











# PROJECT QUANTITIES

2" BASE ROCK					
STA TO STA	LENGTH (FT)	WIDTH (FT)	THICKNESS (IN)	TOTAL (SY)	REMARKS
3+00 - 3+60	60	23	4	153.3	TRANSITION AT WEST END OF MT. HOPE ROAD
3+60 - 31+65	2805	28	4	8726.7	MT. HOPE ROAD
31+25 - 3165	VARIES	VARIES	4	258.3	ENTRANCE TO ROUTE U (RADIUS & TAPER)
100+00 - 156+32	5632	28	4	17521.8	WATERFORD (MT HOPE TO LOW WATER CROSSING)
158+02 - 168+00	998	28	4	3104.9	WATERFORD (LOW WATER CROSSING TO END)
100+00 - 100+50	VARIES	VARIES	4	91.8	WATERFORD (INTERSECTION WITH MT HOPE)
TOTAL:				29856.8	

AGGREGATE BASE - TYPE 5					
STA TO STA	LENGTH (FT)	WIDTH (FT)	THICKNESS (IN)	TOTAL (SY)	REMARKS
3+00 - 3+60	60	23	4	153.3	TRANSITION AT WEST END OF MT. HOPE ROAD
3+60 - 31+65	2805	28	4	8726.7	MT. HOPE ROAD
31+25 - 3165	VARIES	VARIES	4	258.3	ENTRANCE TO ROUTE U (RADIUS & TAPER)
100+00 - 156+32	5632	28	4	17521.8	WATERFORD (MT HOPE TO LOW WATER CROSSING)
158+02 - 168+00	998	28	4	3104.9	WATERFORD (LOW WATER CROSSING TO END)
100+00 - 100+50	VARIES	VARIES	4	91.8	WATERFORD (INTERSECTION WITH MT HOPE)
TOTAL:				29856.8	

SHOULDER AGGREGATE BASE - TYPE 1					
STA TO STA	LENGTH (FT)	WIDTH (FT)	THICKNESS (IN)	TOTAL (SY)	REMARKS
3+60 - 31+25	2650.0	2	5	588.9	MT. HOPE ROAD (LEFT SIDE MINUS WATERFORD INT.)
3+60 - 31+65	2805.0	2	5	623.3	MT. HOPE ROAD (RIGHT SIDE)
VARIES	221.0	2	5	49.1	MT. HOPE INTERSECTION WITH RT. U (RAD & TAPER)
100+31 - 168+00	6599.0	2	5	1466.4	WATERFORD RD (LT SIDE MINUS LOW WATER X-ING)
100+56 - 168+00	6574.0	2	5	1460.9	WATERFORD RD (RT SIDE MINUS LOW WATER X-ING)
VARIES	126.6	2	5	28.1	WATERFORD RD INTERSECTION WITH MT HOPE RD
SUB TOTAL:				4216.70	
MINUS DRIVEWAYS -				154.2	
TOTAL:				4062.50	

BITUMINOUS BASE MIXTURE PG 64-22 (BASE)					
STA TO STA	LENGTH (FT)	WIDTH (FT)	THICKNESS (IN)	TOTAL (SY)	REMARKS
3+60 - 31+65	2805	22	3.25	6856.7	MT. HOPE
31+25 - 31+65	VARIES	VARIES	3.25	229.1	MT. HOPE ROAD RADIUS AND TAPER AT RT. U
100+00 - 156+32	5632	22	3.25	13767.1	WATERFORD (MT HOPE TO LOW WATER CROSSING)
158+02 - 168+00	998	22	3.25	2439.6	WATERFORD (LOW WATER CROSSING TO END)
100+00 - 100+50	VARIES	VARIES	3.25	101.4	WATERFORD (INTERSECTION W/MT HOPE)
TOTAL:				23393.90	

