



REVIEW BY FORT BEND COUNTY
COMMISSIONERS COURT

Fort Bend County
Engineering Department

301 Jackson Suite 401
Richmond, Texas 77469
281.633.7500

Permits@fortbendcountytx.gov

☐

Right of Way Permit

☒

Commercial Driveway Permit

Permit No: 2021-47985

The following "Notice of Proposed Cable, Conduit, and/or Pole Line activity in Fort Bend County" and accompanying attachments have been reviewed and the notice conforms to appropriate regulations set by Commissioner's Court of Fort Bend County, Texas.

(1) COMPLETE APPLICATION FORM:

☒
☒
☒

- a. Name of road, street, and/or drainage ditch affected.
b. Vicinity map showing course of directions
c. Plans and specifications

(2) BOND:

☐

County Attorney, approval when applicable.

☒

Perpetual bond currently posted.

Bond No:



Amount: \$50,000.00

☐

Performance bond submitted.

Bond No:

Amount:

☐

Cashier's Check

Check No:

Amount:

(3) DRAINAGE DISTRICT APPROVAL (WHEN APPLICABLE):

Drainage District Approval

Date

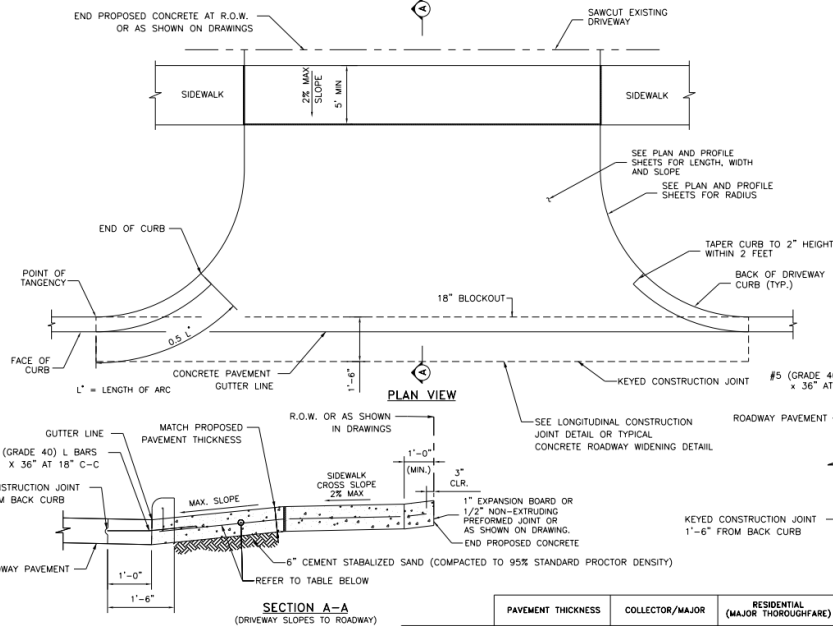
We have reviewed this project and agree it meets minimum requirements.

Permit Administrator

8/16/2021

Date

J:\1704\1804\Fort Bend County Standard\Fort Bend County STD\DRIVEWAY CONSTRUCTION\DRIVEWAY DETAILS FOR MAJOR ROADWAY CONSTRUCTION.dwg

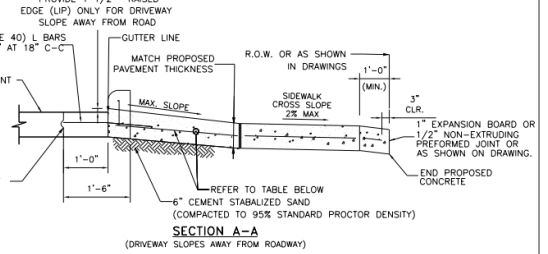


NOTES:

1. SAWCUT EXISTING DRIVEWAY AT R.O.W. LINE OR AS SHOWN ON DRAWING AND REMOVE EXISTING DRIVEWAY TO SAWCUT LINE.
2. IF THERE IS EXISTING CURB ON DRIVEWAY, CONNECT PROPOSED CURB TO EXISTING CURB OTHERWISE TAPER CURB HEIGHT AS SHOWN.
3. SEE PAVEMENT DETAIL SHEET FOR CONCRETE CURB REINFORCEMENT.
4. THIS DRIVEWAY INSTALLATION IS GOVERNED BY HARRIS COUNTY ITEM 360.

