



Schedule Bingo

presented by

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w/Professional Project Management Services

Session Rules

- Ask questions when confused.
- Only one person can talk at a time.
- Everyone participates.
- No such thing as a dumb question.
- No cell phones, pagers
- While sleeping is OK snoring is not



Purpose of Session

Expose you to an alternative method to get to find the fastest, cheapest way to improve your projects end date.



Goals of this Presentation

Give you a new tool for your project
management toolbox

Exchange some ideas

Have Fun

When and Why would you want to use this technique

- Looking to improve completion date
- Trying to recover lost time
- Improve slipping end date or milestone
- Identify possible scenarios
- Identify cause of current situation
- Looking to blame someone other than you

Requirements

- Good schedule must be a real CPM
 - Not Total Float less than 1 or some other number
 - Must be CPM, i.e. Critical = Longest Path
- Use a Copy of the latest schedule

Participants

- Stakeholders
- Identified by having activities with % complete less than 100
 - Contractors
 - Engineers
 - Owners
 - Suppliers

Room / Equipment

- Room large enough for everyone
- LCD Projector
- Laptop w/copy of the current Schedule
- Big Chief Tablet & #2 Pencil

First Iteration

- Filter for Longest Path = yes
- Filter for % Complete less than 100
- Date Range to Display = just before the Data Date to somewhere just past the Finish Date
- View a Time Scaled Logic Diagram or a Bar Chart with Relationships shown
- Review chain of activities
- Iteration 0000 - Baseline

Review of 1st Iteration

Importance of Chain of Activities

- This chain is all that stands between today (DD) and the Completion Date on the project
- To improve the end date one of these activities has to improve
- The point of this exercise is to discuss as a group of stakeholders which activity can change and how will it be changed and by whom

Suggest ways to improve an activity

- **Ways to improve:**
 - Remove it from the chain
 - Change the predecessor or successor
 - Change the type of relationship
 - Improve the duration

Remove it from the chain

- Delete it if it's not necessary
- Change the logic so that the activity is not on the critical path
- Zero the duration – same affect as deletion but serves as a reminder that at least you thought about it

Record any changes

- Who will be responsible for seeing that the change agreed upon will actually be performed after the meeting
- Duration change from X to Y
- How are you going to improve the duration, (overtime / nightshifts / add resources)
- Relationship changes etc.

Deciding to make a change

Any suggestions of changes must be agreed upon by:

- The person responsible for performing that activity
- Owner / other stakeholders consensus
- If consensus can be reached
 - Record the changes to be made
 - Make the changes
 - Calculate the schedule

Which activity do you select to change?

- Any activity that stands out to the group as being unusually long
- An activity whose duration or relationships have changed
- Examples:
 - Earlier than expected delivery of key equipment
 - Work going better than expected – good productivity in an area
- Decision to work overtime or night shifts

