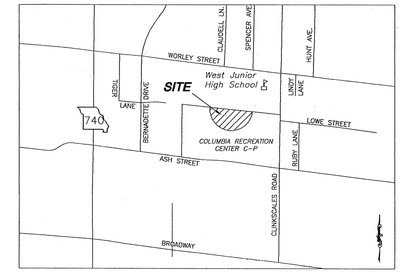
PREVIOUSLY APPROVED

C-P PLAN
FARMERS MARKET
APRIL 13, 2009

RECEIVED
MAY 08 2009
PLANNING DEPT.



LOCATION MAP
NOT TO SCALE

LEGEND

MH ○	EXISTING SANITARY MANHOLE
MH ●	PROPOSED SANITARY MANHOLE
CO ○	EXISTING SANITARY CLEANOUT
CO ●	PROPOSED SANITARY CLEANOUT
	PROPOSED SANITARY A-LOK
FH	EXISTING FIRE HYDRANT
FH	PROPOSED FIRE HYDRANT
	EXISTING GUY WIRE
LP	EXISTING LIGHT POLE
LP	PROPOSED LIGHT POLE
EM	EXISTING ELECTRIC METER
EM	PROPOSED ELECTRIC METER
GM	EXISTING GAS METER
GM	PROPOSED GAS METER
WM	EXISTING WATER METER
WM	PROPOSED WATER METER
C	EXISTING CABLE BOX
E	EXISTING ELECTRIC TRANSFORMER
E	PROPOSED ELECTRIC TRANSFORMER
T	EXISTING TELEPHONE BOX
PP	EXISTING UTILITY POLE
WV	EXISTING WATER VALVE
WV	PROPOSED WATER VALVE
	PROPOSED HANDICAPPED SPACE
	EXISTING HANDICAPPED SPACE
	IRON PIPE CAP #2001006115
	EXISTING
	SET
(REC)	RECORD
	BORE HOLE
	BENCH MARK
DH	DRILL HOLE
IP	IRON PIPE
RB	REBAR
	MONUMENT
PM	PERMANENT MONUMENT
RW	RIGHT OF WAY MARKER
STONE	STONE
	EXISTING STREET SIGN
B	EXISTING BOLLARD
R	EXISTING ROOF DRAIN
S	EXISTING SPRINKLER VALVE
M	EXISTING MAILBOX
	EXISTING FLAGPOLE
BCS	BOONE COUNTY SURVEY
F/G	FINISH GRADE
T/C	TOP OF CURB
T/P	TOP OF PAVEMENT
FF	FINISH FLOOR
(R)	RADIAL LINE
℄	CENTERLINE
0,000	SQUARE FEET
00.00 AC	ACRES
X	EXISTING FENCE
X	PROPOSED FENCE
UE	EXISTING UNDERGROUND ELECTRIC
UE	PROPOSED UNDERGROUND ELECTRIC
OE	EXISTING OVER-HEAD ELECTRIC
OE	PROPOSED OVER-HEAD ELECTRIC
UT	EXISTING UNDERGROUND TELEPHONE
UT	PROPOSED UNDERGROUND TELEPHONE
OT	EXISTING OVER-HEAD TELEPHONE
OT	PROPOSED OVER-HEAD TELEPHONE
FO	EXISTING FIBER OPTIC CABLE
FO	PROPOSED FIBER OPTIC CABLE
G	EXISTING GAS
G	PROPOSED GAS
S	EXISTING SANITARY
S	PROPOSED SANITARY
FM	EXISTING SANITARY FORCEMAIN
FM	PROPOSED SANITARY FORCEMAIN
W	EXISTING WATER
W	PROPOSED WATER
	EXISTING STORM SEWER
	PROPOSED STORM SEWER
CATV	EXISTING CABLE TELEVISION
RD	PROPOSED ROOF DRAIN
	EXISTING FLOWLINE (℄)
	EXISTING TREELINE
	PRESERVED TREELINE
700	PROPOSED CONTOUR
700	EXISTING CONTOUR
T/C 772.00 / F/G 771.50	PROPOSED SPOT ELEVATION
	100-YR FLOODPLAIN
	FLOODWAY
	DIVERSION BERM
	DRAINAGE SWALE
	EROSION CONTROL SILT FENCE
	TEMPORARY SILT TRAP WITH ROCK OUTLET
	TEMPORARY SILT TRAP WITH PIPED OUTLET

