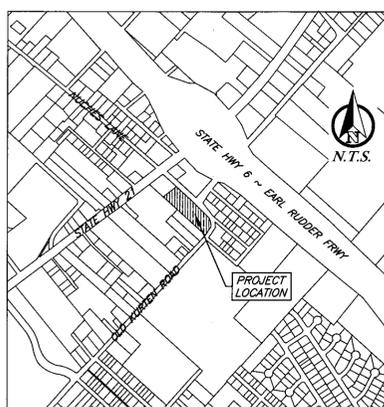


# Bryan Inn & Suites

Aria Estate Subdivision, Block 1, Lot 1

1506 Nuches Lane

Bryan, Brazos County, Texas



VICINITY PLAN  
N.T.S.

OWNER/DEVELOPER:

**Aria Hospitality LLC**

3604 Hwy 21 East  
Bryan, TX 77808

ENGINEER:



Firm # 9951  
PO Box 5192  
Bryan, Texas 77805  
979-739-0567



Know what's below.  
Call before you dig.

Sheet List Table	
Sheet Number	Sheet Title
C1	Notes
C2	Site Plan
C3	Pavement & Dimensional Control Plan
C4	Erosion & Sediment Control Plan
C5	Grading Plan
C6	Drainage Plan
C7	Utility Plan
C8	Landscape Plan
Figure W1	BCS Unified Water Details

**Preliminary Plans Only  
Not for Construction**

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**Released for Review**

August 2014

General Notes:

- 1. The contractor shall promptly notify the engineer of any discrepancies between these plans and other drawings of differing disciplines & specifications.
2. The contractor is specifically cautioned that the location and/or elevation of the existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field.
3. Contractor to verify all underground utilities in the field prior to construction.
4. It is the responsibility of the contractor to comply with all state and federal regulations regarding construction activities near energized over head power lines.
5. The contractor shall be responsible for the protection of all existing utilities or service lines that are crossed or exposed during construction operations.
6. During the execution of the work, the contractor shall maintain the project site in an orderly and acceptable manner as far as practical.
7. Contractor is responsible for OSHA established trench safety as described in the federal register 29 CFR Part 1926.
8. A copy of the approved construction plans shall be kept on site at all times throughout the entire construction of the project.
9. The contractor shall be responsible for safeguarding and protections all material and equipment stored on the jobsite.
10. Contractor shall store materials at location(s) approved by & coordinated with the owner.
11. Contractor shall saw cut remove and replace concrete pavement, and curb & gutter as required to construct proposed improvements.
12. It shall be the responsibility of the contractor to pay for and obtain all required permits and inspection approvals for all work shown.
13. Any adjacent property and right-of-way disturbed during construction will be returned to their existing condition or better.
14. All exposed dirt surfaces shall be seeded, hydro-mulched, or sodded.
15. The contractor shall not create a dirt nuisance or safety hazard in any street or driveway.
16. Adequate drainage shall be maintained at all times during construction and any drainage ditch or structure disturbed during construction shall be restored to existing conditions or better.
17. The contractor shall coordinate all fence removal and replacement with the Owner.
18. The contractor shall protect all monuments, iron pins, and property corners during construction.
19. The contractor must provide construction staking from the information provided on the plans.

General Utility Note (Private & Public):

- 1. All excavation for underground utilities shall be made true to grade. Excavation shall be made a minimum of six inches below the required grade and provide a sand bed for the piping.
2. Minimum bury or cover specified is to be measured from finish grades.
3. Utility installations in non-structural areas shall be bedded and initial backfill consistent with non-structural requirements.
4. Regardless of elevations shown for manhole rims, clean-out covers, or grates, these items shall be placed flush with the pavement elevations and slopes.
5. Contractor shall uncover existing utilities at all "points of interest" to determine if conflicts exist before commencing and construction.
6. The contractor shall coordinate all utility installation so that grade critical elements (i.e. storm drain, sanitary sewer, etc.) do not conflict with non-grade critical elements (i.e. electrical conduit, water services, etc.).
7. The contractor shall furnish all materials, equipment, and labor for excavation, boring, installation, and backfilling of utility lines and relates appurtenances, as shown on the plans.
8. The loading and unloading of all pipe and other accessories shall be in accordance with the manufacturer's recommended practices and shall, at all times, be performed with care to avoid any damage to the material.
9. Contractor shall be responsible for coordinating all connections to public systems and installations with regulatory inspector.
10. This project shall be built by means of open cut except as noted on the drawings.
11. Structural backfill will be required for all excavation within 5 feet of public roadway pavements or walks.

Private Utility Notes:

- 1. The contractor shall install the proposed private utility lines in accordance with local codes, latest national plumbing code, and all applicable state and local laws.
2. It shall be the responsibility of the contractor to pay for and obtain all required permits and inspection approvals for all work shown.
3. The contractor shall coordinate all installations of service lines, conduits, meters, etc., with the appropriate utility company.

Water Line Notes (Public & Private):

- 1. All domestic water line pipe shall be constructed out of PVC (Sch 40).
2. All 15 inch to 42 inch storm sewer pipe, shall be constructed out of reinforced concrete pipe (RCP), C443 ASTM C76, Class III except as noted.
3. Contractor shall provide a minimum of 12 inch clearance at storm sewer and water line crossings and a minimum of 6 inch clearance at storm sewer and sanitary sewer crossings.

Storm Sewer Notes (Private):

- 1. All 15 inch to 42 inch storm sewer pipe, shall be constructed out of reinforced concrete pipe (RCP), C443 ASTM C76, Class III except as noted.
2. All 6 inch to 12 inch storm sewer pipe, except as noted, shall be HDPE.
3. Contractor shall provide a minimum of 12 inch clearance at storm sewer and water line crossings and a minimum of 6 inch clearance at storm sewer and sanitary sewer crossings.
4. Unless otherwise specified, the contractor shall install all storm sewer pipe in accordance with the trench detail contained in these construction drawings.

Demolition & Construction Notes:

- 1. Demolition of existing structures and improvements shall include all work contained on these plans, but shall not be limited to the items specially identified.
2. It shall be the responsibility of the contractor to stage and sequence all demolition work with utility companies to provide minimal interruption and inconvenience of utility services.
3. Demolished surplus material shall be legally disposed of off-site.
4. All pavement edges, bounding the construction area & matching with new construction, shall be neatly sw cut, unless gravel.
5. The contractor shall clear all right-of-ways and easements contained in these construction drawings.
6. The contractor shall field verify and locate all existing utilities on site prior to demolition.
7. The contractor shall perform demolition activities as noted and shown on these plans and as directed by the owner/ developer.
8. It shall be the responsibility of the contractor to obtain any permits and pay any fees required for demolition and disposal from the appropriate authorities.
9. The contractor shall install all erosion and sediment control devices prior to commencing demolition work.
10. The contractor is responsible for the protection of all utilities that are to remain in place.
11. The contractor shall take all precautions to avoid damage to any existing road surface.
12. All existing items that are to remain in place which are damaged during construction shall be restored to original condition, or better, at the sole expense of the contractor.
13. Should any existing utilities not shown or shown incorrectly on this plan be found on site, the contractor shall contact the engineer immediately to discuss any possible conflicts before proceeding with any work in that area.
14. An asbestos survey must be performed prior to the demolishing of any structures.
2. Dimensional Control Notes:
1. The contractor may obtain an electronic copy of these plans for construction purposes.
2. All dimensions shown are to be used in conjunction with these plans for locating all improvements and shall be field verified by the contractor for workability prior to construction of improvements.
3. Unless otherwise shown, all dimensioning is to the back of curb or edge of pavement, which ever is applicable.

Dimensional Control Notes:

- 1. The contractor may obtain an electronic copy of these plans for construction purposes.
2. All dimensions shown are to be used in conjunction with these plans for locating all improvements and shall be field verified by the contractor for workability prior to construction of improvements.
3. Unless otherwise shown, all dimensioning is to the back of curb or edge of pavement, which ever is applicable.

Grading Notes:

- 1. All unpaved areas shall be adequately graded to drain at a minimum of 1.00% slope, unless otherwise noted, so that no ponding occurs.
2. Unless otherwise specified, unpaved areas shall drain away from buildings so that the perimeter curb is a minimum 6" lower than the finished floor.
3. Finish grade adjacent to curbing or sidewalk shall be 1/2" below the top of concrete and 2" below in landscaping areas.
4. When top of curb elevations are shown, the curb height is 6" unless otherwise specified.
5. The contractor shall follow the general intent of the grading plans.
6. Adequate drainage shall be maintained at all times during construction and any drainage ditch or structure disturbed during construction shall be restored to existing conditions or better.
7. The approval of these plans is not an authorization to grade adjacent properties.

Erosion Control Notes:

- 1. Erosion control measures shown in these plans shall be considered the very minimum required.
2. The site operator, or his representative established by a letter of delegation, shall make a visual inspection of all siltation controls and newly stabilized areas.
3. All sediment trapping devices shall be installed as soon as practical after the area has been disturbed.
4. During construction, contractor shall maintain best management practice (bmp).
5. The contractor shall be responsible for establishing temporary erosion control measures as required for different phases of construction.
6. Phase II erosion control measure measures shall be implemented immediately after construction of their associated improvements.
7. The contractor is responsible for removing sediment control devices after the site has been seeded and/ or sodded, and ground cover has taken root.
8. The contractor shall take all necessary measures to ensure that all disturbed areas are stabilized.
9. When hydro-mulching is required, contractor shall keep mulch moist after installation and until area shows growth.
10. Erosion control measures shall be implemented prior to any excavation or demolition work.

Sidewalk Construction

- 1. Sidewalks shall be doveled into and tie to any concrete structure adjacent to sidewalk (driveway, inlet box, curb) #4 x 12" bars @ 18" O.C.
2. ADA ramps shall be constructed per the ambulatory ramp details on the pavement plan shown in these plans.

Paving Notes:

- 1. The pavement system shown was designed without the aid of a geotechnical investigation.
2. Sub-grade
a. Existing trees, stumps, and large tree systems, shall be grubbed and removed.
b. Paving areas shall be proof-rolled with a 20 ton roller and, if required at the time of construction, the contractor shall stabilize weak areas by over excavation and backfilling.
c. Materials excavated on site, excluding the top 6 inches, may be used as fill material, under pavement areas only, if the material is free from trash, lumps, clods, organic substance, & other foreign matter.
d. Fill material shall be placed in eight inch maximum loose lifts, with each lift wetted or dried to a moisture content range of 0% to +3% of the optimum moisture content and compacted to a uniform density of 95% of the maximum dry density as determined by ASTM D698.
e. Compaction test, for fill, shall be verified by in-place density test for each lift.
4. Portland Cement Concrete
a. All concrete, unless otherwise specified, shall have a minimum compressive strength of 3,500 psi at 28 days for pavement and 3,000 psi at 28days for non-pavement applications.
b. All concrete shall be vibrated when placed and not raked a distance greater than 10 feet.
c. Unless otherwise noted, joint spacing shall not exceed 15 feet in any direction to another joint or edge of pavement.
d. Expansion joints shall not exceed a maximum spacing of 45 feet and should not be placed through the middle of area inlets or junction boxes.
e. All joints shall be sealed with Sonoborn Sonolastic SL-1, or an approved equal.
f. Concrete shall not be placed if the air temperature is 50° F and falling or 95° F or higher.

