

3100 R/W PLAN MANUAL

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3101 Introduction

3101.1 History of Roadways in Ohio

The following section provides a brief history of the development of Ohio roadways, and the Ohio Department of Transportation (ODOT). It describes the importance right of way plays in the maintenance and construction of Ohio's roadways.

The building of Ohio roads in the past two centuries has been a complex collection of interwoven accomplishments. From the winding dirt Indian trails of the 19th century, to the huge interstates that span the state today, roads have played key roles in the growth of Ohio.

Until the early 20th century, road building was handled by counties, townships, and private individuals. Then in 1904, the Ohio Department of Highways (ODH) was created. Although this department functioned exclusively in an advisory capacity, it was the first attempt to create a state agency responsible for Ohio's roadways. In 1906, Professor C.E. Sherman of the Civil Engineering Department of the Ohio State University established a road material testing laboratory that helped aid in the production of superior paving materials. With the quick spread of the automobile across the state and country, the need for solid all weather roadways was further emphasized. The speed and weight of automobiles stressed the then-current macadam wearing surface (small or crushed stone usually coupled with a bonding compound like tar). Durable brick and concrete began to gain favor as alternative paving materials, but their high cost meant they were rarely used in rural areas. By 1910, seventy-three percent of the roads in Ohio were still considered dirt roads.

As the transportation demands of the public increased, so did the responsibilities and the size of the ODH. With the passing of the McGuire Bill in 1911, the ODH changed its mission from one of education to the pursuit of active construction. The same bill designated certain Ohio roads as part of the Inter-County Highway System and placed these roads under the jurisdiction of the department. With the passing of the Hudson-Hite Bill in 1913, the state took control of more roadways as established under the Main Market Road System. Both The Inter-County Highway and Main Market Road systems consisted of old county roads appropriated as state roads. Their right of way widths varied from county to county, creating ambiguity within the right of way of the state road system.

The ODH continued to look for new ways to improve the quality and the quantity of roadways in Ohio. With the passing of the Reorganization Bill in 1921, the department divided the state into 11 districts with jurisdiction over eight counties each (a 12th district was added in 1929). The bill also allowed each district office to have a deputy state highway commissioner and state construction workers closely overseeing and monitoring projects in their area. The legislature enacted the Norton-Edwards Highway Bill in 1927, eliminating the previously established Inter-County and Main Market systems. The Bill also provided that all roads on the state highway system be maintained solely at the state's expense. This act established a true state highway system for the first time. By 1928, only 200 of the 11,000 miles of roadway remained unpaved.

The Ohio countryside continued to become more accessible by roadway, and from 1943 to 1949, Ohio took on a large road building program coordinated between all road and street building agencies. By the end of this effort, there were 109,000 miles of roadway in Ohio. In the 1950's and throughout the next several decades, the planning and construction of the interstate highway system dominated the attention of the (ODH). This was the beginning of the modern four and six-lane highways of today.

All of the years of legislation and progress led to what is now called The Ohio Department of Transportation (ODOT). Established in 1972, the department -- together with Federal Highway Administration (FHWA), city, county and township agencies -- control all maintenance and construction of roads and bridges in the state of Ohio.

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3101.2 Importance of Right of Way Plans

In today's ODOT, the acquisition of right of way is critical to the development of many projects. Right of way plans provide the basic authority for the expenditure of public funds for the purchase of land and/or property rights from a property owner. All physical items of value, and the effects these takings will have on the remaining residue, are included in the plan to allow an accurate determination of Fair Market Value of compensation indebted to the owner. In cases that include federal funding, right of way plans also serve as records for support in the state's claims for reimbursements. Finally, right of way plans serve as a reference for land professionals and an inventory of the Department's land purchases.

3101.3 Objectives of the Right of Way Plan Manual

The purpose of this manual is to be instructive to both the experienced and inexperienced Right of Way Plan Designer and Reviewer, and to promote uniformity and continuity among the ODOT districts and consulting firms. Additionally, this manual serves as a beneficial and informational source for acquisition agents, appraisers and Local Public Agencies. If the basic procedures outlined in this manual are carried out, the entire process should be easier for the many individuals involved in each project, resulting in greater accuracy and efficiency.

3101.4 Objectives of a Surveyor Preparing Right of Way Plans

Right of way plans are a visual representation of property rights and professional surveyors are best suited to identify and locate these rights. In preparing right of way plans, it is the surveyor's responsibility to identify the property rights and property lines that will be affected by the proposed project. Protection of the property owner's rights and proper compensation for all effected rights is mandated by Federal and State Law. Surveyors are the eyes and ears of the individuals that use right of way plans for property appraisal, negotiation and acquisition. The plans also serve a greater importance for ODOT by conveying rights acquired by the state, and are kept on record forever. Future generations of surveyors will use these plans to retrace the steps of the past and identify rights that were transferred to the state.

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3102 Project Development Process

3102.1 The Project Development Process (PDP)

ODOT has developed and implemented a Project Development Process (PDP) that includes constant communication among technical disciplines. The PDP is a project management and decision-making process for transportation projects. The process is a guide that defines project development phases from conception through completion. The PDP encourages a seamless transition between project development phases while providing effective and efficient project management.

Following the PDP should result in quality plans and minimized cost overruns during right of way acquisition and project construction. Depending on project size, complexity, and/or potential impact to the environment, ODOT transportation projects are categorized as Minimal, Minor, or Major. For more detailed information on the PDP Process, please refer to the **Project Development Process Manual and the Location and Design Manual, Volume Three, Section 1400**. For information on many commonly used ODOT Reference Materials such as Design Manuals, Specifications and Standard Drawings access ODOT's Design Reference Resource Center (DRRC) at <http://www.dot.state.oh.us/drrc/>.

3102.2 Project Scope of Services

The Project Scope of Services document outlines planning, environmental, design, right of way and construction requirements for a particular project. **A Scope of Services document is required for all consultant and in-house prepared projects. The Project Scope of Services document may be supplemented with a Right of Way Attachment document. The Right of Way Attachment should not duplicate information provided in the Right of Way Manual, but rather outline in more detail the extent of field survey, records research, design and review of right of way plans, and legal descriptions required for the project.** Therefore, it is imperative that the Design Agency's Right of Way Plan Designer and the Right of Way Plan Reviewer be familiar with the Project Scope of Services document and Right of Way Attachment, in addition to the information presented in this manual.

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3103 Right of Way Plan Development

3103.1 Right of Way Plans

While right of way plans are a definite, integral part of the roadway construction plans, they are developed as a separate entity and thus require a significant amount of specialized knowledge in both the right of way field and the profession of boundary surveying. A right of way plan provides information to define the extent of the right of way required in order to construct and maintain a highway. Right of way plans provide a "picture" showing the information needed to facilitate an accurate appraisal of the proposed taking and serve to expedite the required negotiations leading to the acquisition of the rights required for the highway facility. In addition, right of way plans serve as official public records documenting that which has been acquired, monumented and are referred to by land professionals forever. Also see **Section 3103.6 Survey Requirements**.

3103.2 Right of Way Plan Preparation Requirements

The Ohio Revised Code (O.R.C.) 4733 requires that all appropriate right of way documents (plans, plats, descriptions, reports, etc.) shall be signed and sealed by a Professional Surveyor registered in the State of Ohio.

All consultants performing right of way plan design work shall be pre-qualified with the Department for Right of Way Plan Development.

3103.3 Right of Way Plan Design and Review Responsibilities

The Department distinguishes two distinct areas of responsibility when preparing right of way plans and descriptions.

The Right of Way Plan Designer

The responsibility of the designer includes the design and arrangement of the right of way plan sheets and other right of way plan work as necessary to fulfill the scope of services document, and the Department's Policy and Procedure Manuals.

The Right of Way Plan Designer shall be:

- A) A Professional Surveyor registered in the State of Ohio and responsible for signing and sealing the right of way plans and legal descriptions.

Or

- B) An individual with knowledge of right of way plans, acting under the direct supervision of a Professional Surveyor registered in the State of Ohio that is responsible for signing and sealing the right of way plans and legal descriptions.

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The Right of Way Plan Reviewer

The reviewer shall perform a comprehensive review of the boundary resolution, right of way plans and legal descriptions. The reviewer shall provide the following:

- A completed Right of Way Review Checklist (**see Appendix H**) with each review submission
- A Field Review Checklist (**see Appendix I**) with the Preliminary Right of Way review submission and Right of Way Tracings submission
- A Right of Way Description Checklist (**see Appendix J**) with the Final Right of Way review submission.
- The Final Right of Way submittal and the Right of Way Tracings submittal shall include a copy of the ODOT review comments as well as the disposition of each comment.

The Right of Way Plan Reviewer MUST be a Professional Surveyor registered in the State of Ohio.

The Right of Way Plan Designer and Right of Way Plan Reviewer CANNOT be the same person. The initials of the right of way plan designer and reviewer shall be placed in the title block of each right of way plan sheet.

In accordance with the O.A.C. Section 4733-23-01(C) the Professional Surveyor that seals the right of way documents (either the Right of Way Plan Designer or Right of Way Plan Reviewer): “certifies to the accuracy and completeness of the information contained in the sealed document, and by such action, assumes full responsibility thereof.”

3103.4 General Right of Way Plan Requirements

In order to assure the earliest possible commencement of right of way acquisition, the right of way needs must be developed concurrently with the roadway design. Generally, the right of way plan should be developed in phases, the Conceptual Right of Way Plan (if scoped), Preliminary Right of Way Plan, Final Right of Way Plan, and Right of Way Tracings.

In order to allow the acquiring agency sufficient lead time to purchase or acquire the additional right of way needed, the design agency preparing the right of way plans shall initially concentrate on those design items that will most adversely affect individual properties. Those adverse effects might include, but are not limited to, highway design that:

1. Goes through dwellings, outbuildings, wells, septic tanks (systems), or leach fields.
2. Requires a large amount of a subject's property.
3. Eliminates access; creating land locked property.
4. Eliminates a significant amount of parking in commercial areas.
5. Eliminates or reduces the number of access points a property may have.
6. Involves relocation of large private signs or billboards.

To facilitate the earliest acquisition of the remaining properties, the design agency shall continue the right of way plan development process concurrently with the roadway design as outlined in the PDP process.

All abbreviations and symbols used in the right of way plan preparation should conform to the requirements specified in the **Location and Design Manual, Volume Three, Highway Plans** and **CADD Engineering Standards Manual**.

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The standard Right of Way plan consists of the following:

- Right of Way Legend Sheet
- Centerline Plat Sheet*
- Property Map Sheet*
- Summary of Additional Right of Way Sheet
- Right of Way Detail Sheet
- Right of Way Topography Sheet
- Right of Way Boundary Sheet
- Railroad Plat Sheet (when acquiring railroad property)

* Supplemental sheets can be added if sheet space requires them and the District Real Estate Administrator approves them.

If specified in the Project Scope of Services document or approved by District Real Estate Administrator a Utility Plan Sheet or Right of Way Schematic Plan Sheet may be required as part of the Right of Way Plan.

The need for a separate Utility Plan Sheet will depend largely on the nature, complexity, number of utilities affected and their involvement with the project. When a project requires a separate Utility Plan Sheet as part of the right of way plan, a copy of the Utility Plan Sheet shall be submitted to the District Utility Relocation Coordinator for review. If a separate Utility Plan Sheet is not required, all utilities and utility easement shall be shown on the Right of Way Plan Detail Sheets and/or the Right of Way Boundary Sheets. The utility ownership information shall be shown on both the general notes of the construction plan and the Right of Way Legend Sheet of the right of way plans. For additional information on utilities refer to the **Real Estate Policies and Procedures Manual, Section 8200**.

As with the Utility Plan Sheet, the need for a Right of Way Schematic Plan Sheet will be dictated by the complexity of a given project. A Right of Way Schematic Plan Sheet serves as a special index to the Right of Way Detail Sheets, Topography Sheets, and/or Boundary Sheets covering complex areas such as interchanges, extensive side or service road involvement, etc., which are so involved as to make it difficult to visualize the overall relationship of the plan sheets. The Right of Way Schematic Plan Sheet delineates the coverage of each plan sheet.

3103.5 Utility Requirements and Relocation Coordination

Refer to the **Real Estate Policies and Procedures Manual, Section 8200** for further details pertaining to utility relocation coordination.

3103.6 Survey Requirements

Right of Way plans are used to transfer property rights, making them part of a boundary survey. Therefore the O.A.C. 4733-37 "**Standards for Boundary Surveys**" and any additional county conveyance standards must be followed. Further specific criteria to be followed in preparing the right of way plan may be found in the Project Scope of Services document and Right of Way Attachment. **Standards and Specification for ODOT survey can be found on the Office of Aerial Engineering's web site.**

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3103.6.1 Project Control

If necessary, contact the District Survey Operation Manager to determine the governing control and available control that should be used for the given project.

3103.6.2 Data Gathering

The surveyor shall research existing records as per **Section 3104, “Establishing Road Right of Way, Easements & Property Lines”**. Once this research has been completed, the Professional Surveyor supervising the survey field work should review the Project Scope of Services document, analyze the data and instruct the field crew on which control points to search for and what data to gather.

ODOT survey crews and private consultant survey crews are granted access to private land per O.R.C. 163.03 and O.R.C. 5517.01. Property owner notification is required. Both ODOT and consultant surveyors are responsible for any damage to crops or personal property of others incurred during the process of their work. Should any damages occur, the survey crew chief shall document the damage and file a report with the **District Planning and Engineering Office immediately**. Please refer to the **Real Estate Policies and Procedures Manual, Section 5308**.

3103.6.3 Data Reduction and Boundary Analysis

Upon completion of the survey field work (refer to the **PDP Manual** as well as the Scope of Service Document) the Professional Surveyor will:

- Reduce the data gathered
- Select a bearing basis
- Examine the deeds to resolve and establish the boundaries of the properties within the project limits. When problems are encountered with the deeds (e.g., closure, gaps, and overlaps), a note shall be included on the Property Map Sheet, Right of Way Detail Sheet and/or Right of Way Boundary Sheet. Refer to the sample plans in **Appendix A, Figure 3108.3 “Property Map Sheet”** and **Figure 3108.7 “Right of Way Boundary Sheet”**.
- In addition to the plan note(s), add a statement in the plan submittal letter identifying the title issues that were encountered, including identification of the parcels involved and a brief description of the issues. A detailed report of the title problem should be submitted with the Preliminary Right of Way Plan. This report identifies the documents that were used to identify the conflict and the level of research that was completed will assist the Region in scoping the Title Report.
- When necessary to establish the centerline, right of way lines and property lines, or when required by the County Engineer or the County Conveyance Standards, the surveyor will resolve the location of Virginia Military Survey (VMS) Lines, the original government survey corners and lines, or any other land survey system control lines. The resolution of these lines shall follow the intent of the Original Government Survey. If no land survey system control corner monumentation is found during the course of the survey, the surveyor should consult with the County Engineer's Office concerning the local procedure(s) for establishing land survey system control corners or for witnessing the corner from other record survey monuments to meet the County Conveyance Standards and the O.A.C. 4733-37 “Standards for Boundary Surveys”. Also see **Section 3104.4, “Property Lines”**.

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3103.6.4 Right of Way Centerline Establishment

Determination of the centerline of existing right of way and its relationship to both the centerline of proposed right of way and the centerline of construction should occur early in the Project Development Process. For Minor Projects, this will occur during Step 3 (Preliminary Engineering Study). For Major Projects, these issues can be covered as early as Step 5 (Conceptual Alternatives Study), but must be addressed no later than Step 6 (Assessment of Feasible Alternatives).

Guidelines governing establishment of the centerline of proposed right of way differ depending on whether or not the proposed roadway follows an existing alignment or is to be relocated onto a completely independent alignment. The intent of this guideline is to use a centerline of right of way that maintains the originally created and controlling centerline of right of way unless the existing centerline of right of way is unlikely to be needed in the future (e.g., vacation of land) or is not feasible to use for right of way acquisition purposes (e.g., large shift in alignment).

The centerline of existing right of way is established based on research of record alignments from petitions, existing plans, recorded subdivision plats and recorded centerline plats used in conjunction with the locations of existing monuments (centerline, reference or right of way) that define/control the alignment.

For projects that are to be constructed close to an existing alignment, the centerline of right of way used to describe proposed acquisition shall match the centerline of existing right of way.

The centerline of construction for projects on existing alignments should match the centerline of existing/proposed right of way except when a separate centerline is needed due to engineering or construction requirements (e.g., when the centerline of right of way consists of series of points of inflection that fall outside the pavement).

The centerline of construction on new alignment projects will be established in accordance with geometric design criteria. For projects located on a new alignment, a new centerline of (proposed) right of way matching the centerline of construction shall be established. At the beginning/ending of the project where the centerline of construction ties into the existing alignment, the centerline of existing right of way should be used.

For New Alignments ONLY, the centerline of construction may contain spirals in addition to simple curves, deflection points and tangent lines. Though spiral curves should generally be avoided in right of way centerlines, spiral curves in the centerline of proposed right of way are acceptable when fee takings along the proposed alignment are being acquired.

In all cases, the relationship(s) between the various centerlines must be clearly identified within the right of way plans.

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3104 Establishing Road Right of Way, Easements, & Property Lines

3104.1 Existing Right of Way Limits

Existing right of way lines shall be located based on requirements specified in the O.A.C. 4733-37 "Standards for Boundary Surveys".

It is the responsibility of the surveyor and Right of Way Plan Designer to research the existing right of way lines for all roadways within the project limits. In addition to the information received from the title research/report the existing right of way lines and data shall be researched from all available sources including but not limited to:

ODOT records	county engineers	Ohio Historical Society
county road records	city engineers	Local Historical Societies
commissioner's journals	county and city maps/plats/surveys	Deeds

All existing right of way research shall be to the extent necessary to provide accurate foundation for the existing right of way lines. Keep in mind when performing this research that many State Highways were County Roads prior to becoming state highways and therefore may require a more in depth search. On the Legend Sheet include a Basis of Existing Right of Way Note identifying the type of right of way and the year for which it was acquired "when and where possible" (i.e. existing R/W by fee 1975, existing R/W by easement 1950). Refer to **Appendix C "Laws Governing Right of Way Widths"** for additional information on State Highway Right of Way Widths and the years they were established.

3104.2 Existing Easements (Public, Utility and Private)

It is the responsibility of the surveyor and Right of Way Plan Designer to insure that all existing easements are shown on the plans including the type, size, owner(s), and recording data of the easement(s). This is important for the purpose of allocating real estate costs, utility reimbursement costs, and construction cost. It is further important and necessary to know whether utilities that must be moved are occupying their own easement. Keep in mind that not all easements are recorded in the courthouse.

3104.3 Records Research and Investigation

Unless noted otherwise in the project's Scope of Services document, the design agency is responsible for completing records research for all potential acquisition parcels. The records research shall include research of deeds and other documents as well as a field investigation of the parcel(s). The records research shall be completed in accordance with the Ohio Administrative Code, Section 4733-37-02 "Research and Investigation."

Although much information used in the preparation of right of way acquisition plans is available from the county recorder's office (e.g., auditor's parcel numbers, deeds, tax maps, plats, surveys, etc.), records retained by other public (and in some cases private) agencies may need to be examined in order to assemble the best written evidence of the boundaries being researched. See Section 3104.1 for sources of information.

Record Research shall also document any recorded interests in the property. Recorded interests include, but are not limited to, easements, ingress and egress rights, and all mineral rights.

With the Preliminary Right of Way Plan submittal, the design agency shall submit copies of each property owner's record deed. The record deed shall show the transfer of the title to the current property owner.

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Where partial title interest has been conveyed, copies of any supplemental documents required to delineate property lines and property rights shall also be submitted.

Records Research as outlined above is NOT considered a Title Report. Title Reports must be prepared by an ODOT prequalified firm or individual in Title Research. When scoped to perform Title Reports, the design agency will be responsible for a full title search back to root title (a Warranty Deed or Judicial Decree) with a minimum of 42 year search for each parcel series. All title reports shall include easements, liens, encumbrances, taxes, mortgages, etc. as required by the **Real Estate Policies and Procedures Manual, Section 5100**.

3104.4 Property Lines

Property lines shall be located based on the requirements specified in O.A.C. 4733-37 “**Standards for Boundary Surveys**” and in accordance with any special requirements of the county(s) in which the project is located. Also see **Section 3103.6.3, “Data Reduction and Boundary Analysis”**.

3104.5 Existing Monuments

As required in O.A.C. 4733-37-02 “Research and Investigation” after all written documents have been analyzed the survey shall be based on a field investigation of the property. The surveyor shall make a thorough search for **ALL** physical monuments, and analyze evidence of monumentation and occupation. In addition, the surveyor shall, when necessary, confer with the owner(s) of the property being surveyed and the adjoining property. All monuments, evidence of monuments and occupation lines shall be shown in the Right of Way Plans. When a non-controlling or uncalled for monument is located, a witness tie from the computed corner to the non-controlling or uncalled for monument shall be placed in the right of way plans.

3104.6 Mineral Rights (Oil, Gas Coal, etc.)

When the title report or other means has identified mineral rights belonging to someone other than the current land owner, it is imperative that all recording information be included on the Summary of Additional Right of Way Sheet. The recording information shall include the name(s) of the individual(s) that holds these rights, the deed, volume and page number(s), if it is currently under contract and/or lease and, if so, who these contract or lease holders are.

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3105 Location of all Topographic Items (Above and Below Ground)

3105.1 Appurtenances

All topography within the project limits will be documented and displayed as outlined in this manual and the Survey Manual. Right of way plans are developed for appraisal and acquisition purposes and as a consequence require a significant amount of topographic detail, which may in some cases have little relationship/impact to the actual roadway construction. However, depending on the Project Scope of Services document, the complexity of the project, and the properties involved, additional topography may be needed to show the impacts of the roadway construction to the property owners.

For example: the project involves a property which has access located along ODOT right of way, and the structures are located 500' from the existing right of way. These structures must be shown accurately on the plans (Property Map Sheet).

All visible or known items within the potential take area beyond the existing right of way must be mapped. These items include but are not limited to:

Existing pavement, bridges, streams, railroads, right of way lines, driveways (show centerline station intercept, type and size), parking on commercial property and related surfaces, sidewalks, structures, foundations, underground lines, underground storage tanks, easements, wells, cisterns, septic systems, sewers, sprinkler systems, fences, signs, billboards (provide permit number), trees, shrubs, field tiles, drain pipes and drainage structures.

In short, show any item or feature that might be affected by the proposed work or in any way may have an impact on the appraisal of the proposed taking.

3105.2 Structures

When a parcel of land is impacted by the project, all structures within that parcel must be shown on the right of way plans. When the structure is within 100 feet of the proposed right of way line the type, size and a distance from the closest point on the structure to the proposed right of way line must be shown. In addition all porches, overhangs, awnings, and overhead signs that are attached to the structure must be shown accurately.

3105.3 Advertising and Device Controlled Signs

Any sign and/or billboard larger than eight square feet, and located off premise, must be investigated by ODOT's Advertising and Device Control (ADC) section, in the Office of Contracts. A sign advertising something which is not located on the property that the sign is located on is considered an off premise sign. The sign may be located on the property of the sign owner, but if it advertises something which is not happening on that property, it is considered an off-premise sign. When a possible ADC sign is recognized and/or identified, the ADC section should be contacted at toll free at 877-811-4090. They will provide the following information:

Is the route an ADC controlled Highway?
Is the billboard permitted by ADC?
Is the billboard located where it is permitted by ADC?

The designer will then briefly summarize this information within the remarks column of the Summary of Additional Right of Way Sheet. (ADC permit no. #####, Not an ADC controlled Highway, etc.)

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3105.4 Encroachments

Encroachments consist of those objects which are located within public right of way and are NOT permitted to be there. All encroachments shall be shown and described on both the construction and right of way plans. These objects may consist of, but are not limited to, permanent structures, portable structures, porches, awnings, ground mounted signs, signs that overhang from a structure, portable signs, parking spaces, vehicles, equipment, fence, post, landscaping, sprinkler heads, etc. Identifying these objects is dependent entirely on the accurate location of highway rights of way. Identify these objects as early as possible in the project development process. Refer to the **Real Estate Policies and Procedures Manual, Section 5312**, for additional information regarding encroachments.

3105.5 Utilities above and below Ground

As outlined in O.R.C. 153.64, the **Real Estate Policies and Procedures Manual, Section 8200 and the Survey Manual, Section 405**, all utilities above and below ground must be located accurately including individual poles and towers, pedestals, regulator stations, transformer stations, service lines, etc. All recorded utility easements shall be shown on the plans as well as all associated recording data. Utilities located outside ODOT right of way and without the benefit of a recorded easement should be contacted for any rights obtained from property owners that were not recorded.

For the purpose of allocating project costs, it is necessary to know whether utilities that must be moved are occupying their own right of way or ODOT's. The plan preparer shall provide a list, including name, address and phone number of all utilities affected by the project showing the particular office to serve as contact for the project. Refer to the **Real Estate Policies and Procedures Manual, Section 8200** for further details pertaining to utility relocation coordination.

For those utilities located below ground the right of way design agency shall confirm that the Ohio Utility Protection Services (OUPS) and the Oil and Gas Producers Underground Protection Services (OGPUPS) have been contacted during the Project Development Process. The design agency should also obtain a confirmation number or letter from either the utility company, the surveyor that performed the work or the roadway engineer assuring that all utilities are shown on the right of way plans. Keep in mind that some utility companies are OUPS limited basis members. Limited basis members must be contacted directly by the design agency due to the limited information available with OUPS and the level of service provided for this type of membership. Additionally there are non-members of OUPS who must be contacted directly by the design agency since OUPS has no information for these utilities.

In addition to OUPS and OGPUPS, the Subsurface Utility Engineering (SUE) process provides data on existing utilities that are below ground and other subsurface structures at the design phase of a project in four quality levels. The accuracy that **more detailed levels** of SUE can provide is necessary on many projects for determining construction conflicts, easement and property rights which ultimately establishing utility relocation and real estate costs. Refer to the **Real Estate Policies and Procedures Manual, Section 8203** for further details on Subsurface Utility Engineering process.

3105.6 Leach Beds, Septic Systems/Tanks, Sprinkler Systems/Heads and Underground Wells

Every effort must be made to identify those properties that have privately owned underground features such as leach beds, septic systems/tanks, sprinkler systems/heads and underground wells, and show them on the plans. This may require but, is not limited to contacting the local Health Department, property owner, and/or landlord in order to accurately locate these items.

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3106 Proposed Right of Way

3106.1 Base Map

The base map(s) are the foundation for the entire set of roadway plans. The base map(s) should be used throughout the design of both the construction and right of way plan process and should contain all necessary features (existing and proposed) to successfully complete the acquisition and design of the entire project. Review the **CADD Engineering Standards Manual, Section 300** for more information on base maps as well as file naming conventions for all dgn files.

The right of way base map includes: Existing and proposed centerlines, right of way lines (w/ type of R/W), property lines (w/ PL label), all easements (w/ types), **right of way and boundary** monuments (type and size), section lines, VMS lines and other lines established by original surveys.

The existing base map used by both right of way and roadway designers includes: pavement, above and below ground utility locations (type), structures, out buildings, fences (w/ type), drives (w/ type), all vegetation, shrubs and trees (w/ size), etc.

3106.2 Centerline of Right of Way and Boundary Monumentation

Monumentation, with respect to right of way, is needed for two specific purposes.

The first is to maintain the physical location of the centerline of right of way as required by law in O.R.C. 5519.05. Monumentation physically defines the centerline of right of way, may provide a reference point for legal descriptions, and facilitates right of way management activities. This should be accomplished by using one of the following two types of monuments:

MONUMENT ASSEMBLY - consists of an iron pin set inside a monument box that is typically set in pavement. Is a monument located on the right of way centerline and is normally set at the P.C. and P.T. of curves and at appropriate intervals on longer tangent segments.

CENTERLINE MONUMENTS AND CENTERLINE REFERENCE MONUMENTS - consists of an iron pin and cap set in concrete in unpaved areas. Centerline Monuments are located on the right of way centerline. The Centerline Reference Monuments define the right of way centerline based on a specific offset from that centerline. The Centerline Reference Monuments are usually constructed in pairs on either side of the right of way centerline. Both the Centerline Monument and Centerline Reference Monument are normally set at ground level and typically located to reference the P.C. and P.T. of curves and tangent points. In addition, the Centerline Reference Monuments are located in such a way to support the re-establishment of the right of way centerline, yet not in the path of routine maintenance activities and noise walls.

The second is to maintain the physical location of the corners and other points on the boundaries of each parcel of permanent right of way being acquired, satisfying the requirements set forth in O.A.C. 4733-37 "**Standards for Boundary Surveys**". All such monuments are to be recited in the legal descriptions for acquisition of these right of way parcels. This is to be accomplished by the use of the following type of monument:

RIGHT OF WAY MONUMENTS - consists of a monument set along the proposed right of way line (not the centerline) at property corners, property line intersections, and angle points. Right of Way Monuments usually consist of a capped iron pin (without concrete encasement).

Specific details and descriptions of each of the above types of monuments can be found in **Standard Construction Drawing RM-1.1**.

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Right of way monuments should be set with consideration to the O.A.C. 4733-37 "Standards for Boundary Surveys" and the Memorandum of Understanding (MOU) between ODOT and the Ohio State Board of Registration for Engineers and Surveyors. A link to the MOU is available at the following website: <http://www.dot.state.oh.us/Divisions/ProdMgt/Production/row/Pages/row.aspx>

In addition to the MOU, ODOT has developed a detailed procedure for properly setting, resetting and protecting all monuments in accordance with state laws on boundary surveys and the MOU refer to **Appendix K** for more information on ODOT's Monument Setting Procedure.

Refer to the **Construction and Materials Specifications, Section 107.10, "Protection and Restoration of Property"** for further details pertaining to monumentation and the construction process.

NOTE: Frequent reference is made to "right of way staking" and though sometimes perceived otherwise, it is intended to refer to the delineation of proposed right of way lines and usually consists of flagged-laths placed on angle points, corners and property line intersections on said lines to accommodate the appraisal and negotiation process. This is NOT intended to be the final pinning of right of way.

3106.3 Construction Limits

Construction limits will encompass all anticipated work and will assist in defining the minimum right of way required, including temporary easement rights of way. Construction limits are typically placed 4 feet outside the required area for construction activities but can be reduced or expanded in special circumstances. Special attention should be given where any limited access fencing is being installed. Construction limits will include the removal of any items inside the proposed right of way (parking areas, trees, signs, structures, etc.) or any excavation or grading (installation of storm sewers, etc.).

3106.4 Establishing Right of Way Lines and Widths

Federal regulations specify that "The State shall acquire rights of way of such nature and extent as are adequate for the construction, operation, and maintenance of a project". The location of the right of way lines are determined, to a large degree, by the construction limits. The right of way line, either permanent or temporary, must encompass the required area for construction activities. The right of way width should be sufficient to accommodate the proposed roadway. Many additional factors must be taken into consideration before final right of way lines are established.

Factors that should be considered in the selection of right of way widths include, but are not limited to: utilities, anticipated traffic volume, stage construction, real estate values, winter snow removal and storage difficulties, flat or rolling terrain, etc. It is essential that the selected right of way width meet all the requirements of the construction and maintenance of the highway.

It is desirable, whenever local conditions will permit, to call for a uniform width of right of way through a specific property, rather than to break it into a series of varying widths. If the road can be built on less than the standard width, in an effort to avoid costly building relocation, the right of way may be "jogged". However, care should be exercised in this practice, many times when the right of way is jogged to miss the buildings or tree they still suffer substantial damages, thus the jogging may not be justified.

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Below are a few general rules that should be applied to the determination of right of way lines:

- The proposed right of way line(s) must be set beyond or outside the construction limits, and encompass enough right of way to construct and maintain the road. They should also allow room for utilities to be placed within the right of way.
- All drainage structures shall be constructed within permanent right of way. If the end of a drainage pipe (including wing walls and the foundation) falls outside the standard width right of way line, then ensure that permanent right of way extends a minimum of 10 feet beyond the pipe ends and 10 feet from the outside wall of the pipe /culvert for construction and maintenance purposes. Acquire a channel easement for the area of erosion control and other considerations based on future maintenance access needs and terrain.
- The right of way lines should be kept parallel or concentric to the centerline when and where possible. Angles in lines should be kept to a minimum.
- Angles or breakpoints should not be placed in a road, streambed, drainage channel or driveway. When it is necessary to angle at a stream crossing, angle points should be placed on each bank and connected with a straight line.
- In interchange or ramp areas, the right of way should be described from the mainline right of way centerline.
- When and where possible, maintain a uniform highway right of way width on each side of the right of way centerline.
- Where roadside slopes are necessary to maintain the integrity of the roadway, the cut and fill slopes construction limits are to be acquired uniformly and with as few breaks as possible.
- Where width changes in the proposed right of way are required, both right and left offsets, should coincide at the same stationing.
- When there is a need for a proposed right of way width change near the beginning or end of a horizontal curve, the offset points shall be made at the P.C. or P.T. stations.
- When the alignment contains a spiral curve, the proposed right of way lines shall be designed with a single tangent line struck on the chord at the desired offset from the alignment between the T.S. (Tangent to Spiral), and S.C. (Spiral to Curve), as well as the C.S. (Curve to Spiral), and S.T. (Spiral to Tangent) points.
- When right of way is to be acquired at the beginning or end of a project, and those points are within the limits of an individual property ownership, consideration should be given to acquiring right of way through the ownership for uniformity, future development, and so that the owner will not have to be contacted again.
- The access rights at interchanges on a limited access highways maybe acquired at a minimum of 600 feet in each direction along the intersecting highway, measured from the outer-most ramp terminal intersections with the highway. For more direction on access control and access management, see the **Location and Design Manual, Volume One, Section 800** and the **State Highway Access Management Manual**.

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3106.5 Determining Types of Right of Way Parcel Takes

When determining the type of right of way to acquire, one must understand there are two major types of title ODOT acquires, fee simple and easement. The Project Scope of Services document should outline the type of title to be acquired on a project. In the event it does not, the District Real Estate Administrator shall be contacted for direction on the type of title to acquire. Refer to the **Section 3200, “Types of Title to be Acquired”**.

3106.5.1 Fee Simple vs. Easement

There are political, financial, maintenance, and inventory benefits to acquiring both Fee Simple and Easement. As a Right of Way Plan Designer you must identify which of these types of taking is most beneficial to both the department and the public on any given project. When determining whether to use Fee Simple or Easement consider the following:

- What type of title was the existing right of way acquired with?
- Which type is beneficial to both the property owner and the department?
- Are there any property owner conflicts in the project area?
- What is the projected development of the area?
- What are the state and/or federal funding requirements?
- What is the mood of the property owners that will be affected, etc.
- When acquiring Fee Simple does the property encompass Present Road Occupied (PRO) outside the project limits?

Continuous communication with the District Real Estate **Section** and Roadway Designer, as well as common sense and experience, will best assist you when determining whether to use Easement or Fee Simple.

3106.5.2 Cost effectiveness of Real Estate Acquisition vs. Construction Design

From the beginning of the project development process until the plans are completed the Right of Way Plan Designer should continually examine the cost effectiveness of real estate acquisition vs. construction design. While in many cases this examination will not involve exact dollar figures, it should involve the evaluation of those situation where real estate cost / impacts are high and construction design can be tailored to reduce the real estate cost / impacts. This requires open and consistent communication between the roadway designer and Right of Way Plan Designer.

3106.6 Total Takes and/or Land Locked Parcels

During Major Step 6 and Minor Step 3 of the PDP process, the design agency shall identify any properties that are likely to be acquired in their entirety (i.e., total takes and/or landlocked parcels) as well as any residential or commercial structures that may need to be acquired. This will facilitate preparation of the environmental document and should allow ODOT to include sufficient time in the project schedule for acquisition of these properties.

In some cases (i.e., protective buys, hardship acquisition, schedule constraints), property will be acquired prior to completion of the full set of right of way plans. In these instances, the right of way plan designer shall prepare plan sheets and legal descriptions that describe the parcel(s) to be acquired. At a minimum, the right of way plans must contain the Summary of Additional Right of Way information, a Right of Way Detail Sheet(s) and Legal Description of the area to be taken.

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For partial takes, the construction and right of way plan sheets must be sufficiently developed in accordance with the Ohio Revised Code 163.05 to provide: "... a description of the nature of the improvement ... including any specifications, elevations, and grade changes ... in sufficient detail to permit a determination of the nature, extent, and effect of the taking and improvement."

The District Real Estate Administrator should be contacted for any questions regarding plan requirements and/or scheduling of right of way acquisition.

3106.7 Sight Distance

When determining the type and amount of proposed right of way takes at intersection or in the vicinity of a horizontal curve, the designer must take into consideration the required sight distance. Then acquire the appropriate amount of right of way as well as the correct type (Limited Access Right of Way if necessary) can assure that the sight distance will not be impeded during and after the project is completed. For more information see the **Location and Design Manual, Volume One, Section 200**.

3106.8 Access Control, Rules and Regulations

ODOT's access rules and regulations are derived from the Ohio Revised Code (ORC) Section 5501.31 and Section 5515.01. It is a goal of ODOT to preserve and manage the state highway system effectively, improve public safety in the development, design and operation of the state highway system as well as maintain and protect the function and ability to move people and goods efficiently and conveniently.

ODOT is committed to implementing access control, access management policies and sound engineering standards that reduce highway congestion, minimize traffic delays, improve traffic flow, preserve highway capacity, and reduce accidents. For more information see the **Location and Design Manual, Volume One, Section 801**, as well as the **State Highway Access Management Manual**.

3106.9 Drives - Industrial, Commercial, Residential and Field

The right of way design agency must identify all existing driveway access points for all properties along the project corridor. The type and existing material used in each driveway (i.e. gravel, asphalt, concrete, etc.), must also be identified in the plans. In addition, the designer must review, evaluate and identify all proposed and relocated drive locations as well as any driveway access points that are to be eliminated. The type of material used for the proposed driveway, the size of the proposed driveway and the location along the centerline station must be identified.

An industrial driveway is identified as serving a substantial number of truck movements (10 or more per day) to and from loading docks of an industrial facility, warehouse, or truck terminal.

A commercial driveway is identified as providing access to an office, business, retail or institutional building, or residential facility having five or more units. These driveways are customarily serviced by trucks as an incidental drive rather than a principal driveway. Industrial plant driveways, whose primary function is to serve administrative or employee parking are considered commercial driveways and not industrial driveways.

A residential driveway is identified as providing access to a single family residence or duplex.

A field driveway is identified as access to an agricultural or undeveloped tract of land.

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3106.10 Drainage

When determining the amount and type of proposed right of way, the designer must review the proposed drainage design and its impact to the affected property. Some major drainage items of concern are: open water courses (ditches), channels, storm sewers, catch basins, manholes, culverts, headwalls, agricultural drainage tiles, erosion control, and post construction storm water management controls (sediment basins, swirl separators). For more information on drainage design see the **Location and Design Manual, Volume Two**. The Right of Way Plan Designer should contact the drainage designer during the project development.

3106.11 Utility Conflicts and Relocation

With utilities involved as early as the Red Flag Summary (Step 1 - Minor Projects and Step 2 - Major Projects), many major conflicts and relocation issues are identified prior to Stage 1 Detail Design. However continual attention must be given to utility conflicts and relocation during development of the right of way plan and Stage 1 Detailed Design. Many utility conflicts and relocation issues are not clear until detailed roadway design is complete. These conflicts may have a major impact on the type of right of way acquired as well as the amount of land acquired. For more information on Utility Conflicts and Relocation see the **Real Estate Policies and Procedures Manual, Section 8200**.

