of the compliance period and restore the fence area by hand seeding between April 1st and October 15th, all bare areas greater than one square foot.

S-206.9 Contractor Warranty
The Contractor shall guarantee both planted and seeded areas in the Porous Landscape Detention for a period of one year following construction. Contractor will be responsible for replacement of native vegetation that was installed at construction during the first growing year after construction that has died as a result of improper maintenance, disease, or poor planting techniques. Seeded areas (native grasses) will meet or exceed the performance criteria of 80% cover after one full growing season.

S-207 Hardwood Mulch
S-207.1 Material Quality
Shredded hardwood bark shall consist of the bark from hardwood trees which has been milled and screened to a maximum 4 inch in length, particle size and provide a uniform texture free from sawdust, foreign materials, and any artificially introduced chemical compounds that would be detrimental to plant or animal life.

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Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:
LANDSCAPE SPECIFICATIONS

REVISIONS

DEPARTMENT	STORE DEVELOPMENT
CONSTRUCTION	R. HALDER
DRAWN BY	J. MERKLEIN
SCALE	N/A
DATE	01.19.12
DRAWING SHEET	16 OF 25 L1.3

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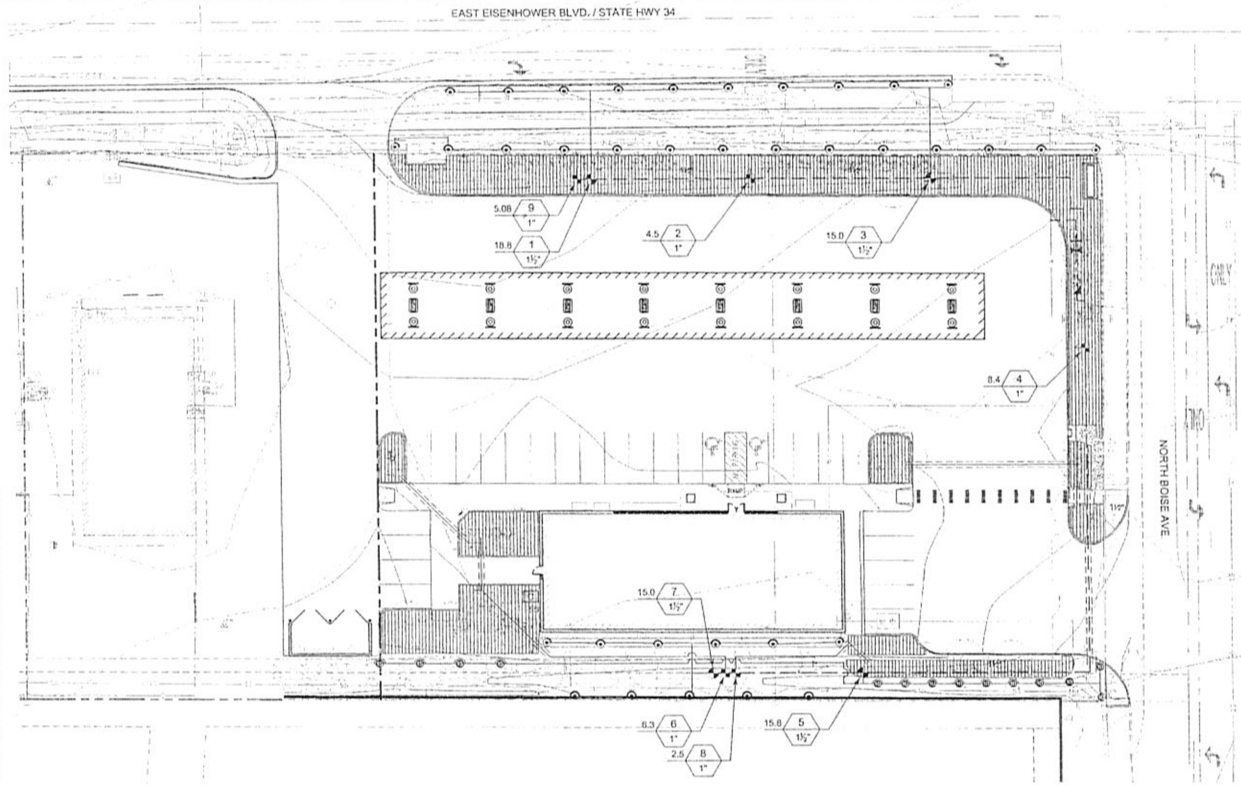

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	WIRE	PSI	PSI @ POC	GPM	PRECIP
1	Rain Bird PGA-PRS-D	1-1/2"	Turf Rotary	572.5	32.31	49.63	18.75	0.51 in/h
2	Rain Bird XCZ-100-PRF	1"	Area for Dripline	514.3	33.80	45.60	4.47	0.35 in/h
3	Rain Bird PGA-PRS-D	1-1/2"	Turf Rotary	449.1	32.40		15.00	0.44 in/h
4	Rain Bird XCZ-100-PRF	1"	Area for Dripline	330.9	37.48		8.41	0.35 in/h
5	Rain Bird PGA-PRS-D	1-1/2"	Turf Spray	128.3	33.29	49.10	15.77	0.78 in/h
6	Rain Bird XCZ-100-PRF	1"	Area for Dripline	78.4	35.97	48.66	6.30	0.35 in/h
7	Rain Bird PGA-PRS-D	1-1/2"	Turf Rotary	78.4	32.28	49.37	15.00	0.54 in/h
8	Rain Bird XCZ-100-PRF	1"	Area for Dripline	82.2	32.96	44.75	2.45	0.35 in/h
9	Rain Bird XCZ-100-PRF	1"	Area for Dripline	577.8	34.19	46.11	5.08	0.35 in/h
	Common Wire			545.0				

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Rain Bird PGA-PRS-D	Turf Rotary	0.51 in/h	1.61	190	3,563	508.9
2	Rain Bird XCZ-100-PRF	Area for Dripline	0.35 in/h	1.61	277	1,239	177.0
3	Rain Bird PGA-PRS-D	Turf Rotary	0.44 in/h	1.61	220	3,300	471.4
4	Rain Bird XCZ-100-PRF	Area for Dripline	0.35 in/h	1.61	277	2,329	332.8
5	Rain Bird PGA-PRS-D	Turf Spray	0.78 in/h	1.61	124	1,955	279.3
6	Rain Bird XCZ-100-PRF	Area for Dripline	0.35 in/h	1.61	277	1,744	249.2
7	Rain Bird PGA-PRS-D	Turf Rotary	0.54 in/h	1.61	179	2,685	383.6
8	Rain Bird XCZ-100-PRF	Area for Dripline	0.35 in/h	1.61	277	679.8	97.1
9	Rain Bird XCZ-100-PRF	Area for Dripline	0.35 in/h	1.61	277	1,408	201.1
		TOTALS:			2,098	18,903	2,700

