

STORM SEWER TO SERVE CHICK-FIL-A STORE #2817

LOT 30, BLOCK 3
PRIVATE PROJECT: 0052 PPD (607851)

CITY OF WICHITA, KANSAS
JAMES ARMOUR, P.E. CITY ENGINEER
SEPTEMBER, 2011



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark Date By

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GBC DESIGN, INC.
3378 W. Market St. Akron, OH 44333-3386
Phone 330-836-0228 Fax 330-836-6792

STORE #2817
Central & Rock Rd.
FSR SOBA
Lease Parcel

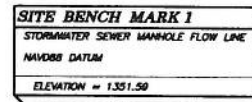
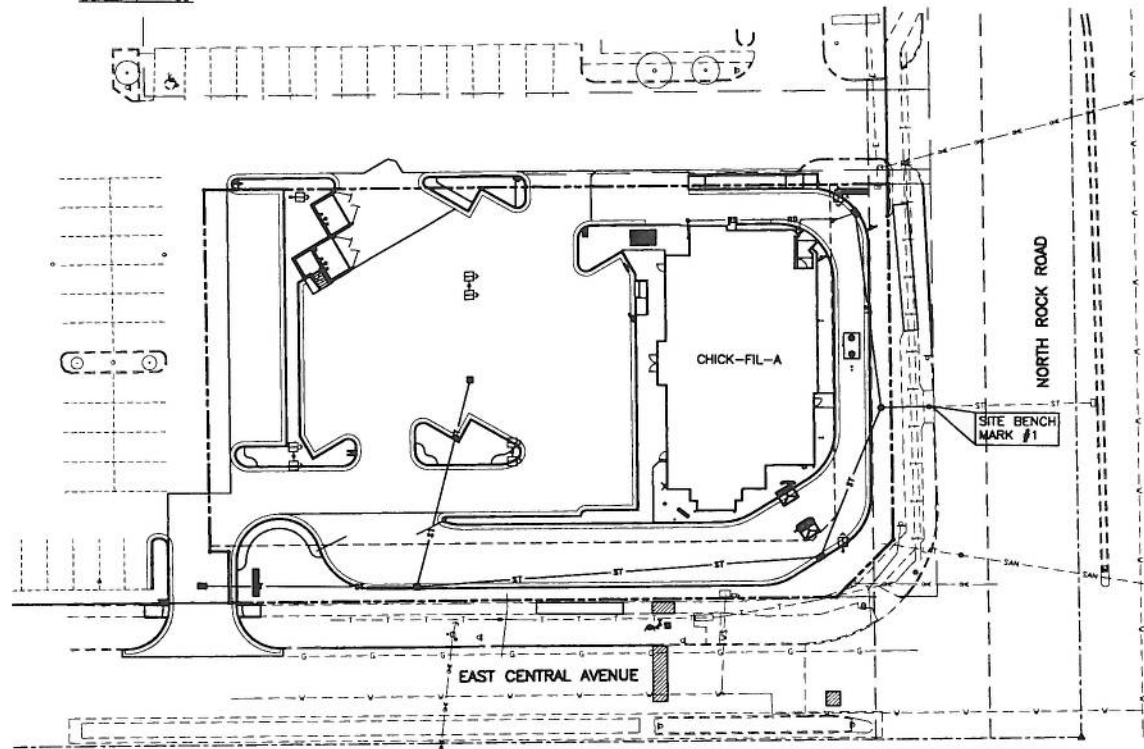
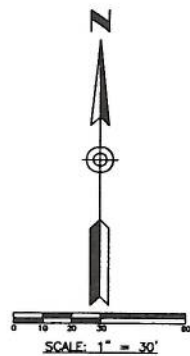
7990 East Central Ave.
Wichita, KS 67206

SHEET TITLE
STORM
SEWER
TITLE
SHEET
DWG EDITION 07.1
REVISION
1

Job No. : 43204A
Store : 2817
Date : 3/4/11
Drawn By : D.K.G.
Checked By : A.S.W.

Sheet

PS-3.0



DESCRIPTION	SHEET NO.
TITLE SHEET	PS-3.0
DETAIL SHEET	PS-3.1
PRIVATE STORM SEWER PPD PLAN	PS-3.2
DRAINAGE PLAN	PS-3.3
EROSION CONTROL PLAN (SWPPP)	PS-3.4
EROSION CONTROL DETAILS	PS-3.5

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Engineering *Julianne Kallman 10-13-11*
Stormwater *Jim Armour 10-14-11*

NOTE TO CONTRACTORS

Inspection and testing for this project are 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 public right-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer.

GENERAL NOTES:

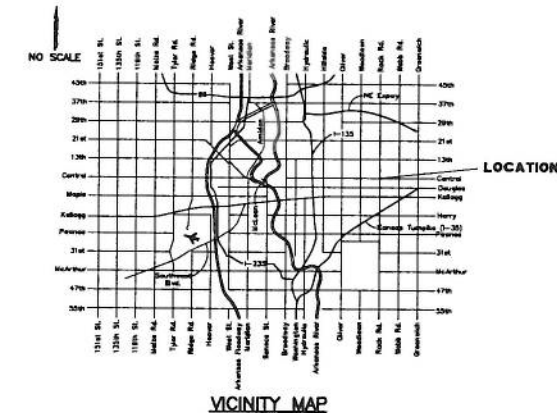
- Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

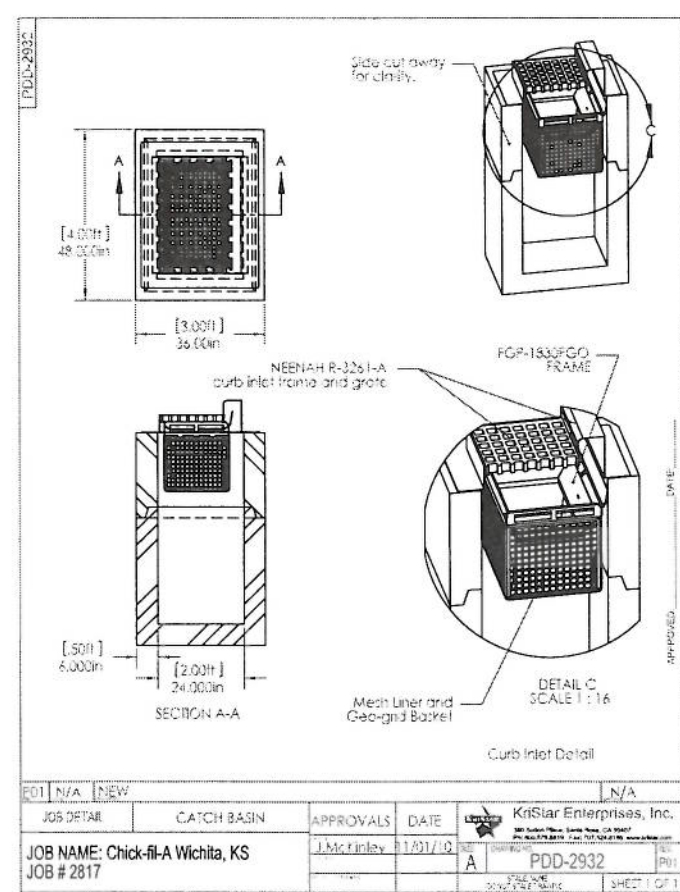
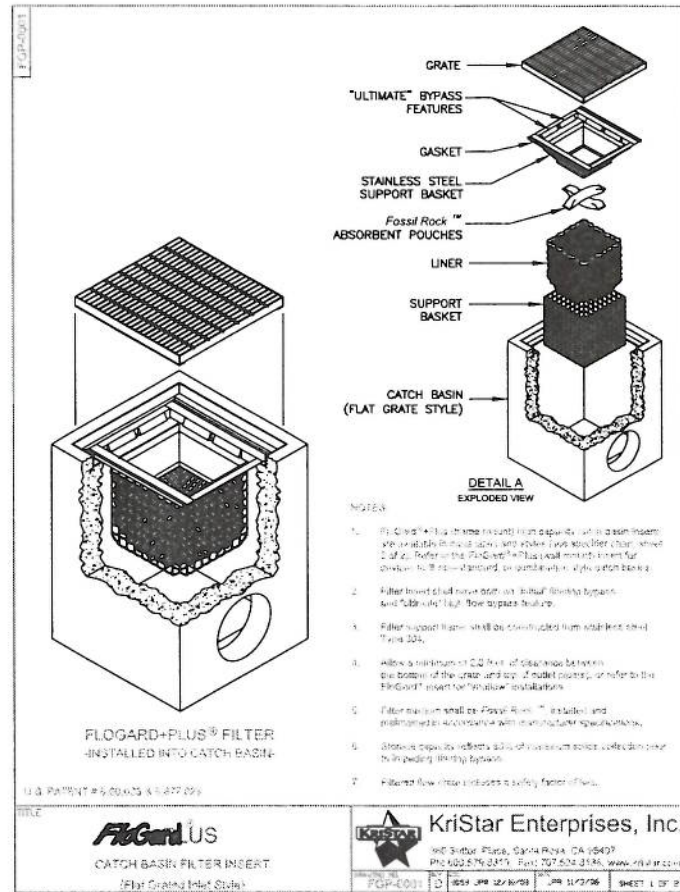
Kansas One-Call	(316)687-2470
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The Contractor must notify the following in case of an emergency:

Cox Communications	(316)262-4270
or	(316)263-2061
Westar Energy/ Kansas Gas & Electric Company	(800)482-4950
AT&T	1-555-1212
City of Wichita Water Department	(316)268-4908
City of Wichita Sewer Department	(316)268-4071
Aquila Natural Gas	(316)941-1608
or	(800)303-6357
- Exist. utilities and their locations, as shown on the plans, represent the best information attainable for design. Location information has been obtained from the various utility companies and is either from company record drawings or company-provided field locations. The Contractor will be required to work around existing utilities which do not conflict with proposed constructions.
- The Contractor to verify utility locations prior to construction of this project.
- Utility service and installation shall be coordinated with the respective utility owner. Contacts are:

Kansas Gas Service	Jim Coe	(316)832-3126
Westar Energy	Miles Capps	(316)261-6251
Aquila Networks	Calvin Briggs	(316)942-5811
Wichita Water & Sewer	Kerry Gibson	(316)268-4555
AT&T	Jim Toben	(316)268-2759
Cox Communications	Mark Anaya	(316)262-4270
- All lawn/turf areas disturbed by construction of proposed improvements shall be restored with the same grass as existing. Restoration of disturbed areas shall include, but not limited to, soil preparation, fertilizing, seeding, mulching (all seeded areas, outside the limits of erosion mat placement), and/or seeding and installation of erosion control mat. All seeding work shall be in accordance with the City of Wichita Standard Specifications and the City of Wichita Administrative Regulations No. AR 6.5 which governs cleanup and restoration or replacement following construction. All cost for the soil preparation, seeding and mulching (all seeded areas, outside the limits of erosion mat placement) shall be paid for through the lump sum bid item for "Seeding." All seeded areas within eight feet of the back of new curb shall be covered with an approved erosion mat, which shall be paid for by the measured quantity bid item "Back of Curb Protection (8' wide)."
- Traffic affected by the construction of this project shall be handled in accordance with the latest edition of the Manual on Uniform Traffic Control Devices.
- It is the contractor's responsibility to visit this site to better understand the extent of site clearing and restoration to be performed. Site clearing and restoration shall include all costs for removal of items which a pay item is not provided.
- The contractor shall be responsible for preserving property irons. The contractor will be required to re-establish any property irons which are damaged or destroyed by the construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.
- Properties within the project limits may have underground sprinkler systems in public right-of-way which conflict with new construction. Contractor will be required to remove such improvements should they not be removed by their owner at the time of construction of the project. The contractor will be required to salvage all sprinkler heads and/or valves and give such material to owner. Portions of underground sprinkler systems not in conflict with new construction shall be protected from damage and shall remain in place. All work in connection with underground sprinkler systems shall be considered as subsidiary to the contract pay items for work.
- Cuts made in paved surfaces on public property will be repaired by the City's Contractor and charged against the contractor. Unit Repair prices are available from the city at 268-4418. A surcharge may be applicable. Call 268-4418 for details. Repair costs to be paid prior to release of utility service if utilities are affected.





GENERAL SPECIFICATIONS FOR MAINTENANCE OF FLOGARD+PLUS CATCH BASIN INSERT FILTERS

SCOPE:

Federal, State and Local Clean Water Act regulations and those of insurance carriers require that stormwater filtration systems be maintained and serviced on a recurring basis. The intent of the regulations is to ensure that the systems, on a continuing basis, efficiently remove pollutants from stormwater runoff thereby preventing pollution of the nation's water resources. These Specifications apply to the Flogard+Plus Catch Basin Insert Filter.

RECOMMENDED FREQUENCY OF SERVICE:

Drainage Protection Systems (DPS) recommends that installed Flogard+Plus Catch Basin Insert Filters be serviced on a recurring basis. Ultimately, the frequency depends on the amount of runoff, pollutant loading and interference from debris (leaves, vegetation, cars, paper, etc.); however, it is recommended that such installation be serviced a minimum of three times per year, with a change of filter medium once per year. DPS technicians are available to do an on-site evaluation, upon request.

RECOMMENDED TIMING OF SERVICE:

- DPS guidelines for the timing of service are as follows:
1. For areas with a definite rainy season: Prior to, during and following the rainy season.
 2. For areas subject to year-round rainfall: On a recurring basis (at least three times per year).
 3. For areas with winter snow and summer rain: Prior to and just after the snow season and during the summer rain season.
 4. For installed devices not subject to the elements (washrooms, parking garages, etc.): On a recurring basis (no less than three times per year).

SERVICE PROCEDURES:

