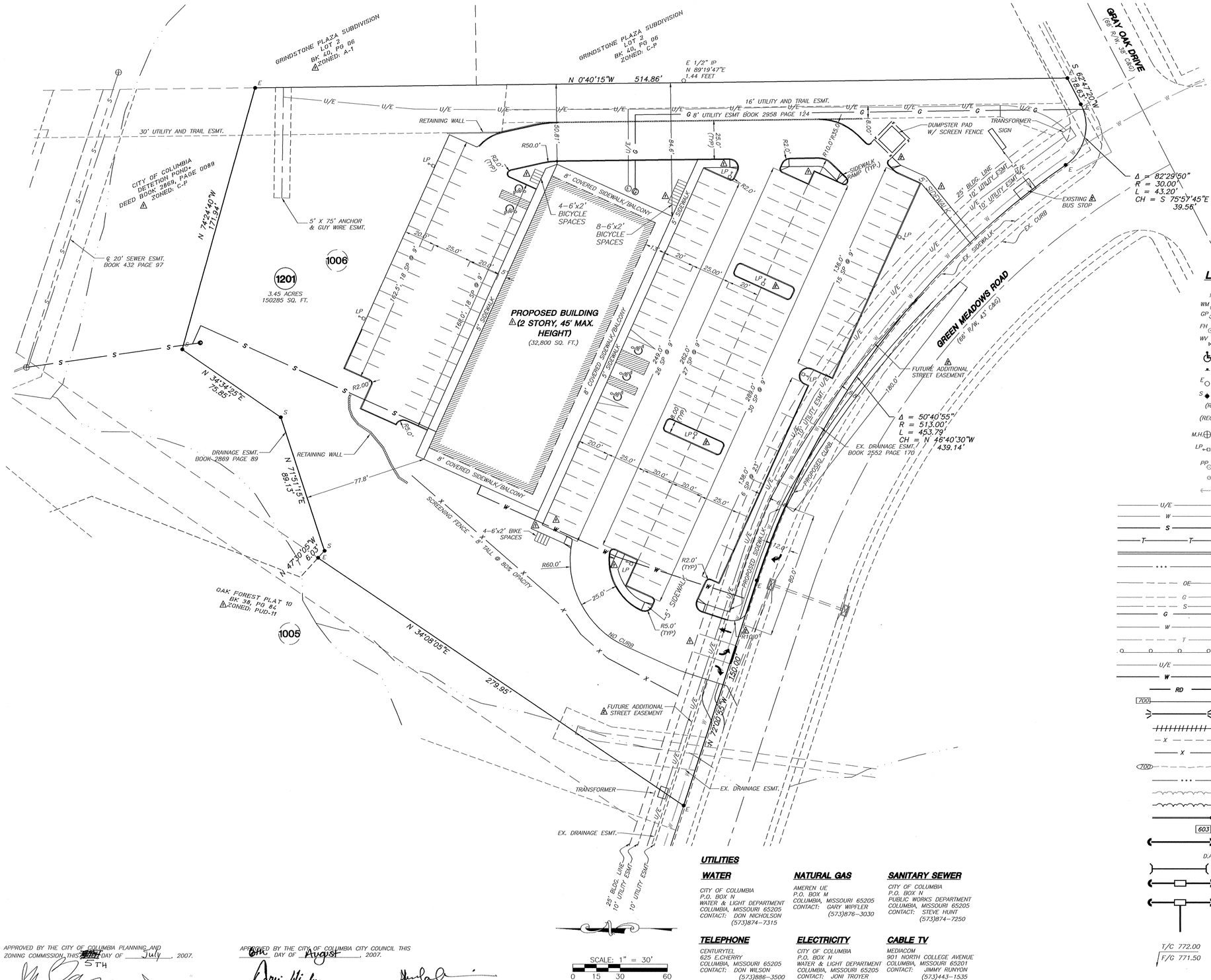
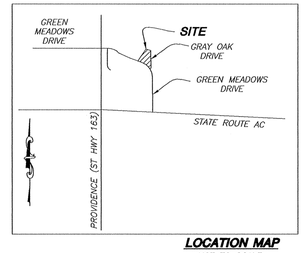
C-P PLAN