MINIMUM RADII REQUIREMENTS - DRIVEWAYS

	LOCAL	COLLECTOR/MAJOR
RESIDENTIAL	5'	-
COMMERCIAL	10'	25'



	PAVEMENT THICKNESS	COLLECTOR/MAJOR	RESIDENTIAL (MAJOR THOROUGHFARE)	RESIDENTIAL (COLLECTORS AND LOCAL STREETS)
REINFORCEMENT	6"	#4 @ 24" O.C.E.W.	N/A	#4 @ 24" O.C.E.W.
	7"	#4 @ 24" O.C.E.W.	#4 @ 24" O.C.E.W.	#4 @ 24" O.C.E.W.
	8"	#4 @ 18" O.C.E.W.	#4 @ 18" O.C.E.W.	#4 @ 18" O.C.E.W.
	9"-10"	#5 @ 18" O.C.E.W.	#5 @ 18" O.C.E.W.	#5 @ 18" O.C.E.W.
EXPANSION DOWEL JOINT	6"	3/4" DIA. SMOOTH BAR	3/4" DIA. SMOOTH BAR	3/4" DIA. SMOOTH BAR
	7"	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR
	8"	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR
	9"-10"	1 1/2" DIA. SMOOTH BAR	1 1/2" DIA. SMOOTH BAR	1 1/2" DIA. SMOOTH BAR
CONSTRUCTION JOINT DOWEL	ALL	#5 REBAR	#5 REBAR	#5 REBAR
SUBGRADE	ALL	6" CEMENT-STABILIZED SAND	2" BANK SAND	2" BANK SAND
RUNNING SLOPE	ALL	2% TO 4%	2% TO 6%	2% TO 10%*

*10% ALLOWABLE ON PRIVATELY CONSTRUCTED PROJECTS
6% MAX ON PUBLIC PROJECTS

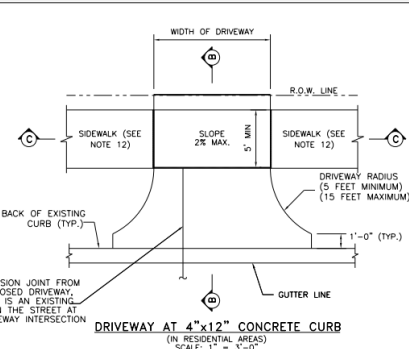
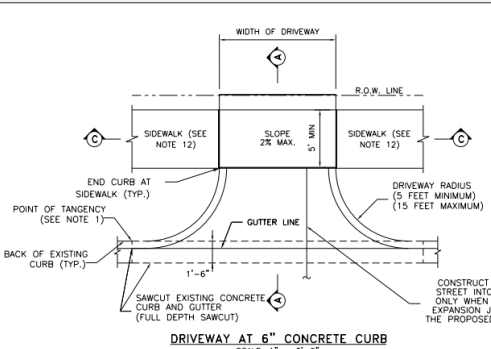
FORT BEND COUNTY
ENGINEERING DEPARTMENT



CONSULTANT LOGO
(LAYER "C-NON-PRINT")

