STORM WATER DRAIN #186

to serve

THE FAIRMONT - PHASE II

CITY OF WICHITA, KANSAS

Neil D. Cable, P.E. City Engineer

Project Number

468-83404

O.C.A. Number

751339

GENERAL NOTES:

1. 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 687-2470

   The Contractor must notify the following in case of an emergency.

Cox Communications	262-4270
Kansas Gas Service	383-8600
Kansas Gas & Electric Company	383-8650
Peoples Gas Company	942-7600
Southwestern Bell Telephone Company	1-800-344-7233
City of Wichita Water Dept.	268-4908
City of Wichita Sewer Maintenance	268-4071
City of Wichita Traffic Engineering	269-4446

2. Utility service lines, poles, valve boxes, meters, and etcetera 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. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

3. 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.

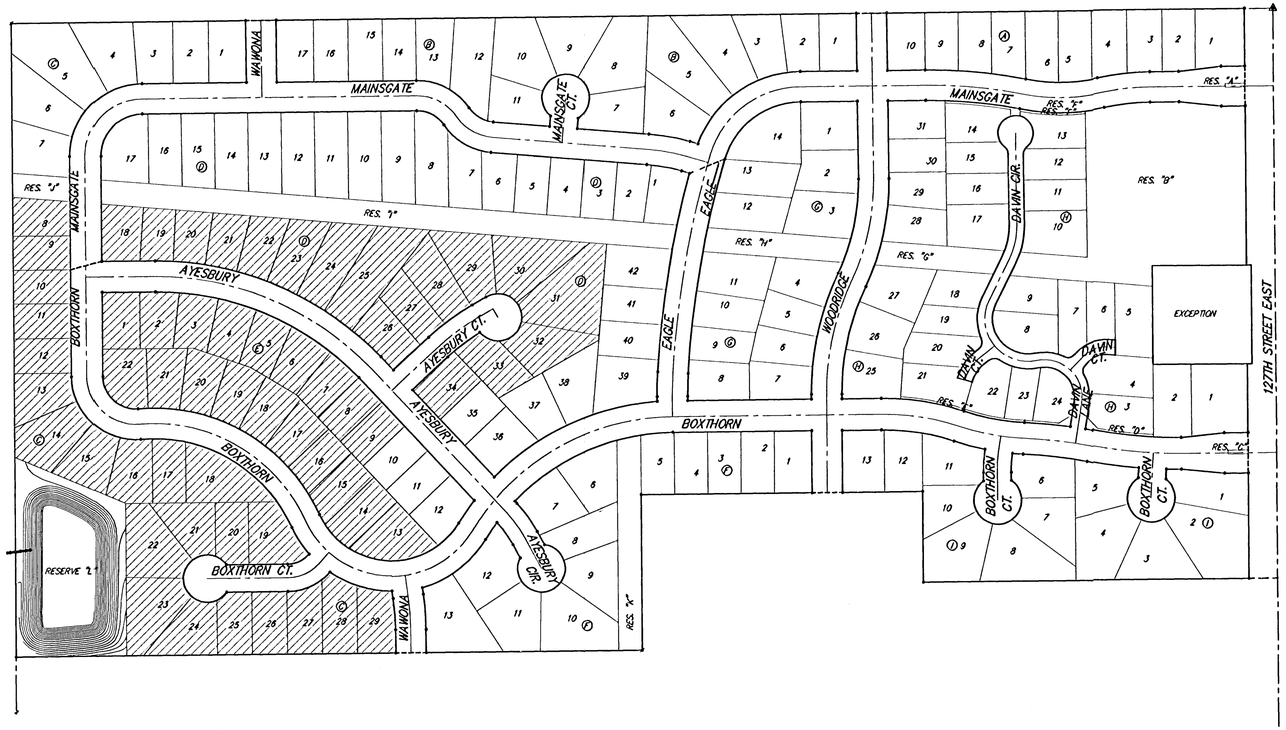
4. All areas disturbed by construction shall be seeded as indicated on the Mass Grading Plan.

5. Rubble from the removal of miscellaneous structures and excess excavation which is to be 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 stockpiles or disposed of in a flood plain would a Kansas State Board of Agriculture permit. Any material dumped in waters of the United States or wetlands is subject to U.S. Corps. of Engineers permitting regulations. Any material buried or stockpiled beyond approved construction limits would require additional archaeological investigations unless buried in a previously approved borrow location.

6. 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 his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state law.

