DATE: June 28, 2023
TO: DOTI Capital Project Managers
FROM: Engineering & Regulatory (ER) Office
SUBJECT: Suggested Standard Notes to be provided on Capital Projects

GENERAL

1. ALL WORK SHALL CONFORM TO CURRENT CITY AND COUNTY OF DENVER STANDARDS AND SPECIFICATIONS. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE LATEST EDITION OF THE CITY STANDARDS SPECIFICATIONS, OR HALT CONSTRUCTION UNTIL THE CONFLICT IS RESOLVED.

2. THE CONTRACTOR SHALL HAVE ONSITE AT ALL TIMES, ONE COPY OF THE APPROVED PLANS, ONE COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND COPIES OF ANY PERMITS AND EXTENSION AGREEMENTS NEEDED FOR THE JOB.

3. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL HOLD A PRE-CONSTRUCTION MEETING, INCLUDING CITY INSPECTORS (FROM ALL APPLICABLE DEPARTMENTS), AND OBTAIN PERMITS FROM RIGHT-OF-WAY SERVICES.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL NECESSARY PERMITS ARE IN PLACE PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE, AT A MINIMUM, FOR OBTAINING THE DOTI STREET OCCUPANCY PERMITS WITH THE APPROPRIATE MHT. CONSTRUCTION AND STREET CUT PERMITS ARE ONLY REQUIRED FOR ALL PRIVATE DEVELOPMENT WORK IN THE PUBLIC RIGHT-OF-WAY, AND OBTAINING A DEWATERING PERMIT IF WATER IS ENCOUNTERED WHILE DOING UNDERGROUND EXCAVATIONS. NO ADDITIONAL TIME WILL BE ALLOTED TO OBTAIN ANY PERMITS, AND NO ADDITIONAL COMPENSATION SHALL BE PAID FOR ANY FEES AND WORK, BUT SUCH COSTS SHALL BE INCLUDED IN THE WORK. CONTRACTOR SHALL SUBMIT THE SOP PERMIT APPLICATION TO DENVER ROWS MINIMUM OF 7 DAYS PRIOR TO NEEDING THE PERMIT.

5. THE CONTRACTOR IS RESPONSIBLE FOR BEING AWARE OF, NOTIFYING, COORDINATING AND SCHEDULING ALL INSPECTIONS REQUIRED FOR FINAL APPROVALS AND PROJECT ACCEPTANCE. ALL WORK, INCLUDING CORRECTION WORK, IS SUBJECT TO NOTIFICATION AND INSPECTION REQUIREMENTS.

6. PROPOSED FINISHED GROUND ELEVATIONS FOR ITEMS TO BE ADJUSTED, RESET, OR MODIFIED SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF SAFETY INCLUDING, BUT NOT LIMITED TO EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.


9. ALL EQUIPMENT IS TO REMAIN ON THE ROAD SURFACE, PAVED PARKING AREAS, OR AREAS OF DISTURBANCE AS SHOWN IN THE PLANS. ANY OFF-ROAD STAGING AREAS MUST BE PRE-APPROVED BY THE ENGINEER. IF THE ENGINEER APPROVES A STAGING AREA, IT MUST BE RETURNED TO ITS EXISTING CONDITION OR BETTER AFTER IT IS NO LONGER NEEDED AT NO ADDITIONAL COST TO THE PROJECT.

11. 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 city inspector at all times. Upon completion of the work, the contractor shall submit record drawings, in a PDF or an AutoCAD compatible format, to the city as determined by the city inspector. The production of these documents will not be paid for separately, but shall be included in the cost of the work.

12. Prior to the commencement of construction, all storm drain inlets, laterals, mains and other storm runoff appurtenances within the project limits shall be cleared of sediment and debris in accordance with Denver wastewater management department standards. After construction, the contractor shall remove any sediment or debris from the storm sewer system at no cost to the city.

13. Prior to final acceptance, all disturbed portions of roadway right-of-way shall be cleaned up and restored to their original condition, subject to city approval.

14. No work shall be permitted on weekends or holidays without prior authorization or unless otherwise specified. The city may restrict work in the right-of-way during adverse weather conditions or during periods of high traffic volume.

15. No cleated or tracked equipment may work in or move over paved surfaces without mats.

16. Where fences in the right-of-way must be removed or cut to facilitate construction, approval must first be given by the city. Existing right-of-way/fence line must be established by good survey practices. Fences shall be replaced in kind according to city fencing standards.

17. Protection and replacement of street improvements are the responsibility of the contractor until these improvements are fully completed and accepted by the city.

18. If during the construction process, conditions are encountered which could indicate a situation that is not identified on the plans or specifications, the contractor shall contact the project manager immediately.

19. All new construction to be adjusted in the field as required to accommodate existing conditions, and to provide adequate drainage must be approved by the project manager prior to the start of work.

20. Contractor must contact parks.locators@denvergov.org, 720-865-6976, when any work is occurring adjacent to city parks, parkways, or park easements. Contractor will need Denver parks permit if there is any intent to touch or encroach upon any city park, parkway or park easement.

Surveying

1. Prior to beginning work on the project, the contractor’s surveyor shall schedule a pre-survey conference with the city surveyor to discuss survey control and monumentation requirements for the project.
   DOTI – Survey Department
   Attn: City Surveyor
   201 W. Colfax Ave.
   Denver, CO 80202
   720-865-3121

2. After completion of the pre-survey conference the contractor’s surveyor shall perform a survey to locate all land survey monuments of any type within the project limits, including but not limited to: City of Denver range points, section corners, benchmarks, and property corners. The contractor shall be responsible for replacing all land survey monuments disrupted by construction activities or by negligence on the part of the contractor. Any range points replaced shall meet current city and county of Denver standards. Monument tie out sheets shall be prepared for all range points within the project and deposited with the city surveyor. At the end of the project, the contractor’s surveyor shall deposit a land survey plat showing all monumentation within the project limits.
3. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS, OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT AND/OR BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE C.R.S. SECTION 18-4-508.