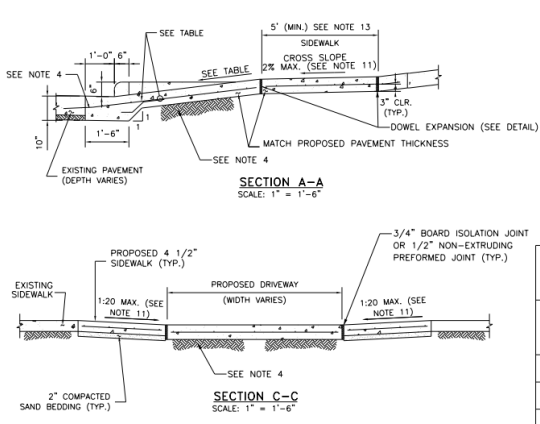
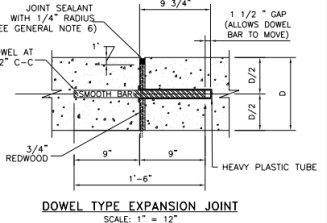
FOR INTERIM REVIEW ONLY
DOCUMENT INCOMPLETE:
NOT APPROVED FOR CONSTRUCTION.
REWORK REQUIRED. (LAYER "C-NON-PRINT")
P.E. SERIAL NO. _____
DATE: 2-1-21

PROJECT TITLE:	DATE:	REVISED STANDARD
DRAWN BY: NIT	2-1-21	
CHECKED BY: NIT		
SHEET DESCRIPTION: DRIVEWAY DETAILS FOR MAJOR ROADWAY CONSTRUCTION		
SCALE: 1"=1'-6"		
APPROVED BY: NIT		



NOTES:

1. PROPOSED DRIVEWAY AT 6" CONCRETE CURB SHALL MATCH EXISTING CURB AT POINT OF TANGENCY.
2. PROPOSED DRIVEWAY SHALL BE BUILT WITH PORTLAND CEMENT CONCRETE, 5 1/2" SACK MINIMUM PER CUBIC YARD, 3,500 PSI STRENGTH AT 28 DAYS. THIS DRIVEWAY INSTALLATION IS GOVERNED BY HARRIS COUNTY ITEM 360.
3. COMPACTION OF SUBGRADE TO 95% OF STANDARD PROCTOR DENSITY (ASTM D698) (A 2% OPTIMUM MOISTURE) FOR PROPOSED DRIVEWAY CONNECTION. THE COUNTY ENGINEER RESERVES THE RIGHT TO INSPECT AND REQUIRE LABORATORY TEST TO BE CONDUCTED.
4. FOR COMMERCIAL DRIVEWAYS, USE 6" OF COMPACTED CEMENT STABILIZED SAND. FOR RESIDENTIAL DRIVEWAYS, USE 2" OF COMPACTED BANK SAND.
5. A PROPOSED DRIVEWAY TO BE BUILT ON A CORNER LOT CANNOT BE LOCATED WITHIN ANY PORTION OF THE PUBLIC STREET CURB RADIUS. THE POINTS OF TANGENCY MAY BE THE SAME POINT ALONG THE STREET CURB LINE.
6. PROPOSED DRIVEWAY REINFORCING STEEL SHALL BE TIED TO EXISTING CONCRETE PAVEMENT WITH A MINIMUM LAP OF 16 INCHES.
7. IF EXISTING STREET REBAR IS CUT OFF, THEN #4 DOWEL BARS (18" LONG) NEED TO BE INSTALLED AT 24" SPACING, EMBEDDED 9 INCHES AND EPOXYED OR MATCH EXISTING SPACING IF TIGHTER.
8. 3" NON-METALLIC CHAIRS ARE REQUIRED.
9. FOR CAPITAL IMPROVEMENT PROJECTS, THE SUBGRADE SHALL BE STABILIZED ACCORDING TO THE GEOTECHNICAL REPORT RECOMMENDATIONS.
10. SAW AND SEAL ALL CONSTRUCTION JOINTS.
11. SIDEWALK SLOPES SHALL COMPLY WITH THE TEXAS ACCESSIBILITY STANDARDS 403.3 "SLOPE".
12. IF SIDEWALK IS EXISTING, SEE SECTION C-C.
13. SIDEWALKS MAY BE REDUCED TO 4" IN FRONT OF SINGLE-FAMILY RESIDENTIAL LOTS WHEN A 5' PASSING AREA IS PROVIDED IN THE DRIVEWAY.
14. FOR SIDEWALK DETAILS SEE SIDEWALK DETAILS SHEET



