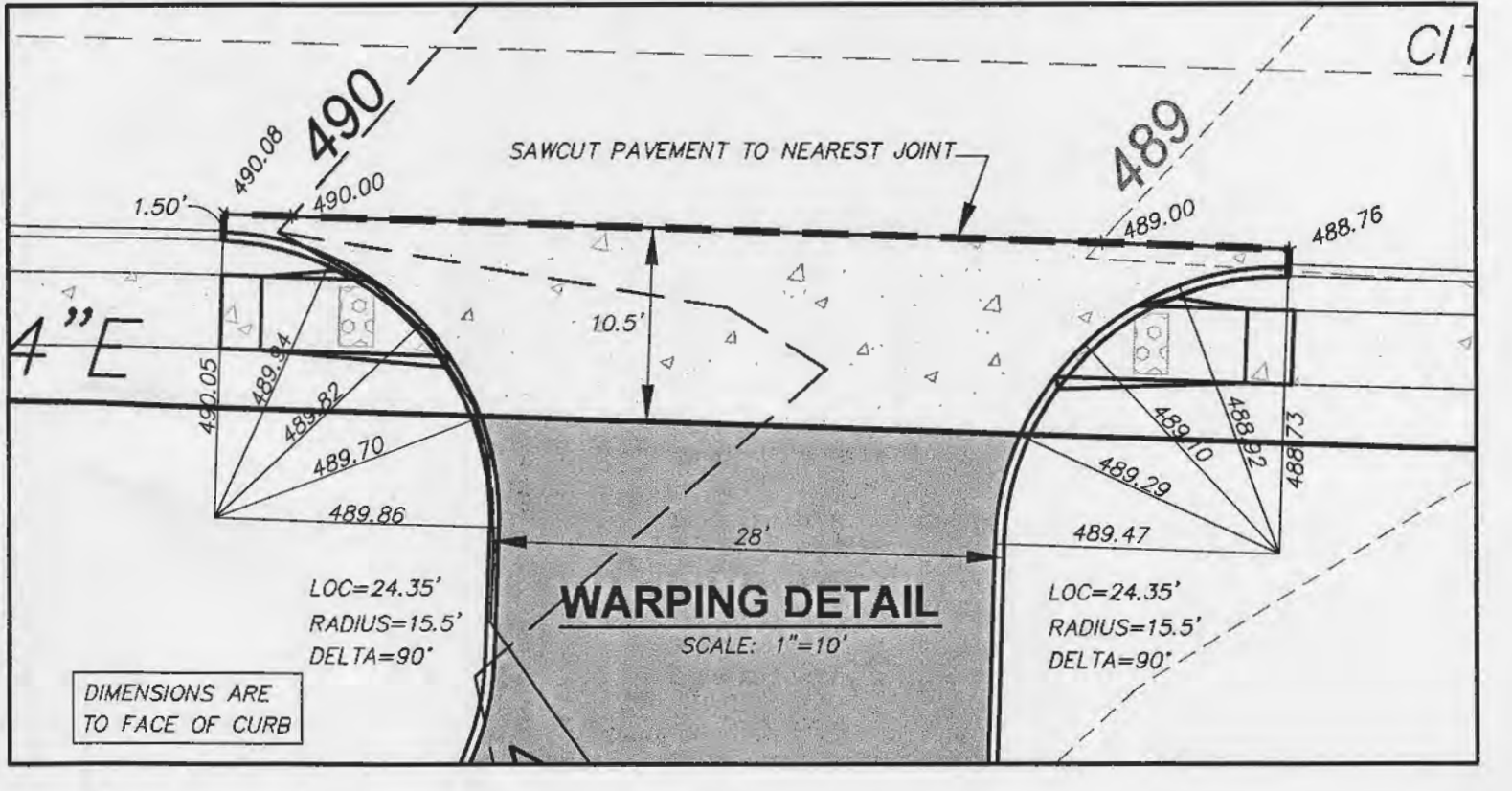


GROUND COVERAGE

TOTAL AREA OF SITE	54,522 S.F. OR 1.25 AC
AREA OF BUILDING	5,990 S.F. (11.0%)
PAVED AREAS	18,976 S.F. (35.0%)
LANDSCAPED AREAS	29,483 S.F. (54.0%)

UTILITIES NOTE

UNDERGROUND FACILITIES, UTILITIES AND STRUCTURES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THEREFORE, THEIR LOCATION MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHERS, THE EXISTENCE OF WHICH IS PRESENTLY NOT KNOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE ALL UTILITIES LOCATED IN THE FIELD PRIOR TO EXCAVATION OR CONSTRUCTION.



