Bryant City Development Review Committee
Thursday, November 17th, 2016
9:00 a.m.
Bryant City Complex/Administration Conference Room

AGENDA

Dollar General Store #18146 (Springhill Road & Northlake Road)
Requesting Site Plan and Construction Plan Approval

Documents:

1611 Civil Plans for DRC 11-11-2016.pdf
Light Fixture Cut Sheets.pdf
Small Scale Checklist 11-11-2016.pdf
transmittal to City 10-24-2016.pdf
SHNL DG Drainage Calcs (1).pdf
SWPPP DG Springhill (1).pdf
Building Plans submitted to DRC 11-11-2016.pdf

. **Benjamin Grove Sub-Division**

Vernon Williams - GarNat Engineering - Requesting Final Plat Approval

Documents:

16025 Benjamin Grove Subd-FINAL PLAT.pdf

. . **Jonathan Hope**

Discussion of new project.

. . **Schrader Commerical Storage Addition**

Eric Richardson - Requesting Approval

Documents:

SHT 3-GP_rev.pdf
SHT 4-UP_rev.pdf
SHT 5-EC_rev.pdf
Schrader Comm. Addn_rev.pdf
SHT 2-SP_rev.pdf

Phone: 501-943-0999 e-mail: cobintern@cityofbryant.com
Fax: 501-943-0992

LEGEND

	PROPERTY LINE	P	METER POLE
	OVERHEAD UTILITY	T	TELEPHONE PEDESTAL
OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS LINE		FIRE HYDRANT
W	WATER LINE		SIGNS/SIGN POST
SS	SANITARY SEWER LINE		GUY ANCHOR
			SOIL BORE
(p)	PER PLAT		POWER POLE w/TRANSFORMER
(d)	PER DEED		POWER POLE
(m)	AS PER MEASURED IN FIELD	EOM	END OF MARKINGS
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	MAT.	MATERIAL
		CPS	COTTON PICKER SPINDLE
		C.I.	CURB INLET
	CALCULATED POINT	nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)	E.M.	ELECTRIC METER
	WATER METER	REF.	REFERENCE
		UGE	UNDERGROUND ELECTRIC
WV	WATER VALVE (UNLESS NOTED)	OHE	OVERHEAD ELECTRIC
PLA	PLASTIC	typ	TYPICAL
	GAS METER	IP	INTERMEDIATE PRESSURE
		W	WELDED
	LIGHT POLE		METER/LIGHT POLE

TREE REFERENCES

1.	12"	OAK	10.	19"	OAK
2.	12"	OAK	11.	19"	OAK
3.	17"	OAK	12.	18"	OAK
4.	14"	OAK	13.	32"	OAK
5.	18"	OAK	14.	14"	OAK
6.	16"	ELM	15.	20"	OAK
7.	16"	ELM	16.	15"	OAK
8.	20"	OAK	17.	20"	OAK
9.	18"	OAK	18.	34"	OAK

GENERAL PROPERTY NOTES

1. THE PROJECT ELEVATIONS ARE BASED ON NGS BENCHMARK EJ0229, GEOID12B, NAVD88.

PROJECT BENCHMARK #1: ELEVATION = 477.70' - TOP OF FOUND 1/2" REBAR WITH CAP.
PROJECT BENCHMARK #2: ELEVATION = 477.84' - TOP OF FOUND 1/2" REBAR.

2. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR HAS LOCATED VISIBLE UTILITIES AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE AND A THOROUGH SEARCH OF THE PREMISES.

3. ANY SERVITUDES AND RESTRICTIONS SHOWN ON THIS SURVEY ARE LIMITED TO THOSE SET FORTH IN THE DESCRIPTION FURNISHED TO SURVEYOR, AND THERE IS NO REPRESENTATION THAT ALL APPLICABLE SERVITUDES AND RESTRICTIONS ARE SHOWN HEREON.

4. NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED ARKANSAS ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY (THE "SUBJECT PROPERTY"). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B-II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT A LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.

5. THIS PROPERTY IS WITHIN CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

6. THE NEAREST FIRE HYDRANT IS AS SHOWN ON SURVEY.

7. CONTOUR INTERVAL = 1 FOOT.

8. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM SALINE COUNTY TAX CARDS AND DEEDS.

9. SURVEYOR MADE AN ATTEMPT TO HAVE UNDERGROUND UTILITIES LOCATED BY CALLING THE ARKANSAS ONE-CALL SYSTEM (TICKET #16083-11344) DATED 8/31/2016. SURVEYOR WAS ABLE TO FIND WATER AND SEWER UTILITIES MARKED IN FIELD.

10. WATER LINE INFORMATION SHOWN ON SURVEY IS PER UTILITY MAPS PROVIDED BY CLARISSE HARRIS, SALEM WATER USERS, PWA. THE LOCATION OF WATER LINE IS APPROXIMATE. WATER LINE CROSSES SUBJECT PROPERTY WITHOUT AN EASEMENT BEING KNOWN OR SUPPLIED TO SURVEYOR.

11. THE SIZE AND TYPE OF THE GAS LINE SHOWN ON SURVEY IS PER UTILITY MAPS PROVIDED BY ANDREW TOWNSEND, CENTERPOINT ENERGY. LOCATION OF GAS LINES ARE APPROXIMATE.

12. PER PHONE CALL WITH LEON BLACK, 4/21/16, CITY OF BRYANT TRANSPORTATION DEPARTMENT, THERE ARE NO CURRENT CONSTRUCTION PLANS. PER PHONE CALL WITH LES PRICE 8/01/16, CITY OF BRYANT CONSULTING ENGINEER, SPRINGHILL ROAD, A MINOR ARTERIAL, HAS A PROPOSED 80 FOOT RIGHT OF WAY, AND NORTHLAKE ROAD, A COLLECTOR STREET, HAS A PROPOSED 60 FOOT RIGHT OF WAY.

13. SURVEYOR DID NOT RECEIVE ANY INFORMATION FROM THE TITLE INSURER REGARDING THE CURRENT ZONING CLASSIFICATION OF THE PROPERTY OR ANY REQUIREMENTS RELATED TO THE APPLICABLE ZONING CLASSIFICATION. SURVEYOR OBTAINED THE ZONING INFORMATION REFLECTED ON THIS SURVEY ON HIS OWN. THE USER OF THIS SURVEY SHOULD CONSULT AN ATTORNEY OR TITLE INSURER TO VERIFY THE ZONING CLASSIFICATION OF THE PROPERTY AS WELL AS THE APPLICABLE RESTRICTIONS AND REQUIREMENTS ASSOCIATED WITH SUCH ZONING CLASSIFICATION.
14. SURVEYOR DID NOT OBSERVE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
15. OVERHEAD UTILITY LINE CROSSES SUBJECT PROPERTY WITHOUT AN EASEMENT BEING KNOWN OR SUPPLIED TO SURVEYOR. LINES SHOWN ARE TO PUT DESIGNER ON NOTICE IF EASEMENT IS REQUIRED DURING PLANNING.
16. PER SURVEY BY JAMES L. HARPER (REF. MATERIAL #4), THERE IS A WATER SERVICE LINE THAT EXTENDS TO THE WEST PROPERTY LINE. EXACT LOCATION IS NOT KNOWN.

NON-STANDARD PROPERTY NOTES

SCHEDULE (B), SECTION (II) SPECIAL EXCEPTION, NON-STANDARD, SURVEY RELATED ITEM(S) (1) OF CHICAGO TITLE INSURANCE COMPANY, COMMITMENT FOR TITLE INSURANCE, FILE NO. E-16-58413; BEARING AN EFFECTIVE DATE OF AUGUST 2, 2016, 8:00 AM AND AN ISSUE DATE OF AUGUST 8, 2016, 3:00 PM.

7. EASEMENT BY ROYCE B. LOVELESS, JR. TO CITY OF BRYANT WASTE WATER PROJECT FILED MARCH 29, 2006 AS INSTRUMENT NO. 2006-32485, RECORDS OF SALINE COUNTY, ARKANSAS. (AFFECTS SUBJECT PROPERTY AS SHOWN ON SURVEY.)

SITE SPECIFIC REFERENCES

1. U.S.G.S. 7.5 MINUTE "CONGO, ARK." DATED 1994 QUADRANGLE
2. SURVEY BY HOPE ENGINEERS, DATED 6-16-1999; DATED 6/11/2004, DWG. NO. 04-320; DATED JUNE 9, 2004, DWG. NO. 04-0184.
3. SURVEY BY DONALD W. BROOKS, DATED MARCH15, 1991; DATED MARCH 13, 1997.
4. SURVEY BY JAMES L. HARPER, DATED 5-26-86
5. SURVEY BY ROBERT C. WYNN, DATED OCTOBER 15, 1985
6. SURVEY BY KERRY D. LANE, DATED 9/6/1990
7. SURVEY BY JOHN C. WILLIAMS, DATED MAY 5, 1999

SITE UTILITY CONTACTS

ELECTRIC:
FIRST ELECTRIC COOP
RANDY JONES
501-854-5159

GAS:
CENTERPOINT ENERGY
ANDREW TOWNSEND
401 W. CAPITOL, SUITE 600
LITTLE ROCK, AR 72201
501-377-4674

SEWER:
BRYANT WATER & WASTEWATER
SCOTT CHANDLER
1017 SW 2ND ST.
BRYANT, AR 72022
501-943-0464

WATER:
SALEM WATER USERS PWA
CLARISSE HARRIS
620 AIRLANE RD.
BENTON, AR 72015
501-315-2212

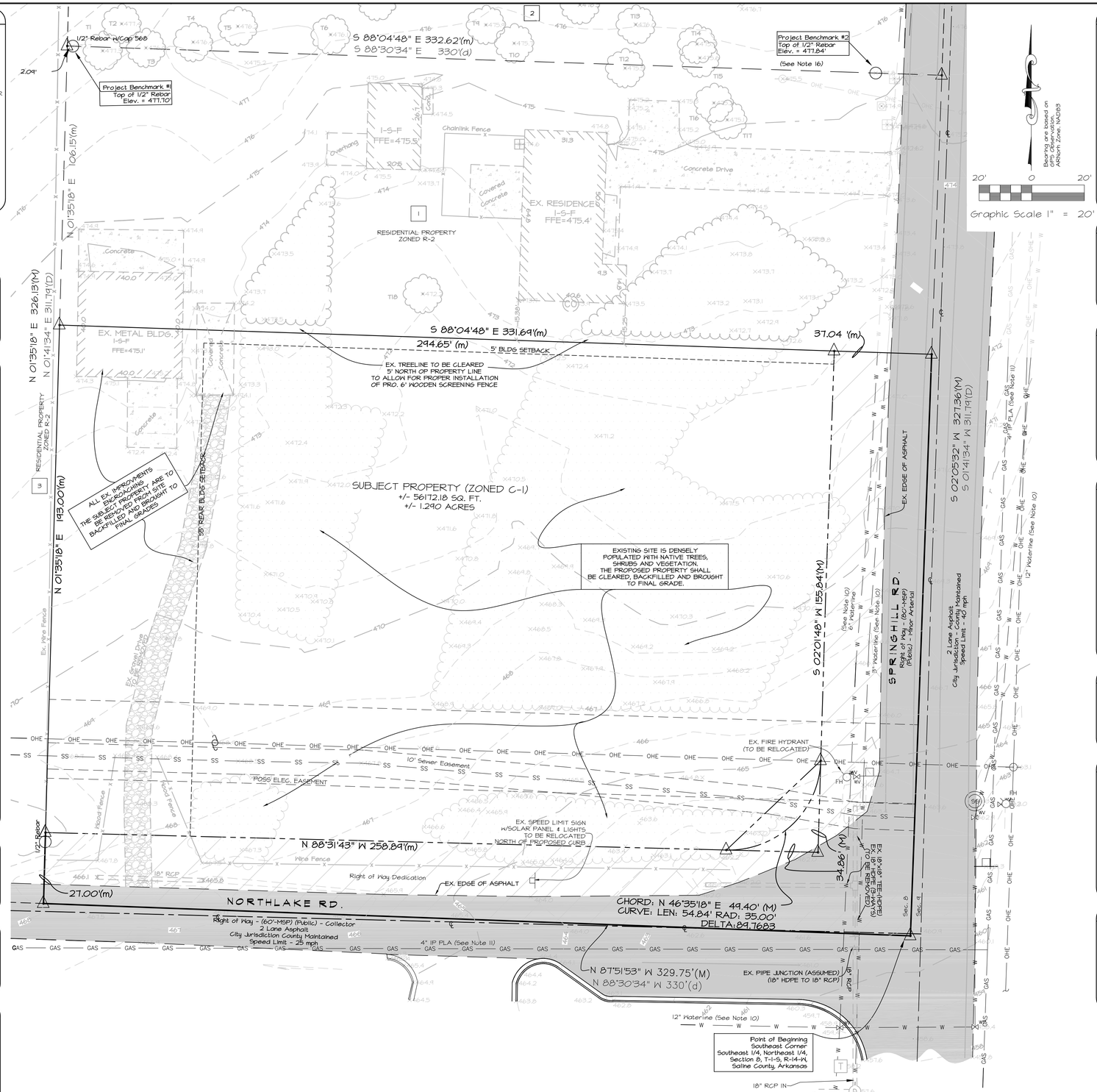
TELEPHONE:
CALLED ATT, COMCAST, AND FIDELITY COMMUNICATIONS, AND THEY ALL STATED THAT THEY DO NOT SERVICE THE AREA.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADE BEFORE AND DURING CONSTRUCTION

CONTRACTOR IS ALSO RESPONSIBLE FOR SHORING AND ENSURING THAT THERE IS NO SLOUGHING OF ADJACENT PROPERTY UNLESS OTHERWISE APPROVED IN WRITING BY THE ADJACENT PROPERTY OWNER.

** UTILITY WARNING **

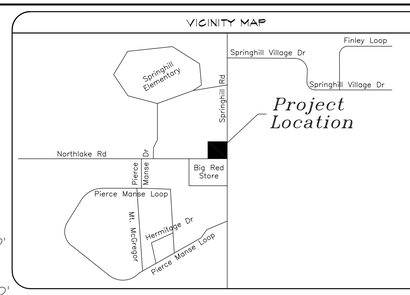
48 HOURS
BEFORE YOU DIG
CALL:
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LOCATION



Bearings are based on Grid Coordinates ARNorth Zone, NAD83

20' 0 20'
Graphic Scale 1" = 20'

VICINITY MAP



TRACT DESCRIPTION PER TITLE COMMITMENT FILE NO. E-16-58413)

A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 AND RUN SOUTH 1 DEGREES 41 MINUTES 34 SECONDS WEST ALONG THE EAST LINE THEREOF, 1014 FEET TO THE POINT OF BEGINNING OF THE LANDS HEREIN DESCRIBED. THENCE CONTINUE SOUTH 1 DEGREE 41 MINUTES 34 SECONDS WEST ALONG THE EAST LINE 311.79 FEET TO THE SOUTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4; THENCE NORTH 88 DEGREES 30 MINUTES 34 SECONDS WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 330 FEET, THENCE NORTH 1 DEGREE 41 MINUTES 34 SECONDS EAST 311.79, THENCE SOUTH 88 DEGREES 30 MINUTES 34 SECONDS EAST 330 FEET TO THE POINT OF BEGINNING.

SUBJECT PROPERTY AS PER SURVEY

A TRACT OF LAND BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 8; THENCE, NORTH 87 DEGREES 51 MINUTES 53 SECONDS WEST, ALONG THE SOUTH LINE THEREOF, A DISTANCE OF 324.75 FEET; THENCE, LEAVING SAID SOUTH LINE, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 27.00 FEET TO A POINT ON THE PROPOSED NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD SAID POINT BEING THE POINT OF BEGINNING; THENCE, LEAVING SAID NORTHERLY RIGHT-OF-WAY, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 193.00 FEET TO A POINT; THENCE SOUTH 88 DEGREES 04 MINUTES 48 SECONDS EAST A DISTANCE OF 244.65 FEET TO A POINT ON THE PROPOSED EASTERLY RIGHT-OF-WAY OF SPRINGHILL ROAD; THENCE SOUTH 02 DEGREES 01 MINUTES 48 SECONDS WEST, ALONG SAID EASTERLY RIGHT-OF-WAY, A DISTANCE OF 40.23 FEET TO A POINT; THENCE SOUTH 01 DEGREES 42 MINUTES 15 SECONDS WEST, ALONG SAID EASTERLY RIGHT-OF-WAY, A DISTANCE OF 65.61 FEET TO A POINT; THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 54.84 FEET, WITH A RADIUS OF 35.00 FEET, WITH A CHORD BEARING OF SOUTH 46 DEGREES 35 MINUTES 16 SECONDS WEST, WITH A CHORD LENGTH OF 49.40 FEET, TO A POINT ON SAID NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD; THENCE NORTH 88 DEGREES 31 MINUTES 43 SECONDS WEST A DISTANCE OF 258.84 FEET BACK TO THE POINT OF BEGINNING.

PROPERTY ZONING

THE SUBJECT SITE IS CURRENTLY ZONED R-2 (SINGLE FAMILY). PER PHONE CALL WITH TINA DAVIS ON 4/11/16, NEIGHBORHOOD COMMERCIAL DISTRICT (NCD) C-1 IS REQUIRED. SETBACKS SHOWN ON SURVEY AND BELOW ARE PER THE C-1 ZONING REGULATIONS.

BULK AND AREA REGULATIONS FOR COMMERCIAL USES AND MIXED-USE BUILDINGS

1. LOT AREA: MINIMUM OF 2,500 SQUARE FEET; MAXIMUM 16,000 SQUARE FEET.
2. LOT WIDTH: AT FRONT OF BUILDING LINE, MINIMUM 25 FEET; MAXIMUM 80 FEET.
3. LOT DEPTH: GENERALLY LOTS SHOULD BE LONGER THAN WIDE. MAXIMUM LOT WIDTH (80') @ FRONT BUILDING LINE THEN DEPTH = 200 FEET.
4. YARD DIMENSIONS:
A. FRONT - COMMERCIAL RETAIL/SEVICE OR MIXED USE, NONE REQUIRED
B. SIDE (EACH SIDE) - A MINIMUM OF FIVE (5) FEET IF NOT ATTACHED TO AN ADJACENT BUILDING, MAXIMUM OF TWENTY (20) FEET
C. REAR - A MINIMUM OF FIFTY-FIVE (55) FEET.
D. THE FRONT AND SIDE YARD DIMENSIONS SET FORTH IN THIS SUBSECTION MAY BE INCREASED UP TO AN ADDITIONAL FIFTEEN (15) FEET BY THE PLANNING COMMISSION IF DEEMED IN THE INTEREST OF PUBLIC SAFETY.
5. HEIGHT: THREE STORIES, FINISHED FIRST FLOOR MUST BE LEVEL WITH THE SIDEWALK, MAXIMUM HEIGHT OF FORTY-FIVE (45) FEET.
6. BUILDING COVERAGE OF LOT: MAXIMUM OF SEVENTY (70) PERCENT.
8. PARKING: ALL PARKING MUST BE OFF STREET. ONE (1) SPACE PER EACH 200 SQUARE FOOT OF COMMERCIAL USE IS REQUIRED.

*SEE ZONING ORDINANCE FOR ADDITIONAL RESTRICTIONS.

FLOOD STATEMENT

BY GRAPHIC PLOTTING OF THE INFORMATION SHOWN ON FLOOD INSURANCE RATE MAP NO. 05125C0225D, DATED JUNE 18, 2012, COMMUNITY BRYANT CITY OF, NUMBER 050308; PANEL 0225; SUFFIX D, INDICATES THAT THE PROPERTY SHOWN ON SURVEY LIES WITHIN:

ZONE X (OTHER AREAS) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

*FLOOD STATEMENT DOES NOT GUARANTEE AGAINST LOCALIZED FLOODING

PROPERTY OWNER REFERENCES

1 RESIDENCE
PARCEL: 840-11624-036
OWNER: ROYCE B. LOVELESS JR. & MAUDIE E. LOVELESS
(MAILING/PHYSICAL ADDRESS)
6021 SPRINGHILL ROAD
BRYANT, AR 72022
QUITCLAIM DEED 2009051546
ZONED R-2

2 RESIDENCE
PARCEL: 840-11624-034
PHYSICAL ADDRESS
6111 SPRINGHILL ROAD
OWNER: LOVETTE L. PARNELL
(MAILING ADDRESS)
P.O. BOX 105
BRYANT, AR 72022
ZONED R-2

3 RESIDENCE
PARCEL: 840-11624-035
OWNER: BRIGHAM J. BAREFOOT
(MAILING/PHYSICAL ADDRESS)
2620 NORTHLAKE ROAD
BRYANT, AR 72022
ZONED R-2

PROJECT CONTACTS

OWNER/DEVELOPER:
PB GENERAL HOLDINGS, LLC
ATTN: SCOTT PROCTOR
510 TALLEY ROAD
LITTLE ROCK, AR 72204
PHONE: (501) 218-8849

ARCHITECT:
BARTLETT ARCHITECTURE, INC.
ATTN: DAN BARTLETT, AIA, NCARB, ICC
603 HWY 5 NORTH
BENTON, AR 72019
PHONE: (501) 794-4448

ENGINEER:
SENTINEL GROUP, LLC
ATTN: ERIC KREBS, PE
2712 CYPRESS POINT DRIVE
BENTON, ARKANSAS 72019
PHONE: (501) 317-2547

SURVEYOR:
PAXTON R. SINGLETON, PRESIDENT/PLS
GLOBAL SURVEYING CONSULTANTS, INC.
6511 HEILMAN COURT
NORTH LITTLE ROCK, AR 72118
PHONE: (501) 455-4484

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS-ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / DEVELOPER:
PB GENERAL HOLDINGS, llc
510 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 218-8849

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL®

SITE DEMOLITION PLAN

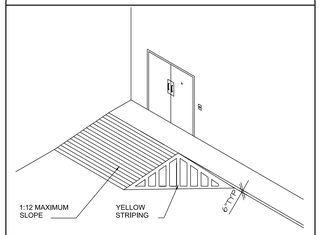
PROJECT NUMBER:	1611
CAD. BY:	C. TAYLOR
CHECKED BY:	E. KREBS
DATED:	11/04/2016

C-1
SHEET 1 OF 7

LEGEND

PROPERTY LINE	METER POLE
OVERHEAD UTILITY	TELEPHONE PEDESTAL
OHE — OHE — OVERHEAD ELECTRIC	SEWER MANHOLE
GAS — GAS — GAS LINE	FIRE HYDRANT
W — W — WATER LINE	SIGN/SIGN POST
SS — SS — SANITARY SEWER LINE	GUY ANCHOR
	SOIL BORE
(p) PER PLAT	POWER POLE w/TRANSFORMER
(d) PER DEED	POWER POLE
(m) AS PER MEASURED IN FIELD	END OF MARKINGS
OR SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	MATERIAL
	COTTON PICKER SPINDLE
	C.I. CURB INLET
CALCULATED POINT	nts NOT TO SCALE
SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I. DUCTILE IRON
FND 1/2" REBAR (UNLESS NOTED)	E.M. ELECTRIC METER
WATER METER	REF. REFERENCE
	UGE UNDERGROUND ELECTRIC
WATER VALVE (UNLESS NOTED)	OHE OVERHEAD ELECTRIC
PLA PLASTIC	typ TYPICAL
GAS METER	IP INTERMEDIATE PRESSURE
	W WELDED
LIGHT POLE	METER/LIGHT POLE

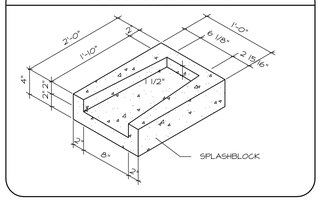
RECEIVING DOOR DETAIL



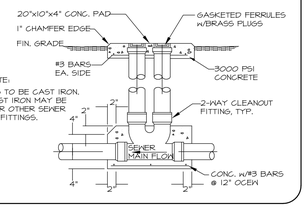
STRIPING LEGEND	
YELLOW CURBING AND BOLLARDS - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY AND METAL SURFACES FREE OF HEAVY RUST 2 COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL SAFETY YELLOW B55Y300
STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PROMAR TRAFFIC MARKING PAINT YELLOW TM5415
HANDICAP STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PROMAR TRAFFIC MARKING PAINT "H.C." BLUE

CONTRACTOR IS RESPONSIBLE FOR ALL PUBLIC UTILITY CONNECTIONS (ELECTRIC, WATER, GAS, SEPTIC, SEWER) AS WELL AS PROVIDING ALL INFRASTRUCTURES REQUIRED BY UTILITY COMPANY

SPLASH BLOCK DETAIL

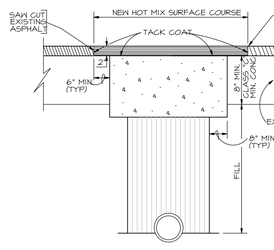


STANDARD 2-WAY SEWER CLEANOUT DETAIL



NOTE:
CLEAN-OUTS TO BE CAST IRON. PVC OR CAST IRON MAY BE UTILIZED FOR OTHER SEWER PIPING AND FITTINGS.

STANDARD PAVEMENT REPLACEMENT DETAIL



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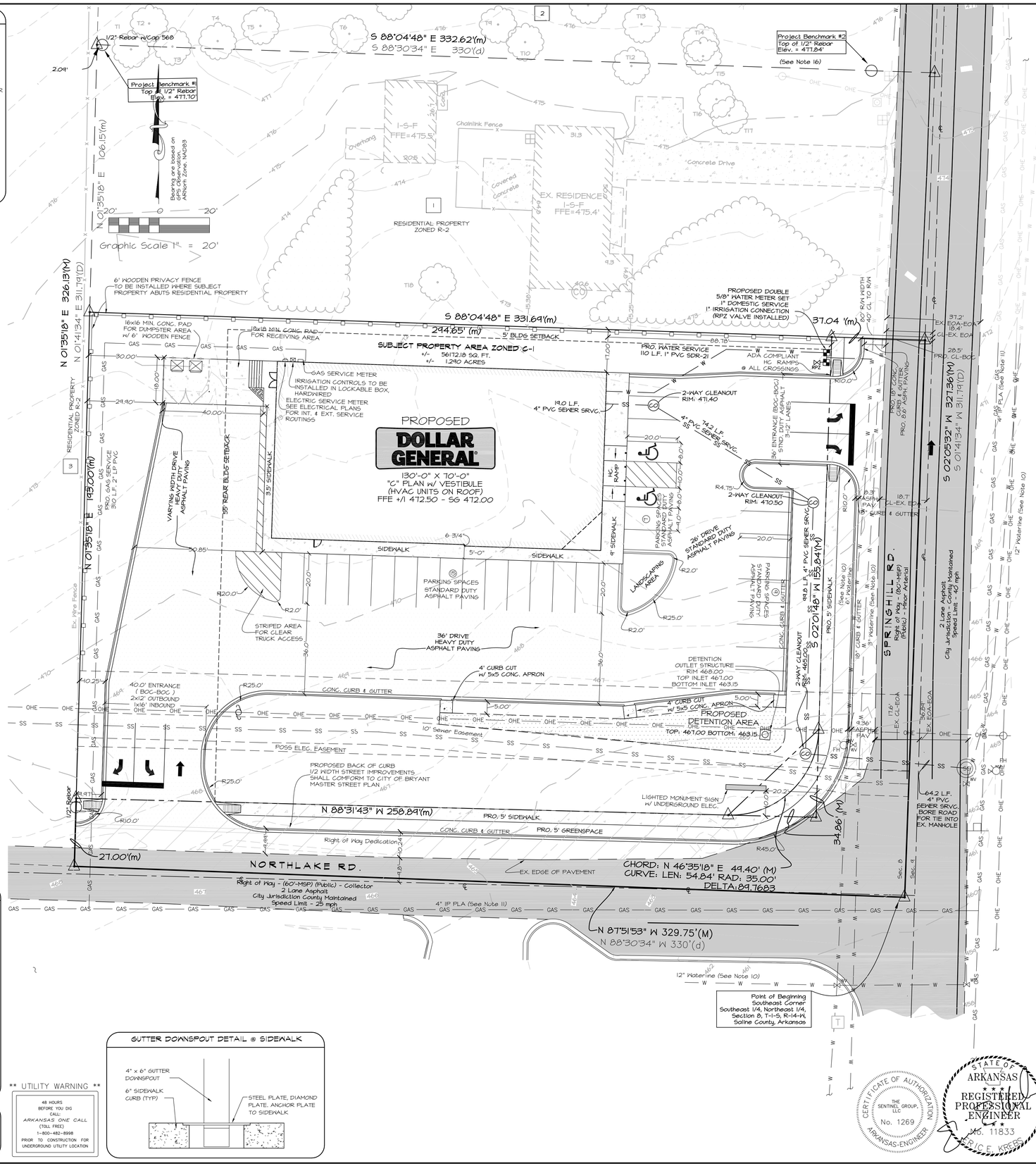
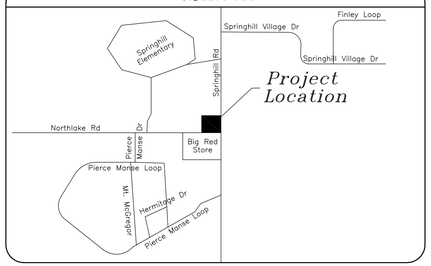


GUTTER DOWNSPOUT DETAIL @ SIDEWALK

** UTILITY WARNING **

48 HOURS BEFORE YOU DIG CALL:
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LOCATION

VICINITY MAP



TRACT DESCRIPTION PER TITLE COMMITMENT FILE NO. E-16-58913

A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 AND RUN SOUTH 1 DEGREES 41 MINUTES 34 SECONDS WEST ALONG THE EAST LINE THEREOF, 1014 FEET TO THE POINT OF BEGINNING OF THE LANDS HEREIN DESCRIBED, THENCE CONTINUE SOUTH 1 DEGREE 41 MINUTES 34 SECONDS WEST LONG THE EAST LINE 311.79 FEET TO THE SOUTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4, THENCE NORTH 88 DEGREES 30 MINUTES 34 SECONDS WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 330 FEET, THENCE NORTH 1 DEGREE 41 MINUTES 34 SECONDS EAST 311.79, THENCE SOUTH 88 DEGREES 30 MINUTES 34 SECONDS EAST 330 FEET TO THE POINT OF BEGINNING.

SUBJECT PROPERTY AS PER SURVEY

A TRACT OF LAND BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 8, THENCE, NORTH 87 DEGREES 51 MINUTES 53 SECONDS WEST, ALONG THE SOUTH LINE THEREOF, A DISTANCE OF 329.75 FEET; THENCE, LEAVING SAID SOUTH LINE, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 21.00 FEET TO A POINT ON THE PROPOSED NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD SAID POINT BEING THE POINT OF BEGINNING; THENCE, LEAVING SAID NORTHERLY RIGHT-OF-WAY, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 143.00 FEET TO A POINT; THENCE SOUTH 88 DEGREES 04 MINUTES 48 SECONDS EAST A DISTANCE OF 294.65 FEET TO A POINT ON THE PROPOSED EASTERLY RIGHT-OF-WAY OF SPRINGHILL ROAD; THENCE SOUTH 02 DEGREES 01 MINUTES 48 SECONDS WEST, ALONG SAID EASTERLY RIGHT-WAY, A DISTANCE OF 40.23 FEET TO A POINT; THENCE SOUTH 01 DEGREES 42 MINUTES 15 SECONDS WEST, ALONG SAID EASTERLY RIGHT-OF-WAY, A DISTANCE OF 65.61 FEET TO A POINT; THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 54.84 FEET, WITH A RADIUS OF 35.00 FEET, WITH A CHORD BEARING OF SOUTH 46 DEGREES 35 MINUTES 16 SECONDS WEST, WITH A CHORD LENGTH OF 49.40 FEET, TO A POINT ON SAID NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD; THENCE NORTH 88 DEGREES 31 MINUTES 43 SECONDS WEST A DISTANCE OF 258.89 FEET BACK TO THE POINT OF BEGINNING.

PROPERTY ZONING

THE SUBJECT SITE IS CURRENTLY ZONED R-2 (SINGLE FAMILY), PER PHONE CALL WITH TINA DAVIS ON 4/11/16, NEIGHBORHOOD COMMERCIAL DISTRICT (NCD) C-1 IS REQUIRED. SETBACKS SHOWN ON SURVEY AND BELOW ARE PER THE C-1 ZONING REGULATIONS.

BULK AND AREA REGULATIONS FOR COMMERCIAL USES AND MIXED-USE BUILDINGS

1. LOT AREA. MINIMUM OF 2,500 SQUARE FEET; MAXIMUM 16,000 SQUARE FEET.
2. LOT WIDTH. AT FRONT OF BUILDING LINE, MINIMUM 25 FEET; MAXIMUM 80 FEET.
3. LOT DEPTH. GENERALLY LOTS SHOULD BE LONGER THAN WIDE. MAXIMUM LOT WIDTH (80') @ FRONT BUILDING LINE THEN DEPTH = 200 FEET.
4. YARD DIMENSIONS.

A. FRONT – COMMERCIAL, RETAIL/SEVICE OR MIXED USE, NONE REQUIRED

B. SIDE (EACH SIDE) – A MINIMUM OF FIVE (5) FEET IF NOT ATTACHED TO AN ADJACENT BUILDING, MAXIMUM OF TWENTY (20) FEET

C. REAR – A MINIMUM OF FIFTY-FIVE (55) FEET.

D. THE FRONT AND SIDE YARD DIMENSIONS SET FORTH IN THIS SUBSECTION MAY BE INCREASED UP TO AN ADDITIONAL FIFTEEN (15) FEET BY THE PLANNING COMMISSION IF DEEMED IN THE INTEREST OF PUBLIC SAFETY

5. HEIGHT. THREE STORIES, FINISHED FIRST FLOOR MUST BE LEVEL WITH THE SIDEWALK, MAXIMUM HEIGHT OF FORTY-FIVE (45) FEET.
6. BUILDING COVERAGE OF LOT. MAXIMUM OF SEVENTY (70) PERCENT.
8. PARKING. ALL PARKING MUST BE OFF STREET. ONE (1) SPACE PER EACH 200 SQUARE FOOT OF COMMERCIAL USE IS REQUIRED.

*SEE ZONING ORDINANCE FOR ADDITIONAL RESTRICTIONS.

FLOOD STATEMENT

BY GRAPHIC PLOTTING OF THE INFORMATION SHOWN ON FLOOD INSURANCE RATE MAP NO. 05125C0225D, DATED JUNE 18, 2012, COMMUNITY BRYANT, CITY OF, NUMBER 050308; PANEL 0225; SUFFIX D INDICATES THAT THE PROPERTY SHOWN ON SURVEY LIES WITHIN:

ZONE X (OTHER AREAS) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

*FLOOD STATEMENT DOES NOT GUARANTEE AGAINST LOCALIZED FLOODING

SITE UTILITY CONTACTS

ELECTRIC:
FIRST ELECTRIC COOP
RANDY JONES
501-454-5156

GAS:
CENTERPOINT ENERGY
ANDREW TOWNSEND
401 W. CAPITOL SUITE 600
LITTLE ROCK, AR 72201
501-377-4674

SEWER:
BRYANT WATER & WASTEWATER
SCOTT CHANDLER
1017 SW 2ND ST.
BRYANT, AR 72022
501-943-2469

WATER:
SALEM WATER USERS PWA
CLARISSE HARRIS
620 AIRLANE RD.
BENTON, AR 72015
501-315-2212

TELEPHONE:
CALLED ATT, COMCAST, AND FIDELITY COMMUNICATIONS, AND THEY ALL STATED, THAT THEY DO NOT SERVICE THE AREA.

PROJECT CONTACTS

OWNER/DEVELOPER:
PB GENERAL HOLDINGS, LLC
ATTN: SCOTT PROCTOR
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
PHONE: (501) 219-8849

ARCHITECT:
BARTLETT ARCHITECTURE, INC.
ATTN: DAN BARTLETT, AIA, NCARB, ICC
603 HWY 5 NORTH
BENTON, AR 72019
PHONE: (501) 794-4448

ENGINEER:
SENTINEL GROUP, LLC
ATTN: ERIC KREBS, PE
2712 CYPRESS POINT DRIVE,
BENTON, ARKANSAS 72019
PHONE: (501) 317-2547

SURVEYOR:
PAXTON R. SINGLETON, PRESIDENT/PLS
GLOBAL SURVEYING CONSULTANTS, INC.
6511 HEILMAN COURT
NORTH LITTLE ROCK, AR 72118
PHONE: (501) 455-4184

REVISION BLOCK

NO.	DESCRIPTION	DATE

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS-ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-8849

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL®

SITE UTILITY & DIMENSION PLAN

PROJECT NUMBER:	1611
C.A.D. BY:	C. TAYLOR
CHECKED BY:	E. KREBS
DATED:	11/09/2016

C-2

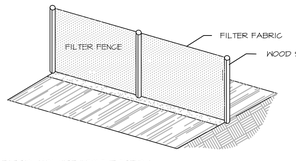
LEGEND

	PROPERTY LINE	P	METER POLE
	OVERHEAD UTILITY	T	TELEPHONE PEDESTAL
OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS LINE		FIRE HYDRANT
W	WATER LINE		SIGNSIGN POST
SS	SANITARY SEWER LINE		GUY ANCHOR
			SOIL BORE
(p)	PER PLAT		POWER POLE W/TRANSFORMER
(d)	PER DEED		POWER POLE
(m)	AS PER MEASURED IN FIELD	EOM	END OF MARKINGS
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	MAT.	MATERIAL
		CPS	COTTON PICKER SPINDLE
		C.I.	CURB INLET
	CALCULATED POINT	nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)	E.M.	ELECTRIC METER
	WATER METER	REF.	REFERENCE
		UGE	UNDERGROUND ELECTRIC
	WATER VALVE (UNLESS NOTED)	OHE	OVERHEAD ELECTRIC
PLA	PLASTIC	typ	TYPICAL
	GAS METER	IP	INTERMEDIATE PRESSURE
	LIGHT POLE	W	WELDED
			METER/LIGHT POLE

EROSION CONTROL DETAILS

WHAT IS THIS

A SILT FENCE ALSO CALLED A "FILTER FENCE" IS A TEMPORARY MEASURE FOR SEDIMENTATION CONTROL. IT USUALLY CONSISTS OF POSTS WITH FILTER FABRIC STRETCHED ACROSS THE POST AND SOMETIMES WITH A WIRE SUPPORT FENCE. THE LOWER EDGE OF THE FENCE IS VERTICALLY TRENCHED AND COVERED BY BACKFILL. A SILT FENCE IS USED IN SMALL DRAINAGE AREAS TO DETAIN SEDIMENT. THESE FENCES ARE MOST EFFECTIVE WHERE THERE IS OVERLAND FLOW (RUNOFF THAT IS SPREAD OVER THE SURFACE OF THE GROUND AS A THIN, EVEN LAYER) OR IN MINOR SWALES OR DRAINAGEWAYS. THEY PREVENT SEDIMENT FROM ENTERING RECEIVING WATERS. SILT FENCES ARE ALSO USED TO CATCH WIND BLOWN SAND AND TO CREATE AN ANCHOR FOR SAND DUNE CREATION. ASIDE FROM THE TRADITIONAL WOODEN POST AND FILTER METHOD, THERE ARE SEVERAL VARIATIONS OF SILT FENCE INSTALLATION INCLUDING SILT FENCE WHICH CAN BE PURCHASED WITH POCKETS WITH POCKETS PRESEWN TO ACCEPT USE OF STEEL FENCE POSTS.



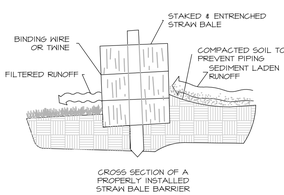
WHEN AND WHERE TO USE IT AS SHOWN BY:

A SILT FENCE SHOULD BE INSTALLED PRIOR TO MAJOR SOIL DISTURBANCE IN THE DRAINAGE AREA. SUCH A STRUCTURE IS ONLY APPROPRIATE FOR DRAINAGE AREAS OF 1 ACRE OR LESS WITH VELOCITIES OF 0.5CFS OR LESS (WASHINGTON STATE, 1992). THE FENCE SHOULD BE PLACED ACROSS THE BOTTOM OF A SLOPE OR MINOR DRAINAGEWAY ALONG A LINE OF UNIFORM ELEVATION (PERPENDICULAR TO THE FLOW). SILT FENCE CAN BE USED AT THE OUTER BOUNDARY OF THE WORK AREA. HOWEVER, THE FENCE DOES NOT HAVE TO SURROUND THE WORK AREA COMPLETELY. IN ADDITION, A SLIT FENCE IS EFFECTIVE WHERE SHEET AND HILL EROSION MAY BE A PROBLEM. SLIT FENCES SHOULD NOT BE CONSTRUCTED IN STREAMS OR SWALES.

STRAW BALE BARRIER

WHAT IS THIS

STRAW BALES CAN BE USED AS A TEMPORARY SEDIMENT BARRIER. THEY ARE PLACED END TO END IN A SHALLOW EXCAVATED TRENCH (WITH NO GAPS IN BETWEEN) AND STAKED INTO PLACED. OF PROPERLY INSTALLED, THEY CAN DETAIN SEDIMENT AND REDUCE FLOW VELOCITY FROM SMALL DRAINAGE AREAS. A STRAW BALE BARRIER PREVENTS SEDIMENT FROM LEAVING THE SITE BY TRAPING THE SEDIMENT IN THE BARRIER WHILE ALLOWING THE RUNOFF TO PASS THROUGH. IT CAN BE USED TO DECREASE THE VELOCITY OF SHEETFLOW OR CHANNEL FLOWS OF LOW-TO-MODERATE LEVELS.



WHEN AND WHERE TO USE IT AS SHOWN BY:

A STRAW BALE BARRIER SHOULD BE INSTALLED PRIOR TO MAJOR SOIL DISTURBANCE IN THE DRAINAGE AREA. THIS TYPE OF BARRIER IS PLACED PERPENDICULAR TO THE FLOW, ACROSS THE BOTTOM OF A SLOPE OR MINOR DRAINAGEWAY WHERE THERE IS SHEET FLOW. IT CAN BE USED AT THE PERIMETER OF THE WORK AREA, ALTHOUGH IS DOES NOT HAVE TO SURROUND IT COMPLETELY. IT CAN ALSO BE VERY EFFECTIVE WHEN USED IN COMBINATION WITH OTHER EROSION AND SEDIMENT CONTROL PRACTICES. A STRAW BALE BARRIER MAY BE USED WHERE THE LENGTH OF SLOPE BEHIND THE BARRIER IS LESS THAN 100 FEET AND WHERE THE SLOPE IS LESS THAN 2:1.

WHAT TO CONSIDER

THE SUCCES OF A STRAW BALE BARRIER DEPENDS ON PROPER INSTALLATION. THE BALES MUST BE FIRMLY STAKED INTO THE ENTRENCHMENT AND THE ENTRENCHMENT MUST BE PROPERLY BACKFILLED. TO FUNCTION EFFECTIVELY, THE BALES MUST BE PLACED END TO END AND THERE CAN BE NO GAPS BETWEEN THE BALES.

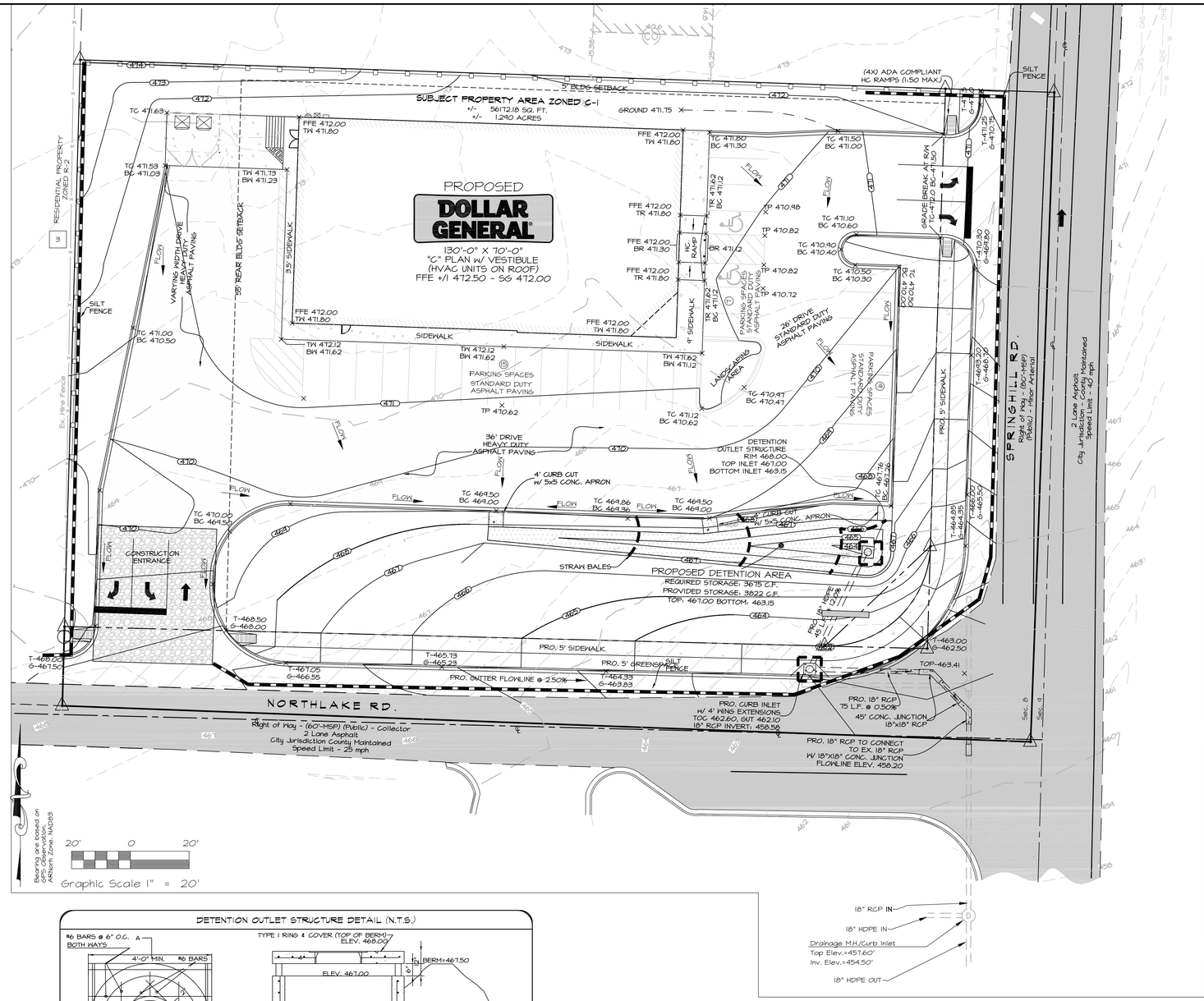
STRAW BALE BARRIER ARE USEFUL FOR APPROXIMATELY 3 MONTHS. THEY MUST BE INSPECTED AND REPAIRED IMMEDIATELY AFTER EACH RAINFALL OR DAILY IF THERE IF PROLONGED RAINFALL. DAMAGED STRAW BALES REQUIRE DAMAGED STRAW BALES REQUIRE IMMEDIATE REPLACEMENT. AFTER EACH STORM, OR ON A REGULAR BASIS, TRAPPED SEDIMENTS MUST BE REMOVED AND DISPROSED OF PROPERLY.

** UTILITY WARNING **

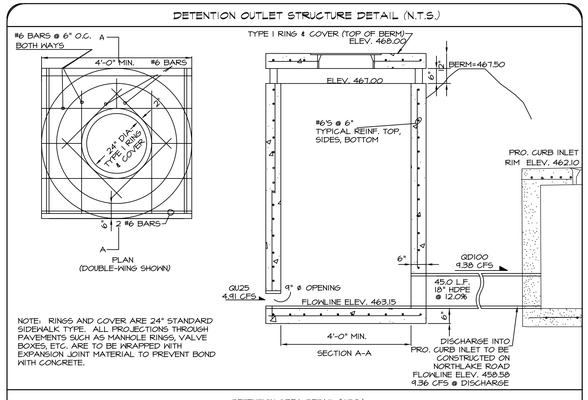
48 HOURS
BEFORE YOU DIG
CALL:
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR
UNDERGROUND UTILITY LOCATION

CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADE BEFORE AND DURING CONSTRUCTION

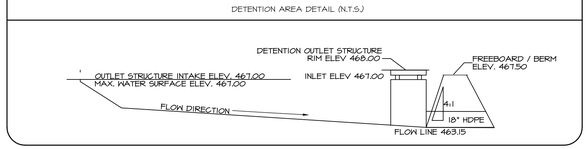
CONTRACTOR IS ALSO RESPONSIBLE FOR SHORING AND ENSURING THAT THERE IS NO SLOUGHING OF ADJACENT PROPERTY UNLESS OTHERWISE APPROVED IN WRITING BY THE ADJACENT PROPERTY OWNER.



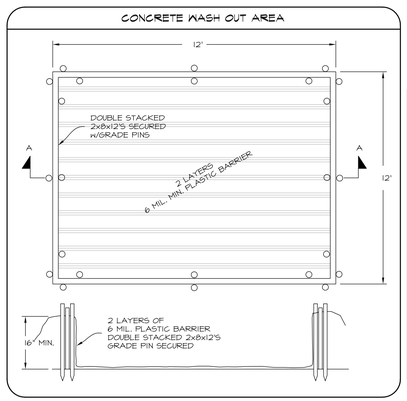
DETENTION OUTLET STRUCTURE DETAIL (N.T.S.)



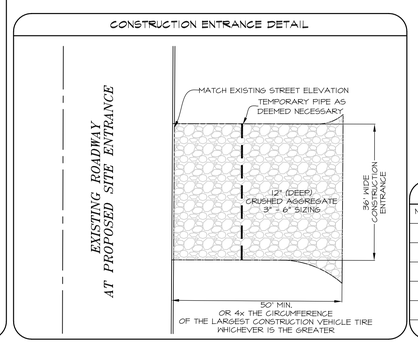
DETENTION AREA DETAIL (N.T.S.)



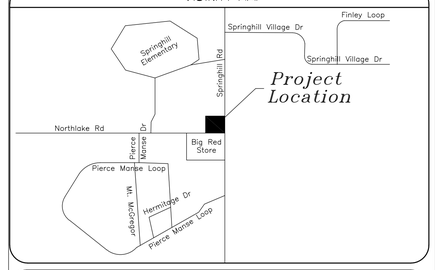
CONCRETE WASH OUT AREA



CONSTRUCTION ENTRANCE DETAIL



VICINITY MAP



GENERAL EROSION CONTROL NOTES AND SPECIFICATIONS

1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THE EROSION PHASE I & II CONSTRUCTION DRAWINGS, THE STANDARD DETAILS AND ANY RELATED DOCUMENTS INCLUDING CITY ORDINANCE.
2. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE, CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
4. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
5. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
6. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
7. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE OR U.S.
8. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED SHALL BE TEMPORARILY SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
9. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
10. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
11. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
12. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
13. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
14. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

EROSION & SEDIMENT CONTROL MAINTENANCE

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHESONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION(SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED

FLOOD STATEMENT

BY GRAPHIC PLOTTING OF THE INFORMATION SHOWN ON FLOOD INSURANCE RATE MAP NO. 05145C0250E, DATED MAY 2, 2012, COMMUNITY WHITE COUNTY, UNINCORPORATED AREAS; NUMBER 050467; PANEL 0285; SUFFIX E INDICATES THAT THE PROPERTY SHOWN ON SURVEY LIES WITHIN:

ZONE X (OTHER AREAS) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

*FLOOD STATEMENT DOES NOT GUARANTEE AGAINST LOCALIZED FLOODING.

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS-ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-6894

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR. 72022

DOLLAR GENERAL

GRADING DRAINAGE & EROSION CONTROL PLAN

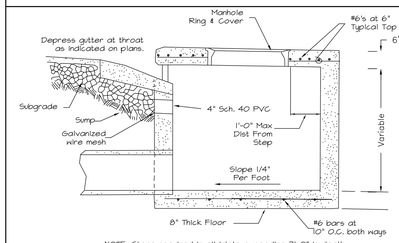
PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-3

LEGEND

PROPERTY LINE		P	METER POLE
OVERHEAD UTILITY		T	TELEPHONE PEDESTAL
OHE	OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS	GAS LINE		FIRE HYDRANT
W	W	WATER LINE		SIGN/SIGN POST
SS	SS	SANITARY SEWER LINE		GUY ANCHOR
				SOIL BORE
(p)	PER PLAT			POWER POLE W/TRANSFORMER
(d)	PER DEED			POWER POLE
(m)	AS PER MEASURED IN FIELD		EOM	END OF MARKINGS
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)		MAT.	MATERIAL
			CPS	COTTON PICKER SPINDLE
			C.I.	CURB INLET
	CALCULATED POINT		nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)		D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)		E.M.	ELECTRIC METER
	WATER METER		REF.	REFERENCE
			UGE	UNDERGROUND ELECTRIC
	WATER VALVE (UNLESS NOTED)		OHE	OVERHEAD ELECTRIC
PLA	PLASTIC		typ	TYPICAL
			IP	INTERMEDIATE PRESSURE
	GAS METER		W	WELDED
	LIGHT POLE			METER/LIGHT POLE

CIRCULAR MONOLITHIC CONCRETE CURB INLET - JUNCTION BOX DETAIL

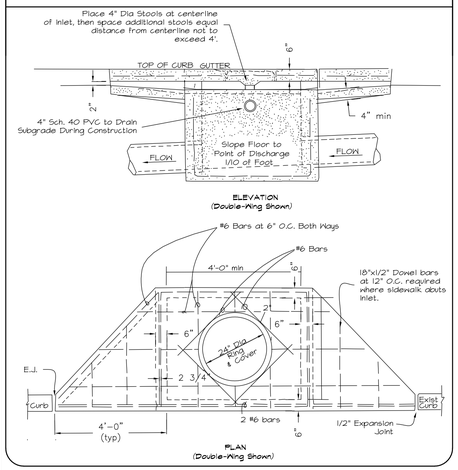


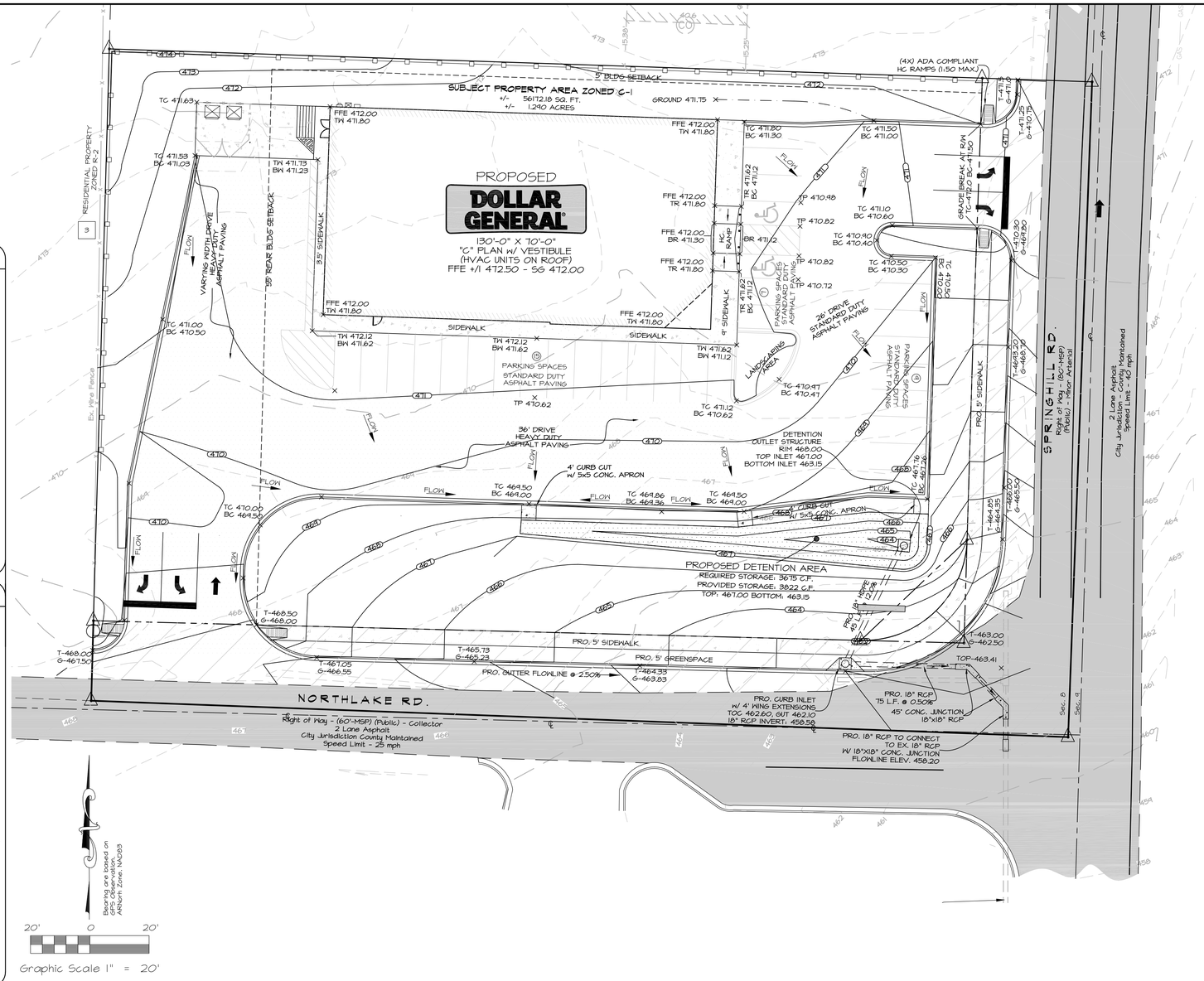
NOTE: Steps required in all inlets exceeding 3'-0" in depth. Reinforcement not required in circular inlet walls unless specified on plans.

Depression See Detail PK-3

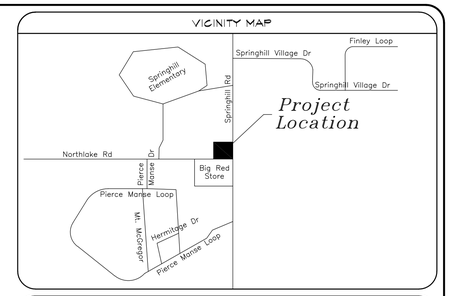
DIA. OF STRUCTURE	WALL THICKNESS	DIA. OF OUTLET PIPE
4' I.D.	6"	15" Thru 21"
5' I.D.	8"	30" Thru 42"
6' I.D.	8"	48" Thru 54"
8' I.D.	10"	60" Thru 72"

RE-INFORCED CONCRETE CURB INLET W/ DOUBLE WING DETAIL

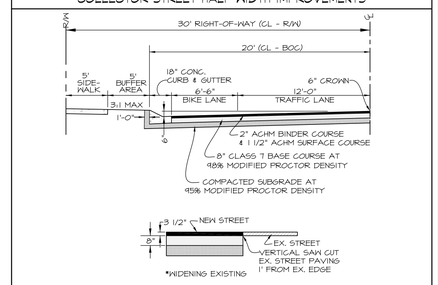




VICINITY MAP



PROPOSED CROSS SECTION NORTHLAKE ROAD COLLECTOR STREET HALF WIDTH IMPROVEMENTS

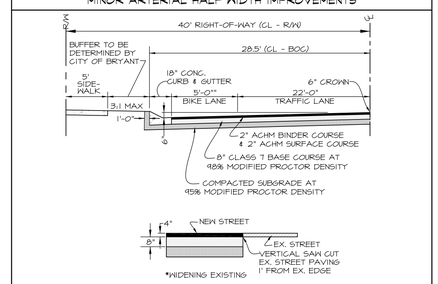


*NOTE: PAVEMENT RECONSTRUCTION IS REQUIRED WHEN EXISTING STREET DOES NOT MEET THESE STANDARDS

GENERAL NOTES:

1. IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 95% OF MAXIMUM MODIFIED DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT.
2. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO DENSITY OF 90% MAXIMUM MODIFIED DENSITY.
3. CRUSHED STONE - MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF 98% MAXIMUM MODIFIED DENSITY.

PROPOSED CROSS SECTION SPRINGHILL ROAD MINOR ARTERIAL HALF WIDTH IMPROVEMENTS



*NOTE: PAVEMENT RECONSTRUCTION IS REQUIRED WHEN EXISTING STREET DOES NOT MEET THESE STANDARDS

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1. IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 95% OF MAXIMUM MODIFIED DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT.
2. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO DENSITY OF 90% MAXIMUM MODIFIED DENSITY.
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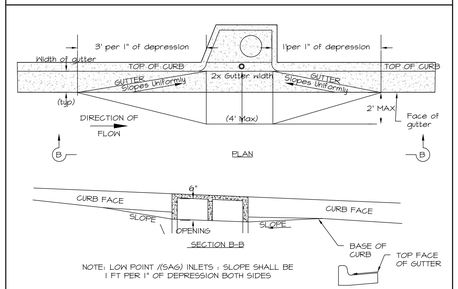
GUTTER DEPRESSION DETAIL



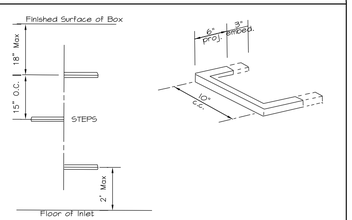
NOTE: LOW POINT (SAG) INLETS - SLOPE SHALL BE 1 FT PER 1" OF DEPRESSION BOTH SIDES

NOTE: THE TOP FACE OF GUTTER SHALL DROP 1/2 OF THE GUTTER DEPRESSION ACROSS THE INLET OPENINGS.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADE BEFORE AND DURING CONSTRUCTION

CONTRACTOR IS ALSO RESPONSIBLE FOR SHORING AND ENSURING THAT THERE IS NO SLOUGHING OF ADJACENT PROPERTY UNLESS OTHERWISE APPROVED IN WRITING BY THE ADJACENT PROPERTY OWNER.

CURB INLET STEPS



A. Manhole steps: corrosion resistant, coated, and reinforced with steel per ASTM C-478. Steel reinforcing minimum 1/2" diameter.

B. Acceptable Manufacturers:

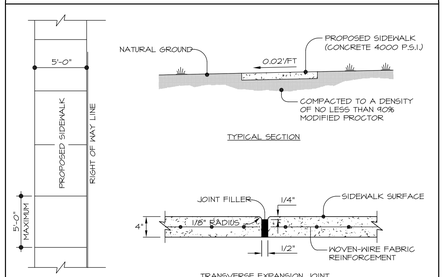
1. Utility Products Inc. Perma Step 100-2
2. ICM Inc. Polypropylene coated steps.
3. M.A. Industries, Inc. Polypropylene coated steps. #PSI-PF
4. BONCO, by H. Bowen Co.

C. Capable of supporting minimum 300 lb. load.

D. Non-Slip textured treads.

E. Required in all structures 3'-0" deep or greater.

STANDARD CONCRETE SIDEWALK



NOTES:

1. CONTRACTION JOINTS SHALL BE AT 5 FT INTERVALS. EXPANSION JOINTS TO BE A MAXIMUM OF 25 FT INTERVALS. EXPANSION JOINTS TO BE 1/2" PRE-FORMED EXPANSION JOINT FILLER, NON-EXTRUDING TYPE.
2. ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.
3. A 6 INCH DEPTH IS REQUIRED AT LOCATIONS OF DRIVEWAY CROSSINGS, AT STREET INTERSECTIONS (ALONG THE LENGTH OF RADIUS CURB RETURNS), AND IN THE HANDICAP RAMPS.

