

## HRPOA Road Plan 2006

Due to the way in which our road operation is funded (3 times a year over 3 years) the varying conditions of our roadways, and the sheer volume of work to do, order of work will be as follows:

### **Part A: Order of Work**

1. Basic regrading of presently graveled roads as they dry out. No compaction or water equipment will be used initially. Roadways will be supplemented with 1000+/- tons of ¾" AB where required. Approximately 20 miles of roadway.
2. Re-construct washed out, rocky or rough sections with dozer/grader and construct correct "sub-grade" section on all non-graveled roadways east of HWY 341. Water and compaction equipment.
3. Install additional drainage as presently staked/mapped. Hy-Ram rocky ditches to drain.
4. Add 1 ½" rock to 7+/- miles of presently non-graveled roadways, mix, water, and compact. 4500+/- tons of 1 ½".
5. Place ¾" AB wearing surface (minimal to be supplemented in '07 & '08 as budget dictates) on 7 miles of improved sub-grade and 4 miles of sub-grade improved in January '06. 3000+/- tons. Water and roll. Supplement wearing surface on 20 miles of improved road as required.
6. Site specific problems-as they fit with equipment rental. Bullfrog at Lousetown Creek washout, repair of N. Star large culvert, Bullfrog/Cartwright siltation spoil, etc.

**NOTE:** Items 2 & 3 may be interchanged if sub-grade remains too wet to work when item 1 is complete.

Presently Non-graveled roadways to be completed (to improve sub-grade minimal ¾" AB wear surface) in 2006:

Yellowjacket  
Flatiron & Musket to Flatiron  
1/3 of Hamilton-Combination end  
Upper Cartwright  
Hannapah  
Livery-Bonanza side  
Wildrose-lower ½ from 5300 to Lousetown  
Goldfield-steep section  
Upper Northstar, Aurora to Sheridan

**NOTE:** All materials placed will be tracked & compared to the spreadsheet in Part "F" for overall parity.

### **Part B: Specifications**

All grading to conform to "Oklahoma" Specs previously adopted by past HRPOA Board

### **Part C: Alternates**

The HRPOA Road Committee is presently looking for material alternatives including AC grindings & is contemplating putting this out to bid and trucking out to bid.

### **Part D: Professional Input & Review**

Review of our basic plan was performed by N.L. Hansen, C.E. P.E., retired, and M. Clarkson, C.E. P.E.

## 2006 Budget-by Stage of Construction

### Part E: Estimated Budget

**Stage I:** Grade 20 miles of graveled road between now and May 15<sup>th</sup> as moisture content allows

*Dirt work*

Cat 12E Grader, operated @ \$40.00/hr x 160 hours.....\$ 6,400.00  
 Fuel 40 gallons/day x 20 days x \$2.00/gallon.....\$ 1,600.00  
 Production rate of 1 mile per day

Total: \$ 8,000.00

*Material & trucking*

Add 1000+/- tons of ¾" AB on 20 miles of Road @ \$12.65/ton.....\$ 12,650.00

Grand Total: \$ 20,650.00

**Stage II:** Construction: Build sub-grade on 13 miles of unimproved roadway

JD 700 Dozer, operated @ \$65.00/hr x 160 hours.....\$ 10,400.00  
 Cat 12E Grader, operated @ \$40.00/hour x 160 hours.....\$ 6,400.00  
 72" Sheepsfoot Roller, operated @ \$45.00/hour x 8 hours x 10 days.....\$ 3,600.00  
 Water Truck, operated (trade with 1 acre association) @ \$35.00/hour...\$ 0.00  
 Fuel @ 100 gallons/day x 20 x \$2.00/gallon.....\$ 4,000.00

Grand Total: \$ 24,400.00

Production rate of 2/3 mile per day

**Stage III:** Construction: Install additional drainage & Hy-Ram work in rocky ditches

Hoe, operated @ \$48.00/hour x 100 hours.....\$ 4,800.00  
 Fuel @ 25 gallons/day x 13 days x \$2.00/gallon.....\$ 650.00  
 Culvert pipe 190 lf of 15" & 60 lf of 18" + tax and bands.....\$ 3,400.00  
 Additional Labor @ \$20.00/hour x 100 hours.....\$ 2,000.00

Grand Total: \$ 10,850.00

Production rate of 60+ ft./day plus 3 to 4 days of Hy-Ram work

**Stage IV:** Construct Improved Sub-grade: Mix 1 ½" with sub-grade, water & compact. 7 miles in 2006, 7 Miles split over '07 & '08.

Cat 12E Grader, operated @ \$40.00/hour x 8 hours/day x 7 days.....\$ 2,240.00  
 Water Truck – 1 acre trade.....\$ 0.00  
 Fuel 100 gallons/day x \$2.00/gallon x 7 days.....\$ 1,400.00  
 Trucking and material @ 4500 ton x \$15.65/ton.....\$ 70,425.00

Grand Total: \$ 74,065.00

Production rate of 1 mile per day @ 640 ton per rock delivery

**Stage V:** Place wearing surface on 7 miles of improved sub-grade (Stage IV work) & 4 miles of January's 1 ½" placed & touch up any of the 20 miles of improved roadway already rocked & graded in Stage I.

Cat 12E, operated @ \$40.00/hour x 80 hours.....\$ 3,200.00  
 Roller, operated @ \$45.00 x 80 hours.....\$ 3,600.00  
 Water Truck (assume rental) @ \$70.00/hour x 8 hours x 10 days.....\$ 5,600.00

Material & Trucking @ \$12.65/ton x 3000 ton.....	\$ 37,950.00
Fuel @ 10 days x 100 gallons/day x \$2.00/gallon.....	\$ <u>2,000.00</u>
Grand Total:	\$ 52,350.00

Production Rate: 300 ton/day x 10 days/1.1 miles/day

<b>Estimated Total Expense:</b>	<b>\$182,315.00</b>
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<b>Estimated Total Budget:</b>	<b>\$184,800.00</b>
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<b>Estimated Total Rock Placed:</b>	<b>8,500 tons</b>
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<b>Stage VI:</b> Site specific problems:	\$ 2,500.00 LS
Bullfrog at Dakin's, Cartwright/Bullfrog siltation, big culvert repair, etc.	

<b>2006 Grand Total</b>	<b>\$184,815.00</b>
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