SITE DATA
ZONING: C-P
ACREAGE: 5.04
LOCATION: SE QUARTER SECTION 10, TOWNSHIP 48 NORTH, RANGE 13 WEST

OWNER:
CITY OF COLUMBIA
701 E BROADWAY
COLUMBIA, MO 65201

DEVELOPER
SUSTAINABLE FARMS & COMMUNITIES
C/O DAN KUEBLER, BOARD CHAIR
P.O. BOX 1092
COLUMBIA, MO 65205
(573) 823-3663

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. BUILDINGS SHALL BE ONE-STORY WITH CUPOLAS WITH A MAXIMUM HEIGHT OF 40'.
3. ALL PROPOSED UTILITIES ARE SHOWN FOR GENERAL LOCATION PURPOSES ONLY. SEE APPROPRIATE UTILITY CONSTRUCTION PLANS FOR FURTHER DETAIL.
4. ALL DIMENSIONS ARE FROM BACK OF CURB UNLESS SHOWN OTHERWISE.
5. ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT UNLESS SHOWN OTHERWISE.
6. A PRIVATE, UNPAVED WALKING TRAIL MAY BE PLACED ALONG THE NORTHERN BORDER OF THE SITE BY THE DEVELOPER IN THE FUTURE.
7. A VARIANCE HAS BEEN REQUESTED FOR SCREENING ALONG THE NORTH PROPERTY LINE HOWEVER, THE DEVELOPER RESERVES THE RIGHT TO PLACE A FENCE OR VEGETATED HEDGE ROW ALONG THIS PROPERTY LINE PENDING THE OUTCOME OF DISCUSSIONS WITH THE NEIGHBORING PROPERTY OWNER.

PARKING DATA
REQUIRED (1 SPACE/250 SQ FT):

PHASE 1 BUILDING
4,480 SQ FT/250 = 17.9 = 18 SPACES

FUTURE BUILDING
9,600 SQ FT/250 = 38.4 = 39 SPACES

PAVILIONS
22,310 SQ FT/250 = 89.24 = 90

TOTAL REQUIRED = 147 SPACES
REQUIRED BICYCLE = 12 SPACES

PROVIDED:
252 PARKING SPACES (4 OF WHICH ARE HANDICAPPED SPACES, WITH 2 BEING VAN ACCESSIBLE, AND 24 BEING BICYCLE SPACES)

BENCHMARK DATA
CITY BM; CHISELED SQUARE ON NE CORNER OF CONCRETE BASE TO SIGNAL POST ON SW CORNER OF WORLEY AND CLINKSCALES, APPROXIMATELY 580 FEET NORTH OF SITE
ELEV= 766.51

FLOOD PLAIN STATEMENT
THIS TRACT IS NOT LOCATED WITHIN THE 100-YEAR FLOOD PLAIN AS SHOWN BY THE CITY OF COLUMBIA FLOOD PLAIN MAP #290036 0011C DATED DECEMBER 28, 1982.

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.

SIGNAGE NOTE
THERE WILL BE TWO(2) FREESTANDING SIGNS AS SHOWN THAT SHALL MATCH THE SIZE AND DIMENSIONS OF THE EXISTING ARC CENTER SIGNS. HOWEVER, SHOULD THE FARMERS MARKET AND ARC CENTER SIGNS BE COMBINED INTO ONE SIGN AT EACH LOCATION, THEY SHALL NOT TO EXCEED 6' IN HEIGHT WITH SIGN "A" NOT TO EXCEED 60 SQUARE FEET IN AREA AND SIGN "B" NOT TO EXCEED 32 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.

LIGHTING NOTE
LIGHT POLES SHOWN SHALL BE IDENTICAL TO THE EXISTING PERMANENT LIGHTING ON THE APPROVED COMMUNITY RECREATION CENTER (ARC) SITE. MAXIMUM LIGHT POLE HEIGHT WILL BE 25 FEET. THE LOCATION AND TOTAL NUMBER OF LIGHT POLES MAY BE CHANGED 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. ALL EXISTING TEMPORARY LIGHTING SHALL BE REPLACED WITH PERMANENT LIGHTING FIXTURES.

LEGAL DESCRIPTION
A TRACT OF LAND LOCATED IN THE SOUTHEAST QUARTER OF SECTION 10, TOWNSHIP 48 NORTH, RANGE 13 WEST BEING THE TRACT DESCRIBED FOR LEASE IN CITY OF COLUMBIA ORDINANCE #17231, BEING PART OF LOTS 1 AND 2 OF COLUMBIA RECREATION CENTER, A MINOR SUBDIVISION AS RECORDED IN PLAT BOOK 35, PAGE 3 AND BEING FURTHER DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 1; THENCE ALONG THE NORTH LINE OF SAID LOT, S83°58'50"E, 358.48 FEET; THENCE LEAVING SAID LINE S06°01'10"W, 37.11 FEET; THENCE ALONG A 351.00-FOOT RADIUS CURVE TO THE RIGHT, 1102.70 FEET, SAID CURVE HAVING A CENTRAL ANGLE OF 180°00'00" AND A CHORD WHICH BEARS N83°58'50"W, 702.00 FEET; THENCE N06°01'10"E, 37.11 FEET TO THE NORTH LINE OF SAID LOT 2; THENCE ALONG SAID LINE S83°58'50"E, 343.52 FEET TO THE POINT OF BEGINNING AND CONTAINING 219,575 SQUARE FEET OR 5.04 ACRES

JAY GEBHARDT, LS-2001001909

STATE OF MISSOURI
JAY ALAN GEBHARDT
NUMBER LS-2001001909
REGISTERED LAND SURVEYOR

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

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

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

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

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

APPROVED BY THE CITY OF COLUMBIA PLANNING AND ZONING COMMISSION THIS 21st DAY OF June, 2009.