OAK FOREST C-P

MAY 29, 2007





LOCATION MAP
NOT TO SCALE

OWNER

KANCO LLC
3215 S. PROVIDENCE
COLUMBIA, MO 65203
(573)443-4724

SITE DATA

EXISTING ZONING: C-P
ACREAGE: 3.45 ACRES
LOCATION: NW 1/4 SECTION 25, T48N, R13W

GENERAL NOTES:

1. CONTRACTOR SHALL VERIFY EXISTING CONDITION AND LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTACT ENGINEER WITH ANY DISCREPANCIES.
2. BUILDING SIZE AND DIMENSIONS ARE APPROXIMATE. SEE ARCHITECTS PLANS FOR ACCURATE DIMENSIONS.
3. TRACT IS ZONED C-P.
4. ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS SHOWN OTHERWISE.

   ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT UNLESS SHOWN OTHERWISE.

   DRIVEWAY APPROACH IS TO BE CONSTRUCTED AS PER CITY OF COLUMBIA STANDARDS.
5. ALL SLOPES GREATER THAN 3:1 SHALL BE STABILIZED AS SOON AS GENERAL GRADING OPERATIONS ARE COMPLETE. IF VEGETATIVE COVER CAN NOT BE ESTABLISHED PRIOR TO THE ONSET OF WINTER, AN ALTERNATIVE METHOD OF STABILIZATION SHALL BE USED UNTIL VEGETATIVE COVER IS ESTABLISHED.
6.
7.

BENCHMARK

TOP OF FIRE HYDRANT LOCATED AT THE CORNER OF BUTTONWOOD AND GRAY OAK.
ELEV.= 729.28

FLOOD PLAIN STATEMENT

1 THIS TRACT IS NOT LOCATED WITHIN THE 100-YEAR FLOOD PLAIN AS SHOWN BY FIRM MAP NUMBER 290036-0020.

STREAM BUFFER STATEMENT

THIS TRACT IS NOT REGULATED BY THE CITY OF COLUMBIA STREAM BUFFER ORDINANCE AS DETERMINED BY THE USGS MAP FOR COLUMBIA QUADRANGLE, BOONE COUNTY, MISSOURI AND ARTICLE X OF CHAPTER 12A OF THE CITY OF COLUMBIA CODE OF ORDINANCES.

1 2 3 SIGNAGE AND LIGHTING

THERE WILL BE ONE(1) FREESTANDING MONUMENT SIGN AS SHOWN, NOT TO EXCEED 12' IN HEIGHT AND 64 SQUARE FEET IN AREA. ALL OTHER SIGNS SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 23 OF THE CITY OF COLUMBIA CODE OF ORDINANCES AS IT RELATES TO C-3 DISTRICTS.

LIGHT POLES SHOWN SHALL BE SEMI-CUTOFF SHOEBOX FIXTURES, INWARD AND DOWNWARD DIRECTED WITH A MAXIMUM HEIGHT OF 28 FEET. THE LIGHT POLES MAY BE RELOCATED OR CHANGED IN TOTAL NUMBER BY THE LIGHTING ENGINEER WITHOUT ADDITIONAL APPROVAL. BUILDING MOUNTED LIGHTING IS UNKNOWN AT THIS TIME. ALL OUTDOOR LIGHTING SHALL BE SHOWN ON A FUTURE LIGHTING PLAN THAT WILL COMPLY WITH CHAPTER 29-30.1 OF THE CITY OF COLUMBIA CODE OF ORDINANCES.