Scale: 1" = 150'

Booked 6-23-04 C-767



Benefit District

Benchmarks

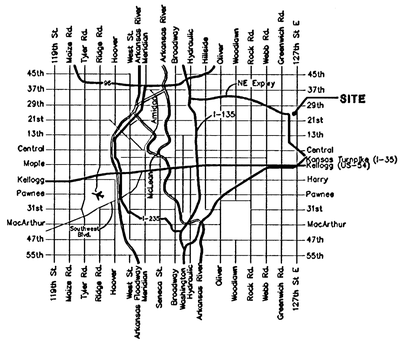
BM #1: "□" Cut on T.C., 12' west of east end of N curb return on the north drive entrance of the Church of the Magdalen.
Elev. = 190.48 (City Datum)

BM #2: RR spike on the west face of PP on the east side of 127th Street East, adjacent to the south line of The Fairmont Addition.
Elev. = 187.25 (City Datum)

BM #3: RR spike on the east face of PP on the west side of 127th Street East, 37' N and 13' E of the NE corner of Lot 1, Block H, The Fairmont Addition.
Elev. = 189.19 (City Datum)

Sheet Index

Title Sheet	1
Mass Grading Plan	2
Pond Plan	3
Soil Erosion BMPs	4
Pond Cross Sections	5-6
Copy of Plat	7



Vicinity Map

BRIAN LEE PELTIER LICENSED 13744 07/09/04 KANSAS PROFESSIONAL ENGINEER

As Built - Per Plan

July 2003

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

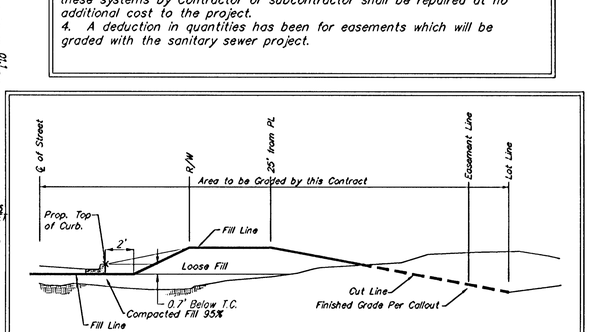
Scale: 1" = 60'

All areas disturbed during construction not under proposed pavement are to be seeded, mulched and fertilized as follows:
Seed: – Rye Grass (PLS) – 3#/1000 Sq. Ft. and Kansas Premium Fescue Blend – 3#/1000 Sq. Ft.
Mulch: – 2 tons prairie hay/acre.
Fertilizer: – 12–24–12 ratio – 350 lbs./acre
Cost of seeding, fertilizing, and mulching shall be incidental to "Project Seeding".

EARTH WORK TOTALS

	C.Y. Excavation	C.Y. Fill
Mass Grading	12,581	11,425
Pond Construction	24,416	0
Total	36,997	11,425

Stockpile excess material on–site at an are to be designated by the engineer out of easements and right–of–way. Earthwork quantities do not include correction factors. Pond excavation shall be bid as C.Y. Excavation. Mass grading earthwork quantities are for reference only. All cost associated with mass grading shall be incidental to lump sum bid item "Mass Grading".
1. Contractor to strip top 3" of soil before mass grading and stockpile. Top soil stockpile to be redistributed over entire disturbed area excluding street right–of–way and ponds to achieve planned grade.
2. Compaction of 90% shall be obtained in all fill areas.
3. It shall be the Contractor's responsibility to protect the sanitary sewer and water distribution system during mass grading. Any damage done to these systems by Contractor or subcontractor shall be repaired at no additional cost to the project.
4. A deduction in quantities has been for easements which will be graded with the sanitary sewer project.



Typical Lot Section
No Scale

Area to be graded
XXX Existing Grade
XXX Proposed Grade

THE FAIRMONT - PHASE 2
MASS GRADING PLAN
WICHITA, KANSAS

BAUGHMAN COMPANY P.A.
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316–262–7271 • 315 ELLIS • WICHITA, KANSAS 67211

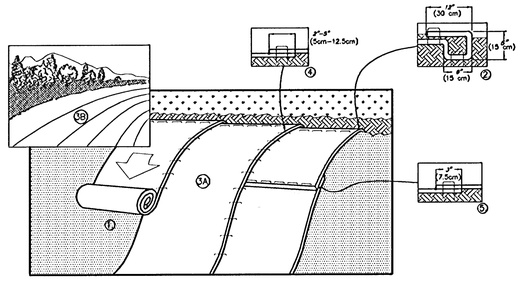
PROJECT NUMBER	SHEET
488-83404	2 OF 7

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS		7/09/03	Noted

02-06-E360
Fairmont Mass

SLOPE INSTALLATION

NORTH AMERICAN GREEN



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15cm) DEEP X 6" (15cm) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30cm) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30cm) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30cm) APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" (5cm-12.5cm) OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5cm) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30cm) APART ACROSS ENTIRE BLANKET WIDTH.