** UTILITY WARNING **

48 HOURS BEFORE YOU DIG CALL: ARKANSAS ONE CALL (TOLL FREE) 1-800-482-8998 PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LOCATION

CERTIFICATE OF AUTHORIZATION THE SENTINEL GROUP, LLC No. 1269 ARKANSAS ENGINEER

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11833 ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-6684

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL®

PUBLIC ROAD IMPROVEMENT PLAN

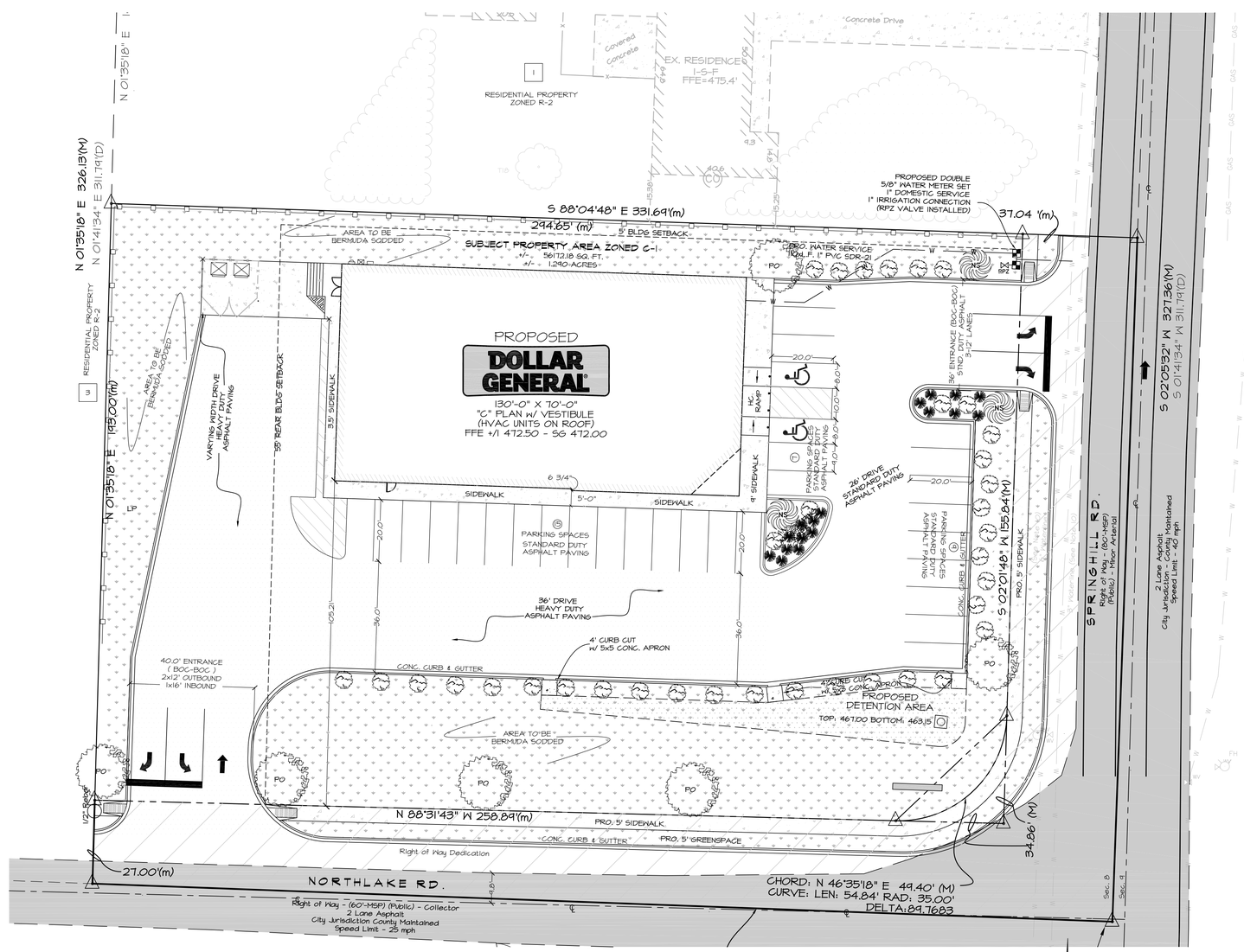
PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-4

SHEET 4 OF 7

LEGEND

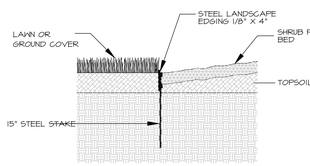
	PROPERTY LINE	P	METER POLE
	OVERHEAD UTILITY	T	TELEPHONE PEDESTAL
OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS LINE		FIRE HYDRANT
W	WATER LINE		SIGN/SIGN POST
SS	SANITARY SEWER LINE		GUY ANCHOR
			SOIL BORE
(p)	PER PLAT		POWER POLE W/TRANSFORMER
(d)	PER DEED		POWER POLE
(m)	AS PER MEASURED IN FIELD	EOM	END OF MARKINGS
		MAT.	MATERIAL
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	CPS	COTTON PICKER SPINDLE
		C.I.	CURB INLET
	CALCULATED POINT	nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)	E.M.	ELECTRIC METER
	WATER METER	REF.	REFERENCE
		UGE	UNDERGROUND ELECTRIC
WV	WATER VALVE (UNLESS NOTED)	OHE	OVERHEAD ELECTRIC
PLA	PLASTIC	typ	TYPICAL
		IP	INTERMEDIATE PRESSURE
G	GAS METER	W	WELDED
	LIGHT POLE		METER/LIGHT POLE



Bearing are based on GPS Observation, Arkansas Zone: NAD83

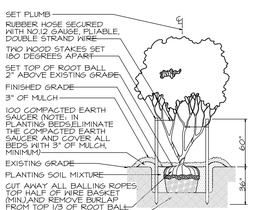
20' 0 20'

Graphic Scale 1" = 20'



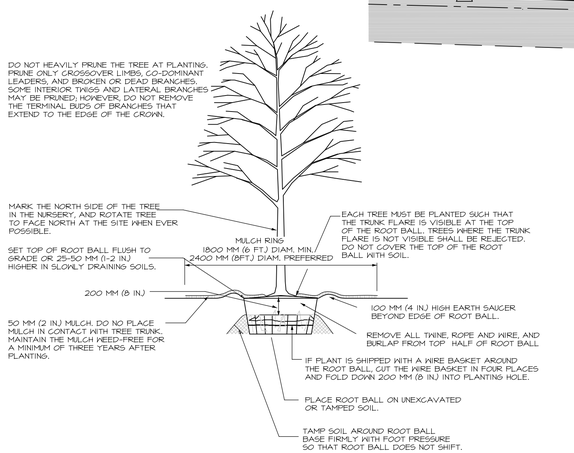
STEEL EDGING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



TREE PLANTING DETAIL

NOTE: THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN 2400 MM (8 FT.) SQUARE, OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.

LANDSCAPING MATERIALS SCHEDULE

SYMBOL	QUANTITY	ABRV.	COMMON NAME	SCIENTIFIC NAME	SIZE (MIN.)
PO	6	PO	PIN OAK	QUERCUS PALUSTRIS	2" CAL. x 12'(T)
	3	NS	NELLY R STEVENS HOLLY	ILEX X ATTENUATA	2" CAL. x 12'(T)
	36	EGH	EVERGREEN HOLLIES	ILEX SPECIES	18" MIN.
	17	ND	NANDINA	NANDINA DOMESTICA	18" MIN.

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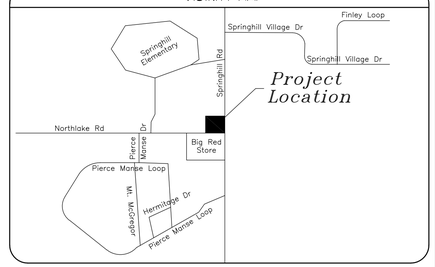
VICINITY MAP



GENERAL NOTES & SPECIFICATIONS

A. GRADING NOTES:

1. CONTRACTOR TO GRADE ALL AREAS SHADED IN THE PLAN, INCLUDING ROW.
2. TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES DURING CONSTRUCTION.
3. TILL SOIL TO A DEPTH OF 4" MINIMUM.
4. REMOVE ALL ROCKS LARGER THAN 1" MEASURED IN LARGEST DIRECTION.
5. GRADE ALL AREAS TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING.
6. ALL GRADED AREAS TO RECEIVE SEED OR SOD, TOP SOIL, STRAW AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
7. REFER TO SHEET C3 FOR MAXIMUM SLOPES.

B. LAWN SEEDING AND SODDING NOTES:

1. ALL LAWNS FROM FACE OF THE BUILDING AND ON THE SIDE WHERE THERE IS PARKING OR A STREET ARE REQUIRED TO BE FULLY SODDED. ALL OTHER LANDSCAPE AREAS TO RECEIVE SEED.
2. AREAS TO RECEIVE SEED OR SOD SHALL BE CLEAN OF DEBRIS AND FREE OF WEEDS.
3. SEED MIX TO BE DROUGHT TOLERANCE FESCUE OR REGIONAL SPECIFIC BLEND. ¼ TO ½ OF THE SEED MIXTURE TO BE ANNUAL RYE TO AIDE IN LIMITING EROSION OF PERENNIAL SEED DURING GERMINATION. STRAW SHALL BE THRESHED STRAW OF HAY, OATS, WHEAT, BARLEY, OR RYE. SPREAD AT A RATE OF 2 1/2 TONS PER ACRE. STRAW NETTING, AND OTHER ANTI-EROSION MATERIALS TO BE REMOVED AFTER ESTABLISHED LAWN.
4. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER SEEDING. WATER REGULARLY TO KEEP LAWN AREAS MOIST TO MAXIMIZE GERMINATION AND MAINTAIN OPTIMUM GROWTH AND SURVIVAL TO ACHIEVE AN ACCEPTABLE STAND OF ESTABLISHED LAWN PRIOR TO THE STORE POSSESSION DATE, FREE OF ERODED OR BARE AREAS.

C. LANDSCAPE NOTES:

1. PROVISIONS FOR LOCAL AND/OR REGIONAL REQUIREMENTS ARE NOT SHOWN ON THESE DRAWINGS. DEVELOPER SHALL PROVIDE LANDSCAPING IN ACCORDANCE WITH JURISDICTION REQUIREMENTS.
2. ALL SOIL USED FOR PLANTING SHALL CONSIST OF REGIONALLY APPROPRIATE SOILS.
3. ALL PLANTING BEDS SHALL HAVE A MINIMUM 3" DEPTH OF MULCH, WITH EDGING AS REQUIRED.
4. ALL TREES LOCATED IN SOD AREAS SHALL HAVE A MULCH RING AROUND THEM WITH EDGING.
5. ALL PLANTINGS SHALL BE THOROUGHLY WATERED BY THE LANDSCAPE CONTRACTOR AT THE TIME OF THE PLANTINGS.
6. PRIOR TO FINAL ACCEPTANCE OF STORE BY DOLLAR GENERAL, THE SITE SHALL BE CLEAN OF ALL DEBRIS AND TRASH, AND MEET ALL REQUIREMENTS OUTLINED IN SECTIONS A-C ABOVE.
7. MAXIMUM SLOPE CUTS SHALL NOT EXCEED 4:1. ALL DISTURBED GRADES GREATER THAN 8:1 SHALL BE STABILIZED BY SODDING. SODDING PINS ARE TO BE USED ON ALL 4:1 GRADES.
8. VEGETATION AT ENTRY SHOULD BE LOW TO ENSURE VISIBILITY OF STORE.
9. IF TREES ARE REQUIRED IN FRONT OF BUILDING, SELECT SMALL LEAFED, NON DENSE SPECIES THAT WILL NOT INTERFERE WITH THE VISIBILITY OF STORE. THE SPACING SHALL CREATE VISUAL CORRIDORS TO STORE.

D. IRRIGATION NOTES:

1. ALL LANDSCAPE AREAS AND LAWNS ADJACENT TO PAVED AREAS AND/OR STREETS ARE TO BE FULLY IRRIGATED.
2. IRRIGATION SYSTEM TO INCLUDE ALL SPRAY HEADS, VALVES AND CONTROLLERS.
3. LOCATE HEADS A MINIMUM OF 2'-0" FROM EDGE OF PAVEMENT / CURB.
4. IRRIGATION DESIGN TO BE PROVIDED BY LANDSCAPE CONTRACTOR.
5. ALL VALVES ARE TO BE RAINBIRD DV SERIES VALVES (OR EQUIVALENT).
6. THIS SYSTEM WILL REQUIRE A RAINBIRD ESP MODULAR SERIES CONTROLLER (OR EQUIVALENT).
7. EACH ZONE WILL REQUIRE ITS OWN ELECTRONIC CONTROL VALVE.
8. FROM THE METER SERVICE THE FOLLOWING SHALL BE INSTALLED IN ORDER:
   1.A. 1-MANUAL MASTER CONTROL VALVE
   1.B. 1-1" RPZ ASSEMBLY
   1.C. 1-1 1/2" MASTER CONTROL VALVE.

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NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL

LANDSCAPE AND IRIGATION PLAN

PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-5

SHEET 5 OF 7

PAVEMENT DETAILS

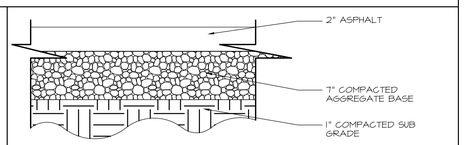
1. DETAILS ARE DOLLAR GENERAL STANDARD REQUIREMENTS AND MAY INCREASE OR DECREASE WITH VARIOUS SOIL CONDITIONS. A GEOTECHNICAL INVESTIGATION WITH PAVEMENT DESIGN RECOMMENDATIONS SHALL BE COMPLETED FOR EACH DEVELOPMENT. THE FOLLOWING DETAILS ARE MINIMUM DOLLAR GENERAL PAVEMENT REQUIREMENTS. INCREASED RECOMMENDATIONS ARE TO BE USED.

2. THE SUBGRADE MATERIALS SHALL BE PROOF ROLLED AND/OR SCARIFIED AND COMPACTED PRIOR TO PLACEMENT OF BASE MATERIAL. WHERE EXISTING SUBGRADE MATERIALS ARE UNSUITABLE, THEY SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT MATERIAL IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.

3. HEAVY DUTY CONCRETE PAVEMENT AND STANDARD DUTY CONCRETE PAVEMENT (AS RECOMMENDED BY THE GEOTECHNICAL REPORT OR DOLLAR GENERAL MINIMUMS) SHALL BE STEEL REINFORCED. REINFORCEMENT TYPE SHALL BE PRIOR APPROVED BY DOLLAR GENERAL.

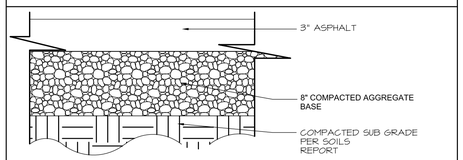
4. CONCRETE PAVEMENT PLAN SHALL BE PROVIDED TO DOLLAR GENERAL FOR PRIOR APPROVAL. ALL JOINTS MUST BE SEALED WITH AN APPROVED SEALANT. STEEL REINFORCING SHALL BE USED AT JOINTS. REFER TO ACI 330R (GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS) FOR JOINT DESIGN AND LAYOUT.

ASPHALTIC PAVEMENT



STANDARD DUTY ASPHALT DETAIL

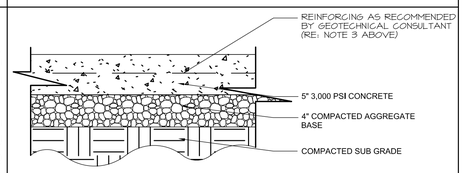
SCALE: NOT TO SCALE



HEAVY DUTY ASPHALT DETAIL

SCALE: NOT TO SCALE

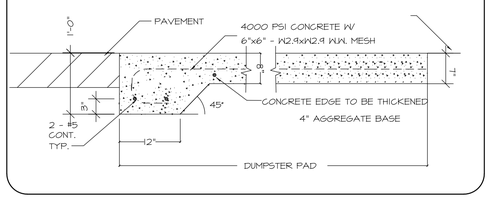
CONCRETE PAVEMENT



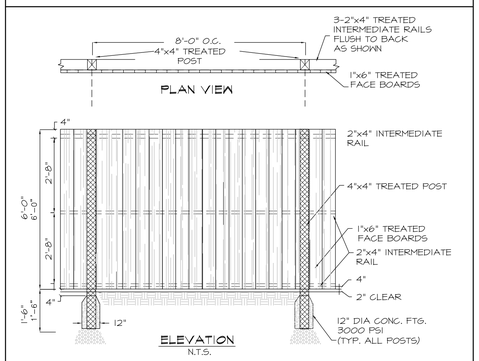
HANDICAP PARKING CONCRETE DETAIL

SCALE: NOT TO SCALE

DUMPSTER PAD CROSS SECTION



6' or 8' WOODEN PRIVACE FENCE DETAIL



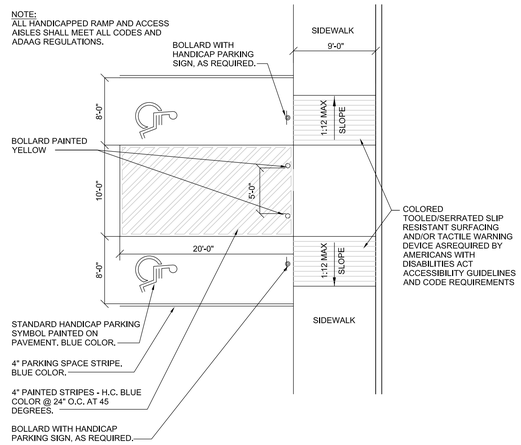
GENERAL NOTES:

*ALL FASTENING HARDWARE TO BE NON-CORROSIVE

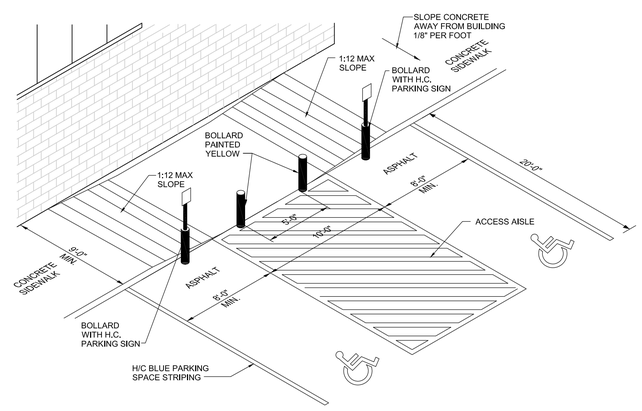
*CONTRACTOR SHALL USE 8P GALVANIZED SIDING NAILS OR 2" GALVANIZED SCREWS THROUGHOUT.

*ALL WOOD MEMBERS SHALL BE TREATED.

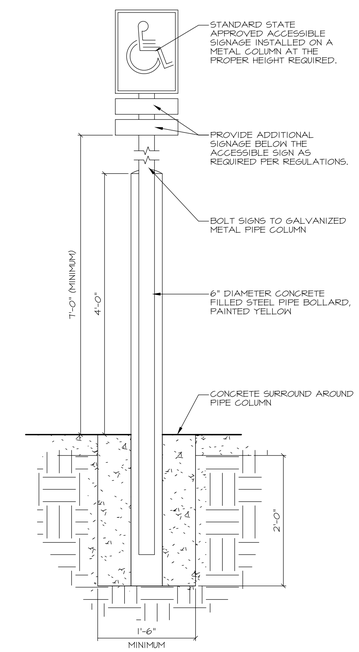
HANDICAP PARKING DETAIL



HANDICAP PARKING, ACCESS RAMP AND ACCESS AISLE DETAILS



HANDICAP SIGN DETAILS



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LITTLE ROCK, AR. 72204
(501) 214-6684

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR. 72022

DOLLAR GENERAL®

DETAIL SHEET 1

PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-6

A. GENERAL CIVIL SITEWORK NOTES:

1. THE CIVIL SITEWORK DRAWINGS IN THIS PACKAGE ARE PROVIDED TO INDICATE MINIMUM STANDARDS FOR DOLLAR GENERAL NEW STORE DEVELOPMENTS. IT IS NOT INTENDED, NOR WILL BE ACCEPTABLE BY DOLLAR GENERAL, AS FINAL CIVIL SITEWORK DRAWINGS AND/OR SPECIFICATIONS FOR NEW STORE SITE DEVELOPMENTS. COORDINATE SITE SPECIFIC PLANS WITH ALL DISCIPLINES.

2. PRIOR TO CONSTRUCTION DEVELOPER SHALL PROVIDE DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT A COMPLETE SET OF CIVIL SITEWORK DRAWINGS STAMPED BY A CIVIL ENGINEER LICENSED IN THE STATE IN WHICH THE DEVELOPMENT IS PROPOSED. DOLLAR GENERAL SHALL APPROVE ENGINEERED DRAWINGS PRIOR TO DEVELOPER STARTING CONSTRUCTION. ANY MAJOR MODIFICATIONS OF THE DRAWINGS, AFTER INITIAL APPROVAL, SHALL BE RESUBMITTED TO DOLLAR GENERAL FOR PRIOR APPROVAL. ANY CHANGES MADE THAT ARE NOT APPROVED BY DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT, MAY NOT BE ACCEPTABLE, AND MAY REQUIRE RECONSTRUCTION.

3. A BOUNDARY AND TOPOGRAPHIC SURVEY SHALL BE INCLUDED IN THE CIVIL SITEWORK DRAWINGS SUBMITTED TO DOLLAR GENERAL. THE DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL LICENSED SURVEYOR REGISTERED IN THE STATE IN WHIGH THE DEVELOPMENT IS PROPOSED. TOPOGRAPHIC SURVEY SHALL SHOW UTILITIES (ABOVE AND UNDERGROUND) AND EXISTING GRADE CONTOURS AT ONE FOOT (1') INTERVALS. TOPOGRAPHIC SURVEY SHALL EXTEND BEYOND THE PROPERTY BOUNDARY AS REQUIRED TO SHOW LOCAL STREETS, NEARBY INTERSECTIONS, ADJACENT DITCHES, ETC. AS ITEMS PERTAIN TO NEW DEVELOPMENT.

4. A UTILITY PLAN SHALL BE INCLUDED IN THE CIVIL SITEWORK DRAWINGS. THE PLAN SHALL INCLUDE UTILITIES REQUIRED FOR BUILDING SERVICES AND ANY UTILITY MAIN IMPROVEMENTS THAT MAY BE REQUIRED. UTILITY DETAILS SHALL BE INCLUDED IN THE DRAWINGS. UTILITIES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ALL JURISDICTIONAL REQUIREMENTS.

5. DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR ANY NATIONAL, STATE AND/OR LOCAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS. EROSION CONTROL MEASURES SHALL BE INSTALLED AS REQUIRED TO INSURE THAT NO SEDIMENT IS CONVEYED OFF THE SITE TO ADJACENT PROPERTIES. AT A MINIMUM, CONTRACTOR/DEVELOPER SHALL SEED, FERTILIZE AND MULCH ALL DISTURBED AREAS. A SUITABLE STAND OF GRASS SHALL BE OBTAINED AT ALL UNIMPROVED AND NON-LANDSCAPED AREAS.

6. PROVISIONS FOR LOCAL AND/OR REGIONAL LANDSCAPING REQUIREMENTS, INCLUDING LANDSCAPING IRRIGATION, ARE NOT SHOWN ON THESE DRAWINGS. DEVELOPER SHALL PROVIDE LANDSCAPING IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.

7. HANDICAP REQUIREMENTS SHOWN ON THE DRAWINGS ARE MINIMUM REQUIREMENTS. DEVELOPMENT SHALL BE IN ACCORDANCE WITH FEDERAL AND LOCAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY, INCLUDING BUT NOT LIMITED TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.

8. PRIOR TO FINAL ACCEPTANCE OF STORE BY DOLLAR GENERAL, THE SITE SHALL BE CLEAN OF ALL DEBRIS AND TRASH.

9. DEVELOPER SHALL OBTAIN ALL JURISDICTIONAL APPROVALS AND PERMITS REQUIRED FOR THE DEVELOPMENT.

10. WHERE OFFSITE WORK IS REQUIRED FOR THE DEVELOPMENT, SUCH AS DOT STREET IMPROVEMENTS, UTILITY IMPROVEMENTS, ETC., DEVELOPER SHALL INCORPORATE THE IMPROVEMENTS AND/OR OFFSITE DESIGN DRAWINGS INTO THE DOLLAR GENERAL SITEWORK DRAWINGS.

11. DOLLAR GENERAL MINIMUM PAVEMENT RECOMMENDATIONS MUST BE MET. DEVIATIONS WILL REQUIRE A GEOTECHNICAL INVESTIGATION INCLUDING DESIGN RECOMMENDATIONS AND APPROVAL BY DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT.

B. SITE ELECTRICAL AND SIGNAGE GENERAL NOTES:

1. UNDERGROUND ELECTRICAL SERVICE IS PREFERRED FOR DOLLAR GENERAL DEVELOPMENTS. TRANSFORMER PAD DESIGN SHALL BE PROVIDED BY ELECTRICAL UTILITY PROVIDER AND SHALL BE BOLLARD PROTECTED WHEN LOCATED IN A HAZARDOUS AREA.

2. SITE LIGHTING SHALL BE DESIGNED TO PROVIDE A MINIMUM OF TWO FOOT-CANDLES AT THE PARKING LOT AREAS, BUILDING ENTRANCES, DUMPSTER AREA AND TRUCK DELIVERY AREA. THE OUTER PERIMETER OF THE BUILDING SHALL BE LIGHTED FOR SECURITY. SITE LIGHTING SHALL BE INSTALLED ALONG THE WALLS OF THE BUILDING AND POLE MOUNTED AT THE PERIMETER OF THE PARKING LOT.

3. REQUIRED POLE MOUNTED LIGHTING: 25' HEIGHT POLES WITH 1,000 WATT METAL HALIDE HEADS. CONFIRM WITH ELECTRICAL DRAWINGS AND PHOTOMETRICS.

4. REQUIRED WALL MOUNTED LIGHTING: 400 WATT METAL HALIDE WALL PACKS. CONFIRM WITH ELECTRICAL DRAWINGS AND PHOTOMETRICS.

5. REQUIRED BI-DIRECTIONAL SECURITY BULLHORN LIGHTING: 400 WATT METAL HALIDE FLOOD LIGHT WITH CUT OFF SHADES. CONFIRM WITH ELECTRICAL DRAWINGS AND PHOTOMETRICS.

6. LIGHTED PYLON SIGN: PROVIDE CONDUIT FROM ELECTRICAL PANEL TO LOCATION OF THE PYLON SIGN BASE. BURY CONDUIT TO PYLON. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND AND A 20-AMP 2-POLE BREAKER AT THE PANEL. A TEMPORARY 3' TALL WIRING STAKE SHALL BE PROVIDED AT THE PYLON SIGN LOCATION UNTIL THE SIGN IS PERMANENTLY INSTALLED.

7. LIGHTED BUILDING SIGN: PROVIDE CONDUIT FROM ELECTRICAL PANEL TO THE CENTER OF THE SIGN CANOPY. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND AND A 20-AMP 2-POLE BREAKER AT THE PANEL. BUILDING CANOPY MUST BE SUFFICIENTLY BUILT TO SUPPORT THE DOLLAR GENERAL SIGN. SIGN WEIGHT UP TO 1,400 LBS.
NOTE: IF THE LEASE SPECIFIES A 5'-0" X 40'-0" BUILDING SIGN OR 24" (OR LARGER) LETTER SET, WITH TWO - 10/2 WIRE WITH GROUND AND TWO 20 AMP FUSES. THE BUILDING CANOPY MUST BE SUFFICIENTLY BUILT TO SUPPORT THE DOLLAR GENERAL SIGN.

8. UNDERGROUND ELECTRICAL SHALL BE PROVIDED TO THE SITE LIGHT POLES.

9. THE FINAL PYLON SIGN CONNECTION AND UNDERGROUND CONDUIT IS LANDLORD RESPONSIBILITY.

10. DOLLAR GENERAL VENDOR PRICING FOR LIGHTING WALL PACKS AND POLE LIGHT FIXTURES ARE AVAILABLE FROM: HARRIS LIGHTING AND NESCO LIGHTING, REFER TO VENDOR LIST. IF STANDARD DG LIGHTING DOES NOT MEET JURISDICTIONAL REQUIREMENTS, CONTACT HARRIS LIGHTING FOR ALTERNATIVE SITE SPECIFIC PHOTOMETRIC CALCULATIONS.

C. SITE PLAN GENERAL NOTES:

1. THE SITE PLAN IS BASED ON MINIMUM REQUIREMENTS FOR SITE ACCESS, PARKING AND FREIGHT DELIVERY. DEVIATIONS FROM THIS PLAN SHALL INSURE PROPER SITE ACCESS FOR DOLLAR GENERAL'S FREIGHT TRUCKS DURING NORMAL BUSINESS (OPERATING) HOURS. ON-SITE DELIVERY TRUCK MANEUVERING PATHS SHALL BE DESIGNED UTILIZING DOLLAR GENERAL'S 73-FOOT LONG FREIGHT TRUCK. PATHS SHALL BE UNOBSTRUCTED AND FREE OF LANDSCAPE ISLANDS, SIGNS, LIGHT POLES, BOLLARDS, ETC. HEAVY DUTY PAVEMENT IS REQUIRED ALONG THE ENTIRE DELIVERY TRUCK (MANEUVERING) PATH.

2. A MINIMUM OF 31 PARKING SPACES, WHICH INCLUDE 2 HANDICAP ACCESSIBLE SPACES, ARE REQUIRED FOR THIS DEVELOPMENT. THE NUMBER OF PARKING SPACES SHALL BE INCREASED AS REQUIRED BY JURISDICTIONAL REQUIREMENTS. IF ADDITIONAL PARKING SPACES ARE REQUIRED OR PROVIDED, THE TOTAL NUMBER OF H.C. SPACES SHALL BE INCREASED IN ACCORDANCE WITH ADA REQUIREMENTS.

3. STANDARD PARKING SPACES SHALL HAVE MINIMUM SIZE OF 9'X 20' UNLESS LOCAL JURISDICTION REQUIRE LARGER SPACES. PARKING SPACE STRIPING SHALL BE STANDARD 90 DEGREE STYLE. MINIMUM SIZE OF H.C. PARKING SPACES AND ACCESS AISLE ARE SHOWN ON DETAILS.

4. PAINTED STANDARD PARKING SPACE AND ISLAND STRIPE COLOR SHALL BE YELLOW FOR ASPHALT PAVEMENT AND CONCRETE PAVEMENT. COLOR FOR PAINTED H.C. ACCESSIBLE PARKING SPACE STRIPES, ACCESS AISLE OR ISLAND STRIPES, H.C. SYMBOLS, SHALL BE PAINTED PER THE REQUIREMENTS OF THE AUTHORITY HAVING JURISIDICTION. BOLLARDS SHALL BE PAINTED YELLOW. PAINT SHALL BE REFLECTIVE TYPE.

5. PAINTED FIRE LANE STRIPING OR PAINTED CURBS SHALL BE PROVIDED AS REQUIRED BY JURISDICTIONAL REQUIREMENTS.

6. CONCRETE PARKING STOPS SHALL BE USED AT PARKING SPACES ALONG THE OUTER PERIMETER OF PARKING LOT WHEN CONCRETE CURBS ARE NOT USED.

7. CONCRETE PARKING STOPS SHALL NOT BE USED AT THE FRONT OF THE BUILDING OR ALONG THE PERIMETER (ADJACENT) TO THE BUILDING.

8. THE SIDEWALK AT THE FRONT OF THE BUILDING SHALL BE A MINIMUM OF 9-FEET WIDE. THE SIDEWALK SHALL INCLUDE A 10-FOOT MINIMUM WIDE ADA ACCESSIBLE RAMP CLOSE TO THE STORE MAIN ENTRANCE. SIDEWALKS ALONG OTHER SIDES OF BUILDING SHALL BE MINIMUM 3'-6" WIDE. SIDEWALKS ADJACENT TO BUILDING SLABS SHALL HAVE SEALED ISOLATION JOINTS AND SHALL BE 6" HIGH ABOVE EXTERIOR OR PAVEMENT FINISH GRADES. ALL EXTERIOR SIDEWALKS SHALL HAVE A BROOM FINISH.

9. PORTLAND CEMENT SIDEWALKS SHALL BE MINIMUM 4" THICK WITH A 6" HIGH CURB AT ALL PAVEMENT TRANSITIONS, USE WELDED WIRE FABRIC REINFORCING.

10. THE PREFERRED WIDTH OF SITE CURB CUTS IS 36' WITH ONE ENTRANCE LANE AND TWO (RIGHT TURN AND LEFT TURN) EXIT LANES.

11. DRIVEWAY CONSTRUCTION WITHIN ROAD RIGHT-OF-WAYS, INCLUDES RADIUS SIZES, PAVEMENT MARKINGS, DRIVEWAY WIDTHS, ETC., SHALL BE IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.

12. A 25' MINIMUM RADIUS SHALL BE USED FOR DRIVEWAY TURNOUTS AS SHOWN ON PLAN.

13. SITE PLANS SHALL UTILIZE DOLLAR GENERAL'S PROTOTYPICAL BUILDING DESIGN WITH 70'-0" BY 130'-0" DIMENSIONS. SHOULD SITE CONSTRAINTS NOT ALLOW THE PROTOTYPICAL BUILDING DESIGN, DEVELOPER SHALL CONTACT DOLLAR GENERAL SITE COMPLIANCE COORDINATORS FOR OPTIONS AND APPROVAL. GROW BUILDING OUTWARD IF NECESSARY TO MAINTAIN CLEAR SALES FLOOR AREA AS SHOWN ON SHEET A1.

14. THE BUILDING MAIN ENTRANCE SHALL BE ORIENTED ON THE SITE TO FACE THE MAIN ACCESS ROAD. PARKING SHOULD BE CONCENTRATED AT THE FRONT OF THE STORE.

15. THE ACTUAL LOCATION FOR THE PYLON SIGN SHALL BE SITUATED FOR OPTIMUM VISIBILITY ALONG THE MAIN FRONT TRAFFIC CORRIDOR.

16. THE LANE OR DRIVE BETWEEN PARKING SPACES SHALL HAVE A MINIMUM WIDTH OF 36' WHEN LANE IS HEAVY DUTY PAVEMENT AND USED FOR FREIGHT TRUCK MANEUVERING. THE LANE SHALL HAVE A MINIMUM WIDTH OF 24' WHEN THE LANE IS CONSTRUCTED OF STANDARD DUTY PAVEMENT AND NOT USED FOR FREIGHT TRUCK MANEUVERING.

17. BUILDING CORNERS ADJACENT TO PAVED AREAS SHALL BE BOLLARD PROTECTED. ABOVE GROUND UTILITY APPURTENANCES, SUCH AS METERS, TRANSFORMERS, FIRE HYDRANTS IN PAVED AREAS, ETC. SHALL BE BOLLARD PROTECTED.

18. DOWNSPOUTS SHALL NOT BE ALLOWED TO DISCHARGE ON CONCRETE SIDEWALKS. SEE DETAIL ON SHEET C2.

19. DUMPSTER AND DELIVERY PADS SHALL BE CONSTRUCTED OF CONCRETE AS DETAILED ON THE DRAWINGS. AN ENCLOSURE SHALL BE PROVIDED ON THE DUMPSTER PAD IF REQUIRED BY JURISDICTIONAL REQUIREMENTS, OR IF VISIBLE BY CUSTOMER TRAFFIC OR ABUTTING RESIDENTIAL. SANITARY SEWER AND DOMESTIC HOT WATER SHALL BE PROVIDED AT DUMPSTER AREA IF REQUIRED BY JURISDICTIONAL REQUIREMENTS.

20. PUBLIC SANITARY SEWER CONNECTION REQUIRED.

21. SEPTIC SYSTEM NOT ALLOWED UNLESS WRITTEN APPROVAL IS OBTAINED FROM DOLLAR GENERAL

22. HOLDING TANK SYSTEMS ARE NOT ALLOWED.

23. LIFT STATIONS ARE NOT ALLOWED WITHOUT DOLLAR GENERAL APPROVAL.

24. EXTERIOR WALLS AND FOUNDATION SHALL HAVE WATERPROOFING.

25. FINISHED GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR AT ALL NON-PAVED AREAS.

26. ALL DOWNSPOUTS DISCHARGING ONTO NON PAVED AREAS ARE TO HAVE A MINIMUM FIVE FOOT PERFORATED LANDSCAPE PIPE STRAPPED TO A MINIMUM 12 INCH X 24 INCH CONCRETE SPLASH BLOCK.

27. FINISH FLOOR TO BE A MINIMUM OF 12 INCHES ABOVE 100 YEAR FLOOD PLAIN.

28. IF AN UNOBSTRUCTED VIEW EXISTS OF A RESIDENTIAL BUILDING BETWEEN TENANT PARCEL AND ADJACENT PARCEL, THEN LESSOR SHALL CONSTRUCT A PRIVACY FENCE IN ACCORDANCE WITH TENANT'S PROTOTYPE CRITERIA SET PLANS AND ANY APPLICABLE GOVERNMENTAL AGENCIES.

D. SITE PARKING LOT:

1. USE PAVING SPECIFICATIONS NOTED ON SHEET C3 & C6 UNLESS A CERTIFIED GEOTECH REPORT SPECIFIES AN ALTERNATE REQUIREMENT (SEE PAGE C6 FOR DETAILS) AND IS APPROVED BY DOLLAR GENERAL.

2. PROVIDE PARKING LOT IN GOOD CONDITION, PROPERLY STRIPED PER SHEET C2 WITH YELLOW PAINT. MINIMUM OF 31 PARKING SPACES REQUIRED, INCLUDING A MINIMUM OF 2 HANDICAP ACCESSIBLE SPACES (PROPERLY MARKED, SIGNED, AND ADA COMPLIANT).

3. PROPER ACCESS FOR DOLLAR GENERAL'S FREIGHT TRUCKS (FREIGHT TRUCKS ARE APPROXIMATELY 73'-0" IN TOTAL LENGTH) ARE REQUIRED DURING NORMAL BUSINESS HOURS. THIS INCLUDES A TRUCK PATH THAT IS FREE OF LANDSCAPE ISLANDS, SIGNS, LIGHT POLES, AND OTHER BARRIERS WHILE MAINTAINING WIDE RADIUS CURVES ON ALL ENTRANCES AND EXITS. HEAVY DUTY PAVING (SEE PAGE C6 FOR SPECIFICATIONS) REQUIRED FOR TRUCK PATHS.

4. PROVIDE PROTECTION (BOLLARDS, GUARD RAILS, OR EQUIVALENT) FOR ELECTRIC, GAS, HVAC, AND WATER METERS THAT ARE IN POTENTIALLY HAZARDOUS LOCATIONS.

5. CONTRACTOR WILL COMPLETE ALL SITE WORK: FINAL GRADING, LANDSCAPING, SEEDING, PAVING, RETENTION, AND REMOVAL OF DEBRIS.

6. ROUTE DOWNSPOUTS UNDER SIDEWALKS AS DETAILED ON SHEET C2 AT ALL SIDEWALK LOCATIONS.

7. PLEASE NOTE THAT THERE SHOULD NOT BE ANY PARKING STOPS LOCATED DIRECTLY IN FRONT OF OR DIRECTLY ADJACENT TO THE BUILDING.

8. EROSION CONTROL AROUND PROPERTY IS REQUIRED BY CONTRACTOR.

9. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING ALL VEGETATION AND REGIONAL APPROPRIATE LANDSCAPING. ALL LOCAL LANDSCAPE REQUIREMENTS MUST BE MET.

10. THE GRADE FOR THE PAVED TRUCK RECEIVING LANE IS NOT TO EXCEED 2.5%. IF THIS CONDITION CANNOT BE MET, NOTIFY DOLLAR GENERAL IN WRITING WITH PROPOSED GRADING PLAN FOR APPROVAL.

11. THE GRADE FOR THE PAVED PARKING AREA IS NOT TO EXCEED 3.5%. IF THIS CONDITION CANNOT BE MET, NOTIFY THE DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT IN WRITING WITH PROPOSED GRADING PLAN FOR APPROVAL.

12. THE CONCRETE DELIVERY TRUCK RECEIVING PAD MUST BE A MINIMUM OF 16'X16'. THE CONCRETE PAD MUST SLOPE AWAY FROM THE BUILDING AT 1/8" PER FOOT.

13. THE CONCRETE DUMPSTER PAD MUST BE A MINIMUM OF 18' X 18'.

14. IF REQUIRED, THE DUMPSTER ENCLOSURE MUST BE 18' WIDE BY 12' DEEP AND HAVE WOOD FENCE ON SIDES AND REAR WITH CHAIN LINK GATES AND PRIVACY SLATS AS A MINIMUM BASIS OF DESIGN.

15. CURBING OR CONCRETE PARKING STOPS SHOULD BE LOCATED AT PERIMETER PARKING ZONES ONLY.

16. LANDSCAPING AND SITE WORK SHALL BE FREE OF DEBRIS AND IN LIKE NEW CONDITION.

E. HVAC SECURITY FENCING:

(**ONLY TO BE USED IF HVAC UNITS ARE ON THE GROUND)

PROVIDE THE FOLLOWING WHEN THE STORE IS DEFINED AS BOTH SELECT AND UTILIZING NNN LEASE.

1. PROVIDE 69 LINEAL FEET x 8'-0" HIGH 6 GAUGE CHAIN LINK FENCING.

2. SCHEDULE 40 GALVANIZED PIPE.

3. PROVIDE POLYETHYLENE THERMOPLASTIC PRIVACY SLATS, COLOR TO MATCH BUILDING WITH UV INHIBITORS. USE WHEN UNITS ARE FACING STREET OR RESIDENTIAL.

4. PROVIDE (2) 30" GATES WITH COMMERCIAL GRADE HEAVY DUTY HINGES AND LOCKS, FRAMES TO BE SAME AS TOP RAIL.

5. MAINTAIN A MINIMUM OF 4'-0" IN-BETWEEN UNITS AND FENCING. FENCING IS TO BE 6" INSIDE OF THE EDGE OF CONCRETE PAD. ADJUST PAD AND FENCING DIMENSIONS ACCORDINGLY.

6. PROVIDE RAZOR COIL FULL LENGTH OF FENCING, 18" DIAMETER, GALVANIZED.

7. CONFIRM NUMBER OF UNITS AND SIZE OF UNITS AND ADJUST PAD AND FENCING ACCORDINGLY.

** UTILITY WARNING **

48 HOURS
BEFORE YOU DIG
CALL
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR
UNDERGROUND UTILITY LOCATION

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-6084

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR. 72022

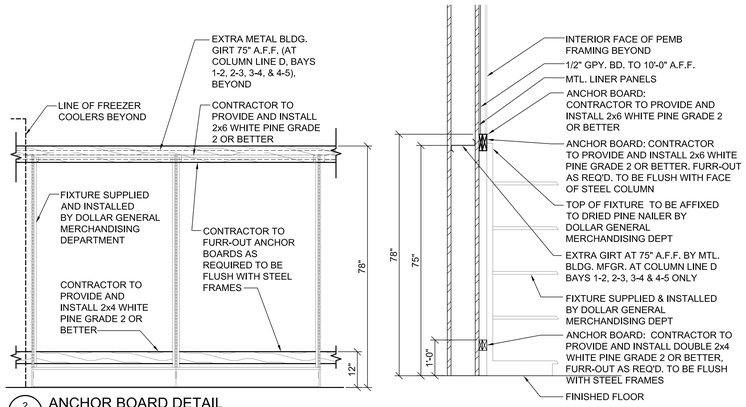
DOLLAR GENERAL®

CONSTRUCTION NOTES & SPECS.

PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/09/2016

C-7

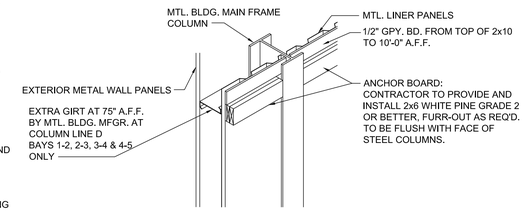
SHEET 7 of 7



2 A1 ANCHOR BOARD DETAIL
SCALE: NTS (1/2"=1'-0")

DRINK FIXTURE WALL MOUNTING SUPPORT NOTES:

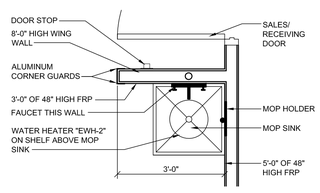
1. PROVIDE AND INSTALL 2X6 WHITE PINE - GRADE 2 OR BETTER.
2. PROVIDE AND INSTALL 2X4 WHITE PINE - GRADE 2 OR BETTER.
3. FASTEN THE 2X6 TO WALL WITH THE TOP EDGE OF THE BOARD AT 78" A.F.F. AND ANCHORED TO METAL BLDG, GIRT @ 75" A.F.F., REFER TO FIXTURE PLAN FOR LENGTH AND LOCATION OF BOARD.
4. FASTEN THE 2X4 TO THE WALL WITH THE TOP EDGE OF THE BOARD AT 12" A.F.F., REFER TO FIXTURE PLAN FOR LENGTH AND LOCATION OF BOARD.
5. PRE-DRILL PILOT HOLES IN ALL BOARDS PRIOR TO INSTALLATION TO PREVENT WOOD SPLITS.
6. SECURE THE 2X6 WITH TWO SELF-TAPPING SCREWS @16" O.C. MINIMUM SCREW SIZE IS 4"x 1/4".
7. FASTEN THE 2X4 WITH WITH ONE SELF-TAPPING SCREW @16" O.C., MINIMUM SCREW SIZE IS 4"x 1/4".
8. CAULK THE EDGES OF THE 2x6 AT THE TOP AND BOTTOM WHERE IT MEETS THE WALL PRIOR TO PAINTING.
9. PRIME AND PAINT BOTH BOARDS TO MATCH WALL COLOR.



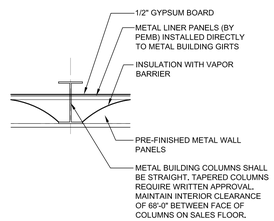
VERIFY LOCATION OF ANCHOR BOARDS WITH FINAL FIXTURE PLAN

FLOOR PLAN KEYED NOTES

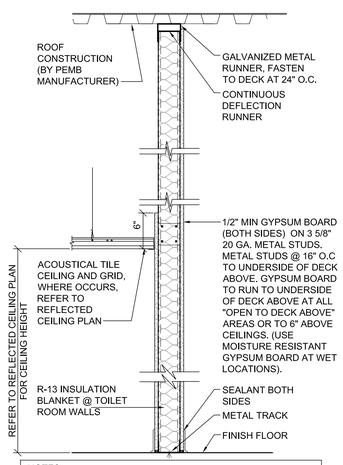
1. RECEIVING DOOR BUZZER - TORK MDL.#TA725 OR EQUAL
2. DOOR SCOPE, PROVIDED BY BASS SECURITY. REFER TO T01 AND DOOR SCHEDULE.
3. WEATHER STRIP & LOW PROFILE THRESHOLD PROVIDED BY BASS SECURITY. SEE TO T01 AND DOOR SCHEDULE.
4. STRIPE FLOOR FOR DESIGNATED EGRESS PATH (PAINT YELLOW).
5. PROVIDE AND INSTALL A TEN GALLON WATER HEATER ABOVE THE MOP SINK. SEE PLUMBING PLANS FOR MORE INFORMATION
6. 3 5/8" 20 GA. METAL STUDS @ 16" O.C. WITH 1/2" MINIMUM GYPSUM BOARD (BOTH SIDES). REFER TO NOTED WALL SECTION. REFER TO ROOM FINISH SCHEDULE FOR GYPSUM BOARD HEIGHT AT ANY PARTICULAR WALL.
7. VERTICAL METAL LINER PANELS (FULL HEIGHT) TO UNDERSIDE OF ROOF DECK. (BY PRE-ENGINEERED BUILDING MFGR.) (TO 8'-0" A.F.F. IN RECEIVING AREA)
8. STRIPE FLOOR FOR DESIGNATED ADA EGRESS PATH (PAINT YELLOW)
9. PRE-FINISHED METAL BUILDING PANELS (BY PRE-ENGINEERED BUILDING MANUFACTURER). CONCEALED FASTNER PANELS (OPTION: MBCI DESIGNER SERIES 16 "FLUTED" CONCEALED FASTENER PANELS)
10. CONCRETE SLAB, SEE SHEET S1 FOR MORE INFORMATION
11. METAL BUILDING FRAME. REFER TO NOTED WALL SECTION FOR ADDITIONAL INFORMATION.
12. 1/2" GYPSUM BOARD (TO 10'-0" A.F.F.) OVER "FULL HEIGHT" METAL LINER PANELS AND INSULATION WITH VAPOR BARRIER.
13. 8" SPLIT-FACED CMU PAINTED TO MATCH SIDE WALL PANELS. ALIGN FACE OF BLOCK WITH STEEL GIRT. PROVIDE PROPER ANCHORAGE TO STRUCTURE.
14. SLOPE CONCRETE 1/8" PER FOOT AWAY FROM BUILDING.
15. BROOM FINISH CONCRETE SIDEWALK, TYPICAL.
16. BRONZE STOREFRONT SYSTEM. REFER TO NOTED WALL SECTION FOR ADDITIONAL INFORMATION. CONTINUE GYPSUM BOARD ABOVE STOREFRONT TO DECK.
17. LINE OF SOFFIT OR CANOPY ABOVE.
18. A.D.A. COMPLIANT ACCESSIBLE RAMP WITH YELLOW PAINTED SIDES TO ACCESSIBLE PARKING STALLS.
19. MC CUE CART AND BUMPER GUARDS. TOP INSTALLED @ 3'-5" A.F.F. ORDER TRIM KIT FOR THIS PROTOTYPE.
20. WALL HYDRANT. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
21. REFRIGERATION BY DOLLAR GENERAL.
22. ROUND PIPE STEEL COLUMN. PAINT SW7005 PURE WHITE. WRAP STEEL COLUMN WITH TIGHT LOOP CARPET (BLACK) FROM BASE TO 48" A.F.F. (SEE SHEET S1 FOR RECESSED BASE AND BLOCK-OUT INFORMATION) (INTERIOR COLUMNS MUST BE ROUND, NO OTHER SHAPES ARE PERMITTED)
23. POWER POLE. COORDINATE FINAL LOCATION WITH ELECTRICAL DRAWINGS AND FINAL DOLLAR GENERAL FIXTURE PLAN (F1).
24. 6", 20 GA. METAL STUDS @ 16" O.C. W/ 1/2" GYP. BD. AND R-19 FACED BATT INSULATION AT CMU WALL TO 10'-0" A.F.F. (ALIGN FACE OF STUD WITH FACE OF METAL LINER PANEL ABOVE)
25. RPZ ASSEMBLY. SEE PLUMBING PLANS FOR MORE INFORMATION
26. FIRE EXSTINGUISHERS, PER CODE.
27. ENDCAP COOLER/FREEZER TO BE HARDWIRED THROUGH WHITE SO CORD WITH DUPLEX AT END. GC TO LEAVE BOTTOM HANGING AT 80" A.F.F. (SEE ELECTRICAL PLANS FOR MORE INFORMATION). CORD ANCHORED TO PURLINS ABOVE. COORDINATE LOCATION WITH FINAL DOLLAR GENERAL FIXTURE PLAN. (SEE SHEET E4 FOR EXAMPLES)
28. KIOSK COOLER TO BE HARDWIRED THROUGH WHITE SO CORD WITH QUAD AT END. GC TO LEAVE BOTTOM HANGING AT 48" A.F.F. (SEE ELECTRICAL FOR MORE INFORMATION). CORD ANCHORED TO PURLINS ABOVE. COORDINATE LOCATION WITH FINAL DOLLAR GENERAL FIXTURE PLAN. (SEE SHEET E4 FOR EXAMPLES)
29. CART AREA. REFER TO 4/A6 & 5/A6.
30. MC CUE RAILING IN FRONT OF ELECTRICAL PANELS 8'-0" LONG WITH TOP TWO RAILINGS AND NO MIDDLE POST.
31. STRIPE FLOOR FOR 3'-0" DESIGNATED EMS PANEL CLEARANCE (PAINT RED)



3 A1 ENLARGED MOP SINK PLAN
SCALE: NTS (1/2"=1'-0")

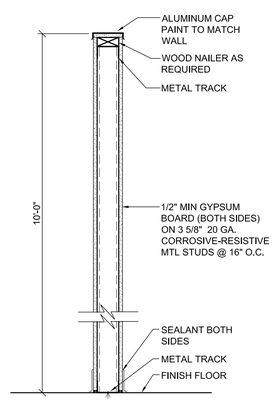


4 A1 DETAIL AT COLUMN
SCALE: NTS (1/2"=1'-0")

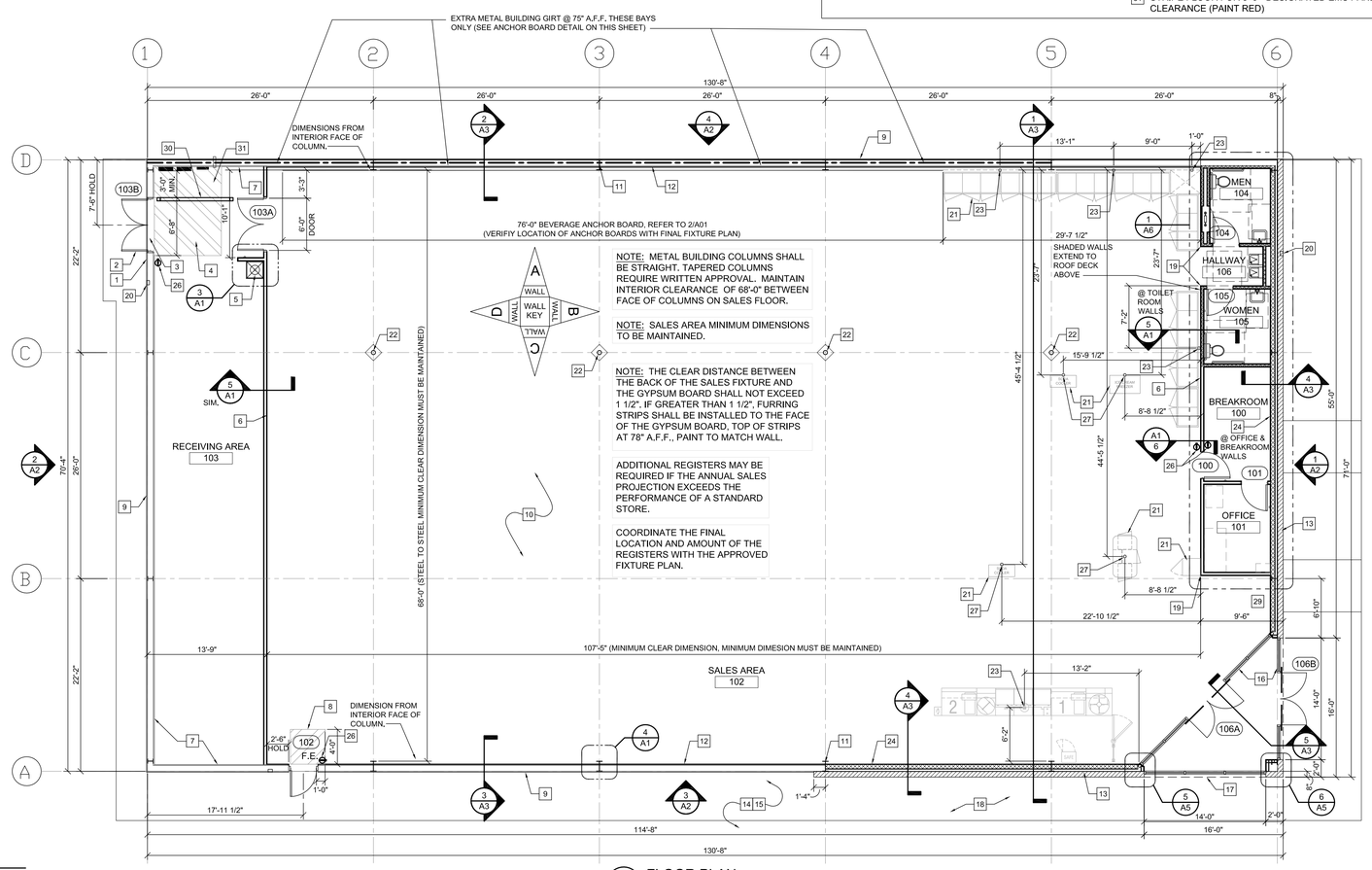


NOTES:
1. DO NOT FASTEN GYPSUM BOARD WITHIN 2" OF BOTTOM OF SLIP TRACK.
2. IN PLACE OF CONTINUOUS SLIP TRACK - METAL STUD CONTRACTOR MAY USE "VERTICLIP" BRAND SLIP CONNECTION TO STRUCTURE.
3. SCREW ANCHORS SHALL NOT EXTEND BEYOND TOP OF DECK ELEVATION.

5 A1 TYPICAL PARTITION
SCALE: NTS (1"=1'-0")



6 A1 PARTITION-OFFICE & BREAKROOM
SCALE: NTS (1"=1'-0")



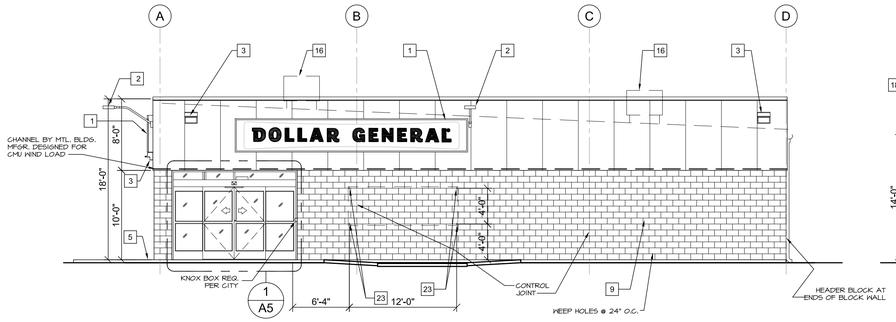
1 A1 FLOOR PLAN
SCALE: NTS (1/8"=1'-0")

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ✦ PLANNER ✦ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

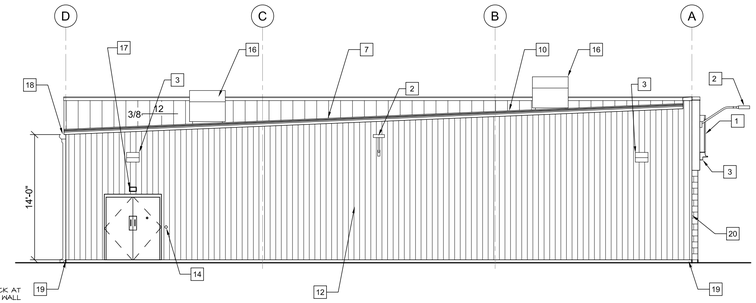
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

FLOOR PLAN
PROJECT # 1611
OCT. 24, 2016

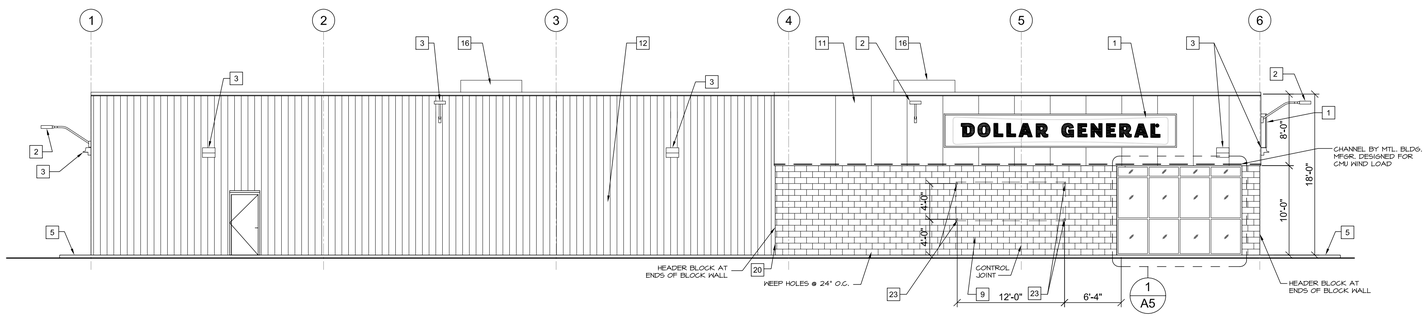
A1
SHEET 1 of 9



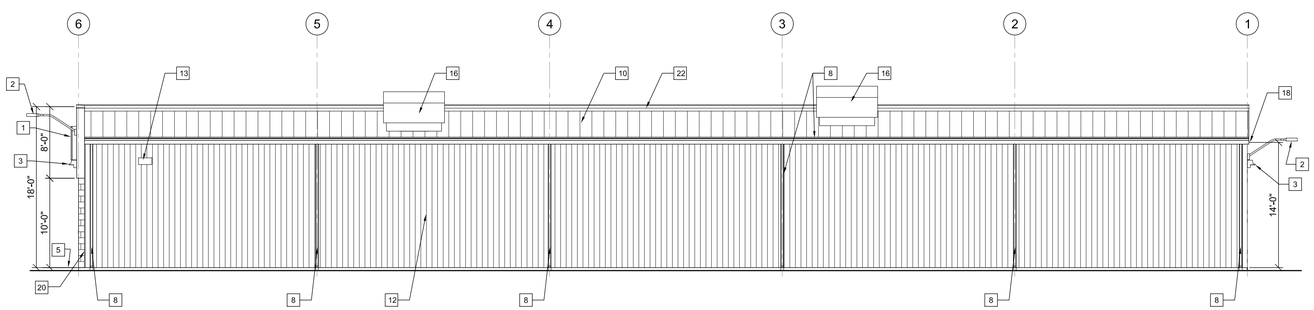
1 A2 FRONT ELEVATION
SCALE: 1/8"=1'-0"



2 A2 REAR ELEVATION
SCALE: 1/8"=1'-0"



3 A2 LEFT ELEVATION
SCALE: 1/8"=1'-0"



4 A2 RIGHT ELEVATION
SCALE: 1/8"=1'-0"

ELEVATION KEYED NOTES

1. SIGN FURNISHED AND INSTALLED BY DOLLAR GENERAL CORP. WITH CIRCUIT AS NOTED ON ELECTRICAL PLAN. SIGN TO BE CENTERED ON FRONT OF BUILDING. CONTRACTOR IS TO PROVIDE ADEQUATE BLOCKING AS REQUIRED BY SIGN MANUFACTURER TO SUPPORT SIGN WEIGHT OF UP TO 1,400 LBS. EXTERIOR CANOPY SIGN SHALL BE SUPPORTED BY THE FACE OF THE CANOPY. COORDINATE THE PROPER SIGNAGE TO BE USED WITH DOLLAR GENERAL.
2. LED LIGHT FIXTURE ON UPSWEEP ARM MOUNT. MOUNT TOP OF FIXTURE 12" BELOW TOP OF PARAPET.
3. LED WALL PACK. 12'-6" A.F.F. TO TOP OF WALL PACK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. (NOT USED)
5. SIDEWALK (SEE CIVIL PLAN FOR LOCATIONS)
6. (NOT USED)
7. TRIM - SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
8. GUTTER AND DOWNSPOUT - SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
9. 8" SPLIT FACE CONCRETE MASONRY UNIT. PAINT TO MATCH SIDE WALL PANELS.
10. STANDING SEAM METAL ROOF. GALVALUME FINISH.
11. (NOT USED)
12. PRE-FINISHED METAL WALL PANELS W/ CONCEALED FASTNERS (OPTION: MBCI DESIGNER SERIES 16 "FLUTED")
13. VENT FOR BATHROOM EXHAUST. REFER TO M01 FOR ADDITIONAL INFORMATION.
14. DOOR BUZZER. REFER TO E01 FOR ADDITIONAL INFORMATION.
15. (NOT USED)
16. HVAC UNITS MOUNTED ON ROOF. REFER TO MECHANICAL SHEET M1 FOR MORE INFORMATION.
17. OUTSIDE AIR TEMP. SENSOR MOUNTED OVER RECEIVING DOORS @ 8'-0" A.F.F.
18. MINIMUM EAVE HEIGHT IS 14'-0" A.F.F.
19. FINISHED GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR AT ALL NON PAVED AREAS.
20. FLASHING AT CMU/MTL. PANEL
21. (NOT USED)
22. WALL/ROOF FLASHING
23. 1/2" DIAMETER x 6" LONG STAINLESS STEEL EYE BOLTS (CLOSED) WITH 1" DIAMETER OPENINGS. DRILL AND EPOXY INTO BLOCK WALL. 4 BOLTS TO BE LOCATED AS SHOWN EACH SIDE OF ENTRY. TOTAL OF 8 BOLTS.