1 PARKING DATA

REQUIRED:
FIRST FLOOR: (RETAIL) 1 SPACE/200 SQ. FT. FOR 16,400 SQ. FT. EQUALING 82 SPACES
SECOND FLOOR: (OFFICE) 1 SPACE/300 SQ. FT. FOR 16,400 SQ. FT. EQUALING 55 SPACES
BICYCLE SPACES: 12 SPACES
TOTAL REQUIRED: 137 SPACES AND 12 BICYCLE SPACES

PROVIDED: 140 SPACES INCLUDING 5 HANDICAP SPACES, ONE BEING VAN ACCESSIBLE, AND 16 BICYCLE SPACES. 1

LEGEND

- STREET SIGN
- WM — EXISTING WATER METER
- GP — GUARD POST
- FH — EXISTING FIRE HYDRANT
- WV — EXISTING WATER VALVE
- HANDICAPPED PARKING
- HANDICAPPED PARKING SIGN
- E — EXISTING IRON PIPE
- S — SET-IRON
- (R) REMOVE
- (REC.) RECORD
- M.H. — EXISTING SANITARY MANHOLE
- LP — LIGHT POLE
- PP — POWER POLE
- ROOF DRAIN
- GUY WIRE
- U/E — EXISTING UNDERGROUND ELECTRIC
- W — EXISTING WATER
- S — PROPOSED SANITARY
- T — T — PROPOSED UNDERGROUND TELEPHONE
- PROPOSED STORM SEWER
- FLOWLINE (fl)
- OE — EXISTING OVER-HEAD ELECTRIC
- G — EXISTING GAS
- S — EXISTING SANITARY
- G — PROPOSED GAS
- W — EXISTING WATER
- T — EXISTING TELEPHONE
- EXISTING GUARDRAIL
- U/E — PROPOSED UNDERGROUND ELECTRIC
- W — PROPOSED WATER
- RD — ROOF DRAIN
- 700 — PROPOSED CONTOUR
- DIVERSION BERM
- SILT FENCE
- X — EXISTING FENCE
- X — PROPOSED FENCE
- 700 — EXISTING CONTOUR
- FLOWLINE (fl)
- EXISTING TREELINE
- PRESERVED TREELINE
- PROPOSED STORM SEWER
- 603 — LOW FLOOR ELEVATION
- SILT TRAP
- D.A. — DETENTION AREA
- DRAINAGE SWALE
- TEMPORARY SILT TRAP WITH ROCK OUTLET
- TEMPORARY SILT TRAP WITH PIPED OUTLET
- T/C 772.00 / F/G 771.50 — PROPOSED SPOT ELEVATION

UTILITIES

WATER
CITY OF COLUMBIA
P.O. BOX N
WATER & LIGHT DEPARTMENT
COLUMBIA, MISSOURI 65205
CONTACT: DON NICHOLSON
(573)874-7315

NATURAL GAS
AMEREN UE
P.O. BOX M
COLUMBIA, MISSOURI 65205
CONTACT: GARY WIPFLER
(573)876-3030

SANITARY SEWER
CITY OF COLUMBIA
P.O. BOX N
PUBLIC WORKS DEPARTMENT
COLUMBIA, MISSOURI 65205
CONTACT: STEVE HUNT
(573)874-7250

TELEPHONE
CENTURYTEL
625 E.CHERRY
COLUMBIA, MISSOURI 65205
CONTACT: DON WILSON
(573)886-3500

ELECTRICITY
CITY OF COLUMBIA
P.O. BOX N
WATER & LIGHT DEPARTMENT
COLUMBIA, MISSOURI 65205
CONTACT: JONI TROYER
(573)874-7321

CABLE TV
MEDIACOM
901 NORTH COLLEGE AVENUE
COLUMBIA, MISSOURI 65201
CONTACT: JIMMY RUNYON
(573)443-1535

LEGAL DESCRIPTION

LOT 1006 OF OAK FOREST PLAT 10, RECORDED IN PLAT BOOK 38 PAGE 84 CITY OF COLUMBIA BOONE COUNTY MISSOURI.

JAY GEBHARDT, LS-2001001909

APPROVED BY THE CITY OF COLUMBIA PLANNING AND ZONING COMMISSION, THIS 5TH DAY OF July, 2007.