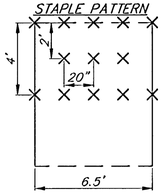
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 8" (15cm) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

14649 HIGHWAY 41 NORTH, EVANSVILLE, INDIANA 47725
USA 1-800-772-2040 · CANADA 1-800-448-2040
www.nagreen.com

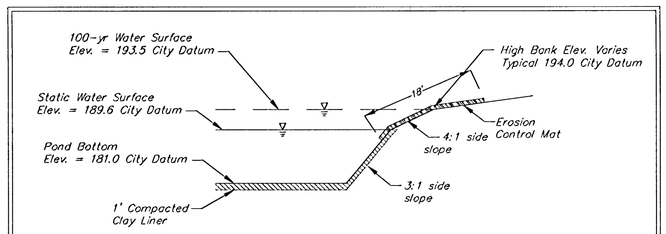
STAPLE PATTERN "D"

3-1/2 staples per sq. yd. using 6-inch, 11 ga. wire "U" staples. 8-inch staples and longer may be used for loose soils. 9 ga. staples or heavier may be necessary in hard or rocky soils.

Contractor shall follow manufacturers installation instructions regarding overlap dimensions. The overlap shall have a minimum dimension of three inches (3").



Erosion control mat.



Typical Section Detail
(No Scale)

NOTES:

1. Pond bottom and sideslopes below static pool elevation shall be over-excavated 1' and a 1' clay liner shall be compacted to 95% std. density. The plasticity index (P.I.) shall be at least 30. The compaction and P.I. shall be verified during construction. P.I. determination and compaction testing shall be arranged by the contractor at the request of the inspector. Cost shall be incidental to "Site Clearing & Restoration".
2. Any excess excavation shall be stored on site, out of easements and R/W. Area will be designated by Engineer. Additional area will be staked out if needed.
3. All of Reserve "L" above the static water surface shall be seeded and mulched as follows: (Permanent Seeding)

   RESERVE 'L' AREAS MARKED "FESCUE"
   SEED -- Kansas Premium Fescue Blend; 8#/1000 Sq. Ft.
   FERTILIZER -- 12-24-12 Ratio at 350 Lbs./Ac.
   MULCH -- 2 Tons Prairie Hay / Acre

   RESERVE 'L' AREAS MARKED "BUFFALOGRASS"
   SEED -- "Texoka" Blend Buffalograss; 2#/1000 Sq. Ft.
   FERTILIZER -- 2 Lbs. Actual Nitrogen /1000 Sq. Ft.
   MULCH -- 2 Tons Prairie Hay / Acre