Steel

- a. All reinforcing steel shall be deformed billed steel bar having a minimum yield strength of not less than 60 KSI conforming to ASTM A615, Grade 60.
b. All reinforcing steel shall be free from rust or other bond reducing agents.
c. All splices in pavement and curbing steel shall be staggered and lapped 30 inches times the bar diameter or 12 inches, whichever is greater.
d. Concrete coverage for the reinforcing steel shall comply with the ACI code, latest edition.
5. Steel
a. All reinforcing steel shall be deformed billed steel bar having a minimum yield strength of not less than 60 KSI conforming to ASTM A615, Grade 60.
b. All reinforcing steel shall be free from rust or other bond reducing agents.
c. All splices in pavement and curbing steel shall be staggered and lapped 30 inches times the bar diameter or 12 inches, whichever is greater.
d. Concrete coverage for the reinforcing steel shall comply with the ACI code, latest edition.

Traffic Control Notes:

- 1. Contractor shall provide and install traffic control devices in conformance with part VI of the Texas Manual on Uniform Traffic Control Devices (Texas MUTCD, most recent edition with revisions) during construction.
2. Lane closure will not be allowed unless approved by the TxDOT or COB representative, as applicable.
3. The work shall be completed such that the roadway will be fully opened to traffic overnight.
4. Plastic drums shall be used for overnight delineation of off roadway work areas.

Legend
Line Types
W-B Existing Water Line, Size Noted
W-B Proposed Water Line, Size Noted
W Existing Water Service
W Proposed Water Service
S-S Existing Sanitary Sewer Line, Size Noted
S-S Proposed Sanitary Sewer Line, Size Noted
S Existing Sanitary Sewer Service
S Proposed Sanitary Sewer Service
Existing Storm Sewer Piping
Proposed Storm Sewer Piping
Existing Natural Gas Line
Proposed Natural Gas Line
Existing Underground Electrical Line
Proposed Underground Electrical Line
Existing Aerial Electrical Line
Proposed Aerial Electrical Line
Existing Underground Telephone
Proposed Underground Telephone
Existing Contour, Elevation Noted
Proposed Contour, Elevation Noted
Existing Easement
Silt Fence
Existing Chain Link Fence
Proposed Chain Link Fence
Existing Wire Fence
Existing Board Fence
Proposed Board Fence
Symbols
Hydrant
Water Valve
Water Manhole
Water Meter
Phone Pedestal
Sign
Storm Grate Inlet
S.E.T.
Sewer Manhole
Sewer Clean-Out
Mail Box
Power Pole
Abbreviations
TP Top of Pavement
TC Top of Curb
TG Top of Ground
TW Top of Walk
TI Top of Inlet
TR Top of Wall
FL Flow Line
MH Man Hole
Min Minimum
Max Maximum
N.T.S. Not to Scale
PI Point of Inflection
PT Point of Tangency
PC Point of Curvature
Sch Schedule
R.O.W. Right of Way
W/ With
W/OUT With Out
S.E.T. Sloped End Treatment
BM Bench Mark
TBM Temporary Bench Mark
SY Square Yard
LF Linear Foot
CO Clean Out
O.C. On Center
O.C.E.W. On Center Each Way
PSI Pounds per Square Inch
PVC Polyvinyl Chloride
RCP Reinforced Concrete Pipe
PVMT Pavement
H Horizontal
V Vertical

Gas Company Notes:

- 1. At all underground gas utility crossings, the contractor shall give the appropriate utility company a minimum of 72 hours notice so that their field representative may be present.
2. Eighteen (18) inch clearance shall be maintained between the proposed utility and the existing underground gas line.
3. For excavation near the underground gas line(s), the contractor shall cover, or remove, the bucket teeth of the excavator.

Notes

General Notes:

- 1. It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.

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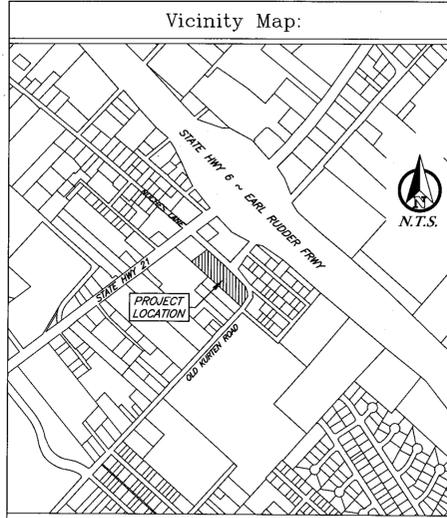
Released for Review

Table with 3 columns: No., Revision/Issue, Date

J4 Engineering
PO Box 5192 - Bryan, Texas - 77805
979-759-0567 www.J4Engineering.com
Firm# 9951

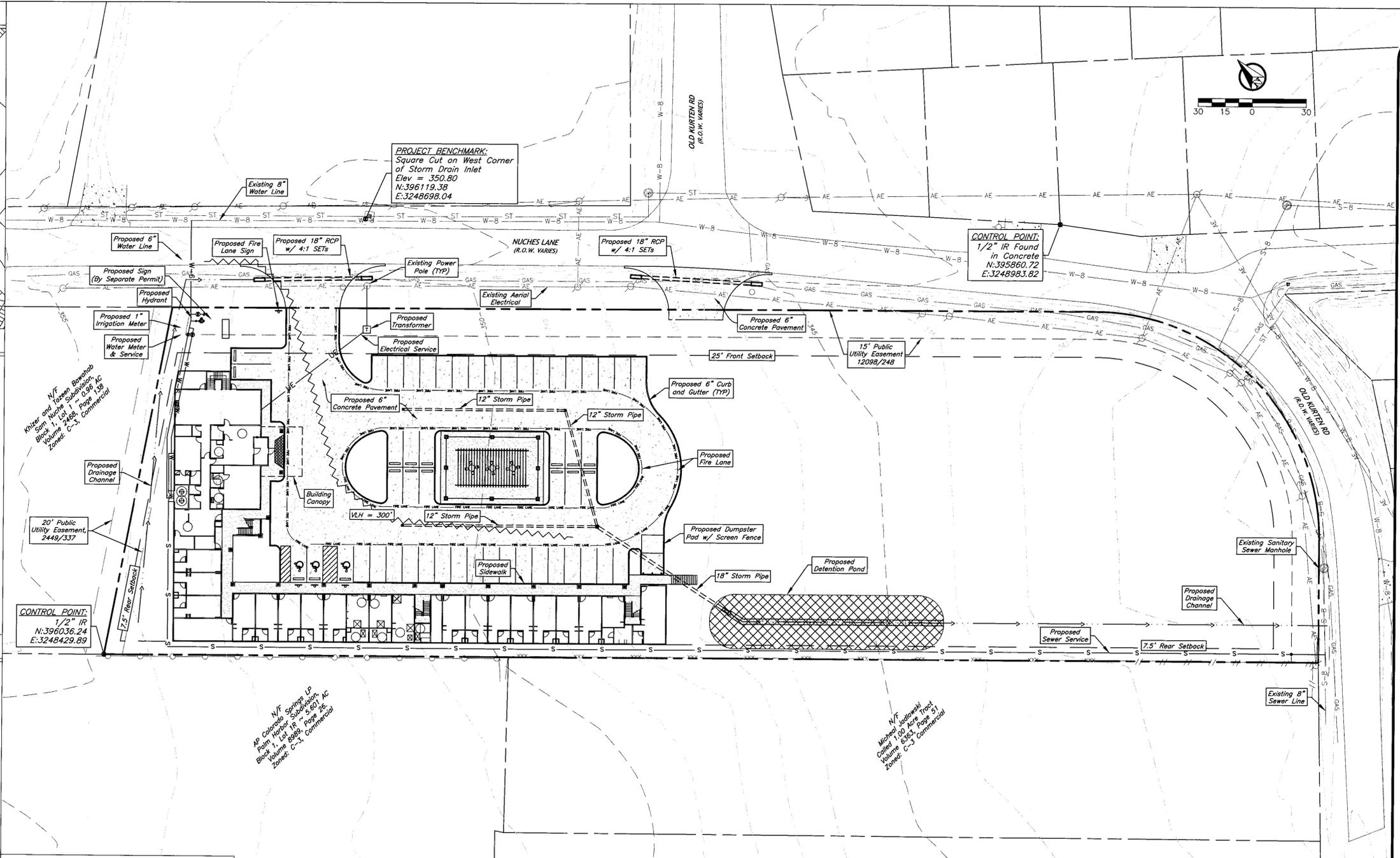
Bryan Inn & Suites
1506 Nuches Lane
Block 1, Lot 1, Aria Estate
Subdivision - 2.815 AC
Bryan, Brazos County, Texas

Date: Aug 2014
Scale: As Noted
Sheet: C1



- Site Specific Notes:**
- The owner & developer of the property is Aria Hospitality, LLC. The subject property is Lot 1, Block 1 of the Aria Estate Subdivision.
  - The property is zoned C-3, Commercial.
  - Proposed use and improvements: hotel building with associated parking, utilities, and landscaping.
  - This lot is not within the 100-yr floodplain according to the FIRM for Brazos County, Texas and incorporated Areas, Map No. 48041C0205F, effective April 2, 2014.
  - Total lot acreage is 2.815 acres (122628 SF).
  - Standard City of Bryan setback lines shall apply to this lot.
  - The stormwater runoff from this development will be controlled by an onsite collection and detention system and discharged into the ROW of Old Kurten Road.
  - Drainage information and details will be provided on the Grading and Drainage Plans.
  - Sign application to be submitted by separate ordinance.
  - The irrigation system must be approved and installed prior to issuance of C.O.
  - Solid waste pickup will be provided by the collection truck entering the parking lot and collecting waste from an 8 CY container within the proposed enclosed dumpster area.

- Construction Notes:**
- 12'x12' dumpster pad w/ 10' apron, 8" reinforced concrete w/ #5 rebar @ 12" O.C.E.W. and w/ 6" tall brick enclosure
  - All radii and distances are measured to the back of curb, unless otherwise noted, as shown on the Pavement Plan.
  - All site work is to be done in conformance with the Bryan/College Station 2012 Standard Specifications for Water & Sewer and the City of Bryan Standard Specifications for Streets & Drainage.
  - All fill subgrade and base material shall be compacted to 98% STD in areas to be paved and 95% STD in all other areas.
  - All concrete to be constructed 4000 psi (Min.) - 28-day strength portland cement concrete.
  - All items to be removed during clearing and grubbing. Remove not only the above ground elements, but all underground elements as well. All excavated material shall become the property of the contractor, unless otherwise directed by the Owner. All debris must be disposed of off-site.
  - Prior to grading operations, the contractor is to strip the first 6" of soil. Contractor shall proof-roll the entire site and remove any unstable materials according to TxDOT specifications. Select fill is to be used in replacing objectionable material.
  - Each utility contractor is responsible for positioning and trenching of service lines. Mark all lines with utility tape. Utility contractors are responsible for coordinating with paving contractor in placement and installation of any necessary utility conduit prior to subgrade preparation. Lines requiring slope control are to be installed first. All other lines not requiring slope control or elevation shall be installed deepest first. Each contractor is responsible for knowing final determination of installation order.
  - The contractor shall be responsible for the containment and proper disposal of all liquid and solid waste associated with the project and shall use all means necessary to prevent the occurrence of wind blown litter.
  - The contractor is required to provide containment for waste prior to demolition/ construction. Solid waste roll-off boxes shall be supplied by the City or by City permitted contractor(s) only
  - Electrical conduit for parking lot lighting will be shown on the electrical site plan.
  - The parking lot is 6" depth concrete pavement to meet or exceed minimum City of Bryan Requirements.
  - The bearing system shown hereon is based on grid north as established from GPS observation.



