# GENERAL

The purpose of "Revised As Constructed" work is to update contract plans to accurately reflect the actual project construction. It is necessary because contract plans are often changed during construction for various reasons. The respective field office is responsible for marking-up contract plans to show how the job was actually constructed. These "As Constructed Field Notes" provide a guide for the drafter to use in revising electronic files for the project. After completion, the drafter places a stamp on each sheet in the file to indicate whether it has been revised or not.

The "Revised As Constructed" electronic files and drawings are retained by ODOT. They are used for reference by ODOT and other interested parties and often serve as the basis for contract plan electronic files for future work in the same area. Accuracy and clarity are very important in the "Revised As Constructed" work effort.

Contract plans were prepared in the Metric System until recently. ODOT is presently converting to the English System and all jobs will soon be prepared in those units. For the purposes of "Revised As Constructed" work, the system that the project was prepared under will be retained. Consequently, if a project was prepared using the English System the "Revised As Constructed" plans will also be based on the English System. Similarly, those jobs under the Metric System will remain as metric jobs throughout the "Revised As Constructed" process.

It is expected that the drafter is familiar with and will use the CAD standards as specified in the Contract Plans Development Guide while completing this work. This includes levels, font and text specifications, patterning and element symbologies.

See Appendix "D" in Volume 1 of the Contract Plans Development Guide for current level naming standards.

# WORK REQUEST FORM

The "Revised As Constructed" work request form will have all the necessary information for revising the design plans of an As Constructed Project.

This information includes:

\* The Contract Number - This is the account number for the funding of the revision work on a project. Each construction project will have a different account number. (The Contract Number is to be included on each sheet that goes through the "Revised As Constructed" process.)

\* Key Number - This is the number which identifies the project through its design phase. Each project will have its own unique key number.

\* Files - All the electronic files necessary for the completion of a "Revised As Constructed" project will be furnished by O.D.O.T. (For a listing of those files, see attached sheet to the work request form).

# THE "REVISED AS CONST" STAMP

NOT REVISED AS CONSTRUCTED

\_\_\_\_Date\_\_\_CONTRACT \_\_\_Number\_\_\_

Use this stamp for Pipe Data, Traffic Control Plans, Material Source, Stockpile Site, Disposal Site and Borrow Source.

cell name - notrevised

REVISED AS CONTRUCTED Date CONTRACT Number

### Use this stamp for all other sheets

cell name - revised

REVISED AS CONTRUCTED <u>Date</u> <u>CONTRACT</u><u>Number</u> PROJ. MGR.

Use this stamp for Title Sheet

cell name - rewithprojmgr

Stamps are located in ODOT. cel library.

# THE "REVISED AS CONST" STAMP CONTINUED

DATE : Day-Month-Year

The date to be placed on the "Revised As Constructed" stamp will be the date on which the project was completed. If, the project completion date is unknown (not furnished by field), then the drafting completion date of the "Revised As Constructed" work will be used.

The "Work Request Form" will indicate which date to apply.

### CONTRACT NUMBER

The contract number is issued by the Oregon Transportation Commission. It differs from the "Key Number" which is used to track the job prior to the contract being awarded. The contract number appears on the "Revised As Constructed" stamp.

All three stamps are available as a cell from the ODOT.cel library.

# ORDER OF SHEETS FOR CONTRACT PLANS

- 1. TITLE SHEET
- 2. TYPICAL SECTIONS
- 3. DETAILS
- 4. TRAFFIC CONTROL
- 5. PIPE DATA
- 6. PLANS & PROFILES
- 7. EROSION CONTROL
- 8. MATERIAL SOURCES
- 9. BORROW SOURCE
- **10. STOCKPILE SITE**
- 11. DISPOSAL SITE
- **12. WETLANDS MITIGATION**
- 13. LANDSCAPING

The above listing is the normal arrangement and is followed for most projects, although not all categories are always Present.

Each set of contract plans which are to be "Revised As Constructed", MUST have a complete set of files.

Check project file directory for list of attached project files.

It is suggested that a verification be made that all project files are placed on the workstation before revising begins. Each sheet of the paper copies has an identification strip on the lower left corner which identifies the file. Also, each electronic file will list the reference files which accompany that file. Seek CAD assistance to locate any missing files.

# FILE NAMING CONVENTIONS FOR CONTRACT PLANS

The number of files for a set of contract plans may vary from one to twenty or more. Some files have a specific task or assignment while others are grouped into categories. All files have a key number and extension number which identifies the file.

For example:

# SPECIFIC TASK (REFERENCE FILES):

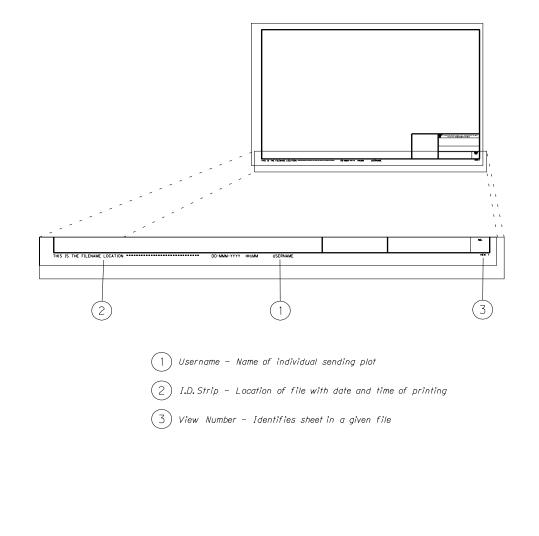
01234fd.ts1	title sheet (English)
01234fd.met	title sheet (Metric)
01234f.ext	existing features (base map)
01234f.con	construction items
01234f.ace	alignment, construction and existing
01234f.pro	profile (strip form)
01234f.cnt	. contours
01234f.tb	. title and "V" number or
01234f.nam	.title and "V" number

## GROUPS:

01234f.ty1	typical sections
01234f.dt1	details (job specific details,
	standard details, material source,
	stockpile site, disposal site,
	wetland mitigation, landscaping)
01234f.tp1	traffic control plans
01234f.er1	erosion control plans
01234f.pd1	pipe data sheets
01234f.pl1	plan sheets
01234f.pf1	profile sheets
01234f.pp1	plan and profile sheets
01234f.nt1	note sheets
01234f.ls1	landscaping (large and/or complex jobs)

# FILE NAMING CONVENTIONS FOR CONTRACT PLANS (CONT'D)

The I.D. strip (item #2) has the key number and extension which identifies the file in which the plan sheet resides. By accessing a file and using the MicroStation reference file dialog box, all associated reference files will be listed. If the reference file dialog box indicates that any of these files are not found — contact CAD support to locate and place these files on the workstation.



# REVISING

Revising as constructed plans involves one or two processes:

- 1. The normal phase down drafting without field revisions
- 2. The normal phase down drafting with field revisions

# NORMAL PHASE DOWN DRAFTING

The normal phase down of a project is the removal of symbols and features that have been moved or replaced by the new construction. This is the normal removal of the existing pavement, fences, inlets, pipes, manholes, structures, etc. -Including notes referring to these items. Some phase down drafting is illustrated on pages which are entitled "Removal Items".

# FIELD REVISIONS

In addition to the normal phase down, any modifications made during construction must be incorporated into the "As Constructed Plans". These Design Changes made in the field are usually shown in red pencil on the field notes. The modifications are unanticipated and job specific and must be dealt with on a sheet by sheet or project by project basis.

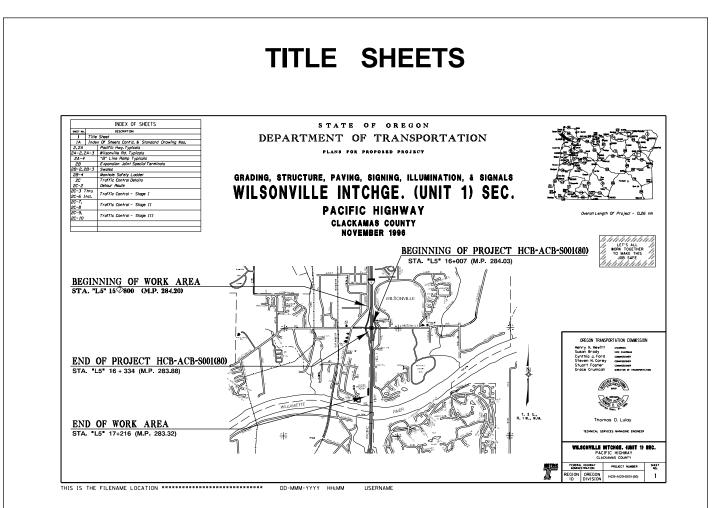
THE REMOVAL ITEMS ARE LOCATED BETWEEN THE BEGINNING AND END OF THE PROJECT AND WITHIN THE RIGHT OF WAY.

# FILING AS CONSTRUCTED DRAWINGS

Roadway Section receives only the files with a "V" number for inclusion in the roadway files.

Other plans that have a drawing number assigned need to be filed with the ODOT Section that issued the drawing number, either Traffic Section or Bridge Section.

Local Government Projects that are not impacting ODOT highways are to be filed with the local jurisdiction.



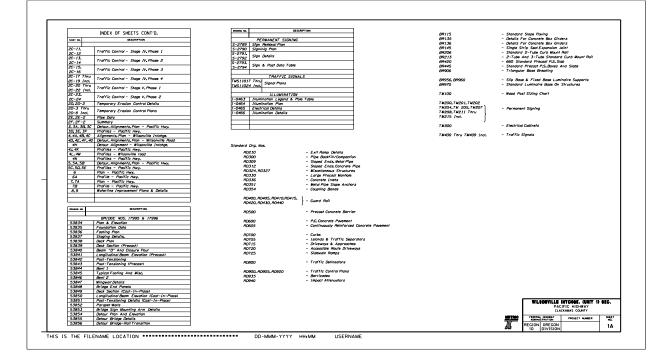
No changes are made on the Title Sheet.

The "REVISED AS CONSTRUCTED" stamp, with project manager, is placed on this sheet.

This sheet may not accompany the set of CAD plans which are to be "Revised As Constructed".

REVISED AS CONTRACTED <u>Date</u> CONTRACT <u>Number</u> PROJ. MGR.