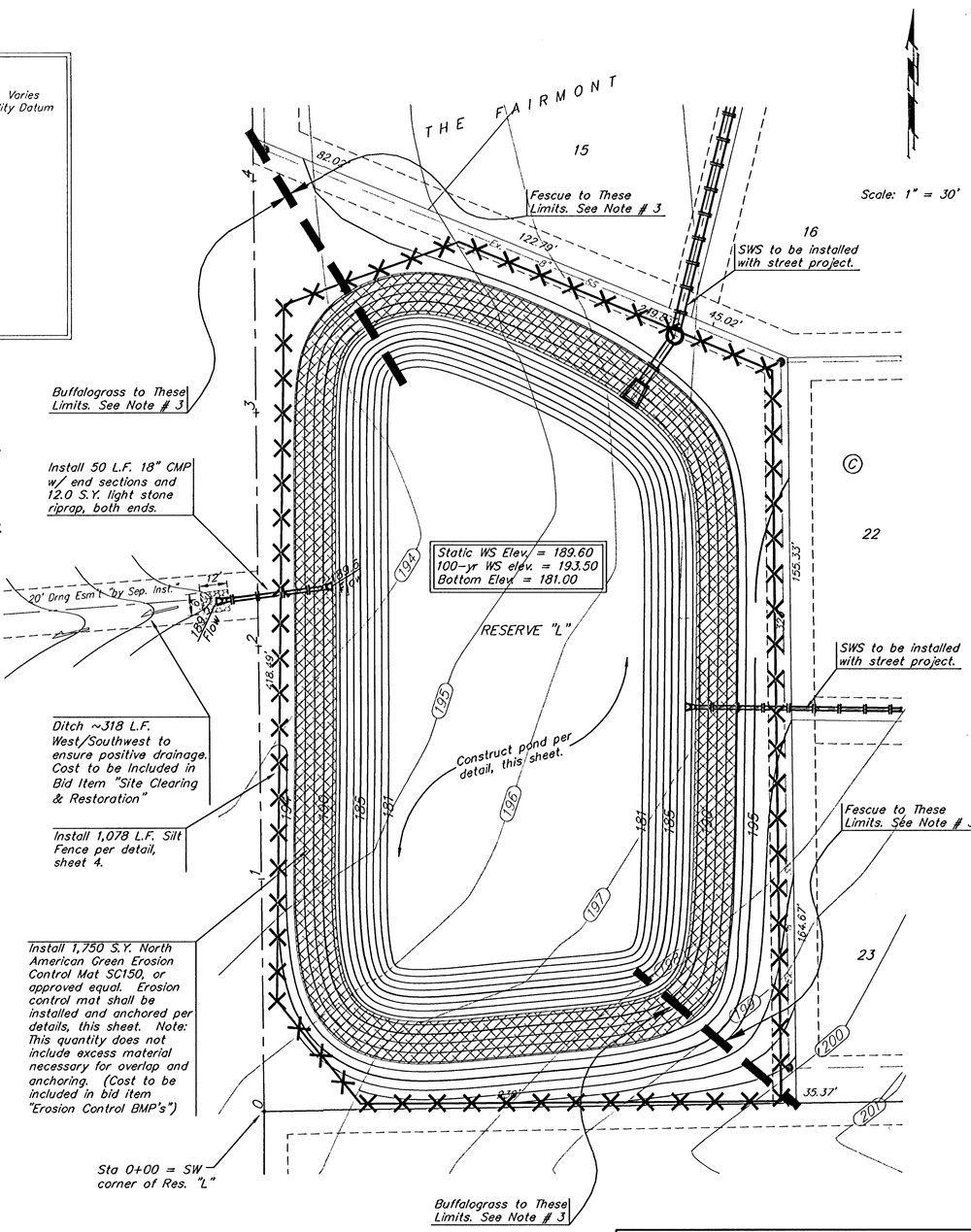
   All other disturbed areas not in street R/W are to be seeded and mulched as follows: (Temporary seeding)
   SEED -- Rye grass (PLS)--3#/1000 Sq. Ft. and Kansas Premium Fescue Blend; 3#/1000 Sq. Ft.
   FERTILIZER -- 10-20-10 Ratio or 12-24-12 Ratio at 350 Lbs./Ac.
   MULCH -- 2 Tons Prairie Hay / Acre
4. Install Erosion Control Mat from 1' below the water surface to 18' up the bank.
5. Contractor to strip top 3" of soil before mass grading and stockpile. Top soil stockpile to be redistributed over entire disturbed area excluding street right-of-way and ponds to achieve planned grade.
6. Compaction of 90% shall be obtained in all fill areas.

EARTH WORK TOTALS

	C.Y. Cut	C.Y. Fill
Mass Grading	12,581	11,425
Pond Construction	24,416	0
Total Earthwork	36,997	11,425

Earthwork quantities do not include correction factors. Pond excavation shall be bid as C.Y. Excavation. Mass grading earthwork quantities are for reference only. All cost associated with mass grading shall be included in the bid item "Mass Grading".

(197) Existing Grade
197 Proposed Grade
Silt Fence



THE FAIRMONT - PHASE 2
POND PLAN
WICHITA, KANSAS

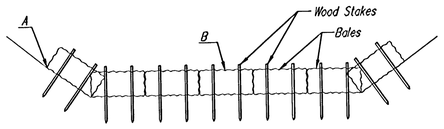
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316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER	SHEET
488-83404	3 OF 7

DESIGN	DRAWN	APPROVED	DATE	SCALE
NBW	TMS		7/09/03	Noted

Fairmont/Pond 02-06-2580

NOTE: Point A must be higher than Point B so that water flows over the bales and not around them.



STRAW BALE DITCH CHECKS

Material Specification:

Bale ditch checks may be constructed of wheat straw, oat straw, prairie hay, or bromegrass hay that is free of weeds declared noxious by the Kansas State Board of Agriculture.
The stakes used to anchor the bales should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.
Optional: The downstream scour apron should be constructed of a double-netted straw erosion-control blanket at least 6' wide.
Optional: The metal landscape staples used to anchor the erosion-control blanket should be at least 8" long.