GRADING NOTES

- HANDICAP PARKING AREA SHALL BE 2.00% SLOPE MAX. IN ALL DIRECTIONS.
- SIDEWALK SHALL SLOPE AT 1.00%.
- ALL HANDICAP ACCESS PATH AND AREA SHALL COMPLY WITH CURRENT A.D.A. STANDARDS.
- ALL GRADES SHALL BE WITHIN 0.2 FEET OF THOSE SHOWN ON THE GRADING PLAN.
- NO SLOPE SHALL BE STEEPER THAN 3:1. ALL SLOPES SHALL BE SODDED OR SEEDED AND MULCHED.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ASPHALT, CONCRETE, ROCK, BUILDING MATERIALS, AND ALL OTHER DEBRIS AT AN APPROVED LANDFILL IN ACCORDANCE WITH ALL RULES AND REGULATIONS, INCLUDING MISSOURI DEPARTMENT OF NATURAL RESOURCES (DNR), AND THE CITY OF O'FALLON.
- DISTURBED AREAS ARE TO BE SEEDED AND MULCHED.
- THE SWALE BETWEEN THE SANITARY AND STORM LINES IS TO BE RESTORED.

GRADING LEGEND

XX.XX	TOP OF CURB
XX.XX	BOTTOM OF CURB
TW XX.XX	TOP OF WALL
BW XX.XX	BOTTOM OF WALL
MEG XX.XX	MATCH EXISTING GRADE
FL XX.XX	FLOWLINE ELEV.
FG XX.XX	FINISH GRADE
SW XX.XX	TOP OF SIDEWALK
TG XX.XX	TOP OF GRATE
P XX.XX	TOP OF PAVEMENT
FL XX.XX	FLOW LINE ELEV.
F.F.E.	FINISH FLOOR ELEVATION

DRAINAGE AREA SUMMARY

DRAINAGE AREA "PI"	AREA (ACRES)	DRY-15-20MIN (CFS)	DRY-30MIN (CFS)
#1	0.57 AC. @ 3.85	2.19	0.86
#2	0.48 AC. @ 1.87	0.86	0.35
#3	3.85-1.87 * 0.10 AC = .20 CFS INCREASE		
#4	3.85-1.87 * 0.03 AC = .05 CFS INCREASE		

POST CONSTRUCTION BMP CALCULATIONS

WATER QUALITY VOLUME
 $WQV = ((P)(R)(A))/12$
 WHERE: P = 1" rainfall
 R = Runoff Coefficient (computed below)
 A = Drainage Area

RUNOFF COEFFICIENT
 $R = 0.05 + 0.009(I)$
 WHERE: I = % Impervious cover

BMP DRAINAGE AREA #1
 $A = 1.03$ acres
 $I = 57%$
 $R = 0.05 + 0.009(57) = 0.56$
 $WQV = (1)(.56)(1.03)/12 = 0.048$ ac-ft = 2.178 cf
 Volume provided = 2.191 cf > 2.178 cf

EARTHWORK QUANTITIES

CUT:	±929 CUBIC YARD
FILL:	±1389 CUBIC YARD
ADJUSTED FILL(15% SHRINKAGE FACTOR):	±1598 CUBIC YARD
NET:	±668 C.Y. (FILL)

SUBGRADE FOR FOUNDATION AND PAVEMENT WILL MAKE THIS A BALANCED SITE.