CRITICAL ANALYSIS

Generated:	2012-01-18 11:49
P.O.C. NUMBER: 01	
Water Source Information:	Tap off of Domestic Service Line, 4' minimum from Meter Pit. Available 52 PSI (low end) per City of Loveland Water Dept.
FLOW AVAILABLE	
Water Meter Size:	1"
Flow Available:	20.23 gpm
PRESSURE AVAILABLE	
Static Pressure at POC:	52.00 psi
Elevation Change:	0.00 ft
Service Line Size:	1"
Length of Service Line:	4.00 ft
Pressure Available:	51.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	18.75 gpm
Flow Available at POC:	20.23 gpm
Residual Flow Available:	1.48 gpm
Critical Station:	4
Design Pressure:	30.00 psi
Loss Elev. high head to valve:	0.00 psi
Pipe Loss Critical Head:	0.07 psi
Loss Fitting Factor:	0.01 psi
Loss through Valve:	7.40 psi
Pressure Req. at Critical Station:	37.47 psi
Loss for Fittings:	0.01 psi
Loss for Main Line:	0.07 psi
Loss for POC to Valve Elevation:	0.00 psi
Loss for Backflow:	12.32 psi
Loss for Water Meter:	0.54 psi
Critical Station Pressure at POC:	50.41 psi
Pressure Available:	51.00 psi
Residual Pressure Available:	0.59 psi

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI
Q T H F	Rain Bird 1804-SAM 10 Series MPR Turf Spray 4" popup with check valve.	30
Q T H TT TQ F	Rain Bird 1804-SAM 15 Series MPR Turf Spray 4" popup with check valve.	30
4 6 8 10 12 15 18	Rain Bird 1804-SAM ADJ Turf Spray 4" popup with check valve.	30
Q T H TT TQ F	Rain Bird 1804-SAM-P45-R17-24 17'-24' Rotary Stream, w/1804 turf spray body, 4" pop-up, with check valve and in-stem pressure regulator.	30

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Rain Bird XCZ-100-PRF Drip Control Kit, 1" (25mm) DV valve, 1" (25mm) pressure regulating filter.
A	Rain Bird AR Valve Kit 1" Air Relief Valve kit with 6" drip valve box.
	Area to Receive Dripline Rain Bird XFS-06-18 (24) Landscape Dripline with 0.61gph emitters at 18" o.c. Dripline laterals spaced at 24" apart, with emitters offset for triangular pattern.

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
	Rain Bird PGA-PRS-D Electric Remote Control Valve, with pressure regulator.
	Rain Bird 5RC 1" Quick Coupler Valve, one piece body
	Nibco T-29-K 200 PSI CWP Bronze Gate Valve, Cross Handle, Size Range - 1/2" - 2"
A	Air Injection Line Per city standards
	Febco 860 1" Reduced Pressure Backflow Preventer
C	Hunter PC-1200 Modular Controller, 12 stations, outdoor model, three PCM-300 included
SS	Hunter Solar-Sync Solar, rain freeze sensor with outdoor interface, connects to Hunter PRO-C and ICC controllers, install as noted.
	Thrust Block
V	Water Meter 1" Top off of Domestic Service Line, 4' minimum from Meter Pit. Available 52 PSI (low end) per City of Loveland Water Dept.
	Irrigation Lateral Line: PVC Class 200 SDR 21 Only lateral transition pipe sizes 1 1/4" and above are indicated on the plan, with all others being 1" in size.
	Irrigation Mainline: PVC Class 200 SDR 21
	Pipe Sleeve: PVC Schedule 40 4"Pipe Sleeve - PVC Schedule 40. Extend sleeves 18 inches beyond edges of paving /curb.

Valve Callout
- Valve Number
- Valve Flow
- Valve Size

LATERAL LINE SIZING CHART	
GPM	PIPE SIZE
0-5	1/2"
6-9	3/4"
10-15	1"
16-20	1 1/4"
21-30	1 1/2"
31-50	2"

N

1" = 20'
0' 10' 20' 40'
SCALE IN FEET

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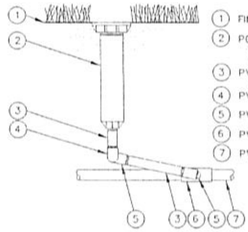
Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:
IRRIGATION PLAN

REVISIONS

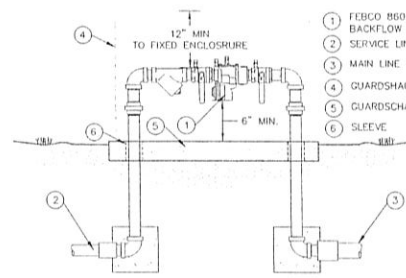
DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: J. MERKLEIN
SCALE: 1" = 20'
DATE: 01.19.12
DRAWING SHEET: 17 OF 25 L2.1



1. FINISH GRADE/TOP OF MULCH
2. POP-UP SPRAY SPRINKLER: RAIN BIRD 1804 -SAM WITH PLASTIC MPR NOZZLE
3. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
4. PVC SCH 40 ELL
5. PVC SCH 40 STREET ELL
6. PVC SCH 40 TEE OR ELL
7. PVC LATERAL PIPE

Rain Bird Turf Spray Head

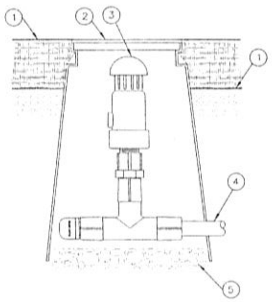
NOT TO SCALE — 1804-SAM WITH SWING JOINT



1. FEBCO 860 REDUCED PRESSURE BACKFLOW PREVENTER
2. SERVICE LINE - SIZE PER PLANS
3. MAIN LINE - SIZE PER PLANS
4. GUARDSHACK ENCLOSURE
5. GUARDSCHACK PAD
6. SLEEVE

FEBCO 860 Backflow Preventer

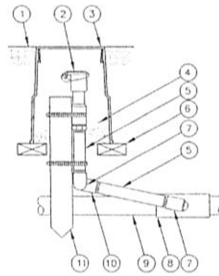
NOT TO SCALE — FEBCO 860
INSTALL PER CITY STANDARDS



1. FINISH GRADE/TOP OF MULCH
2. 6" ROUND VALVE BOX: RAIN BIRD VB-6RND
3. AIR RELIEF VALVE KIT: RAIN BIRD AR VALVE KIT
4. LANDSCAPE DRIPLINE TUBING: RAIN BIRD XF DRIPLINE
5. 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

Rain Bird AR Air Relief Valve

NOT TO SCALE



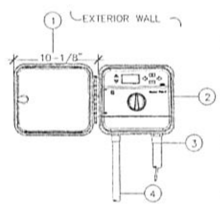
1. FINISH GRADE/TOP OF MULCH
2. QUICK-COUPLING VALVE: RAIN BIRD MODEL 5RC
3. VALVE BOX WITH COVER: RAIN BIRD VB-6RND
4. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
5. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
6. BRICK (1 OF 2)
7. PVC SCH 40 STREET ELL
8. PVC SCH 40 TEE OR ELL
9. PVC MAINLINE PIPE
10. PVC SCH 40 ELL
11. 2" x 2" REDWOOD STAKE WITH STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM

NOTE:

FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.

Rain Bird 5RC Quick Coupler

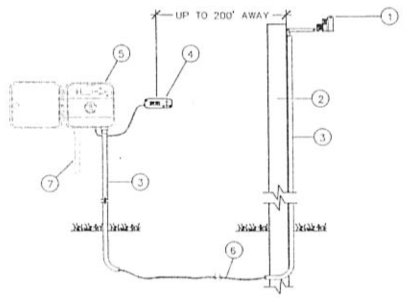
NOT TO SCALE



1. MINIMUM CLEARANCE FOR DOOR OPENING
2. MODEL PC-1200
3. CONTROL WIRE IN ELECTRICAL CONDUIT. SIZE AND TYPE PER LOCAL CODE
4. ELECTRICAL SUPPLY CONDUIT. CONNECT TO POWER SOURCE. J BOX INSIDE CONTROLLER.

