Use of the Income Approach in Valuing a Sand and Gravel Property in a Condemnation Proceeding

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INTRODUCTION

The legal concept of "Market Value" is applied by courts to determine the amount of just compensation for takings. "Market Value" has been defined as "what a willing buyer would pay in cash to a willing seller," but "Just Compensation" has no clear definition or valuation methodology. This article finds that valuing sand and gravel property using the income approach is the most appropriate method of valuation, and that valuation experts should use the same valuation process that is used by owner/operators when buying or leasing land.

VALUING SPECIAL USE PROPERTIES

The essential problem in the valuation of special use properties is the lack of availability of adequate data from the sales of comparable properties. In some cases, there may be a lack of sales within a reasonably defined market area or a lack of specific information about the existing sales to make essential adjustments and draw a reasonable value conclusion.

In recent years, the Supreme Court has stated, "…when market value has been too difficult to find, or when its application would result in manifest injustice to an owner or the public, courts have fashioned and applied other standards."[1] This situation is usually considered to exist when the property involved in the taking is a special use property. Sand and gravel properties, by their nature, are special use properties.

Comparable sand and gravel sales are relatively few and infrequent compared to other types of properties, such as office buildings or retail commercial buildings. In instances where some local sales of sand and gravel properties have occurred, it is often difficult, if not impossible, to analyze these sales because the price paid depends on the remaining reserves (or degree of depletion) as of the date of sale, and this information is usually unavailable. According to the Uniform Appraisal Standards for Federal Land Acquisitions:

> In order to properly develop a sales comparison approach to value for a mineral bearing property, the appraiser needs to understand the level of information available concerning the mineralization found on the

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subject property. It is then important to identify comparable sales that had similar levels of information concerning mineralization available at the time of sale. The verification of data concerning the comparable sales is a critical component of this analysis, and the assistance of experts in identifying all necessary areas of inquiry during the verification process may be required.[2]

Sand and gravel operators mine minerals (aggregate) for use in almost all types of construction. Demand for the materials is based upon the need for new construction materials for both private and public projects. Owners of sand and gravel businesses either purchase or lease land for their operations. When leasing land, they negotiate a rate per ton, or a percentage of gross sales for all extracted materials. This rate is referred to as a royalty rate. When all of the materials are mined, the landowner or operator can then use the property for an inert landfill. Materials deposited for use in reclaiming the land are charged at a rate per ton, and property owners are paid a royalty rate on a per-ton basis.

The income approach is generally reliable for sand and gravel properties because it is based upon estimating the net rental income derived from royalty rates or the sale of material over a period of time. The value is then estimated using a discounted cash flow analysis.

UNDERSTANDING MARKET VALUE AND CONDEMNATION PROCEEDINGS

In a condemnation proceeding, the legal concept of "market value" is applied by the courts to determine the amount of just compensation for takings. Market value has been defined as "what a willing buyer would pay in cash to a willing seller,"[3] and "just compensation"[4] has never been reduced to a single formula. "Rather than a general formula, various ways of valuing property are appropriate depending on the circumstances."[5] The market value concept implies a prospective or hypothetical sale of the subject property and is generally viewed by courts to correspond most closely to the direct sales comparison (or market data) approach to value. Although in most cases this approach is preferred, in the case of "special purpose" or "special use" properties, other methods may be considered by courts to be more appropriate.

"Properties treated by courts as special use properties include church properties, cemeteries, schools, historic properties, commercial enterprises such as a warehouse, a scrap-metal yard, a sand and gravel production business, a horseradish factory... . "[6] The concepts of special use properties and special purpose properties are similar in that they imply peculiar or unique characteristics inherent to the property that would not normally be found in other, recently sold properties. A special purpose property is defined as one that:

- "has physical design features peculiar to a specific use;
- has no apparent market other than to an owner-user;
- has no feasible economic alternative use."[7]

In most jurisdictions, where a property is determined by the courts to be a special use property, three alternative methods of valuation may be considered: the cost approach, the income approach and/or a modified market data approach. The valuation expert's role becomes magnified in the condemnation of a special use property; as such, the selection of methods or techniques must be soundly demonstrated to the jury. The valuation of a special use property is a prime example of where an expert's opinion could be excluded at trial if the expert uses a legally improper valuation method. Additionally, the expert's opinion must meet the Daubert Standard[8] to ensure relevancy and reliability. Applicable questions regarding the admissibility of an approach, method or technique include:

- have you used this approach before when appraising this type of property;
- are there treatises that support use of this approach;
- do other valuation experts use this technique or approach;
- is this technique recognized and used by market participants; and
- are there published articles regarding the valuation approach?

Because of these issues, an expert witness must be careful that his or her opinions and/or approaches to value are not excluded from court testimony. In order to accomplish this task, certain groundwork must be employed.

