

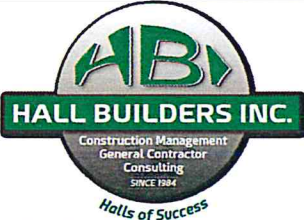
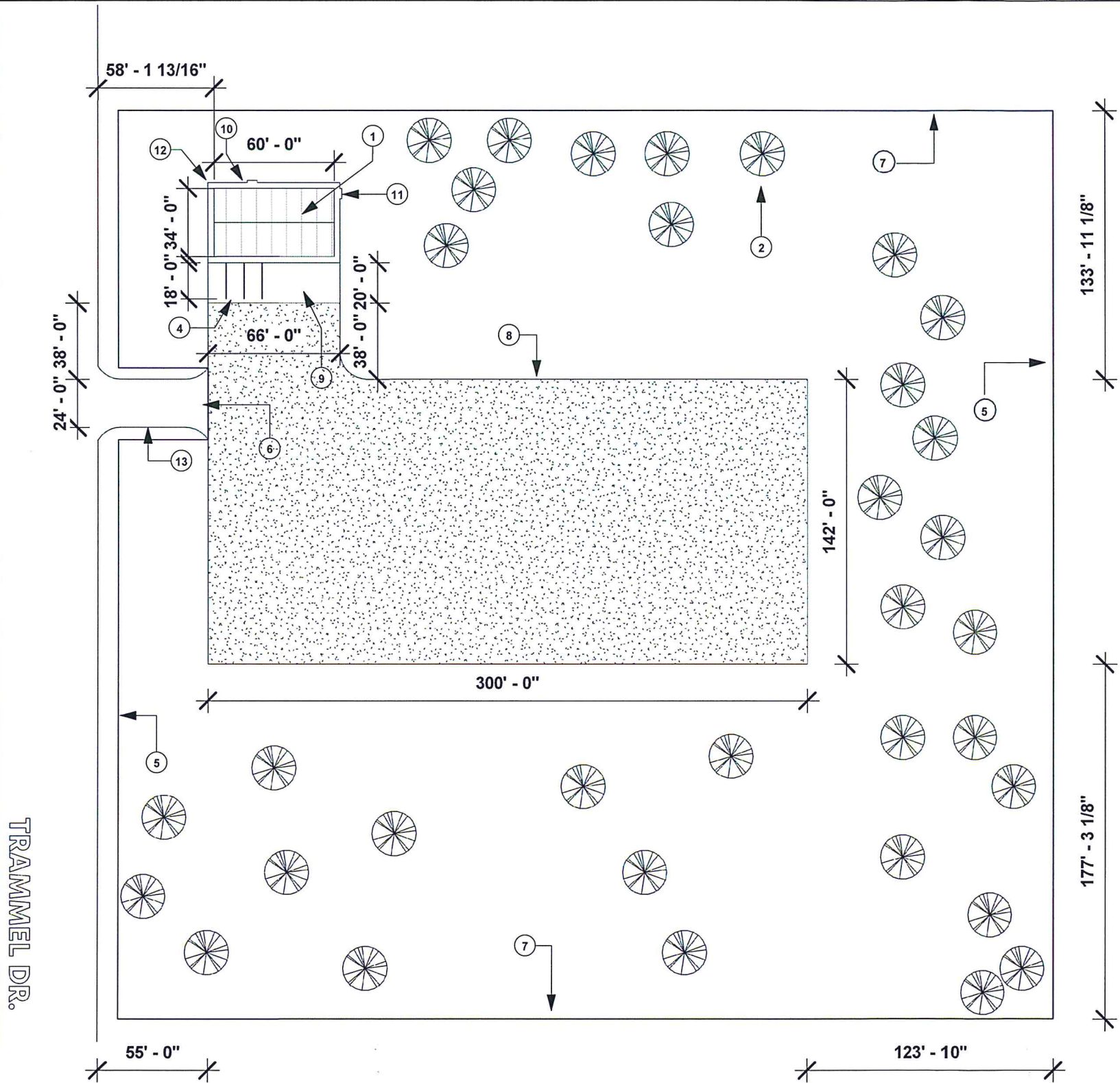
**SITE PLAN MASTER KEY**

- 1 TRUCKING FACILITY OFFICE AND GARAGE | 2,040 SF
- 2 REMOVE ALL TREES AND SHRUBS THAT OBSTRUCT NEW STRUCTURES
- 4 PARKING STALLS & WHEEL STOPS | OFFICE STAFF | APPROX. 3 | 18' x 9'
- 5 NEW 6' STEEL WIRE CHAIN LINK FENCE W/ BARBED WIRE
- 6 AUTOMATIC ENTRY GATE IS TO BE SOLAR OR CONVENTIONAL POWERED | PROVIDE A CLICK2ENTER GATE OPENING SYSTEM FOR AN ELECTRONIC GATE (SHREVEPORT CODE OF ORDINANCES ARTICLE VIII. - LIMITED ACCESS GATES)
- 7 EXISTING 6' STEEL WIRE CHAIN LINK FENCE W/ BARBED WIRE
- 8 SB2 GRAVEL 42,600 SF | TRUCK TURNING AREA | 4' UNDERCUT
- 9 CONCRETE PAD | GARAGE ENTRY AND OFFICE STAFF PARKING | 30' x 20'
- 10 CONCRETE PAD | A/C UNIT | 5' x 4'
- 11 CONCRETE PAD | AIR COMPRESSOR | 5' x 4'
- 12 3' CONCRETE SIDEWALK AROUND BUILDING PERIMETER
- 13 CONCRETE DRIVEWAY