# TITLE SHEET CONTINUATION SHEET

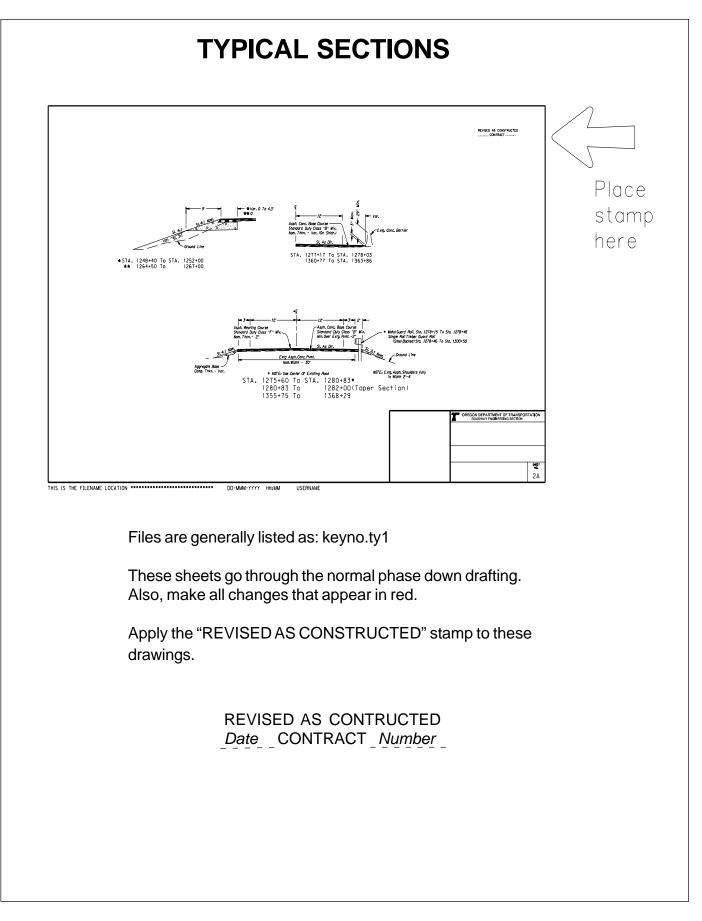


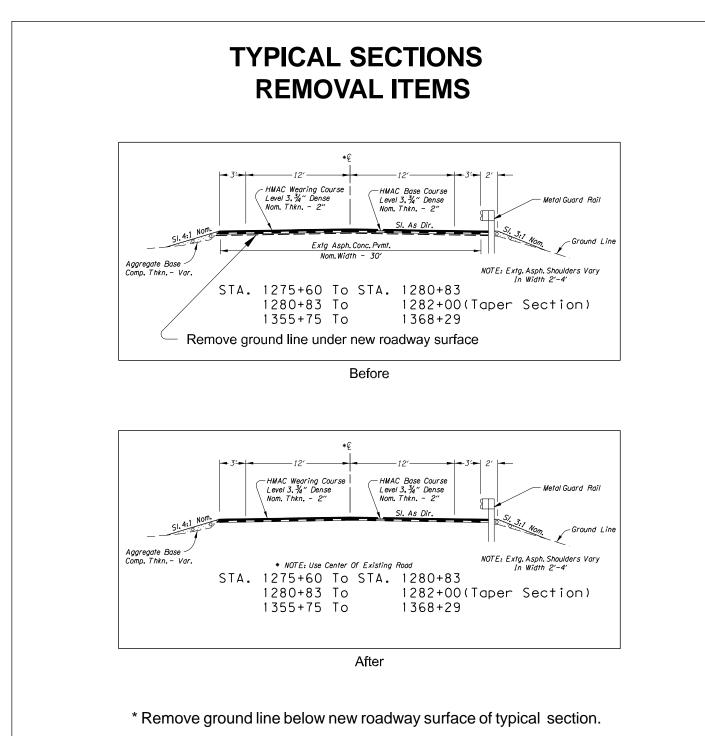
Not all drawing numbers for complex projects can be placed on the left quarter of the Title Sheet. Therefore, an additional sheet must be included to accommodate the list of drawing numbers used in the contract plans.

This sheet is NOT updated.

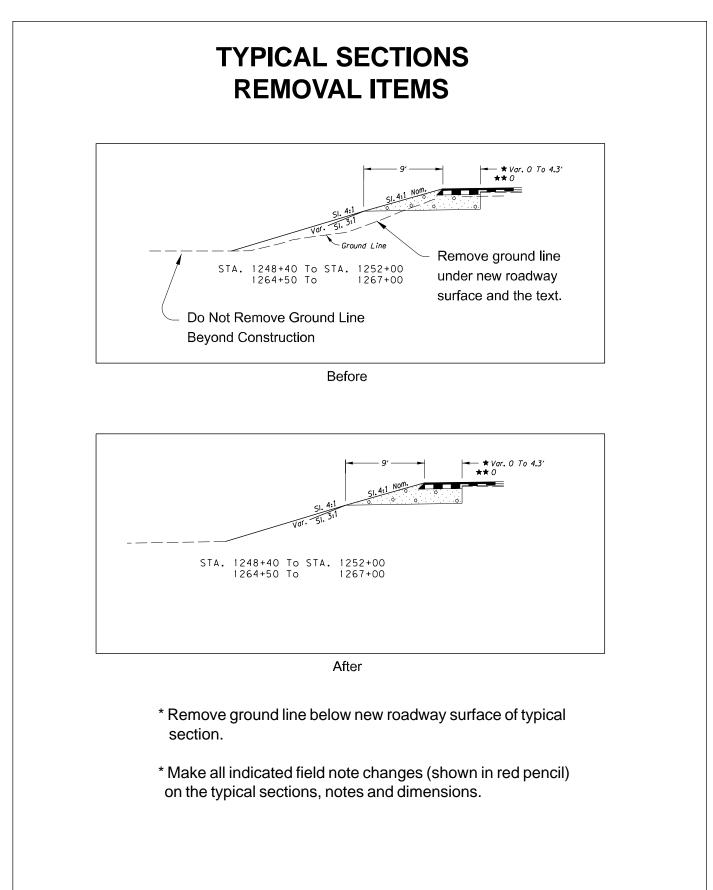
The "NOT REVISED AS CONSTRUCTED" stamp is placed on this sheet.

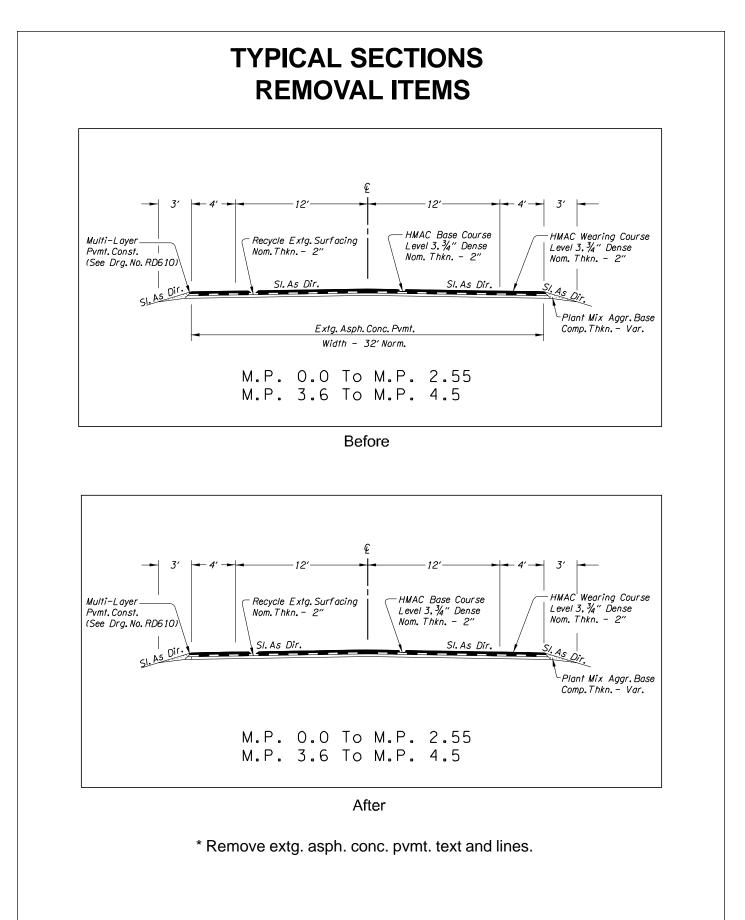
This sheet may not accompany the set of plans which are to be "Revised As Constructed".