Hunter Pro-C 12 Station Controller

NOT TO SCALE



1. MODEL: SOLAR SYNC SENSOR
2. SUITABLE POST, POLE, OR GUTTER MOUNT. MOUNT IN LOCATION WHERE SENSOR CAN RECEIVE FULL SUN, IS OPEN TO RAINFALL AND OUT OF SPRINKLER SPRAY PATTERN
3. CONDUIT FROM SOLAR SYNC SENSOR TO CONTROLLER OR TO A POINT 12" BELOW GRADE
4. MODEL SOLAR SYNC MODULE MOUNT LESS THAN 6' AWAY FROM CONTROLLER.
5. HUNTER PRO-C CONTROLLER
6. COMMUNICATION WIRE, 18-2(WIRE TYPE TO MEET INSTALLATION CODE REQUIREMENTS), FROM MODULE TO SENSOR. MAXIMUM TOTAL WIRE DISTANCE, 200 FEET
7. POWER SOURCE

Hunter Solar Sync w/ Pro-C Controller

NOT TO SCALE

IRRIGATION NOTES

1. THE SYSTEM DESIGN ASSUMES A MINIMUM AVAILABLE STATIC PRESSURE FOR THE IRRIGATION SYSTEM OF 75 PSI AT THE POINT OF CONNECTION. VERIFY PRESSURE AND FLOW ON SITE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES BETWEEN THESE ASSUMPTIONS AND ACTUAL FIELD CONDITIONS IN WRITING TO THE OWNER'S REPRESENTATIVE.
2. READ THOROUGHLY AND BECOME FAMILIAR WITH THE SPECIFICATIONS AND INSTALLATION DETAILS FOR THIS AND RELATED WORK PRIOR TO CONSTRUCTION.
3. COORDINATE LOCATION AND MARKING OF UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY CONFLICT WITH ANY UNDERGROUND UTILITY.
4. DO NOT PROCEED WITH THE INSTALLATION OF THE IRRIGATION SYSTEM WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING, OR IF DISCREPANCIES IN CONSTRUCTION DETAILS, LEGEND, NOTES, OR SPECIFICATIONS ARE DISCOVERED. BRING ALL SUCH OBSTRUCTIONS OR DISCREPANCIES TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IN WRITING PRIOR TO CONSTRUCTION.
5. THESE DRAWINGS ARE DIAGRAMMATIC. THEREFORE, THE FOLLOWING SHOULD BE NOTED:
   A. AVOID CONFLICTS BETWEEN THE IRRIGATION SYSTEM, PLANTING MATERIALS AND ARCHITECTURAL FEATURES. INSTALL IRRIGATION PIPE AND WIRING IN LANDSCAPED AREAS WHENEVER POSSIBLE.
   B. USE ONLY STANDARD TEES AND ELBOW FITTINGS. USE OF CROSS TYPE FITTINGS IS NOT PERMITTED.
6. PROVIDE THE FOLLOWING COMPONENTS TO THE OWNER'S REPRESENTATIVE PRIOR TO THE COMPLETION OF THE PROJECT:
   A. TWO OPERATING KEYS FOR EACH TYPE OF MANUALLY OPERATED VALVES.
   B. TWO OF EACH SERVICING WRENCH OR TOOL NEEDED FOR COMPLETE ACCESS, ADJUSTMENT, AND REPAIR OF ALL SPRINKLERS AND EMITTERS.
7. SELECT NOZZLES FOR SPRAY AND ROTARY SPRINKLERS WITH ARCS THAT PROVIDE COMPLETE AND UNIFORM COVERAGE WITH MINIMUM OVERSPRAY FOR THE SITE CONDITIONS. TO MINIMIZE OVERSPRAY, INSTALL PRESSURE COMPENSATING NOZZLES OR PRESSURE COMPENSATING SCREENS IF UNIFORM LATERAL PRESSURE CANNOT BE ATTAINED WITH PRESSURE ADJUSTMENT AT THE REMOTE CONTROL VALVE. CAREFULLY ADJUST THE RADIUS OF THROW AND ARC OF COVERAGE OF EACH SPRAY AND ROTARY SPRINKLER TO PROVIDE THE BEST PERFORMANCE.
8. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE GENERAL CONTRACTOR FOR THE INSTALLATION OF IRRIGATION SLEEVING. ALL SLEEVING WILL BE SCHEDULE 40 PVC. ALL PIPE AND WIRE WILL BE INSTALLED IN SEPARATE SLEEVES AT ALL PAVED SURFACES, SIDEWALKS, DRIVEWAYS, WALL FOOTINGS AND HARDSCAPE AREAS. ALL SLEEVES MAY NOT BE SHOWN AND/OR SIZED ON THE PLANS. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE IRRIGATION CONTRACTOR FOR THE INSTALLATION OF ALL REQUIRED SLEEVING, PROPER SIZING AND COORDINATE INSTALLATION OF SLEEVING WITH OTHER TRADES. ANY PIPE OR WIRE WHICH PASSES BENEATH EXISTING HARDSCAPE WHERE SLEEVING WAS NOT INSTALLED, REQUIRES HORIZONTAL BORING BY THE IRRIGATION CONTRACTOR. SLEEVE AND CONDUIT SIZES SHALL BE A MINIMUM OF TWICE THE AGGREGATE DIAMETER OF ALL PIPE AND WIRE CONTAINED WITHIN SLEEVE OR CONDUIT PIPE. MINIMUM SLEEVE SIZE IS 2-INCH. INDICATE ALL SLEEVE LOCATIONS ON "AS-BUILT" RECORD DRAWINGS.
9. COORDINATE AND INSTALL ALL ELECTRICAL POWER TO THE IRRIGATION CONTROL SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND ALL APPLICABLE LOCAL ELECTRIC UTILITY CODES.
10. GATE VALVES SHALL BE PORTED TO PROVIDE FOR FULL FLOW. LABELED AND NOMINAL SIZE OF VALVE OPENING SHALL BE THE SAME.
11. ALL MATERIALS AND WORKMANSHIP SHALL BE TRUE TO TYPE, FORM, FINISH AND OF THE HIGHEST STANDARDS OF THE TRADE. DAMAGED OR INFERIOR MATERIALS SHALL BE REMOVED FROM THE SITE WITHOUT DELAY.
12. INSTALL PRESSURE REGULATING MODULE FOR ALL DRIP VALVE ASSEMBLIES. SET DISCHARGE PRESSURE TO 35 PSI.
13. INSTALL IRRIGATION PIPE AND COMPONENTS A MINIMUM OF 8 FEET FROM TREE ROOT BALLS. PIPE ROUTINGS SHOWN ON DRAWINGS IS DIAGRAMMATIC.
14. PROVIDE #12-1 AWG BARE COPPER TRACING WIRE ALONG THE ENTIRE MAINLINE ROUTING. PROVIDE 24 INCH COIL OF TRACING WIRE IN EACH VALVE BOX ALONG MAINLINE ROUTING.
15. CONTRACTOR SHALL FURNISH AND INSTALL MATERIAL AND EQUIPMENT PERTAINING TO THE IRRIGATION SYSTEM HEREIN SPECIFIED OR SHOWN ON THE DRAWINGS. THIS SHALL INCLUDE ALL ITEMS NECESSARY TO COMPLETE INSTALLATION.
16. IRRIGATION CONTRACTOR TO CAP ALL FLUSH ENDS HAND TIGHT PRIOR TO BACKFILL.
17. IRRIGATION CONTRACTOR SHALL COORDINATE WORK WITH PLANTING PLANS TO AVOID CONFLICTING LOCATIONS BETWEEN PIPING AND PLANT PITS.
18. ALL MATERIALS SHALL BE INSTALLED AS DETAILED IN THE PLANS. IF THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS DO NOT THOROUGHLY DESCRIBE THE METHOD OR TECHNIQUES TO BE USED, THEN THE CONTRACTOR SHALL INSTALL AS PER MANUFACTURERS SPECIFICATIONS. IF A CONTRADICTION OCCURS, NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY.
19. IRRIGATION CONTRACTOR TO USE TEFLON TAPE ON ALL THREADED JOINTS.
20. NO PIPES SHALL BE INSTALLED PARALLEL AND DIRECTLY OVER ANOTHER LINE.
21. BRAND EACH VALVE BOX WITH 1" LETTERING SHOWING ZONE NUMBER AND CONTROLLER LETTER. THIS STAMP IS TO MATCH THE ZONE AND CONTROLLER ASSOCIATED WITH THE VALVE'S OPERATION.
22. CONTRACTOR SHALL PERFORM THE FOLLOWING:
   A. VISIT SITE AND VERIFY EXISTING GRADES, CONSTRUCTION AND CONDITIONS.
   B. NOTIFY LANDSCAPE ARCHITECT OF DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS.
   C. RESTORE CONTRACTOR DAMAGED EXISTING WORK TO THE SATISFACTION OF THE ENGINEER OR LANDSCAPE ARCHITECT WITHOUT COST TO THE OWNER.
   D. BE SATISFIED THAT THE PLAN CAN BE CONSTRUCTED, FUNCTIONAL AND COMPLETE.
23. ALL EQUIPMENT SHALL BE MAINTAINED WHILE UNDER CONSTRUCTION. MAINTENANCE INCLUDES: WATER SCHEDULING, REPLACEMENT OF DEFECTIVE OR DAMAGED EQUIPMENT, ADJUSTMENT AND RE-ADJUSTMENT OF HEADS AND OTHER EQUIPMENT.
24. CONTRACTOR TO ENSURE THE FOLLOWING:
   A. LINES AND VALVES ARE TO BE PLACED WITHIN PLANTING BEDS AND PROJECT LIMITS. THESE PLANS ARE SCHEMATIC. CONTRACTOR SHALL SIZE ALL PIPE.
   B. 100% COVERAGE OF IRRIGATION SYSTEM TO ALL PLANTS REGARDLESS OF SIZE OR TYPE AND SHALL CONFIRM ALL NON-IRRIGATED AREAS PRIOR TO SUBMITTING A BID.
25. INSTALL TWO (2) SPARE #14-1 AWG CONTROL WIRES FOR EACH UNUSED STATION AND ONE SPARE #12-1 AWG COMMON WIRE FROM THE RESPECTIVE CONTROLLER TO HIS LOCATION FOR USE AS SPARE WIRES IN EACH REMOTE CONTROL VALVE BOX ALONG THE ENTIRE WIRE ROUTING FOR THIS CONTROLLER. SEAL WIRE ENDS WATER TIGHT AND CONTAIN WITHIN VALVE BOX AT THIS LOCATION.
26. IRRIGATION PIPE AND VALVES MAY BE SHOWN OUTSIDE OF THE PLANTING AREA, IN THE HARDSCAPE OR OUTSIDE OF PROPERTY LINES FOR GRAPHIC CLARITY ONLY. INSTALL ALL IRRIGATION COMPONENTS WITHIN LANDSCAPED AREAS OR THROUGH SLEEVING AND WITHIN THE PROPERTY BOUNDARY.
27. SHOULD FIELD ADJUSTMENTS BE MADE TO THE SITE PLAN, IRRIGATION CONTRACTOR SHALL MAKE ANY NECESSARY ADJUSTMENTS TO THE IRRIGATION SYSTEM TO ENSURE PROPER FUNCTIONALITY. LANDSCAPE ARCHITECT IS TO BE NOTIFIED OF ANY AND ALL CHANGES MADE TO THE IRRIGATION SYSTEM, PRIOR TO INSTALLATION OF SAID CHANGES.
28. ALL ABOVE GROUND BACKFLOW PREVENTION INSTALLATIONS SHALL BE INSTALLED WITH A THERMAL BACKFLOW PREVENTER ENCLOSURE.