**EXECUTIVE  
DIRECTOR  
APPROVAL**

12-28-2020      *ac*  
Date                      By



1185 HAWN AVENUE  
SHREVEPORT, LA 71107  
318-222-4610

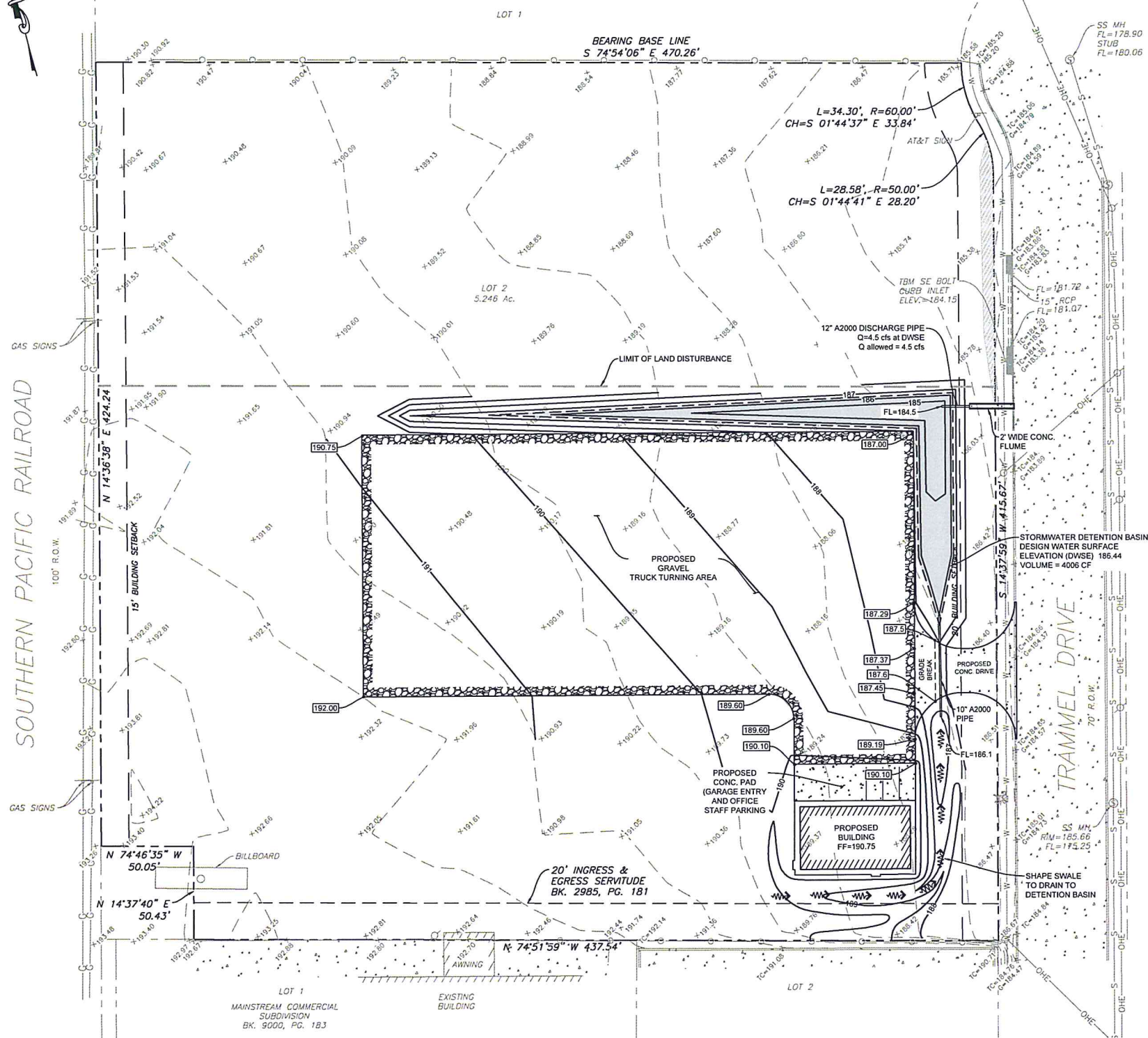
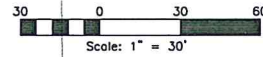
**NEW TRUCKING FACILITY  
DURHAM TRANSPORT EXPRESS**

NO.	DESCRIPTION	DATE

**SITE PLAN**

PROJECT NUMBER	8208	<b>A101</b>
DATE	7/27/2020	
DRAWN BY	DERRICK WARREN	SCALE 1/64" = 1'-0"
CHECKED BY	TERRELL HALL	

20-180-C



LEGEND AND NOTES  
 ENTRANCE DRIVE WIDTH = 24 FT  
 ENTRANCE DRIVE RADIUS = 25 FT  
 [259.00] PROPOSED GRADE  
 [W/S] PROPOSED EARTH SWALE  
 DEPTH VARIES  
 SIDE SLOPES 3:1 OR FLATTER



**EXECUTIVE  
 DIRECTOR  
 APPROVAL**

12.28.2020  
 Date By *[Signature]*

**GRADING & DRAINAGE**  
 DURHAM TRANSPORT EXPRESS  
 7300 - 7400 BLOCK TRAMMEL DRIVE  
 SHREVEPORT, LOUISIANA

**CONSULTING CIVIL ENGINEER**  
 9045 ELLERBE RD., SUITE 106  
 SHREVEPORT, LOUISIANA 71106  
 BUSINESS PHONE: (318) 861-7975