3106.12 Railroad Property

When railroad property falls within the work limits of the proposed project, a construction work agreement must be obtained from the railroad/railway company. This agreement should be coordinated with the ODOT Central Office railroad coordinator. The construction agreement and acquisition of railroad property are two independent steps. ODOT must initiate railroad coordination with the railroad company during the Red Flag Summary (Step 1 - Minor Projects and Step 2 - Major Projects).

It is the responsibility of the right of way design agency to prepare the railroad plat when the acquisition of the railroad property is necessary. Before preparing the plans or acquiring either operating or non-operating railroad right of way, an extensive title search is necessary. The title search is to determine what title the railroad company holds to the real estate. The search involves a report of liens and obtaining a copy of the conveyance that first transferred the real estate to a railroad. The conveyance must be reviewed to determine whether the railroad has fee title or if they only have an easement right to the real estate. If, after reviewing the conveyance, it is not clear what interest or rights the railroad holds, it should be brought to the attention of the District Real Estate Administrator and Railroad Acquisition Unit in the Office of Real Estate. See **Section 3108.8, "Railroad Right of Way Design" and Appendix A, Figure 3108.8 "Railroad Plat Sheet"** for detailed information on how to prepare a railroad plat.

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3106.13 Adherence to the Environmental Document

In order for the Environmental Document to be approved, a fairly accurate location of all proposed permanent and temporary right of way must be identified. This information must be provided during the Assessment of Feasible Alternatives Step 6 Major Projects (PDP) and Preferred Alternative Verification Activities Step 7 Major Projects (PDP) and the Preliminary Engineering Study, Step 3 Minor Projects (PDP). Resources within the proposed permanent and temporary right of way will be studied to determine impact levels.

On those projects that use federal funds for right of way acquisition, the environment document must be approved prior to federal authorization for reimbursement.

The Right of Way Plan Designer must maintain coordination and communication with the project manager and the Office of Environmental Services during the right of way plan development process for possible changes to the location of proposed permanent and temporary right of way relative to sensitive environmental resources. Changes that occur in temporary or permanent right of way may lead to different resource impacts than those approved in the environmental document. When this occurs a re-evaluation of the environmental document is required. A proactive approach including effective communication with the District Environmental Coordinator and the Office of Environmental Services can minimize project delays and scope creep when the right of way limits change. For more information contact the Office of Environmental Services.

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3107 Standard Right of Way Plan Format

3107.1 Numbering of Ownerships

Ownership is defined as the area of all contiguous lands having a common owner. "Contiguous" is defined as being in physical contact with; adjacent, abutting, touching along all or part of any side. "Common owner" is further qualified, in that, in the case of multiple deed references, the owners names should be identical. In the case of multiple deed references in which there appears to be common ownership yet the owners names are not identical, the designer should consult with the District Real Estate Section for clarification on whether the parcels should be separated (e.g. one property being owned by ABC LLC and the adjacent property by ABC, a limited liability company).

An ownership number shall be assigned to each ownership on a project as soon as it is determined that the property will be impacted by the project. This number is limited to four numerical characters and one letter character and is to be a whole number without dashes. Each new number/letter combination shall indicate another ownership as being required. Ownership numbers are generally numbered following the same direction as the stationing of the project. The numbering can bounce from side to side but over the length of the project should increase sequentially.

When an out sale from an ownership occurs during the right of way plan development process, producing a new ownership required by the project, two options exist: (1) assign a new number to the split-out or, if this is impractical, (2) add a letter/alphabetical suffix to the original ownership number. Examples: 12 is one ownership in the name of John Jones, 12A is one ownership in the name of Jack Smith and 12B is one ownership in the name of Sara Smith.

To further clarify the issue, the letter/alphabetical suffix is used to identify an ownership not required or not in existence at the time of initial numbering and to avoid using a number totally out of sequence. A numerical suffix is used to identify additional parcels of the same type within a contiguous ownership (**see Section 3107.02, "Parcel Identification"**).

The auditor's permanent parcel number is a unique number assigned to a tract of land by the County Auditor's Office in which it exists. For those ownerships with multiple auditors permanent parcel numbers that are contiguous, one ownership number shall be assigned, except when directed otherwise by the scope document and/or county recording requirements.

The ownership number, once assigned, shall remain with that ownership throughout the project development and acquisition process. It becomes the basic identification for file maintenance, plans and billing.

If ownerships merge, the higher ownership number should be canceled and subsequent transactions posted to the lower ownership number involved in the merger.

When acquisition starts or ends on a property line, the adjoining ownership should be assigned and listed on the Summary of Additional Right of Way Sheet with the volume and page number and marked "NO ADDITIONAL R/W REQUIRED."

When the work being performed effects only the roadway easement also known as the Present Road Occupied (PRO) area of the property, the property owner should be listed and marked "NO ADDITIONAL R/W REQUIRED", unless we are acquiring Fee Simple Title for the roadway easement (PRO) area.

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3107.2 Parcel Identification

A parcel identifier shall be assigned to each individual parcel required from an ownership which indicates the type of title to be acquired. When a contiguous ownership has multiple parcel identifiers (title) of the same type the parcel identifier shall be followed by a number(s) starting with number "1".

- Example (1): Owner 23 has two separate types of takes (parcel identifiers) a Standard Highway Easement and a Temporary. Therefore, the ownership would be 23-SH and 23-T,
- Example (2): Owner 23 has one type of take (parcel identifier), but in three separate locations within the ownership. Therefore, the ownership would be 23-SH1, 23-SH2, and 23-SH3.

A parcel identifier and number combination once assigned to an ownership shall remain with that ownership throughout the right of way plan development and acquisition. If the parcel is no longer required, its identifier is deleted from the ownership.

A "V" parcel identifier should be used when a parcel is acquired in the name of an entity other than the grantee identified in the "Grantee Note". When a "V" parcel identifier is necessary, the name of the "V" parcel(s) grantee shall appear in the remarks column of the Summary of Additional Right of Way Sheet.

When or if the type of title to a parcel changes, the old identifier is deleted and a new parcel identifier assigned.

For more information on parcel identifiers see **Section 3200, "Types of Title to be Acquired"**.

3107.3 Numbering of Right of Way Plan Sheets

The right of way plan sheets are numbered with two sets of numbers. The first set of sheet numbers is shown in a circle in the lower right corner and includes both the construction plan and right of way plan sheets. The second set of sheet numbers is located just above the circle in the lower right corner and includes the right of way plan sheet numbers only, beginning with the Right of Way Legend Sheet as Sheet Number One. For more information on sheet numbering, see the **Location and Design Manual, Volume Three, Section 1201.5.2**.

3107.4 CADD Engineering Standards

For specific guidance on the project directory structure, electronic file naming, text size, fonts, line styles, plan notes, cells or symbols used throughout the right of way plan design, see the **CADD Engineering Standards Manual**.

3107.5 Match Lines and Cross References

Wherever the right of way plan sheets are continued on another plan sheet, a match line should be shown, the station given, and the sheet number it cross references. The right of way plan sheets that are cross referenced may contain details of the main line, ramps, intersections, service roads, relocated intersecting roads, and railroads.

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3108 Right of Way Plan Sheets

Each section below contains a list of reference numbers and letters that are exhibited as balloon references in **Appendix A, "Sample Plans"**. The reference numbers and letters in the following sections contains either the actual text that must be on the plan sheets or explain what information is required on the plan sheets. Refer to **Appendix A, Figures 3108.1 thru 3108.8**.

3108.1 Right of Way Legend Sheet

The Legend Sheet is a collection of notes, symbols, and detailed project information that are referenced throughout the plans.

Listed below are references to the sample Right of Way Legend Sheet in **Appendix A, Figure 3108.1**.

1A - Title Block

Located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. Project Identification (PID) Number
Federal Project Number

1B - Sheet Heading

The Sheet Heading shows and identifies the county(s), political township(s), original government survey(s), and the city(ies) or village(s) that fall within the project limits.

- a. County
- b. Civil Township
- c. Section / Township Tier / Range / VMS numbers
- d. City or Village, if applicable

1C - Structure Key

Provide a key indicating the different types of structures, e.g., residential, commercial, outbuildings, etc. Differentiate the types of structures by hatching, shading, etc.

1D - Utility List and Note

Provide a list, including name, address and phone number of all utilities affected by the project showing the particular office to serve as contact for the project. Also, include the underground utility note as it appears in the general notes of the construction plan. If a separate Utility Plan is not required, all utility ownership information shall be shown on the Legend Sheet.

1E - Conventional Symbols

Commonly used symbols and line styles throughout the right of way plans shall be displayed here. It is the responsibility of the Right of Way Plan Designer to update the Conventional Symbols for each set of plans prepared. Standard symbology as per the **CADD Engineering Standards Manual** should be used.

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1F - Index of Sheets

The index serves as a table of contents for the right of way plans. It is extremely important that the index of sheets agrees exactly with the right of way plan sheet numbering system to ensure that the plan is complete. Should a sheet need to be added after the Right of Way Tracing are submitted or just before, sheets may be inserted into the plan by alphabetizing (Example: current sheet = 10, new sheets = 10A, 10B, etc.) All alphabetized sheets must be shown in the index of sheets.

1G - Project Description

The Project Description consists of a brief note describing the primary purpose of the improvement and the project length. The description should use words and phrases such as; resurfacing of; widening and resurfacing of; reconstruction of; relocation of; construction of; rehabilitation of; replacement of; etc. This description should mirror the project description listed on the title sheet of the construction plans. **Include a reference to the appropriate baseline used to reference the existing and proposed right of way lines.**

1H - Plans Prepared By

Provide the name of the design agency responsible for preparing the right of way plans as well as the names of the individual right of way designer and right of way reviewer.

The individual right of way designer and/or reviewer that perform the required field reviews shall place their name and provide dates on which any field review was performed. The individual that performs the required ownership update shall place their name and provide the date on which the update is completed. A field review and ownership update must be completed within 15 working days of submitting the Right of Way Tracings.

Provide the date in which the right of way plans were completed. The completion date is the date the design agency has complied with all review comments and submitted the plans as the Right of Way Tracings.

1I - Survey Certification

Provide a surveyor's certification statement identifying the surveyor(s) name, registration number, a brief description of what is being certified, and the surveyor's signature and seal.

For more detailed information on Surveyor's Certification review **Appendix D** and the Project Scope of Services document.

1J - Parcel Identifier Legend

The Parcel Identifier Legend denotes the abbreviation for each parcel identifier used in the plan, and presents the full name of each abbreviation.

1K – Location Map

The Location Map shows the general area in which the project is located. The map should be approximately 7" x 7", for a full size plan, with north pointing toward the top of the sheet. A scale of 1" = 1 mile [1:50000] is often used, however, the map scale shall be such that the Right of Way limits of the project are clearly identified and the lettering clearly legible on an 11"x17" reduced set of plans.

The Location Map shall contain sufficient information to clearly show the location of the improvement with respect to: federal, state, county and township roads; identifiable streets in urban areas; villages, cities, townships and counties; and rivers and creeks. The Begin Acquisition and End Acquisition shall be shown on the location map using Straight Line Mileage (SLM). ODOT maintains an application for use in placing location maps. The application is available for download from the ODOT CADD web site.

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The following item is NOT shown in **Appendix A, Figure 1308.1**, however it is required when encountered on a project.

Limited Access Declaration

If the project is limited access, show the following Limited Access Declaration:

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

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3108.2 Centerline Plat Sheet

The Centerline Plat serves two major purposes.

The first purpose is to define the proposed centerline(s) and relate it accurately and precisely to its geographical location. The Centerline Plat should clearly show the relative location and measurement information of the proposed centerline(s) to the Original Government Survey Lines, recorded subdivision corners or any other acceptable commencement point/lines. Verify that this information is acceptable to the County Engineer and Auditor for the project location. The centerline plat should provide ample data to enable the County Engineer and/or Auditor to locate the proposed centerline(s) as well as sufficient information to re-establish the centerline(s) in the future, should the centerline monuments become lost or obliterated. The plat must clearly show what monuments and/or record information was used to define the existing centerline(s) and Original Government Survey Lines. The Plat shall meet any applicable requirements of O.A.C. 4733-37 "Standards for Boundary Surveys" and requirements (Also see ADDITIONAL ITEMS at the end of this Section).

The second purpose of the Centerline Plat is to show the exact location of new monuments that are set for the purpose of maintaining the physical location of the centerline(s). Since considerable amount of funding is used to establish the location of centerline(s), it is important that ample monumentation be incorporated as part of every project. Due to the items composing the Centerline Plat and the fact that this sheet is recorded at the local county recorder's office, it is the ideal sheet for showing the exact location of all proposed and/or found centerline monuments used as part of the project.

Listed below are references to the sample Centerline Plat Sheet in **Appendix A, Figure 3108.2**.

2A - Title Block

Located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. Project Identification (PID) Number
- f. Scale
- g. North arrow

2B - Sheet Heading

The Sheet Heading shows and identifies the county(s), political townships, original government survey(s), and the city(ies) or village(s) that fall within the project limits.

- a. County
- b. Civil Township
- c. Section / Township Tier / Range / VMS numbers
- d. City or Village, if applicable

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2C - Monument Table

Tabulate the number and location (i.e. station and offset) of all monument assemblies, centerline monuments, centerline reference monuments to be set, and right of way monuments expected to be destroyed. If a right of way monument is to be set within a temporary easement or within the construction limits, it is expected that the monument will be destroyed and will need to be reset after construction.

The total number of monument assemblies, centerline monuments, centerline reference monuments and right of way monuments that are to be set and/or reset shall be carried to the General Summary sheet of the construction plans where a pay item will be associated with the appropriate monument. The format of this table is flexible, relative to the needs of each project. If required by the Project Scope of Services document and/or the Right of Way Attachment, provide state plane grid or project coordinates for the proposed monuments. See **Section 3106.2 "Centerline of Right of Way and Boundary Monuments"** for more information.

2D - Monument Legend

Show a graphic depiction of monuments appearing in the plan clearly distinguishing between those found (existing) and those to be set (proposed).

2E - Basis for Bearings

Provide information regarding the basis for bearings used on the centerline. If they are based on a prior project, cite the county, route and section and recording data for its Centerline Plat. **Bearings are preferred to be based on Grid North of the applicable zone of the State Plane Coordinates System or to assumed bearings relative to recorded documents.**

2F - Basis of Existing Centerline of Right of Way and Right of Way Width

Provide a note that describes the source(s) which were used to establish the Basis of Existing Centerline of Right of Way and the Right of Way Width. For example, **the existing centerline should be based off a previous right of way plan, another survey, an old road record, deed description, etc.** While the Right of Way Width may come from sources such as: existing right of way plans, old construction plans, county commissioners journal, county engineer road record books, **Inter-county Highway System, plats, and/or applicable legislation or laws, etc.**

2G - Centerline of Right of Way Data

Define the centerline of right of way data for all roadways showing the bearing and distance along each tangent section, labeling the curve points along the centerline as well as the curve elements and data for each curve at least once per sheet on which the curve appears. Refer to the **Location and Design Manual, Volume Three, Figures 1303-1 through 1303-3**, for the required elements and data of curves and spirals. In addition provide the chord bearing and chord distances for both curves and spirals. The maximum superelevation (e-max) is NOT necessary.

NOTE: For New Alignments ONLY, the centerline of construction may contain spirals in addition to simple curves, deflection points and tangent lines. Though spiral curves should generally be avoided in right of way centerlines, spiral curves in the centerline of proposed right of way are acceptable when fee takings along the proposed alignment are being acquired.

When a project involves more than one centerline, e.g., of right of way, of construction, etc., the primary concern on the plat should be showing clearly, graphically and mathematically, the distinction and the relationship between these centerlines. In many cases, this can be best accomplished by an exaggerated scale diagram. It should also clearly define which of the centerlines the proposed right of way, etc., will be referenced.

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2H - Centerline Stationing

The Centerline Stationing on a project typically reflects the straight line mileage shown in the "section" (County-Route-Section). Centerline Stationing may also be established based on existing monumentation, bridges and prior projects. Unless specific direction is provided in the scope of services document, the person establishing the Centerline Stationing shall coordinate with the District Real Estate Section and/or District Survey Section to determine the appropriate basis for Centerline Stationing.

Refer to the **Location and Design Manual, Volume Three, Section 1300** for details pertaining to straight line mileages, stationing and project identification.

Centerline Stations are normally displayed at 500-foot intervals, with intermediate ticks every 100 feet. Centerline stationing should normally read from left to right and bottom to top on all plan sheets.

Station equations along the proposed centerline of right of way are normally required when the proposed centerline of right of way ties into the existing centerline of right of way at the beginning and/or end.

2I - Intersections with the Centerline of Right of Way

Identify the station of intersection and offset distance if necessary, where Political Subdivisions, Original Government Surveys, Recorded Subdivisions, side roads and railroad centerlines intersect the centerline of right of way, identifying each by name and/or number and show direction/bearing where appropriate.

Stationing of lines that intersect/cross a spiral curve are permitted.

2J - Political Subdivisions, Original Government Survey, Recorded Subdivision Lines and Monumentation

Show and identify all monumentation found, in relation to the establishment and location of:

Political Subdivisions – State, County, Township or Corporation lines. Corporation lines shall be labeled clearly, leaving no question as to the area of incorporation and adjoining political entities. Show and identify any Political Subdivision lines of record, including names. Recording data for this information shall also be shown, if available.

Original Government Survey – Show rectangular land survey and Virginia Military Survey system lines. Clearly label each line as to Original Government Survey information (i.e. Section, Town Range, Lot Number, Quarter Section, VMS patent Number, etc.).

Recorded Subdivisions – Show lot lines (with lot information) and recorded subdivision boundaries. Clearly label each line as to interior lot lines (with lot information) and recorded subdivision boundaries (with phase or section and recording information).

Monuments - shall contain descriptive information as referenced in O.A.C. 4733-37 "**Standards for Boundary Surveys**" (i.e. 1/2" Iron Pipe Found, 5/8" Rebar with red plastic cap marked Surveyor Name, Surveyor Number Found), unless the monument legend clearly indicates this information. Station and Offset referenced to the centerline of right of way shall be clearly shown on all monuments found. **Show deflection angles of these lines.** Bearing and distance information shall also be shown on these lines. There shall be a clear representation and retraceable relationship between the centerline of right of way and these lines.

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2K - Centerline Monuments Note

Provide a note explaining the procedure for setting and/or resetting monuments during construction. Explain the requirements necessary to address changes or alterations to the location of any monuments shown on the centerline plat. Reference the Standard Construction Drawing RM-1.1 for specifications on setting these monuments. (Notification of, and approval by the County / City Engineer, when involved, would be included in this note)

2L - Recording Block

Provide a block or space for recording data appropriate to the county(s) in which the project is located. Contact the county recorder's office to determine their requirements.

2M - Survey Certification

Provide a surveyor's certification statement identifying the surveyor(s) name, registration number, a brief description of what is being certified, and the surveyor's signature and seal.

For more detailed information on Surveyor's Certification review **Appendix D** and the Project Scope of Services document.

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3108.3 Property Map Sheet

The purpose of a Property Map is to present a good overall picture of the right of way requirements for the project and show the relationship of the proposed right of way to each entire ownership. It should also provide a clear picture of the extent of ownership in each property, the relationship of properties to one another and the effects of the project on access and structures. In accomplishing these purposes, the following guidelines should be followed:

The entire periphery of each ownership must be shown. If space precludes doing so at the prevailing scale, show with broken lines or provide an inset at a scale that will permit showing the whole property.

Delineate extent of ownership clearly by generous use of property line symbols and ownership hook symbols.

Show the owners name(s) and ownership number together, within the property if at all possible. For ownerships with multiple auditors permanent parcel numbers, clearly indicate the portion of the ownership with the auditors permanent parcel numbers.

Show all buildings and drives on affected ownerships.

Identify landlocked parcels and residues.

Beyond those uses cited above, the Property Map also provides a basis for determining:

- The need for service roads and/or access drives
- The possibility for landlocked and "E" parcels

Listed below are references to the sample Property Map Sheet in **Appendix A, Figure 3108.3**.

3A - Title Block

Is located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. Project Identification (PID) Number
- f. Scale
- g. North arrow

3B - Sheet Heading

The Sheet Heading shows and identifies the county(s), political townships, original government survey(s), and the city(ies) or village(s) that fall within the project limits.

- a. County
- b. Civil Township
- c. Section / Township Tier / Range / VMS numbers
- d. City or Village, if applicable

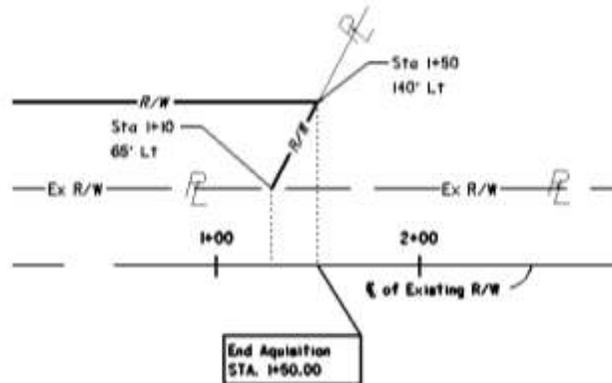
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3C - Station Limit Flags

Station Limit Flags delineating the Begin and End stations for ACQUISITION shall be shown with the staff directed to the appropriate point ON the centerline. If applicable, show same for LIMITED ACCESS, right and left, if the two differ.

The limits for ACQUISITION should be shown in a similar manner on side roads if the proposed right of way is referenced to the side road centerline. This aspect is identified by stations along (longitudinal) the centerline of right of way and/or construction.

BEGIN and END ACQUISITION - determined from the right of way plans as the stations opposite the extreme points of new right of way, permanent or temporary, to be acquired for the project.



3D - Revision Block

A revision block showing the completion date and providing space to list revisions following the completion date shall be shown. Prior to Final Right of Way Plans being submitted for acquisition, changes can be made to the plan without noting any revisions in this block. After the plans have been submitted to the acquiring agency, any necessary revisions needed after that date are noted in the revision block and shall indicate specifically what was changed, the date of the correction or addition and the initials of the person that made the revision. Formal communication indicating the revision(s) made shall be sent by the **District Planning and Engineering Office** to the acquiring agency and shall include a copy of the revised plan sheets to verify the changes. **The District may request updated Microstation and electronic image files (i.e. Tiff) from the Consultant depending on the extent of the plan revisions.** To facilitate additional entries, the revision block is to read from the bottom up.

3E - Ownership Name and Number

Show the owner(s) of record exactly as **it appears** on the instrument(s) conveying title and the ownership number together within the property, if at all possible. When there are multiple owners, all such names shall be spelled out here and elsewhere in the plan, as space dictates.

For those ownerships with multiple Auditors Permanent Parcel Numbers, clearly show the Auditor's Permanent Parcel Numbers within each individual tract. Use leaders when space is limited.

In most cases, individual right of way parcel identifiers (i.e. WD, SH, etc) need not be shown.

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3F - Centerline Stationing

The Centerline Stationing on a project typically reflects the straight line mileage shown in the "section" (County-Route-Section). Centerline Stationing may also be established based on existing monumentation, bridges and prior projects. Unless specific direction is provided in the scope of services document, the person establishing the Centerline Stationing shall coordinate with the District Real Estate Section and/or District Survey Section to determine the appropriate basis for Centerline Stationing.

Refer to the **Location and Design Manual, Volume Three, Section 1300** for details pertaining to straight line mileages, stationing and project identification.

Centerline Stations are normally displayed at 100-foot intervals. Centerline stationing should normally read from left to right and bottom to top on all plan sheets.

Station equations along the proposed centerline of right of way are normally required when the proposed centerline of right of way ties into the existing centerline of right of way at the beginning and/or end.

3G - Proposed Right of Way and Pavement

Show the proposed permanent right of way including standard highway easements and channel easements (other easements need not be shown unless they are the only "taking" proposed), be sure to adequately label all right of way lines (existing and proposed). Show the existing and proposed edges of pavement, including the mainline and side road pavement, ramps and structures (i.e. culverts & bridges).

3H - Structures

Show all structures, including residential, commercial and outbuildings on every ownership affected by the project. Location should be accurate as possible. Aerial photographs and other available sources may be used to locate structures outside the surveyed area.

3I - Political Subdivisions, Original Government Survey and Recorded Subdivision Lines

Political Subdivisions – State, County, Township or Corporation lines. Corporation lines shall be labeled clearly, leaving no question as to the area of incorporation and adjoining political entities. Show and identify any Political Subdivision lines of record, including names. Recording data for this information shall also be shown, if available.

Original Government Survey – Show rectangular land survey and Virginia Military Survey system lines. Clearly label each line as to Original Government Survey information (i.e. Section, Town Range, Lot Number, Quarter Section, VMS patent Number, etc.).

Recorded Subdivisions – Show lot lines (with lot information) and recorded subdivision boundaries. Clearly label each line as to interior lot lines (with lot information) and recorded subdivision boundaries (with phase or section and recording information).

3J - Property Lines

All property lines within the area of concern shall be shown and clearly labeled with the appropriate property line symbol.

3K - Utility Easements

Show and identify all utility easements, including the type of easement, the width of the easement and all recording data for the easement.

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3L - Driveways

All driveways shall be shown as accurately as possible, with special attention to those that provide the sole source of access to a property and could have a bearing on whether a parcel or residue is landlocked. This may require aerial photos to determine the location of drives for properties that extend beyond the field surveyed area of the project corridor.

3M - Side Roads, Waterways, Lakes and Railroads

Show and label all side roads and their existing right of way, clearly identifying each road (include the State Route, County Route, Township Road Numbers, etc.) which intersect or are in the project limits. Provide the names of lakes, streams and/or waterways, and railroads. Provide a flow arrow identifying the direction of flow for all streams and/or waterways. Identify the railroad company that retains the property rights as well as the name(s) of the railroad company that is operating on the rail line.

3N – Closures, Gaps and Overlaps

When problems are encountered with the deeds (e.g., closure, gaps, and overlaps), a note shall be included briefly explaining the circumstances.

The following items are NOT shown in **Appendix A, Figure 3108.3**. However, they are required when encountered on a project.

Adjoining Project Data

Where ownerships and/or right of way have been effected or will be acquired as part of an adjacent project, show the ownership numbers and the "proposed" right of way with dashed lines and cite the county/route/section of the adjoining project.

Match Lines

When you have more than one Property Map Sheet, identify and label match lines clearly as to the station and sheet number they match. For more information about match lines see **Section 3107.5, "Match Lines and Cross References"**.

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3108.4 Summary of Additional Right of Way Sheet

The Summary of Additional Right of Way Sheet is a tabular listing of all parcels and all aspects of those parcels. It identifies the types of takings from each ownership, and summarizes all aspects of the areas involved in the acquisition.

Listed below are references to the sample Summary of Additional Right of Way Sheets in **Appendix A, Figure 3108.4**.

4A - Title Block

Is located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title. If more than one Summary of Additional Right of Way sheet is used identify the Parcels shown on the sheet.
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. State Job Number
- f. Project Identification (PID) Number
- g. Federal Project Number

4B - Ownership Numbers and Parcel Identifiers

As more specifically described in **Section 3107.1, "Numbering of Ownerships"** ownership numbers shall be assigned to each ownership on the project. As described in **Section 3107.2 "Parcel Identification"**, a parcel identifier shall be assigned to each individual parcel required from an ownership which indicates the type of title to be acquired. When there is more than one parcel identifier per ownership, list in order of significance, fee takings, permanent easements, temporary easements, work agreements, etc. A frequently overlooked item is the accounting for all ownership numbers in a sequence, e.g., if numbering is started at 10, identify number 1-9 as "NOT USED" or, if within a sequence, a parcel is eliminated, identify it in like manner. In short, account for all ownership numbers within the project sequence as described in **Section 3107.1, "Numbering of Ownerships"**.

4C - Ownership Name

Show owner(s) of record EXACTLY as he/she (they) appear on the instrument(s) conveying title. When there are multiple owners, all such names shall be spelled out here and elsewhere in the plan, as space dictates. Other terminology - et al, et alii, aka, fka, etc., should be defined here. The existence of land contract in an ownership must be addressed, usually by noting "fee" in parentheses after the owner's name and listing the land contract holder's name on the line below and noted (L.C.). See **Section 3107.1, "Numbering of Ownerships"** for more information on ownerships.

In the case of multiple parcels to be acquired from an ownership, show the owner's name with the first parcel only and if the name requires more than one line, show subsequent parcels below those lines.

When railroad property is involved on a project, show the name of the operating railroad company, and the railroad company that retains the property rights. Due to the peculiar nature of operating railroad ownerships, show the area needed to the nearest square foot for the proposed right of way.

Note any lease holders on a separate line below the fee owner of a particular parcel.

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4D - Sheet Number

Show the Right of Way Detail, Topography, and/or Boundary Sheet number(s) where the corresponding parcel is located in the plan set. If the plan has multiple Property Map sheets, also indicate the sheet number(s) of the Property Map that the parcel is shown on. This will include recorded leases on the property to be acquired.

4E - Owners Record

List the deed of record (Deed Volume and Page, Official Record (O.R.) drawer, micro fiche and/or any other recording information) appropriate to the county in which it was obtained from. This should account for all interest in the property.

The deed of record shown in the Owners Record column is not required to match the deed of record cited in the legal description. However, in the event that this does occur, an explanation in the remarks column is required.

4F - Auditor's Permanent Parcel Number

The Auditor's Permanent Parcel Number is a number given to each parcel by the county Auditor's Office in which it exists. For each property owner show the appropriate Auditor's Permanent Parcel Number(s) that the County Auditor has assigned.

When an ownership has multiple Auditor's Permanent Parcel Numbers, record areas and take areas shall be split out by the appropriate Auditor's Permanent Parcel Numbers as shown for 8-WD.

4G – Auditor's Record Area

The Auditor's Record Area is the area established and reported by the County Auditor's Office. The County Auditor's reported record area will account for out sales, splits and/or acquisition that may not be reflected in the deeds, exhibits and/or legal descriptions. Various county auditors exempt the road right of way from the record area. Be sure to verify what method the county auditor uses. When the existing road right of way area is exempt from the County Auditor's Record Area, a symbol with a note shall be added to indicate the exemption. The note should appear in the Remarks Column and read as follows: The subtraction of the Total PRO area is not part of the Net Residue formula.

Areas are to be shown to the nearest thousandth of an acre, though in urban or other areas of high land valuation, it may be more appropriate to show these areas to the nearest square foot. Whichever the case, label clearly. The record area is NOT the area reported in the deed, exhibit and/or legal description unless that is the only source available. If the record area is unavailable through various sources, it may have to be calculated. When calculated, provide an explanation in the Remarks Column.

4H - Total Present Roadway Occupied (P.R.O.)

Present Roadway Occupied (P.R.O.) is defined as the area in which the property owner holds the underlying fee title, but is currently encumbered by either ODOT or County Standard Highway Easement (SH) or Limited Access Easement (LA). Show the total P.R.O. within an ownership. This figure should reflect ALL road frontage, not just that involved in the proposed taking. In some cases these areas may have to be calculated. If so, indicate by a note on the Summary Sheet. Verify that the Auditor's Record Area has not already been adjusted to account for the exempt road right of way (P.R.O.).

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4I - Gross Take

The gross take (i.e. entire area of taking) is the area enclosed within a parcel of proposed right of way. This area includes existing right of way where underlying fee extends into the existing easement or where the proposed right of way overlaps existing lesser rights of way. Show the gross take area for each proposed right of way parcel. If the parcel extends into several Auditor's Permanent Parcel Numbers, be sure to identify the area of gross take for each Auditor's Permanent Parcel Number. See parcel 8 of the Sample Plans as an example.

4J - P.R.O. In Take

The **P.R.O. In Take** is the area of existing road right of way included within a parcel of proposed right of way that will be acquired as a fee take. Determine the area of P.R.O. In Take and show the area with respect to the parcel and Auditor's Permanent Parcel number(s).

4K - Net Take

The **Net Take** is the area of the proposed taking excluding any existing right of way. This area is calculated by subtracting the P.R.O. In Take column from the Gross Take column, with the remainder being the net take. Calculated as follows:

$$\text{NET TAKE} = \text{GROSS TAKE} - \text{PRO IN TAKE}$$

The above calculation shall only be executed on Fee Takes, Standard Highway Easements and Limited Access Easements.

4L - Structures

This column is used to identify whether the take area has any structures (a.k.a. improvements) or any signs that are not for roadway purposes. An improvement is defined as something that is man-made, that is located within the proposed take area and is not part of the roadway (i.e. a bridge owned by ODOT is not an improvement, however a bridge owned by the property owner would be an improvement). Improvements must be identified as they will be considered in an appraisal or will be relocated. A "YES" in this column indicates the involvement of an improvement in the take area. An "S" indicates the presence of a non-roadway sign to be dealt with during appraisal and acquisition. If there is more than one sign, show the number of signs in parentheses "S(3)". See **Section 3105.3, "Advertising and Device Controlled Signs"** for (ADC) signs and/or any signs larger than eight square feet.

Do not show "S" for signs that are encroachments.

4M - Net Residue

The **Net Residue** is the area of land the property owner(s) will retain after acquisition has been completed. Show the net residue areas remaining left and/or right of the centerline of right of way for the proposed taking. For those projects that involve intersections, side roads and service roads, add a note to the remarks column for clarification on left and/or right. Calculate as follows:

$$\text{NET RESIDUE} = \text{RECORD AREA} - \text{TOTAL PRO} - \text{NET TAKE}$$

When the Net Residue is Landlocked the label "LL" shall be placed next to the residue area.

4N - Type Fund

Identify the type of funds which will be used to acquire each parcel. If the funding is the same for the entire project or large portions thereof, it is not necessary to identify funding for each parcel. Label the top and bottom of each column with such and show a vertical line between the two.

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4O - Remarks Column

A brief description **MUST** be given for those parcels that have special or unique requirements, which include but are not limited to:

Encroachments - for parcels having encroachments, show an asterisk (*) and a one or two word description of the encroaching object. The **District Planning and Engineering Office** should be notified of the encroachment and will add a note spelling out disposition of the encroachment prior to the filing of final tracings.

Temporary Easements - describe what the Temporary Easement is being used for, e.g. grading or to remove shed etc.

Property Right Parcels - describe what the Property Right is being acquired for, e.g. private drive easement.

Grantee - when parcels are acquired in the name of an agency other than the grantee identified in the "Grantee Note", list that agency in the remarks column.

Improvements - provide a brief description of any improvements in the take area, if improvement is linear (i.e. fence), give the length.

Work/Special Agreements - briefly describe the need for any Work Agreements or Special Agreements.

Land Contract/Lease - when involved in a parcel, so indicate along with the appropriate recording data in the remarks column.

Overlap - Indicate area of overlap with existing easements.

Deeds - identify those deeds used to create the existing property lines that do not close.

ADC Signs – identify the ADC permit no. #####, or Not an ADC controlled Highway, etc.

4P - As Acquired

Record the appropriate entry for the instrument of each parcel acquired and recorded. This will be performed by ODOT after the instruments are recorded in the County Recorder's Office.

4Q - Temporary Parcel Duration

When Temporary Easements are to be acquired, provide a Temporary Parcel Duration Note showing the duration of all temporary parcels. The duration shall be in six (6) month increments.

4R - Restriction of Use Note

On all projects utilizing Temporary Easements, provide the following note.

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

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4S - Total Number of Tabulation

On the first Summary of Additional Right of Way sheet only, show for the entire project, the quantities for the following:

- a. Ownerships (Not including "no takes")
- b. Parcels
- c. Total takes (where the entire ownership is to be acquired)
- d. Ownerships with structures involved in the taking (Not including signs)

4T - Parcel Identifier Legend

The Parcel Identifier legend denotes the abbreviation for each parcel identifier used in the plan, and presents the full name of each abbreviation.

4U - Revision Block

A revision block showing the completion date and providing space to list revisions following the completion date shall be shown. Before Final Right of Way Plans are submitted for acquisition, changes can be made to the plan without noting any revisions in the revision block. After the plans have been submitted to the acquiring agency, any necessary revisions needed after that date are noted in the revision block and shall indicate specifically what was changed (i.e. the date of the correction or addition and the initials of the person that made the revision.) Formal communication indicating the revision(s) made shall be sent by the **District Planning and Engineering Office** to the acquiring agency and shall include a copy the revised plan sheets to verify the changes. **The District may request updated Microstation and electronic image files (i.e. Tiff) from the Consultant depending on the extent of the plan revisions.** To facilitate additional entries, the revision block is to read from the bottom up.

4V - Grantee Note

The Grantee Note identifies the name of the agency for which property is being acquired. The right of way designer and/or reviewer must modify the Grantee Note to reflect the appropriate agency receiving the property being acquired.

Parcels acquired in the name of an agency other than the grantee identified in the "Grantee Note" shall contain a "V" parcel identifier. The name of the "V" parcel(s) grantee shall appear in the remarks column.

GRANTEE: ALL RIGHT OF WAY ACQUIRED IN THE NAME OF THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION UNLESS OTHERWISE SHOWN.

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3108.5 Right of Way Detail Sheet

The Right of Way Detail Sheet is a compilation of all topographic and boundary information.

The information outlined on the following pages shall be sufficient in nature to support the take, provide enough information for an appraisal, supply sufficient information to discuss the acquisition with the property owner, support and prepare all legal descriptions. The Right of Way Detail Sheet also serves to document exactly what area was acquired.

The Right of Way Detail Sheet is the preferred method of displaying all plan items necessary for appraisal, acquisition and survey. However, when directed in the Project Scope of Services document, or when approved by the District Real Estate Administrator, separating the Topography data from the Boundary data may be necessary. This is common in urban or congested areas. See **Section 3108.6, "Right of Way Topography Sheet"** and **Section 3108.7, "Right of Way Boundary Sheet"** for further direction.

The scale for the Right of Way Detail Sheet should correspond with the Plan and Profile Sheets of the Construction Plans. It is recommended that the District Real Estate Administrator be consulted if there is any question regarding the scales to be used on a given project.

Listed below are references to the sample Right of Way Detail Sheets in **Appendix A, Figure 3108.5**.

5A - Title Block

Located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. Project Identification (PID) Number
- f. Scale
- g. North arrow

5B - Sheet Heading

The Sheet Heading shows and identifies the county(s), political townships, original government survey(s), and the city(ies) or village(s) that fall within the project limits.

- a. County
- b. Civil Township
- c. Section / Township Tier / Range / VMS numbers
- d. City or Village, if applicable

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5C - Station Limit Flags

Station Limit Flags delineating the Begin and End stations for WORK and ACQUISITION are shown with the staff directed to the appropriate point ON the centerline. If applicable, show same for LIMITED ACCESS, right and left, if the two differ. Limits for WORK and ACQUISITION should be shown in a similar manner on side roads if the proposed right of way is referenced to the side road centerline. These two aspects are identified by stations along (longitudinal) the centerline of construction and/or right of way. See the **Location and Design Manual, Volume Three, Section 1300** for more information on Work Limits.

BEGIN and END WORK - as determined from the construction plan. These are the extreme limits of the contractor's responsibility on a project, including all temporary and incidental construction, with the exception of work zone traffic control devices. This is also the area where we must be concerned with encroachments.

BEGIN and END ACQUISITION - determined from the right of way plans as the stations opposite the extreme points of new right of way, permanent or temporary, to be acquired for the project.

