SANITARY SEWER IMPROVEMENTS FOR DILLON'S FOOD STORE #20 BUILDING EXPANSION
PRIVATE PROJECT NUMBER: 1622PPS (607861)

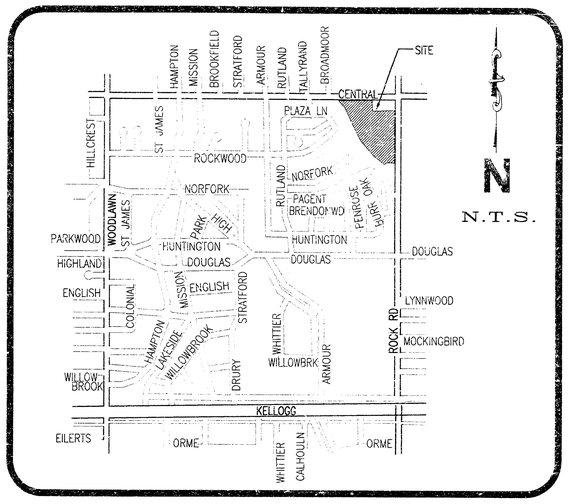
DP-41
ROCKWOOD CENTER
CITY OF WICHITA, SEDGWICK COUNTY, KANSAS
CITY ENGINEER: JIM ARMOUR, P.E.

INDEX OF DRAWINGS

DILLON'S FOOD STORES BUILDING EXPANSION

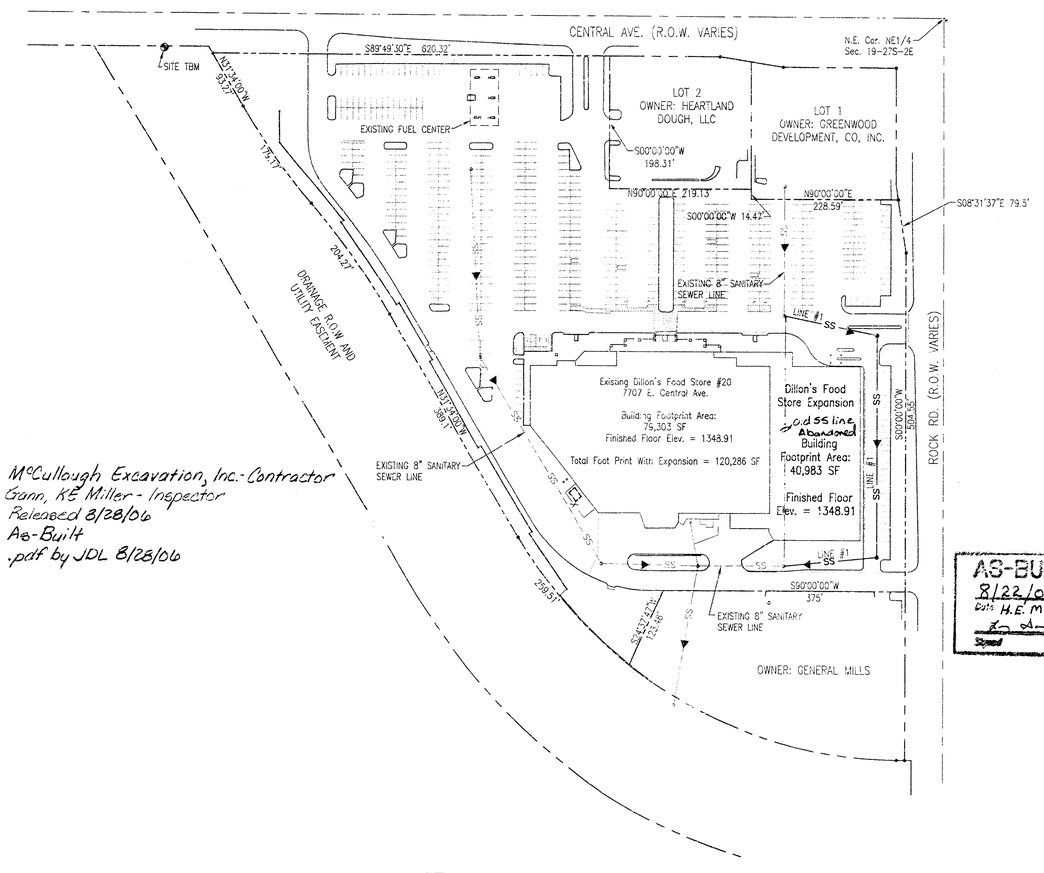
SHEET 1/6	COVER SHEET
SHEET 2/6	PLAN & PROFILE OF SANITARY SEWER LINE
SHEET 3/6	MANHOLE FRAME AND COVER
SHEET 4/6	SHALLOW MANHOLES TYPE "P" & "C"
SHEET 5/6	VARICUS WATER DETAILS
SHEET 6/6	RECORDED PLAT

VICINITY MAP
WICHITA, KS



GENERAL NOTES

1. UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, ET CETERA ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN AND SHALL BE FIELD VERIFIED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
2. CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED TO THE PROJECT AND IS PRESENT ON SITE. CONTRACTOR SHALL NOT START ON THE PROJECT UNTIL ALL NECESSARY BONDS AND PERMITS HAVE BEEN OBTAINED. BONDS MAY INCLUDE BUT ARE NOT LIMITED TO STATUTORY, PERFORMANCE & MAINTENANCE FOR AREAS IN THE PUBLIC RIGHT-OF-WAY AND EASEMENT. FOR PROJECTS WITHIN THE CITY OF WICHITA CONTACT TOM MASON (268-4574). ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO REESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE REESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAW.
4. CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
5. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
6. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
7. WHEN CONNECTING TO EXISTING MANHOLE OR STUB, THE CONTRACTOR SHALL RESHAPE MANHOLE BOTTOM OR ADJUST THE EXISTING STUB'S ALIGNMENT OR ELEVATION AS NECESSARY. COST SHALL BE SUBSIDIARY TO THE PROJECT.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS FLOW OF SEWAGE THROUGH CONSTRUCTION. CONTRACTOR'S PROPOSED METHOD FOR MAINTAINING SEWAGE FLOW SHALL BE APPROVED BY THE ENGINEER. COST OF MAINTAINING FLOW OF SEWAGE THROUGH CONSTRUCTION WILL NOT BE PAID FOR DIRECTLY AND THE COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE OTHER PAY ITEMS OF WORK.
9. ALL SANITARY SEWERS SHALL BE INSTALLED IN ACCORDANCE WITH THE MOST RECENT EDITION OF CITY OF WICHITA, KANSAS STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF CITY PROJECTS.
10. CONTRACTOR SHALL REPLACE EXISTING GRASS IN THIS AREA IN KIND AS NECESSARY TO RESTORE AREAS DISTURBED BY CONSTRUCTION TO ORIGINAL CONDITION. COST TO BE INCLUDED IN BID ITEM "SITE CLEARING & RESTORATION"
11. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY ABUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.