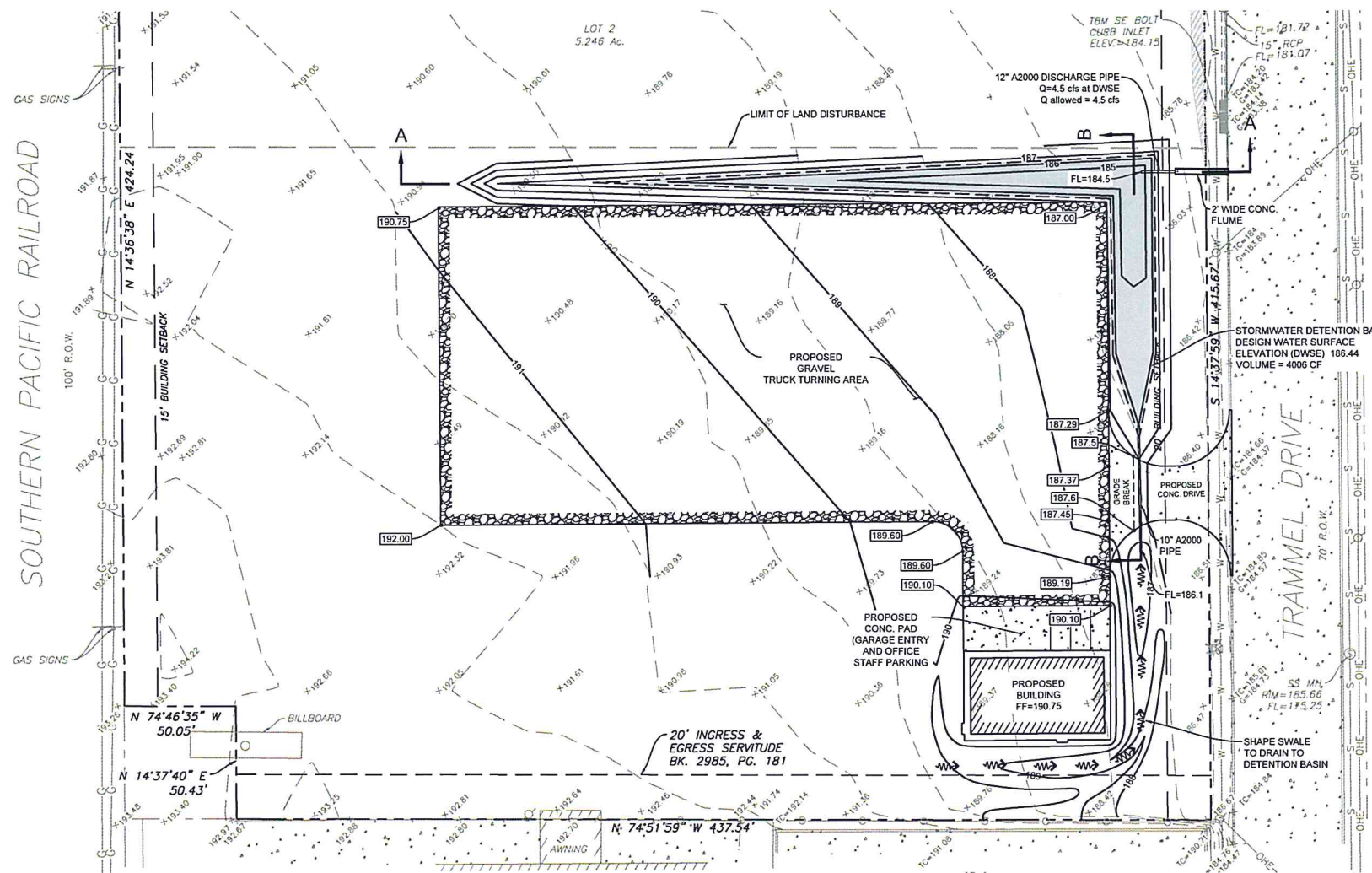
REVISIONS	NO	DATE

JOB NO. 5871	DRAWING NAME:
SCALE: 1"=30'	DATE: 11-18-20
DRAWN BY: DB	CHECKED BY: DD

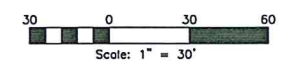
**C1**



20-180-C



DETENTION PLAN  
1"=30'



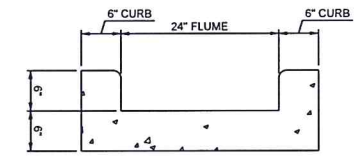
Stormwater Detention Worksheet  
Durham Transport Express - Shreveport, LA  
25 - Year Frequency Storm  
16-Nov-20

	Existing Conditions	Developed Conditions	c
Runoff Coefficient	0.3	0.44	
Time of Concentration	0.393 HR	0.317 HR	$T_c$
Rainfall Intensity	4.56 IN/HR	9 IN/HR	$I$
Area	3.3 AC	3.3 AC	$A$
Discharge	4.51 CFS	13.07 CFS	$Q$

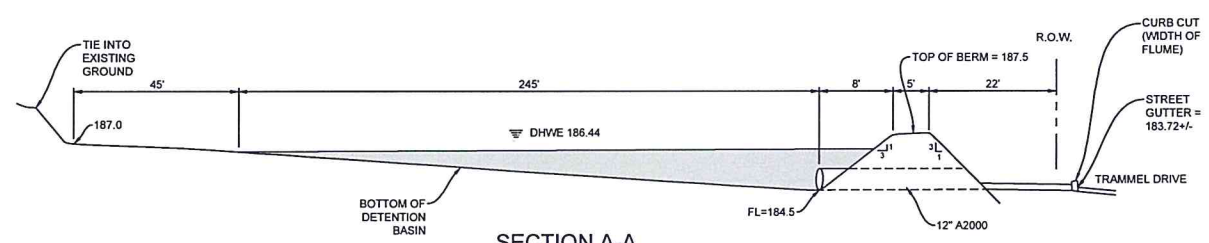
  

Maximum Permissible Release Rate (Qp=Q existing)					4.5144 CFS
Rainfall Duration	Rainfall Intensity	Peak Runoff Rate	Storm Runoff Vol	Release Rate Vol	Storage Volume
T (min)	i (in/hr)	Q (cfs)	V (cu. Ft)	Qr (cu. Ft)	Sv (cu. Ft)
5	8.50	12.34	3.703	1.354	2.348
10	7.00	10.16	6.098	2.709	3.390
15	6.00	8.71	7.841	4.063	3.778
20	5.40	7.84	9.409	5.417	3.992
25	4.80	6.97	10.454	6.772	3.683
30	4.40	6.39	11.500	8.126	3.374
40	3.80	5.52	13.242	10.835	2.408
50	3.40	4.94	14.810	13.543	1.267
60	3.10	4.50	16.204	16.252	-48

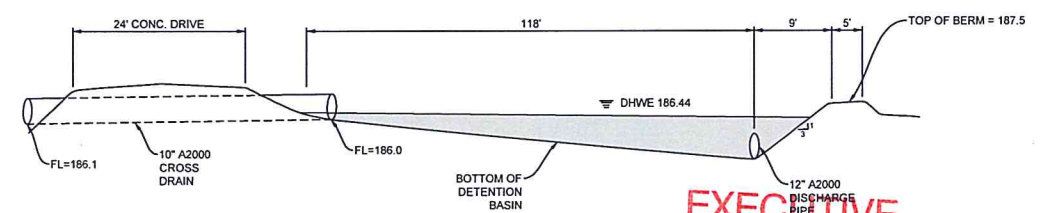
Required Detention: 3.992



CONCRETE FLUME  
N.T.S.