5D - Revision Block

A revision block showing the completion date and providing space to list revisions following the completion date shall be shown. Before Final Right of Way Plans are submitted for acquisition, changes can be made to the plan without noting any revisions in the revision block. After the plans have been submitted to the acquiring agency, any necessary revisions needed after that date are noted in the revision block and shall indicate specifically what was changed, the date of the correction or addition and the initials of the person that made the revision. Formal communication indicating the revision(s) made shall be sent by the **District Planning and Engineering Office** to the acquiring agency and shall include a copy of the revised plan sheets to verify the changes. **The District may request updated Microstation and electronic image files (i.e. Tiff) from the Consultant depending on the extent of the plan revisions.** To facilitate additional entries, the revision block is to read from the bottom up.

5E - Centerline of Right of Way Data

Define the centerline of right of way data for all roadways showing the bearing and distance along each tangent section, labeling the curve points along the centerline as well as the curve elements and data for each curve at least once per sheet on which the curve appears. Refer to the Location and Design Manual, Volume Three, **Figures 1303-1 through 1303-3**, for the required elements and data of curves and spirals. In addition, provide the chord bearing and chord distances for both curves and spirals. The maximum superelevation (e-max) is not necessary.

NOTE: For New Alignments ONLY, though spiral curves should generally be avoided in right of way centerlines, spiral curves in the centerline of proposed right of way are acceptable when fee takings along the proposed alignment are being acquired.

5F - Centerline Stationing

The Centerline Stationing on a project typically reflects the straight line mileage shown in the "section" (County-Route-Section). Centerline Stationing may also be established based on existing monumentation, bridges and prior projects. Unless specific direction is provided in the scope of services document, the person establishing the Centerline Stationing shall coordinate with the District Real Estate Section and/or District Survey Section to determine the appropriate basis for Centerline Stationing.

Refer to the **Location and Design Manual, Volume Three, Section 1300** for details pertaining to straight line mileages, stationing and project identification.

Centerline Stations are normally displayed at 100-foot intervals. Centerline stationing should normally read from left to right and bottom to top on all plan sheets.

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Station equations along the proposed centerline of right of way are normally required when the proposed centerline of right of way ties into the existing centerline of right of way at the beginning and/or end.

5G - Political Subdivisions, Original Government Survey, Recorded Subdivision Lines and Monumentation

Show and identify all monumentation found, in relation to the establishment and location of:

Political Subdivisions – State, County, Township or Corporation lines. Corporation lines shall be labeled clearly, leaving no question as to the area of incorporation and adjoining political entities. Show and identify any Political Subdivision lines of record, including names. Recording data for this information shall also be shown, if available.

Original Government Survey – Show rectangular land survey and Virginia Military Survey system lines. Clearly label each line as to Original Government Survey information (i.e. Section, Town Range, Lot Number, Quarter Section, VMS patent Number, etc.).

Recorded Subdivisions – Show lot lines (with lot information) and recorded subdivision boundaries. Clearly label each line as to interior lot lines (with lot information) and recorded subdivision boundaries (with phase or section and recording information).

Monuments - shall contain descriptive information as referenced in O.A.C. 4733-37 “**Standards for Boundary Surveys**” (i.e. 1/2" Iron Pipe Found, 5/8" Rebar with red plastic cap marked Surveyor Name, Surveyor Number Found), unless the monument legend clearly indicates this information. Station and offset referenced to the centerline of right of way shall be clearly shown on all monuments found. **Show deflection angles of these lines.** Bearing and distance information shall also be shown on these lines. There shall be a clear representation and retraceable relationship between the centerline of right of way and these lines.

5H - Proposed Right of Way & Parcel Boundaries

The perimeter of all proposed right of way parcels shall be shown using the appropriate CADD line styles. Within the perimeter of all proposed Parcel the Owners' number and appropriate parcel identifier shall be shown (Also see 5J). The proposed right of way lines (of all types) shall be shown as the PROMINENT lines on the sheet.

The iron pins to be set on proposed right of way parcels shall match the monument legend which can be found on the Legend Sheet and Centerline Plat Sheet.

5I - Property Lines and Monuments

All property lines within the area of concern shall be shown and clearly labeled with the appropriate property line symbol. **Show boundary monuments used to determine the property lines. When boundary monuments are not found, show the appropriate record data used to determine the location of the property lines.**

5J - Ownership Name, Number and Parcel Identifier

Parcel balloons are a PROMINENTLY drawn circle or oval with the ownership number and parcel identifier drawn inside. Show all parcel balloons in the appropriate take area, some take areas maybe large enough to warrant more than one parcel balloon. Show the owner(s) of record exactly as it appears on the instrument(s) conveying title, **if at all possible.** When there are multiple owners, all such names shall be spelled out as space dictates. Other terminology - et al, et alii, aka, fka, etc., should be defined here.

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The Auditor's Permanent Parcel Number shall also be shown adjacent to the parcel balloons when space permits. For more information on Parcel Identifiers see **Section 3107.2, "Parcel Identification"**.

5K – Side Roads, Waterways, Lakes and Railroads (**Figure 1308.5, sheet 7/12**)

Show and label all side roads and their existing right of way, clearly identifying each road (include the State Route, County Route, Township Road Numbers, etc.) which intersect or are in the project limits. Provide the names of lakes, streams and/or waterways, and railroads. Provide a flow arrow identifying the direction of flow for all streams and/or waterways. Identify the railroad company that retains the property rights as well as the name(s) of the railroad company that is operating on the rail line.

5L - Match Lines

When you have more than one Right of Way Detail Sheet, identify and label match lines clearly as to the station and sheet number they match. For more information about match lines see **Section 3107.5, "Match Lines and Cross References"**.

5M - Existing Topographical Features and their Disposition

Show and identify ALL existing topographic features on the Right of Way Detail Sheets. These features include, but are not limited to:

pavement	bridges	streams
treated shoulders	rivers	lakes
creeks	ditches	paved area
ponds	railroads	structures
driveways	walks	underground storage tanks
foundations	underground lines	cisterns
easements	oil and gas wells	sprinkler systems
septic systems	sewers	culverts
fences	guardrail	inlets
catch basins	manholes	non-highway signs
walls	signs	field tiles
trees (with size)	shrubs	drain pipes
light poles	curbs	

Any existing topographical feature that will be affected by the proposed construction or in any way have an impact on the proposed taking must be shown. The disposition of the features must be determined and represented within both the construction and right of way plans.

Plan preparers should look for evidence of private septic tanks, leach beds and underground sprinkler systems/sprinkler heads and show them in the plans. Obstructions located within existing right of way will be considered an encroachment.

Where it is necessary to show dimensions for topographical features such as trees, drives, sidewalks, etc., they are to be shown in feet or inches, using the unit of measure that fits the degree of accuracy dictated by the situation.

For driveways, label centerline station intercept, type (e.g., asphalt, concrete, aggregate) and size (i.e., throat width).

For structures, identify the type, size and a distance from the closest point on the structure to the proposed right of way when within 100 feet thereof.

For information on how to label easements, refer to **Section 3104.2, "Existing Easements (Public, Utility and Private)"**.

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During the initial preparation of both construction and right of way plans, it should be understood that all obstructions that need to be removed for the project will be removed by the contractor. Construction plans will include specific 202 quantities for all removals.

Place an "X" through any structure(s) that will be removed on both the construction plans and right of way plans. If a structure, or a portion of a structure, can be salvaged or is very close to the proposed taking, yet not needed, label it "DO NOT DISTURB."

Trees and shrubs that fall within the proposed right of way limits are to be removed unless otherwise noted. All trees and shrubs that are to be removed must be within the construction limits. Tree and shrub removal shall be identified by an "X" through the tree and shrub symbol. In those situations that involve a wooded area, only the trees with a diameter of 12" or greater require an "X".

Within temporary easements, trees may be retained if they do not conflict with proposed construction activities. These trees should be identified in the right of way plans as "SAVE" and in the construction plans as "DO NOT DISTURB". When determining whether a tree can be saved, consider that tree roots are very near the ground surface and that an inch or two of additional cover over the root system or any excavation into the root system can cause the tree to die. As a general guide, the below ground root system for a tree extends approximately as far as its canopy extends over the ground.

Communication regarding the disposition of obstructions is of critical importance to the right of way acquisition activities. Every effort must be made to ensure that all parties (property owner, District Real Estate Administrator, Right of Way Plan Designer, Roadway Designer, Project Inspector and contractor) understand which features are to be saved and which are to be removed.

5N - Construction Limits

Construction Limits are lines shown on the plans that identify the lateral extent of the work for all construction activities, including removal/take items and Maintenance of Traffic (MOT).

Construction limits for MOT should address temporary pavement (Item 615 Pavement for Maintaining Traffic) and temporary roads (Item 615 Roads for Maintaining Traffic) and associated temporary embankment and drainage. Temporary signing is NOT included in the construction limits.

Be sure to provide sufficient room for removal/take items, not just the area disturbed by roadway construction. Show and label construction limits throughout the Right of Way Detail Sheet(s) and Right of Way Topography Sheet(s).

The construction limits must allow room for the contractor to demolish and haul away removal items.

5O - Proposed Pavement

Show the edges of pavement for all proposed roadways and drives.

5P - Proposed Plan Items

Describe all proposed plan items including, but not limited to: proposed driveways (giving type, width and centerline intercept for same), noise walls, retaining walls, drainage structures including drive culverts (labeled as to size and type), header tiles, sewers, curb and gutter, medians, channel changes and drainage ditch flow arrows.

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5Q - Utilities

Show and identify all utilities, locating them accurately (overhead by inspection, underground per Section 153.64 ORC) including individual poles and towers, pipelines, conduits, buried cables, pedestals, regulator stations, transformer stations, etc. In urban or congested areas having extensive utilities, a separate Utility Plan Sheet is optional, at the direction of the District Real Estate Administrator.

Show and identify all utility easements, including the type of easement, the width of the easement, and all recording data for the easement.

5R - Land Use

Identify all adjacent land use such as cultivated, pasture, wooded, residential, parking, etc. This is especially significant in urban and/or commercially developed areas. Special use properties such as parks, institutions, airports, etc. should be clearly identified.

5S - Address

Provide the site address for all individual housing and businesses within the boundaries of the appropriate properties, when possible. For those properties that have multi-family housing (apartments) and multiple businesses within one structure, provide the site addresses for each individual unit or business in a list format.

5T - Bearing and Distance

The perimeter of all proposed right of way and parcel boundaries (proposed right of way, existing right of way, property lines) shall be labeled with the bearing and distance along the line. Where it becomes impractical to show a bearing and distance along a line in conventional manner, provide a tabulated listing of the bearing and distances. The bearings shall be shown in degrees minutes and seconds to the nearest second. The distances shall be shown in feet to the nearest hundredth or what serves to satisfy the individual county requirements.

5U - Right of Way Curve Data (see sample Right of Way Detail Sheet 7/12)

Show the radius, central angle, length of curve, chord bearing and distance for each curve and any additional information that serves to satisfy the individual county requirements.

5V - Stations and Offsets

Provide a station and offset distance from the centerline of right of way for all angles, breaks and intersections in the existing and proposed right of way, easement lines and property lines as well as at intersection points of any of these. Station and offset labels should be shown on all found and set iron pins, pipes and survey monuments. Where switching reference from one centerline to another, such as with side roads or service roads, provide a double call point, i.e., a station and offset from each centerline at an appropriate transition point.

5W - Lead in Course(s)

Provide a lead in course for each parcel/legal description, which includes the bearing and distance(s) from a County acceptable, monumented commencement point to the true point of beginning for the legal description. Where it becomes impractical to show a distance along a line in conventional manner, provide a tabulated listing of the bearing and distances. All courses (bearings and distances) used in the legal description must be on the plan.

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5X - Non Public Easements

Show and identify all non public easements, including the type of easement, the width of the easement, and all recording data for the easement.

The following items are NOT shown in **Appendix A, Figure 1308.5**, however they are required when encountered on a project.

Intersections with the Centerline of Right of Way

Identify the station of intersection and offset distance if necessary, where Political Subdivisions, Original Government Surveys, Recorded Subdivisions, side roads and railroad centerlines intersect the centerline of right of way, identifying each by name and/or number and show direction/bearing where appropriate.

Right of Way Fence

Right of Way Fences shall be placed on interstate highways and/or limited access roadways and when the Project Scope of Services document requires it. ODOT typically places two types of fences the first being woven wire fence (type 47) which is usually placed two feet inside the proposed right of way line and a chain link fence which is usually placed one foot inside the proposed right of way line. Show and describe all proposed Right of Way Fences.

Closures, Gaps and Overlaps

When problems are encountered with the deeds (e.g., closure, gaps, and overlaps), a note shall be included briefly explaining the circumstances.

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3108.6 Right of Way Topography Sheet

When a Right of Way Topography Sheet is required by the scope of services document or approved by the District Real Estate Administrator, the Right of Way Boundary Sheet becomes a requirement. The combination of Right of Way Topographic Sheet and Right of Way Boundary Sheet is a substitute for the Right of Way Detail Sheet. The information shown on the Right of Way Topography Sheet shall be sufficient in nature to support the take, provide enough information for an appraisal, and supply sufficient information to discuss the acquisition with the property owner. The Right of Way Topography Sheet also serves to document exactly what area was acquired.

Many of the items shown on the Right of Way Topography Sheets are construction items related to the proposed construction of the project. The extent of work determines the amount of acquisition necessary and in turn, affects the value of residual areas.

Each Right of Way Topography Sheet should be followed by its corresponding Right of Way Boundary Sheet. The entire set shall be numbered consecutively. For example:

Sheet # 9 Right of Way Topo Sheet Sta. 1109 + 50 to Sta. 1114 + 50
Sheet # 10 Right of Way Boundary Sheet Sta. 1109 + 50 to Sta. 1114 + 50
Sheet # 11 Right of Way Topo Sheet Sta. 1114 + 50 to Sta. 171 + 97.56
Sheet # 12 Right of Way Boundary Sheet Sta. 1114 + 50 to Sta. 171 + 97.56

The scale for the Right of Way Topography Sheet should correspond with the Plan and Profile Sheets of the Construction Plans as well as the Right of Way Boundary Sheet. It is recommended that the District Real Estate Administrator be consulted if there is any question regarding the scales to be used on a given project.

Listed below are references to the sample Right of Way Topography Sheets in **Appendix A, Figure 3108.6**.

6A - Title Block

Located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. Project Identification (PID) Number
- f. Scale
- g. North arrow

6B - Sheet Heading

The Sheet Heading shows and identifies the county(s), political townships, original government survey(s), and the city(ies) or village(s) that fall within the project limits.

- a. County
- b. Civil Township
- c. Section / Township Tier / Range / VMS numbers
- d. City or Village, if applicable

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6C - Station Limit Flags (**Figure 1308.6, sheet 11/12**)

Station Limit Flags delineating the Begin and End stations for WORK and ACQUISITION are shown with the staff directed to the appropriate point ON the centerline. If applicable, show same for LIMITED ACCESS, right and left, if the two differ. Limits for WORK and ACQUISITION should be shown in a similar manner on side roads if the proposed right of way is referenced to the side road centerline. These two aspects are identified by stations along (longitudinal) the centerline of construction and/or right of way. See the **Location and Design Manual, Volume Three, Section 1300** of for more information on Work Limits.

BEGIN and END WORK - as determined from the construction plan. These are the extreme limits of the contractor's responsibility on a project, including all temporary and incidental construction, with the exception of work zone traffic control devices. This is also the area where we must be concerned with encroachments.

BEGIN and END ACQUISITION - determined from the right of way plans as the stations opposite the extreme points of new right of way, permanent or temporary, to be acquired for the project.

6D- Revision Block

A revision block showing the completion date and providing space to list revisions following the completion date shall be shown. Before Final Right of Way Plans are submitted for acquisition, changes can be made to the plan without noting any revisions in the revision block. After the plans have been submitted to the acquiring agency, any necessary revisions needed after that date are noted in the revision block and shall indicate specifically what was changed, the date of the correction or addition and the initials of the person that made the revision. Formal communication indicating the revision(s) made shall be sent by the **District Planning and Engineering Office** to the acquiring agency and shall including a copy of the revised plan sheets to verify the changes. **The District may request updated Microstation and electronic image files (i.e. Tiff) from the Consultant depending on the extent of the plan revisions.** To facilitate additional entries, the revision block is to read from the bottom up.

6E - Centerline of Right of Way Data

Define the centerline of right of way data for all roadways showing the bearing and distance along each tangent section, labeling the curve points along the centerline as well as the curve elements and data for each curve at least once per sheet on which the curve appears. Refer to the Location and Design Manual, Volume Three, **Figures 1303-1 through 1303-3**, for the required elements and data of curves and spirals. In addition provide the chord bearing and chord distances for both curves and spirals. The maximum superelevation (e-max) is not necessary.

NOTE: For New Alignments ONLY though spiral curves should generally be avoided in right of way centerlines, spiral curves in the centerline of proposed right of way are acceptable when fee takings along the proposed alignment are being acquired.

6F - Centerline Stationing

The Centerline Stationing on a project typically reflects the straight line mileage shown in the "section" (County-Route-Section). Centerline Stationing may also be established based on existing monumentation, bridges and prior projects. Unless specific direction is provided in the scope of services document, the person establishing the Centerline Stationing shall coordinate with the District Real Estate Section and/or District Survey Section to determine the appropriate basis for Centerline Stationing.

Refer to the **Location and Design Manual, Volume Three, Section 1300** for details pertaining to straight line mileages, stationing and project identification.

Centerline Stations are normally displayed at 100-foot intervals. Centerline stationing should normally read from left to right and bottom to top on all plan sheets.

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Station equations along the proposed centerline of right of way are normally required when the proposed centerline of right of way ties into the existing centerline of right of way at the beginning and/or end.

6G - Political Subdivisions, Original Government Survey, Recorded Subdivision Lines and Monumentation

Show and identify all monumentation found, in relation to the establishment and location of:

Political Subdivisions – State, County, Township or Corporation lines. Corporation lines shall be labeled clearly, leaving no question as to the area of incorporation and adjoining political entities. Show and identify any Political Subdivision lines of record, including names. Recording data for this information shall also be shown, if available.

Original Government Survey – Show rectangular land survey and Virginia Military Survey system lines. Clearly label each line as to Original Government Survey information (i.e. Section, Town Range, Lot Number, Quarter Section, VMS patent Number, etc.).

Recorded Subdivisions – Show lot lines (with lot information) and recorded subdivision boundaries. Clearly label each line as to interior lot lines (with lot information) and recorded subdivision boundaries (with phase or section and recording information).

Monuments - shall contain descriptive information as referenced in O.A.C. 4733-37 “Standards for Boundary Surveys” (i.e. 1/2" Iron Pipe Found, 5/8" Rebar with red plastic cap marked Surveyor Name, Surveyor Number Found), unless the monument legend clearly indicates this information. Station and Offset referenced to the centerline of right of way shall be clearly shown on all monuments found. **Show deflection angles of these lines.** Bearing and distance information shall also be shown on these lines. There shall be a clear representation and retraceable relationship between the centerline of right of way and these lines.

6H - Proposed Right of Way & Parcel Boundaries

The perimeter of all proposed right of way parcels shall be shown using the appropriate CADD line styles. Within the perimeter of all proposed Parcel, the Owners' number and appropriate parcel identifier, shall be shown (Also see 6K). The proposed right of way lines (of all types) shall be shown as the PROMINENT lines on the sheet.

The iron pins to be set on proposed right of way parcels shall match the monument legend which can be found on the Legend Sheet and Centerline Plat Sheet.

6I - Property Lines

All property lines within the area of concern shall be shown and clearly labeled with the appropriate property line symbol.

6J - Intersections with the Centerline of Right of Way

Identify the station of intersection and offset distance if necessary, where Political Subdivisions, Original Government Surveys, Recorded Subdivisions, side roads and railroad centerlines intersect the centerline of right of way, identifying each by name and/or number and show direction/bearing where appropriate.

6K - Ownership Name, Number and Parcel Identifier

Parcel balloons are PROMINENTLY drawn circles or ovals with the ownership numbers and parcel identifiers drawn inside. Show all parcel balloons in the appropriate take area, some take areas may be large enough to warrant more than one parcel balloon. Show **the** owner(s) of record exactly as it appears on the instrument(s) conveying title, **if at all possible.** When there are

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multiple owners, all such names shall be spelled out as space dictates. Other terminology - et al, et alii, aka, fka, etc., should be defined here.

The Auditor's Permanent Parcel Number shall also be shown adjacent to the parcel balloons when space permits. For more information on Parcel Identifiers, see **Section 3107.2, "Parcel Identification"**.

6L - Side Roads, Waterways, Lakes and Railroads

Show and label all side roads and their existing right of way, clearly identifying each road (include the State Route, County Route, Township Road Numbers, etc.) which intersect or are in the project limits. Provide the names of lakes, streams and/or waterways, and railroads. Provide a flow arrow identifying the direction of flow for all streams and/or waterways. Identify the railroad company that retains the property rights, as well as the name(s) of the railroad company that is operating on the rail line.

6M - Match Lines

When you have more than one Right of Way Topography Sheet, identify and label match lines clearly as to the station and sheet number they match. For more information about match lines, see **Section 3107.5, "Match Lines and Cross References"**.

6N - Existing Topographical Features and their Disposition

Show and identify ALL existing topographic features on the Right of Way Detail Sheets. These features include, but are not limited to:

pavement	bridges	streams
treated shoulders	rivers	lakes
creeks	ditches	paved area
ponds	railroads	structures
driveways	walks	underground storage tanks
foundations	underground lines	cisterns
easements	oil and gas wells	sprinkler systems
septic systems	sewers	culverts
fences	guardrail	inlets
catch basins	manholes	non-highway signs
walls	signs	field tiles
trees (with size)	shrubs	drain pipes
light poles	curbs	

Any existing topographical feature that will be affected by the proposed construction or in any way have an impact on the proposed taking must be shown. The disposition of the features must be determined and represented within both the construction and right of way plans.

Plan preparers should look for evidence of private septic tanks, leach beds and underground sprinkler systems/sprinkler heads and show them in the plans. Obstructions located within existing right of way will be considered an encroachment.

Where it is necessary to show dimensions for topographical features such as trees, drives, sidewalks, etc., they are to be shown in feet or inches, using the unit of measure that fits the degree of accuracy dictated by the situation.

For driveways, label centerline station intercept, type (e.g., asphalt, concrete, aggregate) and size (i.e., throat width).

For structures, identify the type, size and a distance from the closest point on the structure to the proposed right of way when within 100 feet thereof.

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For information on how to label easements, refer to **Section 3104.2, "Existing Easements (Public, Utility and Private)"**.

During the initial preparation of both construction and right of way plans, it should be understood that all obstructions that need to be removed for the project will be removed by the contractor. Construction plans will include specific 202 quantities for all removals.

Place an "X" through any structure(s) that will be removed on both the construction plans and right of way plans. If a structure, or a portion of a structure, can be salvaged or is very close to the proposed taking, yet not needed, label it "DO NOT DISTURB."

Trees and shrubs that fall within the proposed right of way limits are to be removed unless otherwise noted. All trees and shrubs that are to be removed must be within the construction limits. Tree and shrub removal shall be identified by an "X" through the tree and shrub symbol. In those situations that involve a wooded area, only the trees with a diameter of 12" or greater require an "X".

Within temporary easements, trees may be retained if they do not conflict with proposed construction activities. These trees should be identified in the right of way plans as "SAVE" and in the construction plans as "DO NOT DISTURB". When determining whether a tree can be saved, consider that tree roots are very near the ground surface and that an inch or two of additional cover over the root system or any excavation into the root system can cause the tree to die. As a general guide, the below ground root system for a tree extends approximately as far as its canopy extends over the ground.

Communication regarding the disposition of obstructions is of critical importance to the right of way acquisition activities. Every effort must be made to ensure that all parties (property owner, District Real Estate Administrator, Right of Way Plan Designer, Roadway Designer, Project Inspector and contractor) understand which features are to be saved and which are to be removed.

6O - Construction Limits

Construction Limits are lines shown on the plans that identify the lateral extent of the work for all construction activities, including removal/take items and Maintenance of Traffic (MOT).

Construction limits for MOT should address temporary pavement (Item 615 Pavement for Maintaining Traffic) and temporary roads (Item 615 Roads for Maintaining Traffic) and associated temporary embankment and drainage. Temporary signing is NOT included in the construction limits.

Be sure to provide sufficient room for removal/take items, not just the area disturbed by roadway construction. Show and label construction limits generously throughout the Right of Way Detail Sheet(s) and Right of Way Topography Sheet(s).

The construction limits must allow room for the contractor to demolish and haul away removal items.

6P - Proposed Pavement

Show the edges of pavement for all proposed roadways and drives.

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6Q - Proposed Plan Items

Describe all proposed plan items, including but not limited to: proposed driveways (giving type, size and centerline intercept for same), noise walls, retaining walls, drainage structures (including drive culverts labeled as to size and type), header tiles, sewers, curb and gutter, medians, channel changes and drainage ditch flow arrows.

6R - Utilities

Show and identify all utilities, locating them accurately (overhead by inspection, underground per Section 153.64 ORC), including: individual poles and towers, pipelines, conduits, buried cables, pedestals, regulator stations, transformer stations, etc. In urban or congested areas having extensive utilities, a separate Utility Plan Sheet is optional, at the direction of the District Real Estate Administrator.

Show and identify all utility easements, including the type of easement, the width of the easement, and all recording data for the easement.

6S - Land Use

Identify all adjacent land use, such as: cultivated, pasture, wooded, residential, parking, etc. This is especially significant in urban and/or commercially developed areas. Special use properties such as parks, institutions, airports, etc. should be clearly identified.

6T - Address

Provide the site address for all individual housing and businesses within the boundaries of the appropriate properties when possible. For those properties that have multi-family housing (apartments) and multiple businesses within one structure, provide the site addresses for each individual unit or business in a list format.

6U - Non Public Easements

Show and identify all non public easements, including the type of easement, the width of the easement, and all recording data for the easement.

The following item is NOT shown in **Appendix A, Figure 1308.6**, however it is required when encounter on a project.

Right of Way Fence

Right of Way Fences shall be placed on interstate highways and/or limited access roadways and when the Project Scope of Services document requires it. ODOT typically places two types of fences the first being woven wire fence (type 47) which is usually placed two feet inside the proposed right of way line and a chain link fence which is usually placed one foot inside the proposed right of way line. Show and describe all proposed right of way fences. For more detailed information, see the Construction and Materials Specifications book.

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3108.7 Right of Way Boundary Sheet

The information shown on the Right of Way Boundary Sheet shall be sufficient in nature to support the legal descriptions and supply sufficient information to discuss the acquisition with the property owner. The Right of Way Boundary Sheet also serves to document exactly what area was acquired.

The scale for the Right of Way Boundary Sheet should correspond with the Plan and Profile Sheets of the Construction Plans as well as the Right of Way Topography Sheet. It is recommended that the District Real Estate Administrator be consulted if there is any question regarding the scales to be used on a given project.

Listed below are references to the sample Right of Way Boundary Sheets in **Appendix A, Figure 3108.7**.

7A - Title Block

Is located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. Project Identification (PID) Number
- f. Scale
- g. North arrow

7B - Sheet Heading

The Sheet Heading shows and identifies the county(s), political townships, original government survey(s), and the city(ies) or village(s) that fall within the project limits.

- a. County
- b. Civil Township
- c. Section / Township Tier / Range / VMS numbers
- d. City or Village, if applicable

7C - Revision Block

A revision block showing the completion date and providing space to list revisions following the completion date shall be shown. Before Final Right of Way Plans are submitted for acquisition, changes can be made to the plan without noting any revisions in the revision block. After the plans have been submitted to the acquiring agency, any necessary revisions needed after that date are noted in the revision block and shall indicate specifically what was changed, the date of the correction or addition and the initials of the person that made the revision. Formal communication indicating the revision(s) made shall be sent by the **District Planning and Engineering Office** to the acquiring agency and shall include a copy of the revised plan sheets to verify the changes. **The District may request updated Microstation and electronic image files (i.e. Tiff) from the Consultant depending on the extent of the plan revisions.** To facilitate additional entries, the revision block is to read from the bottom up.

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7D - Centerline of Right of Way Data

Define the centerline of right of way data for all roadways showing the bearing and distance along each tangent section, labeling the curve points along the centerline as well as the curve elements and data for each curve at least once per sheet on which the curve appears. Refer to the **Location and Design Manual, Volume Three, Figures 1303-1 through 1303-3**, for the required elements and data of curves and spirals. In addition provide the chord bearing and chord distances for both curves and spirals. The maximum superelevation (e-max) is not necessary.

NOTE: For New Alignments ONLY though spiral curves should generally be avoided in right of way centerlines, spiral curves in the centerline of proposed right of way are acceptable when fee takings along the proposed alignment are being acquired

7E - Centerline Stationing

The Centerline Stationing on a project typically reflects the straight line mileage shown in the "section" (County-Route-Section). Centerline Stationing may also be established based on existing monumentation, bridges and prior projects. Unless specific direction is provided in the scope of services document, the person establishing the Centerline Stationing shall coordinate with the District Real Estate Section and/or District Survey Section to determine the appropriate basis for Centerline Stationing.

Refer to the **Location and Design Manual, Volume Three, Section 1300** for details pertaining to straight line mileages, stationing and project identification.

Centerline Stations are normally displayed at 100 foot intervals. Centerline stationing should normally read from left to right and bottom to top on all plan sheets.

Station equations along the proposed centerline of right of way are normally required when the proposed centerline of right of way ties into the existing centerline of right of way at the beginning and/or end.

7F - Intersections with the Centerline of Right of Way

Identify the station of intersection and offset distance if necessary, where Political Subdivisions, Original Government Surveys, Recorded Subdivisions, side roads and railroad centerlines intersect the centerline of right of way, identifying each by name and/or number and show direction/bearing where appropriate.

7G - Political Subdivisions, Original Government Survey, Recorded Subdivision Lines and Monumentation

Show and identify all monumentation found, in relation to the establishment and location of:

Political Subdivisions – State, County, Township or Corporation lines. Corporation lines shall be labeled clearly, leaving no question as to the area of incorporation and adjoining political entities. Show and identify any Political Subdivision lines of record, including names. Recording data for this information shall also be shown, if available.

Original Government Survey – Show rectangular land survey and Virginia Military Survey system lines. Clearly label each line as to Original Government Survey information (i.e. Section, Town Range, Lot Number, Quarter Section, VMS patent Number, etc.).

Recorded Subdivisions – Show lot lines (with lot information) and recorded subdivision boundaries. Clearly label each line as to interior lot lines (with lot information) and recorded subdivision boundaries (with phase or section and recording information).

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Monuments - shall contain descriptive information as referenced in O.A.C. 4733-37 “Standards for Boundary Surveys” (i.e. 1/2" Iron Pipe Found, 5/8" Rebar with red plastic cap marked Surveyor Name, Surveyor Number Found), unless the monument legend clearly indicates this information. Station and Offset referenced to the centerline of right of way shall be clearly shown on all monuments found. **Show deflection angles of these lines.** Bearing and distance information shall also be shown on these lines. There shall be a clear representation and retracable relationship between the centerline of right of way and these lines.

7H - Proposed Right of Way & Parcel Boundaries

The perimeter of all proposed right of way parcels shall be shown using the appropriate CADD line styles. Within the perimeter of all proposed Parcels, the Owners' numbers and appropriate parcel identifiers shall be shown (Also see 7J). The proposed right of way lines (of all types) shall be shown as the PROMINENT lines on the sheet.

The iron pins to be set on proposed right of way parcels shall match the monument legend which can be found on the Legend Sheet and Centerline Plat Sheet.

7I - Property Lines and Monuments

All property lines within the area of concern shall be shown and clearly labeled with the appropriate property line symbol. **Show boundary monuments used to determine the property lines. When boundary monuments are not found, show the appropriate record data used to determine the location of the property lines.**

7J - Ownership Name, Number and Parcel Identifier

Parcel balloons are PROMINENTLY drawn circles or ovals with the ownership numbers and parcel identifiers drawn inside. Show all parcel balloons in the appropriate take area, some take areas maybe large enough to warrant more than one parcel balloon. Show the owner(s) of record exactly as it appears on the instrument(s) conveying title, **if at all possible.** When there are multiple owners, all such names shall be spelled out as space dictates. Other terminology - et al, et alii, aka, fka, etc., should be defined here.

The Auditor's Permanent Parcel Number shall also be shown adjacent to the parcel balloons when space permits. For more information on Parcel Identifiers, see **Section 3107.2, “Parcel Identification”**.

7K - Match Lines

When you have more than one Right of Way Boundary Sheet, identify and label match lines clearly as to the station and sheet number they match. For more information about match lines, see **Section 3107.5, “Match Lines and Cross References”**.

7L - Bearing and Distance

The perimeter of all proposed right of way and parcel boundaries (proposed right of way, existing right of way, property lines) shall be labeled with the bearing and distance along the line. Where it becomes impractical to show a distance along a line in conventional manner, provide a tabulated listing of the bearing and distances. The bearings shall be shown in degrees minutes and seconds to the nearest second. The distances shall be shown in feet to the nearest hundredth or what serves to satisfy the individual county requirements.

7M - Right of Way Curve Data

Show the radius, **central angle, length of curve**, chord bearing and distance for each curve and any additional information that serves to satisfy the individual county requirements.

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7N - Stations and Offsets

Provide a station and offset distance from the centerline of right of way for all angles, breaks and intersections in the existing and proposed right of way, easement lines and property lines as well as at intersection points of any of these. Station and offset labels should be shown on all found and set iron pins, pipes and survey monuments. Where switching reference from one centerline to another, such as with side roads or service roads, provide a double call point, i.e., a station and offset from each centerline at an appropriate transition point.

7O - Lead in Course(s) (**Figure 3108.7, sheet 12/12**)

Provide a lead in course for each parcel/legal description, which includes the bearing and distance(s) from a County acceptable, and a monumented commencement point to the true point of beginning for the legal description. Where it becomes impractical to show a distance along a line in conventional manner, provide a tabulated listing of the bearing and distances. All courses (bearings and distances) used in the legal description must be on the plan.

7P – Closures, Gaps and Overlaps

When problems are encountered with the deeds (e.g., closure, gaps, and overlaps), a note shall be included briefly explaining the circumstances.

The following items are NOT shown in **Appendix A, Figure 3108.7**, however they are required when encounter on a project.

Side Roads, Waterways, Lakes and Railroads

Show and label all side roads and their existing right of way, clearly identifying each road (include the State Route, County Route, Township Road Numbers, etc.) which intersect or are in the project limits. Provide the names of lakes, streams and/or waterways, and railroads. Provide a flow arrow identifying the direction of flow for all streams and/or waterways. Identify the railroad company that retains the property rights, as well as the name(s) of the railroad company that is operating on the rail line.

Non Public Easements

Show and identify all non public easements, including the type of easement, the width of the easement, and all recording data for the easement.

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3108.8 Railroad Right of Way Design

The Right of Way Plan Designer should make every effort possible to avoid or minimize acquisition of real estate from the railroad/railway companies. When acquisition cannot be avoided, the design agency must recognize the operating and maintenance needs of the railroad as well as the highway.

On projects where the right of way is to be acquired from a railroad at a location involving an operating railroad facility, a Railroad Plat Sheet shall be prepared in accordance with this manual and will be included as a part of the right of way plans. In the case of minimal right of way requirements, (e.g., temporary easements, drainage easements, slope easements, etc.), the need for a separate plan can be waived. The waiver must be approved with the Office of Real Estate, Utility and Railroad Program Management office in Columbus.

The primary intent of a railroad plat is to highlight and clarify the additional right of way required from the railroad to facilitate the negotiation and acquisition of the property. For railroad plats and plans, the following items need to be addressed:

- The Railroad Plat Sheet requires the same detail and preparation as the Right of Way Detail Sheet and/or the Right of Way Topography Sheet and Right of Way Boundary Sheet for the railroad involved.
- A larger scale and/or separate details should be considered for small occupational easements.
- Where railroad valuation plan bearings are different from those of the highway survey, show and identify both bearings. Identify at least one station and offset callout point using both the railroad valuation/centerline station and the highway centerline of right of way station. You must include this station and offset callout in each legal description for railroad property.
- The proposed structure, including abutments, wing walls, piers, retaining walls, drainage facilities (including direction of flow) and work limits, shall be clearly shown.
- All existing and proposed right of way and property corners shall be tied to the highway centerline of right of way.

In the occasional situation where more than one railroad company occupies adjoining rights of way, a separate plat is required for each.

The amount and type of right of way to be acquired is based on the following criteria:

Right of Way for Crossing At-Grade

When the highway project crosses a railroad at-grade, either on an existing or on a new alignment, a permanent easement (preferably a Standard Highway Easement) shall be acquired for the width of the proposed pavement and shoulders plus a minimum two (2) feet on each side across the operating railroad property. This area shall be highlighted (hatching, shading, etc.) and designated as "Area of Joint Use." If additional right of way is required beyond this joint use area, (e.g., slope easements, channel easements, etc.), it shall be acquired to provide for the specific needs of construction and maintenance.

Right of Way for Grade Separations

Right of way requirements for an underpass differ from those for an overpass, hence they will be described separately. As noted above, however, clearances in either case should be determined by guidelines set forth in the **Location and Design Manual, Volume One**.

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A. New Highway Underpass

When the proposed highway structure underpass is created crossing railroad property, the permanent highway right of way shall include the entire grade separation structure, i.e., all wing walls, footers, etc., and shall be acquired by STANDARD HIGHWAY EASEMENT. The right of way line for said easement shall follow the top of the slope outside the structure. If the terrain is such that exceptionally long slopes are required, it may be desirable to secure slope easements outside the minimum permanent right of way width for the project.

B. New Highway Overpass

When the proposed highway structure overpass crosses railroad property, an AERIAL EASEMENT shall be acquired. The area covered by this easement across operating property is normally the overall width of the structure plus fifteen (15) feet on each side, though special circumstances might dictate additional width. If it is a twin structure, the same principle applies and includes all of the space between the structures.

A standard highway easement shall be acquired for footers of abutments and piers. The area covered by this easement is normally the overall width of the footing, plus one (1) foot on all sides. Temporary easement, slope easements, channel easements, etc., for construction and/or maintenance shall be acquired between abutments. The normal right of way width for the project shall be acquired for all highway construction beyond the abutments.

C. Grade Crossing Eliminated by new Underpass

When the proposed highway is to pass under the railroad (eliminating the existing grade crossing), the proposed permanent highway right of way shall follow the face of the abutments and wing-walls and the top of the slope outside the structure. If the terrain is such that exceptionally long slopes are required, it may be desirable to secure slope easements outside the minimum right of way width for the project.

The reason for the difference in right of way limits between newly created crossings separated by an underpass, and existing grade crossing elimination projects, is that the underpass structure (except the plate or slab and bridge drainage) for the newly created crossing is maintained by the State of Ohio or other public agency.

D. Grade Crossing Eliminated by new Overpass

The right of way requirements for eliminating an at-grade crossing by creating a highway overpass are the same as those for an overpass on new alignment.

The railroad plat shall show the name of the operating railroad company, the railroad company that retains the property rights and the highway project identification. Due to the peculiar nature of operating railroad ownerships, show the area needed to the nearest square foot for the proposed right of way. Where the situation exists, show a line between the operating and non-operating railroad property.

The railroad plat shall contain a table(s) identifying the parcels that overlap and the measured area of overlap.

Railroad Parcels

The easement used for permanent structures such as piers, abutments, wing walls, retaining walls, pavement on at-grade crossings, etc., is often referred to as an "occupational" or "ground" easement. Technically, it is a standard highway easement for highway purposes and conveys all rights required to construct and maintain a permanent highway facility.