BITUMINOUS PAVEMENT MIXTURE PG 64-22 (BP-1)					
STA TO STA	LENGTH (FT)	WIDTH (FT)	THICKNESS (IN)	TOTAL (SY)	REMARKS
3+60 - 31+65	2805	22	1.75	6856.7	MT. HOPE
31+25 - 31+65	VARIES	VARIES	1.75	229.1	MT. HOPE ROAD RADIUS AND TAPER AT RT. U
100+00 - 156+32	5632	22	1.75	13767.1	WATERFORD (MT HOPE TO LOW WATER CROSSING)
158+02 - 168+00	998	22	1.75	2439.6	WATERFORD (LOW WATER CROSSING TO END)
100+00 - 100+50	VARIES	VARIES	1.75	101.4	WATERFORD (INTERSECTION W/MT HOPE)
TOTAL:				23393.90	

MOBILIZATION
1 LUMP SUM

TRAFFIC CONTROL
1 LUMP SUM

CLEARING AND GRUBBING
1 LUMP SUM

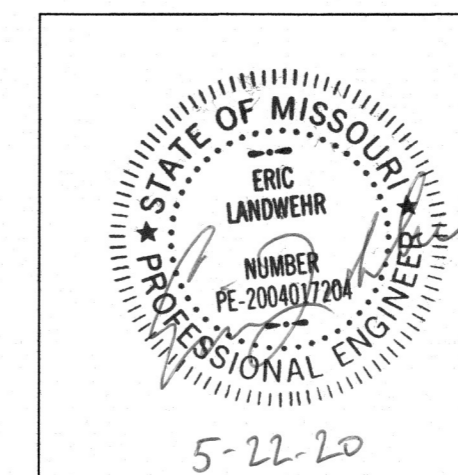
PROPERTY CORNERS MT. HOPE ROAD					
#	STATION	LOCATION	REFERENCE EACH	REESTABLISH EACH	REMARKS
1	8+06.67	30.6' RT	1	0	5/8" PIN - SEC. CORNER DO NOT DISTURB
2	22+27.70	1.35' LT	1	1	1/2" IRON PIN
TOTAL:			2	1	

PROPERTY CORNERS WATERFORD ROAD					
#	STATION	LOCATION	REFERENCE EACH	REESTABLISH EACH	REMARKS
1	112+82.50	3.25' LT	1	1	1/2" PIN (1/4 1/4 CORNER)
2	126+08.00	1.05' LT	1	1	RR SPIKE (1/4 CORNER)
3	126+07.76	16.47' LT	1	1	PIPE
4	128+80.94	29.30' RT	1	0	1/2" PIN w/PLASTIC CAP (DO NOT DISTURB)
5	129+43.13	2.02' LT	1	1	1/2" PIN w/PLASTIC CAP
6	131+60.48	14.16' RT	1	1	5/8" PIN w/METAL CAP
7	131+60.10	129.06' RT	1	0	1/2" PIN w/PLASTIC CAP (DO NOT DISTURB)
8	132+69.48	2.63' LT	1	1	1/2" PIN
9	132+70.00	19.20' LT	1	1	PIPE
10	135+75.76	13.97' RT	1	1	5/8" PIN w/METAL CAP
11	139+31.03	3.32' LT	1	1	RR SPIKE (1/4 1/4 CORNER)
12	139+99.96	17.67' LT	1	1	PIPE
13	140+24.86	17.48' LT	1	1	PIPE
14	152+54.96	3.15' LT	1	1	RR SPIKE (SEC. CORNER)
TOTAL:			14	12	

ROCK LINING (RIP-RAP)						
STATION	LOCATION	LENGTH (FT)	WIDTH (FT)	THICKNESS (FT)	TOTAL (CU YDS)	REMARKS
121+05	RT	12	12	2	11.0	WATERFORD ROAD
OFF R.O.W.	LT	VARIES	VARIES	VARIES	535.0	EROSION CONTROL - MT HOPE ROAD
OFF R.O.W.	LT	VARIES	VARIES	VARIES	270.0	NORTH END BOX CULVERT MT. HOPE ROAD
VARIOUS LOCATIONS					270.0	AS DIRECTED BY THE ENGINEER
TOTAL:					1086.0	