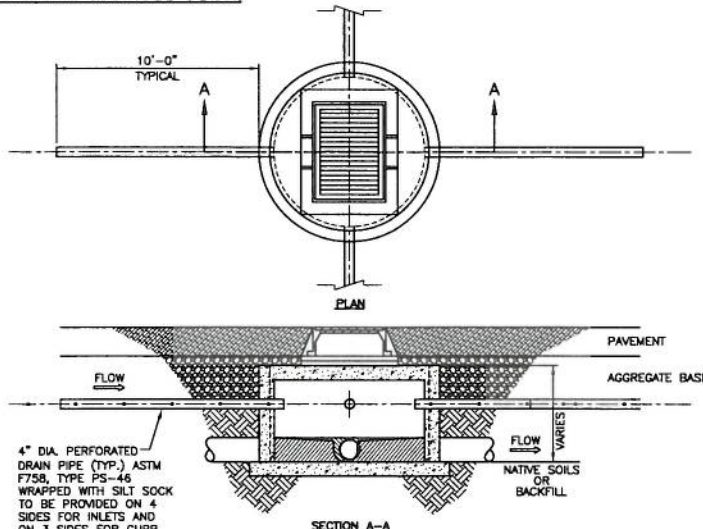
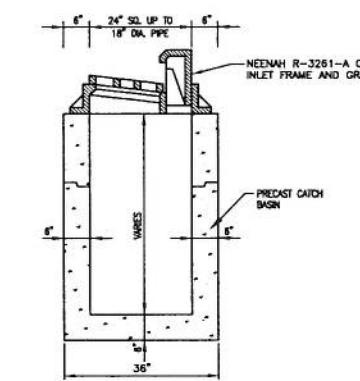
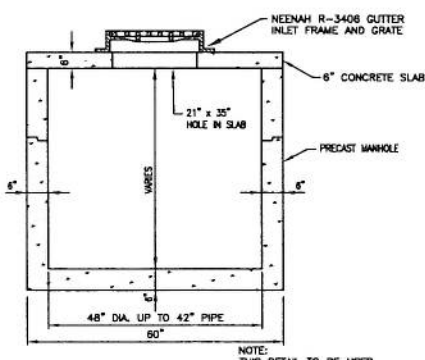
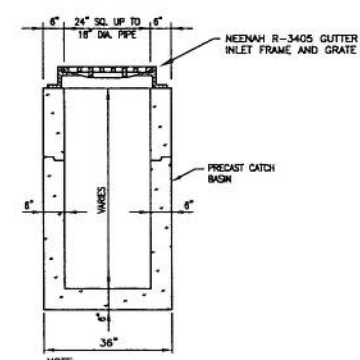
1. The service shall commence with collection and removal of sediment and debris (litter, leaves, paper, cans, etc.) and broom sweeping around the drainage inlet. Accumulated materials shall be placed in a DOT approved container for later disposal.
2. The catch basin shall be visually inspected for defects and possible illegal dumping. If illegal dumping has occurred, the proper authorities and property owner representative shall be notified as soon as practicable.
3. The catch basin grate shall be removed and set to one side. Using an industrial vacuum, the collected materials shall be removed from the filter. (Note: DPS uses a truck-mounted vacuum for servicing Flogard+Plus catch basin inserts.)
4. When all of the collected materials have been removed, the filter medium pouches shall be removed by unsnapping the tether from the D-ring and set to one side. The filter liner, gaskets, stainless steel frame and mounting brackets, etc. shall be inspected for continued serviceability. Minor damage or defects found shall be corrected on-the-spot and a notation made on the Maintenance Record. More extensive deficiencies that affect the efficiency of the filter (torn liner, etc.), if approved by the customer representative, will be corrected and an invoice submitted to the representative along with the Maintenance Record.
5. The filter medium pouches shall be inspected for defects and continued serviceability and replaced as necessary and the pouch tethers re-attached to the liner's D-ring. See below.
6. The grate shall be replaced.

EXCHANGE AND DISPOSAL OF EXPOSED FILTER MEDIUM AND COLLECTED DEBRIS

The frequency of filter medium pouch exchange will be in accordance with the existing DPS-Customer Maintenance Contract. DPS recommends that the medium be changed at least once per year. During the appropriate service, or if so determined by the service technician during a non-scheduled service, the filter medium pouches will be replaced with new pouches and the exposed pouches placed in the DOT approved container, along with the exposed debris. Once the exposed pouches and debris have been placed in the container, DPS has possession and must dispose of it in accordance with local, state and federal agency requirements.

Note: As the generator, the landowner is ultimately responsible for the proper disposal of the exposed filter medium and debris. Because the materials likely contain petroleum hydrocarbons, heavy metals and other harmful pollutants, the materials must be treated as an EPA Class 2 Hazardous Waste and properly disposed of. DPS relieves the landowner of the actual disposal task, and provides certification of its completion in accordance with appropriate regulations.

DPS also has the capability of servicing all manner of catch basin inserts and catch basins without inserts, underground oil/water separators, stormwater interceptors and other such devices. All DPS personnel are highly qualified technicians and are confined space trained and certified. Call us at (888) 959-8926 for further information and assistance.



01.05



Chick-fil-A

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:

Mark	Date	By
2	6/8/11 ASW	

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GBC DESIGN, INC.
 3878 W. Market St. Akron, OH 44333-8386
 Phone 330-836-0228 Fax 330-836-0782

STORE #2817
 Central & Rock Rd.
 FSR 508A
 Lease Parcel

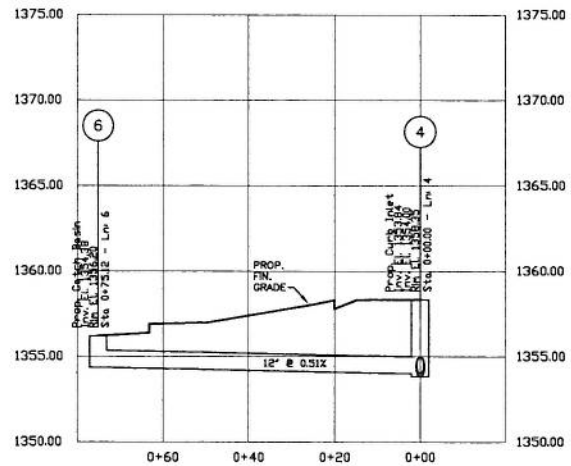
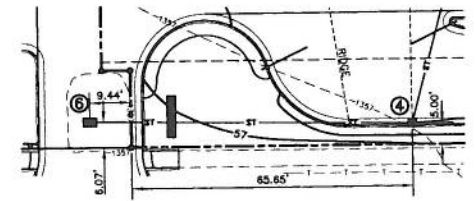
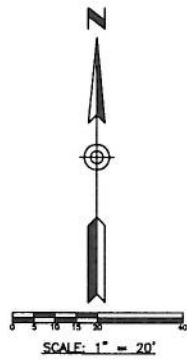
7990 East Central Ave.
 Wichita, KS 67206