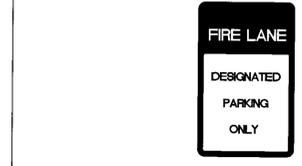
**Parking Analysis:**

Proposed Improvements:	
44	Guest Rooms
4	Apartment Bedrooms
New Required Parking:	
44...	1 Space per Guest Room
4...	1 Space per Bedroom
48...	Total Required
New Provided Parking:	
45...	Straight-in Parking
3...	ADA Parking w/Van Accessible
48...	Total Provided

**Fire Lane Striping:**

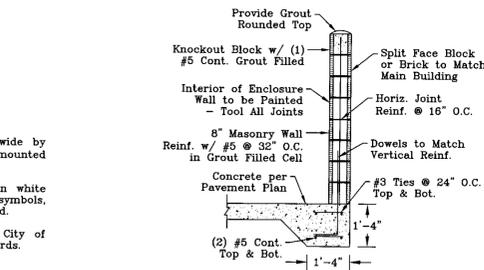
All curbs and curb ends designated as fire lanes on plans shall be painted red with 4" white lettering stating "FIRE LANE-NO PARKING-TOW AWAY ZONE". Wording may not be spaced more than 15' apart.

■ FIRE LANE ■ NO PARKING ■ TOW AWAY ZONE ■

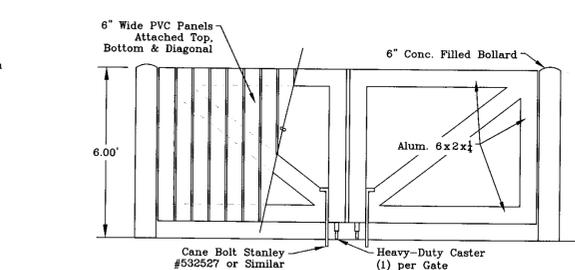


- Notes:**
- The sign shall be 12" wide by 18" in height and be mounted in the location shown.
  - Sign shall be painted on white background with symbols, letters, and border in red.
  - Sign shall comply with City of Bryan fire service standards.

**Fire Lane Sign Detail**  
N.T.S.



**Dumpster Enclosure Section**  
N.T.S.



**Dumpster Enclosure Elevation**  
N.T.S.

**NOTICE!**

The contractor is specifically cautioned that the location and/or elevation of the existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied upon as being exact or complete. It is the contractor's responsibility to avoid all existing utilities and repair any damaged lines, at his own expense, whether the utility is shown on these plans or not. The contractor shall notify the appropriate utility company 48 hours prior to any excavation.

**Contact Information:**

Texas One Call:	800-245-4545
Lone Star One Call:	800-669-8344
Texas Excavation Safety System (Digloss):	800-344-8377
College Station Utilities:	979-764-3638
Bryan Texas Utilities:	979-821-5865
Atmos Energy:	979-774-2506
Verizon:	979-821-4300
Suddenlink:	979-846-2229

**Site Plan**

**General Notes:**

- The topography shown is from field survey data.
- Refer to Final Plat for all lot dimensions and bearings.
- All utilities shown are taken from the best available information based on construction utility documents obtained by J4 Engineering from City and Independent agencies and/or above ground field evidence. Shown positions may not represent as-built conditions.
- The contractor shall be responsible for verifying the exact location of all existing underground utilities, whether shown on these plans or not. Notification of the utility companies 48 hours in advance of construction is required.
- Contractor is responsible for field verifying existing and proposed grades, flowlines, elevations, etc. prior to any construction and reporting any inconsistencies to the Engineer. Utility crossings and other points of possible conflict shall be verified prior to construction.
- All construction shall be in accordance with the current BCS Standard Specifications, Details, and Design Guidelines for Water, Sewer, Streets, and Drainage, unless otherwise noted.
- It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
- See Sheet C1 - General Notes

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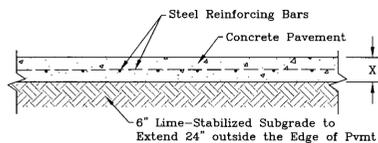
**J4 Engineering**  
PO Box 5192 - Bryan, Texas - 77805  
979-739-0567 www.J4Engineering.com  
Firm # 9951

**Project Name and Address:**

**Bryan Inn & Suites**  
1506 Nuches Lane  
Block 1, Lot 1, Aria Estate  
Subdivision - 2.815 AC  
Bryan, Brazos County, Texas

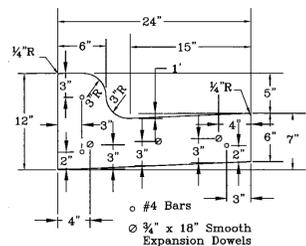
**Date:** Aug 2014 **Sheet:**

**Scale:** As Noted **C2**

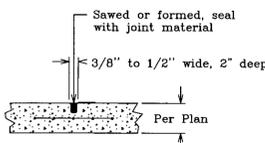


- X = 6" or 8" as shown on the Pavement Plan
- 6" Pavement - use #4 rebar @ 18" O.C.E.W.
- 8" Pavement - use #5 rebar @ 12" O.C.E.W.

Typical Concrete Paving Section  
N.T.S.

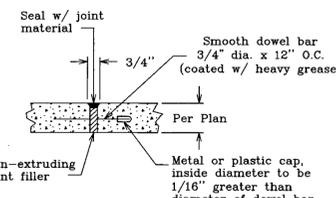


Raised Curb Detail  
N.T.S.



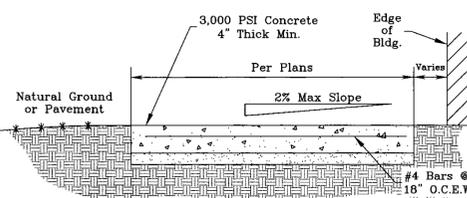
- Note:
- Contraction joint sealant to be Sonneborn SL-1 or approved equal.
  - Contraction joints shall be spaced at 15' maximum intervals.
  - Sawcut control joints within 6-12 hours of concrete placement.

PVMT Contraction Joint Detail  
N.T.S.



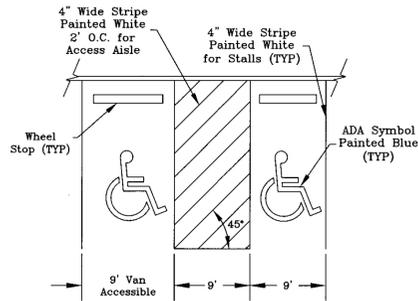
- Note:
- Expansion joint sealant to be Sonneborn SL-1 or approved equal.
  - Expansion joints shall be spaced at 45' maximum intervals.

PVMT Expansion Joint Detail  
N.T.S.

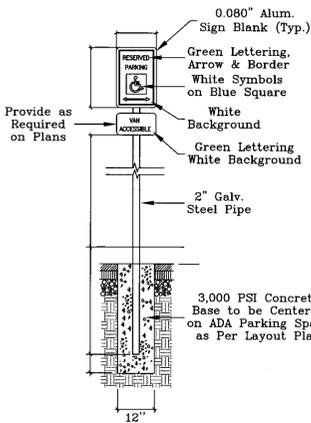


- Note:
- Install expansion joints at 40' (max) longitudinal spacing and install control joints at 5' (max) longitudinal spacing

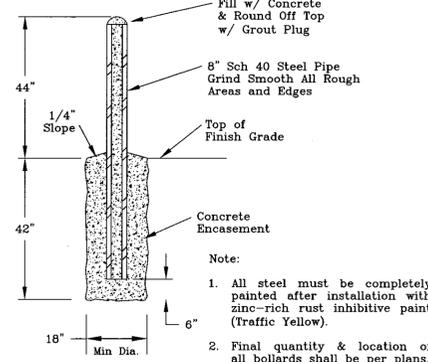
Typical Sidewalk  
N.T.S.



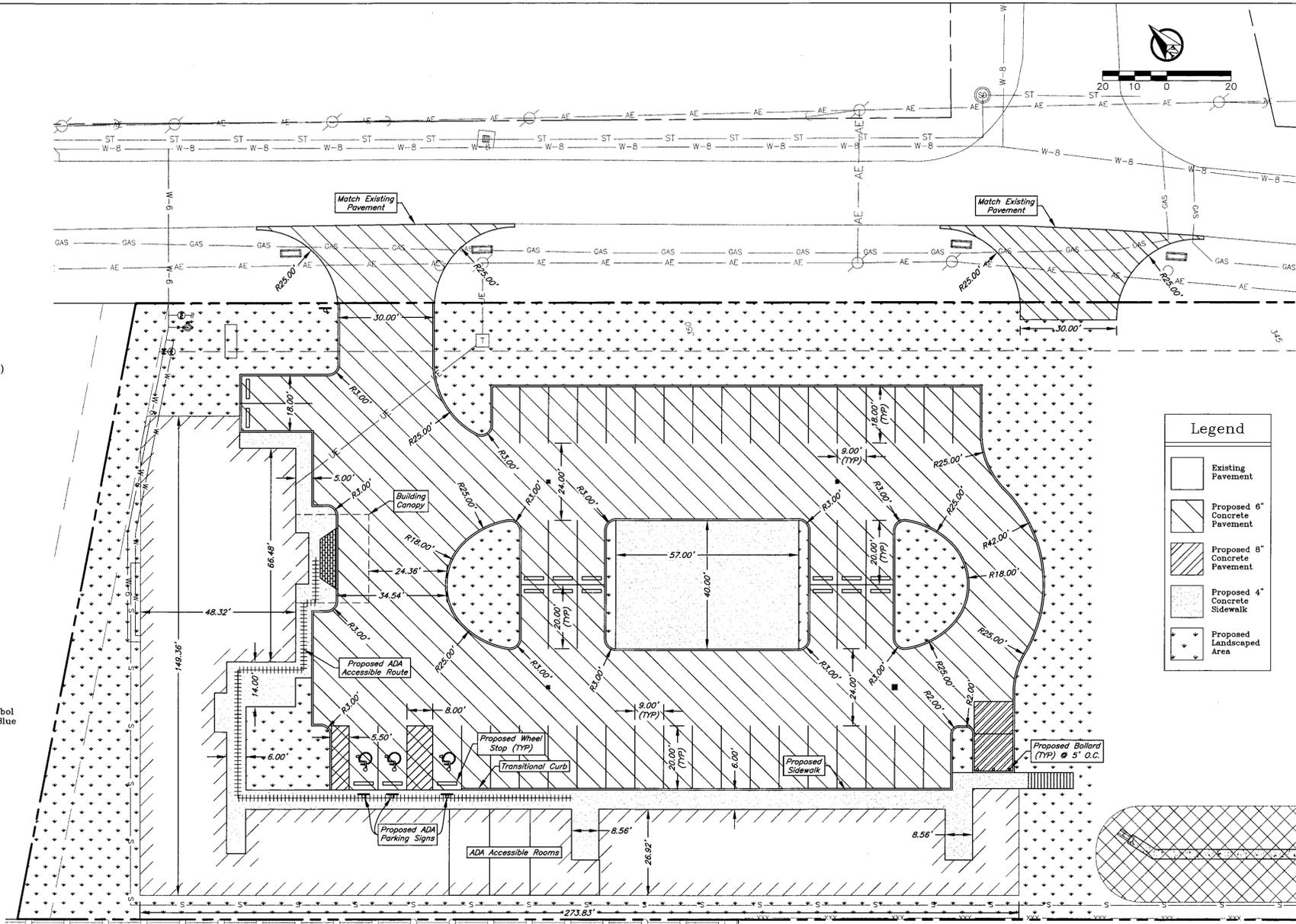
ADA Pavement Markings  
N.T.S.