JEFF BARROW, CHAIRMAN

APPROVED BY THE CITY OF COLUMBIA CITY COUNCIL THIS 15th DAY OF June, 2009.

DARWIN A. HINDMAN, MAYOR

SHEELA AMIN, CITY CLERK

SCALE: 1" = 50'
0 25 50 100

Plotted by: kevin; 07 May 2009 - 2:59pm

C-P PLAN

STATE OF MISSOURI
JAY ALAN GEBHARDT
NUMBER E-25052
PROFESSIONAL ENGINEER
JAY GEBHARDT MO E-25052

A CIVIL GROUP
CIVIL ENGINEERING, PLANNING, SURVEYING
1123 WILKES BLVD., SUITE 450
COLUMBIA, MO 65201
PHONE: (573)811-5750, FAX: (573)811-1471

NO.	DATE	DESCRIPTION	BY
1	5/05/09	CITY COMMENTS	KTM

DRAWN BY: SMH — DATE: 4/13/09
ENGR: JAG — PM: JAG — DRAWING NO.: FARM09-01
JOB NO.: FARM09-01 — SHEET 1 OF 5

X:\Projects\FARMERS MARKET\COLUMBIA FARMERS MARKET\FARM09-01.dwg, C-P PLAN

PREVIOUSLY APPROVED

GRADING PLAN

FARMERS MARKET

APRIL 13, 2009

X:\Project\FARMERS MARKET\COLUMBIA FARMERS MARKET\FARMERS MARKET GP\EXFARMGP-01.dwg GRADING PLAN

TREE PRESERVATION

THERE IS NO EXISTING OAK/HICKORY CLIMAX FOREST ON THIS SITE

GENERAL NOTES:

1. ALL WORK SHALL COMPLY WITH THE CITY OF COLUMBIA AND STATE OF MISSOURI DEPARTMENT OF NATURAL RESOURCES LAND DISTURBANCE REGULATIONS.

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

3. THE FINAL CONTOURS SHOWN ARE APPROXIMATE, AND MAY BE CHANGED IN THE FIELD WITH THE APPROVAL OF THE ENGINEER. THE GOAL BEING TO GRADE THE SITE TO MINIMIZE THE OCCURRENCE OF DRAINAGE PROBLEMS.

4. THE LOW FLOOR ELEVATIONS SHOWN ARE FOR THE LOWEST LIVING FLOOR OF A STRUCTURE. THIS ELEVATION MAY BE REVISED IF AN ALTERNATE BUILDING DESIGN IS PROPOSED, AND THE ALTERNATE DESIGN DOES NOT POSE A RISK FROM STORM WATER INTRUSION TO THE STRUCTURE. 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.

5. THE CONTRACTOR SHALL BE REQUIRED TO HAVE COMPACTION TESTING PERFORMED ON ALL FILL AREAS. THIS DATA MUST BE RECORDED IN A FORM THAT ALLOWS THE TEST SITES TO 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.

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.

SCALE: 1" = 20'

0 10 20 40

GRADING PLAN

Plotted by: kevin; 07 May 2009 - 3:00pm

STATE OF MISSOURI
JAY ALAN GERHARDT
NUMBER E-25052
REGISTERED PROFESSIONAL ENGINEER
JAY GERHARDT MO E-25052

A CIVIL GROUP
CIVIL ENGINEERING, PLANNING, SURVEYING
1123 WILKES BLVD., SUITE 450
COLUMBIA, MO 65201
PHONE: (573)817-5750, FAX: (573)817-1677