COLORADO 811

NOTE:
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Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado
DRAWING INFORMATION

IRRIGATION DETAILS / NOTES

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: J. MERKLEIN
SCALE: N/A
DATE: 01.19.12
DRAWING SHEET: 18 OF 25 — L2.2

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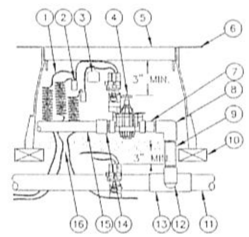
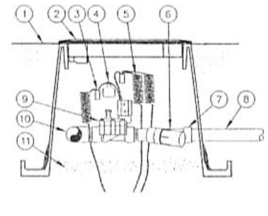
DATE: Jan 18, 2012 11:54am XREFS: 102390_TBLK 102390_PBASE 102390_XBASE 102390_LSC



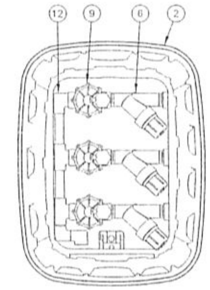
1. 30-INCH LINEAR LENGTH OF WIRE, COILED
2. WATERPROOF CONNECTION: RAIN BIRD SPLICE-1 (1 OF 2)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PGA-PRS-D
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. BRICK (1 OF 4)
11. PVC MAINLINE PIPE
12. SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

Rain Bird Remote Control Valve
NOT TO SCALE — PGA-PRS-D SERIES



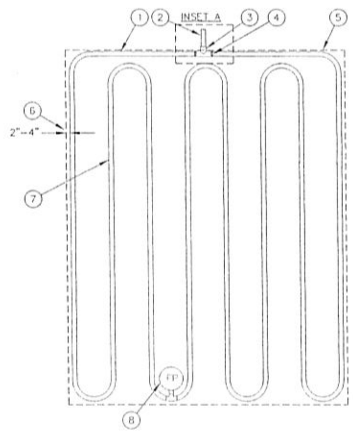
SIDE VIEW

1. FINISH GRADE
2. STANDARD VALVE BOX WITH COVER: RAIN BIRD VB-STD
3. WATERPROOF CONNECTION: RAIN BIRD DB SERIES
4. VALVE ID TAG
5. 30-INCH LINEAR LENGTH OF WIRE, COILED
6. PRESSURE REGULATING FILTER: RAIN BIRD PRF-100-RBY (INCLUDED IN XCZ-100-PRF KIT)
7. PVC SCH 40 FEMALE ADAPTOR
8. LATERAL PIPE
9. REMOTE CONTROL VALVE: RAIN BIRD 100-DV (INCLUDED IN XCZ-100-PRF KIT)
10. PVC SCH 40 TEE OR ELL TO MANIFOLD
11. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
12. MANIFOLD PIPE AND FITTINGS

