

LOW IMPACT DEVELOPMENT (LID) NOTES

1. LID FEATURES SHALL COMPLY WITH THE SAN ANTONIO RIVER AUTHORITY (SARA) TECHNICAL SPECIFICATIONS.
2. CONTRACTOR SHALL COORDINATE CONSTRUCTION SCHEDULE AND INSPECTIONS IN ACCORDANCE WITH SAN ANTONIO RIVER AUTHORITY'S (SARA) LOW IMPACT DEVELOPMENT TECHNICAL DESIGN GUIDANCE MANUAL. CONTRACTOR SHALL DOCUMENT SCHEDULE AND CONDITIONS FOR REVIEW BY THE OWNER'S REPRESENTATIVE.
3. CONTRACTOR SHALL PREPARE SUBMITTALS FOR EACH ITEM LISTED WITHIN LID SUBGRADE PROFILES. SUBGRADE PROFILES ARE TO BE PROVIDED FOR BIORETENTION, BIOSWALES, PERMEABLE PAVEMENT, AND SAND FILTERS.
4. ALL REQUIREMENTS OF LID FEATURES ARE IN ADDITION TO ANY STATE REGULATED SWPPP MEASURES REQUIRED BY TCEQ. REFERENCE CIVIL FOR ADDITIONAL REQUIREMENTS.
5. DURING ALL PHASES OF SITE CONSTRUCTION ALL VEGETATED LID FEATURES, INCLUDING BIORETENTION AND BIOSWALES ARE TO BE PROTECTED BY A SILT FENCE AND STRAW WATTLES AROUND ENTIRE PERIMETER OF LID AREA. PERMEABLE PAVEMENT LID FEATURES ARE TO BE PROTECTED FROM SEDIMENTATION DURING AND AFTER INSTALLATION UNTIL THE END OF CONSTRUCTION.
6. CONTRACTOR SHALL INSPECT AND REPAIR LID FEATURE SILT FENCE AND STRAW WATTLES AFTER EACH RAIN EVENT AND AT A MINIMUM OF ONCE PER WEEK IF THERE ARE NO RAIN EVENTS. DOCUMENT ALL INSPECTIONS.
7. ORANGE FENCING TO BE LOCATED AROUND PROTECTED LID AREAS UNTIL COMMENCEMENT OF LID CONSTRUCTION.
8. CONTRACTOR SHALL PROVIDE TEMPORARY ALTERNATIVE DRAINAGE ROUTES AND/OR SEDIMENTATION BASINS PRIOR TO AND DURING CONSTRUCTION OF BIORETENTION AND ANY OTHER VEGETATED LID FEATURES TO AVOID SEDIMENTATION.
9. HEAVY EQUIPMENT (INCLUDING BOBCATS, SKID STEERS AND SIMILAR EQUIPMENT) SHALL NOT BE USED OR STORED OVER THE TOP OF ANY LID FEATURE.
10. EXCAVATION OF ALL VEGETATED LID FEATURES SHALL BE DONE FROM THE SIDES IN ALL AREAS POSSIBLE. ANY LID AREAS WHICH ARE COMPACTED DURING CONSTRUCTION SHALL BE SCARIFIED AND RESTORED TO PRECONSTRUCTION SOIL CONDITIONS. DOCUMENT INSPECTION OF RESTORED SOIL PRIOR TO CONTINUING LID CONSTRUCTION.
11. EXCAVATION OF LAST 12" OF SUBGRADE DURING CONSTRUCTION OF INFILTRATING LID FEATURES WITHOUT AN IMPERMEABLE LINER ARE TO BE DONE USING THE TOOTHED EXCAVATOR BUCKET. SCARIFY SUBGRADE ON THE BOTTOM OF LID FEATURES.
12. DO NOT PERFORM EARTHMOVING CONSTRUCTION ACTIVITIES FOR VEGETATED LID FEATURES UNDER SATURATED SOIL CONDITIONS. EARTHMOVING ACTIVITIES SHALL TAKE PLACE DURING DRY CONDITIONS ONLY.

13. CONTRACTOR SHALL VERIFY ALL INVERTS, INLETS, OUTLETS, OVERFLOW AND UNDERDRAIN ELEVATIONS TO ENABLE A FULLY FUNCTIONING LID FEATURE. COORDINATE WITH CIVIL AND LANDSCAPE PLANS AS REQUIRED.
14. CONTRACTOR TO VERIFY MATERIAL SEQUENCING OF LID FEATURES SO THAT MATERIAL IS NOT CONTAMINATED BY ON SITE STOCKPILING.
15. ANY IMPORTED SOIL MEDIA IS NOT TO BE INSTALLED UNTIL PAVEMENT AREAS SUCH AS DRIVES, CURBS, PARKING HAVE BEEN COMPLETED AND HAVE RECEIVED FINAL COATING IF APPLICABLE TO PAVEMENT CONSTRUCTION.
16. CONTRACTOR SHALL VERIFY NO FINES WITHIN ANY MATERIAL USED FOR CONSTRUCTION OF BIORETENTION, BIOSWALE AND PERMEABLE PAVEMENT FEATURES.
17. CONTRACTOR SHALL PROVIDE INLET PROTECTION FOR ALL LID FEATURE INLETS AND OVERFLOW DRAINS. INLET PROTECTION TO REMAIN UNTIL END OF PROJECT CONSTRUCTION.
18. TESTING OF BIORETENTION FEATURES TO BE PERFORMED AFTER COMPLETION OF FEATURES TO ENSURE INFILTRATION RATES MEET SAN ANTONIO RIVER AUTHORITY (SARA) TECHNICAL SPECIFICATIONS. SUBMIT RESULTS OF TEST TO OWNER'S REPRESENTATIVE.
19. CONTRACTOR SHALL SUBMIT THE FOLLOWING MATERIALS TO THE LANDSCAPE ARCHITECT OF RECORD OR CIVIL ENGINEER OF RECORD FOR REVIEW AND APPROVAL, AS APPLICABLE;
 - a. GRAVEL - SUBMIT 1 LB BAG
 - b. BIORETENTION SOIL MIX - SUBMIT 1 LB BAG AND SOIL TEST REPORT
 - c. SAND ASTM C-33 - SUBMIT 1 LB BAG
 - d. NUMBER 8 AND NUMBER 57 STONE - SUBMIT 5 LB BAG
 - e. FILTER FABRIC - 12" X 12" SQUARE MIN.