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Overlap Table

When a Standard Highway Easement is acquired, no further rights are required for the same area. When lesser easement rights are acquired, only the right acquired is conveyed. When more than one of these lesser rights (such as an aerial easement and a slope easement) is acquired for the same parcel of land, the overlap easement areas are shown in an overlap table. The areas of overlap are shown in square feet and are broken out for each parcel of land and the area in which they overlap the other easement(s).

Exception Area

With a highway underpass, the railroad retains the aerial right for the structure over the highway and the area shall be identified on the Railroad Plat Sheet. This area is determined by the width of the proposed structure and the length of railroad centerline between the faces of the abutments. The sample plat in Appendix A for a highway underpass illustrates the exception area and a note describing it.

Area of Joint Usage

The area of joint usage is the width of the proposed pavement and shoulders plus a minimum of two (2) additional feet on each side across the railroad property. This area shall be highlighted (hatching, shading, etc.) and designated as "Area of Joint Use." Additionally, this area shall be calculated in square feet and shown in a table format.

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Railroad Plat Sheet

The scale for the Railroad Plat Sheet should correspond with the Plan and Profile Sheets of the Construction Plans. It is recommended that the District Real Estate Administrator be consulted if there is any question regarding the scales to be used on a given project.

Listed below are references to the sample Railroad Plat Sheets in **Appendix A, Figure 3108.8**.

8A - Title Block

Is located on the right side of the sheet and contains:

- a. Sheet Numbers (Overall sheet numbering and right of way sheet numbering)
- b. County, Route, Section
- c. Sheet Title
- d. Initials of Right of Way Plan Designer and Right of Way Plan Reviewer
- e. Project Identification (PID) Number
- f. Scale
- g. North arrow

8B - Sheet Heading

The Sheet Heading shows and identifies the county(s), political townships, original government survey(s), and the city(ies) or village(s) that fall within the project limits.

- a. County
- b. Civil Township
- c. Section / Township Tier / Range / VMS numbers
- d. City or Village, if applicable

8C - Railroad valuation/centerline data with the bearing and distance along each tangent section

Label the curve points along the centerline as well as the curve information for each curve at least once per sheet on which the curve appears. Refer to the Location and Design Manual, Volume Three, **Figures 1303-1 through 1303-3**, for the required elements and data of curves and spirals. In addition provide the chord bearing and chord distances for both curves and spirals.

8D - All other tracks such as double tracks, switch tracks, spurs, sidings, etc. (**Figure 3108.8, sht. 42/46**)

8E - Railroad company(ies) valuation survey stationing

8F - Railroad property lines

8G – The highway centerline of right of way data with the bearing and distance along each tangent section, labeling the curve points along the centerline as well as the curve information for each curve at least once per sheet on which the curve appears.

8H - Relationship between railroad valuation/centerline stationing and highway centerline of right of way stationing.

8I - Station and offset for each railroad parcel tied to both the railroad centerline stationing and the highway centerline of right of way stationing.

8J - Construction limits

8K - Proposed pavement, abutments, pier footers, retaining walls, drainage system, bridge parapets, relocated tracks, etc (**Figure 3108.8, sheet 42/46**)

8L - Ownership number and parcel identifiers

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8M - Overlap tables with areas broken out in square feet, if applicable

8N - Intersection angle of railroad and highway centerlines

8O - Reference to railroad valuation map used as the source of railroad data

The following item is NOT shown on the sample sheets in **Appendix A**, however it is required when encounter on a project.

Enlarged scale detail of footer easements, if applicable

NOTE: In dealing with the different railroads, some variation may be encountered in their individual requirements and needs. It would be impossible to illustrate all of these differences in a limited number of sheets, so they should be addressed on a case by case basis. It is strongly suggested that the Office of Real Estate, Acquisition Services Section be contacted for further information.

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3109 Optional Right of Way Plan Formats

3109.1 Introduction

When minimal right of way is needed or the project is simple in nature, it may be possible to utilize an Optional Right of Way Plan Format. However, all Optional Right of Way Plan Formats must be approved by the District Real Estate Administrator or outlined in the Project Scope of Services document. In all cases, the Optional Right of Way Plan Format must include the essential right of way data that is needed to complete the acquisition and appraisal process.

ODOT currently recognizes three Optional Right of Way Plan Formats.

- One Sheet Right of Way Plan
- Right of Way Data on Construction Plan Sheets
- Right of Way Plat

The One Sheet Right of Way Plan or Right of Way Data on the Construction Plan Sheets should be considered when:

- Minimal or small take areas are required
- No significant negative affects to the remaining property will occur
- Work agreements and temporary takes are to be acquired
- A minimal number of parcels are to be acquired

The Right of Way Plat should be considered when:

- Complex or large take areas are required
- Significant negative affect to the remaining property will occur
- Temporary takes are to be acquired
- A large number of parcels are to be acquired
- It is believed appropriations are likely
- It is important to relate permanent easements or fee simple title parcels, to boundary land lines or property lines
- The taking is in an urban area or a large rural project involving many parcels
- It is desirable to reduce the time spent preparing, checking and proofreading the legal descriptions.

The District Real Estate Administrator may approve any one of the above Optional Right of Way Plan Formats only after full consideration is given to the above criteria.

3109.2 One Sheet Right of Way Plan

The format consists of a Legend Sheet and a Right of Way Sheet(s). The Right of Way Plan Sheet includes those elements normally associated with a Property Map, a Summary of Additional Right of Way and the Right of Way Detail Sheets. A sample of the One Sheet Right of Way Plan has been provided in **Appendix A, Figures 3109.2A and 3109.2B.**

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3109.3 Right of Way Data on Construction Plan Sheets

This optional format is essentially a modified construction plan and profile sheet. The data normally shown on the right of way plan is shown on the plan and profile sheet(s). Take types and ownership information is shown on the plan view. Also, a condensed Summary of Additional Right of Way table is furnished, usually on the last plan and profile sheet, within the series of sheets. A sample of the Right of Way Data on Construction Plan Sheets has been provided in **Appendix A, Figure 3109.3**.

3109.4 Right of Way Plat

The Right of Way Plat contains the standard right of way plan sheets using the Right of Way Topography Sheets and Right of Way Boundary Sheets in the place of the Right of Way Detail Sheets. This optional plan format requires the entire set of right of way plans (excluding the Right of Way Topography Sheets) be recorded in the County Recorder's Office. Use of the Right of Way Plat format allows for abbreviated legal descriptions that refer to parcel numbers within the plans in lieu of a description per O.A.C. 4733-37-06 ((B) Metes and Bounds Descriptions)

The Recorded Right of Way Plat will include the following; the Right of Way Legend Sheet, Centerline Plat Sheet(s), Property Map Sheet(s), Property Index Map Sheet(s) (if required), Summary of Additional Right of Way Sheet(s), and Right of Way Boundary Sheet(s). The plan and associated documents must meet O.A.C. 4733-37 (Minimum Standards for Boundary Surveys in the State of Ohio). The Right of Way Plat shall be recorded after the title research/reports, appraisals, and negotiations are completed, and immediately prior to the closings.

The parcels being acquired will be described in the deed with a reference to the recorded Right of Way Plat and ODOT Parcel Number. See **Appendix E** for a sample legal description using the Right of Way Plat format.

If revisions to the recorded Right of Way Plat are required, an Affidavit of Correction with the associated drawing(s) and all other county required information must be completed by the design agency. The affidavit will clearly state what is to be corrected as well as which sheets of the recorded Right of Way Plat are effected. The affidavit will be cross indexed with the county record index and the recorded Right of Way Plat (Summary of Additional Right of Way Sheet). See **Appendix F** for a sample Affidavit of Correction as well as a sample cover letter to the local County Recorder.

The Right of Way Plat Process requires the release of Temporary Easement parcels when construction is completed. The documents needed to facilitate this release must be prepared and submitted with the Right of Way Tracings. The construction project engineer will sign the release, certifying the construction is complete, and the Temporary Easements acquired for construction are no longer needed. The release will be forwarded to the District Real Estate Administrator. The District Real Estate Administrator shall be responsible for recording the signed release in the appropriate county office.

Sheet Numbering

Given that the Right of Way Plat format requires the entire plan be recorded (with the exception of the Topography sheets), the Right of Way Topography Sheet(s) shall have a "T" added to their right of way plan sheet numbering. For more information on right of way plan sheet number, see **Section 3107.3, "Numbering of Right of Way Plan Sheets"**.

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Right of Way Legend Sheet

The Right of Way Legend Sheet shall be prepared as per **Section 3108.1, "Right of Way Legend Sheet"**. In addition the following items shall be included:

- The County Recorder's recording block shall be added to this sheet (Modify according to local County Recorder's requirements).
- Recorder's Marginal Notes must be added to the index of sheets.

Centerline Plat Sheet

The Centerline Plat Sheet shall be prepared as per **Sections 3108.2, "Centerline Plat Sheet"**

Property Map Sheet

The Property Map shall be prepared as per **Section 3108.3 and 3109.3, "Property Map Sheet"**. In addition, the following items shall be included:

- Show all existing monumentation and lines of occupation that were found and used to establish the Property lines.
- The County Recorder's recording block shall be added to this sheet (Modify according to local County Recorder's requirements).

Summary of Additional Right of Way Sheet

The Summary of Additional Right of Way Sheet shall be prepared as per **Section 3108.4 and 3109.4, "Summary of Additional Right of Way Sheet"**. In addition, the following items shall be included:

- A marginal notation will be completed by the County Recorder when the Release of Temporary Right of Way is recorded at the end of the project. The Temporary Right of Way will be released by affidavit filed by ODOT at the completion of the construction project.

<i>Temporary Easements have been released by Affidavit</i>	
<i>Dated:</i>	
<i>Recorded to</i>	<i>Records Volume:</i>
<i>Page:</i>	
.....	
<i>County Recorder</i>	

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- A table shall be added to this sheet to list all of the affidavits that may be filed for possible revisions of the plan. This table will be used by the County Recorder as a cross reference at the time the affidavits are filed.

Affidavit of Correction:							
<i>Parcel No.</i>	<i>Date</i>	<i>Volume</i>	<i>Page</i>	<i>Parcel No.</i>	<i>Date</i>	<i>Volume</i>	<i>Page</i>

- The County Recorder's recording block shall be added to this sheet (Modify according to local County Recorder's requirements).

Right of Way Topography Sheet

The Right of Way Topography Sheet shall be prepared as per **Section 3108.6, "Right of Way Topography Sheet"**. In addition the following items shall be included:

- A 'T' is added to the right of way plan sheet number.

Right of Way Boundary Sheet

The Right of Way Boundary Sheet shall be prepared as per **Section 3108.7, "Right of Way Boundary Sheet"**. In addition, the following items shall be included:

- The County Recorder's recording block shall be added to this sheet (Modify according to local County Recorder's requirements).

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3110 Right of Way Plan Review Submission

3110.1 Coordination of Review comments

The development of the right of way plan can require reviews and comments from various internal and external offices and agencies, such as the effected railroad company's real estate section, involved utility companies, real estate regional office, etc. For a list of the review agencies and the requirements of the review submittals, see the **PDP Manual, Appendix B – Review Matrices**, as well as the **Location and Design Manual, Volume Three, Sections 1402 and 1403**.

All Right of Way submittals shall be made to the District Planning and Engineering Office unless otherwise indicated in the Project Scope of Services document. Review submissions may be provided electronically when included in the Project Scope of Services document or with approval of the District. For Right of Way Tracings submittals, see Section 3110.4.

3110.2 Right of Way Review Submissions

While there are activities of the right of way plan development process that must be reviewed throughout the entire PDP process, the more complex and detailed submittals and reviews related to right of way are at Stage 1 Design, Preliminary Right of Way and Final Right of Way. The Right of Way Tracings are a submittal only and not for review. See the **Location and Design Manual, Volume Three, Section 1400 and the PDP Manual** for a complete list of submission requirements.

A completed Right of Way Review Checklist (**see Appendix H**) shall be submitted with both the Preliminary Right of Way Plan review **submission** and the Final Right of Way Plan review **submission**. A Field Review Checklist (**see Appendix I**) shall be submitted with the Preliminary Right of Way review **submission** and Right of Way Tracings **submission**. A Right of Way Description Checklist (**see Appendix J**) shall be submitted with the Final Right of Way Plan review **submission**.

In addition to the standard review submission outlined above, a Conceptual Right of Way Review Submission may be requested by the District Real Estate Section as part of the project scope of services document.

Typically a Conceptual Right of Way Review will be requested for large complex projects and/or projects in an urban environment involving commercial and residential property as well as other projects deemed appropriate by the District. The Conceptual Right of Way submittal will occur prior to the Preliminary Right of Way submittal, but is not a substitute for the Preliminary or Final Right of Way submittals.

A Conceptual Right of Way Review submission shall include the following:

- Right of Way Detail Sheet
 - Centerlines
 - Property Lines
 - Existing and Proposed Right of Way Lines
 - Existing Topographic Features
 - Construction Limits
 - Types of Right of Way Takes
 - Land Use
 - Identification of possible problem areas

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3110.3 Field Review Process

As part of the Right of Way Review Submission outlined in **Section 3110.2 “Right of Way Reviews”**, the right of way designer and/or reviewer are required to perform a field review and complete the Field Review Checklist (**Appendix I**) prior to the Preliminary Right of Way submission and within 15 working days of submitting the Right of Way Tracings. The Field Review Checklist should include the reviewer’s signature, contact information and the date the field review was completed.

The right of way designer and/or reviewer are required to notify the District Real Estate Administrator no less than five (5) working days prior to the date of the Right of Way Tracings field review. The District Real Estate Administrator will then determine whether a District representative will accompany the right of way designer and/or reviewer on the field review.

3110.4 Right of Way Tracings Submittal

Submission of the Right of Way Tracings prior to submittal of the Project Plan Package may be made electronically with approval of the District.

When submitting the final plans and the Project Plan Package to Central Office, the Right of Way Tracings for ODOT let projects (includes ODOT Let Local Projects) included with the Project Plan Package **must** be submitted using electronic image formats (i.e. Tiff). See **Location and Design Manual, Volume 3, Section 1504 and 1506** for more information on submittal of the final plans and Project Plan Package.

The process for generating electronic image files (i.e. Tiffs) can be found on the **Office of Contracts** website.

When the right of way review process is completed, a paper and digital copy of the completed RX Forms for each parcel of right of way to be acquired shall be submitted to the District Planning and Engineering Office.

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MAJOR PROJECTS		
<u>DESIGN SUBMISSION</u>	<u>PDP STEP</u>	<u>RIGHT OF WAY ACTIVITIES</u>
Red Flag Summary	2	<ul style="list-style-type: none"> Evaluates unusual impacts to properties or unusually costly parcel takes.
Conceptual Alternatives Study	5	<ul style="list-style-type: none"> Prepare right of way acquisition cost estimate. Determine the centerline of existing right of way and its relationship to both the centerline of proposed right of way and the centerline of construction
Assessment of Feasible Alternatives	6	<ul style="list-style-type: none"> Evaluate drive relocation for landlocked parcels and high traffic generators. Obtain tax maps and overlay property lines, ownerships, and tax identification numbers on mapping data. Determine limits and type of existing right of way For each alternative, identify possible total take parcels and relocations. Prepare right of way acquisition cost estimate.
Preferred Alternative Verification Activities	7	<ul style="list-style-type: none"> Finalize horizontal alignment (construction & right of way). Reevaluate total take parcels and relocations. Identify possible right of way acquisitions from Railroad companies. Prepare right of way acquisition cost estimate.
Stage 1 Detailed Design	8	<ul style="list-style-type: none"> Provide both proposed & existing centerline of construction and right of way. Verify removal items that have an effect on right of way. Verify that the construction limits encompass all work including removal items. Conduct records research. Locate property pins. Determine existing property line location. Present proposed right of way on plan and profile sheets. Identify the types of takes in the transmittal letter to determine if the proposed right of way fits the work being performed. Identify any properties that will be a total take and/or landlocked parcels. Identify right of way encroachments. Prepare right of way acquisition cost estimate.
Preliminary Right of Way	9	<ul style="list-style-type: none"> Revise Stage 1 plans based on review comments that have an impact on construction limits and/or right of way plan information. Provide the correct identification of all affected ownerships, including correct legal names, recorded area, total present road occupied (PRO) and Auditor's Parcel Number. Refine proposed right of way lines based on construction limits determined during Stage 1 Detailed Design. Identify proposed easements (e.g., temporary, drainage, channel).

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		<ul style="list-style-type: none"> ▪ Prepare a Centerline Plat detailing the proposed centerline and its precise geographic and boundary related position. ▪ Prepare a Property Map showing the relationship of proposed right of way to each entire ownership. ▪ Prepare a Summary of Additional Right of Way sheet that includes those items denoted in Appendix H "R/W Checklist". Prepare right of way plan sheets showing all existing and proposed features and their relationship to existing and proposed rights of way. ▪ Conduct a field review and complete the Field Review Checklist (Appendix I). ▪ Prepare Railroad Plats. ▪ Prepare draft legal descriptions for railroad parcels, including: bearings, distances & valuation stations. ▪ Identify all encroachments. ▪ Contact the District Utility Coordinator for a revised cost estimate if right of way plan development indicates any changes to assumptions used to generate the Stage 1 utility cost estimate (e.g. additional easements found). ▪ Prepare an updated right of way acquisition cost estimate. ▪ Provide copies of the deeds and all pertinent information used to resolve the boundary lines and a surveyors report identifying any boundary resolution issues.
Stage 2 Detailed Design	9	<ul style="list-style-type: none"> ▪ Ensure proposed right of way lines are plotted on the appropriate construction plan sheets.
Final Right of Way	10	<ul style="list-style-type: none"> ▪ Incorporate all comments from the Preliminary Right of Way Review, as well as any Stage 2 Detailed Design elements that have an impact on the right of way plans. ▪ Prepare a legal description for each parcel to be acquired on the appropriate RX Form. ▪ Complete a closure calculation for each parcel. ▪ Incorporate railroad review comments. ▪ Update right of way cost estimates. ▪ Notify the District Utility Coordinator of any changes to utility impacts or anticipated reimbursements.
Right of Way Tracings	10	<ul style="list-style-type: none"> ▪ Conduct a field review, complete Field Review Checklist (Appendix I) and verify property owner information fifteen days prior to submitting the Right of Way Tracings. ▪ Tracings should be made within 30 working days after receipt of the Final Right of Way Review comments unless stated otherwise in the project scope. ▪ Update any new ownership transactions. ▪ Update any changes to topographic features, structures, or utilities. ▪ Submit legal descriptions to the county for compliance with current county conveyance standards.

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MINOR PROJECTS		
<u>DESIGN SUBMISSION</u>	<u>PDP STEP</u>	<u>R/W ACTIVITIES</u>
Red Flag Summary	2	<ul style="list-style-type: none"> Evaluate unusual impacts to properties or unusually costly parcel takes.
Minor Project Preliminary Engineering Study	3	<ul style="list-style-type: none"> Determine the centerline of existing right of way and its relationship to both the centerline of proposed right of way and the centerline of construction Obtain tax map and overlay property lines, tax identification numbers, and ownership based on map survey data. Determine limits and type of existing right of way. Determine if additional right of way is needed for any temporary or permanent construction (earthwork, drainage, signal poles, equipment access, drives, etc.). Identify possible total take parcels and relocations. Identify possible right of way acquisition from Railroad / Railway Companies. Prepare right of way acquisition cost estimate.
Stage 1 Detailed Design	4	<ul style="list-style-type: none"> Provide both proposed & existing centerline of construction and right of way. Verify removal items that have an effect on right of way. Verify that the construction limits encompass all work including removal items. Conduct records research. Locate property pins. Determine existing property line location. Present proposed right of way on plan and profile sheets. Identify the types of takes in the transmittal letter to determine if the proposed right of way fits the work being performed. Identify any properties that will be a total take and/or landlocked parcels. Identify right of way encroachments. Prepare right of way acquisition cost estimate.
Preliminary Right of Way	5	<ul style="list-style-type: none"> Revise Stage 1 plans based on review comments that have an impact on construction limits and/or right of way plan information. Provide the correct identification of all affected ownerships including correct legal names, recorded area, total present road occupied (PRO), and Auditor's Parcel Number. Refine proposed right of way lines based on construction limits determined during Stage 1 Detailed Design. Identify proposed easements (e.g., temporary, drainage, channel). Prepare a Centerline Plat detailing the proposed centerline and its precise geographic and boundary related position. Prepare a Property Map showing the relationship of

3100 R/W PLAN MANUAL

		<p>proposed right of way to each entire ownership.</p> <ul style="list-style-type: none"> ▪ Prepare a Summary of Additional Right of Way sheet that includes those items denoted in Appendix H "R/W Checklist". ▪ Prepare right of way plan sheets showing all existing and proposed features and their relationship to existing and proposed rights of way. ▪ Conduct a field review and complete the Field Review Checklist (Appendix I). ▪ Prepare Railroad Plats. ▪ Prepare draft legal descriptions for railroad parcels, including: bearings, distances and valuation stations. ▪ Identify all encroachments. ▪ Contact the District Utility Coordinator for a revised cost estimate if right of way plan development indicates any changes to assumptions used to generate the Stage 1 utility cost estimate (e.g. additional easements found). ▪ Prepare an updated right of way acquisition cost estimate. ▪ Provide copies of the deeds and all pertinent information used to resolve the boundary lines and a surveyors report identifying any boundary resolution issues.
Stage 2 Detailed Design	5	<ul style="list-style-type: none"> ▪ Ensure proposed right of way lines are plotted on the appropriate construction plan sheets.
Final Right of Way	6	<p>Incorporate all comments from the Preliminary Right of Way Review, as well as any Stage 2 Detailed Design elements that have an impact on the right of way plans.</p> <p>Prepare a legal description for each parcel to be acquired on the appropriate RX Form.</p> <ul style="list-style-type: none"> ▪ Complete a closure calculation for each parcel. ▪ Incorporate railroad review comments. ▪ Update right of way cost estimates. ▪ Notify the District Utility Coordinator of any changes to utility impacts or anticipated reimbursements.
Right of Way Tracings	6	<ul style="list-style-type: none"> ▪ Conduct a field review, complete Field Review Checklist (Appendix I) and verify property owner information, fifteen days prior to submitting the Right of Way Tracings. ▪ Tracings should be made within 30 working days after receipt of the Final Right of Way Review comments unless stated otherwise in the project scope. ▪ Update any new ownership transactions. ▪ Update any changes to topographic features, structures, or utilities. ▪ Submit legal descriptions to the county for compliance with current county conveyance standards.

3200 TYPES OF TITLE

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3200 TYPES OF TITLE

3201 Introduction

The Ohio Department of Transportation uses two different types of title when acquiring permanent highway rights of way. The first type is fee simple title. The second type is an easement for highway purposes that conveys, in perpetuity, the right to construct and maintain a highway facility on the land of the fee holder. The general policy of the Department is to acquire permanent highway rights of way in fee simple title. Easement rights of way can be used when fee simple title is not practical. Typical examples can be bridge projects of short length on roadways that occupy existing easement rights of way or on intersecting county and township roads where fee simple title is not considered necessary. The Department also uses several supplemental easements and agreements for purposes other than permanent highway rights of way. This Section of the Real Estate Policies and Procedures Manual has been developed as set forth in the Ohio Revised Code 5501.31(Powers and Duties of Director).

3202 Fee Simple Title

Fee simple title will be acquired for permanent rights of way on new location, limited access, and urban area facilities, except for aerial and footer easements on operating railroad rights of way and rights outside of the main right of way for drainage (channel, sewers, etc.). Fee simple title may also be acquired for any other type of project or for specific ownerships as beneficial to the Department.

Fee simple title is further classified by the intended use within the highway facility. The following parcel identifiers describe these classifications:

WL - Fee Simple With Limitation of Access

Use this identifier to acquire fee simple title for highway rights of way where a plan requires full limitation of access to the facility. The WL instrument may be for whole takes on fully limited access highways even though a portion of the taking lies outside the limited access boundary. The right of way plan will show the portion outside the boundary as a WD area if control of access is not needed.

The form presumes full limitation of access. When design requires less than full limitation of access, such as on a controlled access facility, a limiting feature may be inserted immediately following the description, for example, "Except 12 foot wide residential drive left from station 10+50 to station 10+62".

WD - Fee Simple Reservation of Access

Use this identifier to acquire fee simple title where limitation of access is not to be acquired. The WD form states that the grantor retains the right of ingress and egress to and from any residual area.

BS - Bill of Sale

Use this identifier for an agreement to acquire improvements on the land independent of the conveyance of title.

PRW - Property Right Fee Simple

Use this identifier for an agreement to compensate for the impairment of the right of ingress and egress, when such impairment is directly attributable to the proposed highway facility yet there is no physical acquisition of land. Use the "PRW" identifier when the associated highway right of way is owned in fee. In all cases where "PRW" is used, the Remark's Column of the Summary of Additional Right of Way Sheet shall briefly indicate the specific impairment being compensated for. When it is unclear as whether a "PRW" take is necessary contact the District Real Estate Administrator.

3200 TYPES OF TITLE

E - Fee Simple Excess Land

Use this identifier for excess property that at some future date will be considered for either acquisition as an EL or ER parcel, or disposed of by sale or exchange.

The Summary of Additional Right of Way Sheet and Right of Way Detail Plan Sheet shall show any excess land as an "E" parcel until it is disposed of or acquired.

EL - Acquired Fee Simple Excess Land

If ODOT acquires the fee simple of any excess land, except an uneconomic remnant, then the former "E" parcel will be re-identified as "EL".

ER - Fee Simple Uneconomic Remnant

If ODOT acquires the fee simple of excess land considered to be an uneconomic remnant [i.e., "a parcel of real property in which the owner is left with an interest after the partial acquisition of the owner's property and which the head of the agency concerned has determined has little or no value or utility to the owner." See Ohio Rev. Code Section 163.59(K)], then the former "E" parcel will be re-identified as "ER."

ES - Excess Land Sold or "Swapped" [See Ohio Rev. Code Section 5501.34]

Once the Director has declared certain parcels to be excess land no longer needed for highway purposes, they may be sold (either directly to abutters or at auction, depending on its value), or "swapped" to an owner as part of the consideration for other property being acquired from that owner along the same highway corridor as the excess land.

3203 Easements

Highway easements convey, in perpetuity, the right to construct and maintain a highway facility on the land of the fee holder. The owner retains the underlying fee. The following are the two types of highway easements identifiers.

SH - Standard Highway Easement

Use this identifier to acquire rights of way for a highway improvement where fee simple title is not required and limitation of access from adjoining land is not desired.

LA - Limited Access Easement

Use this identifier to acquire a permanent easement for highway rights of way where a plan requires full limitation of access to the facility. The form presumes full limitation of access. When design requires less than full limitation of access, such as, on a controlled access facility, a limiting feature may be inserted immediately following the description. For example, "Except 12 foot wide residential drive left from station 10+50 to station 10+62".

When the easement needs from one owner are partially limited access and partially non-limited access, the separate easement needs shall be acquired as separate parcels. The suffix LA is used for the limited access parcel and SH is used for the non-limited access parcel. The description of the LA parcel is put on an LA Easement Description Sheet and the non-limited access parcel is put on an Easement for Highway Purposes Description Sheet and both are combined into one instrument.

3200 TYPES OF TITLE

Non-highway easements convey rights associated with the highway facility. The owner retains the underlying fee and can continue to use the property, within limits. The following identifiers describe the various types and uses of non-highway easements.

T - Temporary Easement

Use this identifier for a temporary easement for specific purposes, outside permanent rights of way. Because the duration of a temporary easement is essential for appraisal purposes, a temporary easement must always state its duration in months, starting from the date of entry by ODOT or its contractor and ending when the proposed work has been completed and accepted. Temporary easements are most often used to make adjoining terrain, normally maintained by the owner, conform to new construction. Other uses for temporary easements include temporary detours, construction working areas, temporary access roads, and channel work not requiring a channel easement. A temporary easement is not to be used for parking or for storage of materials or equipment. No structures can be erected within a temporary easement without the owner's written agreement. [Temporary Easements must be in the name of the agency administering the construction, therefore "TV" takes should be used sparingly.](#)

SL - Slope Easement

Use this identifier to acquire a continuing right for the construction and maintenance of slopes until such time as the owner desires to remove or build on the slope, provided that the proper preservation of a highway will not be impaired by such removal or occupancy of the slopes.

S - Sewer Easement

Use this identifier to acquire the right to construct and maintain a sewer outside regular highway rights of way. If additional land is needed to construct the sewer, the right of way plan must clearly show and delineate this land as a temporary parcel.

CH - Channel Easement

Use this identifier to acquire the right to construct and maintain, a perpetual watercourse within the area described in the easement. The grantor retains the right to use the area for any other purpose provided that this use does not impair the proper functioning of the channel.

This type of easement is used for the construction of an open watercourse channel that falls outside of the regular highway rights of way. It may also be used for a large, open channel that parallels a highway to avoid a riparian right controversy.

FL - Flowage Easement

Use this identifier to acquire the perpetual right to cause water to flow over a described area, such as, temporary impoundment of storm water upstream from a channel restriction.

U - Easement For a Railroad or Public Utility

Use this identifier to acquire an easement in the name of a railroad or public utility owning similar facilities for the readjustment or relocation of its facility when fee simple title is not desired. The Summary of Additional Right of Way Sheet and Right of Way Detail Plan Sheet shall show by note **the** name in which the easement will be acquired when this type of easement is needed. An agreement is required between the Department and the Grantee giving the Department authority to acquire the parcel in the name of the Grantee and stipulating that the Grantee accepts the parcel.

3200 TYPES OF TITLE

A - Aerial Easement

Use this identifier to acquire an aerial easement to construct and maintain an elevated facility. Acquisition of aerial easements is independent of other easement rights that may need to be acquired under the aerial easements. For example, standard highway easements footer easements or sewer easements may need to be acquired under an aerial easement. The area of overlap of easements is to be shown on an overlap table on the right of way plan sheets.

PRE - Property Right

Use this identifier for an agreement to compensate for the impairment of the right of ingress and egress, when such impairment is directly attributable to the proposed highway facility yet there is no physical acquisition of land. Use the "PRE" identifier when the associated highway right of way is owned in highway easement. In all cases where "PRE" is used, the Remark's Column of the Summary of Additional Right of Way Sheet shall briefly indicate the specific impairment being compensated for. When it is unclear as whether a "PRE" take is necessary contact the District Real Estate Administrator.

SC - Scenic Easement

Use this identifier to acquire the right to preserve the use and development of an area adjacent to the highway in a manner consistent with the nature and intent of the highway beautification program.

3204 Additional Modifiers

"V" and "R" designations are modifiers used to identify either which political authority will be the eventual owner of the appropriated land or which special rights are expressly reserved for the landowner respectively. When "V" and "R" are used in the same parcel the "V" should precede "R". These identifiers are not to be used with any designations identified in 3205 Agreements.

V - In The Name of Another State Agency, LPA, etc.

Use this identifier when acquiring property rights in the name of an entity other than the Department, such as another State Agency, political subdivision, etc. The Summary of Additional Right of Way Sheet shall show the name in which the property rights will be acquired. An agreement is required between the Department and the Grantee giving the Department authority to acquire the parcel in the name of the Grantee and stipulating that the Grantee accepts the parcel.

R - Special Reservation

Use this identifier where certain rights in the area to be acquired (other than direct access rights) are reserved for the owner. Reservation may include mineral rights (such as coal below a stated elevation), limited rights of access over or under limited access rights of way (such as access under a viaduct), or other reservation which is special in nature. In all cases where "R" is used, the Remarks Column of the Summary of Additional Right of Way Sheet shall indicate briefly the type of reservation, i.e., special access, mineral, etc.

3200 TYPES OF TITLE

3205 Agreements

Agreements are for specific situations that require special arrangements with property owners outside the area needed for perpetual highway rights of way. The following identifiers describe the various types and uses of several commonly used agreements.

WA - Work Agreement

Use this identifier for an agreement for a work area in which the contractor will do non-essential work for the benefit of the owner, such as, connecting drives and dressing slopes. If the owner elects not to sign the agreement then the work does not have to be done. The work agreement permits the contractor to enter upon the property to perform specific work and terminates when the proposed work is completed. A work agreement does not require a legal description and is not appraised.

SA - Special Agreement and Waiver of Damage

Use this identifier for an agreement in those special situations where standard types of title are not applicable. The purpose of this agreement is to describe an understanding between the Department and a property owner.

3206 Special Deviations

Replacement land for railroad relocation, utility transmission line, substation relocation, etc., shall be acquired in accordance with an agreement between the Director of Transportation and the individual companies concerned, and in the same degree of title held by the company in the land replaced unless otherwise provided for in the agreement.

3207 Forms

The plan preparer should carefully review all of the various types of title and agreements and determine which one best fits each parcel of right of way to be acquired. Examples of the various forms can be found in **Real Estate Policies and Procedures Manual Section 5400** of the.

3300 LEGAL DESCRIPTION

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3300 LEGAL DESCRIPTION

3301 Introduction

All legal descriptions prepared by or for the Ohio Department of Transportation shall be in accordance with the current Ohio Revised Code 4733 and Ohio Administrative Code Section 4733-37, all applicable county conveyance standards, the **Real Estate Policies & Procedures Manual** and applicable District guidelines.

Property rights and interests acquired by ODOT are conveyed through the use of an instrument. The instruments contain three parts, the Conveyance, the Acknowledgement and the "Exhibit A". A legal description prepared for ODOT is attached to the instrument as "Exhibit A". Refer to the **Real Estate Policies and Procedures Manual, Section 5401** for details pertaining to the building of the instrument.

When a legal description is required for a total take parcel(s), the District Real Estate Administrator may request the descriptions be prepared and submitted as soon as they are identified and in advance of the remaining right of way parcel takes.

It is the responsibility of the right of way designer and/or reviewer to revise and correct any legal descriptions deemed unacceptable for transfer.

When preparing a legal description for railroad property, the beginning point of each description shall be referenced to both the railroad valuation station and the highway centerline of right of way station.

3302 Standard Legal Description Format

The right of way plan designer and/or reviewer shall adhere to the following format when preparing legal descriptions:

- 1) All legal descriptions shall be prepared using the applicable RX Forms as supplied by ODOT. For information on the RX Forms see the **Real Estate Policies and Procedures Manual, Section 5400, "Preparation and Execution of Instruments"**.
- 2) Provide legal descriptions that have prior approval by the applicable county office when required by the scope of services document or county regulations.
- 3) Submit a paper copy (along with an electronic copy) of the mathematical closure for each right of way parcel using the bearings and distances recited in the legal description courses.
- 4) Submit a paper copy of the legal description signed, sealed and dated, along with an electronic copy in a format as specified by the District Real Estate Administrator.

3300 LEGAL DESCRIPTION

3303 Standard Legal Description Procedure

The right of way designer and/or reviewer shall prepare each legal description containing the following data:

- 1) The bearings and distances of each take line that must match the bearing and distances given in the right of way plans.
- 2) A sufficient caption listing the general location of the parcel to be described making reference to any subdivision of which it might be a portion thereof and containing the following when applicable: State, county, city, village, civil township, section, survey township tier, range, lot, block, etc . Identify which side(s) of centerline of right of way the parcel of land is lying on. Include a statement identifying the right of way plan (county/route/section) referred to the centerline of right of way in the legal description. **Provide a statement identifying the public record (e.g., deed or certificate of transfer) by which the owner, at the time the survey was prepared, claims title to the property. This statement shall read:**

Prior instrument reference as of the date this survey was prepared: *Correct citation to county record (e.g. Deed Book and Page, Volume and Page, Official Record, etc.)* of *County Name* County, Ohio.

- 3) The point of beginning or commencement should be at a physically recoverable, recognized geographic point, a clearly defined control station and shall be acceptable by the county office responsible for approving the transfer.
- 4) If the point of beginning or commencement is NOT a physically acceptable survey monument, then it shall be witnessed by a physically acceptable survey monument per Ohio Administrative Code (OAC) 4733-37-03. Provide documentation and the geographical location of the boundary monument used as the initial point of the legal description.
- 5) The True Point of Beginning "for the Parcel of land being described" shall be referenced to the centerline of right of way by station and offset.
- 6) Each course recited in the legal description shall include the bearing/direction of the line relative to the direction of the basis of bearing. The bearing precision shall be to the nearest second.
- 7) When describing a bearing/direction use the words "degree," "minutes," and "seconds." Symbols may be used at the discretion of District Real Estate Administrator.
- 8) All distances shall be shown in English units of U.S. survey feet with two (2) decimal places of precision.
- 9) Specification of any monuments, e.g., iron pins, iron pipes, railroad spikes, etc., shall be cited in the legal description as found or set. If a general statement is used to denote monument set, i.e., iron pin or iron bar set, add a statement at the end of the legal description identifying in detail what the monument set consists of including any labels stamped on the cap. Example: Iron pins set are 3/4" diameter steel rods, 30" long, with a 1-1/2" diameter aluminum cap stamped "ODOT R/W PS XXXX".
- 10) Sufficient identification and clarification of the intent of a course to follow an existing line, if applicable. Here are a few examples:
 - "...with the grantor's easterly property line..."
 - "...with the existing Southerly Right of Way line..."
 - "...with the existing centerline of Right of Way..."

3300 LEGAL DESCRIPTION

- 11) Station and offset calls, shall be included at the discretion of the county conveyance requirements and/or the District Real Estate Administrator.

3304 Closing Statements

The following closing statements (when applicable) must follow the metes and bounds section of each and every legal description. The closing statements should appear in separate paragraphs, in the order shown below:

- 1) Provide a statement indicating the applicable County Auditor's Permanent Parcel number(s) in which the parcel of land is located. Also provide a breakout of the Present Road Occupied (PRO) in the take area when applicable. When a parcel contains multiple Auditor's Parcel numbers provide a breakout of the area contained in each auditor's parcel number, including the Present Road Occupied (PRO) in the take.

EXAMPLE of a multiple auditor's parcel number:

The above described area contains _____ acres of land, more or less, of which the present road occupies _____ acres of land, more or less, of which _____ acres is part of Franklin County Auditor's Permanent Parcel number _____, and _____ acres is part of (applicable) County Auditor's Permanent Parcel number _____.

- 2) For all parcels which an Auditor's Parcel number cannot be found, provide a statement indicating that the described area is NOT a part of any currently assigned Auditor's Parcel number.
- 3) Provide a statement identifying the basis of bearings used in the legal description.
- 4) Provide a statement listing the surveyor's name who prepared the legal description, his/her surveyor's Ohio registration number, signature and the date of writing and/or survey.
- 5) A statement that the legal description is based on a survey, including reference to the responsible surveyor and the date of the survey.

SAMPLE LEGAL DESCRIPTIONS are available at the respective District Offices.

Appendix – A Sample Plans

Figures 3108.1 through 3108.7 are samples of a complete set of right of way plans for WAR-48-21.05.

Figures 3108.8 (MOT-35-11.33 and FRA-WILSON RD.) are a sample of the Railroad Plat Sheets.

Figures 3109.2A and 3109.2B (RIC-T.R. 57) are a sample of a One Sheet Right of Way Plan.