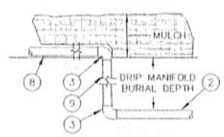


TOP VIEW

Rain Bird XCZ-100-PRF Drip Zone Control Valve
NOT TO SCALE



1. PVC EXHAUST HEADER
2. PVC DRIP MANIFOLD FROM RAIN BIRD CONTROL ZONE VALVE KIT (SIZED TO MEET LATERAL FLOW DEMAND)
3. PVC SCH 40 TEE OR EL (TYPICAL)
4. BARB X MALE FITTING: RAIN BIRD XFD-MA FITTING (TYPICAL)
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"-4" FROM PERIMETER OF AREA
7. ON-SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE (TYPICAL) POTABLE: XFD DRIPLINE NON-POTABLE: XFDP DRIPLINE
8. FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFD FLUSH POINT"
9. PVC SCH 40 RISER PIPE



INSET A

NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, PLANT MATERIALS AND CHANGES IN ELEVATION. SEE INSTALLATION SPECIFICATIONS ON RAIN BIRD WEB SITE (WWW.RAINBIRD.COM) FOR SUGGESTED SPACING.
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED THE MAXIMUM SPACING SHOWN IN THE ACCOMPANYING TABLE.

Rain Bird XF Series Dripline
NOT TO SCALE

NOTE:
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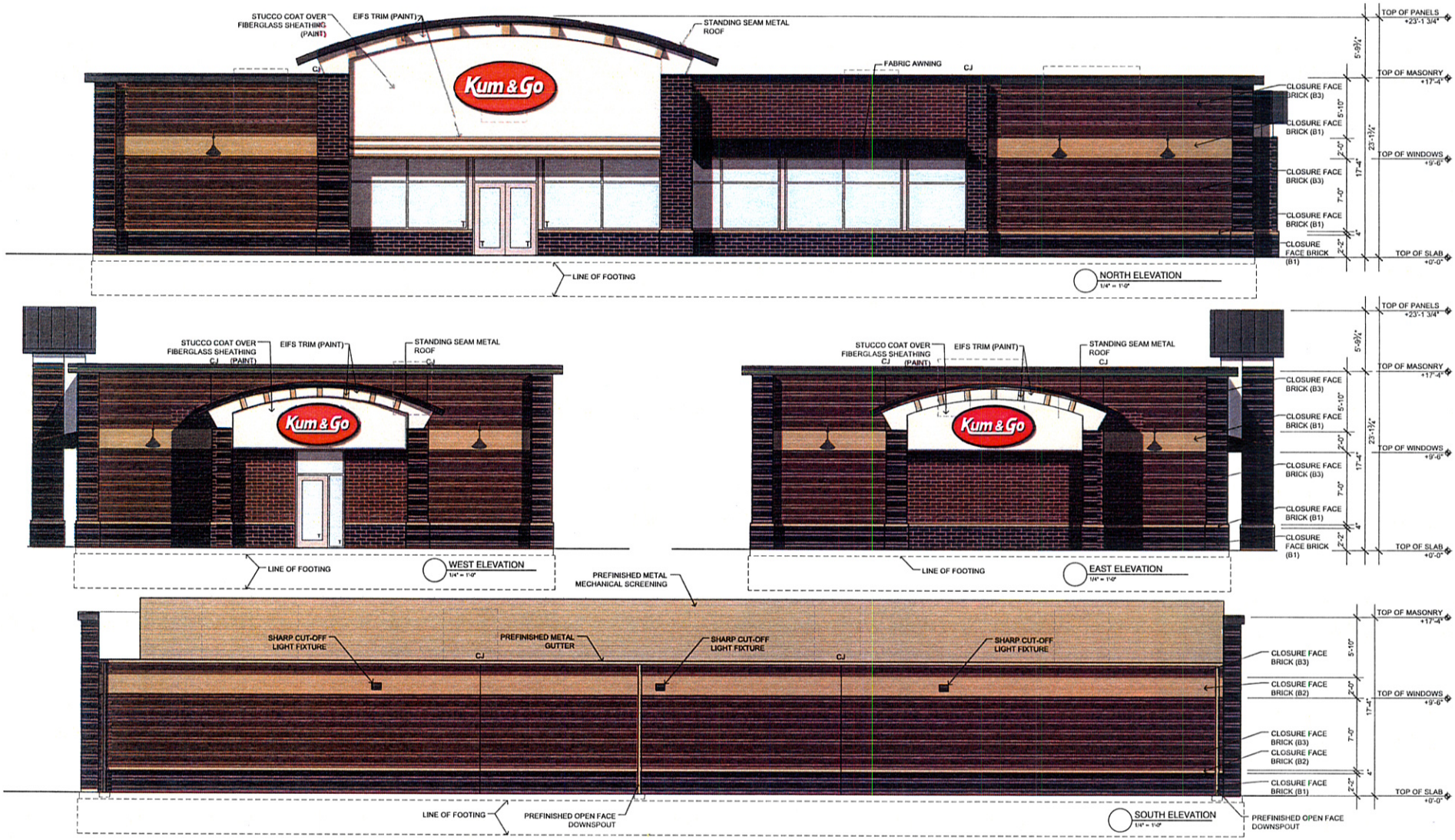
Special Review #896 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION
IRRIGATION DETAILS

REVISIONS

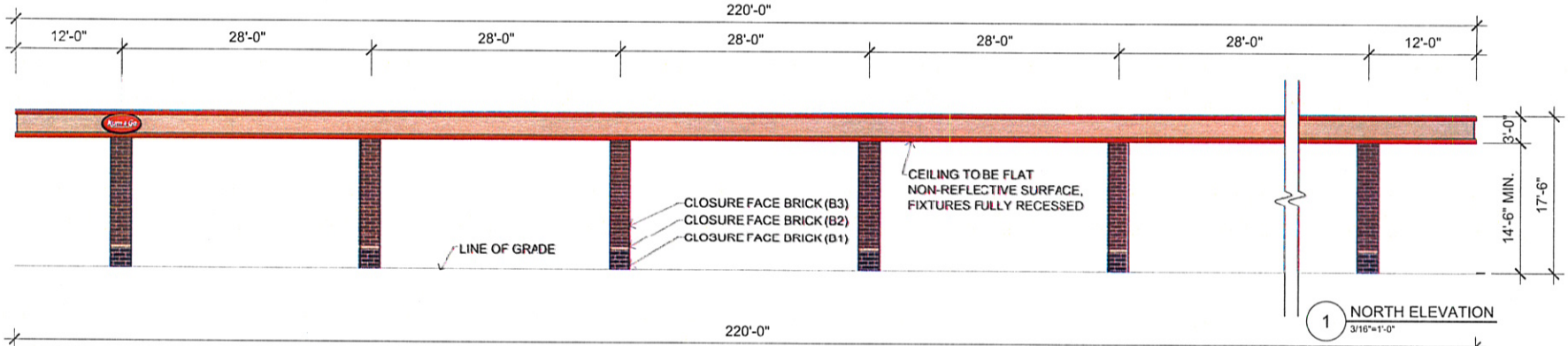
DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: J. MERKLEIN
SCALE: N/A
DATE: 01.19.12
DRAWING SHEET: 19 OF 25 L2.3