NO.	DATE	DESCRIPTION	BY
1	5/05/09	CITY COMMENTS	KFM

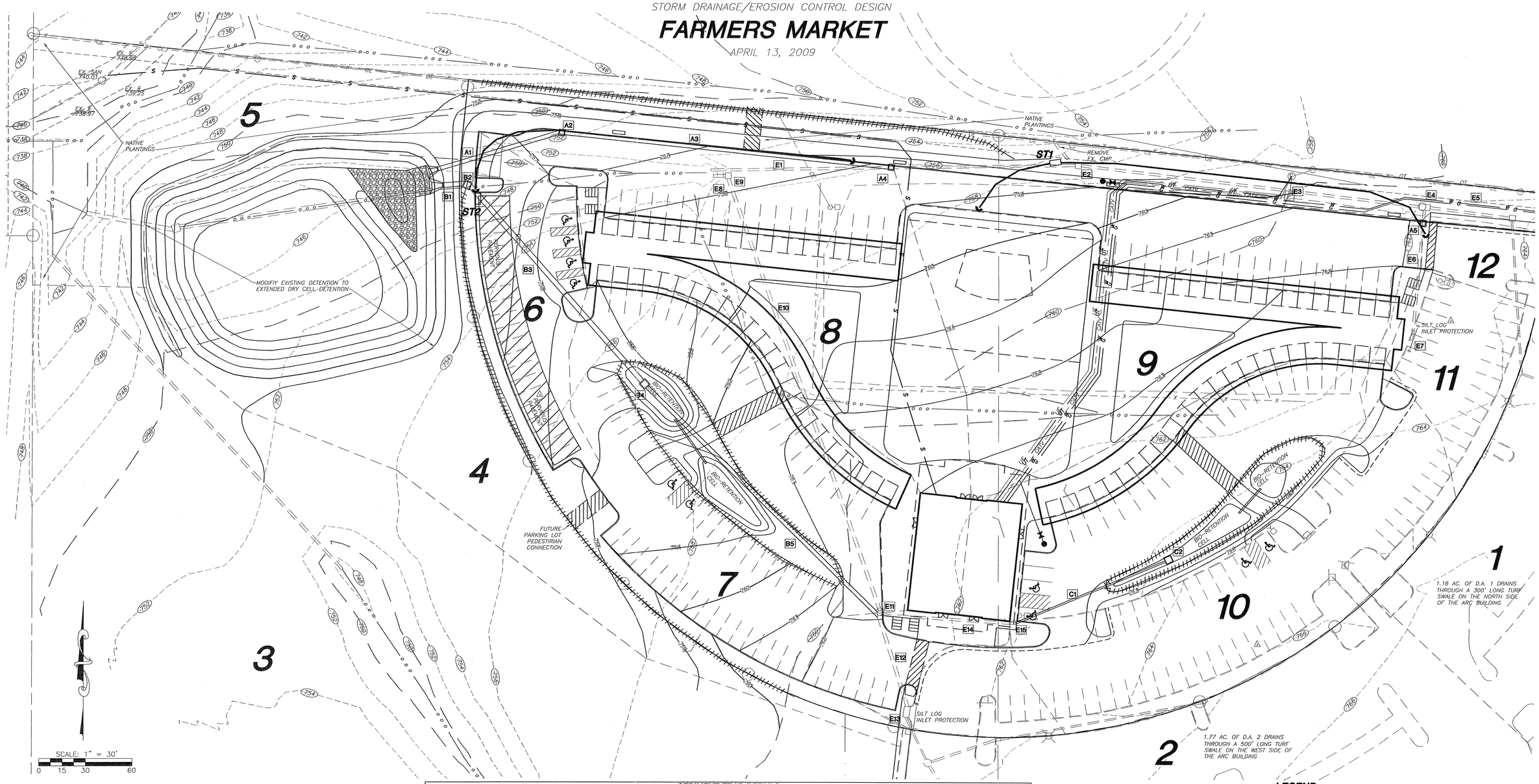
DRAWN BY: SMH DATE: 4/13/09
ENGR: JAG PM: JAG DRAWING NO.: FARM09-01
JOB NO.: FARM09-01 SHEET 2 OF 5

PREVIOUSLY APPROVED

STORM DRAINAGE/EROSION CONTROL DESIGN

FARMERS MARKET

APRIL 13, 2009



DRAINAGE NOTES

- E1 EX. 235 L.F. 18" HDPE @ 1.00% (PARTIALLY REMOVED)
- E2 EX. 3' X 3' J-BOX, TOP=757.60, ℄ IN=753.25, ℄ OUT=753.23
- E3 EX. 219 L.F. 18" HDPE @ 0.50%
- E4 EX. 6' X 3' J-BOX, TOP=762.35, ℄ IN SOUTH=754.98, ℄ IN EAST=754.48, ℄ OUT WEST=754.46
- E5 EX. 52 L.F. 18" HDPE @ 3.20%
- E6 EX. 82 L.F. 18" HDPE @ 1.00%
- E7 EX. 1.5' X 3' TYPE "A" INLET, TOP=762.10 , ℄ BOX=755.88
- E8 EX. 8 L.F. 24"CMP (TO BE REMOVED)
- E9 EX. 3' X 3' J-BOX, TOP=754.70, ℄ IN=751.25, ℄ OUT=751.15 (TO BE REMOVED)
- E10 EX. 295 L.F. 24" HDPE @ 0.60% (TO BE REMOVED)
- E11 EX. 6' X 3' J-BOX, TOP=760.25 , ℄ IN SOUTH=753.21, ℄ IN EAST=753.31, ℄ OUT NORTH=753.13
- E12 EX. 59 L.F. 24" RCP @ 1.00%
- E13 EX. 6' X 3' J-BOX, TOP=760.95 , ℄ IN=753.82, ℄ OUT=753.81
- E14 EX. 83 L.F. 18" RCP @ 1.70%
- E16 EX. 1.5' X 3' TYPE "A", TOP=761.28 , ℄ BOX=754.73
- A1 82 L.F. 30" HDPE @ 1.20% W/F.E.S., ℄=749.00
- A2 3' X 3' TYPE A INLET, TOP=756.50, ℄ IN=749.92, ℄ OUT=749.82
- A3 210 L.F. 30" HDPE @ 1.00%
- A4 3' X 3' TYPE A INLET, TOP=758.68, ℄ IN=752.06, ℄ OUT=751.96
- A5 3' X 3' TYPE A INLET, TOP=762.75, ℄ IN=755.15, ℄ OUT=755.05
- B1 14 L.F. 36" HDPE @ 1.00% W/F.E.S., ℄=749.00
- B2 4' X 4' J-BOX, TOP=757.00, ℄ IN=749.24, ℄ OUT=749.14
- B3 169 L.F. 36" HDPE @ 0.69%
- B4 4' X 4' SIDE OPENING INLET, TOP=757.00, ℄ OPENINGS N./S.=756.00, ℄ IN=750.60, ℄ OUT=750.40
- B5 211 L.F. 30" HDPE @ 1.30%
- C1 94 L.F. 15" HDPE @ 1.60%
- C2 4' X 4' SIDE OPENING INLET, TOP=762.00, ℄ OPENINGS E./W.=761.00, ℄ OUT=756.23