SECTION A-A  
DETENTION BASIN  
N.T.S.



SECTION B-B  
DETENTION BASIN  
N.T.S.

**EXECUTIVE  
DIRECTOR  
APPROVAL**

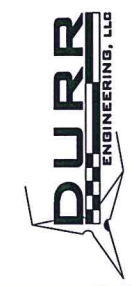
12-28-2020  
Date By *al cr*

DETENTION PLAN

DURHAM TRANSPORT EXPRESS  
7300-7400 BLOCK TRAMMEL DRIVE  
SHREVEPORT, LOUISIANA

CONSULTING CIVIL ENGINEER

9045 ELLERBE RD., SUITE 106  
SHREVEPORT, LOUISIANA 71106  
BUSINESS PHONE: (318) 861-7975



NO.	DATE	REVISIONS

JOB NO. 5871	DRAWING NAME:
SCALE: 1"=30'	DATE: 11-18-20
DRAWN BY: DB	CHECKED BY: DD

**C2**

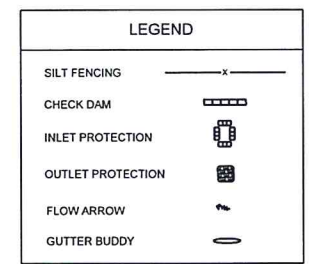
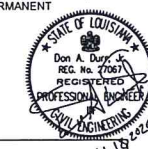
20-180-C

EXECUTIVE  
DIRECTOR  
APPROVAL

12-28-2020  
Date By *DLB*

EROSION CONTROL NOTES

- THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL MEASURES THAT MAY BE NECESSARY TO PREVENT PASSING OF SEDIMENT DOWNSTREAM OF SITE. THE CONTRACTOR SHALL REVISE THIS PLAN TO REFLECT CHANGES TO THE EROSION CONTROL MEASURES.
- GENERAL SEQUENCE OF CONSTRUCTION ACTIVITIES SHALL BE AS FOLLOWS:
  - INSTALLATION OF PERIMETER EROSION CONTROL STRUCTURES
  - EARTHWORK AND FILL WITH SWALES, DRAINAGE PIPE AND DETENTION/SEDIMENT CONTROL BASIN.
  - IMPLEMENT ADDITIONAL CONTROLS FOR EROSION AND SEDIMENT LOSS
  - CONSTRUCTION OF BUILDING FOUNDATION
  - CONSTRUCTION OF PARKING LOTS, DRIVES AND BUILDING.
  - IMPLEMENT PERMANENT EROSION CONTROL MEASURES
- THE CONTRACTOR'S EROSION CONTROL MEASURES SHALL BE IN CONFORMITY WITH THE TERMS AND CONDITIONS OF THE LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ), GENERAL PERMIT NO. LAR 200000, AND WITH THE PROJECT SWPPP, PROVIDED BY THE CONTRACTOR.
- INLET PROTECTION SHALL CONSIST OF STANDARD HAY BALE CHECK DAM AND GUTTER BUDDYS.
- OUTLET PROTECTION SHALL CONSIST OF 18" THICK (MINIMUM) STONE RIP-RAP WITH GEOTEXTILE FABRIC.
- STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED AS REQUIRED BY THE CITY OF SHREVEPORT.
- PERMANENT EROSION CONTROL MEASURES SHALL CONSIST OF SEED, FERTILIZER & MULCH AS REQUIRED TO ESTABLISH PERMANENT VEGETATIVE STATE AND ROOT ESTABLISHMENT.



STANDARDS FOR SILT FENCE

**DEFINITION**  
TEMPORARY BARRIER FENCE MADE OF BURLAP OR POLYPROPYLENE MATERIAL WHICH IS WATER PERMEABLE BUT WILL TRAP WATER-BORNE SEDIMENT.

**PURPOSE**  
TO INTERCEPT AND DETAIN WATER-BORNE SEDIMENT FROM UNPROTECTED AREA OF LIMITED EXTENT.

**CONDITIONS WHERE PRACTICE APPLIES**  
SILT FENCE IS USED DURING THE PERIOD OF CONSTRUCTION NEAR THE PERIMETER OF A DISTURBED AREA TO INTERCEPT SEDIMENT WHILE ALLOWING WATER TO PERCOLATE THROUGH. THIS FENCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. SILT FENCE SHOULD NOT BE USED WHERE THERE IS A CONCENTRATION OF WATER IN A CHANNEL OR OTHER DRAINAGE WAY.

**DESIGN CRITERIA**  
SILT FENCE SHALL NOT BE CONSTRUCTED OUTSIDE THE PROPERTY LINES WITHOUT OBTAINING EASEMENTS FROM THE AFFECTED PROPERTY OWNERS. A DESIGN IS NOT REQUIRED FOR THE INSTALLATION OF SILT FENCE, HOWEVER THE FOLLOWING CRITERIA SHALL BE OBSERVED:

**HEIGHT** - 36 INCH MINIMUM HEIGHT MEASURED FROM THE EXISTING OR GRADED GROUND.

**MATERIAL** - BURLAP WEIGHING APPROXIMATELY 7-10 OUNCES PER SQUARE YARD OR APPROVED JUTE FABRIC OR GEOTEXTILE FABRIC.

**SUPPORT** - STEEL OR WOOD FENCE POSTS SPACED A MAXIMUM OF 8 FEET APART. POST SHALL HAVE A MINIMUM LENGTH OF 5 FEET AND BE SET AT LEAST 18 INCHES DEEP. WOVEN WIRE MESH SHALL BE USED TO SUPPORT THE MATERIAL. SHALL BE AT LEAST 36 INCHES HIGH WITH A MAXIMUM MESH OPENING OF 6 INCHES AND FABRICATED FROM 14 GAGE WIRE OR LARGER.