REGISTERED ARCHITECT DANIEL BARTLETT 10-24-2016 M 2263 ARKANSAS

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ✦ PLANNER ✦ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #18146)

2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

ELEVATIONS
PROJECT # 1611
OCT. 24, 2016

A2
SHEET 2 of 9

Fixture A, A1 & B

LIGHTING SCIENCE | LSPro

L-Bar Luminaire

HIGH-OUTPUT, LIGHT-WEIGHT, ENERGY EFFICIENT LED LIGHTING SOLUTION

Powerful, extremely light-weight and energy efficient, the new L-Bar is ideal for many commercial applications. With an output of up to 4500 lumens, the L-Bar is so powerful that one linear luminaire can replace a standard 2'x4' commercial troffer. Weighing it at only 10 ounces, the L-Bar is so lightweight that it can be mounted directly to the ceiling. Wet-rated and available in two- and four-foot lengths, the L-Bar is the ideal luminaire for both indoor and outdoor environments, including offices, retail, parking garages, stairwells, schools, hospitals—virtually anywhere you are currently using a standard commercial troffer.

- *Lightweight Design* – Low-profile, robust, polymer construction provides simple installation of this high-output light source.
- *Cost Effective* – Costs up to 75 percent less than a standard 2 ft x 4 ft commercial troffer.
- *Energy-Efficient* – Provides up to 150 lumens per watt.
- *Mountable* – Ships with clips that allow for direct mounting. One meter cables for pendant mounting are optional.

ENERGY STAR | ETL | RoHS COMPLIANT 2002/95/EC | WET

PRODUCT SPECIFICATIONS

PRELIMINARY SPECIFICATIONS	2 FT LBAR	4 FT LBAR
Color Temperature	5000K *(3000K and 4000K coming soon)*	
Output	up to 4500 lumens	
Beam Angle	100°	
CRI	80 standard 90 optional	
Power Consumption	15W	30W
Power Factor	≥0.9	
Efficacy (lm/W)	up to 150 lm/W	
Dimmable	No	
Input Voltage	100 -277 VAC	
Weight	1.2lbs (0.54kg)	
Housing	Polycarbonate	
Power Connections	white 6ft hard-wired flying leads	
Controls	Optional microwave occupancy sensor	
Lumen Maintenance (L_{70})	50,000 hours	
Mounting	Surface mount hardware included Pendant mount optional and separate	
Certifications	ETL ; FCC	
Environment	Wet-rated, IP65	
Warranty	5 Year Limited	

ALTERNATE VIEW

1350 DIVISION ROAD, SUITE 204, WEST WARWICK, RI 02893 | **LSGC.COM** | **1-877-999-5742** | 801 N ATLANTIC AVENUE, COCOA BEACH, FL 32931

Fixture C

Catalog Number	
Project	Type

FEATURES & SPECIFICATIONS

APPLICATION — The high performance luminaire is designed for cutoff applications where long life, low maintenance, and consistent color rendering are required. Areas with limited accessibility due to fixture location or where heavy pedestrian traffic makes maintenance difficult are ideal applications such as building facade lighting or wall mounted security lighting. The traditional design style of the luminaire allows it to be seemlessly integrated into existing systems when necessary.

CONSTRUCTION — The heavy duty housing is constructed of die cast aluminum. The optical assemblies are sealed in place using a silicone gasket for weather tight protection. ETL listed for wet locations (IP64). Additional IP66 rating available upon request.

FINISH — A Super Durable Polyester powder coat finish is electrostatically applied in our state of the art paint facility. Standard colors available: Black, Bronze, US Green, White. Custom colors available upon request.

OPTICAL SYSTEM — Made with a state of the art UV stabilized acrylic high performance refractive optical assemblies that use high transmicity materials to achieve precise photometric distributions. Available in a Type III beam configuration.

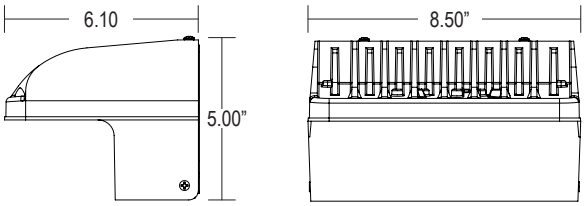
ELECTRICAL SYSTEM — Available in a high output 2 or 4 LED system in 5000K Cool White (+/- 500K) or 4100K Neutral White color temperatures propagated with Philips Lumileds LUXEON® M LED's. Available with 90-300V 50/60 Hz Driver. LED's rated for over 50,000 hours at 25°C ambient temperature. 0-10V dimming standard. Built-in surge protection up to 10 kV. Built-in Active PFC Function >95%/Full load. LED Power Supply conforms to UL1310 and UL8750 standards and is IP67 rated for wet locations.

MOUNTING — Quick sheet metal mounting bracket connects to a standard J-Box. The bracket has a unique hanging feature to allow easy wire connections. After connections are made, the fixture swings up and is secured with with two retaining screws at the top of the fixture. An additional back box is available for applications requiring conduit entry (See Accessories).

LISTINGS — LED Driver listed for wet locations (IP67). LED bricks ETL listed for wet locations (IP64). Meets US and Canadian safety standards. -40°C to 50°C ambient operation.

Small Heat Sink LED Wall Pack

LHSWP SERIES



DesignLights Consortium® Qualified. Please go to www.designlights.org for the current Qualified Products List. Further details about qualified models may be found under Family Models.

Series	Housing Height	Length & Width
LHSWP	5.00"	6.10" x 8.50"

ORDERING INFORMATION

Choose the bold face options for the appropriate luminaire configuration for your application and enter on the line above each fixture attribute. Accessories may be factory installed, depending on the particular accessory chosen, but still be ordered as a separate line item.

Example: **LHSWP1C4T3H1-BZ**

LHSWP _____ _____ _____ _____ _____ _____ _____ _____

Series	# of Bricks	Color Temp	# LED's per Brick	Optics	Drive Current	Voltage	Finish
LHSWP	**1** 1 Brick	**C** Cool White (5000K) **N** Neutral White (4100K)	**2** 2 LED **4** 4 LED	**T3** Type III	**F** 1400mA Driver **H** 2100mA Driver	**1** Multi-Volt[1]	**BK** Black **BZ** Bronze **GR** US Green **WH** White **SP** Special[2]

Accessories (Order as separate line items)

PSHSENCA	Back Box Enclosure with Conduit Entries
LHSWPBBU	2000 Lumen/90 Minute Battery Back-Up with Fixture Back Box
P1000PC[3]	Button Type Photocell (requires PSHSENCA Back Box)
IP66[4]	Additional IP66 Fixture Rating

NOTES
1. Multi-Volt is an auto ranging power supply from 90V to 300V input.
2. Custom RAL color matching is available. Contact your Techlight sale representative for additional information.
3. P1000PC operates at 120V only. For photocells to operate at additional voltages, please consult your local Techlight representative. Back Box Enclosure required for Button Photocell mounting.
4. Additional IP66 rating may not be changed once production has begun on the fixtures.

All dimensions and specifications are subject to change without notice.

REV: 20161024-09

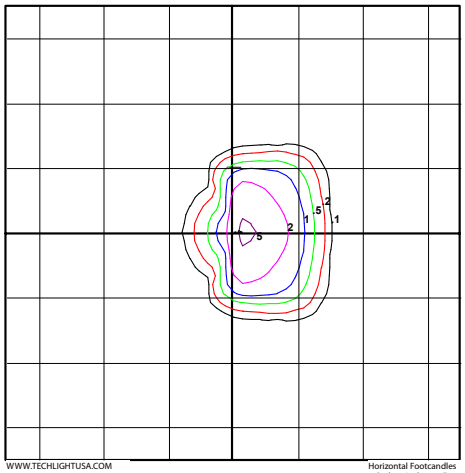
LHSWP Small Cutoff LED Wall Pack

PHOTOMETRICS

IES INDOOR REPORT PHOTOMETRIC FILE NAME: LHSWP1C4T3F1

Type III Optical Assembly 1 Brick, 1400mA, Cool White

38W LHSWP Wall Pack
Color Temperature: 5,000 K

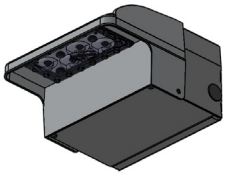


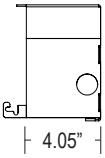
WWW.TECHLIGHTUSA.COM

Horizontal Footcandles
Scale: 1 Inch = 20 Ft.
Light Loss Factor = 0.90
Lumens Per Lamp = N.A. (absolute photometry)
Luminaire Lumens = 3061
Mounting Height = 8.00 Ft
Maximum Calculated Value = 6.13 Fc
Arrangement: Single
Arm Length = .5 Ft

ADDITIONAL FIXTURE ACCESSORIES

PSHSENCA
Back Box Enclosure with Side and Top Conduit Entries





P1000PC
Button-Type Photocell

All dimensions and specifications are subject to change without notice.

LHSWP Small Cutoff LED Wall Pack

LUMINAIRE CHARACTERISTICS

Cool White (5000K) 1400 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens TYPE III	System Wattage	L70 @ 25°C	Amperage Draw 120V	208V	240V	277V
1 BRICK	2	CW	1733	18W	> 50K	.15 A	.09 A	.08 A	.07 A
1 BRICK	4	CW	3150	36W	> 50K	.30 A	.18 A	.15 A	.13 A

Neutral White (4100K) 1400 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens TYPE III	System Wattage	L70 @ 25°C	Amperage Draw 120V	208V	240V	277V
1 BRICK	2	NW	1720	18W	> 50K	.15 A	.09 A	.08 A	.07 A
1 BRICK	4	NW	3055	36W	> 50K	.30 A	.18 A	.15 A	.13 A

Cool White (5000K) 2100 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens TYPE III	System Wattage	L70 @ 25°C	Amperage Draw 120V	208V	240V	277V
1 BRICK	2	CW	2536	22W	> 50K	.18 A	.11 A	.10 A	.08 A
1 BRICK	4	CW	4295	58W	> 50K	.49 A	.28 A	.25 A	.21 A

Neutral White (4100K) 2100 mA Drive Current

# of LED Bricks	# of LEDs per Brick	Color Temp	Delivered Lumens TYPE III	System Wattage	L70 @ 25°C	Amperage Draw 120V	208V	240V	277V
1 BRICK	2	NW	2460	22W	> 50K	.18 A	.11 A	.10 A	.08 A
1 BRICK	4	NW	4166	58W	> 50K	.49 A	.28 A	.25 A	.21 A

BUG RATINGS (BACKLIGHT, UPLIGHT AND GLARE)

Optic Type	BUG Ratings **B** (Backlight)	**U** (Uplight)	**G** (Glare)
Type III (T3)	1	0	1

WARNING: Maintenance performed including the replacement of LED bricks while power is still supplied to the lumenaire may result in system failures and will void the warranty.

TECHLIGHT

Techlight, Inc.
2707 Satsuma Drive
Dallas, TX, 75229
Phone: 214-350-0591, 800-225-0727, Fax: 214-350-9137
www.techlight.com

All dimensions and specifications are subject to change without notice.

BARRON EXITRONIX®

Fixture D

LED-90 Series

THERMOPLASTIC LED EMERGENCY LIGHTING UNIT

Model Number:

Accessories:

Job: Type:

Approvals:

FEATURES

- Each head contains 8 long-lasting, efficient, ultra-bright, white LEDs consuming 1.1 watts per head and providing 66 total fixture lumens
- Completely self-contained, compact, low-profile design
- Rugged, injection-molded UL94 V-0 flame retardant, high-temperature thermoplastic housing
- Remote capable - up to two 1.1 watt HLED remote heads
- AC lockout for ease of installation and installer protection
- Low voltage disconnect eliminates deep discharge
- Brown-out, short circuit and voltage surge protection
- Charge rate/power “ON” LED indicator light with test button
- Maintenance-free 3.6 volt NiCad battery
- UL listed 90 minute emergency run time, 24 hour recharge time
- Universal J-Box mounting system
- Optional Guardian Self-Test/Self-Diagnostics (G2) available
- Standard finishes: Black or white
- 120/277V dual primary, 60Hz input
- Suitable for damp location

The LED-90 Series combines a low-profile, contemporary appearance with LED economy and dependability. Fully adjustable heads complement any application.

3/5 WARRANTY

WARRANTY

Any component that fails due to manufacturer’s defect is guaranteed for 3 years with a separate 5 year pro-rated warranty on the battery. The warranty does not cover physical damage, abuse or acts of God. Manufacturer reserves the right to charge for such repairs if deemed necessary.

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

ORDERING INFORMATION Example: LED-90-G2

Series	**Finish**	**Options** (Factory Installed)	**Accessories**[2] (Field Installed)
LED-90	BLANK = White	G2 = Self-Test/Self-Diagnostics	WG-90 = Wire Guard (Back Mount)
	BL = Black	R[1] = Remote Capacity	XG-90 = Poly Guard (Back Mount)
			WPV-2 = Wet Location/Vandal Guard (Back Mount)

[1] For use with single or double HLED remote lamps only
[2] Order as separate line item

CONSTRUCTION

The LED-90 is a precision molded unit with lamp housings constructed of UV stable 5VA flame retardant, corrosion proof thermoplastic. Units resist denting, peeling, scratching and corrosion. Not recommended for outdoor use. Tool-less access provided for easy maintenance, universal J-box mounting pattern and keyhole slots provided for simple installation.

ILLUMINATION

Illumination is accomplished utilizing high-intensity, long-life LEDs and consumes only 1 watt nominal power per head. LEDs provide excellent illumination while maximizing energy efficiency. LEDs are a maintenance-free solution, providing up to 100,000 hours of use without failure.

ELECTRICAL

Input

Dual-voltage input 120 or 277VAC @ 60Hz

Sealed Nickel Cadmium Battery – NiCad

Exitronix sealed nickel cadmium batteries are maintenance-free with a life expectancy of 15 years. Nickel cadmium batteries offer high discharge rates and continue to perform in a vast temperature range from 0-40 degrees C. NiCad technology provides long lasting, safe and reliable performance by utilizing the jelly-roll design and allows a Ni-Cad cell to deliver a much higher maximum current than an equivalent size alternative battery. As a relatively larger area of the electrode is in contact with the active material in each cell, the internal resistance for an equivalent sized NiCad cell is lower which increases the maximum current that can be delivered.

Emergency

The LED-90 will operate for a minimum of 90 minutes during a loss of power with a 24 hour maximum recharge time for the battery. The LED-90-R will run for 180 minutes in emergency mode if no remote load is connected.

Brownout Circuit

The brownout circuit monitors the flow of AC current to the unit and triggers the emergency lighting system once a set reduction of AC power occurs. This dip in the voltage will cause many fixtures to extinguish causing loss of normal lighting even though a total power failure has not occurred.

Low Voltage Disconnect

When the battery's terminal voltage falls below predetermined levels, the low-voltage circuit disconnects the emergency lighting load. The disconnect remains in effect until normal power is restored, preventing deep battery discharge and improving the life of the battery. The disconnect will also automatically reconnect the load circuit once the battery voltage returns to a normal value after charging.

Solid-State Transfer

The unit features a solid-state switching transistor which eliminates damaged contacts or mechanical failures associated with relays. The switching circuit is designed to detect a loss of AC power and automatically energizes the lamps. Upon restoration of the AC voltage, the emergency lamps will switch off and the charger will automatically recharge the battery.

Overload and Short-Circuit Protection

The solid-state overload monitoring system in the DC circuit disconnects the lamp load from the battery should excessive wattage demands be made and automatically resets when the overload or short-circuit is removed. This overload current protective characteristic eliminates the need for fuses or circuit breakers for the DC load.

Test Button

Our easily located test button allows for manual verification of proper operation of the transfer circuit and emergency lamps.

INSTALLATION

Units are mountable in any orientation, on wall or ceilings. A universal mounting pattern and rear keyhole slots are provided as well as top and side conduit entry options for ease of installation.

Damp Location Rated (Option DR)

Damp location rating ensures the fixture is designed to operate safely in outdoor locations that are protected from the direct elements. Damp location rated fixtures may be installed indoors. Products with damp location ratings are not designed to withstand constant or significant moisture or direct contact with water or steam.

Guardian Self-Test/Self-Diagnostics (Option: G2)

The Guardian circuit continuously monitors the operating condition of the AC power, battery supply voltage, emergency lamp continuity and charging circuit.

The purpose of this option is to provide visual signaling in response to a fault at the EXIT sign battery and/or battery charger. If a failure is detected, visual status will occur immediately via the CHARGER LED and/or the BATTERY FAULT LED. The LEDs will stay illuminated until the fault is corrected.

The Guardian circuit also monitors the transfer circuit as well as performing automatic code compliant testing. The Guardian circuit will perform a 30 second discharge and self-test every 28-30 days. A 90 minute discharge and self-test is performed every 6 months.

Remote Capable (Option: R)

The R option provides this unit with an additional 2.2 watts of remote for use with HLED remote lamps.

CONFORMANCE TO CODES & STANDARDS

The LED-90 Series is UL listed and meets or exceeds the following: UL 924, NEC requirements and NFPA 101.

REMOTE LAMPS (Order Separately)

FEATURES

- Each lamp contains 8 long lasting, efficient ultra-bright white LEDs.
- For use with LED-90 or 400C units only
- Wet location option available

Single Lamp with
Weatherproof (WP) Option

Double Lamp with
No Options

REMOTE ORDERING INFORMATION **Example:** HLED-G2

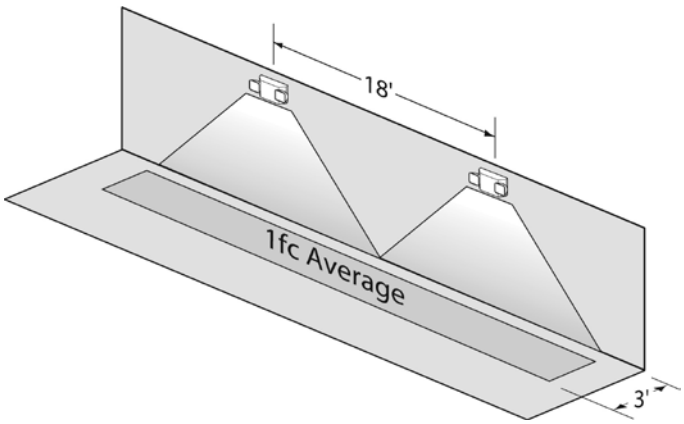
Series	Options
HLED = Single Remote Lamp	G2 = Self Test / Diagnostics
2HLED = Double Remote Lamp	WP = Weatherproof Applications

Order remote lamps as separate line item

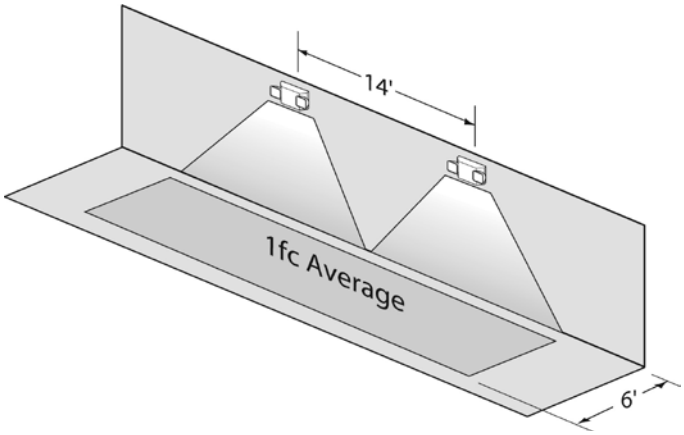
Remote lamps with G2 option are compatible with LED emergency lighting units with G2 option only.

SAMPLE PHOTOMETRICS

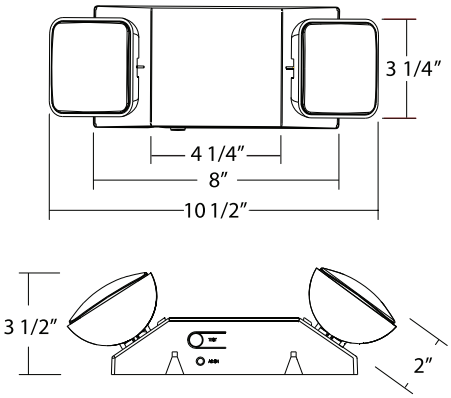
Using multiple units mounted at a typical 7.5' delivers 18' center-to-center spacing on a 3' wide egress path.



Using multiple units mounted at a typical 7.5' delivers 14' center-to-center spacing on a 6' wide egress path.



DIMENSIONS



Fixture E

VLED-EL90 Series

Thermoplastic LED Exit Combo

Combining LED exit illumination with reliable LED lamp heads, this attractive low-profile design offers maintenance-free, long life dependable service. Easily mounts above doors and in restricted spaces to fit any application.

Model: _____ Date: _____

Accessories: _____

Job Name: _____ Type: _____

FEATURES

- LED exit combo where each of the heads contain 8 long lasting, efficient, ultra-bright white LEDs using 1.1 watts per head
- Easy to install, snap together design
- Rugged, injection-molded UL94 5VA flame retardant, high-temperature thermoplastic housing
- Remote capable - up to 2 CLED remote heads
- Universal style - includes 2 face plates, a back plate and mounting canopy
- Charge rate/power “ON” LED indicator light with test button
- Low voltage disconnect eliminates deep discharge
- Maintenance-free NiCad battery
- Ceiling or wall mount
- UL listed 90 minute emergency run time, 24 hour recharge time
- Constant, uniform illumination by long-life, high intensity, red or green LEDs
- Fully-illuminated 6” characters with 3/4” stroke
- Optional Guardian Self-Test/ Self-Diagnostics (G2) available
- Field selectable directional chevron knockouts
- 120/277V dual primary, 60Hz input
- Standard finishes: Black or White
- Suitable for damp location

5/5 WARRANTY

WARRANTY

Any component that fails due to manufacturers defect is guaranteed for 5 years with a separate 5 year pro-rated warranty on the battery. The warranty does not cover physical damage, abuse or acts of God. See the full Exitronix warranty document for detailed information.

ORDERING INFORMATION Example: VLED-U-WH-EL90-G2

Series	**Style**	**Finish**	**Type**	**Options** (Factory Installed)	**Accessories**[4] (Field Installed)
VLED = Red	1 = Single Face	WH = White	EL90 = LED Lamps	G2 = Self-Test/Self-Diagnostics	ER1-KIT[3] = 1’ Pendant Mount Kit
GVLED = Green	U[1] = Universal	BL = Black		R[2] = Remote Capability	ER2-KIT[3] = 2’ Pendant Mount Kit
					VEPA = Pendant Adapter
Notes					WG-5 = Wire Guard (Back Mount)
[1] Universal includes 2nd exit face and backplate					XG-EL90 = Poly Guard (Back Mount)
[2] For use with single or double CLED remote lamps only					
[3] Requires VEPA option					
[4] Order as separate line item					

CONSTRUCTION
The VLED-EL90 series is constructed of a precision-molded housing utilizing 5VA flame retardant, corrosion proof, UV stable thermoplastic. N.F.P.A. approved Field-selectable chevrons. Units resist denting, peeling, scratching and corrosion.

ILLUMINATION
Fully illuminated 6" letters with 3/4" stroke is achieved with high output, long lasting red or green LEDs. An exclusive color-matched diffuser eliminates hot spots and striations, providing optimal light output.

EMERGENCY LIGHTS
6 volt, 1.1 watt high intensity LED lamp heads.

ELECTRICAL
Input
Dual-voltage input 120 or 277VAC @ 60Hz.

Nickel Cadmium Battery – NiCad
Exitronix nickel cadmium batteries are maintenance-free with a life expectancy of 15 years. Nickel cadmium batteries offer high discharge rates and continue to perform in a vast temperature range from 32°F - 104°F (0°C - 40°C).

Emergency
The VLED-EL90 series exit will operate for a minimum of 90 minutes during a loss of power with a 24 hour maximum recharge time for the battery.

Low Voltage Disconnect
Low Voltage Disconnect (LVD) measures the battery terminal voltage. The LVD continuously monitors the battery terminal voltage and if it should fall below a preset voltage threshold, the LVD will disconnect the load. When the battery is recharging and voltage is raised above another preset voltage threshold, the load is automatically reconnected.

Solid-State Transfer
The circuit features solid-state switching for emergency lamps, eliminating concerns of damaged contact or mechanical failures associated with relays. The switching circuit detects a loss of line voltage and automatically switches to emergency mode.

Test Button
The test button is easy to locate and provides manual verification of the transfer circuit and emergency lamps.

INSTALLATION
Simple snap together universal design allows for faceplate and back plate to be fully interchangeable. Mounting canopy is supplied with all signs and snaps into enclosure with two positive locking tabs.

Damp Location Rated
Damp location rated fixture that is normally or periodically subject to condensation of moisture in, on or adjacent to, and includes partially protected locations.

Guardian Self-Test/ Self-Diagnostics (Option: G2)
The Guardian Bi-Color Circuit is factory preset; without any field adjustments needed. It continuously monitors the performance condition of the AC power, battery supply, and charging circuitry.

The intent of this option is to provide visual signaling to identify fault at the Exit. Fault indicators are as follow:

Battery Disconnection: (Steady RED)
Battery Recharge Failure: (Flashing RED)
Battery Failure: (RED Blinking '2' times)
LED Failure: (RED Blinking '3' times)

Remote Capable (Option: R)
The R option provides this unit with an additional 2.2 watts of remote capacity for use with (2) CLED or (1) 2CLED remote lamps.

CONFORMANCE TO CODES & STANDARDS
The VLED-EL90 Series is UL listed and meets or exceeds the following: UL 924, NEC requirements and NFPA 101.

REMOTE LAMPS (Order Separately)
FEATURES
- Each lamp contains 8 long lasting, efficient ultra-bright white LEDs
- For use with VLED-EL90 or CLED combo units only
- Wet location option available

Single Lamp with
Weatherproof (WP) Option

Double Lamp with
No Options

REMOTE ORDERING INFORMATION **Example:** CLED-G2

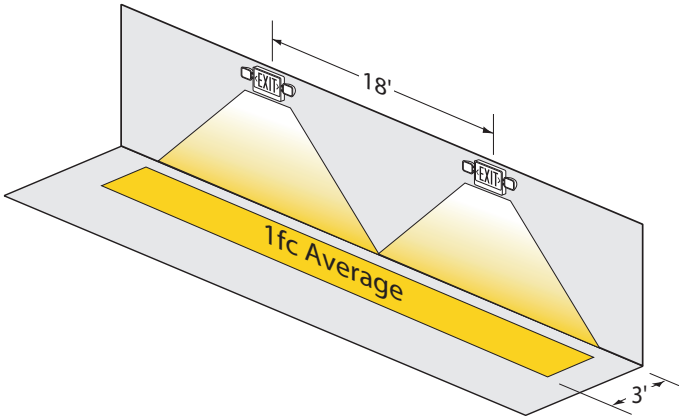
Series	Options
CLED = Single Remote Lamp	G2 = Self Test / Diagnostics
2CLED = Double Remote Lamp	WP = Weatherproof Applications

Order remote lamps as separate line item
Remote lamps with G2 option are compatible with LED combo units with G2 option only.

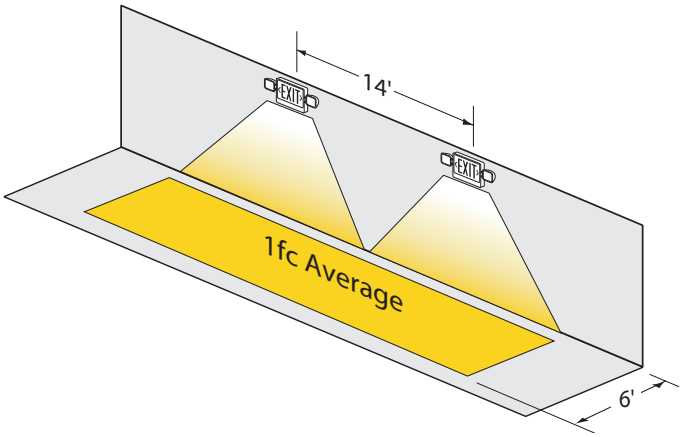
Fixture F

SPACING GUIDES

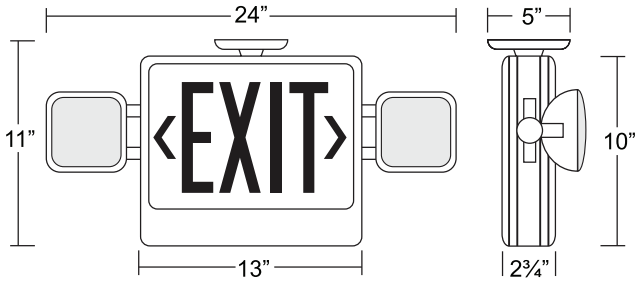
Using multiple units mounted at a typical 7.17' delivers 18' center-to-center spacing on a 3' wide egress path.



Using multiple units mounted at a typical 7.17' delivers 14' center-to-center spacing on a 6' wide egress path.



DIMENSIONS



Specifications are subject to change without notice.
Installation must be performed in accordance with
Barron Lighting Group installation instructions.

108000187 05/16

BARRON lighting group
800.533.3948 • www.barronltg.com

HYPERNOVA™ MULTI-PURPOSE FIXTURE

One Fixture - Many Uses. Replace 250W to 600W Metal Halide

Fixture G

HN15 without mount option

RECOMMENDED APPLICATION

- Parking Lot
- Area Floods
- Street Lights
- Wall Packs
- High Bays
- Low Bays

PRODUCT CERTIFICATIONS

- UL 1598 | CSA C22.2 No.250
- CSA Wet Location
- DLC Qualified Product-Select Categories

PROTECTION AGAINST

- Short circuit
- Over-current
- Over-voltage
- Over-temperature with auto-recovery

VERSATILITY, PERFORMANCE & ECONOMY. Why design a different fixture for every application? Our HyperNOVA series of fixtures utilize: CREE's most advanced LEDs for long-life and high performance; LEDil optics for optimal light distribution; and mounting options for most applications.

S - Slipfitter Mount

W - Flush Wallpack Mount

A6 - Square Pole Mount

T - Trunnion Mount

U - U Yoke

H - Hook

HILUMZ HYPERNOVA 10/7 YEAR WARRANTY

10-year warranty on LEDs and fixture and a 7-year warranty on the LED Driver. See full warranty on website HiLumzUSA.com

30-DAY MONEY BACK SATISFACTION GUARANTEE

Limit of 2 Fixtures per customer trial. Money Back Includes shipping costs.

HiLumzUSA.com | sales@HiLumzUSA.com | O: 678.867.9200 | F: 404.537.1900

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HYPERNOVA™ HN15 LED Fixtures

When “Super” Just Isn’t Enough

HiLumz®
Putting The World In A New Light

PRODUCT SPECS*

*Clear Glass	150 Watt	120 Watt	100 Watt	80 Watt
AC Input Amps	240V - 0.667A	277V - 0.492A	240V - 0.44A	277V - 0.336A
AC Input Voltage	100-277V 347-480V	100-277V 347-480V (CALL)	200-480V	100-277V 347-480V (CALL)
Wattage (AC / DC)	160W / 150W	130W / 120W	105W / 100W	89W / 80W
# of LEDs	16 CREE	16 CREE	16 CREE	16 CREE
Lumens (Delivered)	14,340	12,640	10,900	9,700
Efficacy (Lm/W) (Delivered)	90	97	104	107
CRI	>70 / 50K	>70 / 50K	>70 / 50K	>70 / 50K
Dimensions (LxWxH - No Mount)	15.0” x 13.5” x 3.5”	15.0” x 13.5” x 3.5”	15.0” x 13.5” x 3.5”	15.0” x 13.5” x 3.5”
Weight (No Mount)	12.2 lbs.	12.0 lbs.	12.0 lbs.	11.5 lbs.

PERFORMANCE SPECS

LED L70 Life Hours	>100,000 @ 55°
Beam Angle	125°
Operating Temp	-40°C to +60°C
Color Temp	5000K / 4000K

ADDITIONAL FEATURES

Optics	Street, Parking and High/Low Bay
Mounting	Area: Pole Arm, U-Yoke, Slipfitter, Trunnion Wallpack: Flush Bracket High Bay: Hook
Glass Type	Clear or Prismatic

ORDER SHEET

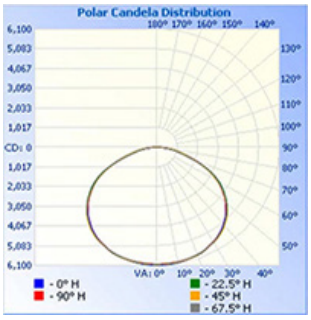
Order Example: HiLumz® HyperNova HN15 Clear Glass, 120W, 5000K, 277V, NonDimmable, Hook, No Optics

HN15C-120-50K-D2N-H

PRODUCT	CCT	DRIVER		MOUNTING		OPTICS
HN15C-120	**50K**	**D2**	**N**	**H**		
HN15C-80 = 80W **HN15C-100 =** 100W **HN15C-120 =** 120W **HN15C-150 =** 150W **HN15P** For Prismatic	**50K =** 5000K **40K =** 4000K	**D2 =** 120-277V **D3 =** 347-480V (100W & 150W) 347-480V for 80W & 120W Call For Options	**D =** Dimmable **N =** Not Dimmable	***Street/Area*** **A6 =** 6” Square Pole **A1 =** 10” Square Pole **S =** Slipfitter **T =** 2 Piece Trunnion **U =** U-Yoke	***High-Low Bay*** **H =** Hook ***Wallpack*** **W =** Wall Bracket	**If Blank =** No Optics **T3 =** Type III **T5 =** Type V **56 =** 56° **31 =** 31°

OTHER OPTIONS

SURGE PROTECTION	PHOTO CELL SENSOR
SP277	**PC120R**
SP277 = Surge Protector - 20kA, 100-277V **SP480 =** Surge Protector - 20kA, 347-480V	**PC120R =** Photo Cell 120V (*Rotatable) **PC277R =** Photo Cell 200-277V (*Rotatable)



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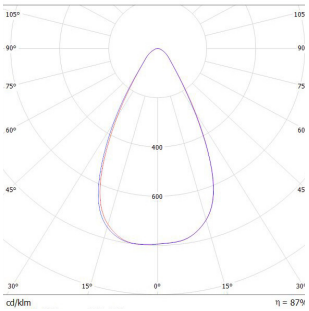
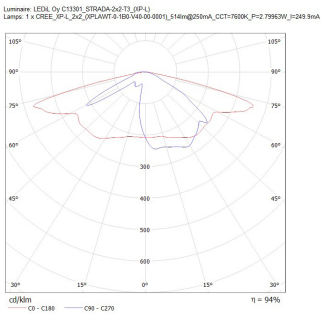
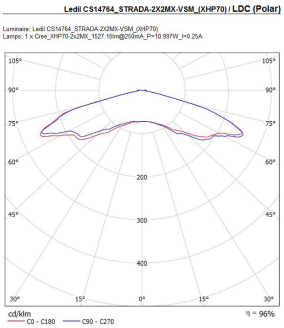


56



T3



T5

HiLumzUSA.com | sales@HiLumzUSA.com | O: 678.867.9200 | F: 404.537.1900

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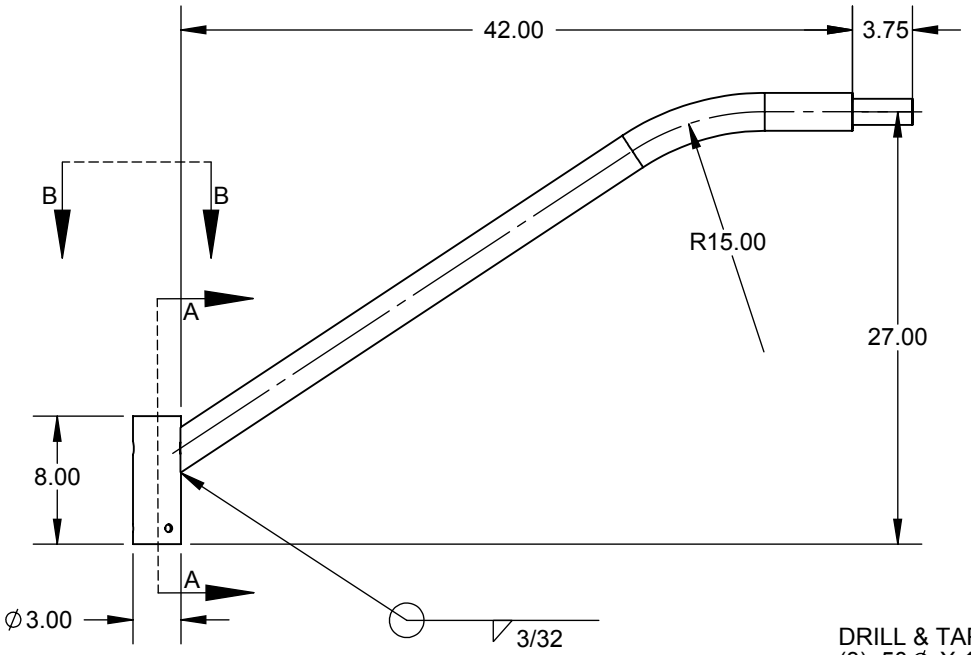
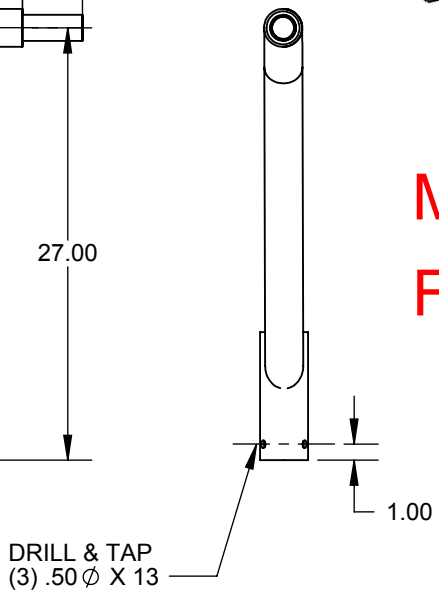
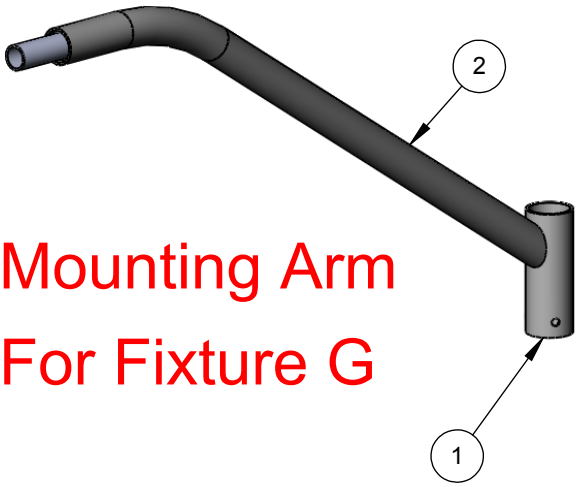
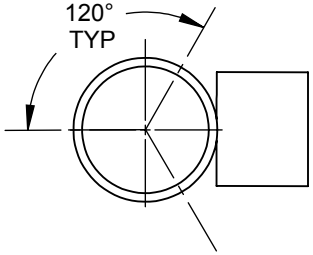


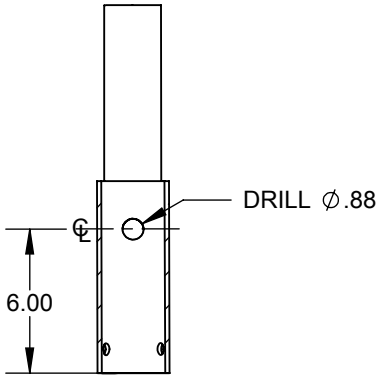




Mounting Arm For Fixture G



SECTION B-B
SCALE 1 : 4



SECTION A-A
SCALE 1 : 8

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	POLE CAP	3.00∅ X 8.00 X 7 GA PIPE	1
2	ARM	2.00∅ X 57.65 SCH 40 PIPE	1
3	UPSWEEP TENON PLATE	2.0625 OD X .25 THK PLATE	1
4	UPSWEEP TENON	3.75LG X 1.625 OD SCH 40 PIPE	1

PROPRIETARY AND CONFIDENTIAL
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NEXT ASSY | USED ON
APPLICATION

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±
ANGULAR: MACH ± BEND ±
TWO PLACE DECIMAL ±
THREE PLACE DECIMAL ±

MATERIAL
MATERIAL

FINISH
FINISH

DO NOT SCALE DRAWING

	NAME	DATE
CREATED	PRM	3/10/2010
REVD	PRM	4/7/2010
REVD	PRM	8/1/2012
REVD		
REVD		

CONFIGURATION

TECHLIGHTUSA.COM

SINGLE UPSWEEP ARM

SIZE A | DWG. NO. Single Arm Assy | REV.

SCALE:1:24 | WEIGHT: | SHEET 1 OF 1

Bryant Planning Commission

SMALL SCALE DEVELOPMENT
COMMERCIAL BUILDING
CHECKLIST

CITY OF BRYANT
210 SW 3RD STREET
BRYANT, AR 72022
501-943-0309

PC MEETING DATE:	THURSDAY OF EACH WEEK
TIME:	9:00 A.M.
PLACE:	ADMINISTRATION CONFERENCE ROOM-BRYANT OFFICE COMPLEX
AGENDA DEADLINE:	5:00 P.M. FRIDAY PRIOR TO SCHEDULED MEETING DATE

REQUIREMENTS FOR SUBMISSION

1. COMPLETED CHECKLIST (SUBDIVISION OR BUILDING)
2. ADA/ABA FORM COMPLETED
3. TWO FULL SETS OF BUILDING PLANS
4. 12 FOLDED COPIES OF SITE PLAN (MINIMUM SIZE 17" X 34") THAT INCLUDES THE FOLLOWING:
   - A, VICINITY MAP
   - B. LEGAL DESCRIPTION
   - C. LANDSCAPING PLAN
5. 12 FOLDED COPIES OF FLOOR PLAN
6. 12 COPIES OF FRONT AND REAR BUILDING ELEVATIONS
7. A CD IN .PDF FORMAT
8. COPY OF ADEQ STORMWATER POLLUTION PREVENTION PLAN FOR PROPERTY PARCEL CONTAINING ONE ACRE OR LARGER.
9. 2 COPIES OF STORMWATER DETENTION PLAN
10. $250.00 FOR STORMWATER DETENTION AND DRAINAGE PLAN REVIEW

ALL REQUIREMENTS LISTED ABOVE MUST BE COMPLETED AND ATTACHED BEFORE SUBMITTING APPLICATION TO BE PLACED ON THE PLANNING COMMISSION AGENDA.

NOTE: WHEN MAKING CHANGES TO AN APPROVED SITE PLAN, A REVISED SITE PLAN MUST BE SUBMITTED TO THE BRYANT PLANNING COMMISSION FOR APPROVAL. THIS MUST BE DONE PRIOR TO IMPLEMENTATION. FAILURE TO COMPLY WILL RESULT IN PENALTIES/FINES BEING IMPOSED IN ACCORDANCE WITH CITY ORDINANCES.

I HAVE COMPLIED WITH THE REQUIREMENTS LISTED ABOVE AND HAVE CHECKED ALL OF THE BOXES ON THE CHECKLIST WHICH APPLY TO THIS PROJECT SUBMITTAL.

Dana Batt

SIGNATURE

10-21-2016

DATE

City of Bryant Commercial Building Checklist

Name of Development Dollar General Store #18146

Site Location Springhill Road & Northlake Road **Current zoning** _____

Owner PB General Holdings (Springhill), LLC **Phone** 501-219-8899

I. Basic Information Needed On The Site Plan

- ▲ 1. Name of Development ✓
- ▲ 2. Current zoning ✓
- ▲ 3. Name and Address of owner of Record ✓
- ▲ 4. Name and address of the architect, landscape architect, engineer, surveyor, or other person involved in the preparation of the plan ✓
- ▲ 5. Date of preparation of the plan ✓
- ▲ 6. Vicinity map locating streets, highways, section lines, railroad, schools, & parks within ½ mile ✓
- ▲ 7. Legal description of the property with exact boundary lines
- ▲ 8. North arrow & Scale ✓
- ▲ 9. Identification of any land areas within the 100 year floodplain and within the 100 year floodway ✓
- ▲ 10. Lot area in square feet
- ▲ 11. Show scale (not less than 1" = 100') (paper size minimum 17" X 34") ✓
- ▲ 12. Existing streams, drainage channels, and other bodies of water ✓
- ▲ 13. Drainage easements for stormwater run-off and detention shown & labeled ✓
- ▲ 14. Location and name of existing streets ✓
- ▲ 15. Show source of water supply ✓
- ▲ 16. Show location of waste water connection to municipal system & sanitary sewer layout ✓
- ▲ 17. Fire Hydrant placement ✓
- ▲ 18. Proposed location of buildings and other structures, parking areas, drives, loading areas, service areas, alleys, walks, screening, and public streets ✓
- ▲ 19. Sufficient dimensions to indicate relationship between buildings, property lines, parking areas and other elements of the plan ✓
- ▲ 20. Extent and character of proposed landscaping. Common and/or Botanical plant names and sizes of new vegetation must be clearly indicated. ✓
- ▲ 21. Location, massing and pattern of existing vegetation to be retained ✓
- ▲ 22. Existing structures on the site ✓
- ▲ 23. Pedestrian and vehicular access points, sidewalks, crosswalks, etc. ✓
- ▲ 24. Typical building elevations depicting the style, size and exterior construction materials of the buildings proposed. Where several building types are proposed on the plan, such as apartments and commercial buildings, a separate sketch shall be prepared for each type. The elevations shall be drawn at a minimum scale of 1/16" to a foot and must show adjoining context. ✓
- ▲ 25. Any variance approvals

II. Additional Information Needed, But Not On The Site Plan

Commercial Building Worksheet

	Yes	No
Site is compatible with Master Street Plan	✓	
Proposed improvement is within building line setbacks Front N/A ft. Side N/A ft. CNR Side 5 ft. Back 55 ft.		
Parking requirements can be satisfied Floor Space 9600 sq.ft. divided by 300 = 30 (no. of parking spaces required)	✓	
Improvement is outside 100 year flood plain (if answer is no - Provide 404 Permit for site)	✓	
Lowest building floor level and all mechanical equipment are above FEMA 100 year flood elevation	✓	
Will there be a dumpster located on the site?	✓	
Will there be a construction site office?		✓
Have you made "One Call"?	✓	
Structure and site complies with ADA (Americans with Disability Act) and ABA (Architectural Barriers Act) Accessibility Guidelines	X	
Design complies with Arkansas Plumbing Code and National Electric Code requirements	X	
Foundation and structure meet earthquake requirements for Zone 1.	X	
Structure meets Arkansas Energy Code for specified use.	X	
Complies with Arkansas Fire Prevention Code	X	
Complies with International Code Council regulations	X	
Will a Site Clearance Permit be required? (City Ordinance 2002-03)	X	
Are you granted any variances by the Board of Adjustment?		✓
If you have been granted a variance please explain in detail:		

III. Landscaping Compliance With Requirements

	YES	NO
No planting within 5 feet of a fire hydrant	✓	
Spacing will be 40' between trees	✓	
Tree must be a minimum 3" in diameter at the base and 12' + tall	✓	
Existing trees meeting the minimum size can be counted to meet above criteria	✓	
No trees can be planted within 30 feet of a property corner or driveway	✓	
Shrubs along street right-of-way lines cannot exceed 30 inches in height	✓	

IV. Site Coverage Compliance with Requirements

(For your convenience we have listed the three commercial zoning site coverage requirements - choose the zoning for this project and complete only that section)

	YES	NO
1. C-1 Zoning - Neighborhood Commercial		
Lot area: minimum of 2,500 square feet; maximum 16,000 square feet	✓	
Front Yard: none required	✓	
Side Yard: minimum of 5 feet each side	✓	
Rear Yard: minimum of 55 feet	✓	
Maximum lot coverage of 70% of the total area of the site for all principal, accessory buildings, parking lots, sidewalks, private streets, or drives.	✓	
Parking: one space per each 200 sq. ft. of commercial use	✓	
Loading areas: physically separated from all streets with 10 ft grassy area	✓	
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	✓	
2. C-2 Zoning - Lots fronting along roadways designated as Interstate 30 and frontage roads, State Highway 5 and 183		
Front Yard: not less than 50 feet from front property line		
Side Yard: not required, except where they abut a street or a residential lot line then a minimum of 25 feet is required		
Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required		
A maximum lot coverage of 35% of the total area of the site for all principal and accessory buildings		
Parking: one space per each 300 sq. ft. of occupied space		
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen		
3. C-2 Zoning - Lots fronting along roadways designated as interior local.		
Front Yard: none required		
Side Yard: not required, except where they abut a street or a residential lot line then a minimum of 25 percent of lot dimension		
Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required		
A maximum lot coverage of 85% of the total area of the site for all principal, accessory buildings and parking		
Parking: one space per each 300 sq. ft. of occupied space		
When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen		

V. Site Plan Attachments

(Application will not be accepted until all attachment requirements are met)

- ▲ 26. Letter to Planning Commission stating your request
- ▲ 27. Completed Checklist
- ▲ 28. Completed ADA/ABA Form
- ▲ 29. Two full sets of Building Plans
- ▲ 30. 20 copies of Site Plan (folded to no larger than 8 ½ X 14 size) that includes vicinity map and landscaping plan (minimum size 17" X 34" paper)
- ▲ 31. 20 copies of Landscaping Plan (folded to no larger than 8 ½ X 14 size)
- ▲ 32. 20 copies of building floor plan (folded to no larger than 8 ½ X 14 size)
- ▲ 33. Copy of Stormwater Detention approval
- ▲ 34. Copy of ADEQ Stormwater Pollution Prevention Plan for property containing one acre or larger.
- ▲ 35. IBM compatible diskette or CD with data in PDF format.
- ▲ 36. Receipt for $250.00 for Stormwater Detention and Drainage Plan review

I CERTIFY that the design of Dollar General Store #18146 in the City of Bryant, Arkansas complies with the above regulations, laws and codes.

x PB General Holdings (Springill), LLC	(Bartlett Archiecture, inc.)
Owner	**Engineer/Architect**
5110 Talley Road	501-794-4448
Mailing Address	Phone #
Little Rock, AR 72204	10-21-2016
City	Date

CITY USE

Action Taken:

Special Conditions:

Permit Issued: Date _____ Sq.Ft. _____ Amount $_____

Construction Completed Certified For Occupancy: Date: _____

Inspector: _____

Permit No. _____

BUILDING PERMIT

ADA/ABA ACCESSIBILITY STANDARDS

The *Americans with Disability Act* and *Architectural Barriers Act* Accessibility Guidelines were prepared by the U.S. Access Board and mandated by the U. S. Department of Justice regulations implementing Title III as the official ADA/ABA accessibility guidelines. **All new construction, remodeling, and modifications must conform to these building standards** for places of public accommodation and commercial facilities. Residential is exempt.

The ADA/ABA accessibility guidelines contain general design standards for building and site elements, such as accessible entrances and routes, ramps, parking spaces, stairs, elevators, restrooms, signage, etc. Also included are specific standards for restaurants, medical care facilities, libraries and transportation facilities and vehicles, and places of lodging.

The guidelines also include "scoping" requirements that outline the necessary features or appropriate quantity for achieving ready access. For example, at least 50 percent of all public entrances to buildings must be accessible with an accessible path of travel. In public restrooms, at least one bathroom stall must be accessible unless there are more than six stalls, in which case the number increases.

I hereby certify that I have read and examined the above notice and will comply with all guidelines of the ADA Accessibility Guidelines. I further understand that a copy of the ADA/ABA Regulations are available for inspection during business hours of City Hall or I may obtain a copy by writing:

The Access Board
1331 F Street, NW, Suite 1000
Washington, DC 20004-1111
(202) 272-0080 (v) (202) 272-0082 (TTY) (202) 272-0081 (fax)
(800) 872-2253 (v) (800) 993-2822 (TTY)
email: info@access-board.gov

Signature of Contractor or Authorized Agent x _____ **Date** 10.24.16

Signature of Owner (If owner-builder) _____ **Date** _____

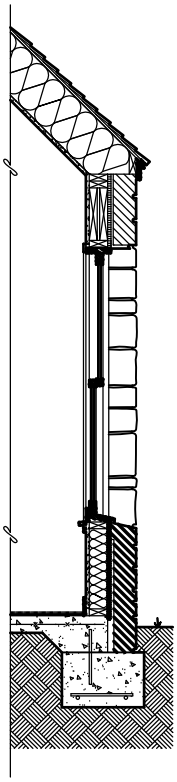
Application of Permit Approved: _____ **Date** _____
Commission - Chairman

BARTLETT

Architects ⊕ Planners ⊕ Designers

603 Hwy #5 North
Benton, AR 72019
501-794-4448 Fax: (501) 794-4449

LETTER OF TRANSMITTAL



DATE: 11/11/2016	PROJECT #: 1611
ATTENTION: Planning Dept	
RE: Dollar General Store #18146 (New Store)	

TO:

City of Bryant, AR

210 SW 3rd Street

Bryant, AR 72022

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Return Documents ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of Letter ☐ Change Order ☐ _____

COPIES	DATE	NO.	DESCRIPTION
15			Civil Plans, floor plan, and elevations for DRC review
1			Complete Checklist
1			Completed and Signed ADA/ABA form
2			Full Sets of Building Plans for DRC Review
1			ADEQ SWPPP and $250.00 plan Stormwater review fee
2			Stormwater Detention Plan
1			LED Lighting Cut Sheets, Fixtures C and G are exterior lighting used

THESE ARE TRANSMITTED as checked below:

☑ For Approval

☐ For your use

☐ As requested

☐ For review and comment

☐ _____

Transmitted Via: ☑ Hand Delivered ☐ UPS ☐ Fed Ex ☐ US Postal Service

REMARKS

Attached,

We would like to place on the agenda for the November 3, 2016 DRC meeting. We would like some preliminary feedback and discussion about the site requirements (Street widening, detention, etc) before we do the complete full blown site submittal. We have included copies of the site plan, building floor plan, and building elevations for your review. Let us know if you need any additional information.

COPY TO _____ SIGNED: Marcus McNeice

STORMWATER FLOW and DETENTION POND CALCULATOR

Existing Conditions: Stormwater drains from the north to south across the site.

Proposed Conditions: Stormwater will continue to flow in the same direction through overland flow to detention pond to the southeast.

Pre-Development Flows

GIVEN:

Drainage Area	2.015	Acres
Flow Length	280	Feet
Slope (Average)	3.50%	

Average C Value				
paved area	0.10	acre	0.95	= C
vegetated areas	1.92	acre	0.40	= C
Cavg =	0.43			

Time of Concentration:	18.00	min	Nomograph
Based on Slope = 3.5%			
Flow length = 280ft			
n = .38	n values obtained from nomograph based on avg/dense grass		
Rainfall Intensities:			
Based on Tc = 18 min			

Pre-Developed Flow

Q = CIA

Cavg =	0.43	
I100 =	7	in/hr
I50 =	6.2	in/hr
I25 =	5.7	in/hr
I10 =	5	in/hr
I2 =	3.6	in/hr
A =	2.015	Acres
Qu100 =	**6.03**	**CFS**
Qu50 =	**5.34**	**CFS**
Qu25 =	**4.91**	**CFS**
Qu10 =	**4.31**	**CFS**
Qu2 =	**3.10**	**CFS**

Post-Development Flows

GIVEN:

Drainage Area	2.015	Acres
Flow Length	280	Feet
Slope (Average)	2.50%	

Average C Value				
Paved Area	0.85	acre	0.95	= C
Sodded/Lawn	1.17	acre	0.35	= C
Cavg =	0.60			

Time of Concentration: 15.00 min

Based on Slope =2.5%

Flow length = 280 ft

navg = 0.28 Average n value obtained from weighted average of fraction of flow over pavement and lawn areas.

Rainfall Intensities:

Based on Tc = 15 min

Post-Developed Flow

Q = CIA

C =	0.60	
I100 =	7.7	in/hr
I50 =	6.8	in/hr
I25 =	6.2	in/hr
I10 =	5.4	in/hr
I2 =	4	in/hr
A =	2.015	Acres
Qd100 =	**9.36**	**CFS**
Qd50 =	**8.26**	**CFS**
Qd25 =	**7.53**	**CFS**
Qd10 =	**6.56**	**CFS**
Qd2 =	**4.86**	**CFS**

Detention Pond Storage Volume Requirements:

From Above:

Pre-Development Flow:	**Qu25 =**	**4.91**	**CFS**	Circular Inlet Flow
Post-Development Flow:	**Qd100 =**	**9.36**	**CFS**	Max Flow from det pond (pipe)

Storage Volume Required:

V = time x Qin x 60 sec/min - 0.5 x Qout x (Time + Tc) x 60 sec/min

25 min	**V100req =**	**2945.94**	CF
	V50req =	**2583.01**	CF
	V25req =	**2306.97**	CF
	V10req =	**1973.00**	CF
	V2req =	**1567.56**	CF
Use 100 yr	**Vs=**	**3535.13**	CF

Detention Pond Size	**l=**	**70.00**	ft
	w=	**35.00**	sf
	av. depth=	**1.50**	ft
	v avail=	**3675.00**	cf
Total storage volume available:		**3675.00**	CF

> volume required: OK

Outlet Pipe From Detention Pond (Qd100)

PIPE TYPE	DIAM. INCHES	PIPE *n*	SLOPE	CAPACITY CFS	VELOCITY FT. SEC
Discharge: 18" HDPE	18	0.012	0.0068	9.38	5.31

Circular Inlet Size (Qu25)

Diameter (in.)	Area (SF)	Head (ft)	Coeff. (Co)	Flow (CFS)
9	0.44	3.00	0.80	4.91

Use 9.0" opening for Qu25 Flow =4.91 cfs

SITE WITH AUTOMATIC COVERAGE (LESS THAN 5 ACRES) CONSTRUCTION SITE NOTICE

FOR THE
Arkansas Department of Environmental Quality (ADEQ)
Storm Water Program

NPDES GENERAL PERMIT NO. ARR150000

The following information is posted in compliance with **Part I.B.8.b** of the ADEQ General Permit Number **ARR150000** for discharges of stormwater runoff from sites with automatic coverage. Additional information regarding the ADEQ stormwater program may be found on the internet at:

www.adeq.state.ar.us/water/branch_npdes/stormwater

Permit Number	ARR150000
Contact Name: Phone Number:	Tim Noonan 501-219-8899
Project Description (Name, Location, etc.): Start Date: End Date: Total Acres:	Dollar General, Springhill Rd, Bryant, AR November 10, 2016 May 1, 2017 2.015
Location of Stormwater Pollution Prevention Plan:	On-Site

For Construction Sites Authorized under **Part I.B.6.a** (Automatic Coverage) the following certification must be completed:

I _____ (Typed or Printed Name of Person Completing this Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part I.B.2. of the ADEQ General Permit Number ARR150000. A stormwater pollution prevention plan has been developed and implemented according to the requirements contained in Part I.B.8.b of the permit. I am aware there are significant penalties for providing false information or for conducted unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

_____ _____
Signature and Title Date

Stormwater Pollution Prevention Plan
For
Sites with Automatic Coverage

National Pollution Discharge Elimination System
General Permit # ARR150000

Prepared for:
Dollar General Store
Springhill Road
Bryant, AR

Date: November 2016

Stormwater Pollution Prevention Plan
General Permit # ARR150000

General Information:
Development of approximately 2.015 acres for commercial use

Project Name and Location:
Dollar General Store, Highway 463, Trumann, AR

Operator Name and Address:
Van Tassel-Proctor General Contractors
5510 Talley Road
Little Rock, Arkansas 72204

A. Site Description

1) Pre-construction Topographic view:
Insert map.

2) Project Description and Intended Use after NOT is filed:
Approximately 2.015 acre commercial site for use as Dollar General retail store.

3) Sequence of Activities:

The site is currently a wooded lot with one residential structure and average grass and numerous trees. Erosion Control Measures as shown on Grading, Drainage, & Erosion Control Plan shall be installed prior to construction starts. Site shall be cleared of all existing vegetation to the extent necessary and rough graded in preparation for fill material. Fill material shall be placed and compacted as necessary to allow a finished floor elevation of a minimum of 182.0 ft. Utilities shall be roughed in according to approved site plan and pad prepared. Construction shall proceed including finished utilities, building construction, and final grading/paving. Site shall be stabilized by plantings and seeding, including application of mulch at a rate of 2.5 tons/per acre. Final stabilization shall be in place no more than fourteen days after construction is complete.

3) Total Acres Available/Total Disturbed Area:
2.015/1.9

B. Responsible Parties-General Contractors, Inspectors, etc:

Tim Noonan
Van Tassel-Proctor General Contractors
501-219-8899

C. Receiving Waters: (pg 19 of Part II)

1) Location of Surface Water on Construction Site
   The following surface waters are located on the construction site:
   N/A

2) The following bodies of water receive runoff from the construction site:
   Runoff flows southwest to an unnamed tributary to Little Hurricane Creek, thence southwest to Hurricane Creek, thence south to the Saline River, thence further south and west ultimately into the Ouachita River.

D. Site Map: See Attachment A for items to be included.

E. Stormwater Controls

1. Initial Site Stabilization, Erosion, & Sediment Controls: (pg 21 of Part II)

Silt Fence and Hay Bale Dikes shall be installed prior to construction starting as shown on Erosion Control Plan. Stabilized construction entrance, vehicle wash-down area, and temporary storage and parking areas shall be established on-site.

2. Stabilization Practices: (pg 21 of Part II)

Site shall be stabilized temporarily and permananently as required in the General Permit

3. Structural Practices: (pg 22 of Part II)

Riprap aprons will be installed at concentrated discharge areas to reduce runoff velocity and erosive flows during construction. Site shall be sodded at all unpaved areas after construction to reduce runoff velocity.

F. Other Controls: In addition to erosion control and storm water management, our plan will include measures to properly manage solid wastes, hazardous wastes, dust generation, and all other activities that will generate wastes during the construction phase. (pg 23 of Part II)

1) Solid material control, debris and wastes:

Per General Permit

2) Offsite vehicle tracking:

Stabilized construction entrance and vehicle washdown area will be established to control tracking.

3) Temporary sanitary facilities:

Temporary facilities shall be provided on-site during construction.

4) Concrete waste area:

Concrete waste shall be disposed of off-site.

5) Fuel storage, hazardous materials and truck washing areas:

These areas shall be established accordint to General permit requirements and located in the temporary staging area.

G. Non-stormwater Discharges: (pg 10 of Part I)

List of Anticipated Allowable Non-Stormwater Discharges:
None

H. State or Local Plans: (pg 24 of Part II)

The municipality in which the construction activity occurs will be contacted to determine if there are erosion control and/or storm water runoff requirements in the city code, city ordinances or city permits. All applicable requirements will be met. Documentation of compliance will be attached to this SWPPP.

I. Inspections: (pg 24 of Part II)

Inspections will be conducted by a qualified inspector at one of the following frequencies:
☒ **Every 7 days or**
☐ **Every 14 Days and within 24 hours after a ½ inch or greater rainfall event**.