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	0.99	4900	2	756	3920	1782	ROCK
ST2	1.21	2400	3	748	2880	2178	ROCK

⚠ DRAINAGE STRUCTURE, PIPES

STRUCTURE	MATERIAL	LENGTH (LF)	SLOPE (%)	PIPE DIAMETER (IN)	COMP Q, 25-YR (CFS)	25-YR EVENT VELOCITY (FPS)	FULL FLOW Q (CFS)
E1	HDPE	235	1.00	18	27.80	5.94	10.51
E3	HDPE	219	0.50	18	27.80	4.20	7.43
E5	HDPE	52	1.0	18	24.46	5.94	10.51
E6	HDPE	82	1.20	18	4.50	6.51	7.01
E8	HDPE	8	3.90	24	38.61	14.22	44.68
E10	HDPE	295	0.60	24	38.61	5.58	17.53
A1	HDPE	82	1.20	30	42.89	9.15	44.94
A3	HDPE	210	1.00	30	36.87	8.36	41.02
B1	HDPE	14	1.00	36	54.36	9.44	66.71
B3	HDPE	169	0.69	36	52.62	7.84	55.41
B5	HDPE	211	1.30	30	46.67	9.53	46.77
C1	HDPE	94	1.60	15	8.06	6.66	8.17

* THE 25-YR EVENT DOES NOT FLOW THROUGH EXISTING PIPES E1, E3, E5 OR E10.

DRAINAGE AREAS

SYMBOL	ACRES	BMP	LS
1	1.25	EXTENDED DRY DETENTION	4.00
1A	1.16	SWALE/EXTENDED DRY DETENTION	6.00
2	3.31	EXTENDED DRY DETENTION	4.00
2A	1.77	SWALE/EXTENDED DRY DETENTION	6.00
3	4.85	N/A	0.00
4	1.19	EXTENDED DRY DETENTION	4.00
5	0.97	NATIVE PLANTINGS	9.25
6	0.24	PERVIOUS PAVEMENT/EXT. DRY DETENTION	8.50
7	0.88	BIO-RETENTION CELL	8.50
8	0.77	EXTENDED DRY DETENTION	4.00
9	1.09	EXTENDED DRY DETENTION	4.00
10	1.11	BIO-RETENTION CELL	8.50
11	0.17	EXTENDED DRY DETENTION	4.00
12	0.45	EXTENDED DRY DETENTION	4.00

LEGEND

- X — EXISTING FENCE
- S — EXISTING SANITARY
- S — PROPOSED SANITARY
- PROPOSED STORM SEWER
- FLOWLINE (℄)
- EXISTING TREELINE
- PRESERVED TREELINE
- 700 — DESIGN CONTOUR
- 700 — EXISTING CONTOUR
- D.A. — DETENTION AREA
- DIVERSION BERM
- DRAINAGE SWALE
- EROSION CONTROL SILT FENCE
- TEMPORARY SILT TRAP WITH ROCK OUTLET
- TEMPORARY SILT TRAP WITH PIPED OUTLET

STORMWATER MANAGEMENT

1. THIS SITE CURRENTLY DRAINS SOUTHEAST TO NORTHWEST ACROSS LANDSCAPED AND PAVED AREAS AND THROUGH AN EXISTING STORM WATER SYSTEM OF WHICH APPROXIMATELY 13.29 ACRES FLOWS TO AN EXISTING FLOOD PROTECTION CONTROL, DRY CELL DETENTION BASIN. IT IS OUR DETERMINATION THAT THE EXISTING DETENTION DOES CONTAIN THE 100-YEAR EVENT AND THAT SEVERAL EXISTING DRAINAGE PIPES DO NOT HAVE CAPACITY FOR THE 25-YEAR EVENT. PORTIONS OF THE EXISTING STORM WATER SYSTEM WILL BE REPLACED WITH THIS PLAN TO A 25-YEAR EVENT SERVICE LEVEL.

