General Construction Inspector General Guidance

Table of Contents

Role of Construction Inspector 3

Documentation 4

Inspector Resources 4

Order of Precedence 5

Specifications and Plans 6

Navigating the Specifications 7

Navigating the Plans 8

Plan Set Organization 8

Basic Plan Reading 10

Select Plan Components 10

Standard Drawings 18

Summary Table 18

Summary of General Inspection Resources 19

Review: Putting It All Together 20

General Inspection Navigation: Where to Start 21

Standard Specifications Review 21

Non-Field Tested Materials Guide (NFTMG) 23

Qualified Products List (QPL) 23

General Guidance

Role of Construction Inspector

The construction inspector has the toughest job in construction. The Inspector has the responsibility and authority to point out deviations from specifications, but has no corresponding authority to approve changes, even though they might be minor. The Inspector's function begins and ends with seeing that construction operations produce the results called for in the plans and specifications. If an Inspector has the quality of firmness coupled with patience, and judgment inherent with a desire to be correct but practical, then they will fulfill their intended function on the construction team.

Inspectors must work constantly to achieve a high standard of excellence in the administration and quality control of construction projects. Each Inspector has the responsibility to perform in such a manner that their personal goals and the owner/designer goals are in harmony. Since an Inspector is isolated from immediate supervisory resources and guidance much of the time, they must be able and comfortable in making many individual judgments throughout the workday affecting the quality of construction. The Inspector represents the owner at the site of work and is empowered to enforce the provision of the Contract. The Inspector is authorized to reject materials and workmanship not in conformance with contract requirements.

SS 00150.01 Inspector's Authority and Duties include the responsibility to orally reject defective materials...

The Inspector must be mature, confident, patient, meticulous in duties, and be a person of integrity who also possesses good judgment. There are innumerable attributes that make up a good Inspector. An unknown author once described an Inspector best by defining what they are not:

- An Inspector is NOT a designer, although they must be able to read plans and speak with designers.
- An Inspector is NOT a surveyor, although they must understand surveying principles.
- An Inspector is NOT a superintendent, although they must know construction and good planning.
- An Inspector is NOT a policeman, although they must secure compliance with the Contract.
- An Inspector is NOT a lawyer, although they must understand and enforce Contract Law.
- An Inspector is NOT a carpenter or other tradesman, although they must recognize qualified people.
- An Inspector is NOT an accountant, although they must be able to keep detailed records.

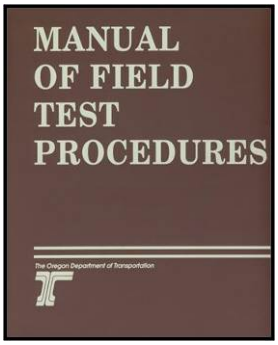
The ideal Inspector must have desire, reasonableness, firmness, good judgment, knowledge, and courtesy. Their interactions with construction crews must be friendly and firm without familiarity, and must be conducted with the skill of a diplomat. The fundamental requirements for a good Inspector are:

- Knowledge – It is of paramount importance that the Inspector has knowledge of the work inspected.
- Common Sense – The means to synchronize knowledge and specifications; apply one to the other.
- Observation – see with eyes as well as considered thought about the image observed.
- Physical Tools – Measuring devices, testing equipment, notebook, pencil; and the ability to use them.
- Courtesy – Valid criticism; how one says it can drastically effect how one receives it.

Documentation

The importance of documentation on a construction project cannot be stressed enough. It is critical for recording quantities and quality of materials placed which allows the contractor to be paid and the Agency confirmation of quality. It is also critical to provide a history of how the project was built for future reference like for making adjustments in the contract time. In addition, it could be important for providing information for the Agency in resolving a dispute. The ODOT *Construction Manual* has a complete chapter on Project Records. To assist the Inspector, excerpts from the chapter are included in the *General Inspection Training Manual* under the documentation tab.

Inspector Resources



Inspectors have many resources available to help them perform their job duties effectively. The most important construction resources are the project plans, special provisions and Oregon Standard Specifications, Volumes 1 and 2. These resources will be discussed in later sections.

Other important resources that may be referred to in the plans or specifications include:

- **The *Manual of Field Test Procedures* (Brown Book)**: The Brown Book applies to testing done at the jobsite like compaction and/or materials sampled at the jobsite like aggregate or concrete. The manual provides several sections including a description of the ODOT Quality Assurance Program; testing requirements and test methods for various materials used; report forms and examples; and *The Field Tested Materials Acceptance Guide for Type D or E Projects Only*.

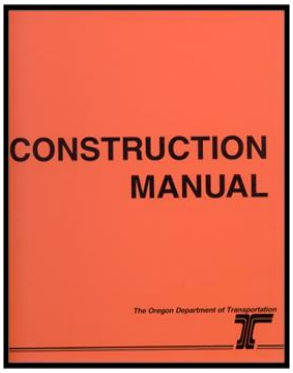
  The Field Tested Materials Acceptance Guide for Type D or E Projects section is

important for inspectors to understand as it details what tests are to be performed; who is to perform them and how frequently they must be performed. While the Quality Control Compliance Specialist (QCCS) is responsible for monitoring the testing, oftentimes it is the inspector's responsibility to notify the QCCS when testing will be needed. Also, it is important to be aware that the testing is occurring and that where possible, test results are documented in the Inspector's Daily Report.

- **The Non-Field Tested Materials Guide**: Non-field tested materials include items like sediment barrier, geotextile, steel piling and bolts. The Guide provides a table of the materials covered along with a list of the required acceptance (quality) documents. A flow chart with guidance on how to use the NFTMG is included in the NFTMG tab in the *General Construction Inspection Training Manual*. For more navigational tips, refer to the Review Section of this Supplement.

- **Qualified Products List**: The "QUALIFIED PRODUCTS LIST" (QPL) is a comprehensive list of all finished products which have been evaluated and/or used by the Oregon DOT. Because there are items that are used over and over on projects, it makes sense to maintain a list of products that have been used and don't need to be re-evaluated every time they are to be incorporated. If an item is required to be taken from the QPL, the Non-Field Tested Materials Guide will provide direction to the QPL. For more navigational tips, refer to the Review Section of this Supplement.