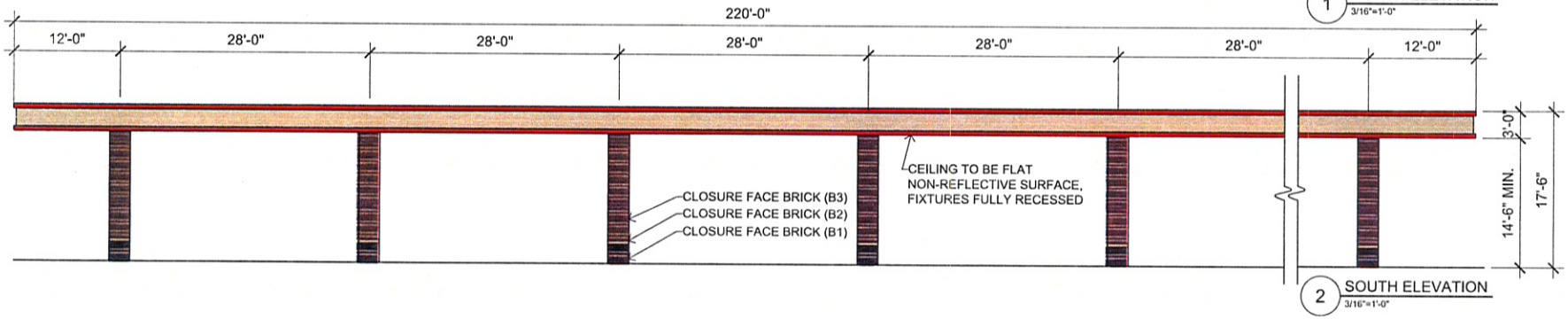
KUM & GO #995 LOVELAND, COLORADO

SHIFFLER ASSOCIATES ARCHITECTS, P.L.C.

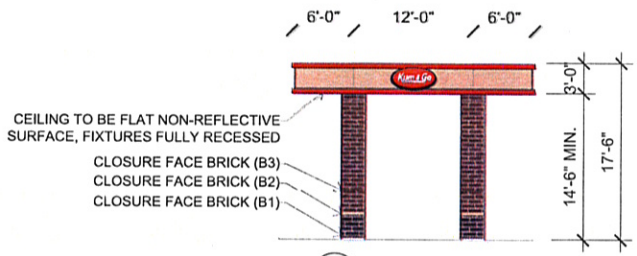
DRAWING SHEET: 20 OF 25 A1.1



1 NORTH ELEVATION
3/16"=1'-0"



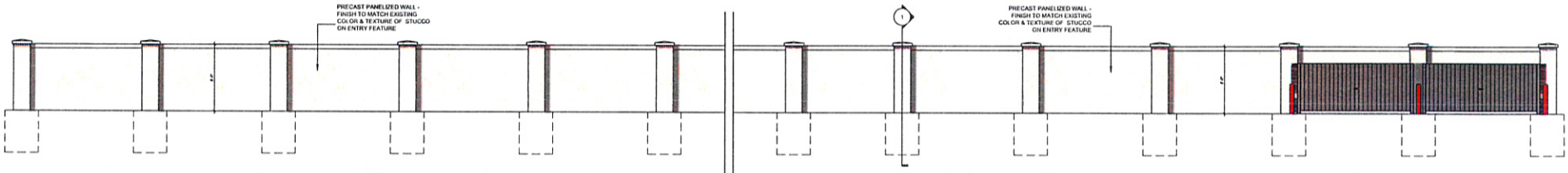
2 SOUTH ELEVATION
3/16"=1'-0"



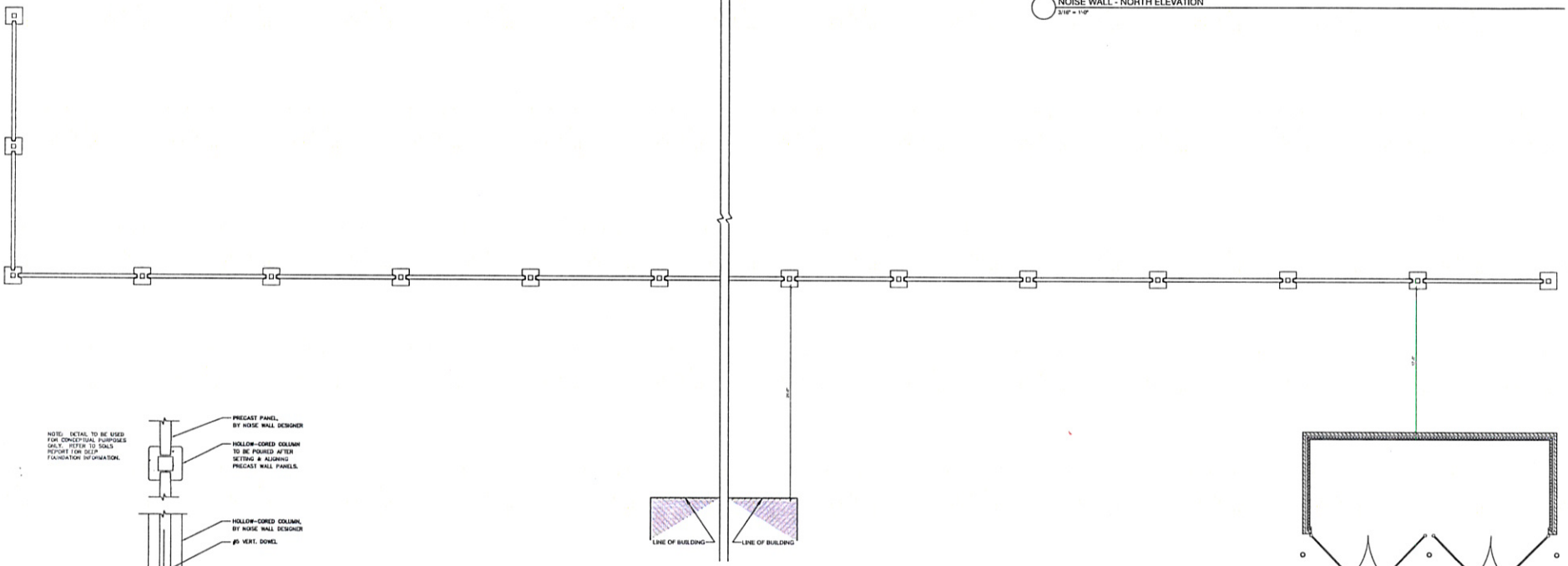
3 EAST/WEST ELEVATION
3/16"=1'-0"

KUM & GO #995 LOVELAND, COLORADO

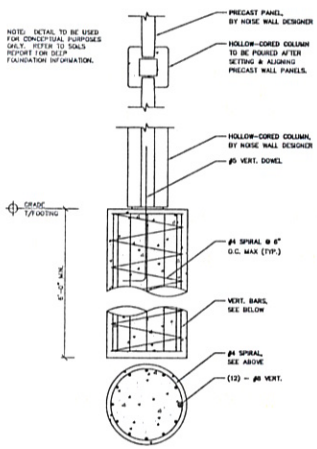
SHIFFLER ASSOCIATES ARCHITECTS, P.L.C.



