

APPENDIX IIA
TRAFFIC

APPENDIX IIA1
TxDOT REVIEW REQUEST

March 24, 2016

Project No. 1401491

**SENT VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Mr. Toribio Garza Jr., P.E.,
District Engineer
Texas Department of Transportation
600 W. US Expressway 83
Pharr, TX 78577 - 1231

**RE: TRAFFIC AND LOCATION RESTRICTIONS REVIEW
PERMIT AMENDMENT APPLICATION
EDINBURG REGIONAL DISPOSAL FACILITY
HIDALGO COUNTY, TEXAS
TCEQ PERMIT MSW-956C**

Dear Mr. Garza Jr:

City of Edinburg is preparing a Permit Amendment Application to be submitted to the Texas Commission on Environmental Quality (TCEQ) Solid Waste Permits Division for a proposed expansion of the Edinburg Regional Disposal Facility, TCEQ Permit MSW-956C. The existing 254-acre Type I facility is located approximately one mile northeast of the intersection of US 281 and Farm-to-Market Road 2812 (FM 2812). Golder Associates is preparing the application for the City of Edinburg to expand the permit boundary from 254 to 603 acres. A map showing the site location and the existing and the proposed limits of the permit boundary is attached.

In order to comply with current Texas solid waste regulation 30 TAC §330.61(i), on behalf of the City of Edinburg, Golder Associates Inc. is requesting TxDOT's consent that there are no traffic and location restrictions that will arise due to the proposed permit amendment. To aid in your review of our request, we have attached a copy of the transportation analysis portion of the Permit Amendment Application.

If further information is required by your department, please call the undersigned at (281) 821-6868.

Sincerely,

GOLDER ASSOCIATES INC.



Chad E. Ireland, P.E.
Senior Project Geological Engineer



May Xin, P.E.
Senior Engineer

cc: Ramiro L. Gomez, Jr., City of Edinburg Department of Solid Waste

CEI/kjc

Attachment – Transportation Analysis
Figure 1: Traffic Volumes – Existing and Future

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Golder Associates Inc.
500 Century Plaza Drive, Suite 190
Houston, TX 77073 USA
Tel: (281) 821-6868 Fax: (281) 821-6870 www.golder.com



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1.0 TRANSPORTATION ANALYSIS 30 TAC §330.61(i)

The City of Edinburg (City) will continue to use the existing entrance located on Jasman Road. This section addresses the availability and adequacy of the transportation infrastructure for the Edinburg Regional Disposal Facility. As explained below, the existing infrastructure can adequately accommodate the expected landfill traffic.

1.1 Site Access Road Availability 30 TAC §330.61(i)(1)

The Site entrance to access both the Type I Landfill and the Type IV Landfill owned by the City is via Jasman Road. This is north of Farm-to-Market Road (FM) 2812. The majority of the traffic accessing the Site will be from US 281 west of the Site, continuing east via FM 2812 directly off of US 281, and entering the Site from Jasman Road. From the east, the Site can be accessed from westbound FM 2812, entering the Site from Jasman Road. All Site access roads are shown on Figure 1.

1.2 Site Access Road Adequacy 30 TAC §330.61(i)(1)

The breakdown of the access road adequacy within one-mile radius of the Site is shown in Table 1 and is based on information provided by TxDOT. Both US 281 and FM 2812 are designed to handle vehicles weighing up to the legal limit of 80,000 pounds, which covers the various vehicles accessing the Site.

The portion of Jasman Road that is located north of FM 2812 is a private road owned by the City and is operated and maintained by the City. The Jasman Road within the City's property (between FM 2812 and the existing gate house for the Type I and IV Landfills) is a 40-foot wide paved roadway, as shown on Figure 1. Jasman Road extends into the City's landfills and serves as an internal access road, but is not a through-road.

TABLE 1. ACCESS ROADWAY CHARACTERISTICS

Roadway	Maximum Weight (Pounds)	Number of Lanes ¹	Width of Lanes (ft)	Curb/Shoulders ²	Surface Type
US 281 ³	80,000	4	12	5 to 10-foot shoulder	Asphaltic concrete Pavement surface overlaying a limed caliche base
FM 2812 ⁴	80,000	2 ⁽⁴⁾	12	~10-foot shoulder	Asphaltic concrete Pavement surface overlaying a limed caliche base

1. The number of lanes represents the total in both directions.
2. Curb and shoulders exist in both directions.
3. Near the intersection with FM 2812, US 281 northbound frontage road has three 12-foot wide lanes.
4. For a distance of approximately 500 ft on the eastern side of the intersection with US 281, FM 2812 has four 12-foot wide lanes.

According to TxDOT, there are three current roadway construction projects for the access roads in the vicinity of the Site. US 281 has two projects (Project ID: 025507128 and 025507129) scheduled to reconstruct the mainlines and add frontage roads between FM 490 and FM 2812. The estimated completion date for these projects is June 1, 2016 according to TxDOT's Project Tracker report on February 2, 2016. FM 2812 has one project (Project ID: 283101010) being finalized for construction to texturize the shoulders and add profile pavement markers between US 281 and FM 493.

1.2.1 Existing and Future Traffic Volumes on Access Roads 30 TAC §330.61(i)(2)

According to 2013 data provided by TxDOT, the Annual Average Daily Traffic (AADT) count on US 281 is 18,954 and 32,674 Vehicles Per Day (VPD) at two locations north and south of the intersection of US 281 and FM 2812, respectively. On FM 2812, the AADT count is 9,610 and 8,420 VPD at two locations west and east of Jasman Road, respectively. All traffic counts are for a 24-hour period and account for both directions of travel.

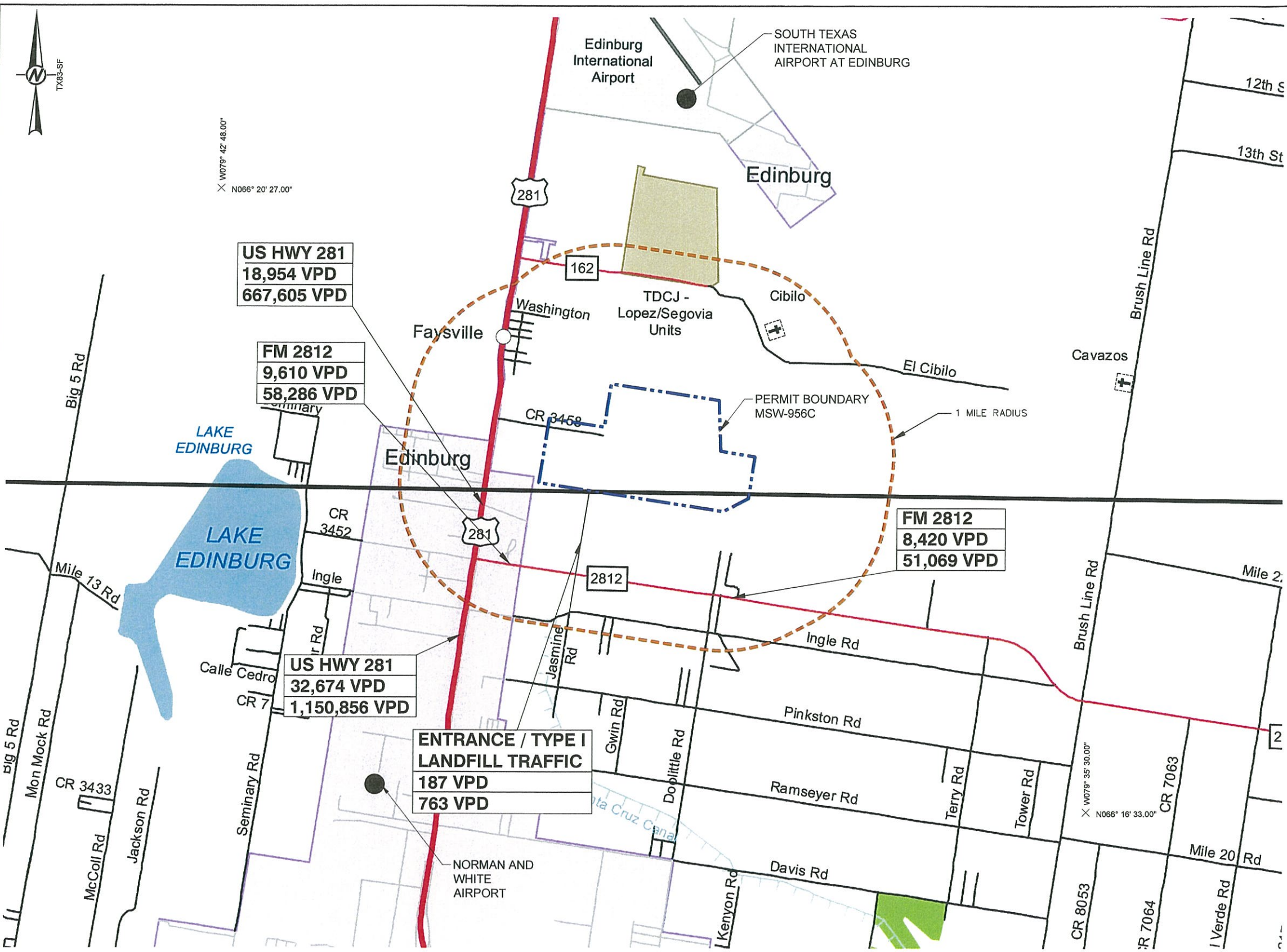
To calculate future traffic projections, we used an estimated average annual growth rate of 5% for US 281 and 2.5% for FM 2812. Anticipated site life at this time is 70 years; therefore, traffic volumes are projected through the year 2086. Based on the recommended growth rate, in the year 2086, the daily traffic volume on US 281 will be 667,605 and 1,150,856 vehicles per day at the two locations north and south of the intersection of US 281 and FM 2812, respectively. The daily traffic volume on FM 2812 will be 58,286 and 51,069 vehicles per day at the two locations west and east of Jasman Road, respectively.

Existing and future traffic volumes for roadways within one mile of the Site are shown on Figure 1.

1.2.2 Traffic Generated by the Type I Landfill 30 TAC §330.61(i)(3)

According to the Site data, the Type I Landfill generated 58,076 vehicles in 2015, i.e., averaging 187 vehicles per day. To project the future traffic volume generated by the Type I Landfill, a 2% annual increase, as used in the Site's Annual Report, was used. The estimated traffic generated by the Type I Landfill in 2086 is estimated to be 763 vehicles per day. Traffic generated by the Edinburg Regional Disposal Facility will continue to comprise only a small portion of the traffic on the access roads.

The traffic volumes generated by the Type I landfill are shown on Figure 1.



LEGEND

US HWY 281
28,000 VPD
61,120 VPD

ROADWAY
EXISTING ANNUAL AVERAGE DAILY TRAFFIC (2013)
FUTURE ANNUAL AVERAGE DAILY TRAFFIC (2086)

1 MILE RADIUS

Legend items:
IH, BI
US, BU, UA, UP
SH, BS
SL, SS, PR
FM, BF, RM, RR, RE, RS, PA
County Road
City Street or other Non-County Maintained Road
Railroad
Incorporated City
Unincorporated Community
Airport
Airport Runway
School
Military Installation
Prison
National or State Park
Cemetery
Dam
County Line
District Line
Canal
Flowing Stream
Intermittent Stream
River
Gulf Intracoastal Waterway
Other Body of Water

NOTES

1. 2013 ANNUAL AVERAGE DAILY TRAFFIC COUNTS PROVIDED BY TxDOT.

2. THE EXISTING TOTAL TRAFFIC GENERATED BY THE TYPE I LANDFILL IS BASED ON THE 2015 LANDFILL DATA.

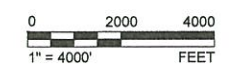
SURFACE TYPES

ROADWAY	SURFACE TYPE
US 281	ASPHALTIC CONCRETE PAVEMENT
FM 2812	CONCRETE AND ASPHALTIC CONCRETE PAVEMENT

REFERENCE (S)

BASE MAP TAKEN FROM TEXAS DEPARTMENT OF TRANSPORTATION, COUNTY MAPBOOK 2012, PAGES 445, & 446; DELIVERED IN PDF, <http://www.dot.state.tx.us> (ACCESSED OCTOBER 2014)

ISSUED FOR PERMITTING PURPOSES ONLY



CLIENT
CITY OF EDINBURG
DEPARTMENT OF SOLID WASTE MANAGEMENT

CONSULTANT
GOLDER ASSOCIATES

HOUSTON OFFICE
500 CENTURY PLAZA DRIVE, SUITE 190
HOUSTON, TEXAS
USA
(281) 821 6868
www.golder.com

SEAL
CHAD E. IRELAND
99283
LICENSED PROFESSIONAL ENGINEER

GOLDER ASSOCIATES INC.
TEXAS REGISTRATION F-2578

PROJECT
EDINBURG REGIONAL DISPOSAL FACILITY
PERMIT AMENDMENT APPLICATION TCEQ PERMIT MSW-956C
EDINBURG, HIDALGO COUNTY, TEXAS

TITLE
TRAFFIC VOLUMES - EXISTING AND FUTURE

PROJECT NO.
1401491

APPLICATION SECTION
IIA3

REV.
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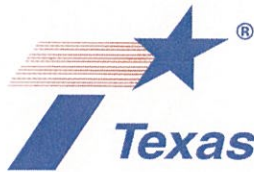
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FIGURE
1

Path: \\houston\drawing\2014\1401491 - City of Edinburg\PRODUCTION - Permit Amendment Application - File Name: 1401491A02.dwg

0	2016-03-24	ISSUED FOR PERMITTING PURPOSES ONLY	CEI	AGM	MX	CEI
REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED

APPENDIX IIA2
TxDOT RESPONSE



600 W INTERSTATE 2 | PHARR, TEXAS 78577 | (956) 702-6100 | WWW.TXDOT.GOV

April 5, 2016

Project No. 1401491

Mr. Chad E. Ireland, P.E.
Senior Project Geological Engineer
Golder Associates
500 Century Plaza Drive, Suite 190
Houston, Texas 77073

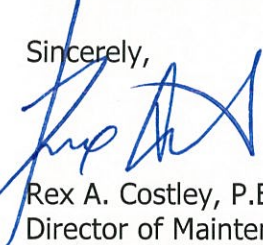
RE: Traffic and Location Restrictions Review
Permit Amendment Application
Edinburg Regional Disposal Facility
Hidalgo County, Texas
TCEQ Permit MSW-956C

Dear Mr. Ireland,

We have received and reviewed your letter dated March 24, 2016, in regards to Traffic and Location restrictions review, for a permit amendment application for the Edinburg Regional Disposal Facility in Hidalgo County, TX, TCEQ Permit MSW-956C. We are in general agreement with the amendment.

If I can be of further assistance, please do not hesitate to contact me at (956) 702-6137.

Sincerely,


Rex A. Costley, P.E.
Director of Maintenance

cc: Toribio Garza Jr., P.E., Pharr District Engineer
Rene Garza, P.E., Pharr Area Engineer

OUR GOALS

MAINTAIN A SAFE SYSTEM ▪ ADDRESS CONGESTION ▪ CONNECT TEXAS COMMUNITIES ▪ BEST IN CLASS STATE AGENCY

An Equal Opportunity Employer



FY2016-058

March 24, 2016

Project No. 1401491

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May Xin, P.E.
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CEI/kjc

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Golder Associates Inc.
500 Century Plaza Drive, Suite 190
Houston, TX 77073 USA
Tel: (281) 821-8868 Fax: (281) 821-8870 www.golder.com



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0	2014-03-24	ISSUED FOR PERMITTING PURPOSES ONLY	CEI	AGM	MX	CEI
REV	1/1/14	AM-00	DESIGN	PROJ		
			DESIGNED	PREPARED	REVIEWED	APPROVED

DOUGLAS ASSOCIATES, INC.
TEXAS REGISTRATION NO. 5578

CLIENT
CITY OF EDINBURG
DEPARTMENT OF SOLID WASTE MANAGEMENT

CONSULTANT
Golder Associates
HOUSTON OFFICE
500 CENTURY PALACE DRIVE, SUITE 190
HOUSTON, TEXAS 77056
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PROJECT
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PERMIT AMENDMENT APPLICATION TCEQ PERMIT MSW-956C
EDINBURG, HIDALGO COUNTY, TEXAS

TITLE
TRAFFIC VOLUMES - EXISTING AND FUTURE

NO. & DATE
1401431

APPROVAL SECTION
DESIGNED
PREPARED
REVIEWED
APPROVED

