

**NOTICE OF REGULAR CITY COUNCIL MEETING
CITY OF TOMBALL, TEXAS**



MONDAY, OCTOBER 15, 2012

6:00 P.M.

Notice is hereby given of a meeting of the Tomball City Council, to be held on Monday, October 15, 2012 at 6:00 P.M., City Hall, 401 Market Street, Tomball, Texas 77375, for the purpose of considering the following agenda items. All agenda items are subject to action. The Tomball City Council reserves the right to meet in a closed session for consultation with attorney on any agenda item should the need arise and if applicable pursuant to authorization by Title 5, Chapter 551, of the Texas Government Code.

1.0 Call to Order

2.0 Invocation

- Led by Chaplain Steve Allison, VFW Chaplain

3.0 Pledges to U.S. and Texas Flags

- Led by Members of the Tomball High School Student Council

4.0 Public Comments and Receipt of Petitions *[At this time, anyone will be allowed to speak on any matter other than personnel matters or matters under litigation, for length of time not to exceed three minutes. No Council/Board discussion or action may take place on a matter until such matter has been placed on an agenda and posted in accordance with law.]*

5.0 Presentations:

- **Mayor's Cup** – Trophy to the Winner of the 2012 **Mayor's Cup** Blood Drive

6.0 Reports and Announcements

- October 27, 2012 – **Tomball Bluegrass Festival - 11:30 a.m.-6:00 p.m.**
- November 5, 2012 – Appointments to Tourism Advisory Committee for terms expiring December 5, 2012
- November 3, 2012 – **Tomball Art Walk**
- November 10, 2012 – **Woodforest Run at the Depot – 8:00 a.m.**
- November 10, 2012 – **2nd Saturday at the Depot – 5:00 p.m.**
- November 10, 2012 – **Bugs, Brew & Barbecue, VW Show and MusicFest Re-Do – 9:00 a.m.-6:00 p.m.**
- **Walk Tomball!** – Every Saturday at 9:00 a.m. at the Depot
- Reports by City staff and members of council about items of community interest on which no action will be taken
 - Mike Baxter - **Bugs, Brew & Barbecue, VW Show and MusicFest Re-Do** – November 10, 2012 (New Date)

7.0 Approve the Minutes of the Following Meetings:

- October 1, 2012 - Regular City Council Meeting
- October 8, 2012 - Special City Council Meeting

8.0 Old Business:

- 8.1 Adopt, on Second Reading, Ordinance No. 2012-41, an Ordinance Amending the Code of Ordinances of the City of Tomball, Texas, by Amending Chapter 30, Environment, Article II, Oil and Gas Wells and Pipelines, to Add a New Definition of *Training Well and Training Well Site*, to Section 30-27 of Division 1, Generally, Thereof; Adding a New Section 30-31a, Location and Setback Requirements for Training Well Sites, to Division 1, Generally, Thereof; Adding Location and Setback Requirements for Training Well Sites to the Appeal Provisions of Section 30-32, of Division 1, Generally, Thereof; Adding Language to Section 30-33, Substitute Wells, of Division 1, Generally, to Make Such Regulations Applicable to Training Wells; Adding Language to Section 30-46, Permit Required to Drill or Deepen a Well, or Conduct Seismic Activities, of Division 2, Wells and Seismic Activities Permits, to Make Such Regulations Applicable to Training Wells; Adding Language to Section 30-47, Application and Filing Fee, of Division 2, Wells and Seismic Activities Permits, to Exempt Training Wells from Certain Regulations and Requiring a Filing Fee for a Training Well Application; Adding Language to Section 30-48, Filing of Application and Notice, of Division 2, Wells and Seismic Activities Permits, Exempting Training Wells from the Regulations of Section 30-48; Adding Language to Section 30-49, Granting or Refusal of Permit, of Division 2 Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-50, Form and Issuance of Permit, of Division 2, Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-51, Bond Requirements, of Division 2, Wells and Seismic Activities Permits, Exempting Training Wells from the Regulations Contained

Therein; Adding Language to Section 30-66, Unlawful to Permit Escape of Mud, Etc., of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-67, Remedial Well Work, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-68, Reworking a Well, Deeper Drilling; Supplemental Permit Required, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding New Sections 30-70, Noise, 30-71, Lighting, and 30-72, Buffering, to Division 3, Well Operation, Providing Regulations for Noise, Lighting and Buffering for Training Wells; Providing a Penalty of up to \$2,000.00 for Violations with Each Day Constituting a Separate Violation; Providing for the Publication of This Ordinance; Providing for Severability; and Making Other Findings and Provisions Related Thereto

8.2 Adopt, on Second Reading, Ordinance No. 2012-42, an Ordinance Amending the Code of Ordinances of the City of Tomball, Texas, by Amending Section 14-293, Special Provisions, of Division 4, Permits and Inspections, of Article IV, Electricity, of Chapter 14, Buildings and Building Regulations, to Allow Aluminum Conductors to be Installed in New Commercial Buildings, 5,000 Square Feet or Larger, on All Service Entrance Conductors and Feeder Conductors Sized 4/0 and Larger; Providing a Penalty of up to \$2,000.00 for Each Violation of Any Provision Hereof; Providing for Severability; Providing for the Publication of This Ordinance; and Making Other Findings and Provisions Related Thereto

8.3 Adopt, on First Reading, Ordinance No. 2012-20, an Ordinance Deleting Article IV., Electricity, of Chapter 14, Buildings and Building Regulations, of the Code of Ordinances of the City of Tomball, Texas, in Its Entirety and Substituting Therefor a New Article IV., Electricity, of Chapter 14, Buildings and Building Regulations; Repealing all Ordinances or Parts of Ordinances Inconsistent or in Conflict Herewith; Providing a Penalty in an Amount of Not More Than \$2,000 for Violation of Any Provision Hereof; Providing for Savings and Severability; Providing for Publication; and Making Other Provisions and Findings Related Thereto

9.0 New Business:

9.1 Adopt, on First Reading, Ordinance No. 2012-22, an Ordinance of the City of Tomball, Texas Amending the Code of Ordinances of the City by Amending and/or Adding Definitions of *Aircraft*, *Awning Sign*, *Bandit Sign*, *Banner Sign*, *Billboard*, *Flag Sign*, *Inflatable Sign*, *Living Or Human Sign*, *Marquee Sign*, *Message Board*, *Monument Sign*, *Pole Sign*, *Premises*, *Temporary Sign*, *Wayfinding Sign*, and *Window Sign* to Section 60-1, Definitions, of Article I, In General, of Chapter 60, Signs; Amending Section 60-4, Sign Administrator and Enforcement, of Article I, In General, of Chapter 60, Signs, to Delete Reference to Rules and Regulations for Appeals to City Council; Amending Section 60-3, Classifications, of Article I, In General, of Chapter 60, Signs, to Add Window Sign as a Classification of Signage; Deleting Subsection (b)(3), Exceptions, Other Signs, from Section 60-5, Sign Permits and Fees, of Article I, In General, of Chapter 60, Signs, to Add to the Exception that Signs Relating to Construction, Repair, Sale or Rental of the Property and Garage Sale Signs be Limited to the Duration that the Property is Under Repair or Construction, or for Sale or Rent; Amending Subsection (c), Application Procedure, of Section 60-5, Sign Permits and Fees, of Article I, In General, of Chapter 60, Signs, by Adding Marquee and

Projecting Signs to the Application Procedure; Amending Section 60-7, Miscellaneous Sign Provisions, of Article I, In General, of Chapter 60, Signs, to Limit properties to One (1) On-Premise Temporary Banner or Flag Sign and Adding Regulations for Message Board and Marquee Signs; Amending Section 60-8, On-Premises Sign Provisions, of Article I, In General, of Chapter 60, Signs, to Provide that On-Premise Signs Shall Adhere to the Visibility Triangle Requirements of Chapter 66 of the Code of Ordinances; Amending Section 60-9, Off-Premises Sign Provisions, of Article I, In General, of Chapter 60, Signs, to Limit Properties to No More Than Two (2) Off-Premise Signs; Adding a New Section 60-12, Attention-Getting Devices, to Article I, In General, of Chapter 60, Signs, to Prohibit Attention-Getting Devices as Defined Herein; Adding a New Section 60-13, Billboards, to Article I, In General, of Chapter 60, Signs, to Prohibit New Billboards within the City or Its Extraterritorial Jurisdiction and Providing Regulations for the Replacement or Restoration of Existing Billboards; Adding a New Section 60-14, Prohibited Signage, to Article I, In General, of Chapter 60, Signs, Prohibiting the Types of Signs Described Therein; Amending Section 60-29, Height Limitations, of Article II, Design and Structural Requirements, of Chapter 60, Signs, to Limit On-Premise Signs to a Height No Greater Than 42 Feet from the Natural Grade Level of the Ground Surface, Requiring that Projecting and Marquee Signs Shall Not Exceed Eight (8) Feet Above the Roof Level, and Requiring That No Off-Premise Sign Shall Exceed a Height of 12 Feet from the Natural Grade Level of the Ground Surface; Deleting Section 60-30, Size Limitation, of Article II, Design and Structural Requirements, of Chapter 60, Signs, and Adding a New Section 60-30, Size Limitation, to Limit On-Premise Wall Signs to a Face Area of 300 Square Feet or Less per Building Face, to Limit CEVMS Signs to a Face Area of 32 Square Feet for a Single Business Use or 50 Square Feet for a Multi-Tenant Use, and Limiting Off-Premise Signs to a Face Area Not to Exceed 40 Square Feet; Deleting From Article II, Design and Structural Requirements of Chapter 60, Signs, Section 30-33, Portable Signs, in Its Entirety; Adding a New Section 60-33, Wayfinding Signs, to Article II, Design and Structural Requirements, of Chapter 60, Signs, to Limit On Premises Wayfinding Signs to a Maximum Sign Face Area of 12 Square Feet, to Limit Off Premises Wayfinding Signs to a Maximum Sign Face Area of 40 Square Feet, Requiring a Wayfinding Guide Sign Plan to be Approved by Sign Administrator and Providing Other Regulations Regarding Wayfinding Signs; Adding a New Section 60-34, Flags and Flag Signs, to Article II, Design and Structural Requirements, of Chapter 60, Signs, to Limit Flag Signs to a Maximum of Three (3) Flag Signs per Premises, Including One (1) Corporate Flag and Providing Other Regulations for the Height, Lighting and Other Matters Related to Flag Signs; Providing for Severability; Providing a Penalty of Up to \$2,000.00 for Violations with Each Day Constituting a Separate Violation; Providing for the Publication of This Ordinance; and Making Other Findings and Provisions Related Thereto.

- 9.2 Consideration to approve **ZONING CASE P12-483**: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center within the City of Tomball, Harris County, Texas, generally located northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

- Conduct a Public Hearing on **ZONING CASE P12-483**
- Adopt on First Reading, Ordinance No. 2012-43, an Ordinance of the City

of Tomball, Texas, amending Its Comprehensive Zoning Ordinance by Changing the Zoning District Classification of Approximately 1.01 Acres of Land, Legally Described as Lot 1, Block 1, Northwest Houston Heart Center, within the City of Tomball, Harris County, Texas, from the Single-Family Residential-6 District to the Commercial District; said Property being Generally Located Northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue; Providing for the Amendment of the Official Zoning Map of the City; Providing for Severability; Providing for a Penalty of an Amount Not to Exceed \$2,000 for Each Day of Violation of Any Provision Hereof, Making Findings of Fact; and Providing for Other Related Matters.

- 9.3 Consideration to approve **ZONING CASE P12-484**: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball within the City of Tomball, Harris County, Texas, generally located at the southeast corner of Barbara Street and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

- Conduct a Public Hearing on **ZONING CASE P12-484**
- Adopt on First Reading, Ordinance No. 2012-44, an Ordinance of the City of Tomball, Texas, amending Its Comprehensive Zoning Ordinance by Changing the Zoning District Classification of Approximately 0.32 Acres of Land, Legally Described as Lots 11 and 12, Block 6, Main Street-Tomball, within the City of Tomball, Harris County, Texas, from the Single-Family Residential-6 District to the Commercial District; said Property being Generally Located at the Southeast Corner of Barbara Street and Lawrence Avenue; Providing for the Amendment of the Official Zoning Map of the City; Providing for Severability; Providing for a Penalty of an Amount Not to Exceed \$2,000 for Each Day of Violation of Any Provision Hereof, Making Findings of Fact; and Providing for Other Related Matters.

- 9.4 Discussion and Direction to Staff regarding Jacqueline Angelo's Request for the City to Acquire the School Street Right-of-Way.

- 9.5 Approve Resolution No. 2012-31, a Resolution of the City Council of the City of Tomball, Texas, Supporting the 47th Annual Tomball Holiday Parade, "***Candy Canes and Christmas Carols***", to be held in Tomball on Saturday, November 17, 2012 and to Approve Requested Street Closures and In-kind Services

- 9.6 Approve the Following Plats, as Recommended by Planning and Zoning Commission:

- **ABBREVIATED PLAT PATEL PLAZA**: Being a Subdivision of 0.3214 Acre, being comprised of Lots 1 and 2 in Block 41 of Tomball Townsite; situated in the William Hurd Survey, Abstract No. 371 according to the Map or Plat thereof recorded in Volume 2, Page 65 of the Map Records of Harris County, Texas.
- **DAKOTA PINES FINAL PLAT**: A Subdivision of 5.0005 Acres of land situated in the John S. Smith Survey, Abstract No. 730, Harris County,

Texas; Being a Replat of a portion of a Tract of land containing a called 21.922 Acres, Being a portion of a Tract of land containing called 52 Acres as described in Deed to Park Place Assembly of God Church under Clerk's File No. E330792 of the Real Property Records of Harris County, Texas.

- **POINT SOUTH BUSINESS PARK FINAL PLAT**: Being a Subdivision of 3.9078 Acres of land out of the Claude M. Pillot Survey, Abstract No. 632, in the City of Tomball, Harris County, Texas.

10.0 Adjournment

CERTIFICATION

I hereby certify that the above notice of meeting was posted on the bulletin board of City Hall, City of Tomball, Texas, a place readily accessible to the general public at all times, on the 11th day of October 2012 by 6:00 p.m., and remained posted for at least 72 continuous hours preceding the scheduled time of said meeting.

Doris Speer

Doris Speer

City Secretary, TRMC

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please feel free to contact the City Secretary's office at (281) 290-1002 or FAX (281) 351-6256 for further information.

AGENDAS MAY ALSO BE VIEWED ONLINE AT www.ci.tomball.tx.us.

Regular City Council
Agenda Item
Data Sheet

Meeting Date: October 15, 2012

Topic:

- Led by Chaplain Steve Allison, VFW Chaplain

Background:

Origination:

Recommendation:

Funding:

Party(ies) responsible for placing this item on agenda:

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

Regular City Council
Agenda Item
Data Sheet

Meeting Date: October 15, 2012

Topic:

- Led by Members of the Tomball High School Student Council

Background:

Origination:

Recommendation:

Funding:

Party(ies) responsible for placing this item on agenda:

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

Regular City Council
Agenda Item
Data Sheet

Meeting Date: October 15, 2012

Topic:

- *Mayor's Cup* – Trophy to the Winner of the 2012 *Mayor's Cup* Blood Drive

Background:

Origination:

Recommendation:

Funding:

Party(ies) responsible for placing this item on agenda:

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

- October 27, 2012 – *Tomball Bluegrass Festival - 11:30 a.m.-6:00 p.m.*
- November 5, 2012 – Appointments to Tourism Advisory Committee for terms expiring December 5, 2012
- November 3, 2012 – *Tomball Art Walk*
- November 10, 2012 – *Woodforest Run at the Depot – 8:00 a.m.*
- November 10, 2012 – *2nd Saturday at the Depot – 5:00 p.m.*
- November 10, 2012 – *Bugs, Brew & Barbecue, VW Show and MusicFest Re-Do – 9:00 a.m.-6:00 p.m.*
- *Walk Tomball!* – Every Saturday at 9:00 a.m. at the Depot
- Reports by City staff and members of council about items of community interest on which no action will be taken
 - Mike Baxter - *Bugs, Brew & Barbecue, VW Show and MusicFest Re-Do* – November 10, 2012 (New Date)

Background:

Origination:

Various

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

City Secretary

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Tomball Bluegrass Festival

TOMBALL BLUEGRASS FESTIVAL

TOMBALL

OCTOBER 27, 2012
11:30 A.M. TO 6 P.M.

BANDS, FOOD, VENDORS AND A KID'S PLAY ZONE!
AT THE HISTORIC DOWNTOWN DEPOT. CALL 281-351-5484

VISIT WWW.FACEBOOK.COM/TOMBALLTEXANFORFUN



Regular City Council Agenda Item Data Sheet

Meeting Date: October 15, 2012

Topic:

Approve the Minutes of the Following Meetings:

- October 1, 2012 - Regular City Council Meeting
- October 8, 2012 - Special City Council Meeting

Background:**Origination:**

City Secretary

Recommendation:**Funding:****Party(ies) responsible for placing this item on agenda:**

City Secretary

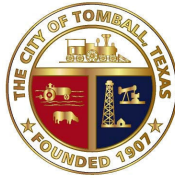
ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Draft Minutes - October 1, 2012 Regular City Council Meeting

Draft Minutes - October 8, 2012 Special City Council Meeting

MINUTES OF REGULAR CITY COUNCIL MEETING CITY OF TOMBALL, TEXAS



**MONDAY, OCTOBER 1, 2012
6:00 P.M.**

1.0 Call to Order

The Council meeting was called to order at 6:00 p.m. by Mayor Gretchen Fagan. Other members present were:

Councilman Hudgens
Councilman Stoll
Councilman Brown
Councilman Townsend
Councilman Dodson

Others present:

City Manager – George Shackelford
Assistant City Manager – Christal Weber
City Secretary – Doris Speer
City Attorney – Loren Smith
Director of Public Works – David Kauffman
Fire Chief – Randy Parr
Finance Director – Glenn Windsor
Marketing Director – Mike Baxter
City Planner – Rebeca Guerra
Assistant City Engineer – Lori Lakatos
Community Events Coordinator – Rosalie Dillon

2.0 Invocation

- Led by Brother James Roberson, Hufsmith Church of Christ

3.0 Pledges to U. S. and Texas Flags

- Led by Rosalie Dillon, Community Events Coordinator

4.0 No public comments were received.

5.0 Reports and Announcements:

- **October 2, 2012 – Annual National Night Out at the Depot – 6:00-8:00 p.m.**
- **October 8, 2012 – Vote on Proposed Tax Rate – 5:00 p.m.**
- **October 13, 2012 - 2nd Saturday at the Depot —“Zomball in Tomball” – 5:00 p.m.**
- **October 27, 2012 – Tomball Bluegrass Festival – 11:30 a.m.-6:00 p.m.**
- November 5, 2012 – Appointments to Tourism Advisory Committee for terms expiring December 5, 2012
- **November 10, 2012 – Tomball Art Walk**
- **Walk Tomball!** – Every Saturday at 9:00 a.m. at the Depot
- Reports by City staff and members of Council about items of community interest on which no action will be taken
 - Mike Baxter - ***Bugs, Brew & Barbecue, VW Show and MusicFest***
 - David Kauffman - Update on the Demolition of the Two Buildings on Walnut and TISD Administrative Building and Construction of Restrooms on Walnut

6.0 Motion was made by Councilman Dodson, second by Councilman Brown, to approve the Minutes of the Following Meetings:

- September 17, 2012 - Regular City Council Meeting
- September 24, 2012 - Special City Council Meeting

Motion carried unanimously.

7.0 Old Business:

7.1 Motion was made by Councilman Townsend, second by Councilman Hudgens, to adopt on Second Reading, Ordinance No. 2012-33, an Ordinance of the City of Tomball, Texas, amending its Comprehensive Zoning Ordinance by changing the zoning district classification of approximately 4.24 acres of land, legally described as Tract 1 R/S 10, Abstract 730, J.S. Smith Survey, within the City of Tomball, Harris County, Texas, from the Single-Family Estate Residential-20 District to the Agricultural District; said property being generally located northerly of East Hufsmith Road, easterly of Snook Lane; providing for the amendment of the official Zoning Map of the City; providing for severability; providing for a penalty of an amount not to exceed \$2,000 for each day of violation of any provision hereof, making findings of fact; and providing for other related matters. Vote was as follows:

Councilman Townsend	<u>Aye</u>
Councilman Dodson	<u>Nay</u>

Councilman Hudgens	<u>Aye</u>
Councilman Stoll	<u>Aye</u>
Councilman Brown	<u>Aye</u>

Motion carried, 4 votes Aye, 1 vote Nay.

- 7.2 Motion was made by Councilman Townsend, second by Councilman Dodson, to adopt on Second Reading, Ordinance No. 2012-34, an Ordinance of the City of Tomball, Texas, amending its Comprehensive Zoning Ordinance by changing the zoning district classification of approximately 6.93 acres of land, legally described as Lot 2, Block 1, Tomball South Commercial within the City of Tomball, Harris County, Texas, from the Agricultural District to the Light Industrial District; said property being generally located northerly of Spell Road, westerly of Hufsmith-Kohrville Road; providing for the amendment of the official Zoning Map of the City; providing for severability; providing for a penalty of an amount not to exceed \$2,000 for each day of violation of any provision hereof, making findings of fact; and providing for other related matters. Vote was as follows:

Councilman Dodson	<u>Aye</u>
Councilman Hudgens	<u>Aye</u>
Councilman Stoll	<u>Aye</u>
Councilman Brown	<u>Aye</u>
Councilman Townsend	<u>Aye</u>

Motion carried unanimously.

- 7.3 Motion was made by Councilman Townsend, second by Councilman Stoll, to adopt on Second Reading, Ordinance No. 2012-35, an Ordinance of the City of Tomball, Texas, amending its Comprehensive Zoning Ordinance by changing the zoning district classification of approximately 17.63 acres of land, legally described as Tract 4B, Abstract 70, Elizabeth Smith Survey, Tract R20-A, Abstract 632, C.M. Pillot Survey, Lot 384, Tomball Outlots, and Tract 385A, Tomball Outlots within the City of Tomball, Harris County, Texas, from the Agricultural, Single-Family Estate Residential-20, and Light Industrial Districts to the Light Industrial District; said property being generally located northerly of Holderrieth Road, westerly of Hufsmith-Kohrville Road; providing for the amendment of the official Zoning Map of the City; providing for severability; providing for a penalty of an amount not to exceed \$2,000 for each day of violation of any provision hereof, making findings of fact; and providing for other related matters. Vote was as follows:

Councilman Hudgens	<u>Aye</u>
Councilman Stoll	<u>Aye</u>
Councilman Brown	<u>Aye</u>

Councilman Townsend	<u>Aye</u>
Councilman Dodson	<u>Aye</u>

Motion carried unanimously.

- 7.4 Motion was made by Councilman Brown, second by Councilman Stoll, to adopt on Second Reading, Ordinance No. 2012-36, an Ordinance of the City of Tomball, Texas, Amending its Comprehensive Zoning Ordinance by changing the zoning district classification of approximately 5.61 acres of land, legally described as Lot 4, Block 1, Tomball South Commercial within the City of Tomball, Harris County, Texas, from the Agricultural District to the Light Industrial District; said property being generally located northerly of Spell Road, westerly of Hufsmith-Kohrville Road; providing for the amendment of the official Zoning Map of the City; providing for severability; providing for a penalty of an amount not to exceed \$2,000 for each day of violation of any provision hereof, making findings of fact; and providing for other related matters. Vote was as follows:

Councilman Stoll	<u>Aye</u>
Councilman Brown	<u>Aye</u>
Councilman Townsend	<u>Aye</u>
Councilman Dodson	<u>Aye</u>
Councilman Hudgens	<u>Aye</u>

Motion carried unanimously.

8.0 New Business:

- 8.1 Motion was made by Councilman Dodson, second by Councilman Brown, to adopt \$0.230000 as the Portion of the Tax Rate for the Interest and Sinking (Debt Service) Fund for Fiscal Year 2012-2013.

Motion carried unanimously.

- 8.2 Motion was made by Councilman Dodson, second by Councilman Stoll, to adopt \$0.111455 as the Portion of the Tax Rate to Fund Maintenance and Operations (M&O) for Fiscal Year 2012-2013.

Motion carried unanimously.

- 8.3 Motion was made by Councilman Townsend, second by Councilman Dodson, to read Ordinance No. 2012-32 by caption only on First Reading.

Motion carried unanimously.

Motion was made by Councilman Dodson, second by Councilman Brown, to adopt, on First Reading, Ordinance No. 2012-32, an Ordinance of the City of Tomball, Texas, Setting the Tax Levy of \$0.341455/\$100 Value Assessed for the Year 2012 on All Taxable Real and Personal Property Located in the City of Tomball, Texas; Providing for Penalty, Interest, and Additional Penalty on Taxes Not Timely Paid; and Providing Other Matters Relating to the Subject. Vote was as follows:

Councilman Brown	<u>Aye</u>
Councilman Townsend	<u>Aye</u>
Councilman Dodson	<u>Aye</u>
Councilman Hudgens	<u>Aye</u>
Councilman Stoll	<u>Aye</u>

Motion carried unanimously.

- 8.4 Mayor Fagan Announced that the Final Vote on the proposed 2012 Tax Rate will be held on October 8, 2012 at 5:00 p.m. No action necessary.
- 8.5 Motion was made by Councilman Hudgens, second by Councilman Stoll, to approve Resolution No. 2012-26, a Resolution Declaring the Intention of the City of Tomball, Texas, to Institute Proceedings to Annex Certain Territory; Describing Such Territory; Setting the Dates, Times, and Places for Two Public Hearings at Which All Interested Parties Shall Have an Opportunity to be Heard; Providing for Publication of Notices of Such Public Hearings; and Directing Preparation of a Municipal Service Plan for the Territory Proposed to be Annexed (3.143 Acres of Land Located at 0 Hufsmith-Kohrville Road, at the Intersection of FM 2978 and FM 2920 – Mary McGill Criner Adickes, Individually and as Trustee and as Successor in Interest to the Joint Venture Agreement, as Recorded under Clerk’s File No. G-572577, Real Property Records, Harris County, Texas) – Tract 1.

Motion carried unanimously.

- 8.6 Motion was made by Councilman Townsend, second by Councilman Hudgens, to approve Resolution No. 2012-27, a Resolution Declaring the Intention of the City of Tomball, Texas, to Institute Proceedings to Annex Certain Territory; Describing Such Territory; Setting the Dates, Times, and Places for Two Public Hearings at Which All Interested Parties Shall Have an Opportunity to be Heard; Providing for Publication of Notices of Such Public Hearings; and Directing Preparation of a Municipal Service Plan for the Territory Proposed to be Annexed (49.544 Acres of Land Located at 0 Dement Road, near the Intersection of FM 2978 and FM 2920 – Ronald J. Collins, Donald Claude Childress, Roy A. Johlke and Susan Lorraine Dietz Varsel, Individually and as Administrator of the Estate of Adell G. Dietz) – Tract 2.

Consideration of Resolution No. 2012-27 was tabled to the October 8, 2012 meeting at the request of Council, pending inclusion of road right-of-way in metes and bounds description for Tract 2.

No action taken.

- 8.7 Motion was made by Councilman Townsend, second by Councilman Dodson, to approve Resolution No. 2012-28, a Resolution Declaring the Intention of the City of Tomball, Texas, to Institute Proceedings to Annex Certain Territory; Describing Such Territory; Setting the Dates, Times, and Places for Two Public Hearings at Which All Interested Parties Shall Have an Opportunity to be Heard; Providing for Publication of Notices of Such Public Hearings; and Directing Preparation of a Municipal Service Plan for the Territory Proposed to be Annexed (23.624 Acres of Land Located at 0 FM 2920, near the Intersection of FM 2978 and FM 2920 – Cypressbrook 2920, LP) – Tract 3.

Motion carried unanimously.

- 8.8 Motion was made by Councilman Dodson, second by Councilman Brown, to approve Resolution No. 2012-29, a Resolution Declaring the Intention of the City of Tomball, Texas, to Institute Proceedings to Annex Certain Territory; Describing Such Territory; Setting the Dates, Times, and Places for Two Public Hearings at Which All Interested Parties Shall Have an Opportunity to be Heard; Providing for Publication of Notices of Such Public Hearings; and Directing Preparation of a Municipal Service Plan for the Territory Proposed to be Annexed (20 Acres of Land Located at 10920 FM 2920, near the Intersection of FM 2978 and FM 2920 – ABCO Land Corporation) – Tract 4.

Motion carried unanimously.

- 8.9 Motion was made by Councilman Townsend, second by Councilman Stoll, to read Ordinance No. 2012-41 by caption only on First Reading.

Motion carried unanimously.

Motion was made by Councilman Townsend, second by Councilman Stoll to Adopt, on First Reading, Ordinance No. 2012-41, an Ordinance Amending the Code of Ordinances of the City of Tomball, Texas, by Amending Chapter 30, Environment, Article II, Oil and Gas Wells and Pipelines, to Add a New Definition of *Training Well Site*, to Section 30-27 of Division 1, Generally, Thereof; Adding a New Section 30-31a, Location and Setback Requirements for Training Well Sites, to Division 1, Generally, Thereof; Adding Location and Setback Requirements for Training Well Sites to the Appeal Provisions of Section 30-32, of Division 1, Generally, Thereof; Adding Language to Section 30-33, Substitute Wells, of Division 1, Generally, to Make Such Regulations Applicable to Training Wells;

Adding Language to Section 30-46, Permit Required to Drill or Deepen a Well, or Conduct Seismic Activities, of Division 2, Wells and Seismic Activities Permits, to Make Such Regulations Applicable to Training Wells; Adding Language to Section 30-47, Application and Filing Fee, of Division 2, Wells and Seismic Activities Permits, to Exempt Training Wells from Certain Regulations and Requiring a Filing Fee for a Training Well Application; Adding Language to Section 30-48, Filing of Application and Notice, of Division 2, Wells and Seismic Activities Permits, Exempting Training Wells from the Regulations of Section 30-48; Adding Language to Section 30-49, Granting or Refusal of Permit, of Division 2 Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-50, Form and Issuance of Permit, of Division 2, Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-51, Bond Requirements, of Division 2, Wells and Seismic Activities Permits, Exempting Training Wells from the Regulations Contained Therein; Adding Language to Section 30-66, Unlawful to Permit Escape of Mud, Etc., of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-67, Remedial Well Work, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-68, Reworking a Well, Deeper Drilling; Supplemental Permit Required, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding New Sections 30-70, Noise, 30-71, Lighting, and 30-72, Buffering, to Division 3, Well Operation, Providing Regulations for Noise, Lighting and Buffering for Training Wells; Providing a Penalty of up to \$2,000.00 for Violations with Each Day Constituting a Separate Violation; Providing for the Publication of This Ordinance; Providing for Severability; and Making Other Findings and Provisions Related Thereto.

Motion to Amend was made by Councilman Townsend, second by Councilman Stoll to Adopt, on First Reading, Ordinance No. 2012-41, an Ordinance Amending the Code of Ordinances of the City of Tomball, Texas, by Amending Chapter 30, Environment, Article II, Oil and Gas Wells and Pipelines, to Add a New Definition of *Training Well Site*, to Section 30-27 of Division 1, Generally, Thereof; Adding a New Section 30-31a, Location and Setback Requirements for Training Well Sites, to Division 1, Generally, Thereof; Adding Location and Setback Requirements for Training Well Sites to the Appeal Provisions of Section 30-32, of Division 1, Generally, Thereof; Adding Language to Section 30-33, Substitute Wells, of Division 1, Generally, to Make Such Regulations Applicable to Training Wells; Adding Language to Section 30-46, Permit Required to Drill or Deepen a Well, or Conduct Seismic Activities, of Division 2, Wells and Seismic Activities Permits, to Make Such Regulations Applicable to Training Wells; Adding Language to Section 30-47, Application and Filing Fee, of Division 2, Wells and Seismic Activities Permits, to Exempt Training Wells from Certain Regulations and Requiring a Filing Fee for a Training Well Application; Adding Language to Section 30-48, Filing of Application and Notice, of Division 2, Wells and Seismic Activities Permits,

Exempting Training Wells from the Regulations of Section 30-48; Adding Language to Section 30-49, Granting or Refusal of Permit, of Division 2 Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-50, Form and Issuance of Permit, of Division 2, Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-51, Bond Requirements, of Division 2, Wells and Seismic Activities Permits, Exempting Training Wells from the Regulations Contained Therein; Adding Language to Section 30-66, Unlawful to Permit Escape of Mud, Etc., of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-67, Remedial Well Work, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-68, Reworking a Well, Deeper Drilling; Supplemental Permit Required, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding New Sections 30-70, Noise, 30-71, Lighting, and 30-72, Buffering, to Division 3, Well Operation, Providing Regulations for Noise, Lighting and Buffering for Training Wells; Providing a Penalty of up to \$2,000.00 for Violations with Each Day Constituting a Separate Violation; Providing for the Publication of This Ordinance; Providing for Severability; and Making Other Findings and Provisions Related Thereto, by deleting the proposed amendment to Section 30-69, Rules for Drilling and Producing Operations for Permit Holder, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells and by amending Section 30-31A(b) to 150 feet. Vote was as follows:

Councilman Townsend	<u>Aye</u>
Councilman Dodson	<u>Aye</u>
Councilman Hudgens	<u>Nay</u>
Councilman Stoll	<u>Aye</u>
Councilman Brown	<u>Aye</u>

Motion carried, 4 votes Aye, 1 vote Nay.

- 8.10 Motion was made by Councilman Townsend, second by Councilman Dodson, to read Ordinance No. 2012-42 by caption only on First Reading.

Motion carried unanimously.

Motion was made by Councilman Townsend, second by Councilman Dodson, to adopt, on First Reading, Ordinance No. 2012-42, an Ordinance Amending the Code of Ordinances of the City of Tomball, Texas, by Amending Section 14-293, Special Provisions, of Division 4, Permits and Inspections, of Article IV, Electricity, of Chapter 14, Buildings and Building Regulations, to Allow Aluminum Conductors to be Installed in New Commercial Buildings, 5,000 Square Feet or Larger, on All Service Entrance Conductors and Feeder Conductors Sized 4/0 and Larger;

Providing a Penalty of up to \$2,000.00 for Each Violation of Any Provision Hereof; Providing for Severability; Providing for the Publication of This Ordinance; and Making Other Findings and Provisions Related Thereto. Vote was as follows:

Councilman Dodson	<u>Aye</u>
Councilman Hudgens	<u>Aye</u>
Councilman Stoll	<u>Aye</u>
Councilman Brown	<u>Aye</u>
Councilman Townsend	<u>Aye</u>

Motion carried unanimously.

- 8.11 Motion was made by Councilman Stoll, second by Councilman Townsend, to approve Professional Services Agreement with CLR, Inc. for Design of the Medical District Sidewalks, E&P Project Number 2012-10018, in the Amount of \$77,423.20.

Motion carried unanimously.

- 8.12 Motion was made by Councilman Hudgens, second by Councilman Stoll, to authorize Engineering and Planning Department to Negotiate and Prepare Professional Services Agreement with CLR, Inc. for Update of the Infrastructure Master Plan.

Motion carried unanimously.

- 9.0 Motion was made by Councilman Townsend, second by Councilman Brown, to adjourn.

Motion carried unanimously.

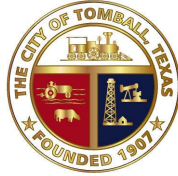
Meeting adjourned.

PASSED AND APPROVED this 15th day of October 2012.

Doris Speer, TRMC, CMC
City Secretary

Gretchen Fagan
Mayor

MINUTES OF SPECIAL CITY COUNCIL MEETING CITY OF TOMBALL, TEXAS



**MONDAY, OCTOBER 8, 2012
5:00 P.M.**

1.0 Call to Order

The Council meeting was called to order at 5:00 p.m. by Mayor Gretchen Fagan. Other members present were:

Councilman Hudgens
Councilman Stoll
Councilman Brown
Councilman Dodson

Members absent:

Councilman Townsend - Excused

Others present:

City Secretary – Doris Speer
City Attorney – Loren Smith
Fire Chief – Randy Parr
Finance Director – Glenn Windsor
City Planner – Rebeca Guerra
Assistant City Engineer – Lori Lakatos

2.0 No Public Comments were received.

3.0 Reports and Announcements:

- **October 13, 2012 - 2nd Saturday at the Depot —“Zomball in Tomball” – 5:00 p.m.**
- **October 27, 2012 – Tomball Bluegrass Festival – 11:30 a.m.-6:00 p.m.**
- November 5, 2012 – Appointments to Tourism Advisory Committee for terms expiring December 5, 2012
- **November 3, 2012 – Tomball Art Walk**

- ***Walk Tomball!*** – Every Saturday at 9:00 a.m. at the Depot
- Reports by City staff and members of council about items of community interest on which no action will be taken
 - Update on Signage for Pine Country of Tomball

4.0 Old Business:

- 4.1 Motion was made by Councilman Dodson, second by Councilman Stoll, to adopt, on Second Reading, Ordinance No. 2012-32, an Ordinance of the City of Tomball, Texas, Setting the Tax Levy of \$0.341455/\$100 Value Assessed for the Year 2012 on All Taxable Real and Personal Property Located in the City of Tomball, Texas; Providing for Penalty, Interest, and Additional Penalty on Taxes Not Timely Paid; and Providing Other Matters Relating to the Subject. Vote was as follows:

Councilman Hudgens	<u>Aye</u>
Councilman Stoll	<u>Aye</u>
Councilman Brown	<u>Aye</u>
Councilman Townsend	<u>Absent</u>
Councilman Dodson	<u>Aye</u>

Motion carried unanimously.

- 4.2 Motion was made by Councilman Stoll, second by Councilman Brown, to approve Resolution No. 2012-27, a Resolution Declaring the Intention of the City of Tomball, Texas, to Institute Proceedings to Annex Certain Territory; Describing Such Territory; Setting the Dates, Times, and Places for Two Public Hearings at Which All Interested Parties Shall Have an Opportunity to be Heard; Providing for Publication of Notices of Such Public Hearings; and Directing Preparation of a Municipal Service Plan for the Territory Proposed to be Annexed (49.544 Acres of Land Located at 0 Dement Road, near the Intersection of FM 2978 and FM 2920 – Ronald J. Collins, Donald Claude Childress, Roy A. Johlke and Susan Lorraine Dietz Varsel, Individually and as Administrator of the Estate of Adell G. Dietz) – Tract 2.

Motion carried unanimously.

5.0 New Business:

- 5.1 Motion was made by Councilman Dodson, second by Councilman Stoll, to approve Resolution No. 2012-30, a Resolution of the City Council of the City of Tomball, Texas Declaring the Intention of the City of Tomball, Texas, to Institute Proceedings to Annex Certain Territory; Describing Such Territory; Setting the Dates, Times, and Places for Two Public Hearings at which All Interested Parties Shall Have an Opportunity to be Heard; Providing for Publication of Notices of Such Public Hearings; and Directing Preparation of a Municipal Service Plan for

the Territory Proposed to be Annexed (0.610 Acres, an Undeveloped Publicly Dedicated Road Right-of-Way Located on FM 2978) – Tract 1B

Motion carried unanimously.

6.0 Motion was made by Councilman Dodson, second by Councilman Stoll, to adjourn.

Motion carried unanimously.

Meeting adjourned.

PASSED AND APPROVED this 15th day of October 2012.

Doris Speer, TRMC, CMC
City Secretary

Gretchen Fagan
Mayor

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Adopt, on Second Reading, Ordinance No. 2012-41, an Ordinance Amending the Code of Ordinances of the City of Tomball, Texas, by Amending Chapter 30, Environment, Article II, Oil and Gas Wells and Pipelines, to Add a New Definition of *Training Well and Training Well Site*, to Section 30-27 of Division 1, Generally, Thereof; Adding a New Section 30-31a, Location and Setback Requirements for Training Well Sites, to Division 1, Generally, Thereof; Adding Location and Setback Requirements for Training Well Sites to the Appeal Provisions of Section 30-32, of Division 1, Generally, Thereof; Adding Language to Section 30-33, Substitute Wells, of Division 1, Generally, to Make Such Regulations Applicable to Training Wells; Adding Language to Section 30-46, Permit Required to Drill or Deepen a Well, or Conduct Seismic Activities, of Division 2, Wells and Seismic Activities Permits, to Make Such Regulations Applicable to Training Wells; Adding Language to Section 30-47, Application and Filing Fee, of Division 2, Wells and Seismic Activities Permits, to Exempt Training Wells from Certain Regulations and Requiring a Filing Fee for a Training Well Application; Adding Language to Section 30-48, Filing of Application and Notice, of Division 2, Wells and Seismic Activities Permits, Exempting Training Wells from the Regulations of Section 30-48; Adding Language to Section 30-49, Granting or Refusal of Permit, of Division 2 Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-50, Form and Issuance of Permit, of Division 2, Wells and Seismic Activities Permits, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-51, Bond Requirements, of Division 2, Wells and Seismic Activities Permits, Exempting Training Wells from the Regulations Contained Therein; Adding Language to Section 30-66, Unlawful to Permit Escape of Mud, Etc., of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-67, Remedial Well Work, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding Language to Section 30-68, Reworking a Well, Deeper Drilling; Supplemental Permit Required, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells; Adding New Sections 30-70, Noise, 30-71, Lighting, and 30-72, Buffering, to Division 3, Well Operation, Providing Regulations for Noise, Lighting and Buffering for Training Wells; Providing a Penalty of up to \$2,000.00 for Violations with Each Day Constituting a Separate Violation; Providing for the Publication of This Ordinance; Providing for Severability; and Making Other Findings and Provisions Related Thereto

Background:

Baker Hughes requests that the City of Tomball amend Article II, Oil and Gas Wells and Pipelines to address training wells and training well sites. The current Oil and Gas Wells and Pipelines, Ordinance No. 2008-23, did not include language to allow training wells or training well sites. The revisions proposed in this Ordinance are to protect the safety and welfare of the adjacent property owners and the public.

The proposed project includes the development of an Education Center, a five bay workshop, and two non-producing training wells with related surface equipment. The complex is planned to be a central facility for major corporate meeting and activities and a consolidated Western Hemisphere Education Center. The project will be an integrated facility to enhance the education opportunities for both Baker Hughes personnel and customers and will develop skills and competencies necessary to support their customers.

On October 1, 2012, Council adopted Ordinance No. 2012-41 on First Reading, amending the ordinance by deleting proposed amendments to Section 30-69, Rules for Drilling and Producing Operations for Permit Holder, of Division 3, Well Operation, Making Regulations Contained Therein Applicable to Training Wells and by amending Section 30-31A(b) to 150 feet.

Origination:

Baker Hughes

Recommendation:

Adopt Ordinance No. 2012-41 on Second Reading

Funding:

Party(ies) responsible for placing this item on agenda:

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

- Ordinance No. 2012-41
- Baker Hughes - Tomball Test Well Specifications
- Baker Hughes - Training Well Enviromental Impact Ltr
- Baker Hughes - WHEC Well Summary

ORDINANCE NO. 2012-41

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF TOMBALL TEXAS BY AMENDING CHAPTER 30, ENVIRONMENT, ARTICLE II, OIL AND GAS WELLS AND PIPELINES, TO ADD A NEW DEFINITION OF *TRAINING WELL* AND *TRAINING WELL SITE*, TO SECTION 30-27 OF DIVISION 1, GENERALLY, THEREOF; ADDING A NEW SECTION 30-31A, LOCATION AND SETBACK REQUIREMENTS FOR TRAINING WELL SITES, TO DIVISION 1, GENERALLY, THEREOF; ADDING LOCATION AND SETBACK REQUIREMENTS FOR TRAINING WELL SITES TO THE APPEAL PROVISIONS OF SECTION 30-32, OF DIVISION 1, GENERALLY, THEREOF; ADDING LANGUAGE TO SECTION 30-33, SUBSTITUTE WELLS, OF DIVISION 1, GENERALLY, TO MAKE SUCH REGULATIONS APPLICABLE TO TRAINING WELLS; ADDING LANGUAGE TO SECTION 30-46, PERMIT REQUIRED TO DRILL OR DEEPEN A WELL, OR CONDUCT SEISMIC ACTIVITIES, OF DIVISION 2, WELLS AND SEISMIC ACTIVITIES PERMITS, TO MAKE SUCH REGULATIONS APPLICABLE TO TRAINING WELLS; ADDING LANGUAGE TO SECTION 30-47, APPLICATION AND FILING FEE, OF DIVISION 2, WELLS AND SEISMIC ACTIVITIES PERMITS, TO EXEMPT TRAINING WELLS FROM CERTAIN REGULATIONS AND REQUIRING A FILING FEE FOR A TRAINING WELL APPLICATION; ADDING LANGUAGE TO SECTION 30-48, FILING OF APPLICATION AND NOTICE, OF DIVISION 2, WELLS AND SEISMIC ACTIVITIES PERMITS, EXEMPTING TRAINING WELLS FROM THE REGULATIONS OF SECTION 30-48; ADDING LANGUAGE TO SECTION 30-49, GRANTING OR REFUSAL OF PERMIT, OF DIVISION 2 WELLS AND SEISMIC ACTIVITIES PERMITS, MAKING REGULATIONS CONTAINED THEREIN APPLICABLE TO TRAINING WELLS; ADDING LANGUAGE TO SECTION 30-50, FORM AND ISSUANCE OF PERMIT, OF DIVISION 2, WELLS AND SEISMIC ACTIVITIES PERMITS, MAKING REGULATIONS CONTAINED THEREIN APPLICABLE TO TRAINING WELLS; ADDING LANGUAGE TO SECTION 30-51, BOND REQUIREMENTS, OF DIVISION 2, WELLS AND SEISMIC ACTIVITIES PERMITS, EXEMPTING TRAINING WELLS FROM THE REGULATIONS CONTAINED THEREIN; ADDING LANGUAGE TO SECTION 30-66, UNLAWFUL TO PERMIT ESCAPE OF MUD, ETC., OF DIVISION 3, WELL OPERATION, MAKING REGULATIONS CONTAINED THEREIN APPLICABLE TO TRAINING WELLS; ADDING LANGUAGE TO SECTION 30-67, REMEDIAL WELL WORK, OF DIVISION 3, WELL OPERATION, MAKING REGULATIONS CONTAINED THEREIN APPLICABLE TO TRAINING WELLS; ADDING LANGUAGE TO SECTION 30-68, REWORKING A WELL, DEEPER DRILLING; SUPPLEMENTAL PERMIT REQUIRED, OF DIVISION 3, WELL OPERATION, MAKING REGULATIONS

CONTAINED THEREIN APPLICABLE TO TRAINING WELLS; ADDING NEW SECTIONS 30-70, NOISE, 30-71, LIGHTING, AND 30-72, BUFFERING, TO DIVISION 3, WELL OPERATION, PROVIDING REGULATIONS FOR NOISE, LIGHTING AND BUFFERING FOR TRAINING WELLS; PROVIDING A PENALTY OF UP TO \$2,000.00 FOR VIOLATIONS WITH EACH DAY CONSTITUTING A SEPARATE VIOLATION; PROVIDING FOR THE PUBLICATION OF THIS ORDINANCE; PROVIDING FOR SEVERABILITY; AND MAKING OTHER FINDINGS AND PROVISIONS RELATED THERETO.

* * * * *

WHEREAS, the City Council of the City of Tomball finds that it is in the best interest of the health, safety and welfare of its citizens to provide regulations regarding the drilling and operation of oil and gas wells for training purposes; and

WHEREAS, the City Council of the City of Tomball desires to amend its existing regulations relating to the drilling and operation of oil and gas wells to provide regulations for training wells; now, therefore:

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. The facts and matters set forth in the preamble are hereby found to be true and correct.

Section 2. Section 30-27, Definitions, of Division 1, Generally, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, of the Code of Ordinances is amended to add a new definition of *Training Well* and *Training Well Site* as follows:

“Sec. 30-27. Definitions.

.....

Training Well shall mean any hole or bore otherwise meeting the definition of “Well” but intended for the sole purpose of educating personnel and not for the purpose of extracting, exploring for, or ascertaining the existence of any oil, gas, liquid hydrocarbon or other mineral.

Training Well Site shall mean any hole or bore otherwise meeting the definition of “Well” but intended for the sole purpose of educating personnel and not for the purpose of extracting, exploring for, or ascertaining the existence of any oil, gas, liquid hydrocarbon or other mineral, and shall include all structures appurtenant thereto.

Section 3. The Code of Ordinances is further amended by adding to Division 1, Generally, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, a new Section 30-31A, Location and Setback Requirements for Training Wells, to read as follows:

“Sec. 30-31A. Location and setback requirements for training well sites.

- (a) A person commits an offense if the person places any training well site within the regulated area that is nearer than 500 feet from the location of any existing or proposed residence, church, public or private school, school, hospital, nursing home, or daycare center.
- (b) A person commits an offense if the person places any training well site that is nearer than 150 feet from any barn, building, cabana, garage, shack, shed, or other enclosed structure, or any publicly dedicated right-of-way.
- (c) A person commits an offense if the person places any training well site nearer than 350 feet from any public park or public athletic field.
- (d) No training well shall be drilled, deepened or operated, or seismic activities conducted within any existing or proposed roadway right-of-way.
- (e) A training well site may include classrooms and offices as part of the rig structure.
- (f) Distances from the training well site to any building (not identified as being part of the rig structure), right-of-way, or activity used in this Article shall be measured in a straight line from the nearest point of the building, right-of-way, or activity to the nearest point of the training well site.

As used herein, the term “roadway right-of-way” shall mean that area within the boundaries of any easement or right-of-way for any highway, street or alley; the term “proposed roadway right-of-way” shall mean any roadway right-of-way for which the City Council or the Planning and Zoning Commission has designated by official action as a projected highway, street, alley, or other thoroughfare in the master development plan of the City, whether or not such roadway right-of-way has actually been dedicated for public use at such time.”

Section 4. The Code of Ordinances is further amended by amending Section 30-32, Appeal from Setback Requirements, of Division 1, Generally, of Article II, Oil and Gas Wells

and Pipelines, of Chapter 30, Environment, to delete the language struck through and add the language underscored below, Section 30-32 to read as follows:

“Sec. 30-32. Appeal from Setback Requirements.

- (a) Whenever, owing to exceptional and extraordinary conditions, the literal enforcement of the setback requirements set forth in section 30-31 or 30-31A will result in a legal hardship or the inability to access or explore a mineral interest, the permittee asserting such hardship or inability to access or explore a mineral interest, may request a variance from such setback requirements.
- (b) A request for such ~~hearing~~ variance must be made in writing and received by the City Secretary. The City Council shall conduct such hearing within thirty (30) days from the date the request is received. The permittee seeking a variance under this section shall have the burden of showing that enforcement of the standards set forth in section 30-31 or 30-31A will result in a legal hardship or the inability to access or explore a mineral interest.
- (c) If the City Council finds that compliance with this Article would prevent a permittee from accessing or exploring a mineral interest, then the City Council may reduce the setback requirements as necessary to allow the permittee to access or explore such mineral interest.”

Section 5. The Code of Ordinances is further amended by amending Section 30-33, Substitute Wells, of Division 1, Generally, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add the language underscored below, Section 30-33 to read as follows:

“Sec. 30-33. Substitute wells.

- (a) Except as provided in subsection (b) of this section, no well or training well shall be drilled or deepened within the regulated of the city without first securing a permit or supplemental permit from the city.
- (b) If a permitted drilling well, actively producing registered well is abandoned due to mechanical failure, a substitute well may at any time be drilled, completed, operated and produced in accordance with the regulations set forth in Division 1 and Division 2 of this Article. No substitute well provided for in this subsection shall be drilled to a deeper reservoir than the deepest productive reservoir of the well for which such substitute well is drilled, without the permittee first securing a supplemental permit as provided in section 30-47 and section 30-68 hereof.

- (c) The provisions of this section shall not prevent a well from being completed in more than one producing horizon; multiple completions in the same bore are expressly authorized.”

Section 6. The Code of Ordinances is further amended by amending Section 30-46, Permit Required to Drill or Deepen a Well, or Conduct Seismic Activities, of Division 2, Wells and Seismic Activities Permits, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add the language underscored below, Section 30-46 to read as follows:

“Sec. 30-46. Permit required to drill or deepen a well, or conduct seismic activities.

It shall be unlawful for any person acting either for himself or as an agent, employee, independent contractor, or servant of any other person to commence to drill or deepen a well or training well, or conduct seismic activities within the regulated area of the city, or to work upon or assist in any way in the prosecution or operation of any well or training well, without a permit for the drilling of a well or training well, a supplemental permit for the deepening of an existing well or training well, or a permit for seismic activities, having first been issued in accordance with the provisions of this Article, except as provided in subsections (b) through (c) of section 30-32 hereof.”

Section 7. The Code of Ordinances is further amended by amending Section 30-47, Application and Filing Fee, of Division 2, Wells and Seismic Activities Permits, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add a new subsection (e) to read as follows:

“Sec. 30-47. Application and filing fee.

.....

(e) Subsections (a) through (d) of this section shall be applicable to training wells with the following exceptions:

- (i) Subsection (a)(6) is not applicable; and
- (ii) The fee for an application for a permit to drill a training well shall be \$1,000 per training well site regardless of the number of wells placed within each training well site covered by such permit application; provided that any training wells covered by such permit must be completed within twelve (12) months of issuance of such permit.”

Section 8. The Code of Ordinances is further amended by amending Section 30-48, Filing of Application and Notice, of Division 2, Wells and Seismic Activities Permits, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add a new subsection (g) to read as follows:

“Sec. 30-48. Filing of application and notice.

.....

(g) The provisions of section 30-48(b) through (f) shall not be applicable to application for a permit for a training well.”

Section 9. The Code of Ordinances is further amended by amending Section 30-49, Filing of Application and Notice, of Division 2, Wells and Seismic Activities Permits, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add the language underscored below, Section 30-49 to read as follows:

“Sec. 30-49. Granting or refusal of permit.

If, after such application is filed pursuant to this Article, it be found by the city council to comply in all respects with terms hereof, and the drilling, deepening or operation of such well, training well, or conducting of seismic activities, is not prohibited by the terms of this article, then the city council shall issue a permit for the drilling, deepening or operation of the well, training well, or conducting of seismic activities; provided, however, the city council shall have the power, and reserves the authority, to refuse any application for a permit when by reason of the proposed well, training well, or seismic activities, and the character and value of the improvements located on the lot or tract in question or adjacent thereto, and the use to which the land and surroundings are adapted for civic purpose, or for sanitary reasons, the drilling, deepening or operation of such well, training well, or conducting of seismic activities, would constitute a danger to either the health, safety, morals or welfare of the city and its inhabitants.”

Section 10. The Code of Ordinances is further amended by amending Section 30-50, Form and Issuance of Permits, of Division 2, Wells and Seismic Activities Permits, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add the language underscored below, Section 30-50 to read as follows:

“Sec. 30-50. Form and issuance of permit.

.....

(a)(2) Specify definitely the location of the well, training well, training well site, or seismic activities;

.....

(c) Any permit issued for a well, training well/training well site, or seismic activities under any ordinance of the city shall continue until said well, training well/training well site, or seismic activities are completed, or one year, whichever is earlier. Upon application of renewal permit showing compliance with the terms of the original permit and the payment of a renewal fee of \$500.00, the city council may renew for a one-year period any permit granted hereunder.”

Section 11. The Code of Ordinances is further amended by amending Section 30-51, Bond Requirements, of Division 2, Wells and Seismic Activities Permits, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add a new subsection (d) to read as follows:

“Sec. 30-51. Bond requirements.

.....

(d) This section shall not be applicable to the drilling of any training well.”

Section 12. The Code of Ordinances is further amended by amending Section 30-66, Unlawful to Permit Escape of Mud, Etc., of Division 3, Well Operation, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add the language underscored below, Section 30-66 to read as follows:

“Sec. 30-66. Unlawful to permit escape of mud, etc.

It shall be unlawful for any person to permit to escape any mud, water, oil, slush, saltwater or other waste matter related to the drilling, deepening or operating of any well, training well, or seismic activities, onto any adjoining lots upon which permittee does not have leases or other contractual rights to use the surface, or upon leases not owned by permittee or into the alleys, streets, gutters, sewers, or ditches of the city. Within 60 days after the completion or abandonment of any

well, training well, or seismic activities, the mud and other similar matter and materials used in connection with the drilling, deepening and operations thereon shall be removed from the premises, and all pits, holes, ruts, and depressions in and around such well or seismic activities locations shall be smoothed out, leveled, and filled.”

Section 13. The Code of Ordinances is further amended by amending Section 30-67, Remedial Well Work, of Division 3, Well Operation, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add the language underscored below, Section 30-67 to read as follows:

“Sec. 30-67. Remedial well work

Any person operating any well or wells, or training well within the regulated area of the city may perform any remedial well work operations in the original well bore, except drilling deeper, without a permit for such operations, provided the operator complies with all safety rules set forth in this article and no additional filing fees will be required for such work.”

Section 14. The Code of Ordinances is further amended by amending Section 30-68, Reworking a Well, Deeper Drilling; Supplemental Permit Required, of Division 3, Well Operation, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, to add the language underscored below, Section 30-68 to read as follows:

“Sec. 30-68. Reworking a well, deeper drilling; supplemental permit required.

(a) Once any well or training well has either been completed as an oil or gas producer or abandoned or the permit for such work has expired, it shall be unlawful for any person to enter such well or training well for the purposes of reworking or to drill such well or training well to a greater depth than that reached in prior drilling operations, or drill outside the scope of the original well bore, without the permittee of such well filing an application with the city secretary and obtaining a supplemental permit which shall contain, in addition to all the requirements heretofore set forth, additional information specifying:

- (1) The then condition of the well or training well and the casing therein;
- (2) The depth to which it is proposed that such well or training well will be deepened; and
- (3) The proposed casing program to be used in connection with such proposed deepening operations.

(b) In any deeper drilling or deepening operations, the permittee shall comply with all other provisions contained in this article and applicable to the drilling, completion, and operation of a well or training well.

(c) A person commits an offense if the person intentional or knowingly reactivates a plugged or abandoned well or training well or re-enters an existing well or training well for purposes of deepening or reworking without a permit from the City.”

Section 15. The Code of Ordinances is further amended by adding to Division 3, Well Operation, of Article II, Oil and Gas Wells and Pipelines, of Chapter 30, Environment, Sections 30-70, Noise, 30-71, Lighting, and 30-72, Buffering, Sections 30-70, 30-71, and 30-72 to read as follows:

“Sec. 30-70. Noise.

No on-site activity associated with a training well site shall produce a sound greater than 65 dB when measured from any property boundary, except when adjacent to a right-of-way. Every two (2) years, the owner or operator of any training well site shall demonstrate, via certified, independent third party, no on-site activity is producing a sound greater than 65 dB when measured from any property boundary, except when adjacent to a right-of-way.

Sec. 30-71. Lighting.

All lighting shall be directed downward and shielded so as to prevent the direct illumination of public right-of-ways and adjacent properties and to minimize glare. Lighting shall be limited to a maximum of one (1) footcandle along all property lines. Every two (2) years, the owner or operator of any training well site shall demonstrate, via a certified, independent, third party, that lighting along all property lines does not exceed one (1) footcandle.

Sec. 30-72. Buffering.

If the base of a training well site is visible from a right-of-way or adjacent properties, a minimum six foot (6’) opaque screen shall be constructed so as to visually screen the training well site from view.

Section 16. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or

provision hereof other any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 17. Any person who shall intentionally, knowingly, recklessly, or with criminal negligence, violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed \$2,000. Each day of violation shall constitute a separate offense.

Section 18. This Ordinance shall become effective fourteen days after the final reading and adoption of this Ordinance when the caption hereof is caused to be published once in the official newspaper of the City, by the City Secretary, as required by law. The City Secretary is directed to publish the caption of this Ordinance in the City's official newspaper within 14 days after the passage of the ordinance.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 1ST DAY OF OCTOBER 2012.

COUNCILMAN HUDGENS	<u>NAY</u>
COUNCILMAN STOLL	<u>AYE</u>
COUNCILMAN BROWN	<u>AYE</u>
COUNCILMAN TOWNSEND	<u>AYE</u>
COUNCILMAN DODSON	<u>AYE</u>

SECOND READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF
THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 15TH DAY OF
OCTOBER 2012.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

Gretchen Fagan, Mayor

ATTEST:

Doris Speer, City Secretary

Lori Lakatos

From: Mouafak Fattal [g.m@technorig.com]
Sent: Friday, September 07, 2012 6:15 PM
To: Rowbottom, Ron; Lawson, Ivan L.; Bernhardt, George P.
Cc: moustafa.fattal@technorig.com
Subject: RE: Tomball Test Well Specifications
Attachments: Site Dubai safety plan TechnoRig FZC.pdf; QHSE Manual TechnoRig FZC.pdf; Risk Hazards Assessment sheets.pdf; Tool Box Talk.pdf; Appendix A2 Step Out Form.pdf; Hazard Identification & Effects Management-Introduction.pdf; Operating Manual & Details Specification Training Rig.pdf; Risk Analysis Matrix.pdf; 6 - Environmental risk assessment Techno Star Contractor.pdf; 7 - Induction program at site Techno Star Contractor.pdf; 18 - Training plan Safety and Health TechnoStar.pdf; 3 - First aid arrangement and emergency proceduresTechnoStar Contractor.pdf; 4a - Project specific health & safety plan Techno Star Contractor.pdf; 5 - Fire risk assessment for the Site and officess Techno Star Contractor.pdf

Dear George,

As we disused during the meeting today to send you the document we used in Dubai regarding the safety issue for the training rig project for BH Dubai.

Please find attached the document I could find in my laptop.

Hope that will help in case the local authority asked more information about the training rig project.

Regards
 Mouafak Fattal
TechnoRig
 P.O BOX 74959 Dubai, UAE
 Fax: + 971 4 88 66 541
 Tel: + 971 4 88 66 540
 Mobile: + 971 50 443 6125



TO DRILL SMARTER

From: Rowbottom, Ron [mailto:Ron.Rowbottom@bakerhughes.com]
Sent: Saturday, September 08, 2012 12:55 AM
To: Lawson, Ivan L.; Bernhardt, George P.; Turchetti, Francesco
Cc: Russell Kelly; James M. Evans, AIA; Thomas Dadoly; Crabtree, Ralph S.; Todd Arenz; 'Mouafak Fattal'
Subject: RE: Tomball Test Well Specifications
Importance: High

George

Attached is the draft of the no environmental impact letter.

Please review and if good I can sign it, scan it and drop a copy at your office.

Ron Rowbottom

HSE Director Real Estate

2929 Allen Parkway
Houston, Texas, USA

(w) +713 439 8045

(m) +918 510 5749

Environmental Affairs Center of Expertise

ron.rowbottom@bakerhughes.com

Baker Hughes Incorporated

Advancing Reservoir Performance

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From: Rowbottom, Ron

Sent: Thursday, September 06, 2012 2:32 PM

To: Lawson, Ivan L.; Bernhardt, George P.; Turchetti, Francesco

Cc: Russell Kelly; James M. Evans, AIA; Thomas Dadoly; Crabtree, Ralph S.; Todd Arenz; 'Mouafak Fattal'

Subject: RE: Tomball Test Well Specifications

Ivan was getting this for me.

I asked for background information on the specifications to include in my write up tomorrow for the City.

Thanks Ivan

Ron Rowbottom

Director HSE Real Estate

2929 Allen Parkway
Houston, Texas, USA

(w) +713 439 8045

(m) +918 510 5749

Environmental Affairs Center of Expertise

ron.rowbottom@bakerhughes.com

Baker Hughes Incorporated

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From: Lawson, Ivan L.

Sent: Thursday, September 06, 2012 1:48 PM

To: Rowbottom, Ron; Bernhardt, George P.; Turchetti, Francesco

Cc: Russell Kelly; James M. Evans, AIA; Thomas Dadoly; Crabtree, Ralph S.; Todd Arenz; Lawson, Ivan L.; 'Mouafak Fattal'

Subject: Tomball Test Well Specifications

Attached is a synopsis of our current well plans. As stated in the note included at the bottom of the well

specifications, these are only plans and could possibly be modified to support our budget and hole conditions. The deeper wells could be shortened but have been identified as 2,000 feet in depth as we further explore our needs. Hopefully this is enough information to support our request to install wells at the WHEC.

If you need clarification, please feel free to contact me.

Regards,
Ivan

Ivan L. Lawson
Baker Hughes
Director Global Education Centers
Work - 281-230-1841
Cell - 832-794-0332

From: Lawson, Ivan L.
Sent: Thursday, September 06, 2012 10:50 AM
To: Rowbottom, Ron; Bernhardt, George P.; Turchetti, Francesco
Cc: Russell Kelly; James M. Evans, AIA; Thomas Dadoly; Crabtree, Ralph S.; Todd Arenz
Subject: RE: Tomball Test wells - Environmental Issues

I will have this to you this afternoon. I have to clarify one depth concern I have with Francesco before I submit.

Francesco, Can you please call me so that I can get this finalized?

Regards,
Ivan

Ivan L. Lawson
Baker Hughes
Director Global Education Centers
Work - 281-230-1841
Cell - 832-794-0332

From: Rowbottom, Ron
Sent: Wednesday, September 05, 2012 11:15 AM
To: Bernhardt, George P.; Lawson, Ivan L.
Cc: Russell Kelly; James M. Evans, AIA; Thomas Dadoly; Crabtree, Ralph S.; Todd Arenz
Subject: RE: Tomball Test wells - Environmental Issues

Mark called last night and explained to Ralph and I what the issues were that were raised and I can work on this.

It really is just displaying the design that this is a test well for training purposes and is not an operating well.

We can show the history of test wells in various locations around the US such as WW Thorne Houston, Claremore Oklahoma, BETA site in Oklahoma, etc to show that these are designed and operated to ensure no environmental impacts.

I will contact Ivan this afternoon and discuss but this should not be a problem.

Ron Rowbottom
Director HSE Real Estate / Regulatory Support

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(m) +918 510 5749
Environmental Affairs Center of Expertise
ron.rowbottom@bakerhughes.com

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From: Bernhardt, George P.
Sent: Wednesday, September 05, 2012 11:08 AM
To: Rowbottom, Ron; Lawson, Ivan L.
Cc: Russell Kelly; James M. Evans, AIA; Thomas Dadoly; Crabtree, Ralph S.; Todd Arenz
Subject: Tomball Test wells - Environmental Issues

Ron & Ivan,

I just spoke to the Tomball mayor and city manager. Our request for incentives received its first approval last night; however, one council member voted against it due to concerns about the environmental impact of the wells, especially on drinking water. I do not see how non-producing wells will be problem, but they have asked that we submit to the city any and all information that we can on the environmental impact of the test wells on or before **TUESDAY SEPT. 11th**. This information will go to the city council for the 2nd reading of our request for development incentives on Monday, Sept. 17th.

Ron, can you take charge of creating some kind of package on this to submit to the city and work with Ivan Lawson on this? Perhaps Ivan's proposed drilling contractor can be of assistance.

George

GEORGE P. BERNHARDT
BAKER HUGHES INCORPORATED
MANAGING COUNSEL, GLOBAL REAL ESTATE
2929 ALLEN PARKWAY, SUITE 2100
HOUSTON, TEXAS 77019
TEL: 713-439-8061 | CELL: 713-826-7426

This e-mail is being sent by an attorney and contains confidential information. If you are not the intended recipient, please notify the sender and destroy all copies of this e-mail.

Notwithstanding anything contained in this e-mail or the provisions of any "electronic signature" law, no offer is intended to be extended or accepted hereby and it is the intention of the sender that a contract may only be formed by a document physically signed by an appropriate officer of Baker Hughes or its relevant subsidiary.



TechnoRig FZC SITE SAFETY PLAN

1.0 Purpose

To ensure the smooth and efficient running of the contract in achieving a safe working environment by setting up specific policies to be followed by all personnel on the project.

2.0 Organization

2.1 TechnoRig ZFC recognises that all of its employees are important to the organization, that each worker has a right to a safe and healthy work place and that all employees can contribute to the ultimate goal of reducing accidents in the work place.

2.2 TechnoRig ZFC advocates that management of Health and Safety is a function of line Management and every Supervisor are responsible and answerable for the safety of his people. This Line Management although subject to change and dependent on the specific needs of the Contract in question will be defined by specified lines of command, which can be indicated on a comprehensive organogram and displayed on each site.

3.0 Responsibilities

3.1 TECHNORIG STAFF

Project Manager

- Responsible for the compliance of this safety plan.
- Responsible to monitor the safety performance of the site through periodical review meetings.
- Arranging to rectify unsafe conditions noticed during day-to-day site inspections.
- Arranging to provide adequate resources to the site to comply with all the provisions of this safety plan.
- Providing adequate manpower for carrying out housekeeping on a permanent basis.
- The Project Manager is responsible for ensuring that all employees, subcontractors and third parties (resident or visiting) comply with the Company Safety Policy and the Local Safety Regulations, Code of Construction Safety Practises issued by Dubai Municipality.
- Monitor safety performance weekly with HSE Officer.
- Ensure adequate resources on site to comply with HSE.



- Investigate and action accidents, incidents and non-compliance.
- To manage HSE issues.

Site Manager

- Understanding this safety plan fully and following the same in their day-to-day activities.
- Giving safety instructions to their workmen on a daily basis as a part of the job instructions, highlighting the possible hazards in that day's work and the precautions to be taken.
- Inspecting the entire work site on a continuous basis, making on-the-spot corrections of unsafe acts of the workmen and taking suitable steps to eliminate all the unsafe conditions.
- Keeping their work area neat and clean, especially at heights, free from loose materials.
- Taking an active part in the site safety meetings.
- Preventing horseplay of workmen.
- Organising toolbox talks to their workmen at regular intervals and submitting records to the safety officer.
- Ensuring the area of work is neat and clean on a continuous basis with specific reference to stacking of materials properly and removing the scrap to the scrap yard at appropriate intervals.
- Sending workmen employed by them on the first day to the safety officer for a safety induction.

Safety Officer

- Conduct safety meetings with site personnel and subcontractors.
- Inspect the Project daily, and record all visible safety hazards, including identification of violators.
- Follow through on timely correction of safety hazards, making immediate corrections as necessary.
- Monitor on Site safety meetings and report it on his Daily Report.
- Foster safety awareness in all tradesmen and supervisors on the Project.
- Follow up, for insurance purposes, all relevant safety reports.
- Check all areas at least once a day for housekeeping and cleanup. Take immediate action to ensure compliance with requirements.



TechnoRig FZC

SITE SAFETY PLAN

- Submit job hazard analysis for each major phase or element of work as necessary.
- Post safety signs on the project.
- Conduct employee indoctrination for all new personnel.
- Ensure training is carried out for specific tasks, especially work of a “non-standard” nature.
- Weekly inspect and certify all plant, equipment, machines and the like and establish a tagging procedure for same, identifying whether safe or unsafe for use in addition to keeping record documentation.
- Weekly inspect and certify all scaffolding, materials and or man hoists, and the like and establish a tagging procedure for same, identifying whether safe or unsafe for use, in addition to keeping record documentation.
- Issue of hot work permits and like counter signed by the PM.
- Advise PM on HSE.
- Ensure implementation, compliance with company, client, and local authority HSE procedure on site.
- Investigate all accidents, incidents and near miss, forward copies to PM and Client, and keep records for the same.
- Prepare weekly and monthly HSE statistics report for inspection to be approved by TECHNORIG PM, and inclusion in monthly safety report and progress report.
- Prepare and distribute all details for staff induction.

3.2 Sub Contractor’s Staff

- All sub-contractors are required to submit their HSE plan, with all duties and responsibilities of their key appointment, which will be assessed by TECHNORIG before approval. They will also appoint a site safety officer.

4.0 Site Safety Induction

- All staff and workforce will undergo an induction session before their deployment at site. The safety officer will give induction to them. Record will be maintained to this effect.



- Subjects to be covered during the induction session will be:
 - Commitment of TECHNORIG to prevent accidents
 - Safety checks to be carried out on scaffoldings, ladders and power tools.
 - Safety rules to be followed and correct use of PPE.
 - Safety appliances to be used with reference to various activities.
 - Power tools: guards / cords / plus tops / connections / ELCB / not allowing
 - Loose cables on the floor.
 - Fire prevention: housekeeping / no smoking / hot works / waterproofing / storage areas.
 - House keeping: de-nailing / de-shuttering areas / stacking of materials.
 - Use of tower crane hoist.
 - What to do in case of fire, accidents and other emergencies at site.
 - Site facilities: toilets / eating area / rest area / water point etc.
 - COSHH
 - Hygiene
- The daily work instruction will include the hazards likely to be encountered and precautions to be taken.
- The respective site foremen will organize toolbox talk every week in the morning before starting the work for their workmen. Before taking up any new work activity, the concerned workmen will be given a toolbox talk regarding the hazards likely to be encountered and the precautions to be taken.
- The induction and toolbox talk will be extended to sub-contract employees also.

5.0 Notification and registration

Verbal or written information about an undesired event immediately after it occurred. A detailed report will be submitted after investigation within 24 hours.



TechnoRig FZC
SITE SAFETY PLAN

The prime objective shall be, but not limited to the following:

- All accidents, incidents & near misses shall be reported. The reporting provides project management with the opportunity to prevent more serious accidents.
- To define methods of reporting such accidents, incidents, and near misses and determine the levels of investigation.
- To improve measures for the prevention of recurrence and to monitor results of prevention methods and remedial measures.

6.0 Process for the evaluation of and approval of sub contractors

The appropriate line management for contractor's ability to comply with TECHNORIG's safety requirements shall check all tender submission of sub contractors.

Contracts shall not be awarded if minimum conditions are not met. TECHNORIG will conduct regular follow up audit and inspection during actual operations to ensure compliance with HSE plan as submitted and approved.

- A responsible person from each sub-contractor (generally their safety officer) shall meet the safety officer before starting the work at site to understand the salient features of this safety plan as applicable to their work.
- The agreements with sub-contractors will include a clause demanding strict adherence to this safety plan and any other safety requirements issued by the site from time to time.
- The employees of the sub-contractor will also be provided with induction sessions and their supervisors will be made to give toolbox talks to their workmen on a weekly basis and as per job requirement.
- All accessories brought by the sub-contractor will be inspected by the site engineer and cleared for use, if found all right. The subcontractors will be responsible to keep their accessories in safe working condition on a daily basis.
- To be selected only after their HSE performance has been reviewed and found acceptable to TECHNORIG PM, in so far as all other contractual obligations are met.



TechnoRig FZC
SITE SAFETY PLAN

- Subcontractor and their employees shall comply with Project Management Plan and other safety requirements issued by TECHNORIG.

7.0 Arrangements for surveillance of Health, Safety and Fire.

- Appoint site safety officers and safety assistants.
- Appointment of Accident Prevention Officer.
- Provision of Qualified First Aider.
- Provision of First Aid Room and First Aid Box.
- Daily site safety inspections and reporting.
- Weekly inspections and reporting.
- Site safety Audits
- Implementation of fire fighting equipment
- Control of ignition sources
- Fire drills
- Work permit systems

8.0 Identification of special hazards and means for dealing with them including

Associated risk assessment

Identification hazards and means for dealing will be as per TECHNORIG Safety Procedure TECHNORIG/HSE/OSP-02. (Refer. Annexure –2)

Risk Assessment (Refer Annexure –3)

Risk assessment shall be carried to ensure that all activities likely to expose anyone to risk are suitably and sufficiently assessed so that the activity is planned to be carried out to the health and safety standards required by the local legislation and guidance.

The following basic steps shall be adopted: -

- What are the activities
- What are hazards
- Who / what could be effected
- Could they be eliminated or reduced
- How are the risks going to be controlled
- How are the control measures monitored to ensure their suitability?

Risk assessment shall be recorded on a risk assessment form and ensure it is suitable and sufficient Risk assessment shall be reviewed if equipment, materials, process, significant personnel or the working environment alters.

When subcontractors are carrying out work they shall undertake the risk assessment. TECHNORIG shall ensure it is suitable and sufficient.



The contents of the risk assessment shall be communicated to all those involved or affected by the activity.

9.0 Safety Training

All employees engaged for this project shall be given safety induction. Respective foremen and charge hands will give safety toolbox talk to their crew.

In addition, few training courses being organized during the project will be:

- General training and identification of types of fire
- Emergency procedure
- Hand tools and power tools
- Hot works permits

In addition to the above, training programme will be as per TECHNORIG Safety Procedure

10.0 Site Access and Traffic Management

The site is provided with suitable access roads for both light vehicles and heavy vehicles, which will be strictly followed.

- Drivers holding valid driving licence will operate all vehicles.
- Speed limit of the vehicles at site will be restricted to 10 km/h within the site premises. If the vehicles have to reverse in restricted work premises, a helper should assist the driver.
- Workmen will not be allowed to sleep under the parked vehicles and plants.
- It will be the responsibility of the drivers to ensure that the vehicles are not overloaded beyond its rated loads.
- They will also be responsible for informing the timekeeper whenever the regular maintenance of the vehicles falls due. No compromise will be made on the maintenance and upkeep of the vehicles.
- Drivers and operators will not be allowed to work for more than 12 hours continuously on any circumstances.
- Vehicles will only be parked at designated locations in the site without obstructing the free flow of the traffic.



TechnoRig FZC

SITE SAFETY PLAN

- If there is any projected material from the vehicles, warning flag and/ or red lamp will be tied to the projection to warn others of the danger.
- The materials will be tied properly when loaded in vehicles to prevent its dislodgement while moving.

11.0 Schedule safety audits

Safety audits shall be conducted as per TECHNORIG Safety Procedure.

12.0 Accident / Incident Reporting

- All accidents and near miss incidents at site will be recorded in the first aid register.
- All lost time injuries and property damage accidents (near misses) will be reported to TECHNORIG head office immediately and a detailed report will be sent within 24 hours of the incident to the Safety Manager and Engineer.
- The safety officer will investigate all accidents, including the near misses and first aid cases. The investigation report will be submitted to Company Safety Manager, Engineer for further action.
- All accidents near misses etc. will be recorded in the first aid register by the safety officer and included in weekly and monthly reports.
- All LTI's will be reported to the worksite Manager and Project Manager for further action and investigation prior to informing the Client.

13.0 Hazard reporting and action system

All types of hazards spotted at site will be immediately reported to the area supervisor and he will take necessary corrective action after a risk assessment. He reports to the site safety officer regarding the hazards action taken. The safety officer will record the same and take further actions to avoid recurrence.

14.0 Emergency Procedure

- Emergency evacuation procedure in case of fire will be as per procedure in item 21.3 and will be reviewed periodically to suit the site condition as the construction work progresses.
- Mock evacuation drill will be conducted at regular intervals as per the needs.



TechnoRig FZC
SITE SAFETY PLAN

- Access to all work areas will be kept free from obstruction at all times.
- Proper directional signage will be provided to identify the location of exits.
- All site personnel will be explained about the evacuation procedures and assembly point locations during safety induction.
- Following telephone numbers will be displayed at all appropriate locations for the information of all concerned for use in case of emergency situations.

Emergency Telephone Numbers: -

Police	-	999
Ambulance	-	998
Civil Defence	-	997
Water & Electricity	-	991
TECHNORIG Site Office	-	06 557 8468
Project Manager	-	050 – 443625
Worksite Manager	-	050 - 5854416
Material Manager	-	050 - 6255981
Drilling Rig Manager	-	055 - 4436125
Safety Officer	-	

14.1 Action in the Event of Minor Injury Accident

- If you witness an accident in the vicinity of your work place, inform your supervisor and the nearest first aider.
- Do not give any drinks or food to the injured unless directed by competent persons.
- Send the injured person to the nearest first aider or to the first aid room for treatment.
- Once the injured is given first aid, shift him to a comfortable place, if required.
- If the injury calls for external medical assistance, the injured person shall be sent to nearest hospital immediately by suitable means.
- Ensure that all concerned (Project Manager, Site Safety officer and Site Agent) are informed about the incident and further updates.
- All injuries shall be recorded in the first aid register.
- Assist the Safety Officer / Safety Co-ordinator in investigating the accident and to identify the root cause of the accident to prevent it in future.



14.2 Action in the Event of Major Injury Accident

Responsibilities: All Employees (Do's and Don'ts)

If any serious accident occurs in the vicinity of your work place:

- Stay calm, do not panic.
- Inform your supervisor, site first aider and site safety officer.
- Don't touch the injured person if you suspect that he has been electrocuted.
- If any material is lying on the injured person, assist others in removing it.
- Don't move the injured person unless it is VERY essential to do so; you may be hurting him by unnecessary movements.
- Move him only if there is further risk of injury to the casualty at the scene of accident.
- Don't crowd around the injured, blocking the flow of fresh air in the area.
- Don't give any drinks or food to the injured unless directed by competent persons.

Responsibilities: First Aider

- On hearing about / seeing the accident, go to the scene of the accident and jointly assess the situation of the injured person along with the safety officer / engineer / construction manager.
- **Call the Ambulance on 998 (give your name, site location, access to the site entrance and type of emergency).**
- Appoint someone to go to the site entrance, to give directions to the ambulance crew.
- Monitor the breathing and pulse rate of the injured; give CPR if necessary.
- Control bleeding.
- Immobilise fractures, if any.
- Severed limbs shall be preserved and packed and sent to the hospital along with the injured.
- Move the injured person to the first aid room with the help of stretcher.
- Inform the ambulance team all that what you did and observed.

Responsibilities: Engineer / Foreman



TechnoRig FZC
SITE SAFETY PLAN

- On hearing / witnessing an accident in your area of operation, ensure that all the do's and don'ts are strictly followed.
- Help the first aider to assess the situation by isolating the injured person from the point of hazard and provide him all the details of the process, which may be required for proper assessment of the type and extent of injury.
- Arrange to cordon the scene of accident and ensure that any evidence is not disturbed to help the investigation.
- The concerned supervisor shall nominate a person to accompany the casualty to hospital.

Responsibilities: Construction Manager / Site Safety Officer

- If construction manager is not available, senior most staff at site shall follow the below mentioned procedure.
- On hearing about the accident, go to the scene of the accident and jointly assess the situation of the injured person along with the first aider.
- Call the ambulance through the nearest available source. Take a complete mental picture of whatever you see (persons around, tools / material lying around, and the condition of any machinery nearby) at the scene of accident immediately on reaching there. At the earliest opportunity, (after arranging medical assistance to the injured person) note down all the details and arrange to take photographic evidences.
- Ensure that all concerned (personnel department and consultants) are informed about the incident and further updates.
- The Safety Officer shall be present at site to give all assistance to the police.
- Send the accident report within 24 hours in the prescribed format to accounts, personnel department and send a copy to the Company Safety Manager.
- Investigate the sequence of events, which led to the accident and identify the root cause of the accident. Communicate the root cause to everybody, to prevent similar accidents in future.

15.0 First Aid

A first aid room will be provided adjacent to the permanent works and TECHNORIG will employ a qualified full time first aider to be on duty during all day and night works.

First aid boxes will be provided at TECHNORIG site offices.



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Injured persons will initially be provided with necessary first aid and will be sent to nearest hospital depending on the severity of the injury. Ambulance facilities will be called in to handle major injuries if required according to TECHNORIG emergency evacuation procedure.

16.0 Reference and detailed Health and Safety Procedure

List of TECHNORIG HSE procedures attached as annexure-1.

17.0 House Keeping

- An appropriate number of people will be allotted for carrying out housekeeping activities regularly everyday and they will not be disturbed for any other activities.
- Smoking will not be permitted in the entire site, including site office and stores.
- Trash containers will be kept near the rest area and workers will be advised to dispose lunch box, soft drink bottle etc. only in trash containers.
- The respective workers at the end of the shift everyday will remove scrap generated at site on a day-to-day basis. The concerned supervisors will be responsible for ensuring this without fail.
- Packing materials, if any, shall be removed from the site immediately after opening the boxes.
- Gas cylinders shall be kept in the floors on trolleys so that it cannot be tipped inadvertently by anybody.
- Welding cables, power cables etc. will be laid in such a way that it will not cause trip hazard.

18.0 Specific Procedures to be followed:

18.1 Temporary Facilities

Hazards:

- 1) Fire hazard
- 2) Electric shock
- 3) Hygiene related hazards

Precautions:

- All electrical connections will be routed through an ELCB only.



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- Makeshift wiring will not be allowed under any circumstances. If any additional requirement arises, flexible wires installed in conduits will be used.
- If LPG cylinder is used in the pantry, the cylinder will be kept outside the portacabin provided with a suitable fireproof enclosure. The platform and the walls of the pantry, where the stove is located, are covered with gypsum board, or steel sheets. If electric stoves are used, it will be provided with a suitable overload protection device.
- Fire extinguishers will be provided as per requirement.
- Dustbins will be provided in the office, stores and rest areas to prevent the workmen from disposing waste materials here and there.
- Enough number of electrical outlets will be provided for the use of electrical appliances.

18.2 Safe access and egress to place of work

- Do not block recognised gangway and access ways unless a clear, safe diversion has been provided.
- Only authorised routes must be used to and from work.
- Do not remove guardrails or barriers without approval from the foreman. A person must be positioned to warn others.

18.3 Fire Prevention and Fire Plan

1. Fire Prevention:

- Welding and flame cutting works will be carried out only after taking the necessary precautions mentioned in the hot work permit.
- Keeping fire extinguisher is a compulsory requirement and a firewatcher will be deployed if the sparks are unable to be contained in floor in which the hot work is being carried out.
- Oxygen and acetylene cylinders will not be taken inside any confined areas. The cylinders will be kept upright always and will be prevented from accidental falling. They will be stored separately in the storage area. All the fuel cylinders will be provided with flash back arrestors.
- Smoking will be totally banned at site. "No Smoking" stickers will be displayed at appropriate locations.
- Enough number of fire extinguishers will be installed and maintained at site wherever there is a potential fire hazard.
- The flammable liquid (paint, insulation compounds etc.) storage area will be clearly identified and will be suitably barricaded. The storage



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area will be provided with fireproof walls. Storage of flammable liquid in the main building will not be permitted.

- All used flammable liquid containers will be collected immediately and brought back to a safe storage place and suitably disposed off. Flammable liquid containers will not be left unattended at site without their lids.
- Training on the use of fire extinguishers will be conducted to all the employees as a part of the induction session and it will be repeated in the toolbox talks whenever required.
- The platform and the walls around the stove area in the pantry / canteen should be provided with gypsum board or metal sheets.
- Appropriate number of people will be allotted for carrying out housekeeping activities every day thus reducing the fire hazard on a regular basis.

2) Fire Plan:

What to do in case of fire

- Sound the alarm or otherwise inform others by shouting “FIRE! FIRE!” Who may be in danger call our internal emergency services for immediate help.
- With the minimum of personal risk, attack the fire with the fire extinguishers provided nearby, using them as instructed.
- Arrange to remove all the flammable materials away from the fire area if possible.
- In the event that the fire cannot be extinguished or controlled:
 - Call Civil Defence Fire Department on 997 immediately.
 - Move away from the area of danger to the safe area
 - Evacuate the building only through stairs to the ‘assembly point’ identified for all personnel at ground level.
 - Report to your group leader / immediate supervisor at once on your safe arrival to assembly point for head count.
 - Do not run.
 - Avoid rumours. Be calm and quiet until you get further instructions.
- The sketch showing, fire assembly points, fire points attached for the stage1. This will be reviewed periodically to suit the site condition as the construction works progresses (Refer. Annexure– 5).

18.4 Excavation

Hazards:



- 1) Men / Material falling into the pit
- 2) Collapse of the sides
- 3) Breakage of buried service lines

Precautions

- Necessary clearances must be obtained from concerned authorities before taking up any excavation in the project area. The lay out drawings of all services should be referred to locate any buried services in the area to be excavated.
- Sides of all excavations must be sloped to a safe angle not steeper than the angle of repose of the particular soil. If sloping is not possible, suitable shoring shall be provided.
- If the excavation or the earthwork is close to the foundation of any adjoining building adequate steps should be taken to prevent damage to the existing structure.
- Every accessible part of an excavation pit, into which there is a danger of person falling, shall be suitably fenced with a barrier as close to the edge of the excavation as practicable. Warning signs and lamps should also be provided along the fence.
- No material or load shall be placed or stacked near the edge of the excavation. The excavated material shall not be placed within 5 ft. of the trench.
- No undercutting at the side of excavation shall be allowed.
- All narrow trenches, 4 ft. or more in depth shall be provided with at least one ladder for each 100 ft. in length or fraction thereof. Ladder should be extended from bottom of the trench to at least 3 ft., above the surface of the ground. At regular intervals, crossover of adequate capacity should be provided to facilitate workmen to cross the trenches whenever required. All employees shall be instructed to use only the authorised ladder or the ramps as an access to the pits.
- All construction machinery used in the excavation should have a reverse horn and authorised personnel should operate them only. They should not be operated within two metres of the edges of excavation.
- The JCB / Loader and dumper, used in the excavation job will be inspected on arrival at site and every fortnight by the plant-in-charge / mechanic at site.
- Excavation supervisor is responsible to enforce all the above precautions.



- Access to the excavation pit shall be by means of a suitable stair tower / ladder.
- Compressed gas cylinders shall not be taken into the excavation pit. If it has to be taken inside, it shall always be kept in a suitable trolley, which can be lifted off easily by means of the crane, in case of emergency.

18.5 Scaffoldings

Hazards:

- 1) Collapse of scaffold
- 2) Fall of persons and materials from the scaffold

Precautions:

- The concerned supervisor will inspect all access scaffoldings, used by his workmen, everyday before allowing the workmen to use it. The height of mobile scaffoldings will be restricted to 3.5 times its minimum base width.
- The working platform of the entire scaffold will be fully boarded and provided with a suitable handrail and toe board wherever required.
- When a new scaffold has been erected at site, the concerned supervisor will inspect it before allowing his workmen to use it.
- All workmen on a mobile platform will be asked to get down before moving the scaffold.
- Suitable approach in the form of ladders will be provided to the working platform of the scaffoldings wherever required.
- Only trained and qualified persons will be allowed to erect or dismantle scaffoldings.
- External access scaffoldings shall be tied to the permanent structure with enough number of locations for stability.
- While erecting scaffoldings in shafts, fully boarded platforms will be put up at alternate floors.

18.6 Mechanical lifting operations

Mechanical handling operations works out as 40% of total production operations involved and material handling alone is found to be responsible for 20% of total accidents that takes place.

Some of the accidents that take place during mechanical handling are:



- The sudden failure of wire rope or chain
- Hand getting caught between the object and the sling
- Slipping of load from the sling
- Swing or oscillating of the load at the time of lifting
- The load while being traversed by an over load crane hits an obstruction and causes accident

Safety in the use of Crane and Hoist

The following points are kept in mind, while the cranes and hoists are used:

- The safe working load should not exceeded
- All moving parts must be guarded
- The braking devices and limit switches should receive proper maintenance at all times
- The chain ropes, slings, hooks, etc should not be used unless they are tested and certified by competent persons
- Only authorised persons should work as crane operators
- The hoist and cranes should under go periodical maintenance as per the manufacturer's directions

18.7 Manual lifting operations

One third of all injuries received at work are the direct result of bad lifting and carrying practice.

Any transporting or supporting of load by hand or bodily force including lifting, putting down, pushing, pulling, carrying or moving, project management and all employee must recognise the causes of injury due to manual handling and assess each worker or group of workers. All shall reduce the injury by:

- Using mechanical means of lifting
- Where possible reducing the loads
- Providing adequate manpower to help heavy lift.

18.8 Electrical safety

The main key to preventing danger and injury from electricity is to employ competent persons. These persons shall have technical knowledge and experience to understand the hazards, which may arise during the work and the precautions to be taken.

Project Management shall establish a system for ensuring the safety of all personnel engaged in the operation and / or maintenance of site electrical installations, equipment and apparatuses.

Responsibilities:



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- The Construction Manager / Site Engineer shall be responsible for ensuring that all personnel working on electrically driven equipment adhere to the relevant rules and regulations. He shall ensure that all personnel carrying out such work are competent, trained and conversant with the requirements of each task to be performed.
- Persons other than properly qualified electricians must not carry out work on any electrical equipment unless specifically authorized by the chief electrician in writing.

Safety precautions:

No personnel shall carry out work of any description, including maintenance, repairs, cleaning and testing of any part of electrical apparatus, which are normally live, unless the following safety precautions have been considered are operationally.

- Electrical apparatus, plant and equipment shall be made safe prior to any work on being carried out.
- All electrical power supplies associated with the particular electrical apparatus, plant or equipment, are isolated / disconnected and that this is done in such a manner to preclude any likelihood of any supply being accidentally or inadvertently made live.
- No work shall be carried out on any electrical equipment unless a work permit is in force (where applicable), and all disconnection, locking isolations and reinstatements shall be specified in the work permit.
- The equipment shall be efficiently earthed as appropriated
- The authorized person shall fully conversant with the nature and also the extent of the work to be carried out and with the location and function of any equipment, which shall remain live during work.
- The giving of instructions to make apparatus live, or dead, by single or prearranged agreement after an interval of time is forbidden.
- It is not always possible to make dead and earth (LV) systems, all work on LV systems shall be carried out as if they were live, unless first proved dead and earthed



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- Guard and protective items removed during the repair of electrical equipment are to be replaced immediately after the repair work has been completed.
- The wearing of jewellery, such as rings, watchbands, metal chains etc. is discouraged. Keep sleeves rolled down when in or close to live circuits or apparatus.

Static Electricity:

The project work forces shall be made aware of:

- Static electricity which often creates itself naturally and which should be remembered by everybody as it can give rise to accidents, fires and explosions.
- The accumulated charge increases the tension to thousands of volts. At certain point a discharge occurs in the form of sparks of live power.
- The danger lies in the fact that the substances and the installations, which cause static electricity, are also those, which are most prone to catch fire to explode.

It is essential that everyone be on the lookout for sparks of any kind and if one is noticed, or if static is felt which touching an object, the supervisor should immediately be notified

18.9 Site plant and equipment

- The use of plant mobile / heavy machinery poses a number of risks for operations and person in the immediate vicinity, as such clear safe work procedures are paramount in ensuring safe systems of work are provided.
- The TECHNORIG plant department is responsible for ensuring the equipment's procurement; planned maintenance of all construction equipment is carried out to a satisfactory standard in accordance with manufacturers recommendations and legislative requirements.
- All plant, equipment, machine operators and the like to be trained and have valid competency certificates whether direct, subcontractor or supplier employees.
- All plant, cranes etc. to be inspected by HSE officer and other relevant authorities as necessary, and be tagged.



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Responsibilities:

The Project Site Engineer / Plant Engineer is responsible for:

- a) Arranging for the implementation for the maintenance procedure on construction plant and equipment and associated miscellaneous service equipment.
- b) To implement the above schedule without effecting construction activities.
- c) To advise field engineering of construction equipment due for major maintenance, and repair, which may have to be taken out of service during normal working hours.
- d) To guide plant workshop and maintenance foreman on procedures and ensure goals are met and make changes as seen necessary to improve job efficiency.
- e) Ensure all operators / driver shall hold a current valid UAE driving license.

18.10 Personal Protective Equipment

- All workforce entering the site will be required to use coveralls on which name of the Company will be prominently displayed. They will also be made to use safety shoes and safety helmets while at site.
- Safety goggles or face shields will be provided to all the employees who are required to carry out drilling, grinding, chipping, polishing and any other works where flying object hazard exists.
- Welders will be provided with welding shields with dark glass of a suitable shade; leather hand gloves and flame cutters will be provided with goggles with dark glasses.
- Cotton gloves will be provided to all employees who are likely to handle materials with sharp edges.
- Earplugs will be provided to noisy operations such as pavement breaking, using the vibratory jackhammers etc.
- Safety harness will be provided to all the workmen who are likely to fall more than 2 m. height from their place of work.
- Dust masks will be provided to all the workmen who are required to carry out work involving generation of dust such as fair facing of concrete, floor-polishing etc.



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18.11 Site Access Control

Full hoarding will be provided to the site with one gate, which will be manned by the site security personal.

The project shall:

- Define the access points to the access- working road from the public highway.
- Detail the logistics of moving vehicle along any stretch of new route, specifying any one way stretches, turning circles, return journeys and rejoining the existing roads.
- Separate pedestrian, vehicle access point and route around site have to provide. If not possible vehicles and pedestrian kept separate.
- Have one-way-systems or turning points been provided to minimize the need for reversing.
- Ensure vehicle maintained; do the steering, handbrake and foot brake work properly.
- Where vehicle have to reverse, they will be controlled by properly trained banks men
- Ensure vehicles are securely loaded
- Passenger prevented from riding in dangerous positions.

18.12 Hazardous Substance management control

Hazardous substances include any flammable liquid or any substance likely to give rise to toxic, corrosive, irritant or harmful risk.

Any such materials brought to site will be accompanied with a Material Safety Data Sheet (MSDS) and/or existing COSHH assessment if available.

The following information on the data sheets shall be provided:

1. Name and address of manufacturer/supplier
2. Composition/information on ingredients
3. Potential hazards
4. First aid measures
5. Fire fighting measures
6. Accidental release measures
7. Handling and storage



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8. Exposure controls / personal protective equipments
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information.

Details of the delivery will be provided to the site safety officer who shall co-ordinate with the Construction /Site Manager and/or Subcontractor concerned to initiate the assessments, storage and safe handling.

Storage Requirements

The storage must be designed and built to meet the following:

- 1 Located away from existing drainage paths to offsite areas (as much as possible).
- 2 Elevated off the ground on an impermeable base and protected to contain any spills from spreading out of the storage area.
- 3 Covered to minimize storm water run off from the storage area.
- 4 The storage area will be constantly reviewed for suitability to both safety and environmental protection standpoints.
- 5 All containers holding hazardous substances must have their lids replaced as soon as they are not in use. Only small quantities should be removed from the approved store at any one time.
- 6 Post fire-fighting extinguishers (appropriate to the substances) and other emergency equipment, including spill equipment located nearby the storage area.

Hazardous Substances

Substances shall:-

- Be kept to a minimum
- Have appropriate warning notices affixed to the storage facility
- Have 'No smoking' notice affixed to the storage facility where flammable area.



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- All containers holding hazardous substances must have their lids replaced as soon as they are not in use. Only small quantities should be removed from the container when required.

18.13 Glass and Aluminium cladding

The work will be under taken by the contractor specialised in this job and procedures to be approved on receipt of the sub contractor's safety plan.

19.0 Work Control Measures

19.1 Permits to Work

- All hot works will be controlled by means of issuing "hot work permits" wherever applicable.
- All edge protections will comply with the specifications.
- Slab penetrations (openings in the floors) will be either covered and / or barricaded depending on the size of opening.
- If any barricade or edge protection is to be removed, Safety Officer shall be notified first and it shall be fixed back immediately or alternative arrangements shall be made to prevent persons or material falling through the opening.
- Before taking up any excavation work in the site, necessary approval should be taken from concerned authorities.

20.0 Procedure

20.2 Use of permit

20.2.1 Any work in a hazardous area is strictly controlled and all precautionary measures are taken before such work commences and while the work in progress.

20.2.2 All personnel concerned are aware of the location and duration of the work and the precautions to be taken.

20.2.3 All supervisors shall be made aware of the work permit procedure so that permits are obtained in a timely manner such that work is not delayed.

20.2.4 For any work at a facility a work permit shall be obtained as situation warrants prior to commencement of work. This shall include:-

- All maintenance work done on production plant
- Hot work to be done in an operational area
- Vessel entry where work is to be carried out in vessels, tanks or other confined spaces.
- On and around live systems outside a facility.



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- Work in conjunction with electrical systems made temporarily dead.
- Work on live electrical systems.
- Work in locations where live underground or overhead services existing and cannot be made dead.

22.2.5 Additional permits and procedures shall be required in the following cases: -

- An excavation permit shall be required for all excavation work to be carried out in an operational area (as situation warrants)
- A permit to work of electrical equipment shall be required before any work can be carried out on: -
 - High voltage equipment.
 - Mechanical equipment driven by electric motor.
- A gas test certificate shall be required prior to the start of hot work or vessel entry.
- Sanction for test to proceed in accordance with the local electrical safety rules.
- Limitation of access to electrical apparatus (permission to work in the vicinity of line conductors).

It is emphasized to those utilising the work permit system that any changes in circumstances within, or affecting, the facility concerned, will result in the automatic suspension of that permit and the work governed by it shall be stopped.

All personnel who apply and hold the work permit are to be fully conversant with the Client's work to permit operational procedures and should undergo necessary training courses.

It is the responsibility of the permit holder to ensure that he fully understands the conditions stated in the permit and fully complies with requirements.

21.0 Site Offices and accommodation

Living Accommodation

No living accommodation is provided at site as the work force is provided with company camp accommodation.

Site Office

Steps, stairs and the floor of corridors, passageways and offices must be maintained in good condition and free from materials, which are likely to cause person to slip or trip.

Trailing electric cables from the equipment such as computers, typewriters, telephones, should be the minimum and kept secured to avoid tripping hazard.



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Sketch showing the layout of the site offices including position of fire fighting equipments, fire escape route, position of first aid box, and other relevant details is attached.

22.0 Safety records

All safety records will be controlled and maintained as per the company procedure TECHNORIG/HSE/OSP-13.

23.0 Arrangement for site visitors

All site visitors are required to report to the reception on arrival. The gate security man will direct the visitors to the site office. The site agent will brief the visitors and will be provided with a visitors pass after registration in the visitor's book. Visitors are never permitted to visit the site with out accompanied by a TECHNORIG responsible person like engineer, foreman, and safety officer. He will be in briefed regarding the site work site hazards and precautions to be taken. He must be in position of personal protective equipment as required. NO PPE NO ENTRY policy will be strictly followed. On completion of the purpose of visit the pass will be returned to the reception and entered.

24.0 Night work safety.

As far as possible night works will be avoided and efforts will be made to close the work before last light. If in any case work has to be continued the following additional precautions will be taken.

- A night safety officer will be present
- Adequate staff for close supervision will be provided.
- Lighting should be adequate and in good standard for access and work areas.
- No hot work will be permitted during night.
- A stand by light vehicle with driver will be made available at site.

25.0 Safety Audits

Safety audits will be as per the company procedure TECHNORIG/HSE/OSP-14

26.0 Method Statements

Method statement shall be prepared for all significant work site activities, so that safe system of work are devised, communicated, and monitored in a controlled, manner. Method statement shall provide information and guide persons carrying out the work. In order for information to be imparted, it needs to be concise, and easy to understand.



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Method statements produced by subcontractors shall be reviewed for adequacy by the site agents and advised of the outcome of the review for improvement.

The contents of the method statement must be imparted to those involved and affected by the activities.

If the planned safe system of work needs to be changed / revised for any reason, the same shall be revised, checked, and briefed in detail to all those involved before implementation.

Monitoring of the implementation of the planned safe system of work as detailed the method statement shall be done on an ongoing basis by the supervisor.

Standard format attached (Refer. Annexure- 5).

27.0 Environment Management

Project management shall ensure client environmental pollution protection requirement are met at all times.

- All litter and waste materials arising from work activities on site shall be collected and disposed in an approved waste disposal site in accordance with waste management procedures.
- Operators shall check the conditions of their mobile and fixed equipment at the commencement of each shift for – 1). Oil and hydraulic leaks, 2). Faulty silencers / exhausts and any defective units shall be withdrawn from service until repairs can be carried out.
- Re-fuelling and maintenance of equipment shall not be carried out in the outside of the designated areas.
- Positive efforts shall be made by personnel at all times to minimize the generation of dust. The supervisions of dust shall be carried out at site by using water tanker fitted with spray-bars at the rear so that surface 'fines' liable to generate dust clouds are kept damp to aid dust during dust suppression during activities.
- Driver of TECHNORIG and sub-contractors shall observe the stipulated speed limits at all times.
- In dusty conditions drivers of all company vehicles shall adjust the speed of their vehicle to minimize dust cloud formation.



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- Operators shall ensure that all silencers and exhaust fitted to the vehicles and equipment are not burst or damaged in any way, which impair their noise reduction efficiency.
- If an incident arises involving spillage of any liquid or solid materials, which could result in environmental pollution immediate actions, shall be taken to minimize the spillage.
- Prevent releases of smoke, fumes, gases, dust and steam, smells, vapours or materials residues into the environment; minimize those releases where they cannot be prevented.
- Petrol, diesel oil, greases and all paints and chemicals must be stored on a hard standing so as to ensure that they cannot seep into the ground, if spilt, and contaminate the water course.
- Approved removal contractor should normally carry out all work with asbestos. While removing takes care not to disturb any fibbers or residues of asbestos, dry sites are most dangerous. Dampen with water the asbestos to be removed to decrease the fibber concentrations.
- Pollution of the environment means pollution to the air, water and land arising from any work or other activity having potential to injure or harm human life or other living organisms.

27.1 Noise

Protection against the effects of noise exposure shall be provided when the sound levels exceed those shown below.

Permissible Noise Exposure

Duration per day hours	Sound Level dBA
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105

When employees are subjected to sound levels exceeding those listed above, feasible administrative or engineering controls shall be utilized. If such controls fail to reduce sound levels within the levels given above, personal protective equipment shall be provided.



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When the daily noise exposure is composed of two or more periods of noise exposure of different levels, their combined effect should be considered rather than the individual effect of each.

As far as possible noise levels at source are to be reduced to the lowest levels that are reasonably practicable.

In circumstances where an operation of works exceeds 90 dB (A), the area is to be demarcated and signs erected to indicate the affected area.

All equipment provided for the purpose of controlling or reducing noise, i.e. ear defenders, mufflers, acoustic screens etc., shall be maintained in good order.

Employees have a duty to co-operate with their employers and are required to make full and proper use of any noise control equipment provided, including ear defenders.

27.2 Waste Management

- All the scrap materials generated at site will be placed at the scrap bins provided at the respective floors. This will be the responsibility of the respective group of workmen. A suitable chute will be identified using the existing features of the building or externally to bring the scrap safely to the ground floor, as site situation warrants.
- Flammable waste such as empty containers of paint, insulation glue, adhesives etc. will not be disposed off in the scrap bins. It will be removed on a daily basis to the site stores where a separate storage will be maintained for such purposes.
- The storekeeper will ensure that garbage bins provided in the temporary facilities area are cleared daily.
- Skips will be provided at work sites.

28.0 Welfare Facilities

- The temporary facilities area for lunch will be provided with garbage bins with lids to dispose all food left over by the employees. It will be removed every day.
- Sufficient number of toilets and urinals will be installed at the assigned locations and will be maintained clean and dry.
- Cool drinking water will be made available at site. All employees will be encouraged to drink sufficient amount of water during summer months.



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29.0 List of Attachments

- Annexure 1 - List of Procedures
- Annexure 2 - Attached Procedures
- Annexure 3 - Risk Assessment
- Annexure 4 - Safety Forms and Format
- Annexure 5 - Site Safety Plan Layout



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Quality, Health, Safety and Environment Management System

QHSE Manual



Policy: The long-term business success of Technorig depends on our ability to continuously improve our products and services while protecting our people and the environment in which they work and live. It is a commitment which is in the best interests of our customers and our employees

QHSE is the responsibility of management, with commitment and support of all employees. We are committed to the proactive integration of QHSE objectives into our management systems at all levels, actively reinforced by our reward and recognition programs. This is critical to our business success because it reduces risk and adds value to our products and services.

Vision: We envision a quality and service culture that enables us to meet customer expectations, actively involve and empower all employees in the continuous improvement process.

Mission: TechnoRig's QHSE mission is to ensure that quality, health, safety and environmental considerations remain top priorities for management and for all employees. Prevention of accidental risk and loss from process failure becomes a recognized.

QHSE Management System

The Technorig QHSE Management System defines the principles by which we conduct our operations in UAE and GCC with regard to the quality of our services and products; the health and safety of our customers, employees, contractors and communities

This QHSE philosophy shall be communicated to all employees, customers, contractors and third parties associated with our business. The QHSE Management System model comprises eight interrelated components:

- Commitment and Leadership: Management shall provide strong, visible commitment, leadership and personal involvement in QHSE. Management shall make available the resources necessary to achieve the QHSE objectives
- Policies and Objectives: Policies and strategic objectives shall be defined, deployed and maintained at all time.
- Organization and Resources: Organizational responsibilities shall be defined and the necessary resources provided to achieve QHSE objectives
- Contractor and Supplier Management: Suppliers and contractors shall be managed to ensure that their products and services meet our QHSE standards.
- Risk Management: shall continually evaluate the QHSE risks to our workforce, customers and the environment. Comprehensive risk assessment provides the



necessary information to reduce these risks and mitigate the impact of our operations on health, safety and the environment.

- Design and Planning: QHSE shall be integral to the design, development and delivery of products and services.
- Implementation and Monitoring: To ensure that objectives are met, activities shall be conducted in accordance with defined standards, and continuous improvement shall be promoted and monitored through active employee participation.
- Assessment and Continuous Improvement: Audits shall be conducted to verify the implementation and effectiveness of the QHSE Management System.

TECHNORIG Commitment / TECHNORIG QHSE Mission Statement

TECHNORIG is totally committed to Quality, Health, Safety and Environment (QHSE) performance and in particular to reduce the lost time injury rate. We will achieve this objective, through the personal commitment of everyone, the way we behave and work together.

The fundamental principles under which we perform our activities are:

- 1- QHSE is a management responsibility.**
- 2- Working safely and protecting the environment is a condition of employment**
- 3- No employee shall commit, condone nor knowingly be party to an unsafe act or violation of the company's QHSE policies or local country Laws. We shall support fully every employee's right to refuse to carry out an activity that can justifiably be considered unsafe.**
- 4- Training in QHSE shall be provided to all employees.**
- 5- Managers shall ensure that risks to people, assets, the environment and our reputation are reduced, through the application of hazard identification and risk assessment tools.**
- 6- Our QHSE policies shall be communicated to all employees, to clients, to suppliers, to contractors and to third parties with whom the Company is associated.**
- 7- Clients, suppliers, contractors and third party personnel working on Technorig facilities are required to comply with Technorig QHSE policies, procedures and standards, as well as the policies of their respective companies.**
- 8- We shall help employees care for their health. Medical support provided includes regular publications on health, vaccinations, physical checkups, medical evacuation and health audits.**
- 9- Our commitment to quality is focused on satisfying both the standards specified and the expectations of our clients. Each facility shall monitor performance against corporate and local benchmarks.**



10- We shall maintain a total quality culture throughout the organization, thereby providing opportunities for all employees to contribute towards the development of the company.

Leadership

Managers shall provide strong, visible leadership and actively participate in the continuing drive toward a corporate culture that places QHSE equal in importance to the other critical business objectives. Visible leadership includes setting a personal example in everyday work and actively contributing to QHSE activities such as audits, site visits, etc. Managers are responsible for maintaining a culture of QHSE awareness so that prevention of accidental risk and loss to process is a recognized and integral part of our daily activities. Managers shall also encourage the involvement of all employees and empower them to develop and implement solutions pertinent to QHSE issues at their site.

Policies, standards and Procedures: The policies, standards and procedures shall be complied with on each worksite. Should one of them be inapplicable, then a system for exemption shall be applied for.

Policies and Objectives

Policies: Managers are responsible for defining and implementing QHSE policies that meet applicable internal and external requirements.

For each worksite unit, the management shall ensure: Compliance with mandatory rules and regulation; and that applicable codes, guidelines and standards recommended by the organization, Administration (i.e. the Government of the state, classification societies and industry organizations are taken into account)

Conflict: Wherever and whenever or TECHNORIG QHSE policies, standards and procedures differ from the applicable regulations in the area of operations, the most stringent of such requirements shall apply.

Objectives: Managers shall identify and set QHSE performance targets. These targets shall be communicated to our customers, employees and contractors, and employees and contractors shall be informed about what is required of them to achieve these targets. Programs shall be in place to assess QHSE performance against the set objectives. The objectives are set yearly by the corporate management. Results shall be monitored, reviewed and consolidated on a monthly basis at Worksite level and HQ level.

Organization and Resources

Organizational Responsibilities: Managers are responsible for QHSE. All employees are individually responsible and accountable for all QHSE issues relating to themselves or others with whom they associate. Line managers shall ensure that all employees have job descriptions and objectives set which match actual responsibilities and that these descriptions are clearly communicated.



SITE MANAGER: On all worksites, the SITE MANAGER is responsible for ensuring compliance with the QHSE policies, standards and procedures. The SITE MANAGER of any worksite shall be present on the worksite.

Authority of the SITE MANAGER

The SITE MANAGER of any worksite shall be one, and only one person. This critical responsibility cannot be shared with anyone, whatever the circumstances and/or the operations of the worksite.

The SITE MANAGER shall be in complete and ultimate command of the worksite. The SITE MANAGER's actions shall be governed by the policies, standards and procedures of and TECHNORIG.

The SITE MANAGER has the overriding authority and the responsibility to make decisions with respect to safety and pollution prevention and to request the company's assistance as may be necessary.

Delegation by the SITE MANAGER

The SITE MANAGER is not necessarily an expert in every aspect of the installation and its operations. The SITE MANAGER commands the assistance of specialist technicians and can delegate tasks to the specialist functions. However, the SITE MANAGER shall remain in ultimate command at all times.

Review of QHSE manual by SITE MANAGER

"The SITE MANAGER shall periodically review the elements of TECHNORIG Safety Management System, and reports its deficiencies, if found, to the company's management."

Contractor and Supplier Management

Suppliers and contractors shall be managed to ensure that their products and services meet applicable QHSE standards.

Evaluation, Qualification and Selection

Risk Assessment: All suppliers and contractors shall be evaluated, qualified and selected based on their ability to deliver a quality product or service in a safe, healthy and environmentally acceptable manner.

Contractor Performance

Mechanisms for monitoring contractor QHSE performance shall be implemented.

Good QHSE performance shall be expected and recognized and Contractors shall be actively involved in the continuous improvement process.

Excellent practices identified shall be promoted.



Poor QHSE performance shall not be tolerated and may result in early termination.

Risk Management

TECHNORIG shall continually evaluate the QHSE risks to our workforce, customers and the environment. Comprehensive risk assessment provides the necessary information to reduce these risks and mitigate the impact of our operations on health, safety and the environment.

Definitions: QHSE definitions shall be used and understood throughout the organization.

Worksite: Worksite here refers to any installation operated by TECHNORIG on land, inland water or offshore.

Qualified Personnel: Any person in possession of a valid certificate of proficiency covering the activity being carried out.

Certified Personnel: Any person complying 100% with TECHNORIG training requirements.

Approved Personnel / Competent Person: Any person appointed in writing by the SITE MANAGER (or higher authority) to carry out a specific task.

Employee: Any regular or part-time employee, consultant, temporary hire, or contractor.

Vehicle: Any vehicle owned, leased, rented or contracted by TechnoRig.

Accident: An undesired event which results in:

Harm to people (injury or occupational illness) and/or damage to the environment and/or losses to assets, process, and reputation

Near Accident: An undesired event which, under slightly different circumstances, had the potential to cause an Accident as defined above.

Hazard: Any object, physical condition, or physical effect that has the potential to cause an Incident.

Hazardous situation: Any situation where a Hazard is present and/or an Unsafe Act is being conducted

Suggestion for Improvement: Any meaningful recommendation for improving any aspect of operations.

Accident Report Form: Used in locations to classify risks and report accidents.

Technorig Involved Accident

Any accident: Happening at a place of work and or involving TechnoRig's employees, any Client or contractor/vendor-related activity at worksite.

Technorig Non-Involved Accident



Any accident happening: During vacation or days-off, As a result of a self inflicted injury such as suicide, drug overdose, etc. As a result of a health condition not clearly caused by work

Industry Recognized Accident

All accidents listed above under “Technorig Involved Accidents” except any accidents involving:

- Travel to and from one’s home and a regular Assembly Point
- Travel to and from one’s home and a regular work place
- Personal travel in a private Vehicle
- Camps, quarters, parking lots, fitness centers and other locations outside the worksite, even if under the responsibility of TechnoRig, the Client or Contractor

Lost Time Injury (LTI)

Any injury (and/or occupational illness) resulting from an accident and which causes the victim not to be able to return within the next 24 hours.

Non-Lost Time Injury (NLTi)

Any work related injury which is not a LTI.

Light Duty (LD)

Any work performed by a person that does not include all the normal duties of the regular job.

Days Without Lost Time Injury (DWLTI)

Number of consecutive days worked without a LTI. The very first day worked without an injury following a lost time injury is numbered "day # 1".

LTI Frequency Rate per million of manhours

Number of LTI's per million of manhours worked. It is calculated as follows =

No. of LTI's x 1,000,000

Manhours

Manhours

Total number of hours worked by the Company personnel, including overtime and training, but excluding travel time, leave, rest, sickness, and other absences.

Worksite Manhours

Actual manhours worked in office, yards and worksite by TECHNORIG employees and sub-contracted employees working under TECHNORIG supervision.



Contractor: Any company or person providing services on a routine basis to TechnoRig.

Headcount: Total number of personnel at month-end, including full and part-time employees, contracted personnel, consultants, and employees on rotation, days-off, field breaks, or vacation.

Third Party: Anyone who is not an Employee, Contractor employee, or Client.

Recognition: Praise for anyone showing excellent implementation of good QHSE practices.

Residual Risk: The risk remaining after prevention and mitigation measures actions have been implemented.

Loss: The negative consequence or cost of an accident. Includes all direct and indirect costs, irrespective of insurance compensations.

Occupational Illness: Any work related illness resulting in days away from work, days of restricted work activity, job transfer, medical treatment or abnormal health condition.

Permanent Partial Disability: Any injury which results in the complete loss, or permanent loss of use, of any part of the body, or any impairment of functions of parts of the body.

Life Loss: The number of days lost allocated is 5000. It is counted as an LTI.

Part Per Million (PPM): Concentration of a gas or liquid, in volume per million of volumes. One ppm is equal to 0.0001 % concentration.

Restricted Areas: Areas prohibited to non-essential personnel.

Shall: Indicates a mandatory requirement.

Should: Indicates a recommendation.

Will: Indicates a future commitment.



Risk Minimization

Systems: Systems shall be in place to ensure the:

- identification of hazards associated with our products and services
- assessment of risk
- Identification of appropriate prevention and mitigation activities.

QHSE risks associated with every product used, manufactured, sold or transported by TECHNORIG or its contractors shall be assessed, and systems shall be in place to incorporate risk assessment in all activities.

Communication: Employees, customers, contractors and all relevant third parties shall be informed of hazards and risks and the required prevention and mitigation measures.

Accountability: Systems shall be in place to communicate the assessed risks to the appropriate, accountable level of management, commensurate with the magnitude of the assessed risk. All related decisions shall be clearly documented.

Risk Management training: Employees shall receive formal training in Risk Management.

Prevention and Mitigation Measures: Required prevention and mitigation measures shall be implemented and then verified.

Permit to Work System

Purpose

A Permit to Work (or Work Permit) is a formal written authorization used to control certain types of work, which are identified as potentially hazardous. It is also a means of communication between site management, worksite supervisors and operators and those who carry out the work.

Objectives and functions of the permit to work system

- Ensure that proper authorization is given to carry out specific work at a certain time and place
- Ensure that personnel carrying out the work clearly understand the nature of the job, the hazards involved, and the limitations on the work and the time.
- Specify the precautions to be taken before starting the work, during the work and after its completion.
- Ensure that the SITE MANAGER is fully aware of the work being done.
- Provide a record showing that the type of work and the proper working procedures have been checked by an approved person.



- Provide for the suitable display of open or suspended permits.
- Provide a procedure for times when work must be suspended.
- Provide for the procedures or arrangements for other activities that may interact or affect one another.
- Provide a formal hand-over procedure for use when work is to be carried out for a longer period than a shift or when permit signatories change.
- Provide a formal hand-back procedure to ensure that any part of the worksite affected by the work is in a safe condition and ready for reinstatement.

Responsibility of the Permit to Work System

The SITE MANAGER has the responsibility of the correct implementation and use of the permit to work system.

Types of Work Permits: Any hazardous work shall require at least one of the following work permits:

- Safe Work Permit.
- Hot Work Permit.
- Electrical Work Permit.

In some cases several types of permits may be required for a complex task.

Tasks to be covered by a Safe Work Permit include but are not limited to:

- Working over water
- Entering confined spaces
- Pressurized operations
- Authorized exemptions from a TECHNORIG Procedure
- Work involving the use of radioactive materials and explosives
- Work in unguarded, unprotected areas
- Work in contaminated or possibly contaminated atmosphere
- Maintenance operations that disable critical safety systems, such as fire and gas detection systems, communication systems, lifesaving and rescue equipment, firefighting equipment, emergency devices.
- Man riding operations

Tasks to be covered by a Hot Work Permit include but are not limited to :



- Hot work of any type (welding, cutting, burning out of the yard area or welding workshop).
- Any work generating ignition sources inside hazardous area.
- Any of the above works in any area of the worksite, when a potential hazardous situation is anticipated, because of the work itself, or because of the adjacent operations

Tasks to be covered by an Electrical Work Permit include but are not limited to:

- Any electrical work that may be hazardous to life

Tasks to be covered by an isolation requirement within a Work Permit include but are not limited to:

- Any work on equipment, or close to equipment that may be remotely activated.
- Any work on electrical equipment or a circuit that has a remote control breaker.
- Any work on hydraulic or pneumatic piping or apparatus that may be pressurized from a remote point, or circulated with fluid or gas.
- Any work on mechanical equipment that may be started by any means.
- Any work inside a tank, container that may be flooded by fluid or invaded by a toxic or explosive atmosphere.

Request for a Work Permit

All Work Permits shall be requested by the Supervisor responsible for the work to be performed. This applies to all potentially hazardous works to be performed by Company and third party personnel. Filling in the work permit form shall be performed by the site manager.

Approval of the Work Permit

Work Permits may be approved only by the SITE MANAGER or his designate. In this case designate shall be worksite superintendent, Asst. worksite superintendent. Client approval may sometimes be required; however, this alone is insufficient, SITE MANAGER Approval shall also be obtained.

No one may authorize a Work Permit for work that he carries out himself.

A work permit can only be approved when the worksite has been inspected by the approver.

Validity of the Work Permit

Permits are not to be carried over from one crew to another. A Permit is no longer valid whenever a change occurs in:

- Personnel carrying out the work,
- Working conditions, that were not anticipated when issuing the work permit, or
- When the permit is suspended.



Suspension of the Work Permit

In the event the work is suspended, upon SITE MANAGER decision, before completion of the work, the area shall be secured and zoned off if necessary. If isolation was in force, it shall be maintained. The original Work Permit previously given to the Supervisor or the person performing the work shall be returned to the SITE MANAGER. To resume the work suspended, a new Work Permit shall be requested and approved by the SITE MANAGER, and attached to the previous one.

Completion of the work

Once the work is completed, necessary checks shall be made by the Supervisor in charge of the work. The permit shall then be signed off by the responsible Supervisor of the work performed and the SITE MANAGER. This closes the work permit.

Administration of the Work Permit

Work Permit form : Appropriate TECHNORIG forms will be used. However, Client's work permit forms may be used provided they meet the same intent of the Technorig system.

In any case only one type of permit form shall be used, to avoid duplication and errors.

Display of valid or suspended Work Permits

In order to permanently monitor the on-going Work Permits, a Permit To Work board (PTW board) shall be installed. The PTW board allows supervisors on the worksite to know the current status of the ongoing work. The PTW board shall be in an adequate place, and in a location determined by the SITE MANAGER.

The SITE MANAGER shall designate a person (called the Work Permit Administrator) to administer the PTW board, i.e. ensuring that the board permanently shows the Work Permits opened and currently valid.

The first copy of the work permit shall be used for display.

The Work Permit Administrator and the SITE MANAGER shall be the only persons authorized to modify or change the Work Permits displayed on the PTW board.

Dispatching and Filing

- When approved by the SITE MANAGER, the original of the Work Permit shall be given to the person in charge of the job.
- The first copy shall be given to the Work Permit Administrator for posting on the Permit To Work board.
- The second copy shall be retained by the Responsible Supervisor in charge of the work.
- Once the task is completed, all Permit forms used shall be collected by the Work Permit Administrator and the original copy shall be signed off by the responsible Supervisor and by the SITE MANAGER.



- When the Permit is closed, the original shall be put in the Work Permit chrono file and other copies discarded.
- The Work Permit file shall retain the closed Work Permits for at least 90 days after they are issued.
- The numbering shall be chronological, regardless of the type of Permit issued.
- The first number shall be 001, from the time the present system is started.
- The Work Permit file shall have a reference index that shall be used for logging each Work Permit issued, and filed.

Management of Temporary Change

Authorization to Rig-Up Client or Third Party Equipment

Before installing any client or third party equipment that may create a hazard when Rig-up and/or operated, an authorization to Rig-up third party equipment shall be approved by the SITE MANAGER.

- The purpose of issuing an authorization to Rig-up client or third party equipment is to ensure that it does not create any hazard to Health, Safety or working Environment and to identify any deficiency in advance.
- The equipment shall be inspected by a TECHNORIG qualified person in accordance with the check list included in the authorization to Rig-up client or third party equipment. The completed check list shall be handed over to the SITE MANAGER for approval.
- Any unsatisfactory items shall be reported to the Client and Third Party Representative, along with possible remedial actions.
- Should it be impossible to put the equipment in a safe condition, the authorization shall not be approved and the SITE MANAGER shall inform the Client representative and the Project Manager as soon as possible.
- The authorization to Rig-up client or third party format should be used.
- The issuance of the authorization to Rig-up client or third party equipment does not preclude the application of the Work Permit procedures.



Authorization To Worksite-Up Client or Third Party Equipment

Worksite:

Date

Type of equipment :

	Yes	No	N/A
- Is the equipment to be located in a hazardous area? - Will the equipment need to be secured & any HP lines snubbed? - Will you require warning signs around this equipment? - Is there sufficient lighting in the operating area? - Will the operator require PPE? - If no, does he have the correct PPE, and training? - Give details below of services to be supplied by worksite : air, etc, - Are all guards properly installed? - In the case of pressure vessels, is the system protected with pressure release devices? - Is the equipment free from leaks (oil, fuel, acid, nitrogen,)? - Are there spark arrestors on engine exhausts and fuel shut off? - Do power inputs / outputs have proper terminal connections? - Is the equipment properly grounded, where required? - Is there any functional overload protection? - Is the equipment explosion proof? - Describe below the state of the insulation and any integrity tests carried out by you: - Is the equipment in accordance with TECHNORIG HSE policies? - If hazardous material, is MSDS record available? - Are spill control procedures in place?			

Note below any additional information or special considerations for this equipment:



Function	TECHNORIG MANAGER	SITE	Client Representative	Third Representative	Party
	authorizing Rig-Up				
Name					
Company					
Signature					
Date					

Exemption

If, in exceptional circumstances, a TECHNORIG and or policy, standard and/or procedure cannot be complied with, operations may proceed only if an "Authorization for Exemption" has been granted.

All past and current request forms for "Authorization for Exemption" shall be retained in a dedicated file and kept in the SITE MANAGER's office.

Handover Process

Supervisors shall conduct a formal handover whenever they are transferring the responsibility for supervising a crew or task to another designated supervisor, such as at shift change

Handover shall be in writing when crew changes are occurring.

The handover shall include but is not limited to:

- Detailed explanation of all known tasks which the incoming supervisor will be responsible for supervising.
- Clear explanation of which crewmen are assigned to perform each separate task.
- Detailed explanation of all tasks requiring a Permit to Work.
- Detailed explanation of any task requiring a Permit to Work that also requires equipment to be isolated, locked out and tagged out.
- Any safety issues which are related to the tasks which are being handed over.
- Detailed explanation of any other operation or condition which could threaten the safety of worksite personnel.

Design and Planning

QHSE shall be integral to the design, development and delivery of products and services.



Equipment & Systems Utilization, Inspections, & Maintenance

Equipment and Systems shall be operated, inspected, maintained and repaired in accordance with Company, and / or OEM standards, procedures and policies.

Equipment & Systems Modifications

No Modification to the Original Design and / or the Service of a piece of Equipment or System shall be performed on a Worksite, or in a designated workshop without prior HQS approval.

Purchasing

QHSE requirements shall systematically be incorporated into the design and purchasing criteria of equipment and products used in TECHNORIG operations.

Processes

Operational, manufacturing and engineering processes shall systematically take QHSE aspects into consideration. QHSE critical processes shall be identified, mapped and regularly reviewed to assess QHSE implications and actions required to minimize the risk of malfunction or process error. Where simultaneous operations are undertaken, the impact of one operation upon another shall be assessed and recorded, and safeguards shall be in place to mitigate cumulative effects.

Explosive, radioactive materials, volatile liquids and gases

Explosives, radioactive materials, volatile liquids and gases shall be handled only by approved personnel. They shall be stored in properly locked containers at all times. On offshore worksites, explosives shall be stored in jettison able containers.

Explosives, radioactive materials and volatile liquids and gases should not be stored on a worksite, unless absolutely necessary for the operations. They should be kept at the minimum stock necessary to carry out operations.

The SITE MANAGER shall maintain a current inventory of all above materials.

Radioactive material storage containers shall be located away from passageways, living quarters, or areas that are usually manned. Storage containers shall be clearly identified with appropriate labels.

The SITE MANAGER is responsible to ensure that the safety procedures have been implemented in accordance with the service company and/or operator's requirements for that equipment.

Electrical Equipment for Classified Areas

All electrical equipment installed in a classified area shall have a correct type of protection.



The classified areas drawings on each worksite shall be defined by the TECHNORIG Engineering department.

Classified areas

All TECHNORIG worksites shall have clearly identified hazardous areas.

Definition of classified areas:

- Zone 1 ➔ In which an explosive gas/mixture is likely to occur in normal operations.
- Zone 2 ➔ in which an explosive gas/mixture is not likely to occur in normal operation and if it occurs, will exist only for a short time.
- Non hazardous area ➔ manned or unmanned areas in which an explosive gas/mixture will not occur in normal operations.

Note: a "zone 0" is also defined as a zone where an explosive gas/air mixture is continuously present or present for long periods.

Equipment suitable for classified areas

Electrical equipment shall comply with flag authority and API specifications for each of the classified areas. Additional Clients requirements shall be referred to TECHNORIG for review.

All combustion engines operated within a zone 2 area shall be equipped with:

- spark arresting system on exhaust (or spark arrestor silencer)
- quick shut-off device acting on fuel supply and/or air intake manifold
- Engines permanently located within a zone 2 area will be equipped with a flameproof starter (air).

Electrical lockouts

All electrical equipment or electrically driven components will have lockout safety switches. Before performing any work on such equipment, it shall be locked out and corresponding switch gear panel tagged, to prevent accidental activation.

A work permit shall be obtained prior to commencing potentially hazardous work on any electrical equipment or electrically driven equipment.

A test shall be performed on the isolated equipment to verify that the isolation is effective.

Electrical work

Only personnel approved by the SITE MANAGER shall perform electrical work.

Water shall not be used to clean around generators, electrical switchboards, and other electrical apparatus.



Wherever possible, electric cables and/or extension cords will be run overhead and not run on the ground or deck.

Broken or defective cords shall be immediately removed from service and repaired by approved electrician.

Power hand tools shall not have a positive locking device.

Live electrical equipment and components shall only be worked on with proper non-conductive tools.

Each worksite shall be equipped at least with:

- One (1) pair of dielectric gloves
- One (1) insulated stool
- One (1) insulated retrieving hook
- One (1) insulated ladder

Non-conductive mats shall be placed in front of the switchboards, transformers, and maintained in a clean and dry condition.

All high voltage panels above 480 volts shall be clearly marked.

Power control room, generator room (including emergency generator room), and other areas containing high-voltage panels shall be labeled "*No entry to unauthorized persons*", in both English and the predominant local language.

Whenever possible, air powered tools shall be preferred to electrical tools for outdoor work.

Portable ladders made of non conductive material shall be used for electrical work.

Breaker switches shall not be thrown in or out under loaded circuit.

Calibrated fuses shall never be replaced by makeshift conductors. Fuse pullers shall be used for handling fuses.

Modification of original wiring shall not be done without following TECHNORIG procedure for modification.

Working alone in the PCR , VFD and control room is not allowed

Safety Procedure for rescuing a victim suffering from electrical shock shall be posted in all switch gear rooms.

Grounding circuit

Yard and worksites loads connected to electrical supply shall be grounded immediately when set on location. Fuel tanks shall also be grounded.

Each land worksite shall have a Megohm metre capable of measuring the resistance of the grounding circuit, which shall not exceed 20 ohms.



The grounding circuit shall be visually inspected every week, and resistance measured at the installation and once a month thereafter. Information shall be recorded.

The grounding diagram shall be of a "loop" type, i.e. the continuity of the grounding circuit will still be maintained even if one conductor is severed.

The ground connection can be made using a galvanized grating in a 1 meter deep pit, the grating being placed on a bed of sand, and covered by a bed of salt and followed by a top coat of sand. The place shall be kept wet for a good conductivity.

The skids grounding connections shall be rust-proof (stainless steel bolts are recommended).

The grounding cable shall have a section equal to the largest conductor, but limited to 125 mm².

For each location, the grounding diagram shall be conspicuously displayed.

Any time the worksite or yard lay-out is modified either by adding, removing or moving a skid, the SITE MANAGER or his designate shall verify that the grounding circuit is modified accordingly, and retested.

Hazardous Condition and Operations

Restricted Areas: Signs shall be posted, to clearly identify restricted areas

The use of pictogram type signs is recommended to identify hazards within restricted areas.

Protection: Fences, barriers, covers, guards and handrails shall be installed to control access to restricted areas.

Fencing and Barriers

barriers shall be erected around all pits. In urban or inhabited zones, the complete location should be enclosed to control the personnel and vehicles access. Barriers shall be installed around openings presenting risk of personnel fall.

Handrails

Fixed handrails with toe board shall be installed on all decks, raised floors, walkways, and on any work platform over 1 meter (3 feet) in height.

Handrails shall be at least 1.2 meters (4 feet) high, with an intermediate rail and toe board. Toe board to be not less than 10 cm (4 in.) high.

Chains shall not be used as permanent handrail.

Stairs

All stairways shall be provided with handrails and non-skid treads.

Guarding

All exposed moving parts of machinery shall be guarded.



Any hot pipe work or surfaces which could cause burns to personnel shall be guarded.

Confined Spaces and Tank Entry

No one shall enter a confined space or tank without a work permit. Confined spaces and tank entry procedures shall be complied with.

The following equipment shall be available for confined space and tank entry:

- A portable gas detector capable to continuously monitoring the oxygen content, H₂S content, and L.E.L.
- Accessories to allow remote detection.
- A portable tripod with a combined fall arrestor-retrieving winch, or similar system.
- One 30 minutes SCBA per person.
- One (1) full harness with lifeline per person.
- An explosion-proof air exhaust fan (electrical or air operated).
- A minimum of two (2) explosion-proof portable lights.
- Explosion-proof radio communication set.
- Signs.

Before completely removing the fastening devices on a confined space, the internal pressure shall be checked and vented if necessary.

Sounding of the tank shall be done before entering inside. In case of doubt and suspected presence of water, floatation devices shall be worn by personnel.

All valves leading to the confined space shall be identified and mechanically/electrically isolated.

The area shall be ventilated and tested for safe entry

A standby man shall be appointed at the entry site and be in contact with a control point (and with the personnel entering the confined space if possible).

A tally of the persons inside shall be maintained by the standby man at the entry site.

Not less than two (2) persons shall be in the confined space at any time.

Adequate tools and PPE shall be worn.