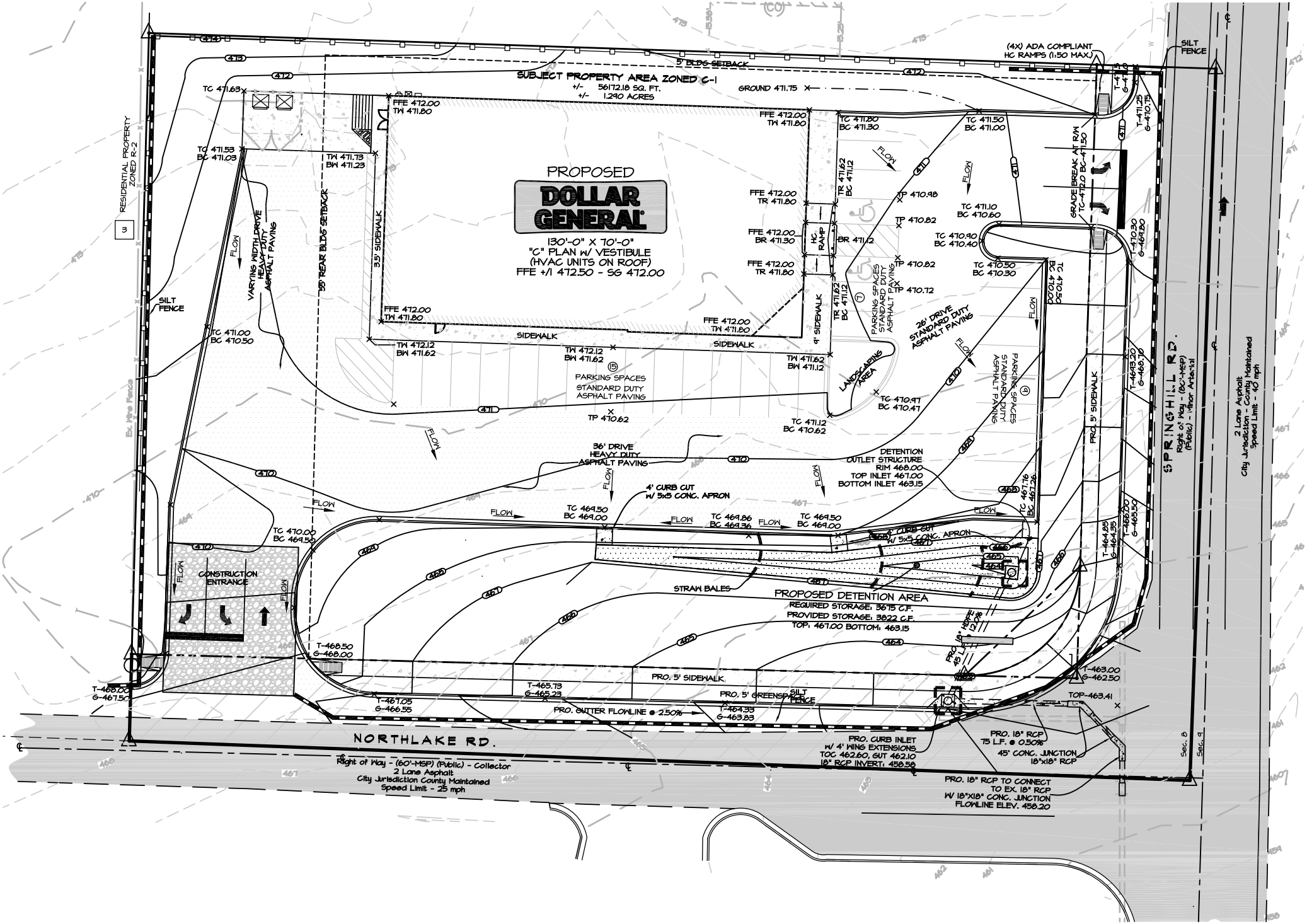
A report of the inspection will summarize the scope of the inspection, the name of the inspector, the date of inspection and any damages observed and repairs made to any control measure. Completed inspection forms will be kept with the SWPPP.
The following are the minimum inspection, maintenance and reporting practices that will be used to maintain erosion and sediment controls at our construction site:
1. Inspection form (Attachment B)
2. All controls will be inspected to ensure that they meet the manufacture's specifications.
3. Sediment basins and sediment traps will be cleaned out when they reach 50% of the original capacity.
4. All site entrances and exits will be checked to ensure no off-site tracking.
5. All inspection reports will be maintained for a minimum of 3 years after permit termination.
6. In addition to inspection, records will be kept of the following: a. Dates when major grading activities occur b. Dates when construction activities cease in an area, temporarily or permanently. c. Dates when an area is stabilized, temporarily or permanently.
J. Maintenance: All erosion and sediment control measure will be maintained in good working order. If a repair is necessary, it will be initiated **within three (3) business days of discovery.**(pg 25 of Part II)

Contractors: (pg 25 of Part II) All contractors should be identified in the plan.			
Contractor Printed Name:		Contractor Signature:	
Contractor Contact Number:			
Contractor Printed Name:		Contractor Signature:	
Contractor Contact Number:			
Contractor Printed Name:		Contractor Signature:	
Contractor Contact Number:			
Contractor Printed Name:		Contractor Signature:	
Contractor Contact Number:			
Inspectors: (pg 25 of Part II) Site inspectors should be identified in the plan.			
Inspector Printed Name:		Inspector Signature:	
Inspector Contact Number:			
Inspector Printed Name:		Inspector Signature:	
Inspector Contact Number:			

Plan Certification: (pg 26 of Part II)
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
Printed Name:
Printed Title:
Signature:
Date:

Attachment A

Site Map


SUBJECT PROPERTY AREA ZONED C-1
+/- 56172.18 SQ. FT.
+/- 1.290 ACRES
5' BLDG SETBACK
35' REAR BLDG SETBACK
PROPOSED
DOLLAR GENERAL
130'-0" X 70'-0"
"C" PLAN w/ VESTIBULE
(HVAC UNITS ON ROOF)
FFE +/1 472.50 - SG 472.00
GROUND 471.75
(4X) ADA COMPLIANT HC RAMPS (1:50 MAX.)
SILT FENCE
RESIDENTIAL PROPERTY ZONED R-2
Ex. Wire Fence
VARYING WIDTH DRIVE HEAVY DUTY ASPHALT PAVING
3.5' SIDEWALK
SIDEWALK
9' SIDEWALK
HC RAMP
PARKING SPACES STANDARD DUTY ASPHALT PAVING
LANDSCAPING AREA
26' DRIVE STANDARD DUTY ASPHALT PAVING
GRADE BREAK AT R/W
36' DRIVE HEAVY DUTY ASPHALT PAVING
4' CURB CUT w/ 5x5 CONC. APRON
DETENTION OUTLET STRUCTURE
RIM 468.00
TOP INLET 467.00
BOTTOM INLET 463.15
CONSTRUCTION ENTRANCE
STRAW BALES
PROPOSED DETENTION AREA
REQUIRED STORAGE: 3615 C.F.
PROVIDED STORAGE: 3822 C.F.
TOP: 467.00 BOTTOM: 463.15
PRO. 18" HDPE 12.0%
45 L.F.
PRO. 5' SIDEWALK
PRO. 5' GREENSPACE
PRO. GUTTER FLOWLINE @ 2.50%
PRO. CURB INLET w/ 4' WING EXTENSIONS
TOC 462.60, GUT 462.10
18" RCP INVERT: 458.50
PRO. 18" RCP 75 L.F. @ 0.50%
45' CONC. JUNCTION 18"x18" RCP
PRO. 18" RCP TO CONNECT TO EX. 18" RCP W/ 18"X18" CONC. JUNCTION FLOWLINE ELEV. 458.20
TOP-463.41
NORTHLAKE RD.
Right of Way - (60'-MSP) (Public) - Collector
2 Lane Asphalt
City Jurisdiction County Maintained
Speed Limit - 25 mph
SPRINGHILL RD.
Right of Way - (80'-MSP) (Public) - Minor Arterial
2 Lane Asphalt
City Jurisdiction - County Maintained
Speed Limit - 40 mph
Sec. 8
Sec. 9

Attachment B

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT FORM

INSPECTOR:_____ D ATE:_____

DAYS SINCE LAST RAINFALL:_____ AMOUNT OF LAST RAINFALL _____

AREA	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED (YES/NO)	STAB. WITH	CONDITIO N

STABILIZATION REQUIRED:

SILT FENCE

IS THE BOTTOM OF THE FABRIC STILL BURIED? _____
IS THE FABRIC TORN OR SAGGING? _____
ARE THE POSTS TIPPED OVER? _____
HOW DEEP IS THE SEDIMENT? _____
MAINTENANCE REQUIRED FOR SILT FENCE:

SEDIMENT BASIN

DEPTH OF SEDIMENT IN BASIN? _____
CONDITION OF BASIN SIDE SLOPES? _____
ANY EVIDENCE OF OVERTOPPING OF THE EMBANKMENT? _____
CONDITION OF OUTFALL FROM SEDIMENT BASIN? _____
MAINTENANCE REQUIRED FOR SEDIMENT BASIN:

CONSTRUCTION EXIT

DOES MUCH SEDIMENT GET TRACKED ON TO ROAD? _____
IS THE GRAVEL CLEAN OR FILLED WITH SEDIMENT? _____
DOES ALL TRAFFIC USE THE STABILIZED EXIT TO LEAVE THE JOB SITE? _____
IS THE CULVERT BENEATH THE EXIT WORKING? _____
MAINTENANCE REQUIRED FOR CONSTRUCTION EXIT:
CHANGES TO BE PERFORMED BY:_____ ON OR BEFORE:_____

CHANGES REQUIRED TO THE STORMWATER POLLUTION PREVENTION PLAN:

REASONS FOR CHANGES:

"I certify under penalty of law that this document was prepared under my direction or supervision. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

_____
Signature

_____
Date

For additional information, please use a separate page.

AUTHORIZATION TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et seq.), and the Clean Water Act (33 U.S.C. 1251 et seq.),

Operator of Facilities with Stormwater Discharges Associated With Construction Activity

is authorized to discharge to all receiving waters except as stated in Part I.B.11 (Exclusions).

For facilities that are eligible for coverage under this General Permit (GP), the Department sends a cover letter (Notice of Coverage with tracking permit number which starts with ARR15) and a copy of the permit to the facility. The cover letter includes the Department's determination that a facility is covered under the GP and may specify alternate requirements outlined in the permit.

The responses to comments related to this permit are available as a separate document on the Department's website.

Issue Date: October 31, 2008

Effective Date: November 1, 2008

Expiration Date: October 31, 2011

Steven L. Drown

Steven L. Drown
Chief, Water Division
Arkansas Department of Environmental Quality

PART I
PERMIT REQUIREMENTS

Information in **Part I** is organized as follows:

Section A: Definitions
Section B: Coverage Under this Permit:

1. Permitted Area
2. Eligibility
3. Responsibilities of the Operator
4. Where to submit
5. Requirements for Qualifying Local Program (QLP)
6. Requirements for Coverage
7. Notice of Intent (NOI) Requirements
8. Posting Notice of Coverage (NOC)
9. Applicable Federal, State or Local Requirements
10. Allowable Non-Stormwater Discharges
11. Limitations on Coverage (Exclusions)
12. Trench and Ground Water Control
13. Buffer Zones
14. Waivers from Permit Coverage
15. Continuation of the Expired General Permit
16. Notice of Termination (NOT)
17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision
18. Change in Operator
19. Late Notifications
20. Failure to Notify
21. Maintenance
22. Releases in Excess of Reportable Quantities
23. Attainment of Water Quality Standards

SECTION A: DEFINITIONS

1. **"ADEQ"** or **"Department"** is referencing the Arkansas Department of Environmental Quality. The Department is the governing authority for the National Pollutant Discharge Elimination System program in the state of Arkansas.

2. **"Arkansas Pollution Control and Ecology Commission"** shall be referred to as APCEC throughout this permit.

3. **"Automatic Coverage"** indicates those sites that are defined as a small construction site or a site that is less than five (5) acres but part of a larger common plan.

4. **"Best Management Practices (BMPs)"** schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. According to the EPA BMP manual the use of hay-bales in concentrated flow areas is not recommended as a best management practice.

5. **"Commencement of Construction"** the initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

6. **"Contaminated"** means a substance the entry of which into the MS4, Waters of the State, or Waters of the United States may cause or contribute to a violation of Arkansas water quality standards.

7. **"Control Measure"** as used in this permit, refers to any Best Management Practice or other method used to prevent or reduce the discharge of pollutants to waters of the State.

8. **"Construction Site"** an area upon which one or more land disturbing construction activities occur that in total will disturb one acre or more of land, including areas that are part of a larger common plan of development or sale where multiple separate and distinct land disturbing construction activities may be taking place at different times on different schedules but under one plan such that the total disturbed area is one acre or more.

9. **"CWA"** the Clean Water Act or the Federal Water Pollution Control Act.

10. **"Dedicated Portable Asphalt Plant"** a portable asphalt plant that is located on or contiguous to a construction site that provides asphalt only to the construction site on which the plant is located or adjacent to. The term does not include facilities that are subject to the asphalt emulsion effluent guideline limitations at 40 CFR Part 443.

11. **"Dedicated Portable Concrete Plant"** a portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site on which the plant is located on or adjacent to.

12. **"Detention Basin"** a detention basin is an area where excess stormwater is stored or held temporarily and then slowly drains when water levels in the receiving channel recede. In essence, the water in a detention basin is temporarily detained until additional room becomes available in the receiving channel.

13. **"Director"** the Director, Arkansas Department of Environmental Quality, or a designated representative.

14. **"Discharge"** when used without qualification means the "discharge of a pollutant".

15. **"Discharge of Stormwater Associated with Construction Activity"** as used in this permit, refers to a discharge of

pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavation), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

16. **"Discharge-Related Activities"** as used in this permit, include: activities that cause, contribute to, or result in stormwater point source pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; management of solid waste and debris; and measures to control stormwater including the construction and operation of BMPs to control, reduce or prevent stormwater pollution.

17. **"Disturbed area"** the total area of the site where any construction activity is expected to disturb the ground surface. This includes any activity that could increase the rate of erosion, including, but not limited to, clearing, grubbing, grading, excavation, demolition activities, haul roads, and areas used for staging. Also included, are stockpiles of topsoil, fill material and any other stockpiles with a potential to create additional runoff.

18. **"Eligible"** qualified for authorization to discharge stormwater under this general permit.

19. **"Erosion"** the process by which the land's surface is worn away by the action of wind, water, ice or gravity.

20. **"Facility" or "Activity"** any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

21. **"Final Stabilization"**:

A. All soil disturbing activities at the site have been completed and either of the two following criteria are met:

1) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 80% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or

2) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

B. When background native vegetation will cover less than 100% of the ground (e.g., arid areas, beaches), the 80% coverage criteria is adjusted as follows: if the native vegetation covers 50% of the ground, 80% of 50% (0.80 x 0.50 = 0.40) would require 40% total cover for final stabilization. On a beach with no natural vegetation, no stabilization is required.

C. For individual lots in residential construction, final stabilization means that either:

1) The homebuilder has completed final stabilization as specified above, or

2) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

D. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land, staging areas for highway construction, etc.), final stabilization may be accomplished by returning the disturbed land to its pre-construction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer

strips immediately adjacent to "water of the United States", and areas which are not being returned to their pre-construction agricultural use must meet the final stabilization criteria in A, B**,** or C above.

22. **"Infrastructure"** streets, drainage, curbs, utilities, etc.

23. **"Impaired Water"** a water body listed in the current, approved Arkansas 303(d) list.

24. **"Landscaping"** improving the natural beauty of a piece of land (i.e. entrance of subdivision) through plantings or altering the contours of the ground.

25. **"Large and Medium Municipal Separate Storm Sewer System"** all municipal separate storm sewer systems that are either:

A. Located in an incorporated place with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census: or

B. Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal, separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

C. Owned or operated by a municipality other than those described in paragraphs (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

26. **"Large Construction Site"** Construction activity including clearing, grading and excavation, **except** operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres. (Please see Part I.B.14 for partial waivers.)

27. **"Larger Common Plan of Development"** a contiguous (sharing a boundary or edge; adjacent; touching) area where multiple and distinct construction activities may be taking place at different times on different schedules under one plan. Such a plan might consist of many small projects (e.g. a common plan of development for a residential subdivision might lay out the streets, house lots, and areas for parks, schools and commercial development that the developer plans to build or sell to others for development.) All these areas would remain part of the common plan of development or sale. The following items can be used as guidance for deciding what might or might not be considered a "Common Plan of Development or Sale." The ''plan'' in a common plan of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. You must still meet the definition of operator in order to be required to get permit coverage, regardless of the acreage you personally disturb.

If a smaller project (i.e., less than 1 acre) is part of a large common plan of development or sale (e.g., you are building a residential home on a ½ acre lot in a 40 acre subdivision or are putting in a fast food restaurant on a ¾ acre pad that is part of a 20 acre retail center) permit coverage is required. Under 40 CFR 122.26(b)(2)(vi), smaller parts of a larger common plan of development are automatically authorized under this general permit and should follow the conditions of a site with automatic coverage set forth in this permit (see Part I.B.6.A).

28. **"NOC"** Notice of Coverage

29. **"NOI"** Notice of Intent to be covered by this permit.

30. **"NOT"** Notice of Termination.

31. **"Operator"** for the purpose of this permit and in the context of stormwater associated with construction activity, means any person (an individual, association, partnership, corporation, municipality, state or federal agency) who has the primary management and ultimate decision-making responsibility over the operation of a facility or activity. The operator is responsible for ensuring compliance with all applicable environmental regulations and conditions.

In addition, for purposes of this permit and determining who is an operator, ‘‘owner’’ refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline or a landowner who allows a mining company to remove dirt, shale, clay, sand, gravel, etc. from a portion of his property). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g., having a house built by a residential homebuilder).

32. **"Outfall"** a point source where stormwater leaves the construction site.

33. **"Owner"** the owner or operator of any “facility or activity” subject to regulation under the NPDES program. In addition, for purposes of this permit and determining who is an operator, ‘‘owner’’ refers to the party that owns the structure being built. Ownership of the land where construction is occurring does not necessarily imply the property owner is an operator (e.g., a landowner whose property is being disturbed by construction of a gas pipeline). Likewise, if the erection of a structure has been contracted for, but possession of the title or lease to the land or structure is not to occur until after construction, the would-be owner may not be considered an operator (e.g. having a house built by a residential homebuilder).

34. **"Physically Interconnected"** that one municipal separate storm sewer system is connected to a second municipal separate storm sewer system in such a way that it allows for direct discharges into the second system.

35. **"Point Source"** any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

36. **“Qualified Local Program”** is a municipal program for stormwater discharges associated with construction sites that has been formally approved by the Department.

37. **"Qualified personnel"** a person knowledgeable in the principles and practice of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact stormwater quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity.

38. **"Regulated Small Municipal Separate Storm Sewer System"** all municipal separate storm sewer systems that are either:

A. Located within the boundaries of an “urbanized area” with a population of 50,000 or more as determined by the latest Decennial Census by the Bureau of Census; or

B. Owned or operated by a municipality other than those described in paragraph A and that serve a jurisdiction with a population of at least 10,000 and a population density of at least 1,000 people per square mile; or
C. Owned or operated by a municipality other than those described in paragraphs A and B and that contributes substantially to the pollutant loadings of a “physically interconnected” municipal separate storm sewer system.

39. **"Retention Basin"** a basin that is designed to hold the stormwater from a rain event and allow the water to infiltrate through the bottom of the basin. A retention basin also stores stormwater, but the storage of the stormwater would be on a more permanent basis. In fact, water often remains in a retention basin indefinitely, with the exception of the volume lost to evaporation and the volume absorbed into the soils. This differs greatly from a detention basin, which typically drains after the peak of the storm flow has passed, sometimes while it is still raining.

40. **"Runoff Coefficient"** the fraction of total rainfall that will appear at the conveyance as runoff.

41. **"Sediment"** material that settles to the bottom of a liquid.

42. **"Sediment Basin"** a basin that is designed to maintain a 10 year-24 hour storm event for a minimum of 24-hours in order to allow sediment to **settle** out of the water.

43. **"Small Construction Site"** Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance.

44. **"Stormwater"** stormwater runoff from rainfall, snow melt runoff, and surface runoff and drainage.

45. **"Stormwater Associated with Construction Activity"** the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to construction activity.

46. **"Stormwater Pollution Prevention Plan (SWPPP or SWP3)"** a plan that includes site map(s), an identification of construction/contractor, activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants (BMPs).

47. **"Temporary Sediment Controls"** controls that are installed to control sediment runoff from the site. These could be silt fencing, rock check dams, etc.

48. **"Total Maximum Daily Load" or "TMDL"** the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for non-point sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any non-point sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

49. **"Uncontaminated"** can not exceed the water quality standards as set forth in APCEC Regulation 2.

50. "**Urbanized Area**" the areas of urban population density delineated by the Bureau of the Census for statistical purposes and generally consisting of the land area comprising one or more central place(s) and the adjacent densely settled surrounding area that together have a residential population of at least 50,000 and an overall population density of at least 1,000 people per square mile as determined by the latest Decennial Census by the Bureau of Census.

SECTION B: COVERAGE UNDER THIS PERMIT

Introduction

This Construction General Permit (CGP) authorizes stormwater discharges from large and small construction activities that result in a total land disturbance of equal to or greater than one acre, where those discharges enter surface waters of the State or a municipal separate storm sewer system (MS4) leading to surface waters of the State subject to the conditions set forth in this permit. This permit also authorizes stormwater discharges from any other construction activity designated by ADEQ where ADEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the State. This permit replaces the permit issued in 2003. The goal of this permit is to minimize the discharge of stormwater pollutants from construction activity. The Operator should make sure to read and understand the conditions of the permit. A copy of the General Stormwater Construction Permit is available on the ADEQ web site at http://www.adeq.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm . You may also obtain a hard copy by contacting the ADEQ's General Permits Section at (501) 682-0623.

1. **Permitted Area**. If a large or small construction activity is located within the State of Arkansas, the operator may be eligible to obtain coverage under this permit.

2. **Eligibility.** Permit eligibility is limited to discharges from "large" and "small" construction activity, or as otherwise designated by ADEQ. This general permit contains eligibility restrictions, as well as permit conditions and requirements. You may have to take certain actions to be eligible for coverage under this permit. In such cases, you must continue to satisfy those eligibility provisions to maintain permit authorization. If you do not meet the requirements that are a pre-condition to eligibility, then resulting discharges constitute unpermitted discharges. By contrast, if you eligible for coverage under this permit and do not comply with the requirements of the general permit, you may be in violation of the general permit for your otherwise eligible discharges.

   A. This general permit authorizes discharges from construction activities as defined in 40 CFR 122.26(a), 40 CFR 122.26(b)(14)(x), and 40 CFR 122.26(b)(15)(i).

   B. This permit also authorizes stormwater discharges from support activities (e.g., concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, borrow areas) provided:

   1) The support activity is directly related to a specific construction site that is required to have NPDES permit coverage for discharges of stormwater associated with the construction activity;
   2) The support activity is not a commercial operation serving multiple unrelated construction projects by different operators, and does not operate beyond the completion of the construction activity at the last construction project it supports;
   3) Pollutant discharges from support activity areas are minimized in compliance with conditions of this permit; and
   4) discharges from the support activity areas must be identified in a stormwater pollution prevention plan stating appropriate controls and measures for the area.

   C. Other activities may be considered for this permit at the discretion of the Director as defined in 40 CFR 122.26(b)(15)(ii).

3. **Responsibilities of the Operator.** Permittees with operational control are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on the construction site, including protection of endangered species and implementation of BMPs and other controls required by the SWPPP. Receipt of this general

permit does not relieve any operator of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.

4. **Where to submit.** The operator shall submit a complete and signed NOI and SWPPP to the Department at the following address:

Arkansas Department of Environmental Quality
Discharge Permits Section
5301 Northshore Drive
North Little Rock, AR 72118-5317

Or by electronic mail (Complete documents (NOI and SWPPP) must be submitted in PDF format) to:

Water-permit-application@adeq.state.ar.us ;

NOTE: Notice of Coverage (NOC) will **NOT** be issued until payment has been received by ADEQ.

5. **Requirements for Qualifying Local Program (QLP).** The Department reviews and approves the QLP programs to ensure that they meet or supersede both state and federal requirements outlined in this permit and 40 CFR 122.44(s). ADEQ will review the QLP program at least every 5 years for recertification. If the Department approves a QLP, then the QLP requirements must at the minimum meet the Department's requirements. This would include all templates and forms.

If the small construction site is within the jurisdiction of a QLP, the operator of the small construction site is authorized to discharge stormwater associated with construction activity under QLP permit requirements only.

List of Qualifying Local Programs: A list of municipalities with Qualifying Local Programs is available at http://www.adeq.state.ar.us/water/branch_npdes/stormwater/ms4.htm. At this time only the City of Hot Springs is meeting the ADEQ minimum requirements.

6. **Requirements for Coverage.**

A. **Automatic Coverage**. An operator of each site with automatic coverage may discharge under this general permit without submitting a NOI, SWPPP and fee . Please note that all the permit conditions set forth must be followed. The Operator is responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting ADEQ or reviewing the ADEQ website http://www.adeq.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm .

B. **Large Construction Sites**. An operator of a large construction site discharging under this general permit must submit the following items at least two weeks prior to commencement of construction:

1) A Notice of Intent (NOI) in accordance with the requirements of Part I.B.7 of this permit.
2) A complete Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of Part II.A of this permit.
3) An initial permit fee must accompany the NOI under the provisions of APCEC Regulation No. 9. Subsequent annual fees will be billed by the Department until the operator has requested a termination of coverage by submitting a Notice of Termination (NOT). Failure to remit the required permit fee may be grounds for the Director to deny coverage under this general permit.
4) Per Part I.B.14 of the permit, any single lot that are less than five (5) acres but part of a larger common plan

greater than five (5) acres, are waived from the requirements of a large site and may be permitted under automatic coverage.

Permitted Ongoing Project:

If you previously did receive authorization to discharge for your project under the 2003 CGP and you wish to obtain coverage under this permit, you must submit only an NOI within 60 days of the issuance date of this permit and update the existing SWPPP in accordance with Part II of this permit.

C. **Coverage within a QLP**

An operator of a site with automatic coverage, as defined in this permit, shall comply with the requirements of the QLP which has jurisdiction over the site.

7. Notice of Intent (NOI) Requirements

A. **NOI Form**. Large Construction site operators who intend to seek coverage for stormwater discharge under this general permit must submit a complete and accurate ADEQ NOI form to the Department at least two weeks prior to coverage under this permit. The NOI form **must** be the current version obtained from the stormwater webpage indicated above in Part I.B.

If the NOI is deemed incomplete, the Department will notify the applicant with regard to the deficiencies by a letter, email, or phone within ten (10) business days of receipt of NOI. If the operator does not receive a notification of deficiencies from ADEQ's receipt of the NOI, the NOI is deemed complete. If the applicant does not provide the Department with the requested deficiencies within the deadline set by the Department, then the Department will return the NOI, fee and SWPPP back to the applicant.

B. **Contents of the NOI.** The NOI form contains, at a minimum, the following information:

1) Operator (Permittee) information (name, address, telephone and fax numbers, E-mail address)
2) Whether the operator is a federal, state, private, public, corporation, or other entity
3) Application Type: New or renewal
4) Invoice mailing information (name, address, and telephone and fax numbers)
5) Project Construction site information (name, county, address, contact person, direction to site, latitude and longitude for the entrance of the site or the endpoints for linear project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, estimate of the total project acreage and the acreage to be disturbed by the operator submitting the NOI, type of the project (subdivision, school, etc), whether the project is part of a larger common plan of development.)
6) Discharge information (name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
7) Endangered Species information
8) Previous/Current permit information
9) The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APCEC Regulation No. 6
10) The certification of the facility corporation
11) Other information (location of the SWPPP).

C. **Notice of Coverage (NOC).** Unless notified by the Director to the contrary, dischargers who submit a NOI in accordance with the requirements of this permit are authorized to discharge stormwater from construction sites under the terms and conditions of this permit two weeks after the date the NOI is deemed complete by ADEQ. If the NOC has not been received by the permittee two weeks after the date the NOI is deemed complete by ADEQ, the NOI should be posted until the NOC is received. Upon review of the NOI and other available information, the Director may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

8. Posting Notice of Coverage (NOC).

A. **Large Sites:** NOC Posting for Large Construction Sites. The posting for large construction sites shall be obtained from the Department only after the permittee has met the NOI, permit fee and complete SWPPP submittal to the Department for the coverage.

B. **Automatic Coverage Sites**. The Automatic Coverage NOC for small sites and a single site less than five (5) acres but part of a larger common plan, as defined in Part I.A, can be obtained from the Water Division's Construction Stormwater webpage. Posting a NOC without a SWPPP is a violation of this permit.

C. **Linear Projects**. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary.

Please note, this permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that the permittee allow members of the public access to a construction site.

9. Applicable Federal, State or Local Requirements. The operator must ensure that the stormwater controls implemented at the site are consistent with all applicable federal, state, or local requirements. Additionally, an operator who is operating under approved local erosion and sediment plans, grading plans, local stormwater permits, or stormwater management plans shall submit signed copies of the Notice of Intent to the local agency (or authority) upon the local agency's request.

10. Allowable Non-Stormwater Discharges.

A. The following non-stormwater discharges that are combined with stormwater during construction may be authorized by this permit. Non-stormwater discharges must be addressed in the stormwater pollution prevention plan.
   1) Fire fighting activities;
   2) Fire hydrant flushings;
   3) Water used to wash vehicles (where detergents or other chemicals are not used) or control dust in accordance with Part II.A.4.I.2;
   4) Potable water sources including uncontaminated waterline flushings;
   5) Landscape Irrigation ;
   6) Routine external building wash down which does not use detergents or other chemicals;
   7) Pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled materials have been removed) and where detergents or other chemicals are not used;
   8) Uncontaminated air conditioning, compressor condensate (See Part I.B.12 of this permit);,
   9) Uncontaminated springs, excavation dewatering and groundwater (See Part I.B.12 of this permit);
   10) Foundation or footing drains where flows are not contaminated with process materials such as solvents (See Part I.B.12 of this permit);

11. Limitations on Coverage (Exclusions). The following stormwater discharges associated with construction activity are not covered by this permit:

A. **Post Construction Discharge.** Stormwater discharges associated with construction activities that originate from the site after construction activities have been completed, the site has undergone final stabilization, and the permit has been terminated.

B. **Discharges Mixed with Non-Stormwater.** Stormwater discharges that are mixed with sources of non-stormwater other than those identified in Part I.B.10.

C. **Discharges Covered by another Permit.** Stormwater discharges associated with construction activity that are covered under an individual or an alternative general permit may be authorized by this permit after an existing permit expires provided the expired permit did not establish numeric effluent limitations for such discharges.

D. **Discharges into Receiving Waters with an Approved TMDL.** Discharges from a site into receiving waters for which there is an established total maximum daily load (TMDL) allocation (www.adeq.state.ar.us/water/branch_planning/default.htm) for Turbidity, Oil & Grease, and/or other pollutants at the discretion of the Director are not eligible for coverage under this permit unless the permittee develops and certifies a stormwater pollution prevention plan (SWPPP) that is consistent with the assumptions and requirements in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. If a specific numeric wasteload allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation. Please note that the Department will be reviewing this information. If it is determined that the project will discharge to a TMDL, then the Department may require additional BMPs.

E. **Discharges into Impaired Receiving Waters (303(d) List).** Discharges from a site into a receiving waters listed as impaired under Section 303(d) of the Clean Water Act (www.adeq.state.ar.us/water/branch_planning/default.htm) for Turbidity, Oil & Grease and/or other pollutants at the discretion of the Director, should incorporate into the SWPPP any additional BMPs needed to sufficiently protect water quality. The SWPPP should include a proposal for monitoring to determine if the BMPs and controls are effective. Please note that the Department will be reviewing this information. If it is determined that the project will discharge to an impaired water body, then the Department may require additional BMPs.

F. **Endangered and Threatened Species and Critical Habitat Protection.** Stormwater discharges from construction sites that are likely to adversely affect a listed endangered or threatened species or its critical habitat must contact the U.S. Fish and Wildlife Service (USFWS) at (501) 513-4470 or www.fws.gov/arkansas-es. Discharges which are not in compliance with the Endangered Species Act (ESA) can **not** be covered under this permit.

In order to obtain coverage, the applicant must follow the process required by the USFWS in order to determine the project's compliance with the ESA. This automatic process can be found on the USFWS website at the following address: www.fws.gov/arkansas-es. The certification provided by the process must be included in the project's Stormwater Pollution Prevention Plan. If at some point during the process, the submittal of information to the USFWS is required, then the incomplete checklist should be submitted to the Department along with the letter of correspondence that was submitted to the USFWS.

12. Trench and Ground Water Control. There shall be no turbid discharges to surface waters of the state resulting from dewatering activities. If trench or ground waters contain sediment, it must pass through a sediment settling pond or other equally effective sediment control device, prior to being discharged from the construction site. Alternatively, sediment may be removed by settling in place or by dewatering into a sump pit, filter bag, or comparable practice. Ground water dewatering which does not contain sediment or other pollutants is not required to be treated prior to discharge. However, care must be taken when discharging ground water to ensure that it does not become pollutant-laden by traversing over disturbed soils or other pollutant sources.

13. Buffer Zones.

An undisturbed buffer zone as stated below shall be maintained at all times. Exceptions from this requirement for areas, such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law.

A. For construction projects where clearing and grading activities will occur, the SWPPP must provide at least twenty-five (25) feet of buffer zone, as measured horizontally from the top of the bank to the disturbed area, from any named or unnamed streams, creeks, rivers, lakes or other water bodies.

B. The Department may also require up to fifty (50) feet of buffer zone, as measured from the top of the bank to the disturbed area, from established TMDL water bodies, streams listed on the 303 (d)-list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), and/or any other uses at the discretion of the Director.

C. Linear projects will be evaluated individually by the Department to determine buffer zone setbacks.

14. Waivers from Permit Coverage. The Director may waive the otherwise applicable requirements of this general permit for stormwater discharges from construction activities under the terms and conditions described in this section.

A. Waiver Applicability and Coverage. Based upon 40 CFR Part 122.26.b.15.i.A, operators of small construction activities may apply for and receive a waiver from the requirements to obtain this permit.

B. No Stormwater Leaving the Site. If all of the stormwater from the construction activity is captured on-site under any size storm event and allowed to evaporate, soak into the ground on-site, or is used for irrigation, a permit is not needed.

C. TMDL Waivers. This waiver is available for sites with automatic coverage if the ADEQ has established or approved a TMDL that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by ADEQ is available from ADEQ online at www.adeq.state.ar.us/water/branch_planning/default.htm.

D. Discharges into Impaired Receiving Waters (303(d) List). This waiver is available for sites with automatic coverage if the ADEQ has listed the waters in 303(d) list that addresses the pollutant(s) of concern and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant

that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on 303(d) that have been established by ADEQ is available from ADEQ online at www.adeq.state.ar.us/water/branch_planning/default.htm

E. Sites part of the Larger Common Plan. Any single lot less than 5 acres that is part of larger common plan may be considered as a small construction site. As long as the operator has complied with all conditions of this permit without submitting an NOI in accordance with 40 CFR 122.28(b)(2)(v). This waiver is applicable if the operator has only one lot in the larger common plan or multiple lots in which construction will not begin within 24 months of the prior construction.

15. Continuation of the Expired General Permit. If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until the earliest of:

- Reissuance or replacement of this permit, at which time the operator must comply with the conditions of the new permit to maintain authorization to discharge and, the operator is required to notify the Department of his/her intent to be covered under this permit within 60 days after the effective date of the renewal permit ; or
- Submittal of a Notice of Termination; or
- Issuance of an individual permit for the project's discharges; or
- A formal permit decision by ADEQ to not reissue this general permit, at which time you must seek coverage under an alternative general permit or an individual permit

Small site Operators are responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by reviewing the ADEQ website at:
http://www.adeq.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm .

16. Notice of Termination (NOT). All construction activities that disturbed soil are complete, the site has reached final effective stabilization (100% stabilization with 80% density), all stormwater discharges from construction activities authorized by this permit are eliminated and all temporary sediment controls are removed and properly disposed, the operator of the facility may submit a complete Notice of Termination (NOT) to the Director. Along with the NOT, pictures that represent the entire site should be submitted for review. Final stabilization is not required if the land is returned to its pre-construction agriculture use. Operators of small construction sites are not required to submit NOTs for their construction sites. However, final stabilization is required on all sites. If a Notice of Termination is not submitted when the project is completed, the operator will be responsible for annual fees.

17. Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision.

A. The operator is ultimately responsible for the runoff from the perimeter of the entire development. Regardless for the reason of the runoff, the operator is responsible for ensuring sufficient overall controls of the development.

B. The operator shall not terminate the permit coverage until the following conditions have been met:

1) After all construction including landscaping and lot development has been completed; and

2) All lots are sold and developed.

The following exceptions to this requirement can apply:

a. less than 100% sold and developed at the discretion of the Director, or
b. Separation of the larger common plan if twenty-four (24) months have passed with no construction activity.

c. All lots are developed and there are no temporary common controls for subdivision outfalls, i.e. sediment basins, large sediment traps, check dams, etc.

3) If lots are sold then re-sold to a third party then permit coverage needs to be obtained by each of the operators while they have ownership of the lots. The second owner is responsible to obtain the same certification from the third owner, i.e. the certification must pass from owner to owner.

C. The operator shall not terminate permit coverage until the operators of all the individual lots within the larger common plan are notified of their permitting requirements under this general permit. In this case, the signed certification statements from each operator of individual lots must be maintained in the stormwater pollution prevention plan for the large common plan. A copy of the signed certifications must be submitted to ADEQ with the NOT. The certification shall be as follows:

"I, _____, operator of an individual lot #_____, block #_____ of _____ subdivision, certify under penalty of law that I was notified by the operator of the larger common plan of the stormwater permitting requirements for my construction site(s). I understand prior to commencement of any construction activity I have to prepare and comply with a SWPPP and post the Construction Site Notice. I understand that prior to the sale of this lot to another party; I must notify the new owner of ADEQ requirements and obtain this certification from the new owner."

Signature _____

D. The following examples are provided as clarification:

1) If a small portion of the original common plan of development remains undeveloped and there has been a period of time (i.e., more than 24 months) where there are no ongoing construction activities (i.e., all areas are either undisturbed or have been finally stabilized), you may re-evaluate the original project based on the acreage remaining from the original "common plan." If less than five but more than one acre remains to build out the original "common plan", coverage under the large permit may not be required. However, you will need to comply with the terms and conditions for Small Construction Sites in the Construction General Permit. If less than one acre remains of the original common plan, your individual project may be treated as a part of a less than one acre development and no permit would be required.
2) If you have a long-range master plan of development where some portions of the master plan are conceptual rather than a specific plan of future development and the future construction activities would, if they occur at all, happen over an extended period of time (i.e., more than 24 months), you may consider the "conceptual" phases of development to be separate "common plans" provided the periods of construction for the physically interconnected phases will not overlap.
3) Where discrete construction projects within a larger common plan of development or sale are located ¼ mile or more apart and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed. For example, an interconnecting access road or pipeline were under construction at the same time, they would generally be considered as a part of a single "common plan" for permitting purposes.
4) If the operator sells all the lots in the subdivision to one or more multi-lot homebuilder(s), provisions must be made to obtain stormwater permit coverage by one of the following options:
   a. The permit may be transferred from the first "operator" to the new/second "operator".

b. A new, separate permit may be obtained by the second "operator".
NOTE: If a new permit is to be obtained, then it must be obtained before the first/original permit is terminated.

5) If the operator retains ownership of any lots in the subdivision, the operator shall maintain permit coverage for those lots under the original permit. The operator shall modify the Stormwater Pollution Prevention Plan (SWPPP) by stating which lots are owned and marking the lots on the site map. If there are one (1) or two (2) lots remaining and the total acreage is less than five (5) acres, the original permit could be terminated and those lots could be covered as a small site.

18. **Change in Operator.** For stormwater discharges from large construction sites where the operator changes, including instances where an operator is added after the initial NOI has been submitted, the new operator must ensure that a permit transfer form is received by the Department at least two (2) weeks prior to the operator beginning work at the site.

19. **Late Notifications**. A discharger is not precluded from submitting an NOI in accordance with the requirements of this part after the dates provided in Part I.B.6 of this permit. In such instances, the Director may bring an enforcement action for failure to submit an NOI in a timely manner or for any unauthorized discharges of stormwater associated with construction activity that have occurred on or after the dates specified in this permit.

20. **Failure to Notify**. The operator of a construction site who fails to notify the Director of their intent to be covered under this permit, and who potentially discharges pollutants (sediment, debris, etc.) to waters of the State without an NPDES permit, is in violation of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

21. **Maintenance.** Determination of the acreage of disturbance does not typically include disturbance for routine maintenance activities on existing roads where the line and grade of the road is not being altered, nor does it include the paving of existing roads. Maintenance activities (returning to original conditions) are not regulated under this permit unless one or more acres of underlying and/or surrounding soil are cleared, graded, or excavated as part of the operation.

22. **Releases in Excess of Reportable Quantities.**

A. The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the operator of the reporting requirements of 40 CFR Parts 110, 117 and 302. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reporting quantity established under either 40 CFR 110, 40 CFR 117, or 40 CFR 302, occurs during a 24-hour period, the following action shall be taken:

1) Any person in charge of the facility is required to notify the National Response Center (NRC) (800-424-8802) in accordance with the requirements of 40 CFR 110, 40 CFR 117, or 40 CFR 302 as soon as he/she has knowledge of the discharge;

2) The operator shall submit within five (5) calendar days of knowledge of the release a written description of the release (including the type and estimate of the amount of material released), the date that such release occurred, and the circumstances leading to the release, and steps to be taken in accordance with Part II.B.13 of this permit to the ADEQ.

3) The stormwater pollution prevention plan described in Part II.A of this permit must be modified within fourteen (14) calendar days of knowledge of the release to:

a. Provide a description of the release and the circumstances leading to the release; and

b. The date of the release;

2. Additionally, the plan must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

B. Spills. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill.

23. Attainment of Water Quality Standards

The operator must select, install, implement and maintain control measures at the construction site that minimize the discharge of turbidity and/or oil and grease and/or other pollutants at the discretion of the Director as necessary to protect water quality. In general, except in situations explained in below, the stormwater controls developed, implemented, and updated to be considered stringent enough to ensure that your discharges do not cause or contribute to an excursion above any applicable water quality standard.

At any time after authorization, the ADEQ may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, ADEQ will require the permittee to:

A. Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or

B. Cease discharges of pollutants from construction activity and submit an individual permit application.

All written responses required under this part must include a signed certification consistent with Part II.B.9.

PART II
STANDARD CONDITIONS

Information in **Part II** is organized as follows:

Section A: Stormwater Pollution Prevention Plans:

1. Deadlines for Plan Preparation and Compliance
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SECTION A: STORMWATER POLLUTION PREVENTION PLANS (SWPPP).

The operator must prepare a stormwater pollution prevention plan (the plan/SWPPP) before permit coverage. At least one SWPPP must be developed for each construction project or site covered by this permit. The SWPPP must follow the order outlined in Part II.A.4-7 below. This basic ADEQ format is available through the Department's website http://www.adeq.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm . Other formats may be used at the discretion of the Director **if** the format has been approved by the Department prior to use. The operator must implement the SWPPP as written from initial commencement of construction activity until final stabilization is complete, with changes being made as deemed necessary by the permittee, local, state or federal officials. The plan shall be prepared in accordance with good engineering practices, by qualified personnel and must:

- Identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges from the construction;
- Identify, describe and ensure the implementation of Best Management Practices (BMPs), with emphasis on initial site stabilization, which are to be used to reduce pollutants in stormwater discharges from the construction site;
- Be site specific to what is taking place on a particular construction site;
- Ensure compliance with the terms and conditions of this permit; and
- Identify the responsible party for on-site SWPPP implementation.

1. Deadlines for Plan Preparation and Compliance.

A. Large Construction Sites

The plan shall be completed and submitted for review, along with a NOI and initial permit fee 2 weeks prior to commencement of construction activities. Submittals of updates to the plan during the construction process are required only if requested by the Director.

B. Automatic Coverage Sites

The plan shall be completed prior to the commencement of construction activities and updated as appropriate. Submittal of NOI, permit fee and SWPPP is not required.

C. Existing Permittees

Existing permittees, that were permitted prior to the issuance of this renewal permit, are required to update their plan as appropriate to come into compliance with the requirements contained in Part II.A.4 within **sixty (60) days** from the effective date of this permit.

2. Signature, Plan Review, Plan Availability and NOC.

A. The plan shall be signed by the operator in accordance with Part II.B.9 and be retained on-site at the construction site during normal business hours (8:00 A.M. – 5:00 P.M.). The operator shall keep the complete updated SWPPP on-site.

B. The operator shall make plans available, upon request, to the Director, the EPA, or a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or, in the case of a stormwater discharge associated with construction activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.

C. The Director, or authorized representative, may notify the operator at any time that the plan does not meet one or more of the minimum requirements of this Part. Within seven (7) business days of such notification from the Director, (or as otherwise provided by the Director), or authorized representative, the operator shall make the required changes to the plan and submit to the Director a written certification that the requested changes have been made. The Department may request re-submittal of the SWPPP to confirm that all deficiencies have been adequately addressed. The Department may also take appropriate enforcement action for the period of time the operator was operating under a plan that did not meet the minimum requirements of this permit.

D. The operator must post the NOC near the main entrance of the construction site and visible to the public. The NOC will indicate the location of the SWPPP.

3. <u>Keeping Plans Current</u>. The operator shall amend the plan within seven (7) business days or whenever there is a change in design, construction, operation, or maintenance at the construction site which has a significant effect on the potential for the discharge of pollutants to the Waters of the State that has not been previously addressed in the SWPPP. The plan should also be modified if a determination has been made through inspections, monitoring (if required), ***or*** investigation by the operator, local, state, or federal officials that the discharges are causing or contributing to water quality violation or the plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in stormwater discharges from the construction site.

4. <u>Contents of the Stormwater Pollution Prevention Plan</u>. The stormwater pollution prevention plan shall include the following items:

A. *<u>Site Description</u>*. Each plan shall provide a description of the following:

1) Pre-construction topographic view;
2) A description of the nature of the construction activity and its intended use after the NOT is filed (i.e., residential subdivision, shopping mall, etc.);
3) A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading, infrastructure installation, etc.);
4) Estimates of the total area of the site (including off-site borrow and fill areas) and the total area of the site that is expected to be disturbed by excavation, grading or other activities; and
5) An estimate of the runoff coefficient of the site for pre- and post-construction activities and existing data describing the soil or the quality of any discharge from the site.

B. *<u>Responsible Parties</u>*. The SWPPP must identify (as soon as this information is known) all parties (i.e., General Contractors, Landscapers, Project Designers, and Inspectors) responsible for particular services they provide to the operator to comply with the requirements of the SWPPP for the project site, and areas over which each party has control. If these parties change over the life of the permit, or new parties are added, then the SWPPP should be updated to reflect these changes.

C. *<u>Receiving Waters.</u>* The SWPPP must identify the nearest receiving water(s), or if the discharge is to a municipal separate storm sewer, the name of the operator of the municipal system, the ultimate receiving water(s

D. *<u>Documentation of Permit Eligibility Related to the 303 (d) list and Total Maximum Daily Loads (TMDL).</u>* The SWPPP should include information on whether or not the stormwater discharges from the site enter a water body that is on the most recent 303 (d) list or with an approved TMDL. If the stormwater discharge does enter a water body that is on the most recent 303(d) list or with an approved TMDL, then the SWPPP should address the following items:

1) Identification of the pollutants that the 303 (d) list or TMDL addresses, specifically whether the 303 (d) list or

TMDL addresses sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation);

2) Identification of whether the operator's discharge is identified, either specifically or generally, on the 303 (d) list or any associated assumptions and allocations identified in the TMDL for the discharge; and
3) Measures taken by the operator to ensure that its discharge of pollutants from the site is consistent with the assumptions and allocations of the TMDL.

If the Department determines during the review process that the proposed project will be discharging to a receiving water that is on the most recent 303 (d) list or with an approved TMDL, then the Department will notify the applicant to include additional Best Management Practices in the SWPPP.

E. *Attainment of Water Quality Standards After Authorization.*

1) The permittee must select, install, implement, and maintain BMPs at the construction site that minimize pollutants in the discharge as necessary to meet applicable water quality standards. In general, except in situations explained below, the SWPPP developed, implemented, and updated to be considered as stringent as necessary to ensure that the discharges do not cause or contribute to an excursion above any applicable water quality standard.

2) At any time after authorization, the Department may determine that the stormwater discharges may cause, have reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. If such a determination is made, the Department will require the permittee to:

   a. Develop a supplemental BMP action plan describing SWPPP modifications to address adequately the identified water quality concerns and submit valid and verifiable data and information that are representative of ambient conditions and indicate that the receiving water is attaining water quality standards; or

   b. Cease discharges of pollutants from construction activity and submit an individual permit application.

3) All written responses required under this part must include a signed certification (Part II.B.10)

F. *Endangered Species*. The SWPPP must contain information on endangered and threatened species, including whether any endangered species are in proximity of the stormwater discharge and BMP's to be constructed to control stormwater runoff. The letter of consent from the USF&W, as stated in Part I.B.11.F must be included with the SWPPP along with the name and telephone number of the person or agency which was contacted to obtain the information.

G. *Site Map***.** The SWPPP must contain a legible site map complete to scale, showing the entire site, that identifies, at a minimum, the following:

1) Direction of stormwater flow (i.e., use arrows to show which direction stormwater will flow) and approximate slopes anticipated after major grading activities;
2) Delineate on the site map areas of soil disturbance and areas that will not be disturbed under the coverage of this permit;
3) Location of major structural and nonstructural controls identified in the plan;
4) Location of main construction entrance and exit;
5) Location where stabilization practices are expected to occur;
6) Locations of off-site materials, waste, borrow area, or equipment storage area;
7) Location of areas used for concrete wash-out;
8) Location of all surface water bodies (including wetlands);

9) Locations where stormwater is discharged to a surface water and/or municipal separate storm sewer system if applicable,
10) Locations where stormwater is discharged off-site (should be continuously updated);
11) Areas where final stabilization has been accomplished and no further construction phase permit requirements apply.

H. *Stormwater Controls*. Each plan shall include a description of appropriate controls and measures that will be implemented at the construction site. The plan will clearly describe for each major activity identified in the project description control measures associated with the activity and the schedule during the construction process that the measures will be implemented. Perimeter controls for the site must be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls must be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls must be removed after final stabilization and properly disposed. The description and implementation of controls shall address the following minimum components:

1) Initial Site Stabilization, Erosion, and Sediment Controls. The SWPPP must address, at a minimum, the following:

   a. For larger common plans, only streets, drainage, utility areas, areas needed for initial construction of streets (e.g., borrow pits, parking areas, etc.) and areas needed for stormwater structures may be disturbed initially. Upon stabilization of the initial areas, additional areas may be disturbed.
   b. The construction-phase erosion (such as site stabilization) and sediment controls (such as check dams) should be designed to retain sediment on-site to the extent practicable.
   c. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications, good engineering, and construction practices. If periodic inspections or other information indicates a control has been used inappropriately or incorrectly, the permittee must replace or modify the control for site situations.
   d. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets). This permit does not give the authority to trespass onto other property; therefore this condition should be carried out along with the permission of neighboring land owners to remove sediment.
   e. Sediment must be removed from sediment traps (if used please specify what type) or sedimentation ponds when design capacity has been reduced by 50%.
   f. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls picked up daily).
   g. Off-site material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and shall be addressed in the SWPPP.

2) Stabilization practices. The SWPPP must include, at a minimum, the following information:

   a. Description and Schedule: A description of initial, interim, and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include: mulching, temporary seeding, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures.

   b. Description of buffer areas: The Department requires that a buffer zone be established between the top of stream bank and the disturbed area. The SWPPP must contain a description of how the site will maintain

buffer zones. For construction projects where clearing and grading activities will occur, SWPPP must provide at least twenty-five (25) feet of buffer zone from any named or unnamed streams, creeks, rivers, lakes or other water bodies. The plan must also provide at least fifty (50) feet of buffer zone from established TMDL water bodies, streams listed on the 303 (d)-list, an Extraordinary Resource Water (ERW), Ecologically Sensitive Waterbody (ESW), Natural and Scenic Waterway (NSW), and/or other uses at the discretion of the Director. If the site will be disturbed within the recommended buffer zone, then the buffer zone area must be stabilized as soon as possible. Exceptions from this requirement for areas, such as water crossings, limited water access, and restoration of the buffer are allowed if the permittee fully documents in the SWPPP the circumstances and reasons for the buffer zone encroachment. Additionally, this requirement is not intended to interfere with any other ordinance, rule or regulation, statute or other provision of law. Please note that above-grade clearing that does not disturb the soil in the buffer zone area does not have to comply with buffer zone requirements.

c. Records of Stabilization: A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the plan.

d. Deadlines for Stabilization: Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased, except:

(1) Where the initiation of stabilization measures by the fourteenth (14th) day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
(2) Where construction activity will resume on a portion of the site within twenty-one (21) days from when activities ceased (e.g. the total time period that construction activity is temporarily ceased is less than twenty-one (21) days), then stabilization measures do not have to be initiated on that portion of the site by the fourteenth (14th) day after construction activity temporarily ceased.

3) Structural Practices. A description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the Clean Water Act. Such practices may include but are not limited to:

- silt fences (installed and maintained)
- earthen dikes to prevent run-on
- drainage swales to prevent run-on
- check dams
- subsurface drains
- pipe slope drains
- storm drain inlet protection
- rock outlet protection
- sediment traps
- reinforced soil retaining systems
- gabions
- temporary or permanent sediment basins.

A combination of erosion and sediment control measures is encouraged to achieve maximum pollutant removal. Adequate spillway cross-sectional area and re-enforcement must be provided for check dams, sediment traps, and sediment basins.

a. Sediment Basins.

(1) For common drainage locations that serve an area with ten (10) or more acres (including run-on from other areas) draining to a common point, a temporary or permanent sediment basin that provides storage based on either the smaller of 3600 cubic feet per acre, or a size based on the runoff volume of a 10 year, 24 hour storm, shall be provided where attainable (so as not to adversely impact water quality) until final stabilization of the site. In determining whether installing a sediment basin is attainable, the operator may consider factors such as site soils, slope, available area on site, etc. Proper hydraulic design of the outlet is critical to achieving the desired performance of the basin. The outlet should be designed to drain the basin within twenty-four (24) to seventy-two (72) hours. (A rule of thumb is one square foot per acre for a spillway design.) The 24-hour limit is specified to provide adequate settling time; the seventy-two (72)-hour limit is specified to mitigate vector control concerns. If a pipe outlet design is chosen for the outfall, then an emergency spillway is required. If "non-attainability" is claimed, then an explanation of non-attainability shall be included in the SWPPP**.** Where a sediment basin is not attainable, smaller sediment basins and/or sediment traps shall be used. Where a sediment basin is un-attainable, vegetative buffer strips or other suitable controls which are effective are required for all side slopes and down slope boundaries of the construction area. The plans for removal of the sediment basin should also be included with the description of the basin in the SWPPP.

(2) For drainage locations serving an area less than ten (10) acres, sediment traps, silt fences, or equivalent sediment controls are required for all side slope and down slope boundaries of the construction area unless a sediment basin providing storage based on either the smaller of 3600 cubic feet per acre, or a size based on the run off volume of a 10 year, 24 hour storm is provided. (A rule of thumb is one square foot per acre for a spillway.) However, in order to protect the waters of the state, the Director, at their discretion, may require a sediment basin for any drainage areas draining to a common point.

b. Velocity Dissipation Devices.

Velocity dissipation devices must be placed at discharge locations, within concentrated flow areas serving two or more acres, and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (i.e., no significant changes in the hydrological regime of the receiving water). Please note that the use of hay-bales is not recommended in areas of concentrated flow.

I. *Other Controls*.

1) No solid materials, including building materials, shall be discharged to waters of the State.
2) Off-site vehicle tracking of sediments and the generation of dust shall be minimized through the use of a stabilized construction entrance and exit and/or vehicle tire washing.
3) For lots that are less than one (1) acre in size an alternative method may be used in addition to a stabilized construction entrance. An example of an alternative method could be daily street sweeping. This could allow for the shortening of the construction entrance.
4) The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, temporary and permanent sanitary sewer or septic system regulations.

5) No liquid concrete waste shall be discharged to waters of the State. Appropriate controls to prevent the discharge of concrete washout waters must be implemented if concrete washout will occur on-site.
6) No contaminants from fuel storage areas, hazardous waste storage and truck wash areas shall be discharged to

waters of the State. Methods for protecting these areas shall be identified and implemented. These areas should not be located near a water body, if there is a water body on or near the project.

J. *Non-stormwater discharges*. Sources of non-stormwater listed in Part I.B.10 of this permit that are combined with stormwater discharges associated with construction activity must be identified in the plan. This list should be site specific non-stormwater discharges.

K. *Post-Construction Stormwater Management*. The operator is required to provide a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 (Corps of Engineers) of the Clean Water Act. This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. However, post-construction stormwater BMPs that discharge pollutants from a point source once construction is completed may need authorization under a separate ADEQ NPDES permit. Such practices may include but are not limited to:

- infiltration of runoff onsite
- flow attenuation by use of open vegetated swales and natural depressions
- stormwater retention structures
- stormwater detention structures (including wet ponds)
- sequential systems, which combine several practices

A goal of at least 80 % removal of total suspended solids from these flows which exceed predevelopment levels should be used in designing and installing stormwater management controls (where practicable). Where this goal is not met, the operator shall provide justification for rejecting each practice listed above based on site conditions.

L. *Applicable State or Local Programs.* The SWPPP must be updated as necessary to reflect any revisions to applicable federal, state, or local requirements that affect the stormwater controls you implement at your site.

M. *Inspections*.

Inspections should conducted by qualified personnel (provided by the operator). Inspections must include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the stormwater conveyance system. Erosion and sedimentation control measures must be observed to ensure proper operation. Discharge locations must be inspected to determine whether erosion control measures are effective in preventing significant impacts to waters of the State, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections may not be required if the lot(s) within a larger common plan is/are sufficiently stabilized. The operator must ensure that no sediment will leave the lot(s) that are stabilized. These lots must be identified within the SWPPP and show what date they were stabilized. If the operator is unable to ensure this, then inspections must continue.

1) **Inspection Frequency.** Inspections must be conduct in accordance with one of the following schedules listed below. The schedule **must be specified** in the Stormwater Pollution Prevention Plan (SWPPP).

   a. At least once every 7 calendar days, or
   b. At least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5inches or greater (a

rain gauge must be maintained on-site).

2) **Inspection Form.** The ADEQ inspection form should be used for all inspections. The inspection form should include any erosion/sediment controls that are being used on the site. The form is available on the Departments website www.adeq.state.ar.us. If a different form is used it must at a minimum contain the following information:

   a. Inspector Name and Title
   b. Date of Inspection
   c. Amount of Rainfall and Days Since Last Rain Event (only applicable to Part II.A.4.M.1.b)
   d. BMPs used on-site
   e. If the BMPs are in working order and if Maintenance is required (when scheduled and completed)
   f. Location and Dates When Major Construction Activities Begin, Occur or Cease
   g. Report Signature of Inspector

   Additional information may be added to the inspection report at the permittees discretion.

3) **Inspection Records.** The report shall be retained as part of the stormwater pollution prevention plan for at least three (3) years from the date the site is finally stabilized. The report shall be signed and have a certification statement in accordance with the requirements of this permit.

4) **Winter Conditions**. Inspections will not be required at construction sites where snow cover exists over the entire site for an extended period, and melting conditions do not exist. Regular inspections, as required by this permit, are required at all other times as specified in this permit.

N. *Maintenance*. A description of procedures to maintain vegetation, erosion and sediment control measures and other protective measures in good, effective operating condition shall be outlined in the plan. Any repairs that are needed based on an inspection shall be completed within three (3) business days of discovery or as otherwise directed by state or local officials. However, if conditions do not permit large equipment to be used, a longer time frame is allowed if the condition is thoroughly documented on the inspection form. Maintenance for manufactured controls must be done at a minimum of the manufacture's specifications. Maintenance for non-manufactured controls, i.e. check dams, sediment traps, must be done upon 50% capacity.

5. Contractors.

For each measure identified in the plan, the stormwater pollution prevention plan must clearly identify the contractor(s) that will implement the measure. If additional contractors are added to the project, then the list of contractors should be updated accordingly in the SWPPP.

6. Inspectors.

The stormwater pollution prevention plan must clearly identify the person or persons that will be conducting the inspections of all stormwater controls. If additional inspectors are added to the project, then the list of inspectors should be updated accordingly in the SWPPP.

7. Plan Certification.

The Stormwater Pollution Prevention Plan (SWPPP) Certification must be signed by either the operator or the cognizant official identified on the Notice of Intent. All documents required by the permit and other information requested by the Director shall be signed by operator or by a duly authorized representative of the operator (Please see Part II.B.10 below

for certification).

SECTION B: STANDARD PERMIT CONDITIONS

1. **Retention of Records.**

   A. The operator shall retain records of all stormwater pollution prevention plans, all inspection reports required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit for a period of at least three years from the date the Notice of Termination letter is signed by the Department. This period may be extended by request of the Director at any time.

   B. The operator shall retain a signed copy of the stormwater pollution prevention plan required by this permit at the construction site from the date of project initiation to the date of final stabilization.

2. **Duty to Comply.** The operator must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Water Act and the Arkansas Water and Air Pollution Control Act and is grounds for: enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application.

3. **Penalties for Violations of Permit Conditions.** The Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a criminal penalty of not more than twenty five thousand dollars ($25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars ($10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

4. **Continuance of the Expired General Permit.** An expired general permit continues in force and effect until a new general permit is issued. If this permit is not re-issued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and remain in force and effect. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by the continued permit until the earliest of:

   A. Re-issuance or replacement of this permit, at which time you must comply with the conditions of the new permit, within 60 days after issuance, to maintain authorization to discharge; or

   B. Your submittal of a Notice of Termination; or

   C. Issuance of an individual permit for the project's discharges; or

   D. A formal permit decision by the ADEQ to not re-issue this general permit, at which time you must seek coverage under an individual permit.

5. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

6. **Duty to Mitigate.** The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has reasonable likelihood of adversely affecting human health or the environment.

7. **Duty to Provide Information.** The operator shall furnish to the Director, an authorized representative of the Director, the

EPA, a State or local agency reviewing sediment and erosion plans, grading plans, or stormwater management plans, or in the case of a stormwater discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, within a reasonable time, any information which is requested to determine compliance with this permit.

8. **Other Information.** When the operator becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Director, he or she shall promptly submit such facts or information.

9. **Signatory Requirements.** All Notices of Intent, reports, or information submitted to the Director or the operator of a regulated small, medium, or large municipal separate storm sewer system shall be signed and certified.

A. All Notices of Intent shall be signed as follows:

1) For a corporation: by a responsible corporate officer. For purposes of this section, a responsible corporate officer means:

a. A president, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

b. The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capitol investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;

3) For a municipality, State, Federal or other public agency: By either a principal executive or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

a. The chief executive officer of the agency; or

b. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

B. All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1) The authorization is made in writing by a person described above and submitted to the Director;

2) The authorization specifies either an individual or a person having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility, or position of equivalent responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

3) Changes to authorization. If an authorization under this Part is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the above requirements must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

10. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments such as Inspection Form were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Note: For this permit only, "this document" refers to the Stormwater Pollution Prevention Plan, "attachments" refers to the site map and inspection forms, and "system" is referencing the project site.

11. Penalties for Falsification of Reports. The Arkansas Water and Air Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties specified in Part II.B.3 of this permit and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

12. Penalties for Tampering. The Arkansas Water and Air Pollution Control act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than twenty five thousand dollars ($25,000) or by both such fine and imprisonment.

13. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the operator from any responsibilities, liabilities, or penalties to which the operator is or may be subject under Section 311 of the Clean Water Act or Section 106 of CERCLA.

