







1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.

- PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
- 3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
- 4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.

5. USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES FOR THE FOLLOWING:

GRAB TENSILE PUNCTURE FLOW RATE PERMITTIVITY (SEC⁻¹) UV RESISTANCE APPARENT OPENING SIZE (AOS) SEAM STRENGTH R EXCEEDS MINIMOM AVERAGE 250 LB 150 LB 70 GAL/MIN/FT² 1.2 SEC⁻¹ 70% STRENGTH @ 500 HOURS 0.15-0.18 MM 90% FOR THE FOLL ASTM D-4632 ASTM D-4833 ASTM D-4491 ASTM D-4491 ASTM D-4355 ASTM D-4751 ASTM D-4632

6. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.

DEPARTMENT OF ENGINEERING & MAPPING/ENGINEERING DIVISION CITY OF HUNTSVILLE, TEXAS

NAME: FILTER BAG CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/22/2016 DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR



448 State Highway 75

Huntsville, TX 77320





City Service Center 448 State Highway 75 Huntsville, TX 77320

SWC-07

SCALE: N.T.S

APPROVED BY: YSR







- 1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
- 2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
- 3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (3/8 TO 1½ INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- 4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF THE RIPRAP.
- 5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- 6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
- 7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
- 8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

DEPARTMENT OF ENGINEERING & MAPPING/ENGINEERING DIVISION CITY OF HUNTSVILLE, TEXAS

NAME: ROCK OUTLET PROTECTION I CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/21/2016 DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR



Huntsville, TX 77320

CITY OF HUNTSVILLE STANDARD DETAILS ROCK OUTLET PROTECTION I

REV#	ISSUER	DATE	APPROVER	SHEET	
0	MAM	08/10/2018		1 OF 3	
				014/0 40	
				SWC-10	



- 1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
- 2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
- 3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (3/8 TO 1½ INCH STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- 4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
- 5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE STONE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- 6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
- 7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
- 8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

DEPARTMENT OF ENGINEERING & MAPPING/ENGINEERING DIVISION CITY OF HUNTSVILLE, TEXAS

NAME: ROCK OUTLET PROTECTION II CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/21/2016 DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR



448 State Highway 75

Huntsville, TX 77320

CITY OF HUNTSVILLE STANDARD DETAILS ROCK OUTLET PROTECTION II

REV#	ISSUER	DATE	APPROVER	SHEET 2 OF 3
				SWC-11



- 1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
- 2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
- PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (³/₈ TO 1¹/₂ INCH MINIMUM STONE FOR
 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- 4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
- 5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- 6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
- 7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
- 8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

DEPARTMENT OF ENGINEERING & MAPPING/ENGINEERING DIVISION CITY OF HUNTSVILLE, TEXAS

NAME: ROCK OUTLET PROTECTION III CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/21/2016 DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR



City Service Center 448 State Highway 75 Huntsville, TX 77320

CITY OF HUNTSVILLE STANDARD DETAILS ROCK OUTLET PROTECTION III

REV#	ISSUER	DATE	APPROVER	SHEET
0	MAM	08/10/2018		3 OF 3
				SWC-12









RI	TYPICAL SEC	CTION	NO STEEPE NO STEEPE SURFACES	OVEF R THAN 1.5:1 R THAN 2:1 F	RLAND FLOW DIV	YERSION SK
 NOTES: DIVERT OVERLAND FLOW FROM TH MAKE SERRATIONS AS THE EXCAVE CONSTRUCT EACH STEP OR SERFE FINAL SLOPE RATIO. FOR RIPLE HORIZONTAL (RUN) SERRATIONS AFOOT VERTICAL (RISE) AND FOUR KEEP ALL BENCHES FREE OF SED HANDLE SEEPS OR SPRINGS SUBSURFACE DRAINS OR OTHER AFOR AND CROSE GRADED, NON ROCK SURFACES IN ON THE APPROVED EROSION AND VEGETATIVE ESTABLISHMENT IN A 	HE TOP OF ALL SERRATE (ATION PROGRESSES. RATION ON THE CONTOU ABLE ROCK SURFACES AT A SLOPE RATIO NO S FOOT HORIZONTAL (RUN MENT DURING ALL PHAS ENCOUNTERED DURING APPROVED METHODS. S SECTION OF SERRATE ACCORDANCE WITH THI SEDIMENT CONTROL PL/ CCORDANCE WITH SECT	ED CUT S JR. RISE 5, MAKE TEEPER IS) SERF ES OF C CONS D SLOPI E 3/7 DA AN. CON TON B-4	& RUN DIME TWO FOO THAN 1.5:1. RATIONS AT CONSTRUCT STRUCTION ES. TEMPOF Y STABILIZA TINUOUSLY VEGETATIVI	CARRY TO A ENSIONS WILI T VERTICAL FOR NON R A SLOPE RAT ION. IN ACCORD RARILY OR PE TION REQUIR MEET REQUI E STABILIZATI	SUITABLE OUTL (RISE) AND TH OCK SURFACES, IO NO STEEPER ANCE WITH SE RMANENTLY ST EMENTS OR AS REMENTS FOR A ION.	et. Ing on the Iree foot Make two Than 2:1. Ection H-2 Abilize All Specified Dequate
DEPARTMENT OF ENGINEERING & MAPPING/ENGINEERING 	Huntsville		CITY O <u>F</u>	HUNTSVILLE LAND GF SERRATEI	STANDARD DET RADING D SLOPE	AILS
NAME: LAND GRD'G, SERRATED SLOPE CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/23/2016		REV#	ISSUER MAM	DATE 08/10/2018	APPROVER	SHEET 1 OF 1
DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR	City Service Center 448 State Highway 75 Huntsville, TX 77320					SWC-17



- USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
- 3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
- 4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- 5. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
- 6. KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.
- 7. OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
- 8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
- 9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

DEPARTMENT OF ENGINEERING & MAPPING/ENGINEERING DIVISION CITY OF HUNTSVILLE, TEXAS

NAME: TEMP. SOIL STBL - CHANNEL CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/23/2016 DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR



CITY OF HUNTSVILLE STANDARD DETAILS

TEMPORARY SOIL STABILIZATION MATTING CHANNEL APPLICATION

REV#	ISSUER	DATE	APPROVER	SHEET
0	MAM	08/10/2018		1 OF 1
				SWC-18

City Service Center 448 State Highway 75 Huntsville, TX 77320

OVERLAP OR ABUT ROLL EDGES (TYP.) 6" DEEP (MIN.) KEY IN TRENCH PREPARED SLOPE (SEEDBED) WITH SEED IN PLACE						
	ISOMET	RIC VIE	N			
NOTES:						
1. USE MATTING THAT HAS A DESIGNATED ON APPROVED PLAN	GN VALUE FOR SHEAR S	STRESS	EQUAL TO	OR HIGHER	THAN THE SHE	AR STRESS
2. USE TEMPORARY SOIL STABILIZA MAN-MADE FIBERS (MOSTLY OR	TION MATTING MADE O GANIC). MAT MUST HA	F DEGR	ADABLE (LA FORM THIC	STS 6 MONT KNESS AND	HS MINIMUM) NA	ATURAL OR OF FIBERS
THROUGHOUT AND BE SMOLDER I TO VEGETATION AND SEED GEF EXTRUDED PLASTIC WITH A MAXIM CENTERS ALONG LONGITUDINAL A	RESISTANT. CHEMICALS RMINATION AND NON-IN IUM MESH OPENING OF 2 AXIS OF THE MATERIAL	USED IN IJURIOU 2x2 INCH TO PRE	N THE MAT N IS TO THE IES AND SUP VENT SEPAN	IUST BE NON SKIN. IF PRE FFICIENTLY BO RATION OF TH	LEACHING AND SENT, NETTING ONDED OR SEWN HE NET FROM T	NON-TOXIC MUST BE NON 2 INCH HE PARENT
3. SECURE MATTING USING STEEL S	TAPLES, WOOD STAKES	S, OR BI			ENT. STAPLES M	IUST BE "U"
MUST AVERAGE 1 TO 1 ¹ / ₂ INCHES W 6 INCHES LONG. "T" SHAPED STAF	IDE AND BE A MINIMUM (LES MUST HAVE A MINIM	OF NO. OF MUM 8 II	NCH MAIN LI	EG, A MINIMU	M 1 INCH SECON	NDARY LEG,
AND A MINIMUM 4 INCH HEAD. WOO 12 TO 24 INCHES IN LENGTH. 1x3 IN	DD STAKES MUST BE ROU CH IN CROSS SECTION.	UGH-SA AND WE	WN HARDWO	DOD, D AT THE BOT	TOM.	
4. PERFORM FINAL GRADING, TO ACCORDANCE WITH SPECIFICATI	PSOIL APPLICATION, S) PREPARA 48 HOURS (TION, AND	PERMANENT S NG SEEDING O	EEDING IN PERATIONS
UNLESS END OF WORKDAY STABIL 5. UNROLL MATTING DOWNSLOPE. L	IZATION IS SPECIFIED O	N THE A	PPROVED E	ROSION & SEI	DIMENT CONTRO RFACE. AVOID S)L PLAN. TRETCHING
THE MATTING. 6. OVERLAP OR ABUT ROLL EDGES	PER MANUFACTURER	RECOM	MENDATION	S. OVERLAP	ROLL ENDS BY	Y 6 INCHES
(MINIMUM), WITH THE UPSLOPE MA	AT OVERLAPPING ON TOP T 6 INCHES (MINIMUM) B	of Thi Y Diggi	E DOWNSLO	PE MAT. CH. PLACING	THE MATTING R	OLL END IN
THE TRENCH, STAPLING THE MAT	IN PLACE, REPLACING	THE EX	CAVATED M	ATERIAL, AND	TAMPING TO SI	ECURE THE
8. STAPLE/STAKE MAT IN A STAG	GERED PATTERN ON 4	FOOT	(MAXIMUM)	CENTERS T	HROUGHOUT AI	ND 2 FEET
9. ESTABLISH AND MAINTAIN VEGET CONTINUOUSLY MET IN ACCORDA	ATION SO THAT REQUIRINCE WITH SECTION B-4 V	EMENTS /EGETA ⁻	S FOR ADEQ TIVE STABILI	UATE VEGETA ZATION.	ATIVE ESTABLISH	HMENT ARE
DEPARTMENT OF ENGINEERING &			CITY OF	HUNTSVILLE	STANDARD DET	AILS
	City of ille		TEMPOR	ARY SOIL STA SLOPE APP	BILIZATION MAT	TING
	Huntsvine		ISSUER			
CATEGORY: STORM WATER CONTROL		0	MAM	08/10/2018		SHEET 1 OF 1
DRAWN BY: WLSIII	City Service Center 448 State Highway 75					
APPROVED BY: YSR	Huntsville, TX 77320					3000-19