SHEET TITLE
STORM SEWER DETAILS

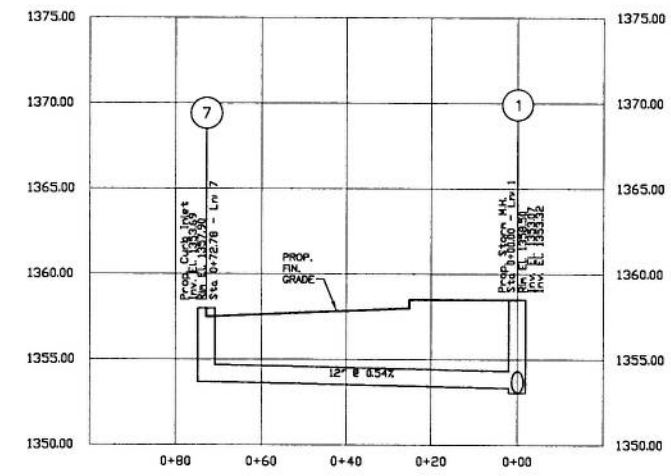
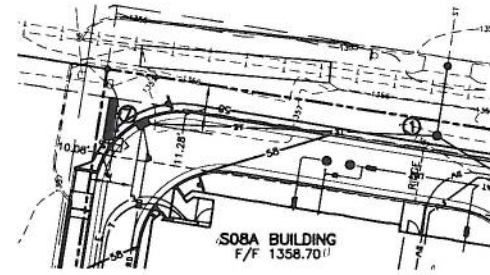
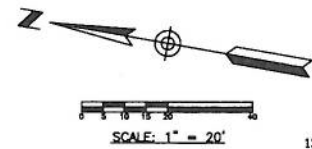
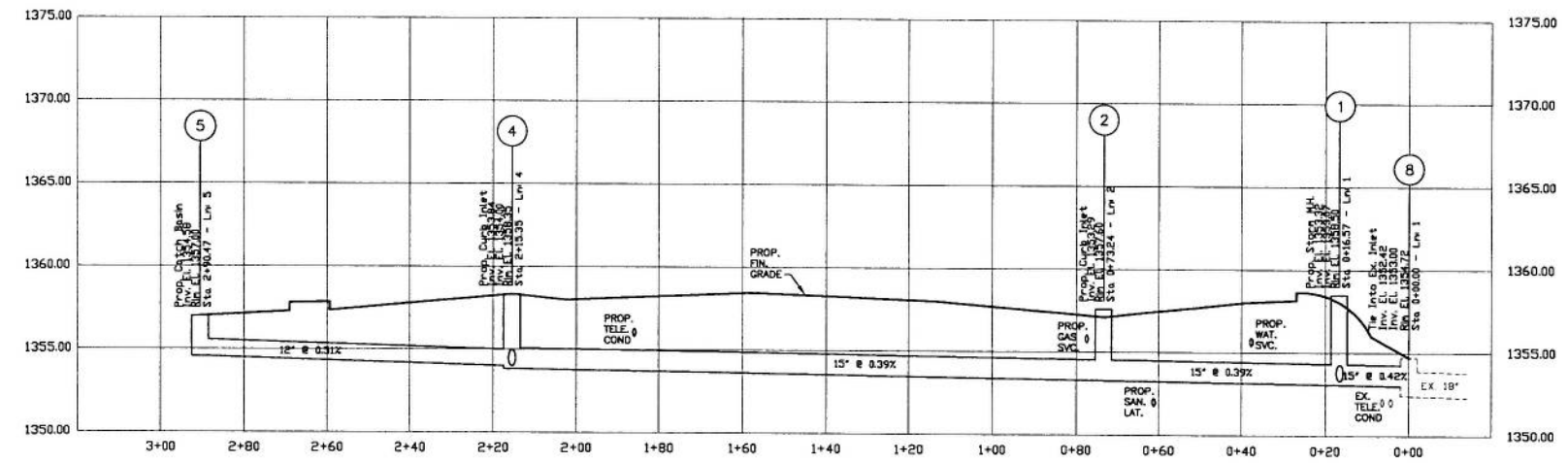
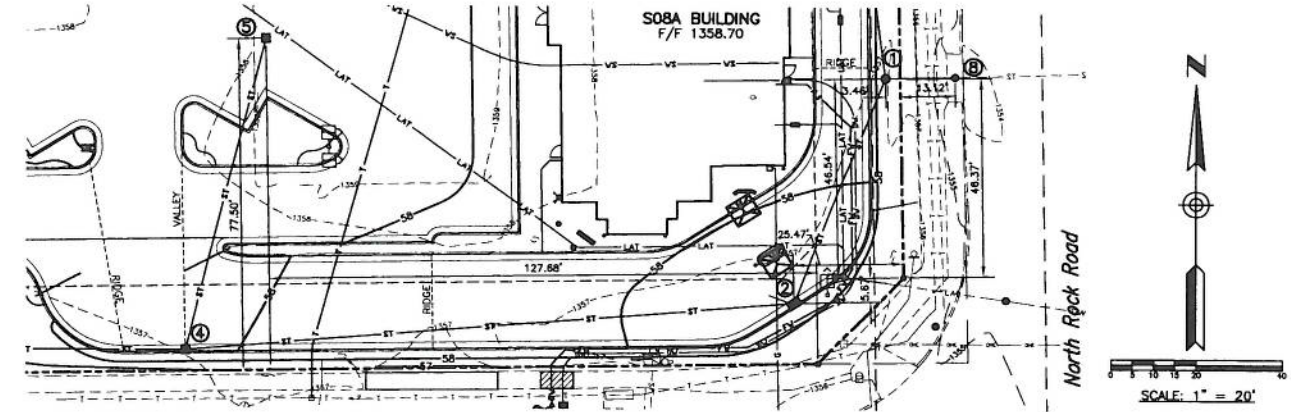
DWG EDITION 07.1
 REVISION 1

Job No. : 43204A
 Store : 2817
 Date : 3/4/11
 Drawn By : D.K.G.
 Checked By: A.S.W.

Sheet
PS-3.1



From Sta. 0+58 to structure at 0+75 is RCP the rest is HDPE pipe. Pipe was connected with concrete collar. tm



LEGEND

	PROP. FIRE HYDRANT
	EX. FIRE HYDRANT
	PROP. VALVE
	EX. VALVE
	PROP. MANHOLE
	EX. MANHOLE
	PROP. CURB INLET
	EX. CURB INLET
	PROP. TREE
	EX. PINE TREE
	EX. LIGHT POLE
	EX. GRADE
	POSITIVE DRAINAGE
	EX. FENCE
	EX. CURB
	PROP. CONTOURS
	EX. CONTOURS
	PROP. STORM SEWER
	PROP. ROOF DRAIN
	EX. STORM SEWER



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SHEET TITLE
**PRIVATE
STORM SEWER
PPD PLAN**

DWG EDITION 07.1
REVISION 1

Job No. : 43204A
Store : 2817
Date : 3/4/11
Drawn By : D.K.G.
Checked By: A.S.W.

Sheet
PS-3.2

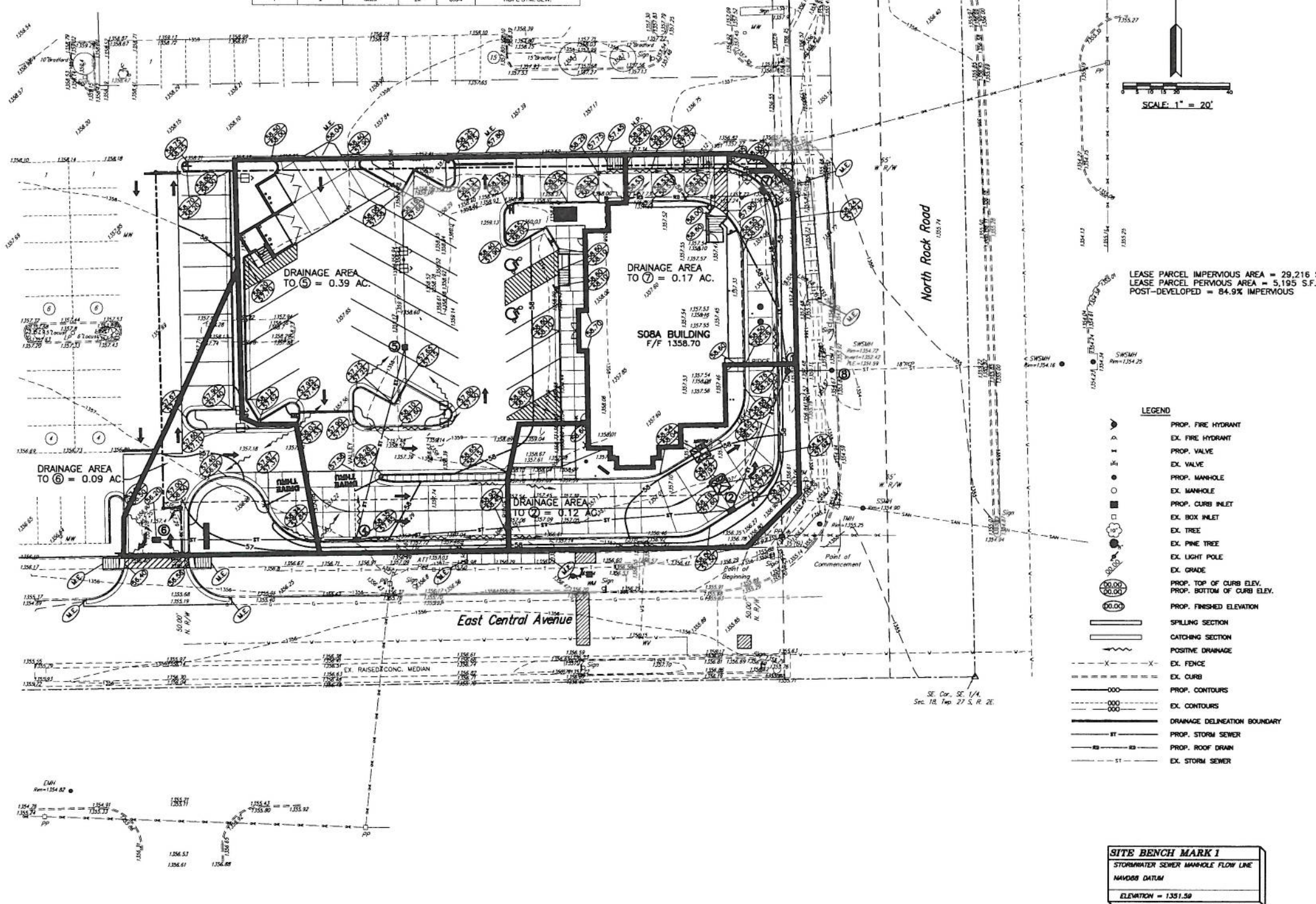
STORM SEWER STRUCTURE	TOP	INV. & SIZE, IN.
1 PROP. STORM MANHOLE	1358.50	1353.32 , 12
2 PROP. CURB INLET w/ FINGER DRAINS NE & SW w/ WATER QUALITY INSERT	1357.60	1353.29 , 15
3 NOT USED		
4 PROP. CURB INLET w/ FINGER DRAINS N, E & W w/ WATER QUALITY INSERT	1358.35	1354.00 , 12
5 PROP. CATCH BASIN w/ FINGER DRAINS N, S, E & W w/ WATER QUALITY INSERT	1357.00	1354.38 , 12
6 PROP. CATCH BASIN w/ FINGER DRAINS E & W w/ WATER QUALITY INSERT	1356.20	1354.38 , 12
7 PROP. CURB INLET w/ FINGER DRAINS NW & SE w/ WATER QUALITY INSERT	1357.90	1353.60 , 12
8 EX. INLET	1354.72	1353.00 , 15 (PROP.) 1352.42 , 18 (EX)