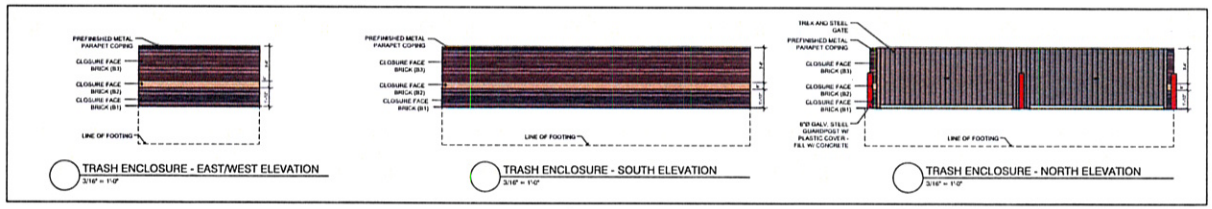
NOISE WALL - NORTH ELEVATION
3/16" = 1'-0"



NOISE WALL - PLAN
3/16" = 1'-0"



1 NOISE WALL - COLUMN SECTION
1/2" = 1'-0"



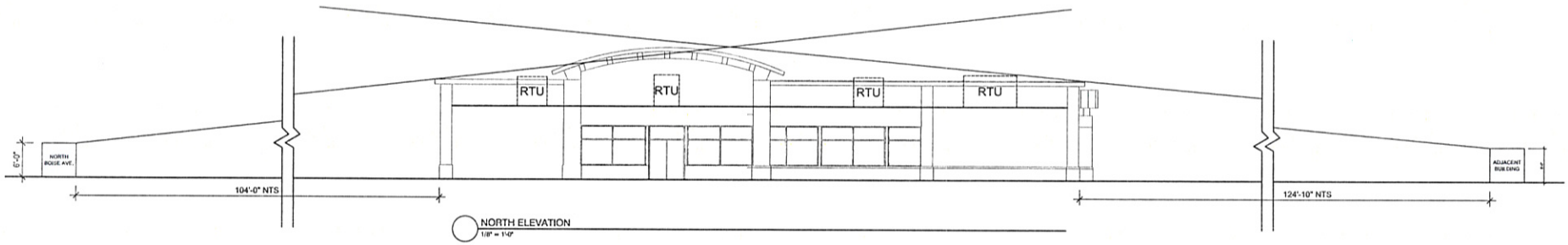
TRASH ENCLOSURE - EAST/WEST ELEVATION
3/16" = 1'-0"

TRASH ENCLOSURE - SOUTH ELEVATION
3/16" = 1'-0"

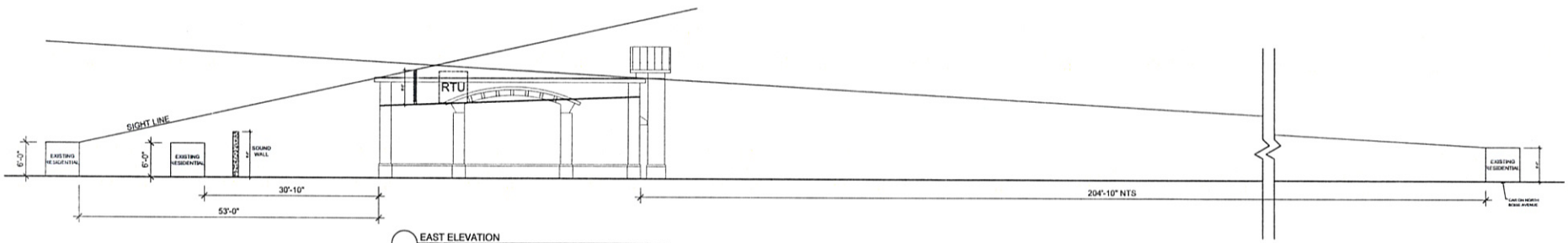
TRASH ENCLOSURE - NORTH ELEVATION
3/16" = 1'-0"

KUM & GO #995 LOVELAND, COLORADO

SHIFFLER ASSOCIATES ARCHITECTS, P.L.C.



NORTH ELEVATION
1/8" = 1'-0"

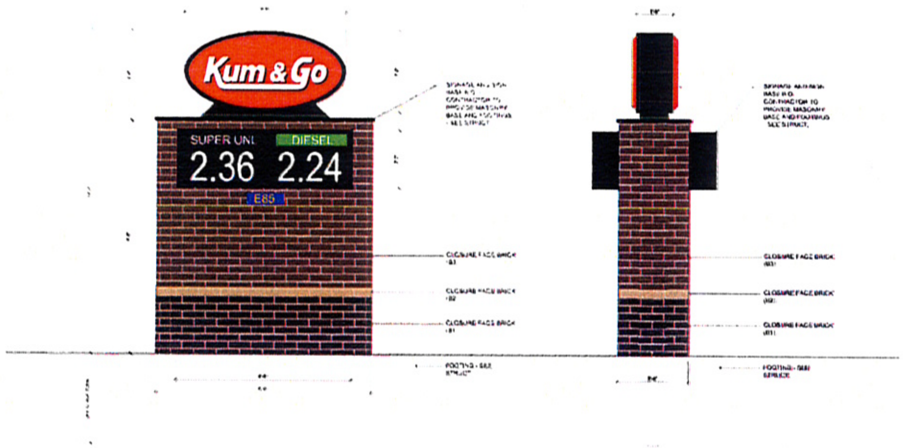


EAST ELEVATION
1/8" = 1'-0"

KUM & GO #995 LOVELAND, COLORADO

SHIFFLER ASSOCIATES ARCHITECTS, P.L.C.

DRAWING SHEET: 23 OF 25 A1.4



KUM & GO #995 LOVELAND COLORADO

SHIFFLER ASSOCIATES ARCHITECTS P.L.C

KUM & GO #995-COLORADO SPRINGS, COLORADO

EXTERIOR FINISH SCHEDULE

AREA	MATERIAL	#	PRODUCT
ROOF	PREFINISHED METAL GUTTER & DOWNSPOUT		KYNAR 500 - COLOR DARK BRONZE
	PREFINISHED METAL COPING		KYNAR 500 - COLOR DARK BRONZE
[illegible]	EXTERIOR INSULATING FINISH SYSTEM (EIFS)	[illegible]	SW PRO CLASSIC WATERBORNE SEMI-GLOSS - COLOR [illegible] LATTE
	EXTERIOR INSULATING FINISH SYSTEM (EIFS)	[illegible]	SW PRO CLASSIC WATERBORNE SEMI-GLOSS - COLOR [illegible] KILIM BEIGE
	EXTERIOR INSULATING FINISH SYSTEM SOFFIT	[illegible]	SW PRO CLASSIC WATERBORNE SEMI-GLOSS - COLOR SW7005 PURE WHITE
[illegible]	CLOSURE FACE BRICK	B1	UNITED BRICK & TILE - ENDICOTT BRICK - MEDIUM IRONSPOT VELOUR
	CLOSURE FACE BRICK	B2	UNITED BRICK & TILE - [illegible] - [illegible] GRAY
	CLOSURE FACE BRICK	B3	UNITED BRICK & TILE - ENDICOTT BRICK - DARK IRONSPOT VELOUR
WINDOWS	ALUMINUM STOREFRONT WINDOW SYSTEM		COLOR: DARK BRONZE
[illegible]	FACTORY FINISH/FIELD PAINT	[illegible]	[illegible] - COLOR [illegible] BLACK FOX
[illegible]	FIELD PAINT	[illegible]	[illegible] - COLOR [illegible] RED
EXTERIOR SIGNS	[illegible]		WINCHESTER [illegible]