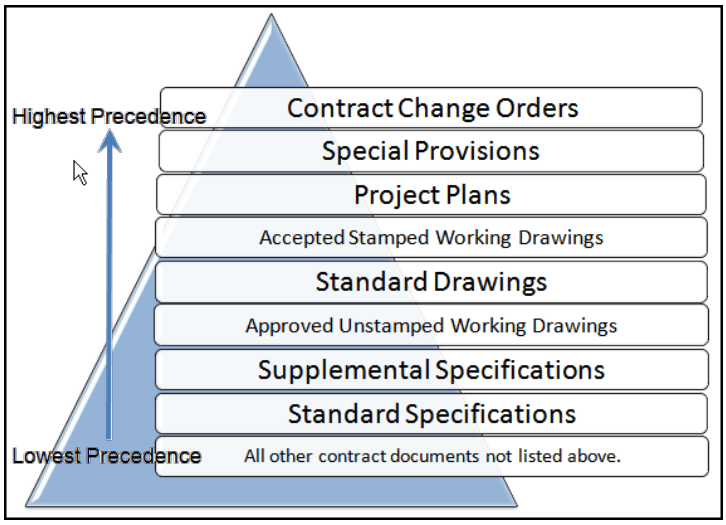
- ***Construction Manual***: An additional useful publication is the *Construction Manual* which you may find in the office bound in an orange binder. The Manual provides background and procedural guidance for Volume 1 of the Oregon Standard Specifications. Chapter 12, Project Records is of particular interest to an inspector as it provides guidance on preparing Daily Reports/Diaries and Quality Documentation, etc.



Order of Precedence

Many documents may be referenced for a project and sometimes conflicting information is included. For example, the project plans may call out for a given dimension and the special provisions have something different. To reconcile the differences, an order of precedence has been established. The order of precedence is listed in Volume 1 of the ODOT Standard Specifications, under 00150.10(a).

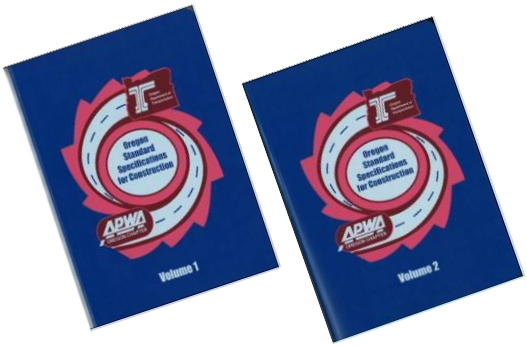
The order is presented in the pyramid to the left indicating that the most general project document which is also, in most cases the oldest, has the least precedence. As you move up the pyramid, the documents become increasingly more project specific and more current with contract change orders taking precedence over all other documents. Note that an order of precedence for material specifications and test methods also is established and can be found in section 00165.20.



Specifications and Plans

As previously mentioned, the critical documents to have available when inspecting a project include the Special Provisions, Standard Specifications and Plans. The plans provide the requirements for constructing a project including the location and dimensions of all features that will be incorporated which make them unique for each project. To answer questions like how deep to install a feature or which side of the highway to place a pipe, the answers are going to be found in the plans. Answers to questions about the scope of the work, the construction limitations, the necessary equipment are going to be found in the specifications.

<u>Specifications</u>



The Oregon Standard Specifications for Construction provide the basic guidelines for constructing a project. The Standard Specifications are printed about every six years so there are areas that require updates as technology changes or best practices are identified. To document the changes, ODOT posts boiler plate special provisions that include the recent changes for a given specification. When a project is developed, the standard specifications and/or boiler plate specifications are compiled and modified as needed and incorporated into the special provisions. From an inspector's perspective, the first check on a specification should be to the special provisions which may or may not refer back to the standard specifications.

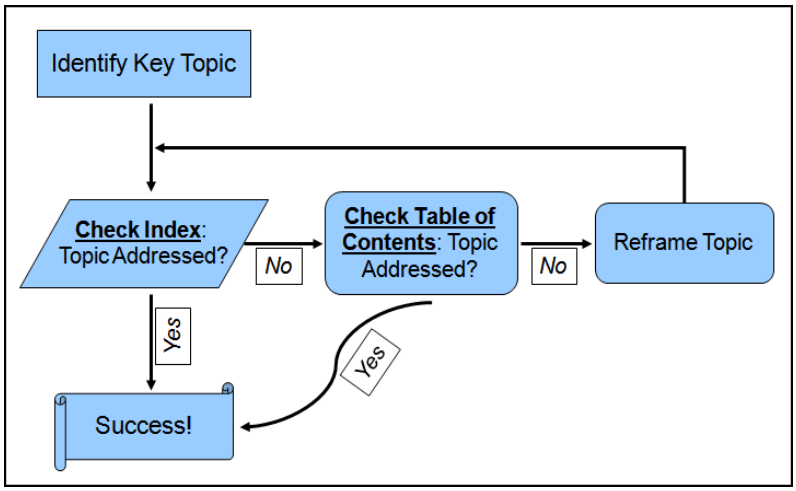
Navigating the Specifications

The Oregon Standard Specifications for Construction include two volumes. Volume 1 contains Part 00100 and covers the defined terms, the bidding process and contractual relationships. Essentially, it covers the rules of the contract between the Agency and the Contractor. Volume 2 contains Parts 00200 through 03000 which describe the actual details of how a design feature is going to be constructed.

Believe it or not, ODOT standard specifications and special provisions (Sections 00200 through 01999) subsections are organized in the same way. The figure to the right shows the general organization of the subsections Each specification will have unique subsections like scope, labor, construction, etc. but the individual subsections will always be listed under X.00 for Scope; X.30 for Labor and X.40 for construction, etc. For example, if the question was *what type of labor is required for Pipe Lining*? it could be answered by looking under 00410.30 (Pipe Lining, Personnel Qualifications). If the question was, *"How is pipe lining measured?"* The answer could be found by referencing 00410.80 (Pipe Lining, Measurement).