1 JEFF BARROW, CHAIRMAN

APPROVED BY THE CITY OF COLUMBIA CITY COUNCIL THIS 6TH DAY OF August, 2007.

1 DARWIN A. HINDMAN, MAYOR

SHEELA AMIN, CITY CLERK

SITE PLAN

Plotted by: kevin; Monday, 09 Jul 2007 - 9:33am

STATE OF MISSOURI — JAY ALAN GEBHARDT — NUMBER 2001001909 — LAND SURVEYOR — PROFESSIONAL ENGINEER

JAY GEBHARDT MO E-35052

NO.	DATE	DESCRIPTION	BY
1	7/09/07	CITY COMMENTS	KPM
2	6/28/07	CITY COMMENTS	SMH
3	6/14/07	CITY COMMENTS	ZUF

A CIVIL GROUP
CIVIL ENGINEERING, PLANNING, SURVEYING
1010 FAY STREET
COLUMBIA, MO 65201
PHONE: (573)811-5750, FAX: (573)811-1171

DRAWN BY: ZUF — DATE: 5/29/2007
CHECKED BY: JG — DRAWING NO.: MKEL07-03
JOB NO.: MKEL07.03 — SHEET 1 OF 3

\\X\Project\Mike Kelly\Oak Forest Plat 10\ep\MKEL04-01\BaseMKEL04-01.dwg

GRADING PLAN

OAK FOREST C-P

MAY 29, 2007

SCALE: 1" = 30'

0 15 30 60

GENERAL NOTES:

1. ALL WORK SHALL COMPLY WITH THE CITY OF COLUMBIA AND STATE OF MISSOURI D.N.R. REGULATIONS IN REGARDS TO LAND DISTURBANCE.

2. THE EROSION CONTROL MEASURES ARE SHOWN ON THE PLAN USING SYMBOLS. REFER TO THE LEGEND FOR A LIST AND MEANING OF THE SYMBOLS.

3. ALL AREAS DISTURBED SHALL BE SEEDED AND MULCHED AFTER ALL CONSTRUCTION IS COMPLETE AND BE IN COMPLIANCE WITH THE STORM WATER POLUTION PREVENTION PLAN. SEEDING MAY BE PHASED SO THAT GROUND COVER IS ESTABLISHED SOONER.

4. THE FINAL CONTOURS SHOWN ARE APPROXIMATE, AND MAY BE CHANGED IN THE FIELD WITH THE PUBLIC WORKS ENGINEERING DEPT. APPROVAL. THE GOAL BEING TO GRADE THE SITE TO MINIMIZE OR ELIMINATE POSSIBLE DRAINAGE PROBLEMS FROM OCCURRING IN THE FUTURE.

5. THE LOW FLOOR ELEVATIONS SHOWN ARE FOR THE LOWEST LIVING FLOOR OF A STRUCTURE. THIS ELEVATION MAY BE REVISED TO FIT A BUILDING DESIGN THAT TAKES INTO ACCOUNT DRAINAGE CONSIDERATIONS. ANY CHANGE TO THE MINIMUM LOW FLOOR ELEVATION MUST BE SUBMITTED BY THE DESIGN ENGINEER AND APPROVED BY THE CITY OF COLUMBIA PUBLIC WORKS DEPARTMENT.

6. THE CONTRACTOR SHALL BE REQUIRED TO HAVE COMPACTION TESTING PERFORMED ON ALL FILL AREAS. THIS DATA MUST BE RECORDED IN A FORM THAT THE AREAS TESTED CAN BE RELOCATED ON A PLAN. THE TESTING REQUIRED SHALL BE ONE PASSING TEST FOR EACH 8 INCHES OF FILL ON EACH LOT WITHIN THE FILLED AREAS.

7. THIS TRACT IS LOCATED IN THE SE QUARTER OF SECTION 25, TOWNSHIP 48N, RANGE 13W, CITY OF COLUMBIA, BOONE COUNTY, MISSOURI.