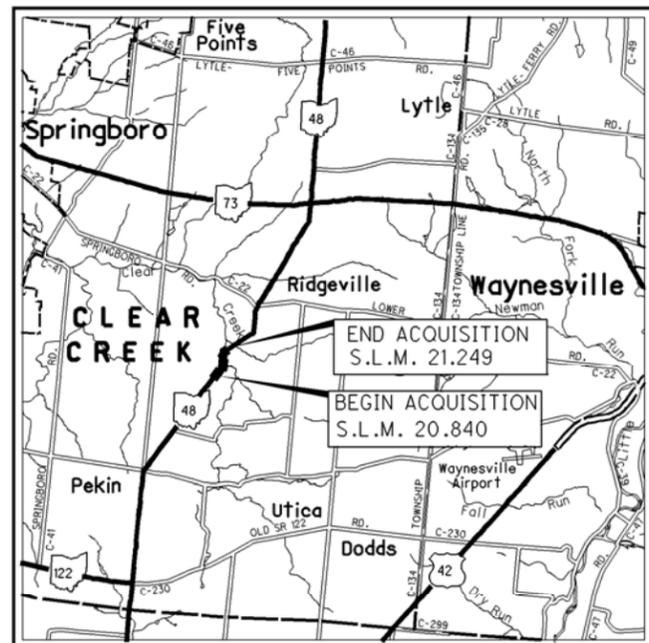
Figure 3109.3 (ERI - C.R. 13-5.18) is a sample of the Right of Way Data on Construction Plan Sheets.

<u>Figure</u>	<u>Subject</u>
3108.1	Right of Way Legend Sheet
3108.2	Centerline Plat Sheet
3108.3	Property Map Sheet
3108.4	Summary of Additional Right of Way Sheet
3108.5	Right of Way Detail Sheet
3108.6	Right of Way Topographic Sheet
3108.7	Right of Way Boundary Sheet
3108.8	Railroad Plat Sheet
3109.2A & 2B	One Sheet Right of Way Plan
3109.3	Right of Way Data on Construction Plan Sheets

RIGHT OF WAY LEGEND SHEET WAR-48-21.05

WARREN COUNTY
CLEAR CREEK TOWNSHIP

SEC. 35 & 36, T. 4 E., R. 4 N.



LOCATION MAP

LATITUDE: 39°31'17" LONGITUDE: 84°11'00"

UTILITY OWNERS	
TYPE	NAME & ADDRESS
TELEPHONE	SPRINT 185 HARMON AVENUE LEBANON, OH 45036 (513) 933-3505
ELECTRIC	CINCINNATI GAS & ELECTRIC CO. 139 E. FOURTH ST., ROOM 467A CINCINNATI, OH 45202 (513) 287-2454

NOTE:
THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

CONVENTIONAL SYMBOLS

Section Line	Ownership Hook Symbol	Example
Fence Line (Ex)	Property Line Symbol	Example
Center Line	Break Line Symbol	Example
Right of Way (Ex)	Tree (Pr)	Tree (Ex), Shrub (Ex)
Right of Way (Pr)	Tree (Remove)	Shrub (Remove)
Standard Highway Ease.(Ex)	Evergreen (Ex)	Stump
Temporary Right of Way	Evergreen (Remove)	Stump (Remove)
Channel Ease. (Pr)	Wetland (Pr)	Grass (Pr), Aerial Target
Utility Ease. (Ex)	Post (Ex)	Mailbox (Ex), Mailbox (Pr)
Guardrail (Ex)	Light (Ex)	Telephone Marker (Ex) TEL
Construction Limits	Fire Hydrant (Ex)	Water Meter (Ex)
Edge of Pavement (Ex)	Water Valve (Ex)	Utility Valve Unknown (Ex.)
Edge of Pavement (Pr)	Telephone Pole (Ex)	Power Pole (Ex)
Edge of Shoulder (Ex)	Light Pole (Ex)	
Edge of Shoulder (Pr)		
Ditch / Creek (Ex)		
Ditch / Creek (Pr)		
Tree Line (Ex)		

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STRUCTURE KEY

	RESIDENTIAL
	COMMERCIAL
	OUT-BUILDING

LEGEND

WD	= WARRANTY DEED
SH	= STANDARD HIGHWAY EASEMENT
SL	= SLOPE EASEMENT
CH	= CHANNEL EASEMENT
PR	= PROPERTY RIGHT
T	= TEMPORARY

I, John J. Doe, P.S., have conducted a survey of the existing conditions for the Ohio Department of Transportation on April 4, 1999. The results of that survey are contained herein. The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinate System, South zone on NAD 83 (CORS 96) datum. The Project Coordinates (US Survey Feet) are relative to State Plane Grid Coordinates US Survey Feet by a Project Adjustment Factor of 1.000072714. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for the property takes herein. As a part of this project I have established the proposed property lines, calculated the Gross Take, Present Roadway Occupied (PRO), Net Take and Net Residue, as well as prepared the legal descriptions necessary to acquire the parcels as shown herein. As a part of this work I have set right of way monuments at property corners, property line intersections, points along the right of way and/or orange points on the right of way, Section Corners and other points shown herein. All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted. The words I and my, as used herein, are to mean that either myself or someone working under my direct supervision.

John J. Doe 8-22-05
John D. Doe, P.S., Ohio Lic# 0000

SURVEYORS SEAL





0 50 100 200
HORIZONTAL SCALE IN FEET

PID NO. 5889

CALCULATED BY BAS
CHECKED BY HJH

CENTERLINE PLAT

WAR-48-21.05

2 / 12

91 / 101

MONUMENT LEGEND

- Ⓜ PROPOSED ADJUSTABLE CENTERLINE MONUMENT
- Ⓞ I.P.S. IRON PIN FOUND W/ ID CAP
- I.R.S. IRON PIN SET W/ ID CAP
- ⦿ P.K. NAIL FOUND
- ⦿ P.K. NAIL SET
- Ⓜ STONE FOUND

MONUMENT TABLE

€ of PROP. R/W S.R. 48		PROJECT COORDINATES SEE SURVEY CERTIFICATION		MONUMENTS TO BE SET DURING CONSTRUCTION		R/W MON. EXPECTED TO BE DISTURBED	DESCRIPTION
STATION	OFFSET	NORTH (Y)	EAST (X)	MON. ASSY.	REF. MON.	R/W MON.	
1096+20.01	€	000000.0000	000000.0000	1			Mon. Assy. Set on Centerline of R/W
1099+00.00	62.00' LT	000000.0000	000000.0000			1	IP Set Within Construction Limits
1100+00.00	62.00' LT	000000.0000	000000.0000			1	IP Set Within Construction Limits
1102+83.17	€	000000.0000	000000.0000	1			Mon. Assy. Set on Centerline of R/W
1107+57.69	€	000000.0000	000000.0000	1			Mon. Assy. Set on Centerline of R/W
1112+78.51	€	000000.0000	000000.0000	1			Mon. Assy. Set on Centerline of R/W
1115+77.50	29.53' RT	000000.0000	000000.0000			1	IP Found Within Construction Limits
TOTAL CARRIED TO GENERAL SUMMARY SHEET				4		3	

SETTING OF ALL MONUMENTS SHALL BE PERFORMED BY A SURVEYOR REGISTERED IN THE STATE OF OHIO. THE MONUMENT ASSEMBLIES AND REFERENCE MONUMENTS WILL BE INSTALLED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. THE IRON PIN AND CAP (WHEN REQUIRED) ARE TO BE INSTALLED BY THE CONTRACTOR'S SURVEYOR.

CHANGES OR ALTERATIONS TO THE LOCATION OF ANY MONUMENTS SHOWN IN THIS TABLE, REQUIRE PRIOR APPROVAL FROM THE DISTRICT REAL ESTATE ADMINISTRATOR OF THE OHIO DEPARTMENT OF TRANSPORTATION. IN THE EVENT THAT CHANGES OR ALTERATIONS ARE APPROVED, A REVISED CENTERLINE PLAT WITH THE NEW LOCATIONS SHALL BE RECORDED IN THE APPLICABLE COUNTY RECORDS AND THE OHIO DEPARTMENT OF TRANSPORTATION. SPECIFICATIONS FOR MONUMENT ASSEMBLIES, REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM-1.1.

BASIS FOR BEARINGS:

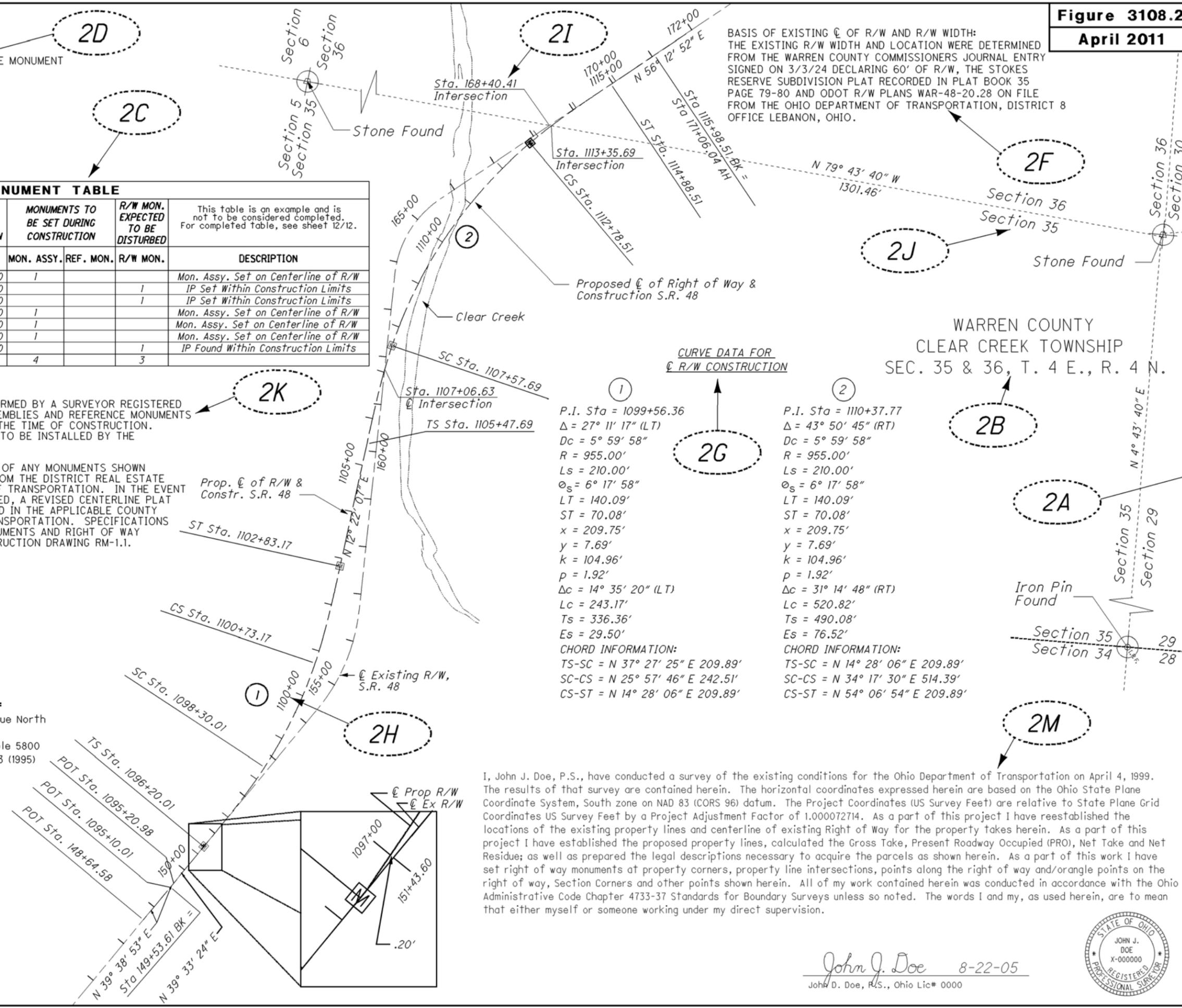
Bearings Shown hereon are based on True North Observed by the Ohio Department of Transportation, District 8, using Trimble 5800 GPS receivers. Horizontal Datum NAD83 (1995)

RECEIVED 8/24, 2005
RECORDED 8/24, 2005
BOOK A PAGE 578
John J. Doe
COUNTY RECORDER

BASIS OF EXISTING € OF R/W AND R/W WIDTH: THE EXISTING R/W WIDTH AND LOCATION WERE DETERMINED FROM THE WARREN COUNTY COMMISSIONERS JOURNAL ENTRY SIGNED ON 3/3/24 DECLARING 60' OF R/W, THE STOKES RESERVE SUBDIVISION PLAT RECORDED IN PLAT BOOK 35 PAGE 79-80 AND ODOT R/W PLANS WAR-48-20.28 ON FILE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, DISTRICT 8 OFFICE LEBANON, OHIO.

CURVE DATA FOR € R/W CONSTRUCTION

<p>① P.I. Sta = 1099+56.36 Δ = 27° 11' 17" (LT) Dc = 5° 59' 58" R = 955.00' Ls = 210.00' Qs = 6° 17' 58" LT = 140.09' ST = 70.08' x = 209.75' y = 7.69' k = 104.96' p = 1.92' Δc = 14° 35' 20" (LT) Lc = 243.17' Ts = 336.36' Es = 29.50' CHORD INFORMATION: TS-SC = N 37° 27' 25" E 209.89' SC-CS = N 25° 57' 46" E 242.51' CS-ST = N 14° 28' 06" E 209.89'</p>	<p>② P.I. Sta = 1110+37.77 Δ = 43° 50' 45" (RT) Dc = 5° 59' 58" R = 955.00' Ls = 210.00' Qs = 6° 17' 58" LT = 140.09' ST = 70.08' x = 209.75' y = 7.69' k = 104.96' p = 1.92' Δc = 31° 14' 48" (RT) Lc = 520.82' Ts = 490.08' Es = 76.52' CHORD INFORMATION: TS-SC = N 14° 28' 06" E 209.89' SC-CS = N 34° 17' 30" E 514.39' CS-ST = N 54° 06' 54" E 209.89'</p>
--	--



I, John J. Doe, P.S., have conducted a survey of the existing conditions for the Ohio Department of Transportation on April 4, 1999. The results of that survey are contained herein. The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinate System, South zone on NAD 83 (CORS 96) datum. The Project Coordinates (US Survey Feet) are relative to State Plane Grid Coordinates US Survey Feet by a Project Adjustment Factor of 1.000072714. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for the property takes herein. As a part of this project I have established the proposed property lines, calculated the Gross Take, Present Roadway Occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire the parcels as shown herein. As a part of this work I have set right of way monuments at property corners, property line intersections, points along the right of way and/or angle points on the right of way, Section Corners and other points shown herein. All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted. The words I and my, as used herein, are to mean that either myself or someone working under my direct supervision.

John J. Doe 8-22-05
John D. Doe, P.S., Ohio Lic# 0000



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Figure 3108.3
April 2011



PID NO. **5889**

CALCULATED BY **BAS**
CHECKED BY **HJH**

PROPERTY MAP

WAR-48-21.05

3/12

92
101

WARREN COUNTY
CLEAR CREEK TOWNSHIP
SEC. 35 & 36, T. 4 E., R. 4 N.

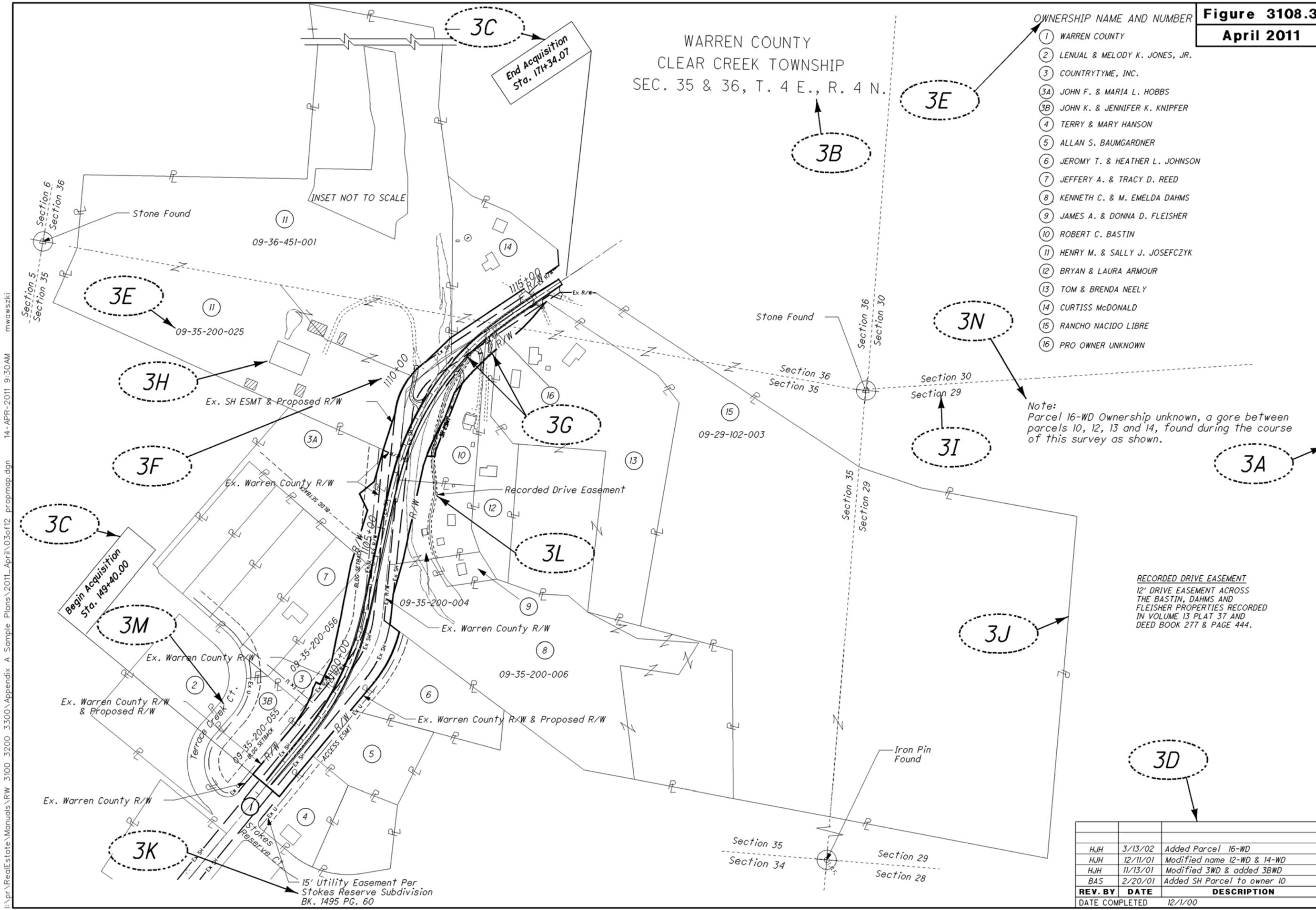
OWNERSHIP NAME AND NUMBER

- ① WARREN COUNTY
- ② LENUAL & MELODY K. JONES, JR.
- ③ COUNTRYTYME, INC.
- ③A JOHN F. & MARIA L. HOBBS
- ③B JOHN K. & JENNIFER K. KNIPFER
- ④ TERRY & MARY HANSON
- ⑤ ALLAN S. BAUMGARDNER
- ⑥ JEROMY T. & HEATHER L. JOHNSON
- ⑦ JEFFERY A. & TRACY D. REED
- ⑧ KENNETH C. & M. EMELDA DAHMS
- ⑨ JAMES A. & DONNA D. FLEISHER
- ⑩ ROBERT C. BASTIN
- ⑪ HENRY M. & SALLY J. JOSEFCZYK
- ⑫ BRYAN & LAURA ARMOUR
- ⑬ TOM & BRENDA NEELY
- ⑭ CURTISS McDONALD
- ⑮ RANCHO NACIDO LIBRE
- ⑯ PRO OWNER UNKNOWN

Note:
Parcel 16-WD Ownership unknown, a gore between parcels 10, 12, 13 and 14, found during the course of this survey as shown.

RECORDED DRIVE EASEMENT
12' DRIVE EASEMENT ACROSS THE BASTIN, DAHMS AND FLEISHER PROPERTIES RECORDED IN VOLUME 13 PLAT 37 AND DEED BOOK 277 & PAGE 444.

REV. BY	DATE	DESCRIPTION
HJH	3/13/02	Added Parcel 16-WD
HJH	12/11/01	Modified name 12-WD & 14-WD
HJH	11/13/01	Modified 3WD & added 3BWD
BAS	2/20/01	Added SH Parcel to owner 10
DATE COMPLETED		12/1/00



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TOTAL NUMBER OF :
 11 OWNERSHIPS 0 TOTAL TAKES
 25 PARCELS 0 OWNERSHIPS W/ STRUCTURES INVOLVED

45

NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

GRANTEE:

ALL RIGHT OF WAY ACQUIRED IN THE NAME OF
 THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION
 UNLESS OTHERWISE SHOWN.

Figure 3108.4
April 2011

ALL AREAS IN ACRES

4V

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD		AUDITOR'S		TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUND	REMARKS COLUMN	AS ACQUIRED	
			O.R.	PAGE	PARCEL NUMBER	RECORD AREA						LEFT	RIGHT			BOOK	PAGE
1-WD	WARREN COUNTY	6,7,8	33, 1495	635, 60	NONE	2.7340	1.4357	2.7340	1.4357	1.2983	YES			STATE	12 TREES & 2 SHRUBS * A PRIVATELY OWNED SIGN TO BE REMOVED		
2	LENUAL & MELODY K. JONES, JR.	-	1207	862	09-35-200-030	3.4613				3.4613	S(3)				NO TAKE		
3-WD	COUNTRYTYME, INC.	6&7	1136	387	09-35-200-056	1.7333	0.0000	0.7244	0.0000	0.7244		1.0089			2 TREES		
3-T					09-35-200-056		0.0000	0.2281	0.0000	0.2281					TO CONSTRUCT PROPOSED MOUNDING		
3A-WD	JOHN F. HOBBS & MARIA L. HOBBS	7&8	2022	106	09-35-200-050	3.4126	0.0000	0.3504	0.0000	0.3504		3.0622			2 TREES		
3B-WD	JOHN K. & JENNIFER K. KNIPFER	6	2310	657	09-35-200-055	1.7907	0.0000	0.0067	0.0000	0.0067		1.7840					
4	TERRY & MARY HANSON	6	1652	128	09-35-255-004	1.4430									NO TAKE		
5	C.T. & F.J. LAWTON	6	1942	316	09-35-255-005	1.8650									NO TAKE		
6	JEROMY T. & HEATHER L. JOHNSON	6&7	1823	52	09-35-255-006	2.4180									NO TAKE		
7-WD	JEFFERY A. & TRACY D. REED	7	1272	994	09-35-200-054	1.7202	0.0000	0.0628	0.0000	0.0628		1.6574					
7-T							0.0000	0.0512	0.0000	0.0512					TO CONSTRUCT PROPOSED MOUNDING		
8-WD	KENNETH C. & M. EMELDA DAHMS	7&8	473	25	09-35-200-006	8.528	0.1074	0.1309	0.1074	0.0235							
			1012	551	09-35-200-004	1.292	0.1719	0.4103	0.1719	0.2384							
	TOTAL					9.820	0.2793	0.5412	0.2793	0.2619		9.2788					
8-CH					09-35-200-006	8.528	0.0000	0.0196	0.0000	0.0196					TO CONSTRUCT & MAINTAIN DITCH		
8-T					09-35-200-004	1.292	0.0000	0.0022	0.0000	0.0022					TO COMPLETE GRADING		
8-PR															PORTION OF DRIVE EASEMENT TO BE ACQUIRED		
9-PR	JAMES A. & DONNA D. FLEISHER	9	1782	988	09-35-200-005	0.812 (c)								STATE	PORTION OF DRIVE EASEMENT TO BE ACQUIRED		
															RECORDED IN VOL. 13 PLAT 37 AND D.B. 277 PG. 444		

FEDERAL PROJECT NO. NON-FEDERAL
 PID NO. 5889
 STATE JOB NO. 089330
 SUMMARY OF ADDITIONAL RIGHT OF WAY (PARCELS 1-9)
 WAR-48-21.05

4A

4B

4C

4D

4E

4F

4G

4H

4I

4J

4K

4L

4M

4N

4O

4P

LEGEND:
 WD = WARRANTY DEED
 SH = STANDARD HIGHWAY EASEMENT
 SL = SLOPE EASEMENT
 CH = CHANNEL EASEMENT
 PR = PROPERTY RIGHT
 T = TEMPORARY

4T

NOTE: ALL TEMPORARY PARCELS TO BE OF 12 MONTH DURATION.

4Q

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

4R

(c) = CALCULATED AREA

* DENOTES RIGHT OF WAY ENCROACHMENT

4U

REV. BY	DATE	DESCRIPTION
HJH	11/13/01	Modified 3WD & added 3BWD
BAS	9/19/01	Changed area of parcel 7-WD
BAS	2/20/01	Added 8-PR Parcel Take

DATE COMPLETED 12/1/00

4 / 12
 93
 101

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NET RESIDUE = RECORD AREA - TOTAL PRO - NET TAKE

GRANTEE:

ALL RIGHT OF WAY ACQUIRED IN THE NAME OF
THE STATE OF OHIO DEPARTMENT OF TRANSPORTATION
UNLESS OTHERWISE SHOWN.

Figure 3108.4

April 2011

ALL AREAS IN ACRES

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD		AUDITOR'S		TOTAL P.R.O.	GROSS TAKE	P.R.O. IN TAKE	NET TAKE	STRUC-TURE	NET RESIDUE		TYPE FUND	REMARKS COLUMN	AS ACQUIRED	
			O.R.	PAGE	PARCEL NUMBER	RECORD AREA						LEFT	RIGHT			BOOK	PAGE
10-WD	ROBERT C. BASTIN	8,9,10	420	172	09-35-200-003	2.681	0.4676	1.4472	0.4676	0.9796				STATE	8 TREES		
10-SH							0.0000	0.0984	0.0000	0.0984				↑	EXISTING SEPTIC/LEACH BED TO BE REMOVED BY OTHERS		
	TOTAL						0.0000	1.5456	0.0000	1.0780							
10-T							0.0000	0.2341	0.0000	0.2341					+ TO CONSTRUCT DRIVE APPROACH		
11-WD	HENRY M. & SALLY J. JOSEFCZYK	8,9,10	1152	948	09-35-200-025	8.6111	0.1786	0.2250	0.1786	0.0464					4 TREES		
			847	81	09-36-451-001.1	29.817	0.1173	0.1425	0.1173	0.0252					* APPROX. 25' OF EXISTING WOOD FENCE TO BE REMOVED BY OTHERS		
	TOTAL					38.4281	0.2959	0.3676	0.2959	0.0716			38.0606		+ TO COMPLETE GRADING AND CONSTRUCT DRIVE APPROACH		
11-T					09-35-200-025		0.0000	0.0463	0.0000	0.0463					+ TO COMPLETE GRADING AND CONSTRUCT DRIVE APPROACH		
	TOTAL				09-36-451-001.1		0.0000	0.0825	0.0000	0.0825					* PRIVATELY OWNED SIGN TO BE REMOVED BY OTHERS		
							0.0000	0.1288	0.0000	0.1288					APPROX. 37' OF WOOD FENCE TO BE REMOVED BY OTHERS FOR GRADING		
12-WD	BRYAN AND LAURA ARMOUR	9,10	2244	883	09-35-200-013	1.7984	0.0293	0.0776	0.0293	0.0483					4 TREES		
12-T							0.0000	0.0181	0.0000	0.0181					+ TO CONSTRUCT DRIVE APPROACH		
13-WD	TOM & BRENDA NEELY	9,10,11,12	1165	646	09-35-200-020	11.965	0.1157	0.2492	0.1157	0.1335					8 TREES		
															+ TO CONSTRUCT DRIVE APPROACH		
13-T							0.0000	0.0355	0.0000	0.0355					TO COMPLETE GRADING AND CONSTRUCT DRIVE APPROACH		
14-WD	CURTISS McDONALD	9,10,11,12	361	126	09-36-477-003	2.979	0.2217	0.4073	0.2217	0.1856			2.5717		12 TREES & 1 SHRUB		
															+ TO CONSTRUCT DRIVE APPROACH		
14-SL							0.0000	0.0863	0.0000	0.0863					TO CONSTRUCT AND MAINTAIN SLOPE		
15-T	RANCHO NACIDO LIBRE	11,12	507	626	09-29-102-003	40.000	0.0000	0.0219	0.0000	0.0219				39.9493	* APPROX. 14' OF CONC. STONE WALL AND WROUGHT IRON FENCE		
															LIMITED PARTNERSHIP		
															+ TO CONSTRUCT DRIVE APPROACH		
16-WD	OWNER UNKNOWN	9,10,11,12					0.0060	0.0060	0.0060	0.0060				STATE	GAP BETWEEN PARCELS 14WD,13WD,12WD&10WD		

FEDERAL PROJECT NO. NON-FEDERAL
 PID NO. 5889
 STATE JOB NO. 089330
 CALCULATED BY BAS
 CHECKED BY HJH
SUMMARY OF ADDITIONAL RIGHT OF WAY (PARCELS 10-16)
WAR-48-21.05

LEGEND:
 WD = WARRANTY DEED
 SH = STANDARD HIGHWAY EASEMENT
 SL = SLOPE EASEMENT
 CH = CHANNEL EASEMENT
 PR = PROPERTY RIGHT
 T = TEMPORARY

NOTE: ALL TEMPORARY PARCELS TO BE OF 12 MONTH DURATION.

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

(c) = CALCULATED AREA

* DENOTES RIGHT OF WAY ENCROACHMENT

+ - Per Item 614, Drive Access to be maintained at all times, See Roadway Plan Sheet 12.

REV. BY	DATE	DESCRIPTION
HJH	3/13/02	Added Parcel 16-WD
HJH	12/11/01	Changed name of parcel 12-WD & 14-WD
BAS	9/19/01	Changed area of parcel 11-T, 13-WD & 14-WD
BAS	2/20/01	Changed area of parcel 10-T
BAS	2/20/01	Added Parcel 10-SH for drive access
DATE COMPLETED		12/1/00

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WARREN COUNTY
CLEAR CREEK TOWNSHIP
SEC. 35 & 36, T. 4 E., R. 4 N.

Figure 3108.5
April 2011



0 20 40
HORIZONTAL
SCALE IN FEET

P.I.D. NO. 5889

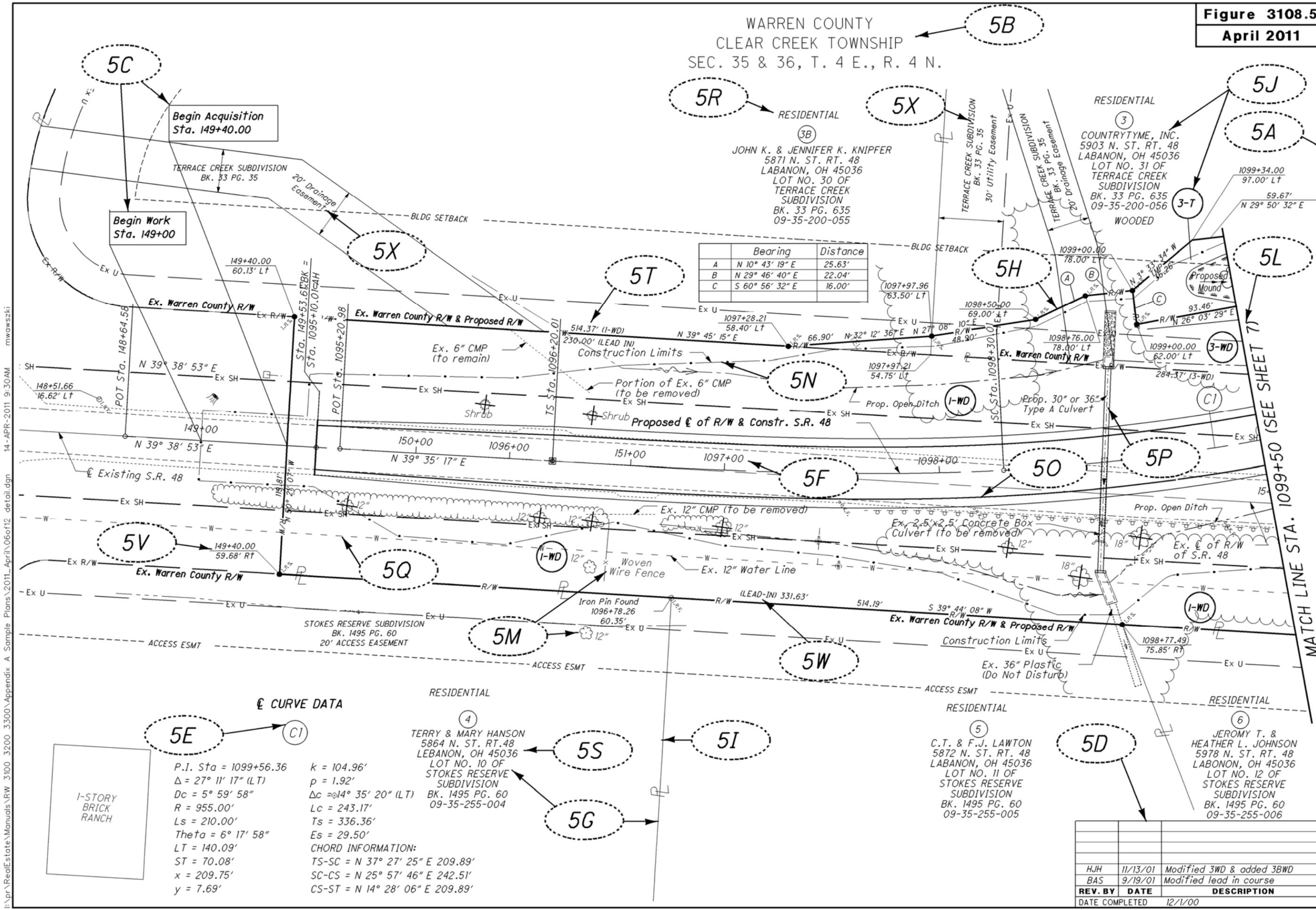
R/W DESIGNER BAS
R/W REVIEWER HJH

RIGHT OF WAY DETAIL SHEET
STA. 148+64.58 TO STA. 1099+50

WAR-48-21.05

6 / 12

95
101



	Bearing	Distance
A	N 10° 43' 19" E	25.63'
B	N 29° 46' 40" E	22.04'
C	S 60° 56' 32" E	16.00'

⊖ CURVE DATA

<p>5E → (C1)</p> <p>P.I. Sta = 1099+56.36 $\Delta = 27^\circ 11' 17''$ (LT) $Dc = 5^\circ 59' 58''$ $R = 955.00'$ $Ls = 210.00'$ $Theta = 6^\circ 17' 58''$ $LT = 140.09'$ $ST = 70.08'$ $x = 209.75'$ $y = 7.69'$</p>	<p>RESIDENTIAL</p> <p>(4) TERRY & MARY HANSON 5864 N. ST. RT. 48 LEBANON, OH 45036 LOT NO. 10 OF STOKES RESERVE SUBDIVISION BK. 1495 PG. 60 09-35-255-004</p>
--	---

REV. BY	DATE	DESCRIPTION
HJH	11/13/01	Modified 3WD & added 3BWD
BAS	9/19/01	Modified lead in course
DATE COMPLETED 12/1/00		

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P.I.D. NO. 5889

R/W DESIGNER: BAS
R/W REVIEWER: HUH

RIGHT OF WAY DETAIL SHEET
STA. 1099+50 TO STA. 1104+50

WAR-48-21.05

7 / 12

96
101

⊕ CURVE DATA

(CI)

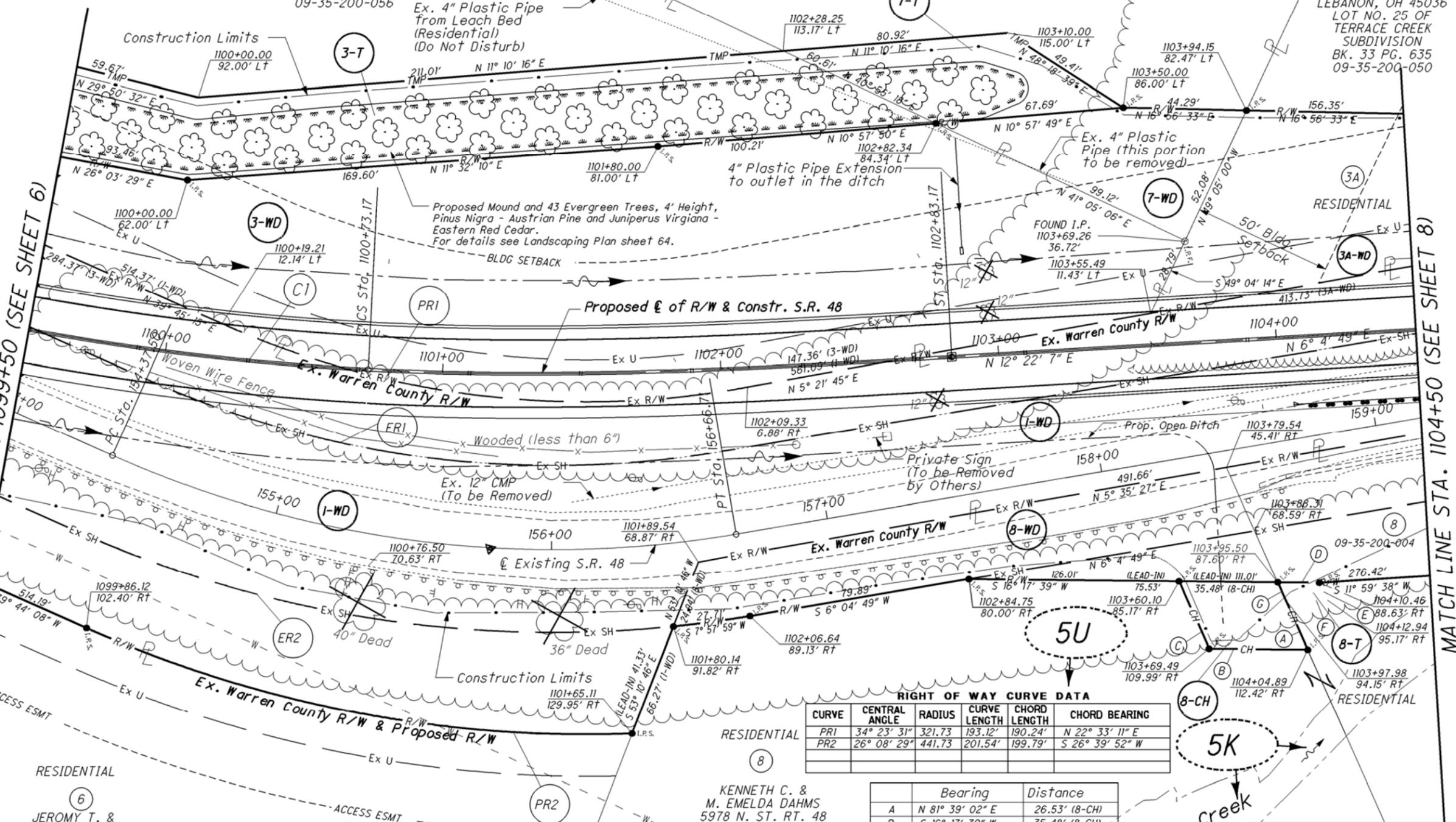
P.I. Sta = 1099+56.36 $p = 1.92'$
 $\Delta = 27^\circ 11' 17''$ (LT) $\Delta c = 14^\circ 35' 20''$ (LT)
 $Dc = 5^\circ 59' 58''$ $Lc = 243.17'$
 $R = 955.00'$ $Ts = 336.36'$
 $Ls = 210.00'$ $Es = 29.50'$
 $\theta = 6^\circ 17' 58''$
 CHORD INFORMATION:
 $TS-SC = N 37^\circ 27' 25'' E 209.89'$
 $SC-CS = N 25^\circ 57' 46'' E 242.51'$
 $CS-ST = N 14^\circ 28' 06'' E 209.89'$
 $LT = 140.09'$
 $ST = 70.08'$
 $x = 209.75'$
 $y = 7.69'$
 $k = 104.96'$

RESIDENTIAL
 (3)
 COUNTRYTYME, INC.
 5903 N. ST. RT. 48
 LABANON, OH 45036
 LOT NO. 31 OF
 TERRACE CREEK
 SUBDIVISION
 BK. 33 PG. 635
 09-35-200-056

WARREN COUNTY
 CLEAR CREEK TOWNSHIP
 SEC. 35 & 36, T. 4 E., R. 4 N.