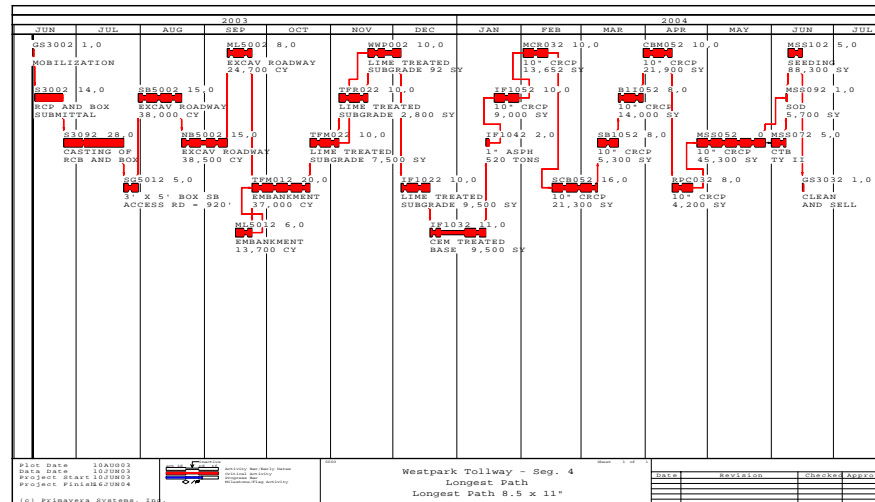
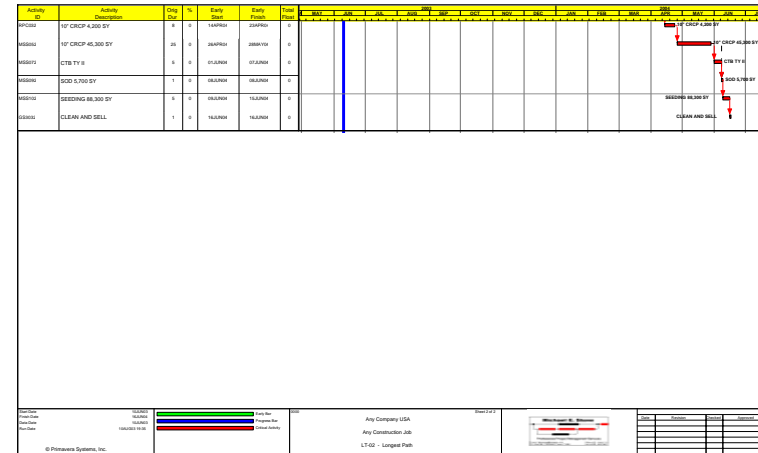
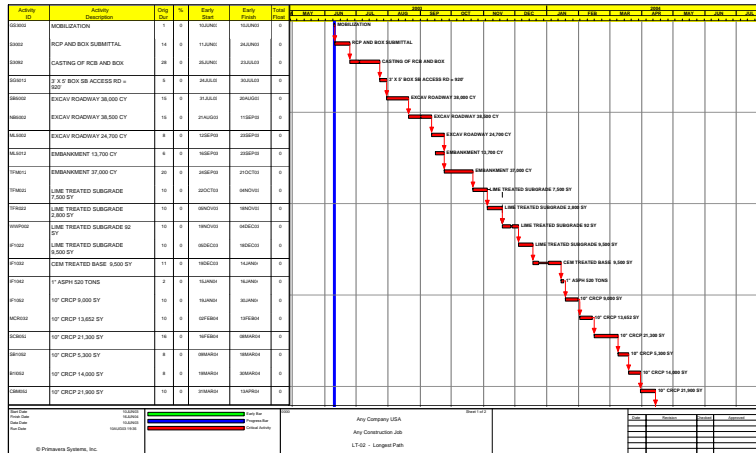


If you see multiple opportunities

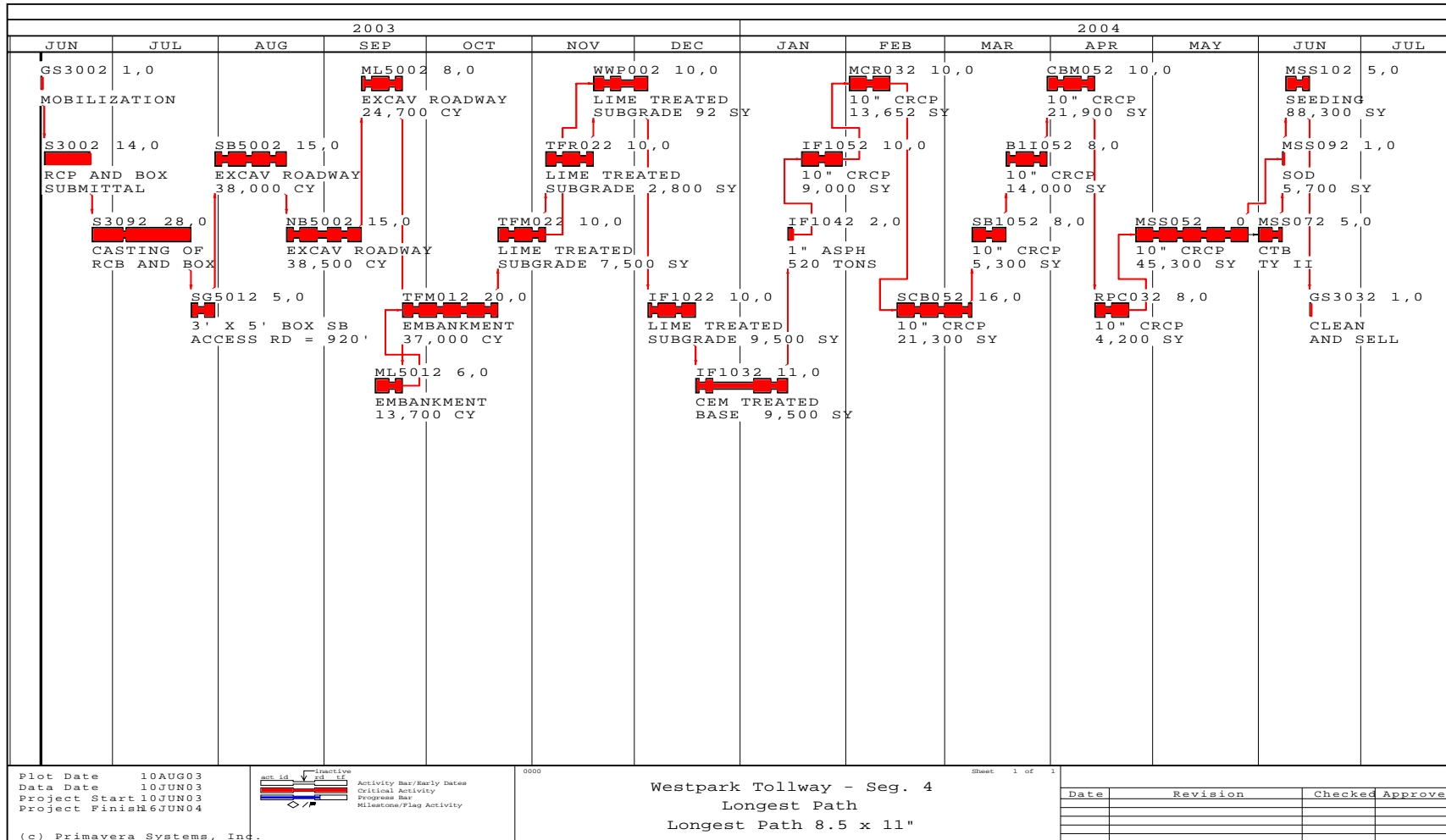
- Make only one change at a time
- Do a quick estimate of the impact cost of the suggested changes
- Always try the cheaper change first / more expensive change might not be necessary



Bar Chart vs Time Scaled Network



Baseline - 0000



Deciding / Making Changes

Activity S3092 - Original Duration was 28 Days

We've decide to reduce that to 21Days

The reduction in duration will be accomplished by working overtime for a cost of \$3,500.00

