
WATERSBEND:
A BROWNFIELD REDEVELOPMENT CASE STUDY

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ABSTRACT

This article describes the evolution of a successful brownfield redevelopment project in Austin, Texas. Watersbend is a 356-unit apartment complex constructed in 1984 over a closed municipal landfill. Because of the threat of explosion from high concentrations of methane, State of Texas officials evacuated all 1,000 residents from the complex in 1991.

The article discusses the property's market value and history, including its evacuation, the owner's subsequent bankruptcy and its tenure as a holding of the Resolution Trust Corporation. Also detailed is the property's eventual purchase by a private developer and the sophisticated remediation and legislative efforts required to make the property's redevelopment successful.

The redevelopment of Watersbend serves as a pilot of environmental remediation and risk management for similar sites throughout the nation. Its history illuminates how a seemingly worthless property can be remediated to where the potential returns justify the risk of the original investment.

This case study should benefit urban planners, as it illustrates how the successful redevelopment created several million dollars in taxable property value. Likewise, it should be instructive to appraisers, investors, lenders and academicians in its discussion of the value of the property during various stages of redevelopment and brownfield legislation and incentives.

BACKGROUND: BROWNFIELDS AND ENVIRONMENTAL LAW

Brownfields are “abandoned or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination,” as defined by the Environmental Protection Agency. During the 1990s, brownfield redevelopment became popular among city officials and urban planners looking for ways to increase their tax bases and revitalize urban centers and other neglected areas. Until recently, laws and programs to facilitate brownfield redevelopment were inadequate or nonexistent.

Laws enacted in the early 1980s such as the Federal Superfund were designed for the worst cases of contamination and most imminent threats to public health and the environment. While government agencies may have served the public interest by “laying down the law” on the most egregious and recalcitrant offenders, this approach created a deeply adversarial relationship between the government and contaminated-property owners. Many owners were not responsible for the pollution and did not know about such pollution when they bought their properties. Also, for brownfields with less-than-imminent threats to health and the environment, the punitive aspects of the law and the Superfund apparatus are overkill. Developers understandably have been loath to undertake brownfield redevelopment projects when they might face the threat of enforcement actions from environmental agencies.

State and federal government needed to create a less onerous system that would encourage remediation instead of litigation. In recent years, Texas has enacted programs such as the Voluntary Cleanup Program (VCP) to facilitate remediation and reclamation of contaminated sites. One goal of these programs is to foster a better relationship between private parties and enforcement agencies so that more money is spent directly on remediation rather than legal fees. Another goal is to use the most recent scientific data to assess which contaminants present the most danger to the public. Hence, less hazardous substances can be handled in a less costly and disruptive manner.

This article discusses the brownfield redevelopment of Watersbend Apartments. During the late 1990s, the owners of Watersbend entered the complex into the VCP and remediated its primary environmental hazard, the potential for explosion from the buildup of methane gas seeping from an underlying landfill. The redevelopment succeeded and serves as a model for other brownfield sites.

WATERSBEND 1984-1992: CONSTRUCTION AND EARLY HISTORY

Watersbend is located on fourteen acres on U.S. Highway 183 in northeast Austin along Walnut Creek. The improvements were constructed in 1984 at a cost of \$13 million during a period of unprecedented economic prosperity and real estate construction in the Austin area.

Watersbend was originally a 358 unit, garden-style complex of average quality construction: 25 buildings with wood frame on concrete slabs and a combination of brick and cedar siding. Amenities included two swimming pools, a clubhouse and laundry rooms. The property was marketed towards college students and middle class families.

By the late 1980s, the Austin real estate market crashed as hard and fast as it grew. New tax rules, a slowing economy and a glut of recently completed projects forced the citywide occupancy level below 80%. Watersbend suffered through this downturn along with other properties in Austin. At the turn of the decade, the market slowly righted itself, and Watersbend surpassed a 90% occupancy level, albeit with depressed rent levels.

WATERSBEND 1992: FORCED EVACUATION

By 1991-1992, approximately 1,000 people called Watersbend home. Unbeknownst to residents, Watersbend was constructed over a closed municipal solid waste landfill. Prior to the construction of the complex, one independent report indicated the site overlaid an abandoned landfill; a thesis by a University of Texas graduate student studied what was known as the “Little Walnut Creek Landfill,” covering the western and eastern bank of the creek near Watersbend. Reportedly, Travis County used the site as a county landfill from 1950-1960, and then the City of Austin used it as a municipal landfill from 1960 through 1968. From 1966 to 1968, the city used a substantial amount of the subject property for filling purposes, including a majority of the area where the apartment buildings were located.

Another report by Underground Resource Management dated the same year as the construction of the project mentions the area as the site of the “Brinkley-Anderson” landfill. In addition, the Travis County Soil Survey shows a filled gravel pit on the north side of the site.