8. DISPOSE OF MATERIAL REMOVED FROM MAINTENANCE OF TRAPS IN BLACK DIRT STOCK PILES.

MDNR REQUIREMENTS

1. SUBSTANCES REGULATED BY FEDERAL LAW UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) WHICH ARE TRANSPORTED, STORED OR USED FOR MAINTENANCE, CLEARING OR REPAIRS SHALL BE MANAGED ACCORDING TO THE PROVISIONS OF RCRA AND CERCLA.

2. ALL PAINTS, SOLVENTS, PETROLEUM PRODUCTS AND PETROLEUM WASTE PRODUCTS (EXCEPT FUELS) AND STORAGE CONTAINERS (SUCH AS DRUMS, CANS, OR CARTONS) SHALL BE STORED SUCH THAT THESE MATERIALS ARE NOT EXPOSED TO STORM WATER. SUFFICIENT PRACTICES OF SPILL PREVENTION, CONTROL AND/OR MANAGEMENT SHALL BE PROVIDED TO PREVENT ANY SPILLS OF THESE POLLUTANTS FROM ENTERING A WATER OF THE STATE. ANY CONTAINMENT SYSTEM USED TO IMPLEMENT THIS REQUIREMENT SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE SUBSTANCES CONTAINED AND SHALL ALSO PREVENT THE CONTAMINATION OF GROUNDWATER.

3. THE APPLICANT SHALL NOTIFY BY TELEPHONE AND IN WRITING THE DEPARTMENT OF NATURAL RESOURCES, WATER POLLUTION CONTROL PROGRAM, POST OFFICE BOX 176, JEFFERSON CITY, MO 65102, 1-800-361-4827, OF ANY OIL SPILLS OR IF HAZARDOUS SUBSTANCES ARE FOUND DURING THE PROSECUTION OF WORK UNDER THIS PERMIT.

EROSION CONTROL NARRATIVE:

1. THE PROJECT CONSISTS OF CREATING A BUILDING(S) ALONG WITH ITS REQUIRED INFRASTRUCTURE. THIS INCLUDES CONSTRUCTION OF THE BUILDING(S), STREETS AND/OR PARKING LOT, SANITARY SEWERS, STORM SEWERS, ELECTRIC, GAS, WATER, TELEPHONE, AND CABLE TV UTILITIES. IN MY OPINION, THERE ARE NO SIGNIFICANT SILTATION OR EROSION CONTROL PROBLEM AREAS ON THE SITE AT THIS TIME. HOWEVER, CONSTRUCTION OF THESE IMPROVEMENTS WILL CREATE THE POTENTIAL FOR SILTATION AND EROSION PROBLEMS IF NOT CAREFULLY MANAGED.

2. TO MY KNOWLEDGE THERE ARE NO EXISTING OFF-SITE EROSION / SILTATION PROBLEMS DOWN STREAM FROM THIS DEVELOPMENT. THE DEVELOPMENT WILL HAVE MINOR IMPACTS TO THE RECEIVING STREAMS IMMEDIATELY DOWN STREAM FROM THE SITE DURING THE 6 TO 12 MONTHS OF CONSTRUCTION OF THE DEVELOPMENT. AFTER CONSTRUCTION, LAND DISTURBANCE ACTIVITIES WILL DIMINISH AND THEIR EFFECTS OFF-SITE WILL DECREASE TO VERY MINOR IMPACT.

3. THE CURRENT RUNOFF FACTORS INCLUDE SEASONAL LEAF COVER ON TREES AND PLANTS AND FESCUE PASTURES. THE SITE WILL CHANGE FROM APPROXIMATELY 0.0% IMPERVIOUS AREA TO APPROXIMATELY 56% IMPERVIOUS AREA.

4. THE PEAK DISCHARGE FOR THE 25-YEAR STORM ON THE ENTIRE SITE= Q= CIA= 0.70 X 8 X 3.45 = 19.32 CFS.

5. THE MANAGEMENT OF THE EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER UNTIL ALL AREAS ARE ESTABLISHED WITH NEW GROUND COVER.