ADA Parking Sign  
N.T.S.



Typical Bollard Detail  
N.T.S.



**Legend**

- Existing Pavement
- Proposed 6" Concrete Pavement
- Proposed 8" Concrete Pavement
- Proposed 4" Concrete Sidewalk
- Proposed Landscaped Area

# Pavement & Dimensional Control Plan

## General Notes:

- Refer to Final Plat for all lot dimensions and bearings.
- All dimensions are to back of curb or edge of pavement, unless otherwise noted.
- Maximum cross slope for all ADA accessible routes is 2% for sidewalks and pavement. The minimum cross slope for sidewalks is 1%.
- Materials and methods for pavement markings shall conform to TxDOT Standard Specifications for Construction of Highways, Streets, and Bridges (Current Edition), with the following exceptions: 1) Type II marking materials need not be purchased from the Department, and 2) Glass beads may be omitted, but marking material shall be Type II paint-type material.
- It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
- See Sheet C1 - General Notes

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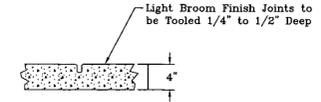
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Subdivision - 2.815 AC  
Bryan, Brazos County, Texas

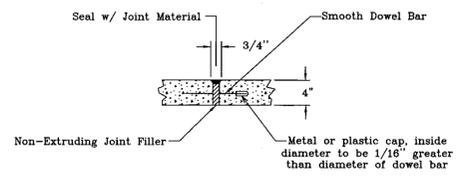
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## Paving Notes:

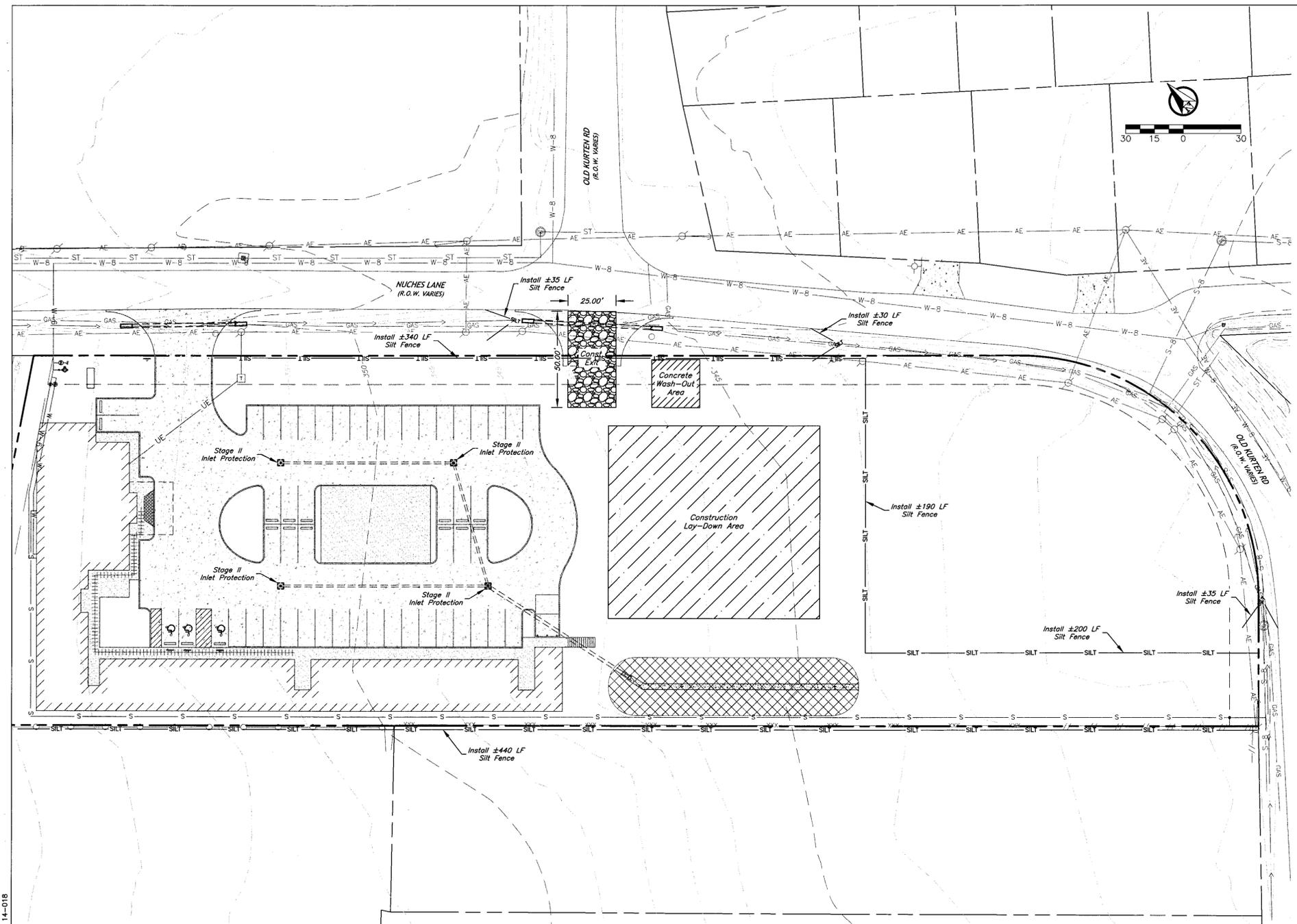
- All concrete for pavement construction shall be to the minimum depth shown on the plans and shall have a minimum 28-day compressive strength of 4,000 psi. The maximum percentage of fly ash replacement of portland cement shall be 20 percent by weight.
- Item 380 of the TxDOT "Standard Specifications for Construction and Maintenance of Highways, Street, & Bridges" shall be used as a technical specification for reinforced concrete pavement.
- The subgrade beneath the concrete pavement and sidewalks shall be compacted and "proof-rolled" prior to stabilization or placement of fill. Any weak or soft areas identified by the "proof-rolling" shall be removed and replaced.
- In accordance with the geotechnical report prepared July 18, 2014, the pavement subgrade soils shall be treated with lime at a rate of 6% cement by dry weight of soil, in accordance with TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets & Bridges (SSCMHSB) Item 260, Lime Treatment for Material Used as Subgrade (Road Mixed), Type A Treatment specification. The lime-treated soil shall be compacted to a density of at least 95% of the maximum dry density as determined by ASTM D698 at a moisture content from optimum moisture to 3% above optimum moisture content.
- A sand leveling course under concrete pavement is NOT permitted.
- Joint sealant material to be Sonneborn SL-1 or approved equal.
- Curing compound shall be applied uniformly to the concrete after the surface finishing is complete at the rate recommended by the manufacturer. The curing compound shall meet the requirements of TxDOT Item 526.
- Contractor shall provide engineer with a proposed pavement expansion and contraction joint plan prior to pavement construction.
- See Sheet C1 - General Notes.



Sidewalk Contraction Joint Detail  
N.T.S.



Sidewalk Expansion Joint Detail  
N.T.S.



**SWPPP Information:**

**Nature of Construction Activity:**  
Pavement, drainage, and utility improvements for a site development. Potential pollutants and sources - Sediment from excavations and equipment movements around the site.

**Schedule of Events:**

1. Install silt fencing.
2. Install stabilized construction exit.
3. Clear and grub.
4. Install utilities and storm culverts.
5. Apply pavement.
6. Complete grading and install permanent seeding.
7. When all construction activity is completed the site is stabilized. Remove silt fence and re-seed any area disturbed during construction and assure a healthy ground cover.

**Areas of Disturbance:**  
During the construction of the pavement, drainage, and utility improvements the area that will be disturbed includes the street right-of-ways and the water and sanitary sewer connections to existing lines.

**Structural Controls:**  
Temporary stabilization ~ areas where construction activity temporarily ceases for at least 21 days will be stabilized with temporary seed no later than 14 days from the last construction activity in that area all proposed fill material will be seeded.

Silt fence and/or hay bales will be installed at all outfalls, areas where water runs off the site; inlets under construction will have silt fencing or hay bales placed around the perimeter of the inlet all constructed inlets will have sandbags placed in front of the throat to collect sediment but allow flow of water into the inlet.

There is one livestock pond present at this site that will be incorporated into the regional detention pond.

**Storm Water Management:**  
Storm water drainage will be controlled by drainage ditches and a detention pond for the development area. All areas affected by construction will be fine graded and have permanent seeding. The remainder of the area will remain in its natural state.

**Offsite vehicle tracking:**  
A stabilized construction entrance will be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be swept to remove any excess mud, dirt, or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

**Certification of Compliance with State and Local Regulations:**  
This storm water pollution prevention plan reflects the city's requirements for storm water management, erosion, and sediment control. To ensure compliance, this plan was prepared in accordance with the city's drainage policy. There are no other applicable state or federal requirements for sediment and erosion site plans (or permits) or storm water management site plans (or permits).

**Maintenance/Inspection Procedures:**  
These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- All control measures will be inspected at least once every 14 days and following any storm event of 0.5 inches or greater.
- All measures will be maintained in good working order; if a repair is necessary it will be initiated within 24 hours of the report.
- Built up sediment will be removed from silt fence when it has reached one-half the height of the fence.
- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- A maintenance inspection report will be made after each inspection. The inspection report form will be prepared by the site superintendent and filed for record.
- A site superintendent will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report.

**Non-Storm Water Discharges:**  
It is expected that the following non-storm water discharges will occur from the site during the construction period:

- Water from water line flushing

**Site Description:**

Project name and location:  
Bryan Inn & Suites  
Bryan, Brazos County, Texas

Owner and Developer:  
Aria Hospitality, LLC  
3804 Hwy 21 East  
Bryan, TX 77808

The site is not located on Indian lands.

Latitude: 30° 41' 41.0"  
Longitude: 96° 21' 36.0"

MS4 operator name: City of Bryan, Texas  
Receiving water body: Carters Creek Tributary B  
Estimated area to be disturbed: 2,815 acres

The storm water pollution prevention plan shall be in compliance with state and local sediment and erosion plans.

**Operator Requirements:**  
The operator shall submit a NOI to TCEQ and a copy to the operator and post a copy at the construction site in a location where it is readily available for viewing prior to commencing construction activities, and maintain the notice in that location until completion of the construction activity.