Project Completion Date – 16 June 04

Re-schedule

Recalculate

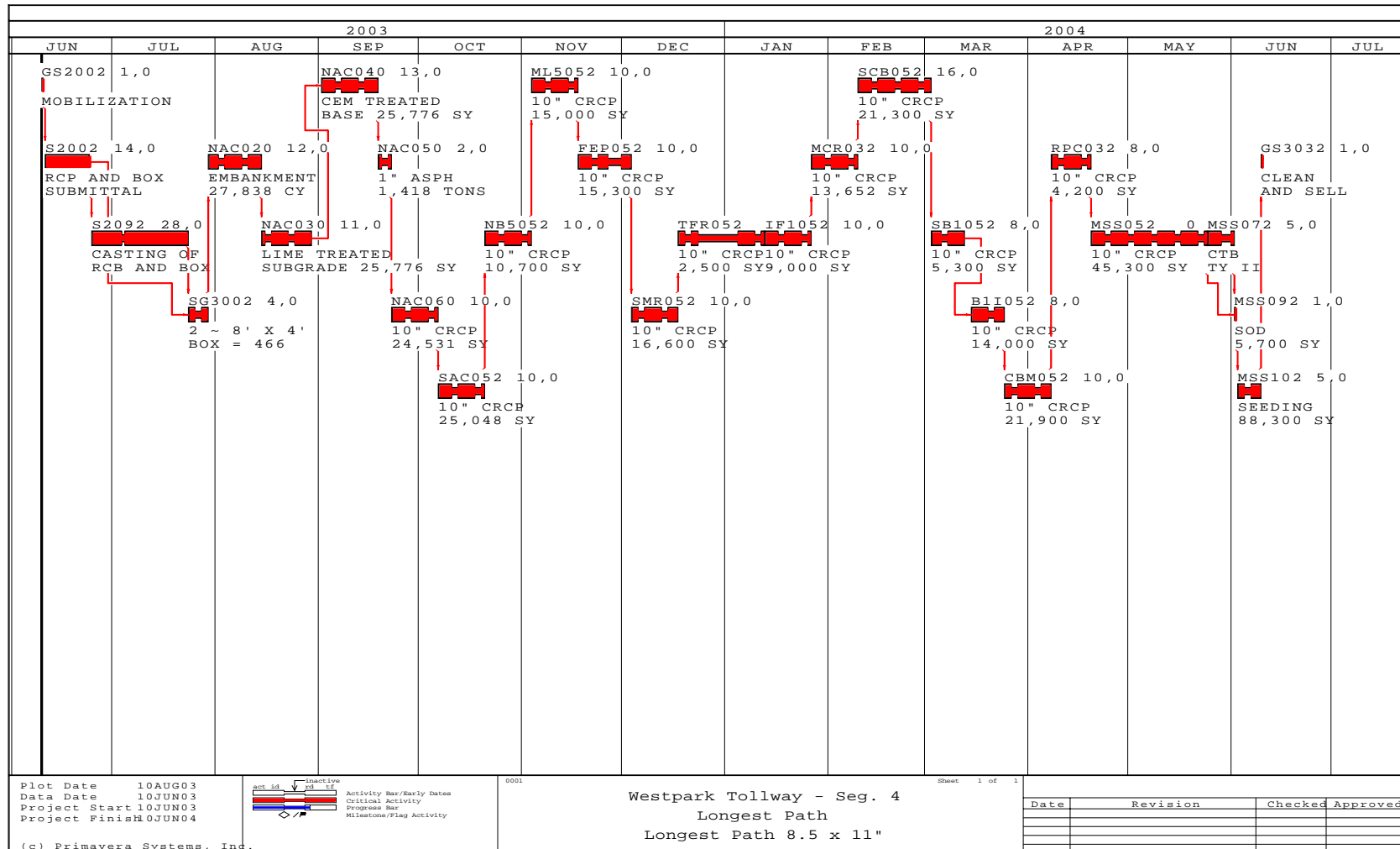
Note New End Date – 10 June 04

- Savings of 6 days

Run Filter

View TSLD

0001 - Results



2nd Iteration

- Note the end date – 10 June 04
- Run the same view Time Scaled Logic Diagram
- Run the same filters
- Review the chain of activities
 - Might be the same chain
 - Might be a completely different chain

2nd Iteration

- Repeat all of the steps of the first
- Look at chain for opportunities
- Discuss various possible changes
- Estimate cost change
- Reach concensus
- Record the changes – what, how, who
- Make the change
- Calculate

0002 – Results

Schedule run on Sun Aug 10 19:54:14 2003
Run Number 308.

