

SONG OF A ROAD

Broadcast 5 November 1959, repeated 29 December 1959

Singers	Musicians	Named Speakers	
Ewan MacColl	Peggy Seeger banj+ah	Sir Owen Williams	Joe Searby
Bert Lloyd	Bruce Turner clar	Bob Dito	A Hunter
Isla Cameron	Fitzroy Coleman guit	Mr Rogers	Mr King
Francis McPeake	Francis McPeake uill	A Graham	Ted Jones
Jimmie McGregor	Jimmie McGregor guit	Mr Shaw	Mr Keely
Seamus Ennis	Jim Bray dbass	David Buchan	Neville Reece
Louis Killen	Alf Edwards conc	GR Aspinall	Dick Bull
Cyril Tawney	John Chilton trum	Mr James	Mr Griffin
John Clarence	John Armitage drums	Mr McCorquodale	James Cryer
William V Thomas	Bobby Mickleburgh trom		Jack Hamilton
Isabel Sutherland		Mr Spencer	Mr O'Donnell
		Mr Beecham	Mr Watson
		Frank Green	Mr Price
		Mr Wildman	Mr Stewart
		Mr Harrison	Frank Sennett
		Wilfred Bailey	Ted McCarth

Text

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This is the BBC Home Service from the Midlands. We present Song of a Road, the London-Yorkshire Motorway, described by the men who planned and built it, and set into song by Ewan MacColl.

**Come all you gallant labouring men,
Leave your family and your friends
You're needed on the job again,
On the London-Yorkshire Highway.**

On March 24th 1958 the Minister of Transport and Civil Aviation formally inaugurates work on the London-Yorkshire motorway.

**A job to do, a job for you,
And nineteen months to see it through
A chance to earn a quid or two
On the London-Yorkshire Highway.**

The task of constructing the 67 miles of motorway is as follows:

Take a heap of gold, (estimated cost 20 million pounds)
And a pinch of time, (time for completion 19 months)
Take 15 million tons of muck and shift it. (excavation, for cuttings and backfilling into

embankments - 11 million cubic yards of earth)
Use cats and dozers, Euclid loaders, 10 RBs,
Use grabs and scrapers, cranes and graders, trucks and tractors.

Oh yes, and two-legged machines.

Take a thousand men from the earth's four corners -

Men, experienced in their own particular field.

Add miles of chalk and clay and sand
And mix the lot with a steady hand,
Add sweat to season, and curse in reason,
Add weeks of rain and dirty weather,
And a couple of floods and mix together,
Add snags, delays and toil and trouble,
And stir the lot with a navy's shovel and then...

You've got a real good road.

We built canals, we laid the tracks
Of railways here to hell and back,
And now we're going to take a crack
At the London-Yorkshire Highway.

So - in with the dozers and the trucks,
Get weaving lads and shift this muck -
We'll meet in the pub and drink good luck
To the London-Yorkshire Highway.

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And we usually finish the shift in the pub if we...
The pub, inside the pub, there's a lot of muck shifted here you know, they knock you
down there with the jibs and the tractors.... knock you down there...

I, I'm, I'm sort of a little bit of a spread boss on you guys here, because I mean to say,
they drive the Euclids, which is, which is a high speed hauling of excavation, see, there's
nine against the one machine I have. This one machine lowers the lot, it puts the lot of
it in about 45 seconds which you can say is nearly 20 ton. Their prime object is to get
back for another. They don't like to see me sitting in the cut there reading the paper
with nothing to, to load, you see what I mean. But the more we move, the more muck we
move, like - the more - the more money we earn - for every yard of muck that we move
we get a penny a yard bonus. I mean, in the summer time that's our harvest. When the
sun shines and we can go to work properly, that's our harvest you see.

3

I think it's the soil, I think it's the soil. I mean, you can trace it all back.

In the beginning there was the land.

Now when you dig the ground you realise what a real bundle of dirt we live on.

**Earth cooled, mountains, plains and seas formed,
Swirling gases rolled away,
Sun in the skies burned down on the saw-toothed mountains.**

**When you're up on the seat
In the cold and the heat
You never think what you're lifting -
You're bashing away every hour of the day,
You're working at the old muck-shifting.
Cats and back-acters,
Rubber-tyred tractors,
Derricks and cranes for lifting -
Whatever your rig, bulldozer or jib,
You're doing the old muck shifting.**

Now it is interesting that all the way up these materials... the chalk overlies the Gault clay, which overlies the greensand, which overlies the Oxford clay, overlying the great Oolite series, and then the Lias series, and all these series are getting older as they go up.... something like 250 million years old, this.