Placement:

Bale ditch checks should be placed perpendicular to the flowline of the ditch.
The ditch check should extend far enough so that the ground level at the ends of the check is higher than the top of the lowest center bale. This prevents water from flowing around the check.
Checks should not be placed in ditches where high flows are expected. Rock checks should be used instead.
Bales should be placed in ditches with slopes of 6% or less. For slopes steeper than 6%, rock checks should be used.
The following table provides check spacing for a given ditch grade:

Ditch grade (%)	Check Spacing (feet)
0.5	200
1.0	200
2.0	100
3.0	65
4.0	50
5.0	40
6.0	30

Proper installation method:

Excavate a trench perpendicular to the ditch flowline that is 4" deep and a bale's width wide. Extend the trench in a straight line along the entire length of the proposed ditch check. Place the soil on the upstream side of the trench-it will be used later.
Optional: On the downstream side of the trench, roll out a length of erosion-control blanket (scour apron) equal to the length of the trench. Place the upstream edge of the erosion-control blanket along the bottom upstream edge of the trench. The erosion control blanket should be anchored in the trench with one row of 8" landscape staples placed on 18" centers. The remainder of the erosion-control blanket (the portion that is not lying in the trench) will serve as the downstream scour apron. This section of the blanket should be anchored to the ground with 8" landscape staples placed around the perimeter of the blanket on 18" centers. The remainder of the blanket should be anchored using two evenly spaced rows of 8" landscape staples on 18" centers placed perpendicular to the flowline of the ditch.
Place the bales in the trench, making sure that they are butted tightly. Two stakes should be driven through each bale along the centerline of the ditch check, approximately 6" to 8" in from the bale ends. Stakes should be driven at least 12" into the ground.
Once all the bales have been installed and anchored, place the excavated soil against the upstream side of the check and compact it. The compacted soil should be no more than 3" to 4" deep and extend upstream no more than 24".

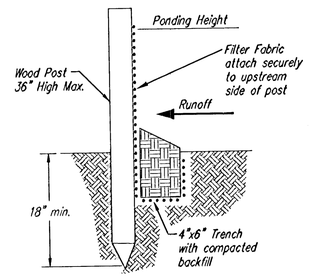
List of common placement/installation mistakes to avoid:

Do not place a bale ditch check directly in front of a culvert outlet. It will not stand up to the concentrated flow.
Do not place bale ditch checks in ditches that will likely experience high flows. They will not stand up to concentrated flow.
Follow prescribed ditch-check spacing guidelines. If spacing guidelines are exceeded, erosion will occur between the ditch checks.
Do not allow water to flow around the ditch check. Make sure that the ditch check is long enough so that the ground level at the ends of the check is higher than the top of the lowest center bale.
Do not place bale ditch checks in channels with shallow soils underlain by rock. If the check is not anchored sufficiently, it will wash out.
Bale ditch checks must be dug into the ground. Bales at ground level do not work because they allow water to flow under the check.

Inspection and Maintenance:

Bale ditch checks should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Does water flow around the ditch check?
Does water flow under the ditch check?
Does water flow through spaces between abutting bales?
Are any bales and/or scour aprons (optional) dislodged?
Are bales decomposing due to age and/or water damage?
Does sediment need to be removed from behind the ditch check?



SILT FENCE BARRIERS

SILT FENCE BARRIERS

Material Specification:

Silt fence fabric should conform to the AASHTO M288 96 silt fence specification.
The posts used to support the silt fence fabric should be a hardwood material with the following minimum dimensions: 2" square (nominal) by 4' long.
Silt fence fabric should be attached to the wooden posts with staples, wire, zip ties, or nails.

Placement:

A slope barrier should be used at the toe of a slope when a ditch does not exist. The slope barrier should be placed on nearly level ground 5' to 10' away from the toe of a slope. The barrier is placed away from the toe of the slope to provide adequate storage for settling out sediment.
When practicable, silt fence slope barriers should be placed along contours to avoid a concentration of flow.
Silt fence slope barriers can also be placed along right-of-way fence lines to keep sediment from crossing onto adjacent property. When placed in this manner, the slope barrier will not likely follow contours.

Proper installation method:

Excavate a trench the length of the planned slope barrier that is 6" deep by 4" wide. Make sure that the trench is excavated along a single contour. When practicable, slope barriers should be placed along contours to avoid a concentration of flow. Place the soil on the upslope side of the trench for later use.
Roll out a continuous length of silt fence fabric on the downslope side of the trench. Place the edge of the fabric in the trench starting at the top upslope edge. Line all three sides of the trench with the fabric. Backfill over the fabric in the trench with the excavated soil and compact. After filling the trench, approximately 24" to 36" of silt-fence fabric should remain exposed.
Lay the exposed silt fence upslope of the trench to clear an area for driving in the posts. Just downslope of the trench, drive posts into the ground to a depth of at least 18".
Place posts no more than 4' apart.
Attach the silt fence to the anchored post with staples, wire, zip ties, or nails.