6. THE CONSTRUCTION OF THE PROJECT SHALL INCLUDE THE PHASES OF: CLEARING, GRADING, STREET/PARKING LOT AND BUILDING CONSTRUCTION. THE ENTIRE SITE SHALL BE GRADED AT ONE TIME AND ALL SURFACES SHALL NOT BE DENUDED FOR, AND SHALL BE STABLE AND NON-EROSIVE WITHIN, THE LESSER OF 30 WORKING DAYS OR 120 CALENDAR DAYS AFTER COMPLETION OF THE WORK AUTHORIZED BY THE LAND DISTURBANCE PERMIT. ALL STOCKPILES SHALL BE PROTECTED W/ SILT FENCE, ALL GRADING ACTIVITIES SHALL BE DONE IN A MANNER THAT CONFORMS TO THE MEASURES SHOWN ON THE PLAN.

7. THE EROSION CONTROL MEASURES SHOWN ON THE PLAN WERE CHOSEN AS THE BEST MANAGEMENT PRACTICES APPROPRIATE FOR THE SITE.

8. THE EROSION CONTROL MEASURES SHALL BE INSPECTED IN ACCORDANCE WITH THE SWPPP, TO INSURE MAXIMUM EFFECTIVENESS OF THE PROTECTIVE MEASURES AND TO ASSURE THAT PREVENTATIVE MAINTENANCE EFFORTS WILL BE CARRIED OUT WHEN NEEDED. ALL AREAS SHALL BE RESEEDED AFTER GRADING IS COMPLETE. ALL STRUCTURAL MEASURES SHALL BE MAINTAINED AND THE WASTE MATERIALS REMOVED AND DISPOSED OF PROPERLY.

9. ALL STORM INLETS WILL HAVE SILT FENCE PLACED AROUND THEM FOR EROSION CONTROL.

10. ALL TEMPORARY CONSTRUCTION ENTRANCES SHALL BE 12' W X 50' L X 6" DEEP, 2" WASH STONE.

11. FILL SLOPES TO BE COMPACTED IN LIFTS AS PER GEOTECHNICAL ENGINEER'S SPECIFICATIONS AND SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION OF WALLS AND GRADING IS COMPLETE. RETAINING WALLS SHALL BE DESIGNED BY A QUALIFIED WALL ENGINEER.

SECTION A-A

N.T.S.

SECTION B-B

N.T.S.

⚠ ACCESSIBLE PAVEMENT/RAMP DETAIL

N.T.S.

STORM WATER MANAGEMENT

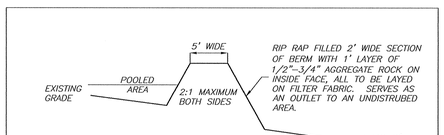
THE STORM WATER MANAGEMENT SHOWN IS CONCEPTUAL, A FULL STORM WATER PLAN BASED ON THE CONCEPTUAL PLAN SHALL BE PROVIDED WITH THE SITE CONSTRUCTION PLAN OR AT THE TIME OF FINAL PLATTING.

DRAINAGE NOTES

- A1 92 L.F. OF 15" CMP @ 19.09% ℄ OUT= 690.13 W/ 1'x4'x12' RIP RAP
- A2 DOUBLE TYPE 'A' INLET, TOP = 713.00, ℄ OUT= 708.9
- B1 47 L.F. OF 15" CMP @ 21.90% ℄ OUT= 694.67 W/ 1'x4'x12' RIP RAP
- B2 TYPE 'A' INLET, TOP = 712.00, ℄ OUT = 705.00
- ⚠ C1 9 L.F. OF 15" CMP @ 1.0%
- ⚠ C2 6'X3' TYPE-M INLET, TOP = 718.59, ℄ OUT = 713.50