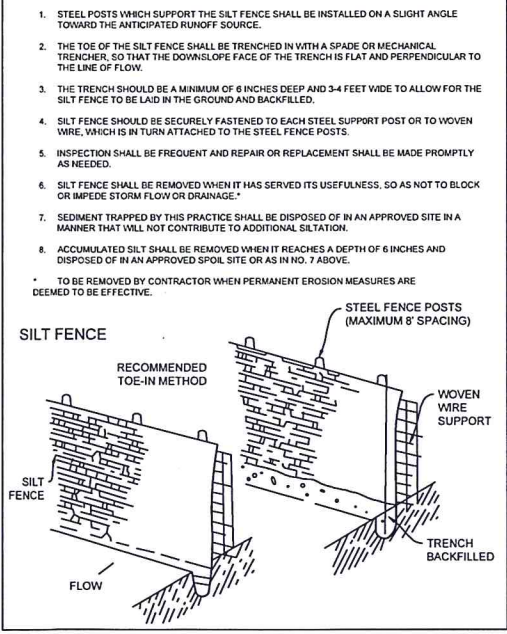
**OUTLET**  
SILT FENCE SHALL BE PLACED AND CONSTRUCTED IN SUCH A MANNER THAT RUNOFF FROM A DISTURBED OR EXPOSED UPLAND AREA SHALL BE INTERCEPTED, SEDIMENT TRAPPED AND THE SURFACE RUNOFF ALLOWED TO PERCOLATE THROUGH THE STRUCTURE.

SILT FENCE SHALL BE PLACED IN SUCH A MANNER THAT SURFACE RUNOFF WHICH PERCOLATES THROUGH WILL FLOW ONTO AN UNDISTURBED STABILIZED AREA OR STABILIZED OUTLET. IF PLACED IN SERIES AREA OR STABILIZED OUTLET.

**GENERAL NOTES**

- STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE.
- THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
- THE TRENCH SHOULD BE A MINIMUM OF 6 INCHES DEEP AND 3-4 FEET WIDE TO ALLOW FOR THE SILT FENCE TO BE LAID IN THE TRENCH AND BACKFILLED.
- SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POSTS.
- INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SILT FENCE SHALL BE REMOVED WHEN IT HAS SERVED ITS USEFULNESS, SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.
- SEDIMENT TRAPPED BY THIS PRACTICE SHALL BE DISPOSED OF IN AN APPROVED SITE IN A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.
- ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES AND DISPOSED OF IN AN APPROVED SPOIL SITE OR AS IN NO. 7 ABOVE.

\* TO BE REMOVED BY CONTRACTOR WHEN PERMANENT EROSION MEASURES ARE DEEMED TO BE EFFECTIVE.



STANDARDS FOR CHECK DAM

**DEFINITION**  
A TEMPORARY BARRIER CONSTRUCTED WITH HAY BALES WITH A LIFE EXPECTANCY OF 3 MONTHS OR LESS, INSTALLED ACROSS OR AT THE TOE OF A SLOPE.

**PURPOSE**  
A PURPOSE OF A CHECK DAM IS TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM UNPROTECTED AREAS OF LIMITED EXTENT.

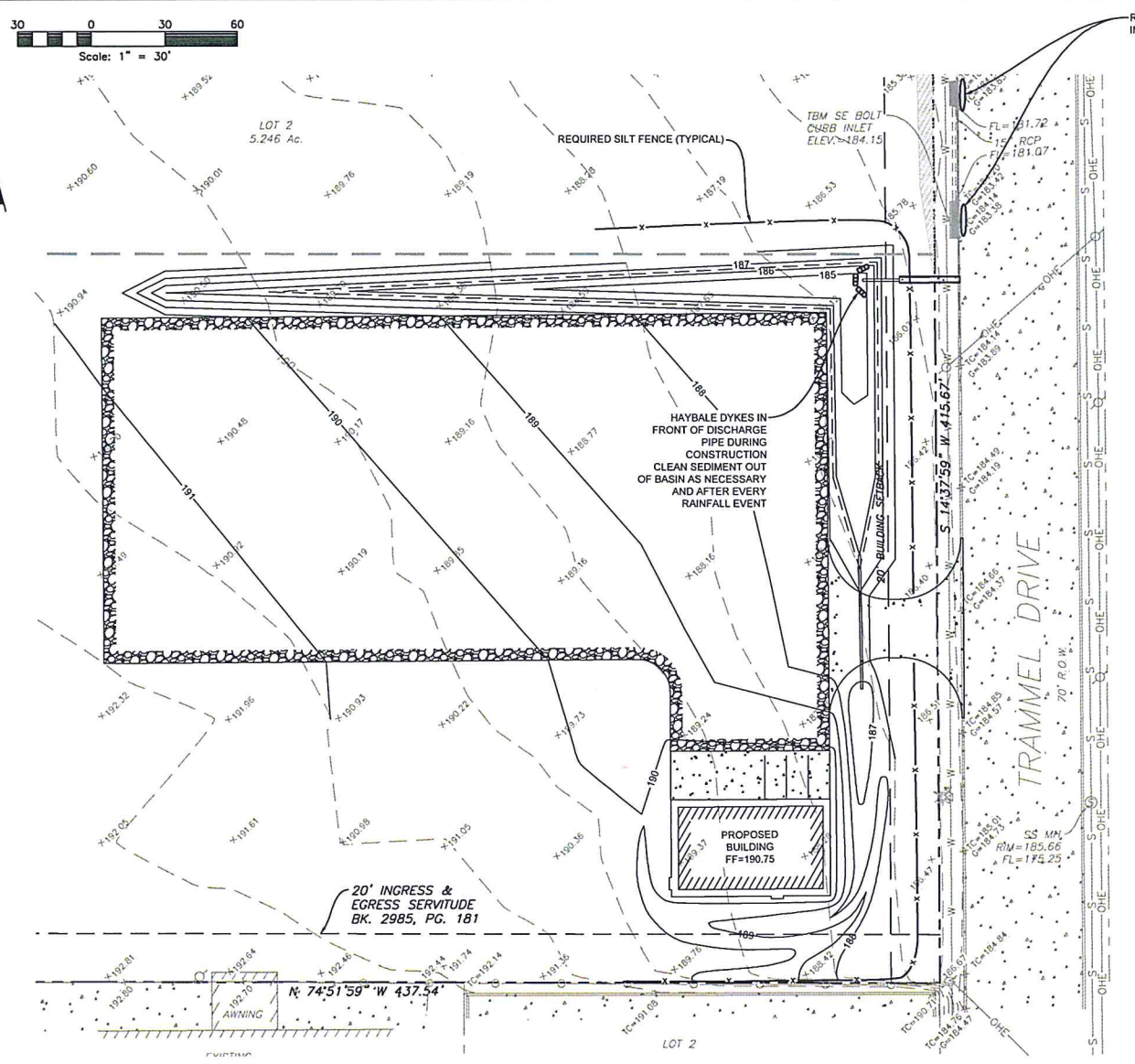
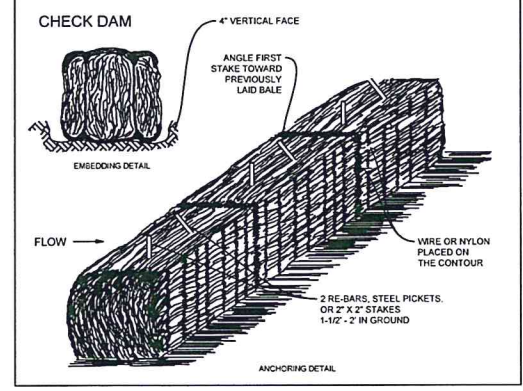
**CONDITIONS WHERE PRACTICE APPLIES**  
THE CHECK DAM IS USED WHERE:

- NO OTHER PRACTICE IS FEASIBLE, AND
- THERE IS NO CONCENTRATION OF WATER IN A CHANNEL OR OTHER DRAINAGE WAY ABOVE THE DAM, AND
- EROSION WOULD OCCUR IN THE FORM OF SHEET AND RILL EROSION, AND
- CONTRIBUTING DRAINAGE AREA IS LESS THAN ONE-HALF ACRE AND THE LENGTH OF SLOPE ABOVE THE DIKE AND LESS THAN 100 FEET. THE PRACTICE MAY ALSO BE USED FOR ALONE, SINGLE FAMILY LOT IF THE SLOPE IS LESS THAN 15 PERCENT, THE CONTRIBUTING DRAINAGE AREA IN THIS INSTANCE SHALL BE LESS THAN 1 ACRE AND THE LENGTH OF SLOPE ABOVE THE DIKE SHALL BE LESS THAN 200 FEET.

**DESIGN CRITERIA**  
A DESIGN IS NOT REQUIRED. ALL BALES SHALL BE PLACED ON THE CONTOUR AND SHALL BE EITHER WIRE BOUND OR NYLON STRING TIED.

**GENERAL NOTES**

- BALES SHALL BE PLACED IN A ROW WITH END TIGHTLY ADJUTING THE ADJACENT BALES.
- EACH BALE SHALL BE EMBEDDED IN THE SOIL. A MINIMUM OF FOUR INCHES, WHERE POSSIBLE.
- BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALE TOGETHER.
- INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY CONTRACTOR.
- BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.
- ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES.



EROSION CONTROL PLAN  
1"=30'

STANDARDS FOR LAND GRADING

**DEFINITIONS**  
RESHAPING OF THE EXISTING TOPOGRAPHY IN ACCORDANCE WITH A PLAN AS DETERMINED BY ENGINEERING SURVEYS, DESIGN AND LAYOUT.

**PURPOSE**  
LAND GRADING IS USED FOR ONE OR MORE OF THE FOLLOWING PURPOSES: PROVIDE MORE SUITABLE SITES FOR BUILDING, FACILITIES, AND OTHER LAND USES; IMPROVE SURFACE DRAINAGE AND CONTROL EROSION.

**DESIGN CRITERIA**  
THE LAND GRADING PLAN AND INSTALLATION SHALL BE BASED UPON ADEQUATE SURVEYS AND INVESTIGATIONS. THE PROPOSED LAND USE AND GRADING PLAN SHOULD FIT AND UTILIZE EXISTING TOPOGRAPHY AND NATURAL SURROUNDINGS AND MAKE EXTREME GRADE MODIFICATIONS UNNECESSARY. THE PLAN IS TO SHOW THE LOCATION, SLOPE, CUT, FILL AND FINISH ELEVATION OF THE SURFACES TO BE GRADED AND THE AUXILIARY PRACTICES FOR SAFE DISPOSAL OF RUNOFF WATER. SLOPE STABILIZATION, EROSION CONTROL, AND DRAINAGE SUCH AS WATERWAYS, LINED CHANNELS, DIVERSIONS, GRADE STABILIZATION STRUCTURES, RETAINING WALLS, AND SURFACE AND SUBSURFACE DRAINS.