RESIDENTIAL
 (7)
 JEFFERY A. & TRACY D. REED
 564 N. TERRACE CREEK CT.
 LABANON, OH 45036
 LOT NO. 29 OF
 TERRACE CREEK
 SUBDIVISION
 BK. 33 PG. 635
 09-35-200-054

RESIDENTIAL
 (3A)
 JOHN F. &
 MARIA L. HOBBS
 5989 N. ST. RT. 48
 LABANON, OH 45036
 LOT NO. 25 OF
 TERRACE CREEK
 SUBDIVISION
 BK. 33 PG. 635
 09-35-200-050



RIGHT OF WAY CURVE DATA

CURVE	CENTRAL ANGLE	RADIUS	CURVE LENGTH	CHORD LENGTH	CHORD BEARING
PRI	34° 23' 31"	321.73	193.12'	190.24'	N 22° 33' 11" E
PR2	26° 08' 29"	441.73	201.54'	199.79'	S 26° 39' 52" W

	Bearing	Distance
A	N 81° 39' 02" E	26.53' (8-CH)
B	S 16° 17' 39" W	35.48' (8-CH)
C	S 81° 39' 02" W	26.53' (8-CH)
D	N 16° 17' 39" E	15.00' (8-T)
E	N 81° 39' 02" E	7.00' (8-T)
F	S 16° 17' 39" W	15.00' (8-T)
G	S 81° 39' 02" W	7.00' (8-T)

EXISTING RIGHT OF WAY CURVE DATA

CURVE	CENTRAL ANGLE	RADIUS	CURVE LENGTH	CHORD LENGTH	CHORD BEARING
ER1	33° 34' 02"	361.23	211.63'	208.62'	N 22° 51' 51" E
ER2	33° 34' 06"	421.23	246.79'	243.27'	N 22° 51' 51" E

REV. BY	DATE	DESCRIPTION
BAS	9/19/01	Added lead in course for parcel 8-T
	12/1/00	

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0 10 20
HORIZONTAL
SCALE IN FEET

PID NO.
5889

R/W DESIGNER
BAS
R/W REVIEWER
HUH

RIGHT OF WAY DETAIL SHEET
STA. 1104+50 TO STA. 1109+50

WAR-48-21.05

8 / 12

97
101

WARREN COUNTY
CLEAR CREEK TOWNSHIP
SEC. 35 & 36, T. 4 E., R. 4 N.

⊖ CURVE DATA

(C2)
P.I. Sta = 1110+37.77 k = 104.96'
Δ = 43° 50' 45" (RT) p = 1.92'
Dc = 5° 59' 58" Δc = 31° 14' 48" (RT)
R = 955.00' Lc = 520.82'
Ls = 210.00' Ts = 490.08'
Theta = 6° 17' 58" Es = 76.52'
LT = 140.09' ST = 70.08' CHORD INFORMATION:
x = 209.75' y = 7.69'
TS-SC = N 14° 28' 06" E 209.89'
SC-CS = N 34° 17' 30" E 514.39'
CS-ST = N 54° 06' 54" E 209.89'

EXISTING RIGHT OF WAY CURVE DATA

CURVE	CENTRAL ANGLE	RADIUS	CURVE LENGTH	CHORD LENGTH	CHORD BEARING
ER3	50° 04' 43"	186.64	163.13'	157.98'	N 31° 07' 11" E
ER4	50° 04' 48"	246.63	215.57'	208.77'	N 31° 07' 11" E

RESIDENTIAL
(11)
HENRY M. &
SALLY J. JOSEFCZYK
5945 N. ST. RT. 48
LEBANON, OH 45036
09-35-200-025

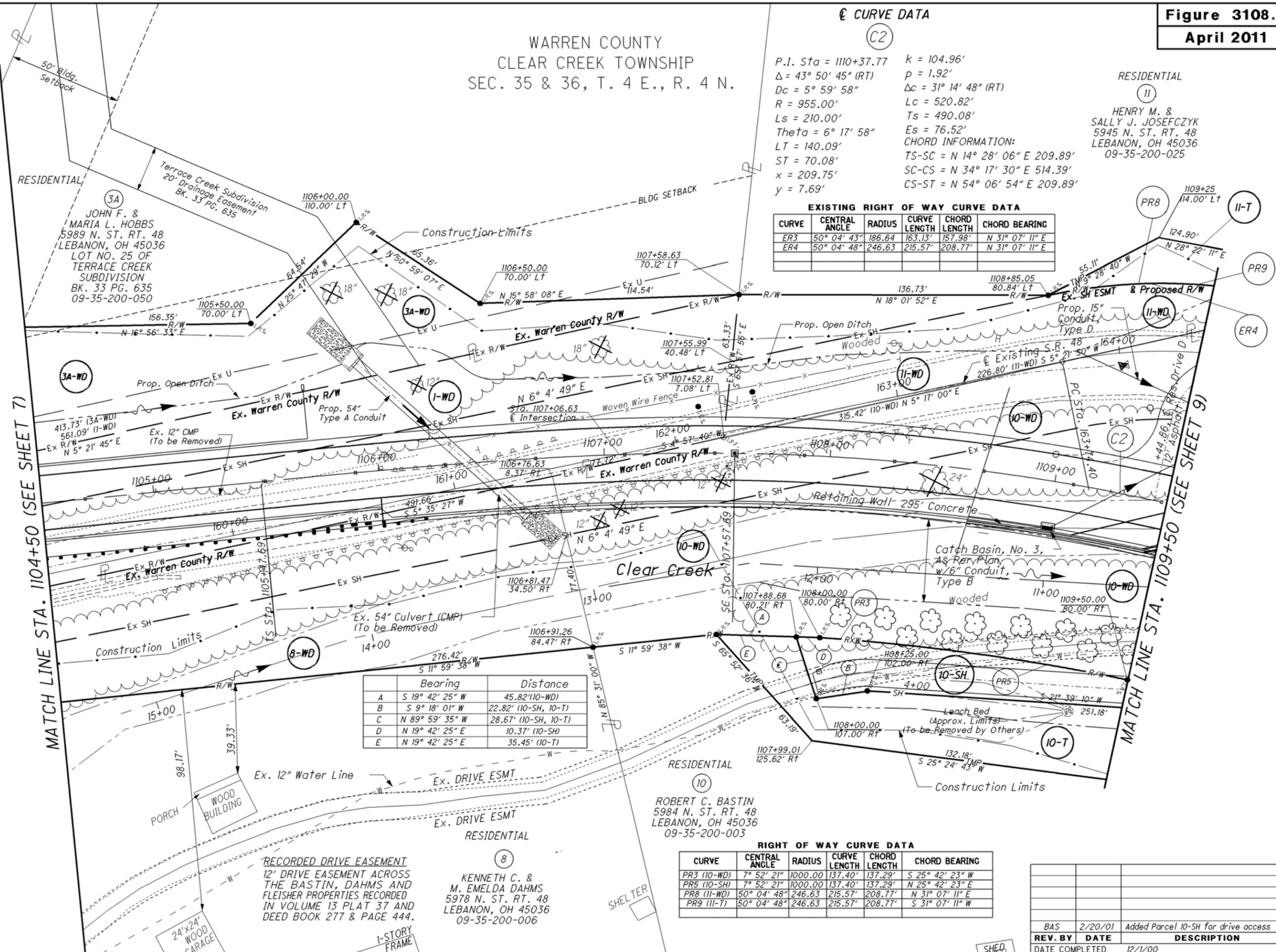
RESIDENTIAL
(10)
ROBERT C. BASTIN
5984 N. ST. RT. 48
LEBANON, OH 45036
09-35-200-003

	Bearing	Distance
A	S 19° 42' 25" W	45.82' (10-WD)
B	S 9° 18' 01" W	22.82' (10-SH, 10-T)
C	N 89° 59' 35" W	28.67' (10-SH, 10-T)
D	N 19° 42' 25" E	10.37' (10-SH)
E	N 19° 42' 25" E	35.45' (10-T)

RIGHT OF WAY CURVE DATA

CURVE	CENTRAL ANGLE	RADIUS	CURVE LENGTH	CHORD LENGTH	CHORD BEARING
PR3 (10-WD)	7° 52' 21"	1000.00	137.40'	137.29'	S 25° 42' 23" W
PR5 (10-SH)	7° 52' 21"	1000.00	137.40'	137.29'	N 25° 42' 23" E
PR8 (11-WD)	50° 04' 48"	246.63	215.57'	208.77'	N 31° 07' 11" E
PR9 (11-T)	50° 04' 48"	246.63	215.57'	208.77'	S 31° 07' 11" W

REV. BY	DATE	DESCRIPTION
BAS	2/20/01	Added Parcel 10-SH for drive access
DATE COMPLETED	12/1/00	



MATCH LINE STA. 1104+50 (SEE SHEET 7)

MATCH LINE STA. 1109+50 (SEE SHEET 9)

RECORDED DRIVE EASEMENT
12' DRIVE EASEMENT ACROSS
THE BASTIN, DAHMS AND
FLEISHER PROPERTIES RECORDED
IN VOLUME 13 PLAT 37 AND
DEED BOOK 277 & PAGE 444.

(8)
KENNETH C. &
M. EMELDA DAHMS
5978 N. ST. RT. 48
LEBANON, OH 45036
09-35-200-006

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0 10 20
HORIZONTAL
SCALE IN FEET

PID NO. 5889

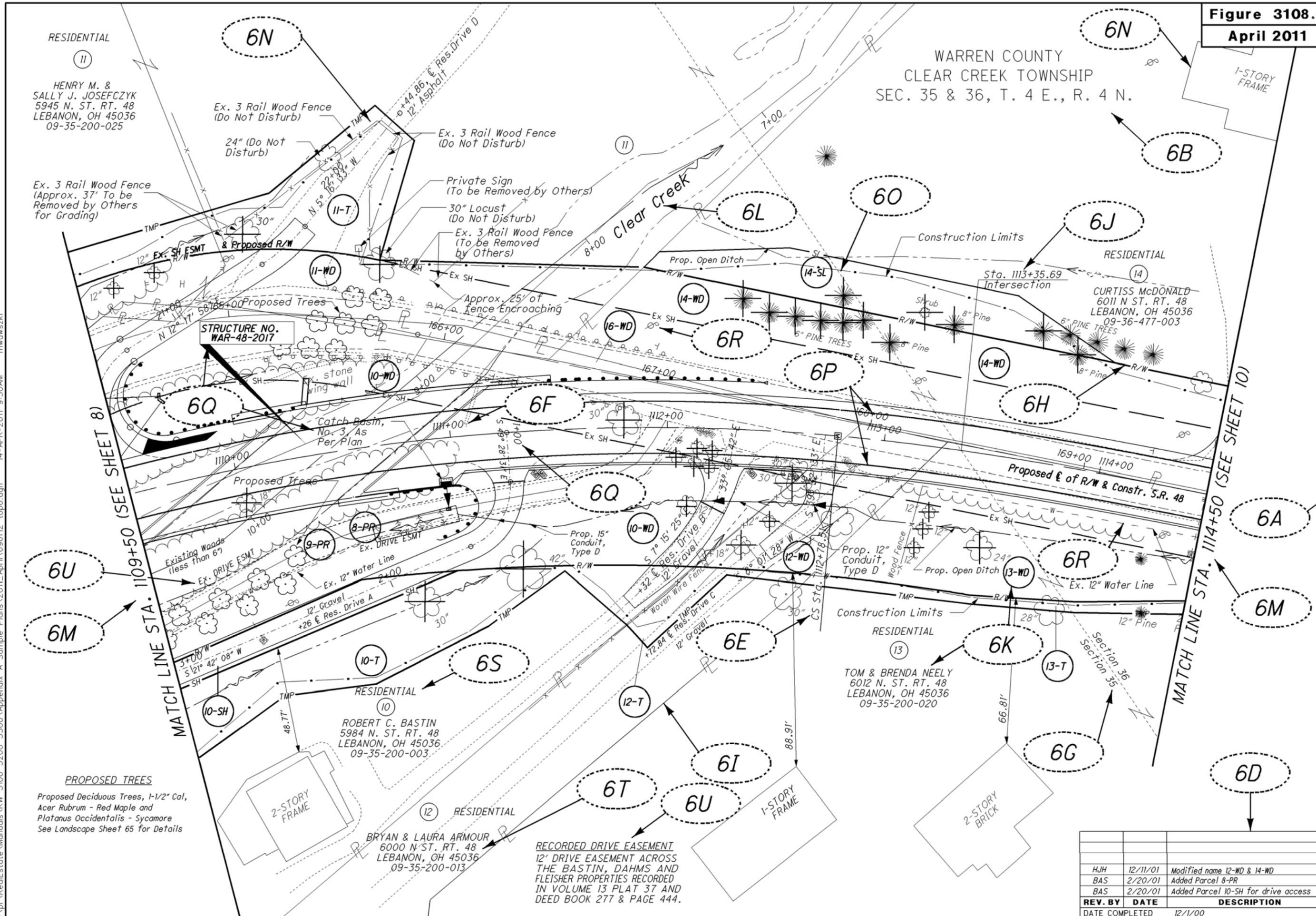
CALCULATED BAS
CHECKED HUH

RIGHT OF WAY TOPO SHEET
STA. 1109+50 TO STA. 1114+50

WAR-48-21.05

9 / 12
98
101

WARREN COUNTY
CLEAR CREEK TOWNSHIP
SEC. 35 & 36, T. 4 E., R. 4 N.



RESIDENTIAL
11
HENRY M. &
SALLY J. JOSEFCZYK
5945 N. ST. RT. 48
LEBANON, OH 45036
09-35-200-025

Ex. 3 Rail Wood Fence
(Approx. 37' To be
Removed by Others
for Grading)

STRUCTURE NO.
WAR-48-2017

6U

6M

MATCH LINE STA. 1109+50 (SEE SHEET 8)

MATCH LINE STA. 1114+50 (SEE SHEET 10)

PROPOSED TREES
Proposed Deciduous Trees, 1-1/2" Cal,
Acer Rubrum - Red Maple and
Platanus Occidentalis - Sycamore
See Landscape Sheet 65 for Details

RESIDENTIAL
10
ROBERT C. BASTIN
5984 N. ST. RT. 48
LEBANON, OH 45036
09-35-200-003

RESIDENTIAL
12
BRYAN & LAURA ARMOUR
6000 N. ST. RT. 48
LEBANON, OH 45036
09-35-200-013

RECORDED DRIVE EASEMENT
12' DRIVE EASEMENT ACROSS
THE BASTIN, DAHMS AND
FLEISHER PROPERTIES RECORDED
IN VOLUME 13 PLAT 37 AND
DEED BOOK 277 & PAGE 444.

RESIDENTIAL
13
TOM & BRENDA NEELY
6012 N. ST. RT. 48
LEBANON, OH 45036
09-35-200-020

REV. BY	DATE	DESCRIPTION
HUH	12/11/01	Modified name 12-WD & 14-WD
BAS	2/20/01	Added Parcel 8-PR
BAS	2/20/01	Added Parcel 10-SH for drive access
DATE COMPLETED		12/1/00



PID NO. 5889

R/W DESIGNER BAS
R/W REVIEWER HJH

RIGHT OF WAY BOUNDARY SHEET
STA. 1109+50 TO STA. 1114+50

WAR-48-21.05
10/12
99/101

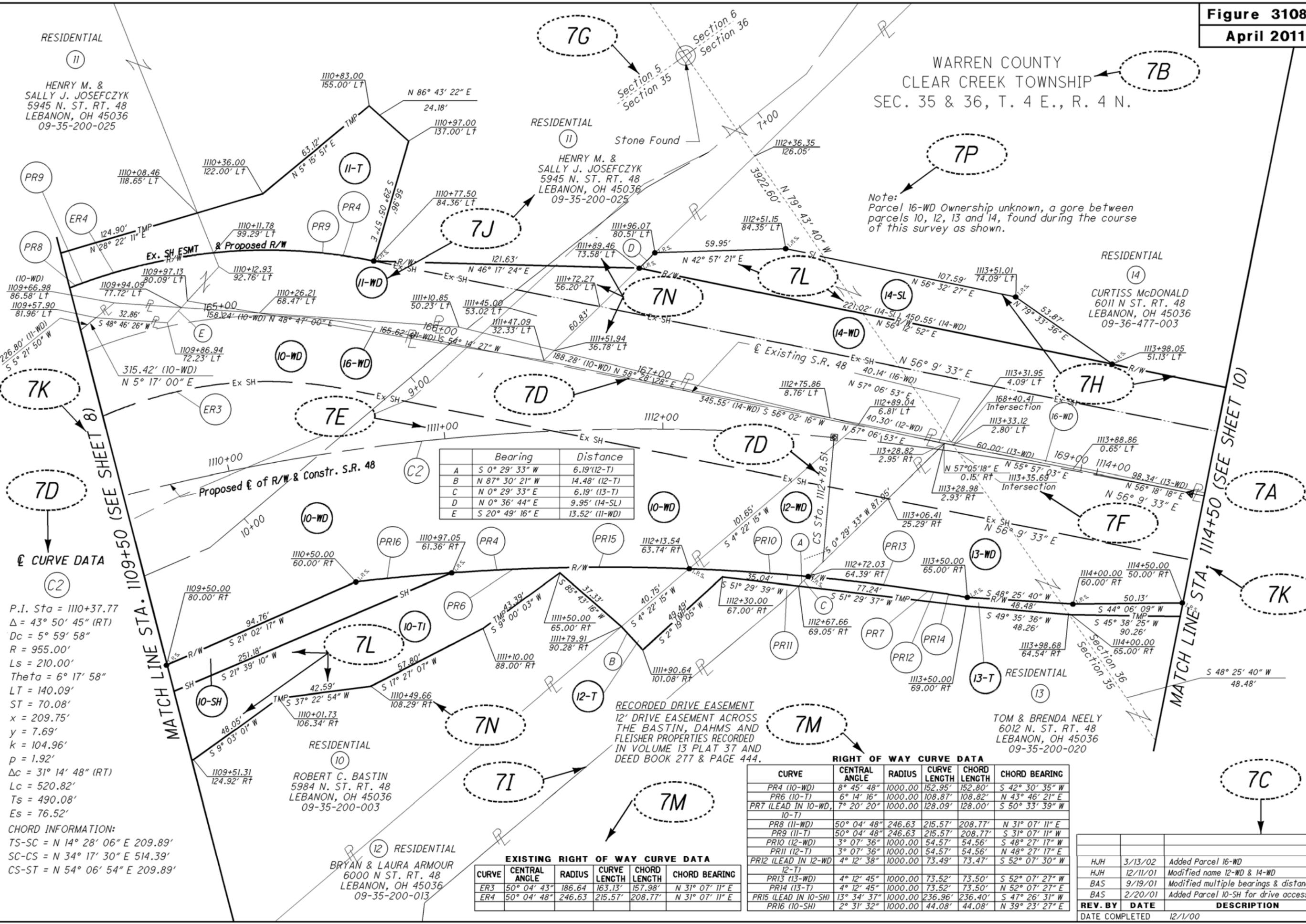
WARREN COUNTY
CLEAR CREEK TOWNSHIP
SEC. 35 & 36, T. 4 E., R. 4 N.

Note:
Parcel 16-WD Ownership unknown, a gore between parcels 10, 12, 13 and 14, found during the course of this survey as shown.

	Bearing	Distance
A	S 0° 29' 33" W	6.19' (12-T)
B	N 87° 30' 21" W	14.48' (12-T)
C	N 0° 29' 33" E	6.19' (13-T)
D	N 0° 36' 44" E	9.95' (14-SL)
E	S 20° 49' 16" E	13.52' (11-WD)

CURVE	CENTRAL ANGLE	RADIUS	CURVE LENGTH	CHORD LENGTH	CHORD BEARING
PR4 (10-WD)	8° 45' 48"	1000.00	152.95'	152.80'	S 42° 30' 35" W
PR6 (10-T)	6° 14' 16"	1000.00	108.87'	108.82'	N 43° 46' 21" E
PR7 (LEAD IN 10-WD, 10-T)	7° 20' 20"	1000.00	128.09'	128.00'	S 50° 33' 39" W
PR8 (11-WD)	50° 04' 48"	246.63	215.57'	208.77'	N 31° 07' 11" E
PR9 (11-T)	50° 04' 48"	246.63	215.57'	208.77'	S 31° 07' 11" W
PR10 (12-WD)	3° 07' 36"	1000.00	54.57'	54.56'	S 48° 27' 17" W
PR11 (12-T)	3° 07' 36"	1000.00	54.57'	54.56'	N 48° 27' 17" E
PR12 (LEAD IN 12-WD, 12-T)	4° 12' 38"	1000.00	73.49'	73.47'	S 52° 07' 30" W
PR13 (13-WD)	4° 12' 45"	1000.00	73.52'	73.50'	S 52° 07' 27" W
PR14 (13-T)	4° 12' 45"	1000.00	73.52'	73.50'	N 52° 07' 27" E
PR15 (LEAD IN 10-SH)	13° 34' 37"	1000.00	236.96'	236.40'	S 47° 26' 31" W
PR16 (10-SH)	2° 31' 32"	1000.00	44.08'	44.08'	N 39° 23' 27" E

CURVE	CENTRAL ANGLE	RADIUS	CURVE LENGTH	CHORD LENGTH	CHORD BEARING
ER3	50° 04' 43"	186.64	163.13'	157.98'	N 31° 07' 11" E
ER4	50° 04' 48"	246.63	215.57'	208.77'	N 31° 07' 11" E



§ CURVE DATA
C2
 P.I. Sta = 1110+37.77
 $\Delta c = 43^\circ 50' 45''$ (RT)
 $Dc = 5^\circ 59' 58''$
 $R = 955.00'$
 $Ls = 210.00'$
 $\theta = 6^\circ 17' 58''$
 $LT = 140.09'$
 $ST = 70.08'$
 $x = 209.75'$
 $y = 7.69'$
 $k = 104.96'$
 $p = 1.92'$
 $\Delta c = 31^\circ 14' 48''$ (RT)
 $Lc = 520.82'$
 $Ts = 490.08'$
 $Es = 76.52'$
CHORD INFORMATION:
 $TS-SC = N 14^\circ 28' 06'' E 209.89'$
 $SC-CS = N 34^\circ 17' 30'' E 514.39'$
 $CS-ST = N 54^\circ 06' 54'' E 209.89'$

RECORDED DRIVE EASEMENT
 12' DRIVE EASEMENT ACROSS THE BASTIN, DAHMS AND FLEISHER PROPERTIES RECORDED IN VOLUME 13 PLAT 37 AND DEED BOOK 277 & PAGE 444.

RESIDENTIAL
 10
 ROBERT C. BASTIN
 5984 N. ST. RT. 48
 LEBANON, OH 45036
 09-35-200-003

RESIDENTIAL
 12
 BRYAN & LAURA ARMOUR
 6000 N ST. RT. 48
 LEBANON, OH 45036
 09-35-200-013

RESIDENTIAL
 13
 TOM & BRENDA NEELY
 6012 N. ST. RT. 48
 LEBANON, OH 45036
 09-35-200-020

REV. BY	DATE	DESCRIPTION
HJH	3/13/02	Added Parcel 16-WD
HJH	12/11/01	Modified name 12-WD & 14-WD
BAS	9/19/01	Modified multiple bearings & distances
BAS	2/20/01	Added Parcel 10-SH for drive access

DATE COMPLETED 12/11/00

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WARREN COUNTY
CLEAR CREEK TOWNSHIP
SEC. 35 & 36, T. 4 E., R. 4 N.

Figure 3108.7
April 2011



PID NO. 5889

R/W DESIGNER BAS
R/W REVIEWER HJH

RIGHT OF WAY BOUNDARY SHEET
STA. 1114+50 TO STA. 171+97.56

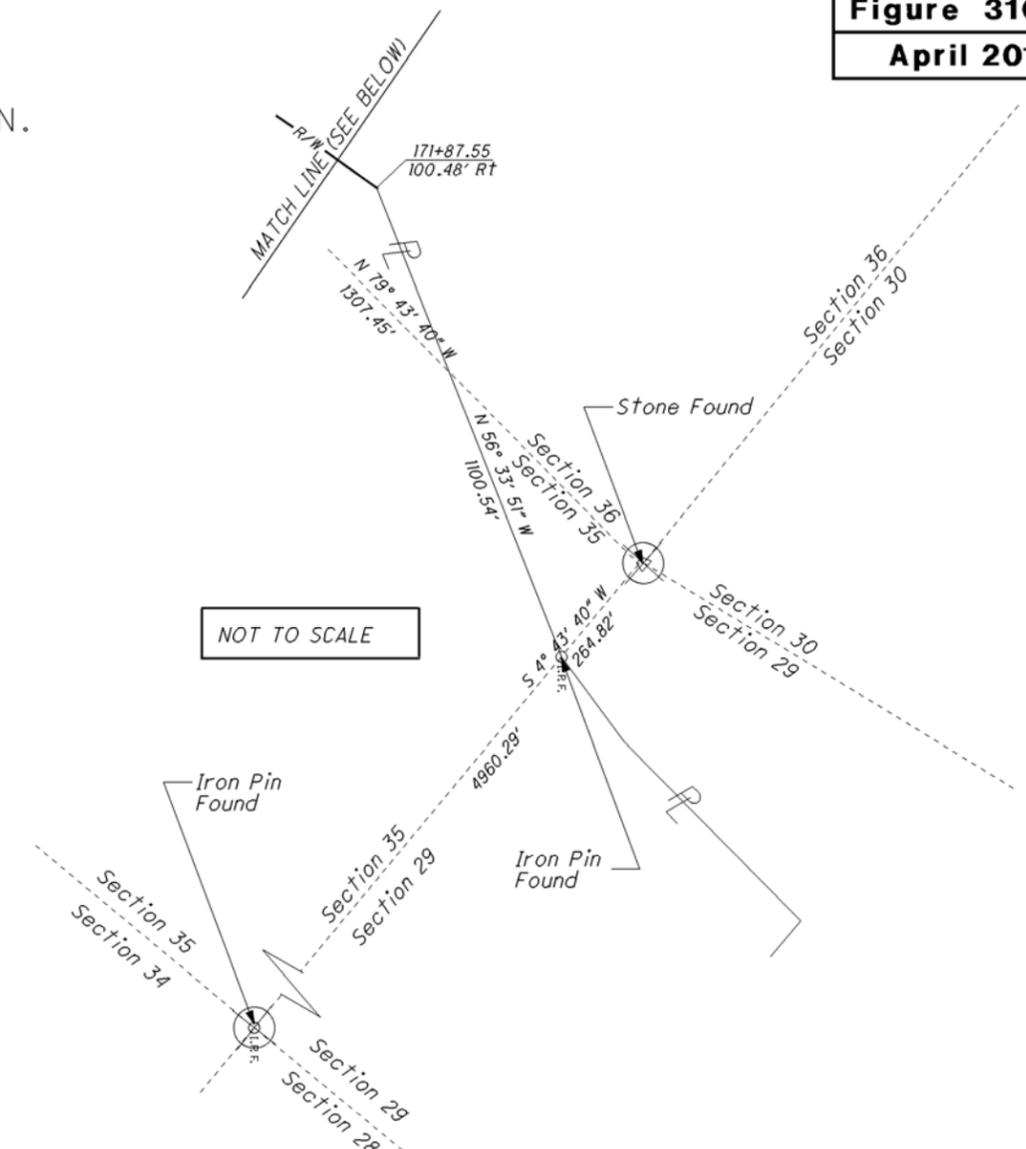
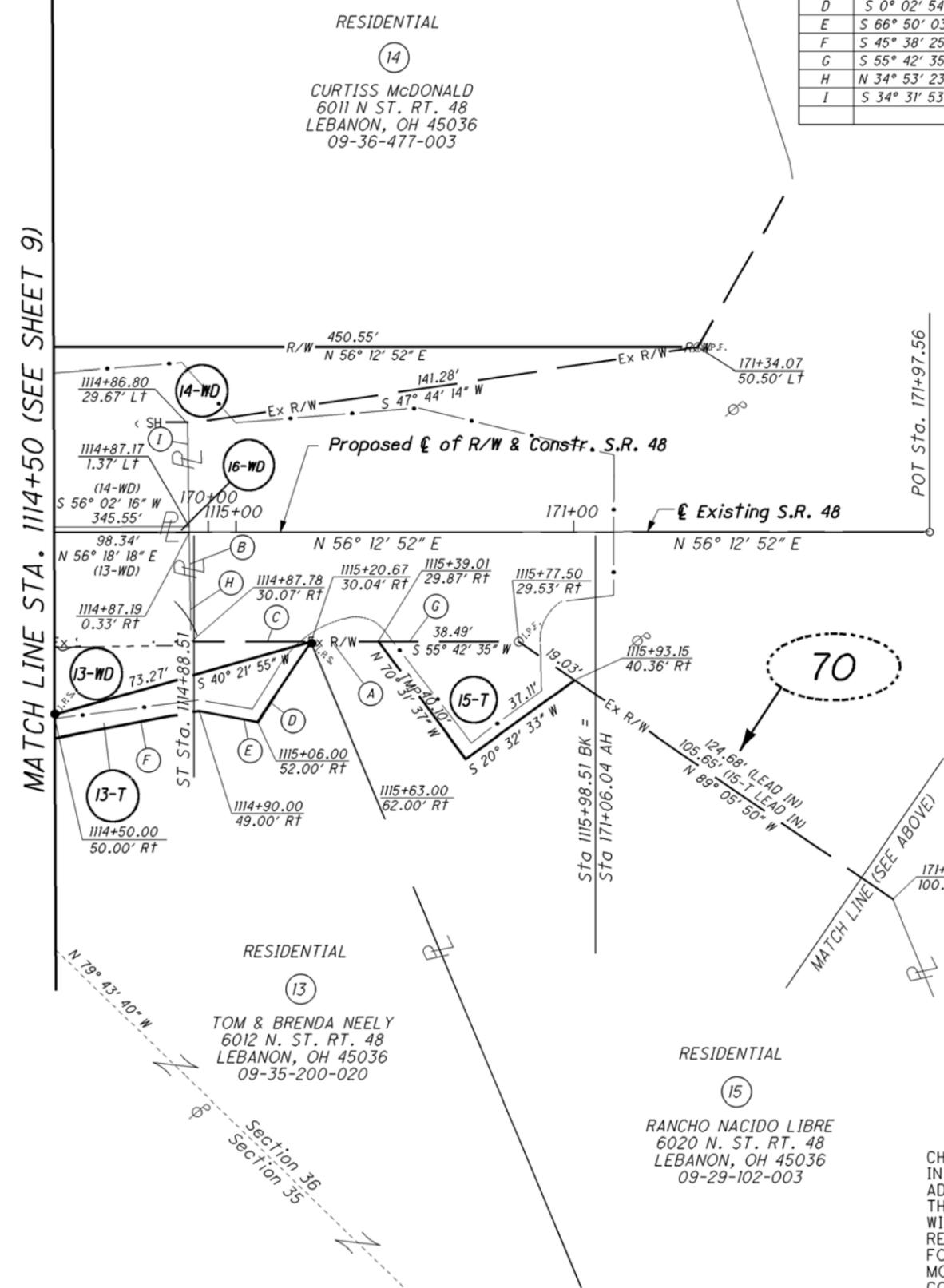
WAR-48-21.05

12 / 12

101
101

	Bearing	Distance
A	S 55° 42' 35" W	57.11' (LEAD IN PAR. 10, 12, 13)
B	S 34° 54' 37" E	29.75' (13-WD)
C	N 56° 09' 23" E	32.89' (13-WD)
D	S 0° 02' 54" E	26.41' (13-T)
E	S 66° 50' 03" W	16.28' (13-T)
F	S 45° 38' 25" W	90.26' (13-T)
G	S 55° 42' 35" W	89.92' (LEAD IN 14-WD, 14-SL)
H	N 34° 53' 23" W	31.45' (LEAD IN 14-WD, 14-SL)
I	S 34° 31' 53" E	28.30' (14-WD)

MATCH LINE STA. 1114+50 (SEE SHEET 9)



MONUMENT TABLE					
€ of PROP. R/W S.R. 48		PROJECT COORDINATES SEE SURVEY CERTIFICATION		R/W MON. EXPECTED TO BE DISTURBED	
STATION	OFFSET	NORTH (Y)	EAST (X)	R/W MON.	DESCRIPTION
1099+00.00	62.00' LT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1100+00.00	62.00' LT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1101+80.00	81.00' LT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1102+82.34	84.34' LT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1107+88.68	80.21' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1108+00.00	80.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1108+00.00	107.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1108+25.00	102.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1109+50.00	80.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1110+50.00	60.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1110+77.50	84.36' LT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1110+97.05	61.36' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1112+13.54	63.74' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1112+72.03	64.39' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1113+50.00	65.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1114+00.00	60.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1114+50.00	50.00' RT	000000.0000	000000.0000	1	IP SET WITHIN CONSTR. LIMITS
1115+77.50	29.53' RT	000000.0000	000000.0000	1	IP FOUND WITHIN CONSTR. LIMITS
TOTAL CARRIED TO GENERAL SUMMARY SHEET				18	

CHANGES OR ALTERATIONS TO THE LOCATION OF ANY MONUMENTS SHOWN IN THIS TABLE, REQUIRES PRIOR APPROVAL FROM THE DISTRICT REAL ESTATE ADMINISTRATOR OF THE OHIO DEPARTMENT OF TRANSPORTATION. IN THE EVENT THAT CHANGES OR ALTERATIONS ARE APPROVED, A REVISED CENTERLINE PLAT WITH THE NEW LOCATIONS SHALL BE RECORDED IN THE APPLICABLE COUNTY RECORDS AND THE OHIO DEPARTMENT OF TRANSPORTATION. SPECIFICATIONS FOR MONUMENT ASSEMBLIES, CENTERLINE MONUMENTS, CENTERLINE REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM-1.1.

REV. BY	DATE	DESCRIPTION
HJH	3/13/02	Added Parcel 16-WD
HJH	12/11/01	Modified name 14-WD
BAS	9/19/01	Modified lead in courses
DATE COMPLETED		12/1/00



CALCULATED
BAS
CHECKED
HJH

PID NO.
4522

RAILROAD PLAT

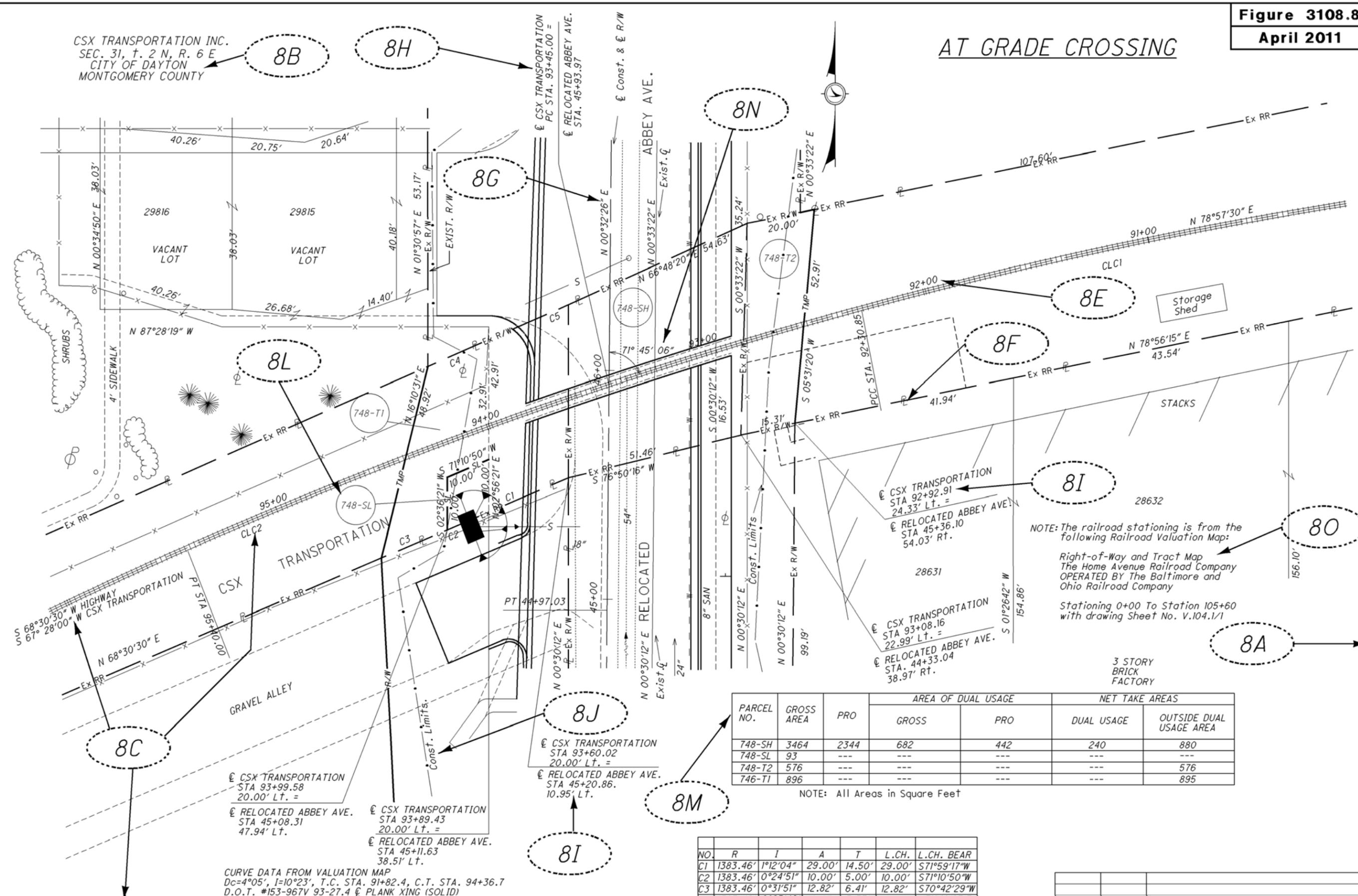
MOT-35-11.33

108/109

921
922

AT GRADE CROSSING

CSX TRANSPORTATION INC.
SEC. 31, T. 2 N, R. 6 E
CITY OF DAYTON
MONTGOMERY COUNTY



NOTE: The railroad stationing is from the following Railroad Valuation Map:
Right-of-Way and Tract Map
The Home Avenue Railroad Company
OPERATED BY The Baltimore and Ohio Railroad Company
Stationing 0+00 To Station 105+60
with drawing Sheet No. V.104.1/1

PARCEL NO.	GROSS AREA	PRO	AREA OF DUAL USAGE		NET TAKE AREAS	
			GROSS	PRO	DUAL USAGE	OUTSIDE DUAL USAGE AREA
748-SH	3464	2344	682	442	240	880
748-SL	93	---	---	---	---	---
748-T2	576	---	---	---	---	576
746-T1	896	---	---	---	---	895

NOTE: All Areas in Square Feet

CURVE DATA FROM VALUATION MAP
Dc=4°05', I=10°23', T.C. STA. 91+82.4, C.T. STA. 94+36.7
D.O.T. #153-967V 93-27.4 @ PLANK XING (SOLID)

R/W CENTER LINE CURVE DATA										
NO.	R	I	DC	A	T	L.CH.	L.CH. BEAR	PT STA.	PC OR CC	PT OR CC
CLC1	1403.347'	5°-02'-17"	4-05'	123.40'	61.74'	123.36'	S76°-26'22"W	92+19.18	91+57.44	92+80.84
CLC2	1403.347'	5°-24'-34"	4-05'	132.56'	66.33'	132.51'	S71°-12'52"W	93+93.73	93+27.40	94+59.96

NO.	R	I	A	T	L.CH.	L.CH. BEAR
C1	1383.46'	1°12'04"	29.00'	14.50'	29.00'	S71°59'17"W
C2	1383.46'	0°24'51"	10.00'	5.00'	10.00'	S71°10'50"W
C3	1383.46'	0°31'51"	12.82'	6.41'	12.82'	S70°42'29"W
C4	1383.46'	0°25'46"	10.67'	5.33'	10.67'	N71°48'27"E
C5	1423.46'	1°05'12"	27.00'	13.50'	27.00'	N72°33'56"E

REV. BY	DATE	DESCRIPTION

DATE COMPLETED 12/1/00

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PROJECT DESCRIPTION

REPLACEMENT OF EXISTING PAVEMENT OVER BEAR RUN AND REPLACEMENT OF CHANNEL STRUCTURE BENEATH T.R. 57.