THE VALUATION RUBRIC

The valuation expert must be knowledgeable on the property type and have experience in appraising such a property in the geographical area. The valuation expert also must be able to cite treatises or publications that support the methodology, including:

- *The Appraisal of Real Estate 13th Ed.*;
- *Real Estate Valuation in Litigation, 2nd Ed.*, by J. D. Eaton, MAI, SRA;
- Various publications by the International Right of Way Association;
- Local publications that address valuation issues within the particular jurisdiction;
- Case law;
- Numerous articles, guides and references that describe the proper valuation methods and procedures.

A valuation expert must decide upon the methodology that will be employed in a valuation assignment for a special use property that is not atypical to other valuation assignments. It is also the valuation expert's responsibility to use the approaches that are supported by the market. Therefore, even with a multitude of good comparable sales, the valuation expert can also use the income approach.

CASE ANALYSIS

In a study conducted to determine the process for buying or leasing property, eight sand and gravel property owners and/or operators in the Phoenix metropolitan area were surveyed. The survey findings revealed consistent criteria used by the owner/operators in the decision-making process when purchasing or leasing a sand and gravel property. All eight participants stated that their decisions were based upon the quantity and quality of the material beneath the overburden (surface or top soil). To estimate the mineable reserves, owners need reasonably reliable information, and in some cases owners engage an engineer to perform test borings at certain locations and depths across the property. The owner/operator would then develop a mining plan based upon the mineable reserves, which would result in a residual amount that they could pay for the property. All eight participants said that they did not use the price per acre in their decision-making process. The conclusion drawn from these interviews is that the actions of knowledgeable parties in this market segment rely on a cash flow analysis (income approach) in their decision-making process. Under these conditions, it is typical that such special use properties cannot be valued reliably using only the sales comparison approach.

"The income capitalization approach can be especially applicable when the property under appraisal is already being mined, and thus the historical income stream flow from the property is available for analysis."[9] For properties that produce a predictable income stream, the income approach may be considered by the courts. Stated simply, the method involves estimating the annual net income likely to be produced by the property and the number of years over which the owner could reasonably expect this level of income. "The present value of this income stream is calculated by applying a (discount) rate, which is intended to approximate the net rate of return on investment reasonably expected by the owner."[10]

PROFIT CONSIDERATIONS

In most condemnation cases, the profit from a business operation carried on at the property is not considered a valid basis for estimating just compensation. This is due to the speculative nature of profit estimates, and to depending more on the nature of the business operation and/or the skill of the business owner (value of the enterprise) than on the intrinsic characteristics of the property itself (value of the real property). "In applying the income capitalization approach, appraisers must take care to consider only the income that the property itself will produce—not income produced from the business enterprise conducted on the property (i.e., the business of mining)."[11] In specific relation to a sand and gravel property, this situation is unique because operators both purchase and lease properties specifically for the mining of materials. In both scenarios, the cost of operations is taken into consideration. When property is leased, the operator pays rent to the landowner in the form of a royalty. The royalty is a dollar amount per ton of extracted material. The royalty rate is typically based upon the quality of the material, the location of the source relative to the market, the supply and demand for the product, the cost associated with the extraction and the price that the market would bear for the product. "The royalty is the amount that a buyer would pay the landowner for the right to remove the materials, with the buyer bearing the expense of extraction."[12]

COURT PRECEDENCE

"In United States v. 103.38 Acres of Land (1984), the Sixth Circuit Court of Appeals held that the royalty capitalization method would be competent evidence of mineral value if:

- an active market for the minerals in place is established;
- transactions in the market commonly take the form of royalty payments;
- the valuation witness possesses the requisite industry experience to give an opinion." [13, 14]

"The income approach to value, using a royalty rate in a sand and gravel property, was determined to be the appropriate method in Maricopa County v. Robert Barkley, (1990)." [15]

The Supreme Court of Missouri in St. Louis v. Union Quarry accepted the income method based on the income stream being both stable and directly attributable to the property itself rather than to an activity conducted on the property that relies on the talent or skills of the owner. As was explained in Union Quarry: "The general rule (that lost profits are inadmissible), however, must be given an exception *ex necessitate* where the business is inextricably related to and connected with the land where it is located, so that an appropriation of the land means an appropriation of the business; where the evidence of net profits apparently is clear, certain and easily calculable, based upon complete records; where past income figures are relatively stable, average and representative, and future projections are based upon reasonable probability of permanence or persistence in the future, so that conjecture is minimized as far as possible, and where the body fixing the damages would be at a loss to make an intelligent valuation without primary reference to the earning power of the business."[16]

Condemning agencies often argue that an income approach cannot be used in the valuation of a sand and gravel operation because it is a business enterprise. Consequently, the property owner will argue that real property rights are being acquired and an income approach is warranted since "minerals are an integral part of real estate, and mineral rights are real property under U.S. law."[17] In the case of a sand and gravel operation, the business value (business enterprise) is not part of the equation because royalty rates are used as the "rental income" to the real property only. As noted previously, royalty income is what a landowner would charge an operator to mine materials situated on the property. "In developing an estimate of value by the income capitalization approach for a mineral property, it is generally recognized that the most appropriate method of capitalization is yield capitalization, most notably discounted cash flow (DCF) analysis. The income that may be capitalized is the royalty income, and not the income or profit generated by the business of mining and selling the mineral. For this reason, the income capitalization approach, when applied to mineral properties, is sometimes referred to as the royalty income approach. DCF analysis has been recognized by the courts as an appropriate method of valuation to be employed in the valuation of mineral properties."[18]