The atmosphere shall be continuously monitored with the portable gas detector.

Permanent ventilation shall be in force during the entire entry period

Fuel-tanks and crude oil tanks shall not be entered without Operation Manager approval.



No hot work shall be performed on the periphery of tanks used for the storage of volatile liquids or gas without the project Manager Approval. In all cases, work shall not commence before proper ventilation is achieved and verified.

Working over Water

On offshore worksites and inland water worksites, no over the side work shall be permitted without a work permit

Hazardous Substances Handling and Storage

Material Safety Data Sheets (MSDS) shall be available on each worksite for each type of chemical used.

The SITE MANAGER or his designate shall verify that any chemical received on the worksite is properly labeled on its container, and that the MSDS is provided. If no MSDS is available, the product shall not be used until the MSDS information is provided.

The SITE MANAGER or his designate shall ensure that personnel working with hazardous substances are made aware of MTECHNORIG handling requirements.

The storage of all hazardous substances shall be in accordance with MSDS.

Suitable first aid equipment and/or fire-fighting equipment in accordance with MTECHNORIG shall be located in the vicinity of the handling/storage area.

Caustic soda or acid

Caustic soda or acid shall be always added to water, and never the contrary. Caustic soda shall never be mixed into the mud through the hoppers

Pumping Flammable and/or Combustible fluids

Pumping of flammables and/or combustible fluids with a cement unit shall not be done unless the Project Manager has been satisfied that adequate precautions have been taken and written permission given.

Unless written permission is received from the Project Manager, no worksite shall use the cement pump to : 1) pump flammable and/or combustible fluids at pressure, or 2) pump at pressure into something, that has already had diesel pumped into/through it, until it has been completely purged.

The compression of a mixture of flammable and/or combustible fluids and air leads to a rise in mixture temperature that can exceed the auto-ignition temperature and lead to an uncontrolled explosion. At normal temperatures, the high flash point and low vapor pressure of flammable and/or combustible fluids mean that any mixture with air is well below the LEL (Lower Explosive Limit).

A further danger of pumping flammable and/or combustible fluids with a cement unit is that if the flammable and/or combustible fluid is spilled, leaks or is sprayed onto hot engine parts, it may ignite.



Flammable and/or combustible fluids are toxic and the recommended handling and protective clothing recommendations must be followed.

Communications

Public Address System (PA)

All worksites shall be equipped with a Public Address system that can be clearly heard and understood throughout the worksite.

Hand-Held Radios

Where local regulation permit, land worksites shall have at least three (3) units, offshore worksites and inland water worksites shall have at least six (6) units.

Welding and Cutting

Compressed gas cylinders storage, handling, and marking

Compressed gas cylinders shall be handled carefully. They shall be stored vertically away from ignition sources. The cylinders temperature should not exceed 54 degrees Celsius.

Verification of gas shall be done upon receiving the cylinder, by an approved person.

- ❖ Oxygen shall be checked using a portable oxygen detector.
- ❖ Acetylene is a combustible gas, and shall be identified with the portable gas detector, or combustible gas detector.
- ❖ Nitrogen is an inert gas. Presented to the oxygen meter, it will show deficient oxygen concentration.

Compressed gas cylinders shall be legibly marked for identifying the gas content with either the chemical name or the trade name of the gas (Ex : O₂ for oxygen, N₂ for nitrogen, A for argon, etc, ...). Such markings shall be made by means of paint stenciling or labeling and shall not be readily removable. When practical, the marking should be made on the shoulder of the cylinder.

Oxygen and acetylene or gas shall be stored separately in appropriate racks, and have the valve protected from shocks during handling, either by having a protector cap screwed on, or by a top protection on the rack itself. Oxygen cylinders shall be stored away from fuel gas cylinders, reserve stocks of carbides, or high combustible materials (especially oil and grease). The minimum distance shall be 6 meters (20 ft); an alternative is to install a non-combustible barrier at least 1.50 m (5 ft) high.

Cylinders shall never be used as rollers or supports, even when considered empty.

A leaking cylinder shall never be used, and shall be immediately emptied and removed from the worksite.

Leaks shall be detected either with soapy water or leak detector, but in no circumstance flame or lighted cigarette shall be used.

Oxygen shall never be used in place of compressed air or for cleaning purposes.



Oxygen shall never be used in air starters.

Torch Cutting equipment

- Pressure reducing regulators shall be used on all oxygen-acetylene cutting and welding assemblies.
- Regulator gauges shall not be used if the glass cover is broken or cracked. Damaged regulators shall immediately be replaced.
- Oxygen and acetylene regulators shall only be repaired by authorized factory representatives.
- Oil, soap or grease shall never be used for connecting the regulators to the gas cylinders.
- Union nuts and connectors on regulators shall be inspected for faulty seats by the user before being put in service.
- Check valves shall be installed on all cutting/welding torches. Flashback arrestors shall be installed on all regulators at bottle end.
- Hoses and connections shall be inspected for leaks, burns, worn places, or other needed repairs. Damaged hoses shall be repaired or replaced.
- Connections that do not fit shall never be forced. An oxygen pressure reducing regulator shall never be connected to a fuel gas cylinder.
- The pressure downstream from the acetylene regulator shall never exceed 100 KPa (15 psi).

Welding and cutting

Torch cutting of closed containers that have held a flammable substance is prohibited.

- ❖ When working in an enclosed area, a careful check with a portable gas detector shall be made, any time there is an interval between cutting or welding operations, to monitor the possible accumulation of gas. Furthermore, continuous ventilation shall be ensured, to extract possible gas and fumes.
- ❖ Extreme care shall be exercised to prevent slag or sparks from igniting flammable materials, such as insulation materials, wood, fabric, or flammable liquid. In case of an identified fire risk, a fire watch with a portable fire extinguisher shall be present during all the time the welding or cutting is carried out. The fire watch shall be trained in fire fighting.
- ❖ All hot work outside the designated welding area shall require a hot work permit.
- ❖ Depending on the nature of operations engaged, a Hot Work Permit may also be required for jobs carried out inside the designated welding area.
- ❖ The welder shall check the welding leads for burns, breaks, or other defects before use. Welding cables shall not be repaired using tape. Welding leads shall be picked up and



- ❖ properly coiled after completion of work, and shall not be left in a place where they can create a tripping hazard.
- ❖ Vapors from arc welding may be harmful. Adequate ventilation shall be ensured when welding on alloys or surfaces coated with lead based paints that may generate harmful fumes. If ventilation cannot be accomplished, proper respiratory protection shall be worn.
- ❖ When work is completed, oxygen and acetylene supply shall be turned off at source.
- ❖ Appropriate welder PPE shall be worn by the welder and his assistant(s), including :
 - Long sleeves fire-retardent coverall
 - Leather apron
 - Welder's gloves
 - Welding screen and goggles.

Before welding is done on machinery, casing, wire line units and equipment where bearings of any type are involved, particular care shall be taken to provide a solid grounding to the object being welded.

General and Miscellaneous

Weapons and substance abuse

- All worksites shall have a weapons and substance abuse policy posted in conspicuous places.
- It is the responsibility of the Project Manager to issue a weapons policy for the operating area.
- Unauthorized possession or use of drugs, narcotics, alcohol and weapons is not permitted at any work locations, either onshore or offshore. Furthermore, reporting to work, working, driving Company automotive under influence of alcohol, drugs or narcotics is not authorized by the Company.
- All personnel, contracted or otherwise, on TECHNORIG installations can be subject to searches and/or urine analysis screening requested by TECHNORIG or its clients without prior notice.
- These searches may include the person, his or her personal effects, lockers, desks, offices and quarters. The Company can also search other areas of its worksites, as well as crew change vehicles, aircraft and boats.
- Any individual discovered in possession of a prohibited item will be removed from the worksite on the first available transportation. Any individual who, as a result of urinalysis or blood analysis screening, is found to have traces of a prohibited substance in his system, may be liable to disciplinary action.
- Personnel taking prescribed medication must present a statement from their doctor detailing the medication, reason for use, and expected duration of the treatment. This information should be presented to the medic upon arrival at the worksite.



- Refusal by any individual to agree to a search and/or urinalysis screening will result in removal from the worksite.
- Drug screening shall be carried out under supervision of a Doctor.

Horseplay and Practical Jokes

- ❖ Horseplay or practical jokes are not permitted on any TECHNORIG worksite, at any time.
- ❖ Offshore and inland-water worksites : smoking is not allowed outside the living quarters.
- ❖ Land worksites: smoking is only permitted outside the restricted areas.
- ❖ Smoking shall not be allowed in the kitchens, dry stores, cold stores, lockers and laundries.
- ❖ "No smoking" signs shall be posted in common areas where smoking is prohibited.
- ❖ Smoking in bed is prohibited.

Swimming and Diving

Recreational swimming and diving is prohibited from all worksites

Wearing of Jewelry

Finger rings, ear rings, necklaces and bracelets shall not be worn while working on worksites, in workshops and in yards. (Exception is made for watches).

Fishing with Hooks

Recreational fishing with hooks is not permitted from yard and worksites.

Housekeeping

- Each worksite shall maintain the highest standards of housekeeping at all times.
- Floors, steps and stairs shall be kept clean and free from oil, grease and other slippery substances.
- Steps, walkways, passages and doorways shall be kept clear of obstructions.
- Soiled cleaning materials, scrap and waste oil shall be placed in the appropriate containers for proper disposal.
- All offices and workshops shall be kept clean and clear of scrap.
- Cargo handling materials shall be stored in a designated area.
- Escape routes and access to safety equipment shall not be restricted in any way.
- Lube oil and fuel oil tanks shall have level indicator gauges, rather than sight glasses whenever possible. If sight glasses are fitted, they shall be of heat and impact resistant



material. There shall be a isolation valve at each end, so the sight glass can be shut off when it is not being read.

Basic Safe Operating Practices

All personnel shall follow the TECHNORIG procedures on basic safe operating practices.

Stepping

- Personnel shall not run or rush in the workplace. Emergency drills shall always be carried out at walking pace.
- Personnel shall keep out of coiled rope, wire, or mooring lines, and shall never cross over a rope or a wire rope that may suddenly take a load, or be slacked off if under tension.
- Stairs shall be climbed up/down with at least one hand holding the handrail.

Use of hand tools

- ❖ All crew members shall be shown the proper functions and operations of the hand tools, during their basic training period. Supervisors shall make sure that the right tool is used for the job.
- ❖ All tools shall be inspected before use. They shall be kept clean and in good working order.
- ❖ Hand tools shall be kept in a designated area when not in use, either in a tool rack or on tool board, in an orderly manner.
- ❖ Wood handles shall be sound and securely wedged or fastened to the tool.
- ❖ Tools made of high strength alloys or brittle steel shall not be struck by/with a tool of similar characteristics.
- ❖ Non-sparking tools shall be used when working in an explosive atmosphere.
- ❖ Tools shall be always used with the appropriate PPE.

Painting

- No one shall be allowed to paint in an unventilated area. If necessary, air-supplied respirators will be provided to the personnel.
- When using spray equipment, painters shall wear filter masks and goggles, or air-supplied respirators. Exposed skin shall be coated with barrier cream.

Load Binders (Load binders are used to tighten loads)

The one stroke type of binder is forbidden and must not be used.

No cheater bars will be used with these binders.



The Ratchet type binder, eg. Lebus L-140, with continuous take-up and adjustment (click-click), recoilless, must be used.

Planning QHSE Plans

Corporate Guidelines for QHSE Plans

The Corporate Guidelines for QHSE plans are issued at Corporate level by the General Manager and at segment line management level. The Guidelines are communicated to each Worksite. They shall form the basis of their own QHSE plan.

Specific QHSE Plans

Specific QHSE plans shall be established by each worksite at the beginning of the year and at the start of major projects. Validity of such plan is one year or for the duration of the project

Worksite specific QHSE plans shall be approved by the Project Manager and the SITE MANAGER and shall be developed jointly with Worksite personnel and Worksite management

Communication of QHSE Plans

When approved, the QHSE plans shall be communicated to all relevant Company personnel. The plans shall be posted at the respective worksites. Techniques like meetings, slide presentations, video's, etc... may be used to inform the relevant Company personnel.

The QHSE plans shall be communicated to the Client.

Safe Start-Up Plan

Prior to a worksite start-up, shipyard job or any new major activities a " Safe start-up plan " shall be produced and submitted to the General Manager for approval.

The safe start-up plan should cover the period of activity up to and until the normal routine operations have started or the job has finished.

The safe start-up plan should contain a plan of action based on the QHSE management system and the QHSE start up plan guidelines.

Environmental planning

TECHNORIG shall continually strive to minimize the impact of its operations on the environment. Plans shall be developed and appropriate actions taken to prevent environmental pollution, conserve resources and minimize waste. Where elimination of a pollution source is not practical, appropriate treatment of waste shall be undertaken and monitored to minimize the impact of discharges and disposals on the environment.



Health Planning

The exposure of all employees, customers, contractors and the general public to hazardous conditions associated with our operations shall be assessed on a continuous basis to minimize risks to health. Measures to limit exposure to identified health hazards shall be defined and implemented, and any exposure to hazardous agents shall be measured periodically and the health of relevant personnel monitored. The company shall also pursue a proactive approach toward the general health awareness of all employees, their families and contractors.

Pre-Employment Medical Examination

Prior to employment, personnel shall be medically examined at a Company-appointed medical centre in order to assess the individual's fitness for work.

Similar examination is recommended for sub-contracted labor

A certificate of fitness shall be issued by the examining physician

Catering Crew Medical Examination

All catering crew shall undergo regular medical examination

The scope of examination shall be appropriate to food handler examination standards, and similar to the pre-employment medical examination of .

The catering Company shall submit certificate of fitness for all catering personnel prior to acceptance on a TECHNORIG worksite.

The minimum examination frequency shall be once a year.

The catering Company shall maintain appropriate records.

Noise

Each worksite shall establish a map indicating the zones where noise levels are above 85 dba.

This map shall be posted on the QHSE bulletin board

Personal Medical Record

A personal medical record shall be established for each of the Company personnel assigned to a worksite. This record shall contain information which might be required in case of emergency, and shall also mention any illness or medical treatment followed by the individual.

The personal medical record shall indicate:

- The name and address of the new arrival
- His blood group.



- Any known allergy to drug or treatment
- Any known physical pre-existing condition
- Any known medication taken or given
- Person to contact in case of emergency

It is the Worksite Manager's responsibility to ensure that the above information is gathered from each newcomer, and that proper personal record forms are completed.

The personal medical record shall be filed in the Medic's filing system and shall be kept confidential and current.

In case of medical evacuation, the Medic shall complete the reverse side of the personal medical record form which shall accompany the evacuated person.

Sick Bays and Medical Stores (if needed in the worksite)

Sick bays shall be equipped and maintained as per TECHNORIG standards. The worksite medic is responsible for maintaining the inventory of the equipment and medicines required.

The sick bay shall not be used as accommodation.

The worksite medic is responsible for the housekeeping and hygiene of the sick bay and for the safe keeping of the medicines stored inside.

The worksite medic shall inspect the first aid boxes weekly, and replenish as necessary.

The worksite medic shall inspect the eye wash stations weekly, and inform the SITE MANAGER if repair is needed.

The syringes and needles shall be of a disposable type and safe guarded. The used ones shall be disposed of by the worksite medic in a SHARPS box.

The outdated medicines shall be boxed, inventoried and sent back to operation office for disposal. The worksite medic and the SITE MANAGER shall countersign the inventory.

The sick bay refrigerator shall only be used for the preservation of temperature controlled drugs, and shall be kept clean

When a worksite is stacked without personnel, the medicines shall be inventoried, and locked. The worksite medic and the SITE MANAGER shall countersign the inventory.

When a worksite is mobilized, the worksite medic shall be assigned as soon as activity of the crew justifies his presence, and sick bay is accessible.

The worksite medic shall handover to his relief the inventory of medicines and the list of medicines consumed during his stay on the worksite



Hygiene of Living Quarters

The living quarters shall be maintained at all times as per the TECHNORIG procedures of hygiene and housekeeping.

Procedures on hygiene in the living quarters

Floors shall be kept clean and washed with disinfectant at least once a day.

Spills shall be cleaned immediately.

Ventilation filters shall be cleaned at least once a week.

Bedrooms shall be tidied and beds shall be made daily.

Toilets and shower rooms shall have sufficient ventilation and shall be cleaned at least once a day.

Liquid soap or other similar degreaser shall be available in dispensers in the sanitary rooms.

Hand dryers should be installed in the vicinity of the wash basins, rather than non-disposable towels.

Bags or nets shall be provided to each individual for the laundry service.

Bed sheets and pillow cases shall be systematically changed whenever the person occupying the bed is replaced, or at least every week.

Unless performing a work task, safety boots/shoes and work coveralls shall not be worn inside the living quarters and sufficient lockers/shelving shall be available to allow the stowage of the worksite crew PPE.

Procedures on Catering and Hygiene

Food containers and transport

- Food shall be transported in a food container and not mixed with other goods.
- The food container shall be marked "food only".
- Frozen food handling shall be done using protective gloves and long sleeve clothing.
- Cold store container shall be emptied as soon as the unit is switched off, and frozen food transferred promptly to the worksite cold store. Any food defrosted shall not be re frozen.
- Food containers shall be cleaned immediately after being emptied.
- The worksite medic shall be present when the food is received on the worksite, and is responsible for rejecting any food that appears unfit for consumption, and reporting to the SITE MANAGER.



Food storage

Dry food stores:

The dry-food store shall be kept dry, cool, well-lit, ventilated, vermin-proof, clean and tidy.

Food shall not be stored on the floors, but on suitable shelves. Flour, rice, and other food stuff arriving in bags, shall be kept in closed containers, and not in open bags.

Detergents, soaps, insect killers and other chemical products shall be stored in a separate location.

Perishable food:

Perishable foods shall be refrigerated at temperatures below 5° C.

Refrigerator temperatures shall always be kept below 5° C. Units should normally operate between 1 and 4° C. A thermometer shall be positioned in the warmest part of the refrigerator and the temperature shall be checked daily by the worksite medic.

Refrigerators shall be defrosted and cleaned frequently, as per the manufacturer's instructions.

Units which defrost automatically shall still be cleaned at least once a week.

Hot food shall never be placed directly into a refrigerator to avoid rise of temperature.

Food such as fruit, fruit juice, tomato or other acidic items shall not be stored in their open metallic cans, they shall be transferred in a non corrosive container (plastic box or glass jar for instance).

Raw food shall always be kept separate from cooked food. If in the same unit, the raw food shall always be placed under cooked food.

Food shall be covered, to prevent drying-out, contamination, and absorption of odor.

Frozen food:

The temperature of frozen food shall be checked upon off-loading, and only the food at temperature less than -10° C shall be transferred in the deep-freezer.

Food at temperature above -10° C or defrosting shall never be stored in the freezer, but cooked in priority.

New stock of frozen food shall always be placed under previous stock, to ensure a proper rotation of the stock.

Thawing of frozen food:

There shall be a separate defrosting area used only for the thawing of frozen food, which shall never be used for preparing the meals or cooling cooked food going into the refrigerator.

All meat, fish and poultry shall be completely thawed before cooking.

Nothing shall be artificially defrosted. However site microwave ovens can be used.



Thawing areas and any other surfaces, pans, sinks, etc... where defrosting has taken place shall be carefully cleaned and disinfected.

Preparation, cooking and cooling of food:

- Personal hygiene rules shall be strictly adhered to by the catering crew preparing the food.
- The waste and spillage shall be cleared immediately.
- The food once cooked shall be either kept hot at a temperature above 63° C, or below 5°C.
- Hot food shall be cooled prior to be put in the refrigerator, but shall not stay longer than 2 hours at ambient temperature. It shall always be covered to prevent contamination.

Facilities:

- Sufficient containers with covers shall be provided inside and outside the galley for waste food disposal.
- The rubbish containers shall be cleaned when empty.
- Waste separation shall be done between bio-degradable and non degradable wastes (glass, plastic, etc...).
- Offshore, waste food can be disposed of at sea after proper maceration.
- Onshore, it shall be dumped in a waste pit located away from the camp.

Galley Equipment

Utensils used for preparation of raw food shall not be used with cooked food.

Chipping machines, slicing machines, saws, crushing machines, meat mincer, can opener and other food processing equipment shall be cleared of debris and washed with hot and soapy water after use.

Chopping-boards shall be regularly re-surfaced

Hygiene of catering crew

Food handlers shall have clean, short or netted hair and clean short fingernails, regular bathing habits and clean clothing. Wearing of closed shoes is mandatory (no sandals or slippers).

Food handlers with skin, nose, throat problem or suffering from colds, diarrhea, or vomiting shall report immediately to the worksite medic and shall not be allowed to handle food until clearance by the medic.



Cuts, burns and sores shall be immediately treated by the worksite medic and a waterproof dressing applied.

Catering crew with septic or infected wound, boils on the hands or face shall not be authorized to handle food.

Disposable hair caps shall be provided and worn by the people handling the food.

Hands shall be washed when coming on duty and immediately after being in contact with potential reservoirs of bacteria, such as : after using the toilets, combing the hair, blowing nose, handling raw food or garbage, cleaning a spill, smoking, etc...

Finger rings, bracelets and watches shall not be worn by the crew handling the food.

Laundry person shall not be involved in food preparation or serving simultaneously.

Pest Control

Pest control shall be regularly performed in the living quarters. Any evidence of pest (rodent, insect) in the food storage areas or kitchens shall be immediately reported to the SITE MANAGER.

Fly killers, rodents traps and similar physical controls shall be used in food storage areas and kitchens, if necessary. In addition, spraying of the quarters and offices shall be done at least quarterly to avoid or minimize the risk of infestation. It shall also be performed whenever stacking or re-activating a worksite.

In case of persistent pest infestation, assistance may be required from a competent agency or contractor.

Once a worksite is stacked, all food shall be systematically removed from the stores. Kitchen shall be cleaned with hot water and sterilizing agent before releasing the catering crew. Worksite medic shall be responsible for supervising this operation.

Hygiene Inspections

Hygiene inspections shall be carried out weekly by the worksite medic and the camp-boss, using an appropriate check-list. The check-list shall be signed by the inspectors and handed over to the SITE MANAGER.

Inspection shall also be made by the SITE MANAGER at least once during his stay, and by the Project Manager once every overnight visit

Procedures on Potable Water

The Company standard on potable water testing shall be complied with the local DEWA Dubai dealing with Potable Water.

Personal Hygiene

Anyone present on a TECHNORIG installation shall conform with elementary personal hygiene standards such as : regular showers, changing clothes, shaving, treatment of minor injuries, proper use of facilities (sanitaries, bathrooms, disposals).



Asbestos

No employee shall be exposed to a dangerous airborne concentration of asbestos

Medical care

Any worksite without readily available medical care shall have a Worksite Medic

Security planning

Security plans shall be in place to protect employees, families and all other people directly involved with our activities as required by the level of risk.

Emergency Response

Plans for coping with all aspects of an emergency shall be created and regularly practiced to ensure that all parties charged with emergency preparedness and crisis management are aware of their roles and responsibilities.

Emergency Response Plan

There shall be Emergency Response Plans at Company Headquarters and each worksite. The Emergency Response Plans shall be in writing and made available to the personnel concerned.

Alarms

The SITE MANAGER is responsible for defining clearly distinguishable alarm signals to identify various emergency situations. Alarms will be tested during drills. Alarm signals will be clearly posted in conspicuous places.

Drills

Exercises and drills shall be attended by all required personnel and conducted on a regular basis and, over an agreed period of time, cover all scenarios of high risk potential and all aspects of the contingency plans and response procedures. In addition, key personnel shall be trained to a level of competence appropriate to their responsibilities in emergency scenarios.

For some emergency's the response is co-coordinated by the client organization in this case the TECHNORIG drill response will include elements of client response plan.

List and frequency of drills:

- | | |
|-----------------------------|---|
| Fire and abandonment drills | → once a week on worksite, once a month on yard |
| Fire with a mock injury | → once a month |
| Rescue drill | → once a month |
| Man overboard drill | → once every 3 months, weather permitting |
| Lifeboat launching drill | → once every 3 months, weather permitting |
| Spill drill | → once every 3-month |
| Pit drill and blowout drill | → once a week when working on active drilling Rig |



H2S drill → once a week, when working in suspected H2S area

Other Emergency Response drills → as mentioned in the Emergency Response Plan

Management Emergency Response drills → twice a year

Drills Evaluation

The SITE MANAGER shall evaluate the drill, with the Supervisors and personnel involved, upon completion of the drill.

Recording of the drills

The drills shall be recorded in the Daily Drilling Report in use.

Drill Procedures

Fire drill

Purpose: To prepare worksite crew for the emergency of a fire and to demonstrate that personnel can perform their assigned duties.

Conduct of the drill

- Fire drill should be followed by abandonment drill every week (offshore and inland water).
- At least once a month, the drill should include a mock injury or a rescue situation.
- The scenario of the drill shall change, incorporating operational problems to better test the reaction of the crew. For example : empty fire extinguisher, fire team leader incapacitated, use smoke generator, etc ...
- The worksite medic shall be ready to assist in the sick bay.
- The observer of the fire will immediately pass the alarm and indicate the location of the fire.
- The designated alarm will be sounded.
- An announcement over the public address system shall be made "**This is a drill, this is a drill, this is a drill. fire in, fire in, fire in, this is a drill, this is a drill, this is a drill**", repeated in the predominant local language.
- The SITE MANAGER or his designate shall immediately go to the designated command center.
- Personnel not assigned to the fire fighting/rescue team or to critical worksite operations, shall muster promptly at the required location. Excused attendance shall require prior approval of the SITE MANAGER. Muster shall be taken by a designated person.



- The fire fighting/rescue team shall muster at the fire station closest to the fire location with the appropriate equipment. Life jackets will not be worn by the team during the drill.
- A designated person shall start the fire pump and stand by for instructions.
- Reports shall be regularly rendered to the command center.
- Stand-by boat, if available, shall be notified and mobilized to a stand-by location.
- Before securing from the fire drill, the SITE MANAGER is responsible for clearly indicating what additional actions would be taken in the event of a real fire.

Man overboard drill (Offshore and inland-water)

Purpose: To train personnel in rescue operations and launch/recovery procedures, and check response time to the emergency.

Conduct of the drill

- The drill shall be preplanned and shall emphasize the key learning point(s).
- The scenario of the drill shall change, incorporating operational problems to better test the reaction of the crew. For example : faulty rescue boat, team leader incapacitated, etc
- The drill shall consist of a man overboard dummy being thrown in the water. The floatable doll or dummy should be the approximate size, shape and weight of a man.
- The word "Man Overboard" shall be passed upon throwing the dummy overboard.
- The designated alarm will be sounded.
- An announcement over the public address system shall be made "**This is a drill, this is a drill, this is a drill, man overboard at ..., man overboard at ..., man overboard at ..., this is a drill, this is a drill, this is a drill**", repeated in the predominant local language.
- A life ring buoy shall be thrown over the side in the vicinity as soon as the word has been passed. Periodically, lights and smoke flares shall be used to add realism to the drill.
- On alarm announcement, the rescue team shall muster at the rescue boat or the designated lifeboat.
- The stand-by boat, if available, shall be notified for assistance.
- The crane operator shall prepare to lower the rescue boat, if no special device exists.
- A lookout shall be posted whose sole responsibility is to watch the man overboard and continually point towards him.
- The worksite medic shall stand by in the sick bay.



- If available, the stand-by boat shall retrieve the dummy. If no stand-by boat is available, the rescue team should descend and retrieve the dummy with the rescue boat, only upon SITE MANAGER's instructions.
- Before concluding the drill, the SITE MANAGER is responsible for clearly indicating what additional actions would be taken in the event of a real man overboard situation.

Rescue Drill

Purpose: To train the fire rescue team in rescue operations, and check response time to the emergency.

Conduct of the drill

- The drill shall be preplanned and shall emphasize the key learning point(s).
- The drill shall include the use of various lifesaving equipments and shall be conducted in a realistic manner.
- The SITE MANAGER and the Worksite Medic shall be part of the drill.
- Retrieval from a confined space shall be done in conformity with the procedure on confined space entry
- Before concluding the drill, the SITE MANAGER and the Medic are responsible for clearly indicating what additional actions would be taken in the event of a real accident.

H2S drill

Purpose: To prepare worksite crew to the event of H2S release in the air, and check the response time to the emergency.

Conduct of the drill

- H2S drills are mandatory on a weekly basis when working in a suspected or known H2S area.
- The drill shall be preplanned and shall emphasize the key learning point(s).
- The drill shall be held on varying days of the week and at varying times.
- The designated alarm will be sounded.
- Announcement shall be made over the public address system that "**This is drill, this is a drill, this is a drill. H2S, H2S, H2S, this is a drill, this is a drill, this is a drill**", repeated in the predominant local language.
- The stand-by boat, if available shall be notified and moved to an area upwind.



- Any helicopter flying to the worksite shall be notified over the radio that a H2S drill is in progress.
- All non essential personnel shall promptly report to the designated upwind safe briefing area.
- The essential crew, as listed on the H2S contingency plan, shall don their breathing apparatus, and wait for instructions.
- The SITE MANAGER and a designated assistant wearing SCBA shall go to the scene with a portable gas detector to assess the H2S concentration.
- A muster shall be taken by a designated person, and reported to the SITE MANAGER. Any missing person shall be searched for.
- The SITE MANAGER shall clearly indicate what additional actions would be taken in the event of a real H2S alert.

Personnel (Muster) List

Each worksite shall maintain a personnel (Muster) list of everyone on the worksite. This list shall be updated as often as necessary by a person designated by the SITE MANAGER, so that it is always current.

The personnel list shall be available in the radio-room, or SITE MANAGER's office, at all times.

Where relevant, a system shall exist and be maintained, to control personnel assignment to lifeboats/rafts stations

While at sea, the headcount shall not exceed the maximum number of personnel on board (POB) authorized, as stated on official documents.

For offshore worksites, a copy of the current muster list shall be transmitted at least daily to shore base office.

Implementation and Monitoring

Performance review

Performance indicators in key QHSE areas shall be identified, targeted, measured and reported to monitor continuous QHSE performance improvement. Indicators shall be representative of the perception that our customer's have of our performance.

Bulletin Board

All worksites, yard and company office shall have a dedicated QHSE Bulletin Board.

Days Without LTI Board

All worksites shall have a DWLTI board updated every day.



Performance Environment Measurement

Each TECHNORIG Worksite shall monitor the progress made on waste minimization.

Each worksite shall define its own preferred methodology to monitor progress.

Waste minimization shall be monitored at three different levels:

1. Natural resources / Energy consumption
2. Chemical usage
3. Generation of waste

Incident Reporting, Investigation and Review

Incident Reporting/Investigation

Each location shall encourage the reporting and recording of all incidents.

- Whenever an accident or a potential accident occurs at a TECHNORIG worksite / Yard, it shall be reported to the SITE MANAGER as soon as possible by the immediate Supervisor in charge of the operation
- All serious accidents and potentially serious incidents shall be investigated and analyzed, and lessons learned from these investigations shall be communicated and corrective actions implemented.
- Investigation teams shall include the SITE MANAGER, the line management, the local QHSE organization and appropriate internal or external resources.
- Investigations shall be conducted according to the accident investigation model.
- Management shall prioritize the remedial actions recommended in accident investigations, assign responsibilities and monitor their progress until completion.
- DATA SYSTEM shall be used to report at minimum all incidents.
- The Worksite Manager and the General Manager shall ensure that management is advised of the occurrence and known details of the incident within 24 hours.

STOP Program: A major feature of the risk minimization is the STOP Program. It is designed to eliminate accidents through a continuous and permanent observation of the worksite by all Company personnel.

Inspection: Systematic inspections shall be conducted in all locations to ensure compliance with defined policies, standards and procedures.



HSE Checks: The QHSE Database HSE checks shall be updated and used to measure the level of compliance with the TECHNORIG safety policies and procedures.

Equipment: All worksite equipment shall be inspected and maintained as per manufacturer recommendations

Weekly hygiene check list: The weekly hygiene checklist shall be completed and acknowledged on a weekly basis by the worksite medic and the camp boss. Remedial corrective actions resulting from the weekly hygiene checklist will be entered into the worksites RATS (Remedial Action Tracking System).

Corrective action: Corrective action and continuous improvement programs shall be in place in all locations, shall actively involve all our employees and our customers, and a "no blame" culture shall be promoted to encourage employees to report problems with and suggest improvements to existing standards, processes and systems shall be conducted in all locations to ensure compliance with defined policies, standards and procedures.

- A nonconformance reporting process (e.g., Risk Identification Reporting, STOP, etc.) shall be in place, and employees shall be actively involved in this process.
- Any corrective remedial actions shall be entered in single RATS. The QHSE database or DATA SYSTEM is the tools to use.
- Each remedial action shall have a responsible person designated and a target closure date.
- All QHSE non conformance reports and suggestions shall be considered and closed out in a way that builds trust and demonstrates commitment to QHSE performance improvement.
- Regular feedback from the field and from our customers on product/service quality shall also be encouraged, reviewed by management and captured to ensure continuous evolution and improvement.
- Systems shall be established to identify customer needs and competitive technical developments.
- The QHSE function shall support line management in analyzing problems and developing quality improvement plans with regard to customer needs and new technology.
- Regular service quality appraisals (SQA) and reviews shall be held with customers as part of the continuous process of quality improvement

Safety Award

Each TECHNORIG worksite shall have a safety award scheme

Corporate safety award program



- The corporate safety award program is for all TECHNORIG personnel working on a TECHNORIG Worksite.
- Each time a worksite accomplishes one year DWLTI, all eligible TECHNORIG personnel assigned to this worksite will be paid a safety award bonus equal to one week of the base salary.
- The one week base salary shall be based on the individual's base salary at the time the worksite reaches the one year DWLTI.
- Personnel eligible for this program are worksite and yard personnel only. It does not include office or shore base personnel. Also, the employee must have been on the worksite's payroll at least 183 days prior to that worksite or yard accomplishing the current DWLTI period.
- Examples :
 1. Mouafak has been assigned for 5 months on a worksite that accomplishes one year WLTl. The period of assignment is less than 183 days; therefore Mouafak is not eligible to receive the safety award bonus (one week base salary).
 2. Kumar has been assigned 7 months on a worksite that accomplished 2 years DWLTI. The period of assignment being greater than 183 days, Kumar is eligible to receive the safety award bonus (one week base salary).
 3. George has been transferred out, after 9 months of assignment on the worksite that accomplishes 3 years DWLTI. George is eligible to receive the safety award bonus (one week base salary).
 4. If an employee is not on the payroll because of termination or resignation when the worksite accomplishes one or more years DWLTI, he shall not be eligible for the safety award bonus

Additional Incentive (Safety) Award Program

- Each worksite may have an additional Incentive Safety Award Program for periods less than a year, to promote prevention attitude within Company personnel.
- The safety award scheme may include, in addition to the corporate annual safety award, an additional incentive scheme. The definition of this additional incentive scheme, as well as the conditions of granting shall be made in writing by the Project Manager and shall not exceed the value of the Corporate Safety Award Program.

Safety Award Plaques

- TECHNORIG Safety Award Plaques shall be prepared and displayed on the worksite, in the yard office, in Headquarters, for accomplishments of each year worked DWLTI.



- The worksite safety office should advise the TECHNORIG General Manager as soon as the worksite accomplishes one or more year DWLTI, and confirm the correct dates for the DWLTI period.
- If the worksite has been working continuously since the last LTI, the year(s) will be achieved at the date of anniversary of this last LTI. Otherwise the day of accomplishment will be when the DWLTI reaches 365.
- The worksite may decide to order additional plaques if necessary. It is recommended to involve clients with the Safety Award Scheme and, where appropriate, to present Clients with a plaque

Records: Procedures shall be developed to ensure that critical information is collected and analyzed. Records shall be maintained to assess compliance with policies, standards and procedures and to monitor improvements in our processes

Assessment and Continuous Improvement

Management shall maintain an effective control process to ensure that the findings of audits are recorded, prioritized, action and closed out. Key lessons shall then be disseminated throughout TECHNORIG worksite.

QHSE MS Audits

- Audits and reviews shall be conducted to verify the implementation and effectiveness of the QHSE Management System.
- Adherence to the QHSE Management System shall be evaluated by means of both internal and external audits.
- The frequency of these audits shall be determined by the perceived business risk but shall not exceed three years.
- Managers shall record and report the results of audits and any other self-regulation processes to all concerned parties.

Hardware Audits: Hardware audits (to verify correct condition and maintenance of equipment) shall be carried out on the worksite by designated personnel selected by HQS Field Support Department. The frequency of these audits shall not exceed three years

Reviews: Periodic management reviews of the QHSE Management System shall be conducted to ensure the effectiveness of the system, and to identify and implement system improvements.

1	Hazard Identification Sheet			
	Accumulator Unit			
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Job Definition:
Accumulator Unit is a unit used to control and operate preventer and hydraulic valves. It is designed to supply fluid in excess of 3000 Psi pressure in order to close preventer or able to shear the drill pipe. Accumulator unit has got accumulator bottles and manifold, which stores and provide pressurized fluid. Air pump and triplex pump is used to generate this high pressure.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Accumulator unit not inspected as per the schedule, causing failure at critical time..	5	2	10
2	Leak in equipment or pipe causing spray of oil on the crew.	3	3	9
3	Unit fails while closing on pipe, during a well control situation, causing blow out.	5	4	20
4	Using low-pressure fittings in accumulator unit manifold or pipe work.	3	3	9
5	Charging oxygen instead of nitrogen in accumulator bottles causing hazard situation.	4	4	16
6	Trying to hammer tight or loosen hammer union connection, without bleeding off the unit pressure.	4	3	12
7	Lock wires not used on flexible connection swirls as it breaks hitting crew.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Correct pressure seals	Tool Box Talk	Permit to Work Training
Function Test	Permit To Work	Supervision
Check Wires		IWCF-Well Control Training

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Accumulator unit not inspected as per the schedule, causing failure at critical time..	5	1	5
2	Leak in equipment or pipe causing spray of oil on the crew.	3	2	6
3	Unit fails while closing on pipe, during a well control situation, causing blow out.	5	2	10
4	Using low-pressure fittings in accumulator unit manifold or pipe work.	3	1	3
5	Charging oxygen instead of nitrogen in accumulator bottles causing hazard situation.	4	2	8
6	Trying to hammer tight or loosen hammer union connection, without bleeding off the unit pressure.	4	1	4
7	Lock wires not used on flexible connection, swirls as it breaks hitting crew.	4	1	4

Reactive Measures

1	Give Immediate First Aid, as described in Chemical Toxic Sheet.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

2	Hazard Identification Sheet			
	BOP Control Lines			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
BOP Control lines are the set of flexible and solid connection that transmit the hydraulic pressure from the accumulator unit to the BOP or hydraulic valves on BOP to be opened or closed.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Solid lines and critical areas not inspected as per the schedule; result in line failure.	5	3	15
2	Leak in pipe or hammer union connection, causing spray of oil on the crew.	3	3	9
3	Line fails while closing BOP on pipe, during a well control situation, causing blow out.	5	4	20
4	Using low-pressure fittings on control lines, causing its failure when pressurized.	5	3	15
5	Trying to hammer tight or loosen hammer union connection, without bleeding off the unit pressure.	4	3	12
6	Lock wires not used on flexible connection; swirls as it breaks hitting crew.	4	3	12
7	Pressure not bled off prior to dismantling the control lines, causing oil spillage.	3	4	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Correct pressure seals	Permit To Work	Safety Meetings
Function Test	Tool Box Talk	IWCF-Well Control Training
Check wires.		Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Solid lines and critical areas not inspected as per the schedule; result in line failure.	5	1	5
2	Leak in pipe or hammer union connection, causing spray of oil on the crew.	3	2	6
3	Line fails while closing BOP on pipe, during a well control situation, causing blow out.	5	2	10
4	Using low-pressure fittings on control lines, causing its failure when pressurized.	5	1	5
5	Trying to hammer tight or loosen hammer union connection, without bleeding off the unit pressure.	4	1	4
6	Lock wires not used on flexible connection; swirls as it breaks hitting crew.	4	1	4
7	Pressure not bled off prior to dismantling the control lines, causing oil spillage.	3	2	6

Reactive Measures

1	Give Immediate First Aid, as described in Chemical Toxic Sheet.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

3	Hazard Identification Sheet			
Chain Tong				
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Job Definition:
Chain Tong is a hand tool used for dismantling or tightening threaded connections. It has a chain fixed at one end of the tong body and other end is passed over the body of the joint to be worked upon, and is latched on to the body through pins in the chain. Tong body has sufficient length to provide leverage for applying force.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Chain tong is not inspected before use, fails and results in injury.	3	4	12
2	Right size chain tong is not used, fails as excessive force is applied.	3	4	12
3	Wrong method is applied to push or pull the tong lever, tong slips, crushes finger.	3	4	12
4	Individual tries to crack the joint by jumping over the tong lever, tong slips, individual falls.	3	4	12
5	Trying to hammer on chain tong, breaks it and gets injured.	3	4	12
6	Using chain tong as hammer.	3	4	12
7	While making up casing shoe and collar or other tools on the catwalk using chain tong, do not use crane, winch and pulley to torque the connection, use rig tongs for cracking and torque joints. Failure of chain tong can cause injury and damage the down hole tool.	3	4	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Check dies, chain and general condition of chain tong.	Operations Procedure	Personnel Protective Equipment
	Tool Box Talk	Safety Meetings
	Safety Campaigns	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Chain tong is not inspected before use, fails and results in injury.	3	3	9
2	Right size chain tong is not used, fails as excessive force is applied.	3	3	9
3	Wrong method is applied to push or pull the tong lever, tong slips, crushes finger.	3	3	9
4	Individual tries to crack the joint by jumping over the tong lever, tong slips, individual falls.	3	3	9
5	Trying to hammer on chain tong breaks it and gets injured.	3	3	9
6	Using chain tong as hammer.	3	3	9
7	While making up casing shoe and collar or other tools on the catwalk using chain tong, do not use crane, winch and pulley to torque the connection, use rig tongs for cracking and torqueing joints. Failure of chain tong can cause injury and damage the down hole tool.	3	3	9

Reactive Measures

1	Give Immediate First Aid, as described in Chemical Toxic Sheet.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

4	Hazard Identification Sheet			
	Cheater Bars			
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Job Definition:
Cheater Bars are the pipes that are used on chain tongs, pipe wrench or spanners to provide extra leverage while making or breaking threaded connections.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Cheater bar not inserted properly over the tool lever it is used on, comes out as force is applied, crew falls and injures himself.	3	4	12
2	Cheater Bar is used on a tool, and excessive force is applied, resulting in tool failure, crew falls and injures himself.	3	4	12
3	Wrong method is applied to push or pull on the cheater bar, tool slips, crushes finger.	3	4	12
4	Individual tries to crack the joint by jumping over the cheater bar, tool slips, individual falls and gets injured.	3	4	12
5	Trying to hammer on cheater bar, hammer bounces off, injuring crew.	3	4	12
6	Using not sufficiently strong pipe as cheater bar, bar itself fails causing injury.	3	4	12
7	Do not use winch or crane over cheater bars to provide excessive force, tool might slip or cheater bar might come out, causing injury	3	4	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Check cheater bar for size and condition.	Operations Procedure	Personnel Protective Equipment
	Tool Box Talk	Safety Meetings
	Safety Campaigns	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Cheater bar not inserted properly over the tool lever it is used on, comes out as force is applied, crew falls and injures himself.	3	3	9
2	Cheater Bar is used on a tool, and excessive force is applied, resulting in tool failure, crew falls and injures himself.	3	3	9
3	Wrong method is applied to push or pull on the cheater bar, tool slips, crushes finger.	3	3	9
4	Individual tries to crack the joint by jumping over the cheater bar, tool slips, individual falls and gets injured.	3	3	9
5	Trying to hammer on cheater bar, hammer bounces off, injuring crew.	3	3	9
6	Using not sufficiently strong pipe as cheater bar, bar itself fails causing injury.	3	3	9
7	Do not use winch or crane over cheater bars to provide excessive force, tool might slip or cheater bar might come out, causing injury	3	3	9

Reactive Measures

1	Give Immediate First Aid, as described in Chemical Toxic Sheet.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

5	Hazard Identification Sheet			
	Chiksan Lines			
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Tool Definition:
Chiksan line is used to make flexible, high-pressure connection used for pumping fluids, with a hammer union connection at the end. As with any other hammer union connection, Chiksan also come in different pressure ratings and thread connections.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Chiksan not inspected and fail while in use.	4	3	12
2	Pressure rating of the Chiksan exceeded while in use.	4	3	12
3	5000 W.P line is used for cementing with unit pressure relief valve of 10,000 Psi rating.	4	3	12
4	Drill pipe is rotated while circulating through a pressurized swivel and Chiksan line, swivel breaks.	5	3	15
5	Chiksan line not check wired and wire ends secured, vibrates during circulation and fails.	4	3	12
6	Chiksan line not lifted with a winch, while string is lifted for reciprocation along with circulation, Chiksan fails.	4	3	12
7	Crew tries to hammer a Chiksan hammer union under pressure, fails and splashes mud, severely injuring the crew.	4	3	12
8	Crew walking or working near a pressurized Chiksan line.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Pressure Testing	Tool Box Talk	Safety Meetings
Check wires and Pressure Seals	Awareness training	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Chiksan not inspected and fail while in use.	4	1	4
2	Pressure rating of the Chiksan exceeded while in use.	4	1	4
3	5000 W.P line is used for cementing with unit pressure relief valve of 10,000 Psi rating.	4	3	12
4	Drill pipe is rotated while circulating through a pressurized swivel and Chiksan line, swivel breaks.	5	1	5
5	Chiksan line not check wired and wire ends secured, vibrates during circulation and fails.	4	1	4
6	Chiksan line not lifted with a winch, while string is lifted for reciprocation along with circulation, Chiksan fails.	4	1	4
7	Crew tries to hammer a Chiksan hammer union under pressure, fails and splashes mud, severely injuring the crew.	4	1	4
8	Crew walking or working near a pressurized Chiksan line.	4	1	4

Reactive Measures

1	Give Immediate First Aid, as described in Chemical Toxic Sheet.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

6	Hazard Identification Sheet		
	Communication		
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1

Job Definition:

The communication between two individuals or group of individuals working simultaneously for the successful completion of the work can become cause of an accident or release of hazard.

This communication can be in the form of signals, eye contact and voice directly heard or through a paging system.

The failure of communication can be due to failure of communication system at the site – e.g. equipment failure between Wire line Operator and Driller during TLC Logging, TCP or fishing of logging tool, high decibels of sound like in close vicinity of engines, distance – e.g. between Crane Operator and Rig Floor crew.

Communication can be a problem in case of different nationalities and language speaking people working together. Breakdown of communication can also be caused due to people with differing temperament working together and do not get into a team.

To avoid these kind of problems, crew should be allowed to gel properly and very frequent changes in basic rig crew should be avoided. People should be encouraged to understand the working nature and culture of dominant or local nationality. Supervisors need to show patience and understanding.

Sufficient number of communication system and paging points should be present and should be checked before starting any simultaneous operations and where signals are to be used e.g. Crane Operator and Rig Floor crew, one person should be delegated to give signals and both parties should be conversant with signals and understand them properly. If any confusion develops, operation should be stopped and clarification sought, and should start again after having understanding the job.

Job Hazard

There are no hazards involved, but failure of communication can be a major cause of releasing hazards.

Proactive Control

Equipment	Operation	Personal
Sufficient number of communication stations.	Tool Box Talk	Personal Induction of Expatriate Crew
Inspection prior to job	Operations Procedures	Job Training
	Awareness Trainings	Supervision

7	Hazard Identification Sheet		
Compressed Air			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1

Job Definition:
Compressed air is used at the rig site for most of the pneumatic equipments and in many other equipments to operate pneumatic valves in the control system Air is pressurized to rig pressure of 125Psi by a compressor and is stored in tank from where it is sent to required points through solid and flexible air lines.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Compressor and storage tank not inspected and certified prior to use.	3	3	9
2	Using home made or water line fittings used in air line.	3	3	9
3	Flexible air line left loose, and air valve opened, swirls and hits crew.	3	3	9
4	Field welding repairs on air vessel, and used without inspection.	3	3	9
5	Shut off valve not used in all the lines, line breaks and bleeds pressurized air on the crew causing injury.	3	3	9
6	Lines and hoses not secured by check wire.	3	3	9
7	Make sure that Pressure Relief Valve of the tank is set at a pressure less than the working pressure of the tank, and is in good working condition..	3	3	9

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Correct pressure seals	Tool Box Talk	Safety Meetings
Check wires.	Awareness training	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Compressor and storage tank not inspected and certified prior to use.	3	1	3
2	Using home made or water line fittings used in air line.	3	1	3
3	Flexible air line left loose, and air valve opened, swirls and hits crew.	3	2	6
4	Field welding repairs on air vessel, and used without inspection.	3	1	3
5	Shut off valve not used in all the lines, line breaks and bleeds pressurized air on the crew causing injury.	3	1	3
6	Lines and hoses not secured by check wire.	3	2	6
7	Make sure that Pressure Relief Valve of the tank is set at a pressure less than the working pressure of the tank, and is in good working condition..	3	1	3

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

8	Hazard Identification Sheet			
Crane				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Tool Definition:
Crane is a tool used for lifting heavy equipments as they are moved, and for loading heavy loads on trucks and trailer.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Load being lifted is not properly balanced, falls and damages equipment or injures persons around.	3	4	12
2	Finger or hands caught and crushed between load and sling while lifting load.	3	4	12
3	While lifting load, sling snaps, dropping load and injuring crew.	3	4	12
4	Man tries to push the load for positioning, as it is lowered. Gets injured.	3	4	12
5	Tag line has a knot at the end; the man holding it gets pulled and falls as load swings.	3	3	9
6	Man is standing on the trailer on which pipes are been placed by crane, pipe rolls, and the person falls, getting injured.	4	4	16

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Maintenance as per the schedule.	Tool Box Talk	Safety Meetings
Pre Job Equipment Check List	Awareness Training	Supervision
		ROP And Crane License For Operator

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Load being lifted is not properly balanced, falls and damages equipment or injures persons around.	3	2	6
2	Finger or hands caught and crushed between load and sling while lifting load.	3	2	6
3	While lifting load, sling snaps, dropping load and injuring crew.	3	2	6
4	Man tries to push the load for positioning, as it is lowered. Gets injured.	3	2	6
5	Tag line has a knot at the end; the man holding it gets pulled and falls as load swings.	3	1	3
6	Man is standing on the trailer on which pipes are been placed by crane, pipe rolls, and the person falls, getting injured.	4	2	8

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

9	Hazard Identification Sheet			
	Doors & Man Holes			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Doors of shops, store etc has caused many accidents, some of them very serious causing bones fracture. Man Holes are the entry points into a confined space like tanks and silos, which have a removal cover, which is replaced back and secured after man has come out of the confined space.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Closing door on finger, crushing it in the process.	3	5	15
2	Leaning on door, as it is opened by some body from the other side.	3	5	15
3	Standing in between the open door, as it slams on the face due to strong wind.	3	5	15
4	Man entering the manhole, without properly removing the cover, cover falls and crushes him.	3	5	15
5	Manhole after being removed is not replaced back, some body falls inside the tank.	4	4	16
6	Man working inside the tank or confined space, without informing anybody or keeping a buddy outside to watch, somebody closes the man hole cover and secures it from outside.	4	4	16

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Check Wires, lock pins and chains	Tool Box Talk	Safety Meetings
Area Fenced Off	Permit To Work	Supervision
		PTW Training

Residual Hazard

1	Closing door on finger, crushing it in the process.	3	2	6
2	Leaning on door, as it is opened by some body from the other side.	3	2	6
3	Standing in between the open door, as it slams on the face due to strong wind.	3	2	6
4	Man entering the manhole, without properly removing the cover, cover falls and crushes him.	3	2	6
5	Manhole after being removed is not replaced back, some body falls inside the tank.	4	2	8
6	Man working inside the tank or confined space, without informing anybody or keeping a buddy outside to watch, somebody closes the man hole cover and secures it from outside.	4	2	8

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

10	Hazard Identification Sheet			
Drawworks				
Rev: 0	Issued by: TechnoRig	Approved:		Page 1/1

Tool Definition:
 Drawworks is the hoisting tool used to hoist drilling string in and out of hole. It is designed to carry heavy loads and is rotated for the purpose by a prime mover that can be electrical (AC or DC electric supply) or mechanical diesel engine coupled directly to the shaft of the draw works. It has two brakes, mechanical and electrical brake.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Drawworks operated with cover removed.	3	4	12
2	Improper lubrication of breaking system resulting in brake failure.	5	2	10
3	Improper maintenance of draw works and brake system, resulting in brake failure.	5	2	10
4	Driller keeping his foot under the brake, brake lever hitting knee as it is applied.	3	3	9
5	Fast end comes out as draw works is loaded to more than capacity.	5	2	10
6	Drawworks operated too fast, goes out of control, and hoisting system hits rotary.	5	2	10

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Pre Job Equipment Check list	Hazard Observation Sheets	Personnel Protective Equipment
Inspections as per the inspection and calibration specification.	Operations Procedure.	Safety Meetings
Maintenance as per the schedule.	Tool Box Talk	Supervision
	Awareness training	

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Drawworks operated with cover removed.	3	1	3
2	Improper lubrication of breaking system resulting in brake failure.	5	1	5
3	Improper maintenance of draw works and brake system, resulting in brake failure.	5	1	5
4	Driller keeping his foot under the brake, brake lever hitting knee as it is applied.	3	2	6
5	Drawworks operated too fast, goes out of control, and hoisting system hits rotary.	5	1	5

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

11	Hazard Identification Sheet			
	Electric Logging Cable			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Electric Logging Cable is multi core steel wire electric cable inside, spooled on its own winch located in the logging truck. It is operated by logging service company to run logging tools and tools for string back off etc.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inspection of winch, wire or sheaves not done, fails causing injury.	4	4	16
2	Wire with kinks run in, breaks from kink, causing injury.	4	4	16
3	Crane operated such that load and crane boom crosses the wire, load falls or hits the cable, cable breaks causing serious injury.	4	4	16
4	Winch operator does not control the winch properly; wire gets stuck and breaks.	4	4	16
5	Broken wire as it flies off with tool; entangling or cutting what ever comes it way, causing very serious injury.	4	4	16
6	During TLC logging, slip crushes cable as it is placed, causing wire failure and serious injury.	5	4	20
7	Improper communication between Driller and Logging Engineer, causes confusion and major accident.	4	4	16

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspection As Per Schedule	Operations Procedure	Personnel Protective Equipment
Communication Points at Rig Floor and Logging Unit.	Tool Box Talk	Safety Meetings
Red Tapes and Hazard Signs	Permit To Work-PDO DSV Permit Holder	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inspection of winch, wire or sheaves not done, fails causing injury.	4	2	8
2	Wire with kinks run in, breaks from kink, causing injury.	4	2	8
3	Crane operated such that load and crane boom crosses the wire, load falls or hits the cable, cable breaks causing serious injury.	4	2	8
4	Winch operator does not control the winch properly; wire gets stuck and breaks.	4	2	8
5	Broken wire as it flies off with tool; entangling or cutting what ever comes it way, causing very serious injury.	4	2	8
6	During TLC logging, slip crushes cable as it is placed, causing wire failure and serious injury.	5	2	10
7	Improper communication between Driller and Logging Engineer causes confusion and major accident.	5	2	10

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

12	Hazard Identification Sheet			
Electricity				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Electricity generated by city power or by rig engines is used to run motors and other equipments on the rig.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Unauthorized persons trying to repair electrical equipments,	4	4	16
2	Improper lockout of electrical equipments, resulting in there accidental starting of the equipment.	4	4	16
3	Spraying water on the electrical connections and fitting, resulting in short circuit and electrocution.	4	4	16
4	Improper purging on the electrical equipments resulting in spark and fire.	4	4	16
5	Faulty switches and controls used in zone 1 console, resulting in sparking and fire.	4	4	16
6	Using non-explosion proof lights in Zone 1 on the rig site.	4	4	16
7	Electrical circuit over loaded, fails and catches fire.	4	4	16
8	Loose cables lying around, causing tripping hazards	4	4	16
9	Heavy equipment dropped on electrical cables, damaging cable and causing accident.	4	4	16

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspection and Maintenance Schedule	Operations & Maintenance Procedure.	Personnel Protective Equipment
Lock Out Tools and Signs	Tool Box Talk	Safety Meetings
	Permit To work	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Unauthorized persons trying to repair electrical equipments,	4	2	8
2	Improper lockout of electrical equipments, resulting in there accidental starting of the equipment.	4	2	8
3	Spraying water on the electrical connections and fitting, resulting in short circuit and electrocution.	4	2	8
4	Improper purging on the electrical equipments resulting in spark and fire.	4	2	8
5	Faulty switches and controls used in zone 1 console, resulting in sparking and fire.	4	2	8
6	Using non-explosion proof lights in Zone 1 on the rig site.	4	2	8
7	Electrical circuit over loaded, fails and catches fire.	4	2	8
8	Loose cables lying around, causing tripping hazards	4	2	8
9	Heavy equipment dropped on electrical cables, damaging cable and causing accident.	4	2	8

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.
5	If camel or wild animal gets inside the pit, try to get them out, inform ROP.

13	Hazard Identification Sheet			
Elevator				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Tool Definition: Elevator is on the Rig Floor. Elevators are used for running in and pulling out drilling tubular, casing pipes and down hole tools.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Elevator is used to lift load more than rated capacity.	1	4	4
2	Finger or hands caught and crushed between elevator handle and drill pipe.	2	4	8
3	While pushing elevator away from the drill pipe in slip, person slips and falls.	3	4	12
4	Elevator lock nut is loose, falls from a height.	3	4	12
5	Tool joint is at very awkward height, floor man trips while trying to latch elevator.	5	3	15
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
Pre Job Equipment Check list		Hazard Observation Sheets	Personnel Protective Equipment	
Inspections as per the inspection and calibration specification.		Operations Procedure.	Safety Meetings	
Maintenance as per the schedule.		Tool Box Talk	Supervision	
Mark handles with green paints.			Awareness Training	
Residual Hazard				
1.	Finger or hands caught and crushed between elevator handle and drill pipe.	2	2	4
2.	While pushing elevator away from the drill pipe in slip, person slips and falls.	3	2	6
	Elevator lock nut is loose, falls from a height.	3	2	6
3.	Tool joint is at very awkward height, floor man trips while trying to latch elevator.	5	1	5
Reactive Measures				
1	Give Immediate First Aid			
2	Obtain assistance from the Rig Medic.			
3	For a serious accident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

14	Hazard Identification Sheet			
	Equipment Hanging In Derrick			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Tongs, Pipe Spinners etc hang from the crown block through an independent sheave, with there own counterweight attached to make it possible to adjust the height. These hanging equipment produce their own hazard.

Job Hazard

Sr. No	Hazard	Seve rity (S)	Proba bility (P)	Risk Factor (R=S x P)
1	Inspection of sheave or wire not done, fails causing injury.	4	3	12
2	Equipment left hanging without being secured, swings and hits crew.	4	3	12
3	Equipment used away from its vertical axis, causing it to swing back as it is released.	4	3	12
4	Counter weight not lubricated properly, causing back strain as equipment height is adjusted.	4	3	12
5	Equipment removed from the wire rope without securing the wire rope, wire rope flies off due to counter weight and falls on the rig floor.	4	3	12
6	Crew tries to hold the flying broken wire with hand, gets severely injured.	4	3	12
7	Damaged pulley at crown block, breaks wire or fails itself.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspection As Per Schedule	Operations Procedure	Personnel Protective Equipment
	Tool Box Talk	Safety Meetings
	Safety Campaigns	Supervision

Residual Hazard

Sr. No	Hazard	Seve rity (S)	Proba bility (P)	Risk Factor (R=S x P)
1	Inspection of sheave or wire not done, fails causing injury.	4	2	8
2	Equipment left hanging without being secured, swings and hits crew.	4	2	8
3	Equipment used away from its vertical axis, causing it to swing back as it is released.	4	2	8
4	Counter weight not lubricated properly, causing back strain as equipment height is adjusted.	4	2	8
5	Equipment removed from the wire rope without securing the wire rope, wire rope flies off due to counter weight and falls on the rig floor.	4	2	8
6	Crew tries to hold the flying broken wire with hand, gets severely injured.	4	2	8
7	Damaged pulley at crown block, breaks wire or fails itself.	4	2	8

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

15	Hazard Identification Sheet			
Equipment In Derrick				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Many equipment are fixed on Derrick, as it is raised like pulleys, lighting, Pins, Bolts. As the derrick vibrates during normal drilling operations, these equipment might fall; moreover; many equipment and tools are taken up the derrick and kept there for repair jobs etc.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Hand tools not properly secured in a tool box which is fixed to the derrick railing, tool fell down due to the vibrations in the mast during drilling, jarring or running in and pulling out.	5	3	15
2	Fixed equipments like paging microphone etc not secured through check wire or chain, falls down on rig floor due to excessive vibrations.	5	3	15
3	Loose bolt or broken piece falls off, as Derrick is being raised or lowered.	5	3	15
4	Derrick not inspected or severe operation like jarring, loose equipment, tool etc comes off.	5	3	15
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Inspections as per the Schedule		Operations Procedure.		Personnel Protective Equipment
Check Wires, lock pins and chains,		Tool Box Talk		Safety Meetings
Check List		Awareness training		Supervision
Residual Hazard				
1	Hand tools not properly secured in a tool box which is fixed to the derrick railing, tool fell down due to the vibrations in the mast during drilling, jarring or running in and pulling out.	5	1	5
2	Fixed equipments like paging microphone etc not secured through check wire or chain, falls down on rig floor due to excessive vibrations.	5	1	5
3	Loose bolt or broken piece falls off as Derrick is being raised or lowered.	5	1	5
4	Derrick not inspected or severe operation like jarring, loose equipment, tool etc comes off.	5	1	5
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

16	Hazard Identification Sheet			
Falling Object				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Many equipment are fixed on Derrick and substructure on a height, like pulleys, lighting, Pins, Bolts etc. As the derrick vibrates during normal drilling operations, this equipment might fall; moreover; many equipment and tools are taken up on heights and might fall. Equipments might also fall from height as they are being carried by the crew on man ridding winch, or up on the ladder to the monkey board or crown block.				
Job Hazard				
Sr. No	Hazard	Seve rity (S)	Proba bility (P)	Risk Factor (R=S x P)
1	Hand tools not properly secured in a tool box which is fixed to the derrick railing, tool fell down due to the vibrations in the mast during drilling, jarring or running in and pulling out.	5	3	15
2	Fixed equipments like paging microphone etc not secured through check wire or chain, falls down on rig floor due to excessive vibrations.	5	3	15
3	Loose bolt or broken piece falls off, as Derrick is being raised or lowered.	5	3	15
4	Derrick not inspected or severe operation like jarring, loose equipment, tool etc comes off.	5	3	15
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Inspections as per the Schedule		Operations Procedure.		Personnel Protective Equipment
Check Wires, lock pins and chains,		Tool Box Talk		Safety Meetings
Check List		Awareness training		Supervision
Residual Hazard				
1	Hand tools not properly secured in a tool box which is fixed to the derrick railing, tool fell down due to the vibrations in the mast during drilling, jarring or running in and pulling out.	5	1	5
2	Fixed equipments like paging microphone etc not secured through check wire or chain, falls down on rig floor due to excessive vibrations.	5	1	5
3	Loose bolt or broken piece falls of as Derrick is being raised or lowered.	5	1	5
4	Derrick not inspected or severe operation like jarring, loose equipment, tool etc comes off.	5	1	5
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

17	Hazard Identification Sheet			
Forklift				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Tool Definition: Forklift is a lifting tool, mounted on a four wheel with two adjustable forks or prongs used for moving heavy loads from one point to another.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Load being lifted is not properly balanced, falls and damages equipment or injures persons around.	3	4	12
2	Finger or hands caught and crushed between load and sling while lifting load.	3	4	12
3	While lifting load, sling snaps, dropping load and injuring crew.	3	4	12
4	Man rides the forklift as load was being moved, falls and gets injured.	3	4	12
5	Forklift used to raise the crew to height, so as to make them work, fork trips, persons fall and get injured.	3	3	9
6	Man giving directions to the operator, while standing in front of fork, operator loses control, and hits the person.	4	4	16
7	Person operating forklift without necessary licenses and training, injures crew working.	4	3	12
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
Inspections as per the Schedule		Operations Procedure.	Personnel Protective Equipment	
Maintenance as per the schedule.		Tool Box Talk	Safety Meetings	
Pre Job Equipment Check List		Awareness training	Supervision	
			ROP and Forklift Driver's License	
Residual Hazard				
1	Load being lifted is not properly balanced, falls and damages equipment or injures persons around.	3	2	6
2	Finger or hands caught and crushed between load and sling while lifting load.	3	2	6
3	While lifting load, sling snaps, dropping load and injuring crew.	3	2	6
4	Man rides the forklift as load was being moved, falls and gets injured.	3	1	3
5	Forklift used to raise the crew to height, so as to make them work, fork trips, persons fall and get injured.	3	1	3
6	Person operating forklift without necessary licenses and training, injures crew working.	4	2	8
7	Man giving directions to the operator, while standing in front of fork, operator loses control, and hits the person.	4	1	4
Reactive Measures				
1	Give Immediate First Aid			
2	Obtain assistance from the Rig Medic.			
3	For a serious accident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

18	Hazard Identification Sheet			
Gas Cylinder				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Various industrial gases used at rig site are delivered in the gas cylinders like Oxygen, Acetylene for gas cutting and Nitrogen for pre-charge in accumulator bottles and discharge dampeners of mud pumps.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Cylinders are transported without proper strapping, falls and burst.	4	4	16
2	Cylinders are rolled over ground to take them to work place, gets damaged and burst.	4	4	16
3	All the different gas cylinders stored in one place, without clear demarcation, wrong gas bottle is used.	3	4	12
4	Proper color coding not used on the gas cylinder. Wrong cylinder picked up and used.	3	5	15
5	Standard keys are not used to open the cylinder, valve breaks causing gas leakage.	3	4	12
6	Gas cylinder is moved around working area by hand, falls and crushes feet. Cylinders should always be moved in standing position, kept in basket.	3	5	15

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Daily Tool Check list	Operations Procedure.	Personnel Protective Equipment
Pre-job tool check.	Tool Box Talk	Safety Meetings
Nitrogen checked for quality	Safety Campaigns	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Cylinders are transported without proper strapping, falls and burst.	4	2	8
2	Cylinders are rolled over ground to take them to work place, gets damaged and burst.	4	2	8
3	All the different gas cylinders stored in one place, without clear demarcation, wrong gas bottle is used.	3	3	9
4	Proper color coding not used on the gas cylinder. Wrong cylinder picked up and used.	3	2	6
5	Standard keys are not used to open the cylinder, valve breaks causing gas leakage.	3	2	6
6	Gas cylinder is moved around working area by hand, falls and crushes feet. Cylinders should always be moved in standing position, kept in basket.	3	3	9

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

19	Hazard Identification Sheet			
Hammers				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Hammer is a hand tool used for dismantling or tightening connections, bolts and studs. It has a heavy piece of iron at one end, and a long handle, which is used to generate the impact to get the desired effect.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Hammer not checked before use, weak handle breaks off or comes out, iron hitting nearby crew.	3	4	12
2	Hammer is swung wildly, slips out of wet hand and hits crew.	3	4	12
3	Hammer misses the target, hits the crew instead.	3	4	12
4	Hammer bounces off as it hits against a very tight connection, hits the crew.	3	4	12
5	Trying to hammer, without standing properly, falls and gets injured.	3	4	12
6	Trying to hammer overhead, misses crew falls with hammer and gets injured.	3	4	12
7	Proper size of hammer not used, holding the tool to be hammered upon by hand, crushing the finger	3	4	12
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Inspections as per the Schedule		Operations Procedure		Personnel Protective Equipment
Inspection before the job.		Tool Box Talk		Safety Meetings
		Safety Campaigns		Supervision
Residual Hazard				
1	Hammer not checked before use, weak handle breaks off or comes out, iron hitting nearby crew.	3	3	9
2	Hammer is swung wildly, slips out of wet hand and hits crew.	3	3	9
3	Hammer misses the target, hits the crew instead.	3	3	9
4	Hammer bounces off as it hits against a very tight connection, hits the crew.	3	3	9
5	Trying to hammer, without standing properly, falls and gets injured.	3	3	9
6	Trying to hammer overhead, misses crew falls with hammer and gets injured.	3	3	9
7	Proper size of hammer not used, holding the tool to be hammered upon by hand, crushing the finger	3	3	9
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

20	Hazard Identification Sheet			
Hand Tools				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Screw Drivers, cutters, clippers, wire brushes etc are termed as hand tools and have a very high probability of accidents				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Hand Tools not used for the purpose they are designed for.	3	4	12
2	Screw Driver Used to clean the surface, slips and hurts.	3	4	12
3	Using knife to cut tapes and strings cuts finger instead.	3	4	12
4	Using screwdriver as chisel - breaks and causes injury.	3	4	12
5	Pliers or cutter used as hammer.	3	4	12
6	Using file as chisel - breaks and hits the crew.	3	4	12
7	Using wire brush, files etc without proper PPE, injures hand or dirt falls into eye.	3	4	12
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Daily Tool Check List.		Operations Procedure		Personnel Protective Equipment
Pre-job tool check.		Tool Box Talk		Safety Meetings
Solvents to clean rusted threads.		Safety Campaigns		Supervision
Residual Hazard				
1	Hand Tools not used for the purpose they are designed for.	3	2	6
2	Screw Driver Used to clean the surface, slips and hurts.	3	2	6
3	Using knife to cut tapes and strings cuts finger instead.	3	2	6
4	Using screwdriver as chisel - breaks and causes injury.	3	2	6
5	Pliers or cutter used as hammer.	3	2	6
6	Using file as chisel - breaks and hits the crew.	3	2	6
7	Using wire brush, files etc without proper PPE, injures hand or dirt falls into eye.	3	2	6
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

21	Hazard Identification Sheet			
Handling Non-Standard Equipment On Rig Floor				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Non-standard equipment can be classified as equipment used on the rig floor having dimensions much larger or smaller than the operating limits of the standard tools available.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Rig tongs used on the equipment with smaller diameter, by placing addition tong dies from outside, die breaks or piece of the tong breaks and flies off, injuring the crew working around.	4	3	12
2	Trying to latch tong by hammering on the latch, over a large diameter tool, latch breaks and injures crew, or tong comes off, and hits the crew.	4	3	12
3	Lifting non-standard equipment using non-standard lifting gears falls and injures crew or damage equipment.	4	3	12
4	Tool owner company supervisor not available on the rig floor, rig crew mishandles the tool and damages it and gets injured.	4	3	12
5	Crew not clear about the purpose of the tool and its handling, damages it and gets injured.	4	3	12
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
Correct lifting gears		Operations & Maintenance Procedure.	Personnel Protective Equipment	
Right size handling tools.		Tool Box Talk	Safety Meetings	
		Tool specific operating and handling instructions.	Supervision	
Residual Hazard				
1	Rig tongs used on the equipment with smaller diameter, by placing addition tong dies from outside, die breaks or piece of the tong breaks and flies off, injuring the crew working around.	4	1	4
2	Trying to latch tong by hammering on the latch, over a large diameter tool, latch breaks and injures crew, or tong comes off, and hits the crew.	4	1	4
3	Lifting non-standard equipment using non-standard lifting gears falls and injures crew or damage equipment.	4	1	4
4	Tool owner company supervisor not available on the rig floor, rig crew mishandles the tool and damages it and gets injured.	4	1	4
5	Crew not clear about the purpose of the tool and its handling, damages it and gets injured.	4	1	4
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			
5	If camel or wild animal gets inside the pit, try to get them out, inform ROP.			

22	Hazard Identification Sheet			
Handling Non-Standard Equipment On Rig Floor				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Non-standard equipment can be classified as equipment used on the rig floor having dimensions much larger or smaller than the operating limits of the standard tools available.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Rig tongs used on the equipment with smaller diameter, by placing addition tong dies from outside, die breaks or piece of the tong breaks and flies off, injuring the crew working around.	4	3	12
2	Trying to latch tong by hammering on the latch, over a large diameter tool, latch breaks and injures crew, or tong comes off, and hits the crew.	4	3	12
3	Lifting non-standard equipment using non-standard lifting gears falls and injures crew or damage equipment.	4	3	12
4	Tool owner company supervisor not available on the rig floor, rig crew mishandles the tool and damages it and gets injured.	4	3	12
5	Crew not clear about the purpose of the tool and its handling, damages it and gets injured.	4	3	12
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
Correct lifting gears		Operations & Maintenance Procedure.	Personnel Protective Equipment	
Right size handling tools.		Tool Box Talk	Safety Meetings	
		Tool specific operating and handling instructions.	Supervision	
Residual Hazard				
1	Rig tongs used on the equipment with smaller diameter, by placing addition tong dies from outside, die breaks or piece of the tong breaks and flies off, injuring the crew working around.	4	1	4
2	Trying to latch tong by hammering on the latch, over a large diameter tool, latch breaks and injures crew, or tong comes off, and hits the crew.	4	1	4
3	Lifting non-standard equipment using non-standard lifting gears falls and injures crew or damage equipment.	4	1	4
4	Tool owner company supervisor not available on the rig floor, rig crew mishandles the tool and damages it and gets injured.	4	1	4
5	Crew not clear about the purpose of the tool and its handling, damages it and gets injured.	4	1	4
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			
5	If camel or wild animal gets inside the pit, try to get them out, inform ROP.			

23	Hazard Identification Sheet			
Hydraulic Equipment				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Hydraulic equipments are the equipments that use hydraulic force to get the desired work done. They can be hydraulic motors installed on winches, spinners, power tongs etc or equipments with rams and pistons like BOP.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Equipment is not inspected and certified prior to use.	4	3	12
2	Pre-job check not done, leaking hose or fitting results in oil spray.	4	4	16
3	Untrained person tries to repair, open pressurized hose without bleeding pressure off, oil sprays under pressure, causing injury.	4	4	16
4	Leakage is repaired by welding, leaks or fails during operation, causing injury.	4	4	16
5	Crew tries to stop leakage from leaking equipment, under pressure by hammering on connection; connection fails causing serious injury.	4	3	12
6	Loose lines and hoses not secured by check wire.	4	3	12
7	Pressure relief valve is not working, or tampered with its setting, causing major accident.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations and Maintenance Procedure.	Personnel Protective Equipment
Correct pressure seals	Tool Box Talk	Safety Meetings
Check wires/ Pressure Relief Valve.	Awareness training	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Equipment is not inspected and certified prior to use.	4	1	4
2	Pre-job check not done, leaking hose or fitting results in oil spray.	4	2	8
3	Untrained person tries to repair, open pressurized hose without bleeding pressure off, oil sprays under pressure, causing injury.	4	2	8
4	Leakage is repaired by welding, leaks or fails during operation, causing injury.	4	2	8
5	Crew tries to stop leakage from leaking equipment, under pressure by hammering on connection; connection fails causing serious injury.	4	1	4
6	Loose lines and hoses not secured by check wire.	4	1	4
7	Pressure relief valve is not working, or tampered with its setting, causing major accident.	4	1	4

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

24	Hazard Identification Sheet			
	Inadequate Competence of Personnel			
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Job Definition:
Competence is defined as “ability to consistently carry out tasks to a defined standard”. Proving competence demonstrates three key characteristics: Knowledge, Skill and Attitude.
Inadequate competence of the personals involved in a particular operation can cause injury to the person himself and people working around him, damage to the asset and can be a cause of major disaster or simply delay the operation.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Incompetent persons in the team, extra load on the other persons of the team causing fatigue and irritation and delay in work and accident.	3	4	12
2	Incompetent persons handling equipment damage the equipment and cause injury to self and others.	4	3	12
3	Incompetent person supervising the critical operation like well control panics, causing major damage to the personals, reservoir, rig and environment.	4	3	12
4	Incompetent person working on the rig, result in poor job planning causing delays and work stoppage.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
	Pre-job safety meetings and tool box talks.	Job knowledge enhancement trainings
	Buddy system for green hands.	Good Supervision
	Competence Assurance Program	Trainings and Training Matrix.
	Safety and Attitude improvement Campaigns	Personal Protective Equipment.

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Incompetent persons in the team, extra load on the other persons of the team causing fatigue and irritation and delay in work and accident.	3	2	6
2	Incompetent persons handling equipment damage the equipment and cause injury to self and others.	4	1	4
3	Incompetent person supervising the critical operation like well control panics, causing major damage to the personals, reservoir, rig and environment.	4	1	4
4	Incompetent person working on the rig, result in poor job planning causing delays and work stoppage.	4	1	4

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

25	Hazard Identification Sheet			
Inadequate Lighting				
Rev: 0	Issued by: TechnoRig		Approved:	
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Job Definition:
 Work area must be properly and sufficiently lit in order to minimize the errors due to poor visibility and reduce the fatigue related stress. Where permanent lights are not sufficient, portable floodlights should be moved to provide sufficient light.
 During bad weather conditions like heavy rain, and storms, etc, light could be poor even during day time. Situation should be analyzed and if possible, work should be stopped or extra safety precautions should be taken to avoid accident.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inadequate light, equipment could not be checked properly prior to use, causing failure and injury.	3	4	12
2	Bad weather condition, poor visibility, and results in human error causing accident and injury to the persons.	3	4	12
3	Working in remote area, away from the rig, inadequate light, bitten by insect (Scorpion or Snake)	3	4	12
4	Light reflectors and cover glass not cleaned, mud and dirt deposition causes inadequate light conditions.	3	4	12
5	Bad weather and inadequate light on the road result in collision and accident.	3	4	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Check light, replace fuse bulbs	Operations Procedure	Personal Protective Equipment
Keep portable flood lights handy	Driving Policy and Procedure	Safety Meetings
Clean the bulbs and reflectors of mud and dirt depositions.	Safety Campaigns.	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inadequate light, equipment could not be checked properly prior to use, causing failure and injury.	3	2	6
2	Bad weather condition, poor visibility, and results in human error causing accident and injury to the persons.	3	2	6
3	Working in remote area, away from the rig, inadequate light, bitten by insect (Scorpion or Snake)	3	2	6
4	Light reflectors and cover glass not cleaned, mud and dirt deposition causes inadequate light conditions.	3	2	6
5	Bad weather and inadequate light on the road result in collision and accident.	3	2	6

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

26	Hazard Identification Sheet			
Ladders				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Ladders are used every minute during regular operations, from climbing on the rig floor to high elevation points like derrick and crown block, and portable ladders are used to reach high elevation during repair or maintenance of the equipment.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Railing of the ladder not inspected, person falls as he tries to ascend or descend using support of railing.	4	3	12
2	Vertical ladders like installed for climbing derrick not with safe backrest. Person slips or loses grip, falls off.	5	2	10
3	Climbing assist and harness belt not used while climbing derrick, falls and gets injured.	5	2	10
4	Ladders not fabricated properly, or steps not secure causing tripping hazard.	3	4	12
5	Improper use of portable ladder, leading to user falling, and getting injured.	4	4	16
6	Failure of ladder, user falling and getting injured.	4	4	16
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
Inspection As Per Schedule		Operations & Maintenance Procedures	Personnel Protective Equipment	
Mast Check List		Tool Box Talk	Safety Meetings	
		Poster Campaigns for use of portable ladder	Supervision	
Residual Hazard				
1	Railing of the ladder not inspected, person falls as he tries to ascend or descend using support of railing.	4	1	4
2	Vertical ladders like installed for climbing derrick not with safe backrest. Person slips or loses grip, falls off.	5	1	5
3	Climbing assist and harness belt not used while climbing derrick, falls and gets injured.	5	1	5
4	Ladders not fabricated properly, or steps not secure causing tripping hazard.	3	2	6
5	Improper use of portable ladder, leading to user falling, and getting injured.	4	2	8
6	Failure of ladder, user falling and getting injured.	4	2	8
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

27	Hazard Identification Sheet			
Lifting And Carrying By Hand				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Lifting and carrying by hand is done every day on the rig, and is the cause of many serious injuries and permanent disabilities.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Wrong lifting posture while lifting load, causing serious back injury.	4	4	16
2	Underestimating the weight being attempted to lift, drops and crushes finger or toes.	3	4	12
3	Load being lifted is too big in size, cannot see, trips and falls, causing injury.	3	4	12
4	Load attempted to be lifted from a rack or place not in clear view, standing on unsecured ladder or other equipment, loses balance, falls with load on the person.	4	4	16
5	Trying to run down the ladder lifting load, trips and falls down.	4	4	16
6	Hand or feet crushed as was trying to put the load down.	3	4	12
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
		Operations Procedure.	Personnel Protective Equipment	
		Tool Box Talk	Safety Meetings	
		Awareness training	Supervision	
Residual Hazard				
1	Wrong lifting posture while lifting load, causing serious back injury.	4	2	8
2	Underestimating the weight being attempted to lift, drops and crushes finger or toes.	3	2	6
3	Load being lifted is too big in size, cannot see, trips and falls, causing injury.	3	2	6
4	Load attempted to be lifted from a rack or place not in clear view, standing on unsecured ladder or other equipment, loses balance, falls with load on the person.	5	2	10
5	Trying to run down the ladder lifting load, trips and falls down.	5	2	10
6	Hand or feet crushed as was trying to put the load down.	3	2	6
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

28	Hazard Identification Sheet			
	Moving Heavy Equipments			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Heavy Equipments can be defined as large size casings, stand or single of drill collars and other equipments like BOP, choke manifolds, hydraulic units, containers etc.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Use inspected and color coded slings and shackles and other lifting gears, failure of lifting equipment might cause serious accident.	5	3	15
2	Use tag lines for controlling the swing of the equipment as it is picked up.	4	4	16
3	If individual has to go near the load to position it at the desired, do not put hands or feet underneath. Might get crushed.	4	5	20
4	Always double check that shackles are put in pad eyes and are free. Unbalanced load picked up, breaks sling and falls.	5	4	20
5	Load lifted is more than the rated capacity of the lifting gear.	5	3	15
6	Moving of equipments can be simultaneous operation, attention diverted, causes accident.	5	4	20
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Inspection as per the schedule		Operations Procedure		Personnel Protective Equipment
Color coding of lifting gears		Tool Box Talk		Safety Meetings
Maintenance As Per Schedule		Safety Campaigns		Supervision
Residual Hazard				
1	Use inspected and color coded slings and shackles and other lifting gears, failure of lifting equipment might cause serious accident.	5	1	5
2	Use tag lines for controlling the swing of the equipment as it is picked up.	4	2	8
3	If individual has to go near the load to position it at the desired, do not put hands or feet underneath. Might get crushed.	4	3	12
4	Always double check that shackles are put in pad eyes and are free. Unbalanced load picked up, breaks sling and falls.	5	2	10
5	Load lifted is more than the rated capacity of the lifting gear.	5	1	5
6	Moving of equipments can be simultaneous operation, attention diverted, causes accident.	5	2	10
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

29	Hazard Identification Sheet			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Tool Definition: Personnel working on rig are exposed all the time to high levels of noise generated due to continuous running of various equipment like engines, rotary, Drawworks, wire line unit, vehicles etc. Noise at certain high decibel levels can be harmful to the person exposed but at certain lower level, does not cause as such any health hazard to the person exposed, but causes fatigue, which on its own can be cause of releasing several hazard and contribute to major accident. Thus some of the hazards cannot be quantified at this stage.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Exposure to steady noise levels above 85dB leading to damage of ear.	3	4	12
2	Exposure to sudden impulse of 135dB or above, leading to instantaneous damage to inner ear, which cause permanent loss of hearing.	5	2	10
3	Continuous exposure to low decibel level sounds for long hour, causing fatigue, loss of concentration resulting in release of hazard from operation in progress.			
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Inspection & Maintenance		Noise Map		Personnel Protective Equipment
Sound lowering insulation		Tool Box Talk		Safety Meetings
		Awareness Training		Supervision
Residual Hazard				
1	Exposure to steady noise levels above 85dB leading to damage of ear.	3	2	6
2	Exposure to sudden impulse of 135dB or above, leading to instantaneous damage to inner ear, which cause permanent loss of hearing.	5	1	5
3	Continuous exposure to low decibel level sounds for long hour, causing fatigue, loss of concentration resulting in release of hazard from operation in progress.			
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

30	Hazard Identification Sheet			
Rev: 0	Paint, Thinner and Coatings	Issued by: TechnoRig	Approved:	Page 1/1

Tool Definition:
Paints, thinner and coatings are corrosion inhibitors applied internally and externally to the surface of the equipment. The contain color pigment and solvents which emit fumes.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Damaged drum being lifted for use, falls over the crew.	1	4	4
2	Incorrect storage of paint and thinner, causing buildup of fumes in conjunction with an ignition source, causing fire/explosion.	3	4	12
3	Improper procedure or PPE resulting in illness due to inhaling fumes, skin problem, poisoning, from ingestion.	3	4	12
4	Improper disposal of used paint drums and container.	2	4	8

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Covered & Ventilated Storage Area	Operations & Disposal Procedure.	Personnel Protective Equipment
Paint Brush	Tool Box Talk	Safety Meetings
Waste Disposal Tools and safe disposal area.	Chemical Hazard Sheet	Supervision
	Awareness Training	Eyewash stations

Residual Hazard

1	Damaged drum being lifted for use, falls over the crew.	1	2	2
2	Incorrect storage of paint and thinner, causing buildup of fumes in conjunction with an ignition source, causing fire/explosion.	3	2	6
3	Improper procedure or PPE resulting in illness due to inhaling fumes, skin problem, poisoning, from ingestion.	3	2	6
4	Improper disposal of used paint drums and container.	2	2	4

Reactive Measures

1	Give Immediate First Aid, as described in Chemical Toxic Sheet.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

31	Hazard Identification Sheet			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Pipe racks are the stands kept on two sides of the cat walk, on which tubular, down hole tools and casing / tubing are kept and prepared prior to being taken on to the rig floor for running in or are pulled out and kept prior to being transported.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Pipe rack end stopper not in place, tubular rollover and falls on the crew injuring him.	4	4	16
2	Crew standing in between the loose pipe, for measuring length or cleaning threads. Pipe rolls and crushes the man.	3	4	12
3	Wrong method of rolling the pipe on to catwalk from pipe rack employed, crew crushes hand or feet.	3	4	12
4	Crew walking on the pipe stacked on the catwalk, pipe rolls, crew trips; falls and gets injured.	3	4	12
5	Hand or leg used for pushing the jammed pipe free, gets crushed.	3	4	12
6	While removing or putting pipe on pipe rack using forklift, stay clear, pipe might fall off, causing crushing injury.	4	4	16
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
Inspections as per the Schedule		Operations Procedure.	Personnel Protective Equipment	
End Stopper		Tool Box Talk	Safety Meetings	
		Awareness training	Supervision	
Residual Hazard				
1	Pipe rack end stopper not in place, tubular rollover and falls on the crew injuring him.	4	2	8
2	Crew standing in between the loose pipe, for measuring length or cleaning threads. Pipe rolls and crushes the man.	3	2	6
3	Wrong method of rolling the pipe on to catwalk from pipe rack employed, crew crushes hand or feet.	3	2	6
4	Crew walking on the pipe stacked on the catwalk, pipe rolls, crew trips; falls and gets injured.	3	2	6
5	Hand or leg used for pushing the jammed pipe free, gets crushed.	3	2	6
6	While removing or putting pipe on pipe rack using forklift, stay clear, pipe might fall off, causing crushing injury.	4	2	8
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

32	Hazard Identification Sheet			
Pneumatic Tools				
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Job Definition:
Tools, which use air pressure to provide necessary drive power, are called pneumatic tools. They operate at rig site available air pressure of 120 psi. Tools like pneumatic spanners, pneumatic grinders, oil pumps, etc fall under this category.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Airline to pneumatic tool not properly secured, flies off and hits the person working with the tool.	3	4	12
2	High noise levels, earmuffs not used.	3	4	12
3	Chips fly off & fall in eye.	3	4	12
4	Person not paying attention to job, heavy pneumatic tool falls and injures the person.	4	4	16
5	Pneumatic tool operating switch in locked position, a slip from hand and emergency shut off fails to work, causing serious injury.	4	4	16

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Check tools before use; make sure all switches are working.	Operations Procedure.	Personnel Protective Equipment
Check airline and airline clamps.	Tool Box Talk	Safety Meetings
Safety lines on air hoses.	Safety Campaigns	Effective Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Airline to pneumatic tool not properly secured, flies off and hits the person working with the tool.	3	2	6
2	High noise levels, earmuffs not used.	3	2	6
3	Chips fly off & fall in eye.	3	2	6
4	Person not paying attention to job, heavy pneumatic tool falls and injures the person.	4	2	8
5	Pneumatic tool operating switch in locked position, a slip from hand and emergency shut off fails to work, causing serious injury.	4	2	8

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

33	Hazard Identification Sheet			
Poor Communication				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Communication is a very key, especially when concurrent operations are being carried out or the operator of a particular equipment has his visibility hampered and has to rely on oral or visual signals to carry out the job, like crane operations, communication between driller and derrick man during tripping, communication through signals between man on man riding winch and the rider, communication between various parties involved during circulating out of kick fluid through choke, cut and retrieve operations using wire line, etc.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Poor knowledge of signals, confusion, chances of human error and accident.	3	5	15
2	More than one-person giving signal to operator, creating confusion, results in human error and accident.	3	5	15
3	Communicating from noisy place, poor communication, instructions misunderstood resulting in accident.	3	5	15
4	Persons communicating have different mother tongue, do not understand each other's language, misunderstanding and accident.	3	5	15
5	Two persons from different cultural background, misunderstand slangs used in communication, misunderstanding and fight, causing injury.	3	5	15

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Good Communication System	Clear instructions	Personal Protective Equipment
	Declare official language and insist on following it.	Good Supervision
	Poster campaign for Visual Signals.	Language Courses

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Poor knowledge of signals, confusion, chances of human error and accident.	3	2	6
2	More than one-person giving signal to operator, creating confusion, results in human error and accident.	3	2	6
3	Communicating from noisy place, poor communication, instructions misunderstood resulting in accident.	3	2	6
4	Persons communicating have different mother tongue, do not understand each other's language, misunderstanding and accident.	3	2	6
5	Two persons from different cultural background, misunderstand slangs used in communication, misunderstanding and fight, causing injury.	3	2	6

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

34	Hazard Identification Sheet			
Pressure Testing				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Pressure testing is done on high pressure containing equipments to prove their pressure integrity prior to subjecting them to the actual job conditions. In field, any equipment should be subjected to 75% of its rated working pressure.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Equipment is not inspected and certified prior to pressure testing, fails during testing.	4	3	12
2	Pressure testing is carried out at more than rated working pressure of the equipment, results in failure of the equipment, causing a serious hazard.	4	3	12
3	Pressure is increased suddenly with valve closed during pressure testing.	4	3	12
4	Equipment being tested is not red tapped, no warning signs displayed, crew accidentally goes near the equipment, get injured.	4	3	12
5	Crew tries to stop leakage from leaking equipment, under pressure by hammering on connection; connection fails causing serious injury.	4	3	12
6	Loose lines and hoses not secured by check wire.	4	3	12
7	While testing well head and BOP using plug tester, the annulus bleed off valve is not kept open, test plug with stump jumps out as BOP is opened without bleeding pressure due to leakage in pressure seal on tester.	3	3	9

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Correct pressure seals	Permit To Work	Safety Meetings
Check wires and isolation tapes.	Tool Box Talk	Supervision
	Awareness Trainings	PTW Training

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Equipment is not inspected and certified prior to pressure testing, fails during testing.	4	1	4
2	Pressure testing is carried out at more than rated working pressure of the equipment, results in failure of the equipment, causing a serious hazard.	4	1	4
3	Pressure is increased suddenly with valve closed during pressure testing.	4	1	4
4	Equipment being tested is not red tapped, no warning signs displayed, crew accidentally goes near the equipment, get injured.	4	1	4
5	Crew tries to stop leakage from leaking equipment, under pressure by hammering on connection; connection fails causing serious injury.	4	1	4
6	Loose lines and hoses not secured by check wire.	4	1	4
7	While testing well head and BOP using plug tester, the annulus bleed off valve is not kept open, test plug with stump jumps out as BOP is opened without bleeding pressure due to leakage in pressure seal on tester.	3	1	3

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

35	Hazard Identification Sheet			
Pumping At High Pressure				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Pumping at any pressure that is greater than the normal pumping pressure of a centrifugal pump is termed as high pressure. It is achieved through a reciprocating pump or pneumatic pump.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Equipment is not inspected and certified prior to use for pumping at high pressure.	4	3	12
2	Pumping is done through the system at more than the rated pressure, damaging the pump or the lines in pumping system; results in failure of the equipment, causing a serious hazard.	4	3	12
3	Pressure is increased suddenly with valve closed during pumping, causing failure of line and spraying of mud.	4	3	12
4	Field welding repairs on high pressure circulating equipment are not inspected and certified, causing failure during pumping.	4	3	12
5	Crew tries to stop leakage from leaking equipment, under pressure by hammering on connection; connection fails causing serious injury.	4	3	12
6	Loose lines and hoses not secured by check wire.	4	3	12
7	Make sure that Pressure Relief Valve is set at a pressure less than the working pressure of the weakest part in the circulation line.	4	3	12
Proactive Controls				
Equipment Control		Operational Control	Personnel Control	
Inspections as per the Schedule		Operations Procedure.	Personnel Protective Equipment	
Pressure Seal, Check Wire & Chains		Tool Box Talk	Safety Meetings	
Pressure Relief Valve		Awareness training	Supervision	
Residual Hazard				
1	Equipment is not inspected and certified prior to use for pumping at high pressure.	4	1	4
2	Pumping is done through the system at more than the rated pressure, damaging the pump or the lines in pumping system; results in failure of the equipment, causing a serious hazard.	4	1	4
3	Pressure is increased suddenly with valve closed during pumping, causing failure of line and spraying of mud.	4	1	4
4	Field welding repairs on high pressure circulating equipment are not inspected and certified, causing failure during pumping.	4	1	4
5	Crew tries to stop leakage from leaking equipment, under pressure by hammering on connection; connection fails causing serious injury.	4	1	4
6	Loose lines and hoses not secured by check wire.	4	1	4
7	Make sure that Pressure Relief Valve is set at a pressure less than the working pressure of the weakest part in the circulation line.	4	1	4
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

36	Hazard Identification Sheet			
Rig Tongs				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Tool Definition:
Rig tongs are on the rig floor for making up and breaking out pipe. Two tongs are put on the toolbox of the tubular, and one of the tong is pulled depending upon whether we want to make or break a connection, and second tong takes the reactive torque. During the operation, both the tongs are subjected to high torsion force depending upon the size and type of connection.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Tong swings as it is pulled back and hits floor man.	1	4	4
2	Floor man using wrong feet position while latching tongs, trips and falls.	2	4	8
3	Finger or hands caught and crushed between tong jaws.	3	4	12
4	Tong does not latch properly, slips and hurts floor man.	3	4	12
5	Tong dies are hammered into the slot and splinter hits the crew.	3	3	9
6	Tong line snaps as it is pulled and hits floor man/Driller.	5	3	15
7	Tong Pin or piece of jaw fails and hits the crew around.	5	2	10
8	Tong Hanging line pulley or piece falls from crown block.	5	1	5
9.	Tong counter balance falls apart, damaging equipment and hurting people.	5	1	5

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Pre Job Equipment Checklist	Hazard Identification Sheets	Personnel Protective Equipment
Inspections as per the inspection and calibration specification.	Operations Procedure.	Safety Meetings
Maintenance as per the schedule.	Tool Box Talk	Supervision
Mark handles with green paints.	Awareness training	

Residual Hazard

1.	Finger or hand caught and crushed between tong jaws.	3	2	6
2.	Floor man using wrong feet position while latching tongs, trips and falls.	2	2	4
3.	Tong line snaps as it is pulled to apply torque to the tool joint.	5	1	5
4.	Tong does not latch properly, slips and hurts floor man.	3	2	6

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

37	Hazard Identification Sheet				
Rotary Table					
Rev: 0	Issued by: TechnoRig		Approved:		Page 1/1
Tool Definition: Rotary Table provides the rotation to the drill pipe as the hole is drilled. It is also used to provide the turning motion, in order to make or break drill pipe.					
Job Hazard					
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)	
1	Stepping on rotary while in rotational motion, person gets thrown away.	3	4	12	
2	Rotary back torques, throws bushing and slips out.	3	2	6	
3	Rotary opening cover removed, with no pipe or slip inside, person falls in while walking on rig floor, or drops something in the well.	4	4	16	
4	Putting or removing slips with pipe in motion.	3	4	12	
Proactive Controls					
Equipment Control		Operational Control		Personnel Control	
Pre Job Equipment Check list		Hazard Observation Sheets		Personnel Protective Equipment	
Inspections as per the inspection and calibration specification.		Operations Procedure.		Safety Meetings	
Maintenance as per the schedule.		Tool Box Talk		Supervision	
Residual Hazard					
1	Stepping on rotary while in rotational motion, person gets thrown away.	3	2	6	
2	Rotary back torques, throws bushing and slips out.	3	2	6	
3	Rotary opening cover removed, with no pipe or slip inside, person falls in while walking on rig floor, or drops something in the well.	4	2	8	
4	Putting or removing slips with pipe in motion.	3	2	6	
Reactive Measures					
1	Give Immediate First Aid				
2	Obtain assistance from the Rig Medic.				
3	For a serious accident, alert Supervisor for emergency procedures.				
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.				

38	Hazard Identification Sheet				
Rotating Equipment					
Rev: 0	Issued by: TechnoRig		Approved:		Page 1/1
Tool Definition: Any machinery or equipment with parts that rotates about their axis and transmit rotational motion to other parts aligned to it, in order to carry out the desired work can be termed as rotating equipment. This includes pipe spinners, Kelly, Draw works, mud pumps, winches etc.					
Job Hazard					
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)	
1	Person working on rotating equipment, with guards and cover removed.	3	4	12	
2	Finger or hands caught and crushed between rotating parts as unauthorized person tries to repair.	3	4	12	
3	Person working with rotating equipment wearing loose clothing, jewellery or with loose long hairs.	4	4	16	
4	Person removes guard and cover without complete isolation.	3	4	12	
Proactive Controls					
Equipment Control		Operational Control		Personnel Control	
Pre Job Equipment Check list		Hazard Observation Sheets		Personnel Protective Equipment	
Inspections as per the inspection and calibration specification.		Operations Procedure.		Safety Meetings	
Maintenance as per the schedule.		Tool Box Talk		Supervision	
Guards and Covers		Awareness training			
Residual Hazard					
1	Person working on rotating equipment, with guards and cover removed.	3	2	6	
2	Finger or hands caught and crushed between rotating parts as unauthorized person tries to repair.	3	2	6	
3	Person working with rotating equipment wearing loose clothing, jewellery or with loose long hairs.	4	2	8	
4	Person removes guard and cover without complete isolation.	3	2	6	
Reactive Measures					
1	Give Immediate First Aid				
2	Obtain assistance from the Rig Medic.				
3	For a serious accident, alert Supervisor for emergency procedures.				
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.				

39	Hazard Identification Sheet			
Simultaneous Operations				
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Job Definition:
When two or more operations are done at the same time, it is called simultaneous operation. Special care and supervision should be provided during any such operation as the probability of any risk increases.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Improper planning, two operations clash, causing confusion and accident.	4	3	12
2	Improper communication between the two groups of people, resulting in confusion and accident.	4	3	12
3	Improper supervision, hazard created by one group causes injury to the other group of crew.	4	3	12
4	Heavy loads being lifted while other crew working in close vicinity, load swings and hits the crew.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
	Operations & Maintenance Procedure.	Personnel Protective Equipment
	Tool Box Talk	Safety Meetings
	Permit To Work	Supervision
	Safety Campaigns	PTW Training

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Improper planning, two operations clash, causing confusion and accident.	4	2	8
2	Improper communication between the two groups of people, resulting in confusion and accident.	4	2	8
3	Improper supervision, hazard created by one group causes injury to the other group of crew.	4	2	8
4	Heavy loads being lifted while other crew working in close vicinity, load swings and hits the crew.	4	2	8

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

40	Hazard Identification Sheet			
	Slick Line			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Single Core Wire line is simple steel wire, spooled on its own winch and used for running in directional and other tools. Winch is kept on rig floor and wire is passed over a pulley at crown block to go into drill string or hole.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inspection of winch or wire not done prior to use, fails causing injury.	4	4	16
2	Wire with kinks run in, breaks from kink, causing injury.	4	4	16
3	Wire is hit with hammer or some other equipment while in tension, breaks; causing injury and loss of tool.	4	4	16
4	Winch operator does not control the winch properly; wire gets stuck and breaks.	4	4	16
5	Broken wire as it flies off with tool; entangling or cutting what ever comes it way, causing very serious injury.	4	4	16
6	Crew tries to hold the flying broken wire with hand, gets severely injured.	4	4	16
7	Damaged pulley at crown block, breaks wire or fails itself.	4	4	16

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspection As Per Schedule	Operations Procedure	Personnel Protective Equipment
Daily Tool Check list	Tool Box Talk	Safety Meetings
		Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inspection of winch or wire not done prior to use, fails causing injury.	4	2	8
2	Wire with kinks run in, breaks from kink, causing injury.	4	2	8
3	Wire is hit with hammer or some other equipment while in tension, breaks; causing injury and loss of tool.	4	2	8
4	Winch operator does not control the winch properly; wire gets stuck and breaks.	4	2	8
5	Broken wire as it flies off with tool; entangling or cutting what ever comes it way, causing very serious injury.	4	2	8
6	Crew tries to hold the flying broken wire with hand, gets severely injured.	4	2	8
7	Damaged pulley at crown block, breaks wire or fails itself.	4	2	8

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

41	Hazard Identification Sheet			
	Slippery / Untidy Surface			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Due to spillage of water, or oil from the drilling operations, mixed with grease, area on the rig floor, around sub structure, mud tanks and engines become very slippery. Poor housekeeping and not following permit to work, makes work area very untidy.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Working on slippery rig floor, trips and falls over other equipment getting injured.	4	3	12
2	Tools after use not kept properly, crew slips as he steps on them.	4	3	12
3	Slips, elevators, subs, crossovers, left lying all around the rig floor and in front of ladders obstructing escape route.	4	4	16
4	Drums, pallets etc left around the landing of Derrickman escape line, cause serious accident, when used in emergency.	4	4	16

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Wash Gun	Operations Procedure.	Personnel Protective Equipment
Daily Check list	Tool Box Talk	Safety Meetings
Rig Inspection Check List		Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Working on slippery rig floor, trips and falls over other equipment getting injured.	4	1	4
2	Tools after use not kept properly, crew slips as he steps on them.	4	1	4
3	Slips, elevators, subs, crossovers, left lying all around the rig floor and in front of ladders obstructing escape route.	4	2	8
4	Drums, pallets etc left around the landing of Derrickman escape line, cause serious accident, when used in emergency.	4	2	8

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

42	Hazard Identification Sheet			
Slips				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Description:
Rig tongs are on the rig floor for making up and breaking out pipe.
Two tongs are put on the toolbox of the tubular, and one of the tong is pulled depending upon whether we want to make or break a connection, and second tong takes the reactive torque. During the operation, both the tongs are subjected to high torsion force depending upon the size and type of connection.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	One person tries to lift the slips out, suffers from back injury.	3	3	9
2	Finger or hands caught and crushed between slip elements.	3	3	9
3	Slip dies do not hold pipe, floor man tries to hammer slip in place, injures himself and/or drops hammer in hole.	3	4	12
4	Slip is not kept properly, falls on the feet of crew, causing injury.	3	4	12
5	Slip dies are hammered into the slot and splinter hits the crew.	3	3	9
6	Slip handle is not properly secured, comes out as it is pulled out, injuring person.	3	3	9
7	Power slip airline left in the normal working area of the crew, causing trip hazard.	3	3	9

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Pre-Job Equipment check list	Hazard Identification Sheets	Personnel Protective Equipment
Inspections as per the inspection and calibration specification.	Operations Procedure.	Safety Meetings
Maintenance as per the schedule.	Tool Box Talk	Supervision
Mark handles with green paints.	Awareness training	

Residual Hazard

1.	One person tries to lift the slips out, suffers from back injury.	3	2	6
2.	Finger or hands caught and crushed between slip elements.	3	2	6
3	Slip is not kept properly, falls on the feet of crew, causing injury.	3	2	6
4	Power slip airline left in the normal working area of the crew, causing trip hazard.	3	2	6

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

43	Hazard Identification Sheet			
Standing /Leaning Equipment				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Long tools and equipments with smaller base are left leaning or standing without properly secured. Such tools or equipments like long subs, stabilizers, reamers, pup joints etc might be heavy, and fall.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	A long and heavy tool is left standing on a soft ground. Tool falls and damages other equipment or crew around.	4	5	20
2	Long tool like sub or stabilizer, is tried to be stabilized by hands, falls and crushes the crew.	4	5	20
3	A standing tool is pushed with leg to lay it down, crushes the feats.	3	5	15
4	Unbalanced heavy load, like kill / choke arm or X-mas tree falls and crushes other equipment.	5	3	15
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Wooden planks for support on wet or soft ground.		Operations Procedure.		Personnel Protective Equipment
		Tool Box Talk		Safety Meetings
		Awareness training		Supervision
Residual Hazard				
1	A long and heavy tool is left standing on a soft ground. Tool falls and damages other equipment or crew around.	4	3	12
2	Long tool like sub or stabilizer, is tried to be stabilized by hands, falls and crushes the crew.	4	3	12
3	A standing tool is pushed with leg to lay it down, crushes the feats.	3	2	6
4	Unbalanced heavy load, like kill / choke arm or X-mas tree falls and crushes other equipment.	5	1	5
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

44	Hazard Identification Sheet			
Wash Gun				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	
Job Definition: Wash Guns use high-pressure pump to make a small but very strong jet spray of water, which is used to clean the mud/oil spillage on the rig floor and for other cleaning purposes.				
Job Hazard				
Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Pointing wash gun at yourself or any other fellow crewmember.	3	4	12
2	Spraying dirt, paint or mud etc towards other person without wearing safety glasses.	3	4	12
3	Person using water gun does not know how to safely operate and start and switch off the pump, injures himself or others.	3	4	12
4	Using low-pressure fittings in wash gun water line.	3	3	9
5	Operator fails to steady himself for the gun blast, falls.	2	4	8
6	Gun left loose, while being switched on, swirls and hits crew.	4	2	8
7	Unauthorized person tries to repair the unit, injures himself.	3	2	6
Proactive Controls				
Equipment Control		Operational Control		Personnel Control
Inspections as per the Schedule		Operations Procedure.		Personnel Protective Equipment
Check wires.		Tool Box Talk		Safety Meetings
		Awareness training		Supervision
Residual Hazard				
1	Pointing wash gun at yourself or any other fellow crewmember.	3	2	6
2	Spraying dirt, paint or mud etc towards other person without wearing safety glasses.	3	2	6
3	Person using water gun does not know how to safely operate and start and switch off the pump, injures himself or others.	3	2	6
4	Using low-pressure fittings in wash gun water line.	3	1	3
5	Operator fails to steady himself for the gun blast, falls.	2	2	4
6	Gun left loose, while being switched on, swirls and hits crew.	4	1	4
7	Unauthorized person tries to repair the unit, injures himself.	3	1	3
Reactive Measures				
1	Give Immediate First Aid.			
2	Obtain assistance from the Rig Medic.			
3	For a serious incident, alert Supervisor for emergency procedures.			
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.			

45	Hazard Identification Sheet			
Waste & Water Pits				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Waste and Water Pits are dug close to the rig, for collection of drilling waste mud, water and cuttings. The water pits are filled with drill water to be used for preparing mud and cleaning.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	No red tapes or barrier placed around pit area, crew falls inside.	4	3	12
2	Driving vehicle very close to the pit, embankment gives way, vehicle along with passengers goes inside the pit.	4	3	12
3	Swimming in waste or water pit, drowns or gets effected by contamination.	4	3	12
4	Oil, Drums, packing, wood, rubbish etc dumped inside the waste pits, causing environmental hazard.	4	3	12
5	Keep wild animals and camels away from the pits or drinking water from it.	4	3	12
6	Overflowing of the pit, causing environmental hazard.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Red Tapes, Barriers	Operations Procedure.	Personnel Protective Equipment
	Tool Box Talk	Safety Meetings
	Awareness Trainings	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	No red tapes or barrier placed around pit area, crew falls inside.	4	1	4
2	Driving vehicle very close to the pit, embankment gives way, vehicle along with passengers goes inside the pit.	4	1	4
3	Swimming in waste or water pit, drowns or gets effected by contamination.	4	1	4
4	Oil, Drums, packing, wood, rubbish etc dumped inside the waste pits, causing environmental hazard.	4	1	4
5	Keep wild animals and camels getting near the pits or drinking water from it.	4	1	4
6	Overflowing of the pit, causing environmental hazard.	4	1	4

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.
5	If camel or wild animal gets inside the pit, try to get them out, inform ROP.

46	Hazard Identification Sheet		
	Welding & Cutting		
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1

Job Definition:
Welding / Cutting is done to join two metals or cut a metal during fabrication and repair of drilling equipment. It is done by arc welding machine or a gas-cutting machine using mixture of oxygen-acetylene gas.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Unprotected exposure to welding arc leading to arc eye'.	2	5	10
2	Inadequately protected welding operation, causing burns to welder or nearby personnel.	2	5	10
3	Slug chip getting into the eye of welder or nearby personnel.	2	5	10
4	Welding or cutting acts as source of ignition, causing fire.	5	3	15
5	Improper storage of gas cylinders.	5	3	15
6	Gas cutting torch backfires, causes explosion.	5	3	15
7	Welding on wet surface, welder or personal gets electric shock.	2	5	10
8	Welding in confined space resulting in suffocation or illness due to inhalation of fumes.	2	5	10

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Flash back arrestors and check valves	Operations & Maintenance Procedures	Personnel Protective Equipment
Inspection of Welding equipments	Tool Box Talk	Safety Meetings
Gas cylinder storage trolleys and designated area	Permit To Work	Supervision
		Permit To work Training

Residual Hazard

1	Unprotected exposure to welding arc leading to arc eye'.	2	3	6
2	Inadequately protected welding operation, causing burns to welder or nearby personnel.	2	3	6
3	Slug chip getting into the eye of welder or nearby personnel.	2	3	6
4	Welding or cutting acts as source of ignition, causing fire.	5	1	5
5	Improper storage of gas cylinders.	5	1	5
6	Gas cutting torch backfires, causes explosion.	5	1	5
7	Welding on wet surface, welder or personal gets electric shock.	2	3	6
8	Welding in confined space resulting in suffocation or illness due to inhalation of fumes.	2	3	6

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

47	Hazard Identification Sheet			
Winches				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Tool Definition:
Winches are located on the rig floor and underneath the sub-structure. They are handling heavy loads in various shapes and sizes, using straps, wire slings and shackles for securing them. They can be pneumatic or hydraulic.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Load being lifted is not properly balanced, falls and damages equipment or injures persons around.	3	4	12
2	Finger or hands caught and crushed between load and sling/shackle.	3	4	12
3	While lifting load, sling snaps, dropping load and injuring crew.	4	4	16
4	Man rides the load-lifting winch.	3	4	12
5	Weight being lifted is more than the capacity of winch and it fails from foundation.	3	3	9
6	Man riding winch used for lifting load.	2	4	8
7	While operating, winch operator tries to pull the line, gets his finger/hand trapped and crushed in wire line loop.	3	4	12
8	Load being lifted is not secured by tag lines, swings and hits person or other equipment, causes injury.	4	4	16
9	Load is sent up the derrick, without sufficient counter weight, line comes out of sheave at crown block, falls on rig floor.	4	2	8
10	Man standing underneath a heavy load, as it is being lifted, something falls and injures him.	4	4	16
11	Man rides man-riding winch without tag line, swings and gets hurts.	3	3	9

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Maintenance as per the schedule.	Tool Box Talk	Safety Meetings
Safety Guards	Daily Equipment Check List.	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Load being lifted is not properly balanced, falls and damages equipment or injures persons around.	3	2	6
2	Finger or hands caught and crushed between load and sling while lifting load.	3	2	6
3	While operating, winch operator tries to pull the line, gets his finger/hand trapped and crushed in wire line loop.	3	2	6
4	Load being lifted is not secured by tag lines, swings and hits person or other equipment, causes injury.	4	1	4
5	Man standing underneath a heavy load, as it is being lifted, something falls and injures him.	4	2	8
6	Man is rides man-riding winch without tag line, swings and gets hurts.	3	1	3

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

48	Hazard Identification Sheet			
	Wire Rope			
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Wire rope is made of steel wires, laid together to provide sufficient strength and flexibility for various uses. It is designed to withstand heavy tensile loads. Drilling Line, tong pull line, winch lines, crane line are the examples.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inspect wire ropes as per the schedules.	4	4	16
2	Kinked or damaged wire rope used.	4	4	16
3	Proper sized sheaves not used, wire jumps out or damages the sheave or wire rope, results in failure and serious accident.	4	4	16
4	Force more than the strength of rope, or sudden force in jerk is applied, breaks the wire and causes accident.	4	4	16
5	Broken wire as it flies off with tool; entangling or cutting what ever comes it way, causing very serious injury.	4	4	16
6	Wire rope held by hand as it moves, broken wire strand pierces hand.	3	5	15
7	Standing on the wire rope or crossing it, when its in tension, wire breaks.	4	4	16
8	Clamping done on wire rope to make loop comes off or correct clamping procedure not followed, loop fails and causing damage and accident.	5	4	20

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspection As Per Schedule/ color coding	Operations Procedure	Personnel Protective Equipment
Correct size U-Clamps	Tool Box Talk	Safety Meetings
Pre-Job Check	Wire rope care and clamping procedure.	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Inspect wire ropes as per the schedules.	4	2	8
2	Kinked or damaged wire rope used.	4	2	8
3	Proper sized sheaves not used, wire jumps out or damages the sheave or wire rope, results in failure and serious accident.	4	2	8
4	Force more than the strength of rope, or sudden force in jerk is applied, breaks the wire and causes accident.	4	2	8
5	Broken wire as it flies off with tool; entangling or cutting what ever comes it way, causing very serious injury.	4	2	8
6	Wire rope held by hand as it moves, broken wire strand pierces hand causing injury.	3	3	9
7	Standing on the wire rope or crossing it, when its in tension, breaks and causes injury.	4	2	8
8	Clamping done on wire rope to make loop comes off or correct clamping procedure not followed, loop fails and causing damage and accident.	5	2	8

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

49	Hazard Identification Sheet			
Working At Height				
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1	

Job Definition:
Any height over and above 3 m from the ground or rotary height can be defined as "Height". Special precautions and protective equipments like safety harness belts and fall arrestors are worn for safe execution of job.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Working at height, without using safety harness belt or fall arrestor (Where required), loses balance, falls.	5	3	15
2	Unsecured tools used, slips from hand, falls on the crew underneath, injuring them.	5	3	15
3	Removed equipment, bolts or nuts fall as they are taken off, fall and injure the crew below.	5	3	15
4	Hard Hat worn without straps; falls off the head of person working at height, injuring the crew below.	3	3	9
5	Escape route not marked while working on height, gets severely injured.	5	3	15
6	Derrick man escape line not installed and tested using dummy load prior to starting drilling on a new location.	4	3	12
7	Jarring is done while man is on mast at height, falls off.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Check Wires, lock pins and chains	Tool Box Talk	Safety Meetings
Fall Arrestor, Safety Harness Belts.	Awareness training	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Working at height, without using safety harness belt or fall arrestor (Where required), loses balance, falls.	5	1	5
2	Unsecured tools used, slips from hand, falls on the crew underneath, injuring them.	5	1	5
3	Removed equipment, bolts or nuts fall as they are taken off, fall and injure the crew below.	5	1	5
4	Hard Hat worn without straps; falls off the head of person working at height, injuring the crew below.	3	1	3
5	Escape route not marked while working on height, gets severely injured.	5	1	5
6	Derrick man escape line not installed and tested using dummy load prior to starting drilling on a new location.	4	1	4
7	Jarring is done while man is on mast at height, falls off.	4	1	4

Reactive Measures

1	Give Immediate First Aid, as described in Chemical Toxic Sheet.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

50	Hazard Identification Sheet			
Working on Derrick				
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Job Definition:
Derrick is the platform on the mast, where Derrickman stands to open or close the elevator and stacks the pipe in the fingers as they are pulled out or ran in the hole. Hand tools and other equipments are kept on the Derrick to help Derrickman in his job.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Hand tools not properly secured in a tool box which is fixed to the derrick railing, tool fell down due to the vibrations in the mast during drilling, jarring or running in and pulling out.	5	3	15
2	Derrick not inspected prior to or after severe operation like jarring, loose equipment, tool etc comes off.	5	3	15
3	Derrickman not using derrick man's harness belt, loses balance and falls	4	3	12
4	Derrickman wearing helmet without straps on, helmet falls on crew below.	4	3	12
5	Escape route through ladder not marked or obstructed by some thing, trips while escaping, getting injured.	4	3	12
6	Derrickman escape line installed or inspected, fails when used in emergency, fails and causes fatal accident.	5	3	15
7	New untrained person sent up without any trained Derrickman.	4	3	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Check Wires, lock pins and chains, railings	Tool Box Talk	Safety Meetings
Harness Belt, Escape line	Awareness training	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Hand tools not properly secured in a tool box which is fixed to the derrick railing, tool fell down due to the vibrations in the mast during drilling, jarring or running in and pulling out.	5	1	5
2	Derrick not inspected prior to or after severe operation like jarring, loose equipment, tool etc comes off.	5	1	5
3	Derrickman not using derrick man's harness belt, loses balance and falls	4	1	4
4	Derrickman wearing helmet without straps on, helmet falls and injures crew below.	4	1	4
5	Escape route through ladder not marked or obstructed by some thing, trips while escaping, getting injured.	4	1	4
6	Derrickman escape line installed or inspected, fails when used in emergency, fails and causes fatal accident.	5	1	5
7	New untrained person sent up without any trained Derrickman, injures himself.	4	1	4

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

51	Hazard Identification Sheet			
	Working On Rig Floor			
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Tool Definition:
Rig Floor is the place from where drilling operation is controlled. Most of the equipments work simultaneously to execute the job, and each generating their own individual hazards and collective hazards. As many people work at the same time, supervising, coordinating and executing the job, some times too many people at the same time also becomes a hazard in itself.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Poor House keeping, tripping and falling.	3	5	15
2	Continuous sound of Drawworks and Rotary during drilling and tripping.	3	2	6
3	Floor Plates and covers removed, without replacing.	4	4	16
4	Escape routes and ladders blocked by equipments by tools and equipments.	3	4	12
5	Too many stands racked in, no space to move or work.	3	4	12
6	Unwanted persons walking around rig floor, when some risky operation is going on.	3	4	12
7	V-door left open without chain or guard.	3	4	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Pre Job Equipment Check list	Operations Procedure.	Personnel Protective Equipment
Inspections as per the inspection and calibration specification.	Safe Track	Safety Meetings
Maintenance as per the schedule.	Tool Box Talk	Supervision

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Poor House keeping, tripping and falling.	3	3	9
2	Continuous sound of Drawworks and Rotary during drilling and tripping.	3	2	6
3	Floor Plates and covers removed, without replacing.	4	2	8
4	Escape routes and ladders blocked by equipments by tools and equipments.	3	2	6
5	Too many stands racked in, no space to move or work.	3	2	6
6	Unwanted persons walking around rig floor, when some risky operation is going on.	3	2	6
7	V-door left open without chain or guard.	3	2	6

Reactive Measures

1	Give Immediate First Aid
2	Obtain assistance from the Rig Medic.
3	For a serious accident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

52	Hazard Identification Sheet			
Working Under Substructure				
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Job Definition:
BOP and Cellar area is the under substructure area. Work in this area can be for nipple up or down BOP, Bell Nipple, Flow Line, cleaning cellar, or opening or closing of annulus valves etc.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Failure of lifting point or lifting gear, causes serious accident.	5	3	15
2	Lot of mud, grease and oil in area, crew slips while working.	4	4	16
3	Cellar pit full of mud and water, crew slips and falls inside.	4	4	16
4	Ladder not properly placed, to reach height, slips and falls.	4	4	16
5	Tools dropped on BOP control hydraulic hoses, damage hose, causing accident.	3	4	12
6	Tries to run in the area, trips over hose lying on surface.	4	3	12
7	Gas cutting or welding without proper precautions, permit, causing fire.	5	4	20

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Inspections as per the Schedule	Operations Procedure.	Personnel Protective Equipment
Wash Gun	Tool Box Talk	Safety Meetings
Harness Belt, Escape line, Fall Arrestor	Awareness training	Supervision
Cellar Pump	Permit To Work	Permit To Work Training

Residual Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Failure of lifting point or lifting gear, causes serious accident.	5	1	5
2	Lot of mud, grease and oil in area, crew slips while working.	4	2	8
3	Cellar pit full of mud and water, crew slips and falls inside.	4	2	8
4	Ladder not properly placed, to reach height, slips and falls.	4	2	8
5	Tools dropped on BOP control hydraulic hoses, damage hose, causing accident.	3	2	6
6	Tries to run in the area, trips over hose lying on surface.	4	2	8
7	Gas cutting or welding without proper precautions, permit, causing fire.	5	2	10

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.

53	Hazard Identification Sheet			
Wrench & Spanners				
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Job Definition:
Wrench and spanners are hand tools used for tightening and loosening bolts and nuts. They come in the size of the nut or bolt heads graduated in millimeter and inches. Every spanner is suitable for a particular size of the nut or bolt.

Job Hazard

Sr. No	Hazard	Severity (S)	Probability (P)	Risk Factor (R=S x P)
1	Correct size spanner not used, slips and causes injury to fingers.	3	4	12
2	Damaged or broken spanner is used, slips causing injury.	3	4	12
3	Wrong method is applied to push or pull on the spanner; spanner slips; crushes finger.	3	4	12
4	Individual tries to crack the joint by jumping over the spanner, spanner slips or comes off, individual falls and gets injured.	3	4	12
5	Trying to hammer on spanner other than hammer wrench, hammer bounces off or spanner breaks, injuring crew.	3	4	12
6	Excessive force is applied on the spanner, spanner breaks causing injury.	3	4	12
7	Do not use winch or crane over spanners or wrenches to provide excessive force, tool might slip or sudden cracking of nut might cause spanner to fly off; causing injury.	3	4	12

Proactive Controls

Equipment Control	Operational Control	Personnel Control
Daily Tool Check List.	Operations Procedure	Personnel Protective Equipment
Pre-job tool check.	Tool Box Talk	Safety Meetings
Solvents to clean rusted threads.	Safety Campaigns	Supervision

Residual Hazard

1	Correct size spanner not used, slips and causes injury to fingers.	3	2	6
2	Damaged or broken spanner is used, slips causing injury.	3	2	6
3	Wrong method is applied to push or pull on the spanner; spanner slips; crushes finger.	3	2	6
4	Individual tries to crack the joint by jumping over the spanner, spanner slips or comes off, individual falls and gets injured.	3	2	6
5	Trying to hammer on spanner other than hammer wrench, hammer bounces off or spanner breaks, injuring crew.	3	2	6
6	Excessive force is applied on the spanner, spanner breaks causing injury.	3	2	6
7	Do not use winch or crane over spanners or wrenches to provide excessive force, tool might slip or sudden cracking of nut might cause spanner to fly off; causing injury.	3	2	6

Reactive Measures

1	Give Immediate First Aid.
2	Obtain assistance from the Rig Medic.
3	For a serious incident, alert Supervisor for emergency procedures.
4	Record the incident, issue notification and carry out investigation, discuss learning points in safety meeting.



Tool Box Talk

List Planned Activities for Next 12 Hrs:

- 1.
- 2.
- 3.
- 4.
- 5.

Do planned Activities Involve

1. Non Routine Work
2. Work At Height
3. Work In Confined Spaces
4. Pressure Testing
5. Concurrent Operations
6. Driving

☐	Yes
☐	Yes
☐	Yes
☐	Yes
☐	Yes
☐	Yes

☐	No
☐	No
☐	No
☐	No
☐	No
☐	No

If “Yes” to any of 1 to 6, then

- A. Is Permit To Work Required
- B. Is There A Hazard ID Covering Activities
- C. Is Planned Work Covered By Procedure

☐	Yes
☐	Yes
☐	Yes

☐	No
☐	No
☐	No

If B. and C. is No, define controls and supervision requirements:

Signature of the Supervisor:

Signature of the Crew:

Appendix A: 2	Hazard Identification Sheet Step Out Form		
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1
Rig No: _____ Location: _____ Date: _____			
Job Definition:			
Step Out Requested From (Date):			
Step Out Valid Till (Date):			
Short Description Of Step Out Requested: _____ _____ _____ _____			
Reasons For The Step Out Requested: _____ _____ _____ _____ _____			
Alternate Controls Suggested: _____ _____ _____ _____			
Name Of The Requester: Signature: Date:			
Signature Of Forwarding Drilling Superintendent Date:			
Signature Of The Approver Date:			

	Hazard Identification & Effects Management-Introduction		
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1.0 TECHNORIG HSE Policy

TECHNORIG is seriously committed to Health Safety and Environment excellence. We recognize that good HSE performance is incisive to our business success and that health, safety and environment issues are equally as important as any other business activity. To demonstrate this commitment, the TECHNORIG empowers all employees

“Not to start work unless they believe it is safe to do so; and to stop work if they believe it has become unsafe”.

1.1 Scope:
To identify and quantify the risk generated during the operation of Drilling Rig.

1.2 Purpose

The purpose of the Hazard Identification Sheet is to identify and quantify the risk generated in the operations being carried out on Drilling Rigs and to state the proactive controls in place to reduce the effect of these hazards and control the damage, an incident occurs. The quantification of the hazard is done prior to the proactive controls and subsequently if proactive controls are in place and adhered to.

Where the hazard is not covered by the Hazard Identification Sheet, a Mini Risk Assessment (Tool Box Talk) exercise is to conducted using the Tool Box Talk – Form (Appendix-1), risks and proactive controls are to be identified and put in place for the safe execution of the job. Hazard Identification Sheets also state the reactive measures to be carried out to mitigate the effects generated due to occurring incident.

1.3 Application

This document applies to all the rigs built or operating by TECHNORIG, in UAE and Overseas and is part of **Rig Specific Drilling Operations Manual**

1.4 Limitations

- This document is applicable to all operations carried out within the premises of the rig location and workshop location of TECHNORIG Drilling Rigs.
- This document classifies the jobs being done on Drilling Rigs as routine-low risk, routine-medium risk and non-routine-high risk jobs depending upon the risk analysis.
- Deviations from the stated controls are to be accepted only after the approval of General Manager TECHNORIG after being forwarded by concerned Rig manager. All such request is to be forwarded from the rig in the attached “Step Out Form” attached as Appendix-2.

	Hazard Identification & Effects Management		
Rev: 0	Issued by: TECHNORIG	Approved:	Page 2/3
2.0 Definitions Definitions of the words and phrases as they are used in this manual. 2.1 Consequence The potential harm that the release of a job hazard can have is termed as Consequence. Consequence of a hazard released can be measured quantitatively. 2.2 First Aid A reactive measure carried out to minimise the effect of the hazard being released, where a trained person on the rig, provides the first medical attention to the person affected by the release of the hazard. 2.3 Inspection And Calibration Manual Inspection and Calibration manual defines the inspection and calibration schedule for safety critical and down hole tools (Document No: 1). 2.4 Job Definition Defines the tool or operation for which the risk analysis is done. 2.5 Job Hazard The potential to cause harm, including ill health and injury, damage to property, products or the environment, production losses or increased liabilities. 2.6 Mini Risk Assessment (Tool Box Talk) A mini risk assessment exercise carried out by the crew using the tool box talk form, to identify, if the operation to be carried out is properly defined with risk analysis and controls, if not, then an onsite risk analysis of the operation is done, controls noted down on the tool box form and put in place. It is a proactive control. 2.7 Operations Procedures Manual Procedures Manual describing the various operations carried out on TECHNORIG Drilling Rigs, Operations Procedure refers to Hazard Identification Sheets. 2.8 Probability The measure of the chance that a hazard can be released during the execution of a job is Probability. Probability of a hazard being released can be measured quantitatively. 2.9 Proactive Control The proactive controls are the barriers put in place to reduce the risk of task to be carried			

	Hazard Identification & Effects Management		
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2.10 PPE (Personnel Protective Equipment) Personal Protective Equipment is the last control to protect a person from the consequences of the hazard, if released. 2.11 Permit To Work A proactive control system put in place to provide the lock out of the equipment, and fixing accountability for an operation which falls under medium or high risk category as per the matrix. 2.12 Reactive Measures Reactive Measures are the corrective measures undertaken to mitigate the effect of the hazard if it is released, in spite of the proactive controls in place. 2.13 Risk A term that combines the chance that a specified undesirable outcome will occur and the consequences of that outcome. 2.14 Risk Analysis Quantitative evaluation of the risk imposed by a job, whether those risks are from human, hardware or software failure, and environmental failure or from combinations of such failures/events. 2.15 Risk Analysis Matrix The matrix portraying risk as the product of probability and consequences, used as the basis for qualitative risk analysis. Consideration for the assessment of probability is shown on horizontal axis, and severity is on vertical axis. Plotting the intersection of the two axes provides the estimate of the risk. 2.16 Relevant Training It's a broad term used to define the trainings required to prepare the persons to understand the risk involved and the corrective measures to be taken to control the risk. It includes trainings like Fire Fighting, Permit To Work (Holder), and etc. 2.17 Safety Meeting A meeting of the crew and supervisors at the rig, where the learning points coming out of Safe Track, various safety alerts and workshops are discussed, and lessons drawn and action points are noted, which are closed out as soon as possible and action point closed out. A record of the topics discussed and action points (if any) should be kept and maintained. 2.18 Tool Box Talk A proactive control, in which the supervisor discusses the job to be done, with his crew and all collective do the risk analysis and put control in place to prevent the release of hazard.			



Operating Manual and Rig Details Specification Training Rig

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d. Reserve for over pull 20 m Tons

1.5. Environmental conditions.

1.5.1 On shore climate

Suitable for typical Arabian Gulf area

Maximum operating temperature 50 °C , 90% relative humidity.

1.5.1 Wind conditions

Unless specified by the local authorities, the Training rig shall be designed for :

- | | | |
|----|---|----------------|
| 1) | Operating up to a maximum wind speed of | 0 to 41 knots, |
| 2) | Waiting on weather wind speed | 41 to 70 knots |
| 3) | Survival conditions wind speed of | 70 to 93 knots |

The considered allowable stress is specified on API 4F Chapter 6.1.2 & 6.3.3a - Chapter 7.1.2 and Chapter 7.2.

1.6. Life Loads

The life loads of the TRAINING RIG are as follows:

- | | | | |
|----|--------------------------------|-------------------------|--------|
| 1. | Hook load | 50 | m tons |
| 2. | Setback load | 30 | m tons |
| 3. | Combined Hook load and setback | 90 | m tons |
| 4. | Pipe rack load | 30 | m tons |
| 5. | Mud (active, mix, reserve) | 23 m3 - 1.0 mud density | |
| 6. | Trip tank | 4 m3-1 mud density | |

2. RULES AND STANDARD

2.1 General

The training rig has been designed and will be built to meet international standard of reliability ease of maintenance, quality, durability safety, comfort and environmental protection applicable to drilling unit.

2.2 List of applied specifications, standards and codes

2.2.1 API Specifications

Spec API 4F Drilling and well servicing structure

Spec API 4G Maintenance and use of drilling structures

Spec API 7K Drilling equipment design and testing



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Spec API 7L Inspection and maintenance of drilling equipment
Spec API 8A Drilling and production hoisting equipment
Spec API 8B Inspection & maintenance of hoisting equipment
Spec API 9A Wire rope
Spec API 9B Evaluation rotary drilling line
Spec API Q1 Application & use of wire rope

2.3 Area classifications

The training rig is not subject to classified area (all electrical equipment will be watertight)

2.4 Certification

All major drilling equipment shall have a manufacture certificate

3. MAIN RIG EQUIPEMENT

3.1 Drawworks & related equipment

1. One (1) 145 hp range electrically driven by AC motor and gear box.
2. One (1) drilling line 1" – 6x19s IWRC EIPS (Drawworks drum not grooved)
3. One (1) hydraulic disk brake
4. One (1) regeneration electrical break
5. One (1) crown-o-matic
6. One (1) anti collision system (PLC controlled)
7. One (1) Drawworks console (integrated type),
8. One (1) Drawworks and brake cooling system
9. One (1) Combined travelling 900 kn (3 sheaves 26" diameter 1" grooved) and hook block with ability to turn and lock it
10. One (1) Air operated pipe spinner suitable for 3 ½ and 5" drill pipes.
11. One (1) Lot of LP and hp pipes valves and fittings including hoses (hydraulic, air)
12. One (1) lot of electrical cables (power and control) and watertight junction boxes
13. One (1) Drawworks drip pan

Note: Sand line and break in break out cathead are not required.

3.2 Mast and related equipment

- 1 One (1) Front open K type mast (with no guide line) rises up by Drawworks:
 - Static hook load 50 tons
 - Mast clearance min 29.5 meter (two stand Drill pipe)
 - Drilling floor level 4,5 m
 - Racking board 800 m of: Drill pipes 3 ½" and 5" and Drill collar- provided with fingers secured by safety cable-Air winch 5 kN capacity



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- Two (2) Pad eyes and sheaves compatible with drill floor winches and man rider winch.
- Wooden block to block bumper with net at water table level
- Ladders to access to racking board and crown block provided with antifall device
- 2. One (1) three (3) 26" grooved 1" sheaves crown block 50 tons capacity with one fast line sheave, provided with rope guard.
- 3. One (1) single mud standpipe 4" Nominal diameter, 5,000 psi working pressure.
- Two (2) 4" x 5,000 psi gate valve working pressure,
- Two (2) 2" x 5,000 psi gate working pressure with Fig 1502 hammer union connection for pressure sensors
- Two (2) 2" x 5,000 psi gate working pressure with Fig 1502 hammer union connection for casing fill up and kill line.
- One (1) 2" x 5,000 psi bleeds of valve.
- 4. Two (2) counter weights for manual tong torque,
- 5. One (1) dead line anchor grooved for 1" drilling line with load cell
- 6. One (1) lot of lighting fixture (Watertight type)
- 7. One (1) air craft anti collision light
- 8. One (1) Lot of LP and hp pipes valves and fittings including hoses (hydraulic, air)
- 9. One (1) lot of electrical cables and watertight junction boxes

3.3 Rotary equipment

1. One (1) 17 ½ " 50 mt capacity rotary table driven by AC motor. Provided with shaft, coupling. (110 kw-120 rpm-4,000 N-m)
2. One (1) master bushing for 17 ½" rotary table.
3. One (1) set of bowls
4. One (1) rotary Kelly bushing for 3 ½ "square Kelly
5. One (1) Lot of LP and hp pipes valves and fittings including hoses (hydraulic, air)
6. One (1) lot of electrical cables and watertight junction boxes
7. One (1) lot of Hp
8. One (1) rotary drip pan

3.4 Drill floor equipment

1. One (1) set of mast pedestal (adjustable) mast pedestal may be set up on the lower substructure level
2. One (1) 30 tons capacity setback
3. One (1) stand pipe 4" nominal diameter
4. One (1) 2 tons air winches
5. One (1) man rider 150kg air winch.
6. Two (2) adjustable back posts for break in break out tongs
7. Two (2) V door ramp back post,
8. One (1) mouse hole,
9. Two (2) hydraulic catheads mounted on rotating back post for break in break out



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10. One (1) cable reel electrically operated,
11. Three (3) stairs
12. One (1) lot lighting fixtures
13. One (1) lot of HP, LP air piping valves and fittings
14. One (1) lot of electrical cable power control lighting.

3.5 Drilling instrumentation

The drilling instrumentation combines conventional instrumentation (analogical type) installed on drill floor and advanced instrumentation with digital display on touch screen, integrated to one air conditioned driller room.

The following display has to be considered.

1. One (1) Total weight & weight on bit indicator,
2. One (1) Stand pipe pressure gauge,
3. One (1) Annulus pressure gauge
4. One (1) Tong torque indicator,
5. One (1) Mud flow return,
6. One (1) Mud volume tank
7. One (1) Rotary speed,
8. One (1) Rotary torque,
9. One (1) Trip tank volume indicators,
10. One (1) Pump stroke counter
11. One (1) Remote push button for trip tank pump and supercharging pumps
12. One (1) set on sensor to comply with the above mentioned
13. One (1) Lot of Hp hoses & piping,
14. One (1) Lot of electrical cable

3.6 Blow-out Preventer (Flanged connection)

1. One (1) annular preventer 13 5/8" 5,000 psi,
2. One (1) Single ram 13 5/8" 5,000 psi equipped with:
(1) set of ram 3 1/3" DP
3. One (1) drilling spool (mud cross)
4. One (1) manual and one (1) remote operated choke valve (2 1/16" 5,000 psi),
5. One (1) 2" 1/16 5,000 psi non return kill line valve
6. One (1) 2 1/16" 5,000 psi manual kill valves.
7. One (1) 12" Bell nipple with 10" flow line prepared for installation of flow detector.
8. One (1) lot of hydraulic hoses and fittings.

3.7 Accumulator Unit and Control Panel

1. One (1) independent accumulator unit with local manifold clearly showing open and close position for BOP and remote controlled valves. The regulator valves will not "fail open" causing complete lost operating pressure



Residual pressure should not be less than 1,000 psi. The unit shall have pressure warning alarm, fluid level indicator or fluid level warning device

2. One (1) rig floor remote operated control panel
3. One (1) Lot of Hp hoses & piping,
4. One (1) Lot of electrical cable

4. RIG CONSTRUCTION

4.1. General

The safety philosophy which governs the general safety design of the training rig is to prevent accidents on the training rig, to give the means to prevent extension to campus to any incident occurring on the training rig and to facilitate the escape of the personnel in case of a major incident on the training rig.

4.2. Substructure

The substructure box type shall be designed to support the drill floor and all equipment attached to drill floor.

The clearance between the substructure and concrete slab shall be not less than 3.5 m and the drill floor level shall be 4.5 meter.

The substructure shall be designed in such way that the BOP is easily accessible for installation and maintenance. A space of a minimum of 700 mm shall be reserved around equipment requiring maintenance access.

Two (2) pad eyes for future installation of a BOP hoists. The capacity of the pad eye is to be two (2) time the weight of the complete BOP.

4.3. Drill floor

The drill floor is covered with plated steel min 3 mm thick.

A working platform to accommodate a slick line unit shall be considered (optional).

There are two (2) lateral stairs to the drill floor. These stairs could be combined with the classroom stairs. One of the stairs shall give access to mud surface.

The general layout of the drill floor is engineered to give full sight to the driller and the classroom during drilling operations.

The driller's cabin shall be fully air-conditioned.

The setback flush with the drill floor shall be fitted with one layer of 3" hardwood timber.

Visitor passage way shall be considered.

4.4. Pipe rack and catwalk

Standard pipe racks catwalks are located in either sides of the catwalk.



Operating Manual and Rig Details Specification Training Rig

The total capacity of the pipe rack shall not be less than 80 joints on one layer. They shall be provided with means to prevent DP and DC to fall from pipe rack.

The cat walk shall be designed to guide DP and DC during lifting to the drill floor.

4.5. HVAC

The HVAC units are related to the classroom, the drilling shelter and the electrical room. They shall be sized in order to comply with the weather criteria of the Arabian Gulf area.

4.6. Outfitting

4.6.1. Handrail:

Handrails, made of pipe, are installed around the all openings on the deck and stairs and on the training rig substructure, drill floor and mud module. Additional handrails are installed when required for personnel safety.

4.6.2. Escape ways

Escape shall be provided on each opposite side on each module:

- Substructure
- Drill floor
- Class room
- Mud module

4.6.3. Walkways and Access Platforms

Suitable walkways and access stairs shall be provided around drill floor, the substructure, the class room and to access to equipment

Walkways and working platforms use grating plates when practicable. All equipment and valves are accessible by means of walkways, ladders or extended rod for easy operation of the training rig

4.7. Classroom

General

The classroom is design to accommodate twenty three (23) trainees having clear access to drill floor. At least one large window gives full access to drill floor.

The classroom hall is provided with:

- Air conditioning
- Chairs and desks
- Video projection screen

Prefabricated class room specification

- External wall. (Sample to be proposed to client)



Operating Manual and Rig Details Specification Training Rig

The external walls shall be in corrugated plates, at least 2 mm. thick, watertight welded each other, vertically, the plates, cut to modular size, shall be rimmed, edged and butt seam welded.

On the upper part, the plates shall be watertight welded to the steel drawn tubes installed along the perimeter of the roof.

Stanchions made by 2 drawn tubes welded each other or by boxes in press formed plates, shall be installed in the four corners, resting on the basement.

These stanchions shall be butt welded to fore cast steel upper corner blocks (container type), in accordance with ISO 116 1.

Intermediate stanchions made by drawn tubes, butt welded to the upper and lower structures shall be installed in correspondence of openings for doors and windows, entries, ventilation grids, etc.. They shall perform the function of counter frames, or reinforcement frames to the openings.

Intermediate stanchions made by drawn tubes shall be installed for cabins long more than 10 m. To the upper end of these stanchions blocks complying with ISO 1161, and sized for the lifting operations of the cabin, shall be welded.

• Roofing

Roofing shall be made by a frame in steel drawn tubes installed all along the perimeter and butt welded to the corner fittings.

The covering of this structure shall be by corrugated plate, 2 mm, thick.

Longitudinally, along the centre line, a drawn tube shall be installed, at such level to originate a 50 mm slope towards the long sides of the roof to both the pitches.

• Doors and windows

Doors

The doors shall be "slide door", in accordance with their dimensions.

Frame

When indicated the frame shall comply with the safe requirements relevant to its fire, resistance. It shall be as follows:

- in press formed plates, properly shaped.
- in special section steel solid drawn tube.

Anodised aluminium frames shall be used in normal conditions where the resistance to fire is not requested.

The outer face shall be in steel plates, welded to the door frame.

Fittings

The wings shall be equipped with:

- a) no, 3 strong AISI 316 1 stainless steel hinges
- b) External closure system with container type shackle, for doors with several wings
- c) External handle * safety lock * three points internal no panic bars.

Windows

If not otherwise indicated, the following types of windows shall be utilized:



Operating Manual and Rig Details Specification Training Rig

Fixed type with tempered antireflection crystal glasses for cabins for which the fire resistance is required. Vasistas type with tempered antireflection crystal glasses for cabins for which the fire resistance is not required,

- Floor
- a) Fixed steel plates grade A36, 3 mm thick. The plates shall be welded each other and the weld seams shall be ground to edge,

- Internal panelling (sample to be proposed to client)
The internal panelling shall be provided for the specified items, as walls, ceilings, doors, multiple wings doors. If not otherwise indicated, the materials shall be utilised: laminated plastic

- Thermal insulation
To obtain the thermal insulation, the external walls, roofing, basement and doors, the internal partitioning, shall be insulated, according to the following method:

Fire resistant insulation

Wool insulation shall be used, with a thickness in accordance with the specified resistance classification and with the normative references listed in the Data Sheet.

The manufacturer shall specify the general characteristics of the standard panel Construction details of the standard panel Evidence of possession of the fire resistance type approval certificate, released by an official recognized Body.

- Accessories and auxiliaries

a) Access stairway

If necessary, they shall be made by:

galvanised steel bars structure and galvanised steel grating steps with anchor ring to rule galvanised tubular steel handrail (if necessary).

The stairs shall be removable with the support brackets bolted to the cabin's structure,

b) Walkway

The walkways shall consist of:

- galvanised steel support brackets
- galvanised steel grating steps
- Galvanised tubular steel handrail

c) Sheds

The sheds shall be in painted steel plates and bars, with the support brackets bolted to the cabin's structure.

d) Supports



All the steel fixed items for the support of equipment or components to be installed outside the cabin shall be drilled and welded to the structure before its painting.

e) Electric cables entries

The entries of the electric cables shall be in accordance with the normative references for the specific plants and relevant to fire resistance.

The closure systems, removable plates and/or manholes on the false bottom, shall be in removable execution to simplify their assembly and any future intervention.

If not otherwise indicated of the following alternative shall be utilised for the insertion and the locking of the electric cables:

- sleeves welded to the plate, with cable glands screwed to the external side

The insertion entries, as the pipes ends, shall be provided complete with watertight plugs, to be removed before the insertion of cables.

f) False ceiling

The classroom false ceiling shall be made by painted in advance panels, staves and/or continuous elements with a 0.3 mm minimum thickness, using the following materials:

- galvanised steel
- stainless steel * aluminium & laminated plastic

g) • Earthing system

Suitable earth connection bars shall be always installed on each side of the basement.

4.8. Protective treatment

The used materials, the preparation of the surfaces and the application procedures shall comply with the following:

- a) Blast all structures to near white metal (SA 2 ½)

- b) Apply three coat:

Tight coat Zinc rich primer (2 mils D.F.T)

Epoxy intermediate coat (3 mils D.F.T)D.F.T)

Urethane top coat (2 mils D.F.T) in Client's Color.

4.9. Piping

All pipe used on the training rig shall comply with the pipe data sheet herewith attached. On all HP mud piping (including kill & choke line) no threaded connection is allowed.

4.10. Electrical

4.1.1 General



The main cables are dimensioned according to the local regulation and or the IEEE recommended practice whatever is the more restrictive:

- To carry the load current (maximum voltage drop 4%)
- For at least 60° C
- To fitful short circuit protection

However a particular attention shall be paid to the cables feeding the equipment driven by Frequency voltage converter (FVD).

4.1.2 VFD Power cables

1. The voltage rated for the motor cable should be minimum 1.0 KV as a general rule,
2. Symmetrical shielded motor cable must be used. (Four conductors system is allowed for main cabling, but shielded symmetrical cable is recommended. To operate as a protective conductor the shield conductivity must be at least 50% of the conductivity of the phase lead.
3. The motor cable and its PE pigtail should be kept as short as possible in order to reduce electromagnetic emission as well as capacitive current.

4.1.3 VFD Control cable

1. All control cables must be shielded. As a general rules, the control signal cable shield be earthed directly the FVD module. The other end of the shield should be left unconnected or earthed indirectly via nanofarad high frequency and high voltage capacitor. The screen can be also earthed directly at both ends if they are in the same earth line with no significant voltage drop between the end points.
 2. Twisted the signal wire with its return wire reduces disturbances caused by inductive coupling. Pair should be twisted as close to terminal as possible
 3. A double shielded twisted par cable must be used for analogue signal and it is recommended for the pulse encoder signal.
- Employ one individually shielded pair for each signal. Do not use common return for different antilog signals
- A double shielded cable is the best alternative for low voltage digital signal, but single shielded twisted multipair cable is also usable.

4.1.4 Cable routing

1. The VFD motor cable should be installed away from other cables routes. Motor cables of several frequency converters can be run in parallel installed next to each other.
2. It is recommended that mains cables and be installed on separate trays (minimum distance 500 mm). Long parallel runs of motor cable with other cables should be avoided in order to decrease electromagnetic interference caused by rapid changes in frequency converter output voltage.



3. Where control cable must cross power cables make sure they are arranged at an angle as near to 90 degrees as possible. Extra cables should not be run through the VFD module.
4. The analogue signal and digital signal should be run in separate screened cables.
5. Relay controlled signals, providing their voltage neither does not exceed 48 Volts can be run in the same cables as digital inputs signal. It is recommended that the relay controlled signals be runs as twisted pairs.
6. Cable trays shall have good electrical bonding to each other and to earthing electrodes.

5. EQUIPMENT SPECIFICATIONS.

5.1. Equipment list

The equipment list and specification are defined in paragraph 3 for the drilling equipment and paragraph 6 for the system

.

5.2. Quality and inspection level

The equipment selected are provided by internationally recognized drilling equipment manufacturer (when applicable), or by internationally recognized equipment manufacturer.

The TRAINING RIG will be rigged up into the campus and each system will be tested and accepted by inspection company approved by CLIENT), before delivery.

The main equipments of the TRAINING RIG are in conformity with the following API specifications:

- Mast structure design & inspection: API 4F.
- Tubular goods: API 5 series.
- Drilling equipment design: API 7K.
- Drilling equipment inspection & testing: API 7L.
- Hoisting tools design & testing: API 8A and API 8C.
- Hoisting tools inspection & maintenance: API 8B.
-

5.3. Final technical documentation

The final technical documentation will includes the following references.

- Name of the supplier,
- Name of the company
- Title of the document

And will consist of:

- Design and installation instruction,
- Operation instruction
- Maintenance instruction

The description and drawings can be contained in catalogues and document of the Supplier, as long as they satisfy the following conditions:

They contain all data and information required in their final form

They are relevant to the type supplied and the material included in the supply are clearly identified among those document



5.4 API Specifications

When applicable the equipment is constructed as per the API recommended practices and standards.

6. SYSTEMS

6.1. Electrical networks (to be supplied by CLIENT)

6.1.1. Main Feeder Transformer

The Training rig will be powered by the city electrical network 11,000 Volts 50 cycles through a transformer 11,000 / 400-440 volts.

The Training Rig would require 1,000 KVA net supply (as per the manufacture and ABB) to cope with the full combined nominal power of the Rig equipment.

The use variation frequency drives (VFD) will generate harmonic contents due to the fast switching inside the AC drive. If we consider a VFD rig power demand of 300 kva feed by a single winding transformer of 400 kva (Ucc 5%), we could estimate the harmonic content to 30 % current and 8% voltage. These values exceed the IEEE 519 standard. Two solutions could be considered to reduce the harmonic contents:

1. Use a larger transformer (1000 kva) to feed the rig,,
2. Verify with the local electrical authority board if they consider the campus as a single user and verify if the harmonic content could be accepted.

If the two alternatives are not accepted by the local electrical authority board two other alternatives have to consider:

1. The use of multiple winding transformer (12 pulses harmonic wave form shall be considered)
2. Installation of passive or alternative filters.

6.1.2 Neutral

On standard drilling rig powered by diesel engine generator, the neutral is grounded by high impedance. This feature permits to have ground fault detection on first ground defect with audible alarm and a tripping on second defect.

The manufacturer and CLIENT shall verify with local electrical authority board if high ground neutral is acceptable. If not the neutral will be grounded and a particular attention shall be paid on the Drawworks braking system (false safe calipers).

6.1.3 .Main AC power

The network is based on high ground

1. One (1) insulator switch
2. One (1) main bus bar braced for lcc (according to solution adopted to 6.1.1)
3. Metering module (Voltage, amps and KVA)
4. One (1) ground detection system with visible and audible alarm.
5. Two (2) breakers to feed the two (2) VFD modules
6. One (1) breaker to feed the Motor control centre (MCC)
7. One (1) breaker to feed the lighting transformer (primary)



8. One (1) 20 kva lighting transformer primary (400/400) Delta/eye

6.1.4 Main MCC

The main MCC will feed at least the following equipment:

- Air dryer
- Air compressor
- General Service Hydraulic unit
- BOP control hydraulic unit
- Air conditioning units
- Submersible pump
- Supercharging pump
- Trip tank pump
- HP washes down pump.
- Spare (2)

6.1.5 VFD section

The proprietary variation frequency drives consist of:

1. One (1) VFD module 400 Volts 50 cycles 160 Kw assigned to Drawworks, with regenerative break 2 x 200 kw air cooled, and anti collision PLC software.
2. One (1) VFD module 400 Volts 50 cycles 160 Kw 400 assigned to rotary table with reversing speed.
3. Interface with ergonomic driller's console chairs equipped with liquid crystal display touch screen.(SIMENS MP370) SIMENS control system (hard and soft) S7 300 series, and SIMENS Protool and WinCC software.
4. Emergency switches.

6.1.6. Lighting network

1. The lighting network of the TRAINING RIG is powered by the normal lighting transformer 220 volts 20 Kva.
2. One third of the lighting fixture will be provided with self contained dry battery sets to assume the safety exit of the drill floor and training room in case of main power failure.
3. Four (2) 3 phases receptacle with switches and two (2) phase receptacle shall be installed around the rig
4. Exit fixtures self-contained dry battery sets type will be provided when required.
5. Level of Illumination

Lighting (Lux)	Mini	Mean	Maxi
Offices	200	300	500
Control room	200	300	500
Machinery	150	200	300
Passageways	50	100	150

Open spaces	300	500
-------------	-----	-----

Note: The lighting illumination above mentioned could not be guarantee at all levels, but they shall be maintained as close as possible to these values to avoid shading zones.

6.1.7 Grounding networks

All metal skids, motors, electrical equipment mast structures, class room structure, mud surface shall be individually bounded on rig ground loop connected to VFD ground connecting point.

6.2. General Service Hydraulic system networks

One central hydraulic unit will be installed to meet power requirement (Drill floor winches, Drawworks, rotary table, power tong. and in general all equipment hydraulically drove and shall include:

1. One (1) central hydraulic unit with oil reserve and:
 - Tool pump
 - Brake pump
 - Circulating pump
2. One (1) hydraulic header loop with at least two free distribution points on drill floor and one (1) on substructure.
3. One (1) lot of pipes valves, hoses and fittings.

6.3. Air system networks

The rig will feed from the air compressor (Rig requirement is deemed to be 194CFM at 120 PSI).

The rig air system shall include at least:

1. One (1) air compressor 200 CFM at 120 psi
2. Two (2) air receiver to comply with the rig air demand
3. One (1) air header around the drill floor with at least two free distribution points on drill floor and one (1) on substructure.
4. One (1) lot of pipes, valves, and fittings. All air system to be steel piping.

6.4. Fire fighting network

The rig will feed from the campus air fire fighting system networks. The rig fire fighting system shall include at least:

1. One (1) fire circuit header (provided by CLIENT)
2. Three (3) reels with fire hose (plain and fog adjustable nozzle). Fire hose length and location of fire hydrant shall permit to fight any point of the rig by two fire nozzle)



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3. ten (10) 10 kg fire extinguishers
4. Two (2) aids kits.

6.5. Wash down system

Hp washes down system capacity as use for car wash.

6.6. Communication

6.6.1 Telephone networks (optional)

The telephone network will be limited to the installation of :

1. One (1) in the training room
2. One (1) station on the electrical room
3. One (1) station in the mud surface.
4. One (1) watertight junction boxes (where each station is connected) and then connected to the campus PABX by multicore cable (third party)

6.6.2 Paging

The paging system will cover all working areas (Drill floor- BOP zone- class room -store room, auxiliary room- electrical room and mud treatment).

Two microphones will be installed on the class room and to the driller's position.

1. One (1) general paging amplifier,
2. Two (2) microphones
3. One (1) lot of loudspeakers heavy duty or watertight type.

6.7. Mud system

6.7.1 .Low pressure mud system

The low pressure mud system includes one (1) 23 m³ tank (2.5 m total high) with under and over flow; the same tank will be use for suction one for return.

One suction header provide with butterfly valve will feed the supercharging pump.

The tank shall be cover by grating.

6.7.2. High Pressure Mud line.

The high pressure circuit includes one (1) 3" nominal diameter stand pipe connected in one side to the HP mud pump thru anti vibration hose and on the other side piped to the mud stand pipe. The 3" safety valve of the mud pump is piped to the mud tank.

6.7.3. Kill and choke line

The kill line is fed from the drill floor stand pipe by a 2" 5,000 psi gate valve.



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The choke line is piped to the choke manifold three ways blocks.
The choke manifold outlet is piped to the mud return circuit.

6.7.4. Mud return system

The bell nipple 10" outlet is piped to the mud return ditch (10" pipe may also be considered as the circuit will use fresh water and there is no decantation) the mud ditch is piped to return tank.

In parallel to the mud ditch the trip tank is connected. The trip tank pump takes suction on mud tank header to feed the trip tank and is manifold (butterfly valves) to empty the tank. One drain with isolating valve shall be provided on the trip tank.

6.8. Fire detection and alarm system (optional)

The rig will be equipped with fire detection and alarm system.

1. One (1) Fire detection monitoring panel,
2. One (1) lot of UV and smoke detectors has required by regulation,
3. One (1) lot Alarm bells,
4. One (1) lot of cable and fittings

6.9 Campus interface

The TRAINING RIG is interfaced with the campus

1. Campus fresh water networks
2. Campus drainage networks
3. Campus Fire fighting networks
4. Campus air system networks.
5. Electrical supply 1000 KVa - 50 hz./ 400-440 volts
6. Telephone PABX.

7. DRILL STRING & HANDLING EQUIPMENT

The Training rig handling equipment is limited to handle:

1. Drill pipe 3 ½"
2. Drill pipe 5"
3. Drill collar 4 ¾"
4. Drill collar 6 ½"

(API certification required)

7.1 Elevator Links & centre latch elevator:



One (1) set of centre latch elevators for 3 1/2" DP

(API certification required)

7.2 Tubular

Provided by CLIENT

7.3 Slips:

1. One (1) Rotary Slips SDML for 3 1/2" Drill Pipe,
5. One (1) safety clamp type MPR or equivalent for 4 3/4" Drill Collar (optional)
6. One (1) safety clamp type CR or equivalent, range 4 1/2" to 5 5/8" (optional)

7.4 Manual tongs:

1. Two (2) manual tong with jaws from 3 1/2 to 6 1/2 inch tubular size.

7.5 Subs.

1. one set of x-over, subs and lifting sub Provided by CLIENT

8. **ACCEPTANCE CRITERIA**

8.1 The following document shall be submit to CLIENT for comments and approval. (All document and drawings shall use English language)

- 1- Training rig lay out (Top view: drill floor + ground level and Elevation)
- 2- Drill floor lay out including the location for each equipment in the drill floor.
- 3- General lay out of the class room and location of furniture
- 4- One line diagram related to mud circuit, air and hydraulic network

8.2 UAE Rig acceptance test

Inspection Company approved by CLIENT shall perform the rig acceptance test which consists of:

1. Pre-commissioning tests, to verify the conformity of location of the equipment, the installation of the piping networks in conformity with the engineering drawings, the installation of the electrical installation in conformity with the engineering drawings.
2. The functional system testing to verify that each system is in operational condition when powered.
3. Integrated test to operate all system running simultaneously as close as possible from the operating conditions



Operating Manual and Rig Details Specification Training Rig

The inspection company approved by CLIENT shall submit a test report to CLIENT to confirm the success of the above tests. After that' CLIENT will issue the completion certificate.

Note: a detailed rig acceptance procedure is provided in Exhibit C

	Risk Analysis Matrix		
Rev: 0	Issued by: TechnoRig	Approved:	Page 1/1

	CONSEQUENCE				INCREASING PROBABILITY				
					1	2	3	4	5
Rating	People	Assets	Environment	Reputation	Never heard of in EP Industry	Incident heard of in EP Industry	Incident heard of in TR & Client	Incident happens several times per year in TR & Client	Incident happens several times per year in that location
1	Slight Injury	Slight Damage	Slight Effect	Slight Impact	1	2	3	4	5
2	Minor Injury	Minor Damage	Minor Effect	Limited Impact	2	4	6	8	10
3	Major Injury	Local Damage	Localised Effect	Considerable Impact	3	6	9	12	15
4	Single Fatality	Major Damage	Major Effect	Major Impact	4	8	12	16	20
5	Multiple Fatality	Extensive Damage	Massive Effect	Massive Impact	5	10	15	20	25

Colour Code	Type Of Job	Controls Required	Risk Rating
	Routine Low Risk	- Safe Track - Safety Meeting - Effective Supervision	Less Than 8
	Routine Medium Risk	- All Above And - Operations Procedure - Tool Box Talk - Skill Enhancing Trainings	Less Than 15 Greater Than Equal To 8
	Non Routine High Risk	- All Above And - Permit To Work - Journey Management - Safety Drills - Mini Risk Assessment	Greater Than Equal To 15
	Non Quantifiable	- All Above - Campaigns - Posters - Safety Meeting	



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Tel 713-439-8600
Fax 713-439-8699

Date: September 7, 2012

Re: Baker Hughes Western Hemisphere Training Center Wells,

Statement of No Environmental Impacts.

Baker Hughes will be installing a total of nine (9) training wells of various depths at the Western Hemisphere Training Center, Highway 2920, Tomball.

The wells are being drilled in compliance with the Texas Railroad Commission Permit requirements to ensure no negative environmental impacts occur during the drilling process and installation of the well casing.

The wells are being installed in order to simulate field condition for trainees in order to train employees on the installation, operation and extraction of equipment, as well as the process for down hole cementing.

The design of the well bores provides a completely enclosed system which ensures that no materials used inside the well bore can be discharged to the soil or ground water table. The wellbores are completely cemented on the bottom and on the sides from the bottom to top. The wells are then lined internally with 9 and 5/8s inch or thicker API grade steel or fiberglass lining that provide a seal on the inside of the cement casing. In addition the well bore is cemented to the well head at the surface so no breaks or openings occur.

The liquid used in the well for simulation training is fresh water with the exception of the cementing procedure that utilizes cement slurry.

The liquids are injected into the well bore and circulated back to the surface in a self contained loop system which captures the liquid discharge. The water is reclaimed and reused with the exception of the cement slurry and any materials separated during the reclaiming of the water. Segregated materials are disposed of in accordance with appropriate regulatory standards.

If you have any questions, you may contact me at (713) 439-8045 or (918) 510 5749 (cell).

Sincerely,

Ron Rowbottom
HSE Director, Real Estate
Baker Hughes Incorporated

Ron.rowbottom@bakerhughes.com

Baker Hughes Western Hemisphere Education Center Well Summary

There will be a total of nine (9) wells planned to be drilled at the Baker Hughes WHEC. All wells will be drilled and governed in accordance with the Texas Railroad Commission guidelines.

1. Six (6) wells to be drilled for Wire Line and well services

operations (under Wire Line Gantry structure, drilled by 12^{1/4"} bit, at a depth of ±1,000 ft.

The summary of the wells under a Wire line Gantry structure includes:

- a. **Each of the 6 wells:** Conductor Pipe (20" OD) installed to ±30 ft. and cemented to surface
- b. **Two (2) wells**, cased with fiber glass casing to ±960 ft. depth, R1 (20 ft length of joint), (OD size yet to be determined) with the annulus cemented from bottom of the well all the way to surface.
- c. **Two (2) wells**, cased with 9^{5/8"} API steel casing, #47 lbs/ft, Grade L80, BTC connection to ±960 ft, R3 (40 ft length casing joints), with the annulus cemented from the bottom of the well all the way to surface
- d. **Two (2) well service wells**, cased with 9^{5/8"} API steel casing, #47 lbs/ft, Grade L80, BTC connection, R3 (40 ft length casing joints), with the annulus cemented from the bottom of the well all the way to surface

2. One (1) well to be drilled for coiled tubing operations, drilled by 12^{1/4"} bit, at a depth of ±1,000 ft.

Summary of the coiled tubing well includes:

- a. Conductor Pipe (20" OD) installed to 30 ft. and cemented to surface
- b. One (1) well cased with 9^{5/8"} API steel casing, #47 lbs/ft, Grade L80, BTC connection, R3 (40 ft length casing joints), to a total depth of ±960 ft. with the annulus cemented from the bottom of the well all the way to surface

Baker Hughes
Western Hemisphere Education Center
Well Summary

3. **One (1) Drilling well under Rig # 108**, with the following detail summary:
- a. Conductor Pipe (42" OD) installed to ± 30 ft. and cemented to surface.
 - b. The well drilled by 36" bit to a depth of ± 325 ft, and then drilled by 17-1/2" bit to a depth of $\pm 1,000$ ft.
 - c. The well to be cased with 30" O.D, ASTM Steel casing to a depth of ± 300 ft, and reduced with 25 ft (casing crossover) ASTM Steel from 30" to API 13^{3/8}" steel casing and remainder cased with 13^{3/8}" API steel casing, #68, Grade J55, BTC connection, R3 (40 ft length of joint) to a total depth of 960 ft. Annulus cemented from the bottom of the well all the way to surface.
 - d. Well deepened with 12-1/4" bit to total depth of ± 2000 ft. and installed with 9-5/8" x 13-3/8" Liner Hanger and 9^{5/8}" API steel casing, #47 lbs/ft, Grade L80, BTC connection, R3 (40 ft length casing joints) to ± 1960 ft. Annulus cemented to the top of the liner lap between 9-5/8" and 13-3/8" casings.
4. **One (1) Work-Over well under Rig # 109**, with the following detail summary:
- a. Conductor Pipe (20" OD) installed to depth of ± 71 FT and cemented to surface
 - b. The well drilled by 17^{1/2}" bit to a depth of ± 600 ft, and then drilled by 12^{1/4}" bit to a depth of $\pm 1,000$ ft.
 - c. The well to be cased with 13^{3/8}" API steel casing, #68, Grade J55, BTC connection, R3 (40 ft length joints) to a depth of ± 960 ft. Annulus cemented from the bottom of the well all the way to surface.
 - d. Well deepened with 12-1/4" bit to total depth of ± 2000 ft. and installed with 9-5/8" x 13-3/8" Liner Hanger with 9^{5/8}" API steel casing, #47 lbs/ft, Grade L80, BTC connection, R3 (40 ft length casing joints) to ± 1960 ft. Annulus cemented to the top of the liner lap between 9-5/8" and 13-3/8" casings.

Note: These well plans, depths and casing materials, are subject to variations in well conditions and could be modified due to wellbore constraints.

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Adopt, on Second Reading, Ordinance No. 2012-42, an Ordinance Amending the Code of Ordinances of the City of Tomball, Texas, by Amending Section 14-293, Special Provisions, of Division 4, Permits and Inspections, of Article IV, Electricity, of Chapter 14, Buildings and Building Regulations, to Allow Aluminum Conductors to be Installed in New Commercial Buildings, 5,000 Square Feet or Larger, on All Service Entrance Conductors and Feeder Conductors Sized 4/0 and Larger; Providing a Penalty of up to \$2,000.00 for Each Violation of Any Provision Hereof; Providing for Severability; Providing for the Publication of This Ordinance; and Making Other Findings and Provisions Related Thereto

Background:

Baker Hughes requests that the City of Tomball amend the electrical code to allow aluminum conductors for new commercial building, 5,000 sf or larger, on all service entrance conductors and feeder conductors (both interior and exterior) sized 4/0 and larger. The Building Official has reviewed the request and does not have any issues with the aluminum conductors being used for these circumstances.

On October 1, 2012, Council adopted Ordinance No. 2012-42 on First Reading.

Origination:

Baker Hughes

Recommendation:

Adopt Ordinance No. 2012-42 on Second Reading

Funding:

Party(ies) responsible for placing this item on agenda:

City Secretary

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Ordinance No. 2012-42

ORDINANCE NO. 2012-42

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF TOMBALL TEXAS BY AMENDING SECTION 14-293, SPECIAL PROVISIONS, OF DIVISION 4, PERMITS AND INSPECTIONS, OF ARTICLE IV, ELECTRICITY, OF CHAPTER 14, BUILDINGS AND BUILDING REGULATIONS, TO ALLOW ALUMINUM CONDUCTORS TO BE INSTALLED IN NEW COMMERCIAL BUILDINGS, 5,000 SQUARE FEET OR LARGER, ON ALL SERVICE ENTRANCE CONDUCTORS AND FEEDER CONDUCTORS SIZED 4/0 AND LARGER; PROVIDING A PENALTY OF UP TO \$2,000.00 FOR EACH VIOLATION OF ANY PROVISION HEREOF; PROVIDING FOR SEVERABILITY; PROVIDING FOR THE PUBLICATION OF THIS ORDINANCE; AND MAKING OTHER FINDINGS AND PROVISIONS RELATED THERETO.

* * * * *

WHEREAS, the City Council of the City of Tomball finds it to be in the best interest of the health, safety and welfare of its citizens to modify the City's electrical regulations to allow for aluminum conductors for new commercial buildings 5,000 square feet or greater; now, therefore:

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. The facts and matters contained in the preamble to this ordinance are hereby found to be true and correct.

Section 2. The Code of Ordinances of the City of Tomball, Texas is hereby amended by adding the language underscored below to Section 14-293, Special Provisions, of Division 4, Permits and Inspections, of Article IV, Electricity, of Chapter 14, Buildings and Building Regulations, Section 14-293 to be amended as follows:

“Sec. 14-293. Special Provisions.

- (a) Temporary power poles shall have a minimum of two 120-volt duplex receptacles and one 240-volt receptacle.

- (b) Electrical metallic tubing (EMT) shall not be buried in ground nor embedded in concrete.
- (c) Aluminum conductors are only permitted to be installed in the following circumstances:
 - (i) overhead between poles, and
 - (ii) for new commercial buildings, 5,000 square feet or larger, on all service entrance conductors and feeder conductors, both interior and exterior, sized 4/0 and larger.”

Section 3. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 4. Any person who shall intentionally, knowingly, recklessly, or with criminal negligence, violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed \$2,000. Each day of violation shall constitute a separate offense.

Section 5. This Ordinance shall become effective fourteen days after the final reading and adoption of this Ordinance when the caption hereof is caused to be published once in the official newspaper of the City, by the City Secretary, as required by law. The City Secretary is directed to publish the caption of this Ordinance in the City’s official newspaper within 14 days after the passage of the ordinance.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 1ST DAY OF OCTOBER 2012.

COUNCILMAN HUDGENS	<u>AYE</u>
COUNCILMAN STOLL	<u>AYE</u>
COUNCILMAN BROWN	<u>AYE</u>
COUNCILMAN TOWNSEND	<u>AYE</u>
COUNCILMAN DODSON	<u>AYE</u>

SECOND READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 15TH DAY OF OCTOBER 2012.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

Gretchen Fagan, Mayor

ATTEST:

Doris Speer, City Secretary

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Adopt, on First Reading, Ordinance No. 2012-20, an Ordinance Deleting Article IV., Electricity, of Chapter 14, Buildings and Building Regulations, of the Code of Ordinances of the City of Tomball, Texas, in Its Entirety and Substituting Therefor a New Article IV., Electricity, of Chapter 14, Buildings and Building Regulations; Repealing all Ordinances or Parts of Ordinances Inconsistent or in Conflict Herewith; Providing a Penalty in an Amount of Not More Than \$2,000 for Violation of Any Provision Hereof; Providing for Savings and Severability; Providing for Publication; and Making Other Provisions and Findings Related Thereto

Background:

In December 2004, in response to legislative changes made by the Texas Legislature to require electricians to be licensed by the State of Texas, City Council adopted Ordinance No. 2004-11, removing the requirements for electricians to be licensed through the City of Tomball. The purpose of the proposed Ordinance No. 2012-20, amending Sections 14-100 through 14-285 of Chapter 14 is to revise definitions and clear up inconsistencies remaining in the City's Code of Ordinances following the adoption of Ordinance No. 2004-11, to eliminate the Electrical Board, and to align the Code of Ordinances with the City's actual and current practices.

A red-lined version of the proposed changes is provided for Council's review:

- references to registration requirements with the City will be deleted;
- the appointment of a "chief electrical inspector" will be removed and replaced with the designation that the "electrical inspector shall be the City's Building Official or his designee", which is current City practice;
- additional references to a "chief electrical inspector" will be changed to "electrical inspector";
- references regarding appeals of decisions made by the electrical inspector will be amended to state that appeals will be made to the City Council, as the electrical board is no longer serving;
- the expiration date for electrical permits will be extended from 120 days to 180 days before a new permit is required;
- City Council can prohibit an electrical contractor, who has accepted payment for electrical work but refused to finish such work, from pulling permits or performing new work within the city limits until the incomplete project is finished;
- electrical work authorized and in progress under a master electrician's license may be completed by his/her employees following the death of the master electrician;
- the references have been corrected for the specific National Electrical Code, to the version adopted by Council; and
- removes/eliminates the Electrical Board, which is no longer required due to State legislative changes.

Please note that the newly adopted Sec. 14-293 (Ordinance No. 2012-42) has been incorporated as well.

Origination:

City Secretary

Recommendation:

Adopt Ordinance No. 2012-20 on First Reading

Funding:

Party(ies) responsible for placing this item on agenda:

City Secretary

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Ordinance No. 2012-20_10-11-12

Redlined Article IV Electricity - Chapter 14

ORDINANCE NO. 2012-20

AN ORDINANCE DELETING ARTICLE IV., ELECTRICITY, OF CHAPTER 14, BUILDINGS AND BUILDING REGULATIONS, OF THE CODE OF ORDINANCES OF THE CITY OF TOMBALL, TEXAS, IN ITS ENTIRETY AND SUBSTITUTING THEREFOR A NEW ARTICLE IV., ELECTRICITY, OF CHAPTER 14, BUILDINGS AND BUILDING REGULATIONS; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES INCONSISTENT OR IN CONFLICT HEREWITH; PROVIDING A PENALTY IN AN AMOUNT OF NOT MORE THAN \$2,000 FOR VIOLATION OF ANY PROVISION HEREOF; PROVIDING FOR SAVINGS AND SEVERABILITY; PROVIDING FOR PUBLICATION; AND MAKING OTHER PROVISIONS AND FINDINGS RELATED THERETO.

* * * * *

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. The Code of Ordinances of the City of Tomball is hereby amended by deleting Article IV, Electricity, of Chapter 14, Buildings and Building Regulations, in its entirety and substituting therefor a new Article IV, Electricity, of Chapter 14, Buildings and Building Regulations to read as follows:

“ARTICLE IV.

ELECTRICITY

DIVISION 1.

GENERALLY

Sec. 14-100. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Apprentice electrician means the person undertaking electrical work under the direct, constant, personal supervision and control of either a licensed master electrician or a licensed journeyman electrician.

Electrical inspector means the building official or his designee as electrical inspector of the city charged with the enforcement of this article and all provisions of this Code and the pertaining city ordinances.

Electrical work means the installing, maintaining, altering, repairing or erecting of any electrical wiring, apparatus, devices, appliances, fixtures or equipment for which a permit is required by the provisions of this article, except poles and guy anchors installed by any electric, telephone, telegraph, signal and/or public service company as a part of its distribution system.

Journeyman electrician means those persons with four years substantiated electrical experience undertaking electrical work under the supervision, direction, and control of a licensed master electrician and who has been properly registered with the city. The term "journeyman electrician," however, shall not include an "apprentice electrician," and nothing in this definition shall be construed as prohibiting an apprentice electrician from doing electrical work under the direct, constant, personal supervision and control of either a licensed master or a licensed journeyman electrician.

Master electrician means the holder of a master electrician's license as provided in this article.

Sec. 14-101. Liability for damages.

The provisions of this article shall not be construed to relieve from or lessen the responsibility of any party owning, operating, or controlling any electric wiring, apparatus, devices, appliances, fixtures or equipment for damages to person or property caused by any defect therein, nor shall the city be held as assuming by this section any such liability by reason of the inspection authorized in this article, or the certificates of approval issued as provided in this article, or otherwise.

Sec. 14-102. Reserved.

Sec. 14-103. Unfranchised public utilities.

(a) No person or public service company that does not operate under a franchise granted by the city shall have the right to install any electrical conduit, wires, ducts, poles or equipment of any character for the transmission, distribution or utilization of electric energy, or for the operation of signals or the transmission of intelligence on, over or under the streets, in the city, without first obtaining from the city council a franchise right or grant for the particular installation so desired to be made, and any such installation so made under such franchise or grant shall be in strict conformity with all pertaining rules, regulations and ordinances of the city.

(b) Any installation of duct, conduit or wires under the public streets shall be in accordance with this article and other city ordinances covering the use of public places and streets.

Sec. 14-104. Penalty for violation.

Any person who shall violate any provision of the code adopted by the provisions of this article shall be deemed guilty of an offense, and shall be punished as provided in section 1-14 of this Code. Each day such violation continues shall be deemed a separate offense.

Secs. 14-105--14-114. Reserved.

DIVISION 2.

ELECTRICAL INSPECTOR

Sec. 14-115. Office established.

The office of the electrical inspector is hereby established in and for the city and shall be the City's Building Official or his designee.

Sec. 14-116. Appointment.

The electrical inspector shall be the City's Building Official or his designee.

Sec. 14-117. Office may be combined.

The chief electrical inspector may be the same person as the city building official.

Sec. 14-118. Conflict of interest.

It shall be unlawful for the electrical inspectors to engage in the business of the sale, installation or maintenance of electrical wiring, apparatus, devices, appliances, fixtures or equipment either directly or indirectly. They shall have no financial interest in any concern engaged in such business in the city at any time while holding the office of electrical inspector for the city.

Sec. 14-119. Interfering with electricians in business.

(a) It shall be unlawful for any person connected with the electrical inspection department of the city in any way whatsoever to solicit business of any kind for any master electrician, or assist or encourage the solicitation of any business for any master electrician.

(b) It shall be unlawful for any person connected with the electrical inspection department of the city to prevent or to assist in preventing any person from doing business with any master electrician whose license has not been suspended or revoked.

Sec. 14-120. Duties generally.

The electrical inspector shall, upon application, cause to be issued permits for the installation and alteration of electrical wiring, devices, appliances, fixtures, apparatus and equipment, and final inspections, and shall be responsible for inspection of all new electrical installations and re-inspections of all electrical installations, as provided for in this article.

Sec. 14-121. Right of entry.

The electrical inspector or his designee shall have the right to enter any building in the discharge of his official duties or for the purpose of making any inspection or re-inspection of the installation of electrical electric wiring, apparatus, devices, appliances, fixtures, and electrical equipment.

Sec. 14-122. Disconnect service.

The electrical inspectors are hereby empowered, in emergencies, to disconnect and to order the discontinuance of electrical services to any electric wiring, apparatus, device, appliance, fixture or equipment found to be dangerous to life or property within the provisions of this article until such wiring, apparatus, device, appliance, fixture or equipment and its installation has been made safe.

Sec. 14-123. Decision of questions.

The electrical inspector shall decide all questions not provided for in this article pertaining to the installation, operation, or maintenance of electric wiring and apparatus, subject to appeal to the city council.

Sec. 14-124. Review of decisions.

Any person aggrieved by any action of an electrical inspector may within ten days after such action file a petition, in writing, with the city council and thereupon the city council will render a decision within 15 days. The city council shall have the right to sustain, modify or reverse the action of any electrical inspector, provided, that until such time as the electrical inspector's action is reversed or modified by the city council, such action shall remain in effect. The decision of the city council shall be final.

Sec. 14-125. Records.

The electrical inspector shall keep complete records of all permits issued, inspections and re-inspections made, and other official work performed in accordance with the provisions of this article.

Secs. 14-126--14-139. Reserved.

DIVISION 3.

ELECTRICIANS

Subdivision 1.

Generally

Sec. 14-140. Work restricted.

No electrical work shall be performed by any person not holding a license required by the provisions of this division.

Sec. 14-141. Homeowners.

A homeowner shall be permitted to do electrical work on the dwelling he resides in, provided a permit is acquired for such work and the work is inspected and approved by the electrical inspector.

Secs. 14-142--14-146. Reserved.

Sec. 14-147. Supervision of work.

All electrical work performed within the city shall be under the control, supervision, direction, and responsibility of a master electrician licensed by the state. A journeyman or apprentice electrician shall perform the actual work under the supervision, control and responsibility of a master electrician.

Secs. 14-148--14-164. Reserved.

Secs. 14-173. Reserved.

Secs. 14-175--14-184. Reserved.

Subdivision III.

Master Electrician

Sec. 14-185. License required.

Except as otherwise provided by this article, it shall be unlawful for any person to perform or contract for electrical work within the city unless such person is licensed by the state as a master electrician.

Secs. 14-186--14-193. Reserved.

Sec. 14-194. Issuance of permits restricted.

A master electrician shall take out electrical permits only under his own license, and shall supervise, direct and control the electrical work for which the electrical permit is obtained.

Sec. 14-195. Misuse of license.

No master electrician shall assign or in any other way convey his license, its use, or its rights, to anyone by power of attorney or any other process, or become involved in any type of agreement, assignment or use whereby the master electrician will not have supervision, direction and control of the electrical work for which he has obtained electrical permits.

Secs. 14-196--14-209. Reserved.

Subdivision IV.

Journeyman Electrician

Sec. 14-210. License required.

No person shall undertake any work as a journeyman electrician unless such person has first obtained the appropriate current state electrician license.

Secs. 14-211--14-214. Reserved.

Sec. 14-215. Display.

Every journeyman electrician shall carry his license while performing the acts which this license entitles him to perform.
(Ord. No. 2000-30, § 2, 1-2-01)

Secs. 14-216--14-229. Reserved.

Subdivision V.

Apprentice Electrician Registration

Sec. 14-230. License required.

No person shall undertake any work as an apprentice electrician unless such person has first obtained the appropriate current state electrician license.

Secs. 14-231--14-233. Reserved.

Sec. 14-233. Reserved.

Sec. 14-234. Display.

Every apprentice electrician shall carry his license while performing the acts which this license entitles him to perform.

Secs. 14-235--14-244. Reserved.

DIVISION 4.

PERMITS AND INSPECTIONS

Sec. 14-245. Permit required.

No wiring, poles, duct line, apparatus, devices, appliances, fixtures or equipment for the transmission, distribution or utilization of electrical energy for any purpose shall be installed within the city limits, nor shall any alteration or addition be made to any such existing wiring, poles, duct lines, apparatus, devices, appliances, fixtures or equipment without first securing a permit.

Sec. 14-246. Exceptions-enumerated.

(a) No permit shall be required for replacing fuses or lamps or the connection of portable equipment to suitable permanently installed receptacles or for repairs to portable appliances.

(b) No permit shall be required for replacing flush or snap switches, receptacles, light fixtures or minor repairs on permanently connected electrical appliances, replacement of small motors of same voltage, amperage, horsepower, but not to exceed three horsepower.

(c) No permit shall be required for the installation, maintenance or alteration of wiring poles and down guys, apparatus, devices, appliances or equipment for telegraph, telephone, signal service or central station protective service used in conveying signals or intelligence, except where electrical work is

done on the primary side of the source of power at a voltage over 50 volts and of more than 500 watts.

(d) No permit shall be required for the installation, maintenance or alteration of electric wiring, apparatus, devices, appliances or equipment to be installed by an electric public service company for the use of such company in the generation, transmission, distribution, sale or utilization of electrical energy. However, an electric public service company shall not do any wiring on a customer's premises other than wiring which is a part of the company's distribution system, including metering equipment wherever located and transformer vaults in which company's transformers are located, nor shall any of its employees do any work other than that done for such company as herein before provided for, by virtue of this exception.

(e) No permit shall be required for the installation of temporary wiring, apparatus, devices, appliances or equipment used by a recognized electrical training school or college.

(f) No permit shall be required for the installation and maintenance of railway crossing signal devices when such is performed by due authority of the railroad and in accordance with the standards of the American Railroad Association.

Sec. 14-247. Same-Compliance.

Where no permit is required for the installation or repair of wiring, apparatus, devices, or equipment for the transmission, distribution, or utilization of electrical energy for any purpose, the wiring, apparatus, devices or equipment shall be installed or repaired in conformity with the provisions of the version National Electric Code adopted by Council.

Secs. 14-248--14-250. Reserved.

Sec. 14-251. Emergencies.

The electrical inspector may issue and enforce any rules or regulations he may deem necessary covering the granting of emergency permits.

Sec. 14-252. Application.

To obtain an electrical permit, the applicant shall first file an application in writing. Each application shall:

- (1) Identify and describe the work to be covered by the permit.
- (2) Describe the location of the proposed work by street address.
- (3) Show the use or occupancy of the building.

(4) Be accompanied by plans and specifications as required by the electrical inspector. However, a permit may be issued covering part of a building or structure before the entire plans and specifications for the whole building or structure have been submitted or approved, provided adequate information and detailed statements have been made complying with all pertinent requirements of this article. The holder of such permit may proceed without assurance that the permit covering the work in the entire building or structure will be granted.

(5) Be signed by the master electrician.

(6) The permit, when issued, shall be issued to the applicant to cover the proposed work as described and detailed. Any changes or additions must be covered by additional permits at the time changes are made.

Sec. 14-253. Checking of plans and specifications.

The application, plans, and specifications filed by an applicant for an electrical permit shall be checked by the electrical inspector. The issuance of a permit based upon these plans and specifications shall not prevent the electrical inspector from requiring the correction of errors. Such plans may be reviewed by other departments of the city to check compliance with laws and ordinances under their jurisdiction.

Sec. 14-254. Fees.

(a) Before any permit shall be issued, under the provisions of this division, the applicant shall pay fees according to the established schedule.

(b) Ordinary fees will be doubled for any permit issued after the work has been started or after the work has been partially completed or concealed.

(c) In case it becomes necessary to make a re-inspection of any work, fees will be charged according to the established schedule.

Sec. 14-255. Temporary installations.

No permit for temporary use shall be valid for a longer period than 90 days unless required for construction purposes. At the end of 90 days, the electrical inspector may issue written instructions to the electric public service company to disconnect service to the temporary installation. A letter addressed to "occupant" at the address of the temporary installation shall be deemed as being sufficient to notify the owner, if name and address of owner is not known to the electrical inspector.

Secs. 14-256--14-260. Reserved.

Sec. 14-261. Display.

Any permit for electrical work shall be displayed in a visible location.

Sec. 14-262. Expiration.

Every permit issued shall expire and become null and void if the building or work authorized by such permit is not commenced within 60 days from the date of the permit or if the building or work authorized by the permit has been suspended for a period of 180 days. Before such work can be restarted, a new permit shall be obtained.

Sec. 14-263. Refusal to finish installation.

Any electrical contractor who accepts payment for electrical work, then refuses to finish the work for which a permit was issued, shall, after written notification by the electrical inspector, and after being reviewed by the city council, be prohibited from pulling permits or performing new work within the city limits until such work is completed.

Sec. 14-264. Suspension or revocation.

The electrical inspector may, in writing, suspend or revoke an electrical permit issued under the provisions of this division whenever the permit is issued in error or on the basis of incorrect information supplied or when in violation of any ordinance, regulation or any of the provisions of this article.

Secs. 14-265--14-268. Reserved.**Sec. 14-269. Certificate of approval.**

When the electrical work is found to be in compliance with this article, the electrical inspector shall give approval to the public utility company authorizing connection of the electrical service.

Secs. 14-270--14-271. Reserved.**Sec. 14-272. Death of master electrician.**

After the death of a master electrician, any person engaged in the electrical contractor business shall have the privilege of completing any work currently authorized under the master electrician's license.

Secs. 14-273--14-283. Reserved.

Sec. 14-284. Adoption.

(a) The latest edition of the National Electrical Code prepared by the National Fire Protection Association, Inc., as adopted by the city council, will be in effect, copies of which are available for review in the building official's office and the city secretary's office.

(b) In case of conflict between the provisions of the National Electrical Code and the provisions of this article, this article shall prevail.

Secs. 14-285--14-292. Reserved.

Sec. 14-293. Special provisions.

- (a) Temporary power poles shall have a minimum of two 120-volt duplex receptacles and one 240-volt receptacle.
- (b) Electrical metallic tubing (EMT) shall not be buried in ground nor embedded in concrete.
- (c) Aluminum conductors are only permitted to be installed in the following circumstances;
 - (i) overhead between poles, and
 - (ii) for new commercial buildings, 5,000 square feet or larger, on all service entrance conductors and feeder conductors, both interior and exterior, sized 4/0 and larger."

Secs. 14-294--14-314. Reserved."

Section 2. All ordinances or parts of ordinances inconsistent or in conflict herewith are, to the extent of such inconsistency or conflict, hereby repealed.

Section 3. It is the intent of the City that this Ordinance shall comply in all respects with the applicable provisions of the United States Constitution, the Texas Constitution, and the Charter of the City of Tomball. In the event any clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission

of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

Section 4. Any person, firm or corporation that knowingly violates any of the provisions or terms of this Ordinance shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Tomball, Texas, and, upon conviction, shall be punished by a fine not to exceed five hundred (\$2,000.00) dollars for each offense.

Section 5. This Ordinance shall take effect immediately from and after its passage and the publication of the caption hereof, as provided by law and the City's home rule Charter.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 2ND DAY OF JULY 2012.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

SECOND READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 16TH DAY OF JULY 2012.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

Gretchen Fagan, Mayor

ATTEST:

Doris Speer, City Secretary

ARTICLE IV.

ELECTRICITY

DIVISION 1.

GENERALLY

Sec. 14-100. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Apprentice electrician means the person undertaking electrical work under the direct, constant, personal supervision and control of either a licensed master electrician or a licensed journeyman electrician.

Electrical inspector means the **building official or his designee as** electrical inspector of the city charged with the enforcement of this article and all provisions of this Code and the pertaining city ordinances.

Electrical work means the installing, maintaining, altering, repairing or erecting of any electrical wiring, apparatus, devices, appliances, fixtures or equipment for which a permit is required by the provisions of this article, except poles and guy anchors installed by any electric, telephone, telegraph, signal and/or public service company as a part of its distribution system.

Journeyman electrician means those persons with four years substantiated electrical experience undertaking electrical work under the supervision, direction, and control of a licensed master electrician and who has been properly registered with the city. The term "journeyman electrician," however, shall not include an "apprentice electrician," and nothing in this definition shall be construed as prohibiting an apprentice electrician from doing electrical work under the direct, constant, personal supervision and control of either a licensed master or a licensed journeyman electrician.

Master electrician means the holder of a master electrician's license as provided in this article.

Sec. 14-101. Liability for damages.

The provisions of this article shall not be construed to relieve from or lessen the responsibility of any party owning, operating, or controlling any electric wiring, apparatus, devices, appliances, fixtures or equipment for damages to person or property

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* **Editors Note:** Ord. No. 2000-30, § 2, adopted Jan. 2, 2001, repealed the former Article IV, §§ 14-100—14-314, and enacted a new Article IV as set out herein. The former Article IV pertained to similar subject matter and derived from Code 1978, §§ 7-1--7-4, 7-16--7-27, 7-40--7-50, 7-59--7-68, 7-76--7-87, 7-95--7-101, 7-109--7-113, 7-125--7-129, 7-131--7-152, 7-164--7-172; Ord. No. 88-10, adopted Nov. 21, 1988; Ord. No. 89-15, adopted Oct. 16, 1989; Ord. No. 93-02, §§ 2--4, adopted April 12, 1993; Ord. No. 95-08, adopted Nov. 20, 1995.¶

Formatted: Justified

Deleted: ~~and who has been properly registered with the city~~

Deleted: Chief

Deleted: chief

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

caused by any defect therein, nor shall the city be held as assuming by this section any such liability by reason of the inspection authorized in this article, or the certificates of approval issued as provided in this article, or otherwise.

Sec. 14-102. Reserved.

Sec. 14-103. Unfranchised public utilities.

(a) No person or public service company that does not operate under a franchise granted by the city shall have the right to install any electrical conduit, wires, ducts, poles or equipment of any character for the transmission, distribution or utilization of electric energy, or for the operation of signals or the transmission of intelligence on, over or under the streets, in the city, without first obtaining from the city council a franchise right or grant for the particular installation so desired to be made, and any such installation so made under such franchise or grant shall be in strict conformity with all pertaining rules, regulations and ordinances of the city.

(b) Any installation of duct, conduit or wires under the public streets shall be in accordance with this article and other city ordinances covering the use of public places and streets.

Sec. 14-104. Penalty for violation.

Any person who shall violate any provision of the code adopted by the provisions of this article shall be deemed guilty of an offense, and shall be punished as provided in section 1-14 of this Code. Each day such violation continues shall be deemed a separate offense.

Secs. 14-105--14-114. Reserved.

DIVISION 2.

ELECTRICAL INSPECTOR

Sec. 14-115. Office established.

The office of the electrical inspector is hereby established in and for the city and shall be the City's Building Official or his designee.

Sec. 14-116. Appointment.

The electrical inspector shall be the City's Building Official or his designee.

Sec. 14-117. Office may be combined.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Deleted: (Ord. No. 2000-30, § 2, 1-2-01; Ord. No. 2002-05, § 3, 3-18-02)¶

Deleted: (Ord. No. 2002-05, § 1, 3-18-02)¶

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Deleted: (Ord. No. 2000-30, § 2, 1-2-01) **(do we still need this "office" or is the work performed by/under the Building Official and his/her designees – can we change this to "electrical inspector" instead of "chief electrical inspector"?)**

Deleted: Sec. 14-116. Qualifications. ¶
The person chosen to fill the office of chief electrical inspector shall be of good moral character, shall be possessed of such executive ability as is requisite for the performance of duties and shall have a thorough knowledge of the standard materials and methods used in the installation of electrical equipment; shall be well versed in approved methods of construction for safety to persons and property, the provisions of this Code and ordinances of the city relating to electrical work, and any orders, rules and regulations issued by authority thereof, and the National Electrical Code. He shall have had at least five years' experience as an electrical inspector or in the installation of electrical equipment, other than that of an apprentice, or in lieu of such experience shall be a graduate in electrical or mechanical engineering of a college or university considered by the mayor and city council as having suitable requirements for graduation and shall have had two years practical electrical experience. ¶
(Ord. No. 2000-30, § 2, 1-2-01)¶
(do we still need this "office" or is the work performed by/under the Building Official and his/her designees – can we change this to "electrical inspector" instead of "chief electrical inspector"?)¶

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Deleted: appointed as set forth in the adopted personnel policies of the city

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶
(We don't currently have anyone appointed as the chief electrical inspection - do we still need this "office" or is the work performed by/under the Building Official and his/her designees?)¶

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The chief electrical inspector may be the same person as the city building official.

▼ **Sec. 14-118, Conflict of interest.**

It shall be unlawful for the electrical inspectors to engage in the business of the sale, installation or maintenance of electrical wiring, apparatus, devices, appliances, fixtures or equipment either directly or indirectly. They shall have no financial interest in any concern engaged in such business in the city at any time while holding the office of electrical inspector for the city.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01) (why not add this to Sec. 14-115 and eliminate Sec. 14-117, and change this to "electrical inspector" instead of "chief electrical inspector")¶

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▼ **Sec. 14-119, Interfering with electricians in business.**

(a) It shall be unlawful for any person connected with the electrical inspection department of the city in any way whatsoever to solicit business of any kind for any master electrician, or assist or encourage the solicitation of any business for any master electrician.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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(b) It shall be unlawful for any person connected with the electrical inspection department of the city to prevent or to assist in preventing any person from doing business with any master electrician whose license has not been suspended or revoked.

▼ **Sec. 14-120, Duties generally.**

The electrical inspector shall, upon application, cause to be issued permits for the installation and alteration of electrical wiring, devices, appliances, fixtures, apparatus and equipment, and final inspections, and shall be responsible for inspection of all new electrical installations and reinspections of all electrical installations, as provided for in this article.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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▼ **Sec. 14-121, Right of entry.**

The ~~chief~~ electrical inspector or his designee, shall have the right to enter any building in the discharge of his official duties or for the purpose of making any inspection or reinspection of the installation of electrical electric wiring, apparatus, devices, appliances, fixtures, and electrical equipment.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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Deleted: ~~or any electrical inspector~~

Deleted: ~~their~~

▼ **Sec. 14-122, Disconnect service.**

The electrical inspectors are hereby empowered, in emergencies, to disconnect and to order the discontinuance of electrical services to any electric wiring, apparatus, device, appliance, fixture or equipment found to be dangerous to life or property within the provisions of this article until such wiring, apparatus, device, appliance, fixture or equipment and its installation has been made safe.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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▼ **Sec. 14-123, Decision of questions.**

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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The electrical inspector shall decide all questions not provided for in this article pertaining to the installation, operation, or maintenance of electric wiring and apparatus, subject to appeal to the **city council**.

Deleted: **chief**

Deleted: **electrical board**

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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Sec. 14-124. Review of decisions.

Any person aggrieved by any action of an electrical inspector may within ten days after such action file a petition, in writing, with the **city council** and thereupon the **city council** will render a decision within 15 days. The **city council** shall have the right to sustain, modify or reverse the action of any electrical inspector, provided, that until such time as the electrical inspector's action is reversed or modified by the **city council**, such action shall remain in effect. The decision of the **city council** shall be **final**.

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Sec. 14-125. Records.

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Deleted: **as provided for in section 14-174**

The electrical inspector shall keep complete records of all permits issued, inspections and reinspections made, and other official work performed in accordance with the provisions of this article.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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Secs. 14-126--14-139. Reserved.

Deleted: **chief**

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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DIVISION 3.

ELECTRICIANS

Subdivision 1.

Generally

Sec. 14-140. Work restricted.

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No electrical work shall be performed by any person not holding a license required by the provisions of this division.

Sec. 14-141. Homeowners.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

A homeowner shall be permitted to do electrical work on the dwelling he resides in, provided a permit is acquired for such work and the work is inspected and approved by the electrical inspector.

Secs. 14-142--14-146. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Sec. 14-147. Supervision of work.

Deleted: **Editors Note:** Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed §§ 14-142--14-146 in their entirety, which pertained to issuance generally, transfer, expiration, renewal, and duplicates, respectively, and derived from Ord. No. 2000-30, § 2, adopted January 2, 2001.¶

All electrical work performed within the city shall be under the control, supervision, direction, and responsibility of a master electrician licensed by the state. A

journeyman or apprentice electrician shall perform the actual work under the supervision, control and responsibility of a master electrician.

Secs. 14-148--14-164. Reserved.

Secs. 14-173. Reserved.

Secs. 14-175--14-184. Reserved.

Subdivision III.

Master Electrician

Sec. 14-185. License required.

Except as otherwise provided by this article, it shall be unlawful for any person to perform or contract for electrical work within the city unless such person is licensed by the state as a master electrician.

Secs. 14-186--14-193. Reserved.

Sec. 14-194. Issuance of permits restricted.

A master electrician shall take out electrical permits only under his own license, and shall supervise, direct and control the electrical work for which the electrical permit is obtained.

Sec. 14-195. Misuse of license.

No master electrician shall assign or in any other way convey his license, its use, or its rights, to anyone by power of attorney or any other process, or become involved in any type of agreement, assignment or use whereby the master electrician will not have supervision, direction and control of the electrical work for which he has obtained electrical permits.

Secs. 14-196--14-209. Reserved.

Subdivision IV.

Journeyman Electrician

Sec. 14-210. License required.

No person shall undertake any work as a journeyman electrician unless such person has first obtained the appropriate current state electrician license.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01; Ord. No. 2002-05, § 4, 3-18-02; Ord. No. 2004-11, § 2, 12-6-04)¶

Deleted: Editors Note: Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed §§ 14-148--14-150 in their entirety, which pertained to payroll records, suspension, withholding or revocation, and time lapse from revocation, respectively, and derived from Ord. No. 2000-30, § 2, adopted January 2, 2001, and Ord. No. 2002-05, § 5, adopted March 18, 2002.¶

Deleted: Subdivision II,¶

¶ Electrical Board¶

¶ Sec. 14-165. Created, ¶

¶ There is hereby created in and for the city an electrical board. ¶ (Ord. No. 2000-30, § 2, 1-2-01)¶

¶ Sec. 14-166. Composition: ¶

¶ The electrical board shall be composed of five members, each of which to be designated by a position number as follows:¶

¶ —(1)— Positions numbered one and two shall be filled by duly licensed city master electricians.¶

¶ —(2)— Position number three shall be filled by an employee of an electric public utility company operating ... [1]

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Deleted: Editors Note: Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed § 14-173 in its entirety, which pertained to conduct examinations ... [2]

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Deleted: (Ord. No. 2000-30, § 2, 1-2-01; Ord. No. 2004-11, § 2, 12-6-04)¶

Deleted: Editors Note: Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed §§ 14-186--14-190, and § 14-192 in their entirety, which pertain ... [3]

Deleted: Sec. 14-194. Insurance. (Are the coverage amounts current? Should we change it to require coverage amounts as currently set by the ... [4]

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Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

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Secs. 14-211--14-214. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01; Ord. No. 2004-11, § 2, 12-6-04)¶

Sec. 14-215. Display.

Every journeyman electrician shall carry his license while performing the acts which this license entitles him to perform.
(Ord. No. 2000-30, § 2, 1-2-01)

Deleted: **Editors Note:** Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed §§ 14-211 and 14-213 in their entirety, which pertained to applications, and a fee, respectively, and derived from Ord. No. 2000-30, § 2, adopted January 2, 2001.¶

Secs. 14-216--14-229. Reserved.

Subdivision V.

Apprentice Electrician Registration

Sec. 14-230. License required.

No person shall undertake any work as an apprentice electrician unless such person has first obtained the appropriate current state electrician license.

Deleted: **Editors Note:** Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed § 14-216 in its entirety, which pertained to revocation and derived from Ord. No. 2000-30, § 2, adopted January 2, 2001.¶

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Secs. 14-231--14-233. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01; Ord. No. 2004-11, § 2, 12-6-04)¶

Sec. 14-233. Reserved.

Deleted: **Editors Note:** Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed §§ 14-231 and 14-232, which pertained to applications and fees, respectively, and derived from Ord. No. 2000-30, § 2, adopted January 2, 2001.¶

Sec. 14-234. Display.

Every apprentice electrician shall carry his license while performing the acts which this license entitles him to perform.

Secs. 14-235--14-244. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

DIVISION 4.

PERMITS AND INSPECTIONS

Sec. 14-245. Permit required.

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No wiring, poles, duct line, apparatus, devices, appliances, fixtures or equipment for the transmission, distribution or utilization of electrical energy for any purpose shall be installed within the city limits, nor shall any alteration or addition be made to any such existing wiring, poles, duct lines, apparatus, devices, appliances, fixtures or equipment without first securing a permit.

Sec. 14-246. Exceptions-enumerated.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

- (a) No permit shall be required for replacing fuses or lamps or the connection

of portable equipment to suitable permanently installed receptacles or for repairs to portable appliances.

(b) No permit shall be required for replacing flush or snap switches, receptacles, light fixtures or minor repairs on permanently connected electrical appliances, replacement of small motors of same voltage, amperage, horsepower, but not to exceed three horsepower.

(c) No permit shall be required for the installation, maintenance or alteration of wiring poles and down guys, apparatus, devices, appliances or equipment for telegraph, telephone, signal service or central station protective service used in conveying signals or intelligence, except where electrical work is done on the primary side of the source of power at a voltage over 50 volts and of more than 500 watts.

(d) No permit shall be required for the installation, maintenance or alteration of electric wiring, apparatus, devices, appliances or equipment to be installed by an electric public service company for the use of such company in the generation, transmission, distribution, sale or utilization of electrical energy. However, an electric public service company shall not do any wiring on a customer's premises other than wiring which is a part of the company's distribution system, including metering equipment wherever located and transformer vaults in which company's transformers are located, nor shall any of its employees do any work other than that done for such company as herein before provided for, by virtue of this exception.

(e) No permit shall be required for the installation of temporary wiring, apparatus, devices, appliances or equipment used by a recognized electrical training school or college.

(f) No permit shall be required for the installation and maintenance of railway crossing signal devices when such is performed by due authority of the railroad and in accordance with the standards of the American Railroad Association.

▼ **Sec. 14-247. Same-Compliance.**

Where no permit is required for the installation or repair of wiring, apparatus, devices, or equipment for the transmission, distribution, or utilization of electrical energy for any purpose, the wiring, apparatus, devices or equipment shall be installed or repaired in conformity with the provisions of the National Electrical Code, NFPA 70.

▼ **Secs. 14-248--14-250. Reserved.**

Sec. 14-251. Emergencies.

The electrical inspector may issue and enforce any rules or regulations he may deem necessary covering the granting of emergency permits.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

▼ **Deleted:** (Ord. No. 2000-30, § 2, 1-2-01)¶

Sec. 14-252. Application.

To obtain an electrical permit, the applicant shall first file an application in writing. Each application shall:

- (1) Identify and describe the work to be covered by the permit.
- (2) Describe the location of the proposed work by street address.
- (3) Show the use or occupancy of the building.
- (4) Be accompanied by plans and specifications as required by the electrical inspector. However, a permit may be issued covering part of a building or structure before the entire plans and specifications for the whole building or structure have been submitted or approved, provided adequate information and detailed statements have been made complying with all pertinent requirements of this article. The holder of such permit may proceed without assurance that the permit covering the work in the entire building or structure will be granted.
- (5) Be signed by the master electrician.
- (6) The permit, when issued, shall be issued to the applicant to cover the proposed work as described and detailed. Any changes or additions must be covered by additional permits at the time changes are made.

Sec. 14-253. Checking of plans and specifications.

The application, plans, and specifications filed by an applicant for an electrical permit shall be checked by the electrical inspector. The issuance of a permit based upon these plans and specifications shall not prevent the electrical inspector from requiring the correction of errors. Such plans may be reviewed by other departments of the city to check compliance with laws and ordinances under their jurisdiction.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01; Ord. No. 2002-05, § 6, 3-18-02)¶

Sec. 14-254. Fees.

(a) Before any permit shall be issued, under the provisions of this division, the applicant shall pay fees according to the established schedule.

(b) Ordinary fees will be doubled for any permit issued after the work has been started or after the work has been partially completed or concealed.

(c) In case it becomes necessary to make a reinspection of any work, fees will be charged according to the established schedule.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01; Ord. No. 2002-05, § 7, 3-18-02)¶

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Sec. 14-255. Temporary installations.

No permit for temporary use shall be valid for a longer period than 90 days unless required for construction purposes. At the end of 90 days, the electrical inspector may issue written instructions to the electric public service company to disconnect service to the temporary installation. A letter addressed to "occupant" at the address of the temporary installation shall be deemed as being sufficient to notify the owner, if name and address of owner is not known to the electrical inspector.

Deleted: (Is 90 days sufficient? Too long/too short?)¶

Secs. 14-256--14-260. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Sec. 14-261. Display.

Any permit for electrical work shall be displayed in a visible location.

Sec. 14-262. Expiration.

Every permit issued shall expire and become null and void if the building or work authorized by such permit is not commenced within 60 days from the date of the permit or if the building or work authorized by the permit has been suspended for a period of 180 days. Before such work can be restarted, a new permit shall be obtained.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Deleted: (Is 60 and 120 days sufficient? Too long/too short?)¶

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Sec. 14-263. Refusal to finish installation.

Any electrical contractor who accepts payment for electrical work, then refuses to finish the work for which a permit was issued, shall, after written notification by the electrical inspector, and after being reviewed by the city council, **be prohibited from pulling permits or performing new work within the city limits** until such work is completed.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Deleted: electrical-board

Deleted: have his license suspended

Sec. 14-264. Suspension or revocation.

The electrical inspector may, in writing, suspend or revoke an electrical permit issued under the provisions of this division whenever the permit is issued in error or on the basis of incorrect information supplied or when in violation of any ordinance, regulation or any of the provisions of this article.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Secs. 14-265--14-268. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Sec. 14-269. Certificate of approval.

Deleted: ¶

When the electrical work is found to be in compliance with this article, the electrical inspector shall give approval to the public utility company authorizing connection of the electrical service.

Secs. 14-270--14-271. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Sec. 14-272. Death of master electrician.

After the death of a master electrician, any person engaged in the electrical contractor business shall have the privilege of completing any work currently authorized under the master electrician's license.

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Deleted: ~~for a period of 60 days after the death of the master electrician~~

Secs. 14-273--14-283. Reserved.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Sec. 14-284. Adoption.

Deleted: Sec. 14-284. Continuing education. ¶

¶
As a condition of license renewal, each active electrical master and each active electrical journeyman shall complete an approved eight-hour course covering changes between each new edition of the National Electrical Code (NEPA 70) and the preceding edition. A certificate of completion shall accompany each license renewal for years in which a new National Electric Code is adopted. (how do we enforce this? – remove?)¶
(Ord. No. 2002-05, § 2, 3-18-02)¶

(a) The latest edition of the National Electrical Code, NFPA 70, prepared by the National Fire Protection Association, Inc., as adopted by the city council, will be in effect, copies of which are available for review in the building official's office and the city secretary's office.

(b) In case of conflict between the provisions of the National Electrical Code, NFPA 70 and the provisions of this article, this article shall prevail.

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Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Secs. 14-285--14-292. Reserved.

Sec. 14-293. Special provisions.

(a) Temporary power poles shall have a minimum of two 120-volt duplex receptacles and one 240-volt receptacle.

(b) Electrical metallic tubing (EMT) shall not be buried in ground nor embedded in concrete.

(c) Aluminum conductors are only permitted to be installed overhead between poles.

Deleted: (Ord. No. 2000-30, § 2, 1-2-01)¶

Secs. 14-294--14-314. Reserved.

~~Subdivision H:~~~~Electrical Board~~~~Sec. 14-165. Created:~~

~~There is hereby created in and for the city an electrical board.
(Ord. No. 2000-30, § 2, 1-2-01)~~

~~Sec. 14-166. Composition:~~

~~The electrical board shall be composed of five members, each of which to be designated by a position number as follows:~~

~~———— (1) ——— Positions numbered one and two shall be filled by duly licensed city master electricians.~~

~~———— (2) ——— Position number three shall be filled by an employee of an electric public utility company operating under a city franchise.~~

~~———— (3) ——— Position number four shall be filled by a resident of the city.~~

~~———— (4) ——— Position number five shall be filled by the chief electrical inspector of the city.~~

~~(Ord. No. 2000-30, § 2, 1-2-01)~~

~~Sec. 14-167. Appointment:~~

~~The members of the electrical board shall be appointed by the mayor and confirmed by the city council.~~

~~(Ord. No. 2000-30, § 2, 1-2-01)~~

~~Sec. 14-168. Terms:~~

~~All appointments to the electrical board shall be for terms of three years. Each member of the board shall serve until his successor has been appointed and qualified.~~

~~(Ord. No. 2000-30, § 2, 1-2-01)~~

~~Sec. 14-169. Removal:~~

~~Any appointive member of the electrical board shall be subject to discharge and removal from his position on the board at any time by the mayor.~~

~~(Ord. No. 2000-30, § 2, 1-2-01)~~

~~Sec. 14-170. Compensation:~~

~~Each member of the electrical board shall serve without compensation; however, members of the board shall be reimbursed for all reasonable expenses incurred in the performance of board duties.
(Ord. No. 2000-30, § 2, 1-2-01)~~

~~Sec. 14-171. Officers.~~

~~The mayor shall designate one member of the electrical board to serve as chairman, and the chief electrical inspector shall serve as secretary of the board.
(Ord. No. 2000-30, § 2, 1-2-01)~~

~~Sec. 14-172. Quorum.~~

~~Three members of the electrical board present at any meeting shall constitute a quorum for the transaction of all business of the board. A majority vote of the members present at any meeting shall prevail.
(Ord. No. 2000-30, § 2, 1-2-01)~~

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Susan Smith

6/28/2012 1:45:00 PM

Editors Note: Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed § 14-173 in its entirety, which pertained to conduct examinations, and derived from Ord. No. 2000-30, § 1, adopted January 2, 2001.

~~Sec. 14-174. Appeal from action.~~

~~Any person dissatisfied with a decision of the electrical board shall have the right to appeal. This appeal shall be accomplished by addressing a letter to the city council within ten days after the electrical board's action. Upon receipt of notice of such appeal, the city council shall set a hearing date and the city secretary shall notify the appellant and the chairman of the electrical board of the date of the hearing. The electrical board, as well as the appellant, shall have the right to be heard whenever this hearing is held. The city council shall have the right to affirm, modify or reverse the action and/or decision of the electrical board. The action of the city council shall be final. If no appeal is made within the time and in the manner provided in this section, the ruling of the electrical board shall be final.
(Ord. No. 2000-30, § 2, 1-2-01)~~

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Susan Smith

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Editors Note: Ord. No. 2004-11, § 1, adopted December 6, 2004, repealed §§ 14-186--14-190, and § 14-192 in their entirety, which pertained to qualifications, application, examination; fee, reexaminations, license fee, and permanent number, respectively, and derived from Ord. No. 2000-30, § 2, adopted January 2, 2001.

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Susan Smith

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Sec. 14-194. Insurance. (Are the coverage amounts current? Should we change it to require coverage amounts as currently set by the state?)

- (a) For any permits to be issued, the applicant must provide evidence of

holding a comprehensive general liability insurance policy (including products liability and completions operations coverage) with minimum limits of \$1,000,000.00 for death or bodily injury and \$250,000.00 for property damage, per occurrence. This policy must be issued by a carrier with a rating of B+ or better in the last published edition of Best's Insurance Reports-Property Casualty Volume (published by A. M. Best Company, Oldwich, New Jersey 08858). Proof of the coverage shall be provided in the form of a certificate issued by an authorized agent or employee of the company issuing the policy, that specifies coverage and identifies the insured. Each certificate shall provide that not less than 30 days' written notice shall be given to the city in the event of reduction or cancellation of the policy prior to the expiration date specified on the certificate, or lapse by nonrenewal.

(b) These insurance requirements would not apply to any permits obtained by homeowners as outlined in section 14-141.
(Ord. No. 2000-30, § 2, 1-2-01)

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Adopt, on First Reading, Ordinance No. 2012-22, an Ordinance of the City of Tomball, Texas Amending the Code of Ordinances of the City by Amending and/or Adding Definitions of *Aircraft, Awning Sign, Bandit Sign, Banner Sign, Billboard, Flag Sign, Inflatable Sign, Living Or Human Sign, Marquee Sign, Message Board, Monument Sign, Pole Sign, Premises, Temporary Sign, Wayfinding Sign, and Window Sign* to Section 60-1, Definitions, of Article I, In General, of Chapter 60, Signs; Amending Section 60-4, Sign Administrator and Enforcement, of Article I, In General, of Chapter 60, Signs, to Delete Reference to Rules and Regulations for Appeals to City Council; Amending Section 60-3, Classifications, of Article I, In General, of Chapter 60, Signs, to Add Window Sign as a Classification of Signage; Deleting Subsection (b)(3), Exceptions, Other Signs, from Section 60-5, Sign Permits and Fees, of Article I, In General, of Chapter 60, Signs, to Add to the Exception that Signs Relating to Construction, Repair, Sale or Rental of the Property and Garage Sale Signs be Limited to the Duration that the Property is Under Repair or Construction, or for Sale or Rent; Amending Subsection (c), Application Procedure, of Section 60-5, Sign Permits and Fees, of Article I, In General, of Chapter 60, Signs, by Adding Marquee and Projecting Signs to the Application Procedure; Amending Section 60-7, Miscellaneous Sign Provisions, of Article I, In General, of Chapter 60, Signs, to Limit properties to One (1) On-Premise Temporary Banner or Flag Sign and Adding Regulations for Message Board and Marquee Signs; Amending Section 60-8, On-Premises Sign Provisions, of Article I, In General, of Chapter 60, Signs, to Provide that On-Premise Signs Shall Adhere to the Visibility Triangle Requirements of Chapter 66 of the Code of Ordinances; Amending Section 60-9, Off-Premises Sign Provisions, of Article I, In General, of Chapter 60, Signs, to Limit Properties to No More Than Two (2) Off-Premise Signs; Adding a New Section 60-12, Attention-Getting Devices, to Article I, In General, of Chapter 60, Signs, to Prohibit Attention-Getting Devices as Defined Herein; Adding a New Section 60-13, Billboards, to Article I, In General, of Chapter 60, Signs, to Prohibit New Billboards within the City or Its Extraterritorial Jurisdiction and Providing Regulations for the Replacement or Restoration of Existing Billboards; Adding a New Section 60-14, Prohibited Signage, to Article I, In General, of Chapter 60, Signs, Prohibiting the Types of Signs Described Therein; Amending Section 60-29, Height Limitations, of Article II, Design and Structural Requirements, of Chapter 60, Signs, to Limit On-Premise Signs to a Height No Greater Than 42 Feet from the Natural Grade Level of the Ground Surface, Requiring that Projecting and Marquee Signs Shall Not Exceed Eight (8) Feet Above the Roof Level, and Requiring That No Off-Premise Sign Shall Exceed a Height of 12 Feet from the Natural Grade Level of the Ground Surface; Deleting Section 60-30, Size Limitation, of Article II, Design and Structural Requirements, of Chapter 60, Signs, and Adding a New Section 60-30, Size Limitation, to Limit On-Premise Wall Signs to a Face Area of 300 Square Feet or Less per Building Face, to Limit CEVMS Signs to a Face Area of 32 Square Feet for a Single Business Use or 50 Square Feet for a Multi-Tenant Use, and Limiting Off-Premise Signs to a Face Area Not to Exceed 40 Square Feet; Deleting From Article II, Design and Structural Requirements of Chapter 60, Signs, Section 30-33, Portable Signs, in Its Entirety; Adding a New Section 60-33, Wayfinding Signs, to Article II, Design and Structural Requirements, of Chapter 60, Signs, to Limit On Premises Wayfinding Signs to a Maximum Sign Face Area of 12 Square Feet, to Limit Off Premises Wayfinding Signs to a Maximum Sign Face Area of 40 Square Feet, Requiring a Wayfinding Guide Sign Plan to be Approved by Sign Administrator and Providing Other Regulations Regarding Wayfinding Signs; Adding a New Section 60-34, Flags and Flag Signs, to Article II, Design and Structural Requirements, of Chapter 60, Signs, to Limit Flag Signs to a Maximum of Three (3) Flag Signs per Premises, Including One (1) Corporate Flag and Providing Other Regulations for the Height, Lighting and Other Matters Related to Flag Signs; Providing for Severability; Providing a Penalty of Up to \$2,000.00 for Violations with Each Day Constituting a Separate Violation; Providing for the Publication of This Ordinance; and Making Other Findings and Provisions Related Thereto.

Background:

This is a City-initiated amendment to Chapter 60 - Signs which seeks to add definitions, regulatory standards, prohibitions, enforcements, and design & structural requirements.

Origination:

City Council

Recommendation:

N/A

Funding:**Party(ies) responsible for placing this item on agenda:**

Rebeca Guerra, City Planner

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Ordinance No.,. 2012-22 - Final Draft (Clean)

Councilman Dodson's Comments with Staff Responses

Draft Sign Ordinance (with changes)

ORDINANCE NO. 2012-22

AN ORDINANCE OF THE CITY OF TOMBALL, TEXAS AMENDING THE CODE OF ORDINANCES OF THE CITY BY AMENDING AND/OR ADDING DEFINITIONS OF *AIRCRAFT*, *AWNING SIGN*, *BANDIT SIGN*, *BANNER SIGN*, *BILLBOARD*, *FLAG SIGN*, *INFLATABLE SIGN*, *LIVING OR HUMAN SIGN*, *MARQUEE SIGN*, *MESSAGE BOARD*, *MONUMENT SIGN*, *POLE SIGN*, *PREMISES*, *TEMPORARY SIGN*, *WAYFINDING SIGN*, AND *WINDOW SIGN* TO SECTION 60-1, DEFINITIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS; AMENDING SECTION 60-4, SIGN ADMINISTRATOR AND ENFORCEMENT, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO DELETE REFERENCE TO RULES AND REGULATIONS FOR APPEALS TO CITY COUNCIL; AMENDING SECTION 60-3, CLASSIFICATIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO ADD WINDOW SIGN AS A CLASSIFICATION OF SIGNAGE; DELETING SUBSECTION (b)(3), EXCEPTIONS, OTHER SIGNS, FROM SECTION 60-5, SIGN PERMITS AND FEES, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO ADD TO THE EXCEPTION THAT SIGNS RELATING TO CONSTRUCTION, REPAIR, SALE OR RENTAL OF THE PROPERTY AND GARAGE SALE SIGNS BE LIMITED TO THE DURATION THAT THE PROPERTY IS UNDER REPAIR OR CONSTRUCTION, OR FOR SALE OR RENT; AMENDING SUBSECTION (c), APPLICATION PROCEDURE, OF SECTION 60-5, SIGN PERMITS AND FEES, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, BY ADDING MARQUEE AND PROJECTING SIGNS TO THE APPLICATION PROCEDURE; AMENDING SECTION 60-7, MISCELLANEOUS SIGN PROVISIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO LIMIT PROPERTIES TO ONE (1) ON-PREMISE TEMPORARY BANNER OR FLAG SIGN AND ADDING REGULATIONS FOR MESSAGE BOARD AND MARQUEE SIGNS; AMENDING SECTION 60-8, ON-PREMISES SIGN PROVISIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO PROVIDE THAT ON-PREMISE SIGNS SHALL ADHERE TO THE VISIBILITY TRIANGLE REQUIREMENTS OF CHAPTER 66 OF THE CODE OF ORDINANCES; AMENDING SECTION 60-9, OFF-PREMISES SIGN PROVISIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO LIMIT PROPERTIES TO NO MORE THAN TWO (2) OFF-PREMISE SIGNS; ADDING A NEW SECTION 60-12, ATTENTION-GETTING DEVICES, TO ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO PROHIBIT ATTENTION-GETTING DEVICES AS DEFINED HEREIN; ADDING A NEW SECTION 60-13, BILLBOARDS, TO ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, TO PROHIBIT NEW BILLBOARDS WITHIN THE CITY OR ITS EXTRATERRITORIAL JURISDICTION AND PROVIDING REGULATIONS FOR THE REPLACEMENT OR RESTORATION OF EXISTING BILLBOARDS; ADDING A NEW SECTION 60-14,

PROHIBITED SIGNAGE, TO ARTICLE I, IN GENERAL, OF CHAPTER 60, SIGNS, PROHIBITING THE TYPES OF SIGNS DESCRIBED THEREIN; AMENDING SECTION 60-29, HEIGHT LIMITATIONS, OF ARTICLE II, DESIGN AND STRUCTURAL REQUIREMENTS, OF CHAPTER 60, SIGNS, TO LIMIT ON-PREMISE SIGNS TO A HEIGHT NO GREATER THAN 42 FEET FROM THE NATURAL GRADE LEVEL OF THE GROUND SURFACE, REQUIRING THAT PROJECTING AND MARQUEE SIGNS SHALL NOT EXCEED EIGHT (8) FEET ABOVE THE ROOF LEVEL, AND REQUIRING THAT NO OFF-PREMISE SIGN SHALL EXCEED A HEIGHT OF 12 FEET FROM THE NATURAL GRADE LEVEL OF THE GROUND SURFACE; DELETING SECTION 60-30, SIZE LIMITATION, OF ARTICLE II, DESIGN AND STRUCTURAL REQUIREMENTS, OF CHAPTER 60, SIGNS, AND ADDING A NEW SECTION 60-30, SIZE LIMITATION, TO LIMIT ON-PREMISE WALL SIGNS TO A FACE AREA OF 300 SQUARE FEET OR LESS PER BUILDING FACE, TO LIMIT CEVMS SIGNS TO A FACE AREA OF 32 SQUARE FEET FOR A SINGLE BUSINESS USE OR 50 SQUARE FEET FOR A MULTI-TENANT USE, AND LIMITING OFF-PREMISE SIGNS TO A FACE AREA NOT TO EXCEED 40 SQUARE FEET; DELETING FROM ARTICLE II, DESIGN AND STRUCTURAL REQUIREMENTS OF CHAPTER 60, SIGNS, SECTION 30-33, PORTABLE SIGNS, IN ITS ENTIRETY; ADDING A NEW SECTION 60-33, WAYFINDING SIGNS, TO ARTICLE II, DESIGN AND STRUCTURAL REQUIREMENTS, OF CHAPTER 60, SIGNS, TO LIMIT ON PREMISES WAYFINDING SIGNS TO A MAXIMUM SIGN FACE AREA OF 12 SQUARE FEET, TO LIMIT OFF PREMISES WAYFINDING SIGNS TO A MAXIMUM SIGN FACE AREA OF 40 SQUARE FEET, REQUIRING A WAYFINDING GUIDE SIGN PLAN TO BE APPROVED BY SIGN ADMINISTRATOR AND PROVIDING OTHER REGULATIONS REGARDING WAYFINDING SIGNS; ADDING A NEW SECTION 60-34, FLAGS AND FLAG SIGNS, TO ARTICLE II, DESIGN AND STRUCTURAL REQUIREMENTS, OF CHAPTER 60, SIGNS, TO LIMIT FLAG SIGNS TO A MAXIMUM OF THREE (3) FLAG SIGNS PER PREMISES, INCLUDING ONE (1) CORPORATE FLAG AND PROVIDING OTHER REGULATIONS FOR THE HEIGHT, LIGHTING AND OTHER MATTERS RELATED TO FLAG SIGNS; PROVIDING FOR SEVERABILITY; PROVIDING A PENALTY OF UP TO \$2,000.00 FOR VIOLATIONS WITH EACH DAY CONSTITUTING A SEPARATE VIOLATION; PROVIDING FOR THE PUBLICATION OF THIS ORDINANCE; AND MAKING OTHER FINDINGS AND PROVISIONS RELATED THERETO.

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WHEREAS, the City Council of the City of Tomball, Texas adopted Ordinance No. 2002-12 on or about the 6th day of May, 2002 containing regulations for the permitting, installation and maintenance of signs within the City of Tomball, Texas; and

WHEREAS, due to the changing dynamics of the City of Tomball and the shifting of the types and usage of sign media, the City Council desires to amend its sign regulations; and

WHEREAS, the City Council of the City of Tomball, Texas finds that the amendments to the sign regulations contained herein are in the best interest of the health, safety and welfare of its citizens; now, therefore,

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS:

Section 1. The facts and matters contained in the preamble to this ordinance are hereby found to be true and correct.

Section 2. The Code of Ordinances of the City of Tomball, Texas is hereby amended by adding definitions for *aircraft*, *awning sign*, *bandit sign*, *banner sign*, *billboard*, *flag sign*, *inflatable sign*, *living or human sign*, *marquee sign*, *message board*, *monument sign*, *pole sign*, *premises*, *temporary sign*, *wayfinding sign*, and *window sign* to Section 60-1, Definitions, of Article I, In General, of Chapter 60, Signs, to read as follows:

“Sec. 60-1. Definitions.

Aircraft shall mean a vehicle capable of atmospheric flight due to interaction with the air, such as buoyancy or lift.

Awning sign shall mean any sign constructed of a plastic, fabric-type, or other material stretched over a rigid metal frame that is permanently attached to the wall, roof, or mansard of a building.

Bandit sign shall mean a sign having less than ten (10) square feet of advertising area.

Banner sign shall mean any sign constructed of cloth, canvas, light fabric or other flexible material; excluding awning signs, which is not rigidly and not permanently attached to a building or the ground through a semi-permanent or permanent support structure.

Billboard shall mean a signage panel for the display of advertisements in public places, such as alongside highways.

Flag sign shall mean any device generally made of flexible material, such as cloth, paper, plastic, or other material, and displayed from a pole, cable, or rope. It may or may not include text.

Inflatable sign shall mean a sign that gains its shape from inserting air or other gas.

Living or human sign shall mean a sign held by or attached to a human being or living creature for the purpose of advertising or otherwise drawing attention to an individual, business, commodity, service, or product. This can also include a person dressed in costume for the purpose of advertising or drawing attention to an individual, business, commodity, service, or product.

Marquee sign shall mean a type of projecting sign attached to or hung from a canopy or covered structure projecting from and supported by a frame or pipe support extending beyond the façade of a building, by no more than 18 inches, but not above its roofline.

Monument sign shall mean a permanent, freestanding sign mounted on a structural base and where the bottom of the sign base is located within two (2) feet of ground level.

Message board sign shall mean any sign or portion of a sign attached to a structure which contains a sign face designed to allow the removal or replacement of individual letters, words, or symbols on the sign face for the purpose of changing an advertising message.

Pole sign shall mean a permanent, freestanding sign that is mounted on a pole(s) or other support(s) that is placed on and anchored in the ground or on a base and that is independent from any building or other structure.

Premises shall mean a lot, tract, or parcel of land including all buildings and structures.

Temporary Sign shall mean a sign shall not be permitted for length of time longer than fourteen (14) consecutive calendar days.

Wayfinding Sign shall mean a systematic network of directional, on- and off-premises, signage installed and maintained by a public or private entity to guide vehicular or pedestrian movement to / through a residential subdivision or non-residential development.

Window Sign shall mean any sign painted or adhered on glass surface(s) of windows or doors.”

Section 3. The Code of Ordinances is further amended by adding to Section 60-3, Classifications, of Article I, In General, of Chapter 60, Signs, the language underscored below, to read as follows:

“**Sec. 60-3. Classifications.**

(b) All signs shall further be classified into one of the following type signs:

(6) Window sign.

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Section 4. The Code of Ordinances is further amended by deleting subsection (b), Exceptions, (3) Other Signs, of Section 60-5, Sign Permits and Fees, of Article I, In General, of

Chapter 60, Signs, and adding a new subsection (b), Exceptions, (3), Other Signs, to read as follows:

“Sec. 60-5. Sign permits and fees.

(b) *Exceptions.*

(3) *Other signs.* On premises signs of the following descriptions; any sign listed hereunder shall be erected and maintained in a safe condition in conformity with section 60-7, all other city ordinances and building codes of the city:

- a. Signs painted or adhered on glass surfaces, windows, or doors;
- b. Railroad signs;
- c. Legal notices and address numbers;
- d. A sign not over 32 square feet in area setting forth information concerning a building or other structure under repair or construction or advertising the sale or rental of the premises so long as the building or other structure is under repair or construction or so long as the premises is for sale or rent;
- e. Temporary signs setting forth the location of or directions to parking or buildings located on the premises, or regulating of the flow of on-premises traffic. Such directional signs may be lighted, consistent with the other requirements for electrical signs in this chapter and with the requirements of the building code.
- f. Signs displayed, designed, or used for or upon motor vehicles;
- g. Signs designed and used for display upon or with lighter or heavier-than-aircraft; and
- h. Garage sale signs. Such signs shall not be displayed for more than three (3) consecutive days for each sale and shall not be placed in right-of-ways or on telephone/power/light poles. The date of the initial posting shall be displayed on all garage sale signs.”

Section 5. The Code of Ordinances is hereby further amended by adding to Subsection (c), Application Procedure, of Section 60-5, Sign Permits and Fees, of Article I, In General, of Chapter 60, Signs, the language underscored below and deleting therefrom the language struck through below:

“Sec. 60-5. Sign permits and fees.

(c) Application Procedure.

(1) The application for a permit shall be submitted in such form as the sign administrator may prescribe and shall be accompanied by drawings and descriptive data to verify compliance with the provisions of this chapter. Construction permit applications for new ground signs when erected or constructed to heights exceeding 20 six (6) feet above ground level, or for new roof, marquee, and projecting signs when erected 20 feet above ground level, shall be accompanied by a drawing of the sign structure and the sign prepared by and certified by a professional engineer registered in the state; the sign administrator at his option may also require similar certification by a registered professional engineer where any unusual structural provisions of a proposed sign indicate such certification is necessary in the interest of public safety.

Section 6. The Code of Ordinances is hereby further amended by adding to Section 60-7, Miscellaneous Sign Provisions, of Article I, In General, of Chapter 60, Signs, the language underscored below and deleting the language struck through below, to read as follows:

“Sec. 60-7. Miscellaneous sign provisions.

~~(a) Christmas displays and similar temporary displays erected without advertising shall not be subject to the provisions of this chapter, but shall be subject to the fire code and rules and regulations for fire safety promulgated by the fire marshal and shall not violate article II of chapter 66.~~ Banner Signs. A property shall be limited to one (1) on-premises or one (1) off-premises banner signs. All banners signs shall be considered temporary in nature, as defined in this Chapter. Excluding signs as specified under Section 60-5(b)(3)d.

~~(l) Message Board Signs. Lettering on message board signs shall remain attached to the sign face at all times and shall spell out comprehensible. If at any time the message board sign is found to be missing letters or spelling out an incomprehensible or message, the Sign Administrator shall give written notice of the condition of the sign to the person owning, leasing, or~~

responsible for the sign. Such person so notified shall correct the condition of the sign in a manner to be approved by the Sign Administrator in conformity with the provisions of this Chapter.

(m) Marquee Signs. Marquee signage shall only provide changeable copy that relates to the principle use on the premises whose message shall not be altered more than once in a 24-hour time period. The principle use on the premises shall be limited to a motion picture theater, museum, art gallery, convention center or hall, exhibition hall, or building for dramatical, musical, or cultural activity.”

Section 7. The Code of Ordinances is hereby further amended by adding to Section 60-8, On-Premises Sign Provisions, of Article I, In General, of Chapter 60, Signs, the language underscored below, to read as follows:

“Sec. 60-8. On-premise sign provisions.

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(d) On-premises signs shall comply with the visibility triangle requirements of Chapter 66 of the Code of Ordinances.”

Section 8. The Code of Ordinances is further amended by adding to Section 60-9, Off-Premises Sign Provisions, of Article I, In General, of Chapter 60, Signs, the language underscored below, to read as follows:

“Sec. 60-9. Off-premises sign provisions.

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(b) No new permits shall be issued for off-premises signs and no additional off-premises signs shall be erected except as authorized by this section. Off-premises ground signs shall be permitted upon compliance with the following standards:

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(6) There shall not be more than two (2) off-premises signs per property.

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Section 9. The Code of Ordinances is further amended by adding a new Section 60-12, Attention-Getting Devices, to Article I, In General, of Chapter 60, Signs, the new Section 60-12 to read as follows:

“Sec. 60-12. Attention-Getting Devices.

- (a) As used in this section, attention-getting devices shall mean devices erected, placed or maintained outdoors so as to attract attention to any commercial business, or any goods, products or services available on the premises of a commercial business, including but not limited to the following devices: cut out figures; discs; festooning, including tinsel, strings of ribbons, and pinwheels; inflatable objects, including balloons; non-governmental flags; pennants; propellers; steam- or smoke-producing devices; streamers; whirligigs; wind devices; blinking, rotating, moving, chasing, flashing, glaring, strobe, scintillating, search, flood or spot lights; or similar devices, any of which are located or employed in connection with the conduct of a commercial business. Attention-getting devices shall not include any structure or device that is permitted under City Building Code.
- (b) It shall be unlawful for any person to place, erect, maintain, or display any attention-getting device on any private or public property within the City. No attention-getting device shall be eligible for a permit under this Chapter.
- (c) Enforcement of this section shall be the duty of the Sign Administrator.”

Section 10. The Code of Ordinances is further amended by adding a new Section 60-13, Billboards, to Article I, In General, of Chapter 60, Signs, the new Section 60-13 to read as follows:

“Section 60-13. Billboards.

- (a) No new billboards shall be permitted within the City Limits or the Extraterritorial Jurisdiction of the City.
- (b) Existing billboards:

- (1) Sign face replacement shall be allowed without a permit to the extent that no structural modifications are required.
- (2) In the event a billboard is damaged by any means or cause and the repair or reconstruction cost, whichever is applicable, equals or exceeds 50 percent of the cost of erecting a new sign of the same type at the same location, it must be removed.

Any billboard lawfully erected and maintained that has no copy, transcript, reproduction, model, likeness, image, advertisement or written material for a period of 120 consecutive days is hereby declared to be a violation of this section, and as such shall be restored to use or removed by the owner or permittee within 30 days after notice by the Sign Administrator of such violation.”

Section 11. The Code of Ordinances is hereby further amended by adding a new Section 60-14, Prohibited Signage, to Article I, In General, of Chapter 60, Signs, new Section 60-14 to read as follows:

“Sec. 60-14. Prohibited Signage

All signage listed in this section shall be prohibited within the City limits. All existing prohibited signage shall be removed within 120 calendar days from the effective date of this Chapter.

- (a) Inflatable Signs
- (b) Human or Living Signs
- (c) Freestanding temporary signage for non-civic events, except as otherwise exempted by this Chapter.
- (d) Attention-Getting Devices
- (e) Bandit Signs
- (f) Obscene Signs
- (g) Portable Signs
- (h) Any sign not specifically mentioned in this Chapter is prohibited unless approved by City Council.”

Section 12. The Code of Ordinances is hereby further amended by adding to Section 60-29, Height Limitations, of Article II, Design and Structural Requirements, of Chapter 60, Signs, the language underscored below and deleting the language struck through below, to read as follows:

“Sec. 60-29. Height Limitations.

- (a) No on-premises ground sign shall be established, constructed, or erected which exceeds an overall height of 42¹/₂ feet including cutouts extending above the rectangular border, measured from the highest point on the sign to the natural grade level of the ground surface in which the sign supports are placed.
- (b) Roof, wall, projecting, and marquee signs shall not at any point exceed eight (8) feet above the roof level.
- (c) No off-premises sign shall be established, constructed, or erected which exceeds an overall height of 12 feet measured from the highest point on the sign to the natural grade level of the ground surface.”

Section 13. The Code of Ordinances is further amended by deleting Section 60-30, Size Limitation, of Article II, Design and Structural Requirements, of Chapter 60, Signs, and adding a new Section 60-30, to read as follows:

“Sec. 60-30. Size limitation.

- (a) No on-premises wall sign shall be established which has a face area exceeding 300 square feet per building face.
- (b) No CEVMS shall be established which has a face area exceeding 32 square feet for a single-business or use and 50 square feet for a multi-tenant business or use.
- (c) All on-premises window signs shall maintain, at minimum, 50% transparency overall, unless otherwise noted in this Chapter.
- (d) No off-premises sign shall be established, constructed, or erected which has a face area exceeding 40 square feet, including cutouts, but excluding uprights.”

Section 14. The Code of Ordinances is hereby further amended by deleting from Article II, Design and Structural Requirements, of Chapter 60, Signs, Section 60-33, Portable Signs, in its entirety.

Section 15. The Code of Ordinances is hereby further amended by adding a new Section 60-33, Wayfinding Signs, to Article II, Design and Structural Requirements, of Chapter 60, Signs, new Section 60-33 to read as follows:

“Sec. 60-33. Wayfinding Signs.

- (a) On-Premises Wayfinding Signs shall have a maximum sign face area of 12 square feet.
- (b) Off-Premises Wayfinding Signs shall have a maximum sign face area of 40 square feet.
- (c) Wayfinding signage shall include only arrows, directions, and references to specific destinations or geographical areas.
- (d) A Wayfinding Guide Sign Plan shall be submitted to the Sign Administrator at the time of permitting. The Plan shall include:
 - (2) Sign detail with dimensions, colors and font size for each sign.
 - (3) Mounting height, type and location of mount.
 - (4) Distance to any existing adjacent traffic control devices, driveways or other physical roadway features.”

Section 16. The Code of Ordinances is hereby further amended by adding a new Section 60-34, Flags and Flag Signs, to Article II, Design and Structural Requirements, of Chapter 60, Signs, new Section 60-34 to read as follows:

“Sec. 60-34. Flags and Flag Signs.

- (a) No more than three (3) free-standing flagpoles may be allowed at any time on the premises, as defined and determined by the City. Federal, state, or local government flags, emblems and/or historical markers and any flags or insignia of a religious, charitable, fraternal, academic, or civic organization may be allowed.

- (b) A maximum of one (1) corporate flag and flagpole may be permitted if erected in conjunction with at least one (1) flagpole and flag consistent with subsection (a).
- (c) Official flags shall be flown in a manner that meets U.S. Congressional protocol. Failure to display flags in this manner shall be a violation of this Section. All flags shall be kept in good repair.
- (d) Flags may be permitted in all Zoning districts.
- (e) Design and lighting of the U.S. flag shall be consistent with the Federal Flag Code, 36 U.S.C. Section 173-8 as amended.
- (f) Flagpoles shall be black, brown, dark green, white, silver, or bronze in color.
- (g) Lighting may be allowed, but shall not direct glare onto any building on any other property.
- (h) Pole Heights, Flag Sizes, Minimum Distances, and Setbacks:
 - (1) No side of any flag on a pole 35 feet or less in height shall be greater than six (6) feet in length.
 - (2) Flags on poles over 35 feet in height may have a flag with a length of not more than 25% of the height of the pole.
 - (3) No flagpole shall exceed 50 feet in height.
 - (4) A minimum distance of six (6) feet shall be maintained between flagpoles. All flags shall maintain a minimum setback of eight (8) feet from all overhead power lines or easements and six (6) feet from a property line.
- (i) Encroachments:
 - (1) No flag may be erected within a utility easement.
 - (2) Neither the flag, flagpole, nor other support structure may extend over a right-of-way.
 - (3) Neither the flag, flagpole, nor any other support structure may extend over an adjoining property line.”

Section 17. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 18. Any person who shall intentionally, knowingly, recklessly, or with criminal negligence, violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed \$2,000. Each day of violation shall constitute a separate offense.

Section 19. This Ordinance shall become effective fourteen days after the final reading and adoption of this Ordinance when the caption hereof is caused to be published once in the official newspaper of the City, by the City Secretary, as required by law. The City Secretary is directed to publish the caption of this Ordinance in the City's official newspaper within 14 days after the passage of the ordinance.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF
THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE ____ DAY OF
_____ 2012.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____

COUNCILMAN DODSON _____

SECOND READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF
THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE ____ DAY OF
_____ 2012.

COUNCILMAN HUDGENS _____
COUNCILMAN STOLL _____
COUNCILMAN BROWN _____
COUNCILMAN TOWNSEND _____
COUNCILMAN DODSON _____

Gretchen Fagan, Mayor

ATTEST:

Doris Speer, City Secretary

To: George Shackelford, City Manager
Rebeca Guerra, City Planner

From: Preston L. Dodson

Date: October 7, 2012

Re: COMMENTS - SIGN ORDINANCE – PROPOSED

Because I will be absent from the October 15, 2012 city council meeting, I request that my comments to the draft Sign Ordinance be made available to Rebeca Guerra and members of city council as a whole.

1. Portable Signs. My recollection is that in earlier discussions the general consensus of counsel was to prohibit Portable Signs. Recommendations are:
 - a. Include a specific provision that clearly prohibits “portable signs”. Mayvbe in Sec. 60-38. Included Portable Signs in this section as being prohibited. We also removed section 60-33 from the Ordinance.
 - b. Clarify the last sentence of 60-7(f). If a Message Board Sign is defined as one that is attached to a structure, then how can you have a “freestanding portable message board sign”? If the intent is to prohibit “portable signs”, then make it a separate subsection. Removed the reference to portable signs.
2. In light of the comments regarding portable signs, review the definition of Ground Signs. Sec. 60-3(b)(1), Sec. 60-5(c)(1), Sec. 60-8(b), Sec. 60-8(c), Sec. 60-8(c)(1-3), Sec. 60-9(c)and possibly other sections would therefore include a “portable sign”. We removed any reference to portable signs throughout the ordinance for consistency
3. If portable signs are prohibited, then 60-33 should be deleted. 60-33(a) implies that you can have a portable sign, which creates an ambiguity in the ordinance. Deleted.
4. Banner Signs; Temporary Signs. It is not uncommon for property owners to attach a banner to their building or have a banner on the property advertising the particular property for sale or lease. Please advise as to how this type of sign will be treated under the ordinance and identify the specific sections in the ordinance that govern such a sign. This type of signage typically will be in place for several months or longer until the property is rented or sold. They are also larger than 10 square feet. I don’t think it is in the best interest of Tomball to prohibit that type of signage or to make it difficult to comply with the ordinance. Added language to Section 60-7(a) to exclude banners associated with the sale or rental of property or the construction or repair. Changed the

squatre footage associate with the signs in Seciton 60-5(b)(3)d to be 32 SF.

5. Coverage on windows. The 50% coverage of windows could likewise be a problem It has been commented that the 50% coverage limit is in part for safety. I am of the opinion that the safety argument is not well founded when you consider that many windows are fully covered by blinds that are closed or some buildings have few if any windows. The 50% coverage allows for more visibility, decrease signage clutter, and increase aesthetics.

My recommendation is to eliminate the 50% maximum coverage limit and allow the merchants to best determine the amount of window space to use or leave clear.

6. Sec. 60-4(e). Refers to appeal to city council pursuant to its rules and regulations. Do we have rules and regulations relating to appeals? If so, are they current? If not, do they need to be developed? Will forward to City Attorney for review.
7. The interaction between Sec. 60-5(b)(3) and Sec. 60-7 is a bit confusing. I particular to house numbers, aircraft signs. Please clarify if needed. Sec. 60-5(b)(3) does not require permits and Sec. 60-7 may require permits.
8. Sc. 60-5(b)(3)(c) refers as an exception to “house numbers”. It seems logical that an office building is not a house and therefore the building number is not an exception to the sign permit and fees. Please advise as to the reason for this difference. Changed to address number to refernce all types of addressing for building or facilities.

-Chapter 60

SIGNS*

* **Editors Note:** Ord. No. 2002-12, § 2, adopted May 6, 2002, enacted provisions intended for use as ~~chapter~~Chapter 58, §§ 58-1--58-10, 58-26--58-33. At the direction of the ~~city~~City, said provisions have been redesignated as ~~chapter~~Chapter 60, §§ 60-1--60-10, 60-26--60-33.

Article I. In General

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Sec. 60-2. Scope; ~~C~~onflicts.
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ARTICLE I.

IN GENERAL

Sec. 60-1. Definitions.

The following words, terms, and phrases, when used in this ~~chapter~~Chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

Aircraft means a vehicle capable of atmospheric flight due to interaction with the air, such as buoyancy or lift.

Advertising means to seek the attraction of or to direct the attention of the public to any goods, services, or merchandise whatsoever.

Awning sign shall mean any sign constructed of a plastic, fabric--type, or other material stretched over a rigid metal frame that is permanently attached to the wall, roof, or mansard of a building.

Bandit sign means a sign having less than ten (10) square feet of advertising area.

Banner sign shall mean any sign constructed of cloth, canvas, light fabric or other lightflexible material; excluding awning signs, which is not rigidly and not permanently attached to a building or the ground through a semi-permanent or permanent support structure.

Billboard means a signage panel for the display of advertisements in public places, such as alongside highways.

Business purposes means the erection or use of any property, building or structure, permanent or temporary, for the primary purpose of conducting in the building or structure or on the property a legitimate commercial enterprise in compliance with all ordinances and regulations of the city-City governing such activity; business purpose shall not include any property, building, or structure erected or used for the primary purpose of securing a permit to erect a sign.

Changeable ~~electronic~~ Electronic variable-Variable message-Message signs-Sign (CEVMS) means a sign which permits lights to be turned on or off intermittently or which is operated in a way whereby light is turned on or off intermittently, including any illuminated sign on which such illumination is not kept stationary or constant in intensity and color at all times when such sign is in use, including an light-Light emitting-Emitting diode-Diode (LED) or digital sign, and which varies in color or intensity. A CEVMS sign does not include a sign located within the right of way which functions as a traffic control device and which is described and identified in the Manual on Uniform Traffic Control Devices (MUCTD) approved by the Federal Highway Administrator as the National Standard.

Commercial or industrial activity means property that is devoted to use for business purposes, and not for residential purposes. "Commercial or industrial activity" shall not include the following:

- (1) Signs;
- (2) Agricultural, forestry, ranching, grazing, farming, and related activities;
- (3) Activities not housed in a permanent building or structure;
- (4) Activities conducted in a building primarily used as a residence.

Curbline means an imaginary line drawn along the edge of the pavement on either side of a public street.

Display surface means the entire surface of a sign, on one side, devoted to exhibiting or contrasting exhibits of advertising. The display surface shall generally include the entire sign surface except for the sign frame and incidental supports thereto.

Electrical sign means any sign containing electrical wiring or utilizing electric current, but not including

signs illuminated by an exterior light source.

Flag sign shall mean any flag, except the flags of the United States, Texas or any other governmental entity, used for advertising that contains or displays any written message, business name, pictorial representation, logo, corporate symbol, silhouette, or other visual representation identifying or advertising a particular business, good, service or merchandise sold or available for sale on the premises where the flag is erected, displayed or maintain device generally made of flexible material, such as cloth, paper, plastic, or other material, and displayed from a pole, cable, or rope. It may or may not include texted.

Ground sign means a sign, which is supported by uprights or braces in or upon the ground, ~~including portable signs as defined herein.~~

Inflatable sign shall mean an on or off premise sign that gains its shape from inserting air or other gas.

Integrated business development shall means a planned development, comprised of two or more separate commercial entities, whether located on a single lot, tract, or parcel of land or not, which provides common off-street parking, pedestrian ways, landscaping, and/or other areas designed, constructed, and maintained for the common use and benefit of the development's tenants or occupants, and the customers thereof.

Living or human sign shall mean an on or off premise sign held by or attached to a human being or living creature for the purpose of advertising or otherwise drawing attention to an individual, business, commodity, service, or product. This can also include a person dressed in costume for the purpose of advertising or drawing attention to an individual, business, commodity, service, or product.

Marquee sign means a type of projecting sign attached to or hung from a canopy or covered structure projecting from and supported by a frame or pipe support extending beyond a the façade of a building, by no more than 18 inches, but not above its roofline.-

Monument sign means a permanent, freestanding sign mounted on a structural base and where the bottom of the sign base is located within two (2) feet of ground level.

Message board sign shall mean any sign or portion of a sign attached to a structure which containsing a sign face designed to allow the removal or replacement of individual letters, words, or symbols on the sign face for the purpose of changing an advertising message.

Off-premises sign means any sign advertising a business, person, activity, goods, products, or services not usually located on the premises where the sign is installed and maintained, or which directs persons to any location not on the premises.

On-premises sign means any sign identifying or advertising the business, person, activity, goods, products, or services primarily sold or offered for sale on the premises where the sign is installed and maintained when such premises are used for business purposes.

Person means an individual, company, corporation, partnership, association, or any other entity.

Pole sign means a permanent, freestanding sign that is mounted on a pole(s) or other support(s) that is placed on and anchored in the ground or on a base and that is independent from any building or other structure.

Portable sign means any sign designed or constructed to be easily moved from one location to another, including signs mounted upon or designed to be mounted upon a trailer, bench, wheeled carrier, or other non-motorized mobile structure; a portable sign which has its wheels removed shall still be considered a portable sign.

Premises means a lot, tract, or parcel of land including all buildings and structures.

Projecting sign means any sign which is affixed to any building wall or structure and extends beyond the building wall or structure more than 12 inches.

Public right-of-way means any part of a right-of-way not privately owned or controlled, and which is the responsibility of the ~~city~~City of other similar public agency to maintain.

Public street means the entire width between property lines of any road, street, way, alley, bridge, or other similar thoroughfare, not privately owned or controlled, when any part thereof is open to the public for vehicular traffic, is the responsibility of the ~~city~~City or of other similar public agency to maintain, and over which the ~~city~~City has legislative jurisdiction under its police power.

Reflectorized lights means any lamp constructed with reflector-type materials so as to focus, intensify, flood, or spot such lamp in a certain direction, including, but not limited to, lamps designated by the manufacturers as flood, spot, reflector or flood, reflector spot, reflector light, or clear reflector.

Residential purposes means property devoted to use as a single-family or multifamily residence. Residential purposes shall include, but not be limited to, property used for houses, duplexes, condominiums, townhomes, patio homes, and apartments; property used for hotels, motels, and boardinghouses shall not be considered as used for residential purposes. Property devoted to both residential and nonresidential use shall be considered as used for residential purposes if its principal use is residential.

Roof sign means any sign erected, constructed, or maintained above the roof of any building.

Sign means any outdoor display, design, pictorial, or other representation, which is constructed, placed, attached, painted, erected, fastened, or manufactured in any manner whatsoever, that is designed, intended, or used for advertising. The term "sign" shall include the sign structure. Every sign shall be classified and conform to the requirements of each of such classification set forth in this ~~chapter~~Chapter.

Sign facing or *facing* means a separate and distinguishable portion of the overall display surface.

Sign structure means any structure which supports or is capable of supporting any sign. A sign structure may be a single pole and may or may not be an integral part of a building.

Temporary Sign means ~~that~~ a sign shall not be permitted for length of time longer than fourteen (14) consecutive calendar days ~~for each distinct event~~.

Wall sign means any sign affixed to or painted upon the wall of any building.

Wayfinding Sign means a systematic network of directional, on- and off-premises, signage installed and maintained by a public or private entity to guide vehicular or pedestrian movement to / through a residential subdivision or non-residential development.

Window Sign means any sign painted or adhered on glass surface(s) of windows or doors.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-2. Scope; ~~e~~Conflicts.

- (a) In accordance with the provisions of § 216.902 of the Texas Local Government Code, the provisions of this ~~chapter~~Chapter shall apply to all signs, as that term is defined herein, within the ~~city~~City and shall also extend to and be enforced within the ~~extraterritorial jurisdiction~~Extraterritorial Jurisdiction of the ~~city~~City.
- (b) Where this ~~chapter~~Chapter shall differ or conflict with ~~article~~Article II of ~~chapter~~Chapter 14, adopting the ~~Standard~~International Building Code, or any other ordinance, this ~~chapter~~Chapter will prevail.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-3. Classifications.

- (a) For the purpose of this ~~chapter~~Chapter, a sign shall be first classified as either an on-premises sign or an off-premises sign.
- (b) All signs shall further be classified into one of the following type signs:
 - (1) Ground ~~S~~Sign;
 - (2) Marquee ~~S~~Sign;
 - (3) Projecting ~~s~~Sign;
 - (4) Roof ~~s~~Sign; ~~or~~
 - (5) Wall ~~s~~Sign; or
 - (6) Window Sign.
- (c) Any on-premises or off-premises sign of any type may also be included within one or more of the

following additional classifications according to special functions:

- (1) Electrical ~~s~~Sign;
- (2) Portable ~~s~~Sign; or
- (3) Temporary ~~s~~Sign.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-4. ~~Sign administrator~~Sign Administrator and ~~e~~Enforcement.

- (a) *Sign ~~a~~Administrator.* The ~~e~~City ~~m~~Manager shall appoint a ~~s~~Sign ~~a~~Administrator. The ~~sign-administrator~~Sign Administrator is empowered to delegate the duties and powers granted to and imposed upon him by this ~~chapter~~Chapter to other persons serving under the ~~sign-administrator~~Sign Administrator. The ~~sign-administrator~~Sign Administrator is directed to enforce and carry out all provisions of this ~~chapter~~Chapter.
- (b) *Enforcement ~~r~~Responsibility.* The duties of the ~~sign-administrator~~Sign Administrator shall include not only the approval of permits as required by this ~~chapter~~Chapter, but also the responsibility of insuring that all signs comply with this ~~chapter~~Chapter and any other applicable law, and that all signs for which a permit is required, do in fact, have a permit. The ~~sign-administrator~~Sign Administrator shall make such inspections as may be necessary and initiate appropriate action to bring about compliance with this ~~chapter~~Chapter and other applicable law if such inspection discloses an instance of noncompliance. The ~~sign-administrator~~Sign Administrator shall investigate thoroughly any complaints of alleged violations of this ~~chapter~~Chapter.
- (c) *Powers of ~~sign-administrator~~Sign Administrator.* The ~~sign-administrator~~Sign Administrator shall have the power and authority to administer and enforce the conditions of this ~~chapter~~Chapter and all other laws relating to signs. Included among such powers are the following specific powers:
 - (1) Every sign for which a permit is required shall be subject to the inspection and approval of the ~~sign-administrator~~Sign Administrator or delegated representative.
 - (2) Upon presentation of proper identification to the owner, agent, or tenant in charge of such property, the ~~sign-administrator~~Sign Administrator or his representative may enter, for the purposes of inspecting and investigating signs or sign structures, any building, structure, or other premises or property between the hours of 8:00 a.m. and 5:00 p.m., Mondays through Saturdays; provided, however, that in cases of an emergency where extreme hazards are known to exist which may involve imminent injury to persons, loss of life, or severe property damage, and where the owner, agent, or tenant in charge of the property is not available after the ~~sign-administrator~~Sign Administrator has made a good faith effort to locate same, the ~~sign-administrator~~Sign Administrator may enter the aforementioned structures and premises at any time upon presentation of proper identification to any other person upon the premises. Whenever the ~~sign-administrator~~Sign Administrator is denied admission to inspect any premises, inspection shall be made only under authority of a warrant issued by a magistrate authorizing the inspection

for violations of this ~~chapter~~Chapter.

- (3) Upon notice and issuance of a stop order from the ~~sign-administrator~~Sign Administrator, work on any sign that is being conducted in a manner contrary to the provisions of this ~~chapter~~Chapter or is being conducted in a dangerous or unsafe manner shall be immediately stopped. Such notice and order shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed. Where an emergency exists, written notice shall not be required to be given by the ~~sign-administrator~~Sign Administrator. Following the issuance of a stop order, the ~~sign-administrator~~Sign Administrator shall initiate proceedings to revoke any permit issued for the work covered by such stop order, consistent with subsection (c)(4) of this section, unless the cause of the stop order is resolved to the ~~sign-administrator~~Sign Administrator's satisfaction.
- (4) The ~~sign-administrator~~Sign Administrator is hereby granted the power and authority to revoke any and all permits authorized by this ~~chapter~~Chapter for violation of the terms and provisions of this ~~chapter~~Chapter.
- (d) *Violations and Penalties.* Any person who shall violate any provision of this ~~chapter~~Chapter shall be guilty of a misdemeanor and shall, upon conviction thereof, be punished as provided in section 1-14.
- (e) *Appeals.* Any person wishing to appeal a decision of the ~~sign-administrator~~Sign Administrator on the grounds that the decision misconstrues or wrongly interprets this ~~chapter~~Chapter may appeal the same to the ~~city~~City Council, pursuant to its rules and regulations, provided that the appealing party shall give notice of appeal in writing to the ~~city~~City Secretary no less than ten days following the decision appealed from and provided further that the appealing party shall comply with the ~~sign-administrator~~Sign Administrator's decision pending appeal unless the ~~sign-administrator~~Sign Administrator shall direct otherwise.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-5. Sign ~~p~~Permits and ~~F~~ees.

- (a) *Permit required.* No person shall erect, construct, or reconstruct a sign without first having secured a written permit from the ~~city~~City to do so, subject to the exceptions in subsection (b).
- (b) *Exceptions.*
- (1) *Governmental/public signs.* No permit shall be required under this ~~chapter~~Chapter for signs erected by the ~~city~~City, ~~e~~County, public school district, ~~the-state~~State, or other political subdivisions thereof, the federal government, signs otherwise required by federal, state, or local laws, and signs otherwise authorized by the ~~city~~City as public signs.
- (2) *Signs for civic events.* Temporary signs that provide information about and/or direct the public to a special event of civic interest, including, but not limited to, parades, organized community events, organized community holiday festivities or celebrations, and special events organized by

charitable or nonprofit organizations.

(3) *Other signs.* On-premises signs of the following descriptions; any sign listed hereunder shall be erected and maintained in a safe condition in conformity with ~~section~~ Section 60-7, all other ~~city~~ City ordinances, and the building codes of the ~~city~~ City:

- a. Signs painted or adhered on glass surfaces, ~~or~~ windows, or doors;
- ~~b. Wall signs;~~
- ~~c. Marquee signs;~~
- b. ~~d.~~ Railroad signs;
- ~~e. Projecting signs;~~
- c. ~~f.~~ Legal notices and ~~house~~ address numbers;
- d. ~~g.~~ A sign not over ~~1040~~ 32 square feet in area setting forth information concerning a building or other structure under repair or construction or advertising the sale or rental of the premises so long as the building or other structure is under repair or construction or so long as the premises is listed for sale or rent;
- e. ~~h.~~ Temporary signs setting forth the location of or directions to parking or buildings located on the premises, or regulating of the flow of on-premises traffic. Such directional signs may be lighted, consistent with the other requirements for electrical signs in this ~~chapter~~ Chapter and with the requirements of the ~~building code~~ Building Code.
- f. ~~i.~~ Signs displayed, designed, or used for or upon motor vehicles;
- g. ~~j.~~ Signs designed and used for display upon or with lighter or heavier-than-air-craft; and
- h. ~~k.~~ Temporary ~~Garage sale signs.~~ Such signs shall not be displayed for more than three (3) consecutive days for each sale and shall not be placed in right-of-ways or on telephone/power/light poles. The date of the initial posting shall be displayed on the back of all garage sale signs.

(c) *Application procedure.*

- (1) The application for a permit shall be submitted in such form as the ~~sign administrator~~ Sign Administrator may prescribe and shall be accompanied by drawings and descriptive data to verify compliance with the provisions of this ~~chapter~~ Chapter. Construction permit applications for new ground signs when erected or constructed to heights exceeding ~~20-six (6)~~ feet above ground level, or for new roof, marquee, and projecting signs when erected 20 feet above ground level, shall be accompanied by a drawing of the sign structure and the sign prepared by and certified by a professional engineer registered in the ~~state~~ State; the ~~sign administrator~~ Sign

Administrator at his option may also require similar certification by a registered professional engineer where any unusual structural provisions of a proposed sign indicate such certification is necessary in the interest of public safety.

(2) Every application shall be executed by both the owner of the premises upon which the sign is to be constructed, or the authorized lessee of such premises, and the sign company, stating that the sign is authorized to be erected or to be thereafter maintained on the premises, and shall contain a statement of the owner or lessee and the sign company that the sign does not violate any applicable deed restrictions or other similar restrictions on the premises.

(3) If the location, plans, and specifications set forth in any application for permit conform to all of the requirements of this ~~chapter~~Chapter and other applicable provisions of the ~~building-code~~Building Code and other codes, the ~~sign administrator~~Sign Administrator shall issue the permit.

(d) *Existing signs.* All signs lawfully existing on the date of adoption of this ~~chapter~~Chapter, must conform to the requirements of ~~section~~Section 60-6 and ~~subsection-sections~~sections 60-7(a) through ~~(k)~~(m). Signs previously erected or in the process of being erected, and lawfully permitted in the ~~city~~City's ~~E~~Extrajurisdiction shall be considered as existing signs under this subsection (d)(1); provided, however, that the date of the first publication of notice for a public hearing (as required by V.T.C.A., Local Government Code § 43.052) regarding the proposed annexation of an area, shall for the purposes of this ~~chapter~~Chapter, be considered the date to determine the applicability of this ~~chapter~~Chapter to any sign within the ~~extrajurisdiction~~Extrajurisdiction, as extended by such annexation. Any sign within such area required by any proper authority to be licensed or permitted shall not be considered to have been legally permitted for the purposes of this subsection (d)(1) unless such license or permit has been properly issued.

(e) *Construction permit effectiveness; renewal permit.* Any permit for construction of a sign shall become null and void unless construction of the sign is completed within 180 days, or the permit is renewed for an additional 180 days, in which case an additional fee shall be payable and the proposed sign shall meet all of the requirements of this ~~chapter~~Chapter on the date of renewal.

(f) *Fees.* Permit fees shall be in accordance with the schedule of fees adopted by the ~~city~~City ~~e~~Council.

(g) *No refund of fees.* The applicant for a permit or holder of a permit shall not be entitled to a refund of any fee paid in case the permit is revoked.

(h) *Electrical signs.* Any electrical sign shall conform fully to the ~~e~~Electrical ~~e~~Code of the ~~city~~City and shall receive a permit under the provisions of that ~~code~~Code.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-6. Sign ~~m~~Maintenance and ~~R~~Removal.

(a) All signs shall be kept in good repair and, unless of galvanized or non-corroding metal or treated with appropriate wood preservative, shall be thoroughly painted as often as is necessary consistent

with good maintenance. All braces, bolts, clips, supporting frame, and fastenings shall be free from deterioration, termite infestation, rot, or loosening. All signs shall be able to withstand safely at all times the wind pressures specified elsewhere in this ~~chapter~~Chapter. In case any sign is not so maintained, the ~~sign administrator~~Sign Administrator shall give written notice to the owner or lessee thereof to so maintain the sign, or to remove the sign.

- (b) Should any sign in the opinion of the ~~sign administrator~~Sign Administrator become insecure or in danger of falling or otherwise unsafe, the ~~sign administrator~~Sign Administrator shall give written notice of the condition of the sign to the person owning, leasing, or responsible for the sign. Such person so notified shall correct the unsafe condition of the sign in a manner to be approved by the ~~sign administrator~~Sign Administrator in conformity with the provisions of this ~~chapter~~Chapter.
- (c) In case any sign shall be installed, erected, constructed, or maintained in violation of any of the terms of this ~~chapter~~Chapter, the ~~sign administrator~~Sign Administrator shall give written notice to the owner, lessee, or person responsible for the sign ordering such owner, lessee, or person to alter the sign so as to comply with this ~~chapter~~Chapter or to remove the sign.
- (d) Any written notice to alter or to remove a sign shall be given by the ~~sign administrator~~Sign Administrator by certified mail or written notice served personally upon the owner, lessee, or person responsible for the sign, or the owner's agent. If such order is not complied with within ten days, the ~~sign administrator~~Sign Administrator shall revoke the permit and direct the owners, lessee, or person responsible therefore to remove the sign.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-7. Miscellaneous ~~s~~Sign Pprovisions.

- (a) ~~Banner and Flag Signs. A property shall will be limited to one (1) on-premises or one (1) off-premises temporary banner, or flag, human or living, or inflatable signs. All banners signs shall be considered temporary in nature, as defined in this Chapter. Excluding signs as specified under Section 60-5(b)(3)d.~~
- ~~(b) Christmas displays. Christmas displays and similar temporary displays erected without advertising shall not be subject to the provisions of this chapter, but shall be subject to the fire code and rules and regulations for fire safety promulgated by the fire marshal and shall not violate article II of chapter 66.~~
- (b) ~~Political Signs.~~ The following signs are exempt from the permit requirements of this ~~chapter~~Chapter: A sign that contains primarily a political message and that is located on private real property with the consent of the property owner. Private real property does not include real property subject to an easement or other encumbrance that allows a municipality to use the property for a public purpose. Provided, however, the sign may not have a sign area greater than 36 square feet, be more than eight (8) feet high, be illuminated or have a moving part. This subsection does not apply to a sign, including a billboard, that contains primarily a political message on a temporary basis and that is generally available for rent or purchase to carry commercial advertising or other messages that are not primarily political.

(c) Signs on ~~P~~ublic ~~R~~ights-of-~~W~~ay.

- (1) With the exception of signs lawfully permitted or erected prior to the effective date of this ~~chapter~~Chapter, it shall be unlawful to place a sign upon a public street, public sidewalk, public alley, public right-of-way, public curb, or other public improvement in any public street or grounds, on any public bridge or part of same, or on any public building or structure of any kind belonging to the ~~city~~City, or in any public place, or on any public improvement unless express consent therefore shall have first been granted by the ~~city~~City ~~council~~Council. However, coin-operated devices used to display and vend newspapers may so be placed, so long as they are not placed to impede vehicular or pedestrian traffic. This subsection does not apply to public property leased for private business purposes.
- (2) Subdivision identification signs erected or painted directly upon the face of lawfully existing fences or walls are permitted provided that:
 - a. The subdivision sign is facing a street which serves as an entrance to the subdivision to which such sign pertains;
 - b. The subdivision sign, or any part thereof, does not extend outward more than six inches from the face of the fence or wall upon which it is mounted; and
 - c. The subdivision sign, or any part thereof, does not extend above the fence or wall upon which it is mounted.
- (3) Any unlawful sign found on public property, buildings, or structures belonging to the ~~city~~City or within a public right-of-way of a public street, public sidewalk, or public alley shall be seized and removal thereof is hereby authorized in addition to authority under ~~article~~Article II of ~~chapter~~Chapter 66. The ~~sign administrator~~Sign Administrator, employees of the police department and the department of public works are hereby authorized to impound any signs found on public property, buildings or structures, or a public street, public sidewalk, or public alley and transport or cause the same to be transported to a location to be designated by the ~~sign administrator~~Sign Administrator for storage. Any sign impounded and stored and not redeemed by the owner thereof within 30 days may be destroyed or sold at public auction in the same manner as surplus property of the ~~city~~City.

(d) Signs on ~~P~~rivate ~~P~~roperty. No person shall place a sign on private property or utility easement without the written consent of the owner or agent for the owner of the private property or utility easement.

(e) Signs ~~R~~esembling ~~O~~fficial ~~S~~igns. No sign shall be constructed which resembles any official marker erected by the ~~city~~City, ~~state~~State, or any governmental agency or which by reason of position, shape, or color would conflict with the proper functioning of any traffic sign or signal or which by its shape or color would conflict with or be confused with emergency vehicle lights, especially blinking lights. Use of words such as "stop," "look," "danger," or any other word, phrase, symbol, or character in such a manner as to interfere with, mislead, or confuse traffic is

prohibited.

- (f) *Sight ~~O~~bstruction at ~~I~~ntersections.* No sign shall be erected, constructed, reconstructed, or maintained in violation of the provisions of ~~article~~Article II of ~~chapter~~Chapter 66.
- (g) *Signs ~~n~~ot to ~~e~~Obstruct.*
- (1) No sign shall be erected, constructed, or maintained so as to obstruct any means of egress, or any opening necessary for required light, ventilation, or firefighting or for escape from the premises, or so as to prevent free passage from one part of a roof to any part thereof.
- (2) No sign shall be attached to any exterior stairway, fire escape, fire tower balcony, or balcony serving as a horizontal exit.
- (h) *Signs ~~N~~ot to ~~C~~reate ~~e~~Easements.* No permit for a sign extending beyond private property onto a public street, public sidewalk, or public alley shall constitute a permanent easement, and every such permit shall be revocable at any time by action of the ~~city~~City ~~council~~Council, and the ~~city~~City shall not be liable for any damages to the owner by reason of such revocation.
- (i) *Change of ~~e~~Ornamental ~~f~~eatures, ~~E~~lectric ~~W~~iring, or ~~A~~ddvertising ~~D~~isplay.* No sign permit is required for the change of any of the ornamental features, electric wiring or devices, or the advertising display of a sign lawfully existing or permitted. This provision shall not release a person from complying with all other applicable permitting requirements of the ~~city~~City, including those of the ~~city~~City ~~building code~~Building Code.
- (j) *Signs ~~O~~bscuring or ~~I~~nterfering with ~~V~~iew.* Signs may not be located or illuminated in such a manner as to obscure or otherwise interfere with the effectiveness of an official traffic sign, signal or device, or so as to obstruct or interfere with the view of a driver of approaching, emerging, or intersecting traffic, or so as to prevent any traveler on any street from obtaining a clear view of approaching vehicles for a distance of 250 feet along the street.
- (k) *Proper ~~S~~hielding of ~~L~~ighted ~~S~~igns; ~~I~~nterference with ~~D~~rives of ~~M~~otor ~~V~~ehicles.* Signs containing lights which are not effectively shielded to prevent beams or rays of light from being directed at any portion of the traveled way from which the sign is primarily viewed and which are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle, or which otherwise interferes with any driver's operation of a motor vehicle, are prohibited.
- (l) ~~M~~essage ~~b~~oard ~~s~~igns. Lettering on message board signs shall remain attached to the sign face at all times and shall spell out comprehensible and non-offensive messages. If at any time the message board sign is found to be missing letters or spelling out an incomprehensible or offensive message, the sign administratorSign Administrator shall give written notice of the condition of the sign to the person owning, leasing, or responsible for the sign. Such person so notified shall correct the condition of the sign in a manner to be approved by the sign administratorSign Administrator in conformity with the provisions of this chapterChapter.
- (m) ~~M~~arquee Signs. Marquee signage shall only provide changeable copy that relates to the principle

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use on the premises whose message shall not be altered more than once in a 24-hour time period. The principle use on the premises shall be limited to a motion picture theater, museum, art gallery, convention center or hall, exhibition hall, or building for dramatical, musical, or cultural activity.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-8. On-Premises Sign Provisions.

- (a) The provisions of this section apply only to on-premises signs.
- (b) On-premises signs, including ground signs, wall signs, marquee signs, projecting signs, window signs, and roof signs erected, constructed, or reconstructed after the date of adoption of this ~~chapter~~Chapter shall comply with the requirements of this ~~chapter~~Chapter.
- (c) On-premises ground signs shall be permitted as follows:
 - (1) One on-premises ground sign shall be permitted on a lot, tract, or parcel of land for each 100 feet of frontage on a public street, provided that there is a minimum separation of 100 feet between ground signs (on-premises and off-premises) located on the same lot, tract, or parcel of land, measured in a straight line from the base of each sign structure. Each lot, tract, or parcel of land shall, in any event, be entitled to at least one on-premises ground sign.
 - (2) A lot, tract, or parcel of land having frontage on more than one public street shall be entitled to one on-premises ground sign on each frontage, notwithstanding the provisions of subsection (c)(1), provided the frontage on which the sign is located measures at least 50 feet and there is a minimum separation between ground signs (on-premises and off-premises) of 100 feet, measured along the property line at the street frontage.
 - (3) An integrated business development shall be permitted one on-premises ground sign for each five entities, with a maximum sign area of 300 square feet plus 50 square feet for each entity in the development identified on such sign in excess of five, not to exceed a maximum sign area of 600 square feet. Provided, further, if more than one on-premises ground sign is permitted hereby, there shall be separation between ground signs (on-premises and off-premises) of a minimum distance of 100 feet, measured in a straight line from the base of each sign structure.
- (d) On-premises signs shall adhere to the visibility triangle requirements of Chapter 66 of the Tomball Code of Ordinances.

(Ord. No. 2002-12, § 2, 5-6-02; Ord. No. 2006-18, § 1, 11-20-06)

Sec. 60-9. Off-Premises Sign Provisions.

- (a) The provisions of this section shall apply only to off-premises signs.

- (b) No new permits shall be issued for off-premises signs and no additional off-premises signs shall be erected except as authorized by this section.
- (c) Off-premises ground signs shall be permitted upon compliance with the following standards:
- (1) Maximum sign height shall be 12 feet measured from the highest point on the sign to the natural grade level of the ground surface in which the sign supports are placed.
 - (2) Maximum sign face area shall be 40 square feet.
 - (3) There shall be a minimum separation of 500 feet between the off-premises ground sign and any other off-premises sign, and a minimum separation of 100 feet between the off-premises sign and any on-premises ground sign. Such distance shall be measured by the shortest distance in a straight line between the two signs.
 - (4) There shall not be more than two (2) off-premises signs per property.
 - (5) No off-premises ground sign shall be permitted within 350 feet of an intersection of public streets.
 - (6) Signs permitted under this section shall otherwise comply with all applicable requirements of this ~~chapter~~Chapter.
 - ~~(6) The addition of an LED Clock or time counter for informational purposes to off-premise signs shall be allowed. The LED clock or time counter shall not constitute more than ten percent (10%) of the total sign area.~~
- (d) Any off-premises sign structure lawfully erected and maintained which has no copy, transcript, model, likeness, image, advertisement, or written material for 120 consecutive days is hereby declared to be in violation of this section and as such shall be restored to use or removed by the owner or permittee within 30 days after notice by the ~~sign administrator~~Sign Administrator of such violation.

(Ord. No. 2002-12, § 2, 5-6-02; Ord. No. 2006-18, § 2, 11-20-06)

Sec. 60-10. Nonconforming ~~S~~signs.

- (a) A permanent sign lawfully erected within the ~~city~~City or its ~~extraterritorial jurisdiction~~Extraterritorial Jurisdiction prior to the date of adoption of this ~~chapter~~Chapter, which does not conform to the regulations of this ~~chapter~~Chapter, shall be deemed to be a nonconforming sign which shall be allowed to continue, with normal maintenance and repair only; provided, however, a nonconforming sign may not be enlarged upon, expanded, or extended. The addition of an LED Clock or time counter for informational purposes to off-premises signs shall not constitute an enlargement, expansion, or extension in so far as it is placed within the original face of the

nonconforming sign and is not more than ten (10) percent of the total sign area. It is not the intent of this section to encourage the survival of nonconforming signs; to the contrary, nonconforming signs are discouraged and contrary to the intent and purpose of this ~~chapter~~Chapter.

(b) *Obsolescence or destruction.* A nonconforming sign shall not be enlarged, expanded, replaced, or rebuilt in case of obsolescence or total destruction by any means or cause.

(c) *Repair or reconstruction if damaged.* In the event a nonconforming sign is damaged by any means or cause and the repair or reconstruction cost, whichever is applicable, equals or exceeds ~~60-50~~ percent of the cost of erecting a new sign of the same type at the same location, it must be removed or brought into compliance with this ~~chapter~~Chapter.

(Ord. No. 2002-12, § 2, 5-6-02)

Editors Note: Ord. No. 2002-12, § 2, adopted May 6, 2002, enacted provisions intended for use as subsections (a) and (b). To preserve the style of this ~~Code~~Chapter, and at the discretion of the editor, said provisions have been redesignated as subsections (1) and (2).

Sec. 60-11. Changeable ~~E~~electronic ~~V~~variable ~~M~~message ~~S~~signs (CEVMS).

(a) Changeable ~~electronic~~Electronic ~~variable~~Variable ~~message~~Message ~~signs~~Signs (CEVMS) shall be prohibited within the corporate limits and the ~~extraterritorial jurisdiction~~Extraterritorial Jurisdiction of the ~~City~~City, except that changeable electronic variable message signs shall be permitted for properties adjacent to all State rights-of-ways and for public tax-supported schools to provide public information. Changeable electronic variable message signs may be permitted on properties not adjacent to a State right-of-way upon application to and approval by the City Council. No new permit shall be issued for the installation, erection, or replacement of a CEVMS, including any conversion or modification of an existing sign to a CEVMS, within the corporate limits or the ~~extraterritorial jurisdiction~~Extraterritorial Jurisdiction of the City, except as provided herein.

(b) ~~Changeable Electronic Variable Message Sign~~ (CEVMS) Regulations:

- (1) Images or messages shall be static in nature and shall not blink, flash, scroll or be animated in such a manner as to constitute a distraction to passing motorists.
- (2) No image or message may be displayed for less than eight (8) seconds.
- (3) Message transitions shall be limited to one (1) second.
- (4) The brightness of any CEVMS shall not exceed 0.3 foot candle illumination from a distance of 250 feet between sunset and sunrise, and each sign shall be fitted with a qualified light sensing device to automatically adjust the brightness in accordance with these standards.
- (5) All CEVMS ~~signs~~ shall be limited to 32 square feet for a single business or use and 50 square feet for a multi-tenant business or use.

(6) All CEVMS shall require a usage permit with annual fee. The annual fee shall be established by resolution of the City Council.

(7) If a CEVMS is found to be operating incorrectly, it must be turned off until it is repaired and inspected by the City of Tomball.

(8) The images displayed on the CEVMS must be directly related to the on-premises business ~~with the exception of messages relating to time, temperature, national news, local news, sporting events, or upcoming events for the City of Tomball.~~

(c) CEVMS shall only be permitted as on-premises signs.

(d) The addition of an LED clock or time counter for informational purposes to off-premises signs shall be allowed. The LED clock or time counter shall not constitute more than ten (10) percent of the total sign area.

Secs. 60-12--60-25. Reserved.

ARTICLE II.

DESIGN AND STRUCTURAL REQUIREMENTS

Sec. 60-26. Design.

All signs and sign structures shall be designed and constructed to resist wind forces as follows:

Wind Load Pressures in Pounds per Square Foot for all Signs

Height above ground* (feet)	Pressure (pounds/ft.)
0--5	0
6--30	20
31--50	25
51--99	35
*Measured above the average level of the ground adjacent to the structure.	

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-27. Construction.

The supports for all signs or sign structures shall be placed in or upon private property and shall be securely built, constructed, and erected in conformance with the requirements of the ~~city~~City building code ~~Building Code~~.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-28. Electrical ~~R~~requirements.

All electrical fixtures, equipment, and appurtenances installed in conjunction with a sign shall be designed and installed in accordance with the ~~city~~City building code~~Building Code~~.
(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-29. Height ~~L~~imitation.

- (a) No ~~on-premises~~ ground sign shall be established, constructed, or erected which exceeds an overall height of 42 ~~42~~ feet including cutouts extending above the rectangular border, measured from the highest point on the sign to the natural grade level of the ground surface in which the sign supports are placed.
- (b) ~~RA-roof- or wall, projecting, and marquee~~ signs shall not at any point exceed eight (8) feet above the roof level.
- (c) No off-premises sign shall be established, constructed, or erected which exceeds an overall height of 12 feet measured from the highest point on the sign to the natural grade level of the ground surface.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-30. Size ~~L~~imitation.

- (a) No on-premises sign, other than an on-premises ~~wall sign and a~~ ground sign permitted by subsection 60-8(c)(3), shall be established, constructed, or erected which has a face area exceeding 300 square feet, including cutouts, but excluding uprights.
- (b) No on-premises wall sign shall be established which has a face area exceeding 300 square feet per building face adjacent to a public right of way.
- (c) No CEVMS shall be established which has a face area exceeding 400-32 square feet for a single-business or use and 20050 square feet for a multi-tenant business or use.
- (d) All on-premises window signs shall maintain, at minimum, fifty (50) percent50% transparency within each overall windowoverall, unless otherwise noted in this Chapter.
- (e) No off-premises sign shall be established, constructed, or erected which has a face area exceeding 40 square feet, including cutouts, but excluding uprights.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-31. Method of ~~D~~determining ~~A~~area of ~~S~~sign.

In determining the area of any sign, the dimensions of the rectangle enclosing the signboard, excluding

the supporting structure, shall be used. If the sign includes cutouts or facings extending beyond the dimensions of the rectangular signboard, the measurement of the sign area shall include the actual area of the cutout or extended facings. For signs of a double-faced, back-to-back, or V-type nature, each face shall be considered a separate sign in computing the face area.

(Ord. No. 2002-12, § 2, 5-6-02)

Sec. 60-32. Clearances.

Signs shall be located at a minimum distance of six feet measured horizontally and 12 feet measured vertically from overhead electric conductors, which are energized in excess of 750 volts.

(Ord. No. 2002-12, § 2, 5-6-02)

~~Sec. 60-33. Portable signs.~~

~~(a) Every portable sign not in transit shall be securely anchored to the ground by cables, ground supports, or other means acceptable to the sign administrator to prevent overturning in high winds.~~

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~~(b) Portable signs shall, for the purposes of this chapter, be considered nonmobile, nonportable ground signs and thereby are subject to all provisions of this chapter, including the structural requirements, permitting fee requirements, on-premises and off-premises provisions, and all other provisions of this chapter applicable to ground signs unless a provision which applies by its terms to portable signs is in conflict with a provision applying to ground signs, in which case the provision applying specifically to portable signs shall control.~~

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~~(Ord. No. 2002-12, § 2, 5-6-02)~~

Sec. 60-33. Wayfinding Signs.

- (a) On-Premises Wayfinding Signs shall have a maximum sign face area of ~~twelve (12)~~ 12 square feet.
- (b) Off-Premises Wayfinding Signs shall have a maximum sign face area of ~~forty (40)~~ 40 square feet.
- (c) Wayfinding signage shall include only arrows, directions, and references to specific destinations or geographical areas.
- (d) A Wayfinding Guide Sign Plan shall be submitted to the Sign Administrator at the time of permitting. The Plan shall include:
 - (1) Sign detail with dimensions, colors and font size for each sign.
 - (2) Mounting height, type and location of mount.
 - (3) Distance to any existing adjacent traffic control devices, driveways or other physical roadway features.

Sec. 60-34. Attention-Getting Devices.

- (a) As used in this section, attention-getting devices shall mean devices erected, placed or maintained outdoors so as to attract attention to any commercial business, or any goods, products or services available on the premises of a commercial business, including but not limited to the following devices: cut out figures; discs; festooning, including tinsel, strings of ribbons, and pinwheels; inflatable objects, including balloons; non-governmental flags; pennants; propellers; steam- or smoke-producing devices; streamers; whirligigs; wind devices; blinking, rotating, moving, chasing, flashing, glaring, strobe, scintillating, search, flood or spot lights; or similar devices, any of which are located or employed in connection with the conduct of a commercial business. Attention-getting devices shall not include any structure or device that is permitted under City Building Code.
- (b) It shall be unlawful for any person to place, erect, maintain, or display any attention-getting device on any private or public property within the City. No attention-getting device shall be eligible for a permit under this Chapter.
- (c) Enforcement of this section shall be the duty of the Sign Administrator.

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Sec. 60-35. Billboards

- (a) No new billboards shall be permitted within the City Limits or the Extraterritorial Jurisdiction of the City.
- (b) Existing billboards:
 - (1) Sign face replacement shall be allowed without a permit to the extent that no structural modifications are required.
 - (2) In the event a billboard is damaged by any means or cause and the repair or reconstruction cost, whichever is applicable, equals or exceeds 50 percent of the cost of erecting a new sign of the same type at the same location, it must be removed.
 - (3) Any billboard lawfully erected and maintained that has no copy, transcript, reproduction, model, likeness, image, advertisement or written material for a period of 120 consecutive days is hereby declared to be a violation of this section, and as such shall be restored to use or removed by the owner or permittee within 30 days after notice by the Sign Administrator of such violation.

Sec. 60-36. Flags and Flag Signs.

- (a) No more than three (3) free-standing flagpoles may be allowed at any time on the premises, as defined and determined by the City. Federal, state, or local government flags, emblems and/or historical markers and any flags or insignia of a religious, charitable, fraternal, academic, or civic organization may be allowed.

- (b) A maximum of one (1) corporate flag and flagpole may be permitted if erected in conjunction with at least one (1) flagpole and flag consistent with subsection (a).
- (c) Official flags shall be flown in a manner that meets U.S. Congressional protocol. Failure to display flags in this manner shall be a violation of this Section. All flags shall be kept in good repair.
- (d) Flags may be permitted in all Zoning districts.
- (e) Design and lighting of the U.S. flag shall be consistent with the Federal Flag Code, 36 U.S.C. Section 173-8 as amended.
- (f) Flagpoles shall be black, brown, dark green, white, silver, or bronze in color.
- (g) Lighting may be allowed, but shall not direct glare onto any building on any other property.
- (h) Pole Heights, Flag Sizes, Minimum Distances, and Setbacks:
 - (1) No side of any flag on a pole 35 feet or less in height shall be greater than six (6) feet in length.
 - (2) Flags on poles over 35 feet in height may have a flag with a length of not more than 25% of the height of the pole.
 - (3) No flagpole shall exceed 50 feet in height.
 - (4) A minimum distance of six (6) feet shall be maintained between flagpoles. All flags shall maintain a minimum setback of eight (8) feet from all overhead power lines or easements and six (6) feet from a property line.
- (i) Encroachments:
 - (1) No flag may be erected within a utility easement.
 - (2) Neither the flag, flagpole, nor other support structure may extend over a right-of-way.
 - (3) Neither the flag, flagpole, nor any other support structure may extend over an adjoining property line.

Sec. 60-37. Prohibited Signage

All signage listed in this section shall be prohibited within the City Limits. All existing prohibited signage shall be removed within 120 calendar days from the effective date of this Chapter.

- (a) Inflatable Signs
- (b) Human or Living Signs

- (c) Freestanding temporary signage for non-civic events, except as otherwise exempted by this Chapter.
- (d) Attention-Getting Devices
- (e) Bandit Signs
- (f) Obscene Signs
- (g) Portable Signs
- (h) Any sign not specifically mentioned in this Chapter is prohibited unless approved by City Council.

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Sec. 60 38. Downtown Specific Plan (DSP) Area

Where the DSP Area section conflicts with this Chapter the DSP shall supersede.

Permitted signage within the DSP area shall be limited to only the following sign types:

Awnings sign:

Temporary Banner sign:

Monument sign:

Marquee sign:

Projecting sign:

Wall sign (also includes parapet or projecting signs); and/or

Window sign.

Off-premise signs, other than official wayfinding signage, shall be prohibited. The use of pole signs and changeable electronic variable message signs (CEVMS) shall be prohibited within the DSP area.

The method of determining the area of signs shall be per Section 60 31 of this Chapter.

Signs shall not be located within the public right of way, except where permitted by this Chapter.

Signs shall not be located in a manner that interferes with or poses a hazard to, pedestrian or vehicular travel or is located within the specified "visibility triangle."

Downtown Specific Plan Area Signage Types:

Monument Signs:

The maximum overall sign height (including the base and any added ornamentation) shall not exceed five (5) feet.

For a single tenant building the sign area shall not exceed one (1) square foot for each two (2) lineal feet of street frontage with the maximum not to exceed twenty four (24) square feet.

For a single building development with multiple tenants the sign shall not exceed one (1) square foot for each two (2) lineal feet of street frontage with the maximum not to exceed thirty two (32) square feet in area.

Monument signs shall be constructed of brick, stone, wood, or similar material.

The sign shall be integrated to complement the streetscape and landscaping frontages.

Wall Signs:

Signs within the Historic Main Street, Old Town Plaza, Old Town Commercial, and Mixed Use Transitional districts shall comply with the following applicable restrictions:

Wall signs may be internally illuminated, externally illuminated if illumination is mounted above the sign and pointed downward, or non-illuminated.

Signage shall be painted on or mounted to the wall or fascia of the building and shall not exceed the height of the building.

Signage shall not extend horizontally a distance greater than eighty (80) percent of the width of the building wall or sign band on which it is displayed.

Signage shall not be located on more than two (2) floors/stories of a multi-story building.

The sign area for one (1) business or individual tenant shall not exceed one (1) square foot for each two (2) linear feet of the primary street or store frontage; maximum not to exceed twenty four (24) square feet. Signage shall also be permitted on additional building elevations that have frontage on a public side street or alley if the business provides a public entryway from said street or alley. This additional signage shall not exceed one half (1/2) square foot for each two (2) linear feet of street or alley frontage with the maximum not to exceed twenty four (24) square feet.

Any complex or building with three (3) or more businesses shall be required to submit a comprehensive sign package to be reviewed and approved by the City Staff.

Signs within the Old Town Residential and Mixed Use Transition districts shall comply with the following applicable restrictions:

Wall signs may be externally illuminated if illumination is mounted above the sign and pointed downward or non-illuminated.

Sign shall not exceed a total aggregate of six (6) square feet. Building number or letter signs for multiple building developments shall be in compliance with Fire Code requirements and shall not be counted as part of the aggregate sign area.

Awning Signs:

A maximum of twenty five (25) percent of the front face area of the awning may be used for signage.

Signage may only identify the name of the business. Such signs shall not include advertising copy.

Window Signage. The total aggregate area of all window signs shall not exceed twenty five (25) percent of the total area of the windows through which they are visible.

Projecting Signs:

One (1) projecting sign which is designed and oriented primarily for the aid of pedestrians may be allowed per business and shall be located immediately adjacent to the business it identifies.

All signs shall have an eight (8) foot minimum clearance between the bottom of the sign and the sidewalk.

Projecting signs shall not project less than six (6) inches or no more than three (3) feet from the building wall or building fence.

Projecting signs for each ground floor business, on a street, shall not exceed one (1) square foot for each linear street frontage of business, up to a maximum of fifteen (15) square feet.

Signage may only identify the name of the business. Such signs shall not include advertising copy.

Changeable Electronic Variable Message Signs shall be prohibited.

Banners and Promotional Signs:

Banners shall be made of cloth, nylon, or similar material.

Banners may be fastened to streetlights specifically designed to accommodate banners. Such banners may advertise a City authorized special event, a community wide event, or a community message, but not for individual businesses.

All banners shall be reviewed and approved by the Sign Administrator.

The duration of banners and promotional signage shall be limited to a maximum of fourteen (14) consecutive calendar days for each distinct event.

Marquee Signs:

Signage shall be mounted to or designated as an integral part of the marquee structure.

Signage shall only be changeable copy using individual letters.

Signage shall not extend horizontally a distance greater than eighty (80) percent of the width of the marquee structure or sign band on which it is displayed.

DRAFT

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Consideration to approve **ZONING CASE P12-483**: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center within the City of Tomball, Harris County, Texas, generally located northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

- Conduct a Public Hearing on **ZONING CASE P12-483**
- Adopt on First Reading, Ordinance No. 2012-43, an Ordinance of the City of Tomball, Texas, amending Its Comprehensive Zoning Ordinance by Changing the Zoning District Classification of Approximately 1.01 Acres of Land, Legally Described as Lot 1, Block 1, Northwest Houston Heart Center, within the City of Tomball, Harris County, Texas, from the Single-Family Residential-6 District to the Commercial District; said Property being Generally Located Northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue; Providing for the Amendment of the Official Zoning Map of the City; Providing for Severability; Providing for a Penalty of an Amount Not to Exceed \$2,000 for Each Day of Violation of Any Provision Hereof, Making Findings of Fact; and Providing for Other Related Matters.

Background:

On August 7, 2012, the City of Tomball met with a representative of Tomball & Magnolia Properties, LLC to discuss the possible rezoning of the subject site from the Single-Family Residential-6 (SF-6) District to the Commercial District. The property representative indicated the rezoning request was to facilitate the expansion of the existing medical office parking lot.

City staff explained that the property is classified on the Comprehensive Plan (CP) Future Land Use (FLU) map as "Mixed Use" which does not appear to be compatible with the Commercial District proposed for this site. On August 14, 2012, the City of Tomball received a rezoning application from Tomball & Magnolia Properties, LLC for the subject site.

There are several land uses in the vicinity of the subject site. To the north are single-family residences, undeveloped land, Barbara Street, auto service garage, and a warehouse in the SF-6 and Old Town & Mixed Use (OT&MU) districts; to the south is Alma Street and undeveloped land in the General Retail District; to the west is Lawrence Avenue and single-family residences in the SF-6 District; and to the east is Holderrieth Boulevard, a law office, and a single-family residence with parking for the subject site in the General Retail District. The uses permitted in the Commercial District do not appear to be consistent with the existing single-family residences to the north and west.

The proposed rezoning to the Commercial District does not appear to be consistent with the CP. The OT&MU District appears to be more consistent with the "Mixed Use" CP FLU designation. The OT&MU District is intended for "...a mixture of retail, commercial and other nonresidential uses, along with single family homes and multiple-family uses. The City's Comprehensive Plan (the Future Land Use Plan) endorses the continuation of the mixture of uses in this area of the City, and specifically states that retail, office, single family, Duplex (Two Family) and multifamily are the most appropriate uses in these areas. In

addition, to serve existing residential areas and their successful integration with future nonresidential uses, increased pedestrian access would be beneficial. The Old Town and Mixed Use District is intended to provide a zoning mechanism for a variety of uses in the original town site and those areas that have a diverse mixture of uses.”

On October 8, 2012, the Planning and Zoning Commission, after conducting a public hearing on this request, and deciding that the Old Town & Mixed Use District was a more appropriate zoning designation for this site, voted to recommend approval of Zoning Case P12-483. This case is now being forwarded to City Council for consideration and possible action.

Origination:

Tomball and Magnolia Properties, LLC

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

Brandy Pate, Engineering and Planning

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

- Notice of Public Hearing
- Ordinance 2012-43
- Property Owner Notification Letter
- P12-483 Staff Report
- Public Comments

**NOTICE OF PUBLIC HEARINGS
CITY OF TOMBALL
PLANNING & ZONING COMMISSION
OCTOBER 8, 2012
&
CITY COUNCIL
OCTOBER 15, 2012**



Notice is Hereby Given that Public Hearings will be held by the Planning & Zoning Commission of the City of Tomball on **Monday, October 8, 2012, at 6:00 P.M.**, and by the City Council of the City of Tomball on **Monday, October 15, 2012, at 6:00 P.M.** at Regular Meetings, in the City Council Chambers of the City of Tomball at City Hall, 401 Market Street, Tomball, Texas. On such dates, the Planning & Zoning Commission and City Council will consider the following:

ZONING CASE P12-483: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center within the City of Tomball, Harris County, Texas, generally located northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

ZONING CASE P12-484: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball within the City of Tomball, Harris County, Texas, generally located at the southeast corner of Barbara Street and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

Persons interested in these cases will be given an opportunity to be heard. Action by the Planning and Zoning Commission serves as a recommendation to the City Council and is not a final action on the request. Should the Planning & Zoning Commission vote to table a decision/recommendation on one or more of the above cases, the date and time of a future meeting will be specified and the City Council will not review the subject case until such a decision/recommendation is forwarded to the City Council by the Planning and Zoning Commission. The application is available for public inspection Monday through Friday, holidays excepted, between the hours of 8:00 a.m. and 5:00 p.m. in the Engineering & Planning Department office, located at 501 James Street, Tomball, TX 77375. **Contact Assistant City Planner** Rodney Schmidt, (281) 290-1410, rschmidt@ci.tomball.tx.us

CERTIFICATION

I hereby certify that the above notice of meeting was posted on the bulletin board of City Hall; City of Tomball, Texas, a place readily accessible to the general public at all times, on the 4th day of October 2012 by 5:00 p.m., and remained posted for at least 72 continuous hours preceding the scheduled time of said meeting.

Brandy Pate

Brandy Pate

Senior Administrative Assistant

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please feel free to contact the City Secretary's office at (281) 290-1002 or FAX (281) 351-6256 for further information. AGENDAS MAY ALSO BE VIEWED ONLINE AT www.ci.tomball.tx.us.

ORDINANCE NO. 2012-43

AN ORDINANCE OF THE CITY OF TOMBALL, TEXAS, AMENDING ITS COMPREHENSIVE ZONING ORDINANCE BY CHANGING THE ZONING DISTRICT CLASSIFICATION OF APPROXIMATELY 1.01 ACRES OF LAND, LEGALLY DESCRIBED AS LOT 1, BLOCK 1, NORTHWEST HOUSTON HEART CENTER, WITHIN THE CITY OF TOMBALL, HARRIS COUNTY, TEXAS, FROM THE SINGLE-FAMILY RESIDENTIAL-6 DISTRICT TO THE COMMERCIAL DISTRICT; SAID PROPERTY BEING GENERALLY LOCATED NORTHERLY OF ALMA STREET, BETWEEN HOLDERRIETH BOULEVARD AND LAWRENCE AVENUE; PROVIDING FOR THE AMENDMENT OF THE OFFICIAL ZONING MAP OF THE CITY; PROVIDING FOR SEVERABILITY; PROVIDING FOR A PENALTY OF AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF, MAKING FINDINGS OF FACT; AND PROVIDING FOR OTHER RELATED MATTERS.

* * * * *

Whereas, the owner(s) of approximately 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center, generally located northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue, in the City of Tomball, Harris County, Texas, (the "Property"), have requested that the Property be rezoned; and

Whereas, at least fifteen (15) days after publication in the official newspaper of the City of the time and place of a public hearing and at least ten (10) days written notice of that hearing to the owners of land within two hundred feet of the Property in the manner required by law, the Planning & Zoning Commission held a public hearing on the proposal to change the zoning for the Property from the Single-Family Residential-6 District to the Commercial District; and

Whereas, the public hearing was held at least forty (40) calendar days after the City's receipt of the request for rezoning; and

Whereas, the Planning & Zoning Commission recommended in its final report that City Council grant such proposed change in the zoning district classification of the Property; and

Whereas, at least fifteen (15) days after publication in the official newspaper of the City of the time and place of a public hearing on the proposal to change the zoning district classification for the Property from the Single-Family Residential-6 District to the Commercial District, the City Council held the public hearing on the proposal to change the zoning for the Property and the City Council considered the final report of the Planning & Zoning Commission regarding the change of zoning district classification, and

Whereas, the City Council deems it appropriate to grant such proposed change in the zoning district classification of the Property.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS, THAT:

Section 1. The City Council finds that the facts and matters set forth in the preamble of this Ordinance are true and correct.

Section 2. The zoning classification of 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center, within the City of Tomball, Harris County, Texas, is hereby changed from the Single-Family Residential-6 District to the Commercial District subject to the regulations, restrictions, and conditions hereafter set forth.

Section 3. The Official Zoning Map of the City of Tomball, Texas-Ordinance 2008-01, ("Zoning District Map"), shall be revised and amended to show the designation of 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center, generally located northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue, as Commercial District, with the appropriate reference thereon to the number and effective date of this Ordinance and a brief description of the nature of the change.

Section 4. This Ordinance shall in no manner amend, change, supplement, or revise any provision of any ordinance of the City of Tomball, save and except the change in zoning classification for 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center, generally located northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue, to the Commercial District as described above.

Section 5. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 6. Any person who shall violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed \$2,000. Each day of violation shall constitute a separate offense.

Section 7. City Council finds and determines that the meeting at which this ordinance is passed was open to the public as required and that public notice of the time, place, and purpose of said meeting was given as required by the Texas Open Meetings Act, Tex.Gov't. Code ch. 551.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 15TH DAY OF OCTOBER 2012.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

SECOND READING:

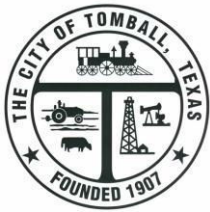
READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 5TH DAY OF NOVEMBER.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

Gretchen Fagan, Mayor

ATTEST:

Doris Speer, City Secretary



Notice of Public Hearing

YOU ARE INVITED TO ATTEND Public Hearings before the **PLANNING & ZONING COMMISSION** and **CITY COUNCIL** of the City of Tomball regarding the following item:

CASE NUMBER: P12-483

APPLICANT: Tomball & Magnolia Properties, LLC

LOCATION: Northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue

PROPOSAL: Request to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center within the City of Tomball, Harris County, Texas, from the Single-Family Residential-6 District to the Commercial District.

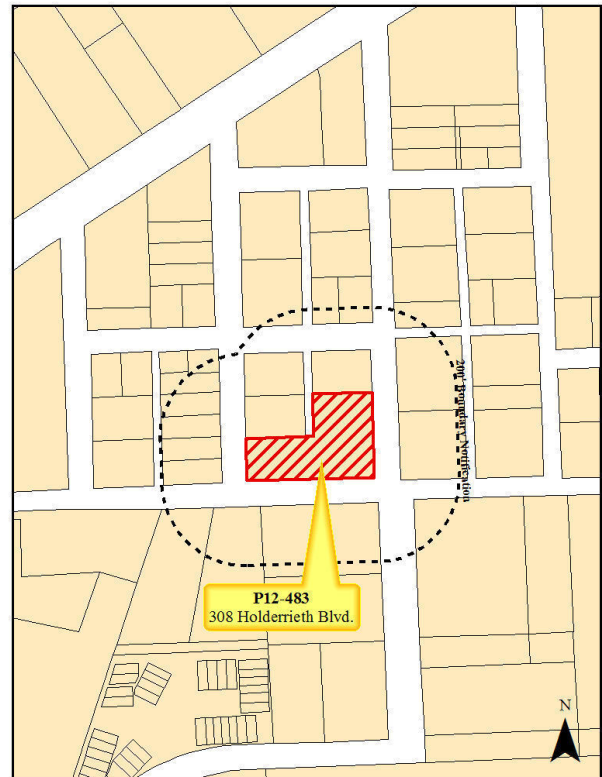
CONTACT: Rodney Schmidt

PHONE: (281) 290-1410

E-MAIL: rschmidt@ci.tomball.tx.us

Interested parties may contact the City of Tomball between 8:00 a.m. and 5:00 p.m. Monday through Friday for further information. The rezoning application is available for public inspection Monday through Friday, holidays excepted, between the hours of 8:00 a.m. and 5:00 p.m. in the Community Development Department office, located at 501 James Street, Tomball, TX 77375. The staff report will be available no later than 4:00 p.m. on the Friday preceding the meeting.

This notice is being mailed to all owners of real property within 200 feet of the request as such ownership appears on the last approved Harris County Appraisal District tax roll. Interested parties may appear and speak on the project or the staff recommendation at the meeting. Written comments may also be submitted for consideration.

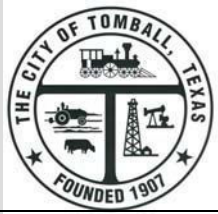


**Planning & Zoning Commission
Public Hearing:
Monday, October 8, 2012, 6:00 PM**

**City Council Public Hearing:
*Monday, October 15, 2012, 6:00 PM**

**The Public Hearings will be held in the
City Council Chambers, City Hall
401 Market Street, Tomball, Texas**

*Should the Planning & Zoning Commission vote to table the recommendation on the case, the date and time of a future meeting will be specified and the City Council will not review the subject case until such a recommendation is forwarded to the City Council by the Planning & Zoning Commission.



Rezoning Staff Report

Planning & Zoning Commission Public Hearing Date: October 8, 2012

Rezoning Case: P12-483
Property Owner: Tomball & Magnolia Properties, LLC
Applicant: Tomball & Magnolia Properties, LLC
Legal Description: Lot 1, Block 1, Northwest Houston Heart Center
Location: Northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue
Area: 1.01 acres
Present Zoning and Use: Single-Family Residential-6 District (Exhibit "A") / Medical office (Exhibit "B")
Comp Plan Designation: Mixed Use (Exhibit "C")
Proposed Zoning and Use: Commercial District / Medical office and parking lot

It should be noted, that any use permitted in the proposed district would be allowed at this location if the zoning is changed. Furthermore, the Planning & Zoning Commission may consider zoning classifications other than that sought by the applicant for this property.

Adjacent Zoning & Land Uses:

North: Single-Family Residential-6 District and Old Town & Mixed Use District / Single-family residences, undeveloped land, Barbara Street, auto service garage, and warehouse
South: General Retail District / Alma Street and undeveloped land
West: Single-Family Residential-6 District / Lawrence Avenue and single-family residences
East: General Retail District / Holderrieth Boulevard, law office, and single-family residence

BACKGROUND

On August 7, 2012, the City of Tomball met with a representative of Tomball & Magnolia Properties, LLC to discuss the possible rezoning of the subject site from the Single-Family Residential-6 (SF-6) District to the Commercial District. The property representative indicated the rezoning request was to facilitate the expansion of the existing medical office parking lot.

City staff explained that the property is classified on the Comprehensive Plan (CP) Future Land Use (FLU) map as "Mixed Use" which does not appear to be compatible with the

Commercial District proposed for this site. On August 14, 2012, the City of Tomball received a rezoning application from Tomball & Magnolia Properties, LLC for the subject site (Exhibit “D”).

ANALYSIS

There are several land uses in the vicinity of the subject site. To the north are single-family residences, undeveloped land, Barbara Street, auto service garage, and a warehouse in the SF-6 and Old Town & Mixed Use (OT&MU) districts; to the south is Alma Street and undeveloped land in the General Retail District; to the west is Lawrence Avenue and single-family residences in the SF-6 District; and to the east is Holderrieth Boulevard, a law office, and a single-family residence with parking for the subject site in the General Retail District (Exhibit “E”). The uses permitted in the Commercial District do not appear to be consistent with the existing single-family residences to the north and west.

The proposed zoning classification of Commercial District “...is intended to provide a location for commercial and service related establishments, such as wholesale product sales, welding/contractor’s shops, automotive repair services, upholstery shops, and other similar commercial uses. Some light manufacturing may also be allowed with certain conditions. The uses envisioned for the district will typically utilize smaller sites and have operation characteristics which are generally not compatible with residential uses and some nonresidential uses.” The Commercial District does not appear to be compatible with the properties zoned SF-6 and OT&MU to the north and west because both districts permit residential uses by right in Section 38.2 of the Tomball Zoning Ordinance.

The Comprehensive Plan’s FLU map identifies the site as “Mixed Use.” The CP states, “Mixed Use is intended to include a mix of office, retail/commercial, and high density residential uses in a master planned, integrated manner. These uses may be located within a development, either horizontally or vertically in form. This may be accomplished on single or multiple parcels of land as long as the site is planned and developed as one integrated project. It is envisioned that Mixed Use designations will ultimately be located in areas with multimodal transportation access to support the intensity of development. Compatibility with surrounding neighborhoods is determined by a transition based on the scale of development using (but not limited to) articulation in building height, required setbacks, building materials, and building massing.”

The proposed rezoning to the Commercial District does not appear to be consistent with the CP. The OT&MU District appears to be more consistent with the “Mixed Use” CP FLU designation. The OT&MU District is intended for “...a mixture of retail, commercial and other nonresidential uses, along with single family homes and multiple-family uses. The City’s Comprehensive Plan (the Future Land Use Plan) endorses the continuation of the mixture of uses in this area of the City, and specifically states that retail, office, single family, Duplex (Two Family) and multifamily are the most appropriate uses in these areas. In addition, to serve existing residential areas and their successful integration with future nonresidential uses, increased pedestrian access would be beneficial. The Old Town and Mixed Use District is intended to provide a zoning mechanism for a variety of uses in the original town site and those areas that have a diverse mixture of uses.”

ZONING CONSIDERATIONS

In making its recommendation regarding a proposed zoning change, the Planning & Zoning Commission shall consider the following factors:

- A. Whether the uses permitted by the proposed change will be appropriate in the immediate area concerned, and their relationship to the general area and to the City as a whole.**

The uses permitted in the Commercial District do not appear to be consistent with the existing single-family residences to the north and west.

- B. Whether the proposed change is in accord with any existing or proposed plans for providing public schools, streets, water supply, sanitary sewers, and other utilities to the area.**

The proposed rezoning is not anticipated to negatively impact public schools, streets, water supply, sanitary sewers, or other utilities to the area.

- C. The amount of vacant land currently classified for similar development in the vicinity and elsewhere in the City, and any special circumstances which may make a substantial part of such vacant land unavailable for development.**

There is little vacant property in the vicinity zoned Commercial District; there are numerous properties in the City zoned Commercial District.

- D. The recent rate at which land is being developed in the same zoning classification as the request, particularly in the vicinity of the proposed change.**

There has been steady development city-wide in the Commercial District. However, there has been no development in the Commercial District in the vicinity of the subject site.

- E. How other areas designated for similar development will be, or are likely to be, affected if the proposed amendment is approved.**

If the proposed zoning change were approved, few, if any affects on other areas designated for similar developments are anticipated.

- F. Any other factors that will substantially affect the public health, safety, morals, or general welfare.**

The proposed zone change may affect the public health, safety, morals, or general welfare of the existing residential developments in the area or future residential developments permitted either in the Zoning Ordinance or planned for in the Comprehensive Plan.

- G. Whether the request is consistent with the Comprehensive Plan.**

According to the CP, rezonings are “to conform to the intended future land use pattern shown on the Future Land Use [FLU] Plan and should occur only when economic, physical, social, and other factors will allow the proposed land use to be developed:

- Within the capacities of existing or funded infrastructure and public facilities and services;
- In a compatible manner with surrounding land uses;
- To standards specified for and appropriate to the proposed land use; and
- In a way that furthers or helps achieve the goals of the Plan.”

The Comprehensive Plan’s FLU map identifies the site as “Mixed Use.” The CP states, “Mixed Use is intended to include a mix of office, retail/commercial, and high density residential uses in a master planned, integrated manner. These uses may be located within a development, either horizontally or vertically in form. This may be accomplished on single or multiple parcels of land as long as the site is planned and developed as one integrated project. It is envisioned that Mixed Use designations will ultimately be located in areas with multimodal transportation access to support the intensity of development. Compatibility with surrounding neighborhoods is determined by a transition based on the scale of development using (but not limited to) articulation in building height, required setbacks, building materials, and building massing.”

The proposed rezoning to the Commercial District does not appear to be consistent with the CP. The OT&MU District appears to be more consistent with the “Mixed Use” CP FLU designation. The OT&MU District is intended for “...a mixture of retail, commercial and other nonresidential uses, along with single family homes and multiple-family uses. The City’s Comprehensive Plan (the Future Land Use Plan) endorses the continuation of the mixture of uses in this area of the City, and specifically states that retail, office, single family, Duplex (Two Family) and multifamily are the most appropriate uses in these areas. In addition, to serve existing residential areas and their successful integration with future nonresidential uses, increased pedestrian access would be beneficial. The Old Town and Mixed Use District is intended to provide a zoning mechanism for a variety of uses in the original town site and those areas that have a diverse mixture of uses.”

PUBLIC COMMENT

Property owners within 200 feet of the project site were mailed notification of this proposal on September 28, 2012; one public comment was received from Cameron Steiner (206 Lawrence Street, Tomball, Texas) in opposition to the request (Exhibit “F”).

RECOMMENDATION

1. **DENIAL** of Zoning Case P12-483 based on the following:
 - a. The uses permitted in the Commercial District do not appear to be consistent with the existing single-family residences to the north and west.
 - b. The Commercial District does not appear to be compatible with the properties zoned SF-6 and OT&MU to the north and west; and
 - c. The Commercial District does not appear to be consistent with the Comprehensive Plan’s FLU classification of “Mixed Use.”

2. APPROVAL of the Staff Report as the Planning & Zoning Commission's final recommendation to the City Council.

EXHIBITS

- A. Zoning Map
- B. Aerial Photo
- C. Comprehensive Plan FLU Map
- D. Rezoning Application
- E. Site Photos
- F. Public Comments

Exhibit "A"
Zoning Map

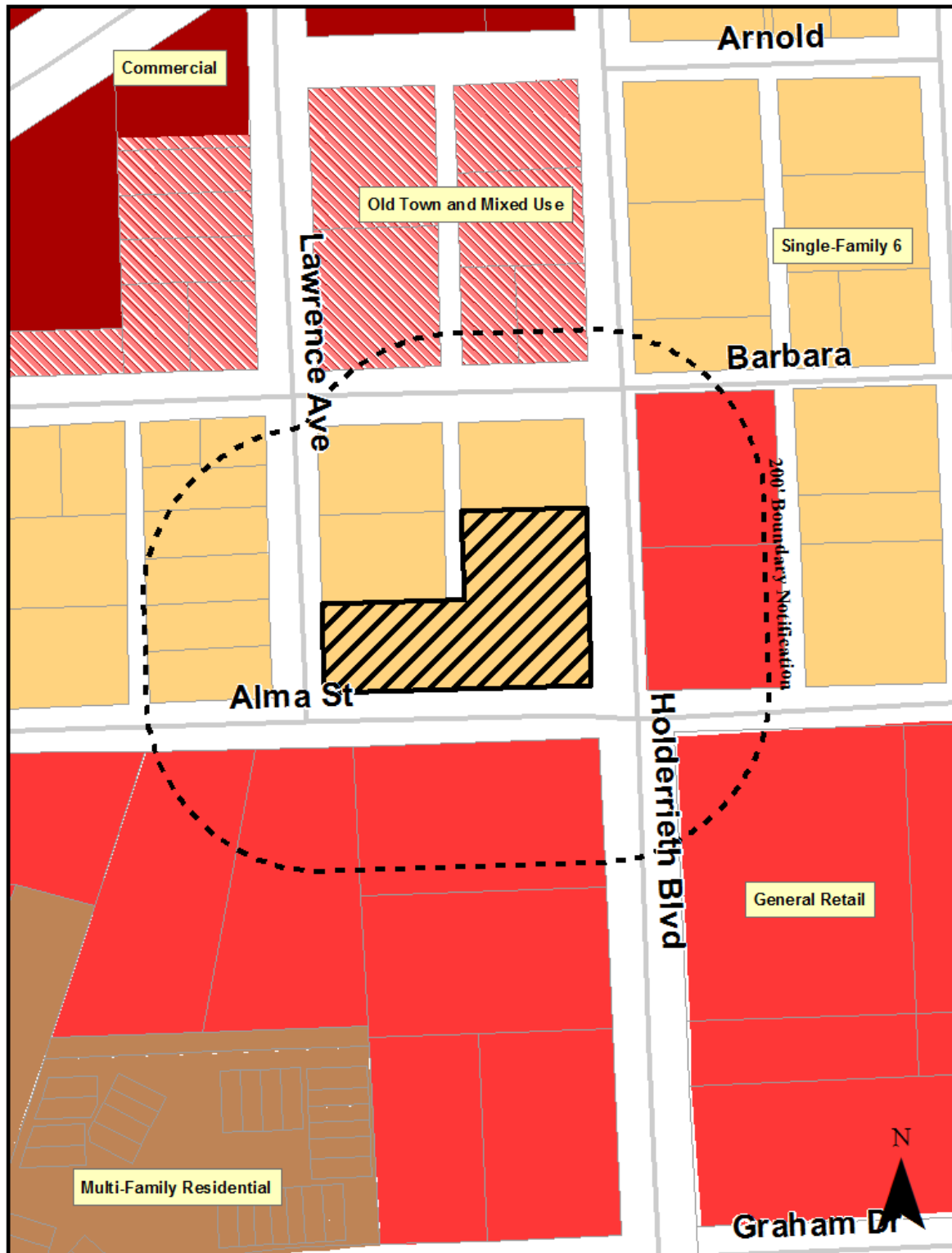


Exhibit "B"
Aerial Photo



Exhibit "C"
Comprehensive Plan FLU Map



Exhibit "D"
Rezoning Application

Revised 1/20/09



APPLICATION FOR REZONING
Engineering & Planning Department



APPLICATION SUBMITTAL: Applications will be *conditionally* accepted on the presumption that the information, materials and signatures are complete and accurate. If the application is incomplete or inaccurate, your project may be delayed until corrections or additions are received.

Applicant

Name: Ahmad Aslam Title: M.D.
Mailing Address: 50 Pendleton Park pt City: Spring State: Tx
Zip: 77382-1679
Phone: (281) 351-4911 Fax: (281) 351-4915 Email: houstonheartcenter@yahoo.com

Owner

Name: Ahmad Aslam Title: M.D.
Mailing Address: 50 Pendleton Park pt. City: Spring State: Tx
Zip: 77382-1679
Phone: (281) 351-4911 Fax: (281) 351-4915 Email: houstonheartcenter@yahoo.com

Engineer/Surveyor (if applicable)

Name: David Kelly Title: President
Mailing Address: 32719 Windsor Terrace City: Fulshear State: Tx
Zip: 77441
Phone: (281) 346-2616 Fax: (281) 346-2616 Email: david.kelly@dkengineering.com

Description of Proposed Project: 1.01 Acres 388 Holderness Blvd

Physical Location of Property: NW Corner of Holderness Blvd & Aling
[General Location - approximate distance to nearest existing street corner]

Legal Description of Property: LOT 1 Block 1 Northwest Houston Heart Care
[Survey/Abstract No. and Tracts; or platted Subdivision Name with Lots/Block]

Current Zoning District: SF 6

Current Use of Property: Commercial

Proposed Zoning District: Commercial

Proposed Use of Property: Commercial Building w/ Parking Lot addition

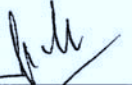
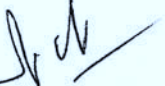
City of Tomball, Texas 501 James Street, Tomball, Texas 77375 Phone: 281-290-1405

www.ci.tomball.tx.us

HCAD Identification Number: 130-784-001-0001 Acreage: 1.0101 AC

Please note: A courtesy notification sign will be placed on the subject property during the public hearing process and will be removed when the case has been processed.

This is to certify that the information on this form is **COMPLETE, TRUE, and CORRECT** and the under signed is authorized to make this application. I understand that submitting this application does not constitute approval, and incomplete applications will result in delays and possible denial.

<u>X</u>		<u>08-02-2012</u>
Signature of Applicant		Date
<u>X</u>		<u>08-02-2012</u>
Signature of Owner		Date

August 02, 2012

Engineering and Planning Department
City of Tomball
Tomball.

Re: Application for Rezoning

Our company, Northwest Houston Heart Center is located at 308 Holderrieth Boulevard, Tomball, TX 77375. Due to growth in our business, we are experiencing the shortage of existing parking facility at this location.

We intend to have additional parking for our customers. We have additional space available next to our existing office but just get to know that this proposed parking space falls under residential zone. We want to request City of Tomball to rezone this place into commercial zone in order to construct additional parking facility for our patients.

In case some question, please call me directly at 281-351-4911. A considerate response to our request is highly appreciated.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ahmad Aslam', with a horizontal line extending to the left.

Ahmad Aslam
Tomball & Magnolia Properties LLC
50 Pendleton Park Pt
Spring, TX, 77382-1679

**Exhibit “E”
Site Photos**



Figure 1: Subject site. Source: maps.google.com



Figure 2: Subject site. Source: maps.google.com



Figure 3: Single-family residence and undeveloped land to the north.
Source: maps.google.com



Figure 4: Auto service garage to the north. Source: maps.google.com



Figure 5: Single-family residence to the north. Source: maps.google.com



Figure 6: Warehouse to the north. Source: maps.google.com



Figure 7: Single-family residence to the north. Source: maps.google.com



Figure 8: Undeveloped property to the south. Source: maps.google.com



Figure 9: Single-family residences to the west. Source: maps.google.com



Figure 10: Single-family residence with parking for subject site and law office to the east. Source: maps.google.com

Exhibit "F"
Public Comments

Cameron Steiner
206 Lawrence St.
Tomball, TX 77375
281-507-1781
Normansteiner10@gmail.com

I request that this letter be read in opposition to proposed zoning amendments P12-483 & P12-484.

When zoning first came to Tomball, I attended a meeting at the community center where a company rep was answering citizens' questions. One lady remarked that the initial map was a mess, with different zones all over the place, with some areas following no apparent design. He said this was because it reflected how the town was built at that exact moment, and showed the best zoning 'fit' for that particular time. Over time, the map would evolve through zoning constraints to become much more work-able, and efficient.

I believe that the two proposed changes mentioned above do not further the efficient design zoning attempts to bring about. These changes run the opposite direction. They only serve a single business landowner, and further the checkerboard patterns that zoning attempts to fix. We have a great hospital, and there is more than sufficient land to build more medical support businesses in the immediate area. Medical Center Drive will soon be built through, and there is still a lot of vacant land on School Street if more medical businesses are needed. I fear that zoning change P12-483 will be made simply to build a parking lot for the adjacent Heart Center, while zoning change P12-484 makes no sense, as it has no direct access to the Heart Center. I fear that ultimately, in this instance, the pressure of imminent domain will be brought to bear against the homeowner in the middle.

Whatever the ultimate intentions of Tomball & Magnolia Properties, LLC, I fear that the passage of these two zoning amendments will result in a reduction of livability to me and the residents of my neighborhood.

Cameron Steiner

Cameron Steiner
206 Lawrence St.
Tomball, TX 77375
281-507-1781
Normansteiner10@gmail.com

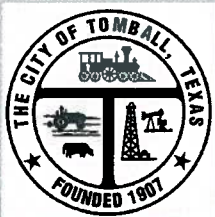
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Whatever the ultimate intentions of Tomball & Magnolia Properties, LLC, I fear that the passage of these two zoning amendments will result in a reduction of livability to me and the residents of my neighborhood.

Cameron Steiner



Public Comment Form

(Please type or use black ink)

All submitted forms will become a part of the public record.

Please return to:

City of Tomball
Attn: Rodney Schmidt
501 James Street
Tomball, TX 77375



Name:

(please print)

Address:

Signature:

Date:

E. Wheeler Co. Jr.
P.O. Box 340
Tomball TX 77377
E. Wheeler Co. Jr.
9/29/12

☒ I am **FOR** the requested rezoning as explained on the attached public notice for **Zoning Case P12-483**. (Please state reasons below)

☐ I am **AGAINST** the requested rezoning as explained on the attached public notice for **Zoning Case P12-483**. (Please state reasons below)

Date, Location & Time of **Planning & Zoning Commission** meeting:

Monday, October 8, 2012, 6:00 PM

City Council Chambers of the City of Tomball, City Hall
401 Market Street, Tomball, Texas

Date, Location & Time of **City Council** meeting:

Monday, October 15, 2012, 6:00 PM

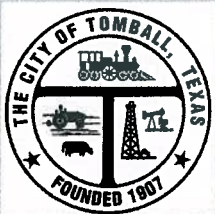
City Council Chambers of the City of Tomball, City Hall
401 Market Street, Tomball, Texas

COMMENTS:

You may also comment via email to rschmidt@ci.tomball.tx.us.

Please reference the case number in the subject line.

For questions regarding this request please call 281-290-1410.



Public Comment Form

(Please type or use black ink)

All submitted forms will become a part of the public record.

Please return to:

City of Tomball
Attn: Rodney Schmidt
501 James Street
Tomball, TX 77375



Name: _____

(please print)

Address: _____

Ahmad A Aslam
50 Pendleton park pt.
The Woodlands TX 77382

Signature: _____

Date: _____



I am **FOR** the requested rezoning as explained on the attached public notice for **Zoning Case P12-483**. (Please state reasons below)

I am **AGAINST** the requested rezoning as explained on the attached public notice for **Zoning Case P12-483**. (Please state reasons below)

Date, Location & Time of **Planning & Zoning Commission** meeting:

Monday, October 8, 2012, 6:00 PM

City Council Chambers of the City of Tomball, City Hall
401 Market Street, Tomball, Texas

Date, Location & Time of **City Council** meeting:

Monday, October 15, 2012, 6:00 PM

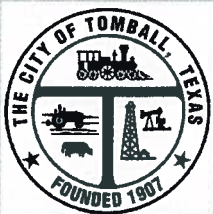
City Council Chambers of the City of Tomball, City Hall
401 Market Street, Tomball, Texas

COMMENTS:

You may also comment via email to rschmidt@ci.tomball.tx.us.

Please reference the case number in the subject line.

For questions regarding this request please call 281-290-1410.



Public Comment Form

(Please type or use black ink)

All submitted forms will become a part of the public record.

Please return to:

City of Tomball
Attn: Rodney Schmidt
501 James Street
Tomball, TX 77375



Name:

Ahmad A. Aslam

(please print)

Address:

50 Pendleton Park pt.
The Woodlands, TX 77382

Signature:

Date:



I am **FOR** the requested rezoning as explained on the attached public notice for **Zoning Case P12-483**. (Please state reasons below)

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COMMENTS:

You may also comment via email to rschmidt@ci.tomball.tx.us.

Please reference the case number in the subject line.

For questions regarding this request please call 281-290-1410.

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Consideration to approve **ZONING CASE P12-484**: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball within the City of Tomball, Harris County, Texas, generally located at the southeast corner of Barbara Street and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

- Conduct a Public Hearing on **ZONING CASE P12-484**
- Adopt on First Reading, Ordinance No. 2012-44, an Ordinance of the City of Tomball, Texas, amending Its Comprehensive Zoning Ordinance by Changing the Zoning District Classification of Approximately 0.32 Acres of Land, Legally Described as Lots 11 and 12, Block 6, Main Street-Tomball, within the City of Tomball, Harris County, Texas, from the Single-Family Residential-6 District to the Commercial District; said Property being Generally Located at the Southeast Corner of Barbara Street and Lawrence Avenue; Providing for the Amendment of the Official Zoning Map of the City; Providing for Severability; Providing for a Penalty of an Amount Not to Exceed \$2,000 for Each Day of Violation of Any Provision Hereof, Making Findings of Fact; and Providing for Other Related Matters.

Background:

On August 7, 2012, the City of Tomball met with a representative of Tomball & Magnolia Properties, LLC to discuss the possible rezoning of the subject site from the Single-Family Residential-6 (SF-6) District to the Commercial District. The rezoning application indicates the rezoning request is to facilitate the construction of an additional medical building and parking lot.

City staff explained to the property representative that the property is classified on the Comprehensive Plan (CP) Future Land Use (FLU) map as "Mixed Use" which does not appear to be compatible with the Commercial District proposed for this site. On August 14, 2012, the City of Tomball received a rezoning application from Tomball & Magnolia Properties, LLC for the subject site.

There are two main land uses in the vicinity of the subject site. To the north are Barbara Street and an auto service garage in the SF-6 District; to the south is a single-family residence in the SF-6 District; to the west is Lawrence Avenue and single-family residences in the SF-6 District; and to the east is a single-family residence in the SF-6 District. The uses permitted in the Commercial District do not appear to be compatible with the existing single-family residences to the south, west, and east.

The proposed rezoning to the Commercial District does not appear to be consistent with the

CP. The OT&MU District, however, appears to be more consistent with the “Mixed Use” CP FLU designation. The OT&MU District is intended for “...a mixture of retail, commercial and other nonresidential uses, along with single family homes and multiple-family uses. The City’s Comprehensive Plan (the Future Land Use Plan) endorses the continuation of the mixture of uses in this area of the City, and specifically states that retail, office, single family, Duplex (Two Family) and multifamily are the most appropriate uses in these areas. In addition, to serve existing residential areas and their successful integration with future nonresidential uses, increased pedestrian access would be beneficial. The Old Town and Mixed Use District is intended to provide a zoning mechanism for a variety of uses in the original town site and those areas that have a diverse mixture of uses.”

On October 8, 2012, the Planning and Zoning Commission, after conducting a public hearing on this request, P12-484 failed to pass with approval due to a 2-2 tie vote. This case is now being forwarded to City Council for consideration and possible action.

Origination:

Tomball and Magnolia Properties, LLC

Recommendation:

N/A

Funding:

Party(ies) responsible for placing this item on agenda:

Brandy Pate, Engineering and Planning

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

- Notice of Public Hearing
- Ordinance 2012-44
- Property Owner Notification Letter
- P12-484 Staff Report
- Public Comments

**NOTICE OF PUBLIC HEARINGS
CITY OF TOMBALL
PLANNING & ZONING COMMISSION
OCTOBER 8, 2012
&
CITY COUNCIL
OCTOBER 15, 2012**



Notice is Hereby Given that Public Hearings will be held by the Planning & Zoning Commission of the City of Tomball on **Monday, October 8, 2012, at 6:00 P.M.**, and by the City Council of the City of Tomball on **Monday, October 15, 2012, at 6:00 P.M.** at Regular Meetings, in the City Council Chambers of the City of Tomball at City Hall, 401 Market Street, Tomball, Texas. On such dates, the Planning & Zoning Commission and City Council will consider the following:

ZONING CASE P12-483: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 1.01 acres of land, legally described as Lot 1, Block 1, Northwest Houston Heart Center within the City of Tomball, Harris County, Texas, generally located northerly of Alma Street, between Holderrieth Boulevard and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

ZONING CASE P12-484: Request by Tomball & Magnolia Properties, LLC to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball within the City of Tomball, Harris County, Texas, generally located at the southeast corner of Barbara Street and Lawrence Avenue, from the Single-Family Residential-6 District to the Commercial District.

Persons interested in these cases will be given an opportunity to be heard. Action by the Planning and Zoning Commission serves as a recommendation to the City Council and is not a final action on the request. Should the Planning & Zoning Commission vote to table a decision/recommendation on one or more of the above cases, the date and time of a future meeting will be specified and the City Council will not review the subject case until such a decision/recommendation is forwarded to the City Council by the Planning and Zoning Commission. The application is available for public inspection Monday through Friday, holidays excepted, between the hours of 8:00 a.m. and 5:00 p.m. in the Engineering & Planning Department office, located at 501 James Street, Tomball, TX 77375. **Contact Assistant City Planner** Rodney Schmidt, (281) 290-1410, rschmidt@ci.tomball.tx.us

CERTIFICATION

I hereby certify that the above notice of meeting was posted on the bulletin board of City Hall; City of Tomball, Texas, a place readily accessible to the general public at all times, on the 4th day of October 2012 by 5:00 p.m., and remained posted for at least 72 continuous hours preceding the scheduled time of said meeting.

Brandy Pate

Brandy Pate

Senior Administrative Assistant

This facility is wheelchair accessible and accessible parking spaces are available. Requests for accommodations or interpretive services must be made 48 hours prior to this meeting. Please feel free to contact the City Secretary's office at (281) 290-1002 or FAX (281) 351-6256 for further information. AGENDAS MAY ALSO BE VIEWED ONLINE AT www.ci.tomball.tx.us.

ORDINANCE NO. 2012-44

AN ORDINANCE OF THE CITY OF TOMBALL, TEXAS, AMENDING ITS COMPREHENSIVE ZONING ORDINANCE BY CHANGING THE ZONING DISTRICT CLASSIFICATION OF APPROXIMATELY 0.32 ACRES OF LAND, LEGALLY DESCRIBED AS LOTS 11 AND 12, BLOCK 6, MAIN STREET-TOMBALL, WITHIN THE CITY OF TOMBALL, HARRIS COUNTY, TEXAS, FROM THE SINGLE-FAMILY RESIDENTIAL-6 DISTRICT TO THE COMMERCIAL DISTRICT; SAID PROPERTY BEING GENERALLY LOCATED AT THE SOUTHEAST CORNER OF BARBARA STREET AND LAWRENCE AVENUE; PROVIDING FOR THE AMENDMENT OF THE OFFICIAL ZONING MAP OF THE CITY; PROVIDING FOR SEVERABILITY; PROVIDING FOR A PENALTY OF AN AMOUNT NOT TO EXCEED \$2,000 FOR EACH DAY OF VIOLATION OF ANY PROVISION HEREOF, MAKING FINDINGS OF FACT; AND PROVIDING FOR OTHER RELATED MATTERS.

* * * * *

Whereas, the owner(s) of approximately 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball, generally located at the southeast corner of Barbara Street and Lawrence Avenue, in the City of Tomball, Harris County, Texas, (the "Property"), have requested that the Property be rezoned; and

Whereas, at least fifteen (15) days after publication in the official newspaper of the City of the time and place of a public hearing and at least ten (10) days written notice of that hearing to the owners of land within two hundred feet of the Property in the manner required by law, the Planning & Zoning Commission held a public hearing on the proposal to change the zoning for the Property from the Single-Family Residential-6 District to the Commercial District; and

Whereas, the public hearing was held at least forty (40) calendar days after the City's receipt of the request for rezoning; and

Whereas, the Planning & Zoning Commission recommended in its final report that City Council grant such proposed change in the zoning district classification of the Property; and

Whereas, at least fifteen (15) days after publication in the official newspaper of the City of the time and place of a public hearing on the proposal to change the zoning district classification for the Property from the Single-Family Residential-6 District to the Commercial District, the City Council held the public hearing on the proposal to change the zoning for the Property and the City Council considered the final report of the Planning & Zoning Commission regarding the change of zoning district classification, and

Whereas, the City Council deems it appropriate to grant such proposed change in the zoning district classification of the Property.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF TOMBALL, TEXAS, THAT:

Section 1. The City Council finds that the facts and matters set forth in the preamble of this Ordinance are true and correct.

Section 2. The zoning classification of 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball, within the City of Tomball, Harris County, Texas, is hereby changed from the Single-Family Residential-6 District to the Commercial District subject to the regulations, restrictions, and conditions hereafter set forth.

Section 3. The Official Zoning Map of the City of Tomball, Texas-Ordinance 2008-01, ("Zoning District Map"), shall be revised and amended to show the designation of 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball, generally located at the southeast corner of Barbara Street and Lawrence Avenue, as Commercial District, with the appropriate reference thereon to the number and effective date of this Ordinance and a brief description of the nature of the change.

Section 4. This Ordinance shall in no manner amend, change, supplement, or revise any provision of any ordinance of the City of Tomball, save and except the change in zoning classification for 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball, generally located at the southeast corner of Barbara Street and Lawrence Avenue, to the Commercial District as described above.

Section 5. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of Tomball, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

Section 6. Any person who shall violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and upon conviction, shall be fined in an amount not to exceed \$2,000. Each day of violation shall constitute a separate offense.

Section 7. City Council finds and determines that the meeting at which this ordinance is passed was open to the public as required and that public notice of the time, place, and purpose of said meeting was given as required by the Texas Open Meetings Act, Tex.Gov't. Code ch. 551.

FIRST READING:

READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF
THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 15TH DAY OF
OCTOBER 2012.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

SECOND READING:

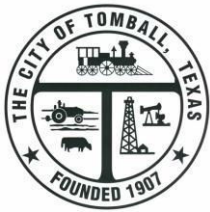
READ, PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF
THE CITY COUNCIL OF THE CITY OF TOMBALL HELD ON THE 5TH DAY OF
NOVEMBER.

COUNCILMAN HUDGENS	_____
COUNCILMAN STOLL	_____
COUNCILMAN BROWN	_____
COUNCILMAN TOWNSEND	_____
COUNCILMAN DODSON	_____

Gretchen Fagan, Mayor

ATTEST:

Doris Speer, City Secretary



Notice of Public Hearing

YOU ARE INVITED TO ATTEND Public Hearings before the **PLANNING & ZONING COMMISSION** and **CITY COUNCIL** of the City of Tomball regarding the following item:

CASE NUMBER: P12-484

APPLICANT: Tomball & Magnolia Properties, LLC

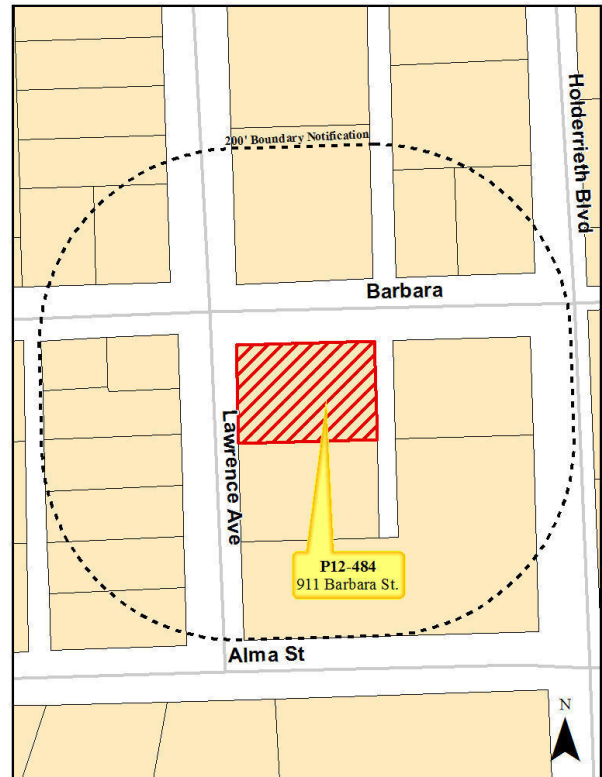
LOCATION: Southeast corner of Barbara Street and Lawrence Avenue

PROPOSAL: Request to amend the City's Comprehensive Zoning Ordinance by rezoning approximately 0.32 acres of land, legally described as Lots 11 and 12, Block 6, Main Street-Tomball within the City of Tomball, Harris County, Texas, from the Single-Family Residential-6 District to the Commercial District.

CONTACT: Rodney Schmidt

PHONE: (281) 290-1410

E-MAIL: rschmidt@ci.tomball.tx.us



Interested parties may contact the City of Tomball between 8:00 a.m. and 5:00 p.m. Monday through Friday for further information. The rezoning application is available for public inspection Monday through Friday, holidays excepted, between the hours of 8:00 a.m. and 5:00 p.m. in the Community Development Department office, located at 501 James Street, Tomball, TX 77375. The staff report will be available no later than 4:00 p.m. on the Friday preceding the meeting.

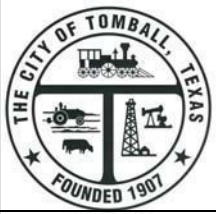
This notice is being mailed to all owners of real property within 200 feet of the request as such ownership appears on the last approved Harris County Appraisal District tax roll. Interested parties may appear and speak on the project or the staff recommendation at the meeting. Written comments may also be submitted for consideration.

**Planning & Zoning Commission
Public Hearing:
Monday, October 8, 2012, 6:00 PM**

**City Council Public Hearing:
*Monday, October 15, 2012, 6:00 PM**

**The Public Hearings will be held in the
City Council Chambers, City Hall
401 Market Street, Tomball, Texas**

*Should the Planning & Zoning Commission vote to table the recommendation on the case, the date and time of a future meeting will be specified and the City Council will not review the subject case until such a recommendation is forwarded to the City Council by the Planning & Zoning Commission.



Rezoning Staff Report

Planning & Zoning Commission Public Hearing Date: October 8, 2012

Rezoning Case: P12-484
Property Owner: Tomball & Magnolia Properties, LLC
Applicant: Tomball & Magnolia Properties, LLC
Legal Description: Lots 11 and 12, Block 6, Main Street-Tomball
Location: Southeast corner of Barbara Street and Lawrence Avenue
Area: 0.32 acres
Present Zoning and Use: Single-Family Residential-6 District (Exhibit "A") / Undeveloped (Exhibit "B")
Comp Plan Designation: Mixed Use (Exhibit "C")
Proposed Zoning and Use: Commercial District / Medical office and parking lot

It should be noted, that any use permitted in the proposed district would be allowed at this location if the zoning is changed. Furthermore, the Planning & Zoning Commission may consider zoning classifications other than that sought by the applicant for this property.

Adjacent Zoning & Land Uses:

North: Old Town & Mixed Use District / Barbara Street and auto service garage
South: SF-6 District / Single-family residence
West: SF-6 District / Lawrence Avenue and single-family residences
East: SF-6 District / Single-family residence

BACKGROUND

On August 7, 2012, the City of Tomball met with a representative of Tomball & Magnolia Properties, LLC to discuss the possible rezoning of the subject site from the Single-Family Residential-6 (SF-6) District to the Commercial District. The rezoning application indicates the rezoning request is to facilitate the construction of an additional medical building and parking lot.

City staff explained to the property representative that the property is classified on the Comprehensive Plan (CP) Future Land Use (FLU) map as "Mixed Use" which does not appear to be compatible with the Commercial District proposed for this site. On August 14, 2012, the City of Tomball received a rezoning application from Tomball & Magnolia Properties, LLC for the subject site (Exhibit "D").

ANALYSIS

There are two main land uses in the vicinity of the subject site. To the north are Barbara Street and an auto service garage in the SF-6 District; to the south is a single-family residence in the SF-6 District; to the west is Lawrence Avenue and single-family residences in the SF-6 District; and to the east is a single-family residence in the SF-6 District (Exhibit “E”). The uses permitted in the Commercial District do not appear to be compatible with the existing single-family residences to the south, west, and east.

The proposed zoning classification of Commercial District “...is intended to provide a location for commercial and service related establishments, such as wholesale product sales, welding/contractors shops, automotive repair services, upholstery shops, and other similar commercial uses. Some light manufacturing may also be allowed with certain conditions. The uses envisioned for the district will typically utilize smaller sites and have operation characteristics which are generally not compatible with residential uses and some nonresidential uses.” The Commercial District does not appear to be compatible with the properties zoned SF-6 and OT&MU to the north, south, west, and east because both districts permit residential uses by right in Section 38.2 of the Tomball Zoning Ordinance.

The Comprehensive Plan’s FLU map identifies the site as “Mixed Use.” The CP states, “Mixed Use is intended to include a mix of office, retail/commercial, and high density residential uses in a master planned, integrated manner. These uses may be located within a development, either horizontally or vertically in form. This may be accomplished on single or multiple parcels of land as long as the site is planned and developed as one integrated project. It is envisioned that Mixed Use designations will ultimately be located in areas with multimodal transportation access to support the intensity of development. Compatibility with surrounding neighborhoods is determined by a transition based on the scale of development using (but not limited to) articulation in building height, required setbacks, building materials, and building massing.”

The proposed rezoning to the Commercial District does not appear to be consistent with the CP. The OT&MU District, however, appears to be more consistent with the “Mixed Use” CP FLU designation. The OT&MU District is intended for “...a mixture of retail, commercial and other nonresidential uses, along with single family homes and multiple-family uses. The City’s Comprehensive Plan (the Future Land Use Plan) endorses the continuation of the mixture of uses in this area of the City, and specifically states that retail, office, single family, Duplex (Two Family) and multifamily are the most appropriate uses in these areas. In addition, to serve existing residential areas and their successful integration with future nonresidential uses, increased pedestrian access would be beneficial. The Old Town and Mixed Use District is intended to provide a zoning mechanism for a variety of uses in the original town site and those areas that have a diverse mixture of uses.”

ZONING CONSIDERATIONS

In making its recommendation regarding a proposed zoning change, the Planning & Zoning Commission shall consider the following factors:

- A. Whether the uses permitted by the proposed change will be appropriate in the immediate area concerned, and their relationship to the general area and to the City as a whole.**

The uses permitted in the Commercial District do not appear to be compatible with the existing single-family residences to the south, west, and east.

B. Whether the proposed change is in accord with any existing or proposed plans for providing public schools, streets, water supply, sanitary sewers, and other utilities to the area.

The proposed rezoning is not anticipated to negatively impact public schools, streets, water supply, sanitary sewers, or other utilities to the area.

C. The amount of vacant land currently classified for similar development in the vicinity and elsewhere in the City, and any special circumstances which may make a substantial part of such vacant land unavailable for development.

There is little vacant property in the vicinity zoned Commercial District; there are numerous properties in the City zoned Commercial District.

D. The recent rate at which land is being developed in the same zoning classification as the request, particularly in the vicinity of the proposed change.

There has been steady development city-wide in the Commercial District. However, there has been no development in the Commercial District in the vicinity of the subject site.

E. How other areas designated for similar development will be, or are likely to be, affected if the proposed amendment is approved.

If the proposed zoning change were approved, few, if any affects on other areas designated for similar developments are anticipated.

F. Any other factors that will substantially affect the public health, safety, morals, or general welfare.

The proposed zone change may affect the public health, safety, morals, or general welfare of the existing residential developments in the area or future residential developments permitted either in the Zoning Ordinance or planned for in the Comprehensive Plan.

G. Whether the request is consistent with the Comprehensive Plan.

According to the CP, rezonings are “to conform to the intended future land use pattern shown on the Future Land Use [FLU] Plan and should occur only when economic, physical, social, and other factors will allow the proposed land use to be developed:

- Within the capacities of existing or funded infrastructure and public facilities and services;
- In a compatible manner with surrounding land uses;
- To standards specified for and appropriate to the proposed land use; and
- In a way that furthers or helps achieve the goals of the Plan.”

The Comprehensive Plan's FLU map identifies the site as "Mixed Use." The CP states, "Mixed Use is intended to include a mix of office, retail/commercial, and high density residential uses in a master planned, integrated manner. These uses may be located within a development, either horizontally or vertically in form. This may be accomplished on single or multiple parcels of land as long as the site is planned and developed as one integrated project. It is envisioned that Mixed Use designations will ultimately be located in areas with multimodal transportation access to support the intensity of development. Compatibility with surrounding neighborhoods is determined by a transition based on the scale of development using (but not limited to) articulation in building height, required setbacks, building materials, and building massing."

The proposed rezoning to the Commercial District does not appear to be consistent with the CP. The OT&MU District appears to be more consistent with the "Mixed Use" CP FLU designation. The OT&MU District is intended for "...a mixture of retail, commercial and other nonresidential uses, along with single family homes and multiple-family uses. The City's Comprehensive Plan (the Future Land Use Plan) endorses the continuation of the mixture of uses in this area of the City, and specifically states that retail, office, single family, Duplex (Two Family) and multifamily are the most appropriate uses in these areas. In addition, to serve existing residential areas and their successful integration with future nonresidential uses, increased pedestrian access would be beneficial. The Old Town and Mixed Use District is intended to provide a zoning mechanism for a variety of uses in the original town site and those areas that have a diverse mixture of uses."

PUBLIC COMMENT

Property owners within 200 feet of the project site were mailed notification of this proposal on September 28, 2012; one public comment was received from Cameron Steiner (206 Lawrence Street, Tomball, Texas) in opposition to the request (Exhibit "F").

RECOMMENDATION

1. **DENIAL** of Zoning Case P12-484 based on the following:
 - a. The uses permitted in the Commercial District do not appear to be compatible with the existing single-family residences to the south, west, and east.
 - b. The Commercial District does not appear to be compatible with the properties zoned SF-6 and OT&MU to the north, south, west, and east; and
 - c. The Commercial District does not appear to be consistent with the Comprehensive Plan's FLU classification of "Mixed Use."
2. **APPROVAL** of the Staff Report as the Planning & Zoning Commission's final recommendation to the City Council.

EXHIBITS

- A. Zoning Map
- B. Aerial Photo
- C. Comprehensive Plan FLU Map
- D. Rezoning Application
- E. Site Photos
- F. Public Comments

Exhibit "A"
Zoning Map

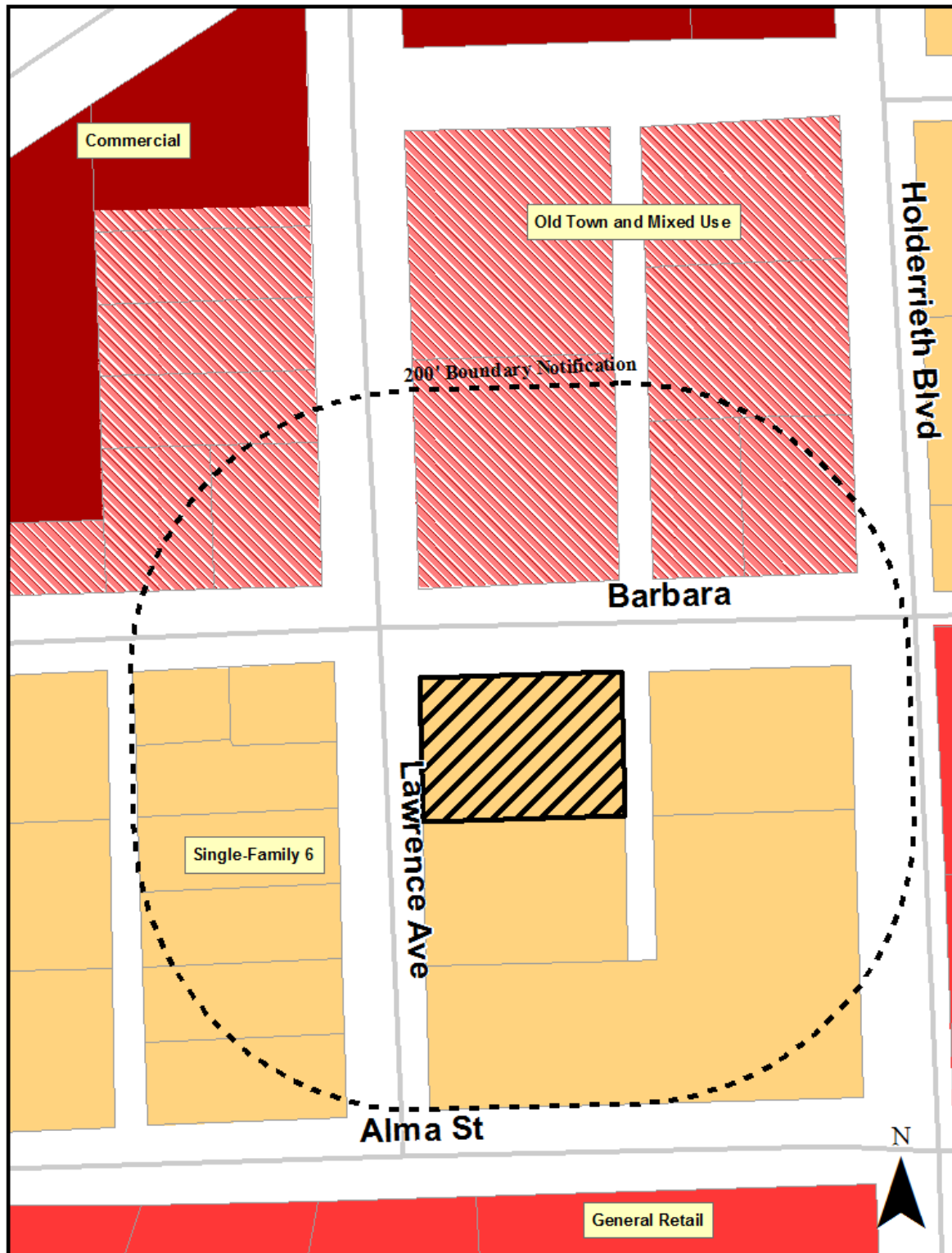


Exhibit "B"
Aerial Photo



Exhibit "C"
Comprehensive Plan FLU Map

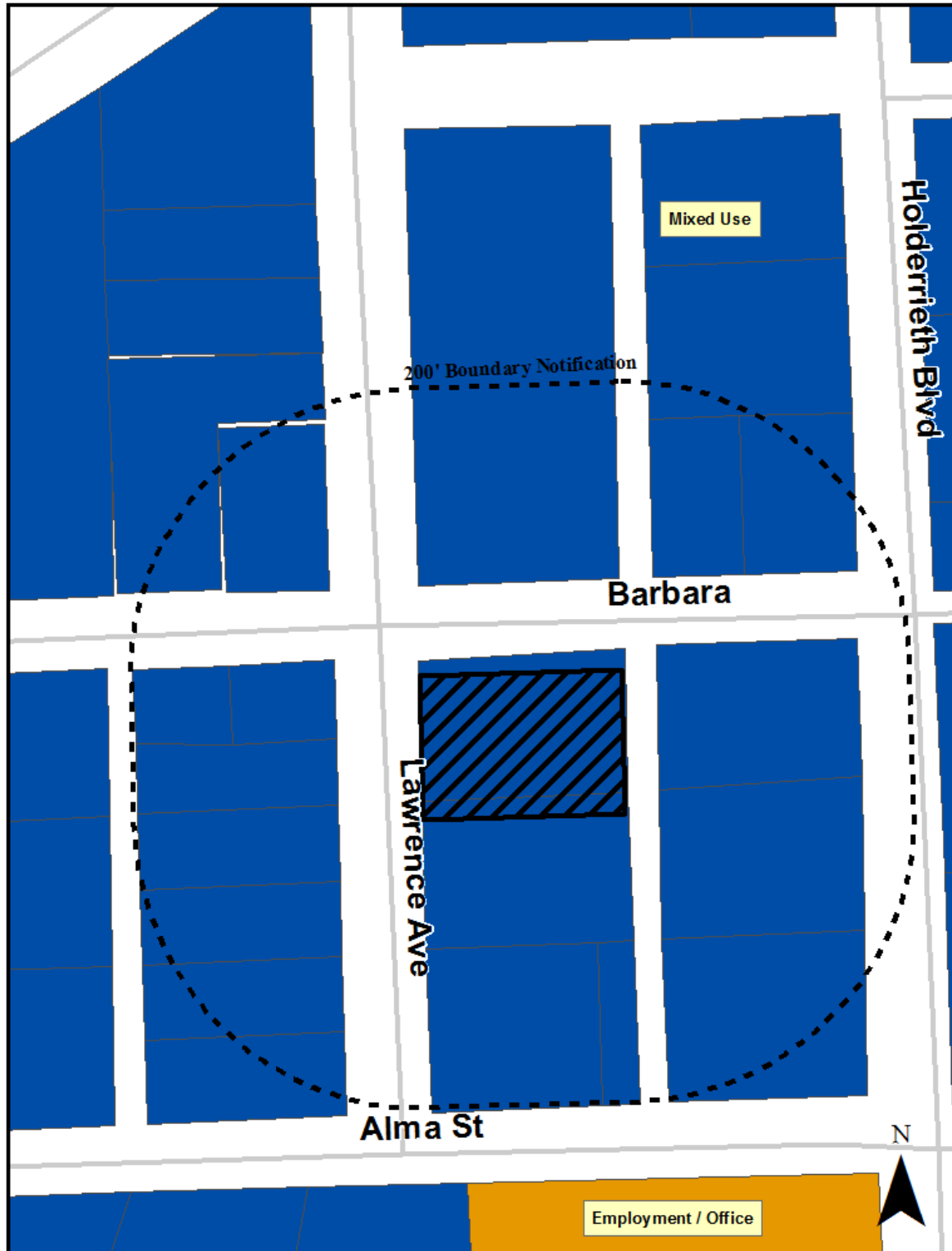
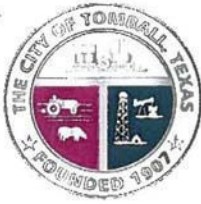


Exhibit "D"
Rezoning Application

Revised 1/20/09



APPLICATION FOR REZONING
Engineering & Planning Department



APPLICATION SUBMITTAL: Applications will be *conditionally* accepted on the presumption that the information, materials and signatures are complete and accurate. If the application is incomplete or inaccurate, your project may be delayed until corrections or additions are received.

Applicant

Name: Ahmad Aslam Title: M.D.
Mailing Address: 50 Pendleton park pt City: Spring State: Tx
Zip: 77382-1679
Phone: (281) 351 4911 Fax: (281) 351 4915 Email: houstonheartcenter@yahoo.com

Owner

Name: Ahmad Aslam Title: M.D.
Mailing Address: 50 Pendleton park pt City: Spring State: Tx
Zip: 77382-1679
Phone: (281) 351 4911 Fax: (281) 351 4915 Email: houstonheartcenter@yahoo.com

Engineer/Surveyor (if applicable)

Name: David Kelly Title: President
Mailing Address: 32719 Windsor Terrace City: Fulshear State: Tx
Zip: 77441
Phone: (281) 346-2616 Fax: (281) 346-2616 Email: david.kelly@dpkengineering.com

Description of Proposed Project: 0.3214 AC 911 Barbara St

Physical Location of Property: Corner of Barbara and James Street
[General Location – approximate distance to nearest existing street corner]

Legal Description of Property: LTS 11 & 12 BLK 6
[Survey/Abstract No. and Tracts; or platted Subdivision Name with Lots/Block]

Current Zoning District: SF 6

Current Use of Property: Commercial

Proposed Zoning District: Commercial

Proposed Use of Property: Commercial Building with Parking Lot Addition

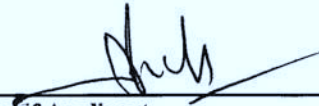
City of Tomball, Texas 501 James Street, Tomball, Texas 77375 Phone: 281-290-1405

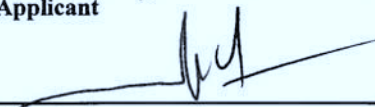
www.ci.tomball.tx.us

HCAD Identification Number: 067-099-006-008 Acreage: 0.3214

Please note: A courtesy notification sign will be placed on the subject property during the public hearing process and will be removed when the case has been processed.

This is to certify that the information on this form is **COMPLETE, TRUE, and CORRECT** and the under signed is authorized to make this application. I understand that submitting this application does not constitute approval, and incomplete applications will result in delays and possible denial.

X  8/7/12
Signature of Applicant Date

X  8/7/12
Signature of Owner Date

August 07, 2012

Engineering and Planning Department
City of Tomball
Tomball.

Re: Application for Rezoning

Our company, Northwest Houston Heart Center is located at 308 Holderrieth Boulevard, Tomball, TX 77375. Due to growth in our business, we are experiencing the shortage of existing building and parking facility at this location.

We intend to add more space for building with parking for our customers. We have additional space available next to our existing office at 911 Barbara St. Tomball, TX 77375 but just get to know that this property falls under residential zone. We want to request City of Tomball to rezone this place into commercial zone in order to construct additional building with parking facility for our patients.

In case some question, please call me directly at 281-351-4911. A considerate response to our request is highly appreciated.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ahmad Aslam', with a long horizontal line extending to the left.

Ahmad Aslam
Tomball & Magnolia Properties LLC
50 Pendleton Park Pt
Spring, TX, 77382-1679

**Exhibit “E”
Site Photos**



Figure 1: Subject site. Source: maps.google.com



Figure 2: Auto service garage to the north. Source: maps.google.com



Figure 3: Single-family residence to the south. Source: maps.google.com

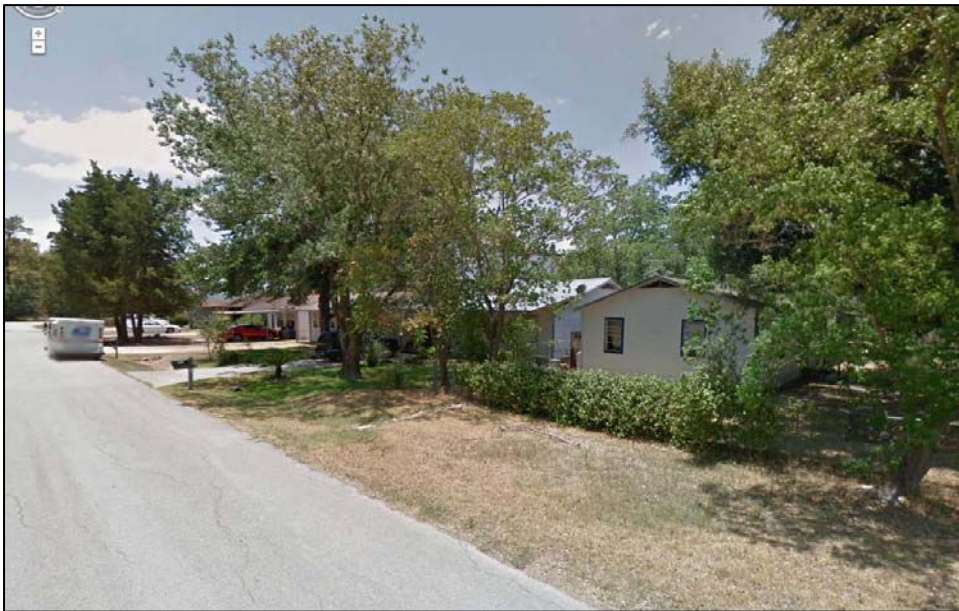


Figure 4: Single-family residences to the west. Source: maps.google.com



Figure 5: Single-family residence to the east. Source: maps.google.com

Exhibit "F"
Public Comments

Cameron Steiner
206 Lawrence St.
Tomball, TX 77375
281-507-1781

Normansteiner10@gmail.com

I request that this letter be read in opposition to proposed zoning amendments P12-483 & P12-484.

When zoning first came to Tomball, I attended a meeting at the community center where a company rep was answering citizens' questions. One lady remarked that the initial map was a mess, with different zones all over the place, with some areas following no apparent design. He said this was because it reflected how the town was built at that exact moment, and showed the best zoning 'fit' for that particular time. Over time, the map would evolve through zoning constraints to become much more work-able, and efficient.

I believe that the two proposed changes mentioned above do not further the efficient design zoning attempts to bring about. These changes run the opposite direction. They only serve a single business landowner, and further the checkerboard patterns that zoning attempts to fix. We have a great hospital, and there is more than sufficient land to build more medical support businesses in the immediate area. Medical Center Drive will soon be built through, and there is still a lot of vacant land on School Street if more medical businesses are needed. I fear that zoning change P12-483 will be made simply to build a parking lot for the adjacent Heart Center, while zoning change P12-484 makes no sense, as it has no direct access to the Heart Center. I fear that ultimately, in this instance, the pressure of imminent domain will be brought to bear against the homeowner in the middle.

Whatever the ultimate intentions of Tomball & Magnolia Properties, LLC, I fear that the passage of these two zoning amendments will result in a reduction of livability to me and the residents of my neighborhood.

Cameron Steiner

Cameron Steiner
206 Lawrence St.
Tomball, TX 77375
281-507-1781
Normansteiner10@gmail.com

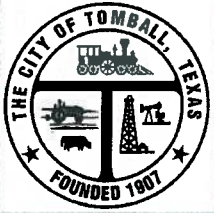
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Whatever the ultimate intentions of Tomball & Magnolia Properties, LLC, I fear that the passage of these two zoning amendments will result in a reduction of livability to me and the residents of my neighborhood.

Cameron Steiner



Public Comment Form

(Please type or use black ink)

All submitted forms will become a part of the public record.

Please return to:

City of Tomball
Attn: Rodney Schmidt
501 James Street
Tomball, TX 77375

RECEIVED

OCT 02 2012

BY: _____

Name: _____

(please print)

Address: _____

Signature: _____

Date: _____

☒ I am **FOR** the requested rezoning as explained on the attached public notice for **Zoning Case P12-484**. (Please state reasons below)

☐ I am **AGAINST** the requested rezoning as explained on the attached public notice for **Zoning Case P12-484**. (Please state reasons below)

Date, Location & Time of **Planning & Zoning Commission** meeting:

Monday, October 8, 2012, 6:00 PM

City Council Chambers of the City of Tomball, City Hall
401 Market Street, Tomball, Texas

Date, Location & Time of **City Council** meeting:

Monday, October 15, 2012, 6:00 PM

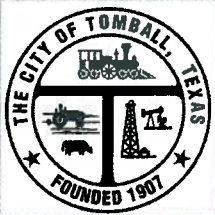
City Council Chambers of the City of Tomball, City Hall
401 Market Street, Tomball, Texas

COMMENTS:

You may also comment via email to rschmidt@ci.tomball.tx.us.

Please reference the case number in the subject line.

For questions regarding this request please call 281-290-1410.



Public Comment Form

(Please type or use black ink)

All submitted forms will become a part of the public record.

Please return to:

City of Tomball
Attn: Rodney Schmidt
501 James Street
Tomball, TX 77375



Name:

(please print)

Address:

Ahmad A. Aslam
50 Pendleton Park pt.
The Woodlands, Tx, 77382

Signature:

Date:



I am **FOR** the requested rezoning as explained on the attached public notice for **Zoning Case P12-484**. (Please state reasons below)

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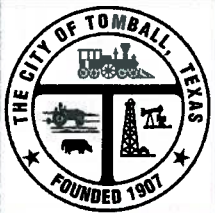
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Please reference the case number in the subject line.

For questions regarding this request please call 281-290-1410.

Regular City Council

Agenda Item

Data Sheet

Meeting Date: October 15, 2012

Topic:

Discussion and Direction to Staff regarding Jacqueline Angelo's Request for the City to Acquire the School Street Right-of-Way.

Background:

Jacqueline Angelo requests that the City of Tomball purchase the School Street Right-of-Way as identified on the Major Thoroughfare Plan.

The City will need to set the alignment, survey, and appraise the proposed ROW in order to make a fair market offer.

Origination:

Jacqueline Angelo

Recommendation:**Funding:****Party(ies) responsible for placing this item on agenda:**

Lori Lakatos, Engineering and Planning

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Request Letter

Proposed School St ROW Map

13142 Holderrieth Rd Map

To: George Shackelford - City Manager,

Gretchen Fagan – Mayor and City Council ,

Greetings!

I am writing a response to the proposal that the City of Tomball move forward with the purchasing of this Particular Right a Way for future School Street as long as it will not impair any and all grandfathering rights including Flood Insurance, any and all existing and/or Renovated Real Estate Structures, including Salvage Structures, any and all water source rights of the Owner (s) and/or Heir (s) of non-existing and existing water well District Well #5100

Harris - Galveston

The Subsidence District and/or NHCRWA:

Permit tee Name:

Jacqueline Rumfolo Angelo, Approved : Jan 8,2002 and/or ,any and all existing vested riparian rights , any and all existing and /or non- existing vested surface water rights , any and all existing and /or non –existing vested groundwater rights and any and all existing and /or non-existing vested oil, gas and mineral lease (s),including shale ,rights to the property situated in:

The City of Tomball, TX.

Legal Description as follows:

TR 4B (026* TR 4 –D), ABST

632 C. N. Pillot 8.5181 ACRES , Harris County, TX formally known as:

13142 Holderrieth Road,

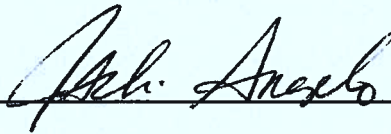
Tomball,TX 77375,

I am requesting that this matter be considered and voted on as quickly as possible because of other real estate and /or legal and / or health issues.

Please include the Option that if the above described Private Property for Right a Way for future School Street for which the property was acquired is cancelled before that property is used for that public purpose and/or no actual progress is made toward public use within ten (10) years and/or the property becomes unnecessary for public use within ten (10) years, the land owner and/or heir(s) may have the right to repurchase the property for the price paid to the Owner and/or Heir(s) by the City of Tomball at the time the City acquired the property .

In my life, Lord be glorified!

Best wishes,



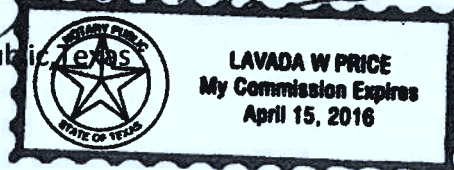
Jacqueline Angelo,

Independent Executrix of the

Estate of Lucille Rumfalo, Deceased

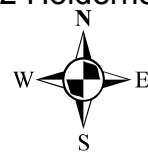
(Seal)

Notary Public, Texas





Jacqueline Angelo
13142 Holderrieth Rd



0 50 100 Feet



Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Approve Resolution No. 2012-31, a Resolution of the City Council of the City of Tomball, Texas, Supporting the 47th Annual Tomball Holiday Parade, *“Candy Canes and Christmas Carols”*, to be held in Tomball on Saturday, November 17, 2012 and to Approve Requested Street Closures and In-kind Services

Background:

The Chamber of Commerce must request approval from TxDOT to close FM 2920 for the annual Holiday Parade; the request must include a Resolution from the City of Tomball supporting the parade.

This is the City's customary resolution supporting and endorsing the annual Chamber-sponsored Tomball Holiday Parade, scheduled to take place on Saturday, November 17, 2012.

In addition to closing FM 2920 from FM 2978 to Business 249 from 9:15 a.m. until 12:30 p.m. for the parade, the Chamber is requesting closure of the following streets on Saturday, November 17, from 7:00 a.m. until noon:

- North Elm between Main Street and Hufsmith Road
- North Walnut between Main and Epps Streets
- 100 and 200 Block of Commerce
- 100 and 200 Block of Houston
- 100 and 200 Block of Oxford
- South Elm between Main and Market Streets
- South Walnut between Main and Fannin Streets
- 100 and 200 Block of Market Street.

The Chamber is also requesting the use of Tomball Police, Fire and Public Works personnel; the estimated cost for the use of City personnel/support services is \$6,000.00-\$6,300.00.

The annual Holiday Parade is extremely popular with the local community and brings visitors from the surrounding areas who often remain to shop, eat, and enjoy our city's amenities. This year, the Holiday Parade and Tomball Art Walk will be held on the same day; we anticipate large crowds at each of these events.

Origination:

Greater Tomball Area Chamber of Commerce

Recommendation:

Approve Resolution No. 2012-31

Funding:

Party(ies) responsible for placing this item on agenda:

City Secretary

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Resolution No. 2012-31

GTACC Request Letter and Map of Parade Route

RESOLUTION NO. 2012-31

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
TOMBALL, TEXAS, SUPPORTING THE 47TH ANNUAL
TOMBALL HOLIDAY PARADE, “CANDY CANES AND
CHRISTMAS CAROLS”, TO BE HELD IN TOMBALL ON
SATURDAY, NOVEMBER 17, 2012 AND TO APPROVE
REQUESTED STREET CLOSURES AND IN-KIND SERVICES.**

* * * * *

WHEREAS the Greater Tomball Area Chamber of Commerce will undertake the 47th Annual Tomball Holiday Parade, to be held in the City of Tomball at 10:00 a.m. on Saturday, November 17, 2012; and

WHEREAS the theme of the 47th Annual Tomball Holiday Parade is “**Candy Canes and Christmas Carols**”, and the purpose of the 47th Annual Tomball Holiday is to celebrate our quality of life and to create an avenue for others outside to come to our fair City to enjoy fun, food and good cheer; and

WHEREAS it is a chance for Tomball area merchants and business people to gain a new customer base through monies spent by those attending the 47th Annual Tomball Holiday Parade; and

WHEREAS activities celebrating the 47th Annual Tomball Holiday Parade will include the annual parade, food, crafts, and hometown merchants selling from their businesses; and

WHEREAS the Greater Tomball Area Chamber of Commerce desires and requests the support and endorsement of the City of Tomball in this community-wide effort;

NOW, THEREFORE, BE IT RESOLVED that the City of Tomball and its governing body endorses and supports the efforts of the Greater Tomball Area Chamber of Commerce in promoting and undertaking the 47th Annual Tomball Holiday Parade and pledge to encourage this effort to celebrate our heritage and promote our future betterment.

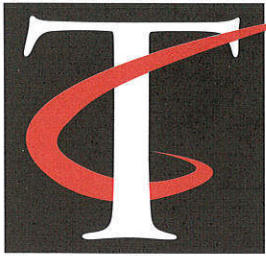
**PASSED AND APPROVED AS SET OUT BELOW AT THE MEETING OF THE CITY COUNCIL
HELD ON THE 15th DAY OF October, 2012.**

GRETCHEN FAGAN, Mayor

ATTEST:

DORIS SPEER, City Secretary

Greater
Tomball Area



Chamber of Commerce

www.tomballchamber.org

October 10, 2012

City of Tomball
Mr. George Shackelford
401 Market Street
Tomball, Texas 77375

RE: Tomball Holiday Parade

Dear Mr. Shackelford,

We are anticipating a fabulous Tomball Holiday Parade at 10 a.m. on Saturday, November 17, 2012 with help from our city, police and fire departments, as well as from numerous volunteers. The popular attraction is a Tomball tradition that has continued for 47 years. We are looking forward again to the expertise of the Tomball Police Department for crowd control and as visual deterrents from any negative activity.

To insure the safety of the many visitors and Parade participants who will be in Tomball on November 17, we are asking for street closures for the following streets on Saturday morning only from 7:00 a.m. until noon:

- North Elm between Main Street and Hufsmith Rd.
- North Walnut between Main Street and Epps
- 100 & 200 block of Commerce
- 100 & 200 block of Houston
- 100 & 200 block of Oxford
- South Elm between Main Street and Market Street
- South Walnut between Main Street and Fannin
- 100 & 200 block of Market Street

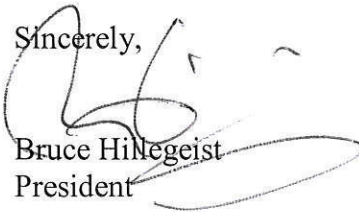
From 9:15 a.m. until 12:30 p.m.

- FM 2920 from FM 2978 to Business 249

Enclosed is a map for your review. Residents of these streets will still have access to and from their homes.

We appreciate the City of Tomball, its special partnership with the chamber and the assistance always offered for our events. Should you have any questions or concerns, please contact Brandy Beyer or myself at 281-351-7222.

Sincerely,


Bruce Hinegeist
President

Thank you, George!!

Encl: Map

Regular City Council

Agenda Item

Meeting Date: October 15, 2012

Data Sheet

Topic:

Approve the Following Plats, as Recommended by Planning and Zoning Commission:

- **ABBREVIATED PLAT PATEL PLAZA**: Being a Subdivision of 0.3214 Acre, being comprised of Lots 1 and 2 in Block 41 of Tomball Townsite; situated in the William Hurd Survey, Abstract No. 371 according to the Map or Plat thereof recorded in Volume 2, Page 65 of the Map Records of Harris County, Texas.
- **DAKOTA PINES FINAL PLAT**: A Subdivision of 5.0005 Acres of land situated in the John S. Smith Survey, Abstract No. 730, Harris County, Texas; Being a Replat of a portion of a Tract of land containing a called 21.922 Acres, Being a portion of a Tract of land containing called 52 Acres as described in Deed to Park Place Assembly of God Church under Clerk's File No. E330792 of the Real Property Records of Harris County, Texas.
- **POINT SOUTH BUSINESS PARK FINAL PLAT**: Being a Subdivision of 3.9078 Acres of land out of the Claude M. Pillot Survey, Abstract No. 632, in the City of Tomball, Harris County, Texas.

Background:

The Planning and Zoning Commission approved the Dakota Pines Preliminary Plat on Monday, May 14, 2012 with contingencies. The Dakota Pines Preliminary Plat was accepted on October 8, 2012. The Planning and Zoning Commission approved the Abbreviated Plat Patel Plaza and the Dakota Pines Final Plat on Monday, October 8, 2012 with contingencies. The Planning and Zoning Commission approved the Point South Business Park Preliminary Plat on June 13, 2011 with contingencies. The Final Preliminary Plat was accepted on September 8, 2011. Comments were addressed and the Final Plat was presented to the Planning and Zoning Commission on September 12, 2011 and approved with contingencies. Due to expiring, the Final Plat was presented to the Planning and Zoning Commission again on September 10, 2012 and was approved with contingencies. Comments have all been addressed and the plats are now being forwarded to City Council for approval consideration.

Origination:

Engineering and Planning

Recommendation:

Approval of Plats

Funding:

Party(ies) responsible for placing this item on agenda:

Brandy Pate and Lori Lakatos, Engineering and Planning

ACTION TAKEN		
APPROVAL	READINGS PASSED	OTHER
☐ YES ☐ NO	☐ 1 ST ☐ 2 ND	

ATTACHMENTS:

Abbreviated Plat Patel Plaza

Dakota Pines Final Plat

Point South Business Park Final Plat

THE STATE OF TEXAS
COUNTY OF HARRIS

I, RATILAL P. PATEL, HEREINAFTER REFERRED TO AS OWNER OF THE 0.3214 ACRE TRACT DESCRIBED IN THE ABOVE AND FOREGOING PLAT OF PATEL PLAZA, DO HEREBY MAKE AND ESTABLISH OF SAID SUBDIVISION PROPERTY ACCORDING TO ALL LINES, DEDICATIONS, RESTRICTIONS AND NOTATIONS ON SAID PLAT AND HEREBY DEDICATE TO THE USE OF THE PUBLIC FOREVER, ALL STREETS, ALLEYS, PARKS, WATERCOURSES, DRAINS, EASEMENTS AND PUBLIC PLACES SHOWN THEREON FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED; AND DO HEREBY BIND MYSELF, MY HEIRS, SUCCESSORS AND ASSIGNS TO WARRANT AND FOEVER DEFEND THE TITLE TO THE LAND SO DEDICATED.

FURTHER, OWNERS HAVE DEDICATED AND BY THESE PRESENTS DO DEDICATE TO THE USE OF THE PUBLIC FOR PUBLIC UTILITY PURPOSES FOREVER AND UNOBSTRUCTED AERIAL EASEMENT FIVE FEET IN WIDTH FROM A PLANE TWENTY FEET (20') ABOVE THE GROUND LEVEL UPWARD, LOCATED ADJACENT TO ALL PUBLIC UTILITY EASEMENTS SHOWN HEREON.

FURTHER, OWNERS DO HEREBY COVENANT AND AGREE THAT ALL OF THE PROPERTY WITHIN THE BOUNDARIES OF THIS PLAT SHALL BE RESTRICTED TO PROVIDE THAT DRAINAGE STRUCTURES UNDER PRIVATE DRIVEWAYS SHALL HAVE A NET DRAINAGE OPENING AREA OF SUFFICIENT SIZE TO PERMIT THE FREE OF WATER WITHOUT BACKWATER AND IN NO INSTANCE HAVE A DRAINAGE OPENING OF LESS THAN ONE AND THREE QUARTERS SQUARE FEET (18-DIAMETER) WITH CULVERT OR BRIDGES TO BE PROVIDED FOR ALL PRIVATE OR WALKWAYS SUCH DRAINAGE FACILITIES.

FURTHER, OWNERS DO HEREBY COVENANTS AND AGREE THAT ALL OF THE PROPERTY WITH THE BOUNDARIES OF THIS PLAT AND ADJACENT TO ANY DRAINAGE EASEMENT, DITCH, GULLY, CREEK, OR NATURAL DRAINAGE WAY SHALL HEREBY BE RESTRICTED TO KEEP SUCH DRAINAGE WAYS AND EASEMENTS CLEAR OF FENCES, BUILDINGS, PLANTING, AND OTHER OBSTRUCTIONS TO THE OPERATION AND MAINTENANCE OF THE DRAINAGE FACILITY AND THAT SUCH ABUTTING PROPERTY SHALL NOT BE PERMITTED TO DRAIN DIRECTLY INTO THIS EASEMENT, EXCEPT BY MEANS OF AN APPROVED DRAINAGE STRUCTURE.

WITNESS MY HAND IN THE CITY OF TOMBALL, TEXAS, THIS 10th DAY OF Oct, 2012

BY: Ratilal P. Patel
RATILAL P. PATEL

THE STATE OF TEXAS
COUNTY OF HARRIS

BEFORE ME THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED, RATILAL P. PATEL, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGE TO ME THAT THEY EXCUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN AND HEREIN, AND AS THE ACT AND DEED OF SAID CORPORATION.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 10th DATE OF Oct, 2012.



Brandy Pate
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
MY COMMISSION EXPIRES : 8-23-16

WE, THE CITY MANAGER AND CITY ENGINEER FOR THE CITY OF TOMBALL DO
HEREBY CERTIFY THAT THIS PLAT COMPLIES WITH THE CITY OF TOMBALL ORDINANCE.

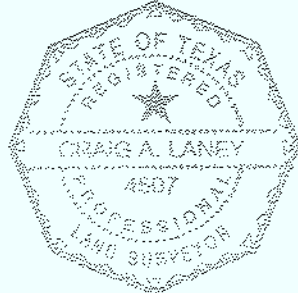
George Shackelford
GEORGE SHACKELFORD, CITY MANAGER
Lori Lakatos
LORI LAKATOS P.E., ACTING CITY ENGINEER

THIS IS TO CERTIFY THAT THE PLANNING AND ZONING COMMISSION OF THE CITY OF TOMBALL, TEXAS HAS APPROVED THIS PLAT AND SUBDIVISION OF PATEL PLAZA IN CONFORMANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE ORDINANCE OF THE CITY OF TOMBALL AS SHOWN AUTHORIZED THE RECORDING OF THIS PLAT THIS _____ DAY OF _____, 2012.

BY: Lori Wallace
LORI WALLACE, CHAIRMAN

Evelyn Chervenak
EVELYN CHERVENAK, VICE CHAIRMAN

I, CRAIG A. LANEY, AM REGISTERED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT THE ABOVE SUBDIVISION IS TRUE AND CORRECT; WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND; THAT ALL BOUNDARY CORNERS, ANGLE POINTS, POINTS OF CURVATURE, AND OTHER POINTS OF REFERENCE HAVE BEEN MARKED WITH IRON (OR SUITABLE PERMANENT METAL) PIPES OR RODS HAVING AN OUTSIDE DIAMETER OF NOT LESS THAN THREE-QUARTER INCH (3/4") AND A LENGTH OF NOT LESS THAN THREE FEET (3'), AND THAT THE PLAT BOUNDARY CORNERS HAVE BEEN TIED TO THE NEAREST SURVEY CORNER.



Craig A. Laney
CRAIG A. LANEY, R.P.L.S.
TEXAS REGISTRATION NO.4507

BY: Gretchen Fagan
GRETCHEN FAGAN, MAYOR

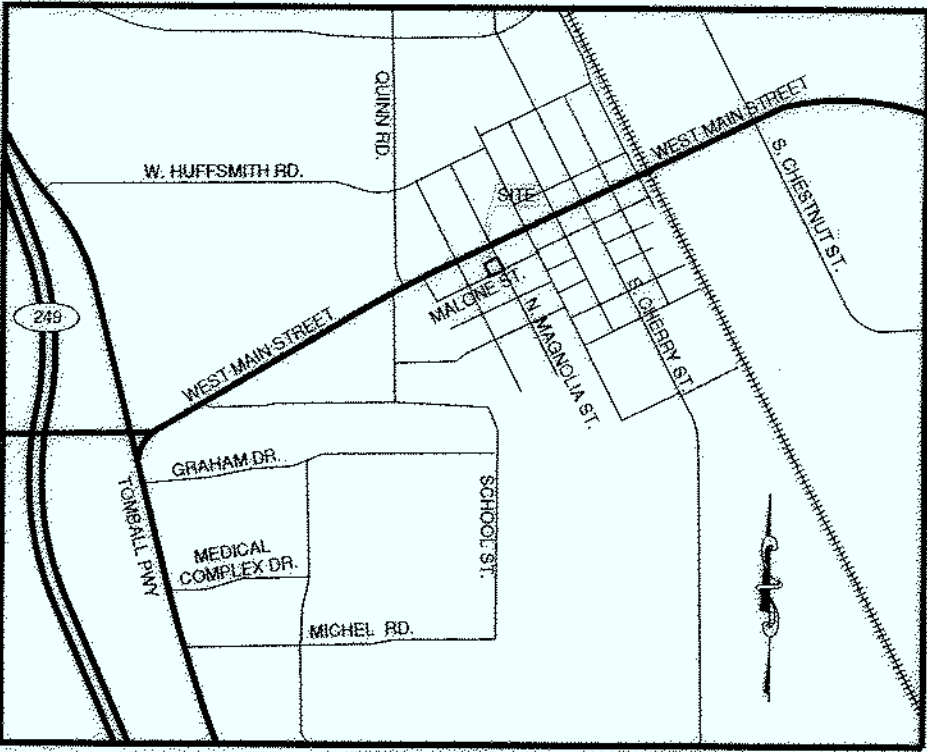
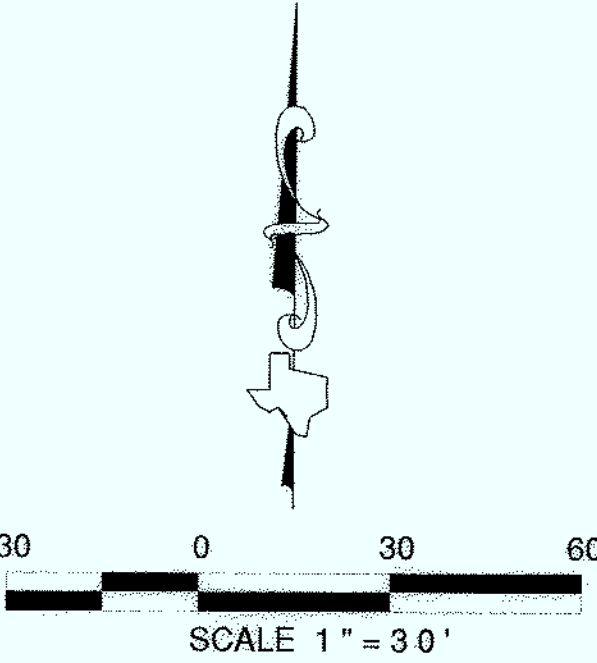
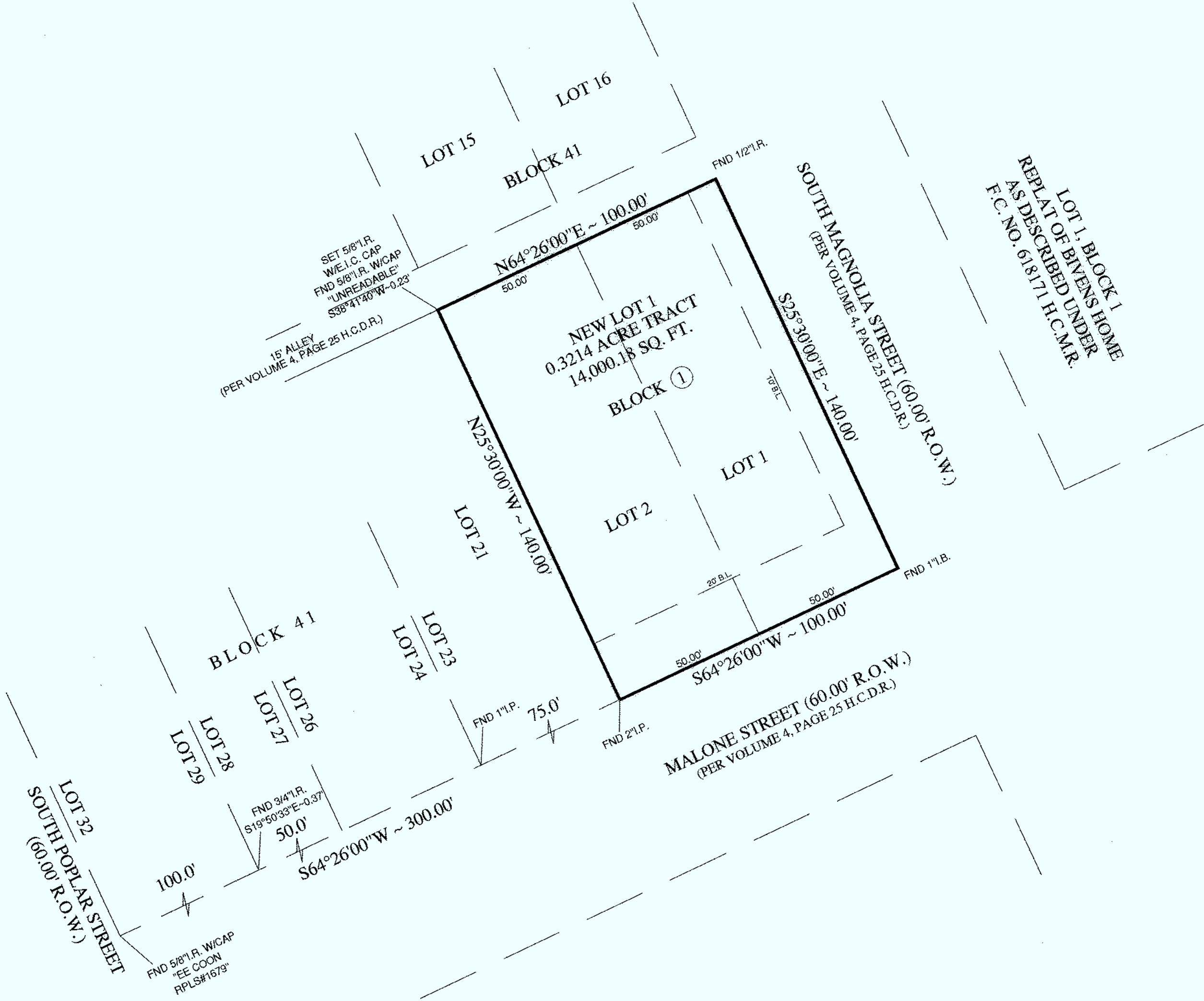
Doris Speer
DORIS SPEER, CITY SECRETARY

Stan Stanart
COUNTY CLERK
OF HARRIS COUNTY, TEXAS

By: _____
DEPUTY

THIS IS TO CERTIFY THAT THE CITY ACCEPTS THE PLANNING AND ZONING COMMISSION'S AUTHORIZED APPROVAL AND ACCEPTANCE OF ALL DEDICATED PUBLIC EASEMENTS IN CONFORMANCE WITH THE LAWS OF THE STATE OF TEXAS THE ORDINANCE OF THE CITY OF TOMBALL AS SHOWN HEREON AND AUTHORIZED THE RECORDING OF THIS PLAT THIS _____ DAY OF _____, 2012.

I, STAN STANART, COUNTY CLERK OF HARRIS COUNTY, DO HEREBY CERTIFY THAT THE WITHIN INSTRUMENT WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR REGISTRATION IN MY OFFICE ON _____, 2012 AT _____ O'CLOCK _____ AND FULLY RECORDED ON _____, 2012, AT _____ O'CLOCK _____ AND UNDER FILM CODED NUMBER _____ OF THE MAP RECORDS OF THE MAP RECORDS OF HARRIS COUNTY FOR SAID COUNTY.
WITNESS MY HAND AND SEAL OF OFFICE, AT HOUSTON, THE DAY AND DATE LAST ABOVE WRITTEN.



VICINITY MAP
NOT TO SCALE

ABBREVIATED PLAT
PATEL PLAZA
BEING A SUBDIVISION OF 0.3214 ACRE
(14,000.18 SQUARE FEET)
BEING COMPRISED OF LOTS 1 AND 2 IN BLOCK 41 OF
TOMBALL TOWNSITE,
SITUATED IN THE WILLIAM HURD SURVEY, ABSTRACT NO. 371
ACCORDING TO THE MAP OR PLAT THEREOF
RECORDED IN VOLUME 2, PAGE 65 OF THE MAP RECORDS OF
HARRIS COUNTY, TEXAS.

CONTAINING
1 LOT 1 BLOCK
(REASON FOR REPLAT IS TO COMBINE TWO LOTS INTO ONE)

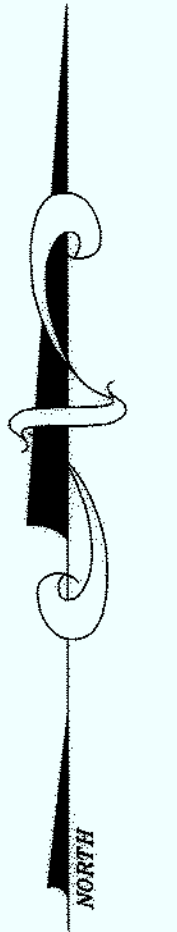
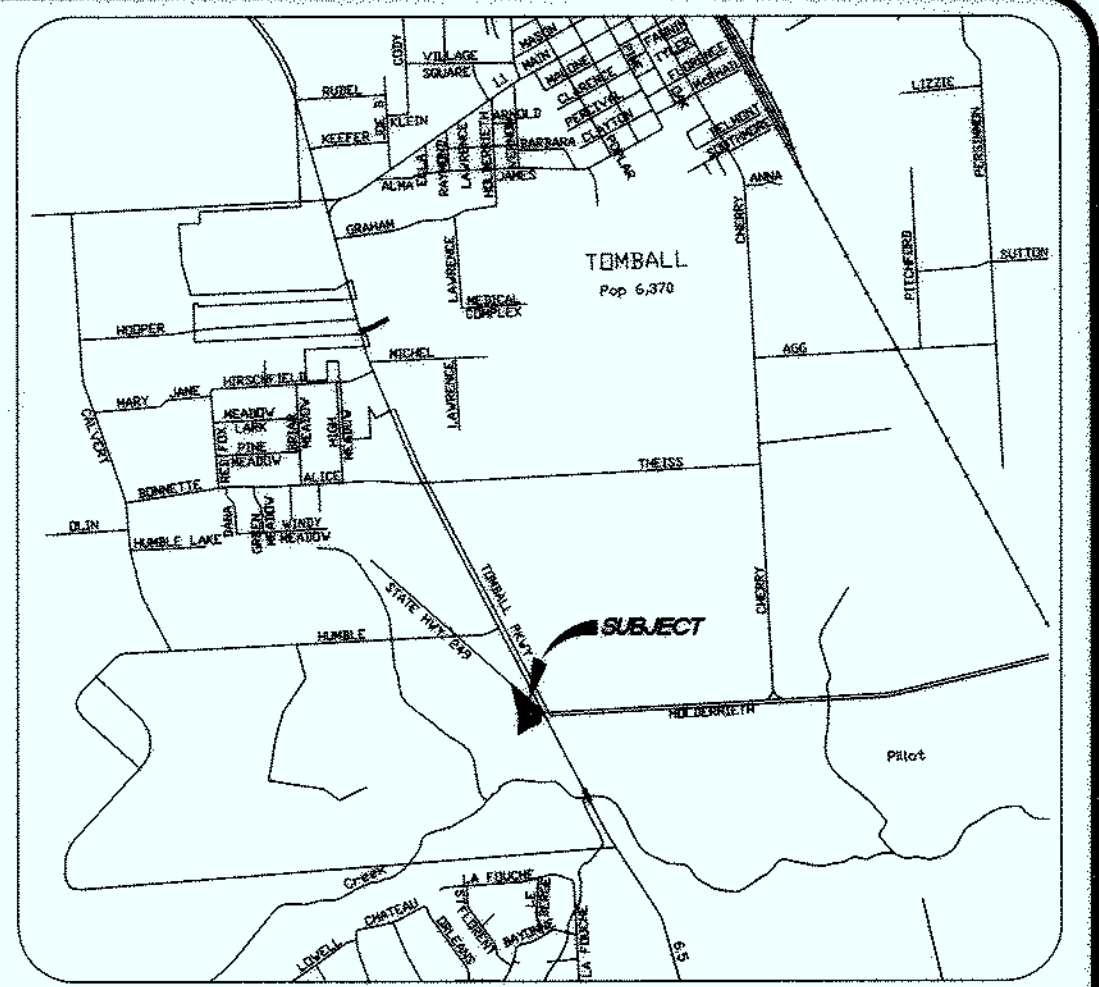
OCTOBER 2012

OWNER
RATILAL P. PATEL 601 WEST MAIN STREET
TOMBALL, TX 77375
(281) 797 - 5378

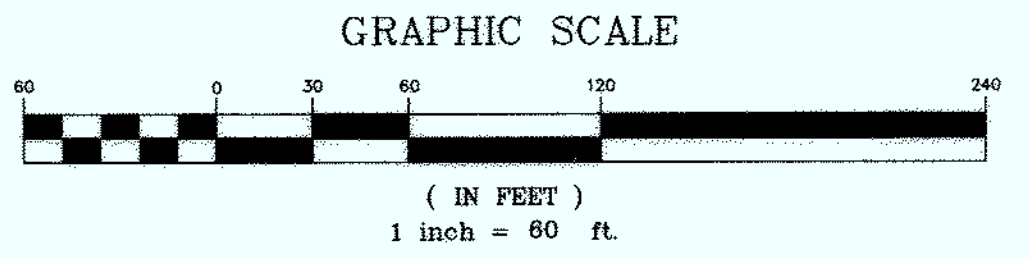
SURVEYOR
E.I.C.SURVEYING COMPANY 12345 JONES ROAD # 270
HOUSTON , TEXAS 77070
(281) 955 - 2772

LEGEND	
B.L.	Indicates " Building Line "
U.E.	Indicates " Utility Easement "
R.O.W.	Indicates " Right-of Way "
AC.	Indicates " Acre "
VOL.	Indicates " Volume "
PG.	Indicates " Page "
I.R.	Indicates " Iron Rod "
H.C.M.R.	Indicates " Harris County Map Records "
H.C.D.R.	Indicates " Harris County Deed Records "
SQ.FT.	Indicates " Square Feet "
C.F.#	Indicates " Clerk's File Number "
FND.	Indicates " Found "

- GENERAL NOTES
- Public easements denoted on this plat are hereby dedicated to the public forever. Any public utility, including the City of Tomball, shall have the right at all times, of ingress and egress to and from and upon said easements for the purpose of construction, reconstruction, inspection, patrolling, maintaining and adding to or removing all or part of its respective systems without the necessity of any time of procuring the permission of the property owner. Any public utility, including the City of Tomball, shall have the right to move and keep moved all or part of any building, fences, trees, shrubs, other growths or improvements that in any way endanger or interfere with the construction, maintenance or efficiency of it's respective systems on any of the easements shown on this plat. Neither the City of Tomball nor any other public utility shall be responsible for any damages to property within an easement arising out of the removal or relocation of any obstruction in the public easement.
 - According to the FEMA Firm Panel No. 4803150230L (Effective Date June 18, 2007), this property is in Zone "X" and is not in the 0.2% Annual Chance Flood Plain.
 - All oil/ gas pipelines or pipeline easements with ownership through the subdivision have been shown.
 - All oil/ gas wells with ownership (plugged, abandoned, and/ or active) through the subdivision have been shown.
 - No Building or structure shall be constructed across any pipelines, building lines, and/ or easements. Building setback lines will be required adjacent to oil/ gas pipelines. The setback at a minimum should be 15 feet off centerline of low pressure gas lines, and 30 feet off centerline of high pressure gas line.
 - This plat does not attempt to amend or remove any valid covenants or restrictions.
 - The building lines shown in this plat shall be in addition to, and shall not limit or replace, any building lines required by the City of Tomball Code of Ordinances at the time of the development of the property.



HOLDERREITH ROAD



LEGEND	
—	CLEAN OUT
—	PIPELINE MARKER
—	POWER POLE
—	MANHOLE
—	FIRE HYDRANT
—	PIPELINE VENT
—	WATER METER
—	GAS METER
—	WATER VALVE
—	GAS VALVE
—	SERVICE POLE
—	BOARD FENCE (UNLESS OTHERWISE NOTED)
—	BARBED WIRE FENCE (UNLESS OTHERWISE NOTED)
—	WATER LINE
—	STORM SEWER LINE
—	SANITARY SEWER LINE
—	GAS LINE
—	SURVEY BOUNDARY LINE

M.R.H.C. = MAP RECORDS OF HARRIS COUNTY
R.P.R.H.C. = REAL PROPERTY RECORDS OF HARRIS COUNTY
D.R.H.C. = DEED RECORDS OF HARRIS COUNTY
C.C.F. = COUNTY CLERK'S FILE
P.O.B. = PLACE OF BEGINNING
R.O.W. = RIGHT-OF-WAY
VOL. = VOLUME
P.G. = PAGE
H.C.F.C.D. = HARRIS COUNTY FLOOD CONTROL DISTRICT

CURVE TABLE					
CURVE	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD LENGTH
C1	10°17'59"	1050.00	188.75	S 57°43'21" W	188.50
C2	9°06'54"	1050.00	167.04	S 67°25'47" W	166.86

RK MCGAUGHY, TRUSTEE
REMAINDER 15.6118 ACRES
TRACT III
(C.C.F. NO. Z273961 R.P.R.H.C.)

Notes:

- All oil/gas pipelines or pipeline easements with ownership through the subdivision have been shown.
- All oil/gas wells with ownership (plugged, abandoned, and/or active) through the subdivision have been shown.
- No building or structure shall be constructed across any pipelines, building lines, and/or easements. Building setback lines will be required adjacent to oil/gas pipelines. The setbacks at a minimum shall be 15 feet off centerline of low pressure gas lines, and 30 feet off centerline of high pressure gas lines.
- This plat does not attempt to amend or remove any valid restrictions or covenants.
- The building lines shown on this plat shall be in addition to, and shall not limit or replace, any building lines required by the City of Tomball Code of Ordinances at the time of the development of the property.
- All existing Pipe Lines that affect the subject tract are located within a proposed 30 foot Easement located adjacent to the West line of the Subject property. The 30 foot Easement will be recorded by separate instrument prior to recordation of this plat and will be plotted on this plat with recording information.

Public Easements:

Public easements denoted on this plat are hereby dedicated to the public forever. Any public utility, including the City of Tomball, shall have the right at all times, of ingress and egress to and from and upon said easements for the purpose of construction, reconstruction, inspection, patrolling, maintaining and adding to or removing oil or part of its respective systems without the necessity of any time of procuring the permission of the property owner. Any public utility, including the City of Tomball, shall have the right to move and keep moved all or part of any building, fences, trees, shrubs, other growths or improvements that in any way endanger or interfere with the construction, maintenance or efficiency of its respective systems on any of the easements shown on this plat. Neither the City of Tomball or any public utility shall be responsible for the replacing or reimbursing the property owner due to removal or relocation of any obstruction on the public easements.

Flood Information:

According to FEMA Firm Panel No. 4803160230L (Effective Date June 18, 2007), a small portion of this property is in Zone "AE" and is in the 1% Annual Chance Flood Plain, the balance of the property is in Zone X and is outside the 100 year flood plain and in the 0.2% annual chance Flood Plain.

POINT SOUTH BUSINESS PARK FINAL PLAT

BEING A SUBDIVISION OF 3.9078 ACRES OF
LAND OUT OF THE CLAUDE M. PILOT
SURVEY, ABSTRACT NO. 632, IN THE CITY OF
TOMBALL, HARRIS COUNTY, TEXAS.

3 LOTS 1 BLOCK

DATE: 08/31/2012 SCALE: 1" = 60'

OWNER/DEVELOPER: R.K. MCGAUGHY, TRUSTEE

14345-B TORREY CHASE
HOUSTON, TEXAS 77014
PHONE : (281) 580-4855
FAX : (281) 580-3808

SURVEYOR: THOMAS LAND SURVEYING

14340 Torrey Chase, Suite 270
Houston, Texas 77014
PHONE : (281) 440-7730
FAX : (281) 440-7737
thomas@thomaslandsurveying.com

STATE OF TEXAS
COUNTY OF HARRIS

WE, R.K. McGaughy, Trustee, owners, hereinafter referred to as Owners of the 3.9078 acre tract described in the above and foregoing plat of POINT SOUTH BUSINESS PARK, do hereby make and establish said subdivision and development plan of said property according to all laws, dedications, restrictions and notations on said map or plat and hereby dedicate to the use of the public forever, all streets (except those streets designated as private streets, or permanent access easements), alleys, parks, water courses, drains, easements and public places shown thereon for the purposes and considerations therein expressed; and do hereby bind ourselves, our heirs, successors and assigns to warrant and defend the title to the land so dedicated.

FURTHER, Owners have dedicated and by these presents to dedicate to the use of the public for public utility purposes forever an unobstructed aerial easement five feet width from a plane twenty feet (20') above the ground level upward, located adjacent to all public utility easements shown hereon.

FURTHER, Owners do hereby covenant and agree that all of the property within the boundaries of this plat and adjacent to any drainage easement, ditch, gully, creek, or natural drainage way shall hereby be restricted to keep such drainage ways and easements clear of fences, buildings, planting, and other obstructions to the operation and maintenance of the drainage facility and that such abutting property shall not be permitted to drain directly into this easement except by means of an approved drainage structure.

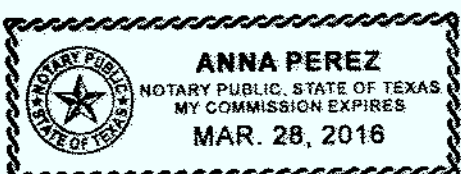
Witness our hand in the City of Tomball, Texas, this the 10th day of October, 2012

By: R.K. McGaughy, Trustee
R.K. McGaughy, Trustee

STATE OF TEXAS
COUNTY OF HARRIS

BEFORE ME, the undersigned authority, on this day personally appeared RK McGaughy, Trustee, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 10th day of October, 2012.



By: Anna Perez
Notary Public, State of Texas
My Commission Expires: 3-28-2016

I, Stan Stanort, County Clerk of Harris County, do hereby certify that the within instrument with its certificate of authentication was filed for registration in my office on _____, 2012, at _____ o'clock _____ M., and duly recorded on _____, 2012, at _____ o'clock _____ M., and at Film Code No. _____ of the Map Records of Harris County for said county.

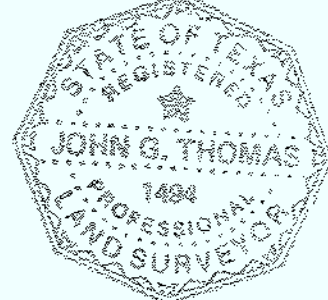
WITNESS my hand and seal of office, at Houston, the day and date last above written.

Stan Stanort
County Clerk
of Harris County, Texas

By: _____
Deputy

I, John G. Thomas, am authorized (or registered) under the laws of the State of Texas to practice the profession of civil engineering (or surveying) and hereby certify that the above subdivision is true and correct; was prepared from an actual survey of the property made under my supervision on the ground; that all boundary corners, angle points, points of curvature, and other points of reference have been marked with iron (or other suitable permanent metal) pipes or rods having an outside diameter of not less than three quarter inch (3/4") and a length of not less than three feet (3'); and that the plat boundary corners have been tied to the nearest street intersection.

By: John G. Thomas
John G. Thomas, RPLS #1494



This is to certify that the Planning and Zoning Commission of the City of Tomball, Texas, has approved this plat and subdivision of POINT SOUTH BUSINESS PARK in conformance with the laws of the State of Texas and the ordinances of the City of Tomball as shown hereon and authorized the recording of this plat this _____ day of _____, 2012.

By: _____
Lori Wallace, Chair

By: _____
Evelyn Chervenak, Vice Chair

We the City Manager and City Engineer for the City of Tomball, do hereby certify that this plat complies with the City of Tomball Ordinances.

By: George Shackelford, City Manager
By: Lori Lakatos, P.E., Acting City Engineer
Engineering & Planning

This is to certify that the City accepts the Planning & Zoning Commission's authorized approval and acceptance of all dedicated public easements in conformance with the laws of the State of Texas and the ordinances of the City of Tomball as shown hereon and authorized the recording of this plat this _____ day of _____, 2012.

By: _____
Gretchen Fagan, Mayor
By: _____
Doris Speer, City Secretary