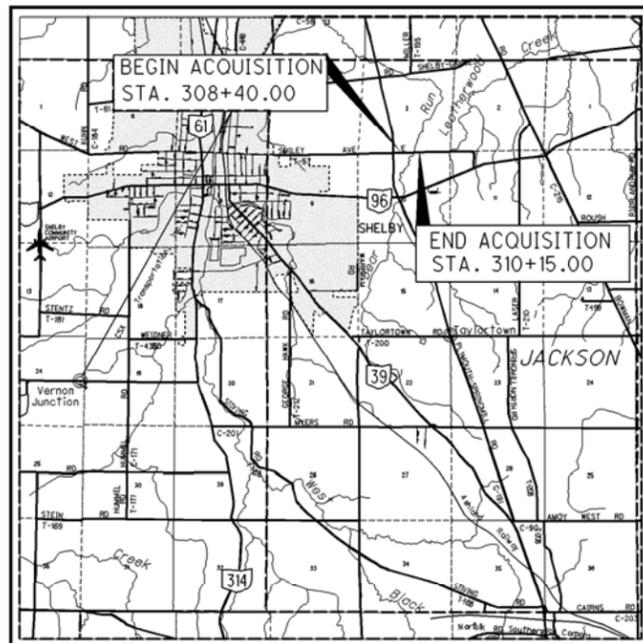
PLANS PREPARED BY:

FIRM NAME : ODOT CENTRAL OFFICE
 R/W DESIGNER: BRETT A. SHEARER
 R/W REVIEWER: JOHN J. DOE
 FIELD REVIEWER: BRETT A. SHEARER
 PRELIMINARY FIELD REVIEW DATE: 6/15/00
 TRACINGS FIELD REVIEW DATE: 11/15/00
 OWNERSHIP UPDATED BY: WILLIAM C LEROY
 DATE COMPLETED: 11/20/00
 PLAN COMPLETION DATE: 12/1/00

RIGHT OF WAY LEGEND SHEET RIC - T.R. 57

RICHLAND COUNTY
JACKSON TOWNSHIP

SECTION 3 8/10. TWP. 22N, RANGE 19W



LOCATION MAP

LATITUDE: 39°31'17" LONGITUDE: 84°11'00"

INDEX OF SHEETS:

LEGEND SHEET	1
RIGHT OF WAY PLAN SHEET	2

UTILITY OWNERS

TYPE	NAME & ADDRESS
TELEPHONE	UNITED TELEPHONE COMPANY 175 ASHLAND ROAD MANSFIELD, OH 44902 (419) 755-7152
ELECTRIC	SHELBY LIGHT & POWER 23 WEST MAIN STREET SHELBY, OH 44875 (419) 342-4085

NOTE:

THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNER OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

CONVENTIONAL SYMBOLS

County Line	-----	Temp. Right of Way	----- TMP -----
Township Line	-----	Exist. Right of Way	----- Ex R/W -----
Section Line	-----	Exist. Stand. High. Ease.	----- Ex SH -----
Corporation Line	----- or -----	Exist. Channel Ease.	----- Ex CH -----
Fence Line (existing)	----- (proposed)	Exist. Utility Ease.	----- Ex U -----
Center Line	-----	Property Line	----- (in existing fence) -----
Trees, Stumps (to be removed)	-----	Railroad	----- or -----
Utility Poles: Telephone, Power, Light	-----	Guardrail (existing)	----- (proposed)
Right of Way (only)	----- R/W -----	Construction Limits	-----
Standard Highway Ease.	----- SH -----		

STRUCTURE KEY

	RESIDENTIAL
	COMMERCIAL
	OUT-BUILDING

LEGEND

WD	= WARRENTY DEED
SH	= STANDARD HIGHWAY EASEMENT
SL	= SLOPE EASEMENT
CH	= CHANNEL EASEMENT
PR	= PROPERTY RIGHT
T	= TEMPORARY

I, John J. Doe, P.S., have conducted a survey of the existing conditions for the Ohio Department of Transportation on April 4, 1999. The results of that survey are contained herein. The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinate System, South zone on NAD 83 (CORS 96) datum. The Project Coordinates (US Survey Feet) are relative to State Plane Grid Coordinates US Survey Feet by a Project Adjustment Factor of 1.000072714. As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for the property takes herein. As a part of this project I have established the proposed property lines, calculated the Gross Take, Present Roadway Occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire the parcels as shown herein. As a part of this work I have set right of way monuments at property corners, property line intersections, points along the right of way and/or angle points on the right of way, Section Corners and other points shown herein. All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted. The words I and my, as used herein, are to mean that either myself or someone working under my direct supervision.

SURVEYORS SEAL



John J. Doe 8-22-05
 John J. Doe, P.S., Ohio Lic# 0000



HORIZONTAL SCALE IN FEET
0 10 20 40

PID NO. 6314

CALCULATED BAS
CHECKED WCL

RIGHT OF WAY PLAN

RIC - T.R. 57

19
19

UNDERGROUND UTILITIES

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE AS OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SECTION 153.64 O.R.C.

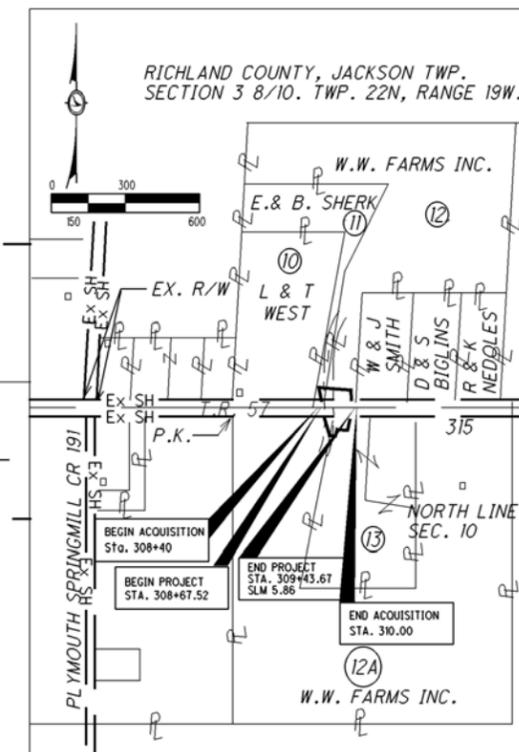
UTILITY OWNERS

UNITED TELEPHONE COMPANY
175 ASHLAND ROAD
MANSFIELD, OHIO 44902
PHONE: (419) 755-7152

SHELBY LIGHT & POWER
23 WEST MAIN STREET
SHELBY, OHIO 44875
PHONE: (419) 342-4085

EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED FROM INFORMATION RECEIVED FROM THE RICHLAND COUNTY ENGINEER ALONG WITH FINDING A P.K. LOCATED IN THE N.W. QUARTER SECTION 10 AND EXISTING PROPERTY PINS ALONG TOWNSHIP ROAD 57.

PROPERTY MAP



MONUMENT LOCATION			
QUANT.	STATION	LOCATION	REMARKS
1*	307+00	P.O.T.	
1*	311+00	P.O.T.	
2*	TOTAL		

* Item 604 - Monument Assembly

SUMMARY OF ADDITIONAL RIGHT OF WAY REQUIRED

NO. OF STRUCTURES = 0 NO. OF PROPERTY OWNERS = 4 NO. OF TOTAL TAKES = 0 STATE JOB NO 03509 PID = 6314

PARCEL NO.	TYPE FUNDS	PROPERTY OWNER	RECORDED		AUDITOR'S RECORD AREA	TOTAL P.R.O.	GROSS TAKE	P.R.O. TAKE	NET TAKE	NET RESIDUE		BLDG.	AUDITOR'S PARCEL NO.	REMARKS	AS ACQUIRED	
			VOLUME	PAGE						LEFT	RIGHT				BOOK	PAGE
1-9		NOT ASSIGNED														
10-SH	COUNTY	LARRY E. & JANET E. WEST	892	649	10.18 AC	0.337 AC	0.012 AC	0.007 AC	0.005 AC	9.843 AC			016-32-257-16-000			
11-T	COUNTY	ERNEST O & BETH A. SHERK	825	423	5.89 AC	0.044 AC	0.128 AC	0	0.128 AC				016-32-257-16-005	TEMP. FOR DRIVE & GRADING		
12-T	COUNTY	W. W. FARMS INC.	890	5	1.12 AC	0.103 AC	0.037 AC	0	0.037 AC				016-32-257-16-006	TEMP. FOR GRADING		
12A-T	COUNTY	W. W. FARMS INC.	729	594/595	31.850 AC	0.677 AC	0.045 AC	0	0.045 AC				016-32-277-09-000	TEMP. FOR GRADING		
13-T	COUNTY	GLENDON R. & JEWELL M. BALDRIDGE	63	42	2.024 AC	0.232 AC	0.045 AC	0	0.045 AC				016-32-277-009-001	TEMP. FOR GRADING		

REV. BY	DATE	DESCRIPTION
		12/1/00

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0 20 40
HORIZONTAL SCALE IN FEET

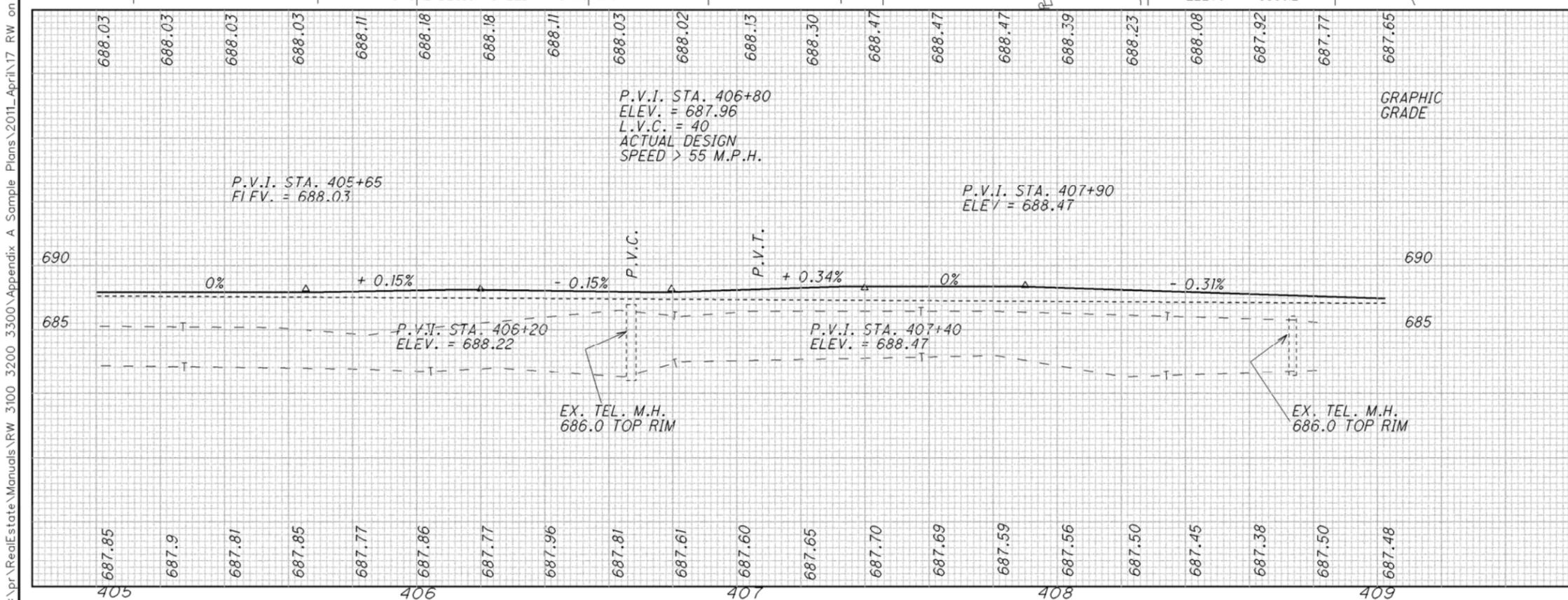
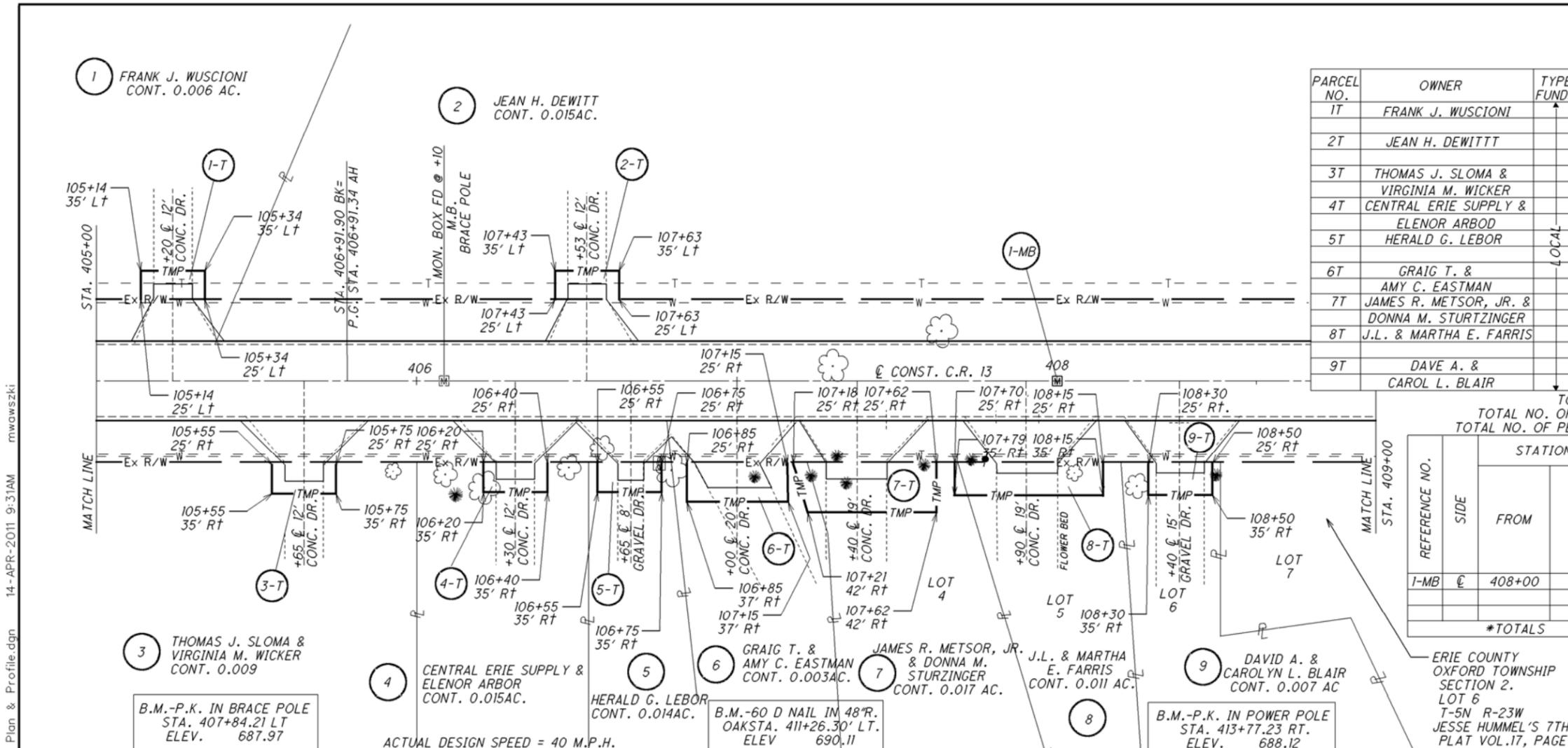
CALCULATED
BAS
CHECKED
WCL

PARCEL NO.	OWNER	TYPE FUNDS	RECORDED BOOK/PAGE	NET TAKE LAND	BLDG.	SHEET NO.	REMARKS	AS ACQUIRED BOOK PAGE
1T	FRANK J. WUSCIONI		OR 18 773	0.006AC	NO	13	GRADING	
2T	JEAN H. DEWITTT		542 274	0.015AC	NO	17	TO CONSTRUCT DRIVE	
3T	THOMAS J. SLOMA & VIRGINIA M. WICKER		OR35 35	0.009AC	NO	18	TO CONSTRUCT DRIVE	
4T	CENTRAL ERIE SUPPLY & ELENOR ARBOD		122 63	0.015AC	NO	20	TO CONSTRUCT DRIVE	
5T	HERALD G. LEBOR	LOCAL	239 393	0.014AC	NO	21	TO CONSTRUCT DRIVE	
6T	GRAIG T. & AMY C. EASTMAN		364 813	0.003AC	NO	23	GRADING	
7T	JAMES R. METSOR, JR. & DONNA M. STURTZINGER		442 374	0.017AC	NO	25	TO CONSTRUCT DRIVE	
8T	J.L. & MARTHA E. FARRIS		382 141	0.011AC	NO	23	TO CONSTRUCT DRIVE	
9T	DAVE A. & CAROL L. BLAIR		512 515	0.007AC	NO	25	TO CONSTRUCT DRIVE	

TOTAL NO. OF OWNERS WITH STRUCTURES = 0
 TOTAL NO. OF OWNERS = 9 TOTAL NO. OF TOTAL TAKES = 0
 TOTAL NO. OF PERSONALTY ITEMS = 0 S.J.N. 0038260 PID 10029

REFERENCE NO.	SIDE	STATION		MONUMENT BOX ADJUSTED TO GRADE
		FROM	TO	
1-MB	€	408+00		1
*TOTALS				1

ERIE COUNTY OXFORD TOWNSHIP SECTION 2. LOT 6
 7-5N R-23W JESSE HUMMEL'S 7TH SUBDIVISION PLAT VOL.17, PAGE 17
 ALL FENCE WITHIN THE EXISTING RIGHT OF WAY SHALL BE REMOVED UNDER ITEM 201 - CLEARING AND GRUBBING.
 *CARRIED TO THE GENERAL SUMMARY



REV. BY	DATE	DESCRIPTION

PLAN AND PROFILE C.R. 13
 STA. 405+00 TO 409+00

ERI-C.R.13-5.18

I:\pr\RealEstate\Manuals\RW 3100 3300\Appendix A Sample Plans\2011_April\17 RW on Plan & Profile.dgn 14-APR-2011 9:31AM mwawski

Appendix – B Glossary

A.A.S.H.T.O.: American Association of State Highway and Transportation Officials.

Abutter's Rights: In the nature of private easements, conferred by law, to and from a public road, street, or highway; the law recognizes several kinds of abutter's rights:

- a) the abutter's right of "access", which is the right or reasonable access to and from the property.
- b) the abutter's right of "light, air, and view", which are commonly grouped together, and which mean: the right to receive light and air upon the property, and the right to see from and be seen upon the property.

Access Control: power of Government to restrict / control a property owner's right to create entrances and exits on a public road.

Access Management: A systematic process to manage the number, location and design of direct access points to the public road system in an effort to maintain traffic flow while providing adequate access to adjacent land.

Acquisition: The act or process of acquiring right of way; also sometimes refers to the area being acquired; see "Partial Acquisition", also "Taking".

Adverse Possession: The process of obtaining title to real property by making a continuous, adverse, notorious, exclusive, hostile claim by continuous possession for a statutory period of time

Aerial Mapping: Topographic mapping and digital terrain data produced from controlled aerial photographs.

Affidavit: A sworn or affirmed statement or declaration in written form.

Air Rights: The rights to the use of airspace above a given elevation from the ground or improvements; also called aerial rights; can be separated from the bundle of rights.

Alignment: The horizontal or vertical ground plan of a roadway. Alignments are usually described by grades, coordinates, bearings, and curve lengths.

Alternative: One of a number of specific transportation improvement proposals, alignments, options, or design choices.

Appraisal: An estimate of value, usually written, as of a certain date.

Appraiser: An individual who estimates market value.

Appropriation: The act of exercising the power of eminent domain; see also "Condemnation" and "Expropriation".

Appurtenant Easement: An easement that is attached to, benefits, and passes with the conveyance of the dominant estate.

Area of Joint Usage: The area of joint usage is the width of the proposed pavement and shoulders plus a minimum of two (2) additional feet on each side across the railroad property.

Assessment of Feasible Alternatives: Development and analysis of a limited number of feasible alternatives to decide which alternatives avoid or minimize impacts while meeting the project's purpose and need.

Appendix B - Glossary

At-grade Intersection: An intersection where the roadways join or cross at the same elevation.

Auditor's Permanent Parcel Number: A unique number attached to each parcel of land that is established by the auditor of the county in which it is located.

Average Daily Traffic (ADT): The average number of vehicles that pass a specified point during a 24-hour period.

Avigation Easement: The right, granted by the owner of land adjacent to an airport, to the use of the air space above a specific height for the flight of aircraft; may prohibit the property owner from using the land for structures, trees, signs, or stacks higher than the altitude specified; the degree of the restriction is dictated by the glide angle necessary for the safe use of the airfield's runway;

Azimuth: The angle between the true (meridian) north and an object; in surveying, it is measured clockwise from the north.

Backslope: The portion of the roadway between the side drainage ditch and the top of the cut, usually measured at a ratio of horizontal distances versus each foot of increase and elevation, i.e. 4 to 1 slope.

Base Map: 1) A map of the project's study area showing topography, roads, streams, project limits, Red Flags, and other items of interest. 2) In CADD, a file containing information for the project area, which is referenced into sheet files showing specific portions of the project.

Bearing Basis: The direction held on a line to which, all lines in the project are related to. This can be true North, Magnetic North or an Assumed Meridian.

Billboard: An advertising device that is used to advertise or to give information in a nature of advertising, or any part thereof, the advertising of information contents of which are visible from the main traveled way of any highway on the interstate system or primary system in this state.

Boundary Survey: A survey used to ascertain the boundary line, natural or artificial, dividing two parcels.

Break/Angle Points: The point where a line changes direction.

CADD Engineering Standards Manual:

<http://www.dot.state.oh.us/Divisions/ProdMgt/Production/CADD/Pages/CADDManual.aspx>

Centerline of Construction: The reference line used for construction of a project. Normally located at the median centerline on a divided highway or at the normal crown point located on an undivided highway.

Centerline of Right of Way: The reference line used for the right of way of a project. Normally located at the center of the highway's existing right of way.

Clear Zone: The roadside border area, starting at the edge of the traveled way, available for safe use by errant vehicles. The desired width is dependant upon traffic volumes and speeds, and on the roadside geometry.

Clearance Easement: An aviation easement which restricts the fee owners use of the land over a certain height, but does not allow for the frequent encroachment of aircraft into the encumbered air space.

Closure Calculations: A calculation of the bearings and distances contained within a legal description, which verifies if the bearings and distances create a fully encompassed shape within a specified tolerance.

Appendix – B Glossary

Commercial Property: Income producing property (e.g. office buildings, apartments, etc.)

Condemnation: The procedure by which the power of eminent domain is exercised whether it be established by statute or otherwise. In Ohio this term is interchangeable with “Appropriation”.

Construction Limits: Lines shown on a plan view which show the lateral extent of the work; Includes room for all construction activities, including demolition and removals.

Construction Plans: Drawings for the detailed construction of the improvement

Contiguous: Being in physical contact with; adjacent, touching, abutting.

Control Points: A term used to define an exact location established by a surveyor, usually having a numeric value for North and East coordinates and an Elevation.

Contour: A line connecting the points on a land surface which have the same elevation.

Controlled Access: A constraint upon unlimited access, ingress, egress and regress to and from a property and the adjoining highway facility.

Conveyance: The transfer of title to land from one person, or class of persons, to another by deed.

Coordination: A process whereby ODOT contacts, consults, and maintains communication with regulatory agencies to facilitate project development.

Cross Section: A laterally cut view at right angles to center line which shows elevation differences between the proposed grade and existing ground left and right of center line; this view shows the degree of cut or fill, back slopes, side slopes, ditch lines, limits of cut or fill and super elevation.

Deed: A written instrument conveying real property or an interest therein from a specified grantor to a specified grantee for a consideration with a description of a property conveyed and containing granting words.

Design Agency: The entity that is contracted by ODOT to prepare the right of way plans. For in-house design, the design agency is ODOT.

Dwelling: A house or other structure in which a person or persons live; a residence; abode; habitation; the apartment or building, or group of buildings occupied by a family as a place of residence.

Easement: A right acquired by one party to use or control property belonging to another party for a designated purpose.

Easement by Prescription: A right to use another’s land which is established by exercising this right over a period of time.

Egress: Act of going out or leaving.

Ellis: ODOT’s web-based project management system linking system forecasting, planning, financial management, and project delivery.

Eminent Domain: The power of the sovereign (and those to whom it has delegated the power) to take private property for public use, without the owner’s consent on payment of just compensation.

Appendix B - Glossary

Encroachment: The act of intrusion upon the property of another, usually occurring when items such as a house, sign, leach bed, well, drive, etc. are discovered to be on public property (right-of-way, etc.) without permission.

Encumbrance: A burden upon property that may diminish the value.

Environmental Document: Written report that summarizes environmental studies, potential impacts, avoidance, mitigation and evaluation of alternatives. The significance of the impacts will determine the level of document (i.e., Environmental Impact Statement, Environmental Assessment or Categorical Exclusion) required.

Existing Right of Way: The present limits of the state or agency owned right of way.

Expressway: A divided arterial highway with full or partial control of access and generally with grade separations at major intersections.

Expropriation: A governmental taking or modification of an individual's property rights by eminent domain.

Federal Project Number: A unique Identification number assigned to each project that is associated with federal financing.

Fee Simple: An absolute estate or ownership in property including the unlimited power of alienation.

Fill Slope: The portion of the roadway between the outside of the shoulder and the toe of the slope where the area has been filled.

Field Investigation: A site visit conducted to gather or verify data, define scope of work, perform analyses, and make decisions for specific projects.

Field Survey: Any type of survey work done at the project site, including topographic survey, location of boundary monuments, recovery survey, control survey, etc.

Final Tracings: Completed construction plans plotted on reproducible material (usually Mylar).

Freeway: An expressway with full access control and no at grade intersections.

Frontage Road: A roadway which permits access to properties facing another, generally parallel, roadway to which there is no access.

Gantt Chart: A schedule showing individual tasks, their durations and interrelationships.

Gaps: A term used to denote an area of unknown/uncertain title rights. Occurs when the titles do not come together to form one line.

General Warranty: A guarantee in a deed by the grantor to defend the title against all defects either before or after the grantor became the owner of the property.

Geographic Information System (GIS): A computerized data management system designed to capture, store, retrieve, analyze, and report on geographic and demographic information.

Grade Separation: A crossing of two roadways, or a roadway and a railroad, or a roadway and a pedestrian walkway or bike path in such a way (by the provision of crossing structures) that neither facility interferes with the operation of the other.

Appendix – B Glossary

Grantee: Party to whom property is transferred by deed (buyer).

Grantor: Party who transfers property by deed (seller).

Gross Take: Area enclosed within a parcel of proposed right of way, this area includes existing right of way where underlying fee extends into the existing easement or where the proposed right of way overlaps existing lesser rights of way.

Highway Easement: An easement acquired specifically for highway purposes; used where highway right of way is not or cannot be acquired in fee.

Horizontal Curve: A circular arc (simple curve) used to connect tangent lines, “usually on the centerline of the right of way”.

Horizontal Datum: A grid reference, usually tied to State Plane Coordinates and Latitude & Longitude.

Ingress: Act or right of entering.

Inlet: The waterway opening located at the upstream portion of a pipe or channel. The flow line or invert of a pipe can also be used to describe the inlet.

Land Contract: Contract for the purchase and sale of land upon execution of which title is transferred. Term commonly refers to an installment contract for the sale of land whereby purchaser receives the deed from the owner upon payment of final installment.

Landlocked: A piece of land belonging to one person and surrounded by land belonging to other persons.

Landlocked Remainder: The residue or remainder of a parcel after a partial taking or the acquisition of access rights, where the remainder has no legal access to or way to reach a public road.

Larger Parcel: Concept in condemnation which deals with the property from which the acquisition is taken; it could be all of one tract, part of one tract, or several tracts; it is based on physical contiguity, unity of use, and unity of ownership; the larger parcel must be established before the highest and best use can be determined.

Leach Field: A land area continuing leach lines for distribution of sewerage effluent into the soil.

Legal Description: A description of real property by government survey, metes and bounds, or lot numbers of a recorded plat including a description of any portion thereof subject to an easement or reservation. Must be complete enough that a particular parcel of land can be located and identified.

Lead In Course: Describes a line/direction from a clearly defined control station to the True Point of Beginning for the property in question (the beginning point of the parcel description).

Lien: a claim, encumbrance, or charge on property for payment of some debt, obligation or duty.

Limited Access: A prohibition of access except at certain public points such as interchanges.

Local-Let Project: A local transportation improvement project that is funded with Federal or State monies in which the local public agency assumes project administration duties.

Local Public Agency: State agency, local political subdivision, board, commission, or other governmental entity identified in the Ohio Revised Code as being eligible for assuming the administrative responsibilities for ODOT improvement projects.

Appendix B - Glossary

Major Project: A transportation improvement where the anticipated result of the improvement is expected to have a significant impact on the highway's public access, level of service, traffic flow, mobility patterns, or mode shares. They require substantial right of way acquisition or have a high degree of public controversy. Examples include new alignments (e.g., bypasses) and new interchanges.

Median: The portion of a divided highway separating the traveled ways from traffic in the opposite direction.

Median Barrier: A low concrete wall erected between lanes of highway traffic which is designed to keep vehicles from vaulting over into oncoming traffic.

Metropolitan Planning Organization (MPO): An organization formed by local elected officials and designated by the Governor that, in cooperation with the state, is responsible for transportation planning in urbanized areas. It serves as the forum for cooperative decisions making by principal elected officials of general local government.

Minimal Project: Transportation improvements generated by the traditional maintenance and preventive maintenance program as they relate to the development of the District Work Plan. These projects do not alter the basic highway cross section or geometry. They require no right-of-way acquisition and have minimal impacts on existing utilities. They have no impacts to environmental resources and require no environmental agency coordination. Minimal projects are likely to require only minor public involvement

Minor Project: Transportation improvements that generally are located on an existing alignment. Small adjustments to the existing alignment to improve geometric conditions may be involved. Substantial relocations of non-interstate roadways that do not result in significant environmental impacts also can qualify as Minor Projects. Minor projects and their associated impacts can be developed and approved through the Categorical Exclusion process. Examples include bridge replacement, culvert replacement, pavement widening, geometric realignment, and intersection upgrades including the addition of turn lanes.

Monument: A marker set to delineate boundaries of a tract of land or mark important features such as intersections of centerlines of roadway and section lines.

Net Residue: Is the area of land the property owner(s) retain after the project acquisition is completed.

Net Take: Is the area of the proposed taking excluding any existing road right of way.

National Environmental Policy Act of 1969 (NEPA): Requires all agencies to disclose and consider the environmental implications of their proposed actions. NEPA applies to all Federal agencies and most of the activities they manage, regulate or fund that affect the environment.

Occupancy: Taking possession of property and use of the same; said e.g. of a tenant's use of leased premises.

Offset: A point or position located from a centerline. Offset distance are measure to the left or right of the centerline.

O.A.C.: Ohio Administrative Code

O.R.C.: Ohio Revised Code

OUPS: Ohio Utility Protection Service

ODOT-Let Project: Project administered by the Ohio Department of Transportation.

Appendix – B Glossary

Outbuildings: Something used in connection with a main building. A small building appurtenant to a main building, and generally separated from it, e.g. outhouse; storage shed.

Overlaps: A term used to denote an area of unknown/uncertain title rights. Occurs when the titles extend beyond and into an abutters title rights creating an overlap in rights.

Parcel: A description of property, set forth in a conveyance, together with the boundaries thereof, in order to provide for easy identification.

Parent Tract: The entire property that could be subject to damages and/or benefits in a partial taking.

Permit: A document granting permission/right to do something.

Personal Property: All property that is not real property; “corporeal property” is a type of personal property which is tangible and moveable and not attached to or part of real estate, such as furniture; “incorporeal property” is a type of personal property which is intangible, such as ownership of stock, patents, copyrights, and so forth.

Personalty: Refers to items which are determined to be personal property.

PID: A unique Project Identification Number assigned by ODOT to every project.

Present Road Occupied (PRO): Area in which the property owner holds the underlying fee title to but is currently encumbered by Highway Easement.

Project: The actual improvements to be constructed upon the right-of-way; such as a highway, pipeline, drainage ditch, power line, etc.

Project Development Process (PDP): Process for the planning, design, and construction of ODOT projects that involves regular communication among technical disciplines,

Property Line: Boundary line of division between two properties/estates.

Proposed Right of Way: The right of way that is necessary to construct and maintain the proposed roadway.

Real Property; Land, improvements and all legal interests therein.

Realty: Refers to items which are determined to be real property.

Recorded Subdivision: A group of building lots, defined in a document called platted subdivisions / recorded subdivisions and kept on file by the County Recorder. Lots are conveyed by lot number rather than metes & bounds descriptions.

Red Flags: Locations of concern, including environmental and engineering issues, within the study area. Red Flags do not necessarily identify locations that must be avoided, but rather identify locations that will entail additional study coordination, creative management or design approaches, or increased right-of-way or construction costs.

Red Flag Summary: A document that identifies areas of concern that may entail additional study coordination, creative management or design approaches or could cause revisions to the anticipated scope of work, the proposed project development schedule, the estimated project budget, or the potential impacts of the project on the surrounding area.

Appendix B - Glossary

Residential Property: An area of land that has a zoning designation of residential and/or has individuals that claim occupancy.

Retaining Wall: Vertical walls, usually constructed of concrete, to hold back material.

Right of Way: A strip of land occupied or intended to be occupied by transportation and public use facilities, such as roadways, railroads, and utility lines. The land is either owned outright or controlled by easement by the public agency. Also, see ORC 4511.01 Traffic Laws – Operation of motor vehicles definitions - (UU) "Right of way".

Right of Way Designer: shall design and arrange the right of way plan sheets and other right of way plan work as necessary to fulfill the scope of services document and the Department's Policy and Procedure Manuals.

Right of Way Plans: A portion of a highway plan showing a graphical representation of a highway improvement and its relation to adjacent property, the parcel or portions thereof needed for highway purposes, and other pertinent information.

Right of Way Reviewer: shall perform a comprehensive review of the boundary resolution, right of way plans and legal descriptions. Provide a completed Right of Way Checklist (see Appendix H) with each review submissions as well as a Right of Way Legal Description Checklist (see Appendix I) with the Final Right of Way submission and Right of Way Tracings. The Final Right of Way submittal and the Right of Way Tracings submittal shall include a copy of the District review comments as well as the disposition of each comment.

Riparian Rights: The right to access to and use of waters that border a person's property.

Scenic Easement: An easement acquired to preserve a particular view for the future enjoyment of the public.

Scope of Services: Document that details specific project requirements and responsibilities. Used for both consultant and in-house services.

Service Road: Sometimes referred to as a Frontage Road or Access Road, it is a roadway generally running parallel to the mainline, which provides access to commercial, residential, or farm area.

Shoulder: The portion of the roadway adjacent to the traveled way provided for the accommodation of stopped vehicles and for lateral support of the road.

Sight Distance: The length of unobstructed line of sight from a given point in a given direction; important where traffic from one traveled way intersects another or where traffic crosses an oncoming traffic lane.

Slope Easement: If permanent, an easement to affect and maintain slopes, usually along a roadway or ditch line; if temporary, an easement to construct slopes where slope area reverts to fee owner after construction or after a designated time.

Special Warranty Deed: Deed in which the grantor warrants the title only against defects arising after he acquired the property.

Spiral Curve: General, the Euler spiral, which is also known as the clothoid, is used in the design of spiral transition curves. The radius varies from infinity at the tangent end of the spiral to the radius of the circular arc at the end that adjoins the circular arc. By definition, the radius of curvature at any point on an Euler spiral varies inversely with the distance measured along the spiral. In the case of a spiral transition

Appendix – B Glossary

that connects two circular curves having different radii, there is an initial radius rather than an infinite value. In simple terms it is a curve that has an ever increasing/decreasing radius.

A transition curve between a straight and a curve where the curvature (the reciprocal of the radius) is proportional to the distance along the curve from its tangent point with the straight.

Stations: Measuring system based on specified intervals; used in highway plans with reference to a monumental line such as a centerline or baseline.

Straight Line Distance: A system used to identify the location of a state highway system, measured from West to East or South to North from the county line or from when the route begins within the county.

Structure: Any formation that was constructed or built by man. For the purpose of this manual structures typically reference buildings and not bridges, however construction plans refer to bridges as a structure.

Subsurface Utility Engineering (SUE): Provides data on existing utilities through four progressive quality levels. Quality Level D gathers information from a review of existing records. Quality Level C gathers information from a visual survey of existing features. Quality Level B gathers horizontal mapping based on field markings, surveying, and surface geophysical methods. Quality Level A gathers three dimensional mapping using vacuum excavation of test holes.

Suburban: A neighborhood which is neither rural nor urban, but has some of the characteristics of both.

Taking: In condemnation, a taking is when an entity with the power of condemnation appropriates a property right owned by either a private individual or another entity with the right of condemnation; a taking can be a formal taking or an act that results in a taking; in either case, the entity that effects the taking must pay just compensation.

Temporary Construction Easement: An easement on property to use or construct on and use the land for a specific purpose for a specified time period.

Temporary Road: Any crossover, ramp, roadway, etc. Whose sole purpose is to temporarily maintain traffic during construction which is normally removed upon project completion.

Title Search: An investigation of public records and documents to ascertain the history and present status of a property.

Topography: Physical features of an area (including trees, signs, buildings, contours, etc.)

Typical Section: A portion of a highway plan showing proposed cross-sectional views of the pavement and roadway.

Uneconomic Remnant: A remainder property of little or little value.

Utility Easement: The right for a utility to use and occupy land and to maintain a facility upon the land, frequently limited as to type of facility and usually limited as to location on the land.

Work Limits: The extreme limits of the contractor's responsibility on a project including all temporary and incidental construction (except temporary traffic control devices).

Zoning: The division of an area into districts or sections and the public regulation of the character and intensity of use of land and improvements therein.