TYPE 2 ROCK BLANKET						
STATION	LOCATION	LENGTH (FT)	WIDTH (FT)	THICKNESS (FT)	TOTAL (CU YDS)	REMARKS
17+25-18+75	LT	VARIES	VARIES	VARIES	100.0	NORTH ALONG BACKSLOPE MT. HOPE ROAD
OFF R.O.W.	LT	VARIES	VARIES	VARIES	130.0	STREAM BANK STABILIZATION MT. HOPE RD.
TOTAL:					230.0	

GROUTED ROCK LINING (RIP RAP) (MIN. 2' THICK) (WATERFORD ROAD ONLY)					
STATION	LOCATION	LENGTH (FT)	WIDTH (FT)	THICKNESS (FT)	TOTAL (CU YDS)
128+56	RT	12	12	2	10.7
138+92	RT	12	4	2	3.6
142+61	RT	12	6	2	5.3
151+55	RT	12	4	2	3.6
165+72	RT	12	4	2	3.6
TOTAL:					26.8



**COLE COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

5055 MONTICELLO ROAD  
JEFFERSON CITY, MO 65109  
Phone 573/636-3614 - Fax 573/636-8389

**PROJECT:** MT. HOPE/WATERFORD ROAD GRAVEL ROAD UPGRADE PROJECT

DATE: \_\_\_\_\_  
REVISED: \_\_\_\_\_  
REVISED: \_\_\_\_\_

# PROJECT QUANTITIES

SEEDING, FERTILIZING, LIMING AND MULCH						
STA to STA	LOCATION	LENGTH (FT)	WIDTH (FT)	SEEDING, FERTILIZING & LIMING (ACRES)	MULCHING - TYPE 4 (EMBEDDED) (ACRES)	REMARKS
MT HOPE ROAD						
3+00 - 31+65	BOTH SIDES	2865	34	2.24	2.24	BEGINNING OF PROJECT TO RT U
31+15 - 31+45	BOTH SIDES	VARIES	VARIES	0.05	0.05	SIGHT TRIANGLES PLUS RT U R/W
8+25 - 22+50	RIGHT SIDE	1425	30	0.98	0.98	TEMP. CONST. ESMT.
OFF R.O.W.	LEFT SIDE	VARIES	VARIES	0.50	0.50	GOLDAMMER PROPERTY
SUB TOTAL:				3.77	3.77	
WATERFORD ROAD						
100+50 - 156+32	BOTH SIDES	5582	34	4.36	4.36	MT. HOPE TO LOW WATER X-ING
158+02 - 168+00	BOTH SIDES	998	34	0.78	0.78	LOW WATER X-ING TO END PROJECT
100+00 - 100+50	BOTH SIDES	VARIES	VARIES	0.03	0.03	SIGHT TRIANGLES AT MT. HOPE INT.
100+50 - 102+50	LEFT SIDE	200	20	0.09	0.09	TEMP. CONST. ESMT.
109+00 - 118+50	LEFT SIDE	950	20	0.44	0.44	TEMP. CONST. ESMT.
125+00 - 126+10	LEFT SIDE	110	20	0.05	0.05	TEMP. CONST. ESMT.
155+00 - 157+00	LEFT SIDE	200	30	0.14	0.14	TEMP. CONST. ESMT.
157+50 - 158+00	LEFT SIDE	50	30	0.03	0.03	TEMP. CONST. ESMT.
155+00 - 157+00	RIGHT SIDE	200	30	0.14	0.14	TEMP. CONST. ESMT.
157+50 - 158+00	RIGHT SIDE	50	30	0.03	0.03	TEMP. CONST. ESMT.
SUB TOTAL:				6.09	6.09	
TOTAL:				9.86	9.86	

DITCH STABILIZATION STRUCTURES			
LENGTH (FT)	WIDTH (FT)	TOTAL EACH	LOCATION
4	6	125	AS DIRECTED BY THE ENGINEER
TOTAL:		125	