During this era, recordkeeping on municipal landfills ranged from poor to nonexistent, and information regarding the landfill's boundaries, types and amounts of waste accepted, and environmental controls is sketchy and vague. What is known is that the project builder convinced the City of Austin that construction of the apartments over a closed landfill was a safe, sound decision. The builder and developers asserted the fireplace chimneys, which were part of every building, would properly ventilate residual methane gas emitted from the closed landfill.

In 1991, environmental consultants performed the first known Phase I Environmental Site Assessment specific to Watersbend. Their soil gas and leachate study revealed high concentrations of methane in two areas beneath the ground. The report also raised concerns about structural settling, health problems caused by methane gas migration into the apartment units and leachate contamination of Walnut Creek.

In July 1992, officials with the Texas Natural Resource Conservation Commission (TNRCC) discovered unacceptably high levels of methane in some first floor units. Contrary to popular opinion, methane is odorless and colorless, so the tenants could not have detected the methane on their own. The risk of explosion was very low, but the results of an explosion obviously would have been catastrophic. Within two days, state and local authorities forced the complete evacuation of the complex. This action received widespread publicity and exacerbated an already tight rental market.

WATERSBEND 1992-1994: ABANDONMENT AND NEGLECT

With no tenants, accusations of negligence and threats of lawsuits, Watersbend instantly became a monetary sinkhole to its owners. The primary lienholder initially declined to foreclose on the property despite the lack of loan payments because the bank was unwilling to assume its risks. Nevertheless, the property eventually became a foster child to the unwilling American taxpayer as a holding of the Resolution Trust Corporation.

The RTC's stewardship of Watersbend could politely be described as indifferent. Despite its vacancy, it was still the hub of unusual activities and controversy. With security consisting of nothing more than a hastily constructed chain-link fence, the property was vandalized repeatedly and inhabited by squatters.

Most of the water heaters, appliances, carpet and even doors and fireplaces were stolen. Vandals set some buildings on fire. The City of Austin used the property to train its firefighters and in one case deliberately set a building ablaze. The Federal Bureau of Investigation conducted SWAT team exercises on the property. Notably, some of these events took place *after* the property's purchase by a private developer. Water damage from neglect and poor building design irreparably damaged many of the exterior walkways.

In 1993, the evacuated tenants filed a class-action lawsuit against the owners of Watersbend demanding \$37 million in damages. The case subsequently settled for approximately \$7 million.

WATERSBEND 1994: PURCHASE BY A PRIVATE DEVELOPER

In 1994, Rio Vista Apartments LLC purchased Watersbend from the Resolution Trust Corporation for \$1,000,000, or just \$2,793 per unit. This sale price was drastically lower than prices of nearby, similar complexes built during the same period, as described in the following table:

#	Apartment	Location	Date of Sale	Year Built	Units	SF/Unit	Monthly Rent / SF	Occ. %	Sale Price	Price/Unit	Notes
	Waters Bend	US 183	Jan-94	1984	358	707	NA	0%	1,000,000	2,793	
1	Chaparral Creek	Wells Branch	Mar-92	1985	372	625	0.59	95%	6,850,000	18,414	\$7 million price minus \$150,000 to cover repairs
2	Creekwood	US 183	Sep-92	1984	96	703	0.55	96%	1,650,000	17,188	Similar location
3	Shadow Wood	Camino La Costa	Jul-93	1984	240	735	0.68	99%	6,000,000	25,000	Good location
4	Villas of La Costa	Camino La Costa	Feb-93	1979	204	780	0.68	100%	4,250,000	20,833	Good location
5	Club Creek	Longspur	Aug-91	1984	160	814	0.56	90%	2,384,909	14,906	RTC transaction
6	Northcape	Middle Fiskville	Dec-92	1983	200	910	0.53	94%	2,600,000	13,000	RTC sale
7	Penbrook Club	US 290	Mar-92	1986	164	776	0.53	96%	2,266,925	13,823	RTC Transaction
8	Springcreek	Springdale	Aug-92	1984	201	851	0.53	60%	1,530,000	7,612	Bank sale

Sales 1-4 consist of transactions between private parties. If not for its evacuation and other problems, Watersbend would have been most comparable to these properties. In fact, **Watersbend sold for a discount of 84% to 89%** when compared to similar properties.

