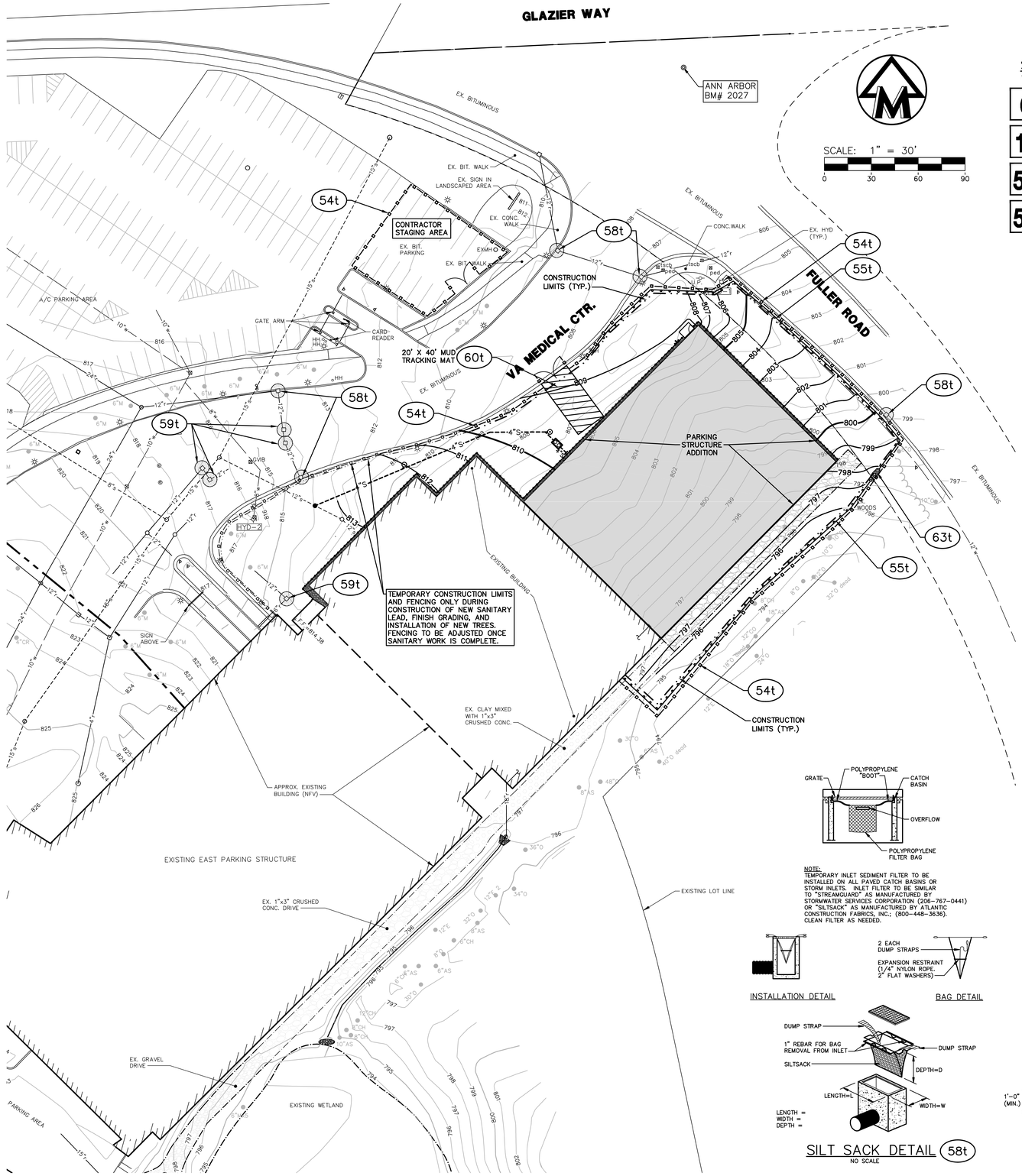
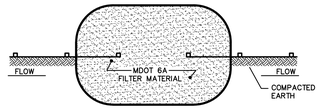


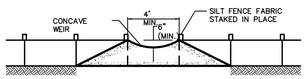
SOIL EROSION CONTROL MEASURES

t = temporary p = permanent

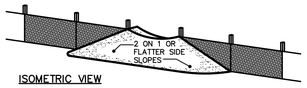
6	SEEDING WITH MULCH AND/OR MATTING	58	CURB INLET FILTER
13	RIPRAP, RUBBLE, GABIONS	59	C.B./INLET FILTER
54	CONSTRUCTION FENCE	60	MUD TRACKING MAT
55	GEOTEXTILE SILT FENCE	63	SILT FENCE WITH STONE FILTER