	PAVEMENT THICKNESS	COLLECTOR/MAJOR	RESIDENTIAL (MAJOR THOROUGHFARE)	RESIDENTIAL (COLLECTORS AND LOCAL STREETS)
REINFORCEMENT	6"	#4 @ 24" O.C.E.W.	N/A	#4 @ 24" O.C.E.W.
	7"	#4 @ 24" O.C.E.W.	#4 @ 24" O.C.E.W.	#4 @ 24" O.C.E.W.
	8"	#4 @ 18" O.C.E.W.	#4 @ 18" O.C.E.W.	#4 @ 18" O.C.E.W.
	9"-10"	#5 @ 18" O.C.E.W.	#5 @ 18" O.C.E.W.	#5 @ 18" O.C.E.W.
EXPANSION DOWEL JOINT	6"	3/4" DIA. SMOOTH BAR	3/4" DIA. SMOOTH BAR	3/4" DIA. SMOOTH BAR
	7"	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR
	8"	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR	1" DIA. SMOOTH BAR
	9"-10"	1 1/2" DIA. SMOOTH BAR	1 1/2" DIA. SMOOTH BAR	1 1/2" DIA. SMOOTH BAR
CONSTRUCTION JOINT DOWEL	ALL	#5 REBAR	#5 REBAR	#5 REBAR
SUBGRADE	ALL	6" CEMENT-STABILIZED SAND	2" BANK SAND	2" BANK SAND
RUNNING SLOPE	ALL	2% TO 4%	2% TO 6%	2% TO 10%*

*10% ALLOWABLE ON PRIVATELY CONSTRUCTED PROJECTS
6% MAX ON PUBLIC PROJECTS

FORT BEND COUNTY
ENGINEERING DEPARTMENT

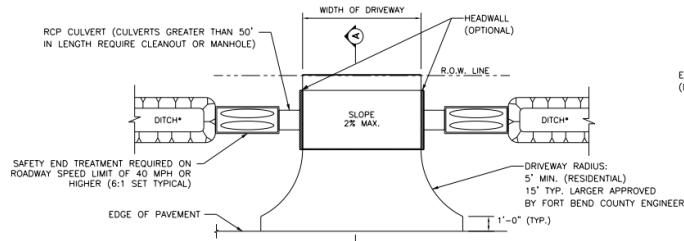


CONSULTANT LOGO
(LAYER "C-NON-PRINT")

FOR INTERIM REVIEW ONLY
DOCUMENT INCOMPLETE:
NOT APPROVED FOR CONSTRUCTION.
REWORK REQUIRED. (LAYER "C-NON-PRINT")
P.E. SERIAL NO. _____
DATE: 2-1-21

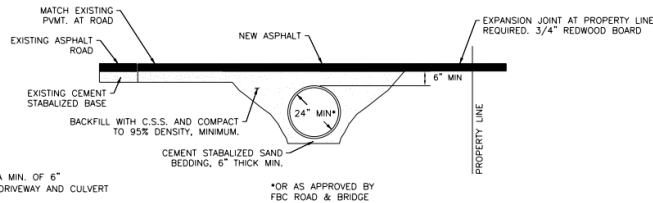
PROJECT TITLE:	DATE:	REVISED STANDARD
DRAWN BY: NIT	2-1-21	
CHECKED BY: NIT		
SHEET DESCRIPTION: DRIVEWAY DETAILS FOR RESIDENTIAL DRIVEWAYS		
SCALE: AS NOTED		
APPROVED BY: NIT		

J:\1704\1804\Fort Bend County Standard\Fort Bend County STD\DRIVEWAY CONSTRUCTION\DRIVEWAY DETAILS FOR MAJOR ROADWAY CONSTRUCTION.dwg