UTILITIES
1. THE TYPE, SIZE, LOCATION AND NUMBER OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THE DRAWINGS, UNLESS OTHERWISE NOTED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK BEFORE COMMENCING NEW CONSTRUCTION. RESPONSIBILITIES FOR THE RELOCATION OF UTILITY LINES ARE AS NOTED IN THE PROJECT SPECIAL PROVISIONS. THE CONTRACTOR SHALL COOPERATE WITH COMPANIES TRYING TO COORDINATE THE RELOCATION EFFORT. LINES NOT RELOCATED SHALL BE PROTECTED BY THE CONTRACTOR IN PLACE. THE CONTRACTOR 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.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITIES DURING CONSTRUCTION AND SHALL HOLD THE CITY AND ITS ENGINEERS HARMLESS FOR DAMAGES ARISING FROM THE CONTRACTOR'S FAILURE TO ADEQUATELY PROTECT EXISTING UTILITIES. DAMAGED UTILITIES SHALL BE REPAIRED BY AND AT THE EXPENSE OF THE CONTRACTOR.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE FOR EVIDENCE OF FAILURES OF OR DEFICIENCIES IN UTILITY COMPANY FACILITIES (I.E. XCEL, DENVER WATER, DOTI, WMD, ETC) AND TO IMMEDIATELY CALL ANY SUCH EVIDENCE OF PRE-EXISTING DAMAGE TO THE ATTENTION OF THE UTILITY COMPANY ALONG WITH PROPER DOCUMENTATION.

4. THE CONTRACTOR IS REQUIRED TO RESET, ADJUST OR REPLACE ANY UTILITIES THAT ARE IMPACTED BY CONSTRUCTION AND ARE DESIGNED TO REMAIN WITHIN THE PROJECT LIMITS.

5. LOCATIONS FOR POTHOLING SHALL BE AS APPROVED BY THE PROJECT MANAGER.

6. ALL UTILITY INSTALLATIONS AND POTHOLE RESTORATIONS SHALL COMPLY WITH CITY AND UTILITY STANDARDS. ANY POTHOLES DRILLED INTO SIDEWALKS WILL REQUIRE FULL PANEL REPLACEMENT. PERMANENT PATCHING OF POTHOLES OR CUTS IS ALSO REQUIRED IN ASPHALT PAVEMENTS, AND FOR CONCRETE PAVEMENT WITH 2 TO 6 UTILITY LOCATE POTHOLES AS DEFINED IN DWG 11.10 OF THE TRANSPORTATION STANDARDS AND DETAILS.

REMOVALS, EXISTING ITEMS, SAW CUTTING
1. ALL ITEMS TO BE REMOVED AND NOT RESET SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.

2. PAVEMENT MARKINGS SHALL BE REMOVED FROM THE PAVEMENT TO THE MAXIMUM EXTENT FEASIBLE BY METHODS THAT DO NOT ALTER OR DAMAGE THE SURFACE OR TEXTURE OF THE PAVEMENT TO THE SATISFACTION OF THE ENGINEER. REMOVAL SHALL BE IN ACCORDANCE WITH SPECIFICATIONS. ALL MATERIAL ON EXISTING ROADWAY, WHICH IS LOOSENED IN THE PROCESS OF PREPARATION OF THE SURFACE FOR STRIPING, NEEDS TO BE CLEARED OFF THE ROADWAY IMMEDIATELY, AND WILL NOT BE PAID FOR SEPARATELY.

3. SIGNS, CITY OWNED STREET LIGHTS AND / OR SIGNAL EQUIPMENT DESIGNATED AS REMOVAL ITEMS SHALL BE CAREFULLY REMOVED AND DELIVERED BY THE CONTRACTOR TO THE CITY YARD AT 5440 ROSLYN STREET, BUILDING E. ANY MATERIAL DESIGNATED FOR SALVAGE THAT IS DAMAGED AFTER REMOVAL SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR LOADING, HAULING, ULOADING, OR PLACING SALVAGED MATERIALS IN THE CITY YARD.

4. WHERE IT IS REQUIRED TO REMOVE EXISTING CONCRETE OR ASPHALT, CUTTING SHALL BE DONE TO A NEAT WORK LINE TO FULL DEPTH USING A SAW, CUTTING WHEEL, OR OTHER METHOD APPROVED BY THE PROJECT MANAGER. THIS WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.

5. REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK, DRIVEWAYS, CURB CUTS, AND OTHER CONCRETE ITEMS THAT ARE ATTACHED OR ADJACENT TO OTHER CONCRETE ITEMS SHALL BE REMOVED TO THE NEAREST JOINT, AS NEEDED TO AVOID DAMAGING THE REMAINING CONCRETE ITEMS. THE
CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ADJACENT SIDEWALK DURING CURB AND GUTTER REMOVAL AND SHALL REPLACE DAMAGED SECTIONS AT NO ADDITIONAL COST TO THE PROJECT.

6. ALL SAW, SANDBLASTING, ABRASIVE WATER BLASTING, AND JET CUTTING RESIDUE MATERIAL SHALL BE PROPERLY CONTAINED, COLLECTED, AND DISPOSED OF AND SHALL NOT RUNOFF INTO WATERS OF THE STATE THROUGH INLETS, STORM DRAINS, VEGETATIVE SWALES OR BY ANY OTHER MEANS. REMOVAL OF RESIDUE SHALL BE ON A DAILY BASIS, SHALL CONFORM TO SPECIFICATIONS AND IS INCLUDED IN THE COST OF THE WORK.

7. THE CONTRACTOR IS REQUIRED TO RESET, ADJUST, OR REPLACE ANY UTILITIES, LANDSCAPING, SPRINKLER SYSTEMS, SIGNS, SIDEWALKS, ETC. THAT ARE IMPACTED BY CONSTRUCTION AND ARE NOT DESIGNATED TO BE REMOVED.

8. THE CONTRACTOR SHALL USE AGGREGATE BASE COURSE TO FILL AREA LEFT BY REMOVAL OF DRIVEWAY OR CURB RAMP PRIOR TO PLACEMENT OF NEW SIDEWALK, DRIVEWAY OR CURB RAMP.

ASPHALT PAVEMENT
1. A TACK COAT IS REQUIRED ON ADJOINING SURFACES PRIOR TO THE PLACEMENT OF SUBSEQUENT LIFTS OF ASPHALT. THIS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.

2. WHERE NEW CONSTRUCTION IS TO ABUT EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE REMOVED TO A NEAT VERTICAL LINE TO CREATE A CLEAN CONSTRUCTION JOINT.

3. PATCH ASPHALT PAVEMENT AS NECESSARY TO JOIN NEW GUTTERS WITH EXISTING PAVEMENT.

4. WHEN AN EXISTING ASPHALT STREET IS CUT, THE STREET MUST BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ITS ORIGINAL CONDITION. THE EXISTING STREET CONDITION SHALL BE DOCUMENTED BEFORE ANY CUTS ARE MADE. PATCHING SHALL BE DONE IN CONFORMACE WITH THE PROJECT STANDARDS. THE FINISHED PATCH SHALL BLEND SMOOTHLY INTO THE EXISTING SURFACE. ALL LARGE PATCHES SHALL BE PAVED WITH AN ASPHALT LAY-DOWN MACHINE.