From Structure	To Structure	Line Length (ft)	Incr. Area (acres)	Total Area (acres)	Runoff Coeff. C	Incr C x A	Total C x A	Inlet Time (min)	Time Conc (min)	Rainfall Intensity (in/hr)	Total Runoff (cfs)	Additional Flow (cfs)	Total Flow (cfs)	Capacity Full (cfs)	Velocity (ft/s)	Pipe Size (in)	Pipe Slope (%)	Inv Elev Up (ft)	Inv Elev Dn (ft)	HGL Up (ft)	HGL Dn (ft)	Grnd/Rim Up (ft)	Grnd/Rim Dn (ft)	Line ID
1	8	16.57	0.00	0.77	0.95	0.00	0.73	10.0	13.3	5.5	4.01	0.00	4.01	4.20	3.27	15	0.42	1353.07	1353.00	1354.31	1354.25	1358.50	1354.72	RCP STM. SEW.
2	1	56.87	0.12	0.60	0.95	0.11	0.57	10.0	13.0	5.5	3.16	0.00	3.16	4.02	2.57	15	0.39	1353.29	1353.07	1354.59	1354.46	1358.50	1357.60	HDPE STM. SEW.
4	2	142.10	0.00	0.48	0.95	0.00	0.46	10.0	11.9	5.7	2.61	0.00	2.61	4.02	2.25	15	0.39	1353.84	1353.29	1354.89	1354.68	1358.35	1357.60	HDPE STM. SEW.
5	4	75.00	0.39	0.39	0.95	0.37	0.37	10.0	10.0	6.1	2.26	0.00	2.26	2.53	3.15	12	0.51	1354.38	1354.00	1355.18	1354.93	1357.00	1358.35	HDPE STM. SEW.
6	4	75.10	0.09	0.09	0.95	0.09	0.09	10.0	10.0	6.1	0.52	0.00	0.52	2.53	0.83	12	0.51	1354.38	1354.00	1355.01	1355.00	1356.20	1358.35	HDPE STM. SEW.
7	1	68.90	0.17	0.17	0.95	0.16	0.16	10.0	10.0	6.1	0.98	0.00	0.98	2.61	1.29	12	0.54	1353.69	1353.32	1354.58	1354.54	1358.00	1358.50	HDPE STM. SEW.

FROM STRUCTURE	TO STRUCTURE	PIPE LENGTH, FT.	PIPE SIZE, IN.	PIPE SLOPE, %	PIPE TYPE
1	8	16.6	15	0.42	RCP STM. SEW.
2	1	56.7	15	0.39	HDPE STM. SEW.
4	2	142.1	15	0.39	HDPE STM. SEW.
5	4	75.0	12	0.51	HDPE STM. SEW.
6	4	75.1	12	0.51	HDPE STM. SEW.
7	1	68.9	12	0.54	HDPE STM. SEW.

GRADING & UTILITY NOTES

- LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. ALL PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED/RELOCATED DURING SITE ACTIVITY.
- THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. IN JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
- WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. CONTRACTOR'S PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPLICANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
- ALL NEW UTILITIES/SERVICES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV, ETC. ARE TO BE INSTALLED UNDERGROUND. ALL NEW UTILITIES/SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE UTILITY SERVICE PROVIDER INSTALLATION SPECIFICATIONS AND STANDARDS.
- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. SUBBASE MATERIAL FOR SIDEWALKS, CURBS, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED UNSUITABLE BY OWNER OR OWNER'S REPRESENTATIVE, SUBBASE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT.
- ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.3% MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S OWN RISK.
- PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBSIDE CUT SHEETS PRIOR TO INSTALLATION.
- IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
- CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING WORK.



Revisions:

Mark	Date	By
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LEASE PARCEL IMPERVIOUS AREA = 29,216 S.F.
LEASE PARCEL PERVIOUS AREA = 5,193 S.F.
POST-DEVELOPED = 84.9% IMPERVIOUS

GBC DESIGN, INC.
8378 W. Market St.
Akron, OH 44333-8386
Phone 330-836-0225
Fax 330-836-5782

STORE #2817
Central & Rock Rd.
FSR SOBA
Lease Parcel

7990 East Central Ave.
Wichita, KS 67206

**SHEET TITLE
DRAINAGE
PLAN**

DWG EDITION 07.1
REVISION 1

Job No. : 43204A
Store : 2817
Date : 3/4/11
Drawn By : D.K.G.
Checked By : A.S.W.

Sheet
PS-3.3

EROSION AND SEDIMENT CONTROLS

- A. THE PROJECT HAS BEEN DESIGNED TO CONTROL EROSION AND PREVENT DAMAGE TO OTHER PROPERTY. ALL STRIPPING, EARTHWORK, AND REGRADING SHALL BE PERFORMED TO MINIMIZE EROSION. NATURAL VEGETATION SHALL BE RETAINED WHEREVER POSSIBLE. THE PROPOSED PLAN WILL ALLOW MOST ERODED MATERIALS TO BE RETAINED ON SITE.
- B. **VEGETATIVE PRACTICES**
 - 1. SUCH PRACTICES MAY INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, MATING, SOIL STABILIZATION, VEGETATIVE BUFFER STRIPS, PHASING AND PROTECTION OF TREES. THE CONTRACTOR SHALL INITIATE APPROPRIATE VEGETATIVE PRACTICES ON ALL DISTURBED AREAS WITHIN SEVEN (7) DAYS IF THEY ARE TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN FORTY-FIVE (45) DAYS. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DISTURBED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE.
 - 2. ALL DISTURBED AREAS SHALL BE SEEDDED AND STRAWED UNLESS OTHERWISE NOTED THE PROJECT SPECIFICATIONS.
- C. **STRUCTURAL PRACTICES**

STRUCTURAL PRACTICES SHALL BE USED TO CONTROL EROSION AND TRAP SEDIMENT FROM ALL SITES REMAINING DISTURBED FOR MORE THAN FOURTEEN (14) DAYS.
- D. **TIMING**