**Rocks and cliffs and broken mountains, crushed and ground beneath the ice,
Covered the earth's bare bones in the plains and valleys**

**When you're slaving away every hour of the day,
You never think what you're lifting
You're bashing away, and you're doing OK,
You're working at the old muck-shifting**

Although I'm not a geologist I'm fascinated by it. For instance these big machines that we use bear a striking resemblance to prehistoric monsters. To think that our imitation of the prehistoric monster trots about up here digging up fossils that are millions and millions of years old.

**Cats and back-acters, rubber-tired tractors,
Derricks and cranes for lifting,
Whatever your rig, bulldozer or jib,
You're doing the old muck shifting.**

4

We are the consulting engineers. We are responsible to the Ministry of Transport for the whole design of the road, and we are employed to design and supervise the construction.

**On the day that you decide to build a road from there to here
The first thing that you need is a consulting engineer.**

**He will do your thinking for you, he'll put your plan in gear -
He's the brainy bloke who's got the knowhow.**

**With his surveyors and designers
And his peggers and his liners,
With his spans and elevations
And these endless calculations
He was there - when it began -
He's the bloke who put the detail in the plan.**

Now we actually surveyed four different routes. For this road, there were certain standard radii, curves, gradients, and so on, and of course minimum amount of property to be demolished. When we plan four different routes in four different places, we've been on, on this particular road for eight years.

Been on the road so long, been on the job so long -

It was one of the longest surveys carried out by a private firm.

Travelled the line, been time after time, along the fifty miles.

I knew every field, and met every farmer personally, in all of the length of the fifty three miles.

**Mapped a million hedges, culverts, streams,
Built embankments in my dreams,
Been on the road so long,
Been on the job so long,**

It was necessary to make sure that the line which we had provided was the best line. And the ratio of the amount of land which was surveyed to the amount of land which was occupied now by the road is something in the region of about four to one. And I would say we covered, my surveyors and myself, covered some 200 miles for the London-Yorkshire motorway.

**Wrote a thousand letters to the Ministry,
Dear Sir your memo of August three,
Your reference BL stroke CT,
Re alteration of existing drainage systems.**

Drainage has been a very big problem - that is the drainage not only of the road itself, the motorway itself, but the carrying across the road of all the existing forms of drainage.

**Been on the road so long, been on the job so long,
Design speed 70 MPH,
Check and recheck coordinates, maximum weight, invisible load,
Super elevation of the road,
Minimum sightlines.**

idea of the River Trent. There there was a question whether the flood plain wanted a viaduct 8000 feet long or much less.

**Know every farm, every cottage and barn,
Know every line of clay
I know every field and its average yield,
I know all the rights of way.**

You make plans meanwhile of all the farm boundaries so that we know just exactly what we're doing to people, so that they can't come along and say D'you know what you're doing to my farm, you're cutting it in half, and we can at least say yes we know that, but it's inevitable...!

**Made plan after plan for the purchase of land,
Blueprinted the bridge designs,
Know the lie of the land like the back of me hand,
I know every boundary line.**

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We were in a great rush when we did this, because in spite of starting early on the preliminary design, the detailed design had to be done in something like 18 months. Yes - middle of 1955 we started on the details and in October 57 we went out to tender.

**When the plans are all completed and the time is drawing near,
To begin the job you need a contracting engineer -
He's the expert in the field and he's the man who's got the gear,
He's the bloke that keeps the job a-rolling.**

**With his managers and his foremen
And mechanics and his storemen,
Batching plant and concrete mixers.**

The surveyors, the planning engineer, the costing surveyor, project engineer who attends to technical matters...

**Fitters, carpenters, steel fixers,
In the field. He's the man -
He's the one who has to carry out the plan.**

I think you get a great sense of elation at the beginning of a job, we went right through the length of this job, before we started, and I got the drawings in my hand there, the plans, I tried to envisage what it was going to look like when it was finished just by walking through the country you know, and in my mind it's got already what type of work, what type of machinery we employ, what type of batchers do we have, what, how many men will we need for this job, things like that, it's, it's a great time and you see it starts from scratch right at the beginning.

**The job's split up in sections
And each has a working scheme**

With the manager in charge
And under him a working team.
Field offices are built
And shops to service the machines -
Now you'll hear the excavators roaring.

