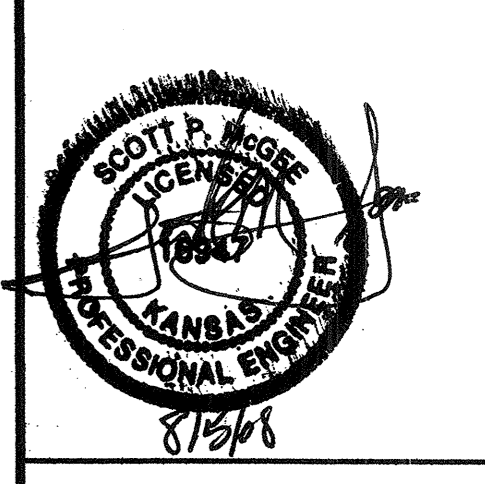


DATE	DESCRIPTION
07/23/08	CITY COMMENTS 06-04-08
07/23/08	STORM WATER COMMENTS 07-16-08



**Xark**  
Civil Engineering Inc.  
Bentonville • Kansas City • Austin

**McDonald's**  
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OFFICE ADDRESS  
KANSAS CITY  
10801 MASTIN BLVD., STE. 400, OVERLAND PARK, KS 66210

STATUS	DATE	BY
PRELIMINARY:	04/07/08	-
PLAN CHECKED:	-	-
AS-BUILT:	-	-
JOB NO:	08-0808	

**C-6**

### GRADING NOTES & DETAILS

Items labeled by the following symbols are shown on this sheet.

- 3051 CURB DRAINAGE CATCH BASIN
- 3052 STANDARD JUNCTION BOX
- 3053 TYPICAL 4" DIA. MANHOLE
- 3055 12" AREA INLET
- 3056 EXTERIOR CLEANOUT
- G01 MATCH EXISTING PAVING

### GRADING PROPOSED FEATURES

- BOUNDARY LINE
- RIGHT OF WAY LINE
- EASEMENT LINE
- CONCRETE CURB AND GUTTER
- FENCE
- GUARD RAIL
- RETAINING WALL
- SANITARY SEWER SERVICE
- WATER SERVICE
- UNDERGROUND ELECTRIC SERVICE
- UNDERGROUND TELEPHONE SERVICE
- OVERHEAD ELECTRIC SERVICE
- OVERHEAD TELEPHONE SERVICE
- FIBER OPTIC CABLE SERVICE
- GAS SERVICE
- SPOT ELEVATIONS:
  - TC=TOP OF CURB
  - G=GUTTER OR CURB
  - CG=BOTTOM OF GRADE (BEHIND TOP OF WALL)
  - HP=HIGH POINT
  - LP=LOW POINT
  - EP=EDGE OF PAVEMENT
  - FB=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 AND DRAINAGE NOTES:

INFORMATION PERTAINING TO UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD LOCATIONS WHEN AVAILABLE. BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITIES CROSSING IN ADVANCE OF MACHINE TRENCHING. IF CLEARANCES ARE LESS THAN SPECIFIED ON THESE PLANS OR IF WHICH EVER IS LESS, CONTACT THE ENGINEER AND THE OWNER/DEVELOPER PRIOR TO PROCEEDING WITH CONSTRUCTION.

ALL STRUCTURES LOCATED WITHIN R.O.W. OR OTHERWISE NOTED ON THESE PLANS SHALL BE CONSTRUCTED FOR THE HIGHWAY DEPARTMENT STANDARDS. IF STRUCTURES ARE NOT PROTOTYPICAL OR CONSTRUCTION CANNOT BE ACHIEVED, CONTRACTOR SHALL SUBMIT SHOP DRAWING TO GEAR ONE ENGINEERING, INC. FOR REVIEW AND APPROVAL.

WHERE THE WORD PIPE IS USED ON THESE PLANS, THE CONTRACTOR HAS THE OPTION TO BID MATERIAL WITH=800 OR 1000.