SEDIMENT TRAP DETAILS

SEDIMENT TRAP ID	CONTRIBUTING AREA (ACRES)	PONDED AREA (FT^2)	HEIGHT OF SEDIMENT TRAP, FT (5' MAX)	BASE ELEVATION (FT)	PONDED VOLUME, FT^3 (PONDED AREA X HEIGHT X 0.4)	REQUIRED VOLUME, FT^3 (CONTRIBUTING AREA X 1800)	OUTLET STRUCTURE (ROCK OR PIPE)
ST1	1.14	1375	5	689	2750	2052	ROCK



EARTHEN BERM WITH ROCK OUTLET

SEDIMENT TRAP BERM

SEE CITY OF COLUMBIA STORM DRAINAGE DESIGN MANUAL SECTION 10.03.7.1 FOR FURTHER INFORMATION

GRADING PLAN

STATE OF MISSOURI — JAY ALAN GEBHARDT — NUMBER E-35059 — REGISTERED PROFESSIONAL ENGINEER

JAY GEBHARDT MO E-35059

A CIVIL GROUP
CIVIL ENGINEERING, PLANNING, SURVEYING
1010 FAY STREET
COLUMBIA, MO 65201
PHONE: (573)817-5750, FAX: (573)817-1671

NO.	DATE	DESCRIPTION	BY
⚠	7/09/07	NO CHANGE THIS SHEET	KPM
⚠	7/26/07	CITY COMMENTS	SMH
⚠	8/14/07	CITY COMMENTS	ZUF

DRAWN BY: ZUF — DATE: 5/29/2007
CHECKED BY: JG — DRAWING NO.: MKEL07-03
JOB NO.: MKEL07.03 — SHEET 2 OF 3

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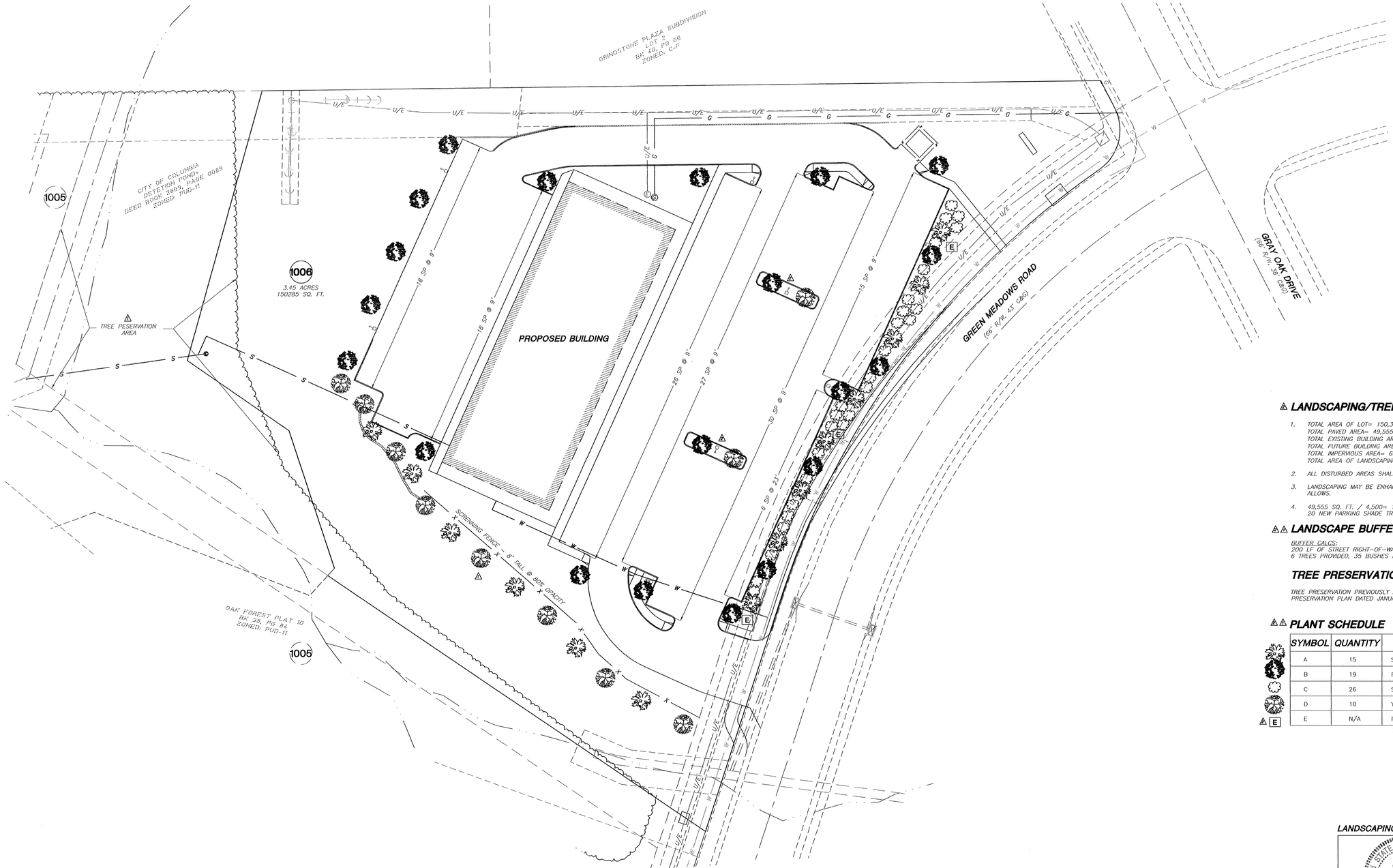
LANDSCAPING PLAN