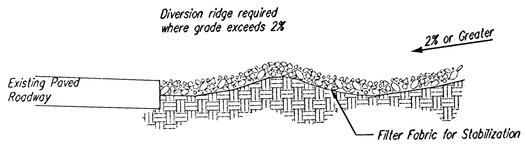
List of common placement/installation mistakes to avoid:

When practicable, do not place silt fence slope barriers across contours. Slope barriers should be placed along contours to avoid a concentration of flow. When the flow concentrates, it overtops the barrier and the silt fence slope barrier quickly deteriorates.
Do not place silt-fence posts on the upslope side of the silt fence fabric. In this configuration, the force of the water is not restricted by the posts, but only by the staples (wire, zip ties, iiails, etc.). The silt fence will rip and fail.
Do not place silt fence slope barriers in areas with shallow soils underlain by rock. If the barrier is not sufficiently anchored, it will wash out.
Silt fence slope barriers must be dug into the ground-silt fence at ground level does not work because water will flow underneath.

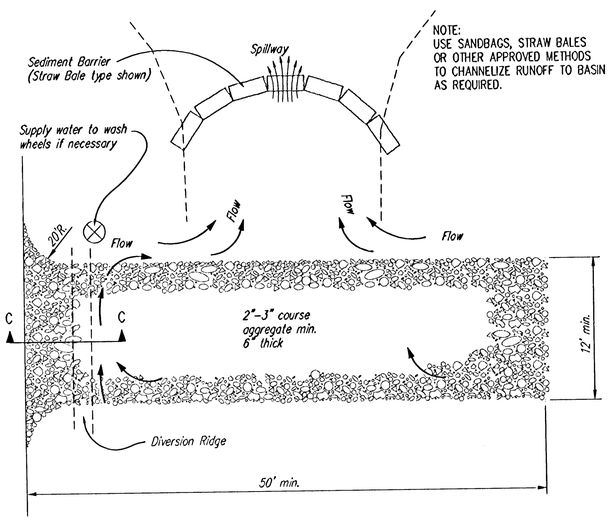
Inspection and Maintenance:

Silt fence slope barriers should be inspected every 7 days and within 24 hours of a rainfall of 1/2" or more. The following is a list of questions that should be addressed during each inspection:

Are there any points along the slope barrier where water is concentrating?
Does water flow under the slope barrier?
Do the silt fences sag excessively?
Has the silt fence torn or become detached from the posts?
Does sediment need to be removed from behind the slope barrier?



SECTION C-C



STABILIZED CONSTRUCTION ENTRANCE

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWNG OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABLIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

* FOR INFORMATION ONLY

3,936 SY EROSION CONTROL MAT
11 EA. STRAW BALE DITCH CHECKS
1,853 LF SILT FENCE
1 EA. STABILIZED CONSTRUCTION ENTRANCE

* TO BE PAID FOR AS THE LUMP SUM BID ITEM "EROSION CONTROL BMP'S"

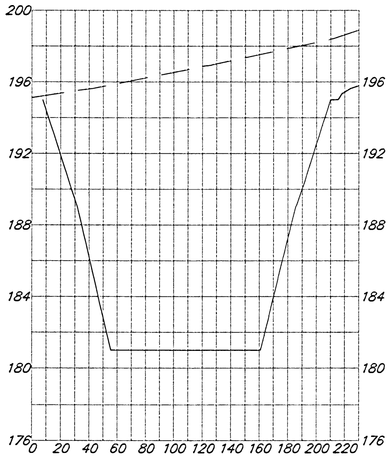
CITY OF WICHITA

SOIL EROSION BMP DETAILS

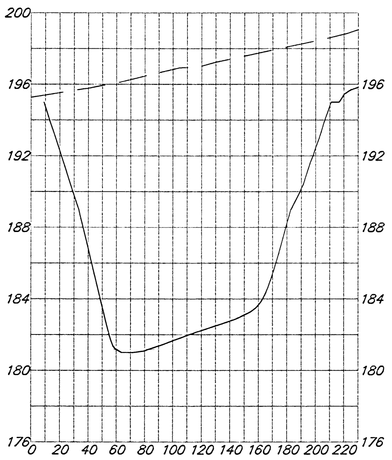
CHRISTOPHER M. CARRIER, P.E.
STORM WATER ENGINEER