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FAX-515-223-9873

Kum & Go # 995
1600 Eisenhower Blvd.
Loveland, Larimer County, Colorado 80537

DRAWING INFORMATION:
SIGN ELEVATION AND EXTERIOR FINISH SCHEDULE

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION: R. HALDER
DRAWN BY: -
SCALE: NA
DATE: 01.18.12
DRAWING SHEET: 24 OF 25 A1.5

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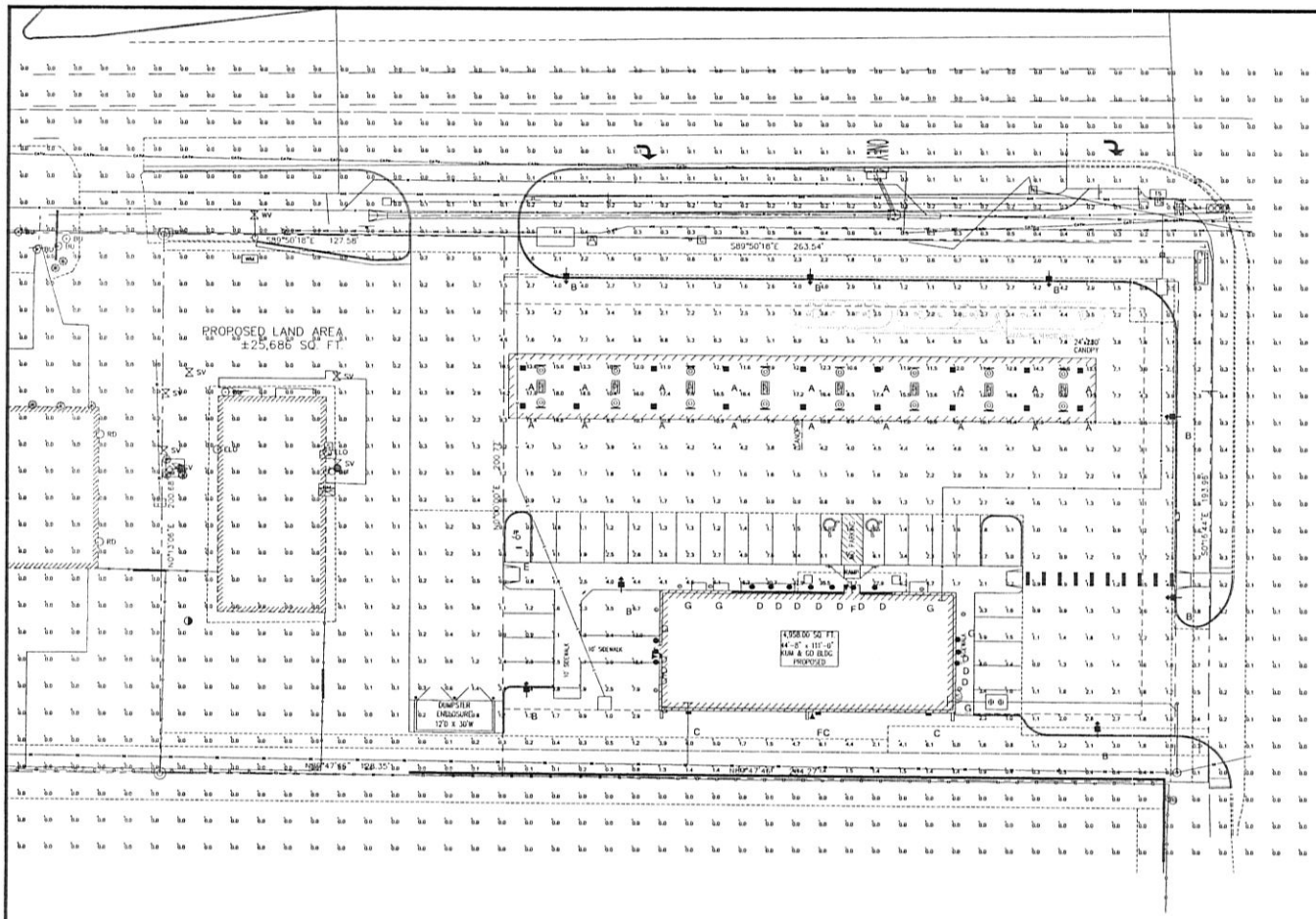

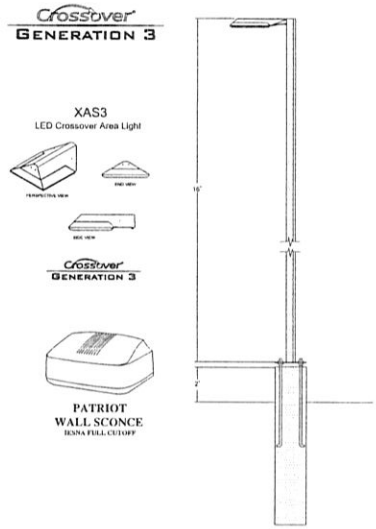

THIS IS NOT AN LSI RECOMMENDED LIGHT LAYOUT.

LSI IS NOT RESPONSIBLE FOR SAFETY AND SECURITY RISKS DUE TO INADEQUATE LIGHT LEVELS.

NOTE:
ALL CEILING MOUNTED LIGHTS ON THE UNDER-SIDE OF THE GAS CANOPY ROOF WILL BE FULLY RECESSED

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
ALL CALC POINTS	Illuminance	Fc	1.51	35.5	0.0	N.A.	N.A.
DISPENSER VERTICAL READINGS_6_	Illuminance	Fc	6.33	6.6	6.0	1.06	1.10
CANOPY SUMMARY	Illuminance	Fc	12.72	19.2	7.4	1.72	2.59
PARKING AREA SUMMARY	Illuminance	Fc	2.88	8.4	0.8	3.60	10.50

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Lumens/Lamp	Arr. Lum. Lumens	Arr. Watts
	7	G	SINGLE	AD-150-10-CW-LED-UE-GWT-DO	1.000	N.A.	700	10
	3	F	SINGLE	CS N DB CT - BATTERY BACK-UP LIGHTING	1.000	1	1	84
	1	E	SINGLE	OFM2 WB 400 PSMU F	1.000	32000	17947	458
	13	D	SINGLE	XSL2-S-LED-50-CW-UE	1.000	N.A.	4958	60
	3	C	SINGLE	XPWS3-FT-LED-48-450-CW-UE	1.000	N.A.	4829	68
	9	B	SINGLE	XAS3-FT-LED-63-350-CW-UE SINGLE ON 16' POLE + 2' BASE	1.000	N.A.	5201	75
	18	A	SINGLE	CRO3-E5-LED-64-450-CW-UE	1.000	N.A.	7440	99

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions.

This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping, or any other architectural elements unless noted.

INDUSTRIES™

LIGHTING PROPOSAL FOR
KUM & GO #995
E. EISENHOWER BLVD.
LOVELAND, CO

SCALE: 1"=20'
DATE: 1/18/12
BY: LLB

LO- 104701-3

Kum & Go

KUM & GO, L.C.
6400 Westown Parkway,
West Des Moines, Iowa 50266
PH-515-226-0128
FAX-515-223-9873

Special Review #996 and Site Development Plan for
Kum & Go Station # 995
Loveland, Colorado

DRAWING INFORMATION:
SITE LIGHTING PLAN

REVISIONS

DEPARTMENT: STORE DEVELOPMENT
CONSTRUCTION:
DRAWN BY:
SCALE: 1"=20'
DATE: 1.18.12
DRAWING SHEET: 25 OF 25 SL1.1