Sales 5-8 are transactions in which the RTC or a bank was the selling party. The RTC and other receivers were the dominant force in real estate transactions in Austin during the early 1990s. Even compared to a relatively underperforming property like Springcreek, which was only 60% occupied when sold, **Watersbend sold for a 63% discount, and it sold for a discount of 79% to 81% compared to the other properties.**

To further illustrate the severity of the landfill’s impact on the property, the following table compiles five additional sales of apartment complexes that needed major rehabilitation and had very low levels of occupancy:

#	Apartment	Location	Date of Sale	Year Built	Units	SF/Unit	Occ. %	Sale Price	Price/Unit	Notes
	Waters Bend	US 183	Jan-94	1984	358	707	0%	1,000,000	2,793	
1	2506 Manor Road	Manor Road	Jan-93	1971	102	360	0%	455,000	4,461	former affordable housing project; abandoned, 100% vacant
2	Creekside	East 51st	Jan-91	1967	43	704	16%	160,000	3,721	poor condition, nearly vacant
3	Greentree	Manor Road	Aug-93	1973	124	869	0%	400,000	3,226	vacant for five years; \$6,000/unit rehabilitation
4	Lantern Hill	Reagan Hill	Jan-93	1970	121	749	48%	750,000	6,198	several down units; bank sale
5	Silverado	Wheless	Jul-90	1972	70	853	16%	252,000	3,600	\$2,100/unit rehabilitation; poor condition and visibility

Rather than for physical or locational similarity, these properties were chosen as representative sales of underoccupied or vacant properties in poor condition with substantial rehabilitation requirements.

Watersbend sold for 55% less than Lantern Hill, the “best” property of the group with a 48% occupancy and relatively inexpensive rehabilitation needs. Considering the other properties in worse condition, **Watersbend still sold at a discount of 13%-37%.** The price of \$2,793 per apartment unit is roughly equivalent to the price of vacant land during 1994. This is indicative of a 100% loss in the contributory value of the improvements as of 1994.

Having purchased the property, the owners faced a long, arduous remediation process. Additionally, the State of Texas had few regulations specifically relating to the use of land over a closed landfill, and existing laws concerning environmentally challenged properties tended to be compulsory and punitive. Two measures were needed to spur the redevelopment of the property: the Voluntary Cleanup Program and Subchapter T, Chapter 330 of the Texas Administrative Code.

THE VOLUNTARY CLEANUP PROGRAM

The Voluntary Cleanup Program (VCP) is the primary program of the Brownfield Redevelopment Initiative. According to the Texas Natural Resources Conservation Commission (TNRCC), it “provides incentives for properties with real and perceived contamination [Brownfields] to be investigated, cleaned, and redeveloped. An additional benefit is the sparing of outlying rural, ‘greenfields.’” The VCP’s purpose is to streamline the remediation process by providing a clear, step-by-step framework for solving the environmental problems and legal issues affecting the site. The VCP intends to be more proactive and less punitive than earlier programs such as the State and Federal Superfund.

In brief, the property owner must submit an application (with a non-refundable deposit of \$1,000) describing the property and an environmental site assessment detailing the type and extent of contamination. Then, the applicant and TNRCC must agree on the remediation process, and the applicant must pay all TNRCC oversight costs. After completion of the cleanup, the owner or participating party receives a Certificate of Completion from the TNRCC stating that all non-responsible parties are released from all liability to the state for cleanup of areas covered by the certificate. Sites already under an enforcement order or pending legal action are not eligible.

As of January 2001, the TNRCC has received 1,205 applications for the VCP, and the TNRCC has issued Certificates of Completion to 469 sites. Once the property owner completes the requirements of the VCP and receives a Certificate of Completion, he may apply for a reduction in property value with the County Appraisal District if the property lies within a special “reinvestment zone” as defined in the Texas Administrative Code.

Watersbend is not in a reinvestment zone but was entered into the VCP in 1996. In 1998, the Watersbend project was issued a conditional Certificate of Completion requiring the owners to monitor methane levels and operate a methane gas recovery system for as long as minimum concentration levels are detected, a period presently estimated to be fourteen years.

SUBCHAPTER T, CHAPTER 330 OF THE TEXAS ADMINISTRATIVE CODE

To help remedy the situation at Watersbend, the Texas Legislature amended legislation pertaining to the state's Solid Waste Disposal Act, and the TNRCC enacted Subchapter T, Chapter 330 of the Texas Administrative Code in 1995. Both were written specifically with Watersbend in mind, and Watersbend became the pilot project for these statutes.

Subchapter T amends the Texas Solid Waste Disposal Act and the Texas Health and Safety Code. The statute "establishes standards for the use and development of land over closed municipal solid waste landfills [and establishes] practical requirements while maintaining strict standards for human health and safety and environmental protection." This statute does not cover hazardous wastes.

Subchapter T provides the TNRCC authority to administer a permit program for construction of enclosed structures over a landfill, to establish requirements related to their construction, to establish procedures for conducting soil tests to determine the existence of a landfill, and to provide notice to tenants of the landfill's existence. The application fee is approximately \$2,500 and varies based on the review time needed by the TNRCC.