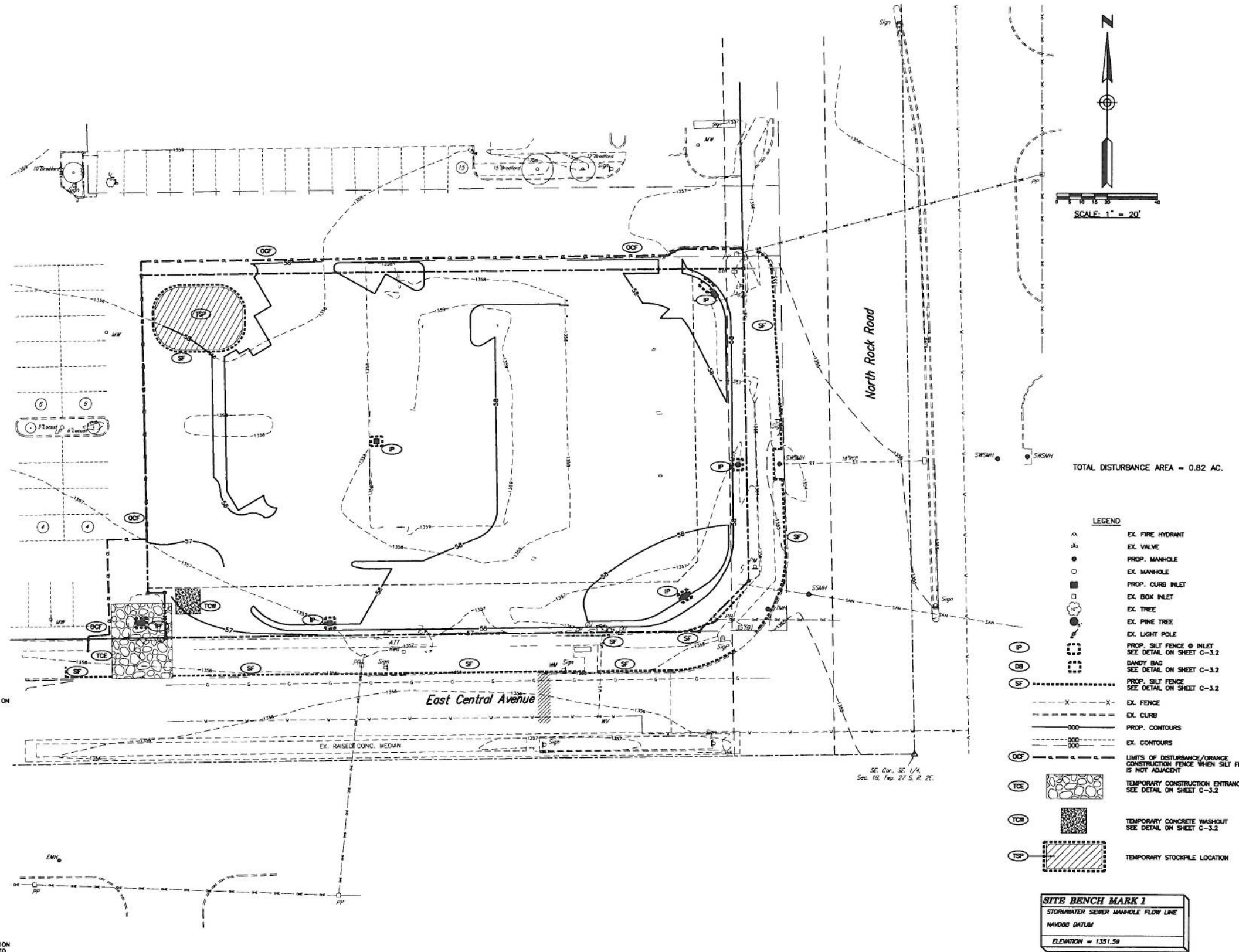
SEDIMENT CONTROL STRUCTURES SHALL BE FUNCTIONAL THROUGHOUT EARTH DISTURBING ACTIVITY. SEDIMENT PONDS AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS FROM THE START OF GRUBBING. THEY SHALL CONTINUE TO FUNCTION UNTIL THE UPSLOPE DEVELOPMENT AREA IS RESTABILIZED.
- E. **SEDIMENT BARRIERS**
 - 1. SHEET FLOW RUNOFF FROM DENUDED AREAS SHALL BE INTERCEPTED BY SEDIMENT BARRIERS. SEDIMENT BARRIERS, SUCH AS SEDIMENT FENCES OR DIVERSIONS DIRECTION RUNOFF TO SETTLING FACILITIES, SHALL PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM SEDIMENT TRANSPORTED BY SHEET FLOW.
 - 2. EROSION AND SEDIMENT CONTROL PRACTICES USE TO SATISFY THE CONDITIONS OF THIS PLAN SHALL MEET THE STANDARDS AND SPECIFICATIONS IN THE CURRENT EDITION OF WATER MANAGEMENT AND SEDIMENT CONTROL IN URBANIZED AREAS (SOIL CONSERVATION SERVICE).
- F. **MAINTENANCE & WASTE DISPOSAL**
 - 1. ALL TEMPORARY AND PERMANENT CONTROL PRACTICES SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ASSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION.
 - 2. NO SOLID OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. OFF-SITE VEHICLE TRACKING OF SEDIMENTS SHALL BE MINIMIZED. THE PLAN SHALL ENSURE AND DEMONSTRATE COMPLIANCE AND APPLICABLE STATE OF LOCAL WASTE DISPOSAL, SANITARY SEWER OR SEPTIC SYSTEM REGULATIONS.
 - 3. EXCESS EXCAVATED MATERIAL IS TO BE DISPOSED OF ON SITE AS DIRECTED BY THE CONSTRUCTION MANAGER. EXCESS MATERIAL SHALL BE GRADED TO DRAIN.
 - 4. CONTRACTOR SHALL IMPLEMENT ALL SOIL AND EROSION CONTROL PRACTICES AS PER PLAN AND AS REQUIRED BY THE LOCAL GOVERNING AGENCY AND THE MISSOURI E.P.A. THE EROSION CONTROL MEASURES SHALL BE INSTALLED PER THE RAINWATER AND LAND DEVELOPMENT HANDBOOK PUBLISHED BY THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, CURRENT EDITION.
- G. **SEDIMENT CLEANUP**

BY THE END OF EACH WORK DAY, SWEEP OR SCRAPER UP SOIL TRACKED ONTO THE ROAD. BY THE END OF THE NEXT WORK DAY AFTER A STORM, CLEAN UP SOIL WASHED OFF-SITE, AND CHECK STRAW BALES AND SILT FENCE FOR DAMAGE OR SEDIMENT BUILDUP.
- H. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO EXCAVATION OR AS SOON AS EXCAVATION IS COMPLETED OR SUSPENDED.
- I. SEED WITHIN 30 DAYS OF REACHING FINAL GRADE OR AS SOON AS POSSIBLE.

SEQUENCE OF CONSTRUCTION ACTIVITY

THE CONTRACTOR SHALL IMPLEMENT ALL OF THE FOLLOWING EROSION CONTROL MEASURES IN THE ORDER STATED, PRIOR TO OTHER CONSTRUCTION ACTIVITY. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL AND STORM WATER POLLUTION PREVENTION ITEMS. ALL EROSION CONTROL MEASURES MUST REMAIN FUNCTIONAL UNTIL THE SITE HAS BEEN STABILIZED.

1. INSTALLATION OF ALL PERIMETER SILT FENCE.
2. INSTALLATION OF TEMPORARY CONSTRUCTION EXIT.
3. DEMOLITION, CLEARING, AND GRUBBING WITHIN DISTURBANCE AREA.
4. INSTALLATION OF INTERIOR INLET PROTECTION.
5. INSTALLATION OF TEMPORARY DIVERSION DITCHES INCLUDING SEEDING AND MULCHING AS REQUIRED.
6. STRIP/STOCKPILE TOPSOIL, AS NECESSARY. LOCATION OF STOCKPILE TO BE AGREED UPON BY OWNER AND CONTRACTOR.
7. COMPLETE EXCAVATION/EMBANKMENT OF SITE TO ROUGH FINISHED GRADE.
8. TEMPORARY SEEDING OF ALL DISTURBED AREAS.
9. INSTALLATION OF SILT FENCE WITHIN GRADED AREAS.
10. INSTALLATION OF ALL UTILITIES.
11. INSTALLATION OF INLET PROTECTION AT ALL STORM SEWER STRUCTURES INDICATED WITHIN THESE PLANS.
12. FINAL GRADING & PAVING.
13. FINAL SEEDING AND MULCHING OF ALL REMAINING DISTURBED AREAS.
14. LANDSCAPING OF SITE INCLUDING NECESSARY MOUNDING AND ALL SOIL STABILIZATION.
15. REMOVAL OF ALL TEMPORARY EROSION CONTROL DEVICES UPON FINAL STABILIZATION & REMOVAL OF SEDIMENT IN THE DRAIN INLET FILTRATION DEVICES ACCORDING TO STATE AND LOCAL REGULATIONS.