2. IT IS THE INTENT OF THIS PLAN TO CAPTURE THE RUNOFF FROM THE IMPROVED SITE AND DETAIN THE PEAK RUNOFF TO PRE-DEVELOPMENT LEVELS FOR THE Q1, Q2, Q10 AND Q100 DESIGN STORMS. THE WATER QUALITY DESIGN STORM SHALL ALSO BE TREATED TO OBTAIN THE APPROPRIATE WATER QUALITY LEVEL OF SERVICE. THE METHODS USED TO ACHIEVE THESE GOALS SHALL INCLUDE THE RECONFIGURATION OF THE EXISTING DRY CELL DETENTION TO AN EXTENDED DRY CELL DETENTION STRUCTURE, THE USE OF PERVIOUS/POROUS PAVEMENT IN A PORTION OF THE PARKING LOT, THE CREATION OF BIO-RETENTION CELLS, THE PLANTING OF NATIVE VEGETATION AND THE USE OF EXISTING GRASS/TURF SWALES. THE COMBINATION OF THESE BMPS SHALL PROVIDE AN OVERALL LEVEL OF SERVICE OF 4.0 FOR THE ENTIRE 19.21 ACRE SITE.

3. ALL NEW STORMWATER MANAGEMENT FACILITIES SHALL BE DESIGNED IN ACCORDANCE WITH CHAPTER 12A AND THE STORMWATER MANAGEMENT AND WATER QUALITY MANUAL OF THE CITY OF COLUMBIA.

STORM DRAINAGE/EROSION CONTROL DESIGN

STATE OF MISSOURI — JAY ALAN GEBHARDT MUNGER E-25052 — REGISTERED PROFESSIONAL ENGINEER

JAY GEBHARDT MO E-25052

A CIVIL GROUP
CIVIL ENGINEERING, PLANNING, SURVEYING
1123 WILKES BLVD., SUITE 450
COLUMBIA, MO 65201
PHONE: (573)811-5750, FAX: (573)811-1471

NO.	DATE	DESCRIPTION	BY
⚠	5/05/08	CITY COMMENTS	KPM

DRAWN BY: KPM — DATE: 4/13/09
ENGR: JAG — PM: JAG — DRAWING NO.: FARM09-01
JOB NO.: FARM09-01 — SHEET 3 OF 5

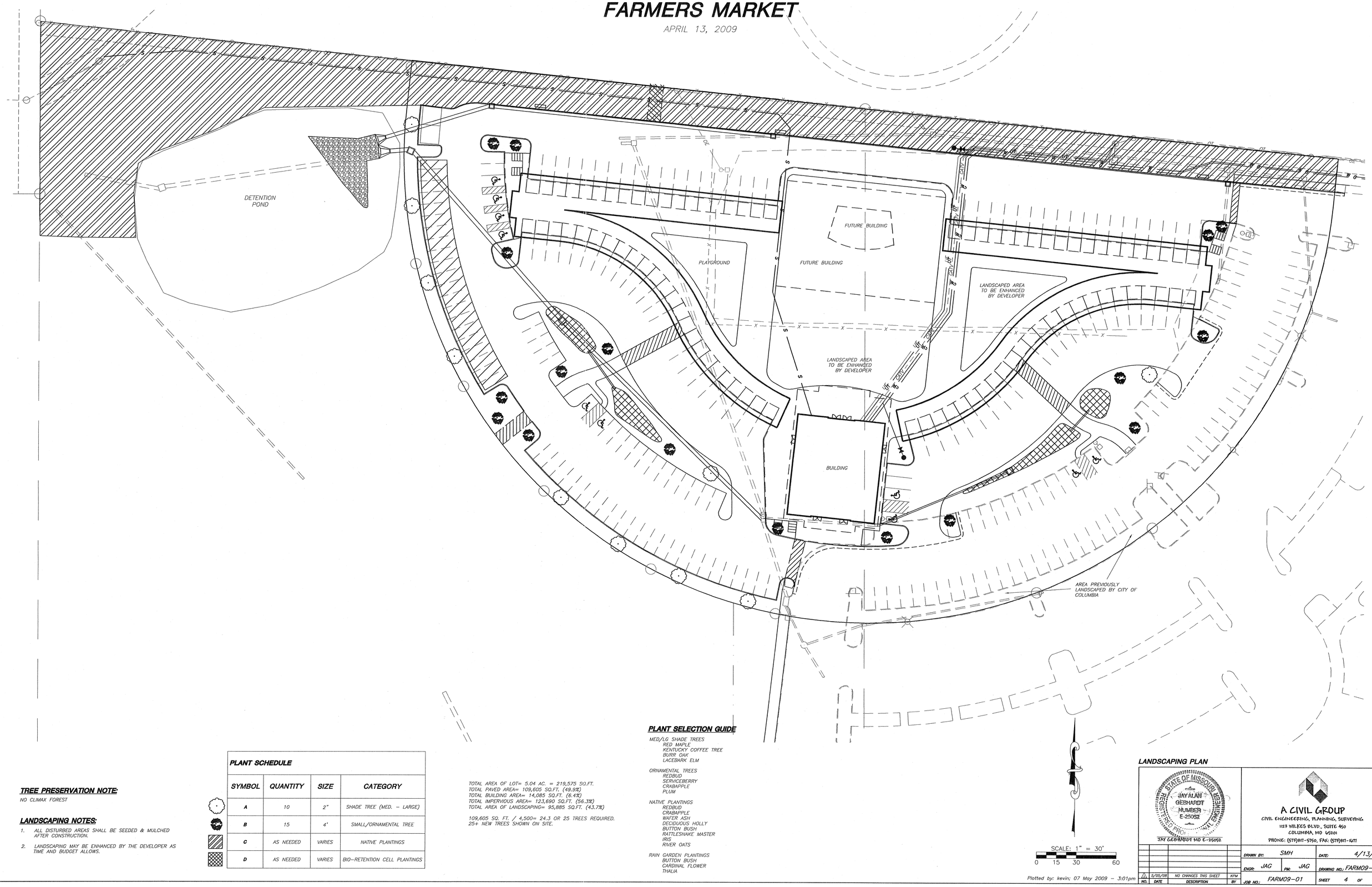
X:\Project\FARMERS MARKET\COLUMBIA FARMERS MARKET\FARMERS MARKET CP\EP\FARM09-01.dwg STORM