GENERAL LAYOUT
SCALE: 1" = 100'

McCullough Excavation, Inc. - Contractor
Gann, KE Miller - Inspector
Released 8/28/06
As-Built
.pdf by JDL 8/28/06

AS-BUILT
8/22/06
Date H.E. Miller
Signed

K:\21\47-01\plan\SEWER PLANS\047-01-C1-COVER-SEWER.dwg
Plot Scale: 1=100
ophelan/ January 31, 2006- 3:03 PM

PREPARED & SUBMITTED BY
PICKERING FIRM, INC.
6775 LENOX CENTER COURT, SUITE 300
MEMPHIS, TN 38115

JOHN L. PICKERING LICENSED 17642 KANSAS PROFESSIONAL ENGINEER

ENGINEER 1/31/06 DATE

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA:

SANITARY SEWERS JRH 2/2/06

STORM SEWERS_____

DRIVEWAY APPROACHES_____

WATER MAINS_____

PAVING_____

NOTE TO CONTRACTOR:
INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

DEVELOPER:

DILLON STORES
2700 EAST 4TH STREET
P.O. BOX 1608
HUTCHINSON, KS 67501-1608

UTILITY NOTE:
VISUAL INDICATIONS OF UTILITIES ARE AS SHOWN. UNDERGROUND LOCATIONS SHOWN, AS FURNISHED BY THEIR LESSORS, ARE APPROXIMATE AND SHOULD BE VERIFIED IN THE FIELD AT THE TIME OF CONSTRUCTION. FOR ACTUAL FIELD LOCATIONS OF UNDERGROUND UTILITIES, CALL KANSAS ONE-CALL 1-800-344-7233. THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

POWER:	WESTAR 316-261-6512
GAS:	KANSAS GAS SERVICE 316-832-3101
WATER & SEWER:	CITY OF WICHITA 316-262-6000
TELEPHONE:	SOUTHWESTERN BELL TELE. CO. 800-870-9330
CABLE:	COX COMMUNICATIONS 316-262-0661

BENCHMARK:
SITE TBM: CITY OF WICHITA STD. DISC IN S.E. CORNER OF S. HEADWALL OF RCBC N. BRANCH GYPSUM CREEK & CENTRAL AVE. E OF BROADMOOR & N. OF ROCK RD

ELEVATION: = 1347.24 NGVD

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER
INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OF SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

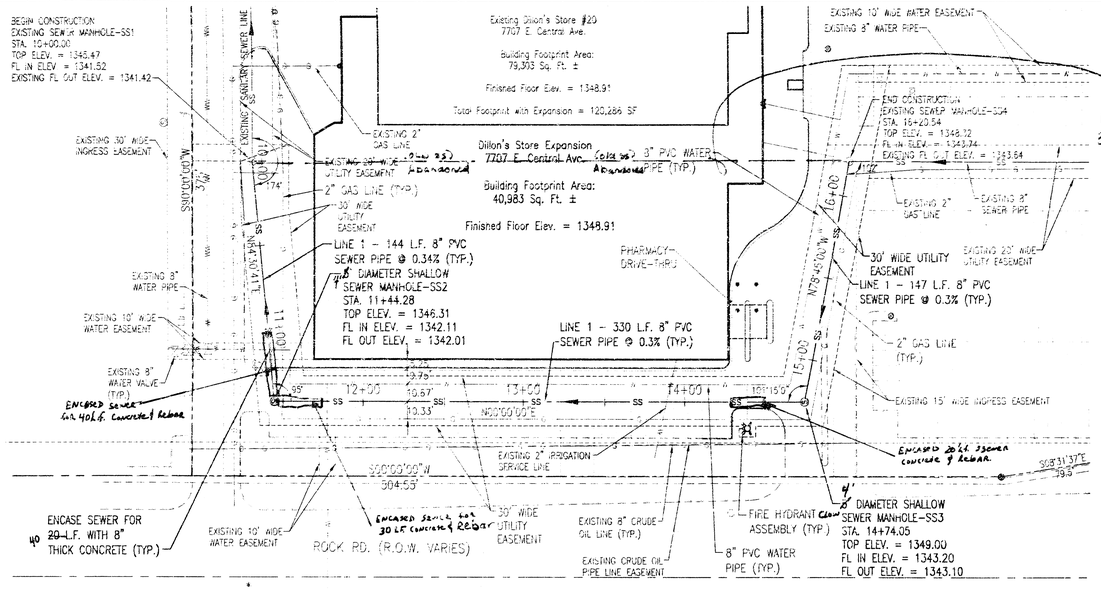
LEGAL DESCRIPTION:
LOTS 3, 4, & 5, ROCKWOOD CENTER SECOND ADDITION, SEDGWICK COUNTY, KANSAS

ZONING NOTE:
THE SUBJECT PROPERTY IS ZONED "LC- LIMITED COMMERCIAL" WITH DP-41 OVERLAY.

SPECIAL FLOOD HAZARD STATEMENT:
BY GRAPHIC DETERMINATION, THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE B, AN AREA BETWEEN THE LIMITS OF THE 100-YEAR FLOOD AND THE 500-YEAR FLOOD, AND IN ZONE C, AN AREA DESCRIBED AS HAVING MINIMAL FLOODING PER FEMA/FIRM MAP NUMBER 20035280030 B, CITY OF WICHITA, KANSAS, SEDGWICK COUNTY, EFFECTIVE DATE OF MAY 15, 1986.