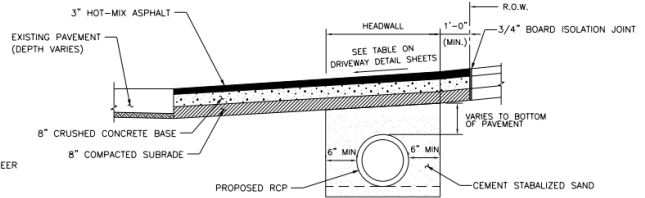


OPEN DITCH DRIVEWAY
*DITCH IS TO HAVE 4:1 SLOPE

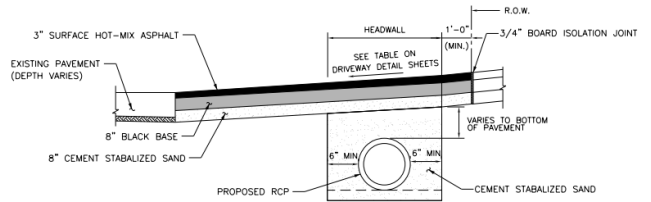
	MINIMUM RADIUS REQUIREMENTS - DRIVEWAYS	
	LOCAL	COLLECTOR/MAJOR
RESIDENTIAL	5'	-
COMMERCIAL	10'	25'



ASPHALT APRON DETAIL - DRIVEWAY PROFILE
FOR CULVERT DRAINAGE



SECTION A-A FOR RESIDENTIAL DRIVEWAYS



SECTION A-A FOR COMMERCIAL DRIVEWAYS

NO.	REVISIONS	DATE	NAME
1	ORIGINAL STANDARD ISSUED	2-1-21	RWB
2			
3			
4			
5			

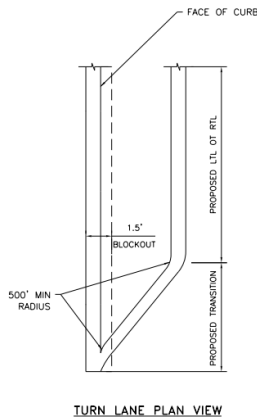
FORT BEND COUNTY
ENGINEERING DEPARTMENT



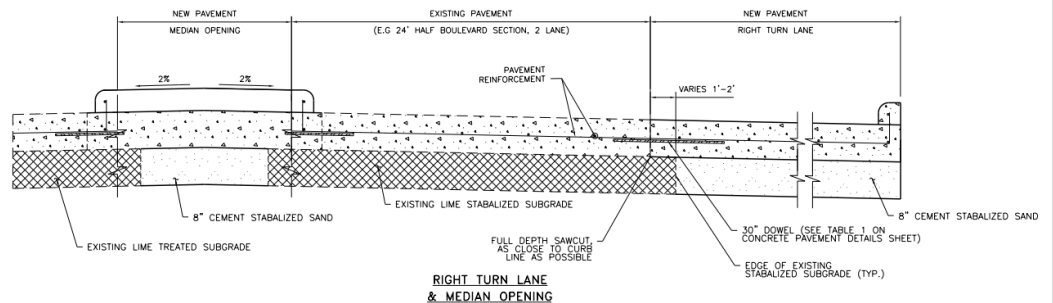
CONSULTANT LOGO
(LAYER "C-NON-PRINT")

FOR INTERIM REVIEW ONLY
DOCUMENT INCOMPLETE.
NOT APPROVED FOR CONSTRUCTION.
BENDING/REINFORCING REBAR
(LAYER "C-NON-PRINT")
P.E. SERIAL No.
DATE:

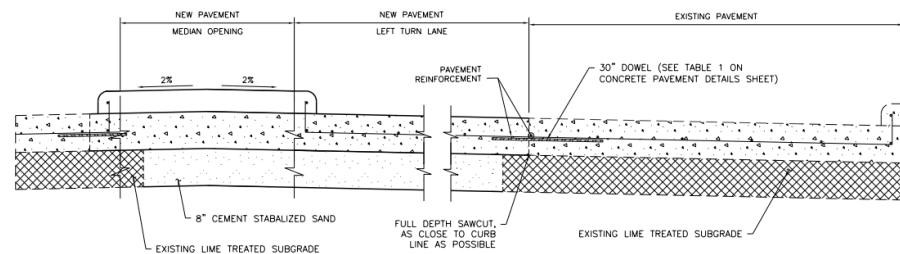
PROJECT TITLE:	DRAWN BY:	DATE:	APPROVED BY:	PROJECT NO.
ASPHALT DRIVEWAY DETAILS	INIT	2-1-21		
	INIT			
	AS NOTED			



TURN LANE PLAN VIEW



RIGHT TURN LANE
& MEDIAN OPENING



LEFT TURN LANE
& MEDIAN OPENING

- NOTES
- FOR CONCRETE PAVEMENT REINFORCEMENT AND JOINT DETAILS, SEE CONCRETE PAVEMENT DETAILS SHEET

NO.	REVISIONS	DATE	NAME
1	ORIGINAL STANDARD ISSUED	2-1-21	RWB
2			
3			
4			
5			

FORT BEND COUNTY
ENGINEERING DEPARTMENT

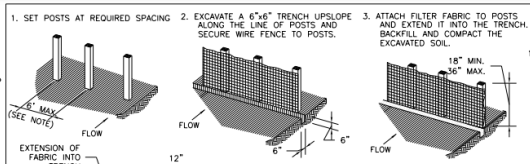


CONSULTANT LOGO
(LAYER "C-NON-PRINT")

FOR INTERIM REVIEW ONLY
DOCUMENT INCOMPLETE.
NOT APPROVED FOR CONSTRUCTION.
BENDING/REINFORCING REBAR
(LAYER "C-NON-PRINT")
P.E. SERIAL No.
DATE:

PROJECT TITLE:	DRAWN BY:	DATE:	APPROVED BY:	PROJECT NO.
TURN LANE & MEDIAN OPENING DETAIL	INIT	2-1-21		
	INIT			
	AS NOTED			

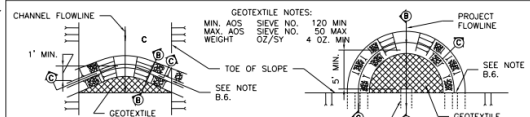
AL TPA-1801\Fort Bend County STD DOWNFDC STORM WATER POLLUTION PREVENTION PLAN DETAILS\PLAN DETAILS.dwg



REINFORCED FILTER FABRIC BARRIER

GENERAL NOTES:

1. SECURELY FASTEN MESH FENCING TO POSTS WITH STAPLES OR TIE WIRES.
2. SECURELY FASTEN FILTER FABRIC TO MESH FENCING.
3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, OVERLAP 6 INCHES AT A POST, FOLD TOGETHER, AND ATTACH TO A POST.
4. REMOVE SEDIMENT DEPOSITS WHEN SILT REACHES ONE-THIRD OF THE HEIGHT OF THE FENCE IN DEPTH.
5. SILT FENCE MINIMUM 2' BEHIND CURB.



SECTION C-C

SECTION B-B

NOTE: ONLY APPLIES FOR DETENTION BASIN OUTFALL PIPE PROTECTION.

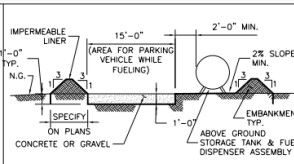
- A. TYPES OF FILTER DAMS**
1. TYPE 1 (NON-REINFORCED)
 - a. HEIGHT - 18-24 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 - c. SLOPES - 2:1 (MAXIMUM).
 2. TYPE 2 (REINFORCED)
 - a. HEIGHT - 18-36 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 - c. SLOPES - 2:1 (MAXIMUM).
 3. TYPE 3 (REINFORCED)
 - a. HEIGHT - 36-48 INCHES. MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 - c. SLOPES - 3:1 (MAXIMUM).
 4. TYPE 4 (GABION)
 - a. HEIGHT - 30 INCHES (MINIMUM). MEASURE VERTICALLY FROM EXISTING GROUND TO TOP OF FILTER DAM.
 - b. TOP WIDTH - 2 FEET (MINIMUM).
 5. TYPE 5. AS SHOWN ON THE PLANS.
- B. CONSTRUCT FILTER DAMS ACCORDING TO THE FOLLOWING CRITERIA UNLESS SHOWN OTHERWISE ON THE PLANS.**
1. TYPE 2 AND 3 FILTER DAMS: SECURE WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1 INCH DIAMETER HEXAGONAL OPENINGS.
 2. PLACE GRANULAR FILL ON THE WIRE MESH TO HEIGHT AND SLOPES SHOWN ON PLANS OR AS SPECIFIED BY THE ENGINEER.
 3. 3-5 INCHES FOR ROCK FILTER DAM TYPES 1, 2 AND 4.
 4. 4-8 INCHES FOR ROCK FILTER DAM TYPE REFER TO GRANULAR FILL IN SPECIFICATION SECTION NO. 02378 RIPRAP AND GRANULAR FILL.
 5. FOLD WIRE MESH AT UPSTREAM SIDE OVER GRANULAR FILL AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOD RINGS.
 6. IN STREAMS: SECURE OR STAKE MESH TO STREAM BED PRIOR TO AGGREGATE PLACEMENT.
 7. SEE HFCDD SPECIFICATION SECTION NO. 02364-FILTER DAMS.
 8. EMBED ONE FOOT MINIMUM INTO SLOPE AND RAISE ONE FOOT HIGHER THAN CENTER OF DEPRESSED AREA AT SLOPE.