PLAN VIEW



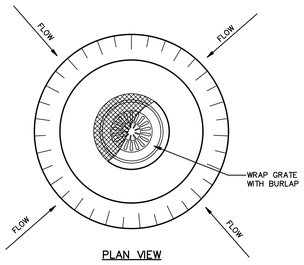
FRONT VIEW



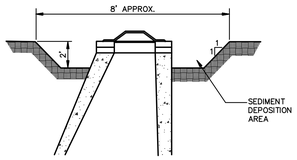
ISOMETRIC VIEW

STONE OUTLET FILTER (63t)

NOT TO SCALE



PLAN VIEW



CROSS-SECTION

INLET SEDIMENT TRAP (59t)

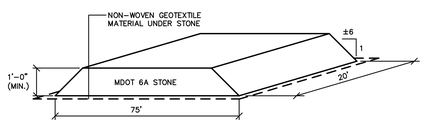
NO SCALE

NOTE:
TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (206-767-0441) OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC.; (800-448-3636). CLEAN FILTER AS NEEDED.

INSTALLATION DETAIL BAG DETAIL

SILT SACK DETAIL (58t)

NO SCALE



GRAVEL MUD TRACKING MAT (60t)

NOT TO SCALE

SOIL EROSION AND SEDIMENTATION CONTROL PLAN

DESCRIPTION OF PROJECT: VA ANN ARBOR HEALTHCARE SYSTEM
CONSTRUCT NORTH PARKING STRUCTURE

1. THE CLOSEST CREEK IS LOCATED APPROXIMATELY 800 FEET SOUTH OF THE PROJECT.
2. PREDOMINANT LAND FEATURES ARE SHOWN ON THE DRAWINGS.
3. GROUND SURFACE ELEVATIONS ARE SHOWN AS CONTOUR INTERVALS AND SPOT ELEVATIONS.
4. PHYSICAL LIMITS OF CONSTRUCTION ARE SHOWN ON THE DRAWING. APPROXIMATE SITE DISTURBANCE IS 1.33 ACRES.
5. THE CONTRACTOR WILL RESTORE ALL DISTURBED GRASS AREAS WITHIN FIVE (5) DAYS OF THE CONTRACTOR'S FINE GRADING.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL MAINTENANCE OF TEMPORARY EROSION CONTROL MEASURES.
7. TEMPORARY MEASURES WILL ONLY BE REMOVED AFTER ALL PERMANENT MEASURES ARE IN PLACE AND COMPLETE INCLUDING WELL ROOTED GROWTH IN THE GRASS AREAS.
8. THE CONTRACTOR SHALL AS A TEMPORARY MEASURE SEED AND MULCH DISTURBED AREAS THAT ARE NOT ACTUALLY PART OF THE CONSTRUCTION WORK ZONE IF SAID AREAS ARE NOT TO BE WORKED ON FOR ANY EXTENDED PERIOD OF TIME.

SOIL EROSION AND SEDIMENTATION CONTROL MAINTENANCE NOTES

IN ACCORDANCE WITH RULE 1709 PROMULGATED UNDER THE AUTHORITY OF PART 91, SOIL EROSION AND SEDIMENTATION CONTROL, OF THE NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT, 1994 PA 451, AS AMENDED, AND IN ADDITION TO THE INFORMATION IN THE PROJECT PLANS AND SPECIFICATIONS, THE FOLLOWING GENERAL CONDITIONS APPLY TO THE EARTH CHANGE AUTHORIZED BY THIS DOCUMENT:

a) DESIGN, CONSTRUCT, AND COMPLETE THE EARTH CHANGE IN A MANNER THAT LIMITS THE EXPOSED AREA OF DISTURBED LAND FOR THE SHORTEST PERIOD OF TIME.

b) REMOVE SEDIMENT CAUSED BY ACCELERATED SOIL EROSION FROM RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH CHANGE.

c) TEMPORARY OR PERMANENT CONTROL MEASURES SHALL BE DESIGNED AND INSTALLED TO CONVEY WATER AROUND, THROUGH OR FROM THE EARTH CHANGE AT NON-EROSIVE VELOCITY.