- 1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
- 2. USE PERMANENT SOIL STABILIZATION MATTING MADE OF OPEN WEAVE SYNTHETIC, NON-DEGRADABLE FIBERS OR ELEMENTS OF UNIFORM THICKNESS AND DISTRIBUTION THROUGHOUT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
- 3. SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1 ½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.
- 4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- 5. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTER LINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
- 6. OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
- 7. KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
- 8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FEET (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
- 9. IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT.
- 10. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

NAME: PERM. SOIL STBL. - CHANNEL CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/23/2016 DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR



City Service Center 448 State Highway 75 Huntsville, TX 77320

CITY OF HUNTSVILLE STANDARD DETAILS

PERMANENT SOIL STABILIZATION MATTING CHANNEL APPLICATION

REV#	ISSUER	DATE	APPROVER	SHEET
0	MAM	08/10/2018		1 OF 1
				SW/C 20
				500-20



City Service Center 448 State Highway 75 Huntsville, TX 77320

DRAWN DATE: 11/23/2016

DRAWN BY: WLSIII

SCALE: N.T.S. APPROVED BY: YSR

REV#	ISSUER	DATE	APPROVER	SHEET
0	MAM	08/10/2018		1 OF 1
				SWC-21
				00021

















NAME: DIVERSION FENCE CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/22/2016 DRAWN BY: WLSIII SCALE: N.T.S APPROVED BY: YSR



448 State Highway 75

Huntsville, TX 77320

ISSUER DATE REV# 0 MAM 08/10/2018

SHEET

1 OF 1

SWC-29





VEGETATED SEDIMENT FILTER STRIPS





NAME: REINFORCED FILTER FABRIC	
DRAWN DATE: 11/22/2016	
DRAWN BY: WLSIII	
SCALE: N.T.S. APPROVED BY: YSR	



REV#	ISSUER	DATE	APPROVER	SHEET
0	MAM	08/10/2018		1 OF 1
				SWC-33
				500-55





 MAINTAIN A MINIMUM OF 1 FOOT MEASURED VERTICALLY FROM THE BOTTOM OF EXCAVATION FOR INLET OPENING.
 WHEN THE INLET IS IN A ROADWAY, INSTALL THE TRAP ON THE OPPOSITE SIDE OF THE OPENING AND DIVERT WATER FROM THE ROADWAY TO THE TRAP.

DEPARTMENT OF ENGINEERING & MAPPING/ENGINEERING DIVISION CITY OF HUNTSVILLE, TEXAS

NAME: STONE INLET SEDIMENT TRAP CATEGORY: STORM WATER CONTROL DRAWN DATE: 11/22/2016 DRAWN BY: WLSIII SCALE: N.T.S. APPROVED BY: YSR



448 State Highway 75

Huntsville, TX 77320

CITY OF HUNTSVILLE STANDARD DETAILS
STONE INLET SEDIMENT TRAP

REV#	ISSUER	DATE	APPROVER	SHEET
0	MAM	08/10/2018		1 OF 1
				SWC-35







