



BASIS OF BEARING: GRID NORTH NAD 1983 MISSOURI, EAST ZONE

## DIFFERENTIAL RUNOFF CALCULATIONS

EXISTING CONDITION

GRASS
TOTAL

= 0.95 ac. x 1.87 c.f.s./ac. = 1.77 c.f.s.
1.77 c.f.s.

PROPOSED CONDITION
BUILDING
PAVEMENT
GRASS
TOTAL

= 0.06 ac. x 3.85 c.f.s./ac. = 0.23 c.f.s.

= 0.64 ac. x 3.85 c.f.s./ac. = 2.46 c.f.s.

GRASS
TOTAL

DIFFERENTIAL RUNOFF

= 3.15 c.f.s. - 1.77 c.f.s. = 1.38 c.f.s. increase

## BEST MANAGEMENT PRACTICE (BMP) CONSTRUCTION NOTES

- ALL STORM WATER FLOW TO THE BMP AREAS SHALL BE DIVERTED, PLUGGED OR DISCONNECTED UNTIL THE CONSTRUCTION SITE IS STABLE AND THE MSD INSPECTOR PROVIDES APPROVAL TO PLACE THE BMP ONLINE.
- CONSTRUCTION SITE RUNOFF SHALL NOT FLOW INTO BMP AREAS.
- CONSTRUCT PERMEABLE PAVEMENT LATE IN THE PROJECT SCHEDULE SO THAT ALL OF THE DIRT WORK SUCH AS GRADING AND LANDSCAPING IS COMPLETED FIRST. POROUS PAVEMENT AND THE STONE BED SHALL NOT BE INSTALLED UNTIL ALL AREAS TRIBUTARY TO IT ARE ESTABLISHED.
- PERMEABLE PAVEMENTS MUST BE PROTECTED FROM SEDIMENT DURING AND AFTER THE PAVING PROCESS. AT NO TIME SHALL SEDIMENT OR OTHER MATERIAL CAPABLE OF CLOGGING THE SURFACE BE ALLOWED TO CONTACT THE PAVEMENT.
- SEWER CONTRACTOR SHALL INSTALL MSD TYPE 4 FILTER FABRIC OVER THE TOP OF ALL TRENCHES UNDER PERMEABLE PAVEMENT.
- FILTER FABRIC SHALL BE <u>REMOVED</u> PRIOR TO THE INSTALLATION OF PERMEABLE PAVEMENT.
- AREAS NOT SUBJECT TO IMMEDIATE CONSTRUCTION ACTIVITY SHALL REMAIN VEGETATED AND UNDISTURBED AS LONG AS POSSIBLE.
- THE PROJECT ENGINEER SHALL PROVIDE CERTIFIED SHOP DRAWINGS TO MSD FOR APPROVAL PRIOR TO CONSTRUCTION OF THIS BMP. THE MSD CONTACT BRIAN DUNN AT 314-335-2072...
- CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION AND ASSOCIATED COSTS REQUIRED IN OBTAINING
   OBSERVATION AND VERIFICATION BY A MISSOLIEU PROFESSIONAL ENGINEER.

BMP TABLE					
BMP AREA	TRIBUTARY AREA	ВМР	WATER QUALITY FLOW/ VOLUME REQUIRED	WATER QUALITY FLOW/ VOLUME PROVIDED	
Α	0.82 ACRES	HDS UNIT	1.20 C.F.S.	1.30 C.F.S.	
TOTAL= 0.82 ACRES					

## STORMWATER MANAGEMENT NOTE: LAND AREA DISTURBED= 0.95 ACRES

1. ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORM WATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THAT TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THIS PLAN).



10820 Sunset Office Drive Suite 200 Saint Louis, Missouri 6312 314.729.1400 Fax: 314.729.1404 www.cedc.net

IWIL ENGINEERING Saint Saint ESIGN CONSULTANTS www.

Site Improvement Plans
Lion's Choice Restauran

Proj. # 1654	
No. Description	Date
1 Rev. per City/Client	7/13/17
To Cottleville FPD	7/17/17
City Resubmittal	7/28/17
City Resubmittal	8/17/17
City Resubmittal	8/31/17

DRAINAGE AREA & BMP PLAN

C09