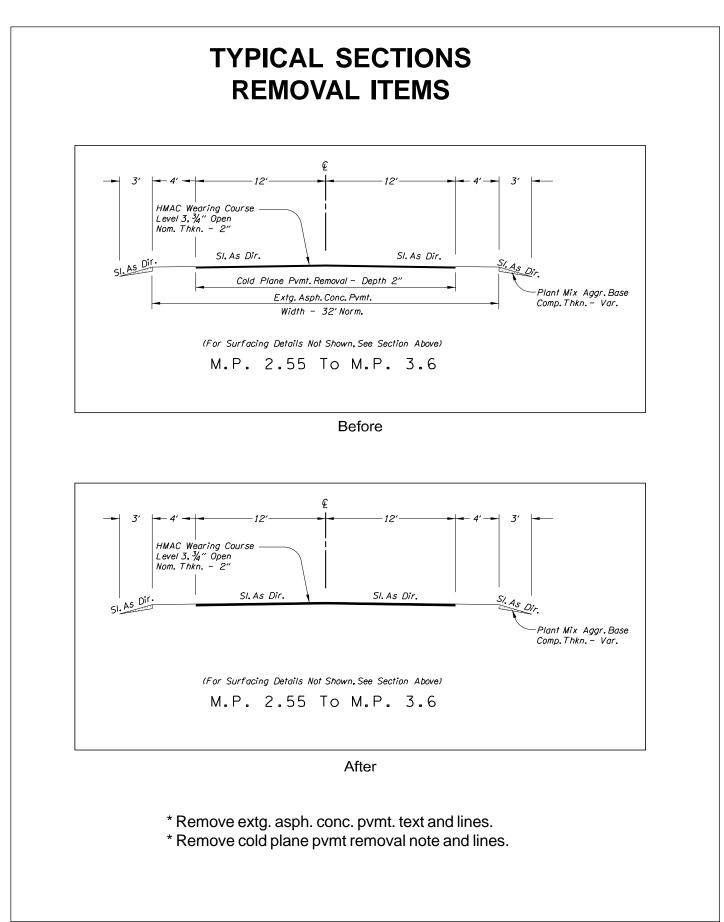


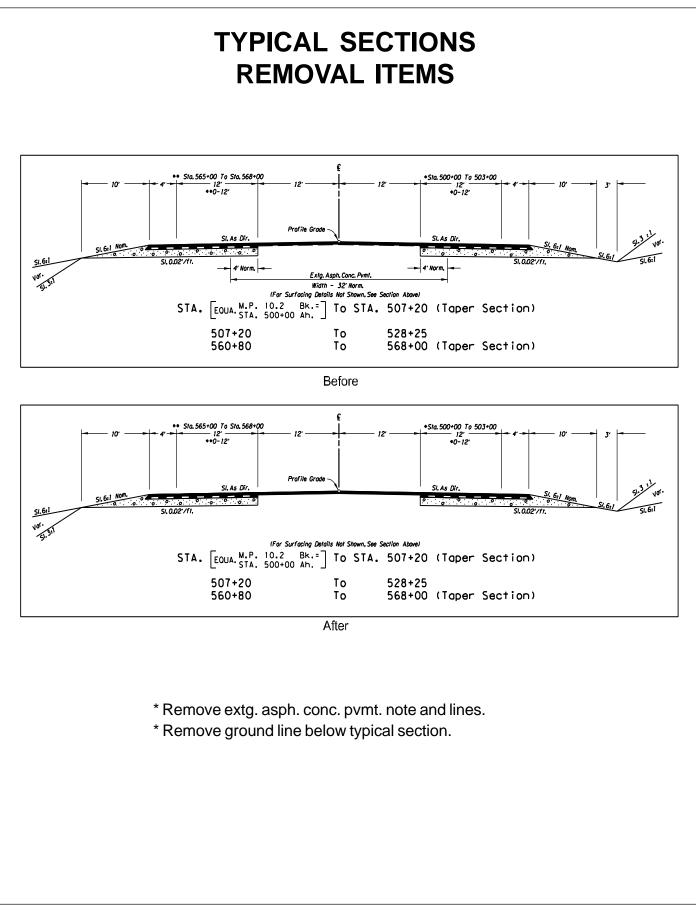


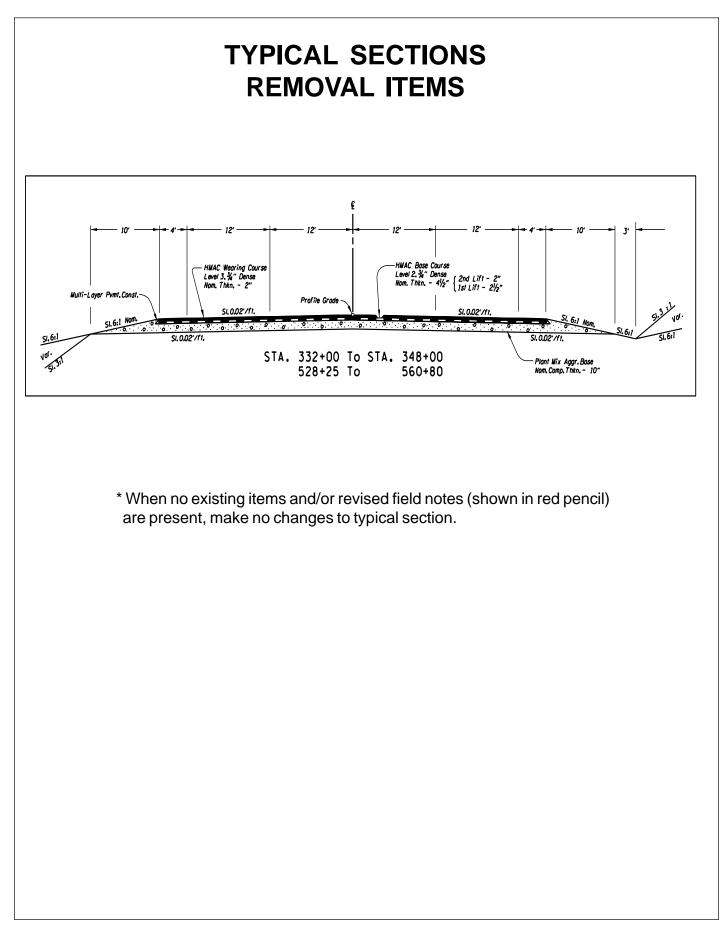
- \* Remove extg. asph. conc. pvmt. text and lines.
- \* Make all indicated field note changes (shown in red pencil) on the typical sections, notes and dimensions.

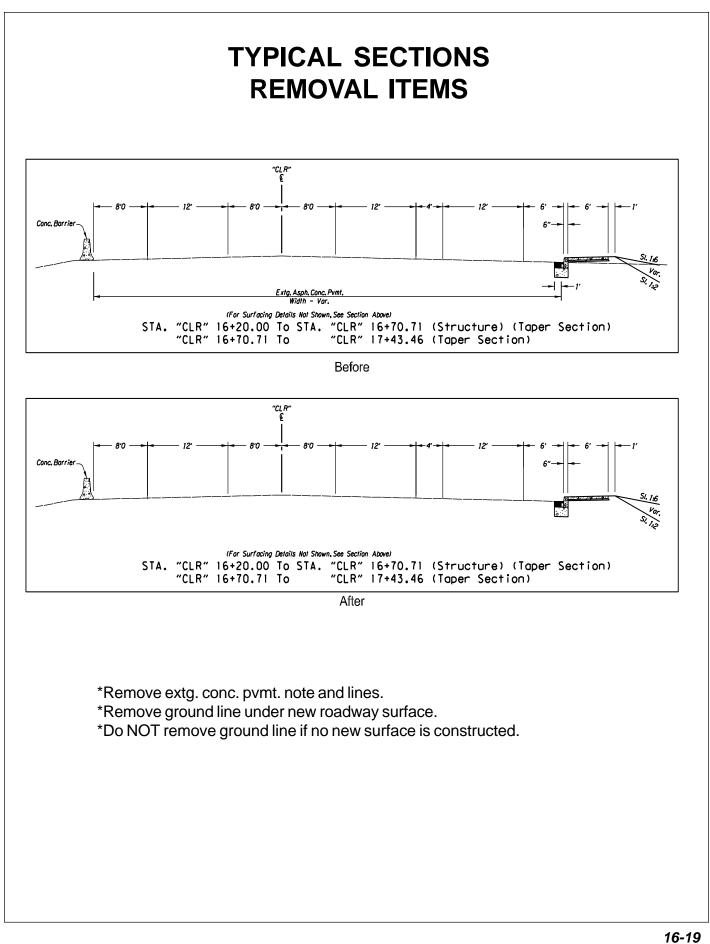


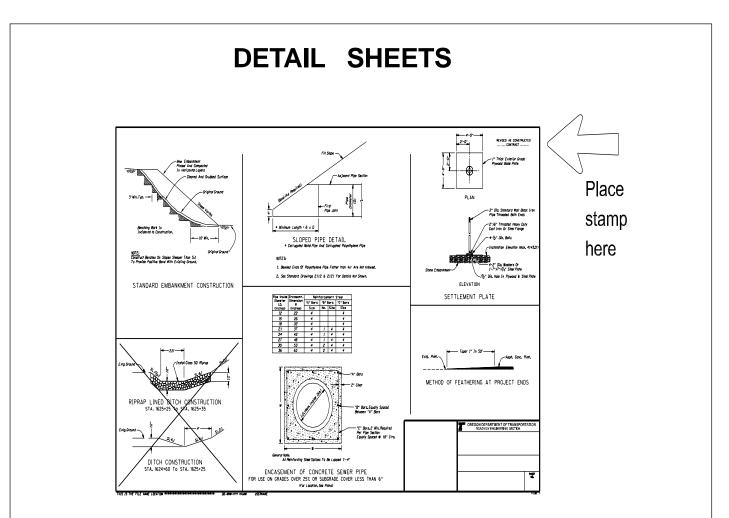












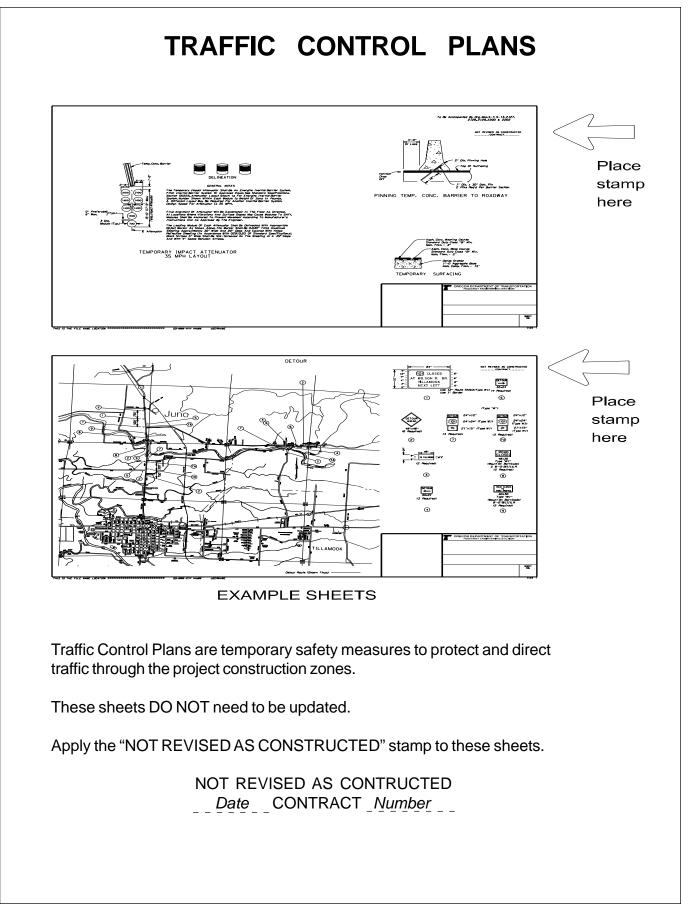
Make all changes that are marked in red on the as construct field notes.

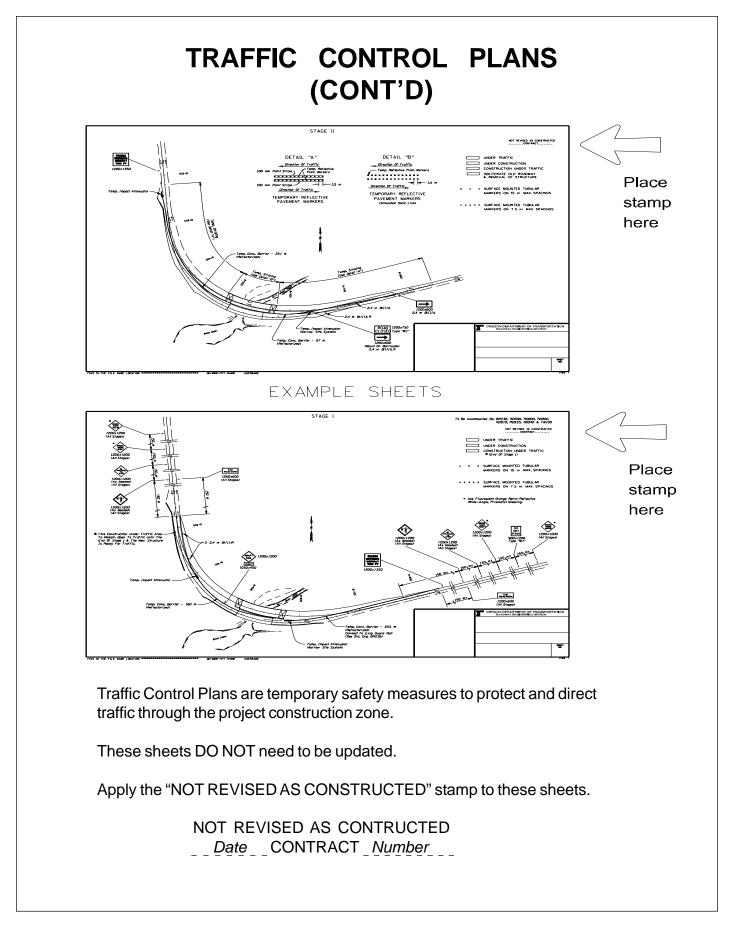
If an entire detail is crossed off on the field copy, draw a large X through the drawing. (line wt. of 5)

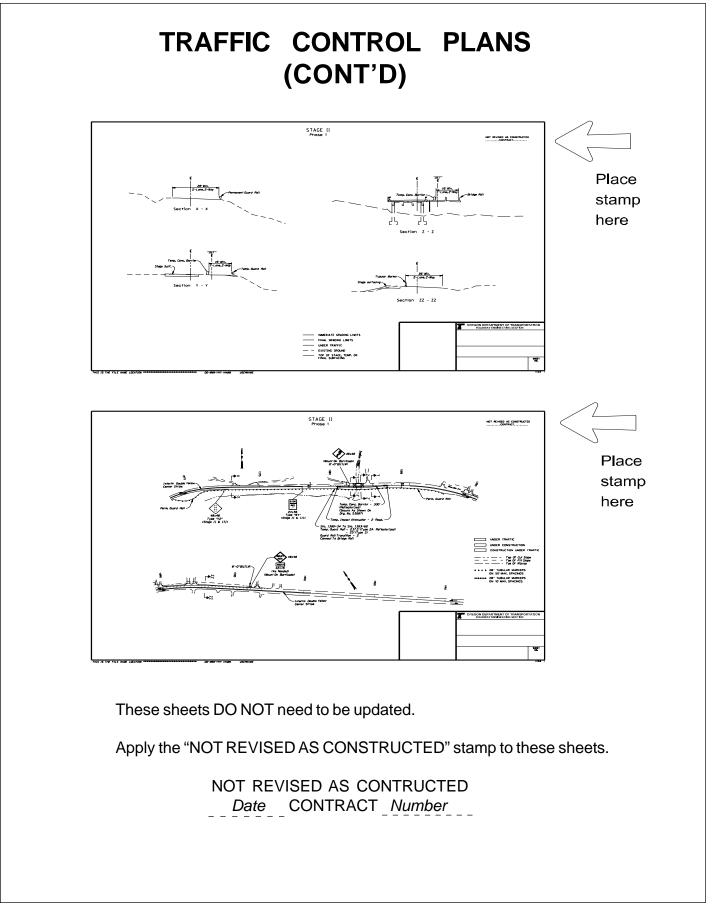
Keep changes consistent with the original work; for example, text sizes and fonts, etc.

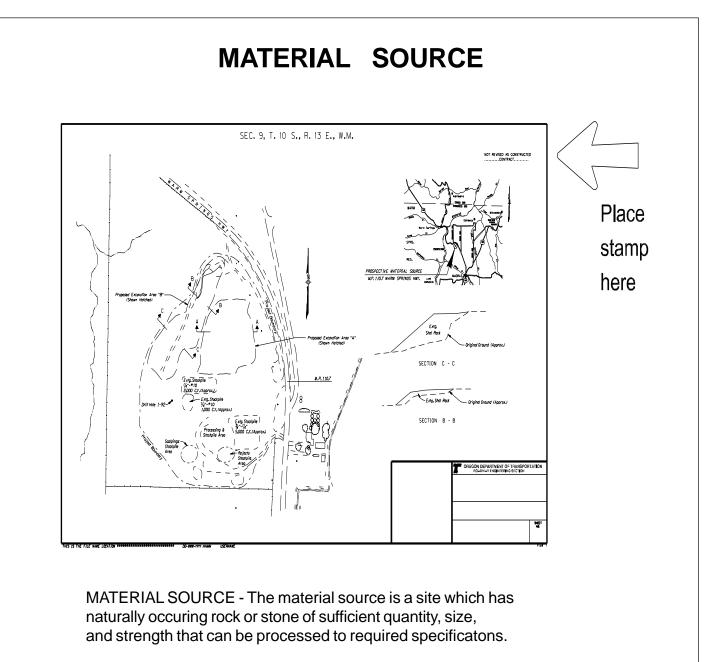
Apply the "REVISED AS CONSTRUCTED" stamp even if there are no changes.

REVISED AS CONTRUCTED Date \_ CONTRACT \_ <u>Number</u> \_









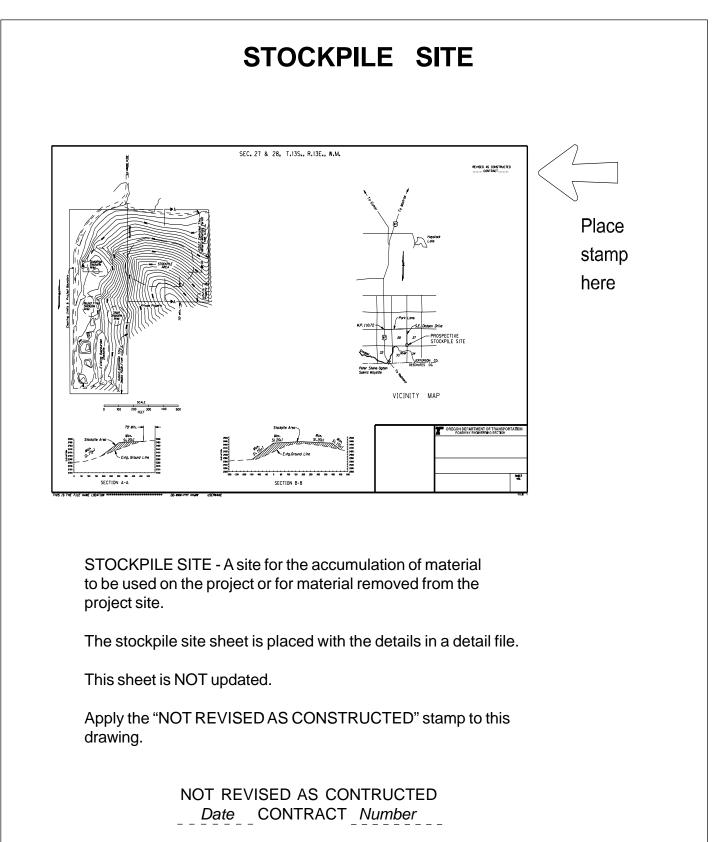
The material source supplies the primary elements used in the construction of roadway surfaces.

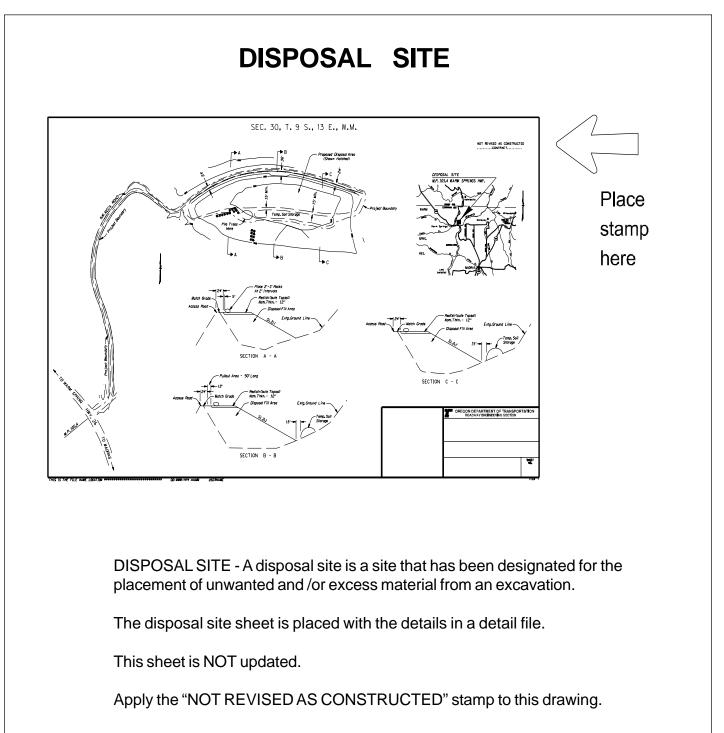
This Sheet does NOT need to be updated.

Apply the "NOT REVISED AS CONSTRUCTED" stamp.

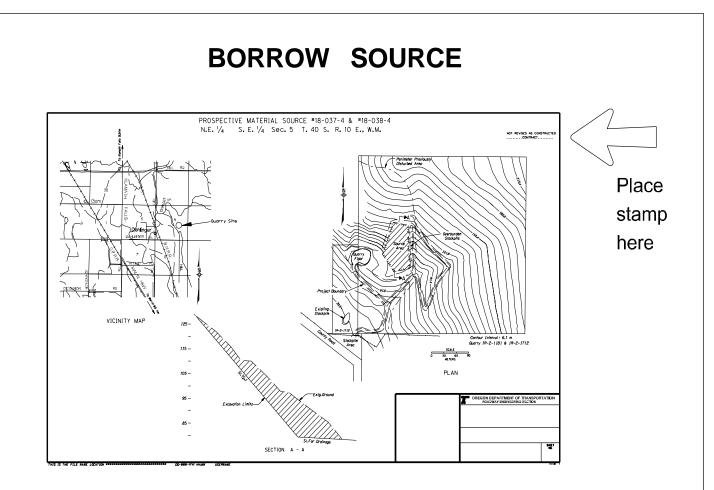
NOT REVISED AS CONTRUCTED Date \_ CONTRACT \_ Number

### Contract Plans Development Guide





NOT REVISED AS CONTRUCTED



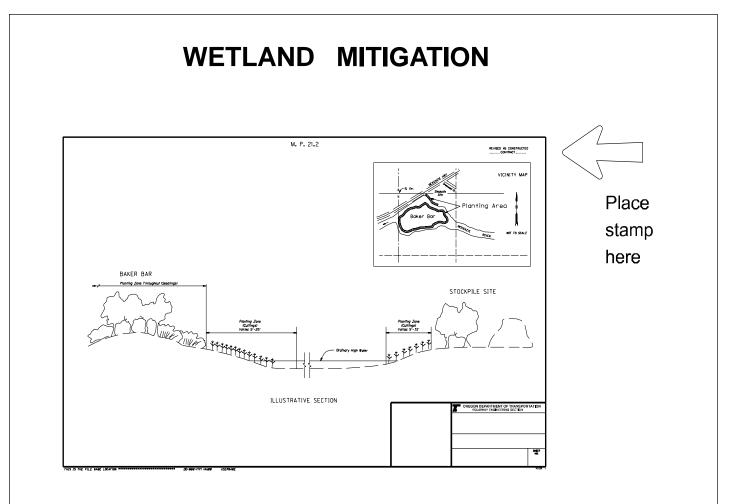
BORROW SOURCE - A material source site used for general embankment construction. It is often moved or hauled to the construction site and used as fill for roadway support, guard rail end protection, sound berms, etc.

The borrow source sheet is placed with the details in a detail file.

This sheet is NOT updated.

Apply the "NOT REVISED AS CONSTRUCTED" stamp to this drawing.

NOT REVISED AS CONTRUCTED Date CONTRACT Number



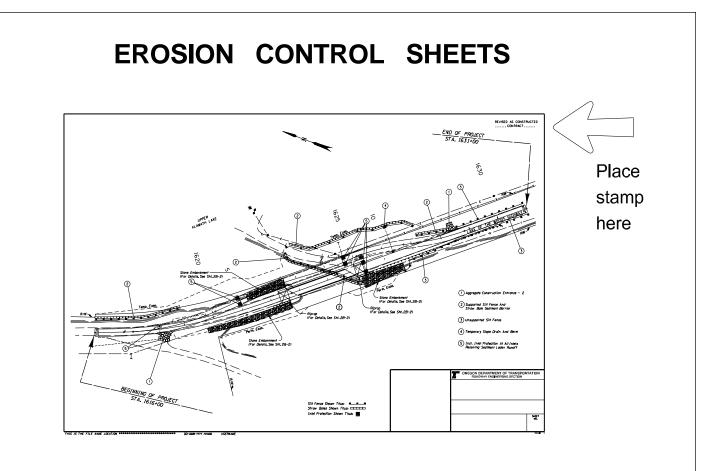
WETLAND MITIGATION SITES - These are sites constructed as substitutes for wetlands that exist in the project area.

The wetland mitigation sheets are placed with the details in a detail file. (See page 6)

These Sheets DO need to be updated. Make all changes that appear in red on the field copy.

Apply the "REVISED AS CONSTRUCTED" stamp to these drawings.

REVISED AS CONTRUCTED

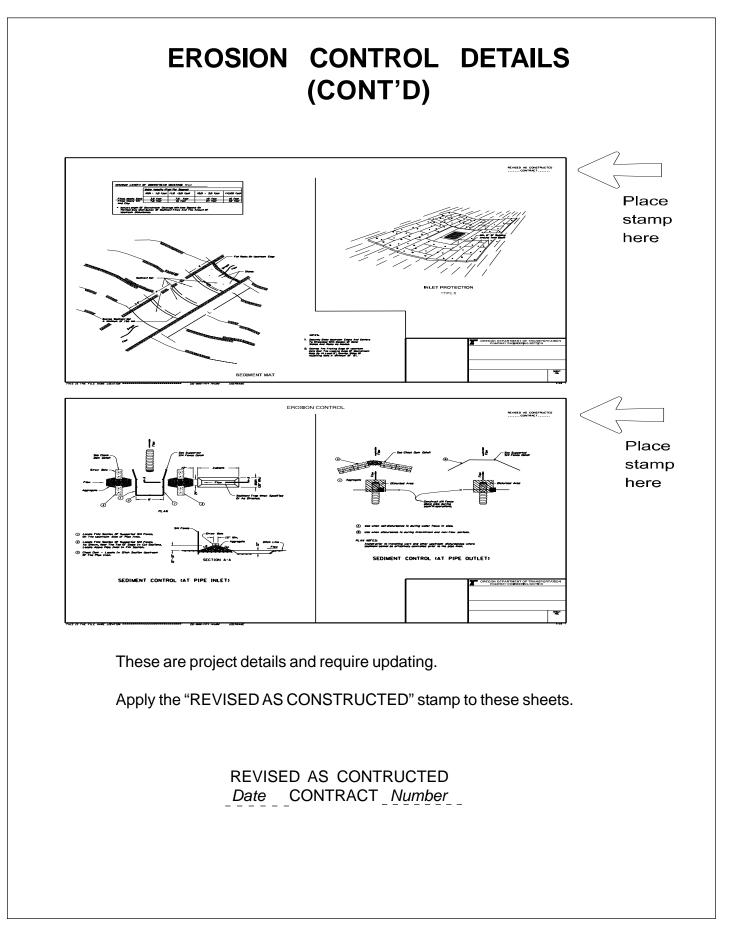


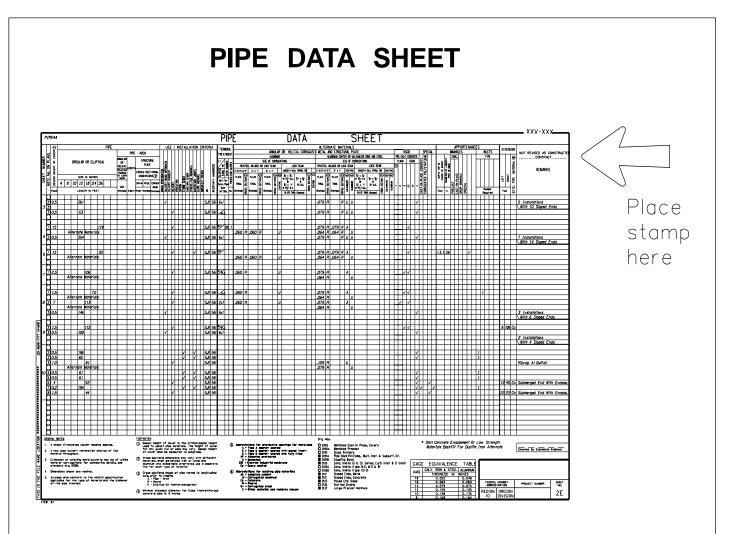
Erosion control plans show measures used to control erosion and sediment resulting from project construction. These plans, including regular updates during construction. are required by federal permit. Post-construction updating is documentation of how permit requirements were met.

These plans need to be updated to clearly define what was in place or what was modified during construction.

Apply the "REVISED AS CONSTRUCTED" stamp to these drawings.

REVISED AS CONTRUCTED Date CONTRACT Number





These sheets identify the size, length, and type of pipes used in the project.

These sheets do NOT need to be updated.

Apply a "NOT REVISED AS CONSTRUCTED" stamp to these sheets.

NOT REVISED AS CONTRUCTED

# <section-header> DEAD SHEEDS

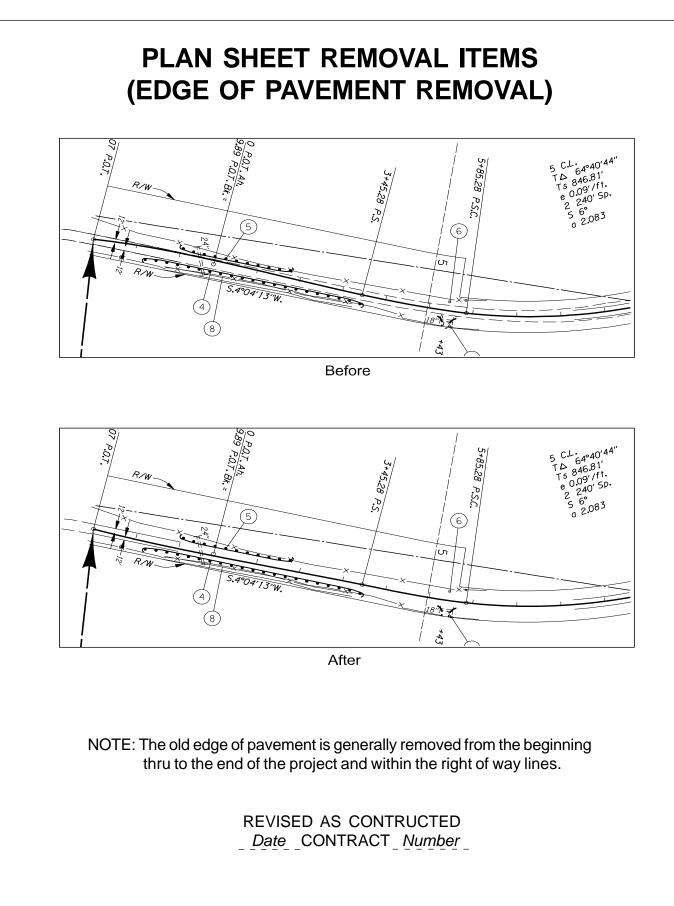
Plan sheets are maps of the project area, locating what construction is to be done, and where. Each plan sheet is accompanied by notes that explain exactly what work is to be performed.

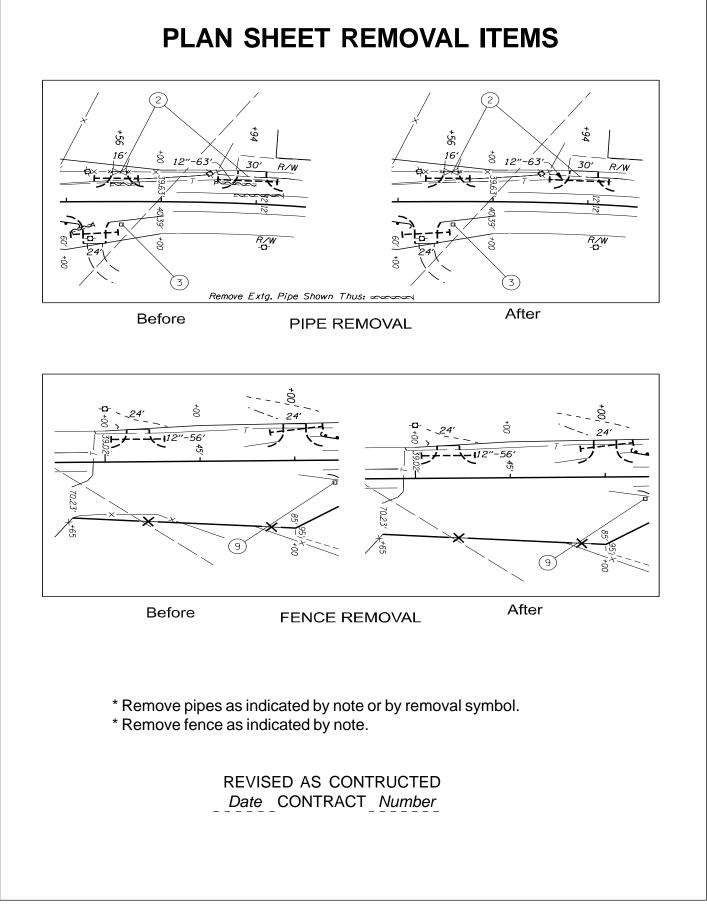
These sheets go through the normal phase down drafting - the removal of symbols and features that have been removed or replaced by new construction.

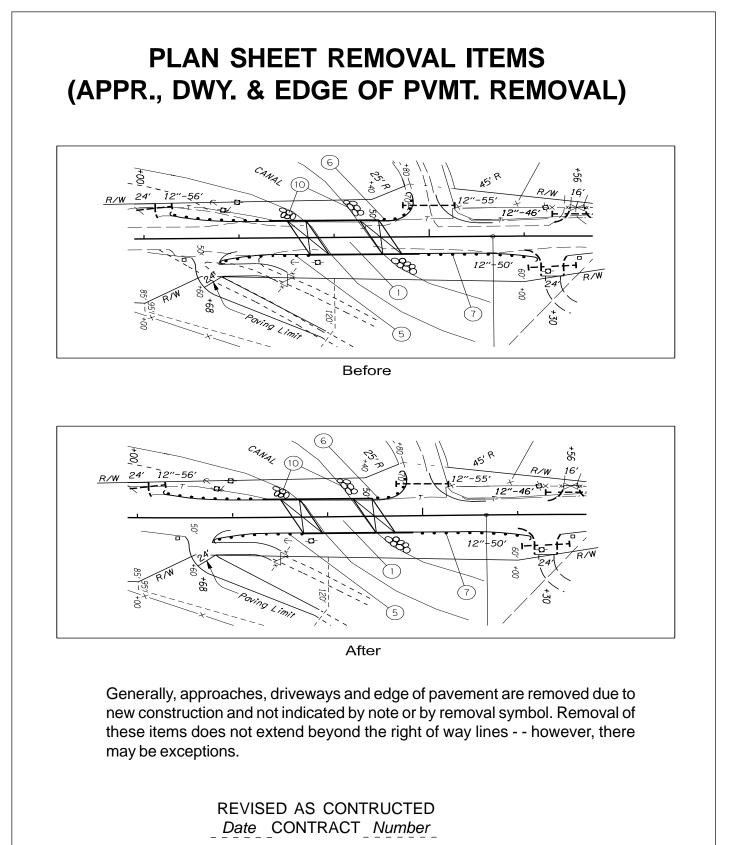
Field revision may also be required - make all changes that are marked on the As Constructed field notes ... usually shown in red.

Apply the "REVISED AS CONSTRUCTED" stamp to these drawings.

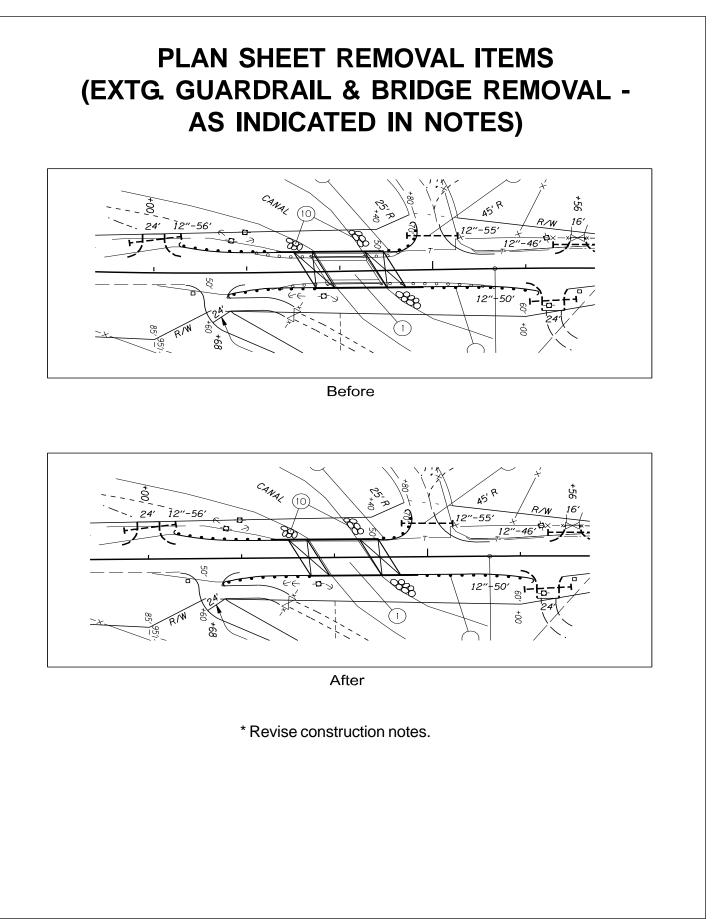
REVISED AS CONTRUCTED \_Date \_ CONTRACT \_ Number \_

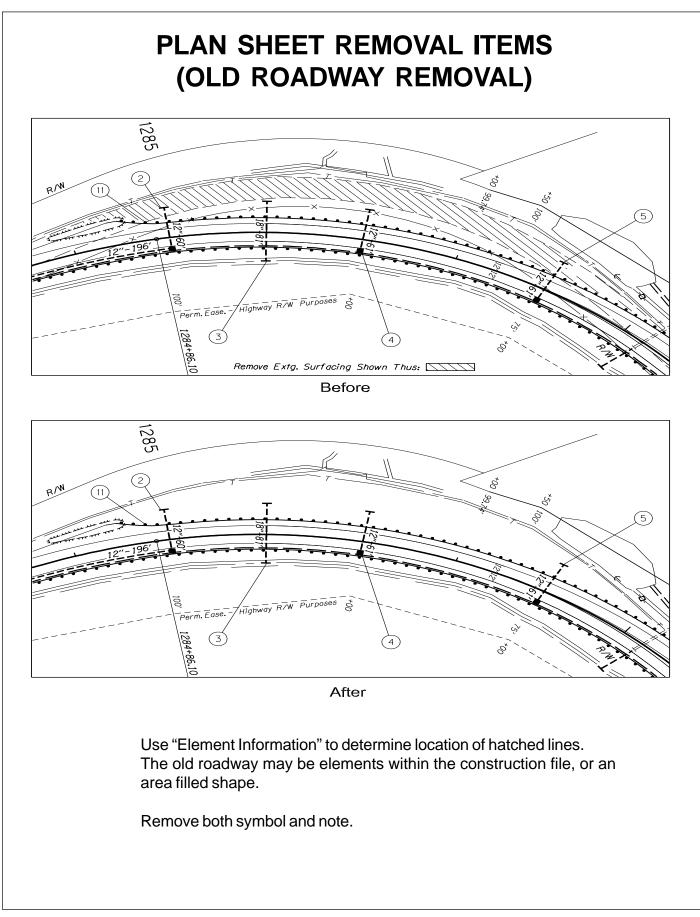


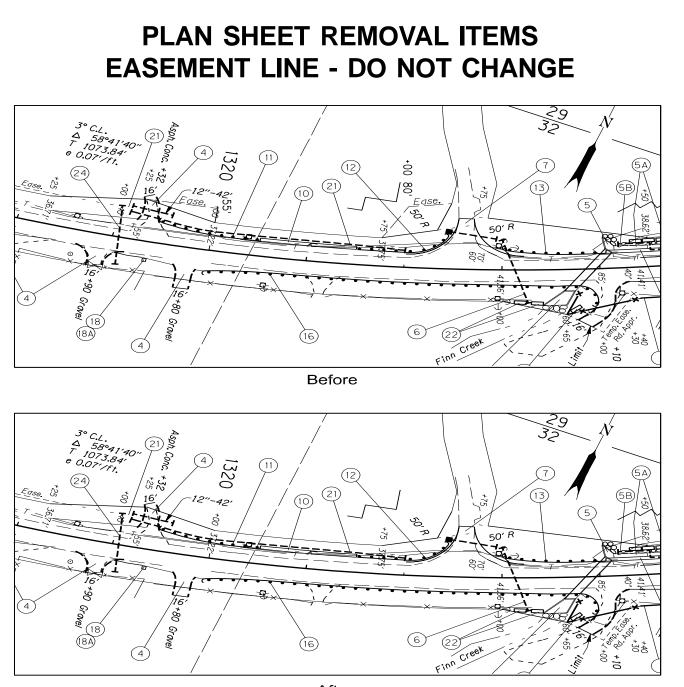




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After

Easement lines DO NOT CHANGE on construction plans even if shown in red - leave as is.

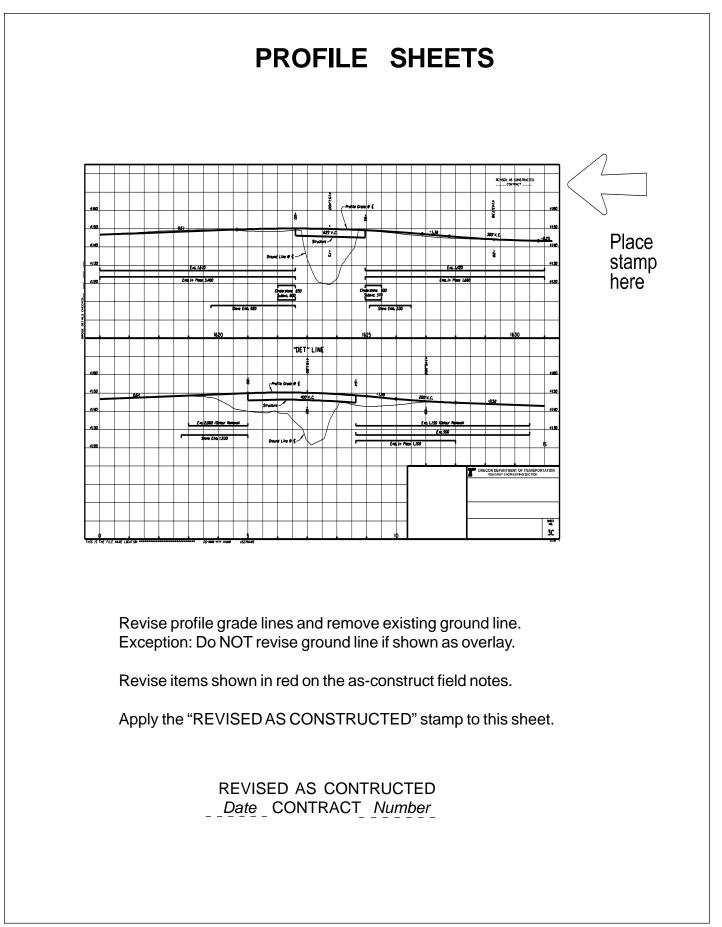
The official RW map will reflect any of the necessary changes or variations in easement lines.