PROJECT NUMBER	OCA NO.
468-83404	751339
DATE: JUL 2003	SHEET 4 OF 7

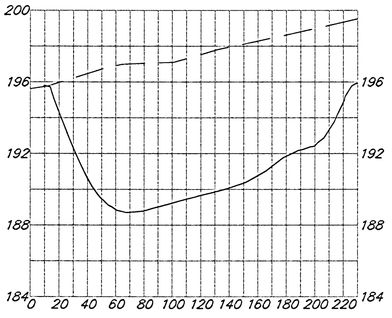
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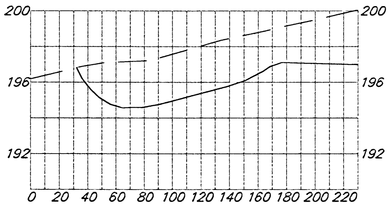
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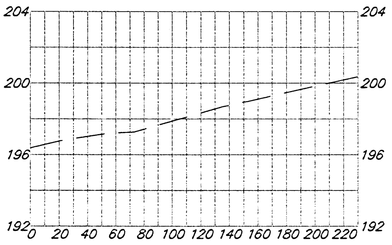
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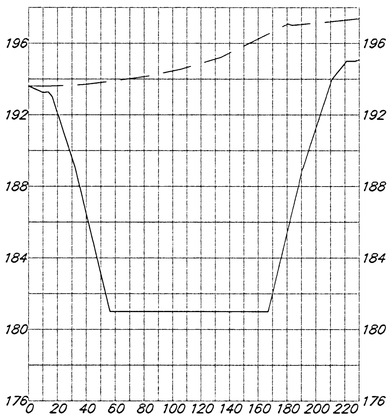
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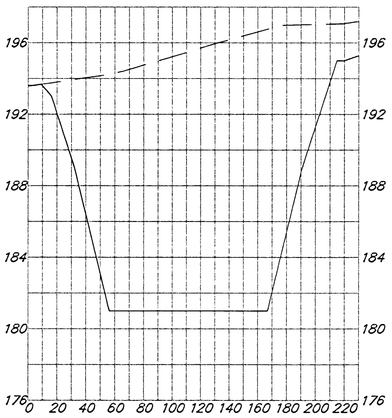
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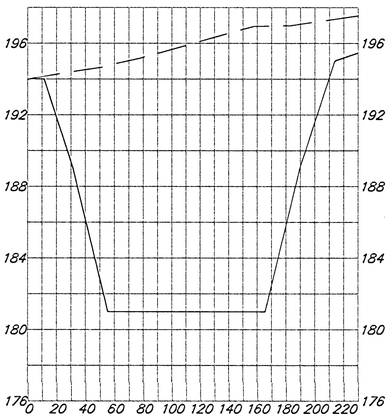
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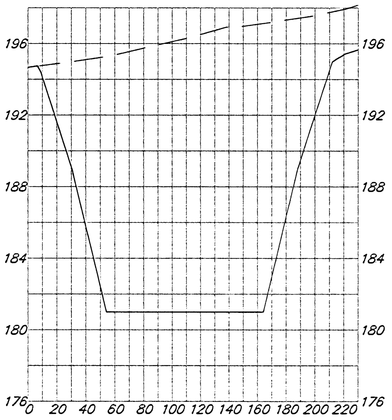
2+00



1+50



1+00



BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-1221 • 315 ELLIS • WICHITA, KANSAS 67211

PROJECT NUMBER
468-83404

REV.