The operator shall provide a copy of the NOI to the operator of the municipal separate storm sewer system receiving the discharge, at least two (2) days prior to commencing construction activities.

The operator shall submit a NOT to TCEQ and a copy to the operator of the municipal storm sewer system once the final stabilization has been achieved and the temporary erosion controls have been removed.

Controls must be developed to limit, to the extent practicable, offsite transport of litter, construction debris and construction materials.

**Operator Inspection Requirements:**  
The following records must be maintained and either attached to or referenced in the storm water plan:

- The dates when major grading activities occur.
- The dates when construction activities temporarily or permanently cease on a portion of the site.
- The dates when stabilization measures are initiated.

A report summarizing the scope of the inspection, names and qualifications of personnel making the inspection, the dates of the inspection, and major observations must be made and retained with the storm water plan. Major observations should include:

- The locations of discharges of sediment or other pollutants from the site;
- Locations of BMP's that failed to operate as designed or proved inadequate for a particular location; and
- Locations where additional BMP's are needed.

**Operator's Record Keeping:**  
The permittee must retain the following records for a minimum of 3 years from the date that a NOT is submitted:

- A copy of the storm water plan and
- All reports and actions required by this permit, including a copy of the construction site notice all data used to complete the NOI.

# Erosion & Sediment Control Plan

## General Notes:

1. The topography shown is from field survey data.
2. Assure positive drainage across project site.
3. It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
4. See Sheet C1 - General Notes.

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Not for Construction**

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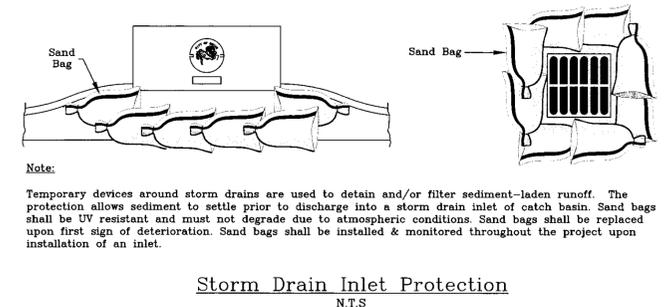
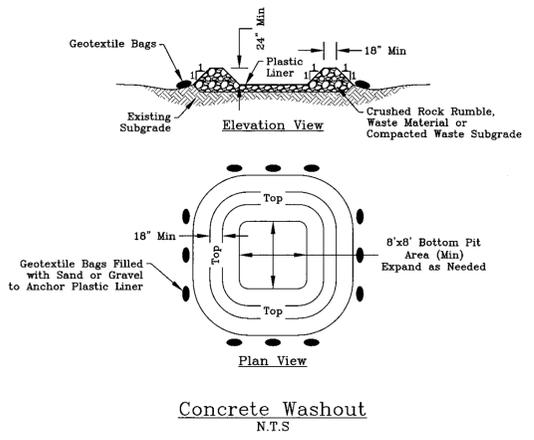
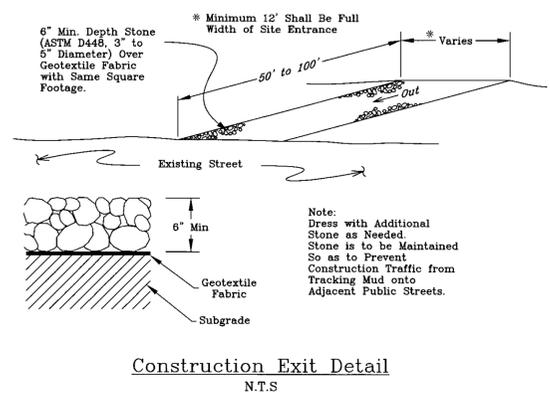
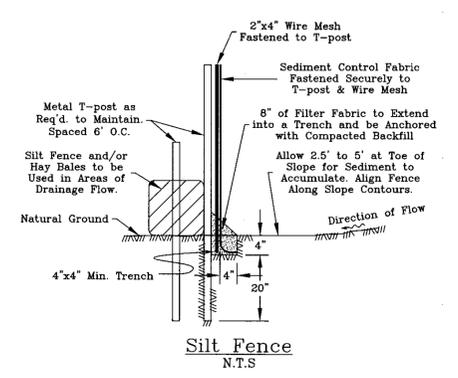
**J4 Engineering**  
PO Box 5192 - Bryan, Texas - 77805  
979-739-0567 www.J4Engineering.com  
Firm# 9951

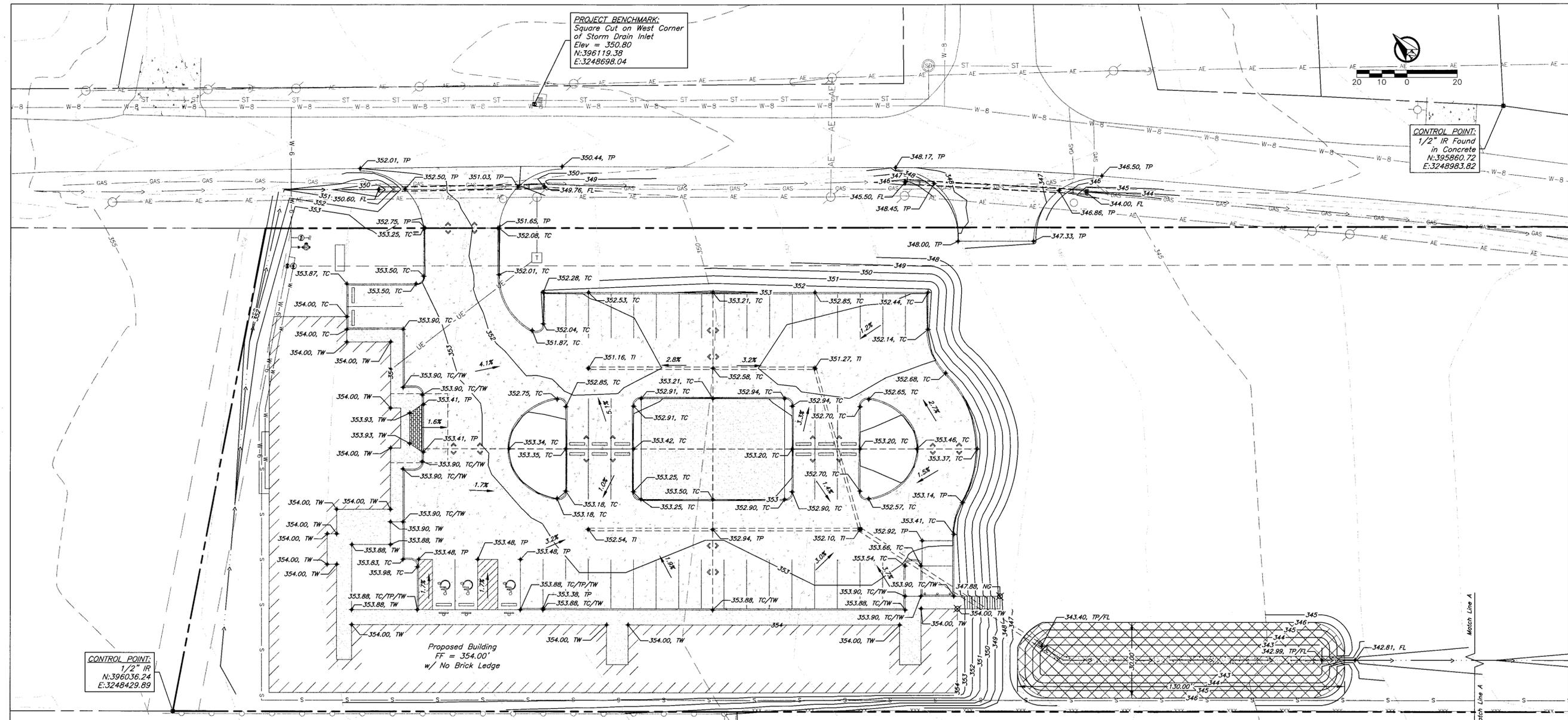
**Project Name and Address:**

**Bryan Inn & Suites**  
1506 Nuches Lane  
Block 1, Lot 1, Aria Estate  
Subdivision ~ 2,815 AC  
Bryan, Brazos County, Texas

Date:	Aug 2014	Sheet:	C4
Scale:	As Noted		

J4 Engineering 08/26/2014 Bryan Inn & Suites.dwg J4E Project # 14-018





# Grading Plan

## General Notes:

- All proposed elevations shown are finished grade.
- The contractor shall field verify and locate all existing utilities on site prior to excavation.
- Should any existing utilities not shown or shown incorrectly on this plan be found on site, the contractor shall contact the design engineer immediately to discuss any possible conflicts before proceeding with any work in that area.
- It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
- See Sheet C1 - General Notes.

FL - Flow Line  
 NG - Top of Ground  
 TC - Top of Curb  
 TI - Top of Inlet  
 TP - Top of Pavement  
 TW - Top of Sidewalk

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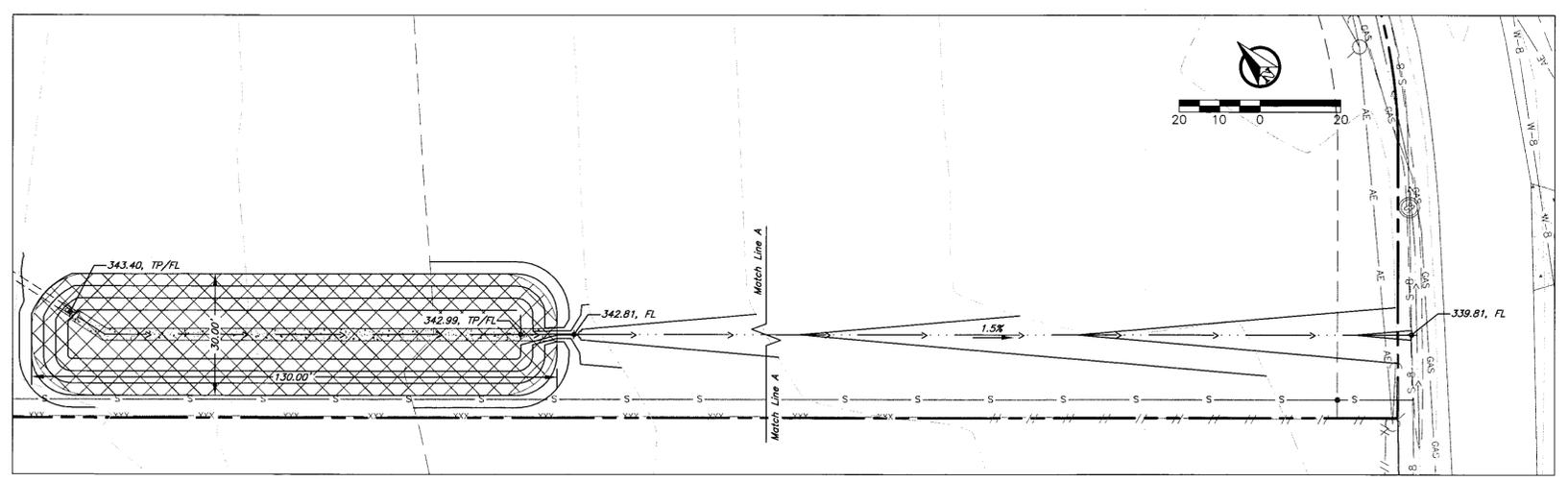
Project Name and Address:

**Bryan Inn & Suites**  
 1506 Nuches Lane  
 Block 1, Lot 1, Aria Estate  
 Subdivision - 2.815 AC  
 Bryan, Brazos County, Texas

Date:	Aug 2014	Sheet:	C5
Scale:	As Noted		

## Grading Notes:

- Assure positive drainage across project site to the storm water structures.
- Backfill all proposed parking lot islands with full depth topsoil.
- Fill material used to achieve grade in areas to receive pavement or within the street right-of-way shall be compacted to at least 98% of the maximum dry density as determined by the standard proctor test, (ASTM D698), at a moisture content from optimum moisture content to 3% above the optimum moisture content. Areas outside of the street right-of-way shall be compacted to 95% of the maximum dry density.
- Fill material shall be placed in compacted lifts of 6" or less and shall be material excavated from the street construction or from utility or storm sewer trenches. Sandy loam topsoil or soil containing organic material shall not be used as fill.
- All items to be removed during clearing and grubbing, both above ground and underground elements as well. All excavated soil shall remain the property of the Owner, unless otherwise directed by the Owner. All debris must be disposed of by the Contractor, off site.
- The subgrade beneath the concrete sidewalks shall be compacted and "proof-rolled". Any weak or soft areas identified by the "proof-rolling" shall be removed and replaced.
- ADA ramp slopes shall not exceed 1v:12h.
- Structural backfill for utility or storm drain trenches is required whenever the trench is within 5' of pavement or sidewalk.
- The contractor shall follow the general intent of the grading plans. Minor adjustments to the actual elevations shown on the grading plan may be required to match existing ground elevations and structures. The proposed contour lines shown are approximate only, and the design grade spot elevations should be used for construction of the site work.
- Refer to Pavement Plan for pavement construction details and notes.
- The contractor shall salvage all topsoil and replace it on all disturbed areas. All parking lot islands and areas adjacent to parking and sidewalk areas shall receive 6" sandy loam topsoil prior to placement of grass sod or hydromulch.
- See Sheet C1 - General Notes



J4E Project # 14-018  
 08/26/2014 Bryan Inn & Suites.dwg  
 J4 Engineering

# Drainage Plan

## General Notes:

- All proposed elevations shown are finished grade.
- The contractor shall field verify and locate all existing utilities on site prior to excavation.
- Should any existing utilities not shown or shown incorrectly on this plan be found on site, the contractor shall contact the design engineer immediately to discuss any possible conflicts before proceeding with any work in that area.
- Area inlets may be cast-in-place concrete. All concrete for drainage construction shall have a minimum 28-day compressive strength of 4000 psi.
- Structural backfill areas are defined as any trench section under or within 5' of pavement.
- Assure positive drainage across project site to the storm water structures.
- All construction shall be in accordance with the current BCS Standard Specifications, Details, and Design Guidelines for Water, Sewer, Streets and Drainage, unless otherwise noted.
- It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
- See Sheet C1 - General Notes.

FL - Flow Line  
 NG - Top of Ground  
 TC - Top of Curb  
 TI - Top of Inlet  
 TP - Top of Pavement  
 TW - Top of Sidewalk

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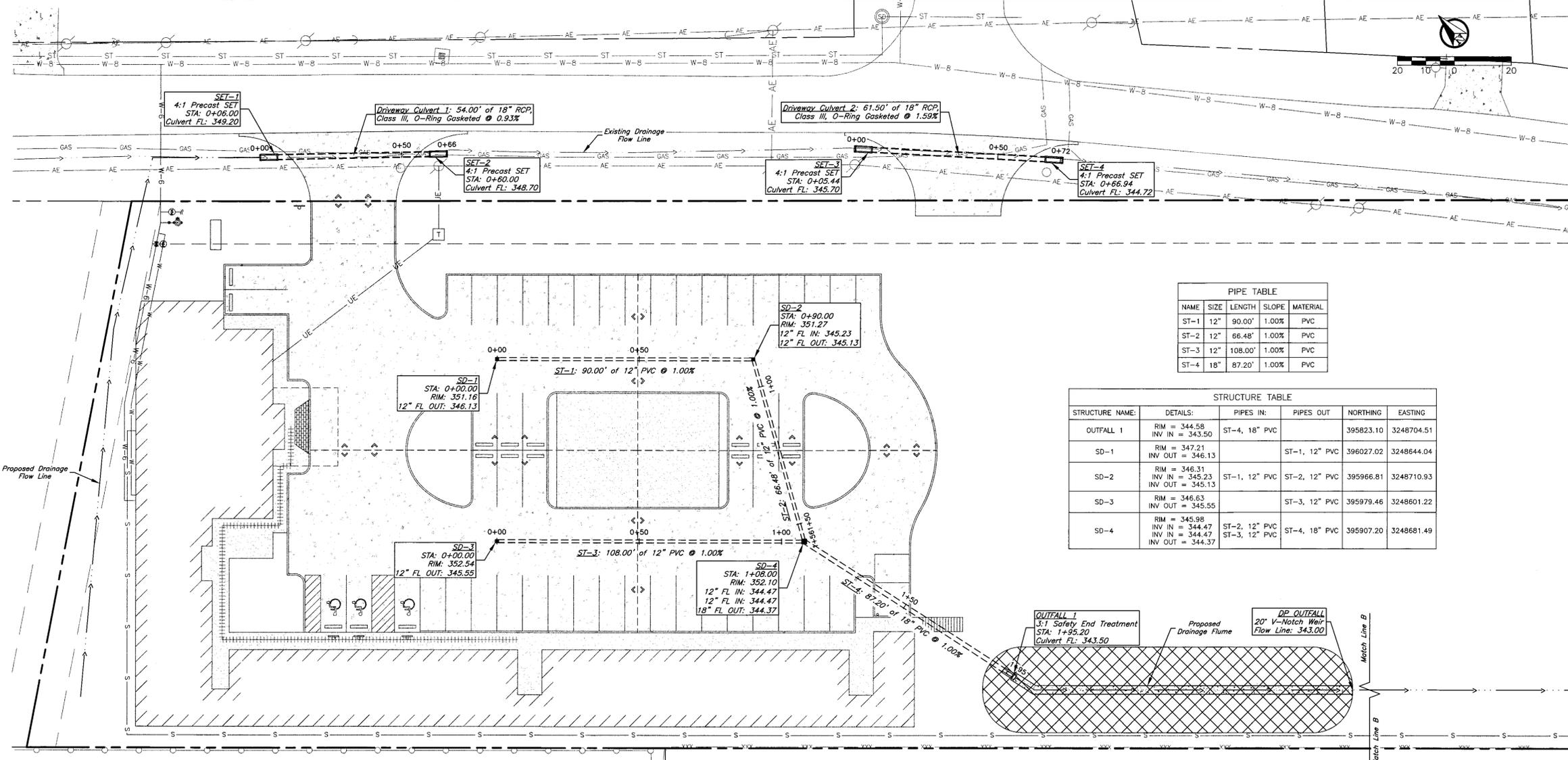
Firm Name and Address:

**J4 Engineering**  
 PO Box 5192 - Bryan, Texas - 77805  
 979-739-0567 www.J4Engineering.com  
 Firm# 9951

Project Name and Address:

**Bryan Inn & Suites**  
 1506 Nuches Lane  
 Block 1, Lot 1, Aria Estate  
 Subdivision - 2.815 AC  
 Bryan, Brazos County, Texas

Date:	Aug 2014	Sheet:	C6
Scale:	As Noted		

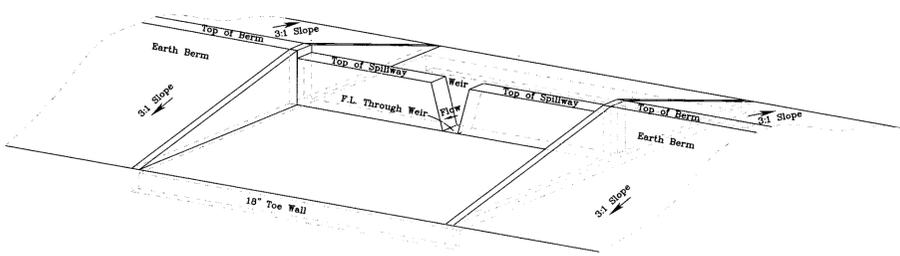


NAME	SIZE	LENGTH	SLOPE	MATERIAL
ST-1	12"	90.00'	1.00%	PVC
ST-2	12"	66.48'	1.00%	PVC
ST-3	12"	108.00'	1.00%	PVC
ST-4	18"	87.20'	1.00%	PVC

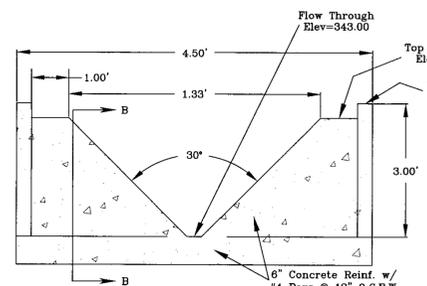
STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT:	NORTHING	EASTING
OUTFALL 1	RIM = 344.58 INV IN = 343.50	ST-4, 18" PVC		395823.10	3248704.51
SD-1	RIM = 347.21 INV OUT = 346.13		ST-1, 12" PVC	396027.02	3248644.04
SD-2	RIM = 346.31 INV IN = 345.23 INV OUT = 345.13	ST-1, 12" PVC	ST-2, 12" PVC	395966.81	3248710.93
SD-3	RIM = 346.63 INV OUT = 345.55		ST-3, 12" PVC	395979.46	3248601.22
SD-4	RIM = 345.98 INV IN = 344.47 INV OUT = 344.37	ST-2, 12" PVC ST-3, 12" PVC	ST-4, 18" PVC	395907.20	3248681.49

**Drainage Notes:**

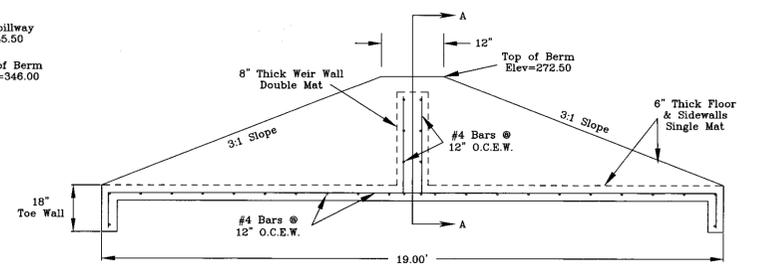
- Driveway culvert SETs shall be Type II Precast 4:1 SETs, per TxDOT Detail PSET-SP.
- All storm sewer pipe, except as noted, shall be HDPE, SDR-35, ASTM D-3034. PVC pipe may be used in place of HDPE pipe. HDPE pipe shall meet AASHTO M294, Type S with watertight seal. However, the proposed storm sewer is private and shall be installed in accordance with the local plumbing code. This includes the pipe material and fittings. The contractor shall verify with the local building officials the type of materials required by the City of Bryan prior to construction of the storm sewer.
- The contractor shall follow the general intent of the drainage plans. Minor adjustments to the actual elevations and flow lines shown hereon may be required to match existing ground elevations and structures.
- See Sheet C1 - General Notes.