Revisions:

Mark	Date	By
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GBC DESIGN, INC.
 3378 W. Market St. Akron, OH 44333-3386
 Phone 330-836-0228 Fax 330-836-5782

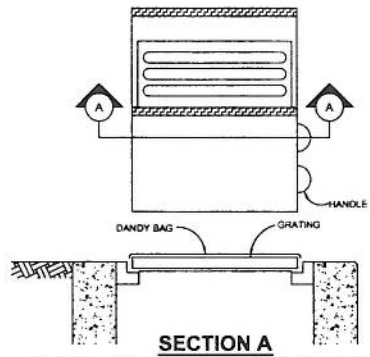
STORE #2817
 Central & Rock Rd.
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7990 East Central Ave.
 Wichita, KS 67206

SHEET TITLE
EROSION CONTROL PLAN & SWPPP
 DWG EDITION 07.1
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Job No. : 43204A
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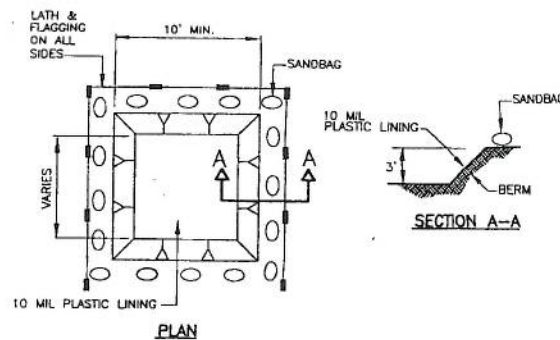
SECTION A

INSTALLATION: STAND GRATE ON END. PLACE DANDY BAG OVER GRATE. FLIP GRATE OVER SO THAT OPEN END IS UP. PULL UP BLACK TUCK FLAP IN BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR DANDY BAG WILL NOT FIT PROPERLY. HOLDING HANDLES. CAREFULLY PLACE DANDY BAG WITH GRATE INSERTED INTO CATCH BASIN FRAME SO THAT RED DOT ON THE TOP OF THE DANDY BAG IS VISIBLE.

MAINTENANCE: AFTER SILT HAS DRIED, REMOVE IT FROM THE SURFACE OF DANDY BAG WITH BROOM.

DANDY BAG

NO SCALE



TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAIL, WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.

LATH AND FLAGGING SHOULD BE COMMERCIAL TYPE.

PLASTIC LINING MATERIAL SHOULD BE A MINIMUM 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

BELOW GRADE

TEMPORARY CONCRETE WASHOUT FACILITY

(NO SCALE)

EROSION CONTROL NOTES

- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL MEET THE MISSOURI DEPARTMENT OF NATURAL RESOURCES REQUIREMENTS.
- SILT FENCES ARE TO BE CONSTRUCTED ON THE OUTSIDE OF ALL FILL AREAS AND AROUND TOPSOIL STOCKPILES WITHIN 7 DAYS OF DISTURBANCE.
- DISTURBED AREAS WHICH WILL REMAIN UNWORKED FOR A PERIOD OF 21 DAYS OR MORE SHALL BE STABILIZED WITH SEEDING AND MULCHING OR OTHER APPROPRIATE MEANS WITHIN 7 DAYS.
- PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH LANDSCAPE SPECIFICATIONS.
- EROSION CONTROL BLANKETS WITH MATTING WILL BE USED ON DITCHES GREATER THAN 1.0% AND ALL OTHER SLOPES GREATER THAN 0% GRADE.
- OTHER EROSION CONTROL MEASURES MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS.
- ALL EROSION MEASURES MUST REMAIN FUNCTIONAL UNTIL UPLAND AREAS ARE STABILIZED.
- REGULAR INSPECTION AND MAINTENANCE MUST BE PROVIDED FOR ALL EROSION CONTROL PRACTICES. PERMANENT RECORDS OF MAINTENANCE AND INSPECTIONS MUST BE MAINTAINED THROUGHOUT CONSTRUCTION. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY 7 DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.50 INCHES IN A 24 HOUR PERIOD. INSPECTION RECORDS MUST CONTAIN NAME OF INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION CERTIFICATION OF COMPLIANCE AND CORRECTIVE ACTION TAKEN.
- OFFSITE VEHICLE TRACKING OF SEDIMENT SHALL BE MINIMIZED. A 24' x 30' GRAVEL DRIVE APPROACH SHALL BE INSTALLED AND MAINTAINED AS A TEMPORARY CONSTRUCTION ENTRANCE.
- NO SOLID, LIQUID OR TOXIC WASTE SHALL BE DISCHARGED IN THE STORM SEWER RUNOFF. WASTE SHALL BE DISPOSED BY THE CONTRACTOR, OFF SITE, IN AN APPROVED WASTE DISPOSAL AREA.
- WINTERIZATION - ANY DISTURBED AREA THAT IS NOT GOING TO BE WORKED FOR 21 DAYS OR MORE MUST BE SEEDING AND MULCHED BY NOVEMBER 1 OR MUST HAVE A DORMANT SEEDING OR MULCH COVER APPLIED BETWEEN NOVEMBER 1 AND MARCH 1.

PROJECT DESCRIPTION

THE LAND IS BEING DISTURBED TO CONSTRUCT A RESTAURANT ALONG WITH PARKING AND SITE UTILITIES.

SCHEDULE OF CONSTRUCTION ACTIVITY

THE CONTRACTOR SHALL IMPLEMENT ALL EROSION CONTROL MEASURES PRIOR TO OTHER CONSTRUCTION ACTIVITY. ALL EROSION CONTROL MEASURES MUST REMAIN FUNCTIONAL UNTIL THE SITE HAS BEEN STABILIZED UNLESS OTHERWISE NOTED.

TEMPORARY SEEDING

TEMPORARY SEEDING SPECIES SELECTION			
SEEDING DATES	SPECIES	LB/1000 FT. ²	PER ACRE
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
AUGUST 16 TO NOVEMBER 1	TALL FESCUE	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40 LB.
NOVEMBER 1 TO SPRING SEEDING	ANNUAL RYEGRASS	1	40 LB.
	TALL FESCUE	1	40 LB.
	PERENNIAL RYEGRASS	1	40 LB.
	ANNUAL RYEGRASS	1	40 LB.
USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING.			

NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED.