CONTRACTOR SHALL BE RESPONSIBLE FOR RELOCATION OR REMOVAL OF EXISTING UNDERGROUND UTILITIES SHOWN OR NOT SHOWN AT NO ADDITIONAL COST TO THE OWNER.

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

CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF SHEETING, SHORING, BRACING AND SPECIAL EXCAVATION MEASURES REQUIRED TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PURSUANT 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.

ALL DISTURBED AREAS AND SLOPES SHALL BE GRADED SMOOTH AND (4) OF TOP SOIL APPLIED. THE AREA SHALL BE SEEDS AND WATERED UNTIL HARDY GRASS GROWTH HAS BEEN ESTABLISHED. (SEE LANDSCAPING GENERAL NOTES FOR SEEDING SPECIFICATIONS).

STORM DRAIN PIPE BEDDING SHALL BE INSTALLED PER DETAIL 3069 (SEE DETAIL SHEET)

SEE EROSION CONTROL PLAN FOR RIP RAP PAD SIZES.

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 RIPRAP.

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

SCARIFY AREAS TO RECEIVE TOPSOIL TO A MINIMUM DEPTH OF 3 INCHES BEFORE PLACING TOPSOIL PER OWNER/DEVELOPER, CITY AND/OR HIGHWAY DEPARTMENT STANDARDS AND SPECIFICATIONS.

CLEAR AND GRASS AREAS TO BE FILLED. REMOVE TREES, VEGETATION, ROOTS, OR OTHER DEBRIS, AND OTHER MATERIALS THAT WOULD AFFECT THE STABILITY OF THE FILL.

ENSURE THAT FILL MATERIAL IS FREE OF BRUSH, BURBUSH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER MATERIALS INAPPROPRIATE FOR CONSTRUCTING STABLE FILLS.

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

KEEP DIVERSIONS 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 PLANS).

CONTRACTOR SHALL MATCH TOP OF PROPOSED DRAINAGE STRUCTURES WITH PROPOSED GRADE. IF A DISCREPANCY OCCURS BETWEEN PROPOSED GRADES AND PROPOSED STRUCTURE TOPS, THE GRADING SHALL GOVERN. IF THE DISCREPANCY IS MORE THAN 4 INCHES 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 CLIENT'S OR THE GOVERNING AGENCY'S SPECIFICATIONS, WHICHEVER IS 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 FENCING, TREES, ETC. WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE, UNLESS OTHERWISE NOTED. ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES AND/OR THE OWNER/DEVELOPER'S STANDARDS AND SPECIFICATIONS.

ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.

ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (D00) LOADING AND BE INSTALLED ACCORDINGLY.

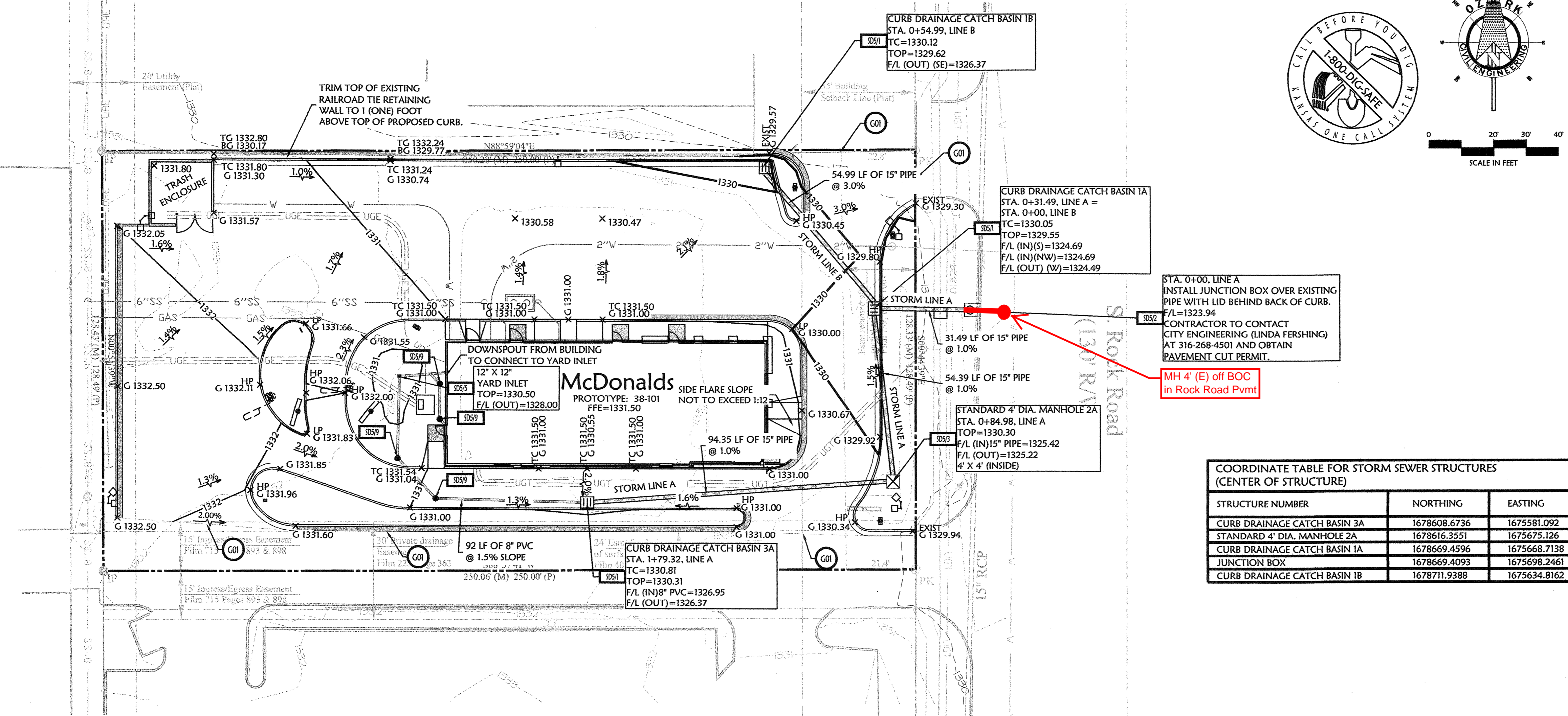
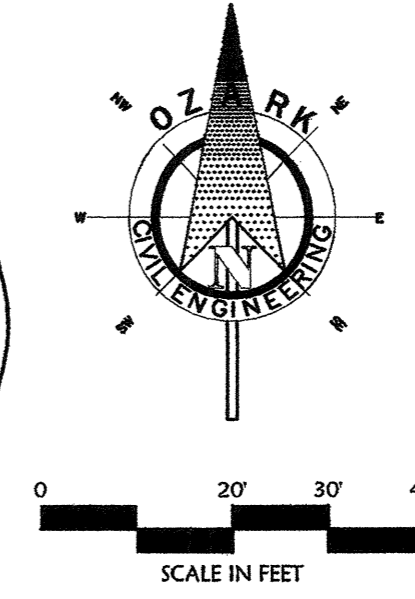
CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT OF WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY (STATE ONE CALL SYSTEM) AND LOCATE ALL UTILITIES PRIOR TO GRADING START.

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 & APPROX TO 0" TO 1/2" OF SUBGRADE.

IMMEDIATELY APPLY & COMPACT STONE BASE FOR BUILDING PAD TO 1/2" 1/2" PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTING.

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



### COORDINATE TABLE FOR STORM SEWER STRUCTURES (CENTER OF STRUCTURE)

STRUCTURE NUMBER	NORTHING	EASTING
CURB DRAINAGE CATCH BASIN 3A	1678608.6736	1675581.092
STANDARD 4" DIA. MANHOLE 2A	1678616.3551	1675675.126
CURB DRAINAGE CATCH BASIN 1A	1678669.4596	1675668.7138
JUNCTION BOX	1678669.4093	1675698.2461
CURB DRAINAGE CATCH BASIN 1B	1678711.9388	1675634.8162