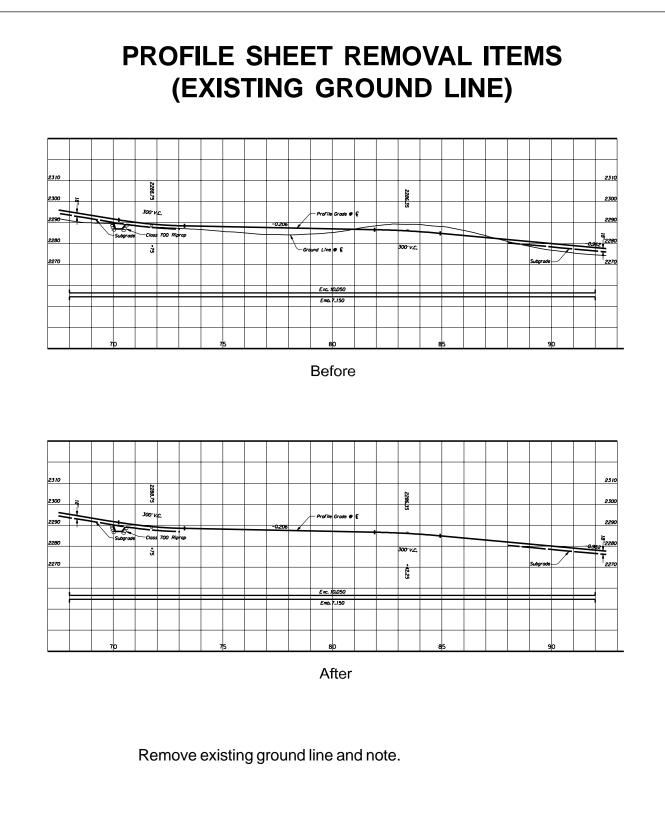
# ADJUST AND RECONSTRUCT SYMBOLS (FOR NORMAL PHASE DOWN DRAFTING)

Adjust inlet symbols:	to be shown as existing: $\Box$
Reconstruct inlet symbols:	to be shown as constructed:
Remove inlets shown as:	
Adjust manhole symbols:	to be chown as existing:
	to be shown as existing:
Reconstruct manhole symbols:	$\rightarrow$ to be shown as constructed: $\textcircled{\bullet}$
Remove manholes shown as: 🔘	(
Remove buildings shown as:	$\ge$
Remove sidewalk shown as:	
Remove old roadway shown as:	

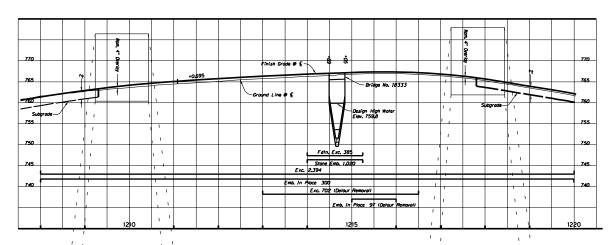
(1) Sta. "DET" 1-00 To Sta. "DET" 5-00 (.1, Const. Import Quark Rat - 3375 (Type 2A) Const. Quark Rat Transition Const. Sucod Rat Transition Const. Str 50 Ext. Transment Five: Robert CH-1:-9 Remote Team, Cuark Rat	(1) Sto. 1625+22 To Sto. 1625+93. L1. Renore Frag. Guord Rei Const. Guard Rei Const. Cuard Rei Tramsliton Const. STR - 350 Cart Transliton Const. STR - 350 Cart Transliton Flore ReterQ.84-4.5-0	(2)         Sex, 16:17-40, R.         RE VIED IN C           Const. A gar.         RE VIED IN C         RE VIED IN C           Sex big. No. 2017.91	Delination
(2) Sta. 1617400 To Sta. 1622-33. L1. Nenne Extp.Goard Rot Const. Guard Rot = 4625/17/pe 24 - 125/17/pe 3 Const.Guard Rot Transfitm	(12) Sra. 1625+22: To Sta. 1630+05, Rt. Remove Extp. Guord Roll Const. Quard Roll - 4125:17(ppe 24) - 125:17(ppe 3) Const. Quard Roll Transition	(C) Calori, Tana ya wa sa	
Cost: 557-550 Ext Transment Fore Review, W-4-E-0 (See Drg.Noc. 2126, 2126, 21266, 2126C, 21266, & 21261)	Const. SR7-350 End Treatment Flare Rate:Q,W-4,E:0 (3) Relocate Utility Poles (By Others)		Place
(3) Star 1967 - 4.96 Court, Party 76 - 75-2" Intel - 4 Court, Party 12" Conc.: Encourser Sea. Pape - 45' Intel Tenty, 12" Sear, Pape - 516' Under Party, - 25' Remove Tenty, Intel - 4	(ii) Sia, 1625+10 Const. 1920 "0-2" / Initi - 2 Inst. 12" San. Pipe - 5.1" Tr. Enc 26 C.1.		stam
namour Tanos, Jine - 561 himmon Tanos, Sim, Pije - 561 17. piz 250 c.1. 1670 Deals, See SM, 280 Gen Dra, Nam, 2001A, 2105, 2112 & 2121) (3) Const. Tano, Doingne Curb Amount Tanos, Diongne Curb Amount Tanos, Diongne Curb	(15) Sia "DFT" 8454 Ta Sia "DFT" 9427. RL		here
Pennov Tenn, Drainge Curb Iser Org. Nas 20771 Ifor Drg. Nas. Ste SM. 1.A1     (5) Sta. "DET" 8+64 Canst. Jetur Structure - J&r	Const. Temporary Guard Anil - 12.5' (Type 3) Onest, Guard Anil Trenstition Dansi, SRT - 350 Ear Treatment Flore Rates 0, II+4', E-0 Remove Temp, Guard Anil		
Polay, Wath − 28° With Tarie Bern Stein Mount Guord Rat Penene Dehour Structure (For Drg. Ras., See Sht. JA)	(b) Sia 1822+80 To Sia 1824+95 Briago Na, 18142 Amerone Erds Structure Const. Structure - 239: Rodry, Nation - 40 With Reinf, Romes Al Bridge Ends		
(€) Star, 1277, 8-69 (Sourt, 7een, 7jap 10-27; Intel - 2 Inst. Tenn, 127; Cuher Pilps - 767 Amorea Ferna, 1207 0-27; Intel - 2 Amorea Ferna, 1207 0-27; Intel - 2 Amorea Ferna, 12087, 767 (7, 5.42, - 42, 0.7, (7) Inst. Tenn, Longord Alteruator Norrow Sile System	(For Drg. Nos., See Snr. J.A) (1) Sin, "DET" 4-38 To Sin, "DET" 5-00, Al, Const. Tepporary Gurd Alp" - 12.5 (Type 3) Const. Gurd Alp" - 150 End Textment Form Rate, Gur F, Ed		
Himmer Tens, Tinpar Alteruator     Annoe Tens, Tinpar Alteruator     Sia, 1624+60 To Sia, 1625+25, L1.     Canat, Dinh     Dinh Exc. 10 CY.     If an Denis, See Sia, 280	Aenove Temp, Guard Aoli (18) Sia. 1618+63. To Sia. 1622+33, Ri. Aenove Eng. Guard Avii Const. Guard Anii - Joor Tiyue 2AJ		
(3) Canst. Detour Remore Detour	- (125/17)ye 3) Const. Guard Moil Transition Const. SRT-350 End Treatment Flore Hate/0.Wr4,E+0	OREGON DEPARTMENT OF RADAWAY LINE MEDICAL	RANSPORTATION
(10) Sta. 1625-725 To Sta. 1625-15, L I. Carel, Dieto W/Marras - U Sa. Ta. BTO: Exa 5 CT. Ifor Denois, See Sin. 220	(19) Sia. "DET" 4+00 & Sia. "DET" 5+00. 15 L1. Inst. Teap. SetTement Pictor - 2 Anamoe Temp. Statement Pictor - 2 (For Details, See Sin. 28)		
heð ið træ fla e mak læstiga freesenssensensensensensensensensen dæma-fin	7 mar ustavat		944 109-1
<ul> <li>Correct note starest of note.</li> <li>Correct and correct and correc</li></ul>	ation and lengths o nsolidate notes to p	of pipe only. Do not revise proper order. s the original drawing.	
<ul> <li>Correct note starest of note.</li> <li>Correct and cor</li> <li>Use the same for</li> </ul>	ation and lengths o nsolidate notes to p	proper order. s the original drawing.	
<ul> <li>Correct note starest of note.</li> <li>Correct and cor</li> <li>Use the same for</li> <li>Removal notes:</li> </ul>	ation and lengths o nsolidate notes to p ont and text size as Remove note and	proper order. s the original drawing.	
<ul> <li>Correct note starest of note.</li> <li>Correct and correct and correc</li></ul>	ation and lengths o nsolidate notes to p ont and text size as Remove note and	proper order. s the original drawing. I symbol djust symbol (show as existin	

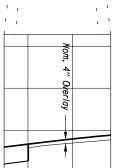
NOTES		
Before	After	
3 Remove Extg. Fence Const. Type "CL-6" Fence (See Drg. No. RD815)	(3) Const. Type "CL-6" Fence (See Drg. No. RD815)	
<ul> <li>Bridge No. 17955</li> <li>Remove Extg. Structure</li> <li>Const. Structure - 90'</li> <li>Rdwy. Width - 30'</li> <li>And Reinf. Panels At Bridge Ends</li> <li>(For Drg. Nos., See Sht. 1)</li> </ul>	<ul> <li>4 Bridge No. 17955 Const. Structure - 90' Rdwy. Width - 30' And Reinf. Panels At Bridge Ends (For Drg. Nos., See Sht. 1)</li> </ul>	
67 67 5 Sta. 85+87 To Sta. 86+87, Rt. Remove Canc. Barrier - 80 Const. Conc. Barrier - 100' Const. Barrier Transition Flare Rate=20:1, W=3.3 m, E=0 (For Details, See Sht. 2B-5) (See Drg. No. RD500 & RD520)	5 Sta. 85+67 To Sta. 86+67, Rt. Const. Conc. Barrier - 100' Const. Barrier Transition Flare Rate=20:1, W=3.3 m, E=0 (For Details, See Sht. 2B-5) (See Drg. No. RD500 & RD520)	
6 Sta. 85+77 To Sta. 87+87 Remove Guardrail – 200 Const. Guardrail – 198'(Type 2A) – 12'(Type 3) Const. Guardrail Transition Flare Rate=0,W=0,E=0.6 m Connect To Extg. Rail	6 Sta. 85+77 To Sta. 87+77 Const. Guardrail – 198' (Type 2A) – 12' (Type 3) Const. Guardrail Transition Flare Rate=0, W=0, E=0.6 m Connect To Extg. Rail	
7 Sta. 86+80 <u>Remove Inlet</u> Const. Type "G-2" Inlet <sup>30</sup> Inst. 12" Culv. Pipe - 3≪ Tr. Exc	(7) Sta. 86+80 Const.Type "G-2" Inlet Inst. 12" Culv. Pipe - 30' Tr. Exc 3 C.Y.	
<ul> <li>8 Sta. 135+74</li> <li>18" Culv. Pipe In Place Remove - 3' Lt. Extend - 3' Lt. (5' Depth) Const. Paved End Slope Const. Inlet Ditch "V" Bottom, 1<sup>1</sup>/<sub>2</sub>:1 Slopes Dt. Exc 1 CY. (For Details, See Sht. 2B-4)</li> </ul>	<ul> <li>8 Sta. 135+74</li> <li>18" Culv. Pipe In Place Remove - 3'Lt. Extend - 3'Lt.(5' Depth) Const. Paved End Slope Const. Inlet Ditch "V" Bottom, 1<sup>1</sup>/<sub>2:1</sub> Slopes Dt. Exc 1 CY. (For Details, See Sht. 2B-4)</li> </ul>	
9 Adjust Water Valve Box - 3 (For Details, See Sht. 2B-10)	(remove note and number)	
(10) Adjust Extg. Manhole (For Details, See Sht. 2B-10)	(remove note and number)	
(11) Inst. 8" Temp. Drainage Pipe – 225' Remove Temp. Drainage Pipe	(remove note and number)	
<ul> <li>Sta. 14+50, Rt. Reconst. Extg. Manhole Const. Slope Protector</li> </ul>	(12) Sta. 14+50, Rt. Reconst. Extg. Manhole Const. Slope Protector	
(13) Const. Detour Remove Detour	(remove note and number)	