14. Property Rights. The issuance of this permit does not convey any property rights of any sort or any exclusive privileges, nor does it authorize any injury to private property, any invasion of personal rights, or any infringement of Federal, State, or local laws or regulations.

15. Severability. The provisions of this permit are severable. If any provisions of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provisions to other circumstances and the remainder of this permit shall not be affected thereby.

16. Transfers. This permit is not transferable to any person except after notice to the Director. A transfer form must be submitted to the ADEQ as required by this permit.

17. Proper Operation and Maintenance. The operator shall at all times:

A. Properly operate and maintain all control (and related appurtenances) which are installed or used by the operator to achieve compliance with the conditions of this permit. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by an operator only when the operation is necessary to achieve compliance with the conditions of the permit.

B. Provide an adequate operating staff which is duly qualified to carry out operation, inspection, maintenance, and testing functions required to insure compliance with the conditions of this permit.

18. Inspection and Entry. The operator shall allow the Director, the EPA, or an authorized representative, or, in the case of a construction site which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator of the separate sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

A. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
B. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
C. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment);

19. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following;

A. Violation of any terms or conditions of this permit;
B. Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts;
C. A change in any conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge;
D. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or
E. Failure of the operator to comply with the provisions of ADEQ Regulation No. 9 (Fee Regulation). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to terminate this permit under the provisions of 40 CFR 122.64 and 124.5(d), as adopted by reference in ADEQ Regulation No. 6, and the provisions of ADEQ Regulation No. 8.

20. Re-Opener Clause.

A. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with industrial activity covered by this permit, the operator of such discharge may be required to obtain an individual permit or an alternative general permit in accordance with Part I.B.22 of this permit, or the permit may be modified to include different limitations and/or requirements.

B. Permit modification or revocation will be conducted in accordance with the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5, as adopted by reference in ADEQ Regulation No. 6.

21. Local Requirements. All dischargers must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding any discharges of stormwater to storm drain systems or other water sources under their jurisdiction, including applicable requirements in municipal stormwater management programs developed to comply with the ADEQ permits. Dischargers must comply with local stormwater management requirements, policies, or guidelines including erosion and sediment control.

FACT SHEET
AND SUPPLEMENTARY INFORMATION
FOR DRAFT GENERAL PERMIT ARR150000
STORMWATER RUNOFF ASSOCIATED WITH CONSTRUCTION SITES
IN ARKANSAS

Information in this part is organized as follows:

1. Background
2. Regulatory Background
3. Permit Coverage
  a. Notice of Intent to be covered
  b. Individual Permits
4. Discharge Characterization
5. Technology Requirements
6. Water Quality Requirements
7. BMP Requirements and Basis
8. Inspections
9. Other Conditions
10. Sources
11. Reaffirmation of Permit Coverage

1. BACKGROUND

On November 1, 2003, General Stormwater Permit No. ARR150000 became effective with an expiration date of October 31, 2008. ADEQ recognizes that it should have a replacement permit in place at that time. ADEQ is proposing to issue a three-year permit. This will enable coordination with a national regulation the EPA is currently developing for the construction and development industry. This national regulation, called the Effluent Limitations Guideline for the Construction and Development Industry, is under development and will not be completed until after the current Construction Stormwater Permit expires. Once finalized, ADEQ will be required to incorporate the provisions of this Effluent Guideline in the Construction General Stormwater Permits.

This is a renewal of the General Construction Stormwater permit. Upon renewal, the Department decided to add additional permit requirements and clarify the overall permit. The proposed major changes are as follows:

A. The phrase "Owners or Operators" has been removed and replaced with the phrase "Operator."
B. The following phrase has been removed from the cover page "in accordance with monitoring requirements, and other conditions set forth in Parts I and II herein."
C. Medium sites have been removed. There are now two sizes for construction sites: Small (1-5 Acres) and Large (5 or more Acres).
D. The following definitions have been added: ADEQ, Agricultural stormwater runoff, Arkansas Pollution Control and Ecology Commission, Automatic Coverage, Construction Site, Contaminated, Detention Basin, Disturbs, Erosion, Infrastructure, Impaired Water, Landscaping, Larger Common Plan of Development, Qualified Local Program, Qualified Personnel, Retention Basins, Sediment and Sediment Basins, Uncontaminated.
E. Part I.B.3 Responsibility of the Operator has been added.
F. Part I.B.4 Where to submit information has been added for clarification.
G. Part I.B.5 was added to allow for Qualifying Local Program (QLP) to be added. A QLP would be authorized to permit small construction sites within their jurisdiction
H. Part I.B.6 has been updated to clarify the requirements for coverage, such as clarifying the requirement that a complete SWPPP, in accordance with Part II. A, be submitted prior to issuance of permit and clarifying the stormwater permitting exemption for smaller construction sites that disturb less than one acre that are not part of a larger common plan of development.

I. Part I.B.8 has been added to include posting requirements for the sites.

J. Part I.B.9 has been added to verify that the local authorities have the authority to request project information.

K. Part I.B.10 has been moved from Part I.C.1 (Allowable Non-Stormwater Discharges).

L. Part I.B.11 has been moved from Part I.B.3 (Limitations on Coverage).

M. Part I.B.11.E has been updated to address the requirements for construction sites that discharge into an impaired receiving stream that is on the 303(d) list.

N. Part I.B.11.F has been updated to clarify endangered species requirements.

O. Part I.B.12. (Trench and Ground Water Control) has been added.

P. Part I.B.13 (Buffer Zones) has been added.

Q. Part I.B.14 (Notice of Termination (NOT)) was updated to only allow termination of permit coverage after 100% of all the construction activities are complete and the site has reached final stabilization.

R. Part I.B.15 (Responsibilities of the Operator of a Larger Common Plan of Development for a Subdivision) has been added to clarify the conditions that must be met before an operator can terminate permit coverage for a larger common plan or subdivision.

S. Part I.B.21 (Maintenance) was added to clarify the difference in maintenance activities and construction activities.

T. Part II.A. was revised to include a SWPPP template or order requirement.

U. Part II.A.3 was modified to include a requirement that changes to the SWPPP must be made within seven (7) business days. In addition, the section was updated to clarify the instances when a SWPPP modification would be required.

V. Part II.A.4 was reorganized.

W. Part II.A.4.A (Site Description) has been updated to include additional requirements for the site description.

X. Part II.A.4.B (Responsible Parties) has been added to identify those working on the site that should be contacted.

Y. Part II.A.4.D TMDL information and requirements have been moved from Part II.A.4.f.

Z. Part II.A.4.E Attainment of water quality standards after authorization has been moved from Part II.A.4.g.

AA. Part II.A.4.F Endangered species requirements have been moved from Part II.A.4.a.vii.

BB. Part II.A.4.G (Site Map) has been moved from Part II.A.4.a.v and expanded to include additional requirements.

CC. Part II.A.4.G.4 was added to require that the site map indicate construction entrances and exits.

DD. Part II.A.4.G.6 was added to require that the site map contained in the SWPPP show "Locations of off-site materials, waste, borrow area, or equipment storage area."

EE. Part II.A.4.G.7 was added to include the site map to show concrete washout areas.

FF. Part II.A.4.G.11 was added to require that the site map contained in the SWPPP show the "Areas where final stabilization has been accomplished and no further construction phase permit requirements apply."

GG. Part II.A.4.H Stormwater controls has been moved from Part II.A.4.b and expanded to include additional requirements.

HH. Part II.A.4.H.1 has been updated to include to language for clearing a larger common plan and maintenance requirements for control measures.

II. Part II.A.4.H.2.b has been added to include clarification on buffer zones for streams, creeks, rivers and lakes.

JJ. Part II.A.4.H.2.d has been added to require that there be a record of stabilization for the major activities taking place on the site.

KK. Part II.A.4.H.2.e has been added to indicate that there are time requirements for stabilization.

LL. Part II.A.4.H.3.a.(1) has been updated to provide clarification on sediment basins.

MM. Part II.A.4.H.3.b has been moved from Part II.4.b.ii.B. It has also been updated to include all drainage areas to a common point greater than or equal to ten (10) acres must have a sediment basin.

NN. Part II.A.4.I.2 has been updated to include the use of a stabilized construction entrance/exit for off-site tracking of sediment minimization.

OO. Part II.A.4.I.5 has been added to require concrete washout controls.

PP. Part II.A.4.I.6 has been added to require fuel storage areas, hazardous waste storage and truck wash areas be addressed in the written portion of the SWPPP.

QQ. Part II.A.4.J has been moved from Part II.A.5 (Non-stormwater discharges).

RR. Part II.A.4.K has been moved from Part II.A.4.b.ii (Post-Construction Stormwater Management).

SS. Part II.A.4.L has been moved from Part II.A.4.c (Approved State or Local Plans).

TT. Part II.A.4.M (Inspections) has been updated to require a rain gauge on-site to ensure inspections are conducted at the required intervals and inspections every seven days or within 24 hours of 1/2 inch of rainfall or more.

UU. Part II.A.4.M.2 has been added to require that all site inspections conducted use the ADEQ inspection form or contain the minimum requirements.

VV. Part II.A.4.M.3 has been added to clarify permit requirements where snow cover exists and snow is not melting.

WW. Part II.A.4.N (Maintenance) has been moved from Part II.A.4.d and modified to allow three business days for maintenance on controls.

XX. Part II.A.5, the contractor certification has been removed from the permit.

YY. Part II.A.6 has been added to include a requirement that the inspector for the site be identified.

ZZ. Part II.A.7 (Plan Certification) has been added to clarify that the certification must be included with the SWPPP.

AAA. Part II.B.9.A.1.b has been revised to include updated language with respect to federal regulation.

BBB. Part II.B.21 has been added to authorize dischargers to comply with local requirements.

CCC. The Notice of Intent (NOI) form has been revised.

DDD. The Notice of Coverage (NOC) Postings have been revised.

2. Regulatory Background

The federal stormwater regulations contained in 40 CFR 122.26 require NPDES permit coverage for small (1 – 5 acre) and large (greater than 5 acre) construction sites.

3. Permit Coverage

Facilities covered by this general permit include those facilities which engage in construction activities greater than one (1) acre in size or less than one (1) acre that is part of a larger common plan.

A. This general permit shall not apply to activities:

1) That originate from the site after construction activities have been completed and the site has undergone final stabilization.
2) Discharges that are mixed with sources of non-stormwater.
3) Stormwater discharges from construction sites that the Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.
4) Stormwater discharges from construction sites if the discharge or clearing activities are likely to adversely affect a listed endangered or threatened species or its critical habitat.
5) Discharges which are not in compliance with the Endangered Species Act (ESA).
6) Discharges to receiving waters listed as impaired on the 303(d) list, of which the SWPPP and selected BMPs do not sufficiently protect water quality.

B. Notice of Intent (NOI)

1) Large Construction Sites (greater than 5 acres)

Written notification from new dischargers shall be submitted to the Department at least two (2) weeks prior to the proposed discharge. Unless the applicant is notified otherwise by the Director within two (2) weeks of the notification being deemed complete, authority to discharge under this general permit will become effective.

2) Sites with Automatic Coverage

Small site and sites that are less than one (1) acre but part of a larger common plan are automatically covered under the provisions of this general permit. All conditions set forth in Part II.A should be followed and the site should be clearly posted with the Site Notice.

3) The Notice of Intent (NOI) contains the following information:

a. Operator (Permittee) information (name, address, telephone and fax numbers, E-mail address)
b. Whether the operator is a federal, state, private, public, corporation, or other entity
c. Application Type: New or renewal
d. Invoice mailing information (Name, address, and telephone and fax numbers)
e. Project Construction site information (Name, county, address, contact person, direction to site, latitude and longitude for the entrance of the site or the endpoints for lineal project (in degrees, minutes, and seconds), estimated construction start date and completion date through site final stabilization, estimated of the total project acreage and the acreage to be disturbed by the operator submitting the NOI to the nearest ½ acres, type of the project (subdivision, school, etc), project part of a larger common plan of development
f. Discharge information (Name of the receiving stream, ultimate receiving stream, name of municipal storm sewer system)
g. Previous/Current permit information
h. The Certification statement and signature of a qualified signatory person in accordance with 40 CFR 122.22, as adopted by reference in APCEC Regulation No. 6
i. The certification of the facility corporation
j. Other information (location of the SWPPP).

C. Termination of a Qualifying Local Program:

1) **Termination Approval.** A Qualifying Local Program may be terminated by either the Department or the municipality. Upon termination of Department approval of a Qualifying Local Program, any construction site must meet the requirements of this permit.

2) **Expiration Approval.** Department approval of a Qualifying Local Program will expire with this general permit. Any municipality desiring to continue Department approval of their program must reapply by 6 weeks after the effective date of the permit. The Division will determine if the program may continue as an approved Qualifying Local Program.

D. Individual Permits

The ADEQ may consider the issuance of individual permits according to the criteria in 40 CFR 122.28(b)(3). These criteria include:

1) the discharge(s) is a significant contributor of pollution,
2) the discharger is not in compliance with the terms and conditions of the general permit,
3) a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source,
4) effluent limitation guidelines are subsequently promulgated for the point sources covered by the general permit,
5) a Water Quality Management Plan containing requirements applicable to such point sources is approved, or
6) the requirements listed in 40 CFR 122.28(a) and identified in the previous paragraphs are not met.

4. Discharge Characterization

Stormwater runoff is caused due to soil disturbing activities, stormwater runoff from construction sites have the potential to be heavily laden with silt, sediment, and debris. This runoff is then discharged to creeks, rivers, lakes, ponds, municipal stormwater drainage systems, etc.

5. Technology Requirements

National guidelines establishing BPT, BCT, and BAT standards have not been promulgated for stormwater discharges from construction activities. In accordance with 40 CFR 122.44(k) and 40 CFR 122.44 (s), the general permit includes requirements for the development and implementation of Stormwater Pollution Prevention Plans (SWPPPs) along with Best Management Practices (BMPs).

6. Water Quality Requirements

In accordance with 40 CFR 122.44(d), the general permit must include any requirements necessary to achieve State Water Quality Standards as established under Section 303 of the Clean Water Act. Discussed below are the requirements based on State Water Quality Standards.

A. Discharges to waters for which there is a total maximum daily load (TMDL) allocation are not eligible for coverage under this permit unless you develop and certify a stormwater pollution prevention plan (SWPPP) that is consistent with the assumptions and requirements in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. If a specific numeric wasteload allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation.

B. Discharges that the Department, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, the Department may notify you that an individual permit application is necessary in accordance with Part I.B.4. However, the Department may authorize coverage under this permit after inclusion of appropriate controls and implementation procedures in the SWPPP designed to bring the discharge into compliance with water quality standards.

7. BMP Requirements and Basis

Numeric discharge limits are not imposed by this general permit. The permit language is included to ensure that those seeking coverage under this general permit select, install, implement, and maintain BMPs at their construction site that will be adequate and sufficient to meet water quality standards for all pollutants of concern. The ADEQ has determined that BMPs, when properly selected, installed, implemented, and maintained do provide effluent quality that can meet WQS based on 40 CFR 122.44(k).

8. Inspections

Monitoring requirements are not imposed by this general permit in accordance with the stormwater federal regulations contained in 40 CFR 122.26. However, inspections of the permitted area are required every 7 days or once every 14 days and within 24 hours after a ½ inch of rainfall.

9. Other Conditions

A. Geographic Area and Covered Facilities

The general permit, when issued, will authorize stormwater discharges from construction activities throughout the State of Arkansas to all receiving waters. The permit will be applicable only to facilities which have direct discharges to waters of the State and are therefore subject to the requirements of Section 301 and 402 of the Clean Water Act.

B. Eligibility and Authorization

An operator engaged in construction activity greater than 1 acre in size in the State of Arkansas is eligible for coverage under this general permit.

C. Expiration Date

This general permit will expire three (3) years from the original effective date of the permit.

10. Sources.

The following sources were used to draft this permit:

A. 40 CFRs 122 and 125.
B. APCEC Regulation No. 2.
C. APCEC Regulation No. 6.
D. APCEC Regulation No. 8.
E. APCEC Regulation No. 9.
F. Ohio EPA permit #OHC000002.
G. U.S. EPA Stormwater web page.
H. State of Arizona Permit #AZG2003-001 and Notice of Intent.
I. Iowa Waste Reduction Center/University of Northern Iowa document #IAC 567-64.13.
J. Colorado Stormwater discharge permit #COR-030000.
K. Missouri State Operating General Permit #MO-R101000.
L. Montana Department of Environmental Quality Permit #MTR100000.
M. Georgia Soil and Water Conservation Commission Permit #GAR100001, GAR100002, & GAR100003.
N. Definitions from http://www.projectbrays.org/detention.html
O. Stakeholders meetings held 01/15/2008 & 02/12/2008.
P. EPA BMP Manual

11. Reaffirmation of Permit Coverage.

A. Large Sites: Any permittee with coverage under this general permit at the time of expiration will continue to have coverage until a renewal general permit is effective. A tracking number can not be issued after the expiration date to new discharges. Therefore, the Department urges new dischargers to submit a complete application as soon as possible, but no later than 2 weeks prior to the expiration date of this permit. Upon issuance of a new or different general permit for all of the stormwater discharges covered by this permit, the permittee is required to notify the Department of their intent to be covered under this new permit within 60 days after the effective date. All permittees must submit a new NOI after the renewal permit effective date, even if the Department has an existing NOI on file for the discharge.

B. Automatic Coverage Sites: Operators of a site with automatic coverage are responsible for ensuring that the site is in compliance with any changes or updates of this general permit, by either contacting ADEQ or reviewing the ADEQ website: http://www.adeq.state.ar.us/water/branch_npdes/stormwater/construction/construction.htm .

70'-0" x 130'-0" 9,100 SQ. FT. PROTOTYPE "E"
RIGHT CORNER ENTRY
RELEASE 2/22/2016
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS 72002
STORE #18146

DRAWING LIST

GENERAL:

T1 TITLE SHEET

CIVIL:

C1 SITE DEMOLITION PLAN
C2 SITE UTILITY AND DIMENSION PLAN
C3 GRADING, DRAINAGE, AND EROSION CONTROL PLAN
C4 PUBLIC ROAD IMPROVEMENT PLAN
C5 LANDSCAPE AND IRRIGATION PLAN
C6 CIVIL DETAILS
C7 CIVIL NOTES

OWNER:

F1.E FIXTURE PLAN

ARCHITECTURAL:

A1.E FLOOR PLAN, DETAILS & INTERIOR PARTITIONS
A2.E EXTERIOR ELEVATIONS
A3.E SECTIONS & DETAILS
A4.E ROOM FINISH SCHEDULE & SALES FLOOR ELEVATIONS
A5.E DOOR SCHEDULE & DETAILS
A6.E TOILET ROOM PLAN & DETAILS
A7.E SIGN DETAILS
A8.E SIGN BRACING DETAILS
A9.E REFLECTED CEILING PLAN

STRUCTURAL:

S1.E FOUNDATION PLAN & METAL BUILDING NOTES
S2.E CONCRETE SPECS & CONCRETE FINISH SPECS
S3.E CONCRETE ANALYSIS & MISC NOTES & ROOF PLAN

ELECTRICAL:

E1.E POWER PLAN
E2.E LIGHTING PLAN
E3.1E POWER POLE DETAILS
E4.E PANEL SCHEDULE AND ELEC. DETAILS
EMS1.E EMS LOW VOLTAGE PLAN
EMS2.E EMS PANEL & CONTROLS
ES1.E SITE LIGHTING PLAN

MECHANICAL:

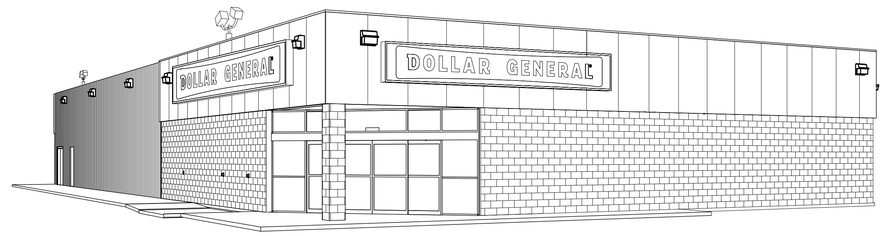
M1.E HVAC PLAN & SCHEDULE
M2.E HVAC DETAILS

PLUMBING:

P1.E PLUMBING PLAN AND DETAILS
P2.E PLUMBING RISER DIAGRAMS AND SCHEDULES

SPECIFICATIONS:

SP-1 SPECIFICATIONS
SP-2 SPECIFICATIONS, CONT'D
AD.1 ADA DETAILS



REQUIRED NATIONAL ACCOUNT VENDORS

COMPANY	CONTACTS	PHONE #	REQUIRED ITEMS
MC CUE CORPORATION	PRICING - BRAD ROBINSON ORDERING - BRETT JOHNSON	404-293-7758 brobinson@mccuecorp.com 800-800-8503 EXT. 268	TRIM KIT INCLUDES BUMPER GUARDS AND CART STOP
YORK	NATIONAL ACCOUNTS	800-481-9738 york-dollargeneral-be@jci.com	HVAC UNITS
CARRIER	ANDREW BROMWELL	877-501-4432 andrew.bromwell@carrier.utc.com	HVAC UNITS
ROOF CURB SYSTEMS	GREG SMYTH	800-683-5848 gsmyth@roofcurb.com	RTU CURB
CURBS PLUS INC.	ALLAN THRAILKILL	888-639-2872 alan.thrailkill@curbs-plus.com	RTU CURB
KCC INTERNATIONAL INC.	GREG CONRAD	800-382-2872 gconrad@kcccurbs.com	RTU CURB
SHERWIN WILLIAMS	LOCAL SHERWIN WILLIAMS STORE		PAINT, PRIMER, CONCRETE SEALER AND BLOCK FILLER
NABCO ENTRANCES	KIM RAUSCH	262-679-7513 dollargeneral@nabcoentrances.com	CT,DC,DE,IN,KY,MA,MD,ME,MI, NH,NJ,NY,OH, PA,RI,VA,VT,WV MODEL #GT1175-02
STANLEY ACCESS TECHNOLOGIES	DENNIS WEBB	256-776-8902 DGdoors@sbdinc.com	AR,AZ,CA,CO,IL,IA,KS,LA,MN, MO,MS,NE,NM,NV,OK,SD,TX,UT,WI MODEL #ESA200
ASSA ABLOY ENTRANCE SYSTEMS	ROSS MERKLING	609-528-2580 dollargeneral.besam.us@assaalboy.com	AL, FL, GA, NC, SC, TN
D&P CUSTOM LIGHTING	NATIONAL ACCOUNT SALES	800-251-2200	CUSTOM POWER POLES
EMERSON CLIMATE TECHNOLOGIES	WEBSITE: http://dollargeneralbid.ectsolutions.net	USER NAME: dollargeneralbid PASSWORD: dollargeneralbid	EMS SUPPLIER NOTE: CUSTOMIZED DOLLAR GENERAL EMS PANEL REQUIRES STORE #, CITY, STATE, ZIP CODE & QTY. OF HVAC UNITS OF THE INSTALL SITE WHEN ORDERING.
EUCLID CHEMICAL COMPANY	PHIL BRANDT	877-438-3826 PBrandt@euclidchemical.com	CONCRETE POLISHING SYSTEMS
RETRO-PLATE SYSTEMS	CURTIS TURNBULL	888-942-3144 corporateaccounts@retroplatesystem.com	CONCRETE POLISHING SYSTEMS
ORION ENGINEEERED SYSTEMS	BRENDAN HARTT	904-380-5033 bhartt@oesx.com	ELECTRICAL LIGHTING SUPPLIES AL,AR,AZ,CA,CO,FL,GA,KY,LA, MS,NC,NM,NV,OK,SC,TN,TX,VA,WV
NESCO LIGHTING	NEEDHAM ELECTRIC SUPPLY	800-244-6980 DollarGeneral@nescoweb.com	ELECTRICAL LIGHTING SUPPLIES CT,DE,IA,IL,IN,KS,MA,MD,MI,MN,MO, NE,NH,NJ,NY,OH,PA,RI,SD,VT,WI
GIRTMAN AND ASSOCIATES	MIKE MOYNAHAN	615-350-6000 dgconstruction@bass-security.com	INTERIOR DOORS AND FRAMES AND RESTROOM ACCESSORIES AL,AR,AZ,CA,CO,FL,GA,IA,KS,LA,MS,MN, MO,NE,NM,NV,OK,OR,SC,SD,TN,TX,WI
COOK & BOARDMAN GROUP	JOE HARRELL	336-837-0673 nationalsales@cookandboardman.com	INTERIOR DOORS AND FRAMES AND RESTROOM ACCESSORIES CT,DE,IL,IN,KY,MA,MD,ME,MI,NC,NH,NJ, NY,OH,PA,RI,VA,VT,WV
STANLEY CONVERGENT SECURITY SOLUTIONS	DAN GOLDSMITH	740-215-8913	INTERIOR FIRE ALARM PANELS
CROSSCOM NATIONAL	ANDREA LEMAY	847-850-6297 dollargeneral@crosscomnational.com	LOW VOLTAGE & VOICE/DATA EAST: CT, DE, FL, IL,IN, MA, MD, ME, MI, MO, NH, NJ, NY, OH, PA, RI, VT, WI, WV
ASD	DWAYNE SIMMONS	826-624-1044 dsimmons@asd-usa.com	LOW VOLTAGE & VOICE/DATA SOUTH: AL, AR, GA, KY, LA, MS, NC, SC, TN, TX, VA
BAILIWICK	COREY CARLSON	952-658-7975 ccarlson@bailiwick.com	LOW VOLTAGE & VOICE/DATA WEST: AZ, CA, CO, IA, KS, MN, ND, NE, NM, NV, OK, OR, SD
GRAYBAR	JEROME BANNISTER	615-743-3202 office, 615-924-2135 cell DollarGeneral@graybar.com	CABLE TRAY
RAINBIRD IRRIGATION	LOCAL RAIN BIRD DISTRIBUTER	WWW.RAINBIRD.COM	IRRIGATION SYSTEMS

REQUIRED NATIONAL ACCOUNTS FOR ENGINEERING AND CONSTRUCTION MATERIAL TESTING

COMPANY	CONTACTS	PHONE #	
ATC ASSOCIATES, INC.	LESLIE GREENWOOD	205-733-8775 dollargeneral@atcassociates.com	www.atcassociates.com
BUILDING AND EARTH SCIENCES, INC.	MATT ADAMS	205-836-6300 dollargeneral@buildingandearth.com	www.buildingandearth.com
EAS PROFESSIONALS, INC.	JERRY MARRONE	864-234-7368 dollargeneral@eas-pro.com	www.eas-pro.com
PROFESSIONAL SERVICE INDUSTRIES, INC. (PSI)	TERESA HEBNER	770-424-6200 #3030 teresa.hebner@psiusa.com	www.psiusa.com
TERRACON	JOHN MEADOW	770-623-0755 #353 dollargeneral@terracon.com	www.terracon.com

NOTE: MATERIAL TESTING IS REQUIRED ON ALL TRIPLE NET LEASES.

PROTOTYPE MANAGEMENT TEAM

COMPANY	CONTACTS	PHONE #	
MJM ARCHITECTS	GARY CONWAY	615-244-8170 dg@mjmarch.com	www.mjmarch.com
ENTECH	MITCH SIMPSON	615-373-2640 email@entechtn.com	www.entechtn.com

NATIONAL ACCOUNT & CONTACT INFORMATION SUBJECT TO CHANGE

REGISTERED ARCHITECT DANIEL BARTLETT 10-24-2016 No. 2963 ARKANSAS

BUILDING DATA:
OCCUPANCY ; BUILDING CLASSIFICATION - M MERCHANTILE (NONSEPARTED USES) CONSTRUCTION - TYPE II B (UNPROTECTED), UNSPRINKLERED (TOTAL FIRE AREA= 8,724.66 S.F.); INDIVIDUAL CLASSIFICATIONS - GROSS MERCHANTILE AREA (M): 7,860.27 S.F. OCCUPANT LOAD (30 GROSS)= 262 PEOPLE, GROSS STORAGE AREA (S1): 864.39 S.F. OCCUPANT LOAD (300 GROSS)= 3 PEOPLE; TOTAL OCCUPANY: 265 PEOPLE.

NOTE: THESE DRAWINGS REPRESENT A "BUILDERS SET" OF DRAWINGS AND ARE TO BE USED AS A GUIDE TO CONSTRUCTION PROCESS. THEY DO NOT REPRESENT A FULL OR COMPLETE ARCHITECTURAL SERVICE. FURNISH ALL LABOR, MATERIAL & EQUIPMENT FOR A COMPLETE INSTALLATION; WORKMANSHIP SHALL BE FIRST QUALITY AND IN ACCORDANCE WITH BEST PRACTICES FOR THE TRADE BY SKILLED WORKERS.

ARCHITECT:
BARTLETT ARCHITECTURE, inc.
DANIEL A. BARTLETT, AIA, NCARB
603 HWY 5 NORTH
BENTON, AR 72019
(501) 794-4448

CIVIL ENGINEER:
THE SENTINEL GROUP, LLC
2712 CYRESS POINT DRIVE
BENTON, ARKANSAS 72019
(501) 317-2547- PHONE

MECH. & PLUMB. ENGINEER:
JAMIE GUIDRY, P.E.
3655 IRBY DR.
CONWAY, AR 72034
(501) 339-3275

ELEC. ENGINEER:
DANIEL JOHNSON, P.E.
928 COUNTY ROAD 139
ELIZABETH, ARKANSAS 72531
(870) 488-5588

STRUC. ENGINEER:
GLENN LEWIS ENGINEERING
GLENN LEWIS, P.E.
23532 INTERSTATE 30
BRYANT, AR 72022
(501) 847-4630

DEVELOPER:
PB GENERAL HOLDINGS (SPRINGHILL), LLC.
P.O. BOX 22407
LITTLE ROCK, AR 72221

CONTRACTOR:
VAN-TASSEL PROCTOR, INC.
5110 TALLEY ROAD
LITTLE ROCK, AR 72204

SQUARE FOOTAGE LEGEND

TOTAL SQUARE FOOTAGE	9,100 S.F.
TOTAL LEASABLE AREA	9,002 S.F.
OVERALL BUILDING DIMENSIONS	70'-0" X 130'-0"
SALES FLOOR DIMENSIONS	68'-0" X 107'-5"
SALES AREA	7,422 S.F.
RECEIVING AREA	905 S.F.
BREAK ROOM & OFFICE AREA	185 S.F.
TOILET ROOMS & HALLWAY AREA	176 S.F.
TOTAL NET AREA (BLDG AREA PER CODE)	8,688 S.F.

NOTES:
1. BUILDING MUST COMPLY WITH ALL BUILDING (FEDERAL, STATE AND LOCAL), FIRE, ACCESSIBILTY AND HEALTH DEPARTMENT CODES.
2. NO TAPERED COLUMNS ALLOWED.
3. MAINTAIN INTERIOR CLEAR SALES SPACE AS REQUIRED ON PLANS.

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ✦ PLANNER ✦ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

TITLE SHEET
PROJECT # 1611
OCT. 24, 2016

T1
SHEET 1 of 1

LEGEND

	PROPERTY LINE	P	METER POLE
	OVERHEAD UTILITY	T	TELEPHONE PEDESTAL
OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS LINE		FIRE HYDRANT
W	WATER LINE		SIGNS/SIGN POST
SS	SANITARY SEWER LINE		GUY ANCHOR
			SOIL BORE
(p)	PER PLAT		POWER POLE w/TRANSFORMER
(d)	PER DEED		POWER POLE
(m)	AS PER MEASURED IN FIELD	EOM	END OF MARKINGS
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	MAT.	MATERIAL
		CPS	COTTON PICKER SPINDLE
		C.I.	CURB INLET
	CALCULATED POINT	nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)	E.M.	ELECTRIC METER
	WATER METER	REF.	REFERENCE
		UGE	UNDERGROUND ELECTRIC
WV	WATER VALVE (UNLESS NOTED)	OHE	OVERHEAD ELECTRIC
PLA	PLASTIC	typ	TYPICAL
	GAS METER	IP	INTERMEDIATE PRESSURE
		W	WELDED
	LIGHT POLE		METER/LIGHT POLE

TREE REFERENCES

1.	12"	OAK	10.	19"	OAK
2.	12"	OAK	11.	19"	OAK
3.	17"	OAK	12.	18"	OAK
4.	14"	OAK	13.	32"	OAK
5.	18"	OAK	14.	14"	OAK
6.	16"	ELM	15.	20"	OAK
7.	16"	ELM	16.	15"	OAK
8.	20"	OAK	17.	20"	OAK
9.	18"	OAK	18.	34"	OAK

GENERAL PROPERTY NOTES

1. THE PROJECT ELEVATIONS ARE BASED ON NGS BENCHMARK EJ0229, GEOID12B, NAVD88.

PROJECT BENCHMARK #1: ELEVATION = 477.70' - TOP OF FOUND 1/2" REBAR WITH CAP.
PROJECT BENCHMARK #2: ELEVATION = 477.84' - TOP OF FOUND 1/2" REBAR.

2. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR HAS LOCATED VISIBLE UTILITIES AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE AND A THOROUGH SEARCH OF THE PREMISES.

3. ANY SERVITUDES AND RESTRICTIONS SHOWN ON THIS SURVEY ARE LIMITED TO THOSE SET FORTH IN THE DESCRIPTION FURNISHED TO SURVEYOR, AND THERE IS NO REPRESENTATION THAT ALL APPLICABLE SERVITUDES AND RESTRICTIONS ARE SHOWN HEREON.

4. NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED ARKANSAS ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY (THE "SUBJECT PROPERTY"). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B-II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT A LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.

5. THIS PROPERTY IS WITHIN CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

6. THE NEAREST FIRE HYDRANT IS AS SHOWN ON SURVEY.

7. CONTOUR INTERVAL = 1 FOOT.

8. NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM SALINE COUNTY TAX CARDS AND DEEDS.

9. SURVEYOR MADE AN ATTEMPT TO HAVE UNDERGROUND UTILITIES LOCATED BY CALLING THE ARKANSAS ONE-CALL SYSTEM (TICKET #16083-11344) DATED 8/31/2016. SURVEYOR WAS ABLE TO FIND WATER AND SEWER UTILITIES MARKED IN FIELD.

10. WATER LINE INFORMATION SHOWN ON SURVEY IS PER UTILITY MAPS PROVIDED BY CLARISSE HARRIS, SALEM WATER USERS, PWA. THE LOCATION OF WATER LINE IS APPROXIMATE. WATER LINE CROSSES SUBJECT PROPERTY WITHOUT AN EASEMENT BEING KNOWN OR SUPPLIED TO SURVEYOR.

11. THE SIZE AND TYPE OF THE GAS LINE SHOWN ON SURVEY IS PER UTILITY MAPS PROVIDED BY ANDREW TOWNSEND, CENTERPOINT ENERGY. LOCATION OF GAS LINES ARE APPROXIMATE.

12. PER PHONE CALL WITH LEON BLACK, 4/21/16, CITY OF BRYANT TRANSPORTATION DEPARTMENT, THERE ARE NO CURRENT CONSTRUCTION PLANS. PER PHONE CALL WITH LES PRICE 8/01/16, CITY OF BRYANT CONSULTING ENGINEER, SPRINGHILL ROAD, A MINOR ARTERIAL, HAS A PROPOSED 80 FOOT RIGHT OF WAY, AND NORTHLAKE ROAD, A COLLECTOR STREET, HAS A PROPOSED 60 FOOT RIGHT OF WAY.

13. SURVEYOR DID NOT RECEIVE ANY INFORMATION FROM THE TITLE INSURER REGARDING THE CURRENT ZONING CLASSIFICATION OF THE PROPERTY OR ANY REQUIREMENTS RELATED TO THE APPLICABLE ZONING CLASSIFICATION. SURVEYOR OBTAINED THE ZONING INFORMATION REFLECTED ON THIS SURVEY ON HIS OWN. THE USER OF THIS SURVEY SHOULD CONSULT AN ATTORNEY OR TITLE INSURER TO VERIFY THE ZONING CLASSIFICATION OF THE PROPERTY AS WELL AS THE APPLICABLE RESTRICTIONS AND REQUIREMENTS ASSOCIATED WITH SUCH ZONING CLASSIFICATION.
14. SURVEYOR DID NOT OBSERVE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
15. OVERHEAD UTILITY LINE CROSSES SUBJECT PROPERTY WITHOUT AN EASEMENT BEING KNOWN OR SUPPLIED TO SURVEYOR. LINES SHOWN ARE TO PUT DESIGNER ON NOTICE IF EASEMENT IS REQUIRED DURING PLANNING.
16. PER SURVEY BY JAMES L. HARPER (REF. MATERIAL #4), THERE IS A WATER SERVICE LINE THAT EXTENDS TO THE WEST PROPERTY LINE. EXACT LOCATION IS NOT KNOWN.

NON-STANDARD PROPERTY NOTES

SCHEDULE (B), SECTION (II) SPECIAL EXCEPTION, NON-STANDARD, SURVEY RELATED ITEM(S) (1) OF CHICAGO TITLE INSURANCE COMPANY, COMMITMENT FOR TITLE INSURANCE, FILE NO. E-16-58413; BEARING AN EFFECTIVE DATE OF AUGUST 2, 2016, 8:00 AM AND AN ISSUE DATE OF AUGUST 8, 2016, 3:00 PM.

7. EASEMENT BY ROYCE B. LOVELESS, JR. TO CITY OF BRYANT WASTE WATER PROJECT FILED MARCH 29, 2006 AS INSTRUMENT NO. 2006-32485, RECORDS OF SALINE COUNTY, ARKANSAS. (AFFECTS SUBJECT PROPERTY AS SHOWN ON SURVEY.)

SITE SPECIFIC REFERENCES

1. U.S.G.S. 7.5 MINUTE "CONGO, ARK." DATED 1994 QUADRANGLE
2. SURVEY BY HOPE ENGINEERS, DATED 6-16-1999; DATED 6/11/2004, DWG. NO. 04-320; DATED JUNE 9, 2004, DWG. NO. 04-0184.
3. SURVEY BY DONALD W. BROOKS, DATED MARCH15, 1991; DATED MARCH 13, 1997.
4. SURVEY BY JAMES L. HARPER, DATED 5-26-86
5. SURVEY BY ROBERT C. WYNN, DATED OCTOBER 15, 1985
6. SURVEY BY KERRY D. LANE, DATED 9/6/1990
7. SURVEY BY JOHN C. WILLIAMS, DATED MAY 5, 1999

SITE UTILITY CONTACTS

ELECTRIC:
FIRST ELECTRIC COOP
RANDY JONES
501-854-5159

GAS:
CENTERPOINT ENERGY
ANDREW TOWNSEND
401 W. CAPITOL, SUITE 600
LITTLE ROCK, AR 72201
501-377-4674

SEWER:
BRYANT WATER & WASTEWATER
SCOTT CHANDLER
1017 SW 2ND ST.
BRYANT, AR 72022
501-943-0464

WATER:
SALEM WATER USERS PWA
CLARISSE HARRIS
620 AIRLANE RD.
BENTON, AR 72015
501-315-2212

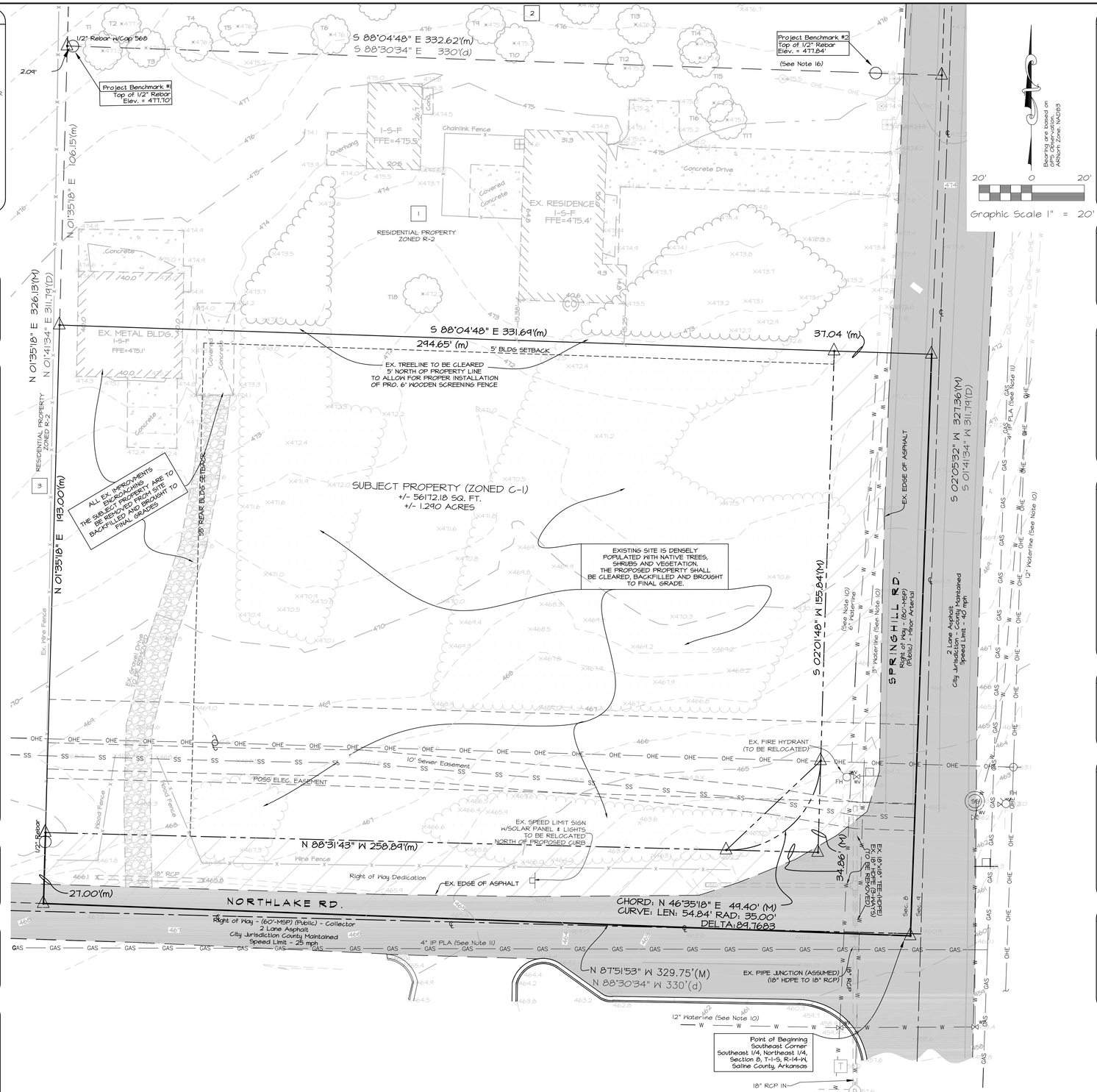
TELEPHONE:
CALLED ATT, COMCAST, AND FIDELITY COMMUNICATIONS, AND THEY ALL STATED THAT THEY DO NOT SERVICE THE AREA.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADE BEFORE AND DURING CONSTRUCTION

CONTRACTOR IS ALSO RESPONSIBLE FOR SHORING AND ENSURING THAT THERE IS NO SLOUGHING OF ADJACENT PROPERTY UNLESS OTHERWISE APPROVED IN WRITING BY THE ADJACENT PROPERTY OWNER.

** UTILITY WARNING **

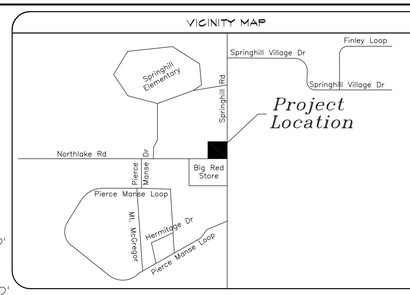
48 HOURS
BEFORE YOU DIG
CALL:
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LOCATION



Bearings are based on Grid Coordinates ARNorth Zone, NAD83

20' 0 20'
Graphic Scale 1" = 20'

VICINITY MAP



TRACT DESCRIPTION PER TITLE COMMITMENT FILE NO. E-16-58413)

A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 AND RUN SOUTH 1 DEGREES 41 MINUTES 34 SECONDS WEST ALONG THE EAST LINE THEREOF, 1014 FEET TO THE POINT OF BEGINNING OF THE LANDS HEREIN DESCRIBED. THENCE CONTINUE SOUTH 1 DEGREE 41 MINUTES 34 SECONDS WEST ALONG THE EAST LINE 311.79 FEET TO THE SOUTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4; THENCE NORTH 88 DEGREES 30 MINUTES 34 SECONDS WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 330 FEET, THENCE NORTH 1 DEGREE 41 MINUTES 34 SECONDS EAST 311.79, THENCE SOUTH 88 DEGREES 30 MINUTES 34 SECONDS EAST 330 FEET TO THE POINT OF BEGINNING.

SUBJECT PROPERTY AS PER SURVEY

A TRACT OF LAND BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 8; THENCE, NORTH 87 DEGREES 51 MINUTES 53 SECONDS WEST, ALONG THE SOUTH LINE THEREOF, A DISTANCE OF 324.75 FEET; THENCE, LEAVING SAID SOUTH LINE, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 27.00 FEET TO A POINT ON THE PROPOSED NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD SAID POINT BEING THE POINT OF BEGINNING; THENCE, LEAVING SAID NORTHERLY RIGHT-OF-WAY, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 193.00 FEET TO A POINT; THENCE SOUTH 88 DEGREES 04 MINUTES 48 SECONDS EAST A DISTANCE OF 244.65 FEET TO A POINT ON THE PROPOSED EASTERLY RIGHT-OF-WAY OF SPRINGHILL ROAD; THENCE SOUTH 02 DEGREES 01 MINUTES 48 SECONDS WEST, ALONG SAID EASTERLY RIGHT-OF-WAY, A DISTANCE OF 40.23 FEET TO A POINT; THENCE SOUTH 01 DEGREES 42 MINUTES 15 SECONDS WEST, ALONG SAID EASTERLY RIGHT-OF-WAY, A DISTANCE OF 65.61 FEET TO A POINT; THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 54.84 FEET, WITH A RADIUS OF 35.00 FEET, WITH A CHORD BEARING OF SOUTH 46 DEGREES 35 MINUTES 16 SECONDS WEST, WITH A CHORD LENGTH OF 49.40 FEET, TO A POINT ON SAID NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD; THENCE NORTH 88 DEGREES 31 MINUTES 43 SECONDS WEST A DISTANCE OF 258.84 FEET BACK TO THE POINT OF BEGINNING.

PROPERTY ZONING

THE SUBJECT SITE IS CURRENTLY ZONED R-2 (SINGLE FAMILY). PER PHONE CALL WITH TINA DAVIS ON 4/11/16, NEIGHBORHOOD COMMERCIAL DISTRICT (NCD) C-1 IS REQUIRED. SETBACKS SHOWN ON SURVEY AND BELOW ARE PER THE C-1 ZONING REGULATIONS.

BULK AND AREA REGULATIONS FOR COMMERCIAL USES AND MIXED-USE BUILDINGS

1. LOT AREA: MINIMUM OF 2,500 SQUARE FEET; MAXIMUM 16,000 SQUARE FEET.
2. LOT WIDTH: AT FRONT OF BUILDING LINE, MINIMUM 25 FEET; MAXIMUM 80 FEET.
3. LOT DEPTH: GENERALLY LOTS SHOULD BE LONGER THAN WIDE. MAXIMUM LOT WIDTH (80') @ FRONT BUILDING LINE THEN DEPTH = 200 FEET.
4. YARD DIMENSIONS:
A. FRONT - COMMERCIAL RETAIL/SEVICE OR MIXED USE, NONE REQUIRED
B. SIDE (EACH SIDE) - A MINIMUM OF FIVE (5) FEET IF NOT ATTACHED TO AN ADJACENT BUILDING, MAXIMUM OF TWENTY (20) FEET
C. REAR - A MINIMUM OF FIFTY-FIVE (55) FEET.
D. THE FRONT AND SIDE YARD DIMENSIONS SET FORTH IN THIS SUBSECTION MAY BE INCREASED UP TO AN ADDITIONAL FIFTEEN (15) FEET BY THE PLANNING COMMISSION IF DEEMED IN THE INTEREST OF PUBLIC SAFETY.
5. HEIGHT: THREE STORIES, FINISHED FIRST FLOOR MUST BE LEVEL WITH THE SIDEWALK, MAXIMUM HEIGHT OF FORTY-FIVE (45) FEET.
6. BUILDING COVERAGE OF LOT: MAXIMUM OF SEVENTY (70) PERCENT.
8. PARKING: ALL PARKING MUST BE OFF STREET. ONE (1) SPACE PER EACH 200 SQUARE FOOT OF COMMERCIAL USE IS REQUIRED.

*SEE ZONING ORDINANCE FOR ADDITIONAL RESTRICTIONS.

FLOOD STATEMENT

BY GRAPHIC PLOTTING OF THE INFORMATION SHOWN ON FLOOD INSURANCE RATE MAP NO. 05125C0225D, DATED JUNE 18, 2012, COMMUNITY BRYANT CITY OF, NUMBER 050308; PANEL 0225; SUFFIX D, INDICATES THAT THE PROPERTY SHOWN ON SURVEY LIES WITHIN:

ZONE X (OTHER AREAS) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

*FLOOD STATEMENT DOES NOT GUARANTEE AGAINST LOCALIZED FLOODING

PROPERTY OWNER REFERENCES

1 RESIDENCE
PARCEL: 840-11624-036
OWNER: ROYCE B. LOVELESS JR. & MAUDIE E. LOVELESS
(MAILING/PHYSICAL ADDRESS)
6021 SPRINGHILL ROAD
BRYANT, AR 72022
QUITCLAIM DEED 2009051546
ZONED R-2

2 RESIDENCE
PARCEL: 840-11624-034
PHYSICAL ADDRESS
6111 SPRINGHILL ROAD
OWNER: LOVETTE L. PARNELL
(MAILING ADDRESS)
P.O. BOX 105
BRYANT, AR 72022
ZONED R-2

3 RESIDENCE
PARCEL: 840-11624-035
OWNER: BRIGHAM J. BAREFOOT
(MAILING/PHYSICAL ADDRESS)
2620 NORTHLAKE ROAD
BRYANT, AR 72022
ZONED R-2

PROJECT CONTACTS

OWNER/DEVELOPER:
PB GENERAL HOLDINGS, LLC
ATTN: SCOTT PROCTOR
510 TALLEY ROAD
LITTLE ROCK, AR 72204
PHONE: (501) 218-8849

ARCHITECT:
BARTLETT ARCHITECTURE, INC.
ATTN: DAN BARTLETT, AIA, NCARB, ICC
603 HWY 5 NORTH
BENTON, AR 72019
PHONE: (501) 794-4448

ENGINEER:
SENTINEL GROUP, LLC
ATTN: ERIC KREBS, PE
2712 CYPRESS POINT DRIVE
BENTON, ARKANSAS 72019
PHONE: (501) 317-2547

SURVEYOR:
PAXTON R. SINGLETON, PRESIDENT/PLS
GLOBAL SURVEYING CONSULTANTS, INC.
6511 HEILMAN COURT
NORTH LITTLE ROCK, AR 72118
PHONE: (501) 455-4484

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS-ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / DEVELOPER:
PB GENERAL HOLDINGS, llc
510 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 218-8849

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL®

SITE DEMOLITION PLAN

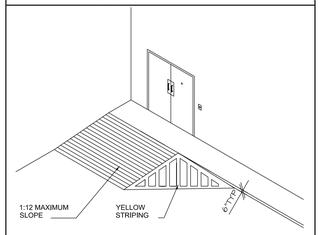
PROJECT NUMBER:	1611
CAD. BY:	C. TAYLOR
CHECKED BY:	E. KREBS
DATED:	11/04/2016

C-1
SHEET 1 OF 7

LEGEND

PROPERTY LINE	METER POLE
OVERHEAD UTILITY	TELEPHONE PEDESTAL
OHE — OHE — OVERHEAD ELECTRIC	SEWER MANHOLE
GAS — GAS — GAS LINE	FIRE HYDRANT
W — W — WATER LINE	SIGN/SIGN POST
SS — SS — SANITARY SEWER LINE	GUY ANCHOR
	SOIL BORE
(p) PER PLAT	POWER POLE w/TRANSFORMER
(d) PER DEED	POWER POLE
(m) AS PER MEASURED IN FIELD	END OF MARKINGS
OR SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	MATERIAL
	COTTON PICKER SPINDLE
	C.I. CURB INLET
CALCULATED POINT	nts NOT TO SCALE
SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I. DUCTILE IRON
FND 1/2" REBAR (UNLESS NOTED)	E.M. ELECTRIC METER
WATER METER	REF. REFERENCE
	UGE UNDERGROUND ELECTRIC
WATER VALVE (UNLESS NOTED)	OHE OVERHEAD ELECTRIC
PLA PLASTIC	typ TYPICAL
GAS METER	IP INTERMEDIATE PRESSURE
	W WELDED
LIGHT POLE	METER/LIGHT POLE

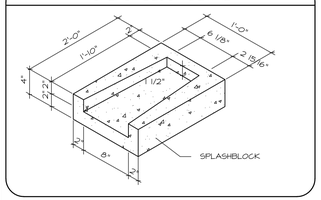
RECEIVING DOOR DETAIL



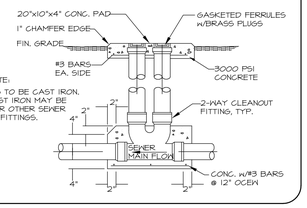
STRIPING LEGEND	
YELLOW CURBING AND BOLLARDS - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY AND METAL SURFACES FREE OF HEAVY RUST 2 COATS SHERWIN WILLIAMS - KEM 4000 ACRYLIC ALKYD ENAMEL SAFETY YELLOW B55Y300
STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PROMAR TRAFFIC MARKING PAINT YELLOW TM5415
HANDICAP STRIPING - PARKING LOT	SURFACES SHOULD BE CLEAN, DRY. TOP COAT SHERWIN WILLIAMS - PROMAR TRAFFIC MARKING PAINT "H.C." BLUE

CONTRACTOR IS RESPONSIBLE FOR ALL PUBLIC UTILITY CONNECTIONS (ELECTRIC, WATER, GAS, SEPTIC, SEWER) AS WELL AS PROVIDING ALL INFRASTRUCTURES REQUIRED BY UTILITY COMPANY

SPLASH BLOCK DETAIL

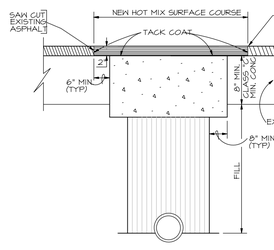


STANDARD 2-WAY SEWER CLEANOUT DETAIL



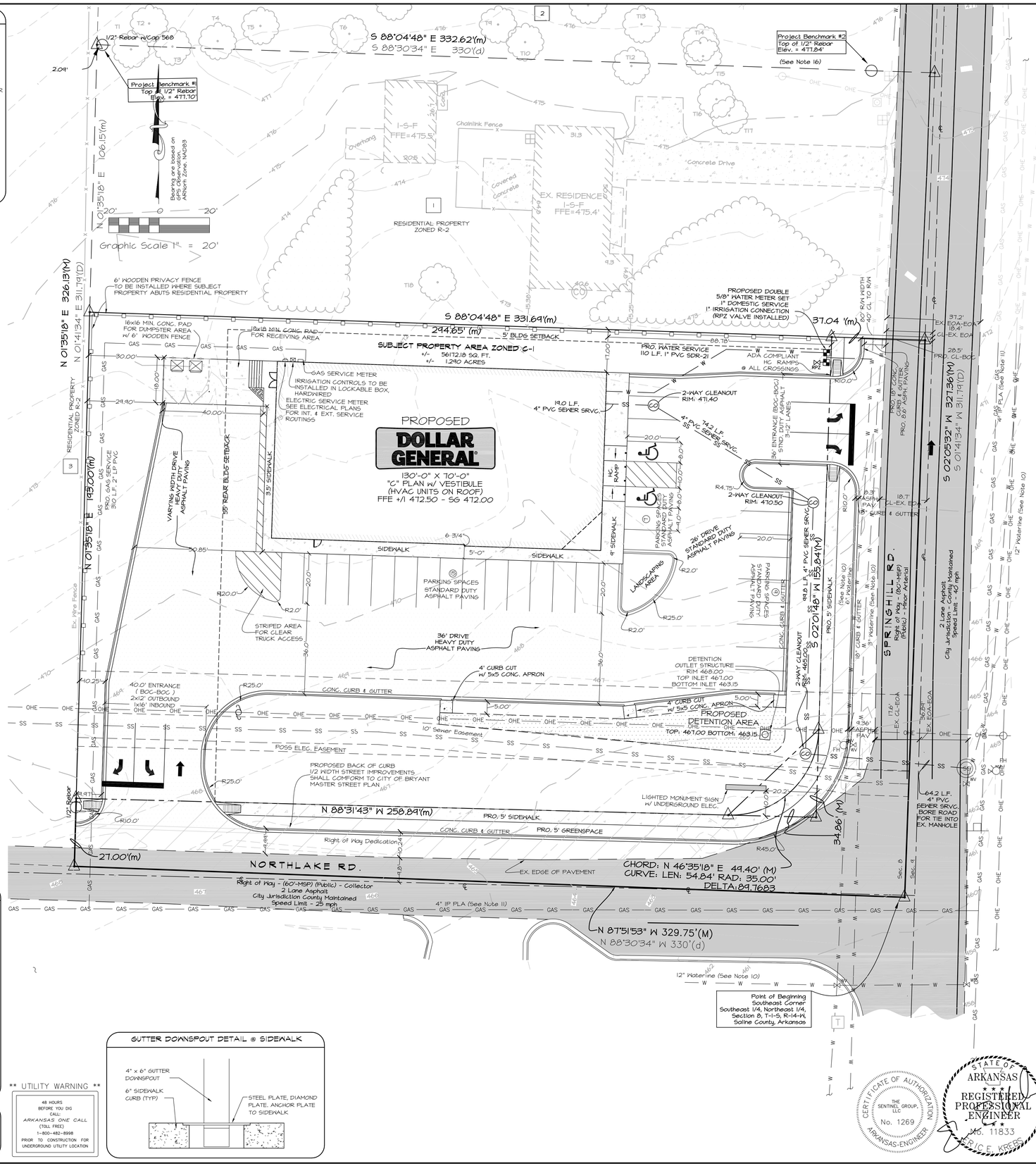
NOTE:
CLEAN-OUTS TO BE CAST IRON. PVC OR CAST IRON MAY BE UTILIZED FOR OTHER SEWER PIPING AND FITTINGS.

STANDARD PAVEMENT REPLACEMENT DETAIL



CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADE BEFORE AND DURING CONSTRUCTION

CONTRACTOR IS ALSO RESPONSIBLE FOR SHORING AND ENSURING THAT THERE IS NO SLOUGHING OF ADJACENT PROPERTY UNLESS OTHERWISE APPROVED IN WRITING BY THE ADJACENT PROPERTY OWNER.

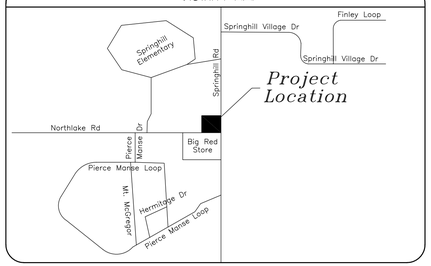


GUTTER DOWNSPOUT DETAIL @ SIDEWALK

** UTILITY WARNING **

48 HOURS BEFORE YOU DIG CALL:
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LOCATION

VICINITY MAP



TRACT DESCRIPTION PER TITLE COMMITMENT FILE NO. E-16-58913

A PART OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE NORTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 AND RUN SOUTH 1 DEGREES 41 MINUTES 34 SECONDS WEST ALONG THE EAST LINE THEREOF, 1014 FEET TO THE POINT OF BEGINNING OF THE LANDS HEREIN DESCRIBED, THENCE CONTINUE SOUTH 1 DEGREE 41 MINUTES 34 SECONDS WEST LONG THE EAST LINE 311.79 FEET TO THE SOUTHEAST CORNER OF SAID SOUTHEAST 1/4 NORTHEAST 1/4, THENCE NORTH 88 DEGREES 30 MINUTES 34 SECONDS WEST ALONG THE SOUTH LINE OF SAID SOUTHEAST 1/4 NORTHEAST 1/4 330 FEET, THENCE NORTH 1 DEGREE 41 MINUTES 34 SECONDS EAST 311.79, THENCE SOUTH 88 DEGREES 30 MINUTES 34 SECONDS EAST 330 FEET TO THE POINT OF BEGINNING.

SUBJECT PROPERTY AS PER SURVEY

A TRACT OF LAND BEING A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 8, TOWNSHIP 1 SOUTH, RANGE 14 WEST, OF THE 5TH PRINCIPAL MERIDIAN, SALINE COUNTY, ARKANSAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 8, THENCE, NORTH 87 DEGREES 51 MINUTES 53 SECONDS WEST, ALONG THE SOUTH LINE THEREOF, A DISTANCE OF 329.75 FEET; THENCE, LEAVING SAID SOUTH LINE, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 21.00 FEET TO A POINT ON THE PROPOSED NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD SAID POINT BEING THE POINT OF BEGINNING; THENCE, LEAVING SAID NORTHERLY RIGHT-OF-WAY, NORTH 01 DEGREES 35 MINUTES 18 SECONDS EAST A DISTANCE OF 143.00 FEET TO A POINT; THENCE SOUTH 88 DEGREES 04 MINUTES 48 SECONDS EAST A DISTANCE OF 294.65 FEET TO A POINT ON THE PROPOSED EASTERLY RIGHT-OF-WAY OF SPRINGHILL ROAD; THENCE SOUTH 02 DEGREES 01 MINUTES 48 SECONDS WEST, ALONG SAID EASTERLY RIGHT-WAY, A DISTANCE OF 40.23 FEET TO A POINT; THENCE SOUTH 01 DEGREES 42 MINUTES 15 SECONDS WEST, ALONG SAID EASTERLY RIGHT-OF-WAY, A DISTANCE OF 65.61 FEET TO A POINT; THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 54.84 FEET, WITH A RADIUS OF 35.00 FEET, WITH A CHORD BEARING OF SOUTH 46 DEGREES 35 MINUTES 16 SECONDS WEST, WITH A CHORD LENGTH OF 49.40 FEET, TO A POINT ON SAID NORTHERLY RIGHT-OF-WAY OF NORTHLAKE ROAD; THENCE NORTH 88 DEGREES 31 MINUTES 43 SECONDS WEST A DISTANCE OF 258.89 FEET BACK TO THE POINT OF BEGINNING.

PROPERTY ZONING

THE SUBJECT SITE IS CURRENTLY ZONED R-2 (SINGLE FAMILY), PER PHONE CALL WITH TINA DAVIS ON 4/11/16, NEIGHBORHOOD COMMERCIAL DISTRICT (NCD) C-1 IS REQUIRED. SETBACKS SHOWN ON SURVEY AND BELOW ARE PER THE C-1 ZONING REGULATIONS.

BULK AND AREA REGULATIONS FOR COMMERCIAL USES AND MIXED-USE BUILDINGS

1. LOT AREA. MINIMUM OF 2,500 SQUARE FEET; MAXIMUM 16,000 SQUARE FEET.
2. LOT WIDTH. AT FRONT OF BUILDING LINE, MINIMUM 25 FEET; MAXIMUM 80 FEET.
3. LOT DEPTH. GENERALLY LOTS SHOULD BE LONGER THAN WIDE. MAXIMUM LOT WIDTH (80') @ FRONT BUILDING LINE THEN DEPTH = 200 FEET.
4. YARD DIMENSIONS.

A. FRONT – COMMERCIAL, RETAIL/SEVICE OR MIXED USE, NONE REQUIRED

B. SIDE (EACH SIDE) – A MINIMUM OF FIVE (5) FEET IF NOT ATTACHED TO AN ADJACENT BUILDING, MAXIMUM OF TWENTY (20) FEET

C. REAR – A MINIMUM OF FIFTY-FIVE (55) FEET.

D. THE FRONT AND SIDE YARD DIMENSIONS SET FORTH IN THIS SUBSECTION MAY BE INCREASED UP TO AN ADDITIONAL FIFTEEN (15) FEET BY THE PLANNING COMMISSION IF DEEMED IN THE INTEREST OF PUBLIC SAFETY

5. HEIGHT. THREE STORIES, FINISHED FIRST FLOOR MUST BE LEVEL WITH THE SIDEWALK, MAXIMUM HEIGHT OF FORTY-FIVE (45) FEET.
6. BUILDING COVERAGE OF LOT. MAXIMUM OF SEVENTY (70) PERCENT.
8. PARKING. ALL PARKING MUST BE OFF STREET. ONE (1) SPACE PER EACH 200 SQUARE FOOT OF COMMERCIAL USE IS REQUIRED.

*SEE ZONING ORDINANCE FOR ADDITIONAL RESTRICTIONS.

FLOOD STATEMENT

BY GRAPHIC PLOTTING OF THE INFORMATION SHOWN ON FLOOD INSURANCE RATE MAP NO. 05125C0225D, DATED JUNE 18, 2012, COMMUNITY BRYANT, CITY OF, NUMBER 050308; PANEL 0225; SUFFIX D INDICATES THAT THE PROPERTY SHOWN ON SURVEY LIES WITHIN:

ZONE X (OTHER AREAS) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

*FLOOD STATEMENT DOES NOT GUARANTEE AGAINST LOCALIZED FLOODING

SITE UTILITY CONTACTS

ELECTRIC:
FIRST ELECTRIC COOP
RANDY JONES
501-454-5156

GAS:
CENTERPOINT ENERGY
ANDREW TOWNSEND
401 W. CAPITOL SUITE 600
LITTLE ROCK, AR 72201
501-377-4674

SEWER:
BRYANT WATER & WASTEWATER
SCOTT CHANDLER
1017 SW 2ND ST.
BRYANT, AR 72022
501-943-2469

WATER:
SALEM WATER USERS PWA
CLARISSE HARRIS
620 AIRLANE RD.
BENTON, AR 72015
501-315-2212

TELEPHONE:
CALLED ATT, COMCAST, AND FIDELITY COMMUNICATIONS, AND THEY ALL STATED, THAT THEY DO NOT SERVICE THE AREA.

PROJECT CONTACTS

OWNER/DEVELOPER:
PB GENERAL HOLDINGS, LLC
ATTN: SCOTT PROCTOR
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
PHONE: (501) 219-8849

ARCHITECT:
BARTLETT ARCHITECTURE, INC.
ATTN: DAN BARTLETT, AIA, NCARB, ICC
603 HWY 5 NORTH
BENTON, AR 72019
PHONE: (501) 794-4448

ENGINEER:
SENTINEL GROUP, LLC
ATTN: ERIC KREBS, PE
2712 CYPRESS POINT DRIVE,
BENTON, ARKANSAS 72019
PHONE: (501) 317-2547

SURVEYOR:
PAXTON R. SINGLETON, PRESIDENT/PLS
GLOBAL SURVEYING CONSULTANTS, INC.
6511 HEILMAN COURT
NORTH LITTLE ROCK, AR 72118
PHONE: (501) 455-4184

REVISION BLOCK

NO.	DESCRIPTION	DATE

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS-ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-8849

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL®

SITE UTILITY & DIMENSION PLAN

PROJECT NUMBER:	1611
C.A.D. BY:	C. TAYLOR
CHECKED BY:	E. KREBS
DATED:	11/09/2016

C-2

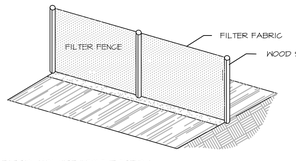
LEGEND

	PROPERTY LINE	P	METER POLE
	OVERHEAD UTILITY	T	TELEPHONE PEDESTAL
OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS LINE		FIRE HYDRANT
W	WATER LINE		SIGNSIGN POST
SS	SANITARY SEWER LINE		GUY ANCHOR
			SOIL BORE
(p)	PER PLAT		POWER POLE W/TRANSFORMER
(d)	PER DEED		POWER POLE
(m)	AS PER MEASURED IN FIELD	EOM	END OF MARKINGS
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	MAT.	MATERIAL
		CPS	COTTON PICKER SPINDLE
		C.I.	CURB INLET
	CALCULATED POINT	nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)	E.M.	ELECTRIC METER
	WATER METER	REF.	REFERENCE
		UGE	UNDERGROUND ELECTRIC
	WATER VALVE (UNLESS NOTED)	OHE	OVERHEAD ELECTRIC
PLA	PLASTIC	typ	TYPICAL
	GAS METER	IP	INTERMEDIATE PRESSURE
	LIGHT POLE	W	WELDED
			METER/LIGHT POLE

EROSION CONTROL DETAILS

WHAT IS THIS

A SILT FENCE ALSO CALLED A "FILTER FENCE" IS A TEMPORARY MEASURE FOR SEDIMENTATION CONTROL. IT USUALLY CONSISTS OF POSTS WITH FILTER FABRIC STRETCHED ACROSS THE POST AND SOMETIMES WITH A WIRE SUPPORT FENCE. THE LOWER EDGE OF THE FENCE IS VERTICALLY TRENCHED AND COVERED BY BACKFILL. A SILT FENCE IS USED IN SMALL DRAINAGE AREAS TO DETAIN SEDIMENT. THESE FENCES ARE MOST EFFECTIVE WHERE THERE IS OVERLAND FLOW (RUNOFF THAT IS SPREAD OVER THE SURFACE OF THE GROUND AS A THIN, EVEN LAYER) OR IN MINOR SWALES OR DRAINAGEWAYS. THEY PREVENT SEDIMENT FROM ENTERING RECEIVING WATERS. SILT FENCES ARE ALSO USED TO CATCH WIND BLOWN SAND AND TO CREATE AN ANCHOR FOR SAND DUNE CREATION. ASIDE FROM THE TRADITIONAL WOODEN POST AND FILTER METHOD, THERE ARE SEVERAL VARIATIONS OF SILT FENCE INSTALLATION INCLUDING SILT FENCE WHICH CAN BE PURCHASED WITH POCKETS WITH POCKETS PRESEWN TO ACCEPT USE OF STEEL FENCE POSTS.



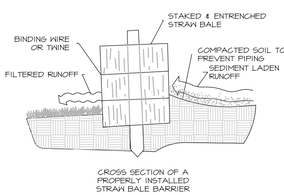
WHEN AND WHERE TO USE IT AS SHOWN BY:

A SILT FENCE SHOULD BE INSTALLED PRIOR TO MAJOR SOIL DISTURBANCE IN THE DRAINAGE AREA. SUCH A STRUCTURE IS ONLY APPROPRIATE FOR DRAINAGE AREAS OF 1 ACRE OR LESS WITH VELOCITIES OF 0.5CFS OR LESS (WASHINGTON STATE, 1992). THE FENCE SHOULD BE PLACED ACROSS THE BOTTOM OF A SLOPE OR MINOR DRAINAGEWAY ALONG A LINE OF UNIFORM ELEVATION (PERPENDICULAR TO THE FLOW). SILT FENCE CAN BE USED AT THE OUTER BOUNDARY OF THE WORK AREA. HOWEVER, THE FENCE DOES NOT HAVE TO SURROUND THE WORK AREA COMPLETELY. IN ADDITION, A SLIT FENCE IS EFFECTIVE WHERE SHEET AND HILL EROSION MAY BE A PROBLEM. SLIT FENCES SHOULD NOT BE CONSTRUCTED IN STREAMS OR SWALES.

STRAW BALE BARRIER

WHAT IS THIS

STRAW BALES CAN BE USED AS A TEMPORARY SEDIMENT BARRIER. THEY ARE PLACED END TO END IN A SHALLOW EXCAVATED TRENCH (WITH NO GAPS IN BETWEEN) AND STAKED INTO PLACED. OF PROPERLY INSTALLED, THEY CAN DETAIN SEDIMENT AND REDUCE FLOW VELOCITY FROM SMALL DRAINAGE AREAS. A STRAW BALE BARRIER PREVENTS SEDIMENT FROM LEAVING THE SITE BY TRAPING THE SEDIMENT IN THE BARRIER WHILE ALLOWING THE RUNOFF TO PASS THROUGH. IT CAN BE USED TO DECREASE THE VELOCITY OF SHEETFLOW OR CHANNEL FLOWS OF LOW-TO-MODERATE LEVELS.



WHEN AND WHERE TO USE IT AS SHOWN BY:

A STRAW BALE BARRIER SHOULD BE INSTALLED PRIOR TO MAJOR SOIL DISTURBANCE IN THE DRAINAGE AREA. THIS TYPE OF BARRIER IS PLACED PERPENDICULAR TO THE FLOW, ACROSS THE BOTTOM OF A SLOPE OR MINOR DRAINAGEWAY WHERE THERE IS SHEET FLOW. IT CAN BE USED AT THE PERIMETER OF THE WORK AREA, ALTHOUGH IS DOES NOT HAVE TO SURROUND IT COMPLETELY. IT CAN ALSO BE VERY EFFECTIVE WHEN USED IN COMBINATION WITH OTHER EROSION AND SEDIMENT CONTROL PRACTICES. A STRAW BALE BARRIER MAY BE USED WHERE THE LENGTH OF SLOPE BEHIND THE BARRIER IS LESS THAN 100 FEET AND WHERE THE SLOPE IS LESS THAN 2:1.

WHAT TO CONSIDER

THE SUCCES OF A STRAW BALE BARRIER DEPENDS ON PROPER INSTALLATION. THE BALES MUST BE FIRMLY STAKED INTO THE ENTRENCHMENT AND THE ENTRENCHMENT MUST BE PROPERLY BACKFILLED. TO FUNCTION EFFECTIVELY, THE BALES MUST BE PLACED END TO END AND THERE CAN BE NO GAPS BETWEEN THE BALES.

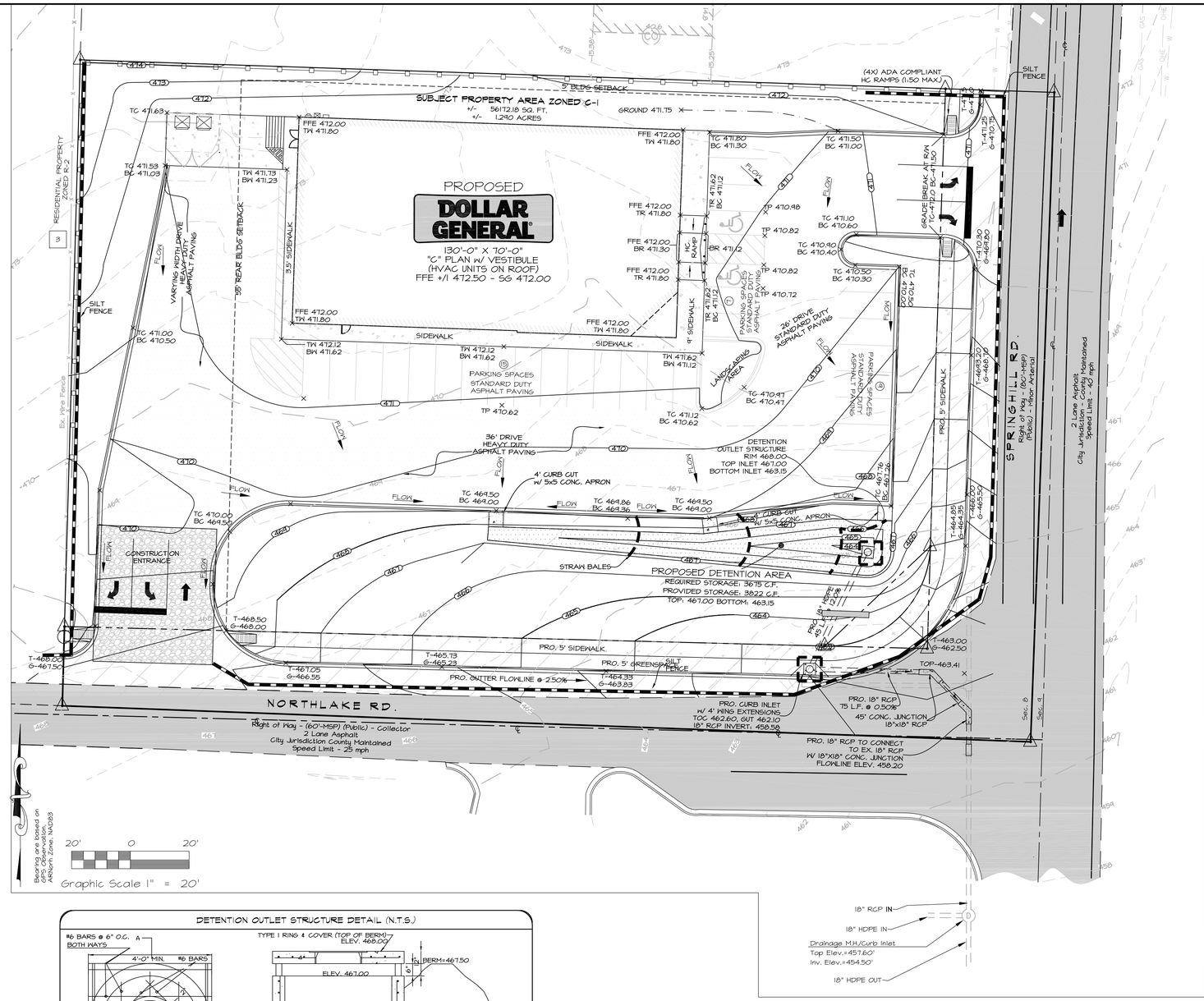
STRAW BALE BARRIER ARE USEFUL FOR APPROXIMATELY 3 MONTHS. THEY MUST BE INSPECTED AND REPAIRED IMMEDIATELY AFTER EACH RAINFALL OR DAILY IF THERE IF PROLONGED RAINFALL. DAMAGED STRAW BALES REQUIRE DAMAGED STRAW BALES REQUIRE IMMEDIATE REPLACEMENT. AFTER EACH STORM, OR ON A REGULAR BASIS, TRAPPED SEDIMENTS MUST BE REMOVED AND DISPROSED OF PROPERLY.

** UTILITY WARNING **

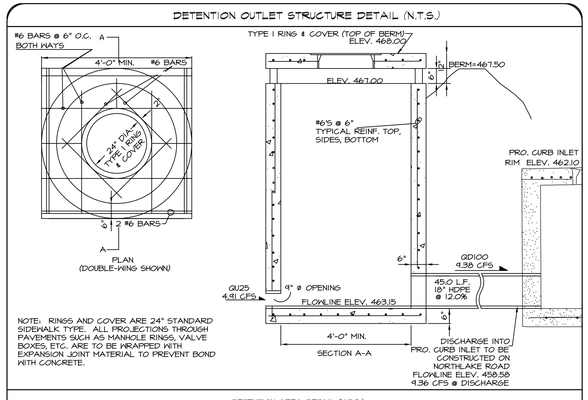
48 HOURS
BEFORE YOU DIG
CALL:
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR
UNDERGROUND UTILITY LOCATION

CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADE BEFORE AND DURING CONSTRUCTION

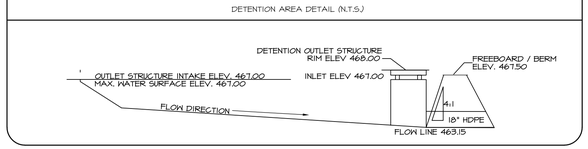
CONTRACTOR IS ALSO RESPONSIBLE FOR SHORING AND ENSURING THAT THERE IS NO SLOUGHING OF ADJACENT PROPERTY UNLESS OTHERWISE APPROVED IN WRITING BY THE ADJACENT PROPERTY OWNER.



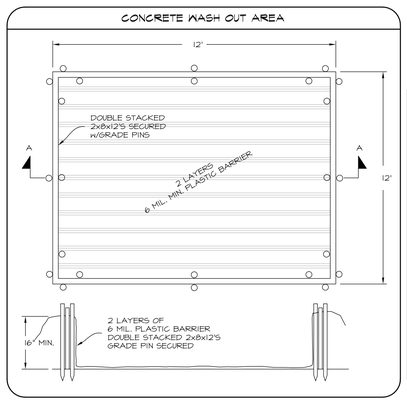
DETENTION OUTLET STRUCTURE DETAIL (N.T.S.)



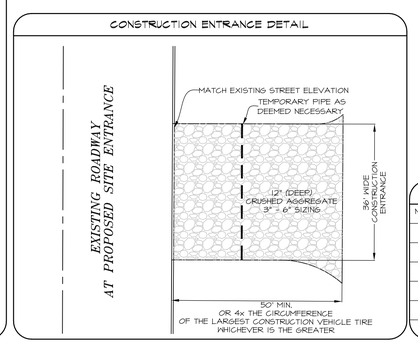
DETENTION AREA DETAIL (N.T.S.)



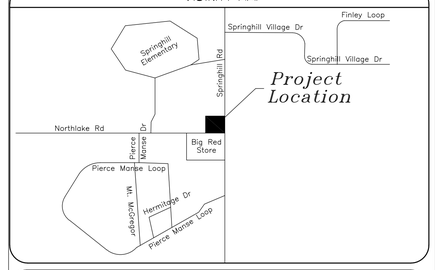
CONCRETE WASH OUT AREA



CONSTRUCTION ENTRANCE DETAIL



VICINITY MAP



GENERAL EROSION CONTROL NOTES AND SPECIFICATIONS

1. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THE EROSION PHASE I & II CONSTRUCTION DRAWINGS, THE STANDARD DETAILS AND ANY RELATED DOCUMENTS INCLUDING CITY ORDINANCE.
2. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
3. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE, CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
4. SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
5. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
6. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
7. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE OR U.S.
8. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED SHALL BE TEMPORARILY SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS.
9. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
10. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
11. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
12. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
13. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
14. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

EROSION & SEDIMENT CONTROL MAINTENANCE

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED.SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHESONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION(SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED

FLOOD STATEMENT

BY GRAPHIC PLOTTING OF THE INFORMATION SHOWN ON FLOOD INSURANCE RATE MAP NO. 05145C0250E, DATED MAY 2, 2012, COMMUNITY WHITE COUNTY, UNINCORPORATED AREAS; NUMBER 050467; PANEL 0285; SUFFIX E INDICATES THAT THE PROPERTY SHOWN ON SURVEY LIES WITHIN:

ZONE X (OTHER AREAS) AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

*FLOOD STATEMENT DOES NOT GUARANTEE AGAINST LOCALIZED FLOODING.

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS-ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-6894

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR. 72022

DOLLAR GENERAL

GRADING DRAINAGE & EROSION CONTROL PLAN

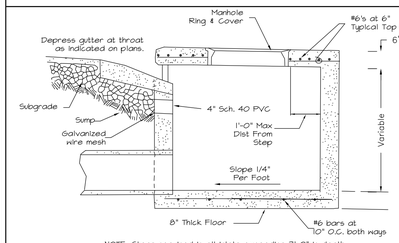
PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-3

LEGEND

PROPERTY LINE		P	METER POLE
OVERHEAD UTILITY		T	TELEPHONE PEDESTAL
OHE	OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS	GAS LINE		FIRE HYDRANT
W	W	WATER LINE		SIGN/SIGN POST
SS	SS	SANITARY SEWER LINE		GUY ANCHOR
				SOIL BORE
(p)	PER PLAT			POWER POLE W/TRANSFORMER
(d)	PER DEED			POWER POLE
(m)	AS PER MEASURED IN FIELD		EOM	END OF MARKINGS
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)		MAT.	MATERIAL
			CPS	COTTON PICKER SPINDLE
			C.I.	CURB INLET
	CALCULATED POINT		nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)		D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)		E.M.	ELECTRIC METER
	WATER METER		REF.	REFERENCE
			UGE	UNDERGROUND ELECTRIC
	WATER VALVE (UNLESS NOTED)		OHE	OVERHEAD ELECTRIC
PLA	PLASTIC		typ	TYPICAL
			IP	INTERMEDIATE PRESSURE
	GAS METER		W	WELDED
	LIGHT POLE			METER/LIGHT POLE

CIRCULAR MONOLITHIC CONCRETE CURB INLET - JUNCTION BOX DETAIL

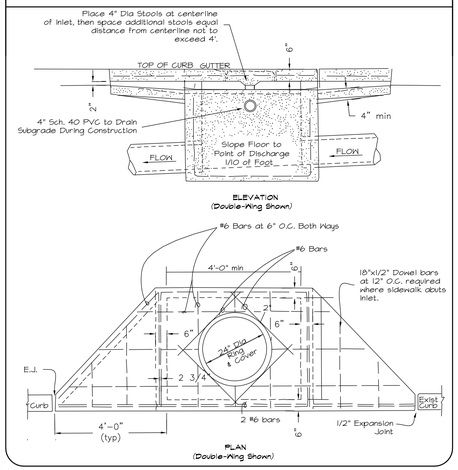


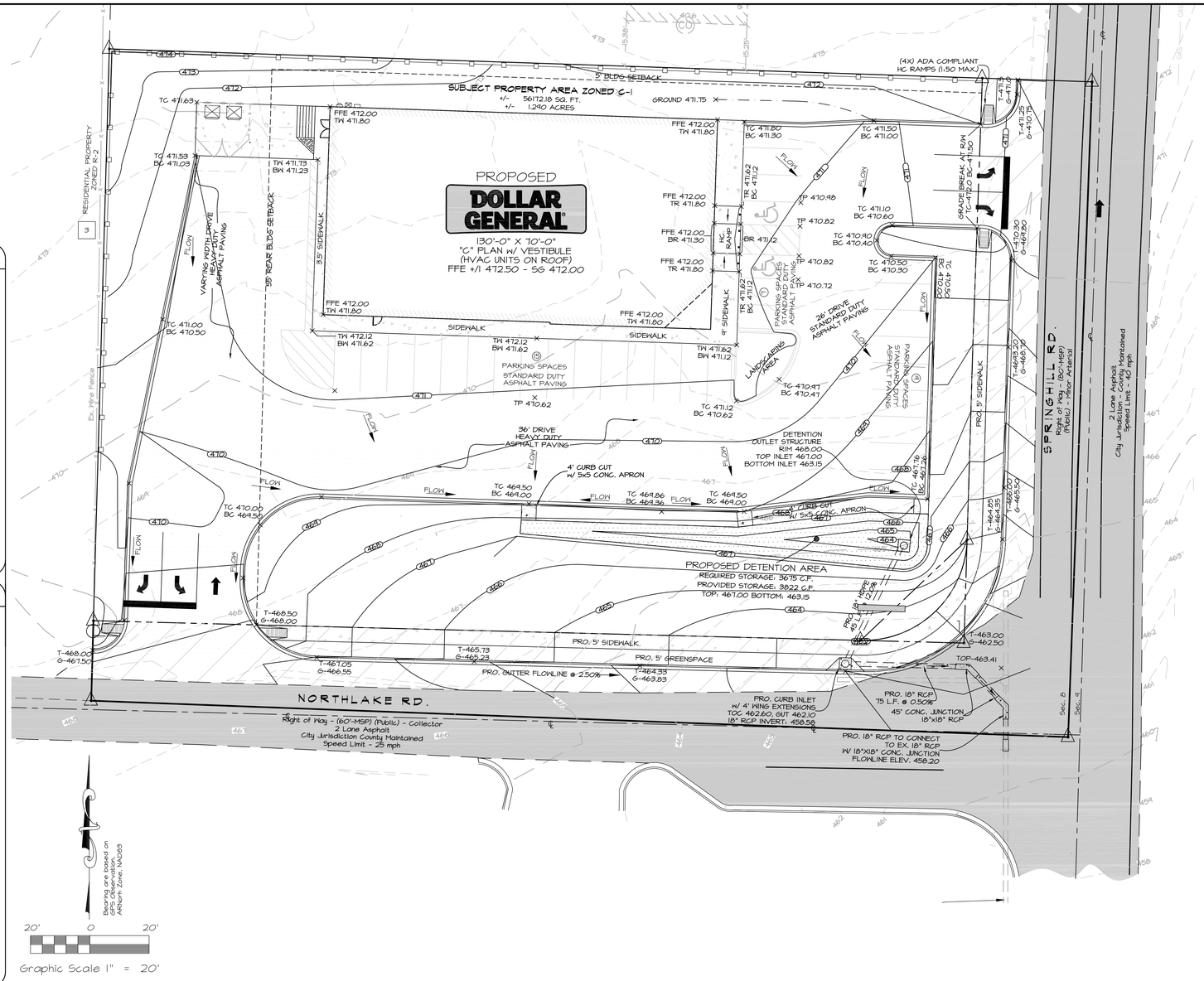
NOTE: Steps required in all inlets exceeding 3'-0" in depth. Reinforcement not required in circular inlet walls unless specified on plans.

Depression See Detail PK-3

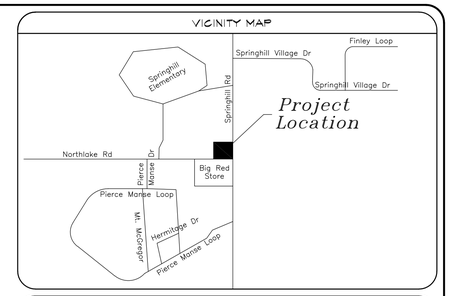
DIA. OF STRUCTURE	WALL THICKNESS	DIA. OF OUTLET PIPE
4' I.D.	6"	15" Thru 21"
5' I.D.	8"	30" Thru 42"
6' I.D.	8"	48" Thru 54"
8' I.D.	10"	60" Thru 72"

RE-INFORCED CONCRETE CURB INLET W/ DOUBLE WING DETAIL

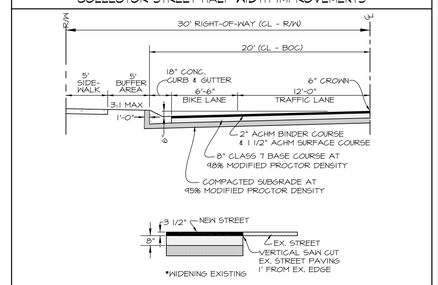




VICINITY MAP



PROPOSED CROSS SECTION NORTHLAKE ROAD COLLECTOR STREET HALF WIDTH IMPROVEMENTS

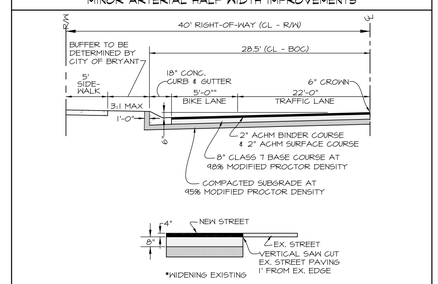


*NOTE: PAVEMENT RECONSTRUCTION IS REQUIRED WHEN EXISTING STREET DOES NOT MEET THESE STANDARDS

GENERAL NOTES:

1. IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 95% OF MAXIMUM MODIFIED DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT.
2. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO DENSITY OF 90% MAXIMUM MODIFIED DENSITY.
3. CRUSHED STONE - MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF 98% MAXIMUM MODIFIED DENSITY.

PROPOSED CROSS SECTION SPRINGHILL ROAD MINOR ARTERIAL HALF WIDTH IMPROVEMENTS



*NOTE: PAVEMENT RECONSTRUCTION IS REQUIRED WHEN EXISTING STREET DOES NOT MEET THESE STANDARDS

GENERAL NOTES:

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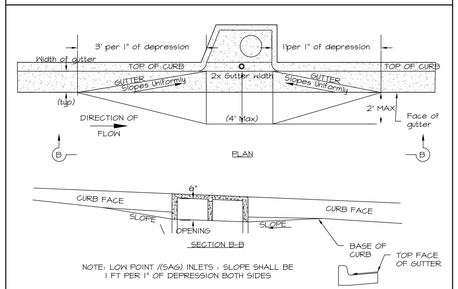
GUTTER DEPRESSION DETAIL



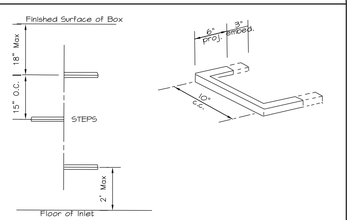
NOTE: LOW POINT (SAG) INLETS - SLOPE SHALL BE 1 FT PER 1" OF DEPRESSION BOTH SIDES

NOTE: THE TOP FACE OF GUTTER SHALL DROP 1/2 OF THE GUTTER DEPRESSION ACROSS THE INLET OPENINGS.

CONTRACTOR IS RESPONSIBLE FOR VERIFYING GRADE BEFORE AND DURING CONSTRUCTION

CONTRACTOR IS ALSO RESPONSIBLE FOR SHORING AND ENSURING THAT THERE IS NO SLOUGHING OF ADJACENT PROPERTY UNLESS OTHERWISE APPROVED IN WRITING BY THE ADJACENT PROPERTY OWNER.

CURB INLET STEPS



A. Manhole steps: corrosion resistant, coated, and reinforced with steel per ASTM C-478. Steel reinforcing minimum 1/2" diameter.

B. Acceptable Manufacturers:

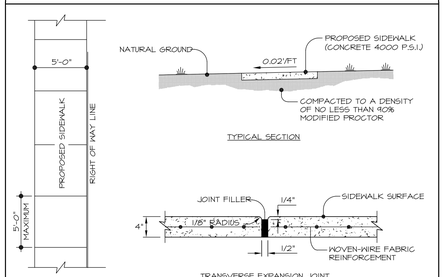
1. Utility Products Inc. Perma Step 100-2
2. ICM Inc. Polypropylene coated steps.
3. M.A. Industries, Inc. Polypropylene coated steps. #PSI-PF
4. BONCO, by H. Bowen Co.

C. Capable of supporting minimum 300 lb. load.

D. Non-Slip textured treads.

E. Required in all structures 3'-0" deep or greater.

STANDARD CONCRETE SIDEWALK



NOTES:

1. CONTRACTION JOINTS SHALL BE AT 5 FT INTERVALS. EXPANSION JOINTS TO BE A MAXIMUM OF 25 FT INTERVALS. EXPANSION JOINTS TO BE 1/2" PRE-FORMED EXPANSION JOINT FILLER, NON-EXTRUDING TYPE.
2. ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.
3. A 6 INCH DEPTH IS REQUIRED AT LOCATIONS OF DRIVEWAY CROSSINGS, AT STREET INTERSECTIONS (ALONG THE LENGTH OF RADIUS CURB RETURNS), AND IN THE HANDICAP RAMPS.

** UTILITY WARNING **

48 HOURS BEFORE YOU DIG CALL: ARKANSAS ONE CALL (TOLL FREE) 1-800-482-8998 PRIOR TO CONSTRUCTION FOR UNDERGROUND UTILITY LOCATION

CERTIFICATE OF AUTHORIZATION THE SENTINEL GROUP, LLC No. 1269 ARKANSAS ENGINEER

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 11833 ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-6684

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL®

PUBLIC ROAD IMPROVEMENT PLAN

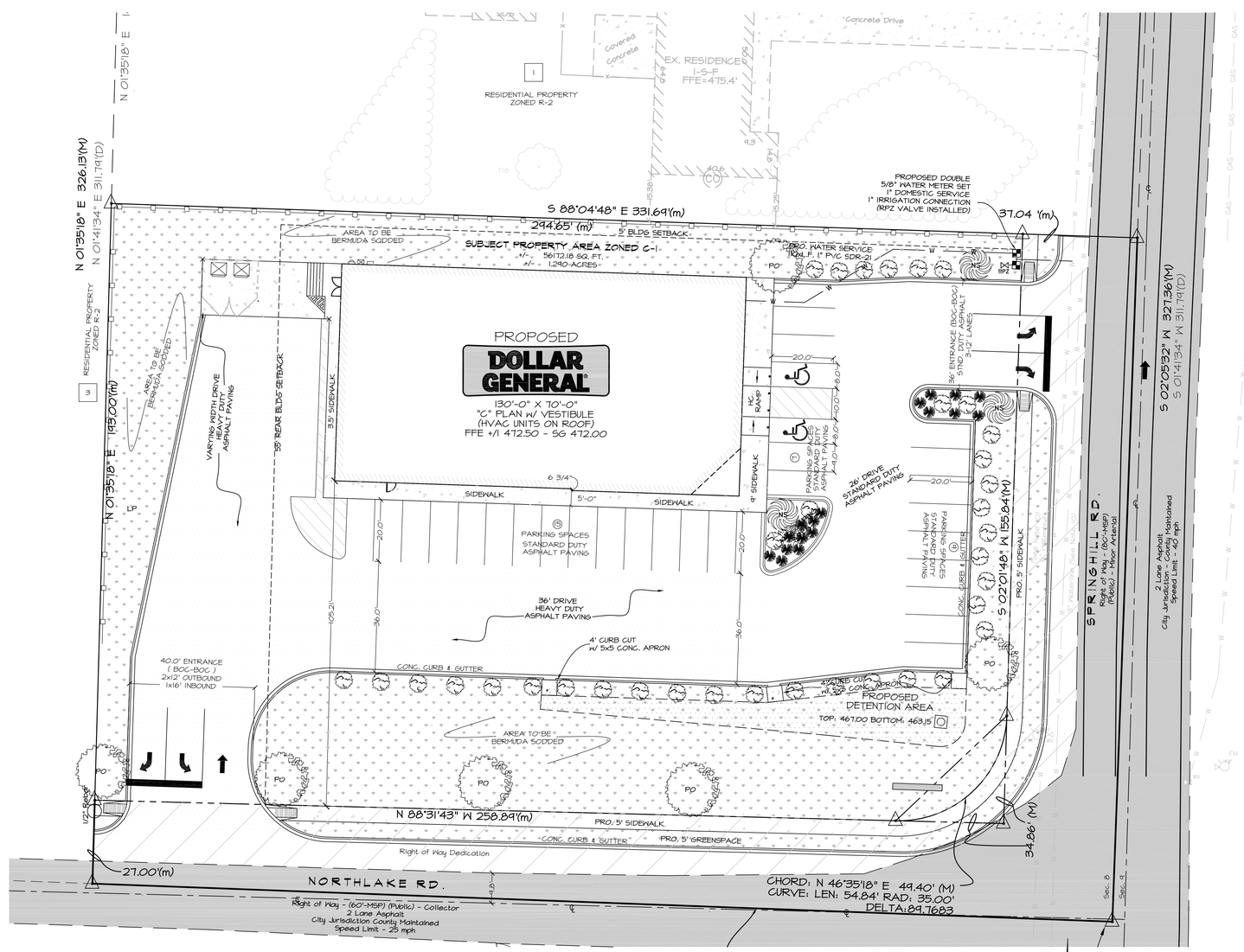
PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-4

SHEET 4 OF 7

LEGEND

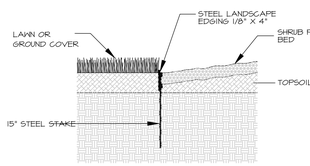
	PROPERTY LINE	P	METER POLE
	OVERHEAD UTILITY	T	TELEPHONE PEDESTAL
OHE	OVERHEAD ELECTRIC	S	SEWER MANHOLE
GAS	GAS LINE		FIRE HYDRANT
W	WATER LINE		SIGN/SIGN POST
SS	SANITARY SEWER LINE		GUY ANCHOR
			SOIL BORE
(p)	PER PLAT		POWER POLE W/TRANSFORMER
(d)	PER DEED		POWER POLE
(m)	AS PER MEASURED IN FIELD	EOM	END OF MARKINGS
		MAT.	MATERIAL
OR	SHOWN FOR DIRECTION ONLY (LINE CONTINUES)	CPS	COTTON PICKER SPINDLE
		C.I.	CURB INLET
	CALCULATED POINT	nts	NOT TO SCALE
	SET 1/2" REBAR w/CAP (UNLESS NOTED)	D.I.	DUCTILE IRON
	FND 1/2" REBAR (UNLESS NOTED)	E.M.	ELECTRIC METER
	WATER METER	REF.	REFERENCE
		UGE	UNDERGROUND ELECTRIC
WV	WATER VALVE (UNLESS NOTED)	OHE	OVERHEAD ELECTRIC
PLA	PLASTIC	typ	TYPICAL
		IP	INTERMEDIATE PRESSURE
G	GAS METER	W	WELDED
	LIGHT POLE		METER/LIGHT POLE



Bearing are based on GPS Observation, Arkansas Zone: NAD83

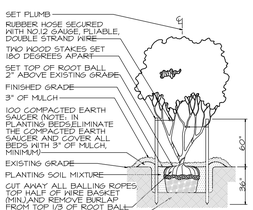
20' 0 20'

Graphic Scale 1" = 20'



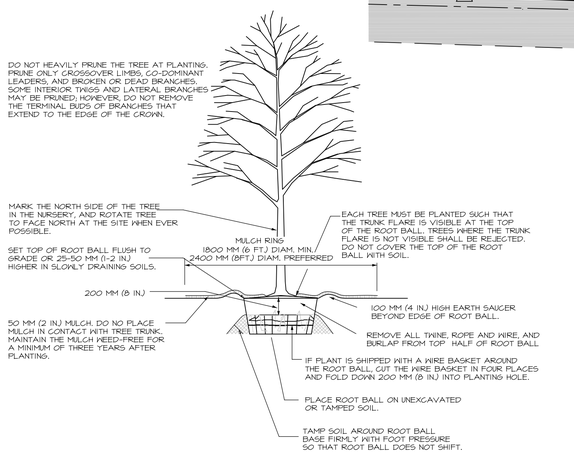
STEEL EDGING DETAIL

NOT TO SCALE



SHRUB PLANTING DETAIL

NOT TO SCALE



TREE PLANTING DETAIL

NOTE: THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN 2400 MM (8 FT.) SQUARE, OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.

LANDSCAPING MATERIALS SCHEDULE

SYMBOL	QUANTITY	ABRV.	COMMON NAME	SCIENTIFIC NAME	SIZE (MIN.)
PO	6	PO	PIN OAK	QUERCUS PALUSTRIS	2" CAL. x 12'(T)
	3	NS	NELLY R STEVENS HOLLY	ILEX X ATTENUATA	2" CAL. x 12'(T)
	36	EGH	EVERGREEN HOLLIES	ILEX SPECIES	18" MIN.
	17	ND	NANDINA	NANDINA DOMESTICA	18" MIN.

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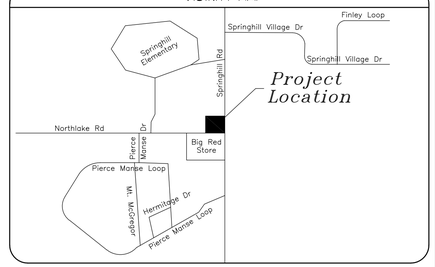
VICINITY MAP



GENERAL NOTES & SPECIFICATIONS

A. GRADING NOTES:

1. CONTRACTOR TO GRADE ALL AREAS SHADED IN THE PLAN, INCLUDING ROW.
2. TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES DURING CONSTRUCTION.
3. TILL SOIL TO A DEPTH OF 4" MINIMUM.
4. REMOVE ALL ROCKS LARGER THAN 1" MEASURED IN LARGEST DIRECTION.
5. GRADE ALL AREAS TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING.
6. ALL GRADED AREAS TO RECEIVE SEED OR SOD, TOP SOIL, STRAW AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
7. REFER TO SHEET C3 FOR MAXIMUM SLOPES.

B. LAWN SEEDING AND SODDING NOTES:

1. ALL LAWNS FROM FACE OF THE BUILDING AND ON THE SIDE WHERE THERE IS PARKING OR A STREET ARE REQUIRED TO BE FULLY SODDED. ALL OTHER LANDSCAPE AREAS TO RECEIVE SEED.
2. AREAS TO RECEIVE SEED OR SOD SHALL BE CLEAN OF DEBRIS AND FREE OF WEEDS.
3. SEED MIX TO BE DROUGHT TOLERANCE FESCUE OR REGIONAL SPECIFIC BLEND. ¼ TO ½ OF THE SEED MIXTURE TO BE ANNUAL RYE TO AIDE IN LIMITING EROSION OF PERENNIAL SEED DURING GERMINATION. STRAW SHALL BE THRESHED STRAW OF HAY, OATS, WHEAT, BARLEY, OR RYE. SPREAD AT A RATE OF 2 1/2 TONS PER ACRE. STRAW NETTING, AND OTHER ANTI-EROSION MATERIALS TO BE REMOVED AFTER ESTABLISHED LAWN.
4. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER SEEDING. WATER REGULARLY TO KEEP LAWN AREAS MOIST TO MAXIMIZE GERMINATION AND MAINTAIN OPTIMUM GROWTH AND SURVIVAL TO ACHIEVE AN ACCEPTABLE STAND OF ESTABLISHED LAWN PRIOR TO THE STORE POSSESSION DATE, FREE OF ERODED OR BARE AREAS.

C. LANDSCAPE NOTES:

1. PROVISIONS FOR LOCAL AND/OR REGIONAL REQUIREMENTS ARE NOT SHOWN ON THESE DRAWINGS. DEVELOPER SHALL PROVIDE LANDSCAPING IN ACCORDANCE WITH JURISDICTION REQUIREMENTS.
2. ALL SOIL USED FOR PLANTING SHALL CONSIST OF REGIONALLY APPROPRIATE SOILS.
3. ALL PLANTING BEDS SHALL HAVE A MINIMUM 3" DEPTH OF MULCH, WITH EDGING AS REQUIRED.
4. ALL TREES LOCATED IN SOD AREAS SHALL HAVE A MULCH RING AROUND THEM WITH EDGING.
5. ALL PLANTINGS SHALL BE THOROUGHLY WATERED BY THE LANDSCAPE CONTRACTOR AT THE TIME OF THE PLANTINGS.
6. PRIOR TO FINAL ACCEPTANCE OF STORE BY DOLLAR GENERAL, THE SITE SHALL BE CLEAN OF ALL DEBRIS AND TRASH, AND MEET ALL REQUIREMENTS OUTLINED IN SECTIONS A-C ABOVE.
7. MAXIMUM SLOPE CUTS SHALL NOT EXCEED 4:1. ALL DISTURBED GRADES GREATER THAN 8:1 SHALL BE STABILIZED BY SODDING. SODDING PINS ARE TO BE USED ON ALL 4:1 GRADES.
8. VEGETATION AT ENTRY SHOULD BE LOW TO ENSURE VISIBILITY OF STORE.
9. IF TREES ARE REQUIRED IN FRONT OF BUILDING, SELECT SMALL LEAFED, NON DENSE SPECIES THAT WILL NOT INTERFERE WITH THE VISIBILITY OF STORE. THE SPACING SHALL CREATE VISUAL CORRIDORS TO STORE.

D. IRRIGATION NOTES:

1. ALL LANDSCAPE AREAS AND LAWNS ADJACENT TO PAVED AREAS AND/OR STREETS ARE TO BE FULLY IRRIGATED.
2. IRRIGATION SYSTEM TO INCLUDE ALL SPRAY HEADS, VALVES AND CONTROLLERS.
3. LOCATE HEADS A MINIMUM OF 2'-0" FROM EDGE OF PAVEMENT / CURB.
4. IRRIGATION DESIGN TO BE PROVIDED BY LANDSCAPE CONTRACTOR.
5. ALL VALVES ARE TO BE RAINBIRD DV SERIES VALVES (OR EQUIVALENT).
6. THIS SYSTEM WILL REQUIRE A RAINBIRD ESP MODULAR SERIES CONTROLLER (OR EQUIVALENT).
7. EACH ZONE WILL REQUIRE ITS OWN ELECTRONIC CONTROL VALVE.
8. FROM THE METER SERVICE THE FOLLOWING SHALL BE INSTALLED IN ORDER:
   1.A. 1-MANUAL MASTER CONTROL VALVE
   1.B. 1-1" RPZ ASSEMBLY
   1.C. 1-1 1/2" MASTER CONTROL VALVE.

REVISION BLOCK

NO.	DESCRIPTION	DATE

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NEW FACILITY LOCATION
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SPRINGHILL RD.
BRYANT, AR 72022

DOLLAR GENERAL

LANDSCAPE AND IRIGATION PLAN

PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-5

SHEET 5 OF 7

PAVEMENT DETAILS

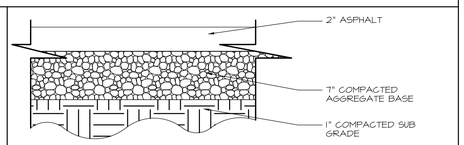
1. DETAILS ARE DOLLAR GENERAL STANDARD REQUIREMENTS AND MAY INCREASE OR DECREASE WITH VARIOUS SOIL CONDITIONS. A GEOTECHNICAL INVESTIGATION WITH PAVEMENT DESIGN RECOMMENDATIONS SHALL BE COMPLETED FOR EACH DEVELOPMENT. THE FOLLOWING DETAILS ARE MINIMUM DOLLAR GENERAL PAVEMENT REQUIREMENTS. INCREASED RECOMMENDATIONS ARE TO BE USED.

2. THE SUBGRADE MATERIALS SHALL BE PROOF ROLLED AND/OR SCARIFIED AND COMPACTED PRIOR TO PLACEMENT OF BASE MATERIAL. WHERE EXISTING SUBGRADE MATERIALS ARE UNSUITABLE, THEY SHALL BE REMOVED AND REPLACED WITH COMPACTED SELECT MATERIAL IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.

3. HEAVY DUTY CONCRETE PAVEMENT AND STANDARD DUTY CONCRETE PAVEMENT (AS RECOMMENDED BY THE GEOTECHNICAL REPORT OR DOLLAR GENERAL MINIMUMS) SHALL BE STEEL REINFORCED. REINFORCEMENT TYPE SHALL BE PRIOR APPROVED BY DOLLAR GENERAL.

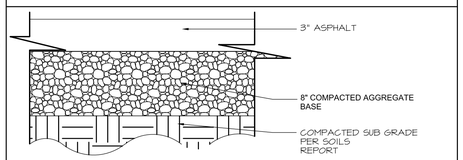
4. CONCRETE PAVEMENT PLAN SHALL BE PROVIDED TO DOLLAR GENERAL FOR PRIOR APPROVAL. ALL JOINTS MUST BE SEALED WITH AN APPROVED SEALANT. STEEL REINFORCING SHALL BE USED AT JOINTS. REFER TO ACI 330R (GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS) FOR JOINT DESIGN AND LAYOUT.

ASPHALTIC PAVEMENT



STANDARD DUTY ASPHALT DETAIL

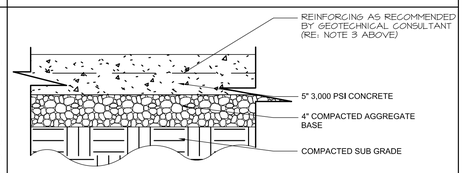
SCALE: NOT TO SCALE



HEAVY DUTY ASPHALT DETAIL

SCALE: NOT TO SCALE

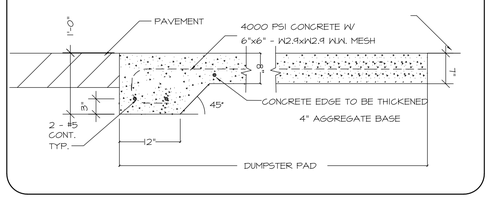
CONCRETE PAVEMENT



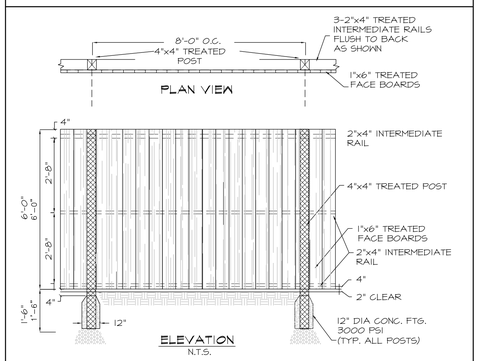
HANDICAP PARKING CONCRETE DETAIL

SCALE: NOT TO SCALE

DUMPSTER PAD CROSS SECTION



6' or 8' WOODEN PRIVACE FENCE DETAIL



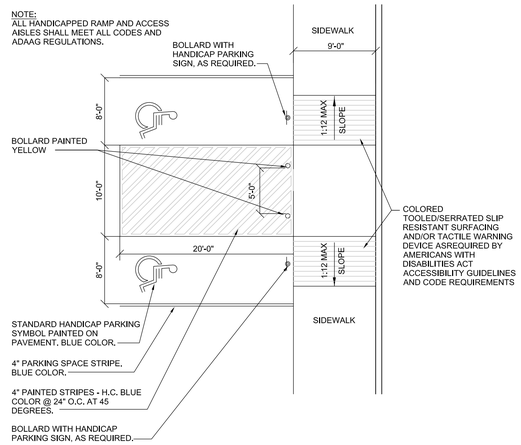
GENERAL NOTES:

*ALL FASTENING HARDWARE TO BE NON-CORROSIVE

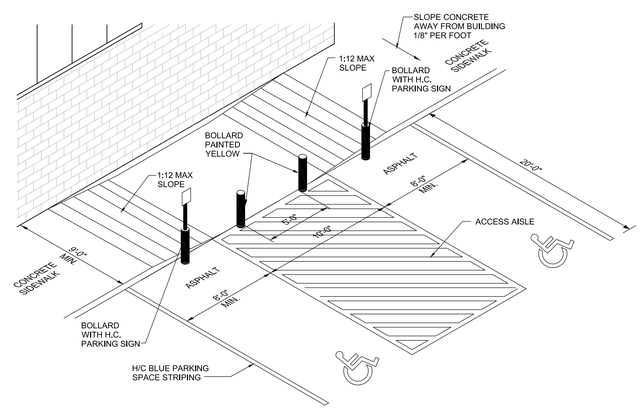
*CONTRACTOR SHALL USE 8P GALVANIZED SIDING NAILS OR 2" GALVANIZED SCREWS THROUGHOUT.

*ALL WOOD MEMBERS SHALL BE TREATED.

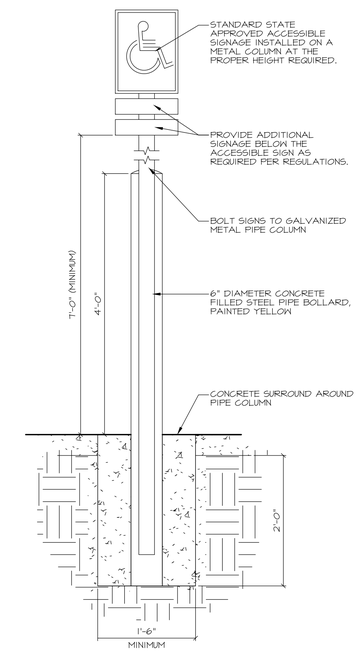
HANDICAP PARKING DETAIL



HANDICAP PARKING, ACCESS RAMP AND ACCESS AISLE DETAILS



HANDICAP SIGN DETAILS



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NEW FACILITY LOCATION
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BRYANT, AR. 72022

DOLLAR GENERAL®

DETAIL SHEET 1

PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/04/2016

C-6

A. GENERAL CIVIL SITEWORK NOTES:

1. THE CIVIL SITEWORK DRAWINGS IN THIS PACKAGE ARE PROVIDED TO INDICATE MINIMUM STANDARDS FOR DOLLAR GENERAL NEW STORE DEVELOPMENTS. IT IS NOT INTENDED, NOR WILL BE ACCEPTABLE BY DOLLAR GENERAL, AS FINAL CIVIL SITEWORK DRAWINGS AND/OR SPECIFICATIONS FOR NEW STORE SITE DEVELOPMENTS. COORDINATE SITE SPECIFIC PLANS WITH ALL DISCIPLINES.

2. PRIOR TO CONSTRUCTION DEVELOPER SHALL PROVIDE DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT A COMPLETE SET OF CIVIL SITEWORK DRAWINGS STAMPED BY A CIVIL ENGINEER LICENSED IN THE STATE IN WHICH THE DEVELOPMENT IS PROPOSED. DOLLAR GENERAL SHALL APPROVE ENGINEERED DRAWINGS PRIOR TO DEVELOPER STARTING CONSTRUCTION. ANY MAJOR MODIFICATIONS OF THE DRAWINGS, AFTER INITIAL APPROVAL, SHALL BE RESUBMITTED TO DOLLAR GENERAL FOR PRIOR APPROVAL. ANY CHANGES MADE THAT ARE NOT APPROVED BY DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT, MAY NOT BE ACCEPTABLE, AND MAY REQUIRE RECONSTRUCTION.

3. A BOUNDARY AND TOPOGRAPHIC SURVEY SHALL BE INCLUDED IN THE CIVIL SITEWORK DRAWINGS SUBMITTED TO DOLLAR GENERAL. THE DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL LICENSED SURVEYOR REGISTERED IN THE STATE IN WHIGH THE DEVELOPMENT IS PROPOSED. TOPOGRAPHIC SURVEY SHALL SHOW UTILITIES (ABOVE AND UNDERGROUND) AND EXISTING GRADE CONTOURS AT ONE FOOT (1') INTERVALS. TOPOGRAPHIC SURVEY SHALL EXTEND BEYOND THE PROPERTY BOUNDARY AS REQUIRED TO SHOW LOCAL STREETS, NEARBY INTERSECTIONS, ADJACENT DITCHES, ETC. AS ITEMS PERTAIN TO NEW DEVELOPMENT.

4. A UTILITY PLAN SHALL BE INCLUDED IN THE CIVIL SITEWORK DRAWINGS. THE PLAN SHALL INCLUDE UTILITIES REQUIRED FOR BUILDING SERVICES AND ANY UTILITY MAIN IMPROVEMENTS THAT MAY BE REQUIRED. UTILITY DETAILS SHALL BE INCLUDED IN THE DRAWINGS. UTILITIES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH ALL JURISDICTIONAL REQUIREMENTS.

5. DEVELOPER AND/OR CONTRACTOR IS RESPONSIBLE FOR ANY NATIONAL, STATE AND/OR LOCAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS. EROSION CONTROL MEASURES SHALL BE INSTALLED AS REQUIRED TO INSURE THAT NO SEDIMENT IS CONVEYED OFF THE SITE TO ADJACENT PROPERTIES. AT A MINIMUM, CONTRACTOR/DEVELOPER SHALL SEED, FERTILIZE AND MULCH ALL DISTURBED AREAS. A SUITABLE STAND OF GRASS SHALL BE OBTAINED AT ALL UNIMPROVED AND NON-LANDSCAPED AREAS.

6. PROVISIONS FOR LOCAL AND/OR REGIONAL LANDSCAPING REQUIREMENTS, INCLUDING LANDSCAPING IRRIGATION, ARE NOT SHOWN ON THESE DRAWINGS. DEVELOPER SHALL PROVIDE LANDSCAPING IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.

7. HANDICAP REQUIREMENTS SHOWN ON THE DRAWINGS ARE MINIMUM REQUIREMENTS. DEVELOPMENT SHALL BE IN ACCORDANCE WITH FEDERAL AND LOCAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY, INCLUDING BUT NOT LIMITED TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.

8. PRIOR TO FINAL ACCEPTANCE OF STORE BY DOLLAR GENERAL, THE SITE SHALL BE CLEAN OF ALL DEBRIS AND TRASH.

9. DEVELOPER SHALL OBTAIN ALL JURISDICTIONAL APPROVALS AND PERMITS REQUIRED FOR THE DEVELOPMENT.

10. WHERE OFFSITE WORK IS REQUIRED FOR THE DEVELOPMENT, SUCH AS DOT STREET IMPROVEMENTS, UTILITY IMPROVEMENTS, ETC., DEVELOPER SHALL INCORPORATE THE IMPROVEMENTS AND/OR OFFSITE DESIGN DRAWINGS INTO THE DOLLAR GENERAL SITEWORK DRAWINGS.

11. DOLLAR GENERAL MINIMUM PAVEMENT RECOMMENDATIONS MUST BE MET. DEVIATIONS WILL REQUIRE A GEOTECHNICAL INVESTIGATION INCLUDING DESIGN RECOMMENDATIONS AND APPROVAL BY DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT.

B. SITE ELECTRICAL AND SIGNAGE GENERAL NOTES:

1. UNDERGROUND ELECTRICAL SERVICE IS PREFERRED FOR DOLLAR GENERAL DEVELOPMENTS. TRANSFORMER PAD DESIGN SHALL BE PROVIDED BY ELECTRICAL UTILITY PROVIDER AND SHALL BE BOLLARD PROTECTED WHEN LOCATED IN A HAZARDOUS AREA.

2. SITE LIGHTING SHALL BE DESIGNED TO PROVIDE A MINIMUM OF TWO FOOT-CANDLES AT THE PARKING LOT AREAS, BUILDING ENTRANCES, DUMPSTER AREA AND TRUCK DELIVERY AREA. THE OUTER PERIMETER OF THE BUILDING SHALL BE LIGHTED FOR SECURITY. SITE LIGHTING SHALL BE INSTALLED ALONG THE WALLS OF THE BUILDING AND POLE MOUNTED AT THE PERIMETER OF THE PARKING LOT.

3. REQUIRED POLE MOUNTED LIGHTING: 25' HEIGHT POLES WITH 1,000 WATT METAL HALIDE HEADS. CONFIRM WITH ELECTRICAL DRAWINGS AND PHOTOMETRICS.

4. REQUIRED WALL MOUNTED LIGHTING: 400 WATT METAL HALIDE WALL PACKS. CONFIRM WITH ELECTRICAL DRAWINGS AND PHOTOMETRICS.

5. REQUIRED BI-DIRECTIONAL SECURITY BULLHORN LIGHTING: 400 WATT METAL HALIDE FLOOD LIGHT WITH CUT OFF SHADES. CONFIRM WITH ELECTRICAL DRAWINGS AND PHOTOMETRICS.

6. LIGHTED PYLON SIGN: PROVIDE CONDUIT FROM ELECTRICAL PANEL TO LOCATION OF THE PYLON SIGN BASE. BURY CONDUIT TO PYLON. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND AND A 20-AMP 2-POLE BREAKER AT THE PANEL. A TEMPORARY 3' TALL WIRING STAKE SHALL BE PROVIDED AT THE PYLON SIGN LOCATION UNTIL THE SIGN IS PERMANENTLY INSTALLED.

7. LIGHTED BUILDING SIGN: PROVIDE CONDUIT FROM ELECTRICAL PANEL TO THE CENTER OF THE SIGN CANOPY. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND AND A 20-AMP 2-POLE BREAKER AT THE PANEL. BUILDING CANOPY MUST BE SUFFICIENTLY BUILT TO SUPPORT THE DOLLAR GENERAL SIGN. SIGN WEIGHT UP TO 1,400 LBS.
NOTE: IF THE LEASE SPECIFIES A 5'-0" X 40'-0" BUILDING SIGN OR 24" (OR LARGER) LETTER SET, WITH TWO - 10/2 WIRE WITH GROUND AND TWO 20 AMP FUSES. THE BUILDING CANOPY MUST BE SUFFICIENTLY BUILT TO SUPPORT THE DOLLAR GENERAL SIGN.

8. UNDERGROUND ELECTRICAL SHALL BE PROVIDED TO THE SITE LIGHT POLES.

9. THE FINAL PYLON SIGN CONNECTION AND UNDERGROUND CONDUIT IS LANDLORD RESPONSIBILITY.

10. DOLLAR GENERAL VENDOR PRICING FOR LIGHTING WALL PACKS AND POLE LIGHT FIXTURES ARE AVAILABLE FROM: HARRIS LIGHTING AND NESCO LIGHTING, REFER TO VENDOR LIST. IF STANDARD DG LIGHTING DOES NOT MEET JURISDICTIONAL REQUIREMENTS, CONTACT HARRIS LIGHTING FOR ALTERNATIVE SITE SPECIFIC PHOTOMETRIC CALCULATIONS.

C. SITE PLAN GENERAL NOTES:

1. THE SITE PLAN IS BASED ON MINIMUM REQUIREMENTS FOR SITE ACCESS, PARKING AND FREIGHT DELIVERY. DEVIATIONS FROM THIS PLAN SHALL INSURE PROPER SITE ACCESS FOR DOLLAR GENERAL'S FREIGHT TRUCKS DURING NORMAL BUSINESS (OPERATING) HOURS. ON-SITE DELIVERY TRUCK MANEUVERING PATHS SHALL BE DESIGNED UTILIZING DOLLAR GENERAL'S 73-FOOT LONG FREIGHT TRUCK. PATHS SHALL BE UNOBSTRUCTED AND FREE OF LANDSCAPE ISLANDS, SIGNS, LIGHT POLES, BOLLARDS, ETC. HEAVY DUTY PAVEMENT IS REQUIRED ALONG THE ENTIRE DELIVERY TRUCK (MANEUVERING) PATH.

2. A MINIMUM OF 31 PARKING SPACES, WHICH INCLUDE 2 HANDICAP ACCESSIBLE SPACES, ARE REQUIRED FOR THIS DEVELOPMENT. THE NUMBER OF PARKING SPACES SHALL BE INCREASED AS REQUIRED BY JURISDICTIONAL REQUIREMENTS. IF ADDITIONAL PARKING SPACES ARE REQUIRED OR PROVIDED, THE TOTAL NUMBER OF H.C. SPACES SHALL BE INCREASED IN ACCORDANCE WITH ADA REQUIREMENTS.

3. STANDARD PARKING SPACES SHALL HAVE MINIMUM SIZE OF 9'X 20' UNLESS LOCAL JURISDICTION REQUIRE LARGER SPACES. PARKING SPACE STRIPING SHALL BE STANDARD 90 DEGREE STYLE. MINIMUM SIZE OF H.C. PARKING SPACES AND ACCESS AISLE ARE SHOWN ON DETAILS.

4. PAINTED STANDARD PARKING SPACE AND ISLAND STRIPE COLOR SHALL BE YELLOW FOR ASPHALT PAVEMENT AND CONCRETE PAVEMENT. COLOR FOR PAINTED H.C. ACCESSIBLE PARKING SPACE STRIPES, ACCESS AISLE OR ISLAND STRIPES, H.C. SYMBOLS, SHALL BE PAINTED PER THE REQUIREMENTS OF THE AUTHORITY HAVING JURISIDICTION. BOLLARDS SHALL BE PAINTED YELLOW. PAINT SHALL BE REFLECTIVE TYPE.

5. PAINTED FIRE LANE STRIPING OR PAINTED CURBS SHALL BE PROVIDED AS REQUIRED BY JURISDICTIONAL REQUIREMENTS.

6. CONCRETE PARKING STOPS SHALL BE USED AT PARKING SPACES ALONG THE OUTER PERIMETER OF PARKING LOT WHEN CONCRETE CURBS ARE NOT USED.

7. CONCRETE PARKING STOPS SHALL NOT BE USED AT THE FRONT OF THE BUILDING OR ALONG THE PERIMETER (ADJACENT) TO THE BUILDING.

8. THE SIDEWALK AT THE FRONT OF THE BUILDING SHALL BE A MINIMUM OF 9-FEET WIDE. THE SIDEWALK SHALL INCLUDE A 10-FOOT MINIMUM WIDE ADA ACCESSIBLE RAMP CLOSE TO THE STORE MAIN ENTRANCE. SIDEWALKS ALONG OTHER SIDES OF BUILDING SHALL BE MINIMUM 3'-6" WIDE. SIDEWALKS ADJACENT TO BUILDING SLABS SHALL HAVE SEALED ISOLATION JOINTS AND SHALL BE 6" HIGH ABOVE EXTERIOR OR PAVEMENT FINISH GRADES. ALL EXTERIOR SIDEWALKS SHALL HAVE A BROOM FINISH.

9. PORTLAND CEMENT SIDEWALKS SHALL BE MINIMUM 4" THICK WITH A 6" HIGH CURB AT ALL PAVEMENT TRANSITIONS, USE WELDED WIRE FABRIC REINFORCING.

10. THE PREFERRED WIDTH OF SITE CURB CUTS IS 36' WITH ONE ENTRANCE LANE AND TWO (RIGHT TURN AND LEFT TURN) EXIT LANES.

11. DRIVEWAY CONSTRUCTION WITHIN ROAD RIGHT-OF-WAYS, INCLUDES RADIUS SIZES, PAVEMENT MARKINGS, DRIVEWAY WIDTHS, ETC., SHALL BE IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.

12. A 25' MINIMUM RADIUS SHALL BE USED FOR DRIVEWAY TURNOUTS AS SHOWN ON PLAN.

13. SITE PLANS SHALL UTILIZE DOLLAR GENERAL'S PROTOTYPICAL BUILDING DESIGN WITH 70'-0" BY 130'-0" DIMENSIONS. SHOULD SITE CONSTRAINTS NOT ALLOW THE PROTOTYPICAL BUILDING DESIGN, DEVELOPER SHALL CONTACT DOLLAR GENERAL SITE COMPLIANCE COORDINATORS FOR OPTIONS AND APPROVAL. GROW BUILDING OUTWARD IF NECESSARY TO MAINTAIN CLEAR SALES FLOOR AREA AS SHOWN ON SHEET A1.

14. THE BUILDING MAIN ENTRANCE SHALL BE ORIENTED ON THE SITE TO FACE THE MAIN ACCESS ROAD. PARKING SHOULD BE CONCENTRATED AT THE FRONT OF THE STORE.

15. THE ACTUAL LOCATION FOR THE PYLON SIGN SHALL BE SITUATED FOR OPTIMUM VISIBILITY ALONG THE MAIN FRONT TRAFFIC CORRIDOR.

16. THE LANE OR DRIVE BETWEEN PARKING SPACES SHALL HAVE A MINIMUM WIDTH OF 36' WHEN LANE IS HEAVY DUTY PAVEMENT AND USED FOR FREIGHT TRUCK MANEUVERING. THE LANE SHALL HAVE A MINIMUM WIDTH OF 24' WHEN THE LANE IS CONSTRUCTED OF STANDARD DUTY PAVEMENT AND NOT USED FOR FREIGHT TRUCK MANEUVERING.

17. BUILDING CORNERS ADJACENT TO PAVED AREAS SHALL BE BOLLARD PROTECTED. ABOVE GROUND UTILITY APPURTENANCES, SUCH AS METERS, TRANSFORMERS, FIRE HYDRANTS IN PAVED AREAS, ETC. SHALL BE BOLLARD PROTECTED.

18. DOWNSPOUTS SHALL NOT BE ALLOWED TO DISCHARGE ON CONCRETE SIDEWALKS. SEE DETAIL ON SHEET C2.

19. DUMPSTER AND DELIVERY PADS SHALL BE CONSTRUCTED OF CONCRETE AS DETAILED ON THE DRAWINGS. AN ENCLOSURE SHALL BE PROVIDED ON THE DUMPSTER PAD IF REQUIRED BY JURISDICTIONAL REQUIREMENTS, OR IF VISIBLE BY CUSTOMER TRAFFIC OR ABUTTING RESIDENTIAL. SANITARY SEWER AND DOMESTIC HOT WATER SHALL BE PROVIDED AT DUMPSTER AREA IF REQUIRED BY JURISDICTIONAL REQUIREMENTS.

20. PUBLIC SANITARY SEWER CONNECTION REQUIRED.

21. SEPTIC SYSTEM NOT ALLOWED UNLESS WRITTEN APPROVAL IS OBTAINED FROM DOLLAR GENERAL

22. HOLDING TANK SYSTEMS ARE NOT ALLOWED.

23. LIFT STATIONS ARE NOT ALLOWED WITHOUT DOLLAR GENERAL APPROVAL.

24. EXTERIOR WALLS AND FOUNDATION SHALL HAVE WATERPROOFING.

25. FINISHED GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR AT ALL NON-PAVED AREAS.

26. ALL DOWNSPOUTS DISCHARGING ONTO NON PAVED AREAS ARE TO HAVE A MINIMUM FIVE FOOT PERFORATED LANDSCAPE PIPE STRAPPED TO A MINIMUM 12 INCH X 24 INCH CONCRETE SPLASH BLOCK.

27. FINISH FLOOR TO BE A MINIMUM OF 12 INCHES ABOVE 100 YEAR FLOOD PLAIN.

28. IF AN UNOBSTRUCTED VIEW EXISTS OF A RESIDENTIAL BUILDING BETWEEN TENANT PARCEL AND ADJACENT PARCEL, THEN LESSOR SHALL CONSTRUCT A PRIVACY FENCE IN ACCORDANCE WITH TENANT'S PROTOTYPE CRITERIA SET PLANS AND ANY APPLICABLE GOVERNMENTAL AGENCIES.

D. SITE PARKING LOT:

1. USE PAVING SPECIFICATIONS NOTED ON SHEET C3 & C6 UNLESS A CERTIFIED GEOTECH REPORT SPECIFIES AN ALTERNATE REQUIREMENT (SEE PAGE C6 FOR DETAILS) AND IS APPROVED BY DOLLAR GENERAL.

2. PROVIDE PARKING LOT IN GOOD CONDITION, PROPERLY STRIPED PER SHEET C2 WITH YELLOW PAINT. MINIMUM OF 31 PARKING SPACES REQUIRED, INCLUDING A MINIMUM OF 2 HANDICAP ACCESSIBLE SPACES (PROPERLY MARKED, SIGNED, AND ADA COMPLIANT).

3. PROPER ACCESS FOR DOLLAR GENERAL'S FREIGHT TRUCKS (FREIGHT TRUCKS ARE APPROXIMATELY 73'-0" IN TOTAL LENGTH) ARE REQUIRED DURING NORMAL BUSINESS HOURS. THIS INCLUDES A TRUCK PATH THAT IS FREE OF LANDSCAPE ISLANDS, SIGNS, LIGHT POLES, AND OTHER BARRIERS WHILE MAINTAINING WIDE RADIUS CURVES ON ALL ENTRANCES AND EXITS. HEAVY DUTY PAVING (SEE PAGE C6 FOR SPECIFICATIONS) REQUIRED FOR TRUCK PATHS.

4. PROVIDE PROTECTION (BOLLARDS, GUARD RAILS, OR EQUIVALENT) FOR ELECTRIC, GAS, HVAC, AND WATER METERS THAT ARE IN POTENTIALLY HAZARDOUS LOCATIONS.

5. CONTRACTOR WILL COMPLETE ALL SITE WORK: FINAL GRADING, LANDSCAPING, SEEDING, PAVING, RETENTION, AND REMOVAL OF DEBRIS.

6. ROUTE DOWNSPOUTS UNDER SIDEWALKS AS DETAILED ON SHEET C2 AT ALL SIDEWALK LOCATIONS.

7. PLEASE NOTE THAT THERE SHOULD NOT BE ANY PARKING STOPS LOCATED DIRECTLY IN FRONT OF OR DIRECTLY ADJACENT TO THE BUILDING.

8. EROSION CONTROL AROUND PROPERTY IS REQUIRED BY CONTRACTOR.

9. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING ALL VEGETATION AND REGIONAL APPROPRIATE LANDSCAPING. ALL LOCAL LANDSCAPE REQUIREMENTS MUST BE MET.

10. THE GRADE FOR THE PAVED TRUCK RECEIVING LANE IS NOT TO EXCEED 2.5%. IF THIS CONDITION CANNOT BE MET, NOTIFY DOLLAR GENERAL IN WRITING WITH PROPOSED GRADING PLAN FOR APPROVAL.

11. THE GRADE FOR THE PAVED PARKING AREA IS NOT TO EXCEED 3.5%. IF THIS CONDITION CANNOT BE MET, NOTIFY THE DOLLAR GENERAL ARCHITECTURAL AND ENGINEERING DEPARTMENT IN WRITING WITH PROPOSED GRADING PLAN FOR APPROVAL.

12. THE CONCRETE DELIVERY TRUCK RECEIVING PAD MUST BE A MINIMUM OF 16'X16'. THE CONCRETE PAD MUST SLOPE AWAY FROM THE BUILDING AT 1/8" PER FOOT.

13. THE CONCRETE DUMPSTER PAD MUST BE A MINIMUM OF 18' X 18'.

14. IF REQUIRED, THE DUMPSTER ENCLOSURE MUST BE 18' WIDE BY 12' DEEP AND HAVE WOOD FENCE ON SIDES AND REAR WITH CHAIN LINK GATES AND PRIVACY SLATS AS A MINIMUM BASIS OF DESIGN.

15. CURBING OR CONCRETE PARKING STOPS SHOULD BE LOCATED AT PERIMETER PARKING ZONES ONLY.

16. LANDSCAPING AND SITE WORK SHALL BE FREE OF DEBRIS AND IN LIKE NEW CONDITION.

E. HVAC SECURITY FENCING:

(**ONLY TO BE USED IF HVAC UNITS ARE ON THE GROUND)

PROVIDE THE FOLLOWING WHEN THE STORE IS DEFINED AS BOTH SELECT AND UTILIZING NNN LEASE.

1. PROVIDE 69 LINEAL FEET x 8'-0" HIGH 6 GAUGE CHAIN LINK FENCING.

2. SCHEDULE 40 GALVANIZED PIPE.

3. PROVIDE POLYETHYLENE THERMOPLASTIC PRIVACY SLATS, COLOR TO MATCH BUILDING WITH UV INHIBITORS. USE WHEN UNITS ARE FACING STREET OR RESIDENTIAL.

4. PROVIDE (2) 30" GATES WITH COMMERCIAL GRADE HEAVY DUTY HINGES AND LOCKS, FRAMES TO BE SAME AS TOP RAIL.

5. MAINTAIN A MINIMUM OF 4'-0" IN-BETWEEN UNITS AND FENCING. FENCING IS TO BE 6" INSIDE OF THE EDGE OF CONCRETE PAD. ADJUST PAD AND FENCING DIMENSIONS ACCORDINGLY.

6. PROVIDE RAZOR COIL FULL LENGTH OF FENCING, 18" DIAMETER, GALVANIZED.

7. CONFIRM NUMBER OF UNITS AND SIZE OF UNITS AND ADJUST PAD AND FENCING ACCORDINGLY.

** UTILITY WARNING **

48 HOURS
BEFORE YOU DIG
CALL
ARKANSAS ONE CALL
(TOLL FREE)
1-800-482-8998
PRIOR TO CONSTRUCTION FOR
UNDERGROUND UTILITY LOCATION

CERTIFICATE OF AUTHORIZATION
THE SENTINEL GROUP, LLC
No. 1269
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 11833
ERIC E. KREBS

REVISION BLOCK

NO.	DESCRIPTION	DATE

The Sentinel Group, LLC
Civil Engineering - Development - Planning - Project Management
2712 Cypress Point Drive, Benton, Arkansas 72019 Ph: (501) 317-2547

OWNER / / DEVELOPER:
PB GENERAL HOLDINGS, llc
5110 TALLEY ROAD
LITTLE ROCK, AR 72204
(501) 219-6084

NEW FACILITY LOCATION
NORTHLAKE RD.
SPRINGHILL RD.
BRYANT, AR. 72022

DOLLAR GENERAL®

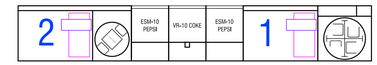
CONSTRUCTION NOTES & SPECS.

PROJECT NUMBER: 1611
C.A.D. BY: C. TAYLOR
CHECKED BY: E. KREBS
DATED: 11/09/2016

C-7

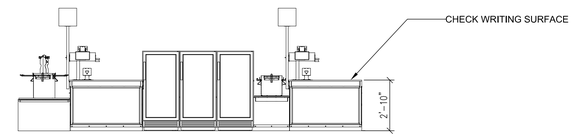
SHEET 7 of 7

B
F1



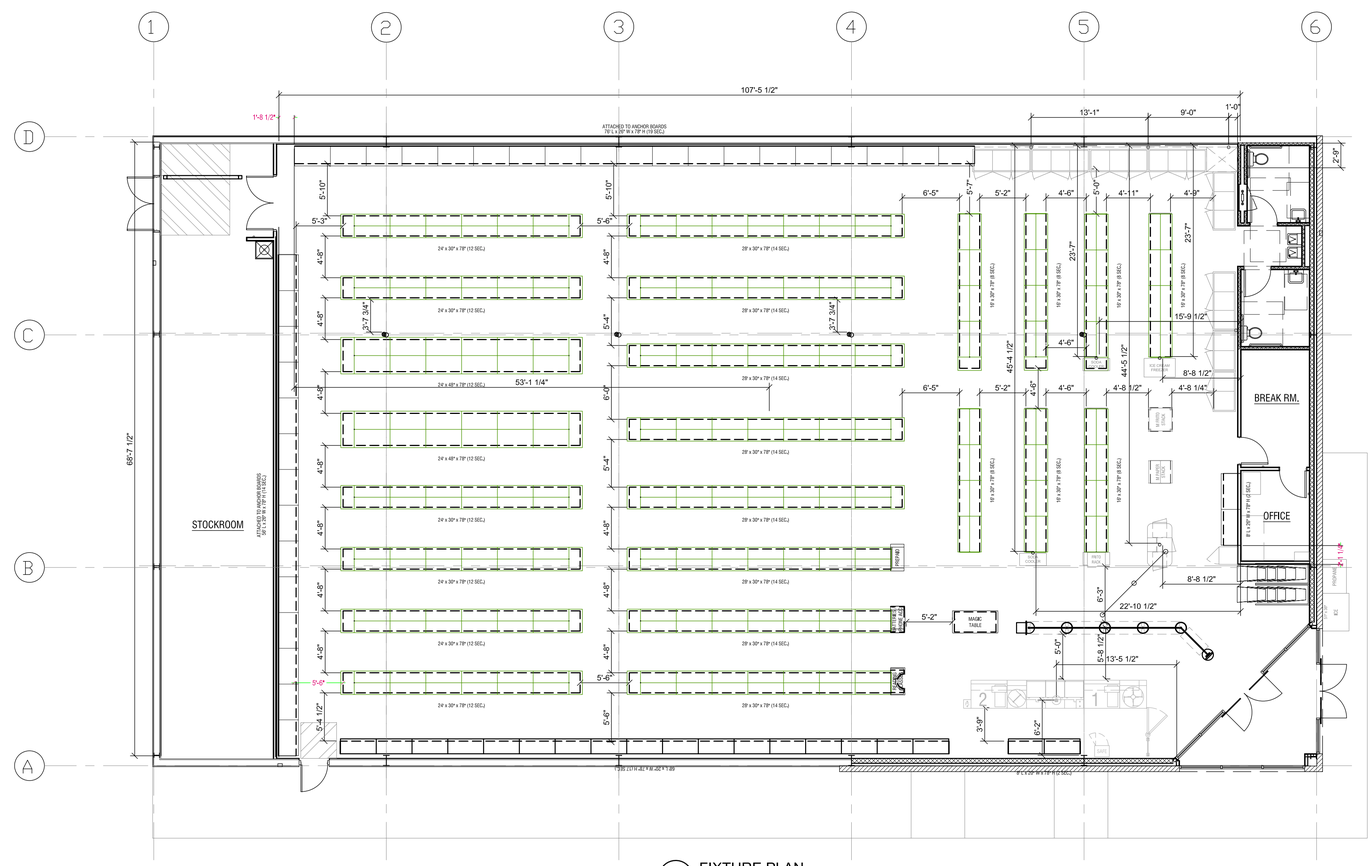
NOTE: FRONT CHECKOUT COUNTER TO BE PROVIDED BY DOLLAR GENERAL AND INSTALLED AT DOLLAR GENERAL'S DIRECTION. COUNTERS SHALL INCLUDE A PORTION OF AT LEAST 36" IN LENGTH WHICH IS NO MORE THEN 34" ABOVE THE FINISH FLOOR. COUNTERS SHALL BE ON AN ACCESSIBLE ROUTE.

A - SERVICE COUNTER PLAN



B - ELEVATION

2 F1 SERVICE COUNTER DETAILS
SCALE: NTS (1/4"=1'-0")



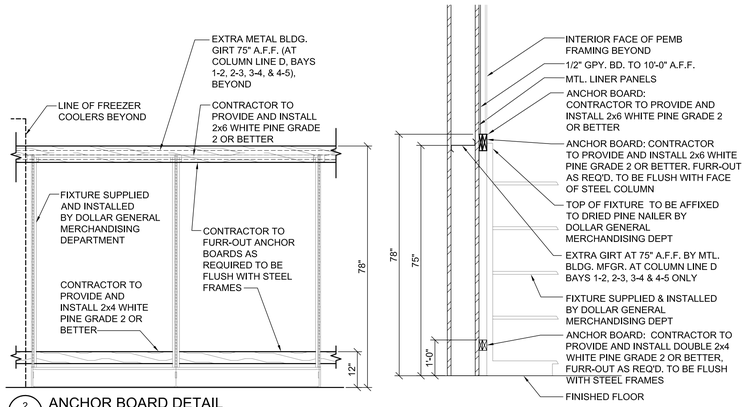
1 F1 FIXTURE PLAN
SCALE: NTS (1/8"=1'-0")

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ✦ PLANNER ✦ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

FIXTURE PLAN
PROJECT # 1611
OCT. 24, 2016

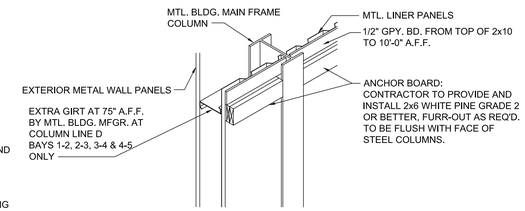
F1
SHEET 1 of 1



2 A1 ANCHOR BOARD DETAIL
SCALE: NTS (1/2"=1'-0")

DRINK FIXTURE WALL MOUNTING SUPPORT NOTES:

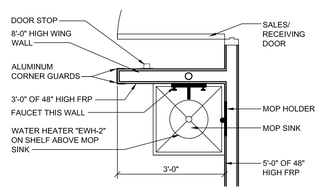
1. PROVIDE AND INSTALL 2X6 WHITE PINE - GRADE 2 OR BETTER.
2. PROVIDE AND INSTALL 2X4 WHITE PINE - GRADE 2 OR BETTER.
3. FASTEN THE 2X6 TO WALL WITH THE TOP EDGE OF THE BOARD AT 78" A.F.F. AND ANCHORED TO METAL BLDG, GIRT @ 75" A.F.F., REFER TO FIXTURE PLAN FOR LENGTH AND LOCATION OF BOARD.
4. FASTEN THE 2X4 TO THE WALL WITH THE TOP EDGE OF THE BOARD AT 12" A.F.F., REFER TO FIXTURE PLAN FOR LENGTH AND LOCATION OF BOARD.
5. PRE-DRILL PILOT HOLES IN ALL BOARDS PRIOR TO INSTALLATION TO PREVENT WOOD SPLITS.
6. SECURE THE 2X6 WITH TWO SELF-TAPPING SCREWS @16" O.C. MINIMUM SCREW SIZE IS 4"x 1/4".
7. FASTEN THE 2X4 WITH WITH ONE SELF-TAPPING SCREW @16" O.C., MINIMUM SCREW SIZE IS 4"x 1/4".
8. CAULK THE EDGES OF THE 2x6 AT THE TOP AND BOTTOM WHERE IT MEETS THE WALL PRIOR TO PAINTING.
9. PRIME AND PAINT BOTH BOARDS TO MATCH WALL COLOR.



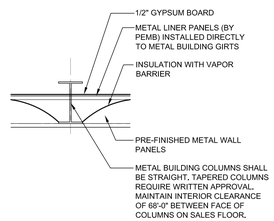
VERIFY LOCATION OF ANCHOR BOARDS WITH FINAL FIXTURE PLAN

FLOOR PLAN KEYED NOTES

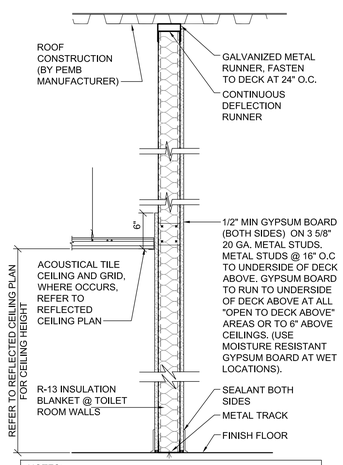
1. RECEIVING DOOR BUZZER - TORK MDL.#TA725 OR EQUAL
2. DOOR SCOPE, PROVIDED BY BASS SECURITY. REFER TO T01 AND DOOR SCHEDULE.
3. WEATHER STRIP & LOW PROFILE THRESHOLD PROVIDED BY BASS SECURITY. SEE TO T01 AND DOOR SCHEDULE.
4. STRIPE FLOOR FOR DESIGNATED EGRESS PATH (PAINT YELLOW).
5. PROVIDE AND INSTALL A TEN GALLON WATER HEATER ABOVE THE MOP SINK. SEE PLUMBING PLANS FOR MORE INFORMATION
6. 3 5/8" 20 GA. METAL STUDS @ 16" O.C. WITH 1/2" MINIMUM GYPSUM BOARD (BOTH SIDES). REFER TO NOTED WALL SECTION. REFER TO ROOM FINISH SCHEDULE FOR GYPSUM BOARD HEIGHT AT ANY PARTICULAR WALL.
7. VERTICAL METAL LINER PANELS (FULL HEIGHT) TO UNDERSIDE OF ROOF DECK. (BY PRE-ENGINEERED BUILDING MFGR.) (TO 8'-0" A.F.F. IN RECEIVING AREA)
8. STRIPE FLOOR FOR DESIGNATED ADA EGRESS PATH (PAINT YELLOW)
9. PRE-FINISHED METAL BUILDING PANELS (BY PRE-ENGINEERED BUILDING MANUFACTURER). CONCEALED FASTNER PANELS (OPTION: MBCI DESIGNER SERIES 16 "FLUTED" CONCEALED FASTENER PANELS)
10. CONCRETE SLAB, SEE SHEET S1 FOR MORE INFORMATION
11. METAL BUILDING FRAME. REFER TO NOTED WALL SECTION FOR ADDITIONAL INFORMATION.
12. 1/2" GYPSUM BOARD (TO 10'-0" A.F.F.) OVER "FULL HEIGHT" METAL LINER PANELS AND INSULATION WITH VAPOR BARRIER.
13. 8" SPLIT-FACED CMU PAINTED TO MATCH SIDE WALL PANELS. ALIGN FACE OF BLOCK WITH STEEL GIRT. PROVIDE PROPER ANCHORAGE TO STRUCTURE.
14. SLOPE CONCRETE 1/8" PER FOOT AWAY FROM BUILDING.
15. BROOM FINISH CONCRETE SIDEWALK, TYPICAL.
16. BRONZE STOREFRONT SYSTEM. REFER TO NOTED WALL SECTION FOR ADDITIONAL INFORMATION. CONTINUE GYPSUM BOARD ABOVE STOREFRONT TO DECK.
17. LINE OF SOFFIT OR CANOPY ABOVE.
18. A.D.A. COMPLIANT ACCESSIBLE RAMP WITH YELLOW PAINTED SIDES TO ACCESSIBLE PARKING STALLS.
19. MC CUE CART AND BUMPER GUARDS. TOP INSTALLED @ 3'-5" A.F.F. ORDER TRIM KIT FOR THIS PROTOTYPE.
20. WALL HYDRANT. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
21. REFRIGERATION BY DOLLAR GENERAL.
22. ROUND PIPE STEEL COLUMN. PAINT SW7005 PURE WHITE. WRAP STEEL COLUMN WITH TIGHT LOOP CARPET (BLACK) FROM BASE TO 48" A.F.F. (SEE SHEET S1 FOR RECESSED BASE AND BLOCK-OUT INFORMATION) (INTERIOR COLUMNS MUST BE ROUND, NO OTHER SHAPES ARE PERMITTED)
23. POWER POLE. COORDINATE FINAL LOCATION WITH ELECTRICAL DRAWINGS AND FINAL DOLLAR GENERAL FIXTURE PLAN (F1).
24. 6", 20 GA. METAL STUDS @ 16" O.C. W/ 1/2" GYP. BD. AND R-19 FACED BATT INSULATION AT CMU WALL TO 10'-0" A.F.F. (ALIGN FACE OF STUD WITH FACE OF METAL LINER PANEL ABOVE)
25. RPZ ASSEMBLY. SEE PLUMBING PLANS FOR MORE INFORMATION
26. FIRE EXSTINGUISHERS, PER CODE.
27. ENDCAP COOLER/FREEZER TO BE HARDWIRED THROUGH WHITE SO CORD WITH DUPLEX AT END. GC TO LEAVE BOTTOM HANGING AT 80" A.F.F. (SEE ELECTRICAL PLANS FOR MORE INFORMATION). CORD ANCHORED TO PURLINS ABOVE. COORDINATE LOCATION WITH FINAL DOLLAR GENERAL FIXTURE PLAN. (SEE SHEET E4 FOR EXAMPLES)
28. KIOSK COOLER TO BE HARDWIRED THROUGH WHITE SO CORD WITH QUAD AT END. GC TO LEAVE BOTTOM HANGING AT 48" A.F.F. (SEE ELECTRICAL FOR MORE INFORMATION). CORD ANCHORED TO PURLINS ABOVE. COORDINATE LOCATION WITH FINAL DOLLAR GENERAL FIXTURE PLAN. (SEE SHEET E4 FOR EXAMPLES)
29. CART AREA. REFER TO 4/A6 & 5/A6.
30. MC CUE RAILING IN FRONT OF ELECTRICAL PANELS 8'-0" LONG WITH TOP TWO RAILINGS AND NO MIDDLE POST.
31. STRIPE FLOOR FOR 3'-0" DESIGNATED EMS PANEL CLEARANCE (PAINT RED)



3 A1 ENLARGED MOP SINK PLAN
SCALE: NTS (1/2"=1'-0")

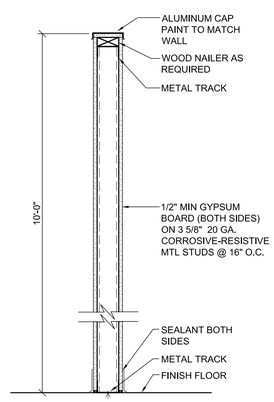


4 A1 DETAIL AT COLUMN
SCALE: NTS (1/2"=1'-0")

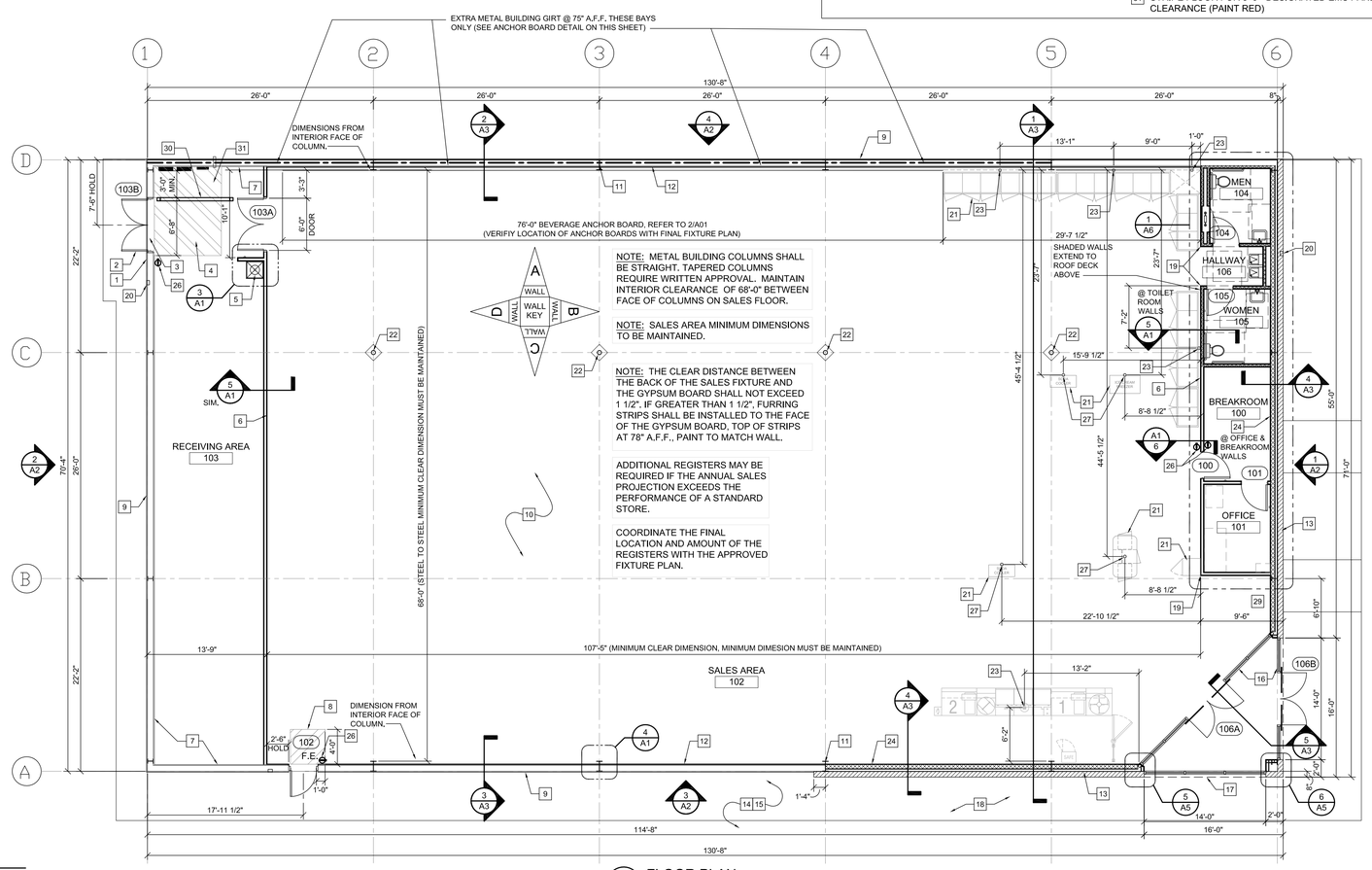


NOTES:
1. DO NOT FASTEN GYPSUM BOARD WITHIN 2" OF BOTTOM OF SLIP TRACK.
2. IN PLACE OF CONTINUOUS SLIP TRACK - METAL STUD CONTRACTOR MAY USE "VERTICLIP" BRAND SLIP CONNECTION TO STRUCTURE.
3. SCREW ANCHORS SHALL NOT EXTEND BEYOND TOP OF DECK ELEVATION.

5 A1 TYPICAL PARTITION
SCALE: NTS (1"=1'-0")



6 A1 PARTITION-OFFICE & BREAKROOM
SCALE: NTS (1"=1'-0")



1 A1 FLOOR PLAN
SCALE: NTS (1/8"=1'-0")

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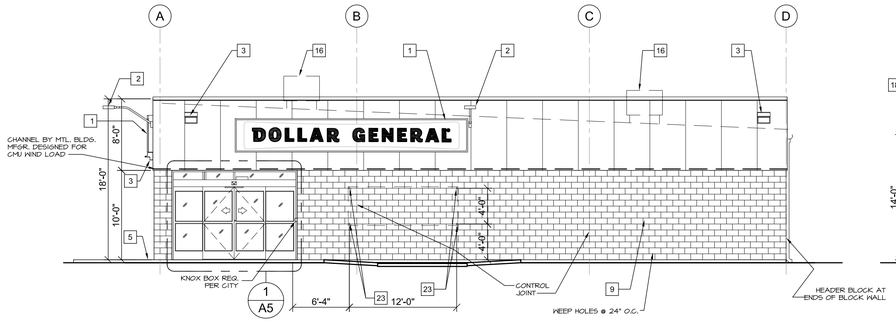
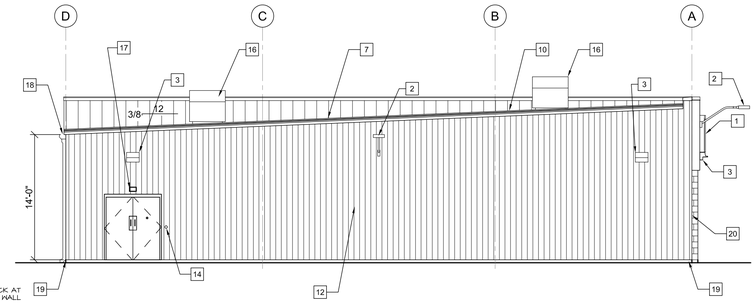
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

FLOOR PLAN
PROJECT # 1611
OCT. 24, 2016

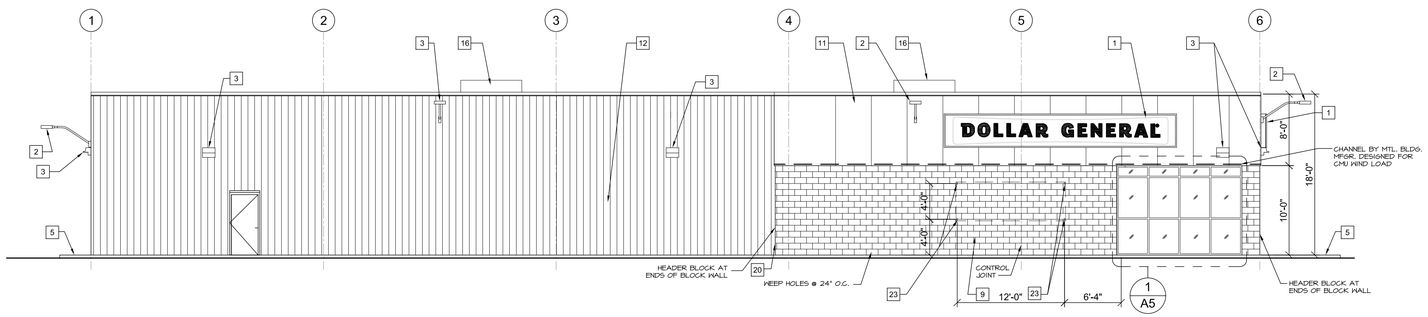
A1
SHEET 1 of 9



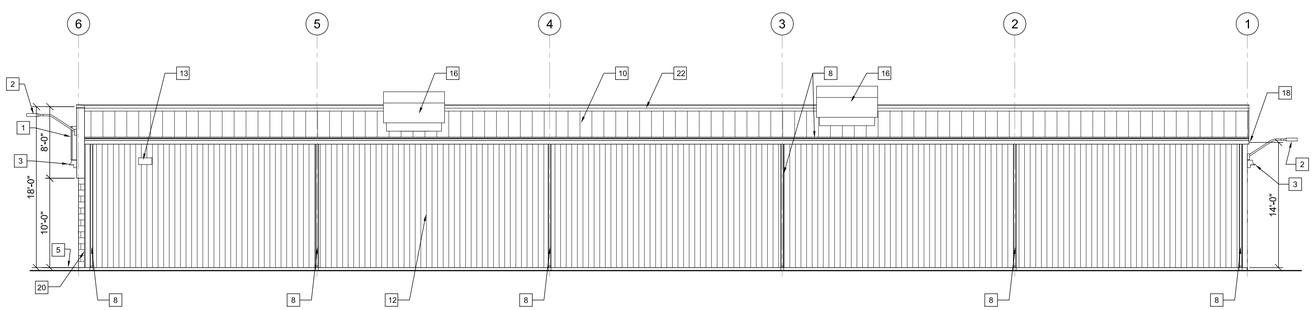
1 A2 FRONT ELEVATION
SCALE: 1/8"=1'-0"



2 A2 REAR ELEVATION
SCALE: 1/8"=1'-0"



3 A2 LEFT ELEVATION
SCALE: 1/8"=1'-0"



4 A2 RIGHT ELEVATION
SCALE: 1/8"=1'-0"

ELEVATION KEYED NOTES

1. SIGN FURNISHED AND INSTALLED BY DOLLAR GENERAL CORP. WITH CIRCUIT AS NOTED ON ELECTRICAL PLAN. SIGN TO BE CENTERED ON FRONT OF BUILDING. CONTRACTOR IS TO PROVIDE ADEQUATE BLOCKING AS REQUIRED BY SIGN MANUFACTURER TO SUPPORT SIGN WEIGHT OF UP TO 1,400 LBS. EXTERIOR CANOPY SIGN SHALL BE SUPPORTED BY THE FACE OF THE CANOPY. COORDINATE THE PROPER SIGNAGE TO BE USED WITH DOLLAR GENERAL.
2. LED LIGHT FIXTURE ON UPSWEEP ARM MOUNT. MOUNT TOP OF FIXTURE 12" BELOW TOP OF PARAPET.
3. LED WALL PACK. 12'-6" A.F.F. TO TOP OF WALL PACK. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
4. (NOT USED)
5. SIDEWALK (SEE CIVIL PLAN FOR LOCATIONS)
6. (NOT USED)
7. TRIM - SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
8. GUTTER AND DOWNSPOUT - SEE EXTERIOR FINISH SCHEDULE FOR COLOR.
9. 8" SPLIT FACE CONCRETE MASONRY UNIT. PAINT TO MATCH SIDE WALL PANELS.
10. STANDING SEAM METAL ROOF. GALVALUME FINISH.
11. (NOT USED)
12. PRE-FINISHED METAL WALL PANELS W/ CONCEALED FASTNERS (OPTION: MBCI DESIGNER SERIES 16 "FLUTED")
13. VENT FOR BATHROOM EXHAUST. REFER TO M01 FOR ADDITIONAL INFORMATION.
14. DOOR BUZZER. REFER TO E01 FOR ADDITIONAL INFORMATION.
15. (NOT USED)
16. HVAC UNITS MOUNTED ON ROOF. REFER TO MECHANICAL SHEET M1 FOR MORE INFORMATION.
17. OUTSIDE AIR TEMP. SENSOR MOUNTED OVER RECEIVING DOORS @ 8'-0" A.F.F.
18. MINIMUM EAVE HEIGHT IS 14'-0" A.F.F.
19. FINISHED GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR AT ALL NON PAVED AREAS.
20. FLASHING AT CMU/MTL. PANEL
21. (NOT USED)
22. WALL/ROOF FLASHING
23. 1/2" DIAMETER x 6" LONG STAINLESS STEEL EYE BOLTS (CLOSED) WITH 1" DIAMETER OPENINGS. DRILL AND EPOXY INTO BLOCK WALL. 4 BOLTS TO BE LOCATED AS SHOWN EACH SIDE OF ENTRY. TOTAL OF 8 BOLTS.

REGISTERED ARCHITECT DANIEL BARTLETT 10-24-2016 M 2263 ARKANSAS

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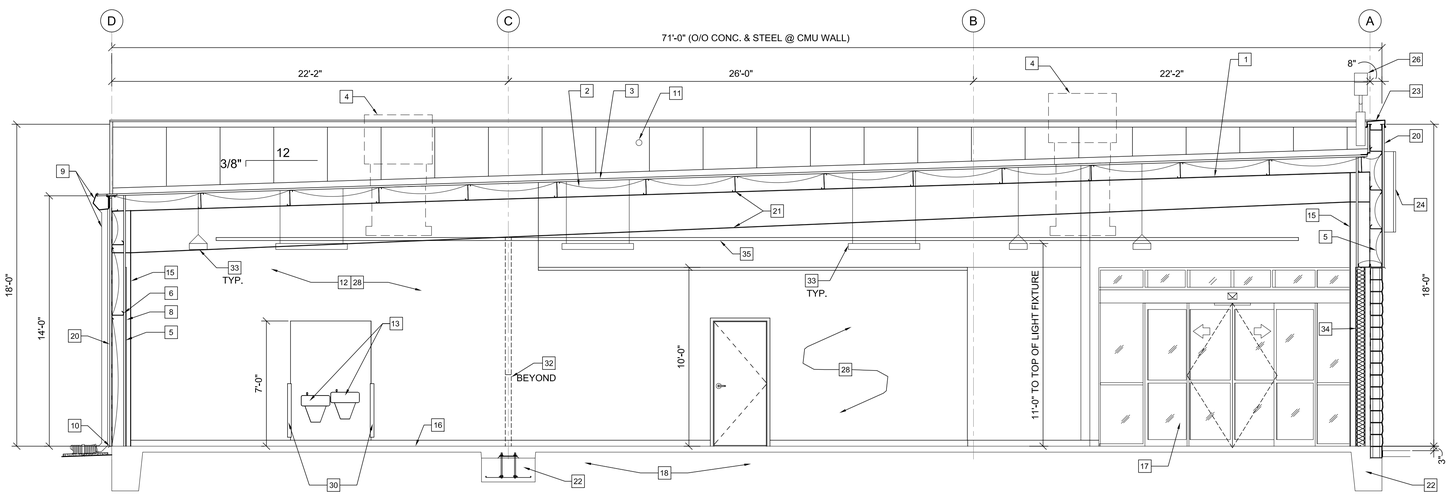
DOLLAR GENERAL (PLAN "E") (STORE #18146)

2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

ELEVATIONS
PROJECT # 1611
OCT. 24, 2016

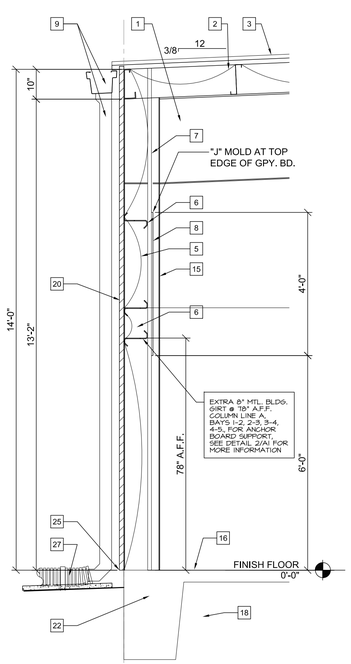
A2
SHEET 2 of 9



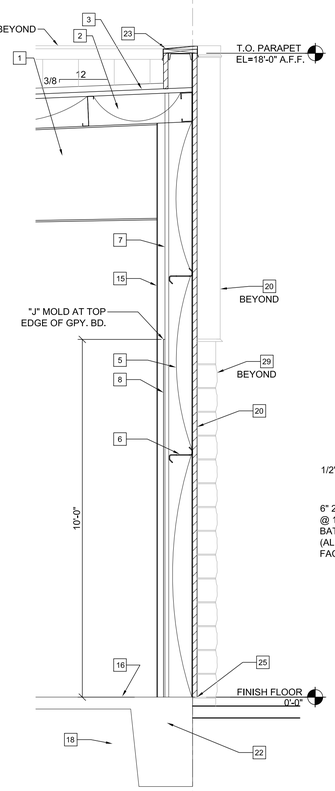
1 / A3 BUILDING SECTION
SCALE: 1/4" = 1'-0"

SECTION KEYED NOTES

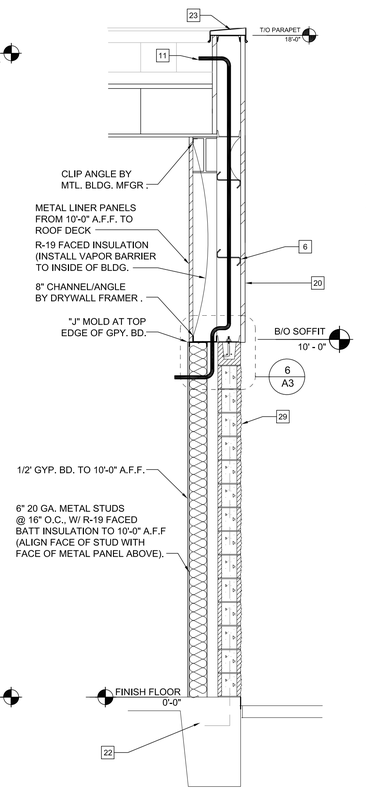
1. PRE-ENGINEERED METAL BUILDING SYSTEM BY BUILDING MANUFACTURER.
2. MINIMUM (R-13 + R-19) SAG AND BAG INSULATION SYSTEM W/ R-5 THERMAL BLOCKS AT EACH PURLIN, BY MTL. BLDG. MFGR.
3. STANDING SEAM METAL ROOF, GALVALUME FINISH (BY MTL. BLDG. MFGR.).
4. ROOF MOUNTED HVAC UNIT, SEE MECHANICAL DRAWINGS.
5. VINYL FACED R-19 BATT INSULATION (BY MTL. BLDG. MFGR.).
6. 8" METAL BUILDING GIRT (BY MTL. BLDG. MFGR).
7. VERTICAL METAL LINER PANELS, FULL HEIGHT, BY MTL. BLDG. MFGR. (FLOOR TO 8'-0" A.F.F. IN RECEIVING AERA)
8. 1/2" GYPSUM BOARD OVER LINER PANELS, METAL LINER PANELS TO DECK ABOVE; GYPSUM BOARD TO RUN TO 10'-0" AFF, PAINTED.
9. PRE-FINISHED GUTTER & DOWNSPOUT.
10. PROVIDE METAL CLOSURE. SEAL & CAULK TO RODENT PROOF BUILDING.
11. LOCATION OF 1 1/2" CONDUIT WITH PULLSTRING (ABOVE OFFICE) FOR SATELLITE LINE. PROVIDE WEATHERTIGHT SEAL AT HORIZONTAL PENETRATION. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF CONDUIT.
12. 1/2" GYPSUM BOARD ON 3 5/8", 20. GA. W MTL STUDS @ 16" O.C., BOTH TO DECK.
13. ADA COMPLIANT DRINKING FOUNTAIN, REFER TO PLUMBING.
14. BLOCKING FOR BUILDING SIGNAGE. COORDINATE WITH SIGN VENDOR.
15. METAL BUILDING COLUMNS SHALL BE STRAIGHT.
16. CONCRETE SLAB, SEE SHEET S1 FOR MORE INFORMATION
17. 21'X10' ALUMINUM BI-PART DOOR AND STOREFRONT GLAZING SYSTEM, COLOR BRONZE.
18. REFER TO SOILS REPORT (CONTACT ARCHITECT OR DEVELOPER FOR COPY)
19. (NOT USED)
20. PRE-FINISHED METAL WALL PANELS W/ CONCEALED FASTENERS (OPTION: MBCI DESIGNER SERIES 16 "FLUTED" PANEL)
21. PAINT EXPOSED ROOF STRUCTURE SW7005, PURE WHITE
22. SEE FOUNDATION DETAILS, SHEET S1
23. PREFINISHED METAL COPING.
24. STOREFRONT SIGN (BY DOLLAR GENERAL), MTL BLDG. MFGR TO DESIGN FOR SUPPORT (1400 LBS)
25. FINISH GRADE AT EXTERIOR WALLS SHALL BE A MINIMUM OF 6" BELOW FINISHED FLOOR AT ALL NON PAVED AREAS.
26. LIGHTING-SEE ELECTRICAL DRAWINGS.
27. WHERE DOWNSPOUTS DUMP ONTO GRADE (NO SIDEWALKS), MINIMUM 5'-0" LONG, 4" PERFORATED LANDSCAPE PIPE, STRAPPED TO A 12"x24" CONCRETE SPLASH BLOCK.
28. INTERIOR WALL - PAINTED - SEE ROOM SCHEDULE FOR MORE INFORMATION.
29. 8" SPLIT-FACED CMU PAINTED TO MATCH METAL SIDING. ALIGN FACE OF BLOCK WITH STEEL GIRT. PROVIDE PROPER ANCHORAGE TO STRUCTURE.
30. MC CUE TRIM KIT.
31. (NOT USED)
32. ROUND STEEL COLUMN, PAINT SW7005, PURE WHITE, WRAP STEEL COLUMN WITH TIGHT LOOP CARPET (BLACK) FROM BASE TO 48" A.F.F. (SEE SHEET S1 FOR RECESSED BASE PLATE AND BLOCK-OUT INFORMATION)
33. 1'x4' LIGHT FIXTURES HUNG WITH AIRCRAFT CABLE, ADD UNISTRUT TO PURLINS AS REQUIRED FOR HANGING.
34. 6" 20, GA. METAL STUDS @ 16" O.C.. W/ R-19 FACED INSULATION TO 10'-0" A.F.F.. ALIGN FACE OF STUD WITH FACE OF FACE OF METAL PANEL ABOVE.
35. CABLE TRAY- SEE SHEET A9
36. EXTRA 8" MTL. BLDG. GIRT @ 75" A.F.F., COLUMN D, BAYS 1-2, 2-3, 3-4, & 4-5, FOR ANCHOR BOARD SUPPORT. SEE DETAIL 2/A1 FOR MORE INFORMATION.



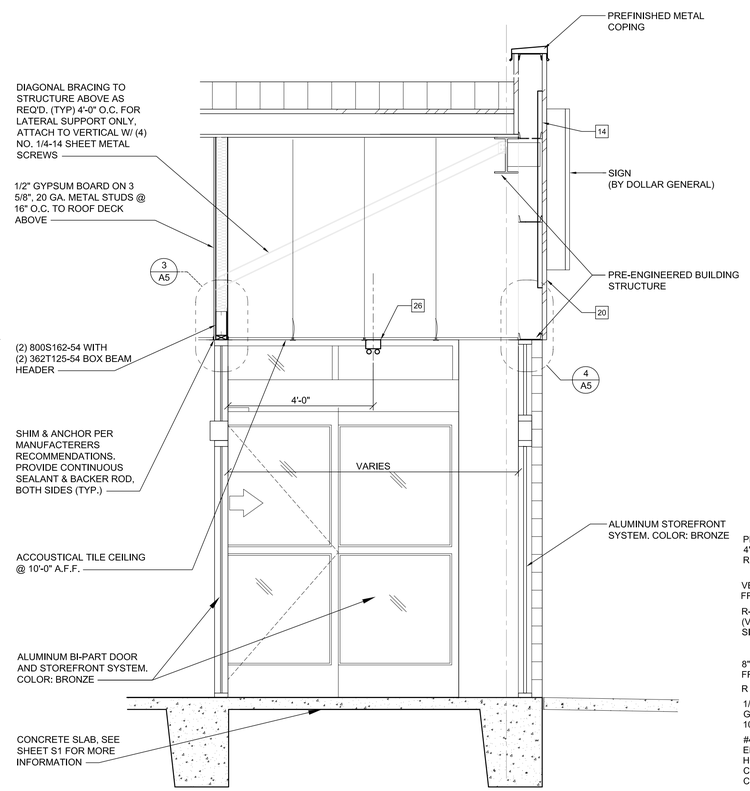
2 / A3 WALL SECTION @ REAR WALL
SCALE: 1/2" = 1'-0"



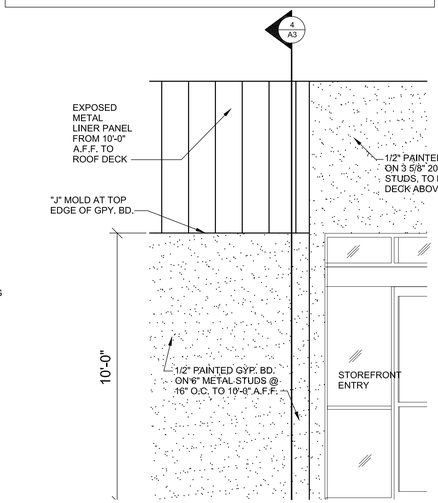
3 / A3 WALL SECTION @ FRONT/SIDING WALL
SCALE: 1/2" = 1'-0"



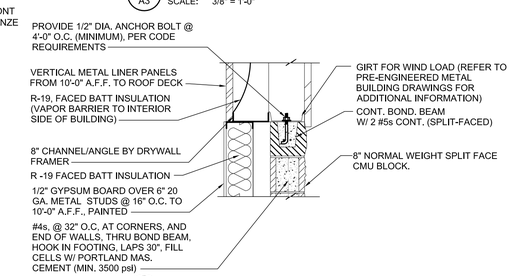
4 / A3 WALL SECTION @ CMU WALL
SCALE: 1/2" = 1'=0"



5 / A3 WALL SECTION @ STOREFRONT
SCALE: 1/2" = 1'=0"



7 / A3 ELEVATION DETAIL @ ENTRY
SCALE: 3/8" = 1'-0"



6 / A3 BOND BEAM DETAIL
SCALE: 3/4" = 1'-0"

REGISTERED ARCHITECT
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10-24-2016
MO 2263
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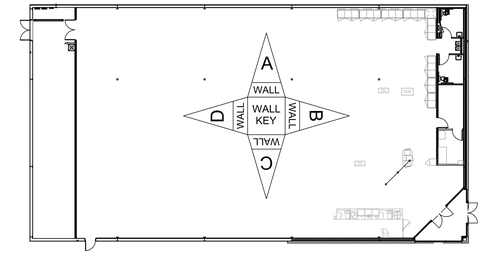
DOLLAR GENERAL (PLAN "E") (STORE #16146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

WALL SECTIONS
PROJECT # 1611
OCT. 24, 2016

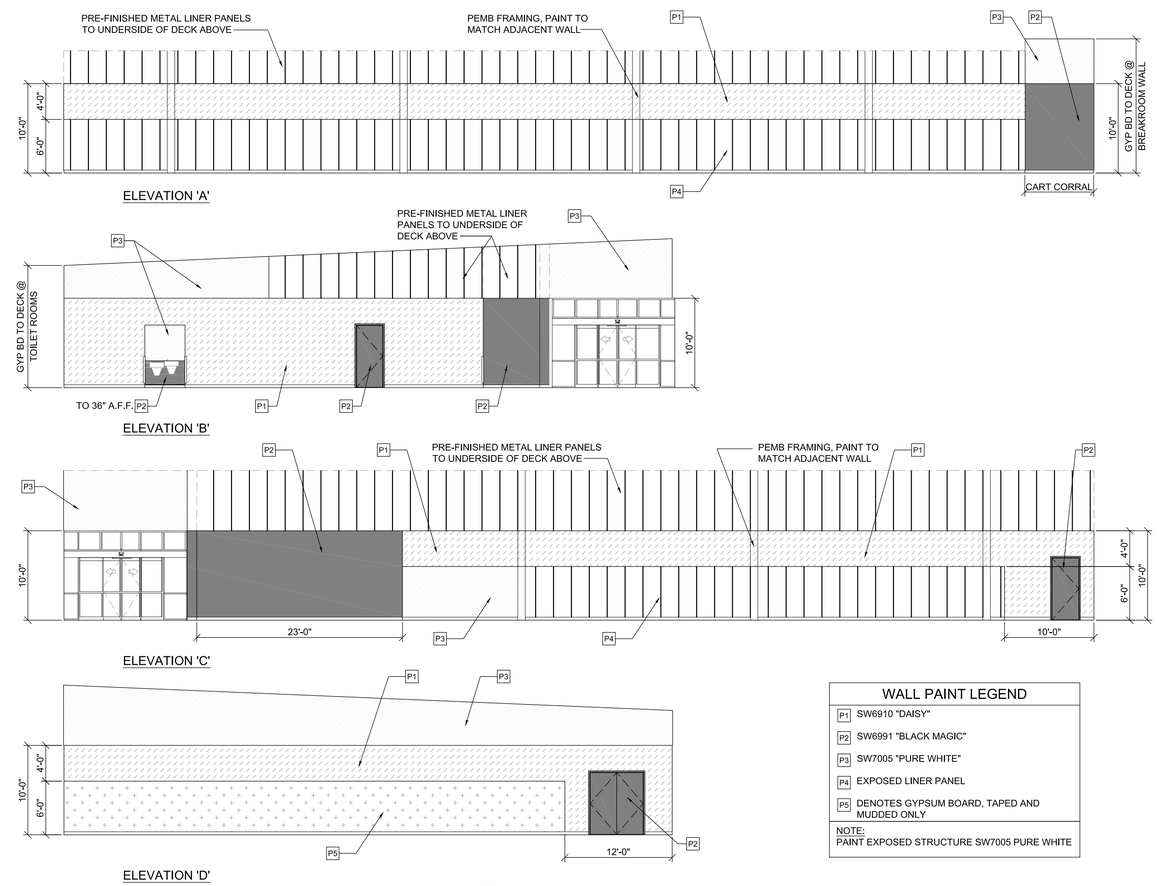
A3
SHEET 3 of 9

ROOM SCHEDULE

NO	ROOM NAME	FLOOR MATERIAL	FLOOR FINISH	BASE MATERIAL	BASE FINISH	A WALL MATERIAL	A WALL FINISH	B WALL MATERIAL	B WALL FINISH	C WALL MATERIAL	C WALL FINISH	D WALL MATERIAL	D WALL FINISH	CEILING MATERIAL	CEILING FINISH	REMARKS
100	BREAK RM	SEALED CONCRETE	CONCRETE WITH SEALER	4" RUBBER / VINYL BASE	BLACK	GYP BD ON MTL STUDS TO UNDER-SIDE OF DECK ABOVE.	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	GYPSUM BOARD TO 10'-0" A.F.F. WHITE MTL LINER PANELS ABOVE	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	GYPSUM BOARD TO 10'-0" A.F.F.	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	GYPSUM BOARD TO 10'-0" A.F.F.	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	EXPOSED TO STRUCTURE ABOVE	N/A	
101	OFFICE	SEALED CONCRETE	CONCRETE WITH SEALER	4" RUBBER / VINYL BASE	BLACK	GYPSUM BOARD TO 10'-0" A.F.F.	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	GYPSUM BOARD TO 10'-0" A.F.F. WHITE MTL LINER PANELS ABOVE	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	GYPSUM BOARD TO 10'-0" A.F.F.	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	GYPSUM BOARD TO 10'-0" A.F.F.	SHERWIN WILLIAMS - SW7005-PURE WHITE, PRO-MAR LATEX SEMI-GLOSS.	EXPOSED TO STRUCTURE ABOVE	N/A	
102	SALES AREA	POLISHED CONCRETE (STEPS 1-9)	POLISHED CONCRETE WITH SEALER	4" RUBBER / VINYL BASE	BLACK	GYPSUM BOARD TO 10'-0" A.F.F. ON WHITE METAL LINER PANELS	SHERWIN WILLIAMS, PRO-MAR LATEX SATIN. SEE ELEVS ON THIS SHEET.	GYP BD TO HEIGHT NOTED ON WALL SECTIONS	SHERWIN WILLIAMS, PRO-MAR LATEX SATIN. SEE ELEVS ON THIS SHEET.	GYPSUM BOARD TO 10'-0" A.F.F. ON WHITE METAL LINER PANELS	SHERWIN WILLIAMS, PRO-MAR LATEX SATIN. SEE ELEVS ON THIS SHEET.	GYPSUM BOARD TO ROOF DECK	SHERWIN WILLIAMS, PRO-MAR LATEX SATIN. SEE ELEVS ON THIS SHEET.	EXPOSED TO STRUCTURE ABOVE	N/A	
103	RECEIVING AREA	SEALED CONCRETE	CONCRETE WITH SEALER	N/A	N/A	METAL LINER PANEL TO 8'-0" A.F.F.	WHITE	GYPSUM BOARD TO ROOF DECK	TAPED, PAINTED AS REQ'D BY CODE. METAL LINER PANEL TO DECK AS ALTERNATE.	METAL LINER PANEL TO 8'-0" A.F.F.	WHITE	METAL LINER PANEL TO 8'-0" A.F.F.	WHITE	EXPOSED TO STRUCTURE ABOVE	N/A	
104	MENS	SEALED CONCRETE	SHERWIN WILLIAMS ACRYLIC SILICONE SILK CHOCOLATE HC-117	4" RUBBER / VINYL BASE	BLACK	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	PAINTED GYP. BD. CEILING TILES @ 8'-0" A.F.F (WASHABLE)	WHITE	
105	WOMENS	SEALED CONCRETE	SHERWIN WILLIAMS ACRYLIC SILICONE SILK CHOCOLATE HC-117	4" RUBBER / VINYL BASE	BLACK	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	GYPSUM BOARD TO 8'-0" A.F.F.	8'-0" HIGH FIBERGLASS REINFORCED PANEL - "WHITE"	PAINTED GYP. BD. CEILING TILES @ 8'-0" A.F.F (WASHABLE)	WHITE	
106	HALLWAY	POLISHED CONCRETE (STEPS 1-9)	POLISHED CONCRETE WITH SEALER	4" RUBBER / VINYL BASE	BLACK	GYPSUM BOARD TO 8'-0" A.F.F.	SHERWIN WILLIAMS - SW6991 BLACK MAGIC, PRO-MAR LATEX SEMI-GLOSS TO 36" AFF, SHERWIN WILLIAMS - SW7005 PURE WHITE, PRO-MAR LATEX SEMI-GLOSS ABOVE 36" AFF.	GYPSUM BOARD TO 8'-0" AFF	SHERWIN WILLIAMS - SW6991 BLACK MAGIC, PRO-MAR LATEX SEMI-GLOSS TO 36" AFF, SHERWIN WILLIAMS - SW7005 PURE WHITE, PRO-MAR LATEX SEMI-GLOSS ABOVE 36" AFF.	GYPSUM BOARD TO 8'-0" AFF	SHERWIN WILLIAMS - SW6991 BLACK MAGIC, PRO-MAR LATEX SEMI-GLOSS TO 36" AFF, SHERWIN WILLIAMS - SW7005 PURE WHITE, PRO-MAR LATEX SEMI-GLOSS ABOVE 36" AFF.	GYPSUM BOARD TO 8'-0" A.F.F. ON BULKHEAD	SHERWIN WILLIAMS - SW7005 PURE WHITE, PRO-MAR LATEX SEMI- GLOSS ABOVE 36" AFF.	ACT CEILING @ 8'-0" A.F.F.	WHITE	



1 / A4 FINISH KEY PLAN
SCALE: NTS (1/16"=1'-0")



WALL PAINT LEGEND	
P1	SW6910 "DAISY"
P2	SW6991 "BLACK MAGIC"
P3	SW7005 "PURE WHITE"
P4	EXPOSED LINER PANEL
P5	DENOTES GYPSUM BOARD, TAPED AND MUDDED ONLY

NOTE:
PAINT EXPOSED STRUCTURE SW7005 PURE WHITE

2 / A4 SALES FLOOR PAINT ELEVATIONS
SCALE: NTS (1/8"=1'-0")

REGISTERED ARCHITECT DANIEL BARTLETT 10-24-2016 ARKANSAS

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ✠ PLANNER ✠ DESIGNER
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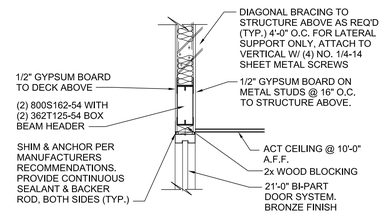
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

FINISH SCHEDULE
PROJECT # 1611
OCT. 24, 2016

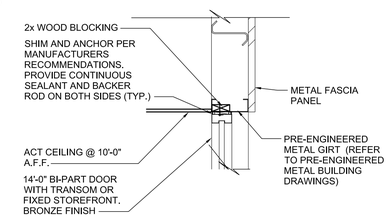
A4
SHEET 4 of 9

DOOR SCHEDULE

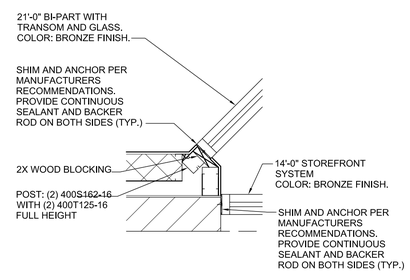
NO.	Type	SIZE W	SIZE H	SIZE T	DOOR HARDWARE	REMARKS
100	A	3' - 0"	7' - 0"	1 3/4"	(1) STANLEY PASSAGE LOCKSET QCL230-E-626-S4 - NO KEY REQUIRED, (1) STANLEY DOOR CLOSER QDC311-689, (1) IVES WALL STOP #402-1/2B-26D	SOLID CORE WOOD DOOR OR HOLLOW CORE METAL DOOR PAINTED SW6991, BLACK MAGIC (SEMI-GLOSS),
101	B	3' - 0"	7' - 0"	1 3/4"	(1) STANLEY STOREROOM LOCKSET QCL270-E-626-S4-SC-KD - KEY #1, (1) STANLEY DOOR CLOSER QDC311-689, (1) IVES WALL STOP #402-1/2B-26D, (1) TACO DOOR VIEWER #TA3310PC.	SOLID WOOD DOOR OR HOLLOW CORE METAL DOOR PAINTED SW6991, BLACK MAGIC (SEMI-GLOSS).
102	D	3' - 0"	7' - 0"	1 3/4"	(1) VON DUPRIN GUARD-X EXIT ALARM LOCK #2670-28, (1) STANLEY DOOR CLOSER QDC311-689, (1) DOOR PULL 8N US28, (1) DOOR SWEEP, WEATHERSTRIPPING, (1) 7015SC8-26D-RIM CYLINDER	HOLLOW CORE METAL DOOR. PAINT EXTERIOR SW7041, VAN DYKE BROWN (SEMI-GLOSS); PAINT INTERIOR SW6991, BLACK MAGIC (SEMI-GLOSS).
103A	C	6' - 0"	7' - 0"	1 3/4"	(2) BURNS PULL PLATES #5410-32D-26D-GRIP, (2) BURNS PUSH PLATES #54-US32D, (4) IVES KICK PLATES #8400-S32D-8X34 (2) STANLEY DOOR CLOSERS QDC311-689, (2) IVES 4" DOOR HOLDER #452B26D - IF NOT FIRE RATED WALL.	SOLID CORE WOOD DOOR OR HOLLOW METAL DOOR PAINTED SW6991, BLACK MAGIC (SEMI-GLOSS).
103B	E	6' - 0"	7' - 0"	1 3/4"	(1) VON DUPRIN GUARD-X EXIT ALARM LOCK #2670-28, (1) VON DUPRIN GUARD-X DOUBLE DOOR STRIKE #2609, (1) DETEX DOUBLE DOOR HOLDER #DDH-2250 TOP & BOTTOM, (2) STANLEY DOOR CLOSERS QDC311-689 (2) BURNS PULL PLATES #5410-32D-26D-GRIP (2) BURNS PUSH PLATES #54-US32D, (1) 2" DOOR SCOPE #DS/1000MB, (2) 8" DOOR HOLDERS #608Z, (1) NATIONAL GUARD HD THRESHOLD #425 HD-6 FT., (2) DOOR SWEEPS, WEATHERSTRIPPING, (1)7015SC8-26D RIM CYLINDER	HOLLOW CORE METAL DOOR. PAINT EXTERIOR SW7041, VAN DYKE BROWN (SEMI-GLOSS); PAINT INTERIOR SW6991, BLACK MAGIC (SEMI-GLOSS).
104	A	3' - 0"	7' - 0"	1 3/4"	(1) STANLEY STOREROOM LOCKSET QCL270-E-626-S4-SC-KD - KEY #2, (1) STANLEY DOOR CLOSER QDC311-689, (1) IVES WALL STOP #402-1/2B-26D.	SOLID WOOD DOOR OR HOLLOW CORE METAL DOOR PAINTED SW6991, BLACK MAGIC (SEMI-GLOSS).
105	A	3' - 0"	7' - 0"	1 3/4"	(1) STANLEY STOREROOM LOCKSET QCL270-E-626-S4-SC-KD - KEY #2, (1) STANLEY DOOR CLOSER QDC311-689, (1) IVES WALL STOP #402-1/2B-26D.	SOLID WOOD DOOR OR HOLLOW CORE METAL DOOR PAINTED SW6991, BLACK MAGIC (SEMI-GLOSS).
106A	F	6' - 0"	7' - 0"		BY DOOR MANUFACTURER TO BE RE-KEYED BY DOLLAR GENERAL AREA MANAGER WITH (1) ILCO RIM CYLINDER #7015SC8-26D.	21'-0" BI-PART WITH TRANSOM AND GLASS. BRONZE FINISH. REFER TO COVER SHEET FOR VENDOR INFORMATION.
106B	G	6' - 0"	7' - 0"		BY DOOR MANUFACTURER TO BE RE-KEYED BY DOLLAR GENERAL AREA MANAGER WITH (1) ILCO RIM CYLINDER #7015SC8-26D.	14'-0" BI-PART WITH TRANSOM AND GLASS. BRONZE FINISH. REFER TO COVER SHEET FOR VENDOR INFORMATION.



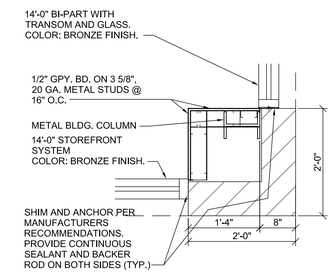
3 A5 HEAD DETAIL
SCALE: 3/4"=1'-0



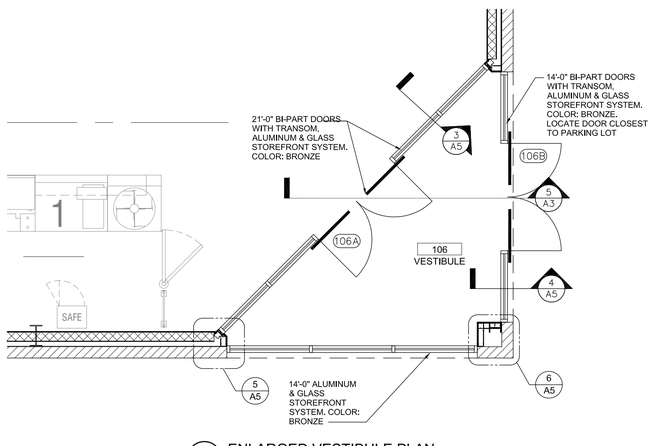
4 A5 HEAD DETAIL
SCALE: 3/4"=1'-0"



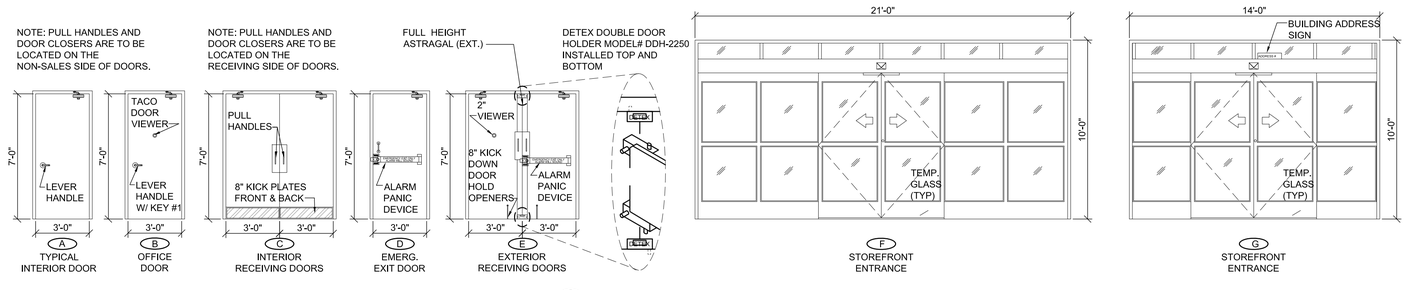
5 A5 JAMB DETAIL
SCALE: 3/4"=1'-0"



6 A5 JAMB DETAIL
SCALE: 3/4"=1'-0"



2 A5 ENLARGED VESTIBULE PLAN
SCALE: 1/4"=1'-0"



1 A5 DOOR ELEVATIONS
SCALE: 1/4"=1'-0"

REGISTERED ARCHITECT DANIEL BARTLETT 10-24-2016 AQ9263 ARKANSAS

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ✦ PLANNER ✦ DESIGNER
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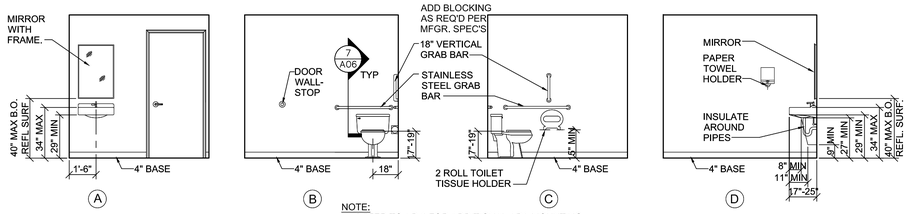
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

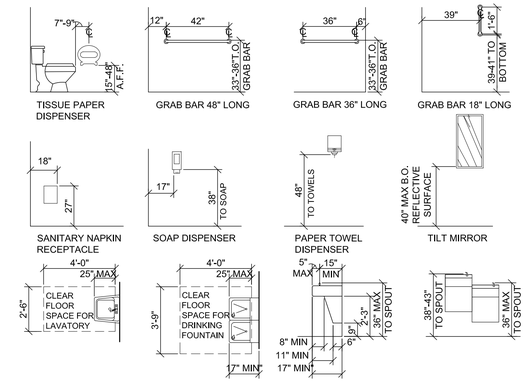
DOOR DETAILS
PROJECT # 1611
OCT. 24, 2016

A5
SHEET 5 of 9

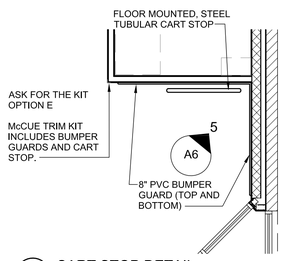


NOTE:
1. REFER TO AD.1 FOR ADDITIONAL ADA MOUNTING HEIGHTS AND REQUIRED CLEARANCES FOR TOILET ROOM ACCESSORIES AND PLUMBING FIXTURES.
2. ADD BLOCKING AS REQUIRED FOR MOUNTING OF OF GRAB BARS AND OTHER ACCESSORIES.

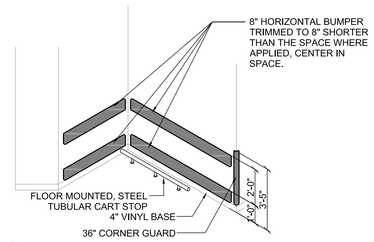
2 / A6 TOILET ROOM ELEVATIONS
SCALE: 1/4" = 1'-0"



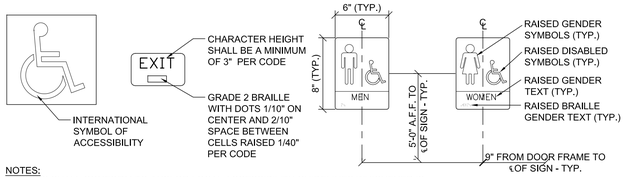
3 / A6 ACCESSIBILITY CLEARANCE/HEIGHTS
SCALE: 1/4"=1'-0"



4 / A6 CART STOP DETAIL
SCALE: 1/4"=1'-0"

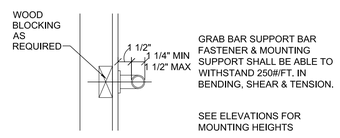


5 / A6 CART AREA DETAIL
SCALE: NTS



NOTES:
1. SIGNS SHALL CONFORM TO ANSI OR LOCAL ACCESSIBILITY GUIDELINES WHICHEVER IS MORE STRINGENT.
2. ALL BUILDINGS AND ENTRANCES THAT ARE ACCESSIBLE AND USABLE BY PERSONS WITH DISABILITIES SHALL BE IDENTIFIED WITH A MINIMUM OF ONE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
3. G.C. TO PROVIDE TACTILE "EXIT" SIGNS AT ALL GRADE LEVEL EXIT DOORS PER CODE.
4. SIGNS TO BE INSTALLED ON THE LATCH SIDE OF THE DOOR, OR IF NO SPACE ON THE NEAREST WALL PREFERABLY ON THE RIGHT. SIGNAGE SHALL HAVE NON GLARE FINISH W/ A CONTRASTING BACKGROUND. SEE A1 FOR LOCATION OF SIGNAGE.

6 / A6 ACCESSIBLE SIGNAGE
SCALE: 1 1/2"=1'-0"



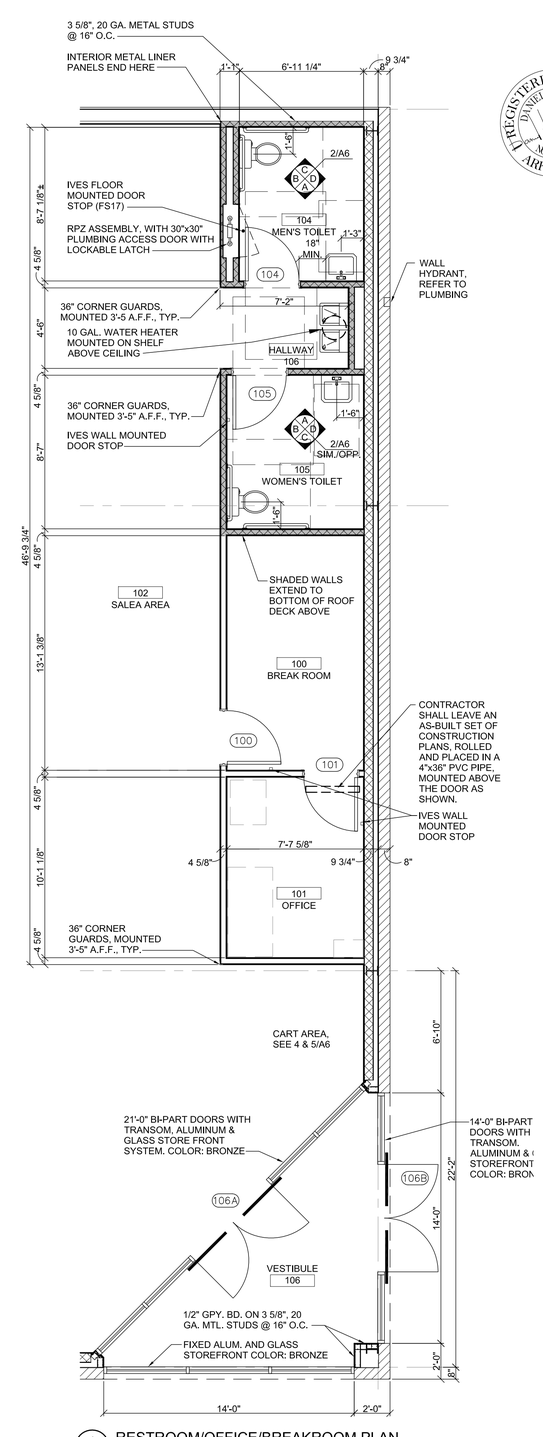
7 / A6 GRAB BAR DETAIL
SCALE: 1 1/2"=1'-0"

TOILET ROOM ACCESSORIES

B2740	BOBRICK DOUBLE TOILET TISSUE DISPENSER
B253	BOBRICK PAPER TOWEL DISPENSER
A-24x36	GAMCO 24" x 36" ANGLE FRAME
150Sx36	MIRROR GAMCO 1 1/2" X 36" GRAB BAR
150Sx42	GAMCO 1 1/2" X 42" GRAB BAR
150Sx18	GAMCO 1 1/2" X 18" GRAB BAR
MS-1	GAMCO MOP HOLDER

TOILET ROOM NOTES:

1. ALL TOILET ROOM ACCESSORIES PROVIDED BY CONTRACTOR.
2. ALL STORES MUST INCLUDE 2 REST ROOMS, EVEN WHEN NOT REQUIRED BY CODE. ANY VARIATION MUST BE APPROVED, IN WRITING, BY THE DOLLAR GENERAL CONSTRUCTION DEPARTMENT.
3. RESTROOMS MUST COMPLY WITH ALL BUILDING (FEDERAL, STATE, AND LOCAL) FIRE, AND HEALTH DEPARTMENT CODES. ADA REQUIREMENTS MUST ALSO BE MET IN BOTH RESTROOMS. SOME CODES MAY REQUIRE ADDITIONAL TOILETS OR LAVATORIES. PLEASE CONTACT DOLLAR GENERAL CONSTRUCTION DEPARTMENT FOR ALTERNATE PLANS FOR THESE SITUATIONS.
4. PROVIDE AND INSTALL 2'x3' MIRROR (OR LARGER IF REQUIRED BY CODE).
5. CONTRACTOR TO INSTALL SOAP DISPENSERS, TOILET PAPER HOLDERS, DOOR CLOSER, EXHAUST FANS, AND ALL BASS SECURITY PARTS IN BOTH RESTROOMS. PROVIDE SOLID BLOCKING IN WALL FOR SUPPORT.



1 / A6 RESTROOM/OFFICE/BREAKROOM PLAN
SCALE: 1/4" = 1'-0"

REGISTERED ARCHITECT
DANIEL BARTLETT
10-24-2016
NO. 2263
ARKANSAS

BARTLETT, ARCHITECTURE, Inc.
ARCHITECT ⊕ PLANNER ⊕ DESIGNER
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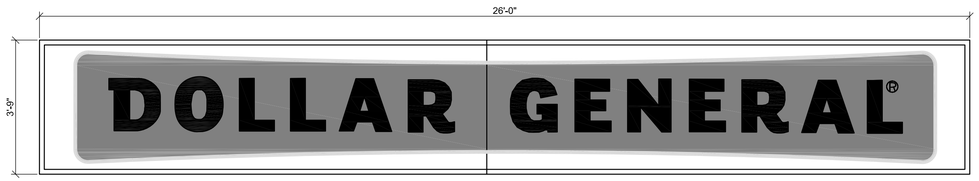
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #19146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

RESTROOM DTL.
PROJECT # 1611
OCT. 24, 2016

A6
SHEET 6 of 9



PROTOTYPICAL MAIN BUILDING SIGN FOR 'A', 'B', 'E' & 'F' SCHEMES

PROTOTYPICAL MAIN BUILDING SIGN FOR 'C' & 'D' SCHEMES

THIS SIGN IS TO BE PROVIDED AND INSTALLED BY THE DEVELOPER OR CONTRACTOR AT THE BEGINNING OF CONSTRUCTION PROJECT.

SIGN SPECIFICATIONS

1. BUILDING SIGNS: PROVIDE CONDUIT AND WIRE FROM ELECTRICAL PANEL TO THE SIGN CANOPY. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND. BUILDING CANOPY MUST BE SUFFICIENTLY BUILT TO SUPPORT THE DOLLAR GENERAL SIGN OF UP TO 1400 LBS. NOTE: IF THE LEASE SPECIFIES A 5'-0" X 40'-0" BUILDING SIGN OR 24" LETTER SET (OR LARGER), 2 qty. - 10/2 WIRE WITH GROUND.
2. PYLON SIGNS: PROVIDE CONDUIT FROM ELECTRICAL PANEL TO LOCATION OF THE PYLON SIGN BASE. BURY CONDUIT UNDER PARKING AREA. THE CONDUIT IS TO BE 1" AND HAVE ONE SET OF 10/2 WIRE WITH GROUND.
3. FINAL ELECTRICAL CONNECTIONS FOR SIGN SHALL BE THE SIGN VENDORS RESPONSIBILITY SINCE THE 'J' BOX AND WIRES ARE IN PLACE.
4. SEE CHART ABOVE FOR SIGN SPECIFICATIONS.
5. SEE SHEET A8 FOR SIGN BRACING DETAILS.
6. PYLON SIGN CABINETS TO CLEAR 15' FROM GRADE AND EDGE SHALL BE LOCATED NO CLOSER THAN 10' TO ANY OVERHEAD UTILITY LINES.

Building Signs

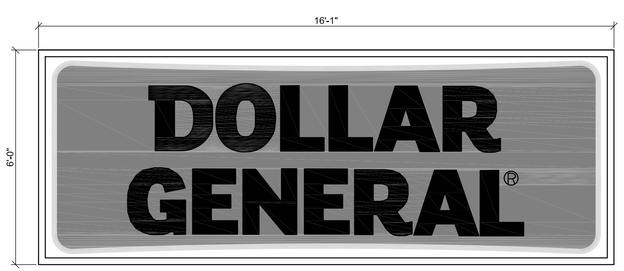
Sign Size	Sign Weight	# Of Circuits	Amps	Voltage
3'-9" x 26' box	441 lbs.	(1) 15 A	5	115
4'-6" x 33'-3" box	750 lbs.	(1) 15 A	8.4	115

Building Letters

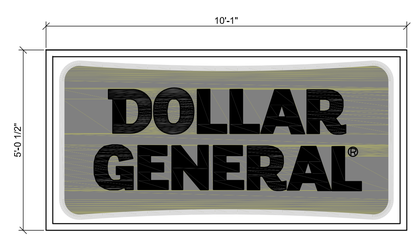
Sign Size	Sign Weight	# Of Circuits	Amps	Voltage
18"	215 lbs.	(2) 15 A	19.6	115
24"	288 lbs.	(1) 15 A & (1) 20 A	23.45	115
30"	387 lbs.	(2) 20 A	28	115
36"	649 lbs.	(2) 15 A & (1) 20 A	32.9	115

Pylon Signs

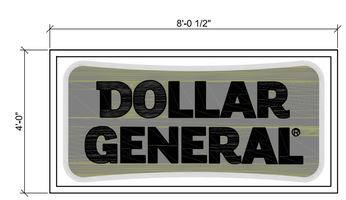
Sign Size	Sign Weight	# Of Circuits	Amps	Voltage
4' x 8'	188 lbs.	(1) 15 A	1.7	115
5' x 10'	375 lbs.	(1) 15 A	3.4	115
6' x 16'	738 lbs.	(1) 15 A	5	115



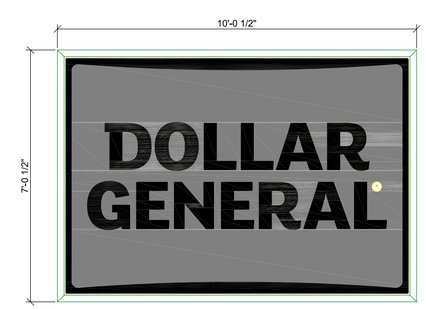
THIS IS THE PRIMARY PYLON SIGN FOR ALL LOCATIONS.



THIS SIGN IS FOR SPECIALTY USE ONLY.



THIS SIGN IS FOR SPECIALTY USE ONLY.



THIS SIGN IS FOR SPECIALTY USE ONLY.

1 A07 SIGNAGE ELEVATIONS
SCALE: NTS (1/2"=1'-0")

REGISTERED ARCHITECT DANIEL BARTLETT 10-24-2016 AR 2803 ARKANSAS

BARTLETT, ARCHITECTURE, inc.
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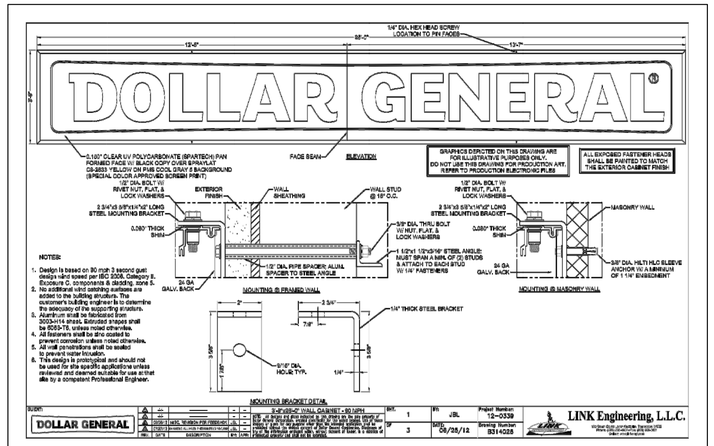
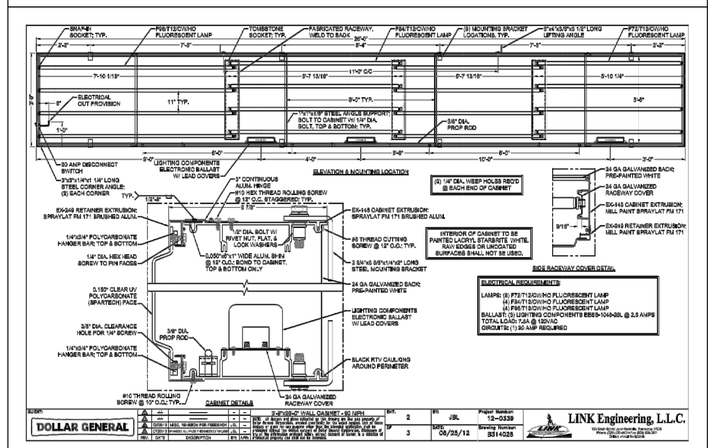
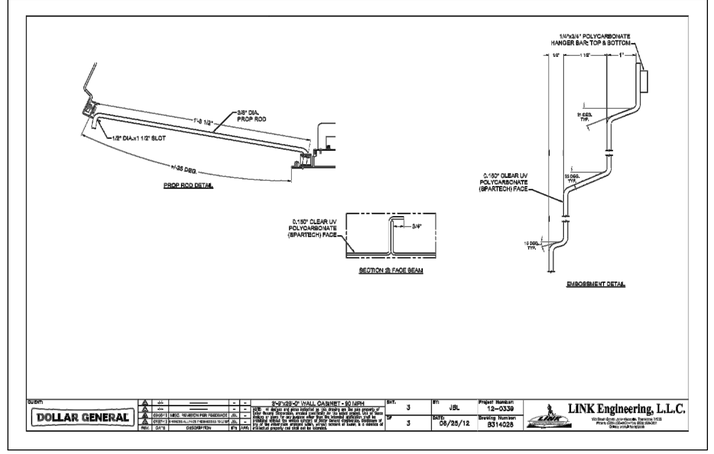
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

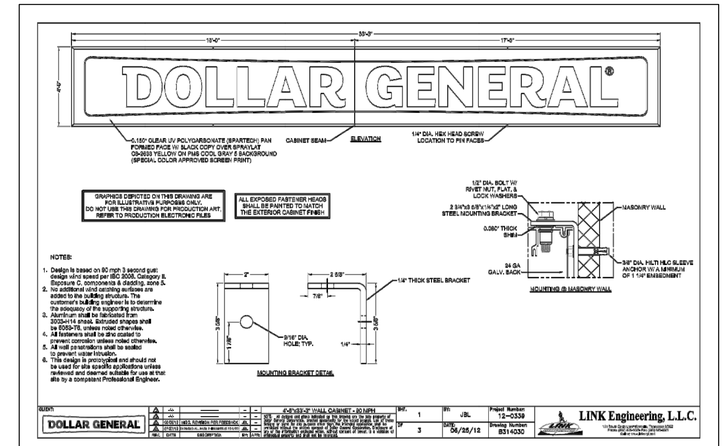
SIGN DETAILS
PROJECT # 1611
OCT. 24, 2016

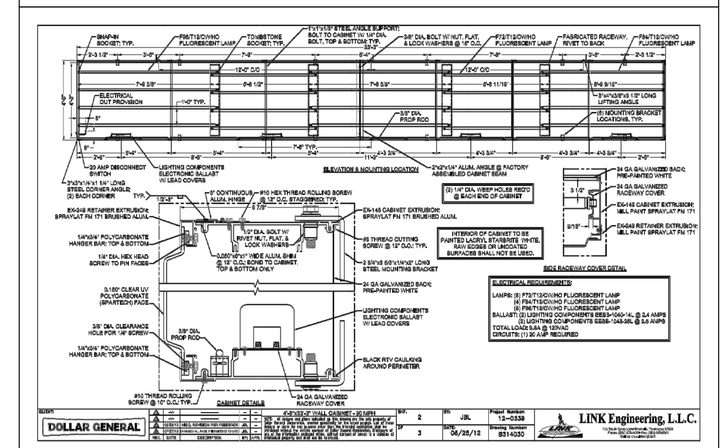
A7
SHEET 7 of 9

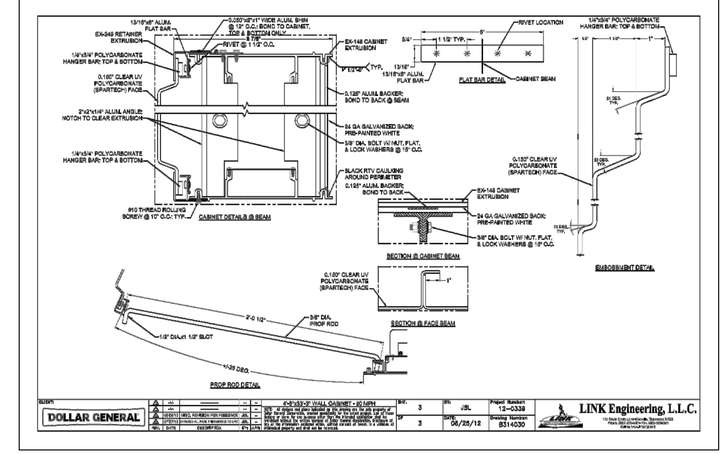












1 / A8 SIGNAGE BRACING DETAILS
SCALE: NTS (1/2"=1'-0")

REGISTERED ARCHITECT DANIEL BARTLETT 10-24-2016 NO. 2263 ARKANSAS

BARTLETT, ARCHITECTURE, inc.
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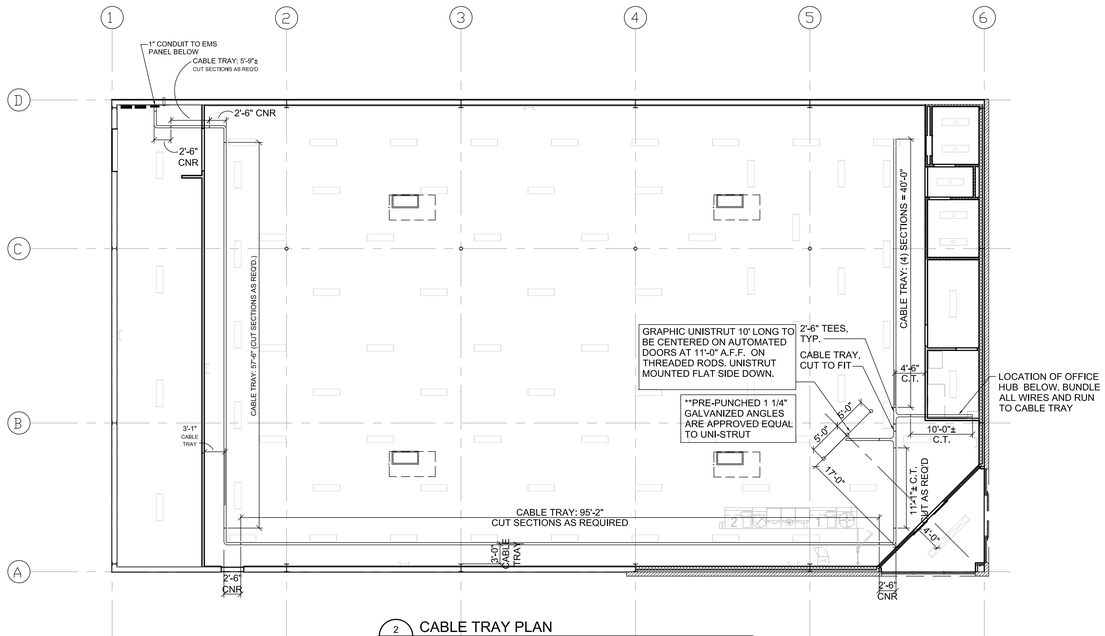
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

SIGN DETAILS
PROJECT # 1611
OCT. 24, 2016

A8
SHEET 8 of 9



2 A9 CABLE TRAY PLAN
SCALE: 3/32"=1'-0"

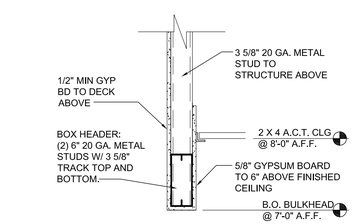
LEGEND

LIGHT FIXTURE TYPE	WALL PACK
LIGHT FIXTURE TYPE	BI-DIRECTIONAL SECURITY LIGHT
NIGHT LIGHT CIRCUIT	EXHAUST FAN
EMERGENCY LIGHT	TRANSFER GRILLE
EMERGENCY LIGHT & EXIT COMBO	

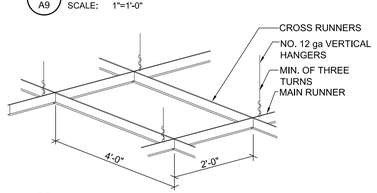
** REFER TO THE ELECTRICAL DRAWINGS FOR LIGHT DESIGNATIONS AND OTHER ADDITIONAL INFORMATION

REFLECTED CEILING PLAN NOTES

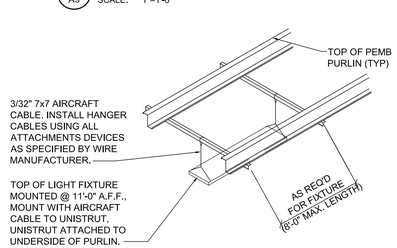
1. ALL LIGHTS TO BE MOUNTED SUCH THAT THE TOP OF THE FIXTURES ARE AT 11'-0" A.F.F. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
2. CABLE TRAY TO BE MOUNTED SUCH THAT BOTTOM OF TRAY IS AT 11'-6" A.F.F. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
3. CABLE TRAY SYSTEM TO BE INSTALLED USING FULL LENGTHS WITH MINIMAL CUTTING OF SECTIONS. AREAS WHERE CUTTING MAY BE REQUIRED ARE AS NOTED ON THE PLAN.
4. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL CABLE TRAY AND ALL CONDUIT WITH PULL STRINGS AS NOTED.



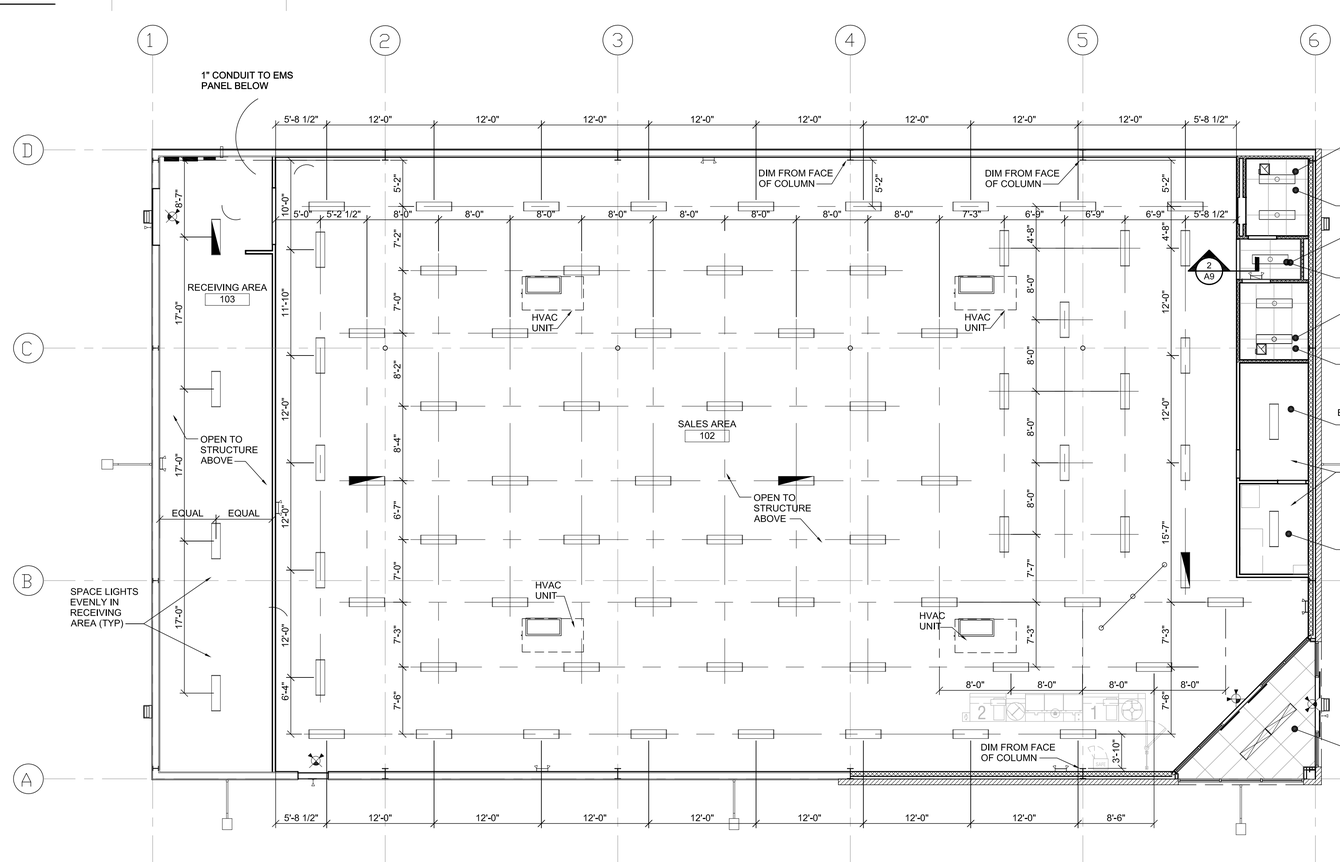
2 A9 SECTION AT SOFFIT
SCALE: 1"=1'-0"



4 A9 CEILING DETAIL
SCALE: 1"=1'-0"



3 A9 LIGHT ATTACHMENT DETAIL
SCALE: 1 1/2"=1'-0"



1 A9 REFLECTED CEILING PLAN
SCALE: 1/8"=1'-0"

BARTLETT, ARCHITECTURE, Inc.
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DANIEL BARTLETT A.I.A., NCARB 501-794-4448

REGISTERED ARCHITECT DANIEL BARTLETT MO 2263 ARKANSAS 10-24-20

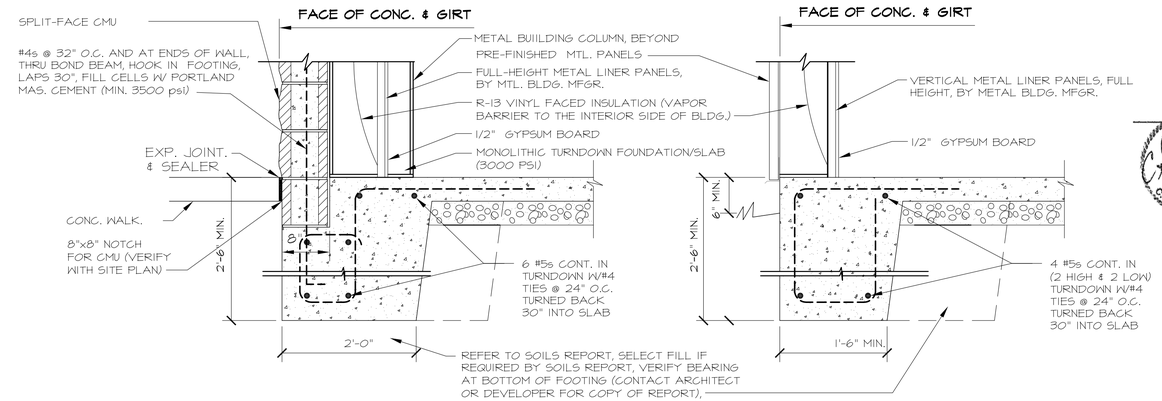
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

CEILING PLAN
PROJECT # 1611
OCT. 24, 2016

A9
SHEET 9 of 9

PRE-ENGINEERED METAL BUILDING VENDOR	VP BUILDINGS ATTN: DAVID ENGLISH (901) 748-6103					STAR BUILDING SYSTEMS ATTN: JEFF HORN (866) 664-8899					NUCOR BUILDING SYSTEMS ATTN: BOB BARRY (315) 622-4440 (260) 837-7891					BIG BEE STEEL BUILDINGS, INC. ATTN: KEVIN BUSLER (800) 633-3378					CHIEF BUILDINGS ATTN: ERIN SULLIVAN (308) 385-4628 (308) 390-8199				
EXTERIOR FINISHES EXTERIOR FINISHES ARE TO MATCH OR BE EQUAL TO VP METAL BUILDING SYSTEM'S FINISH SELECTION.	COOL EGYPTIAN WHITE	COOL DARK BRONZE	BRONZE	COOL COTTON WHITE	GALVALUME	LIGHTSTONE	MEDIUM BRONZE KYNAR 500	BRONZE	POLAR WHITE	GALVALUME	LIGHTSTONE	MEDIUM BRONZE KYNAR 500	BRONZE	POLAR WHITE	GALVALUME	SANDSTONE	BURNISHED SLATE	BRONZE	POLAR WHITE	GALVALUME	PARCHMENT	ANTIQUE BRONZE	BRONZE	POLAR WHITE	GALVALUME
GUTTERS	●					●					●					●					●				
DOWN SPOUTS	●					●					●					●					●				
SIDE AND REAR METAL WALL PANELS & TRIM, RECEIVING & EMERGENCY EXIT DOORS (EXTERIOR OF DOORS TO BE PAINTED, REFER TO DOOR SCHEDULE)	●					●					●					●					●				
ARCHITECTURAL BLOCK AT BUILDING FACADE SHOULD BE PRE-FINISHED OR PAINTED (2 COATS-LOXON XP MASONRY COATING A24W400 SERIES) TO MATCH THE METAL WALL PANELS	●					●					●					●					●				
FLAT METAL SOFFIT AT STOREFRONT VESTIBULE AREA				●					●					●					●					●	
BUILDING PARAPET WALL AND CANOPY		●					●					●					●					●			
STOREFRONT SYSTEM			●					●					●					●						●		
STANDING SEAM METAL ROOF PANELS					●					●					●					●					●
LINER PANELS (INTERIOR SALES AND RECEIVING FLOOR)				●					●					●					●					●	

NOTE:
1. REFER TO SHEET T-1 FOR ADDITIONAL INFORMATION ON RECOMMENDED NATIONAL ACCOUNT VENDORS.
2. NATIONAL ACCOUNT AND CONTACT INFORMATION SUBJECT TO CHANGE.



3 / S1 DETAIL @ CMU WALL
SCALE: 1/8"=1'-0"

2 / S1 DETAIL AT SIDING WALL
SCALE: 3/4"=1'-0"

"UNSUITABLE SOIL CONDITIONS, SEE SOILS REPORT

FOUNDATION NOTES:

1. ALL FILL MATERIAL SHALL BE COMPACTED TO AT LEAST 95% OF MODIFIED PROCTOR DENSITY AS DETERMINED BY STANDARD PROCTOR TEST ASTM 698. FILL MATERIALS SHALL NOT CONTAIN ANY ORGANIC MATERIAL OR EXPANSIVE CLAYS AND GENERALLY THE PLASTICITY INDEX OF FILL SOILS SHALL BE 20 OR LESS.
2. CONTRACTOR SHALL EXCAVATE ANY SOFT OR UNSATISFACTORY MATERIALS AND BACKFILL WITH SATISFACTORY MATERIAL AS NOTED ABOVE. THE CONTRACTOR SHALL ENLIST THE SERVICES OF A SOIL TESTING LAB TO TEST THE BEARING CAPACITY OF THE FOOTING TRENCH PRIOR TO POURING FOUNDATION.
3. THE CONTRACTOR AND SUB-CONTRATORS ARE TO REVIEW THE SOILS REPORT. THE ARCHITECT MUST BE NOTIFIED IMMEDIATELY IF POOR SOIL IS ENCOUNTERED.
4. THE DRAWING SHOWING THE FOOTING, FOUNDATION AND SLAB ARE BASED AN ASSUMED SOILS BEARING CAPACITY OF 2000 PSF.
5. STRIP VEGETATION AND EXISTING ORGANIC PORTION OF TOPSOIL FROM UNDER ALL BUILDINGS AND PAVING EVEN IF FILL IS REQUIRED.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY FOOTING DEPTHS PER LOCAL CODES AND FROST LINE.
7. SITE GRADING TO FOLLOW GEOTECH (SOILS) REPORT'S SITE GRADING RECOMMENDATIONS.
8. COMPACTED FILL SHALL MEET SECTION 1803.5- 2012 ARKANSAS FIRE PREVENTION CODE.

PRE-ENGINEERED METAL BUILDING NOTES

METAL BUILDING NOTES: (2012 ARKANSAS FIRE PREVENTION CODE, AFPC)

1. THE PRE-MANUFACTURED METAL BUILDING STRUCTURE, CONCRETE FOUNDATION, AND INTERIOR CONCRETE SLAB SHALL BE DESIGNED, DETAILED, FABRICATED, AND CONSTRUCTED IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND REGULATIONS. THE MOST STRINGENT REQUIREMENTS APPLY WHERE INCONSISTENCIES OCCUR BETWEEN THE APPLICABLE STANDARDS. IN THE ABSENCE OF OTHER CRITERIA, LOADINGS SHALL CONFORM TO THE 2012 ARKANSAS FIRE PREVENTION CODE (AFPC)
2. THE SCOPE OF THE PRE-MANUFACTURED METAL BUILDING STRUCTURE SHALL INCLUDE THE DESIGN, ENGINEERING, FABRICATION, DELIVERY, AND ERECTION OF THE COMPLETE STRUCTURAL STEEL FRAMING AND EXTERIOR SKIN PACKAGE. THE METAL BUILDING MANUFACTURER SHALL BE CERTIFIED BY AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) METAL BUILDING CERTIFICATION PROGRAM.

3. THE FRONT FASCIA SHALL HAVE (3) 12" PURLINS (MOUNTED VERTICALLY SO THAT THE 12" FACE IS AGAINST THE BUILDING METAL SIDING. THESE PURLINS SHALL BE CENTERED OVER THE ENTRANCE AND SPACED 96" APART TO PROVIDE ADEQUATE SUPPORT FOR SIGNAGE WHICH MAY WEIGH UP TO 1,400 LBS.

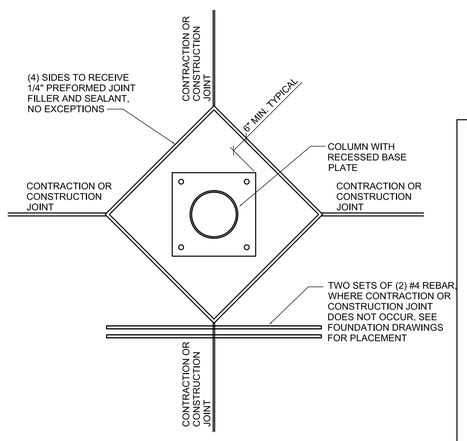
4. MAINTAIN INTERIOR CLEAR SPACE AS REQUIRED ON PLANS.

5. METAL BUILDING COLUMNS SHALL BE STRAIGHT, TAPERED COLUMNS REQUIRE WRITTEN APPROVAL. MAINTAIN CLEARANCE OF 68'-0" BETWEEN FACE OF COLUMNS ON SALES FLOOR.

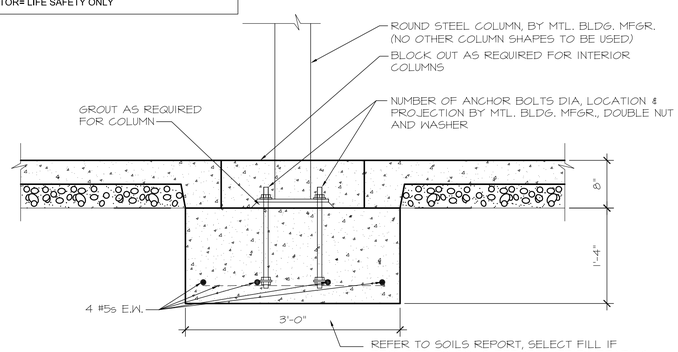
THE LATERAL DEFLECTION SHALL NOT EXCEED THE HEIGHT OF THE BUILDING (H) DIVIDED BY 240 (H/240), MAX DEFLECTION= L/240

DEAD LOAD: METAL BUILDING STRUCTURE, ROOF MATERIAL, AND HVAC UNITS.
LIVE LOAD: 20 PSF (14 PSF REDUCED LOAD)
WIND LOAD: PER CODE
COLLATERAL LOAD: 5 PSF

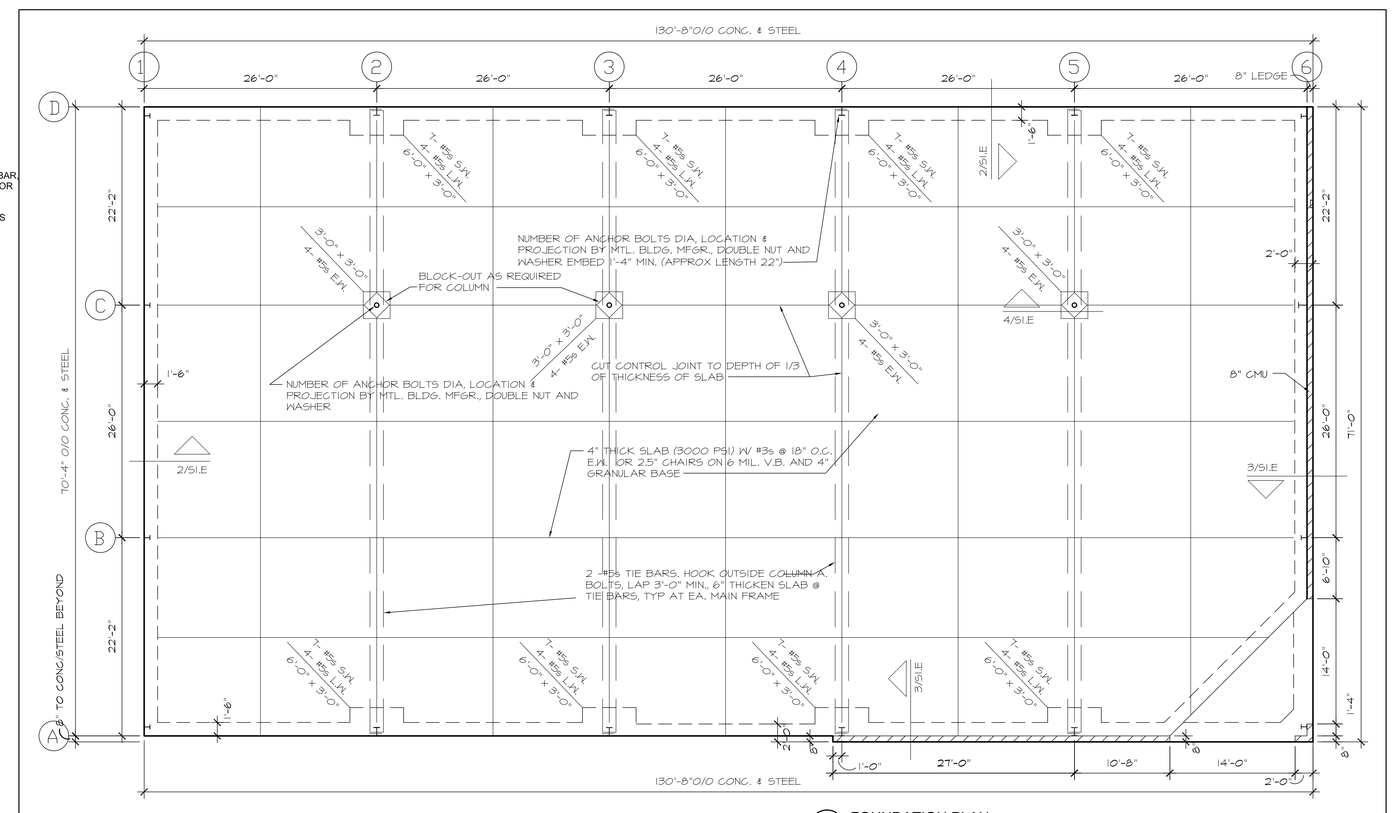
SEISMIC DATA: PER AFPC (2012), CHAPTER 16
Ss: 0.15 S1: 0.35
SEISMIC HAZARD EXPOS: GROUP 1
IMPORTANCE FACTOR= LIFE SAFETY ONLY



5 / S1 PLAN @ INTERIOR COLUMN
SCALE: 1/8"=1'-0"



4 / S1 SECTION @ INTERIOR COLUMN
SCALE: 1/8"=1'-0"



1 / S1 FOUNDATION PLAN
SCALE: 1/8"=1'-0"

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DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

FOUNDATION
PROJECT # 1611
OCT. 24, 2016

S1
SHEET 1 of 3

1) GENERAL

A. The building shall be designed such that there is maintained an absolute minimum of 68'-1" from face-of-column to face-of-column on the sales floor.

2) FOUNDATIONS

A. The concrete foundations shall be designed, detailed and constructed to provide for the safe, serviceable support of the pre-manufactured metal building structure and all prescribed loads applied thereto. The foundations shall conform to the latest editions of all applicable standards of the American Concrete Institute (ACI), the Building Code(s) enforced by the Authority Having Jurisdiction and these requirements.

B. The soils supporting the foundation shall be prepared and compacted in accordance with a geotechnical testing based investigation and site specific recommendations provided by a Professional Engineer registered to practice in the State where the project is located.

C. The slab on grade shall not be utilized to resist horizontal thrust forces at the base of the pre-engineered building frames. Tie beams below and separate from the building slab may be utilized.

D. The bearing materials shall be free of organic, expansive or corrosive material, and shall support the foundation in accordance with the following twenty five year criteria:

1. Maximum differential movement due to either settlement or heave shall not exceed 1/2" over a distance of 50 feet.

2. Maximum total movement due to either settlement or heave shall not exceed 1".

E. The foundations shall be of sufficient depth to bear below local frost depth where exposed, attain minimum design bearing pressure, achieve sufficient protection from settlement or heave, and where adjacent to existing construction, avoid application of lateral earth pressure to adjacent construction.

3) SLAB ON GRADE

A. The subgrade for the slab on grade shall be compacted and prepared in accordance with a geotechnical testing based investigation and site specific recommendations provided by a Professional Engineer registered to practice in the State where the project is located. The subgrade shall provide a minimum of 100 pounds per cubic inch (pci) modulus of sub-grade reaction and shall be proof-rolled to ensure that there are no pumping or soft zones greater than ½" (ACI 302, "Guide for Concrete Floor Slab Construction").

B. The slab on grade shall conform to the latest editions of all applicable standards of the American Concrete Institute (ACI), the Building Code(s) enforced by the Authority Having Jurisdiction and these requirements. The slab on grade shall be a minimum of 4" thick and reinforced with a minimum 6" x 6" x W1.4 x W1.4 welded wire fabric located in the center of the slab.

C. Except at doors at the perimeter of the facility, the slab on grade shall be isolated from the building columns and any perimeter grade beams or walls. The slab on grade shall receive a hard steel trowel finish. Saw-cut contraction joints a minimum of ¼ the depth of the slab shall be provided in both principal directions across the entire floor slab, spaced no further than 13 feet on center and providing panels with an aspect ratio no greater that 1.5:1. Refer to Control Joint Spacing Plan on Sheet S3. The slab shall be protected from the effects of heat or wind as necessary to avoid any curling of the slab segments.

4) CONCRETE SALES FLOOR PRE-INSTALLATION CONFERENCE:

A. At least **30** days prior to the start of the concrete slab construction, the general contractor shall conduct a meeting to review the proposed concrete mix designs and to discuss the required methods and procedures to achieve the requirements of this specification. The general contractor shall send a pre-concrete conference agenda to all attendees **20** days prior to the scheduled date of the conference.

B. The general contractor shall require responsible representatives of every party concerned with the concrete work to attend the conference, including, but not limited to, the following:

General contractor's superintendent

1. Laboratory responsible for concrete mixes, field quality control and floor tolerance testing
2. Ready-mix concrete producer
3. Concrete contractor
4. Chemical admixture manufacturer
5. Liquid densifier and sealer manufacturer
6. Liquid densifier and sealer applicator
7. Joint filling manufacturer
8. Joint filling applicator

C. Minutes of the meeting shall be recorded, typed and printed by the general contractor and distributed to all concerned parties, including the owner's representative, the architect and the structural engineer, within five days of the meeting.

D. The minutes shall include a statement by the concrete supplier stating that the proposed concrete mix design will produce the concrete quality required by these specifications.

E. The minutes shall include a statement by the concrete contractor that the proposed concrete mix design will provide appropriate workability and setting times, to ensure that the concrete contractor can achieve the requirements of this specification.

5) CONCRETE CONTRACTOR QUALIFICATION:

A. The concrete contractor shall include in their bid package to the general contractor, sufficient data, including a minimum of three similar and successful projects that clearly indicates the concrete contractor's ability to successfully perform the work and to achieve the interior sales floor slab tolerances required in this specification. The concrete contractor's team shall have participated in the majority of these projects, and that team shall remain the same through the duration of this project.

6) CONCRETE MATERIALS:

A. Portland Cement: ASTM C 150, Type 1. Use one brand of cement throughout the project.

B. Coarse and fine aggregates: ASTM C 33. Combined aggregate gradation for slabs on grade and other designated concrete shall be 8% - 18% for large top size aggregates (1½") or 8% - 22% for smaller top size aggregates (1" or ¾") retained on each sieve below the top size and above the no. 100 sieve. Slabs on grade shall have a maximum aggregate size of 1½" footings and piers 1" and beams ¾".

C. Water: complying with ASTM C 94.

D. Air-entraining admixtures: Shall conform to ASTM C-260. Admixture manufacturer shall provide written certification that the air-entraining admixture is compatible with other required admixtures. All exterior slabs shall be air-entrained (4% - 6%). Acceptable products: Euclid Chemical AEA-92 or Air 40; BASF Micro Air; W.R. Grace Daravair 1000 or Darex- 1.

1. **Note: Air-entraining admixture shall not be used on interior concrete.**

E. Water-reducing admixture: Shall conform to ASTM C494, Type A and contain no more than 0.05% chloride ions. Acceptable products: Euclid Chemical Eucon series; BASF Pozzolith series; W.R. Grace WRDA or Daracem series.

F. Water-reducing, retarding admixture: Shall conform to ASTM C494, Type D, and contain no more than 0.05% chloride ions. Acceptable products: Euclid Chemical Retarder 75; BASF Pozzolith series; W.R. Grace Daratard 17.

G. High range water-reducing admixture (superplasticizer): Shall conform to ASTM C494, Type F or Type G and contain no more than 0.05% chloride ions. Acceptable products: Euclid Chemical Eucon 37; BASF Rheobuild 1000; W.R. Grace daracem-100.

H. Water-reducing, non-corrosive accelerating admixture: Shall conform to ASTM C494, Type C or E, and contain no more chloride ions than are present in municipal drinking water. The admixture manufacturer must have long-term, non-corrosive test data from an independent testing laboratory (of at least a year's duration) using an acceptable accelerated corrosion test method such as that using electrical potential measures. Acceptable products: Euclid Chemical Accelguard 80/90 or Accelguard NCA; BASF NC534 or Pozzutec 20; W.R. Grace Polarset.

I. Prohibited admixtures:

1. Calcium chloride or admixtures containing more than 0.05% chloride ions are not permitted.
2. Flyash is not permitted.

7) EVAPORATION RETARDER:

A. Waterborne, monomolecular film forming, manufactured for application to fresh concrete.

1. Acceptable products:
   a. "Eucobar" by Euclid Chemical - Phil Brandt 877-438-3826

8) CURING MATERIALS:

A. Exterior curing: **All exterior concrete slabs** shall be cured using a liquid membrane-forming curing compound. The liquid membrane-forming curing compound shall meet the requirements of ASTM C1315 with a maximum V.O.C. Content of 700 g/l.

1. Acceptable products:
   a. "Super Rez Seal" or "Super Aqua Cure" by Euclid Chemical - Phil Brandt 877-438- 3826

B. Interior curing (building not enclosed/sales floor slab is placed first): **The interior sales floor slab** shall be cured using a reduced odor, dissipating liquid membrane forming curing compound that is formulated from hydrocarbon resins. The dissipating liquid membrane forming curing compound shall meet the requirements of ASTM C309 and V.O.C. contents in accordance to EPA 40 CFR, part 59, table 1, subpart D for concrete curing compounds with a maximum V.O.C. content of 350g/l.

1. Acceptable product:
   a. "Kurez DR VOX" by Euclid Chemical - Phil Brandt 877-438-3826

C. Interior curing (building enclosed/sales floor slab is placed last): **The interior sales floor slab** shall be cured using a removable, low odor, fast drying liquid membrane forming curing compound. The removable liquid membrane forming curing compound shall meet the requirements of ASTM C309, AASHTO M 148, USDA compliancy and V.O.C. contents in accordance to EPA 40 CFR, part 59, Table 1, subpart D for concrete curing compounds with a maximum V.O.C. Content of 350g/l.

1. Acceptable product:
   a. "Kurez RC" by Euclid Chemical - Phil Brandt 877-438-3826

9) LIQUID DENSIFIER / SEALER FOR INTERIOR SALES FLOOR:

A. Liquid densifier / sealer shall be a sodium silicate / siliconate blend. Manufacturer of liquid densifier and sealer must be contacted prior to bidding for pricing and application requirements.

1. Acceptable liquid densifier and sealer manufacturer:
   a. "Euco Diamond Hard" by Euclid Chemical - Phil Brandt 877-438-3826
   b. "RetroPlate 99" by RetroPlate Systems - Curtis Turnbull 888-942-3144

B. Approval: All general contractors bidding or negotiating a Dollar General project shall contact Euclid Chemical or RetroPlate to obtain a list of approved applicators located within the geographic region of the project. General contractors shall solicit and accept pricing only from those applicators as provided by Euclid Chemical or RetroPlate. **The approved applicator selected for the initial application of liquid densifier / sealer shall be the same as for the joint filling and additional application of liquid densifier / sealer and polishing process.** Within ten days after completion of work, the approved applicator shall furnish Euclid Chemical or RetroPlate a copy of the invoice, as well as square footage and coverage rate data confirming that the specified application rates were achieved.

C. Project service: at least **10** days prior to application of liquid densifier and sealer, the general contractor shall notify the Euclid Chemical or RetroPlate representative for jobsite service. The representative will be on the project site during the first application of liquid densifier / sealer and will follow the project through to completion.

10) SEMI-RIGID POLYUREA JOINT FILLER:

A. UV Resistant, semi-rigid polyurea joint filler shall be a two (2) component, 100% solids compound, with minimum Shore "A" hardness of 80. Joint filler color shall match the adjacent concrete surface.

1. Acceptable semi-rigid polyurea joint filler manufacturer:
   a. "Euco QWIKJoint UVR" by Euclid Chemical - Phil Brandt 877-438-3826

B. Non-UV Resistant, semi-rigid polyurea joint filler shall be a two (2) component, 100% solids compound, with a minimum Shore "A" hardness of 75. Joint filler color shall match the adjacent concrete surface.

1. Acceptable semi-rigid polyurea joint filler:
   a. "CreteFill Pro 75" by CureCrete - Curtis Turnbull 888-942-3144

C. Approval: All general contractors bidding or negotiating a Dollar General project shall contact the Euclid Chemical company or Retroplate to obtain a list of approved applicators located within the geographic region of the project. General contractors shall solicit and accept pricing only from those applicators as provided by Euclid Chemical or RetroPlate. **The approved applicator selected for the initial application of liquid densifier / sealer shall be the same as for the joint filling and additional application of liquid densifier / sealer and polishing process.**

11) CONCRETE MIXES:

A. Comply with ACI 301 requirements for concrete mixtures.

B. Concrete mix design(s) shall be proportioned according to ACI 301, for normal-weight concrete determined by either laboratory trial mix or field test data as follows:

1. Compressive strength (28 days): 4000psi (27.6mpa), with a maximum water/cement ratio of .53, unless otherwise indicated on the drawings. Concrete materials included in the mix design shall be the same materials provided to the project, and shall be prepared by an independent testing laboratory approved by the owner. If sufficient backup data is not available, the laboratory mix design shall exceed the desired job strength of concrete by 1,200psi. Four copies of the mix design shall be submitted to the owner before concrete work begins.

2. Slump: Concrete containing mid or high range water reducer shall have a maximum slump of 5½" for the interior sales floor slab and 8" (200 mm) for other areas. All other concrete shall not exceed 4 inches (100 mm) unless otherwise indicated on the drawings.

3. Adjustment to concrete mixes: Mix design adjustments may be requested by General Contractor when characteristics of materials, job conditions, weather, test results or other circumstances warrant; at no additional cost to owner and as accepted by owner. Laboratory test data for revised mix design and strength results must be submitted to and accepted by owner before using in work. Both the concrete testing and inspection agency and the concrete contractor shall satisfy themselves that the concrete mix design will produce a concrete which will meet the specifications for this project. In addition, the General Contractor and Concrete Contractor shall verify that the workability, finishability and setting times are appropriate for slab installations. Placement shall be made directly from concrete trucks by chute. If pumping of the concrete is contemplated for any special locations, the proportions established above shall not be altered to suit the capabilities of the pumping equipment. For concrