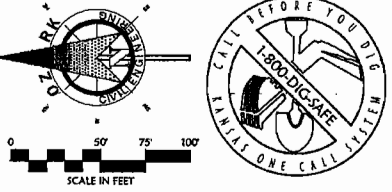
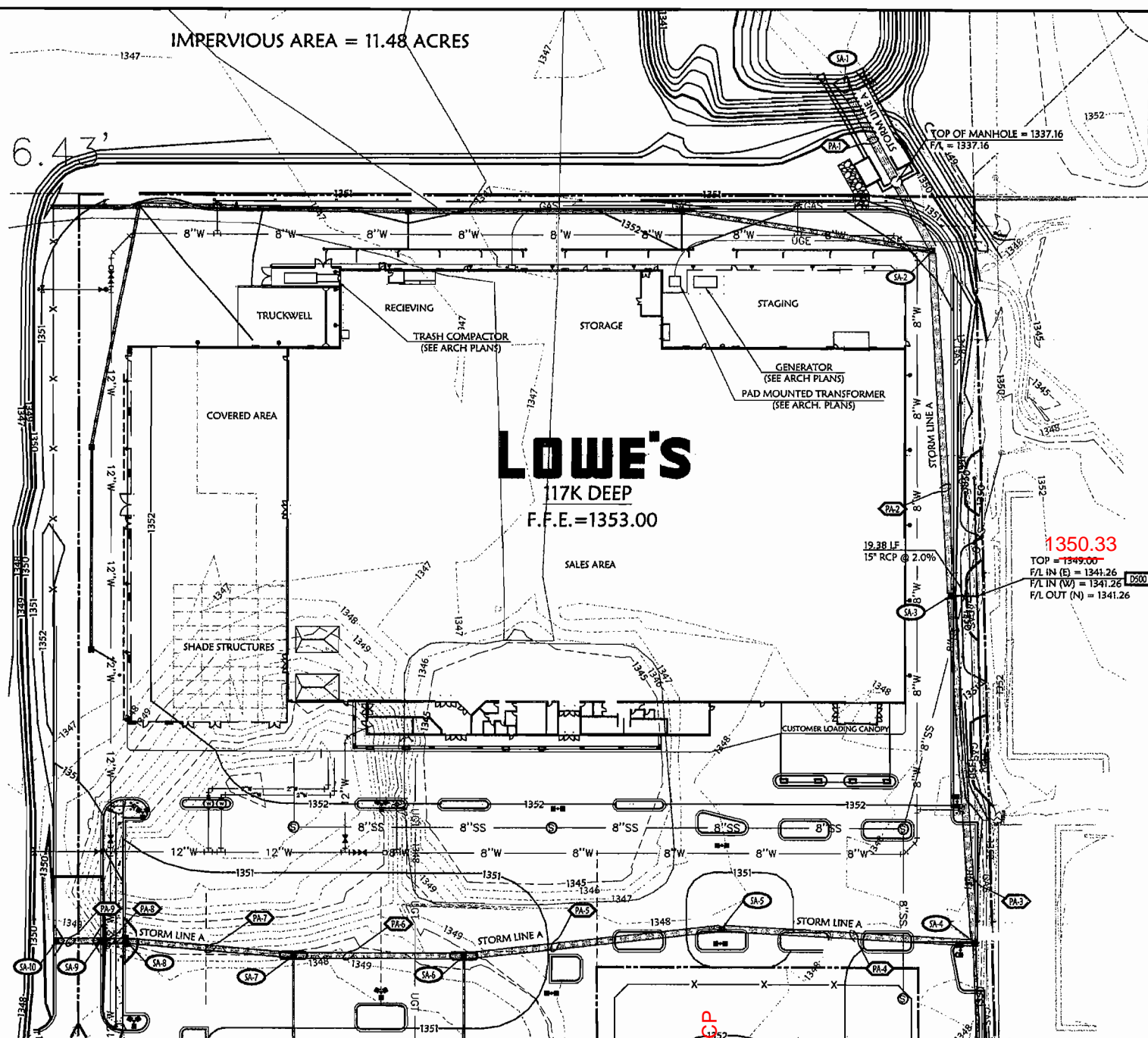


IMPERVIOUS AREA = 11.48 ACRES



BENCHMARK
City of Wichita Disc on the northwest corner of 29th St. N. and Maize Rd.
Elevation = 1349.32 (M.S.L.)
Elevation = 161.92 (City Datum)

GRADING PROPOSED FEATURES

---	BOUNDARY LINE
---	RIGHT OF WAY LINE
---	EASEMENT LINE
---	CONCRETE CURB AND GUTTER
X	FENCE
---	GUARD RAIL
---	RETAINING WALL
---	WATER SERVICE
---	SANITARY SEWER SERVICE
---	UNDERGROUND ELECTRIC SERVICE
---	UNDERGROUND TELEPHONE SERVICE
---	OVERHEAD ELECTRIC SERVICE
---	OVERHEAD TELEPHONE SERVICE
---	FIBER OPTIC CABLE SERVICE
---	GAS SERVICE
X	SPOT ELEVATIONS:
○	TOP OF CURB
○	CENTER OF CURB
○	TOP OF GRADE (BEHIND TOP OF WALL)
○	BOTTOM OF GRADE (AT FRONT OF WALL)
○	FINISHED POINT
○	EDGE OF PAVEMENT
○	FLARED END SECTION

RIP-RAP PAD (SEE EROSION PLANS FOR SIZE)
SANITARY SEWER MANHOLE
FIRE HYDRANT WITH GUARD POSTS
UTILITY POLE
WATER LINE TEE, BEND, VALVE, AND PLUG

GRADING DETAILS

Items labeled by the following symbols are shown in this sheet and referenced on detail sheets, which are included as part of this set of plans.

DB1	FRENCH DRAIN DETAIL
DB2	CLEANOUT DETAIL
DB3	CITY OF WICHITA, KANSAS DROP-INLET DETAIL
DB4	VORTYCHS STORMWATER TREATMENT SYSTEM

GRADING AND DRAINAGE NOTES:

INFORMATION PERTAINING TO UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD LOCATIONS WHEN POSSIBLE. BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS IN ADVANCE OF ANY MAJOR TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED ON THESE PLANS OR IF WORK FOR A UTILITY IS ENCOUNTERED, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY AND NOTIFY THE ENGINEER AND THE CITY ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

ALL STRUCTURES LOCATED WITHIN A 10' OR OTHER DISTANCE NOTED ON THESE PLANS SHALL BE CONTRACTED FOR BY THE HIGHWAY DEPARTMENT. IF STRUCTURES ARE NOT PROTOTYPICAL OR CONTRACTOR CANNOT ACQUIRE CONTRACTOR SHALL NOTIFY CITY ENGINEER, INC. FOR REVIEW AND APPROVAL.

WHERE THE WORD PIPE IS USED ON THESE PLANS, THE CONTRACTOR HAS THE OPTION TO BID MATERIAL WITH A 0.012 OR LESS.

CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OR REMOVAL OF EXISTING UNDERGROUND UTILITIES WHICH ARE NOT INDICATED ON THESE PLANS.

CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES ON ADJUSTING EXISTING UTILITY LINE AS REQUIRED BY CUT AND FILL AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF DRAINAGE, EROSION, AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET CITY, FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO THE INSTALLATION OF THE WORK INDICATED ON THESE DRAWINGS.

ALL STORM DRAIN PIPES ARE MEASURED FROM CENTER OF STRUCTURES AND END OF FLARED END SECTIONS.

RETAINING WALLS SHALL BE CONSTRUCTED TO EXTEND A MINIMUM OF 6" ABOVE THE TOP OF FINISHED GRADE. CONTRACTOR SHALL REFER TO THE RETAINING WALL PLANS FOR CONSTRUCTION AND DESIGN SPECIFICATIONS. CONTRACTOR SHALL NOTIFY CITY ENGINEER, INC. FOR REVIEW AND APPROVAL. STORM DRAIN PIPES SHALL BE INSTALLED PER DETAIL DB2 (SEE DETAIL DB2).

SEE EROSION CONTROL PLAN FOR RIP-RAP PAD SIZE.

CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL PRACTICES IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND CONSTRUCTION SCHEDULE. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING THE BARRIERS.

REMOVE GOOD TOPSOIL FROM AREAS TO BE GRADED AND FILLED, AND PRESERVE IT FOR USE IN FINISHING THE GRADING OF ALL CRITICAL AREAS.

SCAFFOLD AREA TO RECEIVE TOPSOIL TO A MINIMUM DEPTH OF 3" BEFORE PLACING TOPSOIL PER OWNER/DEVELOPER, CITY AND/OR HIGHWAY DEPARTMENT STANDARDS AND SPECIFICATIONS.

CLEAR AND GRASS AREAS TO BE FILLED, REMOVE TREE, VEGETATION, ROOTS, OR OTHER DEBRIS AND OTHER MATERIAL THAT MIGHT AFFECT THE STABILITY OF THE FILL.

ENSURE THAT FILL MATERIAL IS FREE OF BRUSH, RUBBER, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER MATERIALS INAPPROPRIATE FOR CONSTRUCTION FILL.

DO NOT INCORPORATE FRESH MATERIAL OR SOFT, MUCK, OR HIGHLY COMPRESSIBLE MATERIAL INTO FILL SLOPES.

KEEP DRAINAGE AND OTHER WATER CONVEYANCE MEASURES FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.

PERMANENTLY STABILIZE ALL GRADED AREAS AFTER FINAL GRADING IS COMPLETED ON EACH AREA OF THE GRADING PLAN. APPLY TEMPORARY STABILIZATION MEASURES ON ALL GRADED AREAS WHEN WORK IS TO BE INTERRUPTED OR DELAYED (SEE EROSION CONTROL PLAN).

CONTRACTOR SHALL MATCH TOP OF PROPOSED DRAINAGE STRUCTURES WITH PROPOSED GRADE. IF A DISCREPANCY OCCURS BETWEEN PROPOSED GRADE AND PROPOSED STRUCTURE TOP, THE GRADING SHALL CORRECT. IF THE DISCREPANCY IS MORE THAN 4" ABOVE THE STRUCTURE TOP, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD.

ALL UTILITIES, INCLUDING STORM SEWER, SHOWN WITHIN PUBLIC EASEMENTS OR RIGHT OF WAYS SHALL BE CONSTRUCTED TO THE GOVERNING AGENCY'S SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE CONSTRUCTED TO THE GOVERNING AGENCY'S SPECIFICATIONS, WHICH MAY BE MORE STRINGENT. IF THERE IS A QUESTION AS TO WHICH SPECIFICATIONS SHOULD APPLY, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD.

ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, ALL EXISTING TREES, ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. UNLESS OTHERWISE NOTED, ANY REMAINING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES AND/OR THE OWNER'S STANDARDS AND SPECIFICATIONS. (SEE DEMOLITION PLAN).

ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.

ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC LOADS AND BE INSTALLED ACCORDINGLY.

CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT OF WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONDUCT UTILITY LOCATING COMPANY (STATE CALL SYSTEM) AND LOCATE ALL UTILITIES PRIOR TO GRADING STATE.

SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

AFTER PERMITS HAVE BEEN OBTAINED & EROSION CONTROL MEASURES INSTALLED, THE CONTRACTOR SHALL GRADE BUILDING PAD, GARAGE DECKS & APPROX TO 1/2" OF ANGLE AS PER SECTION 0250, DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.

IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO 4" PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.

FRENCH DRAINS SHALL BE INSTALLED AS DIRECTED BY THE GEOTECHNICAL ENGINEER OR AS SHOWN ON PLANS PER DETAIL DB1. (SEE DETAIL DB1).

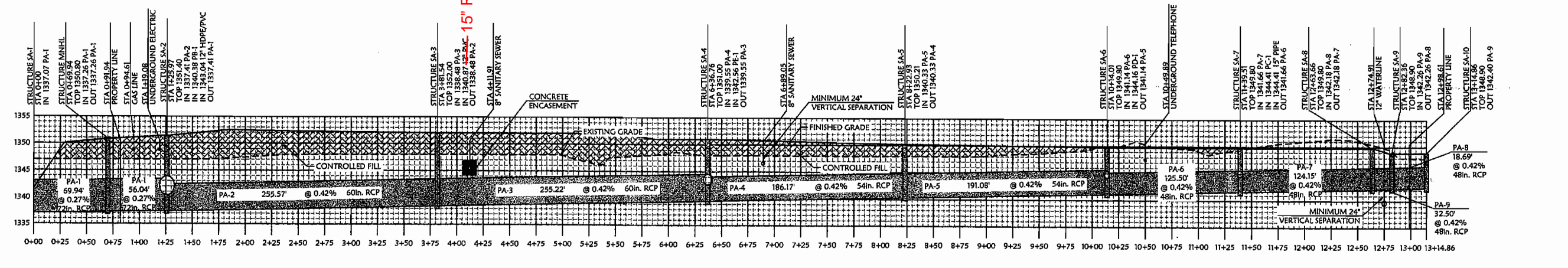
GENERAL CONTRACTOR SHALL PROVIDE 7" x 2" x 6" PRECAST CONCRETE ARCH AT ALL CLEANOUTS OUTSIDE OF BUILDING AND IN PAVED AREAS.

ALL ROOF DRAINS TO BUILDING SHALL END OUTSIDE THE BUILDING LIMITS AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END. (SEE ARCH PLANS FOR EXACT SIZE AND LOCATION OF ROOF DRAINS).

ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.

DRAINAGE STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE	TOP OF	DETAIL NUMBER	INLET IN (INCHES) & DIRECTION	INLET OUT (INCHES) & DIRECTION	INLET IN (INCHES) & DIRECTION	INLET OUT (INCHES) & DIRECTION	DRAINAGE AREA	C/F	TOTAL C/F	PIPE NUMBER	PIPE LENGTH & SLOPE
SA-10	CURB INLET	1349.40	DB17	1342.25 48" RCP	1342.25 48" RCP	1342.25 48" RCP	1342.25 48" RCP	.28 AC	1.99	13.92	PA-9	83 LF @ 0.42%
SA-9	CURB INLET	1349.40	DB17	1342.25 48" RCP	1342.25 48" RCP	1342.25 48" RCP	1342.25 48" RCP	.37 AC	3.44	80.36	PA-8	19 LF @ 0.42%
SA-8	DOUBLE CURB INLET	1350.30	DB17	1342.18 48" RCP	1342.18 48" RCP	1342.18 48" RCP	1342.18 48" RCP	.43 AC	5.88	86.31	PA-7	24 LF @ 0.42%
SA-7	DROP INLET	1349.80	DB16	1341.66 48" RCP	1341.66 48" RCP	1341.66 48" RCP	1341.66 48" RCP	.67 AC	6.23	99.28	PA-6	126 LF @ 0.42%
SA-6	DROP INLET	1349.80	DB16	1341.14 48" RCP	1341.14 48" RCP	1341.14 48" RCP	1341.14 48" RCP	.84 AC	8.73	116.93	PA-5	191 LF @ 0.42%
SA-5	CURB INLET	1350.71	DB17	1340.33 54" RCP	1340.33 54" RCP	1340.33 54" RCP	1340.33 54" RCP	.74 AC	4.90	121.88	PA-4	186 LF @ 0.42%
SA-4	CURB INLET	1351.50	DB17	1339.25 54" RCP	1339.25 54" RCP	1339.25 54" RCP	1339.25 54" RCP	0.56 AC	3.71	131.89	PA-3	258 LF @ 0.42%
SA-3	CURB INLET	1352.30	DB17	1338.48 60" RCP	1338.48 60" RCP	1338.48 60" RCP	1338.48 60" RCP	.18 AC	1.19	131.77	PA-2	236 LF @ 0.42%
SA-2	DROP INLET	1353.40	DB16	1337.45 60" RCP	1337.45 60" RCP	1337.45 60" RCP	1337.45 60" RCP	1.14 AC	7.54	208.30	PA-1	142 LF @ 0.27%
SA-1	FLARED END SECTION		DB23	1337.07 72" RCP	1337.07 72" RCP	1337.07 72" RCP	1337.07 72" RCP					



STORM SEWER PROFILE A
VERTICAL SCALE: 1"=5'
HORIZONTAL SCALE: 1"=50'

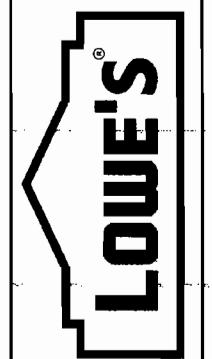
REVISIONS

DATE	DESCRIPTION	REVISION
04-08-08		2



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STORM SEWER PLAN & PROFILE
LOWE'S OF
N.W. WICHITA
MAIZE RD. & CENTRAL PARK ST.
WICHITA, KS.
PROJECT No. 04-0460
DRAWN BY: JG
CHECKED BY: SA

ORIGINAL ISSUE DATE
PERMIT SET
ISSUE DATE
CONSTRUCTION SET
ISSUE DATE: 8-17-07
DRAWING NUMBER:
8.4