In general, any permanent, enclosed structure within 1,000 feet of a waste disposal area must be designed and constructed to prevent gas migration (in other words, the buildup of potentially explosive gases). The primary structural controls consist of a geomembrane of low gas permeability to be installed between the slab and the subgrade, a permeable layer between the geomembrane and the subgrade, and a gas ventilation system to prevent buildup. Also required is a Site Operating Plan and a Structured Gas Monitoring Plan describing the installation, operation of the structural controls, operation of gas monitoring equipment, and safety and evacuation plans.

The property owner must register the site in the county deed records, and the owner cannot lease property over a landfill without the TNRCC permit. Any waste excavated during redevelopment of the property must be disposed of in an approved landfill. Waste cannot be buried on-site.

Owners are not obligated to investigate the existence of a landfill, but once known to them (by whatever means), they must immediately inform all tenants. Also, the permit process is required regardless of the age of the landfill, although the owner can suspend monitoring requirements if he can demonstrate no potential for gas migration. As mentioned previously, the owners of Watersbend expect a monitoring period of fourteen years.

THE REMEDIATION OF WATERSBEND

In 1995, Rio Vista presented its Comprehensive Assessment/Remediation Plan (CARP) to the TNRCC. Later, Rio Vista entered the property into the TNRCC's Voluntary Cleanup Program. The CARP and a Site Investigation Report were completed in 1996. Rio Vista subsequently received approval to design a Remedial Action Work Plan (RAWP) that would detail the remediation project.

The RAWP consisted of three major components: installation of a site-wide Semi-Active Ventilation System (SAVS) consisting of 108 wells placed in ten clusters throughout the property; installation of an Active Gas Extraction System (AGES) for the underslab of each building that would prevent methane buildup in the apartment units; and installation of a site-wide surface drainage control system for elimination of leachate exposure. Each apartment unit has a hard-wired, active gas monitor/alarm that cannot be turned off. These components cost just under \$1.4 million, and the annual monitoring and maintenance cost is slightly under \$40,000.

Concurrent with these projects were slab leveling, repair of slab and beam cracks, provision of better drainage for foundations, rebuilding a retaining wall and construction of a new retaining wall along Walnut Creek. These improvements are partially related to the requirements of Subchapter T and to poor onsite drainage.

Three of the twenty-five apartment buildings were deemed unfit for redevelopment and were demolished. Redevelopment of the apartments took place in two phases during 1998-1999 and included new roofs, doors, windows, flooring, plumbing fixtures and appliances. The demolition of the three units reduced the number of leasable units from 358 to 290.

The comprehensive redevelopment cost, including environmental remediation, was \$9.5 million, or about \$32,750 per unit. Until 1999, the owners paid for all remediation costs out-of-pocket. In 1999, the owners received a construction loan, but they had to provide other properties/personal guarantees as additional collateral. The owners clearly assumed greater-than-normal risks in undertaking this project

WATERSBEND REOPENS AS SALADO AT WALNUT CREEK

After rehabilitation and remediation was completed at Watersbend, the complex was renamed “Salado at Walnut Creek” to avoid the stigma associated with the “Watersbend” moniker. In September 1999, leasing began on 110 rehabilitated units of the rechristened Salado at Walnut Creek, with the initial move-in dates occurring in September and October of that year. Pursuant to Subchapter T, leasing agents inform potential tenants in writing that the property was once used as a municipal solid waste landfill and that structural controls are in place to minimize the dangers posed by the former landfill. According to the leasing manager at Salado at Walnut Creek, the complex received little to no resistance from potential tenants due to the written disclosure. In truth, some of the lack of resistance could be attributed to the condition of Austin’s apartment market, which experienced exploding rents and minimal vacancies during the last half of the 1990s.

Approximately 99 of the 110 available units were leased between August and October 1999. By February 2000, 70% of the full 290 units were occupied or pre-leased. By July 2000, when redevelopment was completed and all 290 units were available for leasing, the complex attained a 94% occupancy rate.

As of 2001, the project’s occupancy is near 95%, equivalent to citywide averages, and the units lease for rates at the upper end of the range of competitive properties. The property still suffers from the presence of methane alarms, required tenant disclosure of the presence of the landfill and ongoing monitoring costs, but these stigma are slight and declining. According to an appraisal performed by the authors’ firm (Austin Valuation Consultants), the value of the project exceeds its redevelopment costs. Because of its recent and extensive redevelopment, Salado at Walnut Creek may be more valuable today than comparable projects built from 1982-1986 despite the stigma, and the owners now have substantial equity in the project.

ASSESSMENT OF RESIDUAL STIGMA AT WATERSBEND

Even though the property is within the Voluntary Cleanup Program and should receive a final Certificate of Completion in the future, Watersbend and other remediated properties do not necessarily achieve their unimpaired market value. While Watersbend receives strong market acceptance, it also carries unusual environmental risks and financial liabilities. The risks and liabilities associated with the project include:

- Legal compliance to the regulations of the Chapter 330, Subchapter T of the Texas Administrative Code as described previously;
- Operation and maintenance of the active gas extraction systems and semi-active gas extraction system as required by the conditional Certificate of Completion of the VCP;
- A \$5,000,000 insurance policy at a cost of \$8,400 per year for five years. The policy covers legal expenses and the primary lien in case of serious environmental problems during the life of the policy;
- The risk of drainage problems with the leachate migration pond and future soil subsidence that could necessitate expensive repairs and maintenance;
- Watersbend's location amidst a larger brownfield area; and
- Other facets of stigma such as deed recordation, notifications to potential tenants and surrounding property owners, potential third-party litigation, lender reluctance to fund additional loans, and unforeseen market resistance.

Austin Valuation Consultants researched the damage caused by these risks and stigma and estimated the market value of Watersbend was 10%-21% less than its unimpaired value. The known financial liabilities comprise approximately 5% of the discount, and the remainder is attributed to the other risks described above. Knowledgeable purchasers would demand this discount in order to justify the investment risk and in anticipation of "market resistance," defined as "the risk... associated with the ongoing stage of a detrimental condition analysis [and] includes the reluctance on the part of the real estate market to buy a property that has historically been damaged or tainted. Sometimes called stigma." (from *Real Estate Damages: An Analysis of Detrimental Conditions*, Randall Bell, MAI, published by The Appraisal Institute, 1999)

Austin Valuation Consultants quantified the discount with several Case Studies, which involve research of sales of similarly contaminated and remediated properties. The discount in each Case Study depends on the type and extent of contamination, the use of the property, the amount of governmental involvement, the extent of the remediation when sold, and most importantly, the extent to which the purchaser was indemnified by the seller or other responsible party liabilities related to the contamination.

The case studies were rated for their respective similarity to Watersbend. Case studies with more severe contamination and less favorable circumstances were rated “Higher,” properties with relatively minor contamination and minor post-remediation stigma were rated “Lower,” and properties most similar to the subject were rated “Even.” The case studies are summarized in the table below:

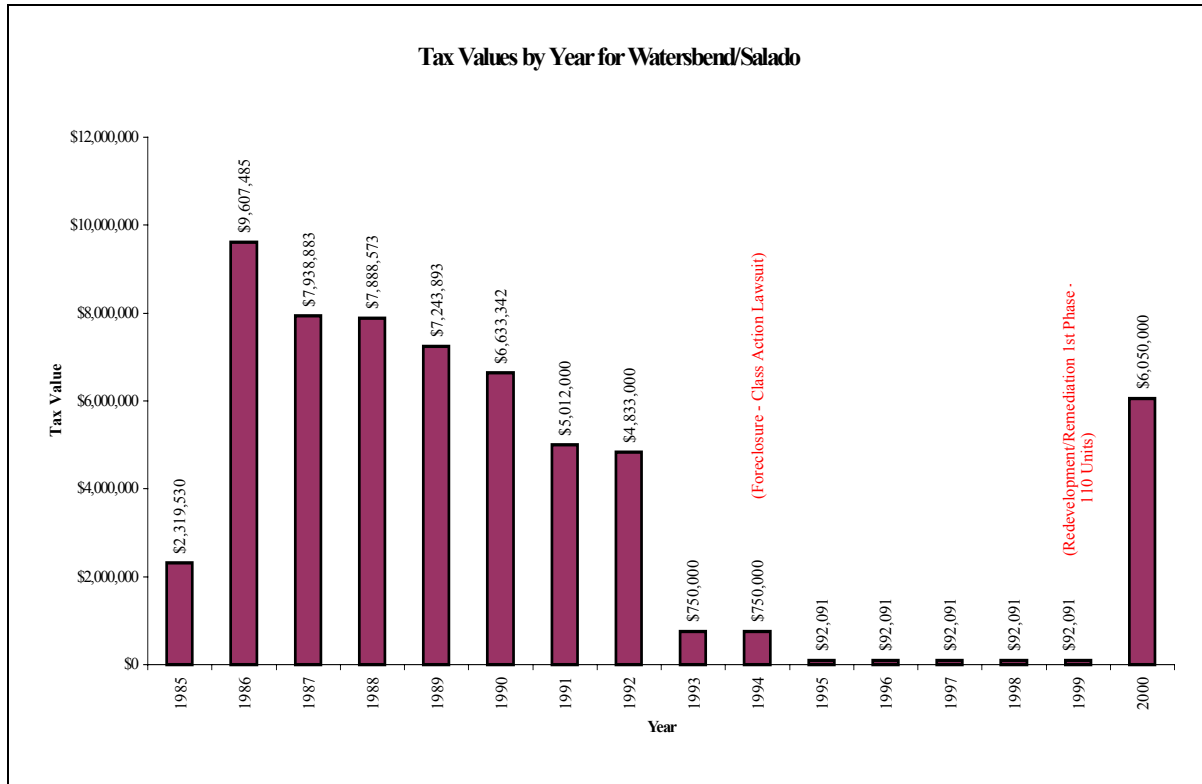
#	Location	Property Type	Waste Type	Amount of Discount	Amount of Discount, Severity of Contamination and post-Remediation Character of Property as Compared to <i>Watersbend</i>
1	Austin, TX	Thousands of residences and businesses surrounding a petroleum storage facility	Gasoline, VOCs, BTEX, TPH	25.0%	HIGHER: Legal action against oil companies; contamination of air, soil and groundwater, 14- year remediation timetable.
2	Austin, TX	Motel and conference center / auditorium	Asbestos, TPH, ethylbenzene	28.0%	HIGHER: Contaminated by on-site asbestos and hydrocarbons from off-site source. No hydrocarbon remediation has occurred.
3	Austin, TX	9.3 acre vacant lot near former gas station	Hydrocarbons from crude oil spill off-site	13.5%; 16%-21%	EVEN: Contamination on adjacent site; discount caused by testing costs and marketing delays and future monitoring costs.
4	Dallas, TX	18.6 acre vacant tract	Municipal solid waste from old landfill	10%-20%	EVEN: Circumstances very similar to subject property; future buildings require gas extraction systems
5	Houston, TX	1.5 acre vacant downtown block	Benzene, lead, phthalate	20.0%	EVEN: Property in VCP, discount consisted of escrow against potential future liabilities
6	Houston, TX	Apartment complex next to gasoline service station	Gasoline, volatile organics (BTEX, TPH)	33.3%	HIGHER: Sale price negotiated before full extent of contamination was known; risk of off-site migration and other contamination issues
7	Keller, TX	22 acre multi-use property on former gas station site	TPH from LUST an lead/heavy metals in soils.	25.75%	HIGHER: Probable greater extent of contamination with no pre-sale remediation; fallout of prior contract and retail use
8	Houston, TX	Housing subdivision near Superfund Site (chemical waste storage facility)	Creosote, heavy metals, sludges, BTEX,	33%-50%	HIGHER: Properties near a Federal Superfund Site with extensive public disclosure. Remediation alternatives: incineration, natural attenuation, excavation and removal of soils.

Case Studies 3, 4 and 5 are rated “Even” and have a discount range of 10% to 21%. These sites sold post-remediation or with a minor threat of future contamination. Two of the three sites are in the Voluntary Cleanup Program. Case Study 4 is the most similar to Watersbend; it involved an old landfill, was in the same stage of remediation before redevelopment and required a similar amount of initial reinvestment capital. Case Study #8, although it also involved a site with a use similar to a landfill, was rated “Higher” because the materials were hazardous and the impact on properties surrounding the landfill was much greater when compared to Watersbend.

The redevelopment of this brownfield site to its current state is a textbook example of how a seemingly intractable situation can be resolved to the benefit of everyone. The owners undertook a substantial risk and received substantial rewards. A bank made a low risk loan that garnered interest income as well as insights that could spur loans to other, similarly affected properties. Renters received an attractive place to live. Furthermore, the City of Austin, Travis County, local schools, and the State of Texas will receive several hundred thousand dollars per year in additional property taxes. At the same time, the state and federal government will be relieved of possible environmental response costs and threats to public health and safety.

PROPERTY TAX ISSUES: HISTORY OF WATERSBEND'S ASSESSED VALUE

The following chart illustrates the assessed property value of Watersbend (Salado at Walnut Creek) from its inception to the present:



At the height of the Austin real estate market in 1986, Watersbend was valued at \$9,607,000. Prior to the evacuation, the property's taxable value was \$4,833,000, or \$13,500 per unit, as assessed by the Travis Central Appraisal District. In 1993, with the property having zero occupancy and dire environmental problems, TCAD shaved the value down to \$750,000, or \$2,095 per unit, a decrease of 84%. By 1995, TCAD decreased the value to just \$92,091, or just \$257 per unit, reflecting the near-worthlessness of the property.

In 2000, with the property partially leased, the Travis Central Appraisal District raised the property value of Salado at Walnut Creek to \$6,050,000, up from the value of \$92,091 that had been in place since 1995. TCAD based its valuation on an assessment that the property's rehabilitation was two-thirds complete as of January 1, 2000. At the \$6,050,000 assessed valuation, the property generated approximately \$150,000 per year in taxes that the city, county and school district would not have collected if not for this brownfield redevelopment. The appraisal district is expected to further raise the property values of

Salado at Walnut Creek in 2001 to reflect the completion of the remediation project and its high occupancy. TCAD's market value for 2001 should exceed \$9,000,000, and Salado at Walnut Creek will generate approximately \$225,000 per year in ad valorem taxes.

PROPERTY TAX ISSUES: DIRECT ABATEMENT OF PROPERTY TAXES

In 1997, the 75th Legislature of Texas passed Senate Bill 1596/House Bill 1239, which amended Texas Tax Code §312 to allow cities to grant property tax abatements for remediated properties. The bureaucratic obstacles for receiving such an abatement are high, but the benefits are substantial and worth pursuing.

As described in the Senate Bill analysis, the amendment “provides an incentive for the development of cleanup sites of contaminated areas by creating a four-year property tax incentive to eligible individuals that clean up and redevelop eligible properties subject to the Texas Voluntary Cleanup Program (VCP).” The sponsors believed that an additional incentive to the VCP was needed to spur remediation and redevelopment of contaminated property.

To be eligible for tax abatement, the real property must pass four basic rules:

1. The property must be located in a “reinvestment zone” as defined and created under Texas Tax Code § 312;
2. The property must not be in an improvement project financed by tax increment bonds;
3. The property must have received a Certificate of Completion from the Voluntary Cleanup Program (VCP) of the TNRCC; and
4. The property value must have been adversely affected by the release of a hazardous substance or contaminants according to the two preceding appraisals by the appraisal office.

Rule 1 covers the “reinvestment zone.” According to the Tax Code, the municipality in question does not merely grant abatement; it must willingly enter such an agreement as it pertains to defined criteria for an abatement program. The property must be located within a “reinvestment zone” or “enterprise zone.”

A “reinvestment zone” is a neighborhood or sector specifically designated by a city as having “substandard, slum, or deteriorated structures, ... unsafe or unsanitary conditions,” and also “substantially arrest[s] or impair[s] the sound growth of the municipality creating the zone.” In this case, the property owner must hire a property tax consultant and/or attorney to research the municipality's involvement in the program and to determine the viability of the property meeting the city's reinvestment criteria.

Rules 2 and 3 are self-explanatory. Rule 2 prevents the “double dip” that would be created by granting tax abatements to a property already receiving similar benefits. Rule 3 prohibits the granting of abatements prior to the complete remediation of the property.

Rule 4 is significant more for what it does not say than what it does say. Appraisal Districts understandably are reluctant to unilaterally grant reductions in property value even if the property is contaminated. County Appraisers and their superiors may feel that discounting properties for on-site contamination is poor public policy, especially when the property owner is principally responsible for the contamination, even if such an opinion violates the spirit of Tax Code 23.14 (described in the following section). The property owner must aggressively pursue a reduction in assessed value prior to or at least during the remediation process.

The governing body must enter into a formal tax abatement agreement with the owner of the brownfield property. The maximum legal abatement per year is as follows:

Year of Agreement	Maximum Property Tax Abatement
Year 1	up to 100%
Year 2	up to 75%
Year 3	up to 50%
Year 4	up to 25%

As stated previously, the benefits of an abatement agreement can be substantial. To illustrate, we have created a hypothetical scenario to illustrate the potential tax savings of the agreement. Assume a property is valued at \$1,000,000 by the local appraisal district, has met all the requirements of the Tax Code and its owner has reached an agreement with the city and county for the maximum abatement allowed by law. Also, assume the property value will appreciate 5% per year and the tax rate will remain at a level of \$2.50 per \$100 of value. The following chart displays what the property taxes would be under the abatement agreement compared to the full assessment:

	Property Value	Tax rate per \$100 in value	Nominal Property Taxes	Abatement	Actual Taxes Paid
Year 1	\$1,000,000	\$2.50	\$25,000	100%	\$0
Year 2	1,050,000	2.50	26,250	75%	6,563
Year 3	1,102,500	2.50	27,563	50%	13,781
Year 4	1,157,625	2.50	<u>28,941</u>	25%	<u>21,705</u>
Sum of Property Taxes			\$107,753		\$42,049
Total Savings					\$65,704

The aggregate tax savings are worth 6.5% of the initial value of the property.

A municipality is under no obligation to grant the maximum abatement or any abatement at all. Numerous factors would come into play, including the city planning department's willingness to provide assistance in redevelopment, the location of the property within the city, the speed and type of redevelopment, and the political climate.

Salado at Walnut Creek is not in a defined reinvestment zone but meets the other criteria of the abatement plan. As of 2001, the owners are exploring their options regarding potential property tax savings.

PROPERTY TAX ISSUES: THE STATE OF TEXAS PROPERTY TAX CODE § 23.14(B)

Even if a property does not meet the abatement criteria described above, it still may be eligible for a reduction in property taxes. For some redeveloped brownfield sites, state and federally mandated environmental costs can be very costly and extend far beyond the operating life of the property. Of primary importance is whether these costs can be amortized and deducted from the value of the facility. Some county appraisal districts have argued that these costs are strictly business expenses that cannot be deducted for property tax valuation purposes, but this argument does not hold up. An example of a business expense is the malpractice insurance paid by a lawyer who is a tenant in an office building. The insurance cost does not affect the real estate; if the lawyer leaves the building, that cost goes with his firm. Conversely, although environmental costs are incurred because of a particular business activity, these costs accrue to the property itself. Environmental costs cannot be transferred to a different property. Even if the property owner ceased or changed the business use of the site, most of these future costs would still have to be paid.

The State of Texas Property Tax Code § 23.14(b) states "*in appraising real property that the chief appraiser knows is subject to an environmental response requirement, the present value of the estimated cost to the owner... is an appropriate element that reduces market value and shall be taken into consideration by the chief appraiser.*" [emphasis added]

Property owners do not always take advantage of this situation. They may not explore this avenue of potential tax savings because of the negative publicity surrounding tax protests and litigation. The

publicity can be especially negative when the property is not welcomed in the community in the first place. However, these problems apply more to pollution-control properties such as hazardous waste incinerators and landfills than redeveloped brownfields, which usually generate more positive perceptions in the community.

In the case of Watersbend, the ongoing monitoring costs are relatively small, so the potential tax benefits would be minor. Still, the owners of Watersbend may achieve a reduction in their future taxes via an exemption covering the \$1.4 million dollars of pollution control equipment required by the VCP Certificate. For other properties with greater mandated costs (perhaps redeveloped industrial projects), the tax savings could be sizable.

CONCLUSIONS

The redevelopment of this brownfield site to its current state is a textbook example of how a seemingly intractable situation can be resolved to the benefit of everyone. The owners undertook a substantial risk and received substantial rewards. A bank made a low-risk loan that garnered interest income as well as insights that could spur loans to other, similarly affected properties. Renters received an attractive place to live. Furthermore, the City of Austin, Travis County, local schools, and the State of Texas will receive several hundred thousand dollars per year in additional property taxes. At the same time, the state and federal government will be relieved of possible environmental response costs and threats to public health and safety.

INTERNET LINKS

A web page with these links and others can be found at <http://www.austinval.com/links.htm>

TNRCC Brownfield Redevelopment Initiative Home Page:

<http://www.tnrcc.state.tx.us/permitting/remed/vcp/brownfields.html>

TNRCC Voluntary Cleanup Program (includes links to Texas VCP News, guidance publications, Applications and Agreement forms, and examples of Certificates of Completion):

<http://www.tnrcc.state.tx.us/permitting/remed/vcp/index.html>

TNRCC Risk Reduction Program (for the VCP):

<http://www.tnrcc.state.tx.us/permitting/trrp.htm>

TNRCC Innocent Owner/Operator Program (includes Application forms and examples of Certificates):

<http://www.tnrcc.state.tx.us/permitting/remed/vcp/iop.html>

Property Tax Incentives for Pollution Control Properties:

<http://www.tnrcc.state.tx.us/exec/chiefeng/prop2/>

Property Tax Incentives for Brownfield Redevelopment:

<http://capitol.tlc.state.tx.us/statutes/codes/TX000046.html> (abatement agreements)

<http://capitol.tlc.state.tx.us/statutes/codes/TX000045.html> (redevelopment zones)

EPA Region 6 Brownfield Program:

<http://www.epa.gov/earth1r6/6sf/bfpages/sbfhome.htm>

Federal Tax Incentives for Brownfield Redevelopment:

<http://www.epa.gov/swerosps/bf/html-doc/taxlaw2.htm>

City of Austin Brownfield Redevelopment Program:

<http://www.ci.austin.tx.us/sws/brownfields.htm>

City of Dallas Brownfield Redevelopment Program:

http://ci.dallas.tx.us/html/brownfields_.html

City of Fort Worth Economic Redevelopment Program:

<http://ci.fort-worth.tx.us/dem/brownfields.htm>

City of Houston Brownfield Redevelopment Program:

<http://www.gcr1.com/brownfields/>

City of San Antonio Brownfield Assessment Pilot:

<http://www.epa.gov/swerosps/bf/html-doc/sananton.htm>

Brownfield News:

<http://www.brownfieldnews.com/>

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