STEEL REINFORCED CONCRETE IN PLACE					
STATION	LENGTH (FT)	WIDTH (FT)	THICKNESS (IN)	CU. YDS.	REMARKS
156+30-156+60	30	31	VARIES	28.0	S. END BRIDGE APPROACH
157+70-158+00	30	31	VARIES	28.0	N. END BRIDGE APPROACH
17+85 LEFT	22	VARIES	VARIE	20.0	BOX FLOOR EXTENSION
TOTAL:				76.0	

LINEAR GRADING		
STA - STA	LENGTH (FT)	STATIONS
MT HOPE ROAD		
3+00 - 31+65	2865	28.65
SUB TOTAL:		28.65
WATERFORD ROAD		
100+00 - 156+32	5632	56.32
158+20 - 168+00	998	9.98
SUB TOTAL:		66.30
TOTAL:		94.95

FOUR (4) INCH PAVEMENT MARKING PAINT			
STA - STA	WHITE (LINEAR FT x 2)	YELLOW (LINEAR FT x 2)	REMARKS
MT HOPE ROAD			
3+80 - 31+65	5610	5610	DOUBLE YELLOW CENTERLINE
SUB TOTAL:		5610	
WATERFORD ROAD			
100+00 - 156+32	11264	11264	
158+02 - 168+00	1996	1996	DOUBLE YELLOW CENTERLINE
SUB TOTAL:		13260	
TOTAL:		18870	18870

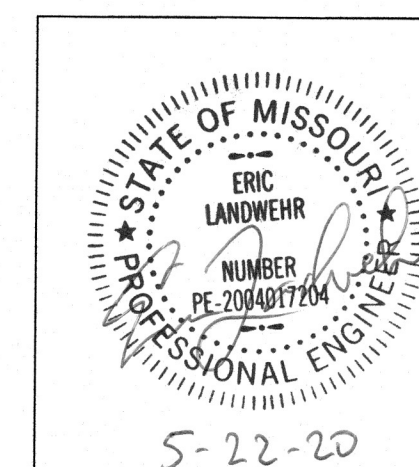
SUBGRADE STABILIZATION (AS DIRECTED BY THE ENGINEER)				
STA-STA	LENGTH (FT)	WIDTH (FT)	THICKNESS (IN)	CU. YDS.
VARIES	1500	28	18	2333.3
TOTAL:				2333.3

GEOTEXTILE FABRIC (AS DIRECTED BY THE ENGINEER)			
STA-STA	LENGTH (FT)	WIDTH (FT)	SQ. YDS.
VARIES	1500	31	
TOTAL:			5166.7

SUBGRADE SCARIFYING IN FILL		
MT HOPE ROAD		
STA - STA	LENGTH (FT)	STATIONS
3+60 - 6+00	240	2.40
7+00 - 15+00	800	8.00
SUB TOTAL:		10.40
WATERFORD ROAD		
102+00 - 108+00	600	6.00
118+00 - 125+00	700	7.00
129+00 - 130+00	100	1.00
135+50 - 139+50	400	4.00
141+50 - 144+00	250	2.50
150+00 - 152+00	200	2.00
SUB TOTAL:		22.50
TOTAL:		32.90

SUBGRADE COMPACTING IN CUT		
MT HOPE ROAD		
STA - STA	LENGTH (FT)	STATIONS
6+00 - 7+65	100	1.00
15+00 - 31+70	1670	16.70
SUB TOTAL:		17.70
WATERFORD ROAD		
100+00 - 102+00	200	2.00
108+00 - 118+00	1000	10.00
125+00 - 129+00	400	4.00
130+00 - 135+50	550	5.50
139+50 - 141+50	200	2.00
144+00 - 150+00	600	6.00
152+00 - 156+50	450	4.50
158+00 - 168+00	1000	10.00
SUB TOTAL:		44.00
TOTAL:		61.70

COMPACTED FILL IN PLACE						
STATION	LOCATION	LENGTH (FT)	WIDTH (FT)	THICKNESS (FT)	TOTAL (CU YDS)	REMARKS
OFF R.O.W.	LT	VARIES	VARIES	VARIES	100.0	STREAM BANK STABILIZATION MT. HOPE RD.
TOTAL:					100.0	



