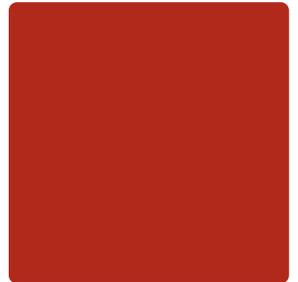
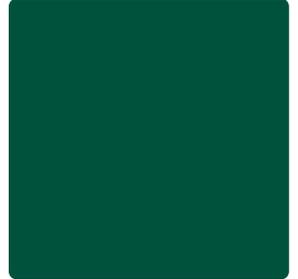
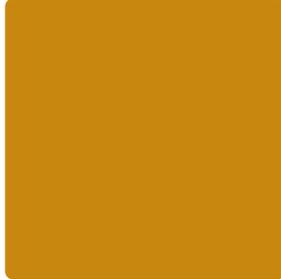
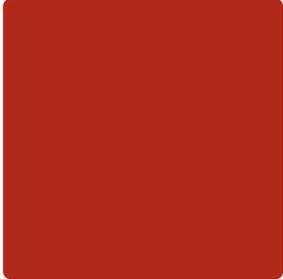




**METRO DISTRICT
OFFICE OF STATE AID**

M I N N E S O T A D E P A R T M E N T O F T R A N S P O R T A T I O N



Municipal Agreement Program Plan Preparation, Design and Construction Guide

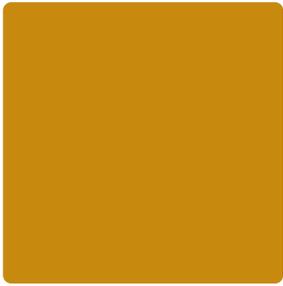


WATERS EDGE 1500 WEST COUNTY ROAD B-2 ROSEVILLE MN 55113
www.dot.state.mn.us/metro/stateaid/home.html

November 2015

TABLE OF CONTENTS

<u>Topic</u>	<u>Page</u>
<u>Plan Preparation</u>	
Design & Construct Process for MnDOT Cooperative Agreement Projects	3
Cooperative Agreement Plan Development Process	4
Cooperative Agreement Plan Checklist	4
Cooperative Agreement Project Kick-Off Meeting Agenda	14
Quality Control Check Process Form	19
Cooperative Agreement Plan Review Process	20
Signature Block	27
<u>Plan Content and Resource Information</u>	
MnDOT Web Sites and Links	29
Design Resources	31
Sample Right-of-Way Compliance Letter	34
Right-of-Way Layout and Plan Routing Checklist	35
Prorata Items in Construction Plans involving Cooperative Construction	36
Temporary and Permanent Erosion and Sediment Control Requirements	37
Materials Design Recommendation	39
<u>Agreement Process</u>	
Cooperative Construction Agreement Process	41
Agreement Submittal Checklists	43
Color Code for Cost Participation	48
<u>Construction and Finaling Process</u>	
Cooperative Agreement Payments.....	50
Sample Request for Advancement	54
Supplemental Agreements, Work Orders and Change Orders	55
Instructions for Initiating, Routing & Processing Final Agreement Payments	57
Sample Request for Complete and Final Billing	60
Certification by Municipal Officials	61
Materials Certification Exceptions Summary	62
Modified Schedule “T” Sample Agreements, Invoices, and Final Certification	63
<u>Appendix</u>	
Acronyms and Glossary	71



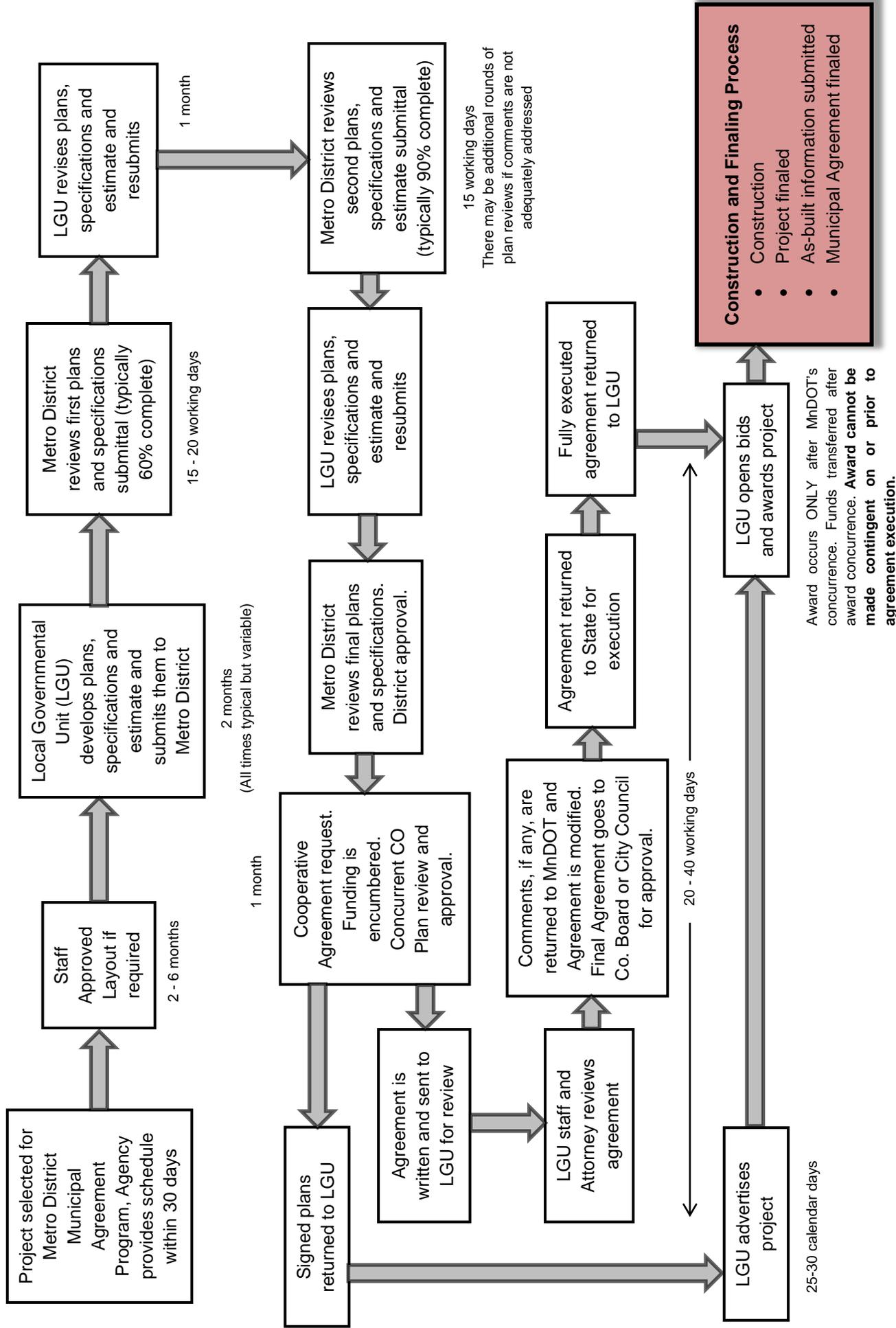
M I N N E S O T A D E P A R T M E N T O F T R A N S P O R T A T I O N

Plan Preparation

DESIGN AND CONSTRUCT PROCESS FOR MnDOT COOPERATIVE AGREEMENT PROJECTS

Non Federally Funded projects
Let by Local Agency

Process typically takes 7-10 months from project initiation
to bid opening. Add 2-6 months if a layout is required.



COOPERATIVE AGREEMENT PLAN DEVELOPMENT PROCESS

After projects are selected for Cooperative Agreement funding, and the Local Agency has been notified of the selection, the Local Agency needs to contact the Cooperative Agreements Engineer to initiate the project and have a Project Manager assigned. Metro Cooperative Agreement contacts can be found on the Metro State Aid Organizational Chart found here: <http://www.dot.state.mn.us/metro/stateaid/home.html>

When the Local Agency is ready to start design, the Project Manager will arrange for a Project Kick-off Meeting. The purpose of the kick-off meeting is to identify to the Local Agency and the designer the requirements and process involved in developing a set of Cooperative Agreement plans and to provide some guidance in the development and submittal of the plans. That is also the purpose of this document. Careful review of this section and following sections should provide a designer and Local Agency with an idea of what is required, the necessary steps that must be taken, and the approximate time required for various reviews and plan approval.

A list of issues typically covered during the Kick-off meeting is shown starting on page 14.

Local Agencies and their designers need to keep in mind that plans making use of Cooperative Agreement funding have to be developed to MnDOT Trunk Highway standards. **This is different from, and typically more stringent than, State Aid, Local Agency, or developer's standards.**

I. Plan requirements

The following checklist is intended as a guide of what needs to be included in the plan set and what is looked for during MnDOT review. The State Aid Project Manager can provide additional guidance.



COOPERATIVE AGREEMENT PLAN CHECKLIST

PRELIMINARY ACTIVITIES

1. Has the Design Memo been completed? (This will help identify the design criteria before design begins. Contact the Project Manager for guidance in completing the Design Memo.)
2. Is an ICE (Intersection Control Evaluation) Study or Report needed?
3. Is a Layout required and if so, has it been completed? (Completing a Layout before starting on the construction plans saves time and money if the lane arrangements, etc. are defined first.)

GENERAL ITEMS

1. North Arrow
2. Flag the Beginning and Ending of the project
3. Consistent beginning and ending Stations
4. Right of way, construction easements, and drainage easements must be shown
5. Sheet titles. Do they follow the MnDOT typical sheet names?
6. Sheet numbering should be logical and numerically consistent. For example, if your plan set has a total of 70 sheets, and the last 20 are cross section sheets you have numbered XS1, XS2, ... XS20, the cover should state "Sheet No. 1 of 50 Sheets," not "... of 70 Sheets." If you wish to separately number subsections of the plans, talk with your Project Manager about how best to show this clearly.
7. State Project number and State Aid Project numbers on all sheets
8. The plan preparer's certification
9. Include bar/graphic scales - check to make sure they are accurate.
Do not use numeric scales (e.g. "1 inch = 50 feet" should never be used).
10. When referencing Standard Plates, the distinguishing letter should only be used on the Standard Plate Tabulation. Throughout the rest of the plan only show the number without the letter (e.g. Std Plate 3000, not Std Plate 3000L).
11. Make sure the State Project number is on all sheets. (As well as any SAP numbers.) All sheets except for the title sheet need to have (TH XX) after the SP number. See note 12 of the TITLE SHEET section below for more information.
12. Can you read the plans? Is the printing legible? Type fonts, line weights, and drawing scales need to be large enough for 11" x 17" sheets. Font size should not be smaller than 10 or 11 point except for select, less-critical notes.
13. Legends for each plan group
14. Do not use the word "install" if you intend "construct", "place" or "furnish & install." For example you place curb and gutter or construct a retaining wall.
15. The word install implies that the item is being provided by the owner, not the contractor. If the item was salvaged or is being provided by the Local Agency, then it may be installed.
16. Does the plan make sense?

TITLE SHEET

MnDOT Computer Aided Design (CAD) standards and some templates, cells, fonts, etc. can be found on the Computer Aided Engineering Services (CAES) website.

<http://www.dot.state.mn.us/caes/index.html>

The zipped file includes a .dgn file of a blank title sheet that is useful to use as a starting point. The appropriate file is "MnDOTstds_tsh-20[##]SPEC.dgn."

1. MINNESOTA DEPARTMENT OF TRANSPORTATION
2. Description of work: CONSTRUCTION PLAN FOR _____. (See page 1-13 of the *Design Scene* for which work activities to include or to not include.)
3. Location of work
4. Federal Aid number in upper right. If no Federal Aid then STATE FUNDS.

5. Index Map
 - a. Large enough to read on an 11" x 17" copy
 - b. Label major roads
 - c. North Arrow
 - d. Flag beginning and ending of each project with Stations
 - e. Bridges with numbers
 - f. Signals
 - g. Bar scale
6. Length blocks for each roadway
 - a. Road name
 - b. SP or SAP number
 - c. Length must match stationing on index map
 - d. If there is no length for a line item (e.g. BRIDGES-LENGTH) leave it blank instead of with "0.00"
 - e. Reference Point. (Show on index map flag if there is no length block.) Get the Reference Point numbers (R.P.s) from the Project Manager.
7. Governing specification note (make sure it references the current Standard Specifications book)
8. Do not include the Subsurface Utility Information note on the cover sheet. This should be on the Utility Tabulation sheet(s).
9. Index needs to show if sheets have A & B sheets, as in 27-33A, 34-40
10. Index ending in THIS PLAN CONTAINS XX SHEETS. (Be sure to count A & B sheets. Do not include bridge sheets.)
11. See page 27 for the signature block
12. Show the Legislative route number with the state project number in the lower right corner (i.e. S.P. XXXX-XX (TH XX=XX). Get the Legislative route number from the Project Manager. This is only included on the cover sheet with the SP number by the page numbers and in the Agreement Information Block.
13. DESIGN DESIGNATION BLOCK
 - a. ADT and date for the year the project is to be let
 - b. Designation block for bikeways
14. Traffic control note (Only on FEDERAL AID projects)
15. Minnesota map icon showing project location
16. MnDOT Metro is a district
17. Agreement Information block

AGREEMENT NO. _____
Who Agreement is with (City, County, etc.)
 S.P. XXXX-XX (TH XX=XX)
Funding (State Funds or Local Funds (*if no State Funds*))
 METRO DISTRICT

GENERAL LAYOUT

1. A sheet layout with a legend is helpful, especially in larger plans
2. Label all roadways
3. Label signals and bridges
4. Show wetlands and environmentally sensitive areas

5. Show stationing

STATEMENT OF ESTIMATED QUANTITIES

1. The columns in the Statement of Estimated Quantities table should be, from left to right:
 - a. TAB/ NOTE - Indicate the tabulation reference letter that is related to the quantity or if a numbered note applies to the pay item
 - b. SHEET NO - Indicate the sheet number where the TAB is located
 - c. ITEM - The 7 digit specification number. Place these in numerical order, preferably in the order found in the TRNS*PORT listing. (This helps during the review process.)
 - d. DESCRIPTION - Must match TRNS*PORT exactly, including any abbreviations
 - e. UNITS - You must use the longer abbreviations instead of the shorter abbreviations (e.g. LUMP SUM, SQ YD, CU YD, GALLON and M GALLON and not LS, SY, CY, GAL and M GAL)
 - f. TOTAL ESTIMATED QUANTITY - The total column should be to the left of the separate funding source columns, next to the units. If you only have one column showing funding sources you do not need a separate TOTAL ESTIMATED QUANTITY column
 - g. When there are multiple SP numbers of funding types, the next column will be the Prime SP number column
 - h. Each funding source should have separate columns. For projects with State Aid funding, have a separate column under the SAP header for storm sewer pay items to assist with any required State Aid eligibility cost splits
2. Mark plan quantity items with a (P) in the far right side of the ITEM DESCRIPTION column
3. The following pay items are required for all projects (with very few exceptions):
 - a. 2011.601 AS BUILT
 - b. 2563.601 TRAFFIC CONTROL
4. The project total for lump sum items must equal 1. If you have a pay item split pro rata among funding sources, you can only apply it to Mobilization, Field Office, Field Laboratory and Traffic Control.
5. Basis of estimated quantities for items such as bituminous tack, fertilizer etc.
 - a. Do not include the quantity basis if it is already covered in the Standard Specifications (such as seed application rates)
 - b. MnDOT no longer pays for tack coat but instead considers it to be incidental
 - c. Make sure the fertilizer application rate and analysis is stated either on the SEQ or on the turf establishment tabulation
6. Salvage items: Where used; Who gets to use; Include the pay item 2104.601 HAUL SALVAGED MATERIAL if hauled off site
7. Quantities should be to whole units
8. Very small quantities may be to tenths of a unit (0.1), never to hundredths (0.01)
9. Can different units make a better quantity? (0.02 tons = 40 pounds)
10. Reference to the quantity tabulations, or special details
11. Quantities agree with the quantity tabulations

12. Use footnotes to provide additional information or clarification to bid items. These are numbered notes (in square brackets, e.g. [1]). Numbered notes can provide the following information:
 - a. Depths of removals such as bituminous or concrete
 - b. If concrete that is removed is reinforced or unreinforced
 - c. Size of bridge removals
 - d. Fertilizer analysis
13. If information regarding funding is provided, use lettered notes (e.g. [A])
 - a. If there are only a few pay items that have local participation, such as for signal work, you can use a lettered footnote to indicate the cost split instead of having a separate column for one or two items (e.g. [A] 50% STATE FUNDS, 50% LOCAL FUNDS)
14. Leave some lines blank (every 5th) or make every 5th line heavy to make tabulation easier to read
15. If there is a pay item for seed then there must be a pay item for seeding
16. Trunk Highway funds cannot typically be used to pay for work on utilities owned by the Local Agency or a private utility company. This includes ADJUST GATE VALVE, RELOCATE HYDRANT, etc.
17. Tack coat is not typically paid for on MnDOT projects but is instead incidental

STANDARD PLATES TABULATION

1. Plate numbers including letter are current
2. All appropriate plates are listed. In the description use the proper Standard Plate name as found on the Index of Standard Plates. Include if there are extra sheets. (e.g. GASKET JOINT FOR R.C. PIPE (2 SHEETS))
3. City or county plates in a separate tabulation
4. Include the note **THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT** at the top of the Standard Plates table
5. Do NOT include Standard Plates that do not apply to the project

TABULATIONS

1. Tabulate quantities by pay item. Separate them into groups by SP number or funding source so that a person can determine where and how the quantities listed in the SEQ were generated. Show a subtotal for each SP/funding source.
2. Work item descriptions must match the SEQ and TRNS*PORT pay item descriptions.
3. Quantities in tables must match the quantities in the SEQ
4. Quantities must be verifiable through tabulations or notes on plan sheets.
5. Label each of the tabulations with a letter. The reference letter should be in the upper right corner of each table. (The Standard Plates table and Index of Tabulations do not need a reference letter.)
6. For larger plans an index of tabulations giving the page numbers of the various tabulations is helpful. With the TAB and SHEET NO columns in the SEQ this is not a requirement.
7. Do not include zeros (“0”) in tables. If there is not a quantity, leave it blank.

INPLACE UTILITIES

1. All underground utilities must be shown on any excavation plan
 - a. On the topography/utility plan
 - b. On the profile
 - c. On the cross sections
 - d. In a utility tabulation, giving:
 - i. Location
 - ii. Type of utility
 - iii. Legal utility name. You may have a list of the full legal names as a separate unlettered listing and use the abbreviated names in the table itself. Contact your Project Manager for the list of legal utility company names.
 - iv. Size
 - v. Expected action (Leave as is, adjust, relocate). Indicate
 - vi. Responsible party
2. All utilities found on the plan sheet must be included in the tabulations and all utilities found in the tabulation must be shown on the plan sheets.
3. Provide the subsurface utility information note, including mention of the quality level achieved.
4. Do not list people's names, phone numbers or email addresses of utility contacts.
5. Utility locations must have been verified within 90 days of the completion of the plan.

TYPICAL SECTIONS

1. Street width:
 - a. Dimension from face of curb.
 - b. Show lane widths.
 - c. Label lanes
2. Pavement section approved by materials?
3. Pavement mix designations and aggregate specifications.
4. Right of way width, including construction easement.
5. Clear zone.
6. Slopes shown as rise: run (or vertical: horizontal)
7. Label the profile grade.
8. Roadway cross slopes are foot per foot, shown as 0.02'/ ' or 0.02 FT/FT.
9. Topsoil depths.
10. Show centerlines, roadway names, and stationing in a logical manner.
11. If bituminous quantity is by Thickness/Square Yard, and multiple lifts are called for, the pay item is for each lift.

MISCELLANEOUS DETAILS

1. Large enough to be clear on an 11" x 17" copy.
2. Bar scale if to scale.
3. Is a Public Interest Finding (PIF) needed? A PIF is required on projects using State or Federal funds if the designer chooses to call for any proprietary products. Proprietary products are those identified as being manufactured by a specified company (e.g. Neenah castings, Mueller curb stops, Infi-Shield Gator Wrap). To prevent the need for a PIF items need to be defined with a generic detail or you specify three or more

equivalent products. It is not adequate to call for one or two specific manufacturers with the note “or equal.” This requirement also applies to proprietary items called for on Local Agency or consultant standard plates.

STANDARD PLAN SHEETS

1. Include all appropriate standard plan sheets
2. Make sure you are using the current standard plan sheets
3. Modified sheets must be labeled modified, and the designer’s certification block must be added.
4. Do NOT include standard detail sheets that do not apply to the project. This includes the 7 sheets of the Temporary Sediment Control series. Leave out sheets that do not apply to the project. The exception is the 5 sheets of the Pedestrian Curb Ramp Details where all 5 sheets must be included.

ALIGNMENT PLAN

1. Curve data
2. Alignment tabulation

TOPOGRAPHY PLAN

1. Legend
2. Flag beginning and ending of project with Stationing
3. Show the new construction
4. Label environmentally sensitive areas
5. Label roadways
6. Put names on commercial buildings. Addresses on houses are helpful too.
7. Show right of way, easements, and construction limits

REMOVAL PLAN

1. Legend
2. Salvaged material
 - a. Where to be installed
 - b. Whose is it
 - c. If delivered someplace, include haul salvage material pay item
3. Right of way lines and easements
4. Flag beginning and ending of project with Stationing

CONSTRUCTION PLAN

1. Dimensions entrance and intersection radii
2. Label construction items
3. Right of way lines and easements
4. Show where the signal structures will fit in at intersections so that they don’t end up blocking the walk or access ramps
5. Construction details
6. Flag beginning and ending of project with Stationing
7. The description of activities should match how they are called out in the SEQ and on the tabulations. Be consistent with phrasing throughout the plan.

8. If noxious weeds are present show the locations on the plans and include required specification language. The Project Manager can provide information regarding noxious weed location.

PROFILES

1. Give Stations of beginning and ending points
2. Station Equations
3. Location of critical points such as intersecting alignments
4. End slopes of sub cuts in rise: run.
5. Vertical curve data
6. Grades as percent
7. Label lines; finished grade, grading grade, subgrade, etc.
8. Underground utilities

DRAINAGE (STORM SEWER)

WATER RESOURCES PLAN CHECK LIST

1. Refer to the checklist under the Water Resources folder
2. Be sure that the pipe classes show up on the storm sewer profiles
3. Use names instead of numbers for ponds. Check with Water Resources staff for naming conventions. Typically use a local landmark, street name or corridor name as the basis for pond names.
4. Have all ponds entirely on or off MnDOT R/W in order to keep maintenance responsibilities clear. This includes infiltration ponds and dry ponds.
5. Provide a spreadsheet indicating maintenance responsibilities of pipes, structures, ponds, etc. within MnDOT R/W. Are facilities maintained by MnDOT or the local road authority? The spreadsheet maybe used as an attachment to the Cooperative Agreement between MnDOT and the Local Agency.

SWPPP (STORMWATER POLLUTION PREVENTION PLAN)

1. Try to keep the SWPPP to 2 pages or fewer
2. Have a table identifying the location (sheet numbers) of SWPPP requirements in the project plans

SUPERELEVATION

1. Crosshatch transition areas
2. Super elevation rate as slopes as foot per foot
3. Station beginning and ending of super elevation runoff and of tangent runoff
4. Flag beginning and ending of project with Stationing

EROSION CONTROL

1. Legend
2. Temporary & Permanent
3. Arrows for existing and proposed drainage
4. Topography
5. List seeding rates only if they are different than called for in the Standard Specifications)

6. Permits
7. Drainage structures and pipes
8. Flag beginning and ending of project with Stationing

CROSS SECTIONS

1. Ditch grades
2. Inplace utilities
3. Culverts
4. Centerline
5. Right of way line
6. Temporary easement
7. Slopes labeled rise: run (i.e. 1:4 not 4:1)
8. Do not sign Cross Section Sheets

SPECIAL PROVISIONS

1. Need to use the 2016 Standard Specifications for Construction
2. Develop the Division S specifications using the MnDOT Special Provisions boiler plate. Include:
 - a. Responsible Contractor
 - b. Special Provisions 1714, 1716 and 1718 language (provided by Project Manager)
 - c. (2011) As-Builts
 - d. Any pay item with a .6## number
3. Use the MnDOT web page Proposal Sequence (<http://www.dot.state.mn.us/pre-letting/prov/sequence.html>) to develop the Special Provisions. These include, among other items, the following:
 - a. Debarment Notice
 - b. State Funded Contract Special Provisions Division A
 - c. State Prevailing Wage Rates
 - d. Truck Rental Rates
 - e. Schedule of Materials Control
 - f. EEO Special Provisions
4. Develop Division SL (lighting), SS (signals), ST (traffic signs), etc. specifications as required



II. Quality Management Process

MnDOT has instituted a Quality Management Process (QMP) that must be followed by internal design staff and consultants completing work on MnDOT design projects. This includes Local Agencies and their consultants who work on Cooperative Agreement projects. Specifics of the QMP are beyond the scope of this document. Training and the *MnDOT Design-Bid-Build Quality Management Process* manual is available from MnDOT. The manual and quality review checklists used by MnDOT can be found at:

<http://www.dot.state.mn.us/design/qmp/index.html>

Local Agencies and their consultants are not required to use the MnDOT QMP on Cooperative Agreement projects but are required to use some established quality review process. The Local Agency *will* be required to sign a Quality Control Check Process Form (see page 19) that certifies that a quality review process has been followed. No additional paperwork will be need to be submitted but if excessive plan quality problems are noted during the MnDOT review, MnDOT reserves the right to audit the quality process and associated paperwork.

III. Transportation Management Plan

A Transportation Management Plan (TMP) is required for any project that has a Trunk Highway lane closure of more than 3 days. The designer must work with the State Aid Project Manager and a Metro District Traffic Work Zone representative to develop the appropriate TMP. The purpose of the TMP is to identify the level of impact of the project on Trunk Highway users and aid in developing appropriate traffic control plans and specifications to manage traffic during construction. The level of complexity of the TMP will depend upon the Trunk Highway affected, the scope of the project and the degree and length of time of necessary closures. A project may require a full TMP, a Basic TMP or no TMP.

See the [Plan Content and Resource Information](#) section of this pamphlet for more information regarding what should be included in the plan set and useful links to resources that will help develop plans to the required standards.

COOPERATIVE AGREEMENT PROJECT KICK-OFF MEETING

Revised August 7, 2015

S.P. _____ T.H. _____ DATE _____

S.A.P. _____ City/County Project No. _____

Agreement No. _____ Let Date _____

Construction Start _____ Construction End _____

Reference No. Begin _____ Reference No. End _____

Legislative Route No. xxxx = xxx _____

Project Location _____

Brief Description of Project _____

Significant Project Elements _____

“The Golden Rules”

1. Advertise only **after** MnDOT has signed the plan.
2. Open bids only **after** the local agency has signed the agreement.
3. Award only **after** the agreement is fully executed and MnDOT has concurred in the award.

Funding

1. Cooperative Agreement funding \$xxx,xxx.xx. Includes construction costs and construction engineering.
2. Any Federal Funding on the project? Amount
3. Any State Aid funding on the project? Amount
4. City of/County is expected to cover all costs over the award amount.

Project Pre-submittal Items (submittal expected at kick off meeting, Templates previously provided)

1. Complete Streets Project Report – Fill out template available at <http://www.dot.state.mn.us/planning/completestreets/policy.html>
2. Design Memo

3. Cooperative Agreement Project Schedule – Fill out template available at <http://www.dot.state.mn.us/metro/stateaid/coopsched2015.pdf>

Cost Sharing and Maintenance Related to Cooperative Agreement Projects:

Cost sharing and maintenance is based on the Policy and Procedures for Cooperative Construction Projects with Local Units of Government (Cost Participation Policy)

<http://www.dot.state.mn.us/metro/stateaid/cooperat.html>

Need to consider such things as:

1. Engineer's cost estimate and cost splits – by funding source and carried through to SEQ
2. Traffic control signal system cost splits – by leg of ownership (MnDOT does not pay anything for painting and it is not included in the cost split of the signal)This includes:
 - a. Interconnect cost splits
3. EVP cost splits
4. Lighting cost splits
5. Drainage system cost splits to include:
 - a. Ponds
 - b. Storm sewers
6. Contaminated material removals
7. Other items such as sidewalks, bikeways, multi-use trails and landscaping
8. Can no longer pay for items like adjust Gate Valve unless MnDOT is the owner of that utility

Plan Development

1. Environmental Documents:

- a. Contaminated properties within MnDOT right of way
- b. State endangered species
- c. <http://www.mnhs.org/shpo/> State Historic Preservation Office (SHPO), State funded
- d. <http://www.pca.state.mn.us/> MPCA Information
- e. <http://www.pca.state.mn.us/water/permits/index.html> Water Quality Permit Application
- f. <http://www.dot.state.mn.us/environment/> Office of Environmental Stewardship (home page)
- g. <http://www.dot.state.mn.us/environment/erosion/index.html> Erosion Control

2. Right of way Issues and Questions:

- a. Initial Metro District Right of Way contact is Dan Phelps, 651-234-7585
- b. Contaminated properties within MnDOT right of way
- c. Wetlands within MnDOT right of way
- d. Right of Way transfers
 - i. Environmental Due Diligence (EDD) Forms if transferring to MnDOT

3. Layout Requirements:

- a. Layout should be approved before plans are sent in. Could prevent errors in design from changes during the layout process.
- b. <http://www.dot.state.mn.us/planning/hpdp/> Highway Project Development Process (HPDP) and Scoping
 - i. Layout turn-in
 - ii. Include both electronic copy and hard copies for review
 - iii. Layout revisions
- c. <http://dotapp7.dot.state.mn.us/edms/download?docId=636152> Geometric Layouts

Review Process Guidance

- d. MSA and CSAH need to meet State Aid rules
 - i. Variance may be possible, discuss with Julie Dresel, State Aid Program Engineer 651-234-7780
- e. Trunk highways need to meet MnDOT design standards

4. Materials/Soil Borings and Materials Design Recommendation (MDR)

Report:

- a. Contact Metro District Materials office before doing borings on trunk highway right of way so soil boring locations and number of borings can be determined.
- b. Widening of roadway without taking adequate soil borings could change project scope

5. Plan and Proposal

- a. **Plan** – See plan set example
 - i. **Use Municipal Agreement Program – Plan Preparation, Design, & Construction Guide – (Green Book)** available at <http://www.dot.state.mn.us/metro/stateaid/cooperat.html>
 - ii. **Ponds, Ditches, Drainage Areas, Storm Sewers:**
 - 1. Pond credits and oversizing of pipes
 - 2. Wetlands within MnDOT right of way
 - 3. Infiltration within watershed
 - 4. Drainage computations, drainage areas and details
 - 5. Pond naming - Coordinate with Water Resources. Use unique names within Metro. Do not use simple designations such as Pond-1.
 - iii. **ADA and Bikeway Facility Design:**
 - 1. <http://www.dot.state.mn.us/bike/designmanual.html> Bikeway Facility Design Manual
 - 2. <http://www.dot.state.mn.us/peds/> Pedestrians in Minnesota
 - 3. <http://www.dot.state.mn.us/ada/tools.html> ADA home page
 - 4. Pedestrian Access Route (PAR)
 - 5. New Pedestrian Technical Memo
 - 6. New ADA Plan Checklist needed for ADA Improvements. See <http://www.dot.state.mn.us/ada/design.html> for more details and checklist.
 - 7. ADA office is available for site review and design consultation. May be required on larger projects.
 - iv. **Other District Requirements:**
 - 1. Traffic Management Plan (TMP)
http://www.dot.state.mn.us/metro/trafficeng/control_striping.html
 - 2. Quality Management Process (QMP)
 - 3. Noxious Weeds
 - 4. 2016 Standard Specification book for projects let beginning November 2015.
 - v. **Utility Coordination**
 - 1. See Technical Memorandum No. 07-08-TS-02 concerning Utility Coordination on Local Agency Projects
<http://dotapp7.dot.state.mn.us/edms/download?docId=700085>
 - 2. Will need to complete MnDOT Utility Certification Form.
- b. **Proposal**
 - i. <http://www.dot.state.mn.us/pre-letting/prov/sequence.html> Proposal Sequence

- ii. Will need complete proposal with final submittal.

Project Turn in

- 1. Documents depend on stage of development, coordinate with the Municipal Agreement Project Manager.

Cooperative Agreement Items based on:

<http://www.dot.state.mn.us/metro/stateaid/cooperat.html> Cost Participation Policy-
(Policy and Procedures for Cooperative Construction Projects with Local Units of Government)

Need to Know:

- 1. Agreement type
- 2. Maintenance and jurisdictional ownership responsibilities of:
 - a. Ponds
 - b. Drainage systems to include storm sewer
 - c. Traffic control signal systems
 - d. Interconnect system
 - e. Landscaping
 - f. Routine and non-routine maintenance
- 3. Timeline of agreement; refer to appendix D of the Cost Participation Policy

Project Coordination with Other Construction Projects in the Area:

- _____
- _____

Permits:

- 1. MnDOT Utility Permits may be needed for certain utility work
 - a. All local utilities, watermain, sanitary sewer, etc. will require a permit for the utility to remain in MnDOT ROW.
 - b. All private utilities will require a permit for the utility to remain in MnDOT ROW.
 - c. Contact Municipal Agreement Project Manager for guidance if you have questions.
- 2. Department of Natural Resources
- 3. Watershed District
- 4. NPDES
- 5. Other permits

Contacts

MnDOT Contacts		Telephone	Email	Other
	Municipal Agreement PM			
	Business Liaison			
	Area Manager			
	Other			
	Other			
Local Agency Contacts				
	Project Manager			
	Administrative			
	Consultant PM			
	Other			
	Other			

Regulatory Agencies and Points of Contact:

- **MnDOT Cooperative Agreements Contact and Information**
 - <http://www.dot.state.mn.us/metro/stateaid/cooperat.html> Cooperative Agreements home page
 - <http://www.dot.state.mn.us/metro/stateaid/cooperat.html> Cost Participation Policy
- **Metro State Aid**
 - <http://www.dot.state.mn.us/metro/stateaid/home.html> Home page
- **Federal Aid**
 - Project Reports (use this if project involves Federal Aid funding)
 - Project Memorandum Writer <http://www.pmwriter.dot.state.mn.us/>

QUALITY CONTROL CHECK PROCESS FORM (Cooperative Agreements)

MnDOT Project Manager: _____

Designer: _____

State Project No.: _____

Project Description: _____

Item to be Checked: _____

Originated by: _____
Print name Sign Date

Checked by: _____
Print name Sign Date

Back Checked by: _____
Print name Sign Date

Corrected by: _____
Print name Sign Date

Verified by: _____
Print name Sign Date

Quality Assurance Verification by Metro State Aid Cooperative Agreements:

Print name Sign Date

Quality Assurance Verification by Central Office Project Delivery Section:

Print name Sign Date

COOPERATIVE AGREEMENT PLAN REVIEW PROCESS

After plans are developed by the Local Agency they need to be submitted to MnDOT, along with supporting documentation, for review by various Metro District and Central Office Functional Groups. The following provides an indication of the process and the required submittals.

I. What to submit for Metro District Review

Plans are reviewed by Metro functional areas (State Aid, Traffic, Water Resources, Right-of-Way, Materials, Design, etc.) as well as receiving final review and approval by the MnDOT Office of Project Management and Technical Services at Central Office.

Be aware that each MnDOT functional area will likely have specific criteria that need to be addressed as part of project submittal. Please contact the Cooperative Agreement project manager for information on these supporting documents (applications, guidelines, check lists, etc.). Following the MnDOT Sample Plan

(<http://www.dot.state.mn.us/metro/finaldesign/sampleplan.html>) format will facilitate reviews and minimize revisions. When a plan is ready to be submitted to the Metro District for the first time, please provide the following items to help expedite the review.

- 1) Electronic and paper copies of the plan. Copies need to be in 11" x 17" format. Coordinate with the Project Manager on the number of paper copies. The number will depend on the plan components and review timeline. Expect to need to furnish four plan sets for each stage of the review.
- 2) Copies of the Proposal and/or Special Provisions. Special Provisions and the construction plans are submitted together for review to each MnDOT functional area. Each MnDOT functional area reviews its part of the Special Provisions for accuracy and completeness. For more information regarding the Special Provisions for a Trunk Highway project visit the MnDOT Technical Support Proposal Sequence website at: <http://www.dot.state.mn.us/pre-letting/prov/sequence.html>. Note that sections 1714, 1716 and 1718 will also need to be added. Coordinate with the Project Manager on provisions required and number of copies. Usually you will need half the number of copies as plans submitted.
 - a. Key functional groups that need Special Provisions include:
 1. Traffic (signal, signing, lighting, etc. specifications, Traffic Management Plan)
 2. Design (for unique or modified items like impact attenuators, guardrail, etc.)
 3. RTMC for various items that may be affected by construction (ramp metering, loops, etc.)

4. Materials Office (bituminous, concrete, grading, base, etc. specifications)
 5. Construction (if MnDOT is performing inspection - review will include “Time and Traffic”)
- b. Proposals must include the administrative information as well as technical (Schedule of Materials Control, Wage Rates, EEO/DBE, etc.). Do not re-write provisions provided by others. See the State and Federal wage requirement updating criteria at: <http://www.dot.state.mn.us/const/labor/contract-admin.html>
 - c. Incorporation by reference is allowable for some items but references should not be made to websites.
- 3) 1 electronic copy of the Engineer’s Estimate (Excel format). MnDOT’s Office of Technical Support maintains the Trns*port list. Technical Support has the list available as a downloadable file. The address is:
<http://bidlet.dot.state.mn.us/ItemSearch.aspx> or
<http://bidlet.dot.state.mn.us/english2016.aspx> (direct link to table)

Reasons for requiring Trns*port based pay items:

- a. The Trns*port item number and description is consistent with the *MnDOT Standard Specification for Construction*. This is a regional standard that the Minnesota construction industry is familiar with and results in better bid prices with fewer change orders.
 - b. MnDOT personnel are familiar with Trns*port items and will be more comfortable seeing them during the plan and specification review process.
 - c. The schedule of prices submitted by each client is input by line number into Trns*port for use in bid analysis, and to recommend awards.
 - d. The Trns*port file can be used to enter the project into the Transportation Automated Control System (TRACS). This is required when MnDOT does the Contract Administration.
- 4) One electronic set or two paper sets of drainage area maps and hydraulic computations as determined by the Project Manager. Usually you will need one set for Water Resources and one for State Aid Bridge/Hydraulics units. The hydraulic cost split also needs to be determined at this time. The cost split should be performed by the local agency then confirmed by the Water Resources Office. Unnecessary delays or complications can be avoided by contacting the Water Resources Office prior to working on the final design.
- 5) One electronic copy or two paper copies of the Materials Design Recommendation (MDR), or information that makes up an MDR, along with boring logs, pavement recommendations, traffic forecasts and computations (including the R-value and ESALs).

Engineering data used in the design for each project is summarized in a project MDR. A link to guidelines for [developing an MDR](#) is contained in the Plan Content and Resource Information section of this guide. The requirements detailed in MnDOT’s “Consultant Specifications for Soils Surveys, Engineering Analysis, Laboratory and Field Soils Tests” also apply. This document is located on the MnDOT Metro District Office of Materials website at:

<http://www.dot.state.mn.us/metro/materials/soils.html> and the document link is:

<http://www.dot.state.mn.us/materials/pvmtdesign/docs/soilsinv.pdf>. Questions about this and the MDR should be directed to the Metro Materials Office. MnDOT uses MicroStation for design work and electronic documents submitted for a project should be in that format.

Construction plans that affect a Trunk Highway’s subgrade and surfacing or contain retaining walls on the Trunk Highway right of way are routed through the MnDOT Metro Materials Office or applicable unit of the MnDOT Materials and Road Research Office for review. There are a number of proactive steps that the designer can take to coordinate with the various divisions within the Materials Office that will ultimately speed up the final review of the plans. The following information and guidance can help in this process.

- a. Contact the MnDOT State Aid Project Manager early in the design phase and prior to field investigation/borings. They will assist in identifying and coordinating with the various Materials Offices. The more complex the project the more lead-time is required.

Significant planning can go into determining the location and number of borings as well as the number of samples to be retrieved for laboratory testing. Prior to taking borings, local agencies should submit a layout or drawing with proposed boring locations and depths for review by the Metro Materials Office. MnDOT may also have existing boring information that could be provided.

When planning the field investigation for a particular project the following are needed (at a minimum):

- Project layout or concept drawing – a MnDOT staff approved layout, as applicable, is preferred.
- Profiles showing both the existing ground line and proposed grade. This is needed for all roadways to be included in the MDR.
- Cross sections showing both the existing ground line and proposed grade for widened areas along existing roads, swamp areas and areas where cuts or fills will be required. This is needed for all roadways to be included in the MDR.

- b. An MDR submittal should include the following for review:
- Field soils investigation report
 - Roadway history, previous construction plans (typical sections, construction plans and layouts and profiles, etc.), maintenance record, etc. (work with Materials Office and the State Aid Project Manager on finding this information)
 - R value and ESAL calculations. Traffic forecasts if ESALs are unavailable.
 - Pavement surface type selection - pavement type needs to be justified and decision documented. Note that even for small projects, such as roundabouts, the surface type recommended needs to be justified based on Life Cycle Cost Analysis (LCCA) comparing different pavement types and designs. MnDOT is not required to use the low-cost option but needs to document reasons for choosing another option. The LCCA documentation must accompany the MDR for the project.
 - Locations of large hydraulic structures, noise wall locations and heights, ponding areas, utilities, and construction staging and bypasses.

- 6) A Right-of-Way Compliance Letter is required for any project that involves R/W acquisition (permanent, temporary or construction), a sample of which is contained in the Design Resources section of this guide.

Please submit an e-mail to your State Aid Project Manager with Adobe .pdf attachments of all easements and new right-of-way documents acquired outside of the existing R/W limits. This documentation may include but is not limited to: deeds, easements, inter-agency agreements, condemnation documents, and plats. Note that “Permits to Construct” and “Right of Entry” documents are not acceptable documents since they may be rescinded and are not binding on the property owner. Contact the State Aid Project Manager and the Metro Right-of-Way Office if you are having difficulty acquiring right of way or any other right of way issues.

If you have any questions on the documentation requirements, contact your Project Manager who will put you into contact with the appropriate staff person in the Metro R/W Office.

- 7) 2 copies of approved permits from all Regulatory Agents including but not limited to, the Corps of Engineers, DNR, PCA, Watersheds. If you do not yet have approved permits, you may submit permit applications although the permits will need to be in-hand before construction can begin.
- 8) All trunk highway bridges will require approval of the preliminary bridge plan before a final bridge is prepared. All trunk highway bridges will require review and approval of foundation recommendations as part of the preliminary plan approval. If the bridge is to be

owned by a local agency and carries trunk highway traffic, a permit will need to be completed. The Bridge Office will review and sign off on this permit assuming all permit requirements are met.

- 9) Laboratory Testing and Inspection Services Form - See the Metro State Aid Website, follow the “Federal/State Aid Construction” link along the top and click on the relevant link under the “Forms” link along the side. A direct link is:
<http://www.dot.state.mn.us/stateaid/other/lab-testing-plant-inspection-request.docx>

This form is required whether MnDOT’s lab services will be used for the project or not. If MnDOT’s services are utilized, the administering agency will be billed for these services. Quality Assurance validation sample testing is also subject to billing.

- 10) If the project involves roadwork and signal system work, additional material including signal plans may be required. If the project involves only signal work, the materials in steps 4, 5, 6 and 8 may not be required.
- 11) One copy of the Utility Coordination Certificate. The form and associated project manager checklist is available on the MnDOT Utility Agreements website:
www.dot.state.mn.us/utility/index.html . See the Design Resources section on page 31 for more information.
- 12) Additional information will be required if the project involves State Aid or Federal Aid funding. Contact the Metro District State Aid Project Manager with specific questions.

II. What happens to the submitted materials?

The Plan and corresponding documents are routed for comment to a number of functional areas within the Metro District as well as some within the Central Office, these areas include:

Area Manager & Engineer	Planning	Design
Right-of-Way (R/W)	Permits	Water Resources
Maintenance Operations	Materials	State Aid/Federal Aid
C.O. Traffic Engineering	C.O. Bridge	C.O. Freight, Rail and Waterways
Traffic Engineering	C.O. Utility Agreements	C.O. Environmental Stewardship
- Traffic Signals	C.O. ADA	Municipal Agreements
- Traffic Studies	Construction	
- Traffic Services	Materials & Road Research (for concrete pavement)	
Regional Traffic Management Center (RTMC)		

Notes:

- 1) Surveys will also review if MnDOT is performing this function.
- 2) Review comments from all functional areas are compiled. Comments are summarized in a review letter from the Cooperative Agreement project manager (State Aid and Federal Aid project comments may be submitted in a separate review letter). Comments may include redline plan sheets. Highly technical comments may require phone conversations, meetings, etc. Comments from individual functional areas can be emailed upon request prior to the review letter being sent.
- 3) Preliminary plan reviews will take from 4 to 10 weeks. The completeness and quality of the initial plan submitted will also affect the time required for review.
- 4) Plans may need to be re-routed through some of the Metro functional groups to ensure that their comments have been addressed. This re-routing will increase the overall review time.

III. Plan Revision and Final Plan Submittal by the Local Agency

When all comments have been addressed and incorporated into the Plan and Special Provisions, the following should be included in the final submittal to Metro:

- 1) A response letter from the designer addressing (in detail) each comment contained in the review letter. Have all the recommended changes been made, and if they were not, why not? Have any significant design changes been made? Include an explanation of any other issues detailed in the review letter.
- 2) A full plan set designated as "original." This needs to be a crisp, clean copy on good quality paper and include signatures from designer, City and/or County officials. The original set must be loose (unbound and unstapled) although securing with a binder clip is advised. **The title sheet must be Mylar or vellum.**
- 3) 5 hardcopies of the plan sheets, 11" x 17" format. It is preferred that these sets are not bound but instead held together with a binder clip as well.

These copies go to the Metro Cooperative Agreements Unit and will be distributed to:

C.O. Municipal Agreements	C.O. Land Management
C.O. Design/Estimating	Metro District

An additional copy for a functional area making a special request.

- 4) 3 hardcopies of the Proposal & Special Provisions.
- 5) 1 electronic copy of the revised Engineer's Estimate (Excel format).
- 6) 1-3 sets of approved drainage computations (unless previously submitted).
- 7) 1 electronic (pdf) copy of all R/W documentation (unless previously submitted).
- 8) Additional documents which may be required if Federal or State Aid funding is included in the plan.
- 9) Laboratory Testing and Inspection Services Request form (unless previously submitted).
- 10) A CAD version of the signal plan for the Metro Traffic database (if signal work is included). Drawings in MicroStation format is preferred.

- 11) Copies of any permits received (Corps of Engineers, NPDES, DNR etc.).
- 12) 2 color copies of the cost participation layout, and maintenance/ownership layout as applicable, showing all participating agencies. See [Color Code for Cost Participation](#) in the Agreement Process section.
- 13) A signed Utility Certificate form certifying that the requirements of Minnesota Statutes 216D.04 have been satisfied. A Project Manager checklist and the certificate form are available at the MnDOT Utility Office website: <http://www.dot.state.mn.us/utility/index.html>. More information is found in the [Design Resources](#) section.

METRO STATE AID SIGNATURE BLOCK

Combinations of funding or jurisdiction will require different combinations of signatures.

☆ FOR COOPERATIVE AGREEMENT PLANS

☺ FOR LOCAL AGENCY SOLICITED FEDERAL AID PLANS

● FOR STATE AID PLANS

* (Include the appropriate signatures when the project affects Materials, Water Resources or Traffic on any portion of the trunk highway right of way.)

☆ ☺ ● Approved _____ 20_____

CITY OF _____ ENGINEER

☆ ☺ ● Approved _____ 20_____

_____ COUNTY ENGINEER

☆ Recommended for Approval _____ 20_____

DISTRICT TRANSPORTATION ENGINEER

☆ * Recommended for Approval _____ 20_____

DISTRICT MATERIALS ENGINEER

☆ * Recommended for Approval _____ 20_____

WATER RESOURCES/HYDRAULICS ENGINEER

☆ * Recommended for Approval _____ 20_____

DISTRICT TRAFFIC ENGINEER

☆ Recommended for Approval _____ 20_____

STATE PRE-LETTING ENGINEER

☆ Office of Land Management Approval _____ 20_____

DIRECTOR, LAND MANAGEMENT

☆ Approved _____ 20_____

STATE DESIGN ENGINEER

☺ _____ 20_____

DISTRICT STATE AID ENGINEER: REVIEWED FOR
COMPLIANCE WITH STATE AID AND/OR FEDERAL AID RULES/POLICY (*)

☺ _____ 20_____

APPROVED FOR STATE AID AND/OR FEDERAL AID FUNDING: STATE AID ENGINEER (*)

● _____ 20_____

DISTRICT STATE AID ENGINEER: REVIEWED FOR
COMPLIANCE WITH STATE AID RULES/POLICY

● _____ 20_____

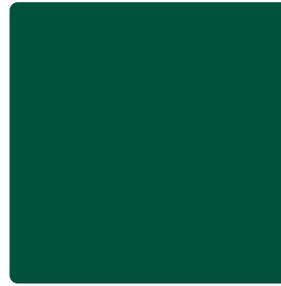
APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER

(*) This portion will be modified when State Aid and/or Federal Aid funds are used for part of the local match.

For plans that contain *both Federal Aid and State Aid funding*, use the required Federal Aid signatures shown above. The City/County Engineer (or approved designee) must sign the plan to approve the use of Federal Aid or State Aid funds.

If a route is shared by more than one City or County, a signature is required from each.

If work will be done on or impacts another agency's right of way, approval by that agency is required.



M I N N E S O T A D E P A R T M E N T O F T R A N S P O R T A T I O N

Plan Content and Resource Information



MnDOT WEB SITES AND LINKS



MnDOT's main web page is <http://www.dot.state.mn.us/>

The links to "Topics A-Z" or "MnDOT A to Z" lead to a useful list of various resources.

Metropolitan District Office of State Aid

The Metro State Aid Office Web address is:

<http://www.dot.state.mn.us/metro/stateaid/home.html>

The following information/links can be obtained from our site.

The main home page has links to Metro State Aid sub-sections with the following information/links:

Cooperative Agreements

- MnDOT Standard Plans and Standard Plates
- Forms required during plan submittal
- Cost Participation Manual

Federal/State Aid Construction

- Downloadable State Aid & Federal Aid Forms - Commonly used State Aid and Federal Aid forms in Word, Excel or PDF format.
- State Aid Manual - link to State Aid Manual, view online or download
- DCP Guidelines and Final Checklist – Delegated Contract Process checklist and forms (only needed if using Federal funds)
- MnDOT Contract Administration Manual, Schedule of Materials Control and other useful tools and web pages

State Aid

- Design Guide for State Aid Projects
- State Aid Rules - link to the Reviser of Statutes site
- State Aid Training - Information on past and upcoming training seminars for State Aid, Federal Aid and Cooperative Agreement Projects

Other Important MnDOT Web Sites

Office of Materials and Road Research http://www.dot.state.mn.us/materials/index.html	Bid Letting http://www.dot.state.mn.us/bidlet/
Office of Environmental Stewardship http://www.dot.state.mn.us/environment/	Office of Land Management http://www.dot.state.mn.us/landmanagement/
Metro Traffic Engineering http://www.dot.state.mn.us/metro/trafficeng	Metro District Final Design http://www.dot.state.mn.us/metro/finaldesign/
Office of Bridges and Structures http://www.dot.state.mn.us/bridge/	MnDOT State Aid for Local Transportation (SALT) http://www.dot.state.mn.us/stateaid/

Design Resources

The following is a list of resources that will be helpful to designers who may not be familiar with producing plans to MnDOT Trunk Highway standards. Designers are encouraged to use these resources and to work closely with the State Aid Project Manager and Metro Program Delivery Area Manager or Area Engineer in order to develop plans to the required standards.

TECHNICAL MEMORANDUMS (TM)

A Technical Memorandum (TM) is a temporary, usually brief, document intended to expedite official change in technical policy; to provide interim or temporary technical guidance; to provide essential technical information until a technical manual, standard drawings, or specification is officially issued or updated, or until the need for the guidance has ended.

MnDOT's Engineering Services Division issues these Technical Memorandums to a wide customer base. This includes all MnDOT technical areas, municipalities and counties. The Engineering Services Division issues several dozen TMs a year. The reader should be aware of the importance that these TMs play in approving plans by MnDOT.

The responsibility for the TM System is assigned to MnDOT's Office of Project Management and Technical Support. The Web Address is: <http://techmemos.dot.state.mn.us/>

MnDOT DESIGN SCENE

The *Design Scene* is a means to communicate with all designers, technicians and engineers. It is very helpful in providing plan development guidance. Ideas are expressed, information assembled and distributed through this document to assist the designer in their everyday assignments. A copy of the *Design Scene* can be viewed or downloaded from this site: <http://www.dot.state.mn.us/pre-letting/scene/index.html>.

UTILITY COORDINATION AND INPLACE UTILITIES IN PLANS

The Minnesota Legislature has enacted legislation that requires utility identification and coordination. Underground utilities must be shown in any plan that includes excavation. The construction plans must show the size, type, and location of any underground utilities in the area of the excavation. It also requires that this information be verified within 90 days of completion of the plans. A Utility Coordination Certificate must be submitted with the plans. The certificate addresses completion of the statutory requirements on utility coordination.

Steps required for Local Agencies and design Consultants to follow during the design process can be found on Land Management's **Consultants** web page:

<http://www.dot.state.mn.us/utility/consultants.html>

Step-by-step guidance for performing utility coordination is found in the **MnDOT Utilities Manual** (also known as the *Utility Accommodation & Coordination Manual*).

A useful form to ensure that utility coordination steps were adequately taken is the Consultant Checklist (under "Requirements"): <http://www.dot.state.mn.us/utility/consultants.html>

and a form required with the final plan submittal is the MnDOT Utility Certification Form: <http://www.dot.state.mn.us/metro/stateaid/cooperat.html> (under Forms and Resources)

RIGHT-OF-WAY DOCUMENTATION

A Right-of-Way Compliance Letter is required, a sample of which is shown on page 34. You will note that this Letter indicates that all Right-of-Way for this project has been acquired in accordance with FHWA and State of Minnesota directives covering acquisition of real property. The following is an excerpt from the State Aid Manual, Chapter 5.2 – Right-of-Way.

Minnesota Statutes 117.51 and Minnesota Statutes 117.52 require "acquiring authorities" to meet the provisions of federal law titled the Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended (aka Uniform Act, or simply The Act), together with those regulations which implement The Act. Conformance with applicable federal policies and regulations are therefore required on all city and county acquisitions, regardless of funding sources.

All local agencies acquiring R/W should have available, as a reference, the Project Development Guide, prepared and made available by the FHWA. It contains The Uniform Act and 49CFR Part 24 (the Federal regulations which implement The Act), together with other guidance on how to acquire R/W.

This and other regulatory and guidance materials are available on the FHWA Real Estate webpage. This site also contains links to The Uniform Act and to 49 CFR Part 24, which is the federal regulation issued to implement The Act.

Please submit an e-mail to your State Aid Project Manager with Adobe .pdf attachments of all easements and new right-of-way documents acquired outside of the existing R/W limits. This documentation may include, but is not limited to: deeds, easements, inter-agency agreements, condemnation documents, and plats. Note that "Permits to Construct" and "Right of Entry" documents are not acceptable documents since they are rescindable and are not binding on the property owner. Contact the State Aid Project Manager and the Metro Right-of-Way Office if you are having difficulty acquiring right of way or any other right of way issues.

SAMPLE PLANS, CHECKLISTS AND GENERAL INFORMATION

Metro Design offers a series of sample plan sheets as well as mid-point plan review checklists to help guide designers in producing a plan set that meets MnDOT Trunk Highway standards.

<http://www.dot.state.mn.us/metro/finaldesign/sampleplan.html>

Designers should only use the phrase “install” on plans if the contractor is expected to place material furnished by the State or Local Agency, or material salvaged from elsewhere on the project. If the intent is for the contractor to furnish and install materials, use the words “place,” “construct,” or just call out the item (e.g. HYDRANT).

Proprietary Items - If you wish to call for a specific make, model or manufacturer of an item, you will need to complete and receive approval of a Public Interest Finding (PIF) memo specifying the rationale for using the specific item. This may be appropriate if you need to match a particular light pole style or model of hydrant in a community. Do not call out a specific manufacturer if there is a generic or MnDOT standard alternative. (For example, specify a MnDOT B-1 casting assembly instead of calling for a NEENAH R-3250-A casting.) It is not acceptable to MnDOT Trunk Highway or FHWA standards to call for a specific model and say “or approved equal.” You may use this approach if you specify at least three separate manufacturers. Work with your State Aid Project Manager if you have questions.

Sample Right-of-Way Compliance Letter

(Submit with documentation)

Use this format for state funded projects **ONLY** and on appropriate letterhead for City/County

State Project No. _____

[Date]

Ms. Debra M. Anderson, P.E.
MnDOT Metro District Right-of-Way Engineer
1500 West County Road B2
Roseville, MN 55113-3174

Dear Ms. Anderson:

I certify that all Right-of-Way for this project has been acquired in accordance with current FHWA and State of Minnesota directive(s) covering acquisition of real property and that all necessary Right-of-Way, including control of access rights when pertinent, have been acquired including legal and physical possession. Trial or appeal of cases may be pending in court but legal possession has been obtained. There may be some improvements remaining on the Right-of-Way, but all occupants have vacated the lands and improvements and the City/County has physical possession and the rights to remove, salvage, or demolish these improvements and enter on all land.

Number of parcels, including easements, on the Project _____
(Attach copy of each Easement and Deed)

Number of parcels acquired by condemnation _____

Hearing on Petition Date (/ /)

Title and Possession Date (/ /)

(Attach copy of Order and Evidence of Payment made)

Number of parcels secured by permit and/or Agreement for construction _____
(Attach copy of each)

(City/County) Agency Engineer

Date

I concur that all Right-of-Way has been acquired for this project.

MnDOT District Right-of-Way Engineer

Date

State Aid, Federal Aid & Cooperative Agreement Projects R/W Layout and Plan Routing Checklist

S.P. _____ **Project Description** _____

Date sent to R/W _____ **Date due back to State Aid** _____

N.A. Copy of Existing R/W map
R/W outlined in one color and access control in another color

N.A. Controlled Access issues?
If checked, what are they?

<input type="checkbox"/> N.A.	<input type="checkbox"/> Any other special types of R/W in a third color	<u>Comments</u>
	Permanent Easements	<input type="checkbox"/> N.A.
	Temporary Easements	<input type="checkbox"/> N.A.
	Drainage Easements	<input type="checkbox"/> N.A.
	Scenic Easements	<input type="checkbox"/> N.A.
	Utility Easements	<input type="checkbox"/> N.A.
	Trail Easements	<input type="checkbox"/> N.A.
	Other _____	<input type="checkbox"/> N.A.

N.A. Date of map information

N.A. Commissioner's Orders checked

Is there R/W information missing from the plan or layout? Yes No N.A.
Explain:

Is there inaccurate R/W information on the plan or layout? Yes No N.A.
Explain:

Are there R/W encroachments? (Drainage easements, ponding areas, etc.)
 Yes No N.A.
Explain:

N.A. Limited Use Permit exists
Explain:

N.A. New Limited Use Permit is required
Explain:

N.A. Existing Limited Use Permit must be revised
Explain:

N.A. Right of Way Certificate No. 1 required (only Federal Aid Projects)
When is it required?:
Issues:

Other R/W Comments or Recommendations:

Prorata Items in Construction Plans Involving Cooperative Construction

Some items used or called for on a cooperative construction project should have the costs prorated across the various agencies that contribute funds for construction. Proration distributes the cost of items, such as mobilization and field offices, among the various funding groups so that the municipality shares in the cost of these items. Some Districts have been prorating items such as computer equipment and cellular phones, while other Districts have not. After discussion with Construction personnel regarding how this equipment is used, the Municipal Agreements Unit has determined that only the following items should be prorated:

Mobilization	Lump Sum
Field Office	Each
Field Laboratory	Each
Traffic Control	Lump Sum

As has been the practice in the past, the prorata percentage for each funding split is to be computed to two decimal places and tabulated on the estimated quantities sheet. The designer is to use estimated quantities and estimated prices to compute the prorata percentages.

Maintenance and restoration of haul roads, which has been prorated in the past, will no longer be prorated because of the small costs associated with this item.

Item such as computer equipment, survey equipment, cellular phones, pickup trucks, etc. will be considered to have no direct municipal participation. These items will be considered to be part of the construction engineering charge.

Special circumstances may justify an exception to these procedures. These situations should be reviewed with the Municipal Agreements Unit, and the determination of how to handle such exceptions will be made on a case-by case basis.

See chapter 2 of the *Design Scene* for guidance on how to compute and apply pro-rata percentages. <http://www.dot.state.mn.us/pre-letting/scene/docs/chapter2.pdf>

TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL REQUIREMENTS ON COOPERATIVE AGREEMENT PLANS

MnDOT requires that standard plans, details and specifications be incorporated into the construction plan documents. An erosion and sediment control strategy must be developed for projects that require erosion and sediment control plan sheets. Examples of these types of projects include grading, bridge replacement or widening, culvert replacement in waterways, work immediately adjacent to wetlands, and land disturbance of one acre or more. Types of projects that typically do not require prepared erosion and sediment control plan sheets are mill and overlay projects and minor shouldering work. The exception occurs when the vegetative land disturbance adds up to one acre or more, thus requiring an NPDES permit. The NPDES permit also requires development of a Storm Water Pollution Prevention Plan (SWPPP) which must be incorporated in the construction plans. For projects that do not warrant specific erosion and sediment control plan sheets, bid items and locations for the re-establishment of turf should be included.

The erosion and sediment control plan sheets should address both temporary and permanent erosion and sediment control devices. All temporary seeding and temporary erosion and sediment control should be shown on the drainage plan sheets. Thus, riprap, pipe flumes or down drains, temporary seeding, temporary mulching and temporary blanket should be indicated on the same sheets as the silt fence, biorolls, sediment basins, etc. along with the drainage system. The permanent erosion control plan sheets should show the permanent turf establishment, indicating such things as sod, permanent seeding, mulching, blanket, fertilizer, etc.

Pay items must be included for both Storm Water Management (Spec. 2573) during construction and Controlling Erosion and Establishing Vegetation (Spec. 2501, 2511, 2575, etc.) for the final work. Having pay items, rather than making devices incidental, will result in a higher compliance rate with the NPDES permit. Approximate locations and quantities of the various devices must be indicated. Even though the methods used to construct certain portions of the project may not be known, estimated locations and quantities of the various temporary devices still need to be shown and provided. The Engineer in the field can adjust the locations of the devices as needed.

Extra emphasis should be placed in critical areas where construction runoff discharges directly into a river, lake, or wetland. Tools to assist with erosion control in these areas are Rapid Stabilization methods (Spec. 2575). There are five different methods of rapid stabilization. Each critical area should be marked with the intended rapid stabilization method to be used. The Statement of Estimated Quantities should list the total area covered under each method. A tab sheet should be included, similar to drainage tab sheets, which indicate each rapid stabilization

station location and offset if necessary, method to be used, and estimated location quantity. The areas should also be identified on the drainage sheets. Individual quantities on the tab sheet are important for the contractor to be able to bid this work appropriately.

The Office of Environmental Stewardship has a useful webpage of design resources located at <http://www.dot.state.mn.us/environment/erosion/index.html>. This webpage has links to information on seed mixes, seeding manuals, relevant standard plan sheets and specifications among other helpful tools.

1. MnDOT uses the following standard plans as applicable in the construction plan sheets. These can be accessed at <http://standardplans.dot.state.mn.us/stdplan.aspx>
 - a. 5-297.404PERMANENT EROSION CONTROL
 - b. 5-297.405 (seven sheets)TEMPORARY SEDIMENT CONTROL [*Only include in the plans sheets that are relevant to construction.*]
 - c. 5-297.407PERMANENT SEDIMENT CONTROL (Bioengineering Soil Stabilization)
2. Additional detailed drawings may be necessary for items that the lead agency may want to include in the construction plan or other agencies require for permit approval; for example, temporary construction entrance, dewatering methods, stockpile protection, etc.
3. The Minnesota Pollution Control Agency (MPCA) requires an NPDES permit for projects that disturb one acre or more of total land area. The lead agency should use the MPCA's application for the General Storm Water Permit for Construction Activity. The general permit, application form, application instructions, inspection log and notice of terminations can be downloaded from the web. Visit www.pca.state.mn.us. Navigate through the site by clicking key words such as water, permits, storm water, and construction activity to locate the Stormwater Program for Construction Activity. Some items to pay attention to are: On Site Spill Kits, Designated Concrete Cleanup Areas, Timeliness of Turf Establishment and Inspection Logs.
4. MnDOT's boiler plate Special Provisions include changes or additions to the Standard Specifications for Construction. Portions of the special provisions are intended to be used on an as need basis for individual projects. The Special Provisions can be accessed through MnDOT's A-Z Index or through links mentioned elsewhere in this document.
5. MnDOT's Environmental Stewardship's Erosion & Stormwater Management Unit gives guidance on erosion control issues when a construction project affects a trunk highway and its right of way.

6. Additional design guidance for erosion and sediment control devices can be found in MnDOT's Road Design Manual- Chapter 8 and the Standard Specifications for Construction.
7. The NPDES Permit requires development of a Storm Water Pollution Prevention Plan (SWPPP) for every permitted project. For MnDOT projects, the SWPPP Plan must be incorporated into the Construction Plan package.

MATERIALS DESIGN RECOMMENDATION

(MDR, formerly called "Soils Letter")

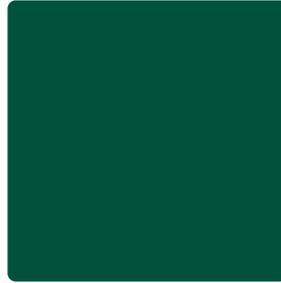
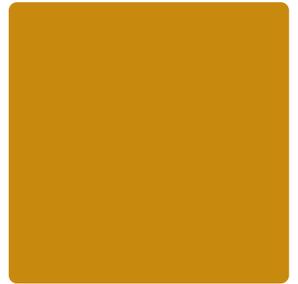
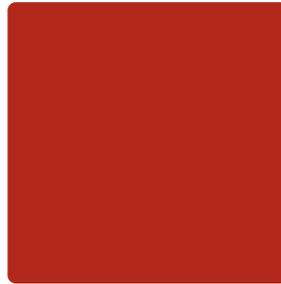
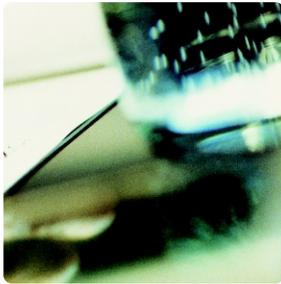
The MDR is a summary of the project geotechnical and pavement survey information, as well as the information used to develop the project design. It is required for any project that has more than a minimum of bituminous patching work. The MDR includes all of the design and construction recommendations developed for the project, including any alternatives. An MDR needs to be prepared for each project by the project proposer or their materials consultant. It is submitted to the State Aid Project Manager and District Materials office for review and comment.

GUIDELINES

A template for an MDR can be found on the MnDOT Pavement Design webpage.

<http://www.dot.state.mn.us/materials/pvmtdesign/docs/index.html>

The objective of preparing an MDR is to summarize *all* of the pertinent information that is used in the development of a design, so the template covers many topics that may not need to be addressed on each and every individual project.



M I N N E S O T A D E P A R T M E N T O F T R A N S P O R T A T I O N

Agreement Process

COOPERATIVE CONSTRUCTION AGREEMENT PROCESS

I. Agreement Request and Execution

If all plan review comments have been satisfactorily addressed and all required documentation was included in the final submittal, you can expect the following to happen:

1. The plan, specifications, estimate and other supporting documentation are submitted to the Central Office Municipal Agreements Unit along with agreement request. See the following agreement submittal checklists. The Cooperative Agreements Project Manager will complete the checklist and accompanying memo using information provided by the Local Agency.
2. The agreement will be prepared. Approximately 3 to 7 weeks are required depending upon the Municipal Agreements Unit workload and the complexity of the project.
3. The plan will be routed through the Offices of Project Management & Technical Support, Land Management, and State Aid (if needed) for final review and signatures. Minor revisions are typically necessary in which case the designer will be contacted. When fully approved, the original signed plan is sent back to the designer.
4. The agreement will be submitted to the local agency to be presented to the City Council or County Board for approval. **A resolution authorizing the agreement is required. Several original copies must be NOTARIZED or STAMPED with the city or county seal.** Suggested phrasing for the resolution will be provided to the local agency along with the agreement. This process may take between 2 and 12 weeks depending on the local agency processing requirements.
5. After execution by the local agency, the agreement is returned to Metro State Aid for the District signature.
6. The agreement is then forwarded to the CO Municipal Agreements Unit for final signatures from MnDOT, the Department of Administration and the Attorney General. This signature process takes approximately 1 to 3 weeks.

Note: For a detailed description of the traffic signal system plan approval, SJR approval and agreement process, contact the Metro District Traffic Engineering Section Signal Design Unit.

II. Process after Agreement has been executed

1. Advertising for Bids - The Local Agency should follow their normal advertising practices. Typically this involves publishing once a week for three successive weeks in the case of a County contract and for two successive weeks in the case of a Town contract, the last publication to be made at least ten days before the time fixed for receiving bids and letting the contract (Minnesota Statute 160.17); or publication shall be made no less than three weeks before the last day for submission of bids for City contracts over \$200,000 (Minnesota

Statute 429.041). Check with your attorney if you have questions regarding legal issues for bidding.

2. Bid Opening – Bid opening (letting) shall not occur until the local government unit (LGU) has executed the agreement.

The reason for this requirement is because normal practice is to award a construction contract within 30 days of bid opening. It is very difficult to both obtain the LGU resolution and to obtain MnDOT signatures on the agreement within 30 days.

3. Prior to the award of the contract the Local Agency shall submit an abstract of bids and the certified low bid to Metro State Aid Office for concurrence in the award. Award of Contract must not occur prior to concurrence in the award and execution of the agreement by MnDOT.
4. Metro District reviews the low bid and contacts Central Office Estimating regarding any concerns.
5. Metro District concurs in low bid and submits low bid information to Municipal Agreements Unit as well as a concurrence letter to the LGU supporting the award of the contract to the low bidder.
6. Award of Contract by the Local Agency.
7. If being utilized, the Municipal Agreements Unit revises the Schedule “T” within the agreement to reflect the actual bid prices for the project.
8. The fully executed agreement is sent to the Local Agency, which constitutes MnDOT’s formal concurrence in the award. A copy of the fully executed agreement and payment processing package is furnished to the local agency within approximately 2 to 4 weeks.

***** GOLDEN RULES *****

1. Advertise only after MnDOT has signed the plan.
2. Open Bids only after the local agency has signed the agreement.
3. Award only after the agreement is fully executed and MnDOT has concurred in the award.

The basis for these requirements are Minnesota Statutes §16A.15 and §16C.05. Statute 16A.15 states that a payment may not be made without the funds being properly obligated. Statute 16C.05 states that contract work may not begin until after the contract has been properly executed.

Minnesota Department of Transportation
Municipal Agreements Unit

AGREEMENT SUBMITTAL CHECK LIST

Agreement No. _____

Prepared by: _____ Phone: _____ Date: _____

Local Agency: _____ S.P. _____ (T.H. _____) S.P. _____ (T.H. _____)

Letting Date: _____ Construction Start Date: _____ Construction Completion Date: _____

City Council or County Board meeting dates: _____

Local Agency's authorized agent for the administration of this agreement:

Name, Title, Phone No.: _____

Address: _____

Yes _____% No Will Federal Funds be applied to the MnDOT cost portion of the cooperative construction?

Yes _____% No Will Federal Funds be applied to the Local Agency cost portion of the cooperative construction?

STIP Ref. No. _____ STIP Years _____

Yes No Are there any "Exceptions to the Cost Participation Policy?"

If yes, attach approvals, including a completed "Exception to the Cost Participation Policy" Memo.

Cost Participation Policy and Exception Memo are located at <http://ihub/projectdelivery/cooperative/index.html> .

Which of the following methods was used to compute the payment amount? (*More than one method can apply*)

Schedule "I" Lump Sum on Bid Prices Composite Percentage

Lump Sum: \$ _____ for construction, \$ _____ for construction engineering

Other – Explain: _____

Project to be let and administered by: MnDOT Local Agency

Construction Engineering to be performed by: MnDOT Local Agency Split C.E. (Explain in Comments)

For Local Let Projects:

Yes No With Const. Eng. by MnDOT, do Pay Items need to go into TRNS*PORT?

Yes No New Right of Way to be taken in by MnDOT? Submit appropriate EIU form

Yes No Did the project require an approved Level 1 or Level 2 geometric layout?

Yes No Is Funding approved by the Office of Transportation System Management (OTSM)?

Yes No Road closure or detour required? If yes, District PM or LGA must notify District Dispatch

Submit [Utility Identification and Coordination Checklist](#)

Submit (QMP) Quality Control Check Process Form (Located on [Coop Agreement Website](#))

List all other agreements associated with this project below: *Include Agreement No. and Local Agency name.*

Traffic (Signal) _____ Traffic (Signal + Lighting) _____

Railroad _____ Detour(s) _____

Other (s) _____

Comments: _____

Minnesota Department of Transportation
Municipal Agreements Unit

Submit the following information to the Municipal Agreements Unit
Central Office, 6th Floor, Mailstop 682

STATE LET PROJECT

- One set of colored plan sheets showing the Local Agency's participation.
- A cost split (Schedule "I"), which lists the quantities by percentages of participation and estimated prices.
 - Please send an electronic version also.
- Correspondence indicating the Local Agency understands and is in agreement with the cost share splits.
- Copy of any Limited Use Permit(s) required for bikeways, multi-use trails, and certain aesthetic elements (bike racks, benches, kiosks, bollards, etc) located within MnDOT right of way.

Comments:

MUNICIPAL LET PROJECT

- SWIFT Project Costing for pre-construction general information page or copy of the Phase P Project Authorization Form (TC08) for each State Project.
- Signed resolution from Local Agency - Dated: _____ Or a Delegation of Authority
- PLANS & ESTIMATES
 - District approved Original Plan that contains the appropriate District signatures with Velum Title Sheet.
 - Four (4) sets of plans and two (2) proposals.
 - One set of colored plan sheets showing the State's participation.
 - One electronic copy of the itemized engineer's cost estimate for the entire contract..
 - A tabulation of quantities by the various percentages of cost participation.
- UTILITY INFORMATION (["Utility Coordination Process"](#))
 - A completed Utility Certification Form (Located on [Coop Agreement Website](#))
 - [Utility Identification and Coordination Checklist](#)
 - Copy of the front sheet of the Utility Permit Application for new or relocated local utility installations. (Includes, water, sanitary sewer, lighting, City-owned storm sewer systems or grit chambers, and any City-owned gas, electric, or other utility systems within the T.H. right of way)
- Copy of any Limited Use Permit(s), if required, for bikeways, multi-use trails and certain aesthetic elements (bike racks, benches, kiosks, bollards, etc.) located within MnDOT right of way.

Comments:

Minnesota Department of Transportation
Municipal Agreements Unit

TURNBACK

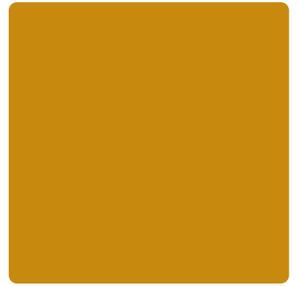
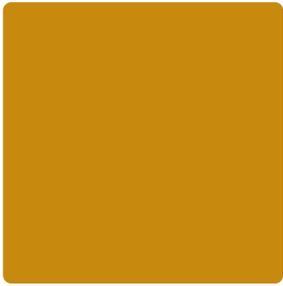
Will any streets or frontage roads on T.H. R/W be released? Yes No If Yes, explain:

Will any Local Agency acquired R/W become permanent T.H. R/W? Yes No

Minnesota Department of Transportation
Municipal Agreements Unit

**COLOR CODE
FOR COST PARTICIPATION**

100% State	Blue	
100% Local Agency	Yellow	
90% State - 10% Local Agency, or 60% State - 40% Local Agency	Green	
Storm Sewer Split: _____ % State - _____ % Local Agency	Orange	
50% State - 50% Local Agency	Red	
Other: _____ % State - _____ % Local Agency	Heliotrope	



M I N N E S O T A D E P A R T M E N T O F T R A N S P O R T A T I O N

Construction and Finaling Process

COOPERATIVE AGREEMENT PAYMENTS

I. Construction Process

- 1) Cooperative Agreement project construction contracts are administered by the local agency. This includes construction inspection. If the project is on the Interstate or National Highway System (NHS) MnDOT forces may handle the construction administration and inspection.
- 2) Local agencies must contact the Metro State Aid Construction Engineer shortly after bid letting to coordinate review procedures. Metro State Aid Construction staff must be invited to the preconstruction meeting held by the local agency. Coordinate with your State Aid Project Manager regarding additional people to invite.
- 3) During construction, the local agency must provide documentation to the Metro State Aid Construction staff and receive prior approval regarding all contract changes that would affect project costs. (This includes Supplemental Agreements, Work Orders or Change Orders.) Note that most Cooperative Agreement projects are capped at a maximum participation amount and additional MnDOT funds will not be provided. For projects where additional funding is available, approvals and encumbrance of funds must occur before the work is completed. Check with your State Aid Project Manager or the State Aid Construction staff for project specific details before proceeding with contract changes.
- 4) The local agency must confer with the appropriate MnDOT specialty office and get prior approval for any changes to the approved plans regarding traffic layout, staging, materials testing, geometrics or pavement sections.
- 5) The local agency is responsible for ensuring that the contractor meets the required specifications as stated in the Plans, Special Provisions, the current edition of the *Standard Specifications for Construction* and the latest *Contract Administration Manual*. The *Contract Administration Manual* can be found at:
<http://www.dot.state.mn.us/const/tools/conadminmanual.html>

The State Patrol and MnDOT Maintenance, Permit, and Construction offices may become involved if the work is on a Trunk Highway. They have the authority to stop work in the case of unsafe or improper conditions.

- 6) The local agency must also ensure that the materials testing is performed in accordance with the “Minnesota Department of Transportation Office of Materials Engineering, Schedule of Materials Control” included with the bid contract.

II. Payment Requests

The payment request is made directly to the Municipal Agreements Office after all terms of the Agreement are satisfied. Coordinate the payment request with the Metro State Aid Project Manager.

Agreements for state cost share on construction projects will require a certification that Local Agency has awarded the contract. See page 54 for a sample memo.

Eligibility of construction costs will be in accordance with the *Cost Participation and Maintenance with Local Units of Government Manual* located at:

<http://www.dot.state.mn.us/policy/financial/fm011.html>

Other requirements, if any, will vary by agreement.

Mail the Request for Advancement memo to:

Maryanne Kelly-Sonnek
Municipal Agreements Engineer
Minnesota Department of Transportation
395 John Ireland Blvd, MS 682
St. Paul, MN 55155

A. Payment Request Process for “Lump Sum Agreement” projects

“Lump Sum” agreements can be either a fixed dollar amount, an amount based on the cost estimate or an amount based on the actual bid prices. If the amount of construction costs eligible for State funding exceeds the amount that was budgeted or available, a simple lump sum payment will usually be made. If the amount of construction costs is less than the amount budgeted, Central Office Municipal Agreements will typically complete a Schedule “I” form to calculate the amount that will be paid. The Schedule “I” consists of the eligible bid items and the actual bid prices to calculate the amount that will be paid.

For “Lump Sum” projects, cost overruns are not typically reimbursed by MnDOT and minor cost underruns are not credited to MnDOT by the Local Agency.

A single payment is made after bid opening, concurrence, award and the request for payment. Coordinate the payment request with the Metro State Aid Project Manager.

Contact the State Aid Construction staff when ready for final inspection.

B. Payment Request Process for Schedule “T” projects

Initial Payment

Schedule “T” agreements are based on the final construction quantities and, accordingly, require more communication at the completion of a project. An initial payment request is made directly to the Municipal Agreements Office after all terms of the Agreement are satisfied. Coordinate the payment request with the Metro State Aid Project Manager. The initial payment is the estimated amount of construction costs minus a contingency amount.

Final Payment

Coordinate with the State Aid Construction staff when ready for final inspection.

See the enclosed instructions for initiating, routing and processing final agreement payments by MnDOT to a local agency (starting on page 57). These instructions are sent to the local agency when MnDOT formally concurs in the award, revises the Schedule “T”, and sends the fully executed agreement to the local agency.

The following items are included in this section as examples of paperwork provided with the instruction for processing the final agreement that is sent to the municipality:

- Instructions
- Sample invoice for final billing
- Sample project certification form
- Materials Certification Exceptions Sheet
- Modified Schedule “T” Sheet (example)

Note: The material submitted for the traffic signal agreements may vary from the above documents.

III. Preconstruction or Construction Kick-off Meeting

The Local Agency that is administering the construction contract **must** hold a Construction Kick-off Meeting or a Preconstruction Meeting prior to start of construction unless specific permission to skip the meeting is granted by the Metro State Aid Construction Staff or Metro State Aid Project Manager.

The following people need to be invited to the Kick-off or Preconstruction meeting:

Cooperative Agreement Construction staff
Labor Compliance representative
EEO Contract Compliance representative
ADA representative
Traffic Work Zone representative
Traffic Signal representative (if applicable)

Contact information for these people can be provided by the State Aid Project Manager.

***** SAMPLE INVOICE – USE TO REQUEST INITIAL PAYMENT*****

MUNICIPALITY
ADDRESS

Invoice No. #####

Date: #####

Maryanne Kelly-Sonnek
Municipal Agreements Engineer
Minnesota Department of Transportation
395 John Ireland Boulevard
MS 682
St. Paul, Minnesota 55155

RE: Coop. Const. Agreement No. #####
S.P #####-###
Name of Municipality

REQUEST FOR ADVANCEMENT

State's share of costs per Agreement No. ##### \$\$\$\$\$\$\$\$\$\$

In accordance with Cooperative Construction Agreement No. XXXXX, and Revised SCHEDULE 'I', The **City/County/Township** requests advancement of funds in the amount of \$\$\$\$\$\$.

I hereby certify that the construction contract for the above referenced project has been awarded by the **City Council/County Board/Township Board** on 'Date' to 'Contractor'.

XXXXXXXXXX XXXXXXXXXXXXX

Authorized **City/County or
Township** Official

Supplemental Agreements, Work Orders and Change Orders

For detailed information, please consult both the
Standard Specifications for Construction
<http://www.dot.state.mn.us/pre-letting/spec/index.html>
and the

Contract Administration Manual
<http://www.dot.state.mn.us/const/tools/conadminmanual.html>

Particularly pay attention to:

Section .350 Contract Changes - <http://www.dot.state.mn.us/const/tools/docs/sec-350.pdf>
Section .365 Municipal Agreements - <http://www.dot.state.mn.us/const/tools/docs/sec-365.pdf>

IMPORTANT!!!

In order to **ensure the participation of state funds** in any extra work performed, contact the Cooperative Agreement Construction Engineer prior to authorizing extra work.

Each of these items has a specific purpose, and they are generally not interchangeable with each other.

SUPPLEMENTAL AGREEMENT

Supplemental Agreements are used anytime additional work is added to a project because of a changed condition. Changed conditions are limited to differing site conditions, suspensions of work, and significant changes in the character of the work. Work is paid for according to negotiated prices or on a Force Account basis.

Work with the State Aid Cooperative Agreement Construction Staff to route draft copies of all Supplemental Agreements for language review and for unit price review. After obtaining preliminary approval of language and prices, submit the Supplemental Agreement to the Cooperative Agreements Construction Staff for final approval.

WORK ORDERS – MINOR EXTRA WORK (MEW)

A Work Order–MEW is used by the Engineer or Project Supervisor to direct the contractor to perform “minor extra work” in situations where there is no contract unit price for the work or

work item. The Work Order–MEW **is not** an agreement and **does not** authorize payment. Specification 1403 “Extra Work” authorizes payment for minor extra work necessary to complete the Contract as originally intended. The Special Provisions for each contract will state the maximum dollar allowed per work order occurrence.

The standard specification applicable to each contract will state the maximum dollar amount allowed per work order occurrence. Payment for minor extra work will be made by negotiated unit price or by Force Account. **Contact the Cooperative Agreements Construction Staff prior to authorizing any Minor Extra Work if state cost participation is anticipated. Approval is required from Metro State Aid Construction Engineer. Approval for negotiated unit prices from MnDOT’s Estimating Unit is mandatory where the total of the negotiated items exceed \$5,000.**

MnDOT Specification 1403 “Extra Work” authorizes payment for minor work necessary to complete the Contract as originally intended and the actual payment authorization occurs when the Engineer adds the Minor Extra Work items to the pay voucher as a backsheet item and certifies that the quantities are eligible for payment.

CHANGE ORDERS

Change Orders are used to address, among other things, documenting increases or decreases in quantities, documenting substitution of materials, documenting minor grade changes or recommendations from MnDOT or modifying the contract time. Change Order pay items must already exist in the contract and they are paid for at contract unit prices.

For Schedule “I” projects, if the project is over 95% complete, and/or the accumulated Change Orders will result in an increase of costs over the encumbered funds, you *must* receive approval for proposed work before completing said work. This is accomplished by working with the Cooperative Agreement Construction Staff to submit a request for Additional Encumbrance of Funds to the Metro State Aid Agreements and Payments Manager or the Metro State Aid Cooperative Agreements Engineer.

NOTE: Useful forms in this section can be viewed and downloaded at Metro State Aid Web page: <http://www.dot.state.mn.us/stateaid/construction-forms.html>

**INSTRUCTIONS FOR
INITIATING, ROUTING & PROCESSING
FINAL AGREEMENT PAYMENTS BY Mn/DOT TO A MUNICIPALITY**

*** NOTE *** This Payment Processing Package is furnished to the municipality along with its copy of the fully executed agreement. Said package contains:

1. **Payment Processing instructions.**
2. **Modified SCHEDULE "I" construction cost estimate form.**
3. **Sample: Contractor's Invoice.**
4. **Sample: Reproduced copy of both sides of the municipality's endorsed and cancelled warrant or check to the contractor.**
5. **Sample: Municipal Invoice.**
6. **Sample: Municipal and Mn/DOT Project Engineer Certification.**

STEP 1. MUNICIPALITY TO:

- a. **Specify on the top of the first sheet of the Modified SCHEDULE "I" form that the quantities listed, are the basis for a final payment.**
- b. **Fill in all of the blank quantity spaces in each percentage participation column of the Modified SCHEDULE "I" form (the applicable quantities of municipal contract construction work items performed).**

Construction work performed under change orders and/or supplemental agreements to the municipal contract is to be listed after the original contract work by item description, unit, unit price and quantity in the same manner as the original contract items. Each such additional item is to be identified with a specific change order or supplemental agreement number or designation.

- c. **Show on the Modified SCHEDULE "I" form the name and position of the person who furnished the construction work item quantities.**

*** NOTE *** Municipality NOT to complete the Modified SCHEDULE "I" form beyond the point described above.

- d. **Submit to the Mn/DOT District Representative, in the Office (telephone number) the following:**
1. **Two copies of the Modified SCHEDULE "I" form with quantities.**
 2. **Two copies of the appropriate contractor's invoice(s).**
 3. **Two copies of the appropriate endorsed and cancelled municipal warrant(s) or check(s) paying the aforesaid contractor's invoice(s).**
 4. **Two copies of all municipal contract change orders and/or supplemental agreements covering quantities of work listed in the Modified SCHEDULE "I" form. Each change order and/or supplemental agreement must identify the appropriate cost participation for the work contained therein.**

*** NOTE * Municipality does NOT prepare and submit an invoice at this time.**

STEP 2. Mn/DOT DISTRICT REPRESENTATIVE TO:

- a. **Check the construction work item quantities furnished by the municipality in the Modified SCHEDULE "I" form, and if acceptable, approve same by signing and dating form.**
- b. **Check all change orders and/or supplemental agreements to the municipal contract relative to State cost participation work represented in the Modified SCHEDULE "I" form, and, if acceptable, approve same by signing and dating each change order and/or supplemental agreement.**
- c. **Review all contractor's invoices and copies of endorsed and cancelled warrants or checks furnished by the municipality for obvious errors or omissions.**
- d. **Contact municipality concerning errors and/or omissions in connection with the documents furnished or not furnished by the municipality. The Central Office Municipal Agreements Section should be contacted if any questions arise concerning agreement provisions or payment processing.**
- e. **Submit to the Central Office Municipal Agreements Section (MailStop 682) one copy of the Modified SCHEDULE "I" form with quantities and ONE copy each of all other documents received from the municipality which are approved by, or acceptable to the Mn/DOT District Representative. The second copy of the documents is to be retained by the District Representative for future reference.**

*** NOTE * Mn/DOT Project Engineer NOT to complete the SCHEDULE "I".**

STEP 3. MUNICIPAL AGREEMENTS SECTION TO:

- a. Check documents transmitted by the Mn/DOT District Representative.
- b. Prepare Final SCHEDULE "I".
- c. Prepare and attach Certification form to completed Final SCHEDULE "I" and transmit same to Mn/DOT Project Engineer.

STEP 4. Mn/DOT PROJECT ENGINEER TO:

- a. Check completed Final SCHEDULE "I" and, if acceptable, sign appropriate portion of attached Certification form.
- b. Submit Final SCHEDULE "I" with attached Certification form to municipality.

STEP 5. MUNICIPALITY TO:

- a. Check completed Final SCHEDULE "I" and, if acceptable, sign appropriate portion of attached Certification form.
- b. Prepare a formal invoice in the amount of the State's total cost as shown on the Final SCHEDULE "I".
- c. Submit:
 1. Completed Final SCHEDULE "I" with signed Certification form attached, and
 2. Original, signed invoice

to: Municipal Agreements Engineer
Minnesota Department of Transportation
395 John Ireland Boulevard
Transportation Building
6th Floor, Mail Stop 682
St. Paul, Minnesota 55155

STEP 6. MUNICIPAL AGREEMENTS SECTION TO:

1. Process municipality's invoice for payment.

***** SAMPLE INVOICE *****

MUNICIPALITY
ADDRESS

Invoice No. #####

Date: #####

Maryanne Kelly-Sonnek
Municipal Agreements Engineer
Minnesota Department of Transportation
395 John Ireland Boulevard
MS 682
St. Paul, Minnesota 55155

RE: Coop. Const. Agreement No. #####
S.P. #####-### (T.H. ###-##)
Name of Municipality

REQUEST FOR **COMPLETE AND FINAL BILLING**

State's share of costs per Agreement No. ##### \$\$\$\$\$\$\$\$\$\$

I hereby certify that the above is true and correct, and that the costs were incurred in accordance with the terms and conditions of Agreement No. #####.

XXXXXXXXXX XXXXXXXXXXXX
Authorized City/County or
Township Official

Agreement No. [Agr. No.]
[city/co./ twp.] of [muni name]
S.P. [sp#1] (T.H. [th#1=])
S.P. [sp#2] (T.H. [th#2=])
State Funds

Minnesota Department of Transportation

CERTIFICATION BY MUNICIPAL OFFICIALS

I hereby certify that all of the contract construction work represented in the attached Final SCHEDULE "I" form dated [date] has been satisfactorily performed in accordance with the terms and conditions set forth in the above referenced agreement between the Minnesota Department of Transportation and the [city/co./ twp.] of [muni name]; and I hereby accept and certify that all of the materials furnished for said construction work are in accordance with the State approved plans, special provisions and Article [##] of Agreement No. [##]; and I (We) also certify that the [city/co./twp.] has made payment in full to its contractor for all of the construction work represented in said attached Final SCHEDULE "I" form.

([city/co./twp.] Engineer)

([city/co./twp.] Official)

Date

Date

RECOMMENDED APPROVAL OF PROJECT COMPLETION BY MnDOT

I have reviewed the final construction documentation and recommend final payment and project closeout in accordance with the attached Final SCHEDULE "I" form.

MnDOT Project Engineer

Date

MATERIALS CERTIFICATION EXCEPTIONS SUMMARY

S.P. No.		Contract No.		Project Description		Const. Year	
T.H.	District		Contractor		Project Location		
Project Engineer/Supervisor				Federal No.		Page of	

Materials and products used on project: (check all boxes that apply)

- Grading and Base
 Bituminous
 Concrete
 Aggregate
 Materials/Chemicals

Specialty	Exception Description	Resolution	Document Reference	Name/Initials

Form TP-02171-04 (Rev Feb 02)

District/Metro Materials Engineer _____ Date _____ Project Engineer _____ Date _____
ATTACH SUMMARY REPORTS OF SUPPLEMENTAL/AGREEMENTS, CHANGE ORDERS and BACKSHEET ITEM EXCEPTIONS.

- No Independent Assurance Required
 Independent Assurance Not Completed
 Independent Assurance Completed Without Exceptions
 Independent Assurance Completed With Exceptions

Information regarding Independent Assurance is available in the District I.A. or Project Engineer Files

Original: Retain in Project file

Copy: State Materials Testing Engineer – MS 645
 Copy: Financial Operations Section – MS 215

Copy: District Materials Engineer
 Copy: Office of Construction and Contract Administration – MS 650

FINAL SCHEDULE "I"

Agreement No. 85157

City of Newport

Preliminary: June 2, 2003
 Revised: October 2, 2003
 Final: June 21, 2012

S.P. 8205-107 (T.H. 61-003)
 S.P. 98-080-11 (7th Avenue)
 S.P. 98-080-13 (2nd Street)
 Fed. Proj. HPP MN34 (103)

Roadway, water main, water main insulation, and storm sewer construction performed under City contract with S.M. Hentges & Sons, Inc. located on 7th Avenue from 2nd Street to approximately 300 feet north of 11th Street in the City of Newport

STATE COST PARTICIPATION

	S.P. 8205-107	CITY
TOTALS	STATE MATCH	FEDERAL AID
	FOR CITY	MATCH
	FEDERAL AID	
From Sheet No. 4	128,257.01	513,028.04
From Sheet No. 7	70,852.43	283,409.73
(1) Total State Construction Cost	\$199,109.44	\$796,437.77
Construction Engineering (6%)	11,946.57	47,786.27
Total State Cost	\$211,056.01	\$844,224.03
(2) Contingency Amount	\$20,000.00	
Encumbered Amount	\$231,056.01	

(1) Amount of advance payment as described in Article III, Section A. of the Agreement.
 (2) For the State's use only as described in Article III, Section A. of the Agreement.

S.P. 8205-107 & S.P. 98-080-11		UNIT	QUANTITY	UNIT PRICE	COST
WORK ITEM					(1)
CONSTRUCTION LAYOUT STAKING	LUMP SUM	0.52	28,050.00	14,586.00	
MOBILIZATION	LUMP SUM	0.52	60,284.96	31,348.18	
CLEARING	ACRE	0.60	3,060.00	1,836.00	
CLEARING	TREE	5.00	260.00	1,300.00	
GRUBBING	ACRE	0.60	3,060.00	1,836.00	
GRUBBING	TREE	5.00	260.00	1,300.00	
REMOVE CONCRETE CULVERT	LN FT	61.00	8.00	488.00	
REMOVE SEWER PIPE (STORM)	LN FT	64.00	8.00	512.00	
REMOVE BITUMINOUS PAVEMENT	SQ YD	19,852.00	1.00	19,852.00	
REMOVE CONCRETE WALK	SQ YD	82.00	5.00	410.00	
REMOVE CATCH BASIN	EACH	1.00	125.00	125.00	
REMOVE HYDRANT	EACH	2.00	250.00	500.00	
SAWING BIT PAVEMENT (FULL DEPTH)	LN FT	1,480.00	3.50	5,180.00	
SALVAGE CHAIN LINK FENCE	LN FT	0.00	8.00	0.00	
COMMON EXCAVATION	CU YD	19,862.00	5.65	112,220.30	
SUBGRADE EXCAVATION	CU YD	0.00	5.65	0.00	
SELECT GRANULAR BORROW MOD 5% (CV)	CU YD	8,890.00	10.30	91,567.00	
TOPSOIL BORROW (CV)	CU YD	138.00	10.00	1,380.00	
AGGREGATE SURFACING, CLASS 5	CU YD	0.00	14.90	0.00	
AGGREGATE BASE, CLASS 5	TON	11,902.00	7.93	94,382.86	
TYPE MV 3 WEARING COURSE MIXTURE (F)	TON	2,025.54	36.50	73,932.21	
TYPE MV 3 BASE COURSE MIXTURE (B)	TON	239.53	32.75	7,844.61	
TYPE MV 3 BASE COURSE MIXTURE (F)	TON	2,058.97	36.50	75,152.41	
BITUMINOUS MATERIAL FOR TACK COAT	GALLON	1,596.00	2.05	3,271.80	
ADJUST CURB BOX	EACH	41.00	70.00	2,870.00	
ADJUST VALVE BOX	EACH	9.00	125.00	1,125.00	
HYDRANT	EACH	2.00	3,223.00	6,446.00	
6" WATER PIPE DUCTILE IRON CL 52	LN FT	78.00	21.00	1,638.00	
WATERMAIN INSULATION	SQ YD	101.00	13.50	1,363.50	
CAST IRON FITTINGS	POUND	370.00	1.60	592.00	
4" CONCRETE WALK	SQ FT	2,028.00	2.80	5,678.40	
CONCRETE CURB & GUTTER DESIGN B618	LN FT	8,279.00	7.55	62,506.45	
6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	281.00	42.00	11,802.00	
8" CONCRETE DRIVEWAY PAVEMENT	SQ YD	78.00	48.00	3,744.00	

S.P. 8205-107 & S.P. 98-080-11 WORK ITEM		UNIT	QUANTITY	UNIT PRICE	COST (1)
CONCRETE VALLEY GUTTER		SQ YD	145.00	48.00	6,960.00
BITUMINOUS CURB		LN FT	0.00	5.50	0.00
INSTALL CHAIN LINK FENCE		LN FT	0.00	26.00	0.00
TRAFFIC CONTROL		LUMP SUM	0.52	8,849.00	4,601.48
SIGN PANELS, TYPE C		SQ FT	125.00	24.00	3,000.00
PAVEMENT MESSAGE (RR CROSSING) EPOXY		EACH	2.00	612.00	1,224.00
24" STOP LINE WHITE-EPOXY		LN FT	37.00	7.75	286.75
4" DOUBLE SOLID LINE YELLOW-EPOXY		LN FT	4,700.00	0.55	2,585.00
4" SOLID LINE WHITE-EPOXY		LN FT	4,280.00	0.27	1,155.60
SILT FENCE TYPE MACHINE SLICED SEEDING		LN FT	1,000.00	2.10	2,100.00
SEED MIXTURE 50B		ACRE	0.60	440.00	264.00
SODDING TYPE LAWN		POUND	30.00	4.25	127.50
MULCH MATERIAL TYPE I		SQ YD	9,000.00	2.15	19,350.00
DISK ANCHORING		TON	1.20	306.00	367.20
COMM. FERTILIZER ANALYSIS 10-10-10		ACRE	0.60	102.00	61.20
CHANGE ORDER NO.1		POUND	300.00	0.31	93.00
CONSTRUCTION LAYOUT STAKING		LUMP SUM	1.00	1,000.00	1,000.00
MOBILIZATION		HOUR	5.00	110.00	550.00
TRAFFIC CONTROL (LANE CLOSURE)		EACH	4.00	500.00	2,000.00
COMMON EXCAVATION		CU YD	1,114.00	5.65	6,294.10
CHANGE ORDER NO.5					
FOREMAN WITH TRUCK, LASER & JUMPING JACK		HOUR	2.00	74.00	148.00
BOBCAT AND OPERATOR		HOUR	1.00	67.35	67.35
CEMENT FINISHER (2)		HOUR	3.00	55.00	165.00
LABORER		HOUR	2.00	45.00	90.00
REDMIX		CU YD	2.00	79.00	158.00
15% MATERIAL MARK UP		LUMP SUM	1.00	23.70	23.70
CHANGE ORDER NO.10					
FOREMAN WITH TRUCK, LASER & JUMPING JACK		HOUR	4.00	74.00	296.00
400 KOMATSU BACKHOE & OPERATOR		HOUR	9.20	183.76	1,690.59
D-5H CAT DOZER & OPERATOR		HOUR	9.00	54.31	488.79
TRIAXLES & DRIVER		HOUR	12.00	58.00	696.00
LABORER		HOUR	22.00	45.00	990.00

S.P. 8205-107 & S.P. 98-080-11 WORK ITEM		UNIT	QUANTITY	UNIT PRICE	COST (2)
CONSTRUCTION LAYOUT STAKING		LUMP SUM	0.17	28,050.00	4,768.50
MOBILIZATION		LUMP SUM	0.17	60,284.96	10,248.44
SELECT GRANULAR BORROW MOD 5% (CV)		CU YD	492.00	10.30	5,067.60
ROCK EXCAVATION IN TRENCH		CU YD	1,490.00	50.00	74,500.00
4" PE PERFORATED PIPE DRAIN		LN FT	200.00	5.00	1,000.00
15" RC PIPE SEWER DES 3006 CL V		LN FT	1,381.00	23.50	32,453.50
18" RC PIPE SEWER DES 3006 CL V		LN FT	575.00	25.50	14,662.50
21" RC PIPE SEWER DES 3006 CL V		LN FT	1,057.00	29.00	30,653.00
24" RC PIPE SEWER DES 3006 CL V		LN FT	204.00	37.00	7,548.00
27" RC PIPE SEWER DES 3006 CL V		LN FT	437.00	54.00	23,598.00
30" RC PIPE SEWER DES 3006 CL V		LN FT	40.00	63.00	2,520.00
36" STEEL CASING PIPE (JACKED)		LN FT	35.00	1,345.00	47,075.00
CONSTRUCT DRAINAGE STRUCTURE DESIGN C, G, OR H		LN FT	10.30	276.00	2,842.80
CONSTRUCT DRAINAGE STRUCTURE DESIGN 48-4020		LN FT	78.40	230.00	18,032.00
CONSTRUCT DRAINAGE STRUCTURE DESIGN 60-4020		LN FT	8.30	278.00	2,307.40
CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 1		LN FT	53.80	222.00	11,943.60
CASTING ASSEMBLY 700-4		EACH	1.00	374.00	374.00
CASTING ASSEMBLY R-3067-V		EACH	26.00	335.00	8,710.00
CASTING ASSEMBLY R-2573		EACH	1.00	274.00	274.00
CASTING ASSEMBLY R-4342		EACH	3.00	219.00	657.00
ADJUST FRAME AND RING CASTING		EACH	9.00	200.00	1,800.00
RECONSTRUCT SANITARY MANHOLES		LN FT	27.90	250.00	6,975.00
TRAFFIC CONTROL		LUMP SUM	0.17	8,849.00	1,504.33
CHANGE ORDER NO.4					
.533 STEEL CASING		LN FT	35.00	89.00	3,115.00
15% MATERIAL MARK UP		LUMP SUM	1.00	467.25	467.25
CHANGE ORDER NO.7					
FOREMAN WITH TRUCK, LASER & JUMPING JACK		hour	2.00	74.00	148.00
225 CAT BACKHOE & OPERATOR		hour	2.00	125.00	250.00
PIPE LAYERS (2EACH)		hour	4.00	45.00	180.00
CHANGE ORDER NO.8					
FOREMAN WITH TRUCK, LASER & JUMPING JACK		hour	47.00	74.00	3,478.00
700 KOMATSU BACKHOE & OPERATOR		hour	21.00	266.59	5,598.39
400 KOMATSU BACKHOE & OPERATOR		hour	3.00	183.76	551.28

S.P. 8205-107 & S.P. 98-080-11		UNIT	QUANTITY	UNIT PRICE	COST
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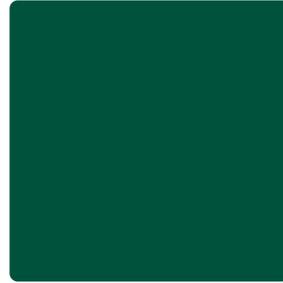
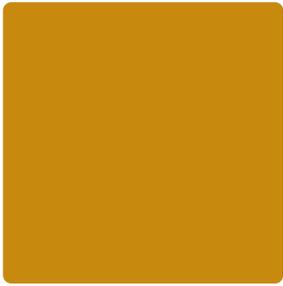
WORK ITEM

WORK ITEM	UNIT	QUANTITY	UNIT PRICE	COST (2)
225 CAT BACKHOE & OPERATOR	22.00	125.00	2,750.00	
450 KOMATSU BACKHOE & OPERATOR	24.00	118.79	2,850.96	
CA15 COMPACTOR	24.00	31.27	750.48	
PIPE LAYERS	86.50	45.00	3,892.50	
4" PVC	342.00	0.79	270.18	
8" PVC	16.00	2.60	41.60	
8"x4" PVC WYE	6.00	26.18	157.08	
8" FERNCO	12.00	12.49	149.88	
4" FERNCO	6.00	3.80	22.80	
3/4 CURB STOP & BOX	1.00	59.09	59.09	
3/4 COPPER	94.00	1.58	148.52	
1" COPPER	131.00	1.99	260.69	
COPPER TO COPPER	7.00	11.94	83.58	
15% MATERIAL MARK UP	1.00	179.02	179.02	
CHANGE ORDER NO.9				
FOREMAN WITH TRUCK, LASER & JUMPING JACK	13.00	74.00	962.00	
700 KOMATSU BACKHOE & OPERATOR	5.50	266.61	1,466.36	
400 KOMATSU BACKHOE & OPERATOR	7.50	183.76	1,378.20	
450 KOMATSU LOADER & OPERATOR	13.00	118.79	1,544.27	
CA15 COMPACTOR	5.50	81.27	446.99	
PIPE LAYERS	30.50	45.00	1,372.50	
CHANGE ORDER NO.11				
FOREMAN WITH TRUCK, LASER & JUMPING JACK	24.50	65.00	1,592.50	
750 KOMATSU BACKHOE & OPERATOR	4.50	266.61	1,199.75	
400 KOMATSU BACKHOE & OPERATOR	3.00	183.76	551.28	
225 CAT BACKHOE & OPERATOR	16.50	125.00	2,062.50	
450 KOMATSU BACKHOE & OPERATOR	7.50	118.79	890.93	
CA15 COMPACTOR	7.50	81.27	609.53	
PIPE LAYERS	47.50	45.00	2,137.50	
6" DIP	46.00	9.00	414.00	
4" DIP	16.00	8.50	136.00	
4" MJ 45 DEGREES	4.00	34.62	138.48	
6" MJ 45 DEGREES	12.00	51.92	623.04	
4" MEGA LUGS	8.00	13.69	109.52	

S.P. 8205-107 & S.P. 98-080-11

WORK ITEM

WORK ITEM	UNIT	QUANTITY	UNIT PRICE	COST (2)
6" MEGA LUGS	EACH	24.00	16.14	387.36



M I N N E S O T A D E P A R T M E N T O F T R A N S P O R T A T I O N

Appendix

ACRONYMS AND GLOSSARY

AADT	Annual Average Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AM	Agreements Municipal (funding designation)
ATIP	Area Transportation Investment Program
ATP	Area Transportation Partnerships
BID ABSTRACT	List of all companies that submitted bids on a contract.
CA	Certified Acceptance
CIDS	Charge Identifiers
CIP	Capital Improvement Plan
CO	Central Office
COE	U.S. Army Corps of Engineers
COOPERATIVE AGREEMENT PROJECT	A construction project initiated and administered by a local agency, involving a Trunk Highway, where MnDOT funds are used for part of the project to the mutual benefit of all partners.
CSAH	County State Aid Highway
DBE	Disadvantaged Business Enterprise
DCP	Delegated Contract Process
DESIGN SCENE	A report issued by MnDOT's Office of Technical Support that addresses Road Design issues.
DSAE	District State Aid Engineer
EA	Environmental Assessment (through the FHWA)
EAW	Environmental Assessment Worksheet (through the MPCA/EQB)
EEO	Equal Employment Opportunity
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
EQB	Environmental Quality Board
ESAL (also known as BESAL)	Equivalent Single Axle Loads (or Bituminous Equivalent Single Axle Loads)
EVP	Emergency Vehicle Preemption (for Signal Systems)
FHWA	U.S. Federal Highway Administration
FINAL VOUCHER	Contractor's invoice (in approved format) showing all final quantities along with all extra work performed.
FONSI	Finding of No Significant Impact (FHWA)
FY	Fiscal Year (SFY – State Fiscal Year: July 1 – June 30; FFY – Federal Fiscal Year: Oct 1 – Sept. 30)
GE	Granular Equivalent
GIS	Geographic Information System
HCADT	Heavy Commercial Average Daily Traffic
HIP	Highway Improvement Plan
HPDP	Highway Project Development Process
ICE	Intersection Control Evaluation
ITS	Intelligent Transportation Systems
LRRB	Local Road Research Board

MAP-21	Moving Ahead for Progress in the 21st Century Act (Latest Federal Transportation Bill)
MEQB	Minnesota Environmental Quality Board
MN MUTCD (MMUTCD)	Minnesota Manual on Uniform Traffic Control Devices.
MPCA	Minnesota Pollution Control Agency
MPO	Metropolitan Planning Organization
MSAS	Municipal State Aid Street
NEPA	National Environmental Policy Act
NHS	National Highway System (Interstate and Key Principal Arterial Highways)
NPDES	National Pollution Discharge Elimination System
PIF	Public Interest Finding
PM	Project Memorandum
PROJECT DEVELOPMENT REPORT	Preliminary Document used on Federal-aid projects
PS & E	Plans, Specifications, and Estimate
R VALUE	Used with the design lane ESAL value to determine the total structural requirement (in terms of GE)
RDC	Regional Development Commission
RFE	Report of Final Estimate. This is used to close out the project.
RTMC	Regional Transportation Management Center
SA	Supplemental Agreement
SALT	State Aid for Local Transportation
SEE	Social, Environmental, and Economic
SHPO	State Historic Preservation Office
SHRP	Strategic Highway Research Program
SJR	Signal Justification Report.
SR	Study Report
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Plan
TECHNICAL MEMORANDUM	A memo from MnDOT's Engineering Services Division that deals with Road Design issues.
TGB	Targeted Group Business
TRACS	Transportation Automated Control System
TRNS*PORT LIST	List of MnDOT Standard Specification Items
TIP	Transportation Improvement Plan
WBE	Women in Business Enterprise
WD	Watershed District
WMO	Watershed Management Organization