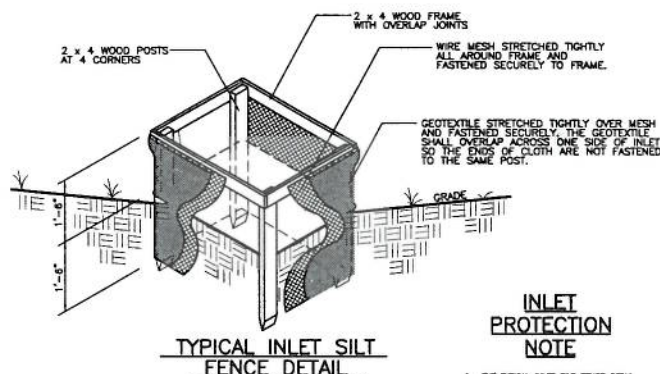
- STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION-SITE.
- TEMPORARY SEED SHALL BE APPLIED BEFORE CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 45 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEEDING AS SOON AS POSSIBLE AFTER GRADING OR SHALL BE SEEDING WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.
- THE SEEDBED SHALL BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. HOWEVER, TEMPORARY SEEDING SHALL NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE.
- SOIL AMENDMENTS--APPLICATIONS OF TEMPORARY VEGETATION SHALL ESTABLISHED ADEQUATE STANDS OF VEGETATION WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. SOIL TESTS SHOULD BE TAKEN ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.
- SEEDING METHOD--SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SOWER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

MULCHING TEMPORARY SEEDING

- APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES AND WITH FAVORABLE SOIL CONDITIONS AND ON VERY FLAT AREAS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.
- MATERIALS:
 - STRAW--IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN APPLIED AT 2 TONS/AC. OR 90 LB. / 1,000 SQ. FT. (TWO TO THREE BALES). THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQ. FT. SECTIONS AND SPREAD TWO 45 LB. BALES OF STRAW IN EACH SECTION.
 - HYDROSEEDERS--IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2,000 LB. / AC. OR 46 LB. / 1,000 SQ. FT.
 - OTHER--OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS / AC.
- STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.
 - ANCHORING METHODS:
 - MECHANICAL--A DISK, CRIMPER OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICAL ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY BE LEFT LONGER THAN 8 IN.
 - MULCH NETTINGS--NETTINGS SHALL BE USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MADE BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
 - ASPHALT EMULSION--ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURER OR AT THE RATE OF 160 GAL / AC.
 - SYNTHETIC BINDERS--SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA-TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
 - WOOD-CELLULOSE FIBRE--WOOD-CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB. / AC. THE WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB. / 100 GAL.

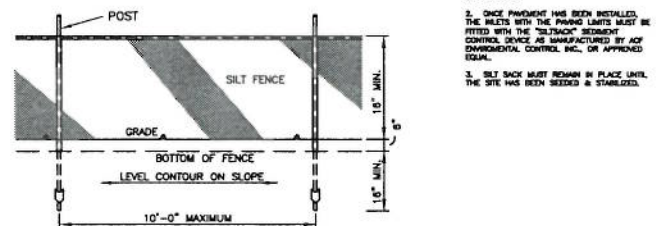
SILT FENCE

- INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE STORM DRAIN BECOMES OPERATIONAL.
- THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH OF AT LEAST 18 INCHES.
- THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-BY-4-IN. CONSTRUCTION-GRADE LUMBER. THE 2-BY-4-IN. POSTS SHALL BE DRIVEN 1 FT. INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF THE 2-BY-4-IN. FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP PORTION OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF POKED WATER WOULD POSE A SAFETY HAZARD TO TRAFFIC.
- WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
- GEOTEXTILE SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40-SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ON SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
- BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 8-IN. LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
- A COMPACTED EARTH DIKE OR A CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION AND IF RUNOFF BYPASSING THE INLET WILL NOT FLOW TO A SETTLING POND. THE TOP OF EARTH DIKES SHALL BE AT LEAST 8 INCHES HIGHER THAN THE TOP OF THE FRAME.



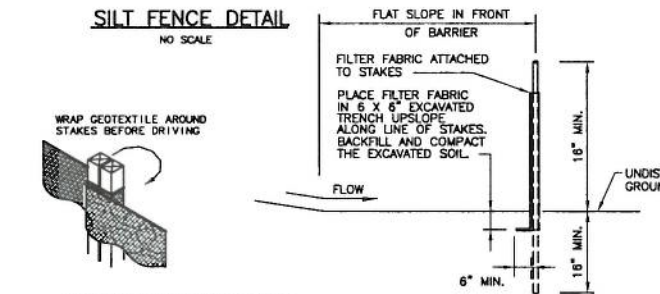
INLET PROTECTION NOTE

- THE TYPICAL INLET SILT FENCE DETAIL SHALL REMAIN IN PLACE UNTIL PAVEMENT IS ESTABLISHED.
- ONCE PAVEMENT HAS BEEN INSTALLED, THE METERS WITH THE PAVING LIMITS MUST BE FITTED WITH THE "T-2" SIGN. SEEDING CONTROL DEVICE AS MANUFACTURED BY HOF ENVIRONMENTAL CONTROL, INC. OR APPROVED EQUIV.
- SILT SHADE MUST REMAIN IN PLACE UNTIL THE SITE HAS BEEN SEEDING & STABILIZED.



SILT FENCE DETAIL

NO SCALE



SILT FENCE SECTION

NO SCALE

- SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
- ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT THE WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
- TO PREVENT WATER POUNDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
- WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
- WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
- THE HEIGHT OF THE SILT FENCE SHALL BE A MIN. OF 18 IN. ABOVE THE ORIGINAL GROUND SURFACE.
- THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MIN. OF 8 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICE WHICH WILL DISURE AN ADEQUATELY UNIFORM TRENCH DEPTH.

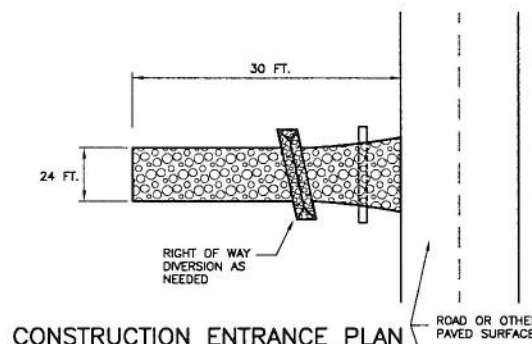
CRITERIA FOR SILT FENCE MATERIALS

- FENCE POSTS--THE LENGTH SHALL BE A MINIMUM OF 32 IN. LONG. WOOD POSTS WILL BE 2-BY-2 IN. HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
- SILT FENCE FABRIC (SEE CHART BELOW):

FABRIC PROPERTIES	VALUES	TEST METHOD
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D 1482
MULLEN BURST STRENGTH	180 PSI MINIMUM	ASTM D 3786
SLURRY FLOW RATE	0.3 GAL. /MIN./FT ² MAXIMUM	ASTM D 3786
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW-02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM-G-26

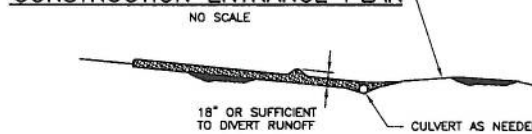
JOINING SECTIONS OF SILT FENCE DETAIL

NO SCALE



CONSTRUCTION ENTRANCE PLAN

NO SCALE



CONSTRUCTION ENTRANCE PROFILE

NO SCALE

- STONE SIZE--TWO-INCH STONE SHALL BE USED, OR RECYCLED CONCRETE PAVEMENT.
- LENGTH--THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS, BUT NOT LESS THAN 50 FT. (EXCEPT ON SINGLE RESIDENCE LOT WHERE A 30 FT. MINIMUM LENGTH APPLIES).
- THICKNESS--THE STONE LAYER SHALL BE AT LEAST 6-IN. THICK.
- WIDTH--THE ENTRANCE SHALL BE AT LEAST 10-FT. WIDE, BUT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- BEDDING--A GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL HAVE A GRAB TENSILE STRENGTH OF AT LEAST 200 LB. AND A MULLEN BURST STRENGTH OF AT LEAST 190 LB.
- CULVERT--A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FLOWING ACROSS THE ENTRANCE FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
- WATER BAR--A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
- MAINTENANCE--TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECK BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
- CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.



Chick-fil-C

5200 Buffington Rd.
Atlanta Georgia,
30349-2998

Revisions:
Mark Date By

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3378 W. Market St. Akron, OH 44333-3386
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Lease Parcel

7990 East Central Ave.
Wichita, KS 67206

SHEET TITLE
EROSION CONTROL DETAILS

DWG EDITION 07.1
REVISION 1

Job No. : 43204A

Store : 2817

Date : 3/4/11

Drawn By : D.K.G.

Checked By : A.S.W.

Sheet

PS-3.5