PREVIOUSLY APPROVED

LANDSCAPING PLAN

FARMERS MARKET

APRIL 13, 2009



TREE PRESERVATION NOTE:

NO CLIMAX FOREST

LANDSCAPING NOTES:

1. ALL DISTURBED AREAS SHALL BE SEEDED & MULCHED AFTER CONSTRUCTION.
2. LANDSCAPING MAY BE ENHANCED BY THE DEVELOPER AS TIME AND BUDGET ALLOWS.

PLANT SCHEDULE

SYMBOL	QUANTITY	SIZE	CATEGORY
A	10	2"	SHADE TREE (MED. – LARGE)
B	15	4'	SMALL/ORNAMENTAL TREE
C	AS NEEDED	VARIES	NATIVE PLANTINGS
D	AS NEEDED	VARIES	BIO-RETENTION CELL PLANTINGS

TOTAL AREA OF LOT= 5.04 AC. = 219,575 SQ.FT.
TOTAL PAVED AREA= 109,605 SQ.FT. (49.9%)
TOTAL BUILDING AREA= 14,085 SQ.FT. (6.4%)
TOTAL IMPERVIOUS AREA= 123,690 SQ.FT. (56.3%)
TOTAL AREA OF LANDSCAPING= 95,885 SQ.FT. (43.7%)

109,605 SQ. FT. / 4,500= 24.3 OR 25 TREES REQUIRED.
25+ NEW TREES SHOWN ON SITE.

PLANT SELECTION GUIDE

MED/LG SHADE TREES
- RED MAPLE
- KENTUCKY COFFEE TREE
- BURR OAK
- LACEBARK ELM

ORNAMENTAL TREES
- REDBUD
- SERVICEBERRY
- CRABAPPLE
- PLUM

NATIVE PLANTINGS
- REDBUD
- CRABAPPLE
- WAFER ASH
- DECIDUOUS HOLLY
- BUTTON BUSH
- RATTLESNAKE MASTER
- IRIS
- RIVER OATS

RAIN GARDEN PLANTINGS
- BUTTON BUSH
- CARDINAL FLOWER
- THALIA

SCALE: 1" = 30'
0 15 30 60

Plotted by: kevin; 07 May 2009 – 3:01pm

LANDSCAPING PLAN

STATE OF MISSOURI REGISTERED JAY ALAN GEBHARDT NUMBER E-25052 ENGINEER
JAY GEBHARDT MO E-25052

A CIVIL GROUP
CIVIL ENGINEERING, PLANNING, SURVEYING
1123 WILKES BLVD., SUITE 450
COLUMBIA, MO 65201
PHONE: (573)811-9750, FAX: (573)811-1471

NO.	DATE	DESCRIPTION	BY
1	5/05/08	NO CHANGES THIS SHEET	KPM

DRAWN BY: SMH | DATE: 4/13/09
ENGR: JAG | PM: JAG | DRAWING NO.: FARM09-01
JOB NO.: FARM09-01 | SHEET 4 OF 5

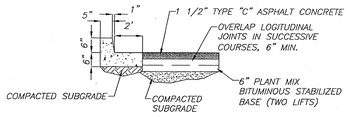
X:\Project\FARMERS MARKET\COLUMBIA FARMERS MARKET\FARMERS MARKET CP\EP\FARM09-01.dwg LANDSCAPE PLAN

PREVIOUSLY APPROVED

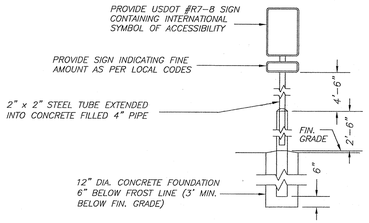
DETAILS

FARMERS MARKET

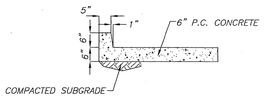
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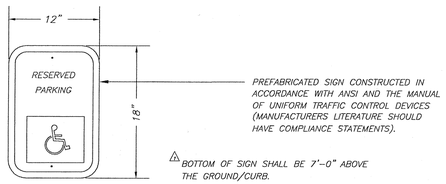
ASPHALT W/ CONCRETE CURB & GUTTER PAVEMENT
N.T.S.