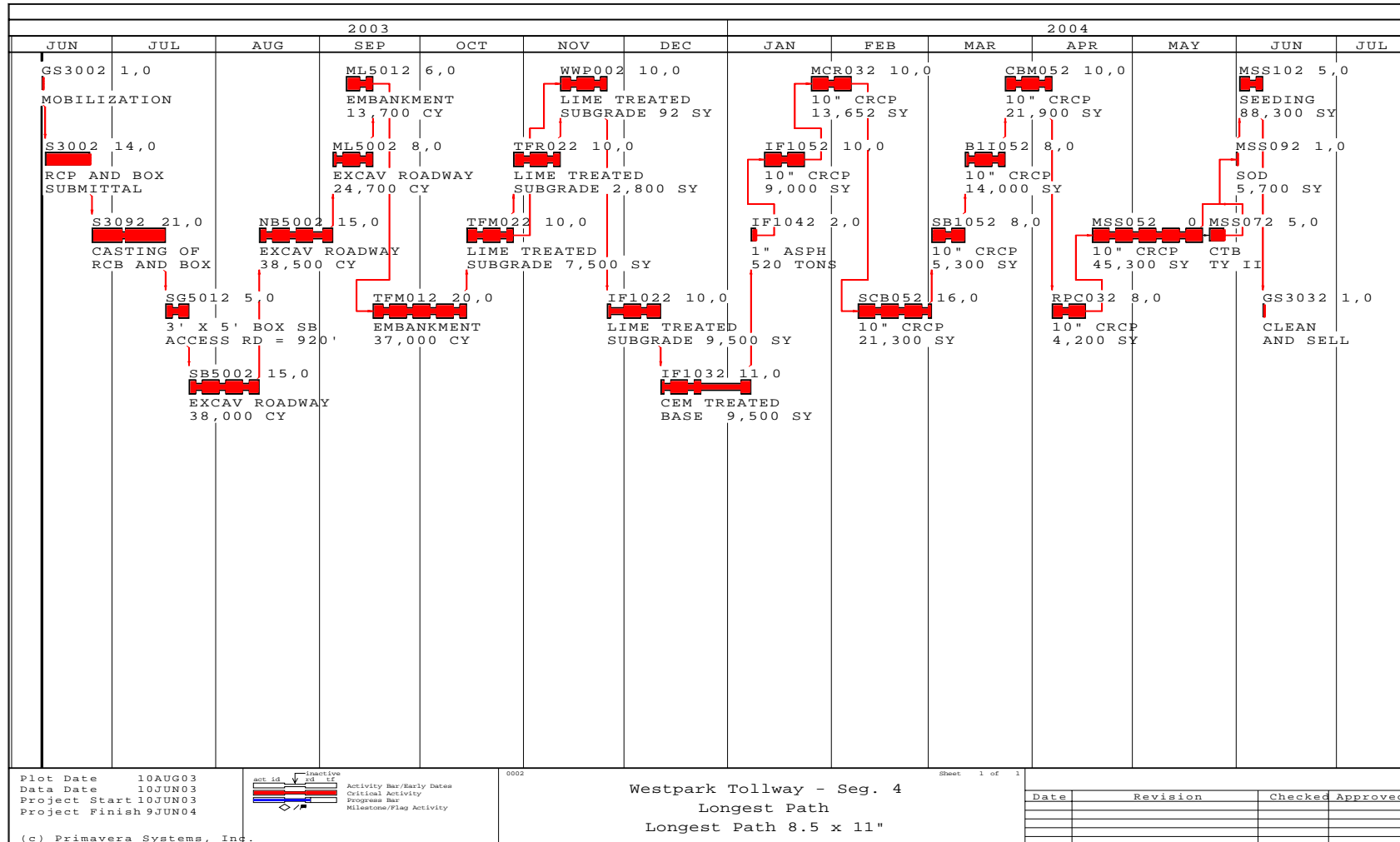
Number of activities.....	434
Number of activities in longest path..	27
Started activities.....	1
Completed activities.....	0
Number of relationships.....	688
Percent complete.....	0.0
Number of start-on constraints.....	1
Data date.....	10JUN03
Start date.....	10JUN03
Imposed finish date.....	
Latest calculated early finish.....	09JUN04

0002 – Results

Typical –

- Made a 7 day change to an activity that was not reflected as a 7 day improvement to the project because another chain of activities became more the longest path.

0002 - Network



2nd Iteration

- Review results
- Record improvement
- Proceed with the 3rd iteration

0003 - Changes

Activity TFM012 – Embankment – 37,000
CY was 20 days

Reduce the OD from 20 to 15 days

0003 - Results

Schedule run on Sun Aug 10 20:08:52 2003
Run Number 310.

Number of activities.....	434
Number of activities in longest path...	36
Started activities.....	1
Completed activities.....	0
Number of relationships.....	688
Percent complete.....	0.0
Number of start-on constraints.....	1