**COLE COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

5055 MONTICELLO ROAD  
JEFFERSON CITY, MO 65109  
Phone 573/636-3614 - Fax 573/636-8389

<b>PROJECT:</b> MT. HOPE/WATERFORD ROAD GRAVEL ROAD UPGRADE PROJECT	DATE: _____
REVISION: _____	REVISION: _____
REVISION: _____	REVISION: _____

# PROJECT QUANTITIES

REINFORCED CONCRETE PIPE												
STATION	15" (LIN.FT)	18" (LIN.FT)	24" (LIN.FT)	30" (LIN.FT)	66" (LIN.FT)	72" (LIN.FT)	15" F.E.S. (EA)	18" F.E.S. (EA)	24" F.E.S. (EA)	30" F.E.S. (EA)	66" F.E.S. (EA)	72" F.E.S. (EA)
MT. HOPE ROAD --- NO RCP PIPE TO BE INSTALLED												
WATERFORD ROAD												
121+05					64						2	
128+56						64						2
138+92	48						2					
142+61				64						2		
151+55			48						2			
165+72		48						2				
<b>TOTAL:</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>64</b>	<b>64</b>	<b>64</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>

CORRUGATED METAL PIPE					
		PIPE DIAMETER		FLARED END	
#	STATION	LOCATION	15" (LIN.FT)	18" (LIN.FT)	15" 18"
MT. HOPE ROAD					
1	14+60	RT		36	2
2	17+05	LT		46	2
3	21+65	RT		28	2
4	22+12	LT		46	2
5	22+76	LT		30	2
6	24+92	RT	40		2
7	26+50	RT	30		2
8	24+85	LT		10	
SUB TOTAL			70	16	4 10
WATERFORD ROAD					
9	113+30	RT		40	2
10	126+25	LT	30		2
11	129+80	LT	36		2
12	133+74	LT	28		2
13	134+62	LT	24		2
14	133+74	RT	28		2
SUB TOTAL			146	40	12 2
<b>TOTAL:</b>			<b>216</b>	<b>236</b>	<b>16 12</b>

TEMPORARY EROSION CONTROL					
		SILT	STRAW BALE	ROCK	REMARKS
STATION	LOCATION	FENCE (LIN.FT)	DITCH CHECKS (EACH)	DITCH CHECKS (EACH)	
VARIOUS	VARIOUS	800	20	20	
<b>TOTAL:</b>		<b>800</b>	<b>20</b>	<b>20</b>	

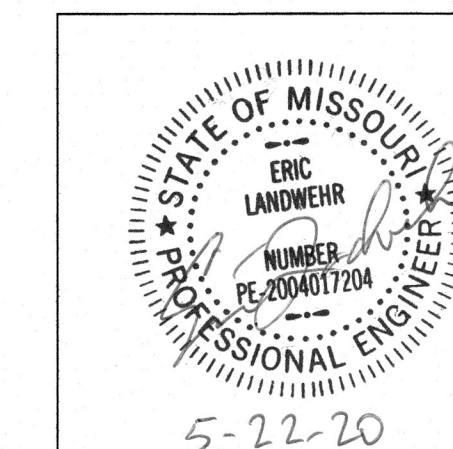
DRIVEWAY AGGREGATE - TYPE 1					
STATION	LOCATION	WIDTH (FT)	LENGTH (FT)	THICKNESS (IN)	TOTAL (SY)
MT. HOPE ROAD					
6+10	RT	25	35	4	97.2
14+60	RT	30	30	4	100.0
17+05	LT	40	30	4	133.3
21+65	RT	22	20	4	48.9
22+12	LT	40	20	4	133.3
22+76	LT	25	20	4	55.6
24+92	RT	36	20	4	80.0
26+50	RT	26	20	4	57.8
SUB TOTAL					706.1
WATERFORD ROAD					
101+00+/-	RT	42	20	4	93.3
113+30	RT	36	20	4	80.0
125+70	RT	30	20	4	66.7
125+85	LT	30	20	4	66.7
126+25	LT	26	20	4	57.8
126+25	RT	24	20	4	53.3
129+80	LT	34	20	4	75.6
133+74	LT	20	20	4	44.4
134+62	LT	20	20	4	44.4
133+74	RT	24	20	4	53.3
140+11	LT	20	20	4	44.4
140+43	RT	30	20	4	66.7
145+80	LT	20	20	4	44.4
146+28	RT	20	20	4	44.4
154+00+/-	RT	30	20	4	66.7
165+21	RT	40	20	4	88.9
SUB TOTAL					991.0
<b>TOTAL:</b>					<b>1697.1</b>