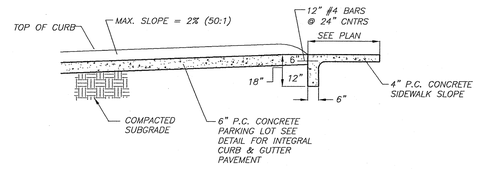
HANDICAPPED PARKING SIGN
N.T.S.



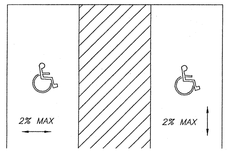
CONCRETE WITH INTEGRAL CURB & GUTTER PAVEMENT
N.T.S.



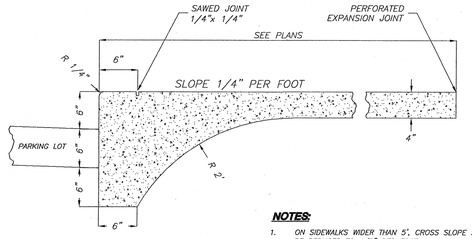
DISABLED RESERVED PARKING SIGN
N.T.S.



SECTION A-A
N.T.S.



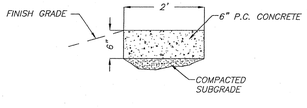
DISABLED PAVEMENT/RAMP DETAIL
N.T.S.



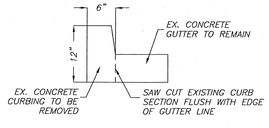
NOTES:

1. ON SIDEWALKS WIDER THAN 5', CROSS SLOPE SHALL BE REDUCED TO 1/8" PER FOOT.

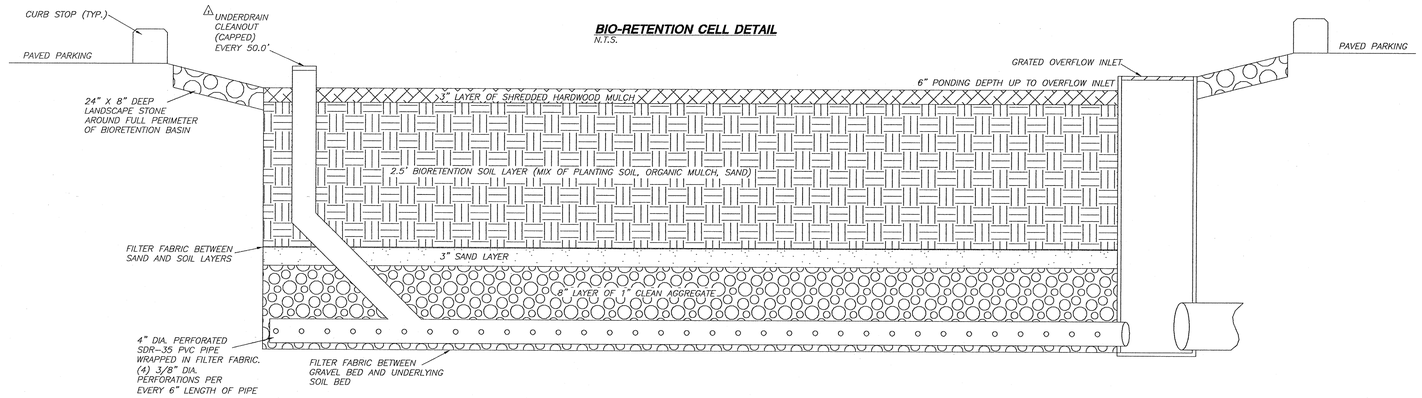
SIDEWALK (DETAIL D)
N.T.S.



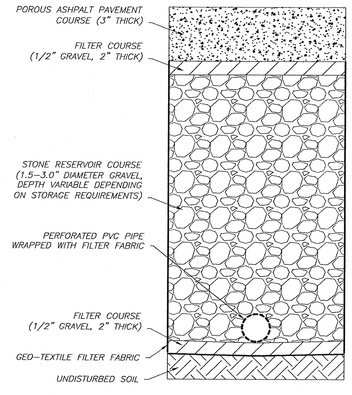
GUTTER SECTION DETAIL - NO CURB
N.T.S.



EXISTING CURB & GUTTER SAW CUT DETAIL
N.T.S.



BIO-RETENTION CELL DETAIL
N.T.S.



TYPICAL PERVIOUS PAVEMENT DETAIL
N.T.S.

DETAILS

STATE OF MISSOURI
REGISTERED PROFESSIONAL ENGINEERS
JAY ALAN GEBHARDT
NUMBER E-25052
JAY GEBHARDT, NO E-25052

A CIVIL GROUP
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NO.	DATE	DESCRIPTION	BY
1	5/05/09	CITY COMMENTS	KPM

DRAWN BY: SMH DATE: 4/13/09
ENGR: JAG PM: JAG DRAWING NO.: FARM09-01
JOB NO.: FARM09-01 SHEET 5 OF 5

X:\Project\FARMERS MARKET\COLUMBIA FARMERS MARKET\FARMERS MARKET CP\CP\FARM09-01.dwg DETAILS