With the banksmen and the drivers,
They're the earliest arrivers,
And the engineers and planners,
Labourers and walking gangers,
They're the boys, wish them luck -
They're the blokes who've got to shift the muck.

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My name is Jack Hamilton, yes, Cork city.
Frank Sennett... Balinaa, Co. Mayo. That's where all the wild men come from.
I'm from Whitehaven, Cumberland.
I come from Norfolk, near Diss.
Derschau. In Polish it's Ischeff.
I come from Hungaria, yeh.
Where am I from? No fixed abode.
Peterhead. I was at the herring fishing.
O'Donnell they call me. I come from Mayo.
Carlow, County Carlow.
From Newcastle upon Tyne.
Thomas McCool. Were you down, were you in the city of Belfast? That's where I came
from way down, near Londonderry.
I from Nanda India. Too many people.
I live down in Broadway, just down the road here.
St Kitts, West Indies.
They're black men, white men, all colours up there, brindle and all. Oh they're a good
old crowd, oh they are yes. Oh they're a good old crowd. Oh, ah, we get on good.

**Every day, you'll find them here,
They come from here and there and everywhere.**

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During that time the survey's been made to ascertain the amount of material to be
moved, and the planning people decide how it is to be moved and where it is to be moved
to. That results in a complicated graph called the mass haul diagram on which the whole
of the earth moving is based.

The earth moving for the cuttings and embankments is the major gamble of the road.
It's the unknown nature of the material.

I think one of the most interesting jobs of this class of work is the muck shifting. It's
a wonderful job is muck shifting. Specially when there's plenty of it you know, and
there's two and a quarter millions to move altogether. Oh yes I must admit I enjoy

muck shifting, better than anything. I do really, no doubt about that.

**The consulting engineer's the man
Who formulates the plan,
The contractor gets it moving
And he does the best he can,
But the labourer's the bloke who gets the blisters on his hand
He's the one who keeps the muck a-moving.**

**With his dumpers and his scrapers
And his ten-ton excavators,
With his rollers and his shovels
And his digs and lodging troubles,
He's the one - who fills the truck.
He's the one who earns his bonus sifting muck.**

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It would take quite a lot of men for to do the job of one of these machines. And then they wouldn't do it half as good. Nor in one tenth of the time. And very expensive - I'm not! I'm only a man. You can get plenty... plenty like me.

It's not a labour job. It's a machine job. Every operation that we are carrying out is based on machine work.

Some people say to me you're a very small man to be driving such a big machine, but you don't have to be a big man to drive these at all. As small a man as me can drive these. Even a lady, a lady can drive these things. Once you get used to the scraper and the dozer blade and the winch and that's all, just to be able to gauge distance with it.

Actually this is a D8 bulldozer, normally known as a dozer. But basically it is a tractor and of course we've various pieces of equipment are fitted onto it. It's all a matter of how's it go for the job, how to set about it. I mean to say you can, you can dive into that now and you'd get yourself bogged right up to the... well you wouldn't shift yourself at all.

You learn different methods of attacking the job see. We talk about this batter work - you get a gradient of what... one and a half in one, two in one. Well you take these up on the side like that you see, working that way on, on the side of the batter. But when you're sitting up there with it looking being so big underneath you, it looks all the world as though it's going to fall over but when you realise you've got 22 tons and the stability of the machine, the bottom weight of it like you know, you can't go over.

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**Come on you gallant drivers wherever you may be,
Whether you drive a Euclid, or a 54 RB,
Keep your hand upon the levers,
Cut and fill a steady load,
And take it nice and steady**

When you're ploughing up the road.

**You've dug a hundred airfields,
In the snow and wind and rain
Built atomic power stations,
More dams than I can name,
We've dug through rock and swampland,
Moved mountains by the load,
Now we're going nice and steady boys,
A-ploughing up the road.**

You know I, I'd die if I was not on this work. I, I couldn't do any other work. I'll drive one of these machines out in snow blizzards, without anything over me. Working in 'em, up on the heights, and I still prefer this... I still prefer the muck and the dirt and the grease than everything to being inside in a factory. I, I... I don't think I could work in a factory. No, I like the rough and go you know, plenty of rough and go. Get into the machine, dig it, dig like blazes and get into the job and go like hell and get the job done, d'ye know.

Now look, the point is this. When you're muck shifting, it gets under your skin. I'll bet you have to fall over. I don't give a damn who it is, anyone sitting here, his foot goes hard down to the boards and he's away. I mean not not... I'm that used to driving machines, it's part of me life, it's me. If I hadn't got a machine, John'll tell you, I didn't have a machine at Meriden, I didn't have one for quite a while, at Meriden, and I was as miserable as hell and as awkward as - you could do nothing with me could you John.

What you want on this work, you want plenty of sense and humour - well, you do - you do yes, because at times it gets right up to there. Well you must have sense and that and humour. And you must stick it.

**When you're digging days are over,
And you've loaded your last ton,
When your cat is broken up for scrap
And your RB10 won't run,
When you've had your last stamp on your card
And reached your last abode
For a long time after there'll be people,
Travelling on your road.**

Course, there's a big variation in drivers like everything else. Some good. Some men's machines you never need to touch. Other men, well, you're there all the time. Of course, I'm a plant fitter working on the road, and, we repair all the earth-moving machines, rollers, that sort of thing. So I've served my time with Vickers, as an apprentice, and during the war of course you gradually gravitated to various types of machines, you know, and all the stuff the army has. And after the war of course, well I didn't want to go back inside again. A garage is all right, but, it's a rusty old life, so I went back to India, and worked and helped them cut coal mines. I finished the contract off in India, and went out to Australia. I spent some time up in the Northern Territory, uranium mines, and down the Snowy River, on the hydro-electric scheme there, and I've been roving

around Australia until I came back here.

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Oh I'm a roving rambler, a fitter to my trade,
I can fix you anything, a camshaft to a spade,
I can fix a dodgy gearbox, or mend a broken tread,
Decoke a Leyland engine while I'm standing on my head.

So, shift boys, shift, do the job and draw your pay,
When this road is finished I'll be moving on my way,
I'll clean my tools and wrap 'em in a pair of oily jeans
You'll always find me working where you'll find the big machines.

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Dig and scrape and load,
See them tractors roll,
When you're working on the road,

Shifting clay, night and day,
Belting with your bulldozer,

Tear into the land
Fifteen million tons
To be shifted, chalk and sand.

Course we're human beings, we're like ants, picking at a big earth mound,

Rock and clay, cleared away,
Here's the base on which we build
The London-Yorkshire motor Highway.

Every time you turn
With your big machines
Helps to make foundations firm.

Eucs and cat, beat it flat,
Level off the base with scrapers

The earth moving then proceeds, and having been completed, cuttings down to a formation level, and embankments up to formation level, we then do the drainage, put in drains through the cuttings and the foot of all the embankments, and more-or-less at the same time we lay the sub-base material, that's the gravel, a sand mixture known as hoggin, or limestone on which the motorway is built. At the same time a start will be made on the bridges -

One hundred and thirty-one bridges planned,
Single span, portal and double-span
Arch-types, viaducts, railway precast,

**Cantilever bridges,
Shift it, cut and fill,
Keep the tractors moving
And slice right through that hill,
Blade all right, feel it bite,
Lift the muck to where it's needed
When we build that great embankment
Ten twelve hours a day,
With your twenty-five ton machine
You'll earn your pay.
Storm and flood, sand and mud,
Striking through the boulder clay,**

I feel now in my own mind that we are building something which is, well, worthy of the name of a road and which is something really good for the country.

Well I don't know, I ain't worried about the country, I'm worried about me farm. Cut the farm in two you see. Left some bits here and there. Got a bridge... Make the most of a bad job, it's not too bad, but what can we do..?

Amazed, amazed really, to know and to see what was below the topsoil. It really was, it was amazing. The variation of the different layers of soil as they got deeper. Layers of sand and clay.

**Limestone, chalk and silt, clear it all away,
Time you've got your bridges built,
Structure Two, on the skew,
There's your steel birdcage scaffold.**

This particular one is a skew bridge, I should imagine it's one of the longest on the motorway... it stretches nearly 300 foot. Well we do come into difficulties on that you see because you run your birdcaging as we call it, that's the actual supporting structure at a different angle you see but... the scaffolding is the most important thing on these structures, I mean once we've got the birdcaging up the joiners follow us before the steel fixers can get in on them.

**Three-eighths of an inch,
Fifty-four foot rock-solid steel,
Fix it with a winch**

I mean it is a heavy job but this machine does the work of ten men. Eight bars to a ton, these are.

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**Sixty tons of steel to take the concrete.
Six hundred cubic yards of concrete for the deck.
Gangs of joiners work preparing shutters.**

I've been in this trade since I was a young man of 16 years of age when I started my

apprenticeship, as a joiner in Dublin. Shop joiner, which is mostly what these boys here are. It's what, what we call shuttering. But this is the first time I've mended bridge work. It's different in, in the type of shuttering and the radius and different curvatures that's on the structure. The main thing there is to hold the line, to keep the, the regularity of the curve. To their satisfaction.

I'm, a walking ganger in charge of the concrete pumps.... We're doing an hour now about 14 yards an hour, 14 cubic yards an hour, 8-9 hours pumping. There's snags you run into ...You want to watch your concrete, got to be consistent, and everything's got to be right about it. A bad mix and, you're finished and then about five hundredweights in each one of them pipes and they're full of concrete. That's the trouble you get. Oh you can tell by looking at the concrete and all when it comes out of the pipe if it's all right. You can tell by looking at it if it's the right mix.

**Keep a steady flow, through the concrete pipe,
Keep your vibrator on the go
Make a start on the central part,
See there's not too much water.
Check it by the clock.
Twenty tons an hour,
You can gauge it by the knock.
You've got to see the pipes are free,
See the concrete flows steady,**

They cut 17 foot 6 out of our place. It was interesting to see what was just underneath what we plough up - 14 foot of clay, and then we ran into chalk, and there was one vein of sand in it, just happens to be where our bridge was - played Harry with the whole job. With sand it'll give, sand'll not stay. When they dug out to get the footings of the bridge in so it just kept collapsing on them.

**Sand for base won't do
Dump it off the site
And the chalk it sticks like glue.
Rocks and cliffs and broken mountains
Crushed and ground beneath the ice,
Covered the earth's bare bones in the plains and valleys.
Miles of sub-base laid,
Second layer of fourteen-inch lean
Concrete is made.
Bridges rise against the sky
Speed the tempo, twelve months past and six to go.
Batchers day and night
Turning out the concrete that's needed on the site.
Hire more men, more again,
Nineteen months to build this road.**

Come on then...

What made you come into this game?

I wanted to get outside. I wanted to get mud on my boots.

What made you come into this game?

Change of faces, change of places.

What made you come into this game?

More-or-less forced into this pre-war, by conditions of work, not being sufficient work in the, in the London area. Not for building.

And take to the open road.

Well there, there's no work up north you see, we've got to come here for bread and butter.

In Belfast they give a job, and for every job there is only need one man, there's at least a hundred looking for that job.

I'm more contented being away from home, where I know I'm doing something. Because when you're at home when you're not getting enough work, you may get a job at eight pounds a week and... you travel across the city maybe on two buses and pay your fare back and forward for a whole week and take a lunch, tea, sugar and milk, and so on, and hand your money in - you don't have very much. I'm lucky enough I don't smoke. Of course now and again I've a habit to a small drink you know, just... oh well, that's just the way it is. At home, well I'm more contented, knowing that I'm doing something for the home, I've been able to do more now since I've come back here.

There's no work in Peterhead. I had to leave home for work you see. Travelling the fishing, working among the herring. Then when the war's finished you see, the steam went out and the diesel come in. North Sea drifters and they didn't do coal and they didn't need half the men you see, they run the fleet there. So I had to take off somewhere else. Pick and shovel.

How long you been doing this mate?

Thirty-three years last October.

How long you been doing this mate?

Well I have been in public works all, all my days.

How long you been doing this mate?

Well... since the war. Since the finish of the war.

A man doing public works.

If God spares me to see the 29th of September it'll be 21 years away from home. I've been married 21 year and I've been away for 21 year and working.

When I first got married in 1934 I was on the labour for about seven months. I couldn't get a job of any description. You take Dick, he's walked up and down this country as much as much as any man, haven't you?

In the month of February the month of February me and our Gordon we slept rough for a fortnight. At back of the hedge. All we had to cover ourselves up with were a raincoat. That's how we had. And, and all the time, all the time we were tramping, we tramped from North Wales into Wolverhampton, walked every inch of the road, from Wolverhampton into Birmingham, Birmingham into Lincoln, Lincoln back into Birmingham, Birmingham we ended up into Biggleswade, Bedfordshire. Never been under a machine before. Took a Barber Green and Gordon took a roller. And that, that's how we got through.

How do you like the job mate?

Bed and work. Bed and work

How do you like the job mate?

I like it fine.

How do you like the job mate?

Nothing to shout about.

....working on the open road.

Just a job to me, I mean, you just do a job and you move from one job to another, and that's that job finished.

There is a great deal of satisfaction in the result, no doubt about it. I mean, roads have been there for all time, haven't they? Even the footpaths we've crossed have been there for a long time. And it is, it is a great thrill to do it, no doubt about that. Great privilege actually.

The trouble is that is in civil engineering there is so much heavy work to be done, see?

Because you realise that in an area like St Albans for instance you get quite a lot of people who don't want to move out of St Albans. You can always find a preponderance of people who can do the work but don't want to leave home.

If you were at home you get more satisfaction out of the job.

And digs, what are the digs like, matey?

This is the most backward place we've been to, for lodgings. Down here, you see, in this

part of the south, they haven't been used to a lot of public works. A lot of us men coming along.

What is the grub like, matey?

The grub's very poor. Some mornings there you couldn't touch it at all.

What are the beds like, matey...?

Ah well the beds there's good beds and all in 'em

In the hostel where you stay.

The bed I'm lying in - has humps and hollows in it... bejakers... like a camel's back. It is. I tell you, I was up in the desert... the first time I slept inside in it. Looking at camels. Humps and hollows. Me arse was all blisters and carabuncles and everything.... In the morning I could hardly walk, I thought I wouldn't be able to go to work. It's an, it's an awful joint. Concentration camp. All they want now is some gas chambers now and smother us.

**Why do you live your life alone,
And leave your wife and kids at home?
Why don't you stay, why must you roam,
And work on the open road?**

It's the man's place for to be at home with the, with the wife, but unfortunately there's no work in my part of the country now.

All the time the, all the time the lads are here you'll find them looking up the labour news for seeing if there's anything going on. That's a good job, I wonder if there's subsistence on that. I'd like to go there, I'd like to go north. I'd be nearer home. You'll hear one feller saying - I'd like to be up in the north of England. It's just a run across to Belfast, you could go across for the weekend.

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**Just a note for time is short dear.
Hard the work and long the day,
But my heart is with you Mary,
Though I'm many a mile away.
Kiss the children for me Mary,
Do not let them pine or grieve.
Tell them how I'm working for them,
Why our home I had to leave.
Building dams, airfields and factories,
Moving concrete by the load -
I'll be with you in November,
When I'm finished on the road.**

All... all trying to save money to buy a house in England, where the work is, but so far we

can't get enough money to buy a house. Not keeping two homes going. You see, you don't get so much hours here. You only get about nine and a half hours here a day. Some men that's keeping a family, if they've got a chance of more hours they couldna get it like you see. Last year on the road now, I never had no more than 60 hours a week, for all the time I was on the road last year, on the Luton section. I mean to say that's the main object of me being away from home, but I'm always hoping like to get some money to pick up to get a house but...

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Oh well, that's just the way it is, at home.

**Come me little son and I will tell you what we'll do.
Undress yourself and get into bed and a tale I'll tell to you
It's all about your daddy, he's a man you seldom see
For he's had to roam far away from home, away from you and me.**

**Remember laddie he's still your dad though he's working far away,
In the cold and heat all the hours of the week on England's motorway.**

**When you fall and hurt yourself and get up feeling bad,
It isn't any use to go a-running for your dad,
For the only time since you were born he's had to spend with you,
He was out of a job and he hadn't a bob, he was signing on the broo.**

**Remember laddie he's still your dad and he really earns his pay,
Working day and night out on the site of England's motorway.**

**Sure we need your daddy here and sure it would be fine
To have him working nearer home and to see him all the time.
But beggars can't be choosers and we have to bear our load,
For we need the money your daddy earns a-working on the road.**

**Remember laddie he's still your dad and he'll soon be here to stay,
For a week or two with me and you when he's built the motorway.**

Call the order mix and ask them how much, how much tons they put through yesterday will you?

Three project office to order mix, three project office to order mix, come in please.
Order mix receiving, come in Wally?
Can you tell me your total output yesterday please.
Home base Taram George come in please.
Taram George receiving.
Contact the concrete train caravan please and see if Love 1 and Love 2 are there please, over.
Will do.

16

**When the muck has all been shifted and the sub-base has been made
The formation then is ready for the base-course to be laid,
And the boys who lay the wearing course that work upon their trade -
The intercom's commandments must be heeded.**

Taram Base, Taram Nan...

Taram Base, over.

Have you any orders please, it's getting rather late, over.

For Batch 2 one hundred yards inch and a half single, three hundred three-quarter,
one hundred sand...

**Order sixty yards of hoggin,
Keep the concrete train a-sloggin'
Taram Base to Taram Nan,
They need a hundred tons of sand
On Section B, an urgent lot,
The deadline for the job is three o'clock.**

Love One . here - the concrete train programme has been altered - twenty six foot train
on the north is going on the west carriageway changing at bridge 13.

OK, message understood, will tell Tommy, over and out.

Chris Larson is getting a crane in by Friday morning which will be down here lifting a
Shavian to bits - in the meantime perhaps you could get the, you could get the machines
back from here onto Friday's concrete. All I'm saying here is these machines you see
have got to be moved from here right, over a mile down the road, which, which means
they've got to be shifted by the black gang, which are these fitters - they can't
dismantle them on there because the concrete's what we call green, which means fresh,
it's not matured, so we trundle the, the machines back, and we can dismantle them
without harming the concrete. And then we, we lift them onto lorries and it's taken
down there and reassembled and then we, we start the concrete trains again.

17

**Bring up your black squad,
Bring up your crack squad,
Bring up your big road crane
We're laying the top
And we'll finish the lot,
So bring up the concrete train.
 When you're part of the team
 On a spreading machine
 And your concrete's firm and stable
 You're spreading your load
 And leaving the road
 As flat as a billiard table.**

Oh - this is an SGME spreader machine. Concrete is tipped from side-tipping lorries into
it. So it travels on rails, and can move along the rails and the hopper can move across
the framework of the machine. The concrete then just drops out of the hopper and is

levelled off by the hopper moving to and fro. Behind that you've got a, an SGME vibrator which is vibrating the bottom layer, driving out all the air, making a solid concrete. Then behind we have a second spreader, same as the first, only that spreads the top two and a half inches.

**It's driving along,
We're going it strong,
At five hundred feet a day,
We're feeding the clock
And we're laying the top,
The top of the motorway.
 When you're part of a team
 And you're on a machine
 And your concrete's firm and stable
 You keep on the move
 And you lay it as smooth
 And flat as a billiard table.**

Well, really there's nothing in it. There's very little in driving it and you have to... first adjust the paddles, and your beam, to whatever depth you want to, and then put your float down at the back, and put it in motion. I mean... machine does the rest, providing you have plenty of concrete in front of us, we've done, we have done up to eight hundred and sixty feet, one day. That's how we work. The Shavian's coming up behind us is pulled over the fat...

**We're forging ahead
And we're getting it spread,
We're laying it smooth and fine,
We're bashing away
Every hour of the day
To finish the job on time.**

That actually is your vibrating screed. You see they're in a V shape and they actually take off any surplus that the other machine might leave. In other words it's a vibrating plane, a levelling plane. And it will bring fat on for the oscillating beam to do a really good finish. It can be set to a thirty-second, which we did, set to a thirty-second.

This is the actual finish now this next one you see

**The finish is made
With a big tamper blade
Far better than a man is able
Your train of machines
Is laying it clean
And flat as a billiard table.**

Now this machine which really floats along on a form - it does that on a whole series of bogeys and rubber cushions. We get perfect control of the hydraulics and it goes along and it, and it finishes the concrete in one pass. The full width of the road is

thirty-eight feet, so we're doing it in two concrete trains, one twenty-six feet wide, and then the twelve-foot train will come along and bring the road out to its full three-lane width.

18

**Been on the road so long,
Been on the job so long,**

It was one of the longest surveys carried out by a private firm

**Working the train
In the sun and the rain
Along the fifty miles,**

I knew every field and met every farmer personally in the whole of the length of the fifty three miles.

**Flattened a million ridges, points,
Finished a thousand expansion joints,
Been on the job so long.
Hoppers, vibrators, beam oscillators,
Tampers and blades in service
The finishing team
Of men and machines
Is laying the new road surface**

It isn't quite as straightforward as that and down in this project we, for carriageway construction, we lay dry lean concrete, to within four inches of the top and then asphalt surfacing. Of course the thing to do is to look at your completion date, work out how long each process is going to take, and say right well we've got to start that bit by such and such a date. We, we felt quite thrilled when we found we were the first project to lay dry lean concrete, and now that we've started up the asphalt we're quite thrilled to see that going down, beginning to look something like the finished article.

19

**You can talk about your concrete and the boys that work the train
And the fellows on the hoppers in the sun and wind and rain,
But the boys who lay the blacktop sure you ought to see them belt
When they're working on the highway laying hot asphalt.**

**We've laid it in the hollows and we've laid it on the flat.
If it doesn't last for ever then I swear I'll eat my hat.
I've travelled up and down the world and sure I've never felt
Any surface that was equal to the hot asphalt.**

**There were boys from Connemara, County Mayo and Kildare,
And the Sligo pincher kiddies, sure all Ireland was there.
We was working all around the clock, you should have seen us belt**

We was racing up the highway laying hot asphalt.