THE GRADING PLAN SHALL BE IN ACCORDANCE WITH THE FOLLOWING DESIGN CRITERIA:

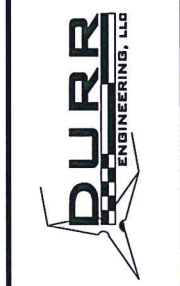
- THE CUT FACE OF EARTH EXCAVATION WHICH IS TO BE VEGETATED SHALL NOT BE STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL. CUT SLOPES OF MATERIALS NOT TO BE VEGETATED SHALL BE AT THE SAFE ANGLE OF REPOSE FOR THE MATERIALS ENCOUNTERED. UNVEGETATED CUT SLOPES SHALL BE PROTECTED BY MECHANICAL TREATMENT TO PROTECT THEM FROM EROSION.
- THE PERMANENT EXPOSED FACES OF FILLS SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.
- PROVISIONS ARE TO BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE NATURAL WATER COURSES AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
- SUBSURFACE DRAINAGE IS TO BE PROVIDED IN AREAS HAVING HIGH WATER TABLE OR SEEPAGE CONDITIONS THAT WOULD AFFECT SLOPE STABILITY, BUILDING FOUNDATIONS, OR CREATE UNDESIRABLE WETNESS.
- EXCAVATIONS SHALL NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT SUPPORTING AND PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING OR CRACKING.
- NO FILL IS TO BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OR SO PLACED ADJACENT TO THE BANK OF A CHANNEL AS TO CREATE BANK FAILURE OR REDUCE THE NATURAL CAPACITY OF THE STREAM.
- FILLS ARE TO CONSIST OF MATERIAL FROM CUT AREAS, BORROW PITS, OR OTHER APPROVED SOURCES.

**GENERAL NOTES**

- TIMBER, LOGS, BRUSH, RUBBISH, AND VEGETATIVE MATTER THAT WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OF FILL AREAS SHALL BE REMOVED AND DISPOSED OF ACCORDING TO THE PLAN. AVOID UNNECESSARY REMOVAL OF TREES AND VEGETATION THAT COULD BE LEFT TO ENHANCE THE ATTRACTIVENESS OF THE DEVELOPMENT.
- TOP SOIL IS TO BE STRIPPED AND STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISH GRADING OF ALL EXPOSED AREAS REQUIRING TOPSOIL FOR THE ESTABLISHMENT OF VEGETATION.
- FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS AND STUMPS IN AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS.
- CUT SLOPES WHICH ARE TO BE TOPSOILED WILL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL.
- ALL FILLS INTENDED TO SUPPORT BUILDINGS, STRUCTURES, SEWERS AND CONDUITS SHOULD BE TESTED FOR STRENGTH AND THE FOUNDATIONS DESIGNED ACCORDINGLY. COMPACTION OF OTHER FILLS WILL BE AS REQUIRED TO REDUCE SLIPPING, EROSION, OR EXCESS SATURATION.
- MAXIMUM THICKNESS OF LAYERS OF FILLS ARE NOT TO EXCEED 8 INCHES.
- ALL AREAS ARE TO BE ROUGH GRADED TO WITHIN 0.2 FOOT OF THE PLANNED ELEVATION AFTER ALLOWANCE HAS BEEN MADE FOR THICKNESS OF TOPSOIL, PAVING OR OTHER INSTALLATIONS.
- ALL DISTURBED AREAS SHALL BE LEFT IN A WELL DRAINED, NEAT AND FINISHED APPEARANCE.

EROSION CONTROL PLAN  
DURHAM TRANSPORT EXPRESS  
7300 - 7400 BLOCK TRAMMEL DRIVE  
SHREVEPORT, LOUISIANA

CONSULTING CIVIL ENGINEER  
9045 ELLERBE RD., SUITE 106  
SHREVEPORT, LOUISIANA 71106  
BUSINESS PHONE: (318) 861-7975



REVISIONS	NO.	DATE:
JOB NO. 5871	DRAWING NAME:	SCALE: 1"=30'
		DATE: 11-18-20
		DRAWN BY: DB
		CHECKED BY: DD

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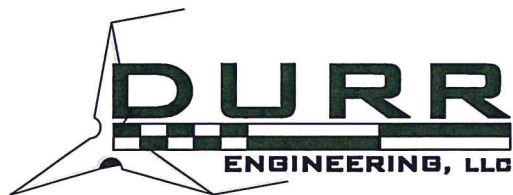
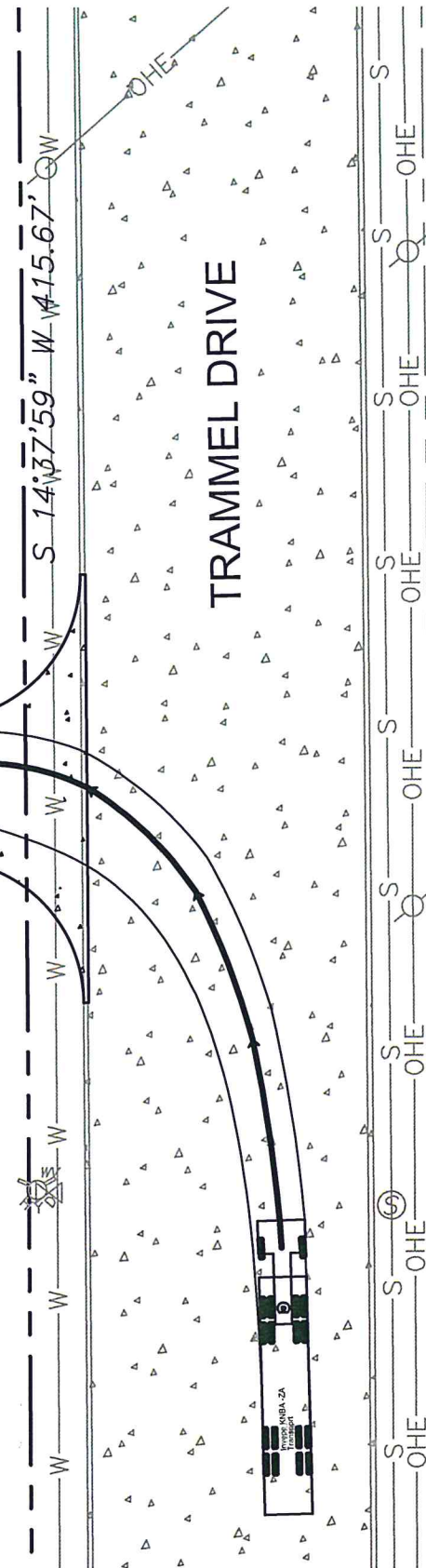
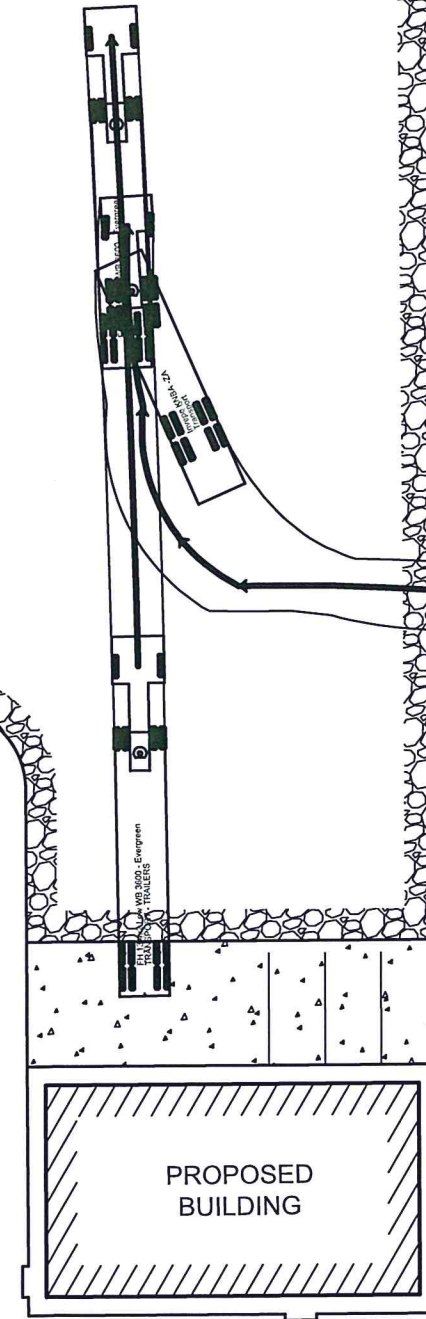