d) INSTALL TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES BEFORE OR UPON COMMENCEMENT OF EARTH CHANGE ACTIVITY AND MAINTAIN THE MEASURES ON A DAILY BASIS. REMOVE TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AFTER PERMANENT SOIL EROSION MEASURES ARE IN PLACE AND THE AREA IS STABILIZED. ("STABILIZED" MEANS THE ESTABLISHMENT OF VEGETATION OR THE PROPER PLACEMENT , GRADING OR COVERING OF SOIL TO ENSURE ITS RESISTANCE TO SOIL EROSION, SLIDING, OR OTHER EARTH MOVEMENT.)

e) COMPLETE PERMANENT SOIL EROSION CONTROL MEASURES FOR THE EARTH CHANGE WITHIN FIVE (5) CALENDAR DAYS AFTER FINAL GRADING OR UPON COMPLETION OF THE FINAL EARTH CHANGE. IF IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE THE EARTH CHANGE, THEN MAINTAIN TEMPORARY SOIL EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IN PLACE AND THE AREA IS STABILIZED.

f) THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING LANDSCAPING DURING THE WARRANTY PERIOD. AFTER THE WARRANTY HAS EXPIRED, THE PERMANENT SESC MEASURES WILL BE MAINTAINED BY THE OWNER.

SOIL EROSION AND SEDIMENTATION CONTROL SEQUENCE

1. INSTALL TEMPORARY INLET FILTERS AT ALL ADJACENT AND DOWN-GRADIENT STORM WATER INLETS, CATCH BASINS AND MANHOLES THAT MAY BE IMPACTED. CATCH BASIN INLET FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT.
2. INSTALL AN ANTI-TRACKING PAD AT THE SITE ENTRY AND EXIT(S). THE ANTI-TRACKING PAD SHOULD BE CONSTRUCTED OF GEOTEXTILE FABRIC WITH LIMESTONE OVER IT.
3. INSTALL SILT FENCING AS SHOWN ON THE PLANS. SILT FENCE SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. IF REPAIR OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT ACCUMULATES TO ½ THE HEIGHT OF THE FENCE. CONTRACTOR SHALL REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. ADDITIONALLY, THE CONTRACTOR SHALL REINSTALL ANY PORTION OF THE FENCING DAMAGED BY CONSTRUCTION MACHINERY.
4. PLACE STOCKPILES AND OTHER SPOIL PILES AWAY FROM THE DRAINAGE SYSTEM TO MINIMIZE SEDIMENT TRANSPORT. IF THE STOCKPILE AND/OR SPOIL PILE MUST REMAIN ON-SITE OVERNIGHT, OR IF THE WEATHER CONDITIONS INDICATE THE CHANCE FOR PRECIPITATION:
   a. COVER THE PILE WITH WATER REPELLANT MATERIAL TO PREVENT EROSION AND/OR
   b. INSTALL SILT FENCING AROUND THE BASE OF THE PILE TO PREVENT TRANSPORT OF SEDIMENT TO THE STORM WATER SYSTEM, OR APPLY OTHER CONTROL METHODS APPROPRIATE TO THE SITE. CONTROL MEASURES TO GUARD AGAINST WIND EROSION MUST ALSO BE EMPLOYED, SUCH AS WETTING OR COVERING OF STOCKPILES. KEEP AS FEW STOCKPILES AS POSSIBLE DURING THE COURSE OF THE PROJECT.
5. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
6. SEEDING AND OTHER STABILIZATION SHALL BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
7. THE CONTRACTOR SHALL MAINTAIN DUST CONTROL ON THE SITE THROUGHOUT THE DURATION OF THE CONSTRUCTION PROCESS.
8. WEEKLY INSPECTIONS BY A TRAINED CERTIFIED STORM WATER MANAGEMENT OPERATOR AS WELL AS PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL WILL BE REQUIRED. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR THE ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS ADDITIONAL CONTROLS.

