WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
600 Fifth Street, NW, Washington, DC 20001-2651

AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT

1. AMENDMENT/MODIFICATION	2. EFFECTIVE DATE
A003	(Same as block 17)
3. ISSUED BY PURCHASING SECTION	**4. ADMINISTERED BY (If other than block 3)**
Benjamin T. Kpadeh PMRT 3C-05-B Department of Procurement & Materials	

5. CONTRACTOR NAME AND ADDRESS

(Street, city, county, state, and Zip Code)

6. FORM TYPE (Check only one)

☒ AMENDMENT OF SOLICITATION NO. FQ13077/BTK

DATE July 3, 2013 (See block 7)

☐ MODIFICATION OF CONTRACT/ORDER NO. _____

DATE _____ (See block 9)

7. THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in block 10. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended, by one of the following methods; (a) By signing and returning _____ copies of this amendment; (b) by acknowledging receipt of this amendment on each copy of the offer submitted; or (c) by separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If, by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided such telegram makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

8. ACCOUNTING AND APPROPRIATION DATA (If required)

9. THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS

(a) ☐ This Change Order is issued pursuant to _____
The Changes set forth in block 10 are made to the above numbered contract/order.

(b) ☐ The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data, etc.) set forth in block 10.

(c) ☐ This Supplemental Agreement is entered into pursuant to authority of _____
It modifies the above numbered contract as set forth in block 10.

10. DESCRIPTION OF AMENDMENT/MODIFICATION

Amendment A003 is answers to questions submitted by offerors concerning RFP No. FQ13077/BTK. Attachment D to Amendment A003 is new requirements to Appendix A, and Part III, Technical Specifications of the RFP No. FQ13077 and to clarify answers to questions from offerors; and Attachment E has examples of reports and supporting materials requested by offerors.
Just a reminder that all proposals are due at 2:00 PM EST on July 22, 2013.

END OF AMENDMENT NO. A003

Except as provided herein, all terms and conditions of the document referenced in block 6, as heretofore changed, remain unchanged and in full force and effect

11.	
☐ CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS MODIFICATION AND RETURN _____ COPIES TO ISSUING OFFICE.	☐ CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT

12. NAME OF CONTRACTOR/OFFICE	15. WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
BY _____ (Signature of person authorized to sign)	BY Felicia D. Carwell 7.3.2013 (Signature of Contracting Officer)

13. NAME AND TITLE OF SIGNER (Type or print)	14. DATE SIGNED	16. NAME OF CONTRACTING OFFICER (Type or print)	17. DATE SIGNED
		Felicia D. Carwell	

Washington Metropolitan Area Transit Authority

Advanced Transit Scheduling Application RFP FQ13077

Pre-Proposal Item Responses

Per the instructions in the WMATA RFP FQ13077, the following questions and comments (items) in *italic font* were submitted by Offerors with regard to the WMATA Advanced Transit Scheduling Application RFP FQ13077 of May 21, 2013 prior. Each of these items is shown verbatim as it was received. A WMATA response to each of these items is shown in **bold font** below the submitted item.

1. *Can documents to be completed and executed (Volume III) as well as the requirement traceability matrix be provided by the Authority in Microsoft Word® file format? Note that this question has already been asked to the Authority on Friday May 24, 2013*.

   WMATA Response (July 2013) – No, WMATA does not send out Word file format solicitation. All WMATA solicitations are posted in Adobe Acrobat file format (pdf)

2. *RFP document, page 2 (Notice to Offerors): it is mentioned that the following forms must be completed and submitted as specified. There is a reference to "APPENDIX C". What exactly must be completed and submitted regarding APPENDIX C as it is a copy of the current CBA? Note that this question has already been asked to the Authority on Thursday June 6, 2013*.

   WMATA Response (July 2013) – Correction on page 2, "Notice to Offerors". Offerors are to complete and submit APPENDIX A: Scheduling System Functional Requirements, and not APPENDIX C.

3. *Price schedule: there is a reference to "On-Site Product Support for up to 180 days". SOW, section 7.1.4: there is a reference to "The vendor shall provide on-site technical support on the need base up to 90 days after the acceptance of full implementation". Can the Authority clarify if these two items refer to the same "type" of support (one refers to "Product Support" whereas the other to "technical support") and if yes, the correct number of days? Note that this question has already been asked to the Authority on Thursday June 6, 2013*.

   WMATA Response (July 2013) – Replace the entirety of Part III Technical Specifications, Section 7.1.4. with the following text: "The Contractor shall provide on-site technical support for up to 180 calendar days following Final Acceptance."

   Following text is added as the definition of Final Acceptance: "Final Acceptance shall occur only after the following conditions have been attained:

   a. **Successful completion of all testing, including availability testing.**
   b. **Completion of all training**
   c. **WMATA's receipt and approval/acceptance of all final documentation reflecting all changes and corrections.**

d. **Resolution of all variances to WMATA's satisfaction**
e. **Resolution of action items and other open issues.**

The Contractor shall request Final Acceptance in writing. The one year warranty shall commence upon written confirmation by WMATA of Final Acceptance of the system."

4. *SOW, section 2.4: is the advanced transit scheduling software be used to plan, schedule and for operations of "train operators", "station managers" as well as "interlocking operators"? SOW, section 4.6: "This component will provide WMATA an efficient and effective tool to manage weekly and/or daily changes to planned rosters and the day-to-day management of "operating" and "station staff". Can the Authority provide the number of employees within each group/role that are expected to be managed by the Advanced Transit Scheduling software? Note that this question has already been asked to the Authority on Thursday June 6, 2013*.

   WMATA Response (July 2013) – Yes. In current pick, there are 500 roughly Train Operator runs, 500 Station Manager runs, and 36 Interlocking Operator runs. The requirement will increase accordingly when new services or service extension is required.

5. *Requirements #3.9.5-3.9.7: cafeteria style bidding is mentioned. Can the Authority indicate which group of employees use cafeteria style bidding and which ones use roster bidding (pre-built position)? Note that this question has already been asked to the Authority on Thursday June 6, 2013.*

   WMATA Response (July 2013) – WMATA utilizes Roster Bidding only.

6. *Requirement # 3.2.8: "Ability to interface to/from AIMS, CAD/AVL system for real-time data exchange". Can the Authority describe use cases for real-time data exchanges with these systems? Note that we understand that AIMS is the "Advanced Information Management System" of ARINC. Note that this question has already been asked to the Authority on Thursday June 6, 2013*.

   WMATA Response (July 2013) – The scheduling system will not interface with AIMS as this system is being replaced. See WMATA response to comment #s 96 and 97. For example, operator work assignments data, vehicle/yard management data.

7. *Requirement #3.14.2: "The system shall provide a display of vehicle locations within the division". Is this limited to the current vehicle location within a yard? So the Advanced Transit Scheduling software would have views to display vehicle locations when trains/cars are*

stabled in yards? Note that this question has already been asked to the Authority on Thursday June 6, 2013.

WMATA Response (July 2013) – Replace the entirety of the Appendix A, Item # 3.14.2 text with the following text: "The scheduling system shall provide displays that closely approximate of each yard's physical layout, yard tracks, and number of vehicles stored at any given time.

8. *Requirement #3.8.11: "The system shall automatically 'Call' assignments with specific start times throughout the day as part of the daily Extraboard assignments, in a manner consistent with the labor agreement and practice and with regard to the daily rotation of the Extraboard. This process should also allow manual intervention." Can the Authority clarify the meaning of "Call"? Note that this question has already been asked to the Authority on Thursday June 6, 2013.*

   WMATA Response (July 2013) – Instead of 'call' assignments the requirement should read identify and list all open assignments with specific start times.

9. *Requirement #1.10.2: "The vendor shall provide an availability analysis for their proposed system in their proposal." Can the Authority elaborate on the level of details expected in the availability analysis? Note that this question has already been asked to the Authority on Thursday June 6, 2013*.

   WMATA Response (July 2013) – The Contractor shall provide sufficient availability analysis detail to clearly demonstrate how the proposed system meets or exceeds the required system availability. This may include calculations based on clustering, proposed system hardware, failover approaches, and server types (blades, chassis design, redundant PSUs).

10. *Requirement #2.3.4: "Ability to retrieve an exported file into the application for further editing" Can the Authority clarify exactly what is the intention of this requirement? Note that this question has already been asked to the Authority on Tuesday June 11, 2013*.

    WMATA Response (July 2013) – The main purpose of this function is to have data exchange with other applications.

11. *Pre-award evaluation data, section 11 b) and 12: should the letters from banks confirm the sources of credit in section 11b? If not, would the Authority provide example of sources of credit for section 11 b) and would precise what credit the bank letters should confirm*?

WMATA Response (July 2013) – Please submit two years of financial statement from a bank your company conducts business with.

12. *Representations, section 3 b) and 5 b): Are foreign companies required to fulfill these pre-requisites from US legislation or can an affidavit detailing the company's practices with respect to EEO and Affirmative Action suffice?*

WMATA Response (July 2013) – Offerors must complete the Representations and Certifications. If an Offeror fails to complete the representations and certifications, the Offeror may not be eligible for award. Offerors should seek legal counsel if they are unsure as to the requirements in the representations and certifications.

13. *Should not the insurance coverage be completely fulfilling section 15 of special provisions, is the certificate of insurance that will be included in the offer is the only manner to disclose this?*

WMATA Response (July 2013) – No, it would not be the only opportunity to disclose the insurance. Suggestion: see WMATA response to question number 31 below, and provide an attachment with certificate if there are concerns about insurance deficiencies.

14. *Can we assume that all needed Oracle licenses will be procured separately by WMATA and are not part of the supply?*

WMATA Response (July 2013) – Yes.

15. *With regard to Art 16 b of the Solicitation Instructions (p. 14) saying "All information relating to cost or pricing data must be included in Volume I. Under no circumstances shall cost or pricing data be included elsewhere in the Offeror's proposal." It seems in contradiction with the Schedule of DBE Participation, where the amount of DBE works has to be indicated. Can you pls clarify ?*.

WMATA Response (July 2013) – Offerors are allowed to state the 25% DBE goal amount on the DBE form but the amount should be included in the yearly proposal grand total cost on the Price Schedule Sheet.

16. *With regard to Appendix A, requirement 1.4.6 "Ability to provide functionality for selective copying/sharing of data across scheduling system databases", can you please provide an example to clarify the requirement ?*

WMATA Response (July 2013) – This is considering the new scheduling system may co-exist with current scheduling system

17. *With regard to Appendix A – Requirement 3.2.3 External actions (performed by third party applications) can be initiated from the Client, Application, or Data tier, can you please provide an example to clarify ?*

WMATA Response (July 2013) – Other applications used by the authority, (e.g., HR application) can start data exchange with scheduling application. An example is when operating in the OPS system, the user should be able to launch a third-part software such as Microsoft Excel or Word from within the application. This allows the user to export data into a user-friendly application to conduct analysis.

18. *With regard to Appendix A Requirement 1.2.16 , are there any specific WMATA IT standards that we should take into consideration ?*

WMATA Response (July 2013) – Yes, there is an IT standard.

19. *With regard to Appendix A Requirement 2.2.5 Ability to allow automatic renumbering of Friday, Saturday and Sunday runs to match weekday run numbers on all regular rosters created can you please provide an example to clarify the reason for this requirement?*

WMATA Response (July 2013) – Currently, Operating personnel assigned to regular runs (as opposed to relief runs) who are normally rostered to be scheduled to work on Sundays, Fridays, or Saturdays, have, as their daily run assignment number, a run assignment number that matches their run assignment number from the weekday schedule. For example, if "370501" weekday run, when rostered, is assigned to have Tuesday and Wednesday off, the daily assignments across the week for that roster will all be numbered "370501," despite the Sunday, Friday, and Saturday runs being constructed based upon a different operating schedule, and having varying on/off-duty times and block numbers within these daily schedules.

Add the following text under new Appendix A, Item # 2.1.78: "Trip, Block, Run, and Roster Numbering The scheduling system shall provide automatic and manual trip, block, run, and roster numbering functions. When these numbers are automatically developed, the scheduling system shall permit the manual renumbering of any developed numbers. All trip, block, run, and roster numbers shall be unique within a booking, and each trip, block, run, and roster in a booking shall have no more than one assigned number. User settings for initial trip, block, run, and roster numbers shall be provided. Trip, block, run, and roster numbers shall consist of those conventions shown in the rail hard rules attachment.

The Contractor shall initialize and configure the new scheduling system using the rules contained in rail hard rules (attached)."

20. *Having understood that after written acceptance of the system there will be one year of Warranty Period, it is not clear whether Out Year 1 in the Price Schedule is the same as the Warranty Period. In other words, can you clarify if the total number of years is 7 (2 for implementation and 5 for maintenance, including warranty period) or 8 (2 for implementation, 1 for warranty and 5 for maintenance)*.

WMATA Response (July 2013) – The Warranty period is not included in the Out Year support.

Please add the following new requirement Item #s under Appendix A: "1.13.1 For each phase of the project, the Contractor warrants that, for a period of one year following the acceptance of that phase of the project by WMATA, the modules of the software included in that phase shall conform to and function according to the Contractor-provided documentation, the Technical Specification, and online help as delivered in delivered system. WMATA shall be provided with software updates during the period of performance at no additional cost to WMATA

1.13.2 The Contractor warrants that the Work, and all parts thereof, shall be of the kind and quality described in this Agreement, shall perform in the manner specified, and shall be fit for the purpose for which it is supplied.

1.13.3 The Contractor shall correct, without delay and at its own expense, any portion of the Work that does not meet the warranty and that is discovered within one year after Final Acceptance by correcting the defective portion of the Work, including any required correction in defective design, or by providing a non-defective replacement on WMATA's premises.

1.13.4 The costs of correction shall be at the Contractor's expense and shall include all shipping costs, both to and from the Contractor's facility, and the appropriate technical advice and direction for removal of the defect and installation of the corrected Work, including on-site services as required.

1.13.5 Any repair, replacement, or modification performed pursuant to the provisions of this clause shall be supplied or repaired on the same terms and conditions as provided for herein for the supply of the Work and in particular a new warranty period shall apply. Such new warranty period shall expire on the date three months from the date of such

replacement, repair, or modification or to the end of the original warranty period, whichever is later.

1.13.6 The scheduling system software shall be warranted by the Contractor to be free of defects for a period of 12-months following final acceptance of the scheduling system by WMATA.

1.13.7 For software defects, the Contractor shall provide telephone consultation to WMATA at no charge. If the Contractor cannot correct the defect by remote telephone support, or if, in the sole discretion of WMATA, the Contractor fails to make significant progress in the repair of the software defects by remote telephone support, the Contractor, at the request of WMATA, shall supply knowledgeable software engineers on site within 24 hours to correct the deficiencies. Assistance by WMATA to the Contractor shall not relieve the Contractor of any responsibilities associated therewith.

1.13.8 The Contractor shall provide all scheduling system preventative and corrective maintenance services until the end of the warranty period for all Contractor-provided software.

1.13.9 The Contractor shall respond to calls for warranty assistance within a four-hour time period. If the Dispatch function is affected, the Contractor shall respond to these calls within a one-hour time period. Using the scheduling system remote diagnostic port, the Contractor shall provide an analysis of any scheduling system hardware/software problems.

1.13.10 The Contractor shall pay for any call to the remote diagnostic port at no additional cost to WMATA. Following this analysis, the Contractor shall advise WMATA as to the state of the scheduling system. If, after analysis, the scheduling system is not usable, the Contractor shall provide maintenance service on-site within 48 hours when deemed necessary by WMATA.

1.13.11 If the Dispatch function is affected, the Contractor shall provide maintenance service on-site within 24 hours when deemed necessary by WMATA.

1.13.12 Any work performed as a result of warranty problem or software defect shall be at no cost to WMATA."

21. *Art 16 d of the Solicitation Instructions (p. 14) says "Contractual documents shall contain a completed signed Solicitation, Offer and Award Form and include Representations, Certifications, Pre-Award Data, Certificate of Insurance, DBE requirements, per Appendix B*

and any amendments. Art.15 of Special Provisions (p.82) says that the insurance must be in force during the term of the Contract. In this case we would not be able to attach the Certificate of Insurance. Can you please confirm whether the Insurance is requested only if the contract is awarded and therefore is not to be included in Volume III ?

WMATA Response (July 2013) – Certificate of Insurance must be submitted with the proposals. If the Offeror is not awarded the contract, the certificate of insurance document will be returned to the Offeror if requested. All documents required by the solicitation must be submitted with Offeror's proposal. If required documents are not submitted with Offeror's proposals, WMATA will decide if Offeror's proposal is responsive or not.

22. *Will existing PeopleSoft system for financials/HR and IBM system for maintenance operations be affected by this procurement? Should the operations and scheduling system interface with these on the assumption that these systems will not change*?

WMATA Response (July 2013) – Please see the WMATA response to comment #s 96 and 97 below.

23. *Assuming the proposal due date of July 3 does not change, what is your expected timetable for making a contract award*?

WMATA Response (July 2013) – Please see WMATA RFP FQ13077, Amendment A002 dated June 20, 2013 for the new proposal submission date. The WMATA contract award timetable will be based a variety of factors and therefore cannot be accurately forecast. WMATA may anticipate the contract award will occur within the next few months.

24. *We understand that the contract will be Firm Fixed-Price. Do travel & incidental expenses need to be included in the firm fixed price*?

WMATA Response (July 2013) – Offerors' proposed price should include all costs and proposals shall include a price data sheet showing all costs contained in the proposed contract value.

25. *On p. 78, it states that funding for this project is not available after June 30, 2014. In the event that no further funding is forthcoming, what will be the process for shutting down the project*?

WMATA Response (July 2013) – WMATA operates on approved yearly budget beginning July 1st thru June 30th. Please reference to RFP No. FQ13077, Part II, Section 2, Article 3.

26. *Conflict detection: Do conflicts need to be detected in the planning stage, the daily operation, or both? If the planned schedule is conflict-free, but a delay or outage in the system creates a conflict on the day of operation, is management of such a conflict required in the second phase (Daily Operations Management)*?

    WMATA Response (July 2013) – The requirements for trip building may be found under Part III Technical Specification, section 5.1 and its subsections. The required system is scheduling and daily operation management only.

27. *Section 3.1.5 (p. 99) states that there are 5 types of regular service. Are there sufficient day-to-day exceptions to expect that the planned work assignments will virtually never operate 100% as planned*?

    WMATA Response (July 2013) – Add the following text to Part III, Section 3.1.5: "On approximately 46 weekends of every calendar year or some of national holidays, replacement schedules and assignments may be prepared to supersede the regular Friday, Saturday, and Sunday schedules as a result of track work projects or special events. The new scheduling system shall provide functions and features to efficiently accommodate weekly schedule modifications to planned weekend track work projects and special events."

28. *What is the status of the CBA? Is it expired? If so, are negotiations ongoing? Should we assume that the agreement given in the RFP, which expired in 2008, is the reference we should use for work rules*?

    WMATA Response (July 2013) – Replace the entirety of the Part III, Section 2.4 text with the following text: "The assignment of work and the hours of pay for Metrorail operating staff (Train Operators, Station Managers and Interlocking Operators) are governed by a Collective Bargaining Agreement (CBA) between WMATA and Local Union 689 of the Amalgamated Transit Union AFL-CIO (Appendix C). The CBA is typically renegotiated every three years. Changes to work rules and compensation may occur at each of the contract renewal periods. The Contractor shall develop and incorporate all work rules that affect the trip building, blocking, runcutting, and rostering functions into the scheduling system as specified in the CBA.

    The scheduling system shall be capable of handling up to 5 different sets of work rules. The scheduling system shall provide functions that enable WMATA adaptations of these CBA work rule inputs in the future without the assistance of the Contractor. Users shall be able to define, test, modify, and insert new rule sets into the scheduling system."

29. *CBA section 206(b), page 42: Are the requirements for straight runs a minimum or a target*?

    WMATA Response (July 2013) – The requirement for straight runs is adequately specified in the CBA section 206(b).

30. *The solicitation, offer and award form (page 4 of the RFP) states that offers will be publicly open. Does this mean that we can be present during the opening of the proposals? What kind of access do we have to the other proposals at this time*?

    WMATA Response (July 2013) – Correction on the offer and award form on page 4 of the solicitation. There will be no public opening of proposals.

31. *You require that with our proposal we present the proof of insurance eligibility. Some of the insurance limits that you require are higher than what we have at this moment. Do we need to increase the limit of our insurance just for the sake of submitting a proposal, or can we commit that when the contract is awarded to have the insurance as required in the proposal*?

    WMATA Response (July 2013) – No. A letter from the insurance producer/broker or an authorized representative of the contractor stating that the specific requirements will be met will be sufficient for pre-approval purposes.

32. *Can you provide a 3-week extension to the delivery date of the proposal*?

    WMATA Response (July 2013) – Please see WMATA RFP FQ13077, Amendment A002 dated June 20, 2013 for the new proposal delivery date.

33. *Will the minutes and the materials presented in the pre-proposal conference be electronically made available to all participants in the RFP*?

    WMATA Response (July 2013) – Yes, the Pre-proposal conference minutes were provided as part of WMATA RFP FQ13077, Amendment A002 dated June 20, 2013.

34. *What are your expectations regarding the format of volume II (technical proposal)? Are we obliged to fill Appendix A in the table format or can we integrate it in a more structured response*?

    WMATA Response (July 2013) – Appendix A must be filled out in the format as it is required by the solicitation. Proposals shall also include a similar table indicating their proposed compliance with RFP FQ13077, Part III, Technical Specifications.