**We've laid it in the hollows and we've laid it on the flat.
If it doesn't last for ever then I swear I'll eat my hat.
I've travelled up and down the world and sure I've never felt
Any surface that was equal to the hot asphalt.**

That plane has..... Will you tell him not to land on our nice new asphalt please. ...over...
He drips a little bit of oil and it won't do the surface any good. He may have to keep a
little bit nearer construction 16, over.

**We spread it in the summer and we rolled it nice and hot
Two million yards or more of it, we had to roll the lot,
And the sun was blazing down until I thought me back would melt
Working on the motor highway laying hot asphalt.**

**We've laid it in the hollows and we've laid it on the flat.
If it doesn't last for ever then I swear I'll eat my hat.
I've travelled up and down the world and sure I've never felt
Any surface that was equal to the hot asphalt.**

Right. Now the next thing is can somebody tell me if the cat's eye people have started?

Yes they have started, making very good progress.

How many have we got to do Bill?

Five thousand.

**When you're speeding in your motor car and tearing through the shires,
And the only thing you're hearing is the humming on your tyres
You'll be riding soft and easy with the road as smooth as felt,
Then it's don't forget the boys who laid the hot asphalt.**

**We've laid it in the hollows and we've laid it on the flat.
If it doesn't last for ever then I swear I'll eat my hat.
I've travelled up and down the world and sure I've never felt
Any surface that was equal to the hot asphalt.**

But I mean, we can't go on at the rate we're going because every preference has gone to
concrete train and quite rightly up to the present moment but it's got to swing out into
the field because it's pick and shovel work now that's got to be done, and a lot of it.

20

**Labour problems, finishers needed,
Slopes and margins to be seeded,
And the cat's eyes and the fences
And reports upon expenses**

**Time is short - close the gap -
The motorway is on the final lap.**

Whenever a problem of judgment arises it's mainly to do with ground conditions. So often with civil engineering works it's rather like an iceberg. Nine tenths of it is not to be seen. But this job makes you feel that here is something that the public is going to see, and that is a very great difference. It does give a little bit of uplift and of course we, you're learning all the time aren't you, this job will produce a wealth of knowledge for jobs that come after it.

Engineers free: four July end, six August end.

The, the motorway there. There's one thing I'd like to do when it would be finished. I'd love to drive the whole length of it. Just, and that would finish me with it.

21

**We needed a way cut through the land.
We bought your strength and skill of hand.
We needed a road - you built it,
And every mile we laid, every concrete mile,
Every bridge and culvert laid,
The cost was met with toil and sweat -
There's your road and we built it.**

Song of a Road, the London-Yorkshire motorway, was the work of Ewan MacColl and Charles Parker, with music direction by Peggy Seeger

**And now the job is ended and the road is all complete,
The embankments are all seeded and the margins clean and neat.
The RB54's are gone, the cranes and concrete batchers
And the piling rigs and pavers, sheep's-foot rollers and the tractors.**

With me whack, fol a doo, fol a diddley dum a day.

**There are hedges, there are fences, shrubs and trees along the border,
There are bridges up with viaducts and drainage all in order,
And the surface is a credit to the boys who did the smoothing -
You can travel at sixty miles an hour and never know you're moving**

With me whack, fol a doo, fol a diddley dum a day.

**The boys have all been paid up and are scattered far and wide,
The train and tractor drivers and the asphalters beside,
The slashers and the scaffolders, the joiners and the mixers,
And the boys as pale as ghosts from working on the concrete mixers.**

With me whack, fol a doo, fol a diddley dum a day.

And now along the carriageway the trucks and cars are rolling,

And the sixteen-wheeler diesels and the trailer jobs are roaring,
There are lorries with their loads of food and things that folk are needing,
And in among them sporting boys in Jaguars are speeding.

With me whack, fol a doo, fol a diddley dum a day.

There are loads of nearly everything a factory can produce,
Everything in all creation that a man can put to use,
That are carried on the motorway to all the destinations,
And there isn't a doubt the motorway's a blessing to the nation.

With me whack, fol a doo, fol a diddley dum a day.

So when you're in the driver's seat and belting with your load
Don't forget the casual labourers who sweated on the road,
When you're racing under bridges, under clover-leaf or flyway,
You can thank the roving boys who built the London-Yorkshire Highway.

With me whack, fol a doo, fol a diddley dum a day.