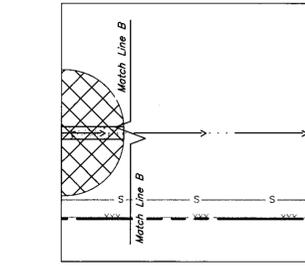
**Detention Pond Outfall Structure: V-Notch Weir**  
 N.T.S.



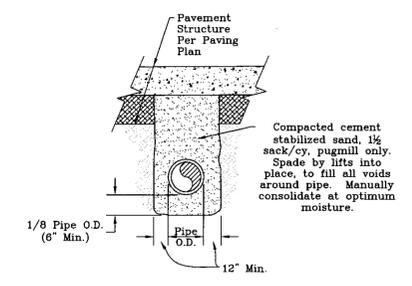
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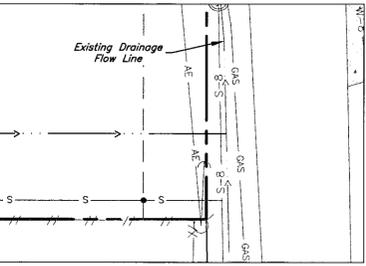
**Section B-B**  
 N.T.S.



**Grate Inlet Detail**  
 N.T.S.

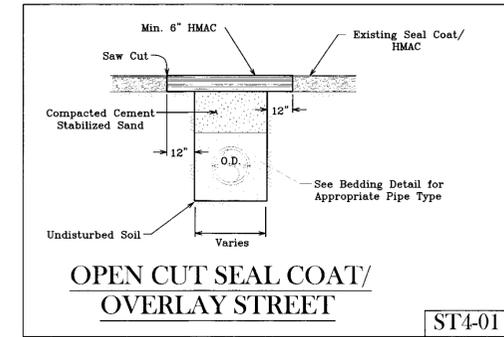
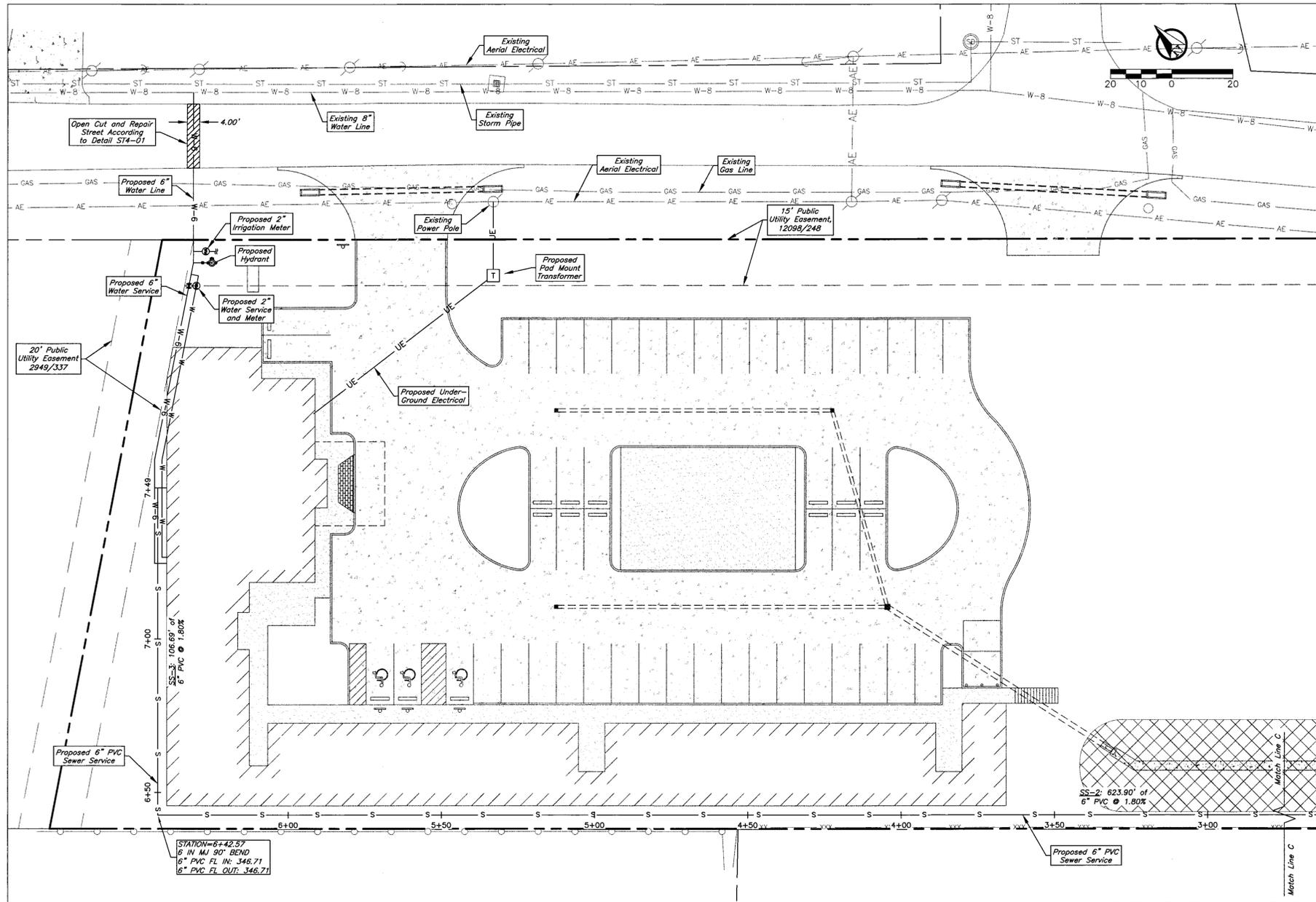


**Bedding and Trench Backfill for PVC Pipe - Structural Areas**  
 N.T.S.

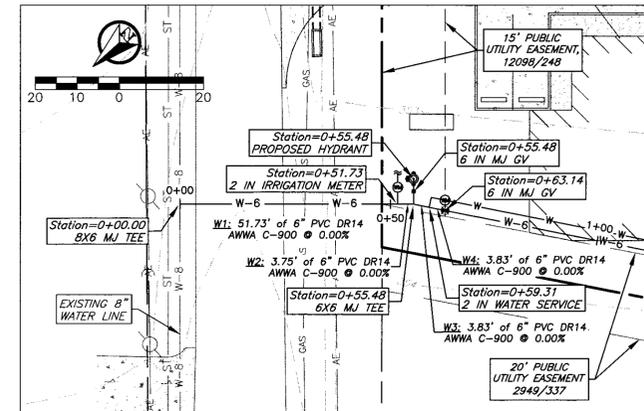


**Typical Drainage Flume Cross-Section**  
 N.T.S.

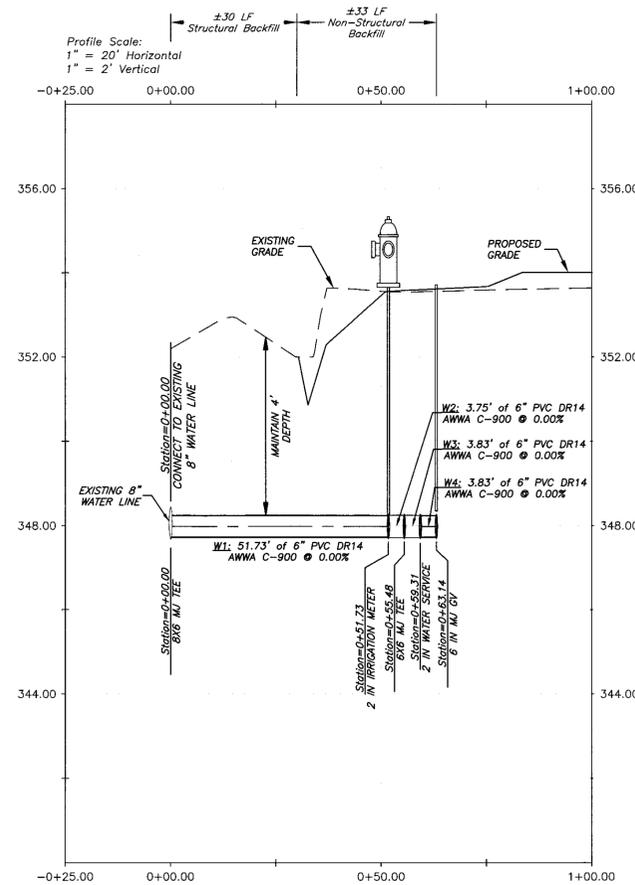
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 J4E Project # 14-018



Plan: Proposed Waterline



Profile: Proposed Waterline



# Utility Plan

## General Notes:

- All utilities shown are taken from the best available information based on construction utility documents obtained by J4 Engineering from City and/or above-ground field evidence. Shown positions may not represent as-built conditions.
- The contractor shall be responsible for verifying the exact location of all existing underground utilities, whether shown on these plans or not. Notification of the utility companies 48 hours in advance of construction is required.
- The contractor shall field verify and locate all existing utilities on site prior to excavation. Should any existing utilities not shown or shown incorrectly on this plan be found on site, the contractor shall contact the design engineer immediately to discuss any possible conflicts before proceeding with any work in that area.
- Each utility contractor is responsible for positioning and trenching of service lines. Mark all lines with utility tape. Utility contractors are responsible for coordinating with paving contractor in placement and installation of any necessary utility conduit prior to subgrade preparation. Lines requiring slope control are to be installed first. All other lines not requiring slope or elevation control shall be installed deepest first. Each contractor is responsible for knowing final determination of installation order.
- It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
- See Sheet C1 - General Notes.

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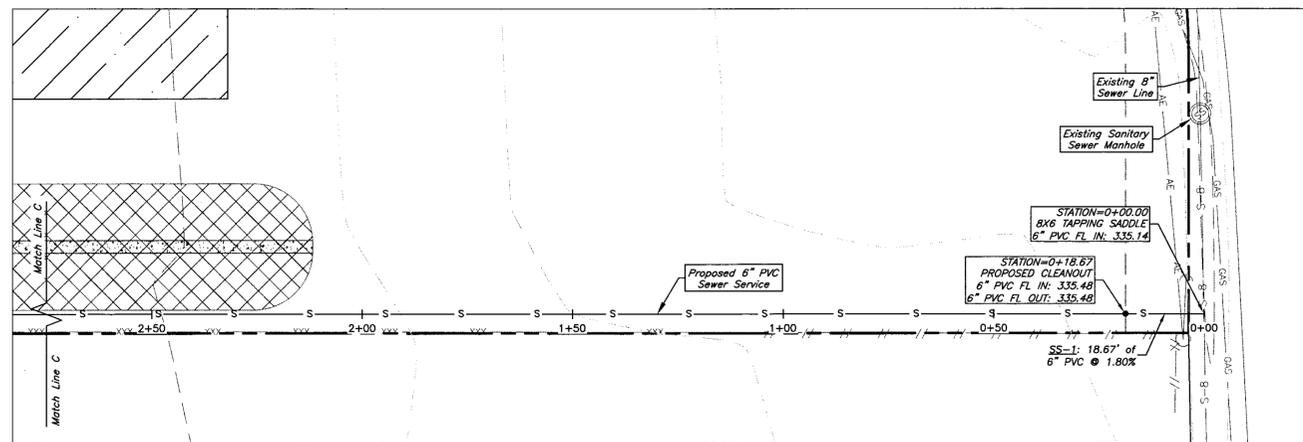
**Bryan Inn & Suites**

1506 Nuches Lane  
Block 1, Lot 1, Aria Estate  
Subdivision - 2.815 AC  
Bryan, Brazos County, Texas

Date:	Aug 2014	Sheet:	C7
Scale:	As Noted		

### Utility Notes:

- All electrical utilities are to be installed per Bryan Texas Utilities (BTU) electrical plan.
- Structural backfill areas are defined as any trench section under or within 5' of pavement. See Detail W4-02.
- Private water line and private sanitary sewer line construction shall be in accordance with the plumbing code. Cleanouts shall be installed per plumbing code.
- Private water and sewer line service materials to be accordance with plumbing code.
- Contractor shall coordinate conduit and/or line installation with telecommunication providers for the site.
- Depth of the existing water and sewer lines to be verified by the contractor.
- Refer to Figures W1 & W2 standard water details for installation of all public water line, fire hydrants, water service taps, meters, etc.
- Traffic control for utility work shall be provided by Contractor, as needed.
- See Sheet C1 - General Notes.