35. *As described in the Solicitation Instructions (page 13, nº14), would it be possible to have a copy of Chapter 20 of Authority's PPM*?

WMATA Response (July 2013) – The Procurement and Materials Department will not post or send Chapter 20 of the Authority's PPM. The procedure for requesting for a copy of the WMATA's PPM Chapter 20 can be found on the WMATA website under Public Access to Record Policy (PARP) at http://wmata.com/about/parp_documents.cfm. You can also write to: Office of General Counsel, Attn: Sonia Bacchus, Associates General Counsel, WMATA, 600 5th Street, NW, Washington, 20001.

36. *On Page 100 – nº 4, you mention "WMATA's existing daily operation management system". Could you elaborate on the system (vendor, product, etc)*.

WMATA Response (July 2013) – The existing operator dispatch software used by WMATA is Trapeze OPS.

37. *We would like to know how many planners do you expect to be using the advanced scheduling software and how many planners will be using the daily operations management system*.

WMATA Response (July 2013) – Approximately, 15 planners will use scheduling modules and 60 operation personnel will use daily operation management system.

38. *Is there any time period during the night in which there are no trains circulating over Metrorail lines*?

WMATA Response (July 2013) – WMATA regular Metrorail revenue service operates between the following hours:

Monday – Thursday	**5:00 AM and 12 AM**
Friday	**5:00 AM and 3 AM**
Saturday	**7:00 AM and 3 AM**
Sunday	**7:00 AM and 12 AM**

(Need to assume ONE hour for pull-out or pull-in time)

39. *Can you provide samples of blocks, runcuts, and rosters actually being used by WMATA*?

WMATA Response (July 2013) – Please find the reports attached to this amendment.

40. *What type of bidding process does WMATA use? Seniority-based? Cafeteria style? Other*?

WMATA Response (July 2013) – Employee bidding requirements are fully spelled out in WMATA RFP FQ13077, Appendix C. WMATA utilizes a seniority based roster-style process.

41. *Although the RFP only addresses Metrorail, there are many requirements that mention bus-related information. Is this a mistake? If not, can you explain the reason of such requirements*?

WMATA Response (July 2013) – All references to WMATA bus operations, CAD/AVL system, etc. do not apply to the work for this project and are to be considered removed from WMATA RFP FQ13077. The work required under this RFP FQ13077 is exclusively for WMATA Metrorail.

42. *Can you describe the method you currently use for creating the timetables for the whole operation*?

WMATA Response (July 2013) – Regular service levels are determined by the WMATA Board approved Standard Metrorail Service Criteria, or the track work project and special events requirements. These service level requirements are then used to build trips by using typical patterns denoting origin, destination, and en route passing points.

43. *Section 2.3 - Due to the fact that lines share parts of the track, is it possible that a train consist that is operating on a certain line, at a certain moment, crosses the common section and starts operating in another line*?

WMATA Response (July 2013) – Yes, revenue trains may originate on one line and cross over to another line.

44. *Section 3.1.1 - Can you explain briefly how do you deal with single-track works (examples of time table solutions)*?

WMATA Response (July 2013) – In a normal situation, for a single tracking zone between two stations, one way running time is doubled, and a buffer is added for clearances and possible piggy backing operation, and new schedules are constructed. Whenever possible to preserve the first and last revenue trips as in the normal service span.

45. *Section 3.1.2 - What do you mean by the "ability to vary routings on service patterns to cater specific capacity or infrastructure limitations"? Can you provide examples*?

WMATA Response (July 2013) – Replace the entirety of Part III Technical Specifications Section 3.1.2 text with the following text: "Railroad Infrastructure Incorporation: Using the attached track diagrams, the Contractor shall incorporate entirety of the existing rail infrastructure into the new scheduling system that includes but is not limited to such items as tracks, crossovers, crossover location, track capacities, station locations, tunnels, signal locations, third rail sectionalization, and tail tracks. The Contractor shall initialize the system with the WMATA rail network infrastructure. User functions shall be provided to specify and redefine the WMATA rail network infrastructure when needed. The system trip building and blocking functions shall allow for any route pattern possibilities that are available within the specific track location capacity and infrastructure limitations, including specific starting and ending locations as well as divergent routings of all scheduled trips to any specific location within this infrastructure. The trip and blocking building functions shall build trips, patterns, blocks, and routes that fully respect the entirety of the existing WMATA rail network infrastructure.

While not included in the current track diagrams, the Contractor shall also be responsible for the incorporation of all Silver Line track definition as defined above. ***{the Silver Line track definition shall be provided at a later time and alignments may be found at http://www.dullesmetro.com/stations/index.html}***

The new scheduling system shall provide functions incorporate vehicle throughput of any areas of the rail territory. The scheduling system functions shall include functions that allow WMATA to assess and redefine established trips, blocks, and runs when specific rail sections are removed from service."

46. *Section 4.3 - When you "say time tables built in Component 1", shouldn't it be "Component 2"? Same in 4.4 where instead of "Component 2" it should read "Component 3"*?

WMATA Response (July 2013) – In Part III Technical Specifications Section 4.3, change text "Component 1" to "Component 2". In Part III Technical Specifications Section 4.4, change text "Component 2" to "Component 3".

47. Section 4.9 - *The "existing daily operation management system" is supposed to be discontinued once the new system is in place. Is this correct? The goal here is to ensure that the new system is fed with current data, is this correct*?

WMATA Response (July 2013) – Yes. The required scheduling system shall interface with HR Payroll.

Replace the entirety of Part III Technical Specifications Section 4.9 text with the following text: "Component 9: Integration with Trapeze OPS. WMATA's expects the project work is to be accomplished in two phases. When Phase 1 is complete, WMATA expects to no longer use the existing Trapeze FX scheduling system. Until Phase 2 of the project is complete, the Trapeze OPS portion of the existing system will need to continue proper operation of daily employee management, bidding, etc in support of the Metrorail operations. As such, as part of Phase 1, the new scheduling system shall provide the Trapeze OPS with requisite data exchanges to support its existing functionality."

Add a new section to Part III Technical Specifications, section 6.9 entitled "Installation and Phase-Over Plan" with the following text: "Early in the implementation phase of the project, the Contractor shall meet with WMATA to discuss and develop the steps, procedures, and schedule for system installation and phase-over for the new scheduling system. Based on the results of these discussions, the Contractor shall prepare an Installation and Phase-Over Plan. This Plan shall be approved prior to the installation of any software or equipment at WMATA facilities.

The Installation and Phase-Over Plan shall describe a smooth and secure transition between the existing operations and the new scheduling system, with no effective loss of control over dispatching operations. This Plan shall detail the approach to be used for the two project phases and support of the Trapeze OPS functionality following completion of Phase 1. This plan shall allow for a period of parallel operations of existing equipment and the new scheduling system. The Contractor shall be responsible for implementing all software and hardware required to support system phase-over.

The Installation and Phase-Over Plan shall describe in detail the design and procedures used to support the parallel operation, to test and verify the functionality of the new scheduling system, and to switch operations between the existing equipment and the new scheduling system. All installation, system configuration, and testing shall be described in this plan."

48. Section 5.1.2 - *Is a return trip a trip in the reverse direction of a given trip? Is the return trip of a trip always performed by the same vehicles?*

WMATA Response (July 2013) – Yes, a return trip will be comprised of the previous trip stations/timepoints run in reverse order at a later time by the same vehicle.

49. Section 5.2.2 - *Taking in consideration that in the blocking problem the train schedules are given as input, what do you mean by minimizing the platform time? Is this related with the computation of deadheads? Is this related with something else? What do you mean by opportunity trips? Can you provide examples*?

    WMATA Response (July 2013) – Minimizing platform time with regards to blocking regards the most practical and efficient methods of blocking to ensure efficient use of vehicle layovers, while adhering to other mitigating factors with regards to blocking, including, but not limited to yard capacity, yard balancing across the service day, minimization of unproductive deadheading mileage, degree of permissibility of interlining, terminal congestion, and safety sensitive minimum layovers at terminals to accommodate unloading and loading of customers and changing of Operators. Opportunity Trips are addressed in the response to question #59.

50. Section 5.2.3 – *Here and in several places in the document you refer interlining. What do you mean exactly by interlining in the context of the blocking problem? Could you provide an example of a block where there is interlining*?

    WMATA Response (July 2013) – Interlining may be broadly defined as a block comprised of trips from different routes where the routes have common station terminals locations.

51. *Section 5.2.7 – What are dynamic blocking scenarios? Can you give an example*?

    WMATA Response (July 2013) – Ability to use dynamic blocking scenarios would mean that train or operator blocks are not rigid within the database, and that different block sets can be loaded and saved for the same inventory of trips. Further, the system should have the ability to dynamically perform automated blocking scenarios of the trip inventory of vehicles and operators on multiple lines that will allow the setting of parameters, including, but not limited to, yard capacity, car consist types, interlining availability, and permissible line assignments by division."

52. *Section 5.2.8 – The train consists operating on Metrorail are always homogeneous (i.e. composed of cars of the same type) or there are cases where they are heterogeneous (i.e. composed of cars of at least two different types)*?

    WMATA Response (July 2013) – Married pairs of any series (1000-6000) can and normally are coupled into a mixed consist. However, upon the arrival of the quad-consist cars (7000s) in 2014, the quad-consist cars may not be able to operate in combined consists with the married pairs.

53. *Section 5.2.8 – The train consists are fixed (i.e., they have the same number of cars from the beginning of the day until the end of the day) or are variable (i.e., during the operation at certain moments of the day they can increase or decrease because cars are attached to the consist or detached from the consist)*?

    WMATA Response (July 2013) – Currently, consists can and do change between 6 cars and 8 cars consist by use of "add" and "cut" of married pairs of cars at terminals before and after peak periods.

54. *Section 5.3.7 – Can you provide examples of pay categories*?

    WMATA Response (July 2013) – A Time Reporting Code (TRC) table is attached.

55. *Section 5.3.10 – Please confirm if a division is a staff management center where drivers sign-in, where vacation periods are planned, etc*.

    WMATA Response (July 2013) – Confirmed. A division is the same as yard.

56. *Section 5.4 – Please confirm if a roster is a sequence of runs and days off describing a work arrangement that repeats itself many times all over again every week. Can you provide us an example of a roster*?

    WMATA Response (July 2013) – Confirmed. See Weekly Pay Sheet Report in Attachment E.

57. *Section 5.4.2 – What do you mean by "simplicity of on-duty time"? Can you provide an example*?

    WMATA Response (July 2013) – Replace the entirety of SOW Section 5.4.2 text with the following text: "Rosters shall be created exclusively on a per division basis. The scheduling system shall provide user functions and constraints to control the rostering building process. These optimization functions and constraints shall include items such as weekday, Friday, Saturday, and Sunday runs, overtime cost, report time, and on-duty/off-duty time. Once rosters are constructed, the system shall provide functions for automatic renumbering of Friday, Saturday, and Sunday runs to match similar parameters for weekday runs. These parameters shall include items such as report time, pay time, OT, platform time, etc."

58. *Section 5.4.3 – What do you mean by optimizing rosters based on similarity? How do you compare two solutions to say that one is better than the other on this aspect*?

WMATA Response (July 2013) – Based on similarity of "on-duty time" for example. "

59. *Section 5.5.2 – Can you explain what opportunity trips are? Can you provide some examples*?

WMATA Response (July 2013) – Opportunity trips are trips not part of the built schedule specification that are operated in service between distant terminals and stations adjacent to yards. These are trips that would not typically be run if not for the need to balance car utilization or to reach a yard from a terminal that was not adjacent to a yard. An example would be the extension of select Yellow line trips in service to Greenbelt Station as headway intervals widen and train requirements reduce.

60. *Section 5.7.2 – Could you provide us with a diagram on how do you envision the new system in your architecture and the interfaces that will be required*?

WMATA Response (July 2013) – This diagram is provided as an attachment to this amendment.

61. *Section 6.8 – Could you elaborate on which systems and what is your understanding of standard API's*?

WMATA Response (July 2013) – Standard API means we are looking for candidate software able to provide API to exchange data with other applications. SOA and EAI solution, capable of providing the real time system integration using web services, configurable import/export interface creation tool with an open data model.

62. *Section 1.1.1 – You say that defining service level requirements is a basic function of the system. Can you describe this in more detail and provide an example of a service level requirement*?

WMATA Response (July 2013) – The phrase "service level requirements" means providing number of trips, frequencies, and consist capacity.

63. *Section 1.1.2 – Can you describe the ITS systems, the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – Intelligent Transportation System; scheduling data, rail station data, and employee information. (please also reference diagram provides as an attachment to this amendment.)

64. *Section 1.11.3 – Can you elaborate on the purpose of the integration with Oracle IDM*?

WMATA Response (July 2013) – User password, single sign-on for now. WMATA's single sign-on and user password are managed by Oracle IDM.

65. *Section 1.11.9 – Do you expect leave information of users to be maintained within the system? If not how will the system get this information*?

WMATA Response (July 2013) – The scheduling system shall not maintain vacation accruals and other calculated employee accrual type data. The PeopleSoft payroll and HR system will maintain this information and provide this information to the scheduling system via periodic data exchanges as indicated in WMATA responses to questions 96 and 98 below.

66. *Section 1.2.1 – What do you mean by "origin"? Is it the vendor*?

WMATA Response (July 2013) – The components of the software are built upon, for example, Oracle, Web, JAVA. Please also refer to 1.2.2.

67. *Section 1.2.12 – Can you elaborate on your needs concerning this requirement*?

WMATA Response (July 2013) – We need new application to have open architecture to provide the possibility to seamless exchange data with other applications. Provide integration tools that use open technologies to integrate with other systems including XML or SOAP, COM (+), J2EE or .NET.
Please refer to 3.2 for additional detail.

68. *Section 1.2.13 – Can you provide the document or a link to the document*?

WMATA Response (July 2013) – These standards may be found at www.ntcip.org.

69. *Section 1.2.14/15 – Can we assume that the system must have a set of predefined standard reports, that can be modifiable and configurable, and that you can later use Report writing tools in case you need extra reports*?

WMATA Response (July 2013) – Add a new section to Appendix A, Item # 2.3.8 entitled "Report Generation/Editing Software" with the following text:

"The scheduling system shall include facilities to allow authorized users to generate new report formats and edit all existing report formats. WMATA prefers a web-based set of tools to support the report development process.

The report generator/editor shall enable an authorized scheduling system user to construct ad hoc queries and define and save reports for any scheduling system data

via interactive procedures that do not require specific knowledge of SQL. The capability to format reports for both display on system monitors, and for printout on a system printer shall be provided.

The capability to format reports for export to other systems shall be provided. Proposals shall indicate the capability of the base application software for exporting report data and where it is implemented for the system proposed, or whether this will require new software development. Proposals shall also indicate the file type preferences.

Executing the report generating function shall not interfere with the on-line functions of the scheduling system. Users at all scheduling system workstations shall be able to perform this function simultaneously."

70. *Section 1.2.16 – Can you provide the mentioned WMATA IT standards*?

WMATA Response (July 2013) – The WMATA IT standards will be only provided by WMATA to the Contractor following Contract award.

71. *Section 1.3.7 – Can you elaborate on the need for standard JDBC access*?

WMATA Response (July 2013) – If the application is JAVA application then this is needed, otherwise application needs to provide an industry standard data connection method (e.g. ODBC)

72. *Section 1.4.1 – Can you describe the systems, the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – Please refer to WMATA responses to questions 96 and 97, the attached diagram, and Appendix A, Item # 3.2.

73. *Section 1.4.2: – Can you describe the publishing system, the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – Trapeze ATIS, export schedule data to travel planning application. This is for exporting schedule data to trip planner and Google. Additional information about trip planner tool can be found on www.wmata.com.

74. *Section 1.4.4: – Can you describe the files format and data on each file*?

WMATA Response (July 2013) – ARTS is Trapeze ATIS, the WMATA trip planner that may be found on www.wmata.com. ATIS relies on schedule data and therefore the

Contractor shall develop an data exchange between the scheduling system and ATIS. OPAS, PrintShop: page maker are the tools to make signs with schedule information to patrons.

75. *Section 1.4.6 – Can this be done using files*?

WMATA Response (July 2013) – Export files may be proposed as long as these files deliver any automatic, efficient, reliable, and working functionality.

76. *Section 1.4.9 – Can you clarify this requirement*?

WMATA Response (July 2013) – Replace the entirety of Appendix A Item # 1.4.9 text with the following text: "Using personnel reallocation threshold data received from PeopleSoft HR, the scheduling system shall provide functions to manage reassignment of work to meet the reallocations. These assignment reallocations shall be selectable by WMATA clerk personnel. WMATA personnel shall not be able to exceed the reallocation threshold values as provided by the HR system without management approval via scheduling system override functions. All information related to these reassignments and manual overrides (e.g., name, employee number, terminal number, date, time) shall be logged and shall be controlled via the payroll audit functionality described elsewhere."

77. *Section 1.4.10 – Can you describe the OPS system, the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – At the completion of the scheduling component, the new software must integrate with the existing Trapeze OPS system until the new OPS system is developed. All data that is generated in the scheduling modules must be integrated into the Trapeze OPS System.

78. *Section 1.5.13 – can you provide examples of the histograms you refer*?

WMATA Response (July 2013) – This requirement is removed in its entirety.

79. *Section 1.5.18 – Is this required for every data item in the system*?

WMATA Response (July 2013) – Ability to add new fields is required, especially for those tables that need customization work.

80. *Section 1.7.2 – The maximum time length of a block is given as an example of a constraint to be checked in the block construction. Why electrical powered vehicles (such as metro cars) should have this type of constraint*?

WMATA Response (July 2013) – Replace the entirety of Appendix A Item # 1.7.2 text with the following text: "The system should provide validation functions for various parameter sets in the system. The system should provide users with the ability to alter, add, and control validations using various parameter sets. Validation warning shall be displayed to the users when set validation parameters are exceeded."

81. *Section 1.8 – Please identify which kind of data the system is supposed to "read" from GIS and "write" in GIS. Which kind of computations is the system supposed to do with information got from GIS? In particular, why it is relevant for a system that plans metro operations to know the location of bus stops*?

WMATA Response (July 2013) – The system shall read all locational information from GIS. Examples of relevant locational information are given in section 1.8.

The system shall write to GIS any locational information created or defined by the scheduling process or the scheduling system. Examples of relevant locational information are given in section 1.8.

82. *Section 1.11.9 – How will this information be fed into the system*?

WMATA Response (July 2013) – Scheduling system shall maintain all relevant attendance information for all Operators and shall reference this attendance information during all Operator sign in events.

83. *Section 1.12.1 – Could you elaborate on what do you mean by "web site resources"*?

WMATA Response (July 2013) – WMATA assume this questions refers to Appendix A, Item #1.12.2. Contractor shall provide website support and resolve all reported issues. Website resources means problems reported via the website.

84. *Section 2.1.1 – Can you clarify "sign-up" and "service group"*?

WMATA Response (July 2013) – A "sign up" refers to the effective picking calendar, typically a period of about six months, when a new schedule booking begins, and runs until superseded by another booking period. A service group refers to a service day type, typically "Weekday," "Friday," "Saturday," "Sunday," or "Sunday" but also

typically used to replace existing "normal" service days with modified schedules for single days in the event of track work schedule builds.

85. *Section 2.1.40 – Can you explain what seasonal routes are*?

WMATA Response (July 2013) – Replace the entirety of Appendix A Item # 2.1.40 text with the following text: "Not Used"

86. *Section 2.1.58 – this refers to work to be assigned to operators. Is this work given as input or is the result of a computation to be done inside the system. Please explain the concept of gap trains and incidental runs*.

WMATA Response (July 2013) – Gap trains are positioned at intermediate locations within the Metrorail territory and are deployed to fill service gaps resulting from mechanical failures of the originally scheduled trains.

The term "incidental run" refers to operator assignments for known, non-revenue train movement assignments. By CBA rules, these assignments pay specific guarantees that the system shall include in its run cut solution.

87. *Section 2.1.70 – Could you describe how the sign-in/sign-off process is currently implemented*?

WMATA Response (July 2013) – WMATA currently only utilizes a sign-in process, not a sign-out process. Currently we have two processes – manual and automatic. For the automatic process the sign-in terminal is accessed by the Operators using a valid driver's license, the device verifies that the driver's license is valid and notifies OPS that the driver has reported in. Then the device notifies the Operator of their assignment and any information/direction from the supervisor (i.e., report to the supervisor prior to assignment).

88. *Section 2.3.5 – Could you provide samples of the reports described, as you have them now (or at least the ones you do)*?

WMATA Response (July 2013) – The Contractor shall replicate the attached WMATA reports.

89. *Section 3.1.2 – Can you provide details on WMATA current sign-in-terminals*?

WMATA Response (July 2013) – The electronic sign-in device that validates the employee has a valid driver license and then print out the Operator's daily assignment.

90. *Section 3.2.1 – The tools will be the ones used to implement the required system integrations, correct*?

WMATA Response (July 2013) – Correct. Replace the entirety of the Appendix A, Item # 3.2.1 text with the following text: "For any interfaces between the new scheduling system and the required external systems, the Contractor shall use the open technologies software integration tools including XML or SOAP, COM (+), J2EE or .NET."

91. *Section 3.2.2 – What kind of integration do you need with MS Office applications*?

WMATA Response (July 2013) – This requirement is removed in its entire.

92. *Section 3.2.3 – Please describe the actions and external applications to be supported*.