NO.	REVISIONS	DATE	NAME
1	ORIGINAL STANDARD ISSUED	2-1-21	RWB
2			
3			
4			
5			

FORT BEND COUNTY
ENGINEERING DEPARTMENT



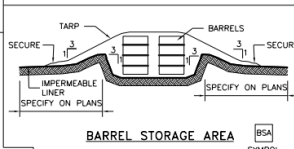
CONSULTANT LOGO
(LAYER "C-NON-PRINT")



ABOVE GROUND TEMP. VEHICLE & EQUIPMENT FUELING AREA WITH TANK

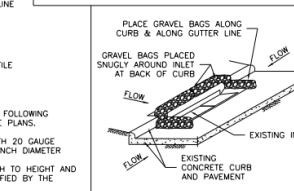
GENERAL NOTES:

1. THE SIZE OF TANK FOUNDATION AREA DEPENDS ON THE SIZE OF ABOVE GROUND STORAGE TANK AND DISPENSER ASSEMBLY.
2. PROVIDE A MINIMUM SLOPE OF 2% TOWARD THE SUMP PIT.
3. INSTALL IMPERMEABLE LINER AS PER MANUFACTURER'S RECOMMENDATIONS.



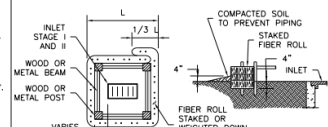
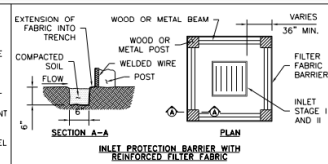
GENERAL NOTES:

1. ALTERNATIVELY, STORE BARRELS IN AN ENCLOSED BUILDING OR SHED.
2. INSTALL IMPERMEABLE LINER AS PER MANUFACTURER'S RECOMMENDATIONS. 60 mil MINIMUM.
3. CONSTRUCT BERMED AREA WITH VOLUME GREATER THAN OR EQUAL TO 110% VOLUME OF BARRELS.



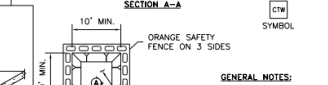
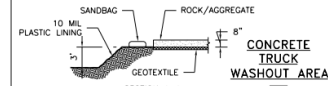
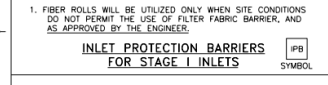
GENERAL NOTES:

1. REMOVE SEDIMENT DEPOSIT WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-THIRD THE HEIGHT OF THE BARRIER.
2. GRAVEL BAGS SHALL NOT BLOCK THROAT OF INLET UNLESS DIRECTED BY ENGINEER.



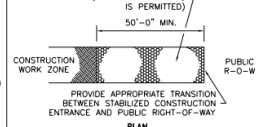
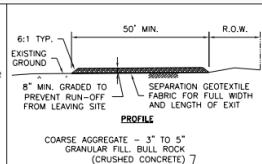
GENERAL NOTES:

1. FIBER ROLLS WILL BE UTILIZED ONLY WHEN SITE CONDITIONS DO NOT PERMIT THE USE OF FILTER FABRIC BARRIER, AND AS APPROVED BY THE ENGINEER.



GENERAL NOTES:

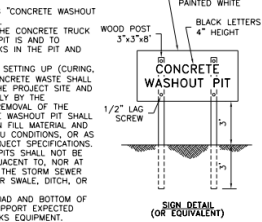
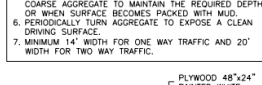
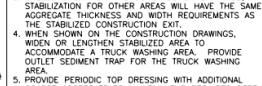
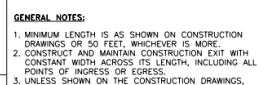
1. POST A SIGN READING "CONCRETE WASHOUT PIT" NEXT TO THE PIT.
2. VERBALLY INSTRUCT THE CONCRETE TRUCK DRIVERS WHERE THE PIT IS AND TO WASHOUT THEIR TRUCKS IN THE PIT AND NOWHERE ELSE.
3. UPON THE CONCRETE SETTING UP (CURING, DRYING OUT), THE CONCRETE WASTE SHALL BE REMOVED FROM THE PROJECT SITE AND DISPOSED OF PROPERLY BY THE CONTRACTOR. AFTER REMOVAL OF THE CONCRETE WASTE, THE WASHOUT PIT SHALL BE FILLED WITH CLEAN FILL MATERIAL, AND COMPACTED TO IN-SITU CONDITIONS, OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
4. CONCRETE WASHOUT PITS SHALL NOT BE LOCATED DIRECTLY ADJACENT TO, NOR AT ANY TIME DRAIN INTO THE STORM SEWER SYSTEM OR ANY OTHER SWALE, DITCH, OR WATERWAY.
5. CONSTRUCT ENTRY ROAD AND BOTTOM OF WASHOUT AREA TO SUPPORT EXPECTED LOADINGS FROM TRUCKS EQUIPMENT.



STABILIZED CONSTRUCTION ACCESS

GENERAL NOTES:

1. MINIMUM LENGTH IS AS SHOWN ON CONSTRUCTION DRAWINGS OR 50 FEET, WHICHEVER IS MORE.
2. CONSTRUCT AND MAINTAIN CONSTRUCTION EXIT WITH CONSTANT WIDTH ACROSS ITS LENGTH, INCLUDING ALL POINTS OF INGRESS OR EGRESS.
3. UNLESS SHOWN ON THE CONSTRUCTION DRAWINGS, STABILIZATION FOR OTHER AREAS WILL HAVE THE SAME AGGREGATE THICKNESS AND WIDTH REQUIREMENTS AS THE STABILIZED CONSTRUCTION EXIT.
4. WHEN SHOWN ON THE CONSTRUCTION DRAWINGS, WIDEN OR LENGTHEN STABILIZED AREA TO ACCOMMODATE A TRUCK WASHING AREA. PROVIDE OUTLET SEDIMENT TRAP FOR THE TRUCK WASHING AREA.
5. PROVIDE PERIODIC TOP DRESSING WITH ADDITIONAL COARSE AGGREGATE TO MAINTAIN THE REQUIRED DEPTH OR WHEN SURFACE BECOMES PACKED WITH MUD.
6. PERIODICALLY TURN AGGREGATE TO EXPOSE A CLEAN DRIVING SURFACE.
7. MINIMUM 14\"/>



PROJECT TITLE:	FOR INTERIM REVIEW ONLY	FOR INTERIM REVIEW ONLY
DRAWN BY: INT	DOCUMENT INCOMPLETE: NOT REVIEWED FOR CONSTRUCTION, PROGRAMMING CHANGES	NO. OF SHEETS: 1
CHECKED BY: INT	DATE: 2-1-21	DATE: 2-1-21
SCALE: NONE		
APPROVED BY: 2-1-21		