5. BEFORE FINAL PAVING IS COMPLETED, CONTRACTOR SHALL PROVIDE SMOOTH AND SAFE TRANSITIONS BETWEEN NEW AND ACTIVE EXISTING PAVEMENTS. TRANSVERSE JOINTS SHALL BE MAXIMUM 1 INCH VERTICAL TO 20 INCH HORIZONTAL. LONGITUDINAL JOINTS WITH VERTICAL DROP OFF SHALL BE TAPERED PAST THE NEW LANE LINE TO MAXIMUM 1 INCH VERTICAL TO 8 INCH HORIZONTAL.

6. HMA (PATCHING)(ASPHALT) SHALL BE 9 INCHES THICK OR MATCH THE DEPTH OF THE SURROUNDING EXISTING PAVEMENT, WHICHER IS GREATER, AND APPROVED BY THE ENGINEER. HOT MIX ASPHALT FOR PATCHING SHALL CONFORM TO THE GRADATION REQUIREMENTS FOR HMA (GRADING S)(100) (PG64-22). ASPHALT PATCHING SHALL FOLLOW CITY AND COUNTY OF DENVER STANDARD DRAWINGS 12.0 THROUGH 12.5, AVAILABLE ON THE CITY’S WEBSITE.

EARTHWORK AND EXCAVATIONS
1. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND TOES OF SLOPE AS SHOWN ON THE PLANS AND CROSS SECTION. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS AT THE EXPENSE OF THE CONTRACTOR.

2. WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. COST FOR DUST PALLIATIVE SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE WORK.


4. MOISTURE DENSITY CONTROL SHALL BE APPLIED FULL DEPTH FOR ALL EMBANKMENTS.

5. DURING EACH PHASE OF CONSTRUCTION, THE CONTRACTOR SHALL SHAPE TO DRAIN AND COMPACT THE WORK AREA TO A UNIFORM CROSS-SECTION. ELIMINATE ALL RUTS AND LOW SPOTS THAT COULD HOLD WATER. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO ADDITIONAL COST TO THE CITY.
6. **ALL WORK SHALL BE PROPERLY BACKFILLED PRIOR TO THE END OF THE WORKDAY, OR PROTECTED APPROPRIATELY PER ALLOWABLE PRACTICES AND PER THE CITY INSPECTOR. NO OPEN HOLES ARE ALLOWED OVERNIGHT.**

7. **WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL IS TO BE PLACED ON THE UPHILL SIDE OF TRENCHES.**

8. **MATERIAL REMOVED FROM ANY PORTION OF THE ROADWAY PRISM MUST BE REPLACED IN LIKE KIND WITH EQUAL OR BETTER COMPACTION. NO SEGREGATION OF MATERIALS WILL BE PERMITTED.**

9. **ALL SOIL SUBGRADE FOR PATCHBACK ALONG CURB AND GUTTER, CONCRETE PAVEMENT, SIDEWALK AND MEDIAN COVER SHALL BE PROOF ROLLED BY THE CONTRACTOR TO FIND ANY UNSTABLE AREAS OF SUPPORT.**

10. **THE INSPECTOR MAY ALLOW HAND OPERATED COMPACTION EQUIPMENTS, SUCH AS A JUMPING JACK OR HEAVY ROLLER, FOR PROOF ROLLING, OR FOLLOW CDOT 203.09 CRITERIA, IN TIGHT SPACES, DEPENDING ON THE SIZE OF THE CONSTRUCTION AREA.**

**ENVIRONMENTAL**

1. **REGULATED ASBESTOS CONTAMINATED SOILS (RACS) MAY BE ENCOUNTERED IN BUILDING DEBRIS THROUGHOUT THE CITY DURING EXCAVATION. ALL RACS MUST BE MANAGED, DOCUMENTED, AND DISPOSED IN ACCORDANCE WITH STATE REGULATIONS PERTAINING TO SOLID WASTE SITES AND FACILITIES, SECTION 5 - ASBESTOS WASTE MANAGEMENT. STATE REGULATIONS REQUIRE ANY DISTURBED DEBRIS BE CHARACTERIZED TO DETERMINE APPLICABILITY OF THE REGULATION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPETENT TRAINED PERSONNEL CAPABLE OF IDENTIFYING RACS IN DEBRIS AND HAVING ACCESS TO AN ONSITE CERTIFIED ASBESTOS BUILDING INSPECTOR (CABI) IN CASE OF RACS DISCOVERY.**

2. **CONTRACTOR SHALL TAKE REASONABLE MEASURES TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE AND TO PREVENT THE VISIBLE DISCHARGE OF FUGITIVE PARTICULATE EMISSIONS BEYOND THE PROPERTY LINE FROM WHICH THE EMISSIONS ORIGINATE. THE MEASURES TAKEN MUST BE EFFECTIVE AT ALL TIMES ON THE SITE, INCLUDING PERIODS OF INACTIVITY SUCH AS EVENINGS, WEEKENDS, AND HOLIDAYS AS WELL AS ANY OTHER PERIOD OF INACTIVITY.**

3. **DURING ANY SOIL DISTURBING ACTIVITIES, IF UNKNOWN/UNIDENTIFIED UNDERGROUND STORAGE TANKS, DRUMS, ODOROUS SOIL, STAINED SOIL, ASBESTOS-CEMENT PIPE (TRANSIT), BUILDING DEBRIS, OR WASTE MATERIALS ARE ENCOUNTERED, CONTRACTOR SHALL IMMEDIATELY STOP WORK IN THE AREA OF THE DISCOVERY UNTIL DENVER DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (DDPHE) MAKES A DETERMINATION OF HOW TO PROCEED. CONTRACTOR SHALL IMMEDIATELY NOTIFY DDPHE OF THE DISCOVERY AT (720) 460-8376.**


5. **THE CONTRACTOR SHALL DIRECT NON-RECYCLABLE, NON-HAZARDOUS WASTES FROM CITY-OWNED OR CONTROLLED PROPERTY OR FACILITIES TO THE DENVER ARAPAHOE DISPOSAL SITE (DADS) LANDFILL FOR DISPOSAL, FOLLOWING THE REQUIREMENT AND PROCEDURAL GUIDANCE PER CITY EXECUTIVE ORDER 115. LABORATORY ANALYTICAL RESULTS WILL BE REQUIRED PRIOR TO DADS ACCEPTANCE FOR SOIL AND POSSIBLY OTHER MATERIALS. EARLY TESTING IS RECOMMENDED; DDPHE CAN ASSIST. CONTACT DDPHE AT (720) 865-5448 WITH QUESTIONS.**

6. **NOISE CONTROL. ALL NOISE CAUSED BY CONSTRUCTION OF, OR RESULTING FROM COMPLETED PROJECTS, MUST COMPLY WITH DENVER'S NOISE ORDINANCE, DENVER REVISED MUNICIPAL CODE CHAPTER 36 “NOISE CONTROL”. EXEMPTED HOURS FOR CONSTRUCTION IN THE CITY AND COUNTY OF DENVER ARE FROM 7 AM TO 9 PM MONDAY THROUGH FRIDAY AND 8 AM TO 5 PM ON SATURDAYS AND SUNDAYS. IF THERE IS A NEED TO WORK OUTSIDE OF THE EXEMPTED HOURS: 1) THE CONTRACTOR SHALL REQUEST A VARIANCE, AND 2) THE VARIANCE PROCESS NEEDS TO BE STARTED A MINIMUM OF**
THREE MONTHS PRIOR TO THE DESIRED START DATE. ANY QUESTIONS SHOULD BE DIRECTED TO DDPHE COMMUNITY NOISE PROGRAM AT (720) 865-5410.

CONCRETE
1. IF CONCRETE REPLACEMENT IS NECESSARY, THE ENTIRE AFFECTED SLAB OR PANEL MUST BE REPLACED.
2. THE CONTRACTOR SHALL USE A CIRCULAR BLOCKOUT AT NEW MANHOLES AND OTHER ROADWAY APPURTENANCES OF SIMILAR AND LARGER SIZE. SMALL APPURTENANCES, SUCH AS VALVES, MONUMENT BOXES, AND EXISTING MANHOLES DO NOT REQUIRE A BLOCKOUT, BUT DO REQUIRE A BOND BREAKER AND FLEXIBLE EXPANSION JOINT MATERIAL. SEE CCD STD DWG NO. 11.6.
3. SIDEWALK SHALL BE CLASS P CONCRETE WITH 28 DAY COMpressive STRENGTH REQUIRED OF 4,500 PSI. THE USE OF ½ IN (#67) TOP SIZE AGGREGATE IS ALLOWED.
4. CONCRETE STREET PAVEMENT SHALL BE CDOT CLASS P CONCRETE WITH 28 DAY COMpressive STRENGTH REQUIRED OF 4,500 PSI, AND FLEXURE STRENGTH OF 650 PSI. THE USE OF UP TO 1.5 INCH (#357 or 467) TOP SIZE, WITH INTERMEDIATE AGGREGATE IS ALLOWED.
5. CDOT CLASS E MIXES FOR HIGH EARLY OPENING SHALL OBTAIN COMpressive STRENGTH OF 3,000 PSI TO ALLOW FULL TRAFFIC. STRENGTH MATURITY METHODS ARE ENCOURAGED TO DETERMINE OPENING STRENGTH.
6. FLEXIBLE FORMS (WELL STAKED TO BE AS STIFF AS TWO-INCH NOMINAL MINIMUM THICKNESS) SHALL BE USED ON ALL CURVES OF LESS THAN 75 FOOT RADIUS.
7. ALL THICKNESSES SHALL BE ACCORDING TO THE STANDARDS, NOT LIMITED TO THE AVAILABLE NOMINAL FORM DEPTHS.
8. CURB AND GUTTER ANGLE BREAKS SHALL BE SMOOTHED WITH A 2 FT RADIUS UNLESS OTHERWISE SHOWN ON THE PLANS.
9. PROVIDE A 2 FT CURB AND GUTTER TRANSITION AT EACH END OF INLETS.
10. THE CONTRACTOR SHALL INSTALL ½ IN EXPANSION JOINT MATERIAL BETWEEN THE CURB OR CURB AND GUTTER AND THE ATTACHED SIDEWALK, AND AROUND INLET STRUCTURES OR BLOCKOUTS OR AS DIRECTED BY THE PROJECT MANAGER.
11. CURB RAMPS SHALL BE CONSTRUCTED USING TRUNCATED DOMES AS SHOWN IN THE CITY AND COUNTY OF DENVER STANDARD DETAILS. TRUNCATED DOMES SHALL NOT BE PAID SEPARATELY, BUT INCLUDED IN THE COST OF THE CONCRETE CURB RAMP.

TRAFFIC
1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE TRAFFIC CONTROL THROUGHOUT THE PROJECT, INCLUDING PROPER TRAFFIC CONTROL DEVICES AND PERSONNEL. A TRAFFIC CONTROL PLAN (TCP) IS SUBJECT TO CITY APPROVAL PRIOR TO COMMENCING WORK ON ROADWAY RIGHT-OF-WAY. A COPY OF APPROVED TCPs MUST BE AVAILABLE ON SITE DURING WORK. TRAFFIC CONTROL IS TO BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). SITE SPECIFIC PLANS ARE REQUIRED ON COLLECTOR AND ARTERIAL STREETS, AND MUST SHOW ALL EXISTING FEATURES.
2. ALL PAVEMENT MARKINGS MUST BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
3. COORDINATE ALL TRAFFIC SIGNAL EQUIPMENT RELOCATIONS WITH DOTI TRAFFIC ENGINEERING.
4. UNIFORMED TRAFFIC CONTROL (UTC) REQUIRED TO BE USED TO CONTROL (OVER-RIDE) TRAFFIC AT SIGNALIZED INTERSECTIONS, OR WHEN DIGGING WITHIN 100 FT OF A LIGHTED, SIGNALIZED INTERSECTION. MUST USE OFF DUTY DENVER POLICE. CALL KEVIN SMOLKA, 720-327-7333, SEVERAL DAYS IN ADVANCE TO SCHEDULE.
5. RTD REQUIRES A THREE DAY NOTIFICATION FOR ALL BUS STOP CLOSURES. ALL REQUESTS NEED TO BE SENT TO RTD SIGN DEPARTMENT, BUS_STOP@RTD-DENVER.COM, 303-299-6563 OR 303-299-6561. ANY EMERGENCY CLOSURES SHOULD BE SENT TO RTD IMMEDIATELY.

LANDSCAPING
1. THE CONTRACTOR SHALL NOT SPRAY, CUT OR TRIM TREES OR OTHER LANDSCAPING WITHIN THE RIGHT-OF-WAY UNLESS SUCH WORK IS OTHERWISE SPECIFIED IN THIS PERMIT OR CLEARLY INDICATED
ON THE APPROVED PLANS. ANY WORK PROPOSED FOR PUBLIC RIGHT-OF-WAY TREES MUST BE AUTHORIZED BY THE OFFICE OF THE CITY FORESTER PRIOR TO COMPLETION.

2. SEEDING, SODDING AND PLANTING IN THE RIGHT-OF-WAY SHALL BE AS SPECIFIED OR OTHERWISE APPROVED BY THE CITY. CONSTRUCTION, MAINTENANCE AND WATERING REQUIREMENTS SHALL CONFORM TO CITY/PARKS STANDARD SPECIFICATIONS.


OFFICE OF THE CITY FORESTER

1. EXISTING TREES TO BE PRESERVED IN PUBLIC RIGHT-OF-WAY SHALL BE PROTECTED PER OFFICE OF THE CITY FORESTER STANDARDS AND PRACTICES. TREE PROTECTION SHALL BE INSTALLED PRIOR TO ISSUE OF DEMOLITION/BUILDING PERMIT, APPROVED BY OFFICE OF THE CITY FORESTER STAFF, AND SHALL REMAIN IN PLACE THROUGHOUT CONSTRUCTION.

2. NO CONSTRUCTION ACTIVITIES OR STORAGE OF CONSTRUCTION MATERIALS/DEBRIS/EQUIPMENT SHALL TAKE PLACE WITHIN TREE PROTECTION ZONES WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OFFICE OF THE CITY FORESTER. ALL CONSTRUCTION ACTIVITY SHALL OCCUR OUTSIDE TREE PROTECTION ZONES (I.E. DRIPLINES OF TREES).

3. IF PRUNING FOR CONSTRUCTION ACTIVITY IS NECESSARY, CONTRACTOR SHALL CONSULT WITH OFFICE OF THE CITY FORESTER PRIOR TO COMMENCEMENT OF WORK.

4. MINIMUM TREE PROTECTION REQUIREMENTS: TREE PROTECTION SHALL BE INSTALLED AT THE CRITICAL ROOT ZONE (CRZ). THE CRZ IS EQUAL TO THE DRIPLINE, FURTHEST EXTENT OF TREE CANOPY, OR IS EQUAL TO ONE FOOT RADIIALLY FROM THE TREE FOR EVERY ONE INCH OF TRUNK DIAMETER AT BREAST HEIGHT (DBH = 4.5 FT ABOVE SOIL LINE). WHICHEVER IS GREATER.
   A. FOR DEMOLITION ACTIVITIES: ORANGE PLASTIC SAFETY FENCING IS ACCEPTABLE. FENCING SHALL BE MIN 48 INCHES IN HEIGHT, TOP SECURED TO METAL T-POSTS WITH 12-GAUGE WIRE WOVEN THROUGH TOP OF FENCING FOR ENTIRE LENGTH. HEAVY DUTY T-POSTS SHALL BE PLACED SO THAT WIRE AND FENCE ARE TAUT.
   B. FOR CONSTRUCTION ACTIVITIES: USE 6 FT CHAIN LINK FENCING TO ESTABLISH TREE PROTECTION ZONE (TPZ). ONCE TPZ IS IN PLACE, IT MAY NOT BE MOVED, RESIZED, REMOVED, OR ALTERED IN ANY MANNER WITHOUT PRIOR WRITTEN APPROVAL FROM OFFICE OF THE CITY FORESTER.

5. OFFICE OF THE CITY FORESTER STAFF SHALL INSPECT AND APPROVE BOUNDARIES OF TREE PROTECTION ZONE(S) PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES; INCLUDING WHEN PLASTIC FENCING IS TO BE REPLACED WITH CHAIN LINK FENCING (IF PLASTIC FENCING IS INITIALLY INSTALLED). ONCE APPROVED BY OFFICE OF THE CITY FORESTER, THE TPZ SHALL NOT BE MOVED, RESIZED, REMOVED, OR ALTERED IN ANY MANNER WITHOUT PRIOR WRITTEN APPROVAL.

6. “TREE PROTECTION ZONE” SIGNS SHALL REMAIN IN PLACE AS POSTED BY OFFICE OF THE CITY FORESTER AND SHALL BE MAINTAINED IN THE CONDITION IN WHICH THEY WERE INSTALLED.

7. NO ENTRANCE AND/OR ACCESS TO THE TREE PROTECTION ZONE, INCLUDING CONSTRUCTION ACTIVITIES, IS PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM OFFICE OF THE CITY FORESTER.

8. EXISTING RIGHT-OF-WAY TREES APPROVED FOR REMOVAL BY OFFICE OF THE CITY FORESTER MUST BE PROTECTED IN PLACE PER FORESTRY STANDARDS AND SPECIFICATIONS UNTIL REMOVED BY AN OFFICE OF THE CITY FORESTER LICENSED TREE CONTRACTOR.

9. A TREE REMOVAL PERMIT IS REQUIRED FROM OFFICE OF THE CITY FORESTER PRIOR TO REMOVAL. FAILURE TO PROTECT SUCH TREES UNTIL REMOVAL, OR REMOVING TREES WITHOUT A FORESTRY ISSUED PERMIT WILL RESULT IN NOTICE OF VIOLATION AND MAY INCLUDE CITATIONS/FINES. TREE REMOVAL PERMITS ARE NOT INCLUDED WITH BUILDING PERMITS AND MUST BE OBTAINED SEPARATELY FROM OFFICE OF THE CITY FORESTER.
DRAINAGE (use these notes on City managed capital projects)

1. ALL SEWER PIPES SHALL BE INSTALLED WITH CLASS B BEDDING AS A MINIMUM.
2. SANITARY SEWER PIPES SHALL BE PVC AND CONFORM TO: ASTM D3034 SDR 35 FOR SIZES 8 INCHES TO 15 INCHES IN DIAMETER (SOLID WALL), ASTM F789 FOR 18 INCHES (SOLID WALL), ASTM F679 FOR SIZES 18 TO 36 INCHES (SOLID WALL), ASTM F949 FOR SIZES 8 TO 36 INCHES (PVC PROFILE WALL), ASTM F794 FOR SIZES 8 TO 48 INCHES (PROFILE WALL), OR ASTM F1803 FOR SIZES 18 TO 60 INCHES (CLOSED PROFILE GRAVITY PIPE).
3. THE CONTRACTOR PERFORMING WORK ON ANY PUBLIC OR PRIVATE STORM SEWER FACILITY OR APPURTENANCE MUST BE PROPERLY TRADE LICENSED AS A COMPANY AND HAVE A LICENSED PLUMBER OR CERTIFIED JOURNEYMAN DRAINLAYER ON SITE DURING THE WORK.
4. ACCESS MUST BE MAINTAINED FOR ALL SEWER MANHOLES DURING CONSTRUCTION. MINIMUM ACCESS TO EACH MANHOLE IS A 20-FOOT-WIDE LANE FROM THE NEAREST PUBLIC RIGHT OF WAY, CENTERED AT THE MANHOLE INCLUDING A 10 FOOT RADIUS AROUND THE MANHOLE AND 22.0 FEET OF VERTICAL CLEARANCE.
5. THERE SHALL BE NO STOCKPILING OR SIDE CASTING OF WASTE MATERIAL INCLUDING, BUT NOT LIMITED TO PAINT CHIPS, ASPHALT, OR CONCRETE ADJACENT TO ANY DRAINAGEWAYS (INCLUDING DRY DRAINAGEWAYS). PAINT MATERIAL REMOVED IN THE COURSE OF RESTRIPING SHALL BE PROPERLY CONTAINED AND DISPOSED OF TO PREVENT SUCH MATERIALS FROM ENTERING WATERS OF THE STATE.
6. ALL DROP STRUCTURES SHALL BE INSPECTED BY CCD MAINLINE INSPECTIONS. THE CONTRACTOR MUST CALL MAINLINE INSPECTIONS AT (303) 446-3722 A MINIMUM OF 24 HOURS PRIOR TO THE PRECONSTRUCTION MEETING AND PRIOR TO STARTING ANY WORK.

DRAINAGE (only use these notes on outside agency projects not managed by CPM, such as: CDOT, RTD, UDFCD, Metro, Denver Water, etc...)

1. ALL SEWER PIPES SHALL BE INSTALLED WITH CLASS B BEDDING AS A MINIMUM.
2. SANITARY SEWER PIPES SHALL BE PVC AND CONFORM TO: ASTM D3034 SDR 35 FOR SIZES 8 INCHES TO 15 INCHES IN DIAMETER (SOLID WALL), ASTM F789 FOR 18 INCHES (SOLID WALL), ASTM F679 FOR SIZES 18 TO 36 INCHES (SOLID WALL), ASTM F949 FOR SIZES 8 TO 36 INCHES (PVC PROFILE WALL), ASTM F794 FOR SIZES 8 TO 48 INCHES (PROFILE WALL), OR ASTM F1803 FOR SIZES 18 TO 60 INCHES (CLOSED PROFILE GRAVITY PIPE).
3. THE CONTRACTOR PERFORMING WORK ON ANY PUBLIC OR PRIVATE STORM SEWER FACILITY OR APPURTENANCE MUST BE PROPERLY TRADE LICENSED AS A COMPANY AND HAVE A LICENSED PLUMBER OR CERTIFIED JOURNEYMAN DRAINLAYER ON SITE DURING THE WORK.
4. ACCESS MUST BE MAINTAINED FOR ALL SEWER MANHOLES DURING CONSTRUCTION. MINIMUM ACCESS TO EACH MANHOLE IS A 20-FOOT-WIDE LANE FROM THE NEAREST PUBLIC RIGHT OF WAY, CENTERED AT THE MANHOLE INCLUDING A 10 FOOT RADIUS AROUND THE MANHOLE AND 22.0 FEET OF VERTICAL CLEARANCE.
5. ALL CITY & COUNTY OF DENVER (CCD) STORM AND/OR SANITARY SEWERS HAVE BEEN IDENTIFIED AND LABELED AS SUCH ON THESE CONSTRUCTION PLANS.
6. ALL CITY & COUNTY OF DENVER (CCD) STORM AND/OR SANITARY SEWERS, INCLUDING MANHOLE ADJUSTMENTS, ARE TO BE INSPECTED BY CCD MAINLINE INSPECTIONS. YOU MUST CALL MAINLINE INSPECTIONS @ (303)446-3722, A MINIMUM OF 24 HOURS PRIOR TO THE PRECONSTRUCTION MEETING AND PRIOR STARTING ANY WORK. SEWER LOCATES CAN BE REQUESTED BY CALLING (303) 446-3744. ALL CCD STORM AND/OR SANITARY SEWERS MUST BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CCD-WASTEWATER MANAGEMENT DIVISION (WMD) STANDARD DETAILS AND SPECIFICATIONS.
7. THERE SHALL BE NO STOCKPILING OR SIDE CASTING OF WASTE MATERIAL INCLUDING, BUT NOT LIMITED TO PAINT CHIPS, ASPHALT, OR CONCRETE ADJACENT TO ANY DRAINAGEWAYS (INCLUDING DRY DRAINAGEWAYS). PAINT MATERIAL REMOVED IN THE COURSE OF RESTRIPING SHALL BE PROPERLY CONTAINED AND DISPOSED OF TO PREVENT SUCH MATERIALS FROM ENTERING WATERS OF THE STATE.

EROSION CONTROL (use these notes when a separate CASDP Permit is not required)
THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL ENSURE THAT ALL POTENTIAL POLLUTANTS GENERATED DURING DEMOLITION OR CONSTRUCTION WORK ASSOCIATED WITH THIS PROJECT, BE PREVENTED FROM DISCHARGE TO STORMWATER CONVEYANCE SYSTEMS IN THE VICINITY OF THIS PROJECT SITE IN ACCORDANCE WITH THE FOLLOWING:

1. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, BORING, GRADING, OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, RECEIVING WATERS, WATERWAYS, WETLANDS, AND OR OTHER PUBLIC OR PRIVATE PROPERTIES, RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

2. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR, ACCUMULATE IN THE FLOW LINES OF STORM DRAINAGE APPURTENANCES, AND PUBLIC RIGHTS OF WAYS OF THE CITY AND COUNTY OF DENVER, AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT. ALL REMOVALS SHALL BE CONDUCTED IN A TIMELY MANNER.

3. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS OF WAY. (SEC.49-552; REVISED MUNICIPAL CODE).

4. THE USE OF REBAR TO ANCHOR BEST MANAGEMENT PRACTICES, OTHER THAN PORTABLE TOILETS, IS PROHIBITED.

5. THE OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL IMPLEMENT THE FOLLOWING BEST MANAGEMENT PRACTICES (BMPS) ON SITE DURING CONSTRUCTION:

A) VEHICLE TRACKING CONTROL: THIS BMP IS REQUIRED AT ALL ACCESS POINTS FOR INGRESS/EGRESS FROM OFF-SITE IMPERVIOUS SURFACES TO CONSTRUCTION SITE PERVIOUS AREAS THAT ARE USED BY VEHICULAR TRAFFIC OR CONSTRUCTION EQUIPMENT.

B) INLET PROTECTION: THIS BMP IS REQUIRED ON ALL EXISTING OR PROPOSED STORM SEWER INLETS IN THE VICINITY OF THE CONSTRUCTION SITE THAT MAY RECEIVE SITE RUNOFF. THE BMP MUST BE APPROPRIATE TO THE TYPE OF STORM INLET AND APPROPRIATE FOR THE GROUND SURFACE AT THE INLET.

C) INTERIM SITE STABILIZATION: THIS BMP IS REQUIRED TO PROVIDE A MEASURE FOR PREVENTING THE DISCHARGE OF SEDIMENT FROM CONSTRUCTION SITES WHERE OVERLOT GRADING OR OTHER SITE DISTURBANCE HAS OCCURRED. THIS BMP IS PARTICULARLY NECESSARY ON SITES WHERE CONSTRUCTION ACTIVITIES/DISTURBANCE WILL BE LIMITED TO SMALL AREAS OF THE PROJECT SITE. ACCEPTABLE BMPS INCLUDE:
   I. PRESERVING EXISTING VEGETATION
   II. SEEDING AND PLANTING
   III. MULCHING
   IV. MULCHING AND SEEDING
   V. TEMPORARY/PERMANENT RE-VEGETATION OPERATIONS
   VI. CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES WMD APPROVAL)

D) WASTE MANAGEMENT/CONTAINMENT: THIS BMP REQUIRES THAT ALL CONSTRUCTION WASTES, FUELS, LUBRICANTS, CHEMICAL WASTES, TRASH, SANITARY WASTES, CONTAMINATED SOILS OR DEBRIS SHALL BE CONTAINED ON SITE, PROTECTED FROM CONTACT WITH PRECIPITATION OR SURFACE RUNOFF, PERIODICALLY REMOVED FROM THE CONSTRUCTION SITE, AND PROPERLY DISPOSED OF.

E) SPILL PREVENTION/CONTAINMENT: THIS BMP DEFINES THE MEASURES PROPOSED FOR PREVENTING, CONTROLLING, OR CONTAINING SPILLS OF FUEL, LUBRICANTS, OR OTHER POLLUTANTS; AND PROTECTING POTENTIAL POLLUTANTS FROM CONTACT WITH PRECIPITATION OR RUNOFF.
F) CHUTE WASHOUT CONTAINMENT: WATER USED IN THE CLEANING OF CEMENT TRUCK DELIVERY CHUTES SHALL BE DISCHARGED INTO A PREDEFINED, BERMED CONTAINMENT AREA ON THE JOB SITE. THE REQUIRED CONTAINMENT AREA IS TO BE BERMED SO THAT WASH WATER IS TOTALLY CONTAINED. WASH WATER DISCHARGED INTO THE CONTAINMENT AREA SHALL BE ALLOWED TO INFILTRATE OR EVAPORATE. DRIED CEMENT WASTE IS REMOVED FROM THE CONTAINMENT AREA AND PROPERLY DISPOSED OF.

I. THE DIRECT OR INDIRECT DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).

G) SWEEPING: THIS BMP REQUIRES THAT IMPERVIOUS SURFACES WHICH ARE ADJACENT TO OR CONTAINED WITHIN CONSTRUCTION SITES BE SWEEPED ON A DAILY BASIS OR AS NEEDED DURING THE DAY WHENSEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ON TO THEM. EITHER SWEEPING BY HAND OR USE OF STREET SWEEPERS IS ACCEPTABLE. STREET SWEEPERS USING WATER WHILE SWEEPING IS PREFERRED IN ORDER TO MINIMIZE DUST. FLUSHING OFF PAVED SURFACES WITH WATER IS PROHIBITED.

H) PERIMETER CONTROL: THIS BMP REQUIRES THAT A CONSTRUCTION SITE INSTALL A PERIMETER CONTROL MEASURE ALONG THE EDGE OF THE CONSTRUCTION SITE, TO PREVENT, OR FILTER THE DISCHARGE OF SURFACE RUNOFF FROM THE CONSTRUCTION SITE. THE TYPE OF PERIMETER CONTROL USED SHALL BE DETERMINED BASED ON-SITE CONDITIONS AND LOCATION. MAINTENANCE AND REPAIR OF THE CONTROL MEASURE SHALL OCCUR AS NEEDED, IN A TIMELY MANNER.

I) STOCK PILES: SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE PROTECTED FROM WIND AND WATER EROSION WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. STABILIZATION OF STOCKPILES LOCATED WITHIN 100 FEET OF RECEIVING WATERS, OR WITH SLOPES 3 TO 1 OR GREATER SHALL BE COMPLETED WITHIN SEVEN (7) DAYS FOLLOWING STOCKPILE CONSTRUCTION. STABILIZATION AND PROTECTION OF THE STOCKPILE MAY BE ACCOMPLISHED BY ANY OF THE FOLLOWING: MULCHING, TEMPORARY/PERMANENT REVEGETATION OPERATIONS, CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES DENVER DOTI APPROVAL), OR EROSION CONTROL MATTING/GEOTEXTILES. IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF RECEIVING WATERS, A DRAINAGeway OR THE SITE PERIMETER, ADDITIONAL SEDIMENT CONTROLS SHALL BE REQUIRED.

J) SAW CUTTING OPERATIONS: THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING, OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS OR AS NEEDED THROUGHOUT THE WORK DAY. THE DISCHARGE OF ANY WASTEWATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED. (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).

K) STRUCTURAL CONTROLS: DEVELOPMENT SITES THAT ARE REQUIRED TO PROVIDE DETENTION AND WATER QUALITY ENHANCEMENT FACILITIES FOR STORM RUNOFF NEED TO INSTALL THE DETENTION FACILITIES EARLY IN THE CONSTRUCTION BUILD-OUT OF THE SITE. PROJECTS THAT ARE USING UNDERGROUND DETENTION ARE REQUIRED TO INSTALL A PRETREATMENT STRUCTURE(S) OR SEDIMENTATION BASIN(S) AS A MEANS OF TREATING POTENTIALLY POLLUTED STORM WATER PRIOR TO ENTERING THE DETENTION STRUCTURE. USE OF THESE STRUCTURES IS REQUIRED FOR ENTRAPPING SEDIMENT AND CONSTRUCTION DEBRIS DURING THE ACTIVE CONSTRUCTION PHASE OF THE PROJECT. A NARRATIVE SECTION OF A MANAGEMENT PLAN SHOULD ADDRESS OPERATION AND MAINTENANCE OF THE STRUCTURAL CONTROLS BEING USED AS AN ACTIVE CONSTRUCTION BMP.

6. EROSION AND SEDIMENT CONTROL 'BEST MANAGEMENT PRACTICES' SHALL BE MAINTAINED AND KEPT IN EFFECTIVE OPERATING CONDITION FOR THE DURATION OF THIS PROJECT. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IMMEDIATELY UPON DISCOVERY OF ANY DEFICIENCY OR DEFECT.
1. **THE PERMITTEE MUST IMPLEMENT AND COMPLY WITH THE APPROVED CASDP AND ASSOCIATED DOCUMENTS FOR THIS PROJECT.**

2. **THE CONTRACTOR SHALL PREVENT SEDIMENT, DEBRIS AND ALL OTHER POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM DURING ALL DEMOLITION, EXCAVATION, TRENCHING, BORING, GRADING, OR OTHER CONSTRUCTION OPERATIONS THAT ARE PART OF THIS PROJECT. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO THE MUNICIPAL SEPARATE STORM SEWER SYSTEM, RECEIVING WATERS, WATERWAYS, WETLANDS, AND OR OTHER PUBLIC OR PRIVATE PROPERTIES, RESULTING FROM WORK DONE AS PART OF THIS PROJECT.**

3. **THE PERMITTEE AND/OR CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO OR, ACCUMULATE IN, THE FLOWLINES, STORM DRAINAGE APPURtenances, AND PUBLIC RIGHTS OF WAYS OF THE CITY AND COUNTY OF DENVER AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SAID REMOVAL SHALL BE CONDUCTED IN A TIMELY MANNER.**

4. **SOIL STABILIZATION MEASURES SHALL BE IMPLEMENTED WITHIN FOURTEEN (14) DAYS FOLLOWING COMPLETION OF GRADING ACTIVITIES. STABILIZATION OF DISTURBED AREAS ADJACENT TO RECEIVING WATERS OR WITH SLOPES 3 TO 1 OR GREATER SHALL BE COMPLETED WITHIN SEVEN (7) DAYS FOLLOWING COMPLETION OF GRADING ACTIVITIES. NOTE: FEDERAL AND STATE REGULATIONS MAY SOON REQUIRE STABILIZATION WITHIN SEVEN (7) DAYS OF COMPLETION OF GRADING ACTIVITIES. IN SUCH CASES, THE SHORTER TIMEFRAME SHALL APPLY TO PROJECTS WITHIN DENVER AS WELL.**

5. **THE DEVELOPER, GENERAL CONTRACTOR, GRADING CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL INSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THIS SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHTS OF WAY.**

6. **THE USE OF REBAR TO ANCHOR BEST MANAGEMENT PRACTICES IS PROHIBITED. STEEL FENCE POSTS MAY BE USED ON A CASE BY CASE BASIS AND REQUIRES APPROVAL FROM THE CITY AND COUNTY OF DENVER SWMP REVIEWER OR THE STORMWATER ENFORCEMENT INVESTIGATOR PRIOR TO INSTALLATION.**

7. **SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE PROTECTED FROM WIND AND WATER EROSION WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. STABILIZATION OF STOCKPILES LOCATED WITHIN 100 FEET OF RECEIVING WATERS, OR WITH SLOPES 3 TO 1 OR GREATER SHALL BE COMPLETED WITHIN SEVEN (7) DAYS FOLLOWING STOCKPILE CONSTRUCTION. STABILIZATION AND PROTECTION OF THE STOCKPILE MAY BE ACCOMPLISHED BY ANY OF THE FOLLOWING: MULCHING, TEMPORARY/PERMANENT ReveGETATION OPERATIONS, CHEMICAL SOIL STABILIZER APPLICATION (REQUIRES DENVER PUBLIC WORKS APPROVAL), OR EROSION CONTROL MATTING/GEOTEXTILES. IF STOCKPILES ARE LOCATED WITHIN 100 FEET OF RECEIVING WATERS, A DRAINAGeway OR THE SITE PERIMETER, ADDITIONAL SEDIMENT CONTROLS SUCH SHALL BE REQUIRED.**

8. **APPROVED EROSION AND SEDIMENT CONTROL ‘BEST MANAGEMENT PRACTICES’ SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. AT A MINIMUM, THE PERMITTEE OR CONTRACTOR SHALL PRODUCE AND RETAIN WEEKLY WRITTEN INSPECTION RECORDS FOR ALL BMPS AND AFTER SIGNIFICANT PRECIPITATION EVENTS. ALL NECESSARY MAINTENANCE AND REPAIR SHALL BE COMPLETED IMMEDIATELY. ADDITIONALLY, STREET SWEEPING IS TO BE COMPLETED BY THE CLOSE OF THE BUSINESS DAY OR (AND) ON AN AS NEEDED BASIS THROUGHOUT THE DAY.**

9. **WATER USED IN THE CLEANING OF CEMENT TRUCK DELIVERY CHUTES SHALL BE DISCHARGED INTO A PREDEFINED, CONCRETE WASHOUT AREA ON THE JOB SITE. BERMED CONTAINMENT OR COMMERCiALLY AVAILABLE CONCRETE WASHOUT DEVICES THAT FULLY CONTAIN ALL WASH WATER ARE ACCEPTABLE. WASH WATER DISCHARGED INTO THE CONTAINMENT AREA OR DEVICE SHALL BE ALLOWED TO INFILTRATE, EVAPORATE, AND OR BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. DRIED CEMENT WASTE IS TO BE REMOVED FROM THE CONTAINMENT AREA AND PROPERLY DISPOSED. THE DIRECT OR INDIRECT DISCHARGE OF WATER CONTAINING WASTE CEMENT**
TO THE STORM SEWER SYSTEM IS PROHIBITED. (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER).

10. THE CONTRACTOR SHALL PROTECT ALL STORM SEWER FACILITIES ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING, OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL WASTE PRODUCTS GENERATED BY SAID CUTTING OPERATIONS ON A DAILY BASIS OR AS NEEDED THROUGHOUT THE WORK DAY. THE DISCHARGE OF ANY WATER CONTAMINATED BY WASTE PRODUCTS FROM CUTTING OPERATIONS TO THE STORM SEWER SYSTEM IS PROHIBITED. (SEC.56-102A, C; REVISED MUNICIPAL CODE, CITY AND COUNTY OF DENVER)

11. PAVED AND IMPERVIOUS SURFACES WHICH ARE ADJACENT TO CONSTRUCTION SITES MUST BE SWEPT ON A DAILY BASIS AND AS NEEDED DURING THE DAY WHEN SEDIMENT AND OTHER MATERIALS ARE TRACKED OR DISCHARGED ONTO THEM. EITHER SWEEPING BY HAND OR USE OF STREET SWEEPERS IS ACCEPTABLE. STREET SWEEPERS USING WATER WHILE SWEEPING IS PREFERRED IN ORDER TO MINIMIZE DUST. FLUSHING OFF PAVED SURFACES WITH WATER IS PROHIBITED.