WMATA Response (July 2013) – Please see the WMATA response to Question #17 above.

93. *Section 3.2.4 – Could you please elaborate on this requirement*?

WMATA Response (July 2013) – Replace the entirety of the Appendix A, Item # 3.2.4 text with the following text: "Not used."

94. *Section 3.2.6 – Can you describe the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – Replace the entirety of the Appendix A, Item # 3.2.6 text with the following text: "Not used."

95. *Section 3.2.7 – Can you describe the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – Please see the answer to comment #97 below.

96. *Section 3.2.8 – Can you describe the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – Replace the entirety of the Appendix A, Item # 3.2.8 text with the following text: "The scheduling system shall interface with critical external systems that include but are not limited to PeopleSoft human resources, PeopleSoft payroll, Trapeze Advance Traveler Information System (ATIS), Google Transit (using GTFS), Rail Performance Monitor (RPM), WMATA transit database, Maintenance and Material Management System (MMMS), Safety Management System (SMS), and

Passenger Information Display System (PIDS) for scheduled and real-time data exchanges.

The Contractor shall be solely responsible for the design and implementation of all interfaces for data exchanges with external systems. The scheduling system interfaces to external systems shall utilize, to the fullest extent feasible, the capabilities already present in the external systems, so as to minimize the need for modifications to those systems. All Contractor software and modifications required to interface with external systems shall fully comply with those system's warranty and maintenance contract terms.

The Contractor shall not require WMATA involvement for coordination and management of any agreement between the Contractor and manufacturer of the system being interfaced with concerning the required scheduling system interfaces.

All interfaces shall be described in an ICD."

97. *Section 3.4.1 – Can you describe the systems, the type of integration and the data to be exchanged*?

WMATA Response (July 2013) – Replace the entirety of the Appendix A, Item # 3.4.1 text with the following text: "The system shall be exchange all necessary data with the following external systems: Trapeze OPS, ATIS systems, PIDS, PeopleSoft human resources (HR), PeopleSoft payroll system, Rail Performance Monitor, MAXIMO Material Management System, Passenger Information Display System, and Transit Database System (TDB). Please note that by the end of January, 2014, the PeopleSoft HR/Payroll/Time & Labor module will upgraded to version 9.1. PeopleSoft HR and Payroll are one system, with Time & Labor being a separate module that interfaces with PeopleSoft HR/PR."

Add the following text under new Appendix A, Item # 3.4.6: "Data Import General Requirements - All existing electronic data that is necessary for scheduling system initialization and periodic data exchange shall be accepted by the scheduling system in its native form and format. The scheduling system shall include all necessary translation, reformatting and manipulation functions necessary to import this existing external data without requiring user manipulation of the data.

The scheduling system shall ensure that all additions, changes, and deletions to its database during import operations shall occur without interfering with normal online operation of the scheduling system and without compromising database integrity.

Once imported data is successfully validated and stored in the database, the scheduling system shall make this data immediately available to the appropriate scheduling system functions. During an import operation, the scheduling system shall automatically record status and any errors encountered to a user-accessible log on the scheduling system server(s).

The Contractor shall be solely responsible for the proper operation of all system interfaces. If necessary to fully define and successfully complete any interface, the Contractor shall enter into an agreement with the manufacturer of the external system interfaced to the scheduling system."

Add the following text under new Appendix A, Item # 3.4.7: "Data Export General Requirements - The scheduling system shall provide periodic data to several external systems. Where these systems currently exist, the scheduling system shall provide the data in the format currently required by these existing systems.

Where these systems are "future", the scheduling system shall support a standard export data set that is suitable for use by each type of external system. WMATA strongly prefers that these data sets conform to published ITS standards where applicable. For each such data set, the Contractor shall supply a clearly documented description of the data set and its format via an interface control document (ICD) that shall be delivered to WMATA for approval within 60 days of Contract award. WMATA plans to include these ICDs, as appropriate, in the requirements for each future system that is acquired. However, WMATA reserves the right to utilize these documents in any manner necessary in the performance of agency responsibilities."

Add the following text under new Appendix A, Item # 3.4.8: "Scheduling System Interfaces and Data Exchange - The Contractor shall be responsible for all interfaces and data exchanges to the specific systems described in the following sections. The new scheduling system shall exchange data with these systems over the existing LAN/WAN. Both automatic and manual data exchange processes shall be supported.

It shall be the responsibility of the Contractor to provide the method of importing or exporting, translating, and performing any other necessary data manipulations to make the imported or exported data sets automatically usable by the scheduling system. The Contractor shall document all required data exchanges via an ICD that shall be delivered to WMATA as part of the software documentation."

Add the following text under new Appendix A, Item # 3.4.9: "PeopleSoft Human Resources Interface - The scheduling system shall support the importing of employee

data from the PeopleSoft HR/PR system. This data shall consist of employee data necessary to support all dispatch processes offered by the installed system. These data products include all necessary items such as employee name, badge number, address, phone number, driver's license number, etc. The Contractor is responsible for properly implementing this interface such that the necessary employee data is provided to the scheduling system to properly execute the dispatch process.

Add the following text under new Appendix A, Item # 3.4.10: "PeopleSoft Payroll Interface - The scheduling system shall provide the PeopleSoft HR/PR Time & Labor system with all data necessary to support the required payroll processes. The data products necessary to support these processes shall include items such as employee name, badge number, roster/run selected, run hours, guarantee times, payroll codes, etc. The Contractor shall be responsible for properly implementing this interface such that the necessary data is presented to the PeopleSoft HR/PR Time & Labor system to properly execute the existing payroll processes."

Add the following text under new Appendix A, Item # 3.4.11: "Trapeze ATIS Interface – The scheduling system shall provide all necessary schedule data to the Trapeze ATIS for supporting the ATIS trip planning functions. The scheduling system shall support the export of scheduling data to the existing Trapeze ATIS trip planning system to be used to generate trip itineraries, vehicle information, station information, and other transit related information. The data to be exchanged with the scheduling system includes the following elements:

a. **Schedules and schedule type**
b. **Passing times**
c. **Station locations**
d. **Time point locations**
e. **Shape files**
f. **Route/pattern overlays**
g. **Trip definitions**
h. **Block definitions**
i. **Time point sequence numbers**
j. **Station code**
k. **Destination sign codes"**

Add the following text under new Appendix A, Item # 3.4.12: "PIDS Interface – The scheduling system shall provide the PIDS system with all data necessary to support the existing functions of this passenger information display system.

Add the following text under new Appendix A, Item # 3.4.13: "Transit Database (TDB) shall be used as a central hub of information exchange between application systems. Batch and real time information exchange processes should be controlled and maintained in TDB."

98. *Section 3.5.8 – What is a "work force calculation/utilization report"? Can you provide us with an example?*

WMATA Response (July 2013) – An example is the existence of report tools that can analyze the extra board utilization.

99. *Section 3.8.3 – What are "OT assignments"?*

WMATA Response (July 2013) – Overtime assignments.

100. *Section 3.8.11 – What exactly do you mean by "automatically "Call" assignments"?*

WMATA Response (July 2013) – Add the following text to Appendix A, Item # 3.8.11: "The scheduling system shall automatically select the next on-duty extraboard Operator (name and badge) for assignment to miss outs and shall provide user interface functions to manually match unassigned work according to defined CBA work rules (see Appendix C), using parameters such as seniority, rest time, and overtime policies."

101. *Section 3.8.39 – What kind of file do you mean? Could you provide an example of the IVRU import file?*

WMATA Response (July 2013) – Replace the entirety of the Appendix A, Item # 3.8.39 text with the following text: "Not used."

102. *Section 3.10.10 – What does a "closed day" mean?*

WMATA Response (July 2013) – A security feature that will not permit changes to any work day assignments after the day has been reviewed and approved.

103. *Section 3.13.1 – Which metrics are you referring to?*

WMATA Response (July 2013) – This is a new requirement. The desire is to allow users to create their own metrics and display the results on a "dashboard" display.

104. *Section 3.13.2 – All metrics are available to all users?*

WMATA Response (July 2013) – No, this should be a secured permission.

105. *Section 3.15 – Will this functionality replace an existing system? How does it interface with the HR system*?

WMATA Response (July 2013) – Yes, the Contractor shall provide the interface with HR system.

106. *When reading your RFP-document we have stumbled on the requested "BUY AMERICA ACT CERTIFICATION" (page 24 of your tender document). We found several waivers/exceptions for this certification, but we are not sure about the impact for a foreign supplier in context of your bidding process. Can you please clarify this impact for a foreign company*?

WMATA Response (July 2013) – Transit scheduling software would fall under FTA's Buy America waiver for software that is solely for the purpose of processing or storing data.

107. *Does a foreign company has equal rights to take part in your bidding process (incl. same evaluation of quotation like quotations of domestic companies)*?

WMATA Response (July 2013) – Yes.

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
ADVANCED TRANSIT SCHEDULING APPLICATION
REQUEST FOR PROPOSAL FQ13077

New RFP Requirements

New Requirements - The following changes and new requirements are hereby included in the WMATA RFP FQ13077:

1. Add a new requirement under Appendix A, Item #1.2.18 with text: "Remote System Access - Remote connectivity for system support and maintenance will be via VPN software or firewall modification using ports and protocols specified in advance by the Contractor to access each of the servers. Any physical or virtual diagnostic ports shall be individually enabled and disabled by the System Administrator via a display. The enabling of a port shall be done, at the System Administrator's option, for either a single terminal session or until disabled by the System Administrator. The System Administrator shall have the option of being notified periodically by the scheduling system, via an alarm or event message, that the diagnostic port is enabled; and of being notified of each log-in and log-out and the port that was used. User name and password authentication shall also be required to gain remote access to the scheduling system."

2. Add a new requirement under Appendix A, Item #3.10.12 with text: "Payroll Audit Functions - The system shall include functions to automatically provide full audit tracking capabilities for any system or user adjustments to payroll records. When changes are made to payroll records, the system shall record all relevant data regarding the payroll record alteration that includes but is not limited to the following:

    a. Date and time of record alteration

    b. Employee ID and name that altered the record

    c. System workstation where the alteration was performed

    d. Initial record altered

    e. Final record altered

    The system shall not permit any user to alter audit records for any reason. Audit record displays shall be provided that allows users to view all audit records by any users."

3. Add a new Part III Technical Specifications Section 8.3 with text: "Design Review Process - The Contractor shall conduct a technical Design Review at WMATA's facilities in Washington, DC for each implementation Phase of the project. The Design Reviews are intended to inform WMATA personnel of the Contractor's intended implementation of the

scheduling system. The Contractor shall, using various materials, documents, and correspondence, inform WMATA of all implementation approaches in order for WMATA to properly receive, prepare, and coordinate for the new scheduling system. The Design Review shall culminate in a meeting.

Each of the Design Review meetings is expected to be at least two to three days in length but shall be of a duration as determined by the Contractor to develop the requisite understanding of the WMATA scheduling and dispatching processes. The Contractor shall develop and provide a Design Review agenda for WMATA approval at least two weeks prior to the scheduled start of the Design Review. This agenda shall detail all major topics that are to be discussed during the Design Review. The Contractor shall prepare slides and other meaningful presentation materials that sufficiently document their intended approach. All presentation material shall be provided to WMATA at least two weeks prior to the start of the Design Review meeting.

For the Design Review, the Contractor shall present the design approach for all major functions, subsystems, and test parameters and proposed procedures. Topics to be addressed during the Design Review shall include the following: scheduling system project schedule, software to be provided, user interface design, approaches to meeting the requirements of the system and each major function, total system functional description, system hardware architecture, training, interfaces to other computer systems, system performance criteria, and scheduling system configuration. The following submittals shall be provided at least three weeks prior to the start of the Design Review:

a. System description documentation.
b. Hardware configuration block diagram.
c. Detailed Design Review including the data dictionary, ERD, test checklists and procedures.
d. Sample scheduling, dispatcher, and system administrator user's manuals that describes the layout and content of all the scheduling system displays and reports and the user actions required to perform each function available to the users. A sample copy of all Contractor-provided standard reports
e. Design documentation for all external interfaces (ICDs).

New RFP Requirements

The Design Review shall not be considered complete until all documentation is received and accepted/approved by WMATA and all action items generated as a result of the Design Review process are satisfied. Approval of the design and associated documentation will allow the coding effort and other final designs to be formalized and completed. Any unapproved design and implementation efforts conducted before the approval of WMATA will be at the Contractor's own risk."

4. Add a new Part III Technical Specifications Section 1.1.4 with text: "System Initialization - The Contractor shall initialize the new scheduling system with GIS map, existing time points (lat/lon locations, numeric IDs, short name, long name), trackage description data (see rail diagram attachment), interlockings, signal locations, existing stations (lat/lon locations, numeric IDs, short name, long name), vehicle data, CBA work rules, notes, relief points locations, relief matrix, run types, run times, deadhead matrix (including times), trip patterns, employee data, payroll codes, trips, blocks, runs, patterns, route overlays, pattern overlays, and schedules (including all passing times). This data shall be current at the time of dry run testing."

5. Add a new Part III Technical Specifications Section 10 with text: "System Testing - Approval of inspection and test results, and the waiving of inspection and tests, shall in no way relieve the Contractor of the responsibility for furnishing a complete Advanced Transit Scheduling Application system that meets the requirements of this Specification.

   If any inspection and test indicates that specific software, hardware, and documentation does not meet the requirements of this Specification, the Contractor shall replace, modify, and add the appropriate items necessary to correct noted deficiencies at no additional cost to WMATA.

   WMATA representatives shall have free entry into any of the Contractor's facilities where the scheduling system is being produced to verify that the scheduling system is being fabricated in accordance with this Specification.

   10.1 Test Documentation

   The Contractor shall furnish complete documentation for all testing. This documentation shall consist of test procedures and test records.

   10.1.1 Test Procedures

New RFP Requirements

The Contractor shall develop all test procedures necessary for the full testing and configuration verification of the system. These procedures shall be comprehensive, representative of each scheduling system function, and repeatable in whole and in part. Complete test procedures shall be submitted for approval at least three weeks before any testing is scheduled to begin. WMATA written comments on the test procedures shall be responded to in writing by the Contractor and the test procedures shall be resubmitted. All test procedures shall be approved and ready for use at least one week before the scheduled start of any testing. No testing shall begin until all associated test procedures are approved in writing by WMATA. The test procedures shall include the following general information:

a. Test schedule
b. Responsibilities of Contractor and WMATA personnel
c. Record keeping assignments, procedures, and forms
d. System configuration diagram of the scheduling system configuration to be tested, including any test and simulation hardware and software
e. Variance classifications
f. Procedures for handling variances identified during a test period.

For each individual test, the procedures shall include the following specific information:

a. The functions to be tested, and the Specification paragraph reference
b. The test set-up and test conditions
c. The detailed step-by-step test procedures to be followed
d. All inputs and expected outputs
e. Expected test procedure results
f. The acceptance criteria.

A minimum of 25% of the test schedule period shall be set aside for unstructured testing of the scheduling system configuration under test by WMATA representatives.

10.1.2 Test Records

The Contractor shall maintain a complete record of all test results. This record shall be keyed to the test procedures and shall include fields for the test execution date and signatures of the Contractor and WMATA personnel witnessing each of the tests. Space

for comments by testers and witnesses shall be provided. A copy of the test records shall be delivered to WMATA within one week following the completion of each test period.

A variance report shall be prepared and included in the test record each time a variance from a Specification or system functional requirement is detected during testing.

10.1.3 Reporting of Variances

A Variance Report shall be prepared by WMATA and Contractor personnel each time a deviation from Specification requirements, test procedures, or the Contractor's design is detected between the start of acceptance test through acceptance. Each variance shall be assigned by WMATA to one of four variance classes depending upon the severity of the variance.

a. Priority 1: Critical – a failure that results in WMATA being unable use critical functions of the system operationally, affects the safety of WMATA personnel, and prevents or severely impedes the proper dispatching of vehicles or personnel. The system shall not be used by WMATA with any Priority 1 variances established.

b. Priority 2: Major – indicates a deficiency of lesser severity than a Priority 1 which does not substantially reduce the capability of the system to accomplish its primary system functions (e.g., optimized vehicle scheduling, optimized Operator assignments, and Operator dispatch), but the correction of which will result in significant agency compensation to achieve the desired level of performance. However, the system is still capable of accomplishing its primary system functions with a satisfactory degree of safety and effectiveness.

c. Priority 3: Minor – a low impact failure, documentation error, or problem with a defined and acceptable (to WMATA) work around method. Problems of this nature should be corrected in future system updates.

d. Priority 4: System Enhancement – Requests for functions not presently part of the system software or hardware suite.

10.2 System Testing

The Contractor shall provide support for the following system testing periods. WMATA expects these test phases to occur during each of the two implementation phases.

New RFP Requirements

10.2.1 Dry Run Testing

The Contractor shall conduct a dry run of the acceptance test procedures prior to requesting the presence of WMATA's representatives for acceptance test. During this acceptance test dry run testing period, the Contractor shall execute all acceptance test procedures as written using the WMATA approved acceptance test procedures document. During this dry run test, the Contractor shall initial and date all acceptance test procedure pages when that particular test procedure functional unit is complete, note the test procedure step where any variances are established, and note all established variances on the Variance Report. Immediately after the completion of the initial acceptance test dry run, the Contractor shall send copies of the signed and dated dry run acceptance test procedures and all established variances to WMATA for review. WMATA will determine which of the variances will be required to be fixed prior to the commencement of the acceptance test. The Contractor shall fix these selected variances and again perform those portions of the acceptance test procedures as deemed necessary by WMATA. At WMATA's option, a WMATA representative may witness the dry run of the acceptance test.

When all WMATA selected variances have been fixed to the satisfaction of WMATA, the Contractor shall provide written certification to WMATA of the successful completion of the acceptance test dry run. This certification shall be submitted and received one week prior to the start of the acceptance test.

10.2.2 Acceptance Test

Following the completion of Contractor dry run testing, WMATA will conduct an acceptance test upon Contractor completion of the delivery, configuration, and initialization of software and data for each implementation Phase. The acceptance test for each implementation Phase shall confirm to WMATA that the Contractor-delivered software, configuration, and data initializations are complete and operational and are ready for acceptance testing, thereby verifying that the associated payment milestone has been successfully completed. WMATA reserves the right to reject a delivery if it is found during an acceptance test to be incomplete in terms of required functions and data, or if any of the required functions are inoperable.

WMATA will host the acceptance test at their own facilities in a staging area or areas that are designated by WMATA. The Contractor shall be responsible for all installation and

configuration of the submitted software and data in preparation for acceptance test. For each implementation Phase, this testing shall last no more than 7 days and shall be attended by appropriate Contractor personnel. The Contractor shall assume that the designated area(s) are for staging only and are not necessarily the final installation location.

All WMATA application software, system software, and databases shall be complete and installed on the test hardware. Any special hardware, software, telephone lines, and test equipment required for the proper operation of the test shall be supplied by the Contractor and verified to be working properly. No changes to the hardware and software test configuration shall be permitted during acceptance test without the approval of WMATA. The Contractor shall provide the test procedures for each acceptance test. The acceptance test for each implementation phase shall not begin until all relevant test documents, User's Manuals, and System Administrator's Manuals have been submitted and the test procedures have been approved by WMATA. Up-to-date documentation describing the specific software of the delivered system shall be available during the acceptance testing. Actual, current WMATA GIS, route, schedule, trackage description data, station attributes, interlocking definitions, signal locations, employee, and other data needed by the system shall be used exclusively during acceptance testing.

10.2.3 Confidence Testing

Following the completion of acceptance testing, WMATA shall conduct a confidence test of the system functionality. Utilizing the Contractor-provided training methods, users shall exercise the scheduling system in parallel operation with the existing WMATA systems for a period of 30-days. During this test, if the system exhibits any variances, WMATA will generate variance reports. These variance reports will be provided to the Contractor. The Contractor shall be responsible for the correction of the affected software and data for any variances established during this test.

As a requirement for final acceptance of the scheduling system, the Contractor shall resolve all established variances as directed by WMATA."

6. Add a new Part III Technical Specifications Section 9 "Documentation" with text:

"9.1 Master Project Schedule

New RFP Requirements

The Contractor shall provide a detailed master project schedule showing major Contractor activities and major WMATA activities. The detailed project schedule shall be submitted within two weeks after NTP. Frequent, meaningful, measurable performance milestones shall be established so that progress can be monitored effectively. Testing periods and delivery of documentation for WMATA's review and approval shall be included as milestones in the schedule; deliveries of final documentation also shall be included in the schedule. The schedule shall identify the dates for all critical WMATA activities. This scheduling system project schedule shall include the training items as discussed elsewhere in this specification. The schedule shall also show all Contract payment milestones within each of the two implementation Phases.

9.2 Document Review Process

All documents delivered to WMATA under this Contract shall be submitted in unlocked electronic format. The electronic format shall include both the native file format (MS. Word, MS Excel, etc) and Adobe portable document format.

New software documentation, and portions of standard software documentation produced specifically for the WMATA implementation shall be subject to WMATA's approval. WMATA will submit comments electronically and in writing to the Contractor within ten working days after receipt of the documents. The Contractor shall respond to all comments in writing within ten days using the electronic copy of the comments sent by WMATA. The affected documents shall be corrected and resubmitted by the Contractor to WMATA within ten days. WMATA will review the document changes resulting from the comments and will submit additional comments (if necessary) within ten working days after the receipt of any revised document. No implementation schedule relief is to be implied for documents requiring correction and resubmission to WMATA.

Documentation for the Contractor's standard software shall be furnished for WMATA's review, but approval by WMATA will not be required prior to implementation. All standard documentation shall be submitted to WMATA prior to implementation of the relevant hardware and software. Comments will be submitted to the Contractor within ten working days.

Any purchasing, manufacturing, and application programming started before the relevant documentation has been reviewed and approved by WMATA shall be done at the

Contractor's own risk. Acceptance and approval of any documentation by WMATA shall not relieve the Contractor from the obligation to satisfy all Specification requirements.

9.3 Scheduling System User's Manual

The Scheduling System User's Manual shall contain: an overview description of the software from the user's perspective; function descriptions and detailed operating instructions and procedures for all user available functions; copies of the scheduling system displays; report building methods; WMATA-specific terminology; and a sample map. Coverage of the functions shall be geared to the needs and experience of the users.

The Scheduling System User's Manual will be used as a reference manual and, therefore, shall be organized so that information can be quickly and easily located, with appendixes of important information and an index.

Proposals shall include a sample copy of user's manuals for all functional areas of the delivered scheduling system.

9.4 Dispatch User's Manual

The Dispatcher User's Manual shall contain: an overview description of the hardware and software from the user's perspective; function descriptions and detailed operating instructions and procedures for all user available functions; copies of the system displays; report building methods; WMATA-specific terminology; and a sample map. Coverage of the functions shall be geared to the needs and experience of the users.

The Dispatcher User's Manual will be used as a reference manual and, therefore, shall be organized so that information can be quickly and easily located, with appendixes of important information and an index.

Proposals shall include a sample of a Dispatcher User's Manual.

9.5 Data Dictionary, ERD, and Database Use Rights

The Contractor shall grant WMATA unlimited rights to use all data within the scheduling system database(s) and shall provide the necessary facilities, both end-user and developer, for performing such access. WMATA intends to use these access rights and facilities for the purpose of creating future interfaces to the scheduling system, for

generation of new reporting capabilities, and for any other purpose to which WMATA's scheduling data can be used in the normal operations of WMATA. The database access facilities provided shall include an accessible data dictionary and entity relationship diagrams (ERD) that fully describes and documents all scheduling system database content. Future use of the database facilities by authorized and qualified WMATA personnel shall not require that additional support, documentation, or licensing be obtained from the Contractor.

9.6 Interface Control Documents

An ICD shall be provided for each interface to an external computer system that completely describes the data exchanged between the scheduling and the external system. This description shall include descriptions of the following data elements:

- File format
- File overview
- Number of files provided in the interface
- File names
- File naming conventions
- Message protocols
- Message structures
- Message size/field lengths
- Individual field formats (alpha, alphanumeric, numeric, Boolean, binary, etc).

9.7 System Administrator's Manual

The System Administrator's Manual shall include reference information and detailed procedures for all System Administrator functions. These shall include assigning scheduling system user access rights, allocating disk space, executing interface/data exchange procedures, updating databases and system constants, performing data retrievals, performing system backups, installing additional workstations, ad hoc report development, and troubleshooting system problems.

The System Administrator's Manual will be used as a reference manual and, therefore, shall be organized so that information can be quickly and easily located, with appendixes of important information and an index.

New RFP Requirements

9.8 Dispatcher Procedure Guide

The Contractor shall work with WMATA to develop a User Procedure Guide for the Dispatch modules. This Guide shall document the specific steps in order of interaction with the system that are required to perform common user tasks. The User Procedure Guide shall be written specifically for WMATA's users and shall use WMATA terminology."

7. Add a new paragraph "6.c." under Part II, Section 2 - Special Provisions with text: "Payment milestones have been selected that clearly identify the actual status of the portion of the work completed rather than anticipated project progress schedules. Payments will be based on actual completion of each milestone event, as approved by Commission, not on the scheduled completion date. WMATA will not approve a milestone payment until all preceding milestones have been approved. When a change is made to the contract, the Purchase Price will be changed as needed and the milestone payments will be adjusted by mutual agreement of the Contractor and WMATA.

WMATA will pay the Contractor using the following payment milestone schedule:

Milestone Description	Contract Value %
Approval of the detailed project schedule and a complete list of training, hardware, software, and other documentation deliverables	5
Phase 1	
Approval of Phase 1 Design Review process	10
Successful completion of Phase 1 testing	15
WMATA acceptance Phase 1 is complete	10
Successful completion of Phase 1 warranty period	10
Phase 2	
Approval of Phase 2 Design Review process	10
Successful completion of Phase 2 testing	15
WMATA acceptance Phase 2 is complete	15
Successful completion of Phase 2 warranty period	10"

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
ADVANCED TRANSIT SCHEDULING APPLICATION
REQUEST FOR PROPOSAL FQ13077

New RFP Requirements

8. Please add the following requirement to Solicitation Instructions, page 14, Section 16.a(1): "Electronic version of the price proposal shall also be provided in and unlocked MS Excel format."

9. Please add the following requirement to Solicitation Instructions, page 14, Section 16.a(2): "Thumb drives shall contain unlocked versions of all proposal materials in native file format (MS Word, MS Excel, etc) as well as unlocked Adobe Portable Document Format."

10. Replace the entirety of Part III Technical Specifications, Section 7.13. text with the following text: "The Contractor shall provide the following training sessions for up to 12 WMATA trainees per session at WMATA facilities in Washington DC:

    - Scheduling - three week training session covering operation of the scheduling system functions, including route development, trip building, blocking, runcutting, rostering, optimization techniques, and the efficient operation of the workstations.

    - Bidding and daily operation management - six 3-weeks training sessions covering semi-annual bidding, weekly hold down bidding, employee management, vacation management, and all functional capabilities of the scheduling system's dispatch functions and report capabilities

    - System administration - two week training session covering procedures such as assigning access levels, backing up and restoring the system, software patch insertion, loading database updates, importing a new GIS map data set, code control, data exchange with other agency systems, and retrieving archival data. This training shall also cover the organization and content of all scheduling system databases, use of the database editor to modify the databases, and the techniques used by the System Administrator to control access to the databases.

    These courses shall familiarize the users with the overall design of the scheduling system, provide hands-on training on WMATA's workstations, and provide a thorough understanding of the user interface for all scheduling system functions and displays. All training courses shall include training on report generation and familiarization with database structure, ODBC, and the table definitions necessary to support the development of new reports."

New RFP Requirements

11. Replace the entirety of the Appendix A, Item # 3.1.2 text with the following text: "WMATA will provide reader hardware and workstation equipment to read Operator's drivers license bar code at each of the rail divisions. In order to report in to work each day, Operators will present their driver's license on up to two card readers to be located at each dispatch window location. Once the drivers license data is read by the reader, the read driver's license data shall be used by the scheduling system to establish check-in for that Operator. Using the scanned drivers license information, the scheduling system shall determine the Operator and shall automatically record the current time and date as the Operator's report time. The scheduling system shall also validate if the Operator is eligible to operate a train on the assigned run due to status of employment, status of drivers license, assigned work, reported off duty status, driving time, discipline measures, etc.

    Once the Operator has reported in, the scheduling system shall present the Operator (via the workstation monitor) with a description of the day's work (run number, assigned vehicle ID, vehicle locations, start and end times) and any relevant Dispatcher-entered notes. Operators shall be able to print the manifest report specific to their assigned run for that day via a scheduling system printer resource located within the dispatch window area.

    The scheduling system shall also permit window clerk personnel to check-in Operators via mouse insertion pointer selections.

    All Operator check-ins, times of check-in, and messages displayed to the Operator shall be logged to the system database. "

12. Add a new requirement under Appendix A, Item #3.1.3 with text: "HARDWARE REQUIREMENTS

    WMATA will acquire the system hardware (system server, workstation, printer, network and uninterruptible power supply (UPS) system), other hardware products that are of a commodity nature based, as recommended by the Contractor in their proposal. WMATA will acquire the third party system software (operating system, database software, network software, Voice Genie system used by IVR, and Citrix) that are of a commodity nature based on the proposed third-party software recommended by the Contractor in their proposal. It will take WMATA approximately 120 calendar days to acquire the scheduling system hardware and third-party software following Contract Award. WMATA will be responsible for loading, initialization, and setup of this hardware and third-party software

based on the Contractor's instructions and configurations. WMATA prefers IBM pSeries, Dell server and workstation equipment and Cisco network equipment.

For the hardware used by sign-in process, please refer to 118, scanner, special printer, and desktop will also acquired by WMATA.

The Contractor shall be responsible for ensuring that the WMATA-provided hardware has adequate capability and flexibility to meet the requirements of this Specification and the needs of their intended system configuration and operation. If, for any reason, the WMATA-acquired hardware and third-party software is missing items not specified by the Contractor in their proposal, fails to meet the performance or functional requirements of this Specification, or fails to work properly with the Contractor-installed software, the Contractor shall be responsible for the acquisition and installation of any and all hardware and software upgrades to correct any system failures and improper operations."

Rail Hard Rules

1) Platform time must be equal or less than 5:45 on a piece of work of a (regular?) run
2) All regular runs are guaranteed 8 hours pay per day
3) All tripper runs are guaranteed 2 hours pay per day
4) *All runs (including trippers) get 10 minute report pay*
5) Any overtime pay or any spread on a swing run that is a half minute gets rounded up. For example:
   - If the total pay time of a run is 8 hours and 31 minutes, the overtime pay is 15 and one half minutes by calculation, the overtime pay will round up to 16 minutes for the run.
   - If a spread for a swing run is 10 hours 27 minutes. The spread pay is 13 and one half minutes so the run will have 14 minutes spread pay.

6) Straight run rule:
   - weekday runs must be at least 57.5% straight runs (can be less at any 689 division but must be at least 57.5% for the total of 689 weekday runs)
   - Saturday runs must be at least 80.0% straight runs (can be less at any 689 division but must be at least 80.0% for the total of 689 weekday runs)
   - Sunday runs must be at least 100% straight runs

7) Time-off:
   - All operators will have two consecutive days off
   - Any operator may bump off his run to another if
     - The off days on the run are changed
     - If one of the bus lines on the run changes
     - If the pay time on the run changes by more than 15 minutes up or down
   - all operators must have at least 8 hours off between their off duty time and their on duty time of the next day

8) Paid Time:
   - Any total work time on a regular run, that includes report time, platform time and travel time, over 8 hours total will get paid overtime (time and one half)
   - Meal time, swing time, spread penalty, double spread penalty is not subject to an overtime penalty

9) Travel time:
   - Travel is paid for an operator when his/her starting and ending location is not at the bid division he/she is assigned to
   - Travel is paid for an operator when he/she needs to get from one relief point to a different one on a run
   - Travel time is computed by using half of the base day frequency of service on the line or lines needed to travel on plus adding the running time on that line or lines between the two relief points
   - Travel time must include any walk time that is necessary

10) Paid Break Time:
   - Paid meal time on a straight run should be equal or greater than 20 minutes and equal or less than 60 minutes

- Swing time break is paid
- Only one unpaid break allowed on a run
- On a three piece run, any two pieces of work with a combined platform of 5:45 or greater must have at least a 20 minute meal break

11) Spread penalty on a swing run:
    - starting to pay penalty over 10 hours,
    - starting to pay double penalty over 11.5 hours

12) Run numbering:
    - All run numbers at a division must be six numbers long, and the first two numbers on all runs must be the division number that the run is at. The assigned division numbers are:
        - Alexandria - 38
        - New Carrollton - 39
        - West Falls Church - 43
        - Greenbelt - 44
        - Branch Av - 49
        - Largo – 50
        - Brentwood - 37
        - Shady Grove - 42
        - Glenmont – 46

    - Run Type:
        - Owls are off duty before 2 pm and numbered from 001 to 019
        - Early straight are off duty before 4 PM and are numbered from 020 to 199
        - Swings work the AM and PM rush hours, and are numbered from 200 to 399
        - Early midday straight are off duty between 4 PM and 7:59 PM and are numbered from 400 to 499
        - Late midday straight are off duty between 8 PM and 9:59 PM and late straight runs are off duty after 10 PM. Both late midday straight runs and late straight runs are numbered 500 to 799
        - Relief runs also called jumper runs are numbered 800 to 999
        - AM tripper runs are numbered 1000 to 1999
        - PM tripper runs are numbered 2000 to 2999
        - All runs by category in run numbers are ordered by the on duty time

13) Self relief regular runs must have the same block number on each piece of work
14) Any spread and double spread on a swing run that is a half DOES NOT get rounded up. For example, if a swing run is on duty at 6:30 AM and off duty at 7:03 PM this creates a spread of 12:33. The spread pay is 1:16 and one half minutes and the double spread pay is 31 and one half minutes. The run will have a total spread and double spread pay of 1:48. The half minute on spread and the half minute on double spread are added together for a total of one minute. If you rounded up the spread and double spread separately it would cost two minutes instead of one.

Mileage and Platform Hours Statistics Report

Washington Metropolitan Area Transit Authority

Signup: 2013 June_Rail | Rail Car Times & Miles by Block | Page: 2

Line: RED - RED LINE | SERVICE: 11 - M-TH RAIL | Printed: 06-19-13

Effective:

	TRAIN MILES			REVENUE CAR MILES				NON-REVENUE CAR MILES				TOTAL CAR	REV	NON-REV	LAYOVER	REVENUE	TOTAL
TRAIN	REVENUE	NON-REV	TOTALS	4-CARS	6-CARS	8-CARS	TOTALS	4-CARS	6-CARS	8-CARS	TOTALS	MILES	TIME	TIME	TIME	TRIPS	TIME
201	449.34	33.83	483.17	0.00	2123.15	763.88	2887.03	0.00	196.97	8.00	204.97	3092.00	15h44	1h22	2h15	17	19h21
202	345.20	11.69	356.89	0.00	2071.22	0.00	2071.22	0.00	70.14	0.00	70.14	2141.36	12h24	40	1h17	15	14h21
203	440.69	1.25	441.94	0.00	2644.13	0.00	2644.13	0.00	7.50	0.00	7.50	2651.63	15h29	20	2h05	18	17h54
204	336.00	12.44	348.44	0.00	2016.03	0.00	2016.03	0.00	74.64	0.00	74.64	2090.67	11h51	40	1h22	13	13h53
205	408.86	1.25	410.11	0.00	2453.16	0.00	2453.16	0.00	7.50	0.00	7.50	2460.66	14h25	20	1h45	17	16h30
206	307.14	7.60	314.74	0.00	1204.84	850.63	2055.47	0.00	6.00	52.82	58.82	2114.29	11h07	33	1h29	13	13h09
207	471.21	12.44	483.65	0.00	2827.28	0.00	2827.28	0.00	74.64	0.00	74.64	2901.92	16h29	40	2h19	18	19h28
208	371.14	1.25	372.39	0.00	2226.84	0.00	2226.84	0.00	7.50	0.00	7.50	2234.34	12h52	20	1h20	14	14h32
209	502.62	2.00	504.62	0.00	3015.73	0.00	3015.73	0.00	12.00	0.00	12.00	3027.73	17h27	20	1h53	19	19h40
210	444.49	1.25	445.74	0.00	2666.97	0.00	2666.97	0.00	7.50	0.00	7.50	2674.47	15h47	20	2h21	20	18h28
211	89.16	2.00	91.16	0.00	534.98	0.00	534.98	0.00	12.00	0.00	12.00	546.98	3h20	20	19	4	3h59
213	71.31	2.00	73.31	0.00	427.85	0.00	427.85	0.00	12.00	0.00	12.00	439.85	2h39	20	9	3	3h08
225	72.86	1.25	74.11	0.00	0.00	582.85	582.85	0.00	0.00	10.00	10.00	592.85	2h44	20	17	4	3h21
TOTAL	4310.04	90.25	4400.29	0.00	24212.19	2197.36	26409.55	0.00	488.38	70.82	559.20	26968.75	152h18	6h35	18h51	175	177h44
GRAND TOTAL	RED LINE 12859.25	295.90	13155.15	0.00	50135.83	36026.19	86162.02	0.00	1091.02	912.54	2003.56	88165.58	448h38	26h12	50h02	468	524h52

WMATA response to items 39 & 88

Driver Paddle Report

```
===== DRIVER PADDLE ================================================================================================================================================
   RUN 380201 -- ALEXANDRIA - R -- BOGY_Sun_121612                    SUNDAY RAIL                                                    EFFECTIVE: 12/16/2012
----------------------------------------------------------------------------------------------------------------------------------------------------------------
     BLOCK    ON      OFF       BLOCK    ON      OFF                                                                                                  PAGE: 1
      (302)-(6:40)-(1218)        (303)-(1:18)-(3:41)
================================================================================================================================================================
P-O       -- LEAVE  7:00 FROM ALEXANDRIA YARD --  ARRIVE  7:13 AT HUNT STAT    --
================================================================================================================================================================
LINE GRYL <<      SOUTH ++                                                -GREEN-YELLOW-                                                    ++      NORTH >>
----------------------------------------------------------------------------------------------------------------------------------------------------------------
RTE  NOTE     HUNT KING NATL PENT LENF GALL  MT  SHAW FT   FTOT
              STAT ST.  PORT STA. PLAZ STA. VERN HOWD TOTT TNBK

          ++  7:13 7:16 7:23 7:28 7:33 7:36 7:38 7:39 7:49 7:51 >>
          <<  8:48 8:45 8:38 8:33 8:28 8:25 8:23 8:21 8:12 8:10 ++
          ++  8:58 9:01 9:08 9:13 9:18 9:21 9:23 9:24 9:34 9:36 >>
          <<  1033 1030 1023 1018 1013 1010 1008 1006 9:57 9:55 ++
          ++  1043 1046 1053 1058 1103 1106 1108 1109 1119 1121 >>

          << (1218)1215 1208 1203 1158 1155 1153 1151 1142 1140 ++
================================================================================================================================================================
LINE GRYL <<      SOUTH ++                                                -GREEN-YELLOW-                                                    ++      NORTH >>
----------------------------------------------------------------------------------------------------------------------------------------------------------------
RTE  NOTE     HUNT KING NATL PENT LENF GALL  MT  SHAW FT   FTOT
              STAT ST.  PORT STA. PLAZ STA. VERN HOWD TOTT TNBK

          << (1:18)1:15 1:08 1:03 1258 1255 1253 1251 1242 1240 ++
          ++  1:28 1:31 1:38 1:43 1:48 1:51 1:53 1:54 2:04 2:06 >>
          << (3:03)3:00 2:53 2:48 2:43 2:40 2:38 2:36 2:27 2:25 ++
================================================================================================================================================================
```

Block Paddle Report

```
===== BLOCK PADDLE ==========================================================================================================================================
BLOCK 101 ---- RED LINE                                                    SUNDAY RAIL                                                    EFFECTIVE:
------------------------------------------------------------------------------------------------------------------------------------------------------------
RUNS    420207 --   460202 --   420205 --   420212 --    SCENARIO: Red Sunday June2013 062313                                                  PAGE: 1
============================================================================================================================================================
P-O       -- LEAVE  7:28 FROM SHADY GROVE YARD --  ARRIVE  7:39 AT SHAD GROV    --
============================================================================================================================================================
LINE  RED <<  GLEN-SHAD ++                                                 -RED LINE-                                                 ++  SHAD-GLEN >>
------------------------------------------------------------------------------------------------------------------------------------------------------------
RTE  NOTE    SHAD  GROS  MED.  FRD.  VAN   DUPO  METR  GALL  UNST  BREN  RHOD  FORT  SILV  GLEN
             GROV  VENR  CTR.  HTS.  NESS  CIR.  CTR.  PLCE  INNR  PLAT  ISL.  TOTT  SPRG  MONT

         ++ 7:39  7:51  7:54  7:59  8:03  8:09  8:13  8:15  8:19   --   8:23  8:28  8:33  8:42  >>
         <<(9:52) 9:40  9:37  9:32  9:28  9:22  9:18  9:16  9:12        9:08  9:03  8:58  8:49  ++
         ++ 1003  1015  1018  1023  1027  1033  1037  1039  1043   --   1047  1052  1057  1106  >>
         <<(1222) 1210  1207  1202  1158  1152  1148  1146  1142        1138  1133  1128  1119  ++
         ++ 1233  1245  1248  1253  1257  1:03  1:07  1:09  1:13   --   1:17  1:22  1:27  1:36  >>

         <<(2:52) 2:40  2:37  2:32  2:28  2:22  2:18  2:16  2:12        2:08  2:03  1:58  1:49  ++
         ++ 3:00  3:12  3:15  3:20  3:24  3:30  3:34  3:36  3:40  3:43  3:44  3:49  3:54  4:03  >>
         <<(5:22) 5:10  5:07  5:02  4:58  4:52  4:48  4:46  4:42        4:38  4:33  4:28  4:19  ++
         ++ 5:33  5:45  5:48  5:53  5:57  6:03  6:07  6:09  6:13   --   6:17  6:22  6:27  6:36  >>
         <<(7:52) 7:40  7:37  7:32  7:28  7:22  7:18  7:16  7:12        7:08  7:03  6:58  6:49  ++

         ++ 8:03  8:15  8:18  8:23  8:27  8:33  8:37  8:39  8:43   --   8:47  8:52  8:57  9:06  >>
         << 1022  1010  1007  1002  9:58  9:52  9:48  9:46  9:42        9:38  9:33  9:28  9:19  ++
         ++ 1030  1042  1045  1050  1054  1100  1104  1106  1109   --   1112  1117  1122  1131  >>
       #  <<  --    --    --    --    --    --    --    --    --        --    --    --    1149  ++
      ET  << 1250  1238  1235  1230  1226  --    --    --    --        --    --    --    --    ++

============================================================================================================================================================
P-I       -- LEAVE  1250 FROM SHAD GROV    --  ARRIVE  1:01 AT SHADY GROVE YARD --
============================================================================================================================================================

#---  Lite Train

ET--  Employee Train

============================================================================================================================================================
```

Headway Report

METRORAIL — EFFECTIVE DATE: 06-28-2013

Line: BLUE-ORANGE — HEADWAY SHEET — Page: 1

SERVICE: FRIDAY-RAIL — DIRECTION: Va.-Md. — DIVISION: ALEXANDRIA - RAIL

TRAIN NO.	T C	CREW NO.	C	GARG. /FROM	FRAN SPRI	ALEX PLAT	EISN AVE	KING ST	NATL PORT	PENT STA.	VIEN NA	WEST FALL	BALL STON	ROSS LYN	METR CTR.	LENF PLAZ	STAD ARM.	ADDR ROAD	LRGO TOWN	CHEV STA	NCAR STA.	STOP LEAVE	GARG. /TO
410	6	500020	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	445A	-	500A	-	-	506A	-
411	6	390022	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	513A	-	-	518A	-
401	6	390021	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	514A	-
401	6	390021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	519A	528A	534A	-	-	542A	-
915	6	430022	ET	433A	-	-	-	-	-	-	-	446A	453A	501A	-	-	523A	-	-	-	-	530A	-
402	6	380022	ET	428A	-	-	442A	444A	451A	456A	-	-	-	-	-	-	-	-	-	-	-	528A	-
915	6	430022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	530A	-	-	538A	544A	548A	-
402	6	380022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	535A	544A	550A	-	-	601A	-
921	8	430021	-	-	-	-	-	-	-	-	500A	507A	514A	522A	529A	534A	543A	-	-	551A	557A	600A	-
403	6	380021	-	-	500A	-	-	511A	518A	523A	-	-	-	528A	535A	540A	549A	558A	604A	-	-	612A	-
908	6	430023	-	-	-	-	-	-	-	-	511A	518A	525A	533A	540A	545A	554A	-	-	602A	608A	611A	-
404	6	380023	-	-	508A	-	-	519A	526A	531A	-	-	-	536A	543A	548A	557A	606A	612A	-	-	618A	-
959	6	390206	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	618A	-	-	624A	-
912	8	430024	-	-	-	-	-	-	-	-	523A	530A	537A	545A	552A	557A	606A	-	-	614A	620A	629A	-
405	6	380024	-	-	521A	-	-	532A	539A	544A	-	-	-	549A	556A	601A	610A	619A	625A	-	-	630A	-
913	8	430200	-	-	-	-	-	-	-	-	535A	542A	549A	557A	604A	609A	618A	-	-	626A	632A	635A	-
951	6	390207	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	636A	-	-	642A	-
406	6	380026	-	-	534A	-	-	545A	552A	557A	-	-	-	602A	609A	614A	623A	632A	638A	-	-	648A	-
900	6	430025	-	-	-	-	-	-	-	-	547A	554A	601A	609A	616A	621A	630A	-	-	638A	644A	647A	-
407	6	380027	-	-	544A	-	-	555A	602A	607A	-	-	-	612A	619A	624A	633A	642A	648A	-	-	654A	-
973	6	390208	LT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	654A	-	-	700A	-
930	6	430201	-	-	-	-	-	-	-	-	559A	606A	613A	621A	628A	633A	642A	-	-	650A	656A	659A	-
408	6	380028	-	-	557A	-	-	608A	615A	620A	-	-	-	625A	632A	637A	646A	655A	701A	-	-	712A	-
917	8	390023	-	-	-	-	-	-	-	-	608A	615A	622A	630A	637A	642A	651A	-	-	659A	705A	711A	-
953	6	430026	-	-	-	-	-	-	-	-	610A	617A	624A	632A	639A	644A	653A	702A	708A	-	-	718A	-
928	6	430211	-	606A	-	-	-	-	-	-	-	619A	626A	634A	641A	646A	655A	-	-	-	-	703A	-
918	6	430202	-	-	-	-	-	-	-	-	614A	621A	628A	636A	643A	648A	657A	-	-	705A	711A	717A	-
409	6	500022	-	-	610A	-	-	621A	628A	633A	-	-	-	638A	645A	650A	659A	708A	714A	-	-	724A	-
919	8	430212	-	-	-	-	-	-	-	-	620A	627A	634A	642A	649A	654A	703A	-	-	711A	717A	723A	-
410	6	380206	-	-	616A	-	-	627A	634A	639A	-	-	-	644A	651A	656A	705A	714A	720A	-	-	730A	-
920	8	390024	-	-	-	-	-	-	-	-	626A	633A	640A	648A	655A	700A	709A	-	-	717A	723A	729A	-
966	6	430203	-	-	-	-	-	-	-	-	628A	635A	642A	650A	657A	702A	711A	720A	726A	-	-	736A	-
927	6	390025	-	-	-	-	-	-	-	-	632A	639A	646A	654A	701A	706A	715A	-	-	723A	729A	735A	-
416	6	500020	-	-	628A	-	-	639A	646A	651A	-	-	-	656A	703A	708A	717A	726A	732A	-	-	742A	-
904	6	430204	-	-	-	-	-	-	-	-	638A	645A	652A	700A	707A	712A	721A	-	-	729A	735A	741A	-
411	6	390022	-	-	634A	-	-	645A	652A	657A	-	-	-	702A	709A	714A	723A	732A	738A	-	-	748A	-
905	6	430205	-	-	-	-	-	-	-	-	644A	651A	658A	706A	713A	718A	727A	-	-	735A	741A	747A	-
976	6	390026	-	-	-	-	-	-	-	-	646A	653A	700A	708A	715A	720A	729A	738A	744A	-	-	754A	-
915	6	430206	-	-	-	-	-	-	-	-	650A	657A	704A	712A	719A	724A	733A	-	-	741A	747A	753A	-
412	6	380202	-	-	646A	-	-	657A	704A	709A	-	-	-	714A	721A	726A	735A	744A	750A	-	-	800A	-
906	6	390200	-	-	-	-	-	-	-	-	656A	703A	710A	718A	725A	730A	739A	-	-	747A	753A	759A	-
401	6	500023	-	-	652A	-	-	703A	710A	715A	-	-	-	720A	727A	732A	741A	750A	756A	-	-	806A	-
921	8	430207	-	-	-	-	-	-	-	-	702A	709A	716A	724A	731A	736A	745A	-	-	753A	759A	805A	-
981	6	430022	-	-	-	-	-	-	-	-	704A	711A	718A	726A	733A	738A	747A	756A	802A	-	-	812A	-
907	6	430208	-	-	-	-	-	-	-	-	708A	715A	722A	730A	737A	742A	751A	-	-	759A	805A	811A	-
415	6	390021	-	-	704A	-	-	715A	722A	727A	-	-	-	732A	739A	744A	753A	802A	808A	-	-	818A	-
908	6	430209	-	-	-	-	-	-	-	-	714A	721A	728A	736A	743A	748A	757A	-	-	805A	811A	817A	-
402	6	500202	-	-	710A	-	-	721A	728A	733A	-	-	-	738A	745A	750A	759A	808A	814A	-	-	824A	-
924	8	430021	-	-	-	-	-	-	-	-	720A	727A	734A	742A	749A	754A	803A	-	-	811A	(817A)	823A	-
975	6	430215	-	-	-	-	-	-	-	-	722A	729A	736A	744A	751A	756A	805A	814A	820A	-	-	830A	-

WMATA response to items 39 & 88

Assignment Sheet Report

Division: BRANCH AVE - RAIL
Service: FRIDAY ONLY Exceptions Off
Exception Combination:
Scenario: BOGY Fri June-2013 062813

As Of: 06/21/2013
Print Date: 05/22/2013

RUN NO.	BLOCK NO.	TIME ON DUTY	REL PT	TIME ON	TIME OFF	REL PT	TIME OFF DUTY	PLAT-FORM TIME	SUBJECT ALLOW	OT BLOCK TIME	PAY RUN TIME	ALLOW W/O OT		TOTAL PAY TIME	LINE	PAY BY LINE
490001	RY-1	00:00A	BRAVg	00:10A	03:00A	BRAVg		2:50	X :10	3:00		M :20			YARD WORK	3:20
490001	RY-1		BRAVg	03:20A	08:00A	BRAVg	08:00A	4:40		4:40	7:40			8:00	YARD WORK	4:40
								7:30			7:40	0:20		8:00		
490002	RY-2	00:30A	BRAVg	00:40A	03:30A	BRAVg		2:50	X :10	3:00		M :20			YARD WORK	3:20
490002	RY-2		BRAVg	03:50A	08:30A	BRAVg	08:30A	4:40		4:40	7:40			8:00	YARD WORK	4:40
								7:30			7:40	0:20		8:00		
490003	RY-3	01:00A	BRAVg	01:10A	06:00A	BRAVg		4:50	X :10	5:00		M :20			YARD WORK	5:20
490003	RY-3		BRAVg	06:20A	09:00A	BRAVg	09:00A	2:40		2:40	7:40			8:00	YARD WORK	2:40
								7:30			7:40	0:20		8:00		
490020	RG-1	04:09A	BRAVg	04:19A	09:20A	BRAVg		5:01	X :10	5:11		M :30	D :25		GAP TRAIN	5:41
490020	RG-1		BRAVg	09:50A	01:29P	BRAVg	01:29P	3:39		3:39	8:50			9:45	GAP TRAIN	4:04
								8:40			8:00	0:30		9:45		
490021	505	04:09A	BRAVg	04:29A	09:33A	GRBTg		5:04	X :10	5:44		M :30			GREEN-YELLOW	6:14
490021	GY-12		GBLTs	10:33A	10:46A	GBLTs	12:09P	0:13	T 1:53	1:46	7:30			8:00	WORK AS DIRECTED	1:46
								5:17			7:30	0:30		8:00		
490022	508	04:42A	BRAVg	05:02A	09:48A	GBLT		4:46	X :10	5:06		M :45	D :09		GREEN-YELLOW	5:51
490022	504		GBLT	10:33A	12:21P	GBLT	01:45P	1:48	T 1:24	3:12	8:18			9:12	GREEN-YELLOW	3:21
								6:34			8:00	0:45		9:12		
490023	515	04:57A	BRAVg	05:17A	10:09A	GBLT		4:52	X :10	5:25		M :59	D :19		GREEN-YELLOW	6:24
490023	508		GBLT	11:21A	02:03P	BRAN	02:34P	2:42	T :44	3:13	8:25			9:56	GREEN-YELLOW	3:32
								7:34			8:00	0:59		9:56		
490024	507	06:16A	BRAVg	06:36A	11:21A	GBLT		4:45	X :10	5:17		M :36	D :15		GREEN-YELLOW	5:53
490024	503		GBLT	12:09P	02:51P	BRAN	03:22P	2:42	T :43	3:13	8:18			9:21	GREEN-YELLOW	3:28
								7:27			8:00	0:36		9:21		

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

OPERATORS MANIFEST

PUNCH MARK ☐ DIV: ALEXANDRIA - RAI SIGNUP: 2013 Jun_Rail

IF WORK WAS PERFORMED ON ASSIGNED DAY OFF PUNCH HERE ☐

NEW EMPLOYEE NUMBER AND NAME IF OTHER THAN BELOW

PLEASE HANDPRINT BLOCK LETTERS ABC. ETC.

RUN DATE: FRIDAY-RAIL

EMPLOYEE NUMBER | OPERATORS NAME

IF ACTUAL IS MORE OR LESS THAN SCHEDULED TIME STATE REASON

Call for trouble: 962-1811 (bus). 962-1652 (rail)

Transit Police: 962-2121

☐ CONTRACT RUN

IF ANOTHER MAINFEST HAS BEEN USED ENTER RUN NUMBER OF ADDITIONAL WORK

RUN NUMBER	ACTUAL TIME HRS	ACTUAL TIME MIN
380001	8	00
TOTAL	8	00

TRIPS CUT OR ADDED TO BLOCK

	TO	FROM	CUT	ADDED
			☐	☐
			☐	☐

BUS CONDITION O.K.	BUS CONDITION DEF.	VEHICLE NO.	BLOCK NO.	TIME OF STARTING SCHEDULE TRIPS HRS	SCHEDULE TRIPS MIN	RUN TIME LTR	ACT. FROM HRS	IF DIF SCHED. MIN	A.M. or P.M.	LEAVING POINT	ROUTE NO.
				12	00				A	ON DUTY	
			AY-1	12	10				a	ALEXANDRIA YD	
				3	00					Relieved	
			AY-1	3	20				a	ALEXANDRIA YD	
				8	00					Relieved	
				8	00					OFF DUTY	
a		YARD WORK									

REMARKS:

SIGNATURE/DATE

Car/Train Requirements Summary by Division and Line Report

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
TRAINS AND CARS BALANCE BY DIVISION

Sign Up Period: 2013 June Rail — Effective: 6/23/2013

DIVISIONS	CAR CONSISTS	AM RUSH TRAINS	AM RUSH CARS	NET LAY-UP TRAINS	LAY-UP CARS	BASE DAY TRAINS	BASE DAY CARS	NET PUT-IN TRAINS	PUT-IN CARS	PM RUSH TRAINS	PM RUSH CARS	LAY-UP TRAINS	LAY-UP CARS
ALEX	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
NCAR	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
WFCH	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
BREN	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
SHGR	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
GLEN	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
GRBT	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
BRAV	6'S												
	8'S												
GAP													
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
LARG	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
ALL LINES	6'S												
	8'S												
GAPS	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
GRAND	TOTALS												

Car/Train Requirements Summary by Division and Line Report

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
TRAINS AND CARS BALANCE BY LINE

Sign Up Period 2013 June Rail Effective 6/23/2013

LINES	CAR CONSISTS	AM RUSH TRAINS	AM RUSH CARS	NET LAY-UP TRAINS	LAY-UP CARS	BASE DAY TRAINS	BASE DAY CARS	NET PUT-IN TRAINS	PUT-IN CARS	PM RUSH TRAINS	PM RUSH CARS	LAY-UP TRAINS	LAY-UP CARS
BLUE	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
GREEN	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
ORANGE	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
RED	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
YELLOW	6'S												
	8'S												
GAP	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
	TOTALS												
ALL LINES	6'S												
	8'S												
GAPS	6'S												
ADD ONS	(2'S)												
CUTS	(2'S)												
GRAND	TOTALS												

WMATA response to items 39 & 88

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
TRAINS AND CARS BALANCE BY DIVISION

Sign Up Period 2013 June

Effective 6/23/2013

DIVISIONS	CAR CONSISTS	SATURDAY SERVICE AM OUT TRN	SATURDAY SERVICE AM OUT CAR	SATURDAY SERVICE LAY-UP TRN	SATURDAY SERVICE LAY-UP CAR	SUNDAY SERVICE AM OUT TRN	SUNDAY SERVICE AM OUT CAR	SUNDAY SERVICE LAY-UP TRN	SUNDAY SERVICE LAY-UP CAR
ALEX	6'S								
GAP	6'S								
TOTAL									
NCARR	6'S								
GAP	6'S								
TOTAL									
WFCH	6'S								
GAP	6'S								
TOTAL									
BRENT	6'S								
GAP	6'S								
TOTAL									
SHADY	6'S								
GAP	6'S								
TOTAL									
GLENMONT	6'S								
GAP	6'S								
TOTAL									
GREENBELT	6'S								
GAP	6'S								
TOTAL									
BRANCH	6'S								
GAP	6'S								
TOTAL									
LARGO	6'S								
GAP	6'S								
TOTAL									
ALL	6'S								
GAP	6'S								
GRAND	TOTAL								

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
TRAINS AND CARS BALANCE BY LINE

Sign Up Period 2013 June

Effective 6/23/2013

LINES	CAR CONSISTS	SATURDAY SERVICE PUT-IN TRN	SATURDAY SERVICE PUT-IN CAR	SATURDAY SERVICE LAY-UP TRN	SATURDAY SERVICE LAY-UP CAR	SUNDAY SERVICE PUT-IN TRN	SUNDAY SERVICE PUT-IN CAR	SUNDAY SERVICE LAY-UP TRN	SUNDAY SERVICE LAY-UP CAR
BLUE	6'S TOTALS								
GREEN	6'S TOTALS								
ORANGE	6'S TOTALS								
RED	6'S TOTALS								
YELLOW	6'S TOTALS								
GAPS	6'S								
TOTAL	6'S								

Weekly Pay Sheet Report

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

CLASSIFICATION OF WEEKLY RUNS

Effective Date: June 16, 2013 Division: Alexandria Station Managers

SCHEDULE OF WEEKLY PAY HOURS

RUN	OFF DAYS	WEEKDAY	FRIDAY ONLY	SATURDAY	SUNDAY	OTAL WEEKLY PAY HOURS
		EARLY STRAIGHTS				
13xxxx	SUN - SAT	8:10	xx	xx	xx	xx
13xxxx	SUN - SAT	xx	xx	xx	xx	xx
13xxxx	SUN - MON	xx	xx	xx	xx	xx
13xxxx	SUN - SAT	xx	xx	xx	xx	xx
13xxxx	THU - FRI	xx	xx	xx	xx	xx
13xxxx	SUN - MON	xx	xx	xx	xx	xx
13xxxx	FRI - SAT	xx	xx	xx	xx	xx
13xxxx	THU - FRI	xx	xx	xx	xx	xx
13xxxx	MON - TUE	xx	xx	xx	xx	xx
13xxxx	SUN - SAT	xx	xx	xx	xx	xx
13xxxx	FRI - SAT	xx	xx	xx	xx	xx
		SWINGS				
1302xx	MON - TUE	8:00	xx	xx	xx	xx
1302xx	WED - THU	xx	xx	xx	xx	xx
1302xx	MON - TUE	xx	xx	xx	xx	xx
1302xx	SUN - SAT	xx	xx	xx	xx	xx
1302xx	SUN - SAT	xx	xx	xx	xx	xx
1302xx	SUN - SAT	xx	xx	xx	xx	xx
		EARLY MIDDAYS				
1304xx	SUN - MON	xx	xx	xx	xx	xx
1304xx	FRI - SAT	xx	xx	xx	xx	xx
1304xx	THU - FRI	xx	xx	xx	xx	xx
1304xx	SUN - SAT	xx	xx	xx	xx	xx
		LATE MIDDAYS & LATE STRAIGHTS				
1305xx	SUN - SAT	xx	xx	xx	xx	xx
1305xx	SUN - MON	xx	xx	xx	xx	xx
1305xx	TUE - WED	xx	xx	xx	xx	xx
1305xx	SUN - SAT	xx	xx	xx	xx	xx
1305xx	THU - FRI	xx	xx	xx	xx	xx
1305xx	SUN - MON	xx	xx	xx	xx	xx
1305xx	WED - THU	xx	xx	xx	xx	xx
1305xx	SUN - SAT	xx	xx	xx	xx	xx
1305xx	MON - TUE	xx	xx	xx	xx	xx
1305xx	SUN - MON	xx	xx	xx	xx	xx
1305xx	FRI - SAT	xx	xx	xx	xx	xx

Weekly Pay Sheet Report

1305xx	FRI - SAT	xx	xx	xx	xx	xx
1305xx	SUN - SAT	xx	xx	xx	xx	xx
1305xx	MON - TUE	xx	xx	xx	xx	xx
1305xx	THU - FRI	xx	xx	xx	xx	xx
1305xx	FRI - SAT	xx	xx	xx	xx	xx
1305xx	MON - TUE	xx	xx	xx	xx	xx

RELIEFS

1308xx	TUE - WED	xx
1308xx	TUE - WED	xx
1308xx	WED - THU	xx
1308xx	THU - FRI	xx
1308xx	WED - THU	xx
1308xx	TUE - WED	xx
1308xx	TUE - WED	xx
1308xx	THU - FRI	xx
1308xx	MON - TUE	xx
1308xx	TUE - WED	xx
1308xx	WED - THU	xx
1308xx	WED - THU	xx
1308xx	TUE - WED	xx

RELIEF WORK

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx
1308xx	xx	xx	xx	xx	xx	xx	xx

EXTRA RELIEFS

SUN	MON	TUE	WED	THU	FRI	SAT
		130xxx				

Run Date 6/17/2013
Relief Assignments

Division: Alexandria Station Managers
Effective: 6/23/2013

Weekly Pay Sheet Report

	Type of Run		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	Early Straight	5							
130xxx			130xxx	130xxx	OFF	OFF	130xxx	130xxx	130xxx
	Early Straight	4							
130xxx	Early Mid	1	130xxx	130xxx	OFF	OFF	130xxx	130xxx	130xxx
	Early Straight	3							
130xxx	Early Mid	2	130xxx	130xxx	130xxx	OFF	OFF	130xxx	130xxx
	Early Mid	2							
130xxx	Swings	3	130xxx	130xxx	130xxx	130xxx	OFF	OFF	130xxx
	Early Straight	1							
130xxx	Early Mid	2	130xxx	130xxx	130xxx	OFF	OFF	130xxx	130xxx
	Swings	2							
	Early Mid	5							
130xxx			130xxx	130xxx	OFF	OFF	130xxx	130xxx	130xxx
	Early Mid	3							
130xxx	Late Straight	1	130xxx	130xxx	OFF	OFF	130xxx	130xxx	130xxx
	Swings	1							
	Late Mid	3							
130xxx	Late Straight	2	130xxx	130xxx	130xxx	130xxx	OFF	OFF	130xxx
	Early Mid	2							
130xxx	Late Straight	3	130xxx	OFF	OFF	130xxx	130xxx	130xxx	130xxx
	Late Straight	5							
130xxx			130xxx	130xxx	OFF	OFF	130xxx	130xxx	130xxx
	Late Straight	5							
130xxx			130xxx	130xxx	130xxx	OFF	OFF	130xxx	130xxx
	Late Straight	5							
130xxx			130xxx	130xxx	130xxx	OFF	OFF	130xxx	130xxx
	Late Straight	5							
130xxx			130xxx	130xxx	OFF	OFF	130xxx	130xxx	130xxx

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

COMPARISON OF SCHEDULES

Effective Date: 6/23/2013

DIVISION 19 — Branch Ave -Station Managers — Signup Period: 2013 June

	Present	Proposed
Regular Assigned Runs		
Early Straight	x	x
Early Mid	x	x
Late Mid	x	x
Late Straight	x	x
Swings	x	x
Regular Runs	x	x
Reliefs	x	x
Total Runs	x	x
Manager Quota	x	x
Assignments	x	x
Average Pay Time	x	x
Average Meal Allowance		
Early Straight	x	x
Early Mid	x	x
Late Mid	x	x
Late Straight	x	x
Swings	x	x
Average length Meals	x	x
Swing Runs Off		
Before 6:00 PM	x	x
6:00 to 7:00 PM	x	x
7:00 to 8:00 PM	x	x
After 8:00 PM	x	x
Totals	x	x
Runs with Spread Time		
Under 8 Hours	x	x
8 to 9 Hours	x	x
9 to 10 Hours	x	x
10 to 11 Hours	x	x
11 to 12 Hours	x	x
12 to 13 Hours	x	x
Over 13 Hours	x	x
Trippers		
AM Tripper	x	x
PM Tripper	x	x
Runs Working on Saturday	x	x
Runs Off on Saturday	x	x
Runs Working on Sunday	x	x
Runs Off on Sunday	x	x

Washington Metropolitan Area Transit Authority

106 Mile Area Regional System Track Schematic

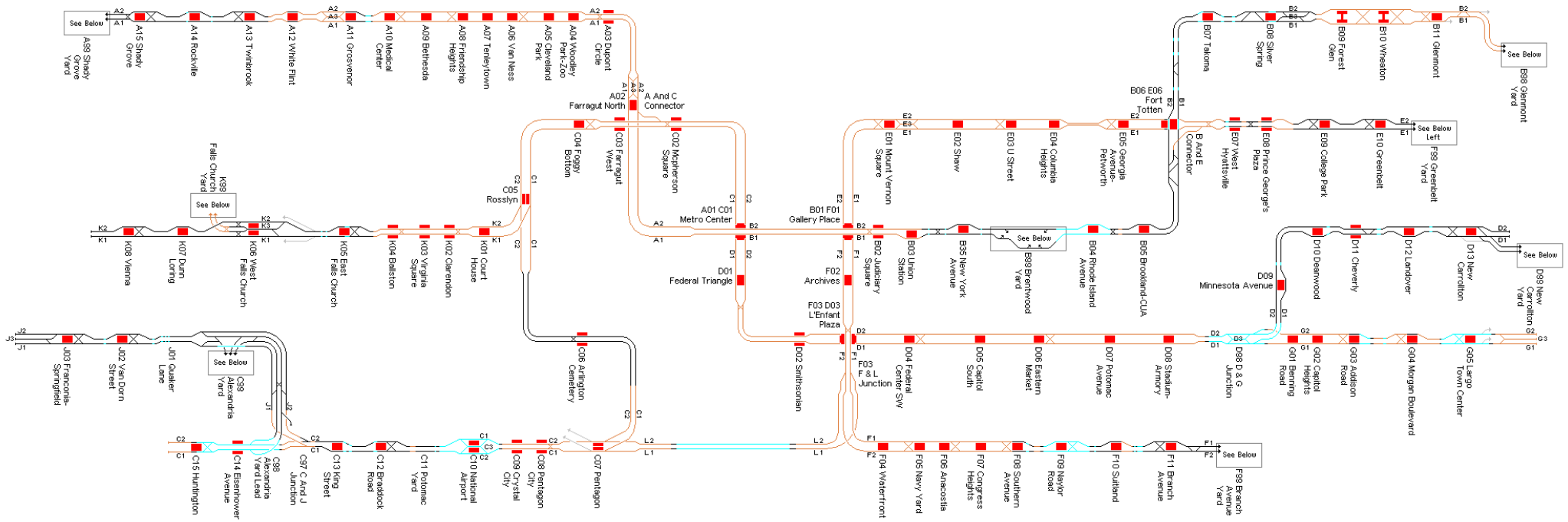
A Route Metro Center - Shady Grove Road
B Route Metro Center - Glenmont
C Route Metro Center - Huntington
D Route Metro Center - New Carrollton
E Route Gallery Place - Branch Avenue

F Route Gallery Place - Greenbelt
G Route D & G Junction - Largo Town Center
J Route C & J Junction - Springfield-Franconia
K Route C & K Junction - Vienna
L Route F & L Junction - C & L Junction

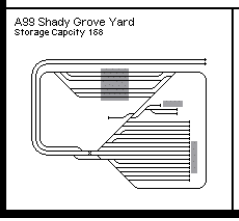
Red Line Shady Grove Road - Glenmont
Blue Line Franconia-Springfield - Largo Town Center
Orange Line New Carrollton - Vienna
Yellow Line Huntington - Mount Vernon Square
Green Line Greenbelt - Branch Avenue

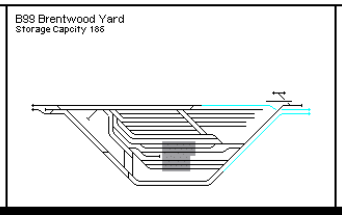
Surface
Subway
Elevated
Future

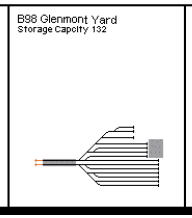
Stacked tunnels
Track Centers 14' 4.26 m
Track Centers 36' 10' 11.22 m
Track Centers greater then 36' 10' 11.22 m

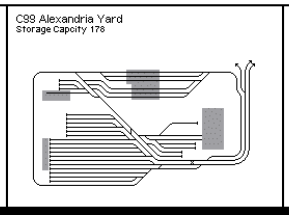


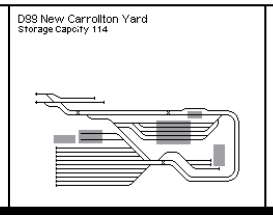
John R Cambron 06 2006

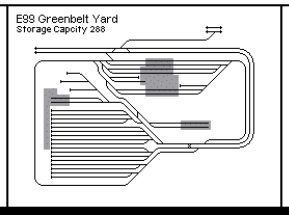


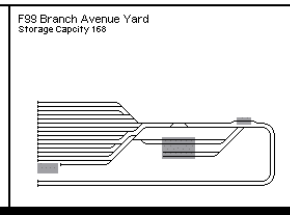


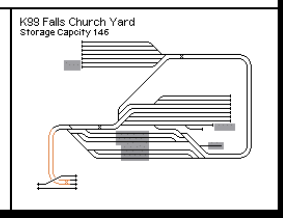










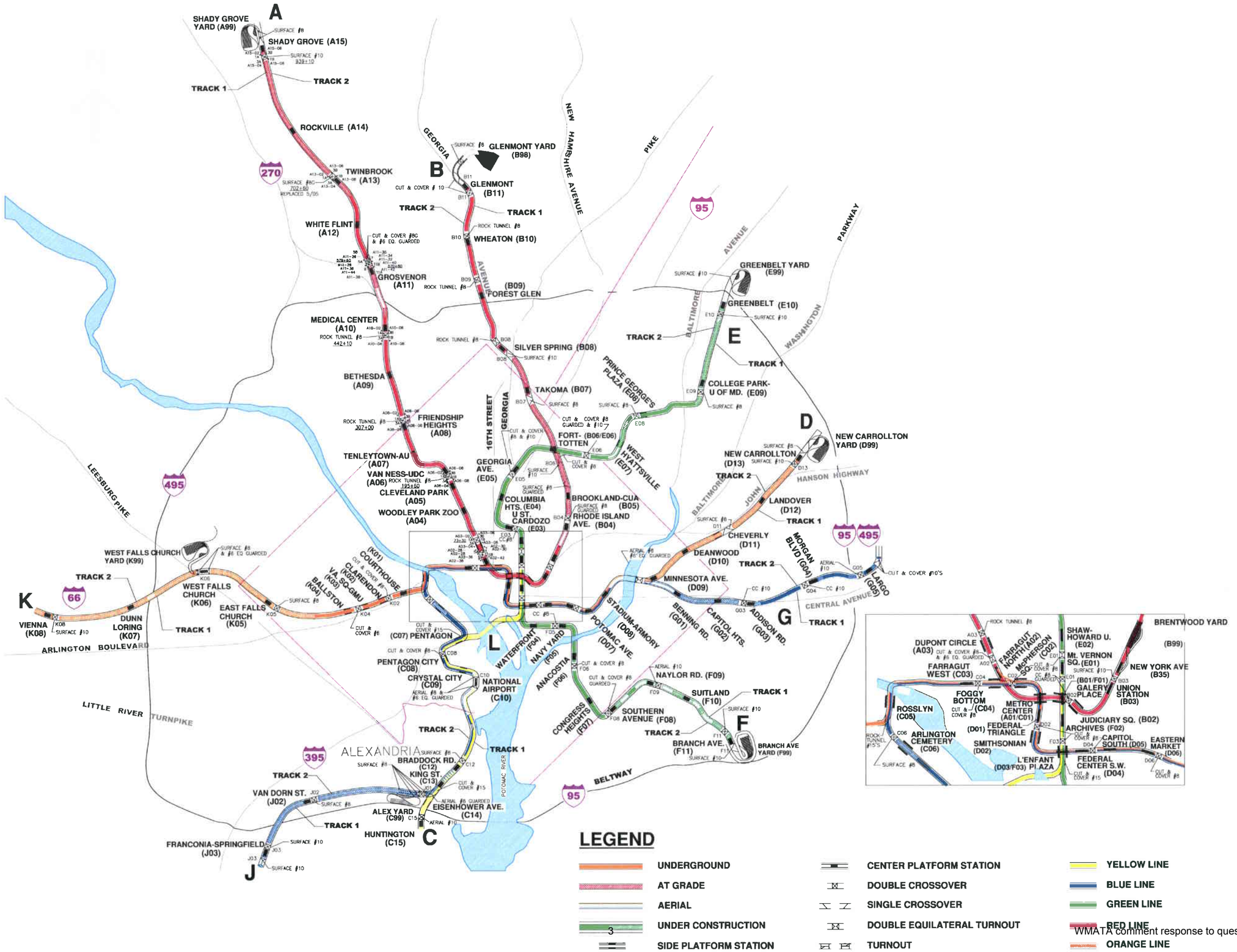


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

SYSTEM WIDE MAINLINE TRACK MAINTENANCE DATA

WMATA comment response to questions 45 & 111

UPDATED: June, 2013 C.RIGGINS



WMATA comment response to questions 45 & 111

TRST Systemwide Turnout and Switch Machine Summary Report

#8 Main Line & Connecting Leads

Line	Goal	Actual	Remain	% Compl
A	29	29	0	100.0%
B	35	35	0	100.0%
C	25	25	0	100.0%
D	24	24	0	100.0%
E	22	22	0	100.0%
F	16	16	0	100.0%
J	8	8	0	100.0%
K	19	19	0	100.0%
	178	178	0	100.0%

#8 Yard Line & Secondary Tracks

Line	Goal	Actual	Remain	% Compl
A99	17	17	0	100.0%
B99	7	7	0	100.0%
B98	4	4	0	100.0%
C99	36	36	0	100.0%
D99	23	14	9	60.9%
E99	29	0	29	0.0%
F99	22	0	22	0.0%
K99	28	14	14	50.0%
	166	92	74	55.4%
Grand Total	344	270	74	78.49%

#6, 10, 15 Main Line & Connecting Leads

Line	Goal	Actual	Remain	% Compl
A	8	4	4	50.0%
B	16	12	4	75.0%
C	10	10	0	100.0%
D	8	8	0	100.0%
E	13	10	3	76.9%
F	10	2	8	20.0%
G & G98	15	11	4	73.3%
J	4	0	4	0.0%
K	9	9	0	100.0%
	93	66	27	71.0%

#6, 10, 15 Yard Line & Secondary Tracks

Line	Goal	Actual	Remain	% Compl
A99	25	0	25	0.0%
B99	39	0	39	0.0%
B98	20	12	8	60.0%
D99	7	0	7	0.0%
E99	21	0	21	0.0%
C99	29	0	29	0.0%
K99	19	1	18	5.3%
	160	13	147	8.1%

US&S M3 Switch Machines Main Line

Line	Goal	Actual	Remain	% Compl
A	43	19	24	44.2%
B	62	48	14	77.4%
C	36	27	9	75.0%
D	32	16	16	50.0%
E	36	32	4	88.9%
F	26	6	20	23.1%
G & G98	15	11	4	73.3%
J	21	15	6	71.4%
K	29	19	10	65.5%
	300	193	107	64.3%

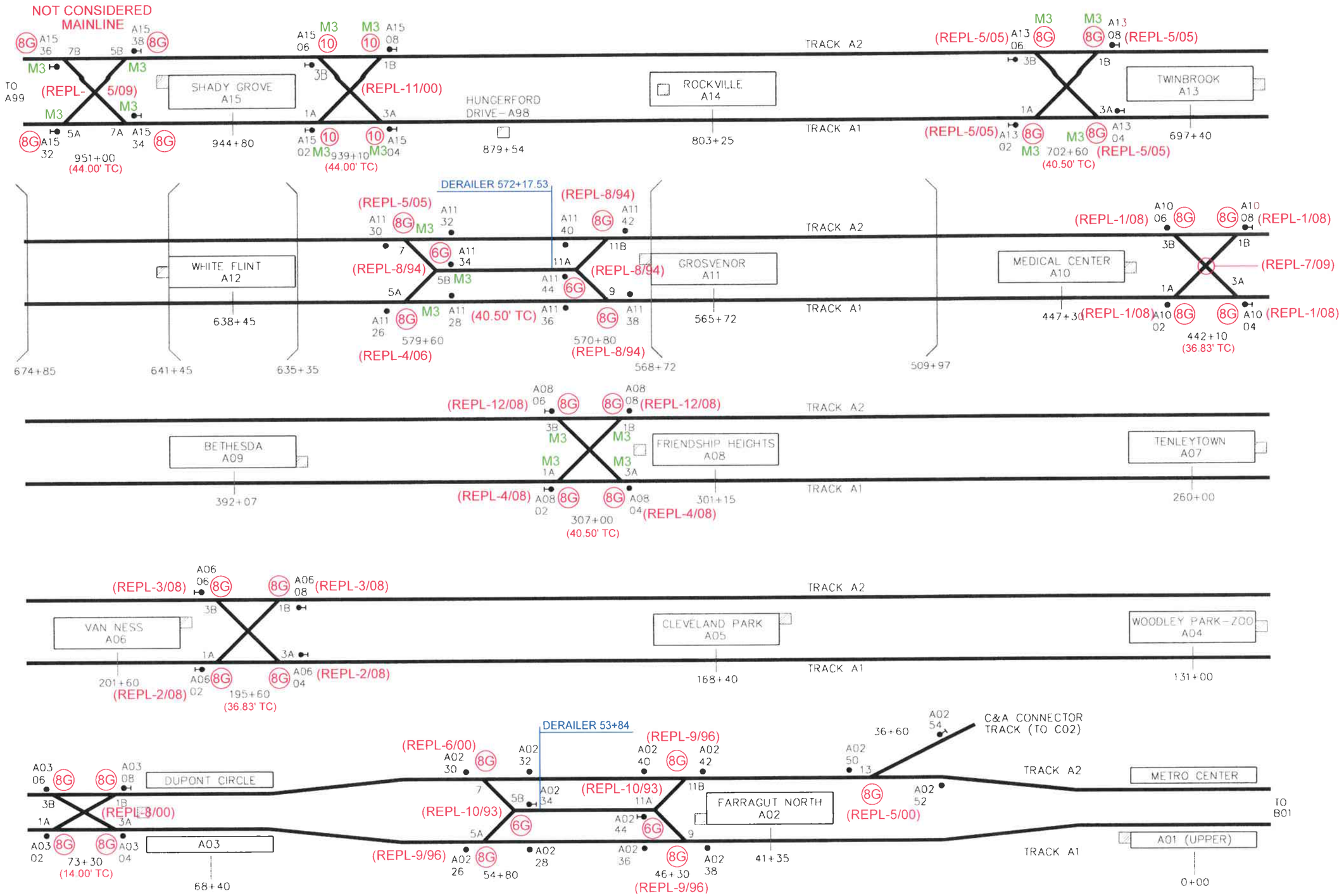
#6 Yard Line & Secondary Tracks

Line	Goal	Actual	Remain	% Compl
A99	25	25	0	100.0%
B99	39	39	0	100.0%
B98	12	12	0	100.0%
D99	7	7	0	100.0%
E99	15	15	0	100.0%
F99	0	0	0	0.0%
C99	29	29	0	100.0%
K99	19	19	0	100.0%
	146	146	0	100.0%

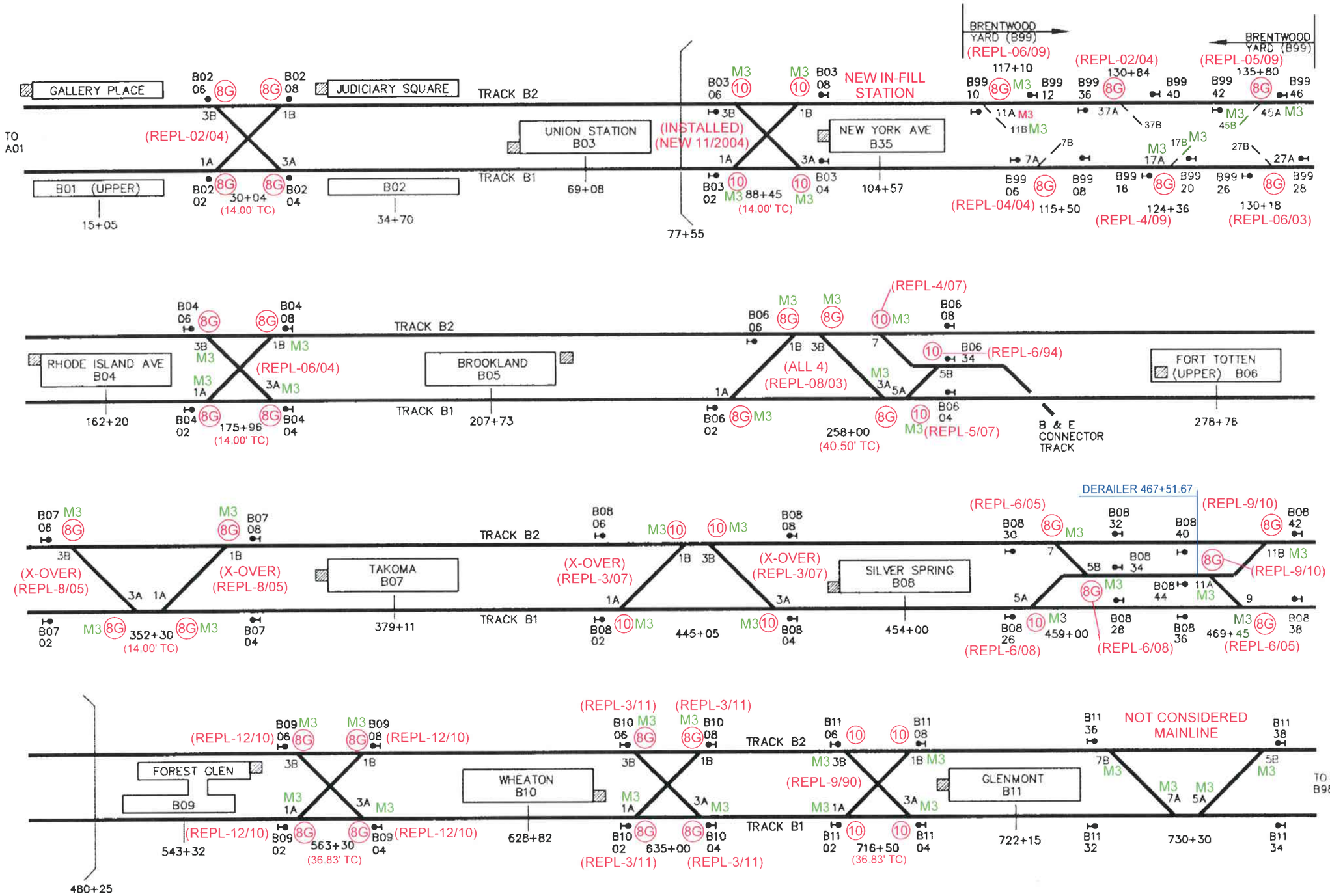
#6 Main Line Tracks

Line	Goal	Actual	Remain	% Compl
A	4	4	0	100.0%
B	0	0	0	0.0%
C	0	0	0	0.0%
D	2	2	0	100.0%
E	2	2	0	100.0%
J	0	0	0	0.0%
K	1	1	0	100.0%
	9	9	0	100.0%