# Landscape Plan



## Landscape Analysis:

<b>Construction Activities:</b>	
Parking & Pavement	= 29,808 SF
Building	= 11,876 SF
<b>Net Total</b>	<b>= 41,684 SF</b>
<b>Requirements:</b>	
Building, Parking, & Pavement	= 6,253 SF
41,684 SF @ 15%	= 6,253 SF
<b>Net Total</b>	<b>= 6,253 SF</b>
<b>Provided:</b>	
Canopy Trees	= 3,200 SF
16 @ 200 SF	
Non-Canopy Trees	= 3,150 SF
21 @ 150 SF	
Shrubs	= 120 SF
12 @ 10 SF	
<b>Net Total</b>	<b>= 6,470 SF</b>

Symbol	Qty.	Common Name	Botanical Name	Size
	16	Live Oak	Quercus virginiana	2" cal.
	21	Crepe Myrtle	Lagerstroemia indica	1 1/2" cal.
	12	Waxleaf Ligustrum Shrub	Ligustrum japonicum	2 Gallon

## Landscape Notes:

- All disturbed area to be seeded with Bermuda Grass except where Bermuda Grass Sod is called for in the plans.
- "Cal." indicates caliper at 12" above the ground.
- All trees shall be provided as container grown trees.
- All landscaping plant material shall be guaranteed for a period of one year from the date of installation by contractor. After one year, the owner will be responsible for maintenance of all landscaping.
- Plant material shown here is represented at its mature size. Plants to be installed will be significantly smaller than those shown and should not be expected to reach maturity for several years dependant on growing conditions.
- Contractor is to seed all disturbed areas left unpaved and guarantee coverage of vegetation until establishment of grass. Grass type shall be Bermuda grass or Rye/Bermuda mixture.
- Plant material will be watered by hose bibs located at building corners.
- Plantings for parking lot screening (Crepe Myrtles) shall be planted a maximum of 3 feet from the edge of parking lot pavement. No plantings shall be placed directly over existing water/sewer lines.

## General Notes:

- An irrigation system to service all new plantings will be inserted by a certified installer prior to a certificate of occupancy being issued.
- It is the intent of these plans to comply with all City of Bryan guidelines, specifications & details.
- See Sheet C1 - General Notes.

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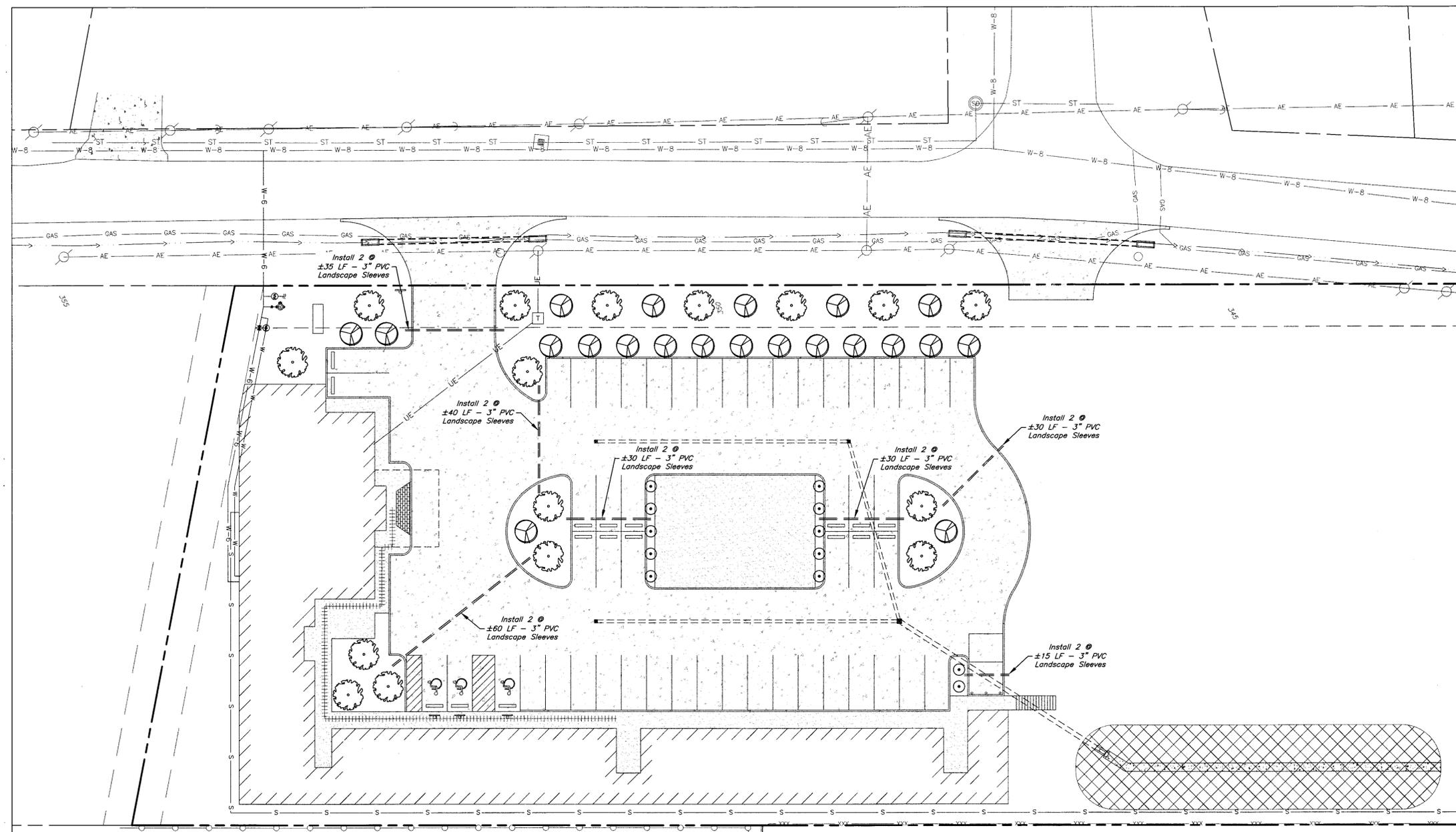
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979-739-0567 www.J4Engineering.com  
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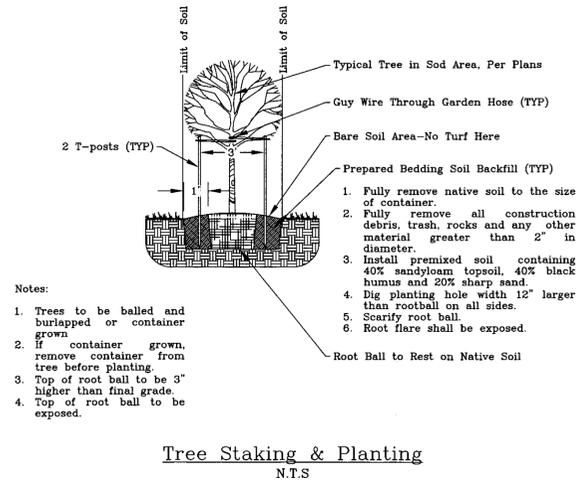
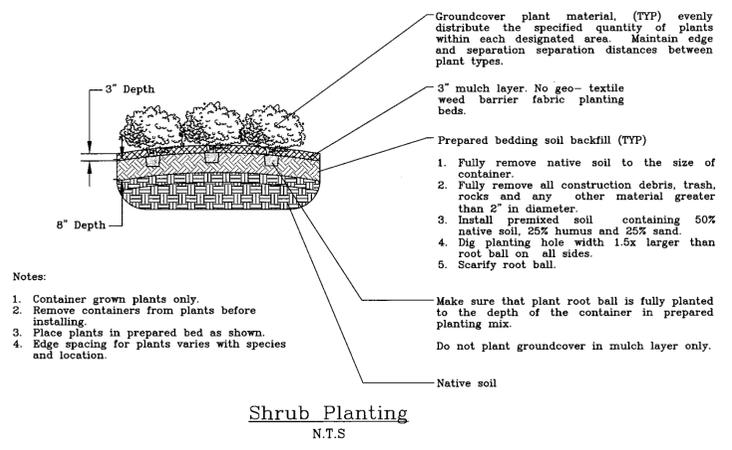
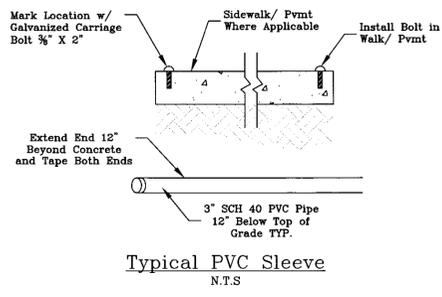
**Bryan Inn & Suites**

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Bryan, Brazos County, Texas

Date:	Aug 2014	Sheet:	C8
Scale:	As Noted		



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- Notes:
- Container grown plants only.
  - Remove containers from plants before installing.
  - Place plants in prepared bed as shown.
  - Edge spacing for plants varies with species and location.
- Groundcover plant material (TYP) evenly distribute the specified quantity of plants within each designated area. Maintain edge and separation distances between plant types.
- 3" mulch layer. No geo-textile weed barrier fabric planting beds.
- Prepared bedding soil backfill (TYP)
- Fully remove native soil to the size of container.
  - Fully remove all construction debris, trash, rocks and any other material greater than 2" in diameter.
  - Install premixed soil containing 50% native soil, 25% humus and 25% sand.
  - Dig planting hole width 1.5x larger than root ball on all sides.
  - Scarify root ball.
- Make sure that plant root ball is fully planted to the depth of the container in prepared planting mix.
- Do not plant groundcover in mulch layer only.
- Native soil

- Notes:
- Trees to be balled and burlapped or container grown.
  - If container grown, remove container from tree before planting.
  - Top of root ball to be 3" higher than final grade.
  - Top of root ball to be exposed.