OAK FOREST C-P

MAY 29, 2007



⚠ LANDSCAPING/TREE PRESERVATION NOTES

1. TOTAL AREA OF LOT= 150,309 SQ.FT.
   TOTAL PAVED AREA= 49,555 SQ.FT. (32.9%)
   TOTAL EXISTING BUILDING AREA= 0 SQ.FT. (0%)
   TOTAL FUTURE BUILDING AREA= 16,400 SQ.FT. (10.9%)
   TOTAL IMPERVIOUS AREA= 65,955 SQ.FT. (43.8%)
   TOTAL AREA OF LANDSCAPING= 84,355 SQ.FT. (56.2%)
2. ALL DISTURBED AREAS SHALL BE SEEDED & MULCHED AFTER CONSTRUCTION.
3. LANDSCAPING MAY BE ENHANCED BY THE DEVELOPER AS TIME AND BUDGET ALLOWS.
4. 49,555 SQ. FT. / 4,500= 11.01 OR 12 TREES REQUIRED.
   20 NEW PARKING SHADE TREES SHOWN ON SITE.

⚠⚠ LANDSCAPE BUFFER

BUFFER CALCS:
200 LF OF STREET RIGHT-OF-WAY, THUS REQUIRING 4 TREES AND 30 BUSHES FOR 50% OPACITY.
6 TREES PROVIDED, 35 BUSHES PROVIDED.

TREE PRESERVATION NOTES

TREE PRESERVATION PREVIOUSLY APPROVED ON TREE PRESERVATION PLAN DATED JANUARY 29, 2004

⚠⚠ PLANT SCHEDULE

SYMBOL	QUANTITY	PLANT SPECIES	SIZE
A	15	SEAGREEN JUNIPER	5 GAL
B	19	RED MAPLE	2"
C	26	SPIREA	5 GAL
D	10	YOSHINO CHERRY	2"
⚠ E	N/A	FESCUE GRASS	N/A

SCALE: 1" = 30'

0 15 30 60

LANDSCAPING PLAN

STATE OF MISSOURI
JAY ALAN GERHARDT
NUMBER E-25052
JAY GERHARDT MO E-25052

A CIVIL GROUP
CIVIL ENGINEERING, PLANNING, SURVEYING
1010 FAY STREET
COLUMBIA, MO 65201
PHONE: (573)811-5750, FAX: (573)811-1471

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DRAWN BY: ZUF
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JOB NO.: MKEL07.03
SHEET 3 OF 3

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