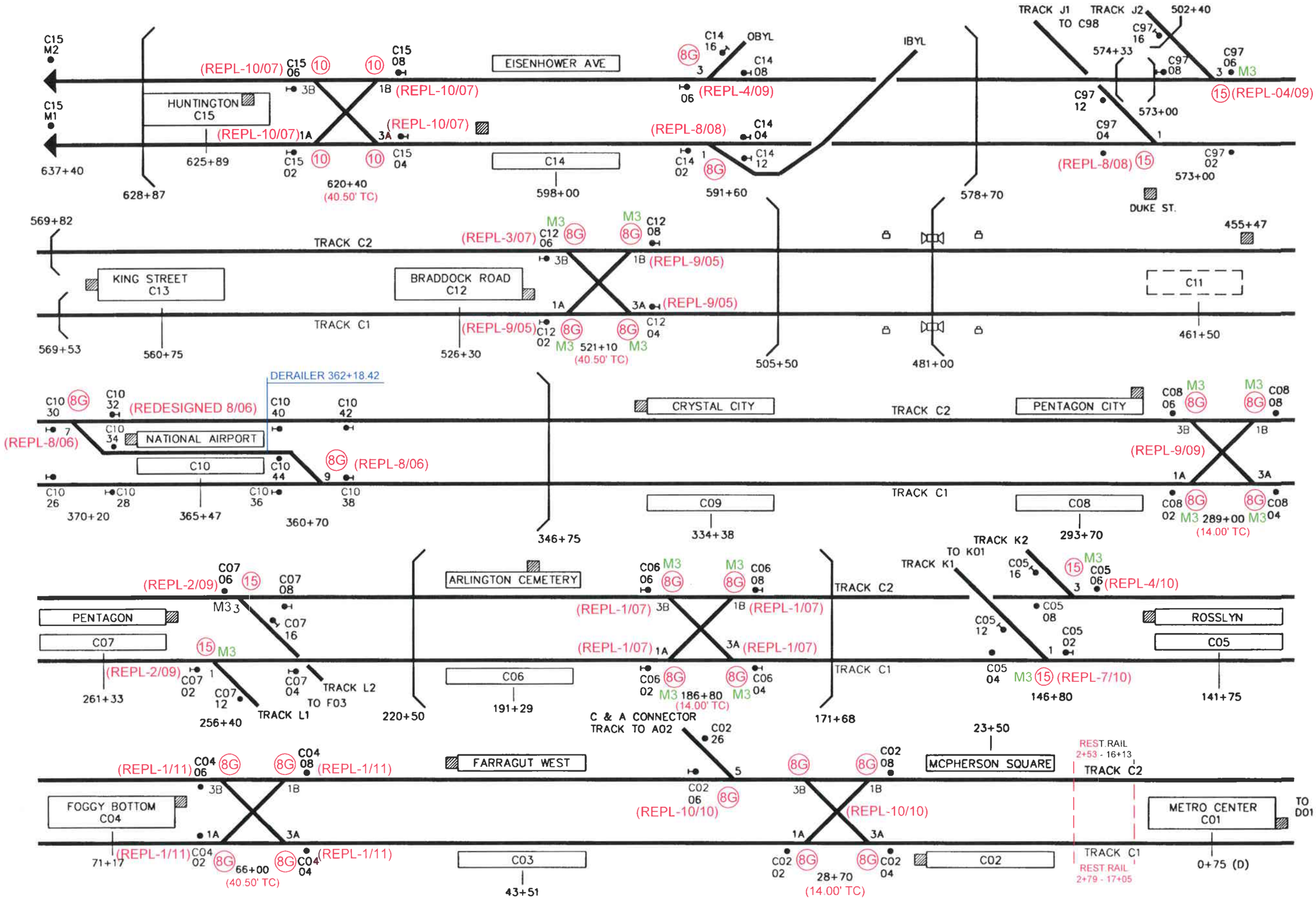
MAINLINE "A" (RED) LINE



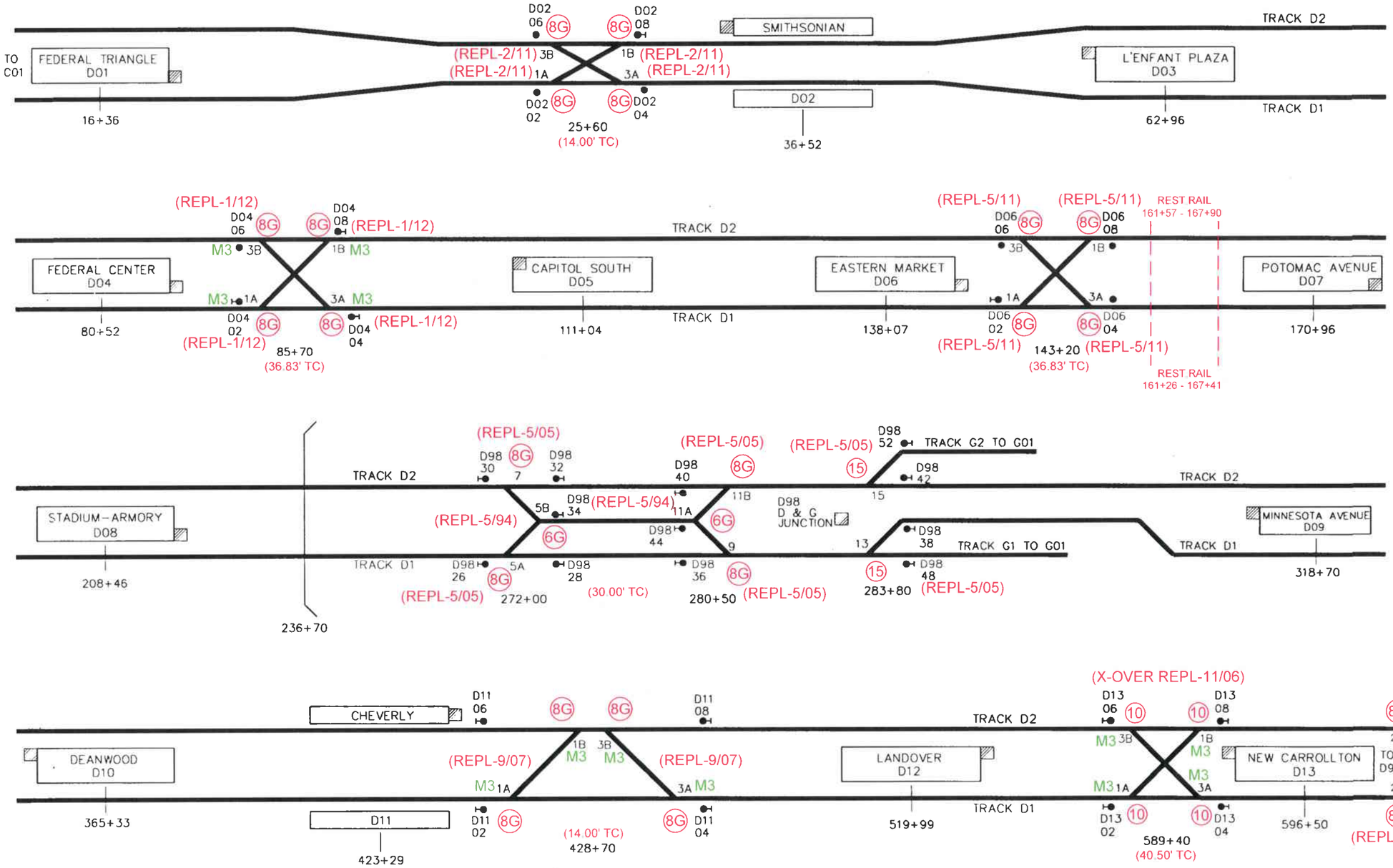
MAINLINE "B" (RED) LINE



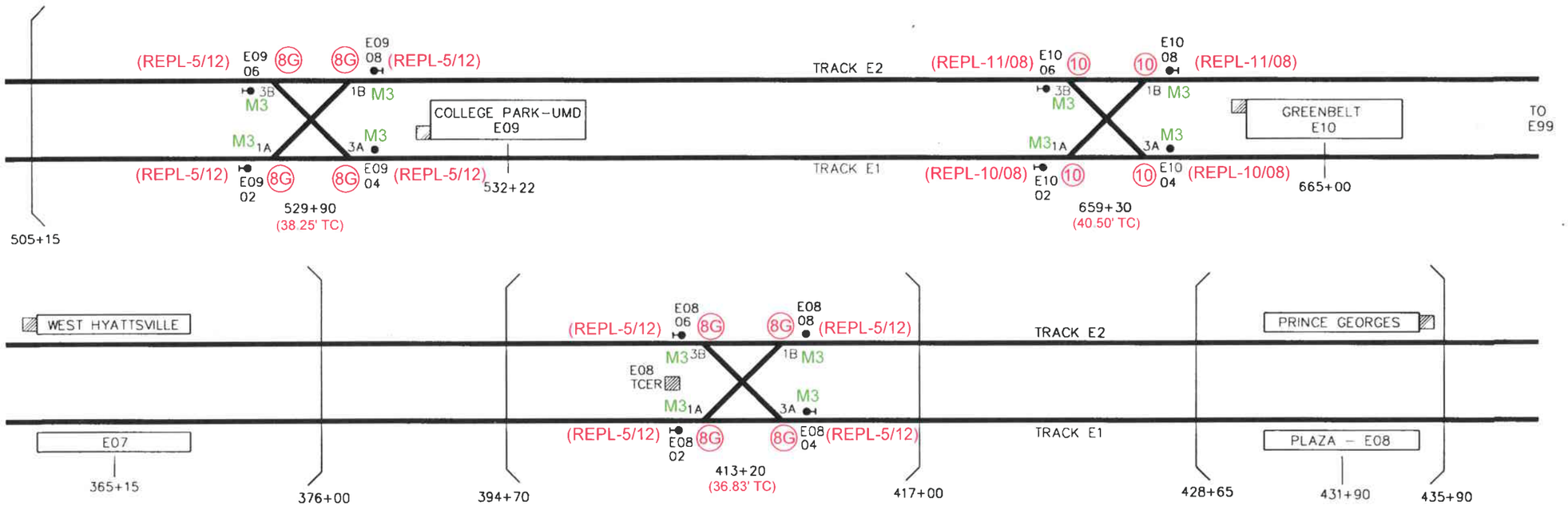
MAINLINE "C" (BLUE/ORANGE/YELLOW) LINE

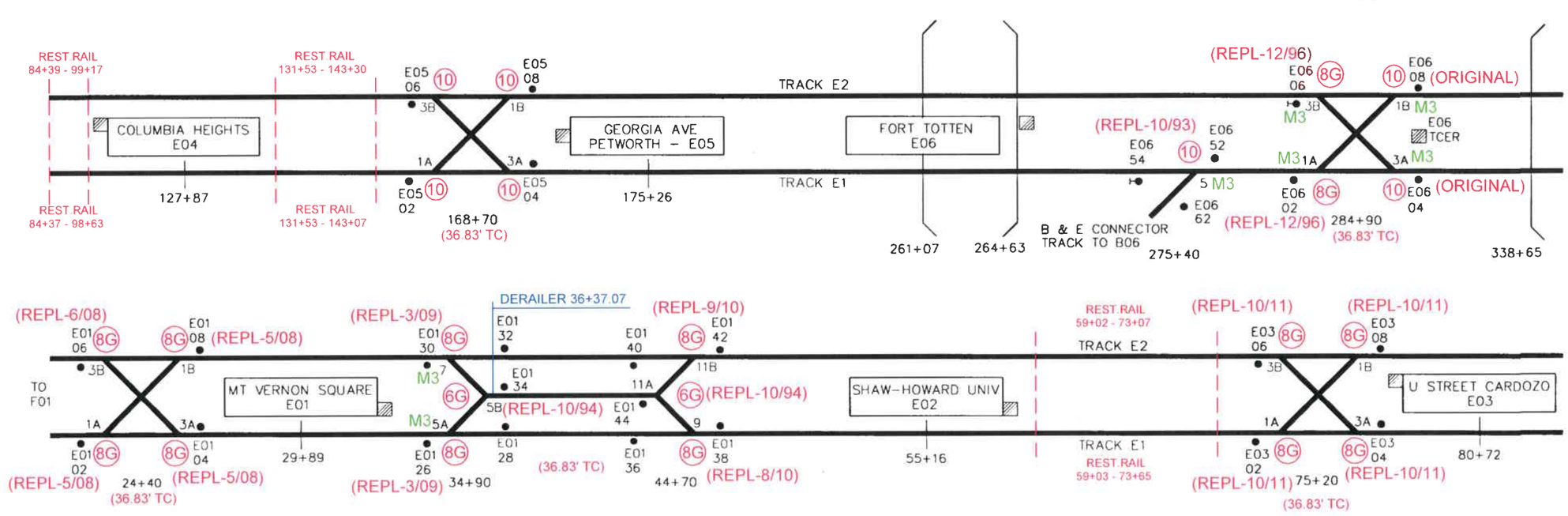


MAINLINE "D" (BLUE/ORANGE) LINE

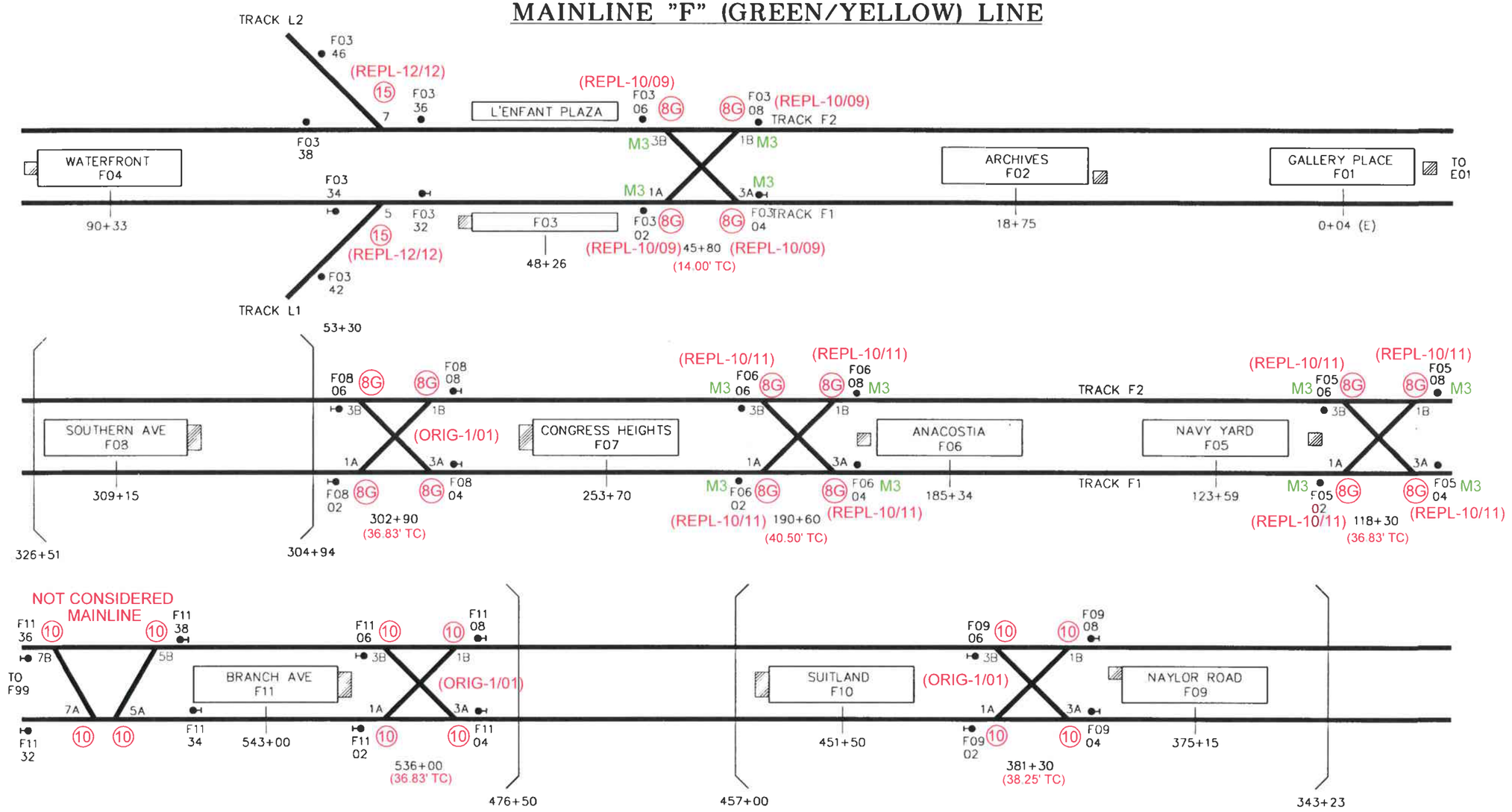


MAINLINE "E" (GREEN/YELLOW) LINE

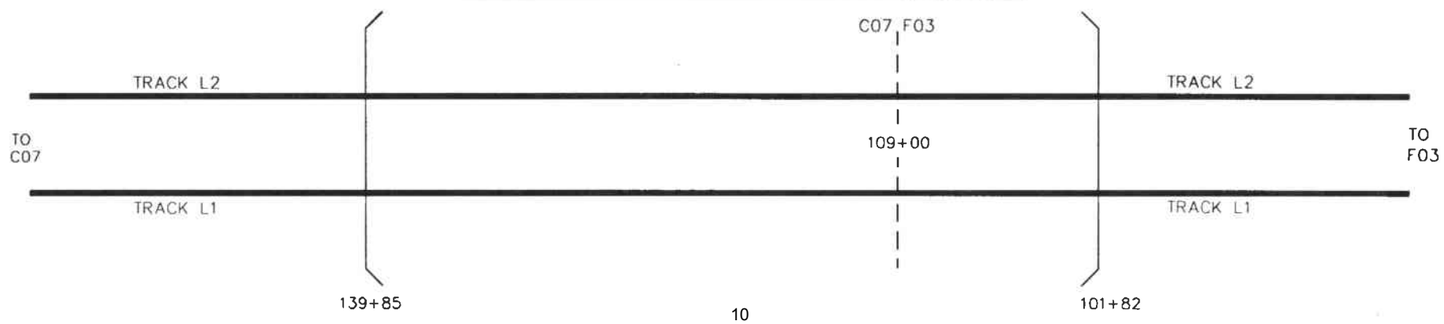




MAINLINE "F" (GREEN/YELLOW) LINE

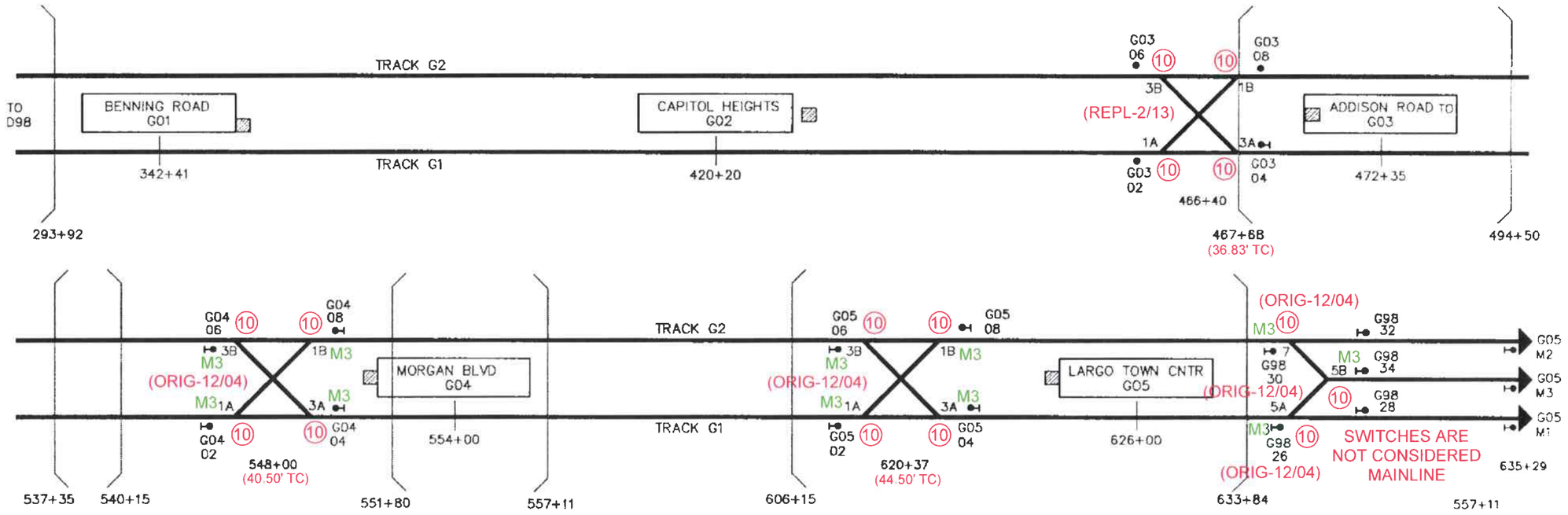


MAINLINE "L" (YELLOW) LINE

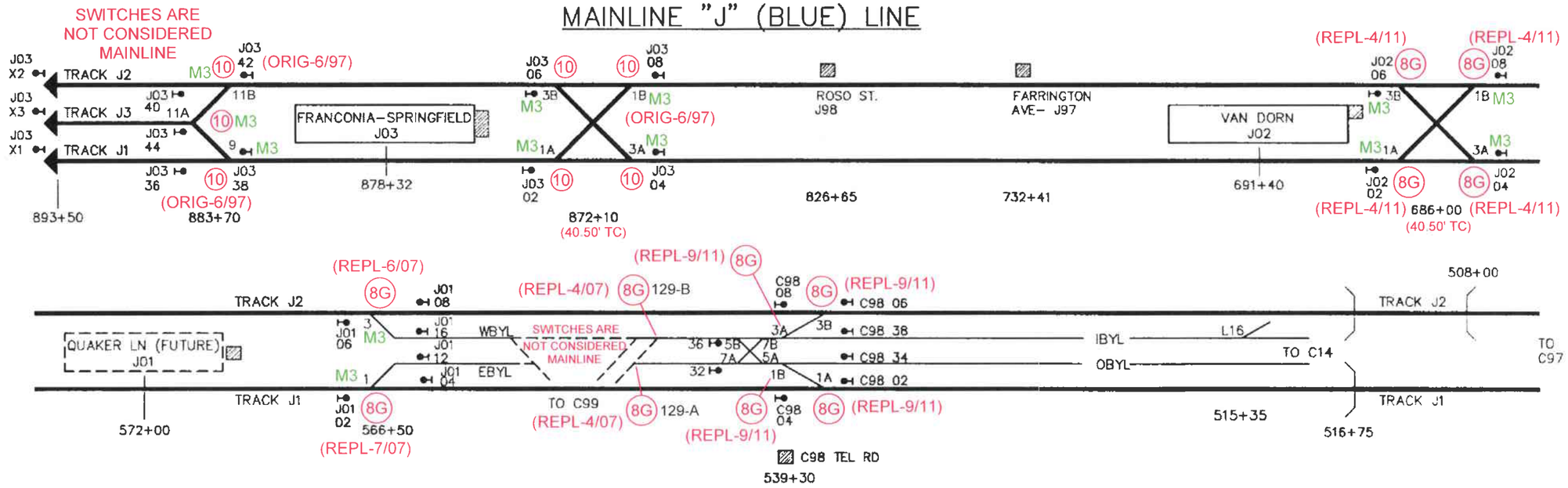


WMATA comment response to questions 45 & 111

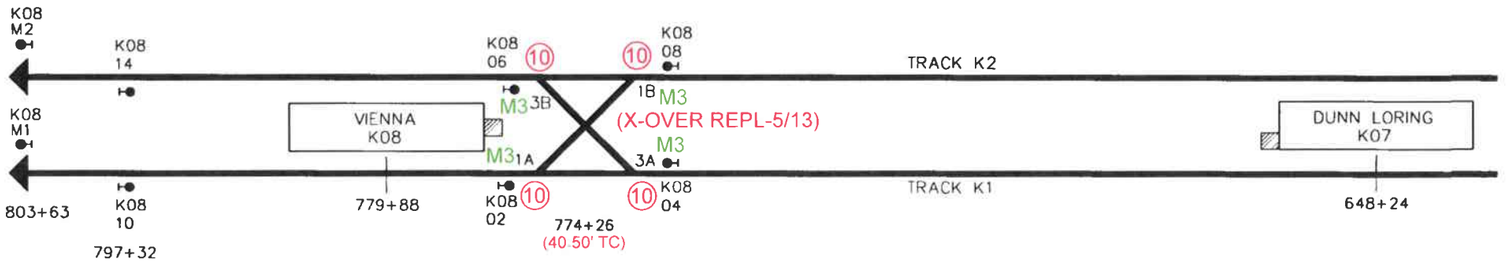
MAINLINE "G" (BLUE) LINE

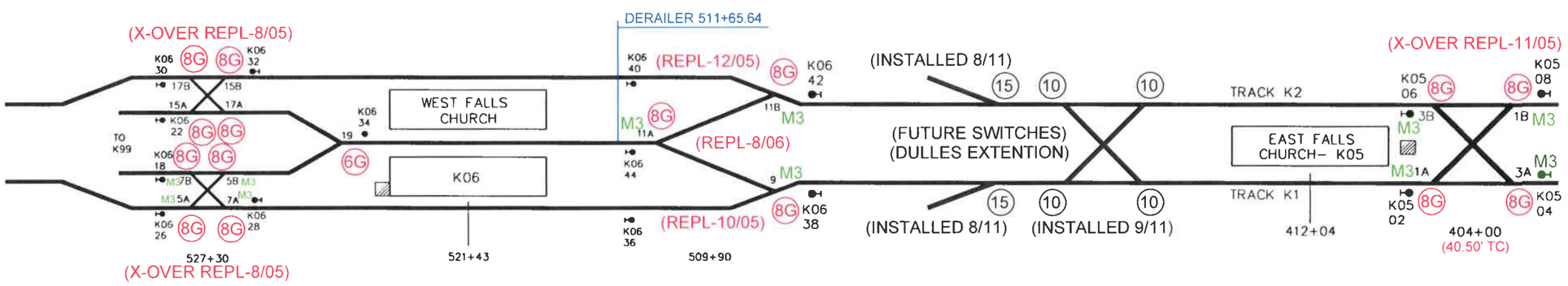


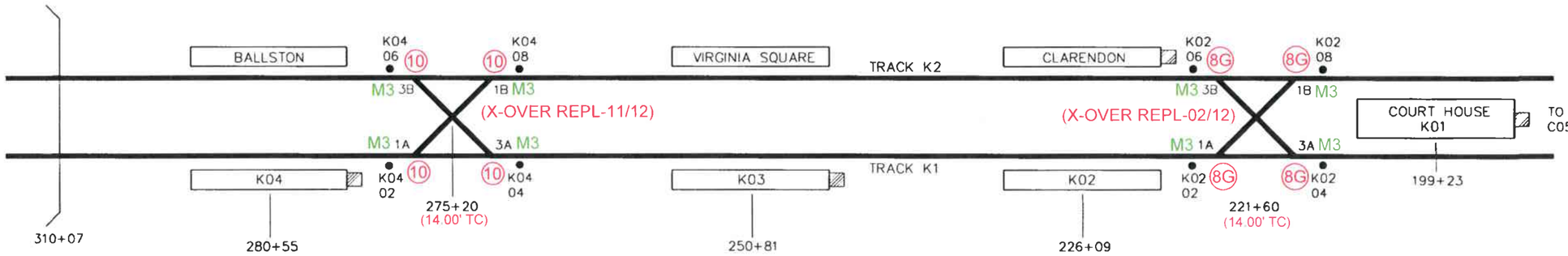
MAINLINE "J" (BLUE) LINE



MAINLINE "K" (ORANGE) LINE





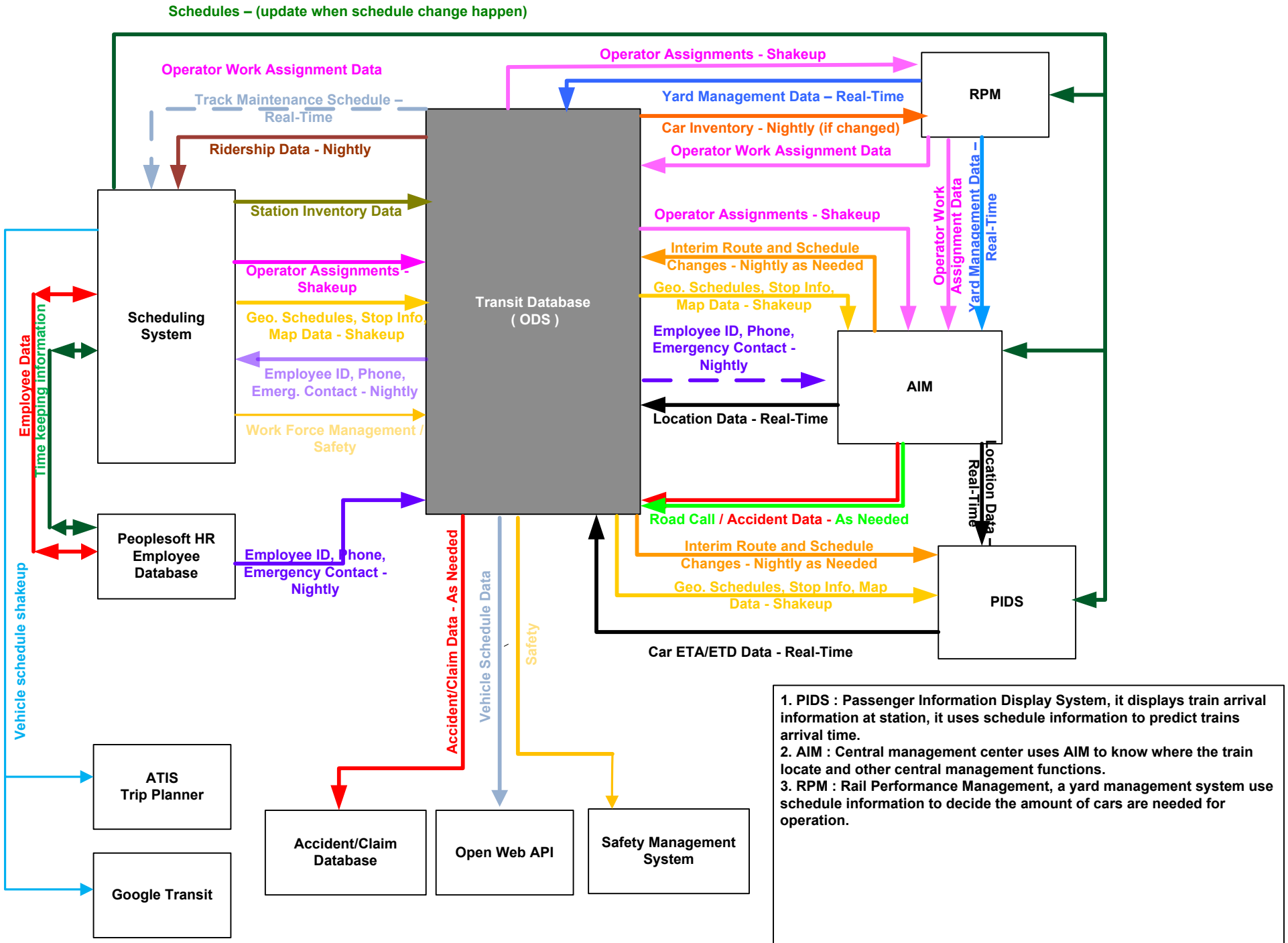


TRC Program	Eff Dt	TRC	TRC Descr	TRC Status
OPS	1/1/2013	ACCD	Regular Earnings	Active
OPS	1/1/2013	ADML	Administrative Leave	Active
OPS	1/1/2013	ALLD	Overtime Pay - Double Time	Active
OPS	1/1/2013	ALLO	Overtime Pay - 1.5	Active
OPS	1/1/2013	ALLT	Regular Earnings	Active
OPS	1/1/2013	APPL	Sick	Active
OPS	1/1/2013	ARAL	Regular Earnings	Active
OPS	1/1/2013	BDIO	Overtime Pay - 1.5	Active
OPS	1/1/2013	BDIS	Regular Earnings	Active
OPS	1/1/2013	BULD	Regular Earnings	Active
OPS	1/1/2013	CDEX	Regular Earnings	Active
OPS	1/1/2013	CHRD	Overtime Pay - Double Time	Active
OPS	1/1/2013	CHRO	Overtime Pay - 1.5	Active
OPS	1/1/2013	CHRT	Regular Earnings	Active
OPS	1/1/2013	CSRV	Regular Earnings	Active
OPS	1/1/2013	D04T	Instruct Trainee Differential	Active
OPS	1/1/2013	D13T	Platform Instruct Differential	Active
OPS	1/1/2013	D14T	OP Snow Work Differential	Active
OPS	1/1/2013	D55T	Operator Differential	Active
OPS	1/1/2013	DBTM	Overtime Pay - Double Time	Active
OPS	1/1/2013	DSPD	Regular Earnings	Active
OPS	1/1/2013	ENWA	Regular Earnings	Active
OPS	1/1/2013	EXNG	Regular Earnings	Active
OPS	1/1/2013	EXTD	Overtime Pay - Double Time	Active
OPS	1/1/2013	EXTO	Overtime Pay - 1.5	Active
OPS	1/1/2013	EXTS	Regular Earnings	Active
OPS	1/1/2013	FLTH	Floating Holiday	Active
OPS	1/1/2013	FUNL	Funeral Leave	Active
OPS	1/1/2013	GUAR	Regular Earnings	Active
OPS	1/1/2013	HOLL	Holiday	Active
OPS	1/1/2013	HOTP	Regular Earnings	Active
OPS	1/1/2013	IAMG	Regular Earnings	Active
OPS	1/1/2013	INKD	Overtime Pay - Double Time	Active
OPS	1/1/2013	INLD	Overtime Pay - Double Time	Active
OPS	1/1/2013	INLK	Regular Earnings	Active
OPS	1/1/2013	INLO	Overtime Pay - 1.5	Active
OPS	1/1/2013	INRD	Overtime Pay - Double Time	Active
OPS	1/1/2013	INRG	Regular Earnings	Active
OPS	1/1/2013	INRO	Overtime Pay - 1.5	Active
OPS	1/1/2013	INST	Platform Instruct Differential	Active
OPS	1/1/2013	INTO	Overtime Pay - 1.5	Active
OPS	1/1/2013	INTV	Regular Earnings	Active

TRC Program	Eff Dt	TRC	TRC Descr	TRC Status
OPS	1/1/2013	JURL	Jury Duty	Active
OPS	1/1/2013	LATD	Overtime Pay - Double Time	Active
OPS	1/1/2013	LATO	Overtime Pay - 1.5	Active
OPS	1/1/2013	LATT	Regular Earnings	Active
OPS	1/1/2013	LDEX	Regular Earnings	Active
OPS	1/1/2013	LECD	Overtime Pay - Double Time	Active
OPS	1/1/2013	LECO	Overtime Pay - 1.5	Active
OPS	1/1/2013	LECT	Regular Earnings	Active
OPS	1/1/2013	LPIN	Regular Earnings	Active
OPS	1/1/2013	LPIO	Overtime Pay - 1.5	Active
OPS	1/1/2013	MEAL	Regular Earnings	Active
OPS	1/1/2013	MKPY	Regular Earnings	Active
OPS	1/1/2013	NVEH	Regular Earnings	Active
OPS	1/1/2013	OBLD	Overtime Pay - 1.5	Active
OPS	1/1/2013	OGUA	Overtime Pay - 1.5	Active
OPS	1/1/2013	OTAJ	Overtime Pay - 1.5	Active
OPS	1/1/2013	OTHR	Regular Earnings	Active
OPS	1/1/2013	OVER	Overtime Pay - 1.5	Active
OPS	1/1/2013	OWLP	Owl Pay Differential	Active
OPS	1/1/2013	PALL	Regular Earnings	Active
OPS	1/1/2013	PENT	Regular Earnings	Active
OPS	1/1/2013	PIML	Regular Earnings	Active
OPS	1/1/2013	PLNW	Regular Earnings	Active
OPS	1/1/2013	PLTD	Overtime Pay - Double Time	Active
OPS	1/1/2013	PLTO	Overtime Pay - 1.5	Active
OPS	1/1/2013	PLTT	Regular Earnings	Active
OPS	1/1/2013	PRTD	Overtime Pay - Double Time	Active
OPS	1/1/2013	RAND	Regular Earnings	Active
OPS	1/1/2013	RBRD	Overtime Pay - Double Time	Active
OPS	1/1/2013	RBRK	Regular Earnings	Active
OPS	1/1/2013	RBRO	Overtime Pay - 1.5	Active
OPS	1/1/2013	RDIS	Regular Earnings	Active
OPS	1/1/2013	RGAJ	Regular Earnings	Active
OPS	1/1/2013	RNPY	Regular Earnings	Active
OPS	1/1/2013	RPTD	Overtime Pay - Double Time	Active
OPS	1/1/2013	RPTO	Overtime Pay - 1.5	Active
OPS	1/1/2013	RPTT	Regular Earnings	Active
OPS	1/1/2013	RSTD	Overtime Pay - Double Time	Active
OPS	1/1/2013	RSTO	Overtime Pay - 1.5	Active
OPS	1/1/2013	RSTR	Regular Earnings	Active
OPS	1/1/2013	RSUP	Regular Earnings	Active

TRC Program	Eff Dt	TRC	TRC Descr	TRC Status
OPS	1/1/2013	RUNS	Runs selection Differential	Active
OPS	1/1/2013	SCKL	Sick	Active
OPS	1/1/2013	SCKP	Sick	Active
OPS	1/1/2013	SCLK	Regular Earnings	Active
OPS	1/1/2013	SNOD	Overtime Pay - Double Time	Active
OPS	1/1/2013	SNOO	Overtime Pay - 1.5	Active
OPS	1/1/2013	SNOW	Regular Earnings	Active
OPS	1/1/2013	SPEC	Overtime Pay - Double Time	Active
OPS	1/1/2013	SPEX	Regular Earnings	Active
OPS	1/1/2013	SPRD	Regular Earnings	Active
OPS	1/1/2013	SSUP	Regular Earnings	Active
OPS	1/1/2013	STDR	Regular Earnings	Active
OPS	1/1/2013	STDX	Regular Earnings	Active
OPS	1/1/2013	STND	Regular Earnings	Active
OPS	1/1/2013	STUD	Regular Earnings	Active
OPS	1/1/2013	SWGT	Regular Earnings	Active
OPS	1/1/2013	TPLD	Overtime Pay - Double Time	Active
OPS	1/1/2013	TPLO	Overtime Pay - 1.5	Active
OPS	1/1/2013	TPLT	Regular Earnings	Active
OPS	1/1/2013	TRED	Overtime Pay - Double Time	Active
OPS	1/1/2013	TREO	Overtime Pay - 1.5	Active
OPS	1/1/2013	TRND	Overtime Pay - Double Time	Active
OPS	1/1/2013	TRNG	Regular Earnings	Active
OPS	1/1/2013	TRNO	Overtime Pay - 1.5	Active
OPS	1/1/2013	TRNT	Regular Earnings	Active
OPS	1/1/2013	TROD	Overtime Pay - Double Time	Active
OPS	1/1/2013	TROT	Overtime Pay - 1.5	Active
OPS	1/1/2013	TRVD	Overtime Pay - Double Time	Active
OPS	1/1/2013	TRVL	Regular Earnings	Active
OPS	1/1/2013	TRVO	Overtime Pay - 1.5	Active
OPS	1/1/2013	UTID	Overtime Pay - Double Time	Active
OPS	1/1/2013	UTIL	Regular Earnings	Active
OPS	1/1/2013	UTIO	Overtime Pay - 1.5	Active
OPS	1/1/2013	UUCH	Unpaid Union Calculation Hour	Active
OPS	1/1/2013	VACL	Vacation	Active
OPS	1/1/2013	VACO	Vacation - Overtime	Active
OPS	1/1/2013	VEHD	Overtime Pay - Double Time	Active
OPS	1/1/2013	VEHO	Overtime Pay - 1.5	Active
OPS	1/1/2013	VEHT	Regular Earnings	Active
OPS	1/1/2013	WITT	Regular Earnings	Active
OPS	1/1/2013	WRKS	Regular Earnings	Active

TRC Program	Eff Dt	TRC	TRC Descr	TRC Status
OPS	1/1/2013	APPT	Appointment Not Paid	Active
OPS	1/1/2013	ARAT	Physical Not Paid	Active
OPS	1/1/2013	AWOL	Absent w/o Leave	Active
OPS	1/1/2013	DOFF	Scheduled Day Off	Active
OPS	1/1/2013	EMRG	Emergency Leave Not Paid	Active
OPS	1/1/2013	EXUS	Excused Absence Not Paid	Active
OPS	1/1/2013	FAIL	Failure to Report Timely	Active
OPS	1/1/2013	FLTN	Floating Holiday Not Paid	Active
OPS	1/1/2013	FUNN	Funeral Not Paid	Active
OPS	1/1/2013	HOLN	Holiday Not Paid	Active
OPS	1/1/2013	JURN	Jury Duty - Not Paid	Active
OPS	1/1/2013	LATE	Late Time Without Pay	Active
OPS	1/1/2013	LWOP	Leave w/o Pay	Active
OPS	1/1/2013	MILN	Military Leave Not Paid	Active
OPS	1/1/2013	PERS	Personal Leave Not Paid	Active
OPS	1/1/2013	PIME	Post Incident Not Paid	Active
OPS	1/1/2013	PLNN	Planned Night Work Not Paid	Active
OPS	1/1/2013	RETT	Retroactive Pay (Non-OT)	Active
OPS	1/1/2013	ROTT	Retro Overtime Pay	Active
OPS	1/1/2013	SCKN	Sick Not Paid	Active
OPS	1/1/2013	SUSP	Suspended Not Paid	Active
OPS	1/1/2013	TERM	Terminated Not Paid	Active
OPS	1/1/2013	TLST	Time Lost	Active
OPS	1/1/2013	UWOP	Union Business Not Paid	Active
OPS	1/1/2013	VACN	Vacation Not Paid	Active
OPS	1/1/2013	WKCP	Work Comp Not Paid	Active



1. PIDS : Passenger Information Display System, it displays train arrival information at station, it uses schedule information to predict trains arrival time.
2. AIM : Central management center uses AIM to know where the train locate and other central management functions.
3. RPM : Rail Performance Management, a yard management system use schedule information to decide the amount of cars are needed for operation.

06/27/2013

WMATA Transit Database Data Flow Diagram

WMATA comment responses to questions 60, 63, & 72