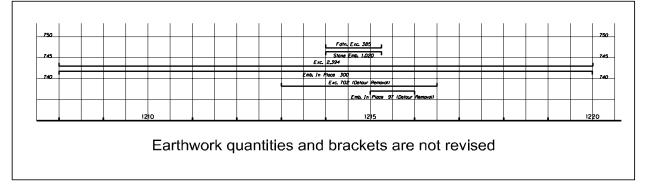




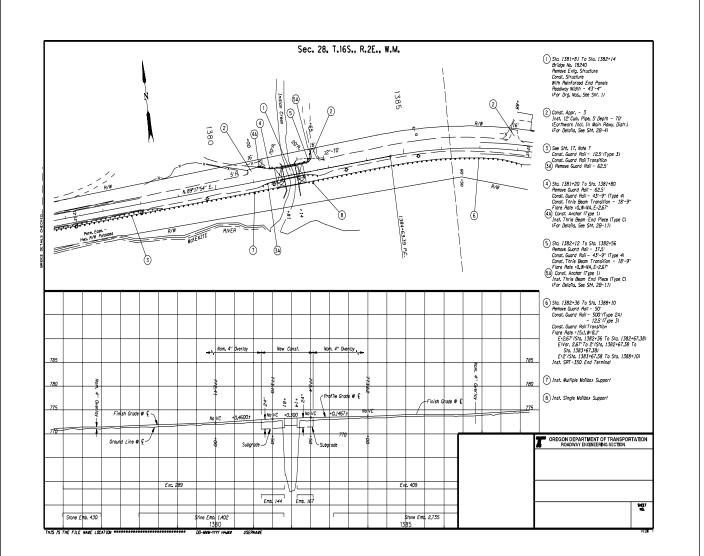
The ground line is not removed from beneath overlays. However, the ground line is removed beneath new construction.

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	Nom. 4" Overlay	
	V I	

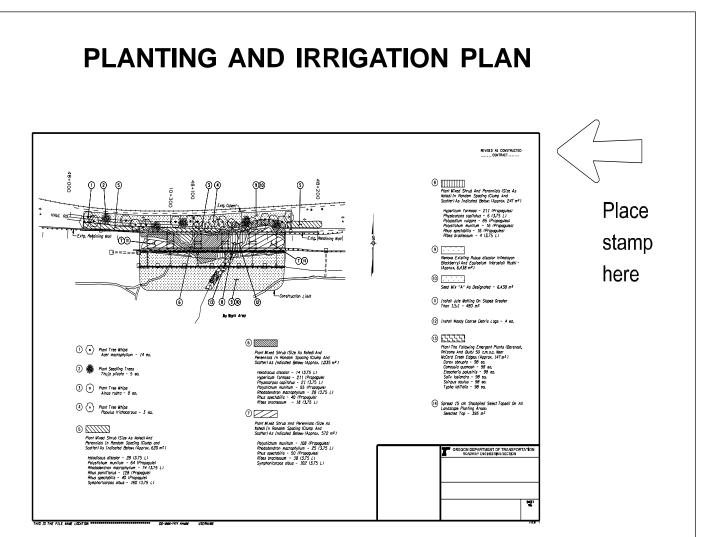
## EARTHWORK







For instructions, see PLAN SHEETS, NOTE SHEETS and PROFILE SHEETS.



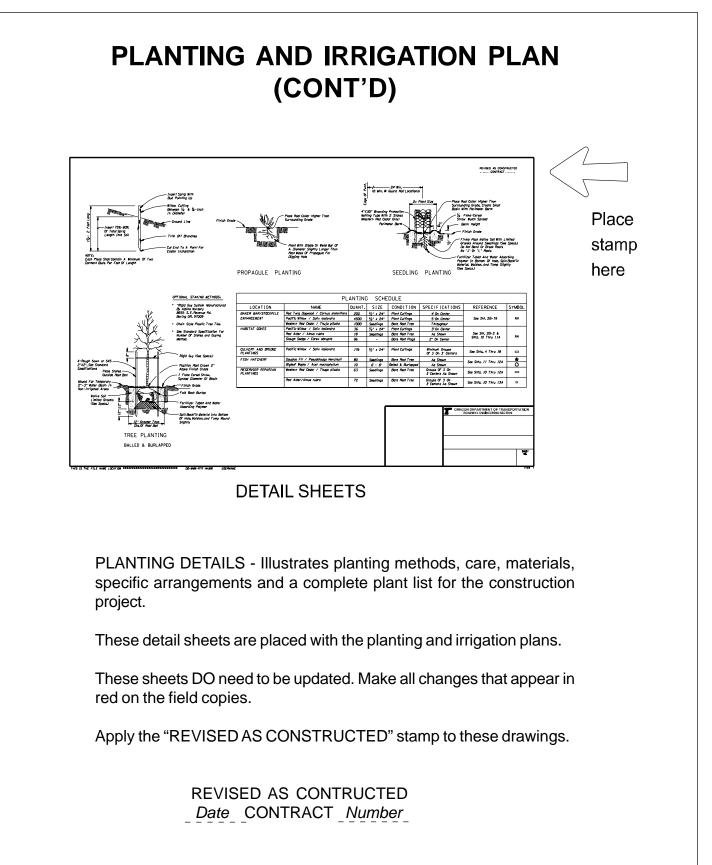
PLANTING PLAN - Illustrates the restoration of plants and plant materials destroyed or displaced due to project construction.

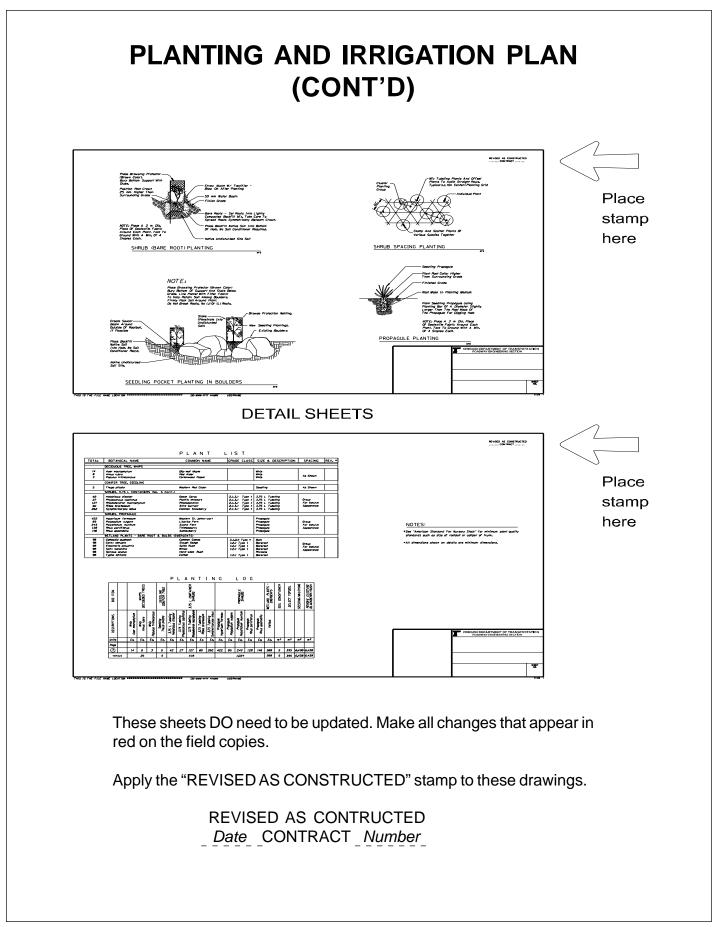
The planting and irrigation plan sheets are placed after the plans and profiles. (See page 7)

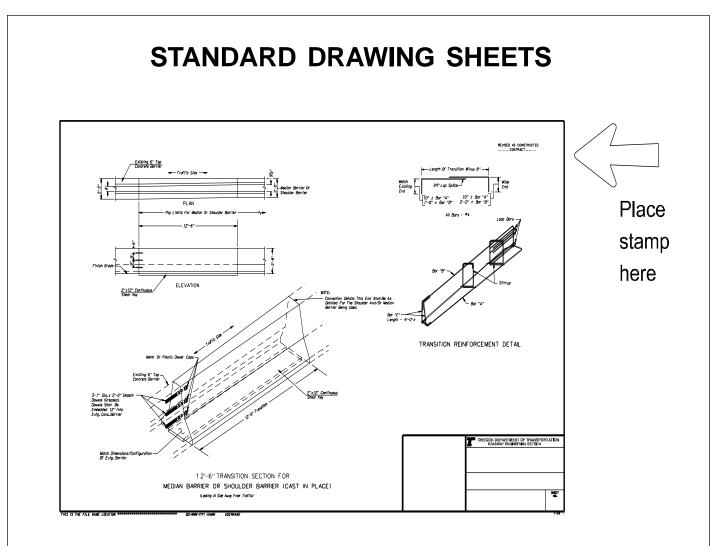
These sheets DO need to be updated. Make all changes that appear in red on the field copies.

Apply the "REVISED AS CONSTRUCTED" stamp to these drawings.

REVISED AS CONTRUCTED <u>Date</u> CONTRACT <u>Number</u>







These drawings show standard details of construction methods. They are usually placed at the end of roadway's construction plans.

Make all changes as indicated by field notes.

Normally these sheets do not change and do not accompany as construct plans — but if they do, make the indicated changes shown in red and apply the "REVISED AS CONSTRUCTED" with the following text added above the stamp: "MODIFIED STANDARD DRAWING".