REMOVAL OF IMPROVEMENTS		
STA - STA	LOCATION	REMARKS
MT HOPE ROAD		
14+61	RT	18" CMP DRIVEWAY CULVERT
17+04	LT	18" CMP DRIVEWAY CULVERT
17+40 - 18+40	LT	GUARDRAIL AND POSTS
17+40 - 18+40	RT	GUARDRAIL AND POSTS
21+65	RT	18" CMP DRIVEWAY CULVERT
22+12	LT	15" CMP DRIVEWAY CULVERT
22+76	LT	15" CMP DRIVEWAY CULVERT
24+92	LT	15" CMP TO MAIL BOX CULVERT
24+92	RT	15" CMP DRIVEWAY CULVERT
26+50	RT	15" CMP DRIVEWAY CULVERT
WATERFORD ROAD		
100+20	C/L	18" CMP CROSSROAD CULVERT
113+30	RT	18" CMP DRIVEWAY CULVERT
121+05	C/L	5' X 4' CMP CROSSROAD CULVERT
126+20	LT	15" CMP DRIVEWAY CULVERT
128+56	C/L	72" CMP CROSSROAD CULVERT
129+80	LT	15" CMP DRIVEWAY CULVERT
133+74	LT	15" CMP DRIVEWAY CULVERT
134+63	LT	15" CMP DRIVEWAY CULVERT
138+92	C/L	15" CMP CROSSROAD CULVERT
142+61	C/L	24" CMP CROSSROAD CULVERT
151+55	C/L	15" CMP CROSSROAD CULVERT
156+32 - 156+60	C/L	CONCRETE APPROACH
157+70 - 158+02	C/L	CONCRETE APPROACH
165+72	C/L	18" CMP CROSSROAD CULVERT
1 LUMP SUM		

4" DIA. PRIVATE UTILITY CROSSING SLEEVE		
STATION	LENGTH/FT	4" DIA CLEANOUTS
132+75	70	2
<b>TOTAL:</b>	<b>70</b>	<b>2</b>

GUARDRAIL AT BOX CULVERT ON MT. HOPE ROAD				
		TYPE A		REMARKS
LOCATION	TOTAL	GUARDRAIL	CRASHWORTHY	
STA - STA	LENGTH (FT)	(6' POSTS) (LIN.FT)	END TERMINAL (25' LENGTH) (EACH)	
17+25-18+75LT	150	50	2	TO BE MARKED BY THE ENGINEER
17+00-18+25RT	125	25	2	
<b>TOTAL:</b>	<b>275</b>	<b>75</b>	<b>4</b>	

Additional Off Site Guardrail Replacement Locations			
Location	Type A Crashworthy End Terminal (Each)	Type A Crashworthy End Terminal (TL-2) (Each)	Remarks
Liberty Road		1	R/R Exist full length terminal w/new TL-2
Business 50 W		1	R/R Exist. Damaged TL-2 w/ new TL-2
Boise Brule Road	1		R/R Exist. Damaged end terminal w/new end terminal
<b>Total:</b>	<b>1</b>	<b>2</b>	



**COLE COUNTY**  
**DEPARTMENT OF PUBLIC WORKS**

5055 MONTICELLO ROAD  
JEFFERSON CITY, MO 65109  
Phone 573/636-3614 - Fax 573/636-8389

**PROJECT:** MT. HOPE/WATERFORD ROAD  
GRAVEL ROAD UPGRADE PROJECT

DATE: \_\_\_\_\_  
REVISED: \_\_\_\_\_  
REVISED: \_\_\_\_\_