SHEET
5/7

3+70

3+50

3+30

3+10

2+90

2+70

BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

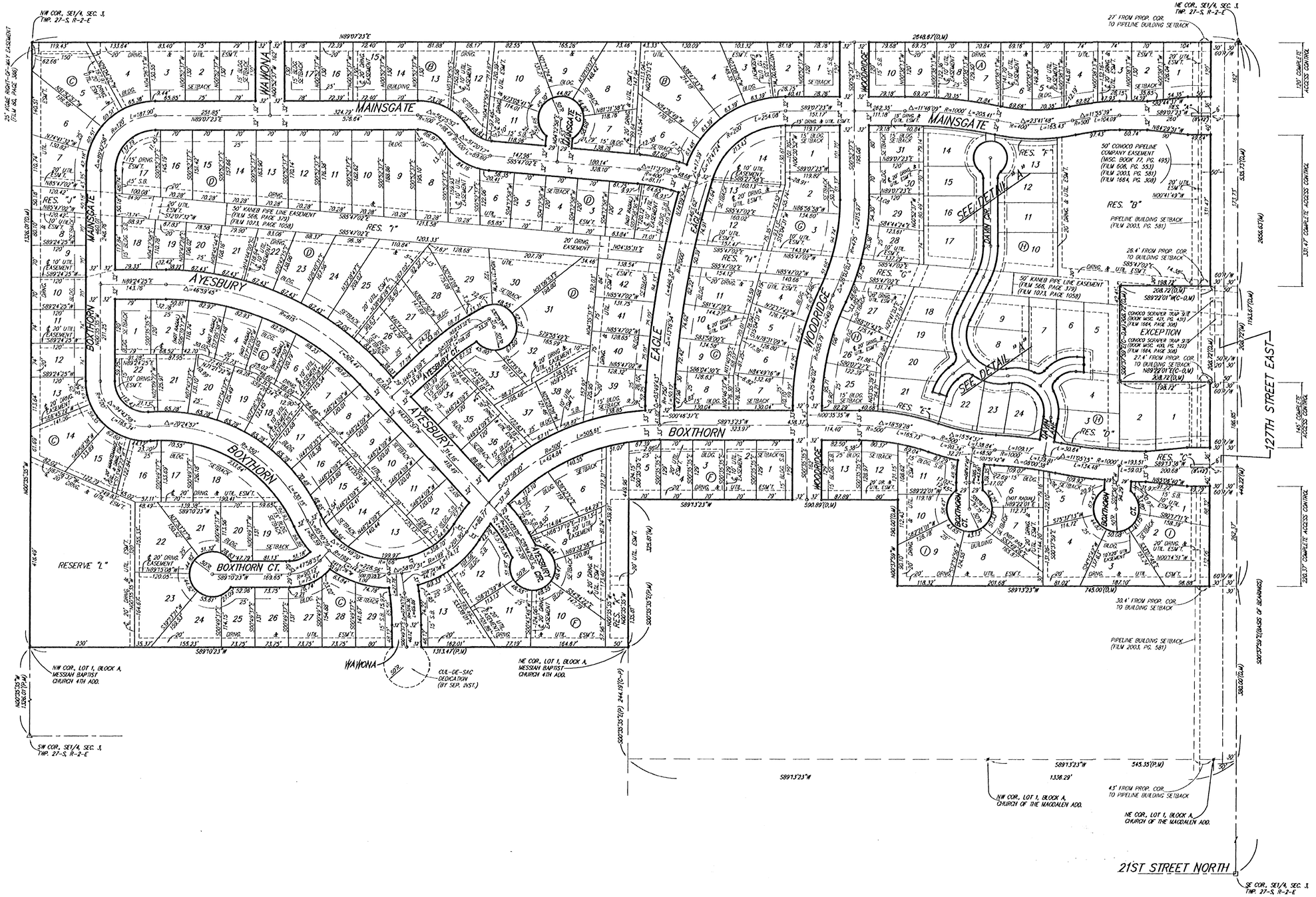
REV.

PROJECT NUMBER
468-83404

SHEET
6/7

THE FAIRMONT

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES			
LOT(S)	BLOCK	ELEVATION	
		CITY DATUM	NGVD29
14,15,16,22,23	C	198.5	1383.9
5-10	F	198.5	1383.9
5-7, 9-13	H	188.0	1373.4

BENCHMARK:

GREENWICH AND 21ST NORTH
CITY OF WICHITA BENCHMARK DISC
41' SOUTH AND 58' WEST OF IRON CTR. LINE BOTH.
17.0' SW OF ASPHALT, 14.2' EAST OF FACE P.P.
17.0' WEST OF FACE P.P.
ELEVATION = 173.98 (CITY DATUM), 1381.38 NGVD

COUNTY "D" CUT, SOUTH HEADWALL
1/2 MILE WEST OF 127TH ST. EAST
ON 37TH STREET NORTH
ELEV. = 185.83 (CITY DATUM), 1373.23 NGVD

TOP OF IRON - SE COR., SE1/4, SEC. 3, TWP. 27-S, R-2-E, (127TH ST. EAST & 21ST ST. NORTH)
ELEV. = 198.01 (CITY DATUM), 1385.41 NGVD

Note:
The following instrument is in the process of being released this 7th day of January, 2003: Telephone and Telegraph Easement to Shell Petroleum Corporation (Misc. Book 77, Page 413) and last assigned to Conoco Pipe Line Company (Film 1684, Page 308)

NOTE:
A master grading plan for drainage has been developed for this subdivision and is on file with the City of Wichita, Kansas. All drainage easements, right-of-ways, or reserves shall remain at established grades or as modified with the approval of the City Engineer of the City of Wichita, Kansas. No obstructions which impede the flow of this drainage system be allowed.

40-50-11-01

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 319 ELLIS • WICHITA, KANSAS 67211
T:\PLAT\THE FAIRMONT\FAIRMONT.DWG-MOD

THE FAIRMONT
40-50-11-01
4-10-03