Scope	• X.00 to X.09
Material	• X.10 to X.19
Equipment	• X.20 to X.29
Labor	• X.30 to X.39
Construction	• X.40 to X.59
Maintenance	• X.60 to X.69
Finishing, Cleaning Up, and Warranties	• X.70 to X.79
Measurement	• X.80 to X.89
Payment	• X.90 to X.99

Specification Organization



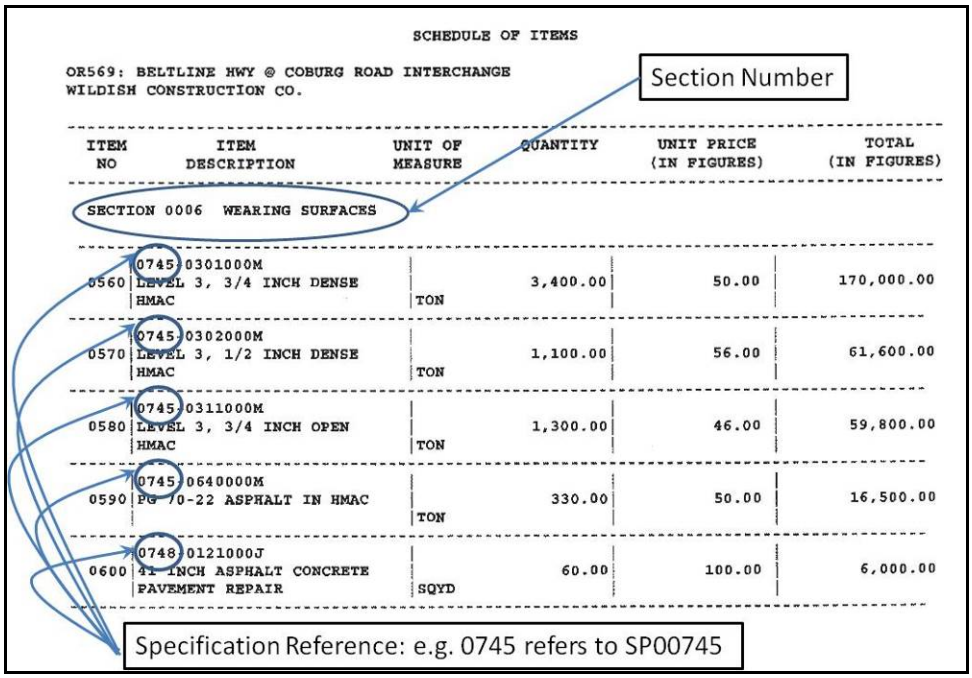
Searching for a Specification

Sometimes, however, more effort is required. Navigating the specifications could be as easy as referring to the table of contents and/or index. The key to finding answers in the specifications is to not give up – **and be sure to read the entire subsection.** The flow chart is provided as a tool to assist in searching the specifications. For more navigational tips, refer to the Review Section of this Supplement.

Special Provisions and Schedule of Items

An alternate method to find a specification is to refer to the special provisions. If the question is specific to a construction project, there should be a related bid item. The special provisions include a *Schedule of Items* toward the end of the document, which lists all of the project bid items with a specification reference. Hence, if the bid item can be found then the specification can be found.

The *Schedule of Items* is arranged by sections which are logically sequenced from activities that take place at the beginning of construction to those that take place later in a project. In the class project, the *Schedule of Items* has ten sections including Section 0001: Temporary Features and Appurtenances, Section 0002: Roadwork, Section 0003: Drainage and Sewers, etc. By narrowing the area of construction, a bid item can be found. A snapshot of Section 0006 Roadwork is shown below:



SCHEDULE OF ITEMS

OR569: BELTLINE HWY @ COBURG ROAD INTERCHANGE
WILDISH CONSTRUCTION CO.

Section Number

ITEM NO	ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE (IN FIGURES)	TOTAL (IN FIGURES)
	SECTION 0006 WEARING SURFACES				
0560	0745-0301000M LEVEL 3, 3/4 INCH DENSE HMAC	TON	3,400.00	50.00	170,000.00
0570	0745-0302000M LEVEL 3, 1/2 INCH DENSE HMAC	TON	1,100.00	56.00	61,600.00
0580	0745-0311000M LEVEL 3, 3/4 INCH OPEN HMAC	TON	1,300.00	46.00	59,800.00
0590	0745-0640000M PG 70-22 ASPHALT IN HMAC	TON	330.00	50.00	16,500.00
0600	0748-0121000J 4½ INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	60.00	100.00	6,000.00

Specification Reference: e.g. 0745 refers to SP00745

Items number 560, 570, 580 and 590 reference 0745 which means that Special Provision Section 00745 Hot Mix Asphalt Concrete includes multiple pay items. Since hot mix asphalt concrete paving can include many materials, each material listed is required to be measured and paid for separately.

Navigating the Plans

ODOT plans include the specific locations, dimensions, drawings, and installation notes for constructing the features on the project. The plans have consistent layouts that make them easy to navigate. The table below provides a description of what information is provided in a plan set by sheet number.

Plan Set Organization

Page	Page Description	Information Included

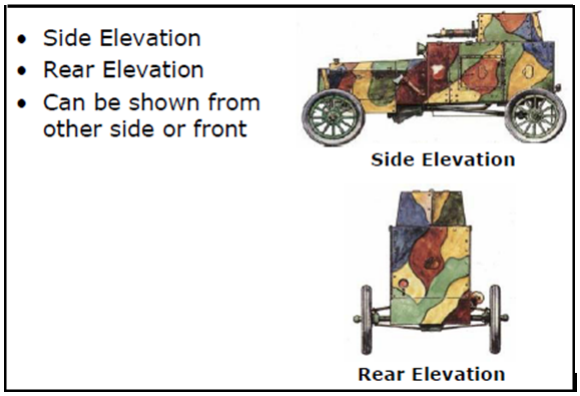
Page	Page Description	Information Included
1	Title page	• Project limits, location • Work activities (below project name)
1A's	• Index of Sheets • Index of Standard Drawings	• List of project specific drawings • Standard drawings used specific to the project
2A's	Typical Sections (listed by line and station)	• Roadway dimensions • Widening dimensions • Pavement thicknesses (aggregate base, HMAC base course, HMAC wearing course) • HMAC mix type
2B's	Details used specific to the project (modified standard drawings)	• Construction information that could be needed at various locations. • HMAC pavement repairs • Subgrade stabilization • Miscellaneous
2C's	Traffic Control Plans	• Details of sign placements • Detour • Traffic control plans (including cross sections)
2D's	Pipe Data Sheets	• Size and length of pipe • Pipe Use • Pipe material • List of standard drawings related to pipe installation
3's	General Construction (shown by line and station)	• General construction alignment • General construction profile including excavation and fill estimates • Drainage and utilities
G's	Geo/Hydro/Environmental Sheets	• Erosion Control (GA-) • Geotechnical Data (GB-) • Retaining Walls (GC-) • Sound Walls (GD-) • Culverts (GE-) • Fish Passage (GF-) • Temporary Water Management (GG-) • Bank Protection (GH-) • Stormwater (GJ-) • Landslide Correction (GK-) • HazMat (GL-) • Material source/Disposal Sites (GM-) • Roadside Development (GN-) • Waterway Enhancement (GP-) • Rockfall Mitigation (GQ-)
Drawing Numbers	From Bridge	See plan index (Sheet 1A) for what is included.
Drawing Numbers	From Traffic	See plan index (Sheet 1A) for what is included. Most common sheets include: • Permanent Pavement Markings • Permanent Signing

Page	Page Description	Information Included
		• Illumination Plans • Signal Plans

Basic Plan Reading

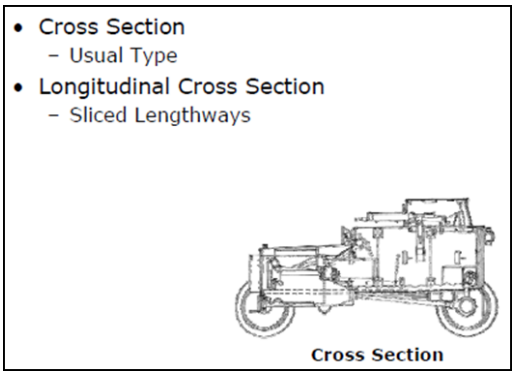
Construction plans include tabular information as well as graphical information. It is important to understand what the graphical depictions are in order to match up the information to the field. The fundamental graphical views are discussed here as background.