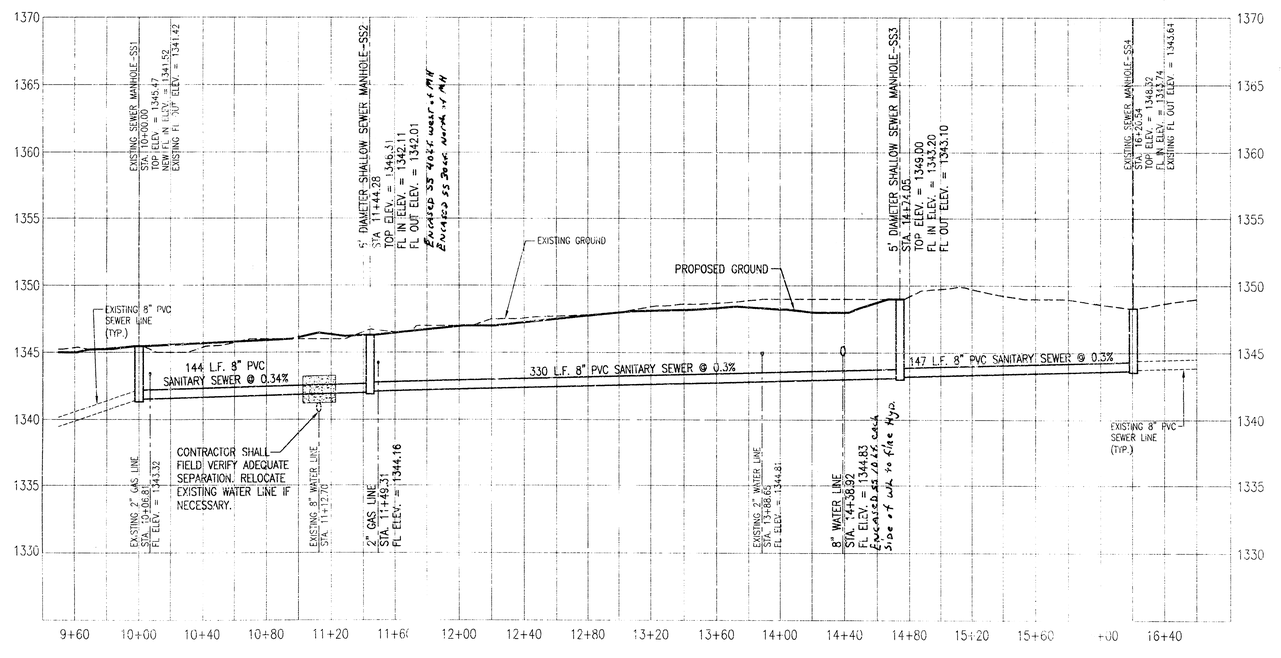
Pickering Firm Incorporated
Planning-Architecture-Engineering-Management
6775 Lenox Center Court Suite 300 Memphis, TN 38115 901.767.6050 901.767.6051 FAX

DILLON'S FOOD STORE #20 BUILDING EXPANSION		
PROJECT NAME		
COVER SHEET		
SHEET TITLE		
AJP	ATP	CLM
DRAWN BY	CHKD BY	CHECKED BY
01-31-06	21047-01	1 OF 6
DATE	JOB NUMBER	SHEET



1 LINE 1 - SANITARY SEWER PLAN

SCALE: 1" = 40'



2 LINE 1 - SANITARY SEWER PROFILE

SCALE: 1" = 40' HORIZONTAL, 1"= 5' VERTICAL

K:\21047-07\com\SEWER PLANS\047-01-C2-PROFILE-SEWER.dwg
Xref: Scale: 1=40
ophelm / January 31, 2006 - 3:32 PM

UTILITY NOTE:

CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING NATURAL GAS, WATER, AND STORM SEWER LINES WHERE CROSSING PROPOSED SANITARY SEWER LINES OR ANY SANITARY SEWER CONSTRUCTION. CONTRACTOR SHALL PROVIDE ELEVATIONS OF EXISTING UTILITIES TO THE ENGINEER TO VERIFY ADEQUATE CLEARANCE.

SEWER NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ANY UTILITY COMPANY WHICH MAINTAINS A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT PRIOR TO THE INITIATION OF ANY CONSTRUCTION ON THE PROJECT OR IN THE STREETS BORDERING THE PROJECT. THE CONTRACTOR SHALL ALSO ASSUME THE RESPONSIBILITY FOR ANY DAMAGE INCURRED BY ANY UTILITY COMPANY, TO THEIR LINES, WHETHER SHOWN ON THE CONSTRUCTION PLANS OR NOT, DURING WORK ON THE PROJECT.
2. ALL SANITARY SEWER MATERIALS, TESTING, INSPECTION, AND INSTALLATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WICHITA AND STATE OF KANSAS SPECIFICATIONS.
3. SEVENTY-TWO (72) HOURS BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL KANSAS ONE CALL AT 316-687-2470.
4. THE CONTRACTOR SHALL FIELD VERIFY SANITARY SEWER ELEVATIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
5. ALL SEWER LINES SHALL BE PVC SDR 26.

PICKERING FIRM INCORPORATED UNDERGROUND UTILITIES DISCLAIMER

INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE USING THIS DRAWING. THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, HIS EMPLOYEES, HIS CONSULTANTS AND HIS CONTRACTORS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE CORRECTNESS OF SUFFICIENCY OF THIS INFORMATION REGARDING THE UNDERGROUND UTILITIES AND STRUCTURES RELATED TO UNDERGROUND UTILITIES SHOWN HEREON.

Site Data:

Dillon's Store #20
7707 E. Central Ave
Wichita, KS 67206

Zoning: LC (Limited Commercial)

Parcel Size: 12.81 Acres

Minimum Required Setbacks:
20' Front Yard
10' Rear Yard
No Side Yard Setback

SPECIAL FLOOD HAZARD STATEMENT

BY GRAPHIC DETERMINATION, THE SUBJECT PROPERTY IS LOCATED WITHIN ZONE B, AN AREA BETWEEN THE LIMITS OF THE 100-YEAR FLOOD AND THE 500-YEAR FLOOD, AND IN ZONE C, AN AREA DESCRIBED AS HAVING MINIMAL FLOODING PER FEMA/FIRM MAP NUMBER 200328 0030 B; CITY OF WICHITA, KANSAS, SEDGWICK COUNTY, EFFECTIVE DATE OF MAY 15, 1986.

WATER/SEWER SEPARATION NOTES:

1. WATER MAINS SHALL BE LAID AT LEAST 10' HORIZONTALLY AND 24" VERTICALLY FROM ANY SEWER OR MANHOLE (WATER OVER SEWER).
2. WHERE LOCAL CONDITIONS PREVENT ADEQUATE VERTICAL SEPARATION, THE SANITARY SEWER MUST BE CONSTRUCTED OF DUCTILE IRON, PVC, OR REINFORCED CONCRETE, THE SEWER LINE MUST MEET REQUIREMENTS OF THE CITY OF WICHITA STANDARD SPECIFICATIONS, AND MUST BE PRESSURE TESTED PURSUANT TO CHAPTER VI OF THE KDHE MINIMUM STANDARD OF DESIGN OF WATER POLLUTION CONTROL FACILITIES.
3. JOINTS IN THE SEWER PIPE SHALL BE LOCATED A MINIMUM OF 10' FROM THE INTERSECTED WATER MAIN.
4. WHERE A 24" SEPARATION, WATER OVER SEWER, CANNOT BE MAINTAINED, THE SANITARY SEWER SHALL BE REINFORCED CONCRETE ENCASED FOR A DISTANCE OF TEN FEET EACH WAY FROM THE WATER LINE CROSSING. (SEE SHEET 5/6, SANITARY SEWER DETAILS - VARIOUS WATER DETAILS)
5. WHERE A WATER MAIN IS LAID BELOW THE SANITARY SEWER, REGARDLESS OF CLEAR SPACE, THE SANITARY SEWER SHALL BE REINFORCED CONCRETE ENCASED FOR A DISTANCE OF TEN FEET EACH WAY FROM THE WATER LINE CROSSING.

SYMBOL LEGEND

- LIGHT POLE
- ELECTRIC BOX
- TELEPHONE PEDESTAL
- SANITARY SEWER MANHOLE
- WATER VALVE
- FIRE HYDRANT
- CURB INLET
- GRATE INLET
- STORM SEWER MANHOLE
- MONITOR WELL
- RECOVERY WELL
- GAS METER
- ELECTRIC METER
- VALVE BOX
- CLEAN OUT
- UTILITY ACCESS COVER
- VAULT

ABBREVIATIONS

EP	EDGE OF PAVEMENT
ROW	RIGHT OF WAY
℄	CENTERLINE
RCP	REINFORCED CONCRETE PIPE
CONC.	CONCRETE
CMP	CORRUGATED METAL PIPE
PL	SUBJECT PROPERTY LINE
TC	TOP OF CURB
BC	BOTTOM OF CURB
POB	POINT OF BEGINNING
HCR	HANDICAP RAMP
♿	HANDICAP PARKING/ACCESS

LINE LEGEND

- EXIST. OVERHEAD ELECTRIC LINES
- EXIST. UNDERGROUND ELECTRIC LINES
- EXIST. GAS LINE
- EXIST. WATER LINE
- EXIST. SANITARY SEWER LINE
- EXIST. OVERHEAD TELEPHONE LINE
- EXIST. UNDERGROUND TELEPHONE LINE
- EXIST. DRAINAGE/STORM SEWER LINE
- FENCE
- SUBJECT AREA BOUNDARY
- OVERHEAD ELECTRIC LINES
- UNDERGROUND ELECTRIC LINES
- GAS LINE
- WATER LINE
- SANITARY SEWER LINE
- OVERHEAD TELEPHONE LINE
- UNDERGROUND TELEPHONE LINE
- DRAINAGE/STORM SEWER LINE
- FENCE

NOTE:
REPAIR ALL EXIST. ASPHALT PAVEMENT, CONCRETE CURB AND GUTTER, AND REPLACE SOD AND LANDSCAPING AS REQUIRED FOR UTILITY CONSTRUCTION

UTILITY NOTE:
EXISTING CONDITIONS AND UTILITY INFORMATION WAS PROVIDED BY THE SAVOY COMPANY, P.A.

NOTE: ALL SYMBOLS, ABBREVIATIONS, OR LINESTYLES DO NOT NECESSARILY APPEAR ON DRAWING(S). USE ONLY AS APPLICABLE.

TARA L. LEE LICENSED 17642 KANSAS PROFESSIONAL ENGINEER 1/31/06

UTILITY NOTE:

CONTRACTOR SHALL SUPPLY AND INSTALL ALL ITEMS AND PERFORM ALL WORK NOT COVERED BY UTILITY COMPANIES. VERIFY INSTALLATION PROCEDURE WITH UTILITY COMPANY.

Pickering Firm Incorporated
Planning-Architecture-Engineering-Management
6075 Poplar Avenue, Suite 500, Memphis, TN 38119

DILLON'S FOOD STORE #20 BUILDING EXPANSION
PLAN & PROFILE OF SANITARY SEWER LINE

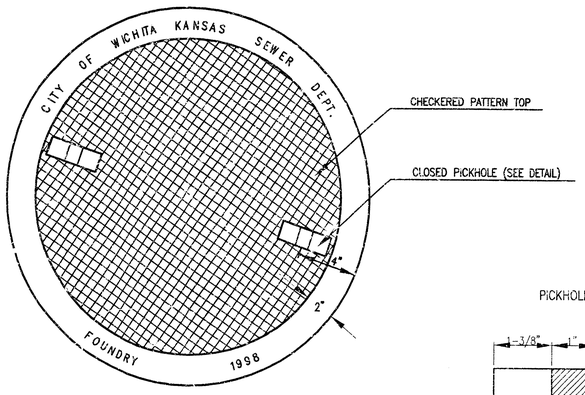
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DATE	JOB NUMBER	SHEET

MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

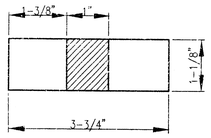
MANHOLE COVER

Weight = 180 Lbs.

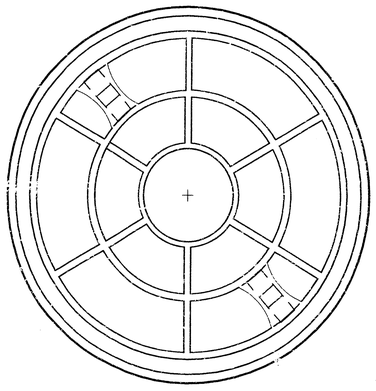


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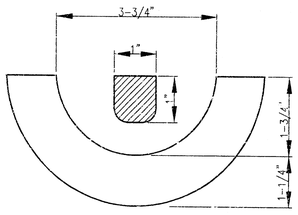
PICKHOLE DETAIL



TOP VIEW



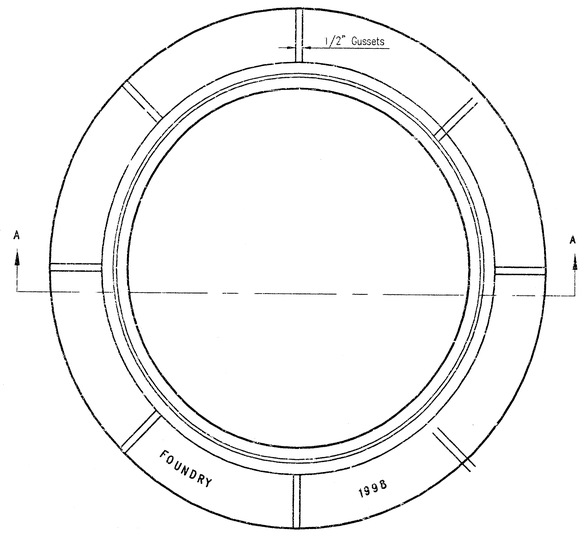
BOTTOM VIEW



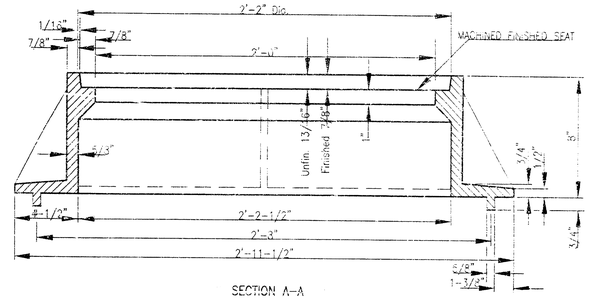
SECTION VIEW

MANHOLE FRAME

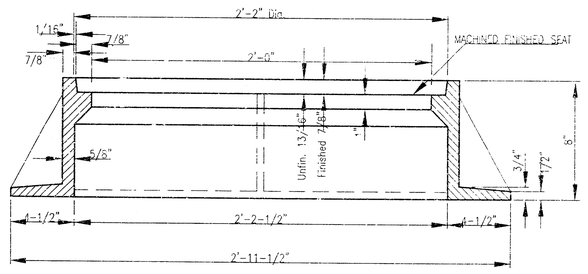
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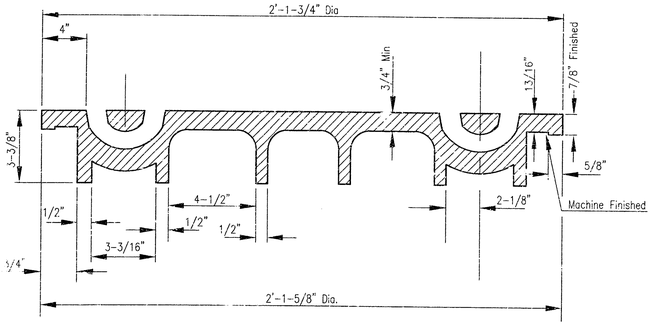
TOP VIEW



SECTION A-A
MUD RING



SECTION A-A



SECTION VIEW

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL WEIGH A MINIMUM OF 180 POUNDS ON THE SOLID COVER AND 240 POUNDS ON THE MANHOLE RING. THIS IS A TOTAL OF 420 POUNDS ON A RING AND COVER SET. CASTINGS WEIGHING LESS THAN THE MINIMUM SPECIFICATIONS WILL NOT BE ACCEPTED.

3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDARY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1 INCH IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

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CITY of WICHITA
PUBLIC WORKS
ENGINEERING

MANHOLE FRAME AND COVER

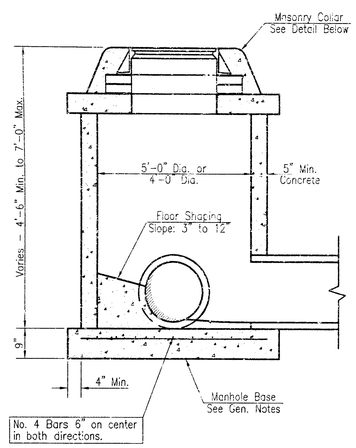
CITY ENGINEER
JAMES L. ARMOUR, P.E., L.S.
ACTING

PROJECT NUMBER	OCA NUMBER	DATE
21047-01	-	01/06

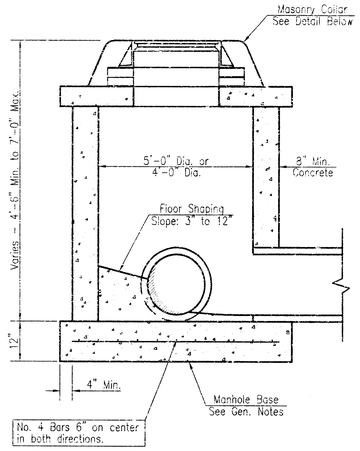
CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501

DESIGN	DRAWN
C of W	C of W

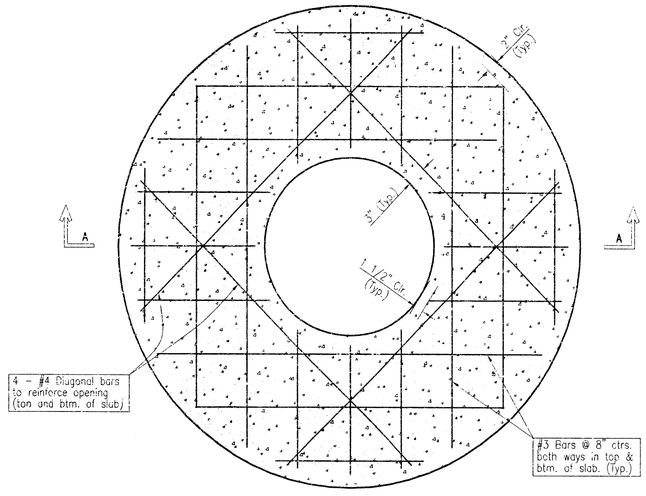
SHEET
3 of 6



SHALLOW TYPE "P" MANHOLE



SHALLOW TYPE "C" MANHOLE



PLAN

GENERAL NOTES

1. Mortar used in masonry construction shall contain 8 sacks of cement per cubic yard. Concrete used in manhole bases shall conform to the requirements of concrete for concrete pavement construction as specified in the city standard paving specifications using city concrete cement mix without air entraining admixture. Mortar shall be placed around the manhole ring as shown on the drawings when manholes are constructed in unpaved areas. Manholes constructed where pipe sizes are smaller than 24" shall have an inside diameter of 4'. Manholes constructed where pipe sizes are 24" or larger shall have an inside diameter of 5'. Completed manhole shall be without leaks and water tight.

2. Reinforcing steel shall be installed in the manhole bases and shall consist of no. 4 bars placed on 6" centers in both directions. The manhole base reinforcement shall be placed 6" above the bottom of the manhole base. All costs for furnishing and installing reinforcing steel shall be included in the unit price bid for the manhole.

3. The floors of all manholes shall be shaped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited as sewage flows through the manhole from all inlet pipes to the outlet pipe. Flow channels shall be formed to match the bottom halves of the inflowing pipes and the outflowing pipe as shown by the drawings. Manhole floors shall have slopes of 3 inches per foot in the areas outside of the flow channels sloped toward the flow channels. Pipes laid through manholes shall have the top half removed to neat lines for the full inside diameter of the manhole. Manhole floors shall then be shaped around the bottom half of the pipe which forms the flow channel.

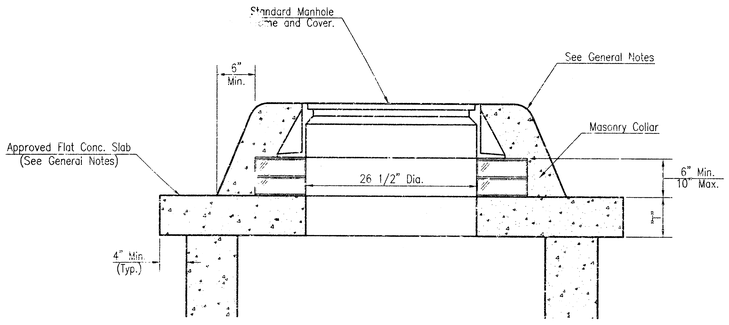
4. Pipes installed within the excavation made for the manhole shall be cradled with concrete to the limits of the manhole excavation. When clay pipe is used, the cradle shall extend to the first joint outside the manhole. The cradle shall be terminated at the clay pipe joint in a manner which will maintain the flexibility of the joint. Cost of cradle within manhole excavation or to clay pipe joints adjacent to manhole shall be included in the unit price bid for the manhole.

5. Manhole cover castings and manhole frame castings shall conform to the requirements as indicated in the standard specifications and as shown in the standard detail drawings.

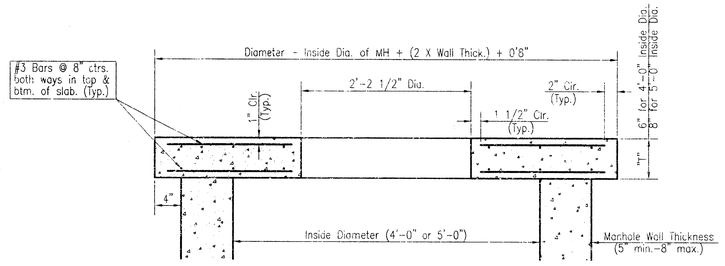
6. The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.

7. Standard shallow manholes type "P" and "C" shall be paid for at the unit price bid per each for the type and diameter indicated. All standard shallow manhole diameters will be 5' unless indicated otherwise.

8. All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62 &7.



MASONRY COLLAR DETAIL



SECTION A-A

FLAT CONCRETE SLAB DETAILS

CITY OF WICHITA
PUBLIC WORKS
ENGINEERING

SHALLOW MANHOLES
TYPE 'P' & 'C'

CITY ENGINEER
JAMES M. ARMOUR, P.E., L.S.
ACTING

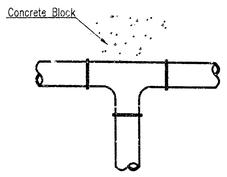
PROJECT NUMBER	OCA NUMBER	DATE
21047-01	-	01/06

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C of W	C of W

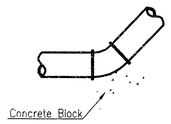
SHEET 4 of 6

CITY ENGINEER'S OFFICE
CITY HALL - SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202-1620
(316) 268-4501
(316) 268-4114 FAX

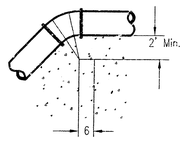
K:\21047-01\plans\OTHER PLANS\047-01-C4- SHALLOW-MANHOLE.dwg
Plot Scale: 1=1
rphelan/ January 31, 2006-3:15 PM



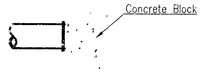
TEE



BEND



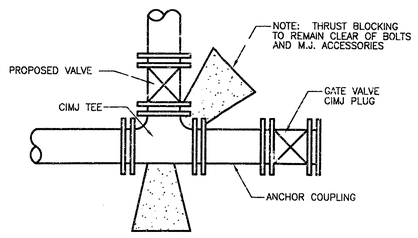
VERTICAL BEND



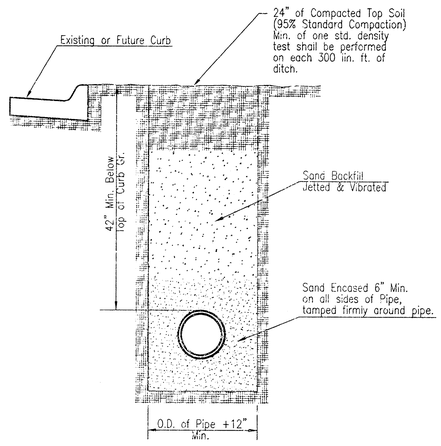
PLUG

PIPE SIZE	THRUST AT FITTINGS IN TONS–AT 150#/IN² P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

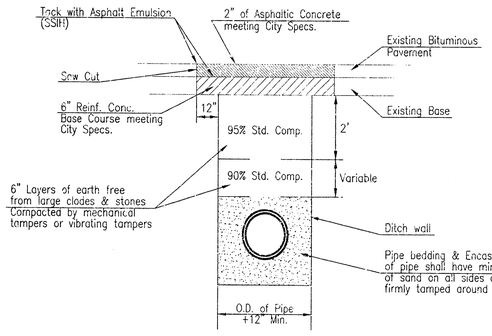
TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL



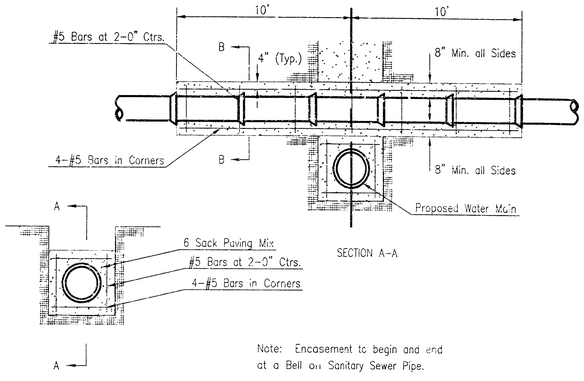
SETTLEMENT & COMPACTION ON CITY AND COUNTY ROAD RIGHT-OF-WAY EXCEPT UNDER PAVEMENT



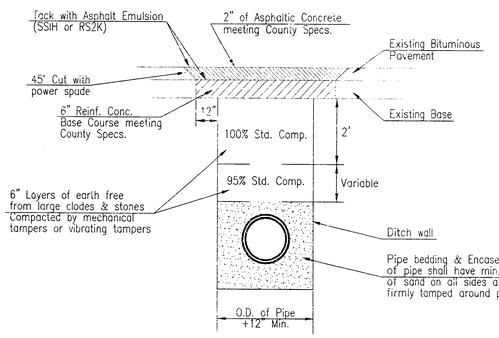
Standard Density Test, as described in the latest addition of ASTM D698, shall be performed to verify the above requirements to the Satisfaction of the Sedgwick County Director of Public Works. All testing cost shall be included in the unit price bid for the pipe in place.

When laying under paving, parallel with the centerline of the street, a minimum of one (1) Standard Density Test shall be performed on each 300 lineal feet of ditch.

PAVEMENT REPLACEMENT & DITCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER



Standard Density Test, as described in the latest addition of ASTM D698, shall be performed to verify the above requirements to the Satisfaction of the Sedgwick County Director of Public Works. All testing cost shall be included in the unit price bid for the pipe in place.

When laying under paving, parallel with the centerline of the street, a minimum of one (1) Standard Density Test shall be performed on each 300 lineal feet of ditch.

PAVEMENT REPLACEMENT & DITCH COMPACTION UNDER EXISTING AND PROPOSED COUNTY ROADS

REVISED APR 97

CITY OF WICHITA PUBLIC WORKS ENGINEERING

VARIOUS WATER DETAILS

CITY ENGINEER
JAMES L. ARMOUR, P.E., L.S.
ACTING

PROJECT NUMBER	OCA NUMBER	DATE
21047-01	–	01/06

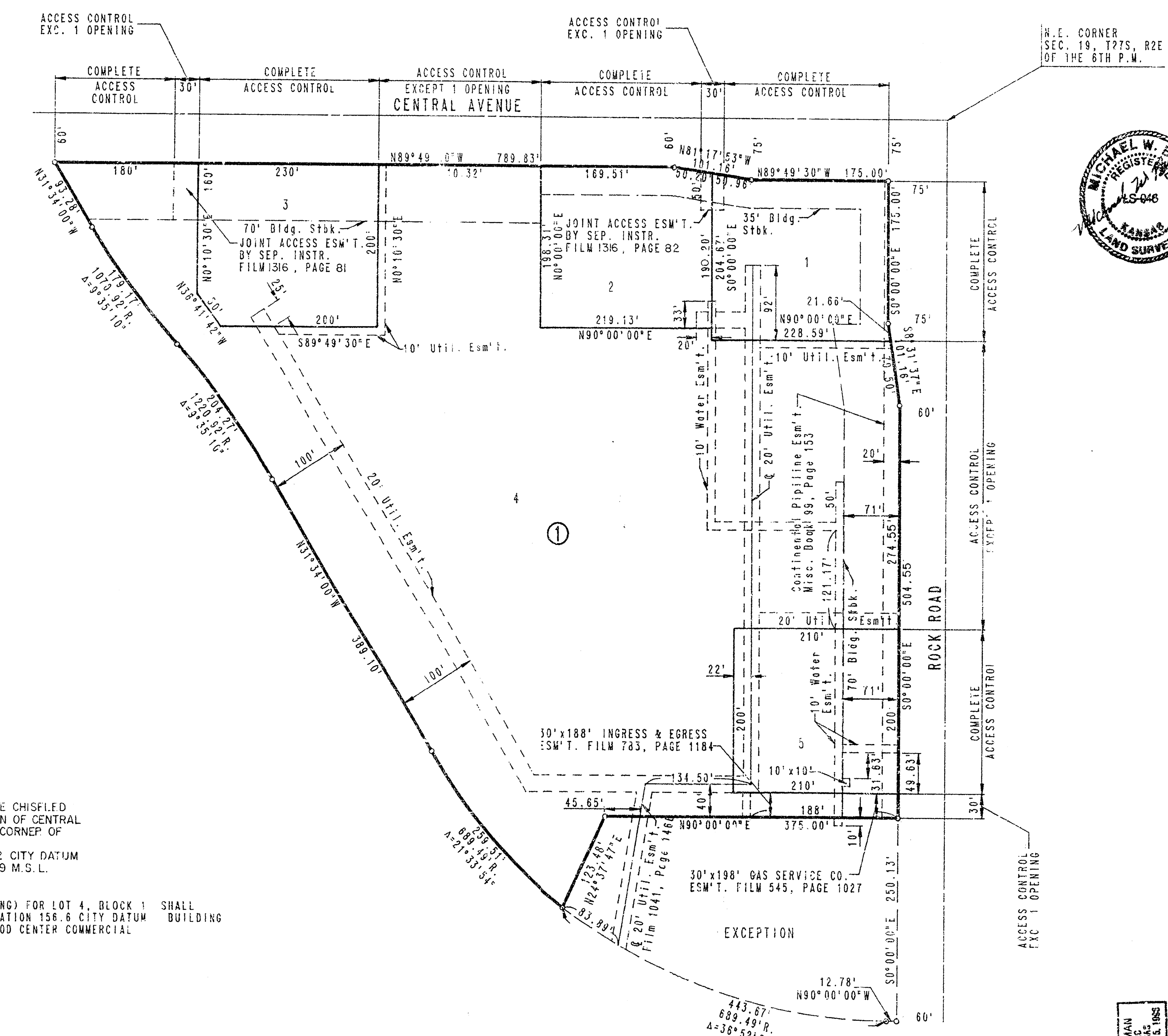
DESIGN	DRAWN
C of W	C of W

SHEET 5 OF 6

CITY ENGINEER'S OFFICE
CITY HALL, SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KS 67202-1620
(316) 268-4501
(316) 268-4114 FAX

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Plot Scale: 1=1
ajohnson | January 31, 2006 - 3:15 PM

ROCKWOOD CENTER 2ND ADDITION
TO WICHITA, SEDGWICK COUNTY, KANSAS



SCALE: 1"=100'

○ = 3/4" IRON SET
● = IRON FOUND

B.M. - CITY STANDARD B.M. SQUARE CHISELED ON NW CORNER INTERSECTION OF CENTRAL AND ROCK ROAD AT THE SE CORNER OF CONCRETE VALVE BOX.
ELEV. = 167.692 CITY DATUM
ELEV. = 1355.09 M.S.L.

MINIMUM PAD ELEVATION (LOWEST OPENING) FOR LOT 4, BLOCK 1 SHALL BE ELEVATION 1344.00 M.S.L. OR ELEVATION 156.6 CITY DATUM BUILDING SETBACK REQUIREMENTS ARE PER ROCKWOOD CENTER COMMERCIAL C.U.P. DP-41 (AMENDMENT #1).

20.00
ck

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

I, MICHAEL W. BERRY, A REGISTERED LAND SURVEYOR IN AFORESAID STATE AND COUNTY, DO HEREBY CERTIFY THAT ON THIS 16th DAY OF FEBRUARY, 1993, I HAVE CAUSED TO BE SURVEYED AND PLATTED ROCKWOOD CENTER 2ND ADDITION TO WICHITA, SEDGWICK COIUNTY, KANSAS, INTO LOTS AND A BLOCK THE SAME BEING A REPLAT OF AND DESCRIBED AS LOT 1 AND LOT 2 IN ROCKWOOD CENTER ADDITION, WICHITA, SEDGWICK COUNTY, KANSAS, EXCEPT BEGINNING AT THE S.E. CORNER OF SAID LOT 1 THENCE BEARING N90°00'00"W ALONG THE SOUTH LINE OF SAID LOT 1 A DISTANCE OF 12.78 FEET TO THE P.C. OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 689.49 FEET; THENCE NORTHWESTERLY ALONG THE SOUTH LINE OF SAID LOT AND ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 36°52'06", AN ARCH DISTANCE OF 443.67 FEET; THENCE BEARING N24°37'47"E, A DISTANCE OF 123.48 FEET; THENCE BEARING N90°00'00"E A DISTANCE OF 375 FEET TO THE EAST LINE OF SAID LOT 1; THENCE BEARING S0°00'00"W ALONG THE EAST LINE OF SAID LOT 1, A DISTANCE OF 250.13 FEET TO THE POINT OF BEGINNING.

MICHAEL W. BERRY REGISTERED LS-946 KANSAS LAND SURVEYOR

Michael W. Berry
MICHAEL W. BERRY, R.L.S. NO. 946
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

KNOW ALL MEN BY THESE PRESENTS THAT WE, THE UNDERSIGNED PROPERTY OWNERS OF THE LAND, AS ABOVE SET FORTH IN THE SURVEYOR'S CERTIFICATE, HAVE CAUSED THE LAND TO BE SURVEYED AND PLATTED INTO LOTS AND A BLOCK, THE SAME TO BE KNOWN AS ROCKWOOD CENTER 2ND ADDITION, TO WICHITA, SEDGWICK COUNTY, KANSAS.

EASEMENTS AS INDICATED FOR THE CONSTRUCTION AND MAINTENANCE OF PUBLIC UTILITIES AND DRAINAGE ARE HEREBY GRANTED.

ALL ABUTTERS' RIGHT OF ACCESS TO AND FROM CENTRAL AVENUE AND ROCK ROAD OVER AND ACROSS THE NORTH AND EAST LINES OF BLOCK 1, ARE HEREBY GRANTED TO THE CITY OF WICHITA, KANSAS; PROVIDED HOWEVER THAT LOTS 1 AND 2 SHALL HAVE ONE (1) JOINT ACCESS TO CENTRAL AVENUE AND LOTS 3 AND 4 SHALL ALSO HAVE ONE (1) JOINT ACCESS TO CENTRAL, AS SHOWN THAT LOT 4 SHALL HAVE ACCESS TO ROCK ROAD AT TWO (2) LOCATIONS AS SHOWN; SAID LOCATIONS TO BE DETERMINED BY THE CITY ENGINEER OF THE CITY OF WICHITA, KANSAS.

THAT PORTION OF LOT 1, AND ALL OF LOT 2, ROCKWOOD CENTER ADDITION, WICHITA, KANSAS, TOGETHER WITH THE FOLLOWING EASEMENTS WITHIN THE ABOVE DESCRIBED TRACT:

WATER LINE EASEMENT - FILM 542, PAGE 1415
UTILITY EASEMENT - FILM 783, PAGE 1184
UTILITY EASEMENT - FILM 1041, PAGE 1466
UTILITY EASEMENT - FILM 1190, PAGE 707

ARE HEREBY VACATED AND REPLATTED BY VIRTUE OF K.S.A. 12-512(b) AMENDED.

MINIMUM PAD ELEVATION (LOWEST OPENING) FOR LOT 4, BLOCK 1, SHALL BE ELEVATION 1344.00 M.S.L. OR ELEVATION 156.6 CITY DATUM. BUILDING SETBACK REQUIREMENTS ARE PER ROCKWOOD CENTER COMMERCIAL C.U.P. DP-41 (AMENDMENT #1).

#1285980

OWNERS:

ROCKWOOD CENTER, A KANSAS GENERAL PARTNERSHIP

BY W.W. Taylor, GENERAL PARTNER
W. W. TAYLOR

GENWOOD DEVELOPMENT CO., INC.

BY W.W. Taylor, PRESIDENT
W. W. TAYLOR

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

BE IT REMEMBERED ON THIS 16th DAY OF February, 1993, BEFORE ME, A NOTARY PUBLIC IN AFORESAID STATE AND COUNTY, CAME W. W. TAYLOR, GENERAL PARTNER OF ROCKWOOD CENTER, A KANSAS GENERAL PARTNERSHIP AND PRESIDENT OF GENWOOD DEVELOPMENT CO., INC. TO ME PERSONALLY KNOWN TO BE THE SAME PERSON WHO EXECUTED THE FOREGOING INSTRUMENT OF WRITING AND DULY ACKNOWLEDGED THE EXECUTION OF SAME FOR AND ON BEHALF AND AS THE ACT AND DEED OF SAID PARTNERSHIP AND CORPORATION, IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY NOTARIAL SEAL THE DAY AND YEAR ABOVE WRITTEN.

DAWN A. TRUMAN NOTARY PUBLIC STATE OF KANSAS My Appt. Exp. July 15, 1996

Dawn A. Truman, NOTARY PUBLIC
DAWN A. TRUMAN
MY COMMISSION EXPIRES July 15, 1996

WE, THE LINCOLN NATIONAL LIFE INSURANCE COMPANY, AN INDIANA CORPORATION, HOLDER OF A MORTGAGE ON THE ABOVE DESCRIBED PROPERTY, DO HEREBY CONSENT TO THE PLATTING OF ROCKWOOD CENTER 2ND ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

BY Lawrence T. Kissko
LAWRENCE T. KISSKO VICE-PRESIDENT

NOTE: THE LINCOLN NATIONAL LIFE INSURANCE COMPANY IS SUCCESSOR BY MERGER WITH THE LINCOLN NATIONAL PENSION INSURANCE COMPANY

STATE OF INDIANA)
) SS
COUNTY OF ALLEN)

BE IT REMEMBERED ON THIS 19th DAY OF February, 1993. BEFORE ME, A NOTARY PUBLIC IN AFORESAID STATE AND COUNTY, CAME LAWRENCE T. KISSKO, VICE-PRESIDENT OF THE LINCOLN NATIONAL LIFE INSURANCE COMPANY, AN INDIANA CORPORATION TO ME PERSONALLY KNOWN TO BE THE SAME PERSON WHO EXECUTED THE FOREGOING INSTRUMENT OF WRITING AND DULY ACKNOWLEDGED THE EXECUTION OF SAME FOR AND ON BEHALF AND AS THE ACT AND DEED OF SAID CORPORATION, IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY NOTARIAL SEAL THE DAY AND YEAR ABOVE WRITTEN.

JULIE A. ROMINE, Notary Public Resident of Allen County, Indiana My Commission Expires February 15, 1994

Julie A. Romine, NOTARY PUBLIC
JULIE A. ROMINE
MY COMMISSION EXPIRES February 15, 1994

THIS PLAT HAS BEEN SUBMITTED TO AND APPROVED BY THE WICHITA SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, WICHITA, KANSAS, DATE THIS 11th DAY OF February, 1993.

________, CHAIRMAN
C. O. BRECKENRIDGE, JR.

Marvin S. Krout, SECRETARY
MARVIN S. KROUT

THIS PLAT APPROVED AND ALL DEDICATIONS SHOWN HEREON ARE ACCEPTED BY THE CITY COUNCIL OF THE CITY OF WICHITA, KANSAS. DATED THIS 10th DAY OF March, 1993.

F M Ojile, MAYOR
FRANK M. OJILE

Pat Burnett, DEPUTY CITY CLERK
PAT BURNETT

ENTERED ON TRANSFER RECORD THIS 29 DAY OF April 1993.

Susan E. Crockett-Spoon, COUNTY CLERK
SUSAN E. CROCKETT-SPOON

CLERK OF SEDGWICK COUNTY KANSAS

THIS IS TO CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD IN THE REGISTER OF DEEDS OFFICE AT 11:30 A.M., ON THIS 30TH DAY OF APRIL, 1993.

Pat Kettler, REGISTER OF DEEDS
PAT KETTLER

Phyllis Hernandez, DEPUTY
~~ED RESH~~ PHYLLIS HERNANDEZ

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Plot Scale: 1=1
ophelan/ January 31, 2006-3:16 PM