Appendix C – Laws Governing R/W

ROAD RIGHT OF WAY

From 1792 to 1804 any width necessary, unless a width is stated

From 1804 to 1806 any width necessary, not over 66 feet

From 1806 to 1809 any width necessary, not over 60 feet

From 1809 to 1816 any width necessary, not over 66 feet

From 1816 to 1820 any width necessary, not over 60 feet

From 1820 to 1824 any width between 30 feet and 60 feet with a specific width to be set forth in Commissioners order.

From 1824 to 1844 all county roads 60 feet wide

From 1844 to 1853 any width between 40 and 60 feet , the width to be recorded

From 1853 to 1915 any width between 30 and 60 feet to be determined by viewers.

From 1915 to present time any width over 30 feet

Between 1867 and 1880 the County Commissioners had the power to increase or reduce the width of any County or Township road, provided that they were not increasing or decreasing more than the limits allowed by law

GENERAL LAWS OF THE STATE OF OHIO RELATING TO THE WIDTH OF COUNTY ROADS

.....

- **Vol. II, page 210**

It shall be the duty of said Commissioner to order the said road to be opened a necessary width, not exceeding sixty-six feet, and made in respects convenient for the passage of travelers and cause a record therefor to be made which thenceforth shall be deemed a public road.

February 17, 1804

- **Vol. XIV, page 226**

They (the Commissioners) shall order such road to be opened a necessary which not exceeding sixty feet and made in other respects convenient for the passage of travelers and carriages and cause a record thereof to be made, which road thenceforth shall be deemed a public highway.

February 16, 1816

- **Vol. XVII, page 197**

They (the Commissioners) shall order such roads to be opened a necessary width not exceeding sixty nor less than thirty feet and the Commissioners shall set forth in their order the width of said road according to the utility of the road.

February 26, 1820

- **Vol. XXII, page 305**

All county roads shall be sixty feet wide.

February 26, 1824

Appendix C – Laws Governing R/W

- **Swan And Critchfield**

- Vol. II, page 1290**

- All County and Township roads shall hereafter be laid out and established agreeably to the provisions of this act; and shall not be less than thirty nor more than sixty feet wide, and in all cases the width of such roads shall be determined by the viewers of the same as hereinafter provided

- February 27, 1853

- **Soc, 4637 Revised Statutes**

- All County roads hereafter laid out and established shall not be less than thirty and more than sixty feet wide to be determined by the viewer as herein provided

- April 15, 1892

- **Sec 6861, G.C.**

- All public roads hereafter located and established by the County Commissioners shall be of such width, not less than thirty feet, as may be determined by the County Surveyor, subject to approval of the County Commissioners.

- September- 1915

- **Note--** From 1804 to 1824 width should be found in Commissioners' order to Township Trustees. 1824 to 1853, no mention of width will be found in any order or report. 1853 to 1915, width is to be fixed by viewers in their report.

- From 1915 to Present date, width is determined by County Surveyor, Subject to approval of County Commissioners.

.....

OHIO ROAD LAWS ESTABLISHED WIDTHS

Date 2-17-1804 Vol. Page 2-207

".....It shall be the duty of said Commissioners to order said road to be opened a necessary width, not exceeding 66 feet"

Date 1-22-1806 Vol. Page 4-13

(Repeal 2-207, 3-435 and all previous acts) ".....shall order said road to be opened not exceeding 50 feet in width

Date 2-20-1809 Vol. Page 7-126, 8-567

(Repeal 4-13) ".....shall order such roads to be opened a necessary width not exceeding 66 feet"

Date 2-16-1816 Vol. Page 14-223

(Repeal 7-125, 8-567) ".....shall order a road opened necessary width , not exceeding 60 feet."

Appendix C – Laws Governing R/W

Date 2-26-1820 Vol. Page 18-193

(Repeal 14-223) “.....Commissioners shall set forth in their order the width of the road, not exceeding 60 feet nor less than 30 feet”

Date 2-25-1824 Vol. Page 22-303

“.....that whom the General Assembly shall by law authorize any state roads or roads to be laid out and established”“they shall be 66 feet in width”

Date 2-26-1824 Vol. Page 22-305

(Repeal 18-193) “.....that all roads and highways which have been or may hereafter be laid out and established agreeable by law, within this State, shall be opened and kept in repair or in manner hereinafter provided,..... “and all county roads and township roads shall hereafter be laid out and established agreeably to the provisions of this act” and all county roads shall be 60 feet wide.

Date 3-14-1831 Vol. Page 29-353

(Repeal 22-303)..... “and all state roads that shall be hereafter established agreeably to the provisions of this act shall be opened and considered public highways 60 feet wide.” Effective October 11, 1831

Date 3-14-1831 Vol. Page 29-358

(This act supercedes all previous county road acts) “That all roads and highways which have been, or may hereafter be laid out and established agreeably to law, within this State, shall be opened and kept in repair in the following manner” “and all County roads shall be 60 feet wide.” Effective October 1, 1831

Date 3-11-1831 vol. Page 29-365

(All laws and parts of laws contrary to this act are repealed) Effective June 1, 1831

Date 2-15-1844 Vol. Page 42-18

(Amendment to 29-359 and repeal that part of 29-358 requiring that all county roads shall be 60 feet wide) “County Commissioners, when they shall establish any county road, shall cause to be entered on their records the width of such road, provided such road shall not be opened less than forty nor more than 60 feet wide” “.....and upon petition the Commissioners may reduce the width of any road which has been already laid out and established, to a width not less than 40 feet. This law does not apply to Hardin, Allen, Van Wert, Pitnam, Williams, Henry, and Lucas counties.

Appendix C – Laws Governing R/W

Date 1-27-1853 Vol. 51-303

(Repeal 29-356,42-18,29-365 provided that it shall not affect done according to proceeding acts) “.....That all county and township roads shall hereafter be laid out and establishednot less than 30 nor more than 60 feet, and in all cases shall be determined by the viewers. Effective March 1, 1853

Date 2-7-1853 Vol. Page 51-327

“That part of Act 51-303 which roads “This act shall take effect and be in force from and after the first day of March, 1853, be, and the same is hereby repealed.

Date 3-11-1853 Vol.51-388

(Repeal 29-353) “.....That all state roads be hereafter laid out by petition to the County Commissioner”.....roads shall be opened and considered public highways 60 feet wide”

Date 4-7-1865 Vol. 62-98

(Repeal 51-303) “..... That all county roads and highways which shall hereafter be laid out and established, shall be not less than 30 nor more than 60 feet wide and in all cases the widths shall be determined by the viewer of the same.” Effective April 7, 1865

Date 3-27-1867 Vol. 64-68

“County Commissioners of their respective counties and Trustees of their respective townships shall have power to increase or reduce the width of any county or township roads, provided they are not increasing more than the maximum or minimum limits fixed by law” Effective March 27, 1867

Date 1-1-1880 R.S. 4637

(Revised Statute 4637 supercedes all previous acts) “.....all County roads hereafter laid out and established shall not be less than 30 nor more than 60 feet wide, to be determined by the viewer of the same as hereinafter provided, except that when the road is upon a state line, the County Commissioners may determine the width, not less than 15 nor more than 30 feet of land to be taken in this state.

Date 4-27-1896 Vol. Page 92-748

“All turnpikes in Pickaway County shall be 45 feet wide when laid out with side track and 40 feet wide when laid out without side track.”

Date 5-17-1915 Vol. Page 106-574 (General Code 6851)

All public roads hereafter located and established by the County Commissioners shall be of such width, not less than 30 feet as may be determined by the County Surveyor subject to the approval of the County Commissioners.

Appendix C – Laws Governing R/W

Establishment of Width When Records Have Been Lost

Section 12358 General Code relates to lost road records and roads as follows; “As to all county roads where records have been lost or destroyed as aforesaid (by fire, riot, or civil commotion) and are not reproducible under the next four preceding sections prima facie. The center of the road as now fenced shall be taken as the true center and prima facie the width of such road shall be 60 feet.

Appendix D – Survey Certification

The information contained in the sample certifications is required by ORC 4733.14. It is expected that the involved surveyor's will modify the certification language to suit the circumstance of a given project.

Surveyor certifications are required for all projects that involve:

- Acquisition of additional right of way,
- Establishment or reestablishment of the centerline of right of way, or
- Retracement of existing property boundaries,
- Legal Descriptions prepared for right of way plans

All Minor and Major ODOT Projects will require surveyor certification. Minimal Projects do not usually require this certification.

The following sheets present standard clauses and possible project specific variations that should be used by the Professional Surveyor to clarify the work that they are certifying and the level of accuracy used. Each Professional Surveyor doing work on a project shall certify and seal the plan for the work they are responsible for. Depending on the circumstances there may only be one person certifying and sealing a plan or there may be many individuals.

The sample certification titled “**Right of Way Plan Certification**” is to be used when one individual has responsibility for the entire (existing and proposed) Right of Way Plan.

The sample certification titled “**Proposed Right of Way Plan Certification**” is to be used when one individual has responsibility for the proposed Right of Way Plan only.

The sample certification titled “**Existing Right of Way Plan Certification**” is to be used when one individual has responsibility for the existing Right of Way Plan only.

If **Subsurface Utility Location** is done by a third party then the third party will need to certify and seal the plan noting the work that **was performed**.

The certifications are shown on the following pages with an explanation of the items that may need to be modified on a project by project basis.

Appendix D – Survey Certification

Right of Way Plan Certification

- A I, John D. Doe, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation on February 3, 2003. The results of that survey are contained herein.
- B Underground utility locations are shown for informational purposes only. Though they are believed to be accurate, their location is as marked on the ground by the utility company per OUPS and OGPUPS Confirmation Number 12345x78 and those markings subsequently being surveyed as a part of this project.
- C The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinates System, (North or South) zone on NAD 83 (CORS 96) datum. The Project Coordinates (US Survey Foot) are relative to State Plan Grid Coordinates (meters or US Survey Feet) by a Project Adjustment Factor of 0.999999999.
- D As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for property takes contained herein.
- E As a part of this project I have established the proposed property lines, calculated the Gross Take, present roadway occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire the parcels as shown herein.
- F As a part of this work I have set right of way monuments at property corners, property line intersections, points along the right of way and/or angle points on the right of way, Section Corners and other points as shown herein.
- G All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted.
- H The words “I” and “my” as used herein are to mean that either myself or someone working under my direct supervision.

John D. Doe, Professional Land Surveyor # 0000,

Date: _____

SEAL

Appendix D – Survey Certification

Notes as to changes that may need to be made to Right of Way Plan Certification:

- A The Certifying individual needs to insert his name and change the date to reflect the date of his survey.
- B This paragraph may be omitted if Utility Locations have been provided by a third party. However, that third party also needs to certify and seal the plan as to his methodology for locating the utilities. If you are certifying the locations of the utilities, this paragraph will need to be modified to reflect your methodology. Also, the OUPS and OGPUPS Confirmation number will need to be entered.
- C This paragraph needs to be modified to reflect how the coordinates for the project were determined, what coordinate system was used, what control points were used, and the appropriate project adjustment factor.
- D No changes are needed in this paragraph.
- E No changes are needed in this paragraph.
- F No changes are needed in this paragraph.
- G The Certifying individual may wish to add notes to this paragraph explaining any abridgement to OAC 4733-37.
- H No changes are needed in this paragraph.
- * * The Certifying individual may rearrange these items to suit the space on the plans.

Appendix D – Survey Certification

Proposed Right of Way Plan Certification

- A I, John D. Doe, P. S. have established the proposed property lines, calculated the Gross Take, present roadway occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire these parcels as shown herein.
- B As a part of this work I have set right of way monuments at property corners, property line intersections, points along the right of way and/or angle points on the right of way, Section Corners and other points as shown herein.
- C All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted.
- D The words I and my as used herein are to mean that either myself or someone working under my direct supervision.

John D. Doe, Professional Land Surveyor # 0000,

Date: _____

SEAL

Appendix D – Survey Certification

Notes as to changes that may need to be made to Proposed Right of Way Plan Certification:

- A The Certifying individual needs to insert his name.
- B No changes are needed in this paragraph.
- C No changes are needed in this paragraph.
- D No changes are needed in this paragraph.
- * * The Certifying individual may rearrange these items to suit the space on the plans.

Appendix D – Survey Certification

Existing Right of Way Plan Certification

- A I, John D. Doe, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation on February 3, 2003. The results of that survey are contained herein.
- B Underground utility locations are shown for informational purposes only. Though they are believed to be accurate, their location is as marked on the ground by the utility company per OUPS and OGPUPS Confirmation Number 12345x78 and those markings subsequently being surveyed as a part of this project.
- C The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinates System, (North or South) zone on NAD 83 (CORS 96) datum. The Project Coordinates (US Survey Foot) are relative to State Plan Grid Coordinates (meters or US Survey Feet) by a Project Adjustment Factor of 0.999999999.
- D As a part of this project I have reestablished the locations of the existing property lines and centerline of existing Right of Way for property takes contained herein.
- E All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted.
- F The words I and my as used herein are to mean that either myself or someone working under my direct supervision.

John D. Doe, Professional Land Surveyor # 0000,

Date: _____

SEAL

Appendix D – Survey Certification

Notes as to changes that may need to be made to Existing Right of Way Plan Certification:

- A The certifying individual needs to insert his name and change the date to reflect the date of his survey.
- B This paragraph may be omitted, if Utility Locations have been provided by a third party. However, that third party also needs to certify and seal the plan as to his methodology for locating the utilities. If you are certifying the locations of the utilities, this paragraph will need to be modified to reflect your methodology. Also, the OUPS and OGPUPS Confirmation number will need to be entered.
- C This paragraph needs to be modified to reflect how the coordinates for the project were determined, what coordinate system was used, what control points were used, and the appropriate project adjustment factor.
- D No changes are needed in this paragraph.
- E No changes are needed in this paragraph.
- F No changes are needed in this paragraph.
- * * The Certifying individual may rearrange these items to suit the space on the plans.

Appendix D – Survey Certification

Example: Right of Way Plan Certification

I, John D. Doe, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation on February 3, 2003. The results of that survey are contained herein.

Underground utility locations are shown for informational purposes only. Though they are believed to be accurate, their location is as marked on the ground by the utility company per OUPS Confirmation Number 12345x78 and those markings subsequently being surveyed as a part of this project.

The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinates System, -South zone on NAD 83 (CORS 96) datum. The Project Coordinates (US Survey Foot) are relative to State Plan Grid Coordinates (US Survey Feet) by a Project Adjustment Factor of 0.99999999.

As a part of this project I have reestablished the locations of the existing property lines and the existing centerline of Right of Way for property takes contained herein.

As a part of this project I have established the proposed property lines, calculated the Gross Take, present roadway occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire the parcels as shown herein.

As a part of this work, I have set right of way monuments at property corners, property line intersections, points along the right of way and/or angle points on the right of way, Section Corners and other points as shown herein.

All of my work contained herein was conducted in accordance with the Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted.

The words I and my as used herein are to mean that either myself or someone working under my direct supervision.

John D. Doe Professional Land Surveyor # 0000

Date: _____

SEAL

Appendix D – Survey Certification

Example: Proposed Right of Way Certification

I, John D. Doe, P. S. have calculated the proposed property lines, Gross Take, present roadway occupied (PRO), Net Take and Net Residue; as well as prepared the legal descriptions necessary to acquire these parcels as shown herein.

As a part of this work I have set right of way monuments at property corners, property line intersections, points along the right of way and/or angle points on the right of way, Section Corners and other points as shown herein.

All of my work contained herein was conducted in accordance with Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted.

The words I and my as used herein are to mean that either myself or someone working under my direct supervision.

John D. Doe, Professional Land Surveyor # 0000,

Date: _____

SEAL

Appendix D – Survey Certification

Example: Existing Right of Way Plan Certification

I, John D. Doe, P. S. have conducted a survey of the existing conditions for the Ohio Department of Transportation on February 3, 2003. The results of that survey are contained herein.

Underground utility locations are shown for informational purposes only. Though they are believed to be accurate, their location is as marked on the ground by the utility company per OUPS Confirmation Number 12345x78 and those markings subsequently being surveyed as a part of this project.

The horizontal coordinates expressed herein are based on the Ohio State Plane Coordinates System, South zone on NAD 83 (CORS 96) datum. The Project Coordinates (US Survey Foot) are relative to State Plan Grid Coordinates (US Survey Feet) by a Project Adjustment Factor of 0.999999999.

As a part of this project I have reestablished the locations of the existing property lines and the existing centerline of Right of Way for property takes contained herein.

All of my work contained herein was conducted in accordance with Ohio Administrative Code Chapter 4733-37 Standards for Boundary Surveys unless so noted.

The words I and my as used herein are to mean that either myself or someone working under my direct supervision.

John D. Doe, Professional Land Surveyor # 0000,

Date: _____

SEAL

Appendix E - Plat Legal Description

The sample legal description below is to be used when only right of way plans are prepared using the Right of Way Plat format described in Section 3109.4 of the Right of Way Plan Manual. For direction on how to prepare a standard legal description for ODOT see section 3300 Legal Description.

Sample Right of Way Plat Legal Description

"Situated in the State of Ohio, Warren County, Clear Creek Township, Section 35 and Section 36, Township 4 East, Range 4 North, being part of a 9.820 acre tract described in Official Record 473, Page 25, and Official Record 1012, Page 551 in the Warren County Recorders Office, and being Parcel 8 WD on the right side of the centerline of right of way State Route 48, as shown on the Centerline Plat and Right of Way plans recorded August 28, 2005, in Plat Record Volume A, Slide 578, in said Warren County Recorders Office, containing 0.5412 acres, of which 0.2793 acres is PRO (Present Roadway Occupied), leaving a net take of 0.2619 acres, more or less, subject to legal highways and other easements of record.

Bearings for the above description are based upon the Ohio State Plane Coordinate System, NAD 83, South Zone.

Iron pins set, as shown on said Right of Way plans in the above description, are 3/4 by 30 inch reinforcing rod with an aluminum cap stamped "ODOT R/W"

The above legal description is based on Official Records 473 & 1012, Pages 25 & 551.

The Gross Take from Auditors Tax Parcel 09-35-200-006 is 0.1309 acres.

The P.R.O. in Take for Auditors Tax Parcel 09-35-200-006 is 0.1074 acres.

The Gross Take from Auditors Tax Parcel 09-35-200-006 is 0.4103 acres.

The P.R.O. in Take for Auditors Tax Parcel 09-35-200-006 is 0.1719 acres.

Description prepared by John J. Doe, P.S., Registered Surveyor No. 0000. Based upon a survey by the Ohio Department of Transportation, District 8 as shown on said Centerline Plat and the right of way plans for WAR-48-21.05, dated April 4, 1999, a complete set consists of 101 sheets."

Appendix F – Affidavit of Correction

Affidavit of Correction

I, John J Doe, hereby state that right-of-way take for parcel 94WLR and the ownership of parcel 69, pages 6, 11, 13, 28, 32, 43, 45 and 49 of the Ohio Department of Transportation - Project ATH-33-30.98, recorded in Plat Envelopes 514 A & B of the Athens County Recorders Office, shall be changed and made part of the permanent record. The recorder shall cause to be made a notation on the original plat.

Signature of Affiant
John J Doe, P.S.

This document was prepared by John Noah Luck for the Ohio Department of Transportation, District 1

Sworn to and before me
Notary Public

Appendix F – Affidavit of Correction

Sample Cover Letter for Affidavit of Correction

November 29, 2001

Local County Recorder
Local Courthouse
Wherever, Ohio 99999

Dear County Recorder:

Please find attached an Affidavit of Correction. This Affidavit pertains to ODOT project MEG-124-31.57, recorded in Plat Records 4, Page 453 of Meigs County.

Please record this Affidavit and make marginal entries in the blanks provided on sheet 3 (list all sheets that it pertains to) of the above plans to direct people to it.

Thank you for your help in this matter.

Respectfully,

John J Doe
District Real Estate Administrator

Appendix G – Sample Temporary Release

Release of Temporary Right of Way

I, the affiant, am hereby stating that:

Construction of Ohio Department of Transportation - Project ATH-33-30.98 is complete.

Temporary Right-of-Way take for parcel (List all T-Parcels) of the Ohio Department of Transportation - Project ATH-33-30.98, recorded in Plat Envelopes 514 A & B of the Athens County Recorders Office, are no longer needed and are hereby released.

The Athens County Recorder shall cause to be made (a) notation(s) of this release in the blank(s) provided on the Summary of Additional Right of Way Sheet(s) in the original plat, recorded as stated above.

Signature of Affiant

John J Doe, P.E.

This document was prepared by John Doe for the Ohio Department of Transportation, District 1

Sworn to and before me
Notary Public

Appendix G – Sample Temporary Release

Sample Cover Letter for Release of Temporary Right of Way

November 29, 2001

Local County Recorder
Local Courthouse
Wherever, Ohio 99999

Dear County Recorder:

Please find attached a Release of Temporary Right of Way. This Release pertains to ODOT project MEG 124-31.57, recorded in Plat Records 4, Page 453 of Meigs County.

Please record this Release and make entries in the blanks provided on sheet 3 of the above plans to direct people to this Release.

Thank you for your help in this matter.

Respectfully,

John Doe
District Real Estate Administrator

Appendix H – Right of Way **Review Checklist**

The following is a tabulation of the items addressed for each plan sheet in this manual. It provides a good, concise guide against which a right of way plan can be checked for completeness before submission.

Project: _____
 Date: _____ PID NO.: _____

R/W Designer: _____
 R/W Reviewer: _____

- Preliminary Right of Way Plans
- Final Right of Way Plans

* Denotes items required for the Preliminary Right of Way Submission

Right of Way Legend

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> 1A *Title Block | <input type="checkbox"/> 1D *Utility List and Note | <input type="checkbox"/> 1G *Project Description | <input type="checkbox"/> 1J Parcel Identifier Legend |
| <input type="checkbox"/> 1B *Sheet Heading | <input type="checkbox"/> 1E *Conventional Symbols | <input type="checkbox"/> 1H *Plans Prepared By | <input type="checkbox"/> 1K Location Map |
| <input type="checkbox"/> 1C *Structure Key | <input type="checkbox"/> 1F *Index of Sheets | <input type="checkbox"/> 1I Survey Certification | <input type="checkbox"/> Limited Access Declaration |

Centerline Plat

- | | | | |
|--|--|--|--|
| <input type="checkbox"/> 2A *Title Block | <input type="checkbox"/> 2E *Basis for Bearings | <input type="checkbox"/> 2I *Intersections w/ C/L of R/W | <input type="checkbox"/> 2M Survey Certification |
| <input type="checkbox"/> 2B *Sheet Heading | <input type="checkbox"/> 2F *Basis of Existing R/W | <input type="checkbox"/> 2J *Subdivision & Survey | |
| <input type="checkbox"/> 2C *Monument Table | <input type="checkbox"/> 2G *C/L of R/W Data | <input type="checkbox"/> 2K *C/L Monument Note | |
| <input type="checkbox"/> 2D *Monument Legend | <input type="checkbox"/> 2H *Centerline Stationing | <input type="checkbox"/> 2L *Recording Block | |

Property Map

- | | | | |
|---|--|---|--|
| <input type="checkbox"/> 3A *Title Block | <input type="checkbox"/> 3E *Owner Name & Number | <input type="checkbox"/> 3I *Subdivision & Survey | <input type="checkbox"/> 3M *Roads, Waterways, Lakes & R.R |
| <input type="checkbox"/> 3B *Sheet Heading | <input type="checkbox"/> 3F *Centerline Stationing | <input type="checkbox"/> 3J *Property Lines | <input type="checkbox"/> 3N *Closures, Gaps and Overlaps |
| <input type="checkbox"/> 3C Station Limit Flags | <input type="checkbox"/> 3G *Prop. R/W & Pavement | <input type="checkbox"/> 3K *Utility Easements | <input type="checkbox"/> *Adjoining Project Data |
| <input type="checkbox"/> 3D *Revision Block | <input type="checkbox"/> 3H *Structures | <input type="checkbox"/> 3L *Driveways | <input type="checkbox"/> *Match Lines |

Summary of Additional Right of Way

- | | | | |
|--|--|--|---|
| <input type="checkbox"/> 4A *Title Block | <input type="checkbox"/> 4G *Auditor's Record Area | <input type="checkbox"/> 4M Net Residue | <input type="checkbox"/> 4S Total No. Of Tabulation |
| <input type="checkbox"/> 4B *Owner No. & Parcel Ident. | <input type="checkbox"/> 4H *Total P.R.O. | <input type="checkbox"/> 4N *Type Fund | <input type="checkbox"/> 4T *Parcel Identifier Legend |
| <input type="checkbox"/> 4C *Ownership Name | <input type="checkbox"/> 4I Gross Take | <input type="checkbox"/> 4O *Remarks Column | <input type="checkbox"/> 4U *Revision Block |
| <input type="checkbox"/> 4D Sheet Number | <input type="checkbox"/> 4J P.R.O. In Take | <input type="checkbox"/> 4P As Acquired | <input type="checkbox"/> 4V *Grantee Note |
| <input type="checkbox"/> 4E *Owners Record | <input type="checkbox"/> 4K Net Take | <input type="checkbox"/> 4Q *Temporary Parcel Duration | |
| 4F *Auditor's Parcel No. | <input type="checkbox"/> 4L *Structures | <input type="checkbox"/> 4R *Restriction of Use | |

Appendix H – Right of Way **Review** Checklist

Right of Way Detail Sheet

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> 5A *Title Block | <input type="checkbox"/> 5H *Proposed R/W & Parcel Boundary | <input type="checkbox"/> 5O *Proposed Pavement | <input type="checkbox"/> 5V *Stations and Offsets |
| <input type="checkbox"/> 5B *Sheet Heading | <input type="checkbox"/> 5I *Property Lines and Monuments | <input type="checkbox"/> 5P *Proposed Plan Items | <input type="checkbox"/> 5W Lead in Course(s) |
| <input type="checkbox"/> 5C Station Limit Flags | <input type="checkbox"/> 5J *Owner Name, No. and Parcel ID | <input type="checkbox"/> 5Q *Utilities | <input type="checkbox"/> 5X Non Public Easement |
| <input type="checkbox"/> 5D *Revision Block | <input type="checkbox"/> 5K *Roads, Waterways, Lakes &R.R | <input type="checkbox"/> 5R *Land Use | <input type="checkbox"/> *Intersections w/ C/L of R/W |
| <input type="checkbox"/> 5E *C/L of R/W Data | <input type="checkbox"/> 5L *Match Lines | <input type="checkbox"/> 5S *Address | <input type="checkbox"/> *Right of Way Fence |
| <input type="checkbox"/> 5F *Centerline Stationing | <input type="checkbox"/> 5M *Exist. Topographic Features | <input type="checkbox"/> 5T Bearing and Distance | <input type="checkbox"/> *Closer, Gaps and Overlaps |
| <input type="checkbox"/> 5G *Subdivisions & Survey | <input type="checkbox"/> 5N *Construction Limits | <input type="checkbox"/> 5U Right of Way Curve Data | |

Right of Way Topography Sheet

- | | | | |
|--|---|--|---|
| <input type="checkbox"/> 6A *Title Block | <input type="checkbox"/> 6H *Proposed R/W & Parcel Boundary | <input type="checkbox"/> 6O *Construction Limits | <input type="checkbox"/> Right of Way Fence |
| <input type="checkbox"/> 6B *Sheet Heading | <input type="checkbox"/> 6I *Property Lines | <input type="checkbox"/> 6P *Proposed Pavement | |
| <input type="checkbox"/> 6C Station Limit Flags | <input type="checkbox"/> 6J *Intersections w/ C/L of R/W | <input type="checkbox"/> 6Q *Proposed Plan Items | |
| <input type="checkbox"/> 6D *Revision Block | <input type="checkbox"/> 6K *Owner Name, No. and Parcel ID | <input type="checkbox"/> 6R *Utilities | |
| <input type="checkbox"/> 6E *C/L of R/W Data | <input type="checkbox"/> 6L *Roads, Waterways, Lakes &R.R. | <input type="checkbox"/> 6S *Land Use | |
| <input type="checkbox"/> 6F *Centerline Stationing | <input type="checkbox"/> 6M *Match Lines | <input type="checkbox"/> 6T *Address | |
| <input type="checkbox"/> 6G *Subdivisions & Survey | <input type="checkbox"/> 6N *Exist. Topographic Features | <input type="checkbox"/> 6U Non Public Easements | |

Right of Way Boundary Sheet

- | | | | |
|--|---|---|---|
| <input type="checkbox"/> 7A *Title Block | <input type="checkbox"/> 7F *Intersection w/ C/L of R/W | <input type="checkbox"/> 7K *Match Lines | <input type="checkbox"/> 7P *Closure, Gaps and Overlaps |
| <input type="checkbox"/> 7B *Sheet Heading | <input type="checkbox"/> 7G *Subdivisions & Survey | <input type="checkbox"/> 7L Bearing and Distance | <input type="checkbox"/> *Roads, Waterways, Lakes & R.R |
| <input type="checkbox"/> 7C *Revision Block | <input type="checkbox"/> 7H *Proposed R/W & Parcel Boundary | <input type="checkbox"/> 7M Right of Way Curve Data | <input type="checkbox"/> Non Public Easements |
| <input type="checkbox"/> 7D *C/L of R/W Data | <input type="checkbox"/> 7I *Property Lines and Monuments | <input type="checkbox"/> 7N *Stations and Offsets | |
| <input type="checkbox"/> 7E *Centerline Stationing | <input type="checkbox"/> 7J *Owner Name, No. and Parcel ID | <input type="checkbox"/> 7O Lead in Course(s) | |

Railroad Plat

- | | | | |
|---|--|--|--|
| <input type="checkbox"/> 8A *Title Block | <input type="checkbox"/> 8E *Valuation Survey Stationing | <input type="checkbox"/> 8I *Station & Offset to C/L | <input type="checkbox"/> 8M Overlap Tables |
| <input type="checkbox"/> 8B *Sheet Heading | <input type="checkbox"/> 8F *R.R. Property Lines | <input type="checkbox"/> 8J *Construction Limits | <input type="checkbox"/> 8N *Intersection Angle |
| <input type="checkbox"/> 8C *R.R. Centerline Data | <input type="checkbox"/> 8G *Centerlines R/W Data | <input type="checkbox"/> 8K *Proposed Pavement/Plan Items | <input type="checkbox"/> 8O *Valuation Reference |
| <input type="checkbox"/> 8D *Other Track Data | <input type="checkbox"/> 8H *Relationship of Stationing | <input type="checkbox"/> 8L *Owner Name, No. and Parcel ID | <input type="checkbox"/> Detail of footer easement |

Appendix I – Field Review Checklist

The Department recognizes that the R/W Designer/Reviewer alone may not be able to answer some of the questions regarding the review tasks below. However, the R/W Designer/Reviewer shall consult with the project design engineer, project manager and/or District REA to address all questions below.

County-Route-Section: _____ PID: _____ Date of Field Review: _____
 Review Performed By: _____ Phone Number of Reviewer: _____

Field review performed prior to what design review submission.

Preliminary Right of Way Right of Way Tracings Other: _____

This form is intended to document the Right of Way Designer/Reviewer's required field review of the project site.

	Item	Yes/No	Approximate Location of Deficiency/Other Comments
	<i>Were any of the following existing above ground features omitted or misidentified in the plans?</i>		
1	Roads (including pavement and shoulders)		
2	Waterways (e.g., streams, rivers, lakes, ponds, creeks, ditches, wetlands, etc.)		
3	Railroads		
4	Driveways (Commercial, Residential, Field) and drive pipes		
5	Buildings (e.g., residential and commercial structures, Out-buildings, etc.); including steps, overhangs, porches, sunroom, decks, etc. within 100' of take area		
6	Fences (private and limited access) and gates		
7	Catch basins, manholes, inlets, or other drainage features		
8	Retaining walls		
9	Mailboxes		
10	Sidewalks (private and/or public)		
11	Guardrail or Cable barrier		
12	Trees, bushes, shrubs, landscaping, planter boxes, etc.		
13	Curbs and gutters		
14	Non-highway signs (private) and billboards (ADC), including electrical connections		
15	Encroachment (supports and overhangs)		
16	Utility poles (power, telephone, cable, etc.) Applicable easements MUST be noted on plans.		
17	Water wells		

Appendix I – Field Review Checklist

	Item	Yes/No	Approximate Location of Deficiency/Other Comments
18	Oil/natural gas wells.		
19	Private poles (lighting, etc.)		
20	Sprinkler Systems		
21	Monuments (centerline and right of way)		
	<i>Is there evidence that any of the following below ground features have been omitted or misidentified in the plans?</i>		
22	Septic systems (leach fields, septic tanks, etc.)		
23	Underground utilities (gas, water, power, cable, telephone, oil, etc.) Applicable easements MUST be noted on plans.		
24	Underground storage tanks		
25	Cisterns		
26	Farm and field tiles		
27	Storm sewers and culverts		
28	Structural foundation (retaining wall, bridge, building, etc.)		
29	<i>Are all topographic items near construction limits identified as (Take or Save)?</i>		
30	<i>Does the type of take fit the construction work being performed?</i>		
31	<i>Does there appear to be sufficient room for construction access, including maintenance of traffic?</i>		
32	<i>Are land uses (e.g., residential, commercial, etc.) correctly identified?</i>		
33	<i>Does the general site topography (i.e., location of hill/valleys, etc.) appear to be correct?</i>		
34	<i>Does there appear to be sufficient room for utility relocation?</i>		
35	<i>Are there any other features that might impact the right of way plans?</i>		

Appendix J – R/W Description Checklist

Project: _____ PID NO.: _____
Date: _____ R/W Reviewer: _____

- Final Right of Way Plans
- Other

Instrument:

- Instruments acceptable for recording at the county recorder's office.
- Legals pre-approved by the county Engineer's Tax Map Office, Auditor's Office, GIS, etc. (as appropriate per county).
- Descriptions prepared on ODOT approved RX Form, with headers and pagination on each page.
- Caption with general location of the parcel (State, county, city, village, civil township, section, survey township tier, range, lot, block, etc.) Lying on the left or right side of survey, County-route-section, recording data for the centerline plat, if applicable.
- Lead in course, the point of beginning or commencement (shall start at a physical recoverable, recognized geographic point and a clearly defined control station) must be acceptable by the county and tied by station and offset to the centerline of the project.
- True Point of, Principal place of, Place of / Beginning (description of boundary monument used).
- Each course on separate line, with bearing, distance, specification of any monuments and intent with regard to adjoining.
- Auditor's permanent parcel number and a breakout of the PRO in the take.
- When an Auditor's Permanent Parcel number cannot be found provide a statement indicating as such.
- Name of person that prepared the description/instrument (surveyor's Ohio registration number, signature, date the description was prepared).
- Description based on a Survey by (name), (registration number), (date of survey).
- A citation to the public record of the appropriate prior deed(s).
- Provide a statement identifying the basis of bearing used in the description.
- Identification of any special reservations.
- Copy of closure calculations attached (Paper and/or Disk).

Appendix K – Monument Setting Policy

The goal of the following procedure is to properly set, reset and protect all monuments in accordance with state laws on boundary surveys.

1. A right of way design team will prepare the right of way plans and legal descriptions. The construction and right of way plans shall include pay items for all Monument Assemblies, Reference Monuments (Centerline Monument and Reference Monument) and Right of Way Monuments expected to be set and/or reset by the contractor's surveyor.
2. When right of way acquisition is complete, the Right of Way Monuments will be set as called for in the right of way plans. It is typical that Right of Way Monuments are set after the completion of acquisition for all parcels of a project. However, it is also permissible to set Right of Way Monuments for individual parcels of a multi-parcel project as the individual parcels are acquired.

The following scenarios are typical for setting Right of Way Monuments:

- a. An ODOT surveyor will set the Right of Way Monuments when plans are prepared by ODOT.
- b. The design consultant's surveyor will set the Right of Way Monuments when plans are prepared by a consultant.

In either case, it is preferable that all Right of Way Monuments be set by the original Right of Way Reviewer as per the Ohio Administrative Code Chapter 4733-37, "Standards for Boundary Surveys".

3. Prior to the start of earthmoving activities, the construction contractor will make a reasonable effort to verify the location of all survey monuments as shown in the right of way plans or construction plans, if no right of way plans are provided. Verifying the location shall include locating their positions relative to a project control network, traverse line or centerline using standard acceptable surveying measurements and techniques suitable to meet the requirements of OAC Chapter 4733-37-04, "Measurement Specifications". The construction contractor will submit to the Engineer a report and/or drawing with the coordinates, station, offset and a description of each monument found. The description shall include the size, material, condition, any cap stamping or markings, and notes describing any differences from the plan locations of the monuments.

If additional survey monuments not shown in the plans are found (either before or during construction), the contractor will protect, reference and preserve them in the same manner as the survey monuments shown in the plans. Also, when additional survey monuments are reported, by the contractor, the project engineer will contact the district project manager who will coordinate with the District Real Estate Administrator, the District Survey Operations Manager and the Right of Way Reviewer to determine the appropriate actions needed to address these monuments.

Appendix K – Monument Setting Policy

If the Contractor determines that the plans correctly reflect the location of survey monuments, the Contractor shall submit a report indicating that the locations of survey monuments have been verified and match the right of way and/or construction plans.

4. If disturbed, obliterated, relocated, and/or damaged survey monuments are found (by the construction contractor) and reported prior to the start of earthmoving activities, the project engineer will contact the district project manager and the District Real Estate Administrator who will contact and coordinate with the District Survey Operation Manager and the Right of Way Reviewer to determine who will reset the monuments. Resetting of monuments that have been disturbed, obliterated, and/or damaged prior to construction activities (e.g., by utility relocation activities) may be reset by any Professional Surveyor licensed in the State of Ohio.

When monuments are reset by the Right of Way Reviewer, payment for resetting monuments destroyed prior to construction will be included under the On-Going Consultant Services during the Construction Phase portion of the right of way design consultant's scope of services. When reset by the contractor's surveyor, payment will be in accordance with the construction contract.

5. If the installed location of any survey monuments differs from the location shown on the right of way plans, the District Real Estate Administrator, in consultation with the District Survey Operation Manager and/or Right of Way Reviewer, will determine if the survey monument can be left in place or must be reset.
6. When temporary right of way easements are purchased to construct the work and it is expected that the permanent Right of Way Monuments within the temporary easements may get destroyed in the performance of the work, a quantity for replacement of Right of Way Monuments expected to be destroyed within a temporary easement shall be included in the construction plans.

Any permanent Right of Way Monuments on or outside the right of way limits that are not enclosed within a temporary easement for the project will be the contractor's responsibility to protect. Upon completion of the final grading, any Right of Way Monuments destroyed by construction activities shall be replaced by the Contractor at no cost to the Department.

Appendix K – Monument Setting Policy

7. All survey monuments set and/or reset by the construction contractor's surveyor shall be constructed according to Standard Construction Drawing RM-1.1.

The construction contractor's surveyor is required to submit to ODOT a signed and sealed report and/or drawing identifying any survey monuments that were set and/or reset. The report will identify the station and offset relative to the centerline of right of way shown in the right of way plans, as well as the northing and easting coordinates relative to the project control coordinate datum defined in the plans.

For projects scoped after October 15, 2010, project control monuments shall be reset according to the Mapping and Survey Specification located at:

www.dot.state.oh.us/Divisions/ProdMgt/Aerial/Pages/StandardsSpecifications.aspx

8. In accordance with CMS 107.10 and/or Supplemental Specification 823, the contractor will not be reimbursed for the cost of repairing, replacing, resurveying, or resetting any survey monuments that they have disturbed, obliterated or damaged unless the survey monuments are noted and quantified in the contract documents or noted by the contractor in the construction contractor's preconstruction inventory report and/or drawing.