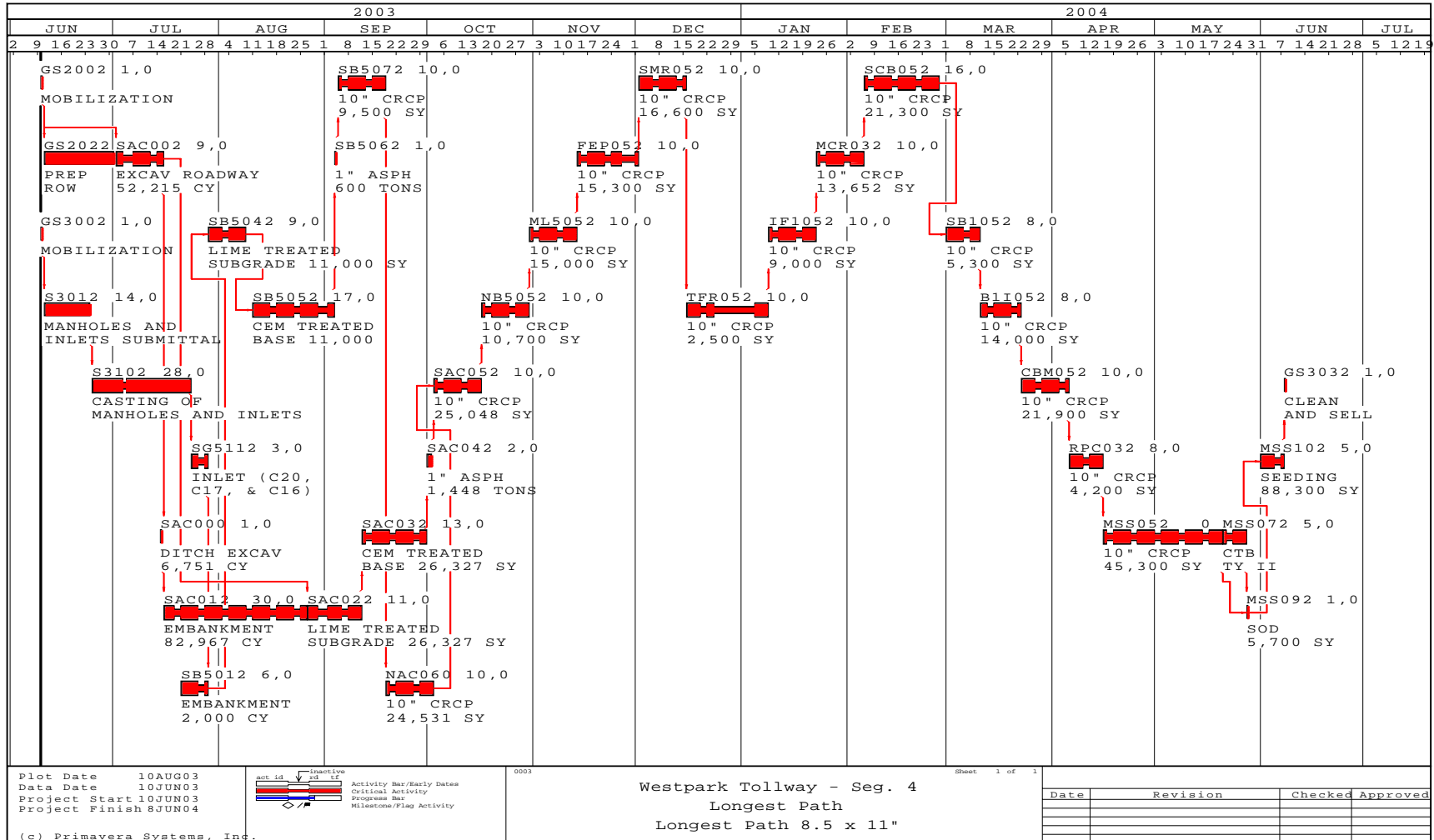
Data date.....	10JUN03
Start date.....	10JUN03
Imposed finish date.....	
Latest calculated early finish.....	08JUN04

0003 - Results

Another 1 week reduction resulting in only
a 1 day gain.

Longest Path has shifted again.

0003 - Results





Make another change

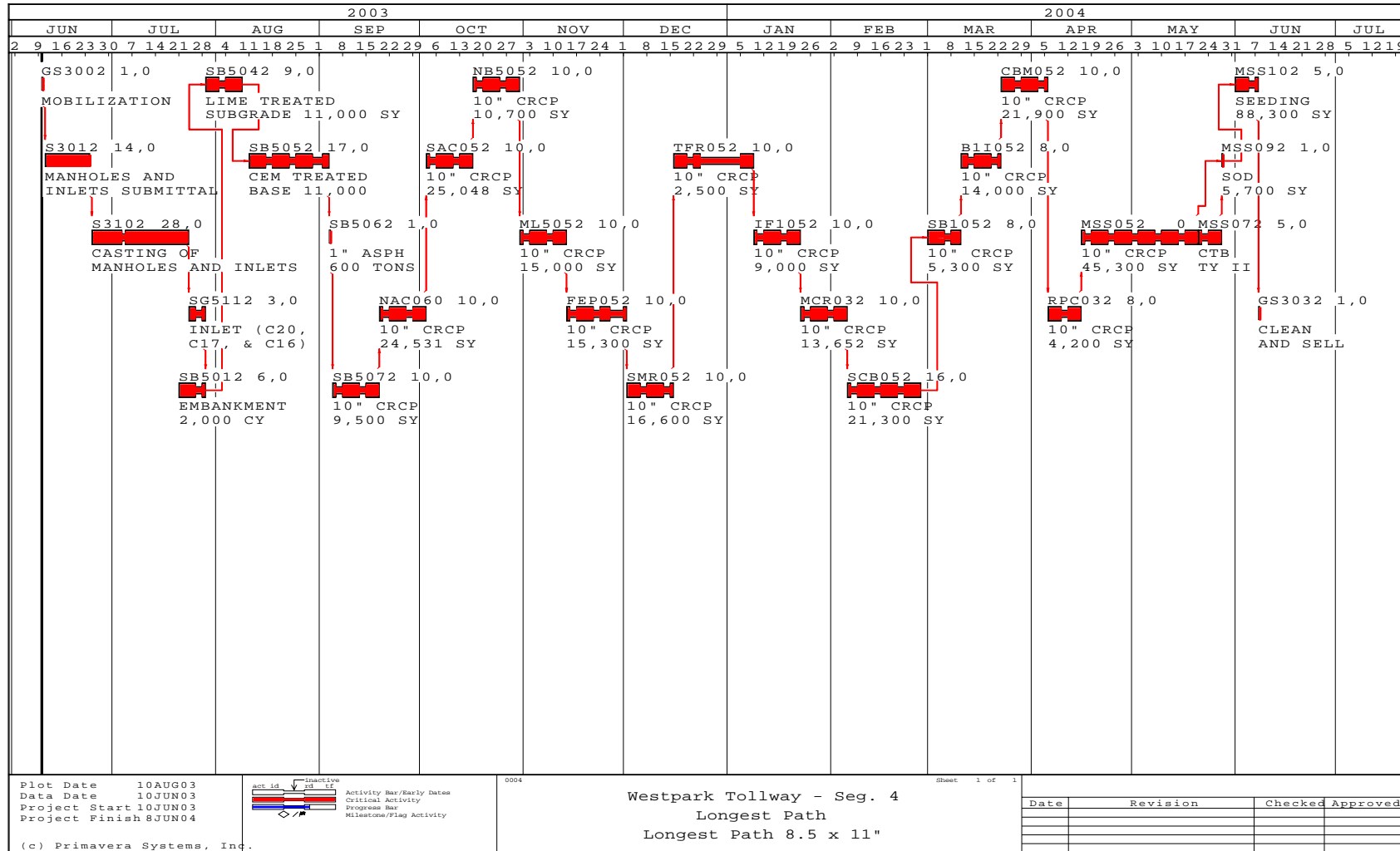
Change SAC012 – Embankment 82,967
CY from 30 days to 25 days.

0004 - Results

Schedule run on Sun Aug 10 20:19:51 2003
Run Number 313.

Number of activities.....	434
Number of activities in longest path..	28
Started activities.....	1
Completed activities.....	0
Number of relationships.....	688
Percent complete.....	0.0
Number of start-on constraints.....	1
Data date.....	10JUN03
Start date.....	10JUN03
Imposed finish date.....	
Latest calculated early finish.....	08JUN04

0004 - Results



0004 - Results

- No Change to the End Date
- Longest Path has shifted from excavation and embankment work to almost all concrete paving operations.

• *Decision Time*

- Do you keep trying to find an activity to reduce the duration of or
- Do you change the logic of some of the chains of activities
- Do you accept the schedule as is

Number of Iterations

- Somewhere between 3 and 10
- You will have determined that you've either made all of the changes you can assimilate or
- You've reached the limit of what is feasible at this point in time.



maximize project value

Questions

Questions ???