LEGEND

838	EXIST. CONTOUR
838	PROVIDE CONTOUR
×836.2	EXIST. SPOT ELEVATION
36.60	PROVIDE SPOT ELEVATION
U.P.	EXIST. UTILITY POLE
GP	EXIST. GUY POLE
	GUY WIRE
	ELEC. TRANSFORMER
OH	EXIST. OVERHEAD UTILITY LINE
	EXIST. LIGHT POLE
t	EXIST. TELEPHONE LINE
e	EXIST. ELECTRIC LINE
g	EXIST. GAS LINE
g	EXIST. GAS VALVE
f.o.	EXIST. FIBER OPTIC LINE
w	EXIST. WATER MAIN
W	PROVIDE WATER MAIN
	EXIST. HYDRANT
	PROVIDE HYDRANT
	EXIST. GATE VALVE IN BOX
	PROVIDE GATE VALVE IN BOX
	EXIST. GATE VALVE IN WELL
	PROVIDE GATE VALVE IN WELL
	EXIST. CURB STOP & BOX
	PROVIDE CURB STOP & BOX
	EXIST. BLOW-OFF
	PROVIDE BLOW-OFF
r	EXIST. STORM SEWER
R	PROVIDE STORM SEWER
	EXIST. CATCH BASIN OR INLET
	PROVIDE CATCH BASIN OR INLET
	END SECTION
	HEAD WALL
	CULVERT
s	EXIST. SANITARY SEWER
S	PROVIDE SANITARY SEWER
	EXIST. CLEANOUT
	PROVIDE CLEANOUT
	C/L OF DITCH
	DRAINAGE DIRECTION
T	ENCLOSED TRASH AREA
	SIGN
MB	MAILBOX
t	TELEPHONE RISER
catv	CABLE TELEVISION RISER
e	ELECTRIC METER
w	WATER METER
g	GAS METER
gm	GAS LINE MARKER
fber	FIBER OPTIC MARKER
PED	PEDESTRIAN CROSSING SIGNAL
tscb	TRAFFIC SIGNAL CONTROL BOX
	POST
	FENCE
	SINGLE TREE
	TREE OR BRUSH LIMIT
	SECTION CORNER
SB-1	SOIL BORING LOCATION
S	SET IRON PIPE
F	FOUND IRON PIPE
F	FOUND MONUMENT
FPK	FOUND P.K.
S	SET IRON ROD
FIR	FOUND IRON ROD
	CONTROL PT.
	SILT FENCE
	LIMITS OF CONSTRUCTION
	CONSTRUCTION FENCE
FF	FINISH FLOOR ELEVATION

NOTES:

1. CONTRACTOR TO OBTAIN GRADING, SOIL EROSION CONTROL, AND R.O.W. PERMITS FROM THE CITY OF ANN ARBOR PRIOR TO START OF CONSTRUCTION.
2. HORIZONTAL AND VERTICAL SURVEYS MUST BE COMPLETED BEFORE ANY PERMANENT WORK IS INSTALLED TO ENSURE PROPER ALIGNMENT AND ORIENTATION OF NEW PARKING STRUCTURE.
3. CERTIFIED STORM WATER OPERATOR IS REQUIRED TO COMPLETE A WEEKLY SOIL EROSION INSPECTION LOG ON A TEMPLATE PROVIDED BY THE MDEQ (MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY) AND WITHIN 24 HOURS AFTER A RAINFALL EVENT.
4. WASTE AND RECYCLE REPORTS SHALL BE SENT WEEKLY TO GEMS (GLOBAL ENVIRONMENTAL MANAGEMENT SERVICES) COORDINATOR FOR RECORDS.
5. SEE C-501 FOR ADDITIONAL DETAILS.

Know what's below. Call before you dig.

1 SOIL EROSION CONTROL PLAN

Revisions	Date
100% FINAL BID DOCUMENTS	08-18-2017
100% BID DOCUMENTS-NOT FOR CONSTRUCTION	07-24-2017
95% CONSTRUCTION DOCUMENTS SUBMISSION	06-15-2017
65% DESIGN DEVELOPMENT SUBMISSION	04-19-2017
35% SCHEMATIC DESIGN SUBMISSION	03-06-2017

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Wireless Communications • Transportation • Landfill Services

KEYPLAN

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Bancroft-AE Project No. 16-121

Drawing Title: SOIL EROSION CONTROL PLAN	Project Title: CONSTRUCT NORTH PARKING STRUCTURE		Project Number: 506-331
Approved: Project Director	Location: ANN ARBOR, MICHIGAN		Building Number: 29
	Date: 08-18-2017	Checked: RCW / Drawn: TPH	Drawing Number: CG-102

Office of Construction and Facilities Management
Department of Veterans Affairs

VA FORM 08-6231

100% FINAL BID DOCUMENTS

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three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot
three quarters inch = one foot
one half inch = one foot
one inch = one foot
one and one half inches = one foot
three inches = one foot