According to the survey conducted of sand and gravel operators in the Phoenix metropolitan area, it is common practice to pay landowners a royalty rate on a per-ton basis for extracting aggregate materials. Therefore, the market supports the use of an income approach in the valuation of sand and gravel properties. "In developing an estimated income stream, the property royalty rate can be derived from comparable mineral lease transactions, and the mineral unit price to which the royalty rate is applied may be derived from appropriate market transactions."[19]

The U.S. Securities and Exchange Commission (SEC) requirements regarding the reporting of mineable materials focus on investor protection. The basis of this protection is mineable reserves, and these reserves must be proven and probable. The SEC rules similarly restrict the reporting of valuation estimates of reserves. The SEC's definition of a reserve is: "That part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve."

This SEC policy is intended to reduce speculative value estimates based upon non-quantitative mineral reserves. Therefore, it is imperative for an appraiser to develop his or her opinion of market value based upon the quantity and quality of the mineral reserves. Again, referencing interviews of operators, their purchase or lease decision is based upon mineable aggregate. Everyone surveyed stated that, as part of their "due diligence," they would want information concerning the quantity and quality of the materials. Some indicated that, at times, this may include performing core drillings.

Another recent specific example of special use properties being valued using the income approach for condemnation is that of a privately owned airport parking lot. This case faced the courts in North Carolina in Charlotte v. Huriahe, et. al., (2006). "The matter at stake was substantial—the city's sales comparison approach would award $842,000, while the landowner's income approach totaled $2,000,000. In the end, both the trial court and the Court of Appeals sided with the landowner, finding that a well-constructed income approach provided the more accurate indication of land value of an airport parking lot." [20]

Clearly, this process is also directly applicable to quarry operations, landfill sites, sand and gravel operations and various other extractive industries where the income to the owner is predictable and is directly derived from the land itself. In most of these cases, the property includes a resource or some intrinsic element that is subject to depletion. Based on its rate of extraction, the level and duration of future income may be readily projected. In addition, its value (if any) once depleted may be estimated and taken to be a reversionary value. Therefore, such properties are ideally suited to discounted cash flow analysis and may be valued on the basis of their net present value.

SUMMARY

The income approach may be used in estimating market value in condemnation proceedings for certain property types, including special use properties. Based on the above findings, the most appropriate method of valuing sand and gravel property is the income approach. For this property type, valuation experts should use the same valuation process that is used by owner/operators when buying or leasing land, if only to reflect the marketplace and these market transactions. In such cases, the royalty income stream is both stable and directly attributable to the property itself, rather than to the business activity conducted on the property or one that relies primarily on the talent or skill of the owner. Furthermore, the future royalty income may be reliably forecasted, analyzed and valued based on a conventional discounted cash flow analysis. ■

ENDNOTES

1. Duvall, Richard O. and Black, David S., JD, "Methods of Valuating Properties Without Compare", *Appraisal Journal*, (January 2000) p. 2.
2. Uniform Appraisal Standards for Federal Land Acquisitions, Chicago, IL, Section D-11, p. 97.
3. United States v. Commodities Trading Corp., 339 U.S. 121, (1950).
4. United States v. Cors, 337 U.S. 325, 69 S. ct. 1086, 93 L. Ed. 1392, (1949).
5. United States v. Miller, 317 U.S. 369, 63 S. ct. 276, 87 L. Ed. 336, (1943).
6. Duvall, op. cit p. 3.
7. Schumtz, George I., *Condemnation Appraisal Handbook*, (Englewood Cliffs, NJ: Prentice Hall, 1963), p. 163.
8. Daubert v. Merrell Dow Pharmaceuticals 509 US 579 (1993).
9. Uniform Appraisal Standards, op.cit. p. 97.
10. Duvall, op. cit p. 6.
11. Uniform Appraisal Standards, op.cit. p. 97.
12. Maricopa County v. Robert Barkley, 168 Ariz. 234; 812 P.2d 1052; 1990 Ariz. App. LEXIS 398; 75 Ariz. Adv. Rep. 48, (1990).
13. Nichols on Eminent Domain, 3d, 14F21.
14. United States v. 103.38 Acres of Land, 660 F.2d 208, (6th Cir. 1984).
15. Maricopa County op. cit.
16. Duvall, op. cit. p. 7.
17. Ellis, Trevor R., & Abbot, David M., Jr., *Regulatory Trends in Mineral Property Valuation – An International Perspective*, (ASA, AI and ASFMRA), 31.
18. Uniform Appraisal Standards, op. cit. p. 98.
19. Ibid.
20. *The Greenfield Advisor*, Seattle, Washington. Issue 2-3, June 2006, p. 1.