20-180-C

DURHAM  
TRANSPORT  
EXPRESS

VEHICLE TRACKING  
SCENARIO "A"

1"=30'

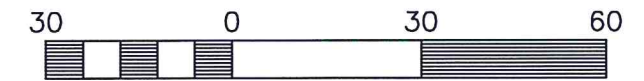


CONSULTING CIVIL ENGINEER

9045 ELLERBE RD., SUITE 106  
SHREVEPORT, LOUISIANA 71106  
BUSINESS PHONE: (318) 861-7975

EXECUTIVE  
DIRECTOR  
APPROVAL

12-28-2020 *ARB*  
Date By

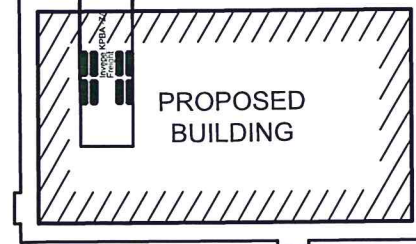


Scale: 1" = 30'

DURHAM  
TRANSPORT  
EXPRESS

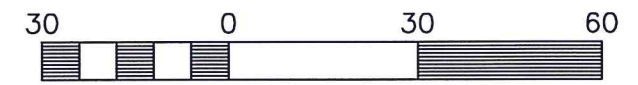
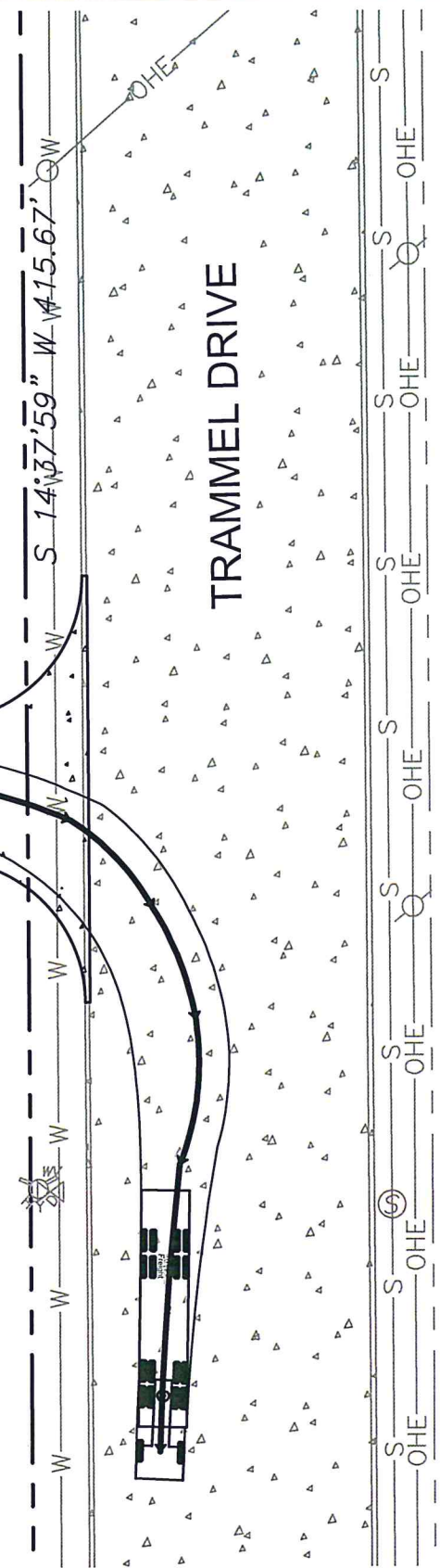
VEHICLE TRACKING  
SCENARIO "B"

1"=30'



EXECUTIVE  
DIRECTOR  
APPROVAL

12-28-2020 *ad*  
Date By



Scale: 1" = 30'




**CONSULTING CIVIL ENGINEER**  
 9045 ELLERBE RD., SUITE 106  
 SHREVEPORT, LOUISIANA 71106  
 BUSINESS PHONE: (318) 861-7975

70-180-C