Common views presented include the plan, elevation, and cross section view. The views are presented below using a four wheel motorized vehicle, courtesy of NHI Course *134108 Plan Reading*. For more information and detail, check out the NHI website for on-line training modules.



The Plan View is a snapshot of a feature looking directly down on it. The elevation is looking at a feature straight on from one side or the back. The cross section view can either be a slice across the side or the middle as shown in the example to the right.

In the cross section view to the right, a section has been "sliced" away and the inside of the armored car is seen from the side. The inside of the car is also shown. In a drawing, dotted lines show parts not seen, such as the tires or other parts that cannot be seen.



Select Plan Components

<u>Alignment</u>

When building a project, oftentimes more than one roadway segment includes work activities. Each roadway segment is an alignment with a unique designation. The designation may apply to an off-ramp or an adjoining street or separate alignments on divided highways. For example, for a project constructed in Lane County for the Beltline Highway, one alignment was designated *BL* for *Belt Line* while another alignment was designated *EBO* for *East Bound Off-ramp*. Information in the plan set will be tied to an alignment which can typically be found on the Title Sheet.

Stationing

Stationing is used to identify the beginning and ending of a given section on an alignment or to identify a point where a feature is located. Stationing is designated continuously from a starting point of 0+00. Each 100 feet increases the stationing by one so that the stationing would run 1+00 to 2+00, etc. The 2+00 indicates that the point is 200 feet from a starting point. If the point was 3005 feet from a starting point, the station would be 30+05.

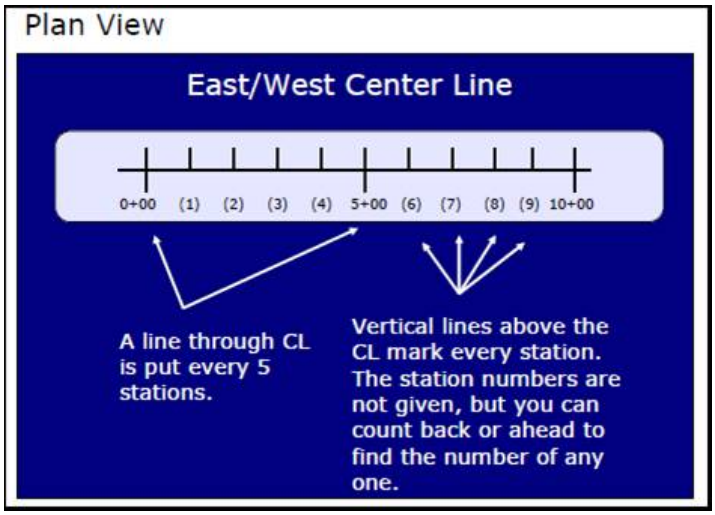
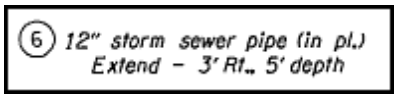


Image courtesy of NHI Course 134108

Stationing is marked along the centerline of a given alignment as shown in the example. Stationing allows the distance between any two points to be determined. For example, to determine the distance between Sta. EBO 104+00 to Sta EBO 105+07.5, remove the "+" in the stations and subtract the higher station from the lower station: 10507.5-10400=107.5 feet.

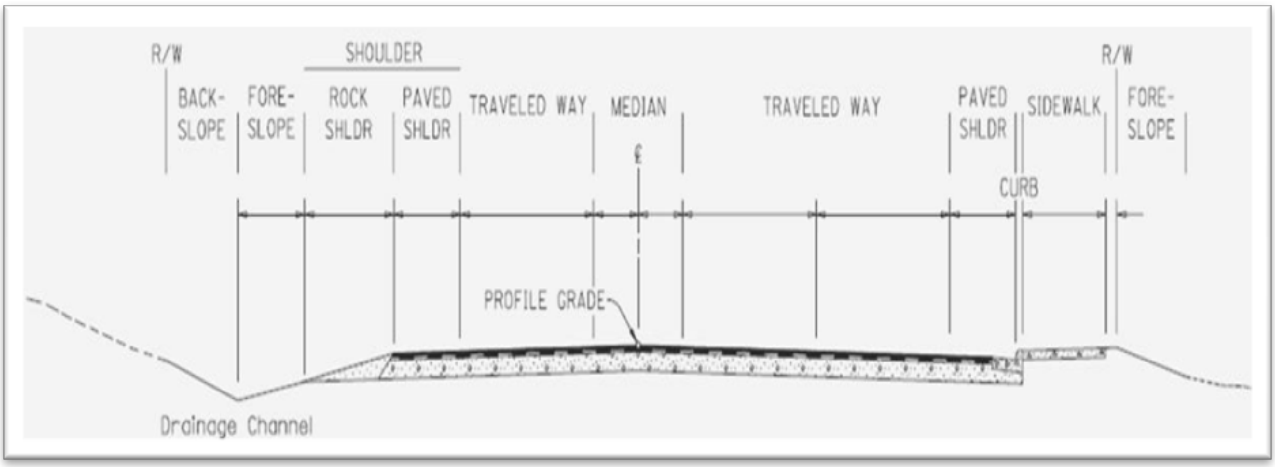
When a particular feature is located along an alignment, a station will be provided with an offset distance designated either left or right. To determine the orientation of left and right side of road, picture yourself standing on the beginning station looking ahead with the stationing increasing. From that perspective, the right offset is to your right and the left is to the left side of the roadway.



Example of construction note with direction Rt. designated.

Typical Sections – General

Typical sections are cross sectional views that define the configuration of a proposed roadway at right angles to the centerline. Typical sections show the width, thickness, and descriptions of the surfacing courses, as well as, the geometrics of the graded roadbed, side ditches, and side slopes. Typical sections will have the alignment designation and the beginning and ending stations to show where that typical section is used and what is going on between those stations.



Typical Section Components

Typical section requirements differ from project to project; however, all typical sections share the same general components as shown in the figure above and described below.

- **Median** – The portion of a divided highway separating the traveled way for traffic in opposing directions. The principal functions of a median are to separate opposing traffic, provide a recovery area for out-of-control vehicles, provide a stopping area in case of emergencies, allow space for speed changes, storage of left turning vehicles, minimize headlight glare, and to provide width for future lanes.
- **Profile Grade** – A control point referring to the design profile for maintaining proper roadbed grade.
- **Traveled Way** – The area of roadway surface designed for vehicular movement (traffic lanes) between fog lines.

- **Paved Shoulder** – The portion of the roadway contiguous with the traveled way for emergency use recovery of out of control vehicles, accommodation of pedestrians, bicyclists, and stopped vehicles, and for lateral support of subbase rock, base rock, and surface courses.
- **Rock Shoulder** – The shoulder created with rock drainage material used to cover the ends of the surface courses and bases, and for additional area for recovery of out of control vehicles.
- **Curb** – Edging along a street or roadway.
- **Foreslope** – Negative slope of drainage channel. Slope must accommodate recovery of out of control vehicles.
- **Backslope** – Positive slope of drainage channel. Slope must accommodate recovery of out of control vehicles.

Typical Sections – ODOT

Typical sections are used in most contract plans developed in the ODOT format. They are an important part of the plans because they show a detailed cross-sectional view of the work to be done. Therefore, each subsequent typical section or partial section represents a change or variation in the design.

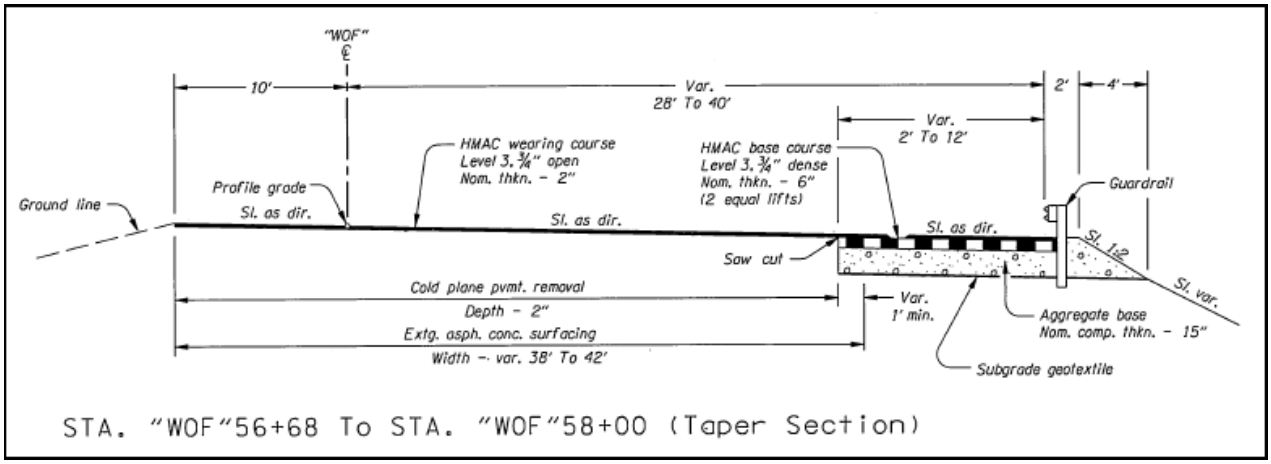
Typical Sections are listed in the following order:

- Mainline
- Frontage Roads or Intersecting Alignments
- Ramps

Check the Stationing on the typical sections to be sure that the entire project is represented with no gaps or overlaps. When looking for a feature, make sure to verify the proper alignment.

Working with the typical section above, many things can be determined including:

- This section is applicable for 5800 - 5668 =132 feet
- The pavement section includes a subgrade geotextile, 15″ of aggregate base, 6″ of HMAC for base (Level 3 (*mix type*) dense mix (*aggregate gradation*) with ¾″ aggregate (*largest aggregate size*)), and 2″ of HMAC for a wearing course (Level 4 open mix with ¾″ aggregate)
- The side slope is to be constructed at 1:2 which represents 1 vertical to 2 horizontal (*listed as a separate note in the plans*).



ODOT Typical Section

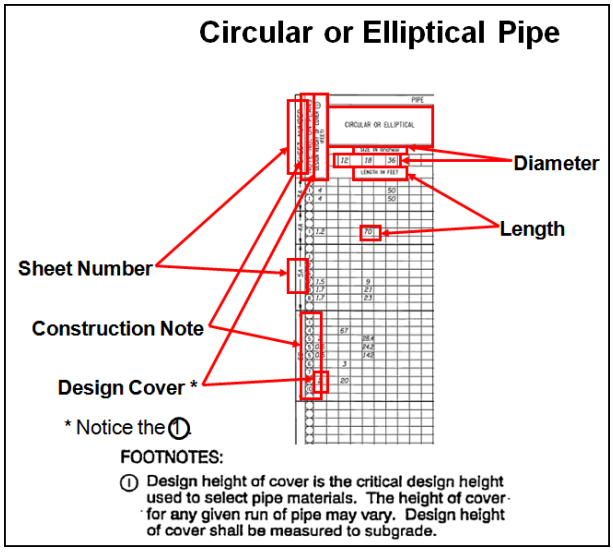
Taper Sections

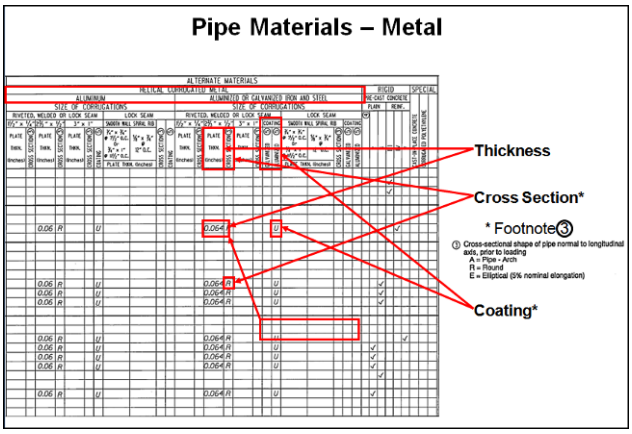
The typical section above includes taper sections since the road width is changing over the 132 feet. At the beginning station for the typical section, the first taper width listed is used. At the ending station for the typical section, the final taper width listed is used. For the section above the taper widths would be:

- 2' at STA. WOF 56+68
- 12' at STA. WOF 58+00

Pipe Data Sheets

Pipe data sheets include a wealth of information that can easily be overlooked unless each section is carefully reviewed. Included in the data sheets are the sheet number that provides the location of the pipe installation, the pipe length, diameter, type, use, and appurtenances like attached manholes or inlets. The sheet also includes a list of standard drawings that are needed for the project. Examples of information included in the pipe data sheets are shown in the figures.





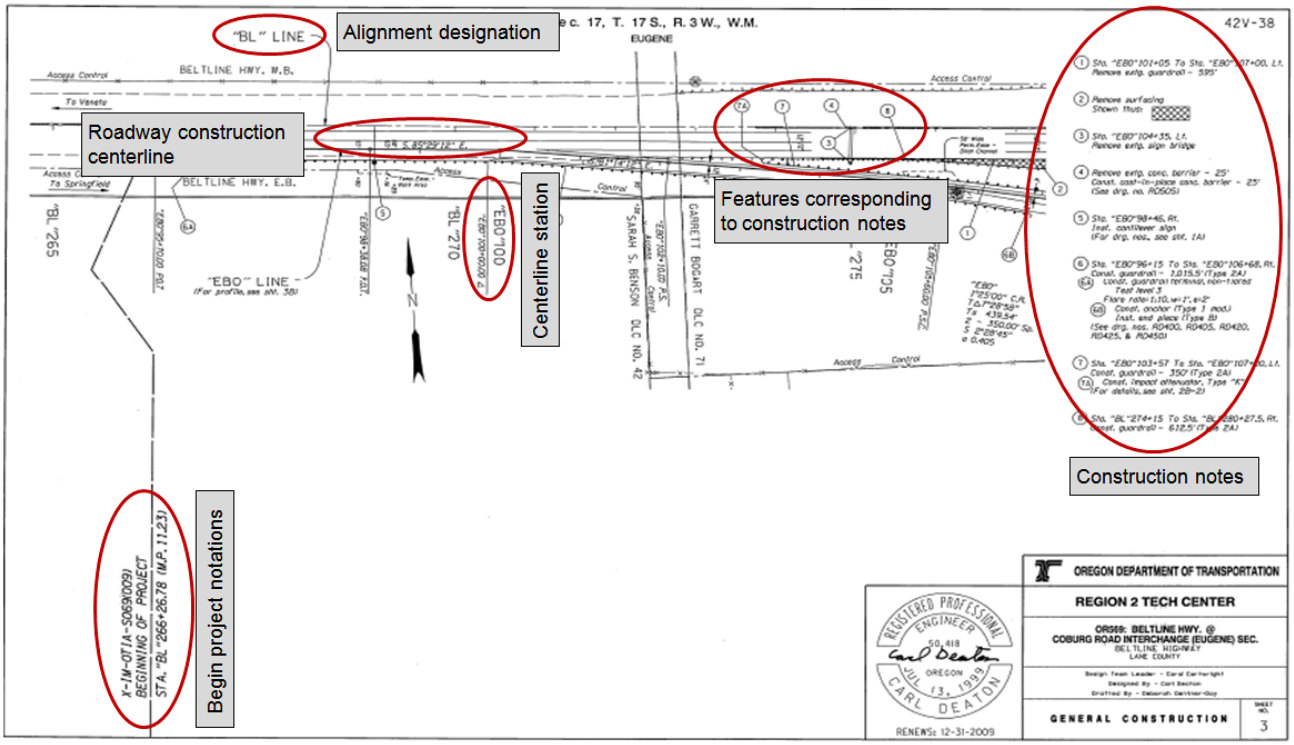
Example Pipe Data Sheet Information

General Construction Information

After the pipe data sheet, the plans include general construction information. The sheets are bundled by station for easy navigation. The first sheet in the set is General Construction sometimes followed by Drainage and Utilities and then the Profile Sheet, The Profile Sheet may include information on manhole and inlet elevations, grades, and excavation and embankment quantities. For example, general construction information from station 1+00 to 2+00, would start on sheet 3, Sheet 3A would include drainage and utilities and 3B would be the profile. Station 2+00 to 3+00 would be covered by sheets 4 through 4B. Other sheets could be included in the packet like the alignment plan, detour information or removal plans. The other sheets would be linked to the General Construction, Drainage and Utilities and Profile sheets with the same number followed by the next letter in the alphabet. (See Plan Set Organization table.)

Plan View

The plan views for a project are included on the Construction Plan Sheets. The stationing on the sheets typically increases from left to right. The top of the sheet (above the centerline) is left to the centerline and the bottom of the sheet (below the centerline) is right. Installation location information for features like signs, fencing, guardrail, delineators, and/or guardrail is included.



Construction Plan Sheet

Profile View

The profile view is like a longitudinal cross section of the road. Elevation, in feet is listed on the left and right hand sides of the section with station listed underneath the section. The profile grade is drawn on the scaled profile at an elevation taken at a point on the highway, usually at the centerline. The original ground line depicts the land before grading. If the original ground is excavated to match the profile grade, the section is a cut area. If the original ground is below the profile grade line, fill material will be required to bring it up to grade.

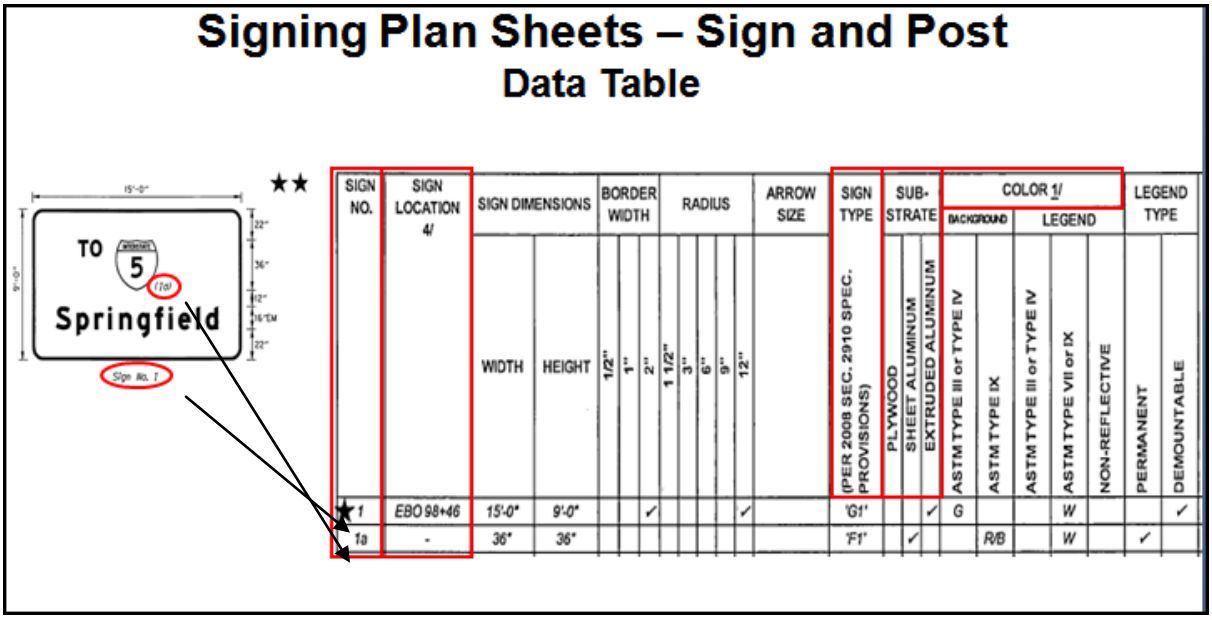
Information included on the profile sheet includes the elevation of the original ground, finished grade, subgrade elevation, curve information and grades. The sheet may also include excavation and embankment quantities, as shown below.

Construction Profile Sheet

Signing

Permanent signing sheets fall within the broad category of traffic. The sheets include information on the location of the sign, whether it is to be removed or left in place, the location of new signs and the type of sign support all referenced to a sign number. The actual signs are located on a separate plan sheet that shows new signs indicated with solid borders and existing signs indicated with broken borders.

Also included with the sign sheets, are a sign and post data table. The table includes a reference back to the sign number, the size, legend type and the post support type. The sign and post data table references the Oregon Standard Drawings needed for a particular sign construction. Like the pipe data sheet, the signing plan sheets are full of information and careful attention to detail is needed.



Standard Drawings

Standard drawings include design features that are used over and over from project to project. That is, they are not project specific so they won't include the installation location only the construction information. Standard drawings are like the standard specifications in that they can apply to any project. Features like concrete inlets, guardrail installation, sidewalks, and pavement markings are included.

Summary Table

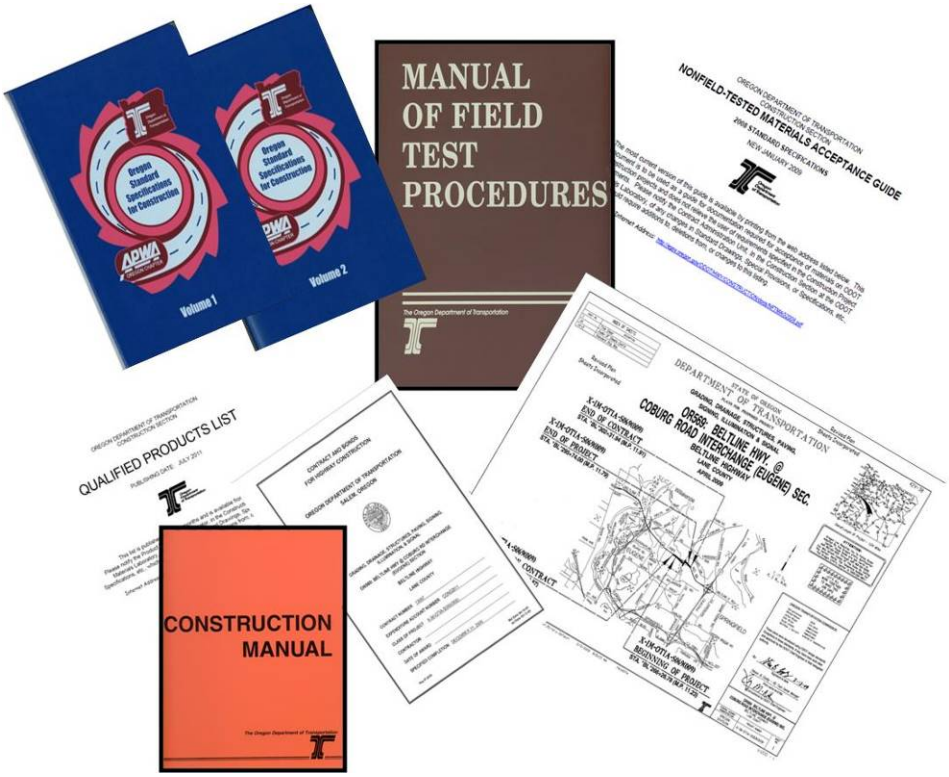
The following table provides a general overview of what information is provided in what resource.

Summary of General Inspection Resources

		Topics Covered	Navigation Options	Important Sections
Special Provisions		Modifications to standard specifications for a specific project.	• Refer to Schedule of Items (bid item list) which includes spec reference • Table of Contents in Standard Specifications.	Schedule of Items (bid item list)
Standard Specifications	**Volume 1**	*Contract rules*: common to all contracts; administration.	• Table of Contents • Index	• Authorities • Order of Precedence • Prosecution and Progress
	Volume 2	*How to*: directions/requirements for building a project.	• Table of Contents • Index	• 200-1999 Deals with building; • 2000-End deals with material specifications.
Plans		Information for specific dimensions, locations and features on the project.	• Table of Contents • Some sheets have references for specific Standard Drawings that pertain to a specific item or action on the plans.	• Typical Sections • Details (specific to the project) • General Construction Sheets • Pipe Sheets • Sign Sheets • Standard Drawings
NFTMG		Quality (acceptance) documentation needed for materials used on the project that aren't field tested. Ex: temporary traffic control devices; steel; pipe.	• Page 2 of NFTMG provides descriptions of quality documents • Materials referenced by specification section.	May refer to the QPL.
QPL		List of finished ***products which have been evaluated and/or used*** by ODOT; If the product is *Approved* or *Qualified* or *Rejected* for use.	• Alphabetical index by category in front of the document to get spec. number • Products listed by specification number; • Other products pulled out in front of doc.	• Erosion control items • Pavement markings • Permanent impact attenuator attributes and types
Brown Book		Testing requirements for materials tested ***in the field*** like rock, asphalt or subgrade, etc.		• 4(B) Small Quantity Schedule • 4(D) Field Tested Materials Acceptance Guide

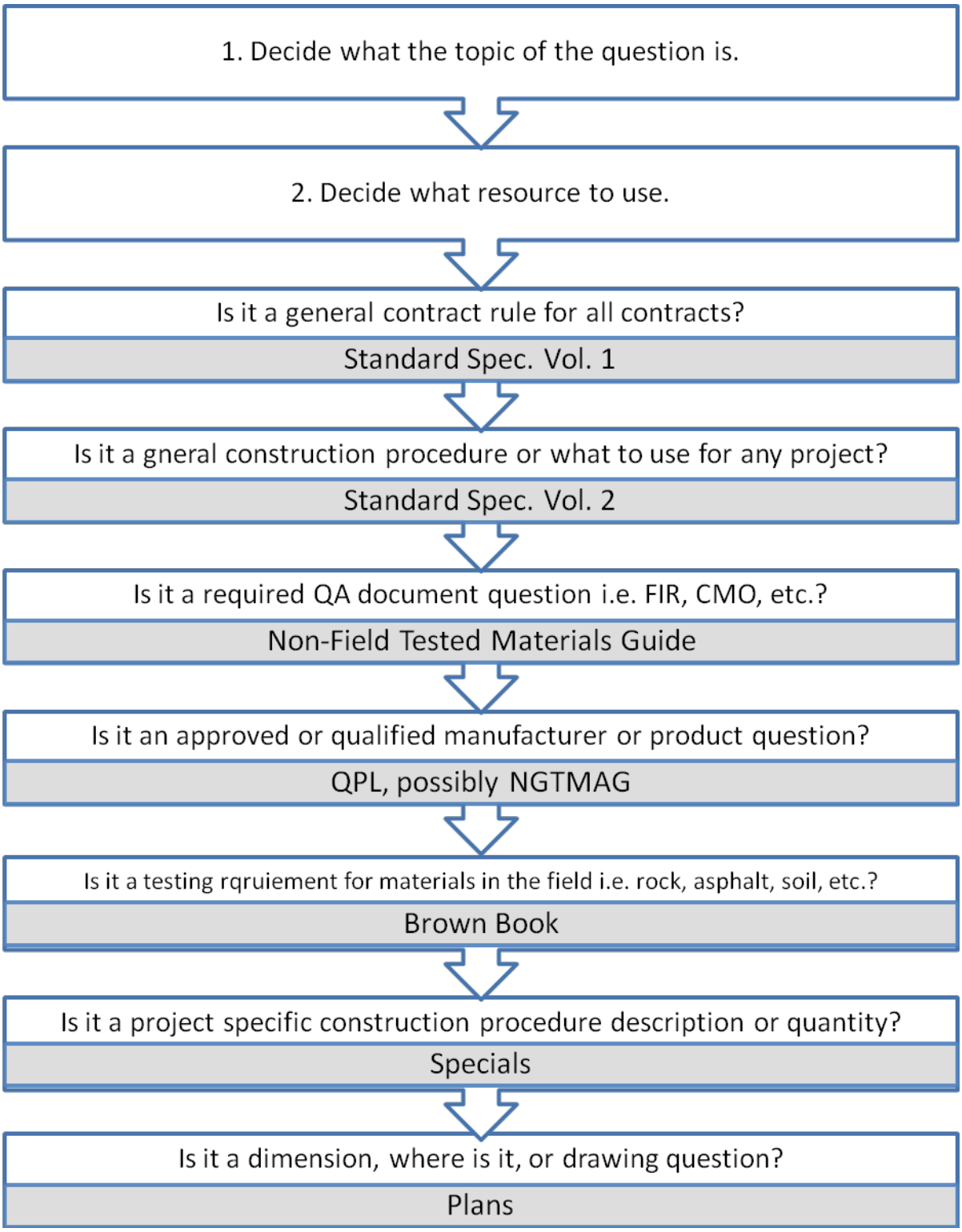
Review: Putting It All Together

By now all of the resources available for inspection should be familiar. This section includes a quick review of navigating the materials available to you.



Can you list the information provided in each resource?

General Inspection Navigation: Where to Start



Standard Specifications Review

Standard Specifications Vol. 1 and Vol. 2 include Contract Rules and General Construction Procedures or Materials common to all contracts. There are two methods for navigating the Standard Specifications: Table of Contents and Index Method. Either method will get you to where you need to go. The Table of Contents method will take longer if you don't know where to start. The Index method is quicker if you know what the topic of question is. The methods are summarized below.

Table of Contents

a. Each general section is broken down to specific sections in the Table of Contents

b. To use this method, decide what the topic of the question is and what the general section of the topic deals with.

c. Once you find the General Section look down the list of Specific Sections to see which specific section your topic pertains to and go to that specific section.

d. Once you are in a Specific Section then decide which Subsection you are dealing with.

Table of Contents Example:

What are the requirements for removal and salvaging guardrail?

- This is a general construction procedure.
- Topic is removing and salvaging guardrail.
- General section would be Permanent Traffic Safety and Guidance Devices -800
- Part 800 starts on page toc-29. The Specific Section would be 810 – Metal Guardrail.
- Look down the subsection list and find Salvaged materials – page 533.

Index

To use this method, decide what the topic of the question is, then look in the index for that specific topic.

Index Example:

What are the requirements for removal and salvaging guardrail?

- This is a general construction procedure.
- Topic is removing and salvaging guardrail.
- Look in the Index for this topic.

- Index – page 17 has Removal – guardrail page 73, but it has Remove and Salvage Guardrail page 533.
- The second one fits our topic better, so start there.

Non-Field Tested Materials Guide (NFTMG)

This Resource will show all of the required Quality Acceptance Documentation needed, if any, for a given material. This document will also reference the QPL if the product needs to be off of the QPL list.

- Definitions of each Quality Acceptance Document on the first page of NFTMG.
- Set up in Standard Specification order. Starting with 00225 and working up.

Navigating the Non-Field Tested Materials Guide includes:

- Decide what topic of question is.
- Look in Standard Specifications for the Specification number for that topic.
- Look in NFTMG for that specification number topic.
- Read what Quality Acceptance Document is required, if any, and who needs to submit them.

Qualified Products List (QPL)

This resource is a list of manufacturers and products that have been evaluated by ODOT that is either on an approved/qualified list or a rejected list.

Navigating the QPL includes:

- Decide what topic of question is.
- Look in Standard Specifications for the Specification number for that topic.
- Look in Project Special Provisions for any change to the Standard Specifications or Special Directions.
- Look in NFTMG for that specification number topic and find out what quality documentation needs to go with that material if any.
- Look in QPL under that specification number to find the specific product or manufacturer.