THE ENGINEER HAS CALCULATED THE ABOVE QUANTITIES OF EARTHWORK TO BE REQUIRED AS AN ESTIMATE OF THE BULK MOVEMENT OR REDISTRIBUTION OF SOILS ON THIS PROJECT. AS AN ESTIMATE, THESE QUANTITIES ARE INTENDED FOR GENERAL USE, AND THE ENGINEER ASSUMES NO LIABILITY FOR COST OVERRUNS DUE TO EXCESS EXCAVATED MATERIALS OR SHORTAGES OF FILL.

THE QUANTITIES ESTIMATED FOR EACH OF THE IMPROVEMENT ITEMS LISTED AS PROPOSED ON THE SITE ENGINEERING PLANS PREPARED BY ABOVE ARE BASED UPON THE HORIZONTAL AND VERTICAL LOCATION OF PICKETT, RAY & SILVER, INC.

THE ENGINEER'S EARTHWORK ESTIMATE DOES NOT INCLUDE ANY OF THE FOLLOWING ITEMS REQUIRING EARTHWORK THAT MAY BE NECESSARY FOR COMPLETION OF THE PROJECT: MISCELLANEOUS UNDERGROUND CONDUITS, INCLUDING SEWER LINES AND WATER MAINS, STANDARD MANHOLES; PROCESS OR TRANSFER PIPING; ELECTRICAL OR TELEPHONE CONDUITS; BASES FOR LIGHT STANDARDS; BUILDING FOOTINGS AND FOUNDATIONS, ETC.

THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACTUAL SIZE OF THE FIELD EXCAVATIONS MADE FOR THE INSTALLATION OF UNDERGROUND STRUCTURES, AND AS SUCH, THE ACTUAL QUANTITIES OF EARTHWORK FROM SUCH ITEMS MAY VARY FROM THE ESTIMATE SHOWN ABOVE.

** CONTRACTOR IS TO PROVIDE HAUL ROUTE AND HAUL SITE LOCATION, HAUL ROUTE AND SITE INFORMATION SHALL BE PROVIDED TO GEOTECHNICAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO HAULING.

THE ABOVE QUANTITIES ARE AN ESTIMATE AND SHOULD BE CONSIDERED AS SUCH. IT IS THE GRADING CONTRACTOR'S RESPONSIBILITY TO PREPARE A QUANTITY TAKEOFF AND NOTE ANY DISCREPANCIES TO THE ENGINEER.

ITG EYECARE OFFICE
 1198 TOM GINNEVER AVE.
 O'FALLON, MISSOURI 63376

PRS PROJECT # 01212.COMS.01R
 DRAWN: C.L.
 CHECKED: D.T.
 11/11/13

PICKETT, RAY & SILVER, INC.
 CIVIL ENGINEERING, LAND SURVEYING,
 AND NATURAL RESOURCES SERVICES

Branson
 3027 W. Hwy 76, Suite B
 St. Peters, MO 65276
 Phone (636) 397-1211 Fax (636) 397-1104
 www.prs3.com 1-800-708-3918

ENGINEERS AUTHENTICATION
 THE RESPONSIBILITY FOR PROFESSIONAL ENGINEERING LIABILITY ON THIS PROJECT IS HEREBY LIMITED TO THE SET OF PLANS AUTHENTICATED BY THE SEAL, SIGNATURE, & DATE HEREINAFTER ATTACHED. RESPONSIBILITY IS DISCLAIMED FOR ALL OTHER ENGINEERING PLANS INVOLVED IN THIS PROJECT AND SPECIFICALLY EXCLUDES REVISIONS AFTER THIS DATE UNLESS RE-AUTHENTICATED.

PICKETT, RAY & SILVER, INC.
 NO LICENSE #000325

CHRISTINE ANN LOCKER
 LICENSE # 000150037
 PROFESSIONAL ENGINEER LICENSE 3000160037

Developer / Owner Information

CONTACT: MR. DOUG CROSS
 ADDRESS: 17258 LOST CABIN ROAD
 WILDWOOD, MO 63025
 PHONE: (314) 651-3489

ITG EYECARE OFFICE

GRADING AND DRAINAGE AREA MAP

P+Z No. Approval Date 06-06-2013
 City No.
 Page No.

SHEET 5 OF 11