

# CONSTRUCTION PLANS

## FRONTAGE ROAD IMPROVEMENTS

### AT LAKE AVENUE

A PART OF SECTION 6,  
TOWNSHIP 3 NORTH, 75 WEST, OF THE 6TH. P.M.  
TOWN OF GRAND LAKE, COUNTY OF GRAND, STATE OF COLORADO

#### GENERAL NOTES:

- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF PUBLIC IMPROVEMENTS SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS FROM THE TOWN OF GRAND LAKE, THE THREE LAKES WATER AND SANITATION DISTRICT, AND APPLICABLE STATE AND FEDERAL REGULATIONS. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THESE STANDARDS OR ANY APPLICABLE STANDARDS, THE HIGHER QUALITY STANDARD SHALL APPLY. WORK SHALL BE INSPECTED AND APPROVED BY THE TOWN OF GRAND LAKE.
- THE CONTRACTOR 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 CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY PERTINENT LOCATIONS AND ELEVATIONS, ESPECIALLY AT CONNECTION POINTS AND AT POTENTIAL UTILITY CONFLICTS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL COORDINATE AND COOPERATE WITH THE TOWN AND ALL UTILITY COMPANIES INVOLVED WITH REGARD TO RELOCATIONS OR ADJUSTMENTS 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 CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PARTIES AFFECTED BY ANY DISRUPTION OF ANY UTILITY SERVICE.
- THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE APPROVED PLANS, ONE (1) COPY OF THE APPROPRIATE CRITERIA AND SPECIFICATIONS, AND A COPY OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB ONSITE AT ALL TIMES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
- IF DURING THE CONSTRUCTION PROCESS CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE CONTRACTOR SHALL CONTACT THE TOR PUBLIC WORKS INSPECTOR IMMEDIATELY.
- ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH MUTCD TO THE APPROPRIATE RIGHT-OF-WAY AUTHORITY (TOWN, COUNTY OR STATE) FOR APPROVAL PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN OR AFFECTING THE RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY AND ALL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED BY THE CONSTRUCTION ACTIVITIES.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIALS NECESSARY FOR THE COMPLETION OF THE INTENDED IMPROVEMENTS SHOWN ON THESE DRAWINGS OR AS DESIGNATED TO BE PROVIDED, INSTALLED, OR CONSTRUCTED UNLESS SPECIFICALLY NOTED OTHERWISE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADWAYS FREE AND CLEAR OF ALL CONSTRUCTION DEBRIS AND DIRT TRACKED FROM THE SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING AS-BUILT INFORMATION ON A SET OF RECORD DRAWINGS KEPT ON THE CONSTRUCTION SITE AND AVAILABLE TO THE TOR PUBLIC WORKS INSPECTOR AT ALL TIMES.
- DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE CONSULTANT ENGINEER FOR CLARIFICATION AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
- THE CONTRACTOR 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.
- ALL STRUCTURAL EROSION CONTROL MEASURES SHALL BE INSTALLED AT THE LIMITS OF CONSTRUCTION PRIOR TO ANY OTHER EARTH-DISTURBING ACTIVITY. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD REPAIR BY THE CONTRACTOR UNTIL SUCH TIME AS THE ENTIRE DISTURBED AREA IS STABILIZED WITH HARD SURFACE OR LANDSCAPING.
- THE CONTRACTOR 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.
- THERE SHALL BE NO SITE CONSTRUCTION ACTIVITIES ON SATURDAYS UNLESS SPECIFICALLY APPROVED BY THE TOR PUBLIC WORKS INSPECTOR AND NO SITE CONSTRUCTION ACTIVITIES ON SUNDAYS OR HOLIDAYS UNLESS THERE IS PRIOR WRITTEN APPROVAL BY THE PUBLIC WORKS DIRECTOR.
- NO SOLID OBJECT (EXCLUDING FIRE HYDRANTS AND TRAFFIC CONTROL DEVICES AND TRAFFIC SIGNS) EXCEEDING THIRTY (30) INCHES IN HEIGHT ABOVE THE FLOWLINE ELEVATION OF THE ADJACENT STREET, INCLUDING BUT NOT LIMITED TO BUILDINGS, UTILITY CABINETS, WALLS, FENCES, LANDSCAPE PLANTINGS, CROPS, CUT SLOPES, AND BERMS, SHALL BE PLACED WITHIN SIGHT DISTANCE LINES AND SIGHT DISTANCE EASEMENTS.

#### GENERAL EROSION CONTROL NOTES

- THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD AND CONSTRUCTION DEBRIS THAT MAY ACCUMULATE IN THE FLOWLINES AND PUBLIC RIGHTS-OF-WAY OF THE APPROPRIATE GOVERNING AGENCY AS A RESULT OF THIS CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER.
- ALL DISTURBED AREAS MUST BE HYDRO-MULCHED W/ TACKIFIER AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE NOT OTHERWISE PERMANENTLY STABILIZED.
- THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE POSTS TO STAKE DOWN STRAW OR HAY BALES; OR TO SUPPORT SILT FENCE USED AS AN EROSION CONTROL MEASURE; IS PROHIBITED. THE USE OF OSHA APPROVED COLORED WARNING CAPS ON REBAR OR FENCE POSTS USED WITH EROSION CONTROL MEASURES IS NOT ACCEPTABLE.
- IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF A DRAINAGE WAY, ADDITIONAL SEDIMENT CONTROLS SUCH AS TEMPORARY DIKES OR SILT FENCE SHALL BE REQUIRED.
- EROSION BALES SHALL BE PLACED SUCH THAT RUNOFF WILL NOT FLOW BETWEEN, AROUND OR UNDER BALES. BALES TO BE ANCHORED WITH 2" X 2" X 3' WOODEN STAKES OR TWO PER BALE.
- WHEN TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE REMOVED, ANY SILT AND SEDIMENT DEPOSITS SHALL BE REMOVED AND SPREAD EVENLY IN OPEN AREAS.
- BEST MANAGEMENT PRACTICES (BMP) SHOWN ON THESE PLANS ARE CONCEPTUAL ONLY. ADJUST AS NECESSARY TO FIT FIELD CONDITIONS.
- TEMPORARY SEDIMENT BASINS SHALL BE USED DURING CONSTRUCTION TO CONTAIN ALL RUNOFF FROM THE SITE. IF TRENCH DEWATERING OR GROUND WATER REMOVAL IS REQUIRED, THE SEDIMENT POND OR OTHER APPROVED MEANS SHALL BE USED TO DETAIN ALL WATER PUMPED BY THESE OPERATIONS.
- THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF CONSTRUCTION, GRADING AND LANDSCAPING, INCLUDING THE NAME AND 24 HOUR PHONE NUMBER OF THE RESPONSIBLE PARTY TO CONTACT REGARDING ANY EROSION OR SEDIMENT PROBLEM TO THE APPROPRIATE GOVERNING AGENCY PRIOR TO BEGINNING ANY CONSTRUCTION.
- EROSION CONTROL MEASURES TO BE COORDINATED WITH CONSTRUCTION MANAGER.
- EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH REGULATIONS OF THE APPROPRIATE GOVERNING AGENCY.



PERMANENT SEED MIX  
RECOMMENDED BY GRAND CO. NRCS

LAND USE	% OF MIX	SPECIES	VARIETY	APPLICATION RATE (lbs/Ac)
DRY LAND NON-IRRIGATED RECLAMATION	50%	SMOOTH BROME	MANCHAR	16 Lbs/Ac
	25%	SHEEP FESCUE	COVAR	8 Lbs/Ac
	20%	PUBESCENT WHEATGRASS	LUNA	6.5 Lbs/Ac
	5%	WILD FLOWER	BLUE FLAX	2 Lbs/Ac

#### NOTES:

- THE APPLIED SEED SHALL NOT BE COVERED BY A SOIL THICKNESS GREATER THAN 0.5 INCHES IN DEPTH.
- SEEDING SHALL TAKE PLACE WITHIN 14 DAYS OF ACHIEVING FINISHED GRADE. SEEDING MUST OCCUR WITHIN 3 DAYS OF TOPSOIL PLACEMENT.
- TO PROVIDE TEMPORARY EROSION CONTROL PRIOR TO SEED APPLICATION, UTILIZE SURFACE ROUGHENING (ON THE CONTOUR OR PERPENDICULAR TO PREVAILING WINDS) AND APPLY MULCH.
- SEED SHALL BE PLANTED WITH DRILL SEEDING EQUIPMENT, WHEN POSSIBLE.
- AREAS THAT REQUIRE BROADCAST SEEDING SHALL BE MULCHED AND TACKIFIED.
- SEED APPLIED HYDRAULICALLY SHALL INCLUDE TACKIFIER IN THE MIX, AS SPECIFIED BY MANUFACTURER.

#### PERMANENT SEEDING

#### GENERAL NOTES:

- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION OF FRONTAGE ROAD IMPROVEMENTS SHALL MEET OR EXCEED THE REQUIREMENTS IN THE GRAND LAKE MUNICIPAL CODE, CHAPTER 11, ARTICLE 2.
- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR WATER MAIN CONSTRUCTION SHALL MEET OR EXCEED THE RULES AND REGULATIONS OF THE GRAND LAKE WATER DEPARTMENT.
- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR SANITARY SEWER CONSTRUCTION SHALL MEET OR EXCEED THE REQUIREMENTS IN THE THREE LAKES WATER AND SANITATION DISTRICT RULES AND REGULATIONS, 3-10-2010.
- APPROVED VARIANCES SHALL SUPERCEDE PUBLISHED STANDARDS.

**Bowman**  
CONSULTING

Phone: (970) 887-2600  
135 East Jasper  
Granby, CO 80446  
www.bowmanconsulting.com

#### REVISIONS

REVISION	DATE	DESCRIPTION

#### COVER SHEET

LAKE AVENUE

COLORADO

GRAND LAKE

SEAL



DESIGN TG	DRAWN TG	CHKD DH
SCALE	H: N/A V: N/A	
JOB No.	020234-01-001	
DATE :	10/24/2016	
SHEET C1		



Know what's below.  
Call before you dig.

#### DESIGN ENGINEER APPROVAL

THESE CONSTRUCTION PLANS FOR FRONTAGE ROAD IMPROVEMENTS AT LAKE AVENUE WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF GRAND LAKE.

R. TIMOTHY GAGNON, PE NO. 35765  
FOR AND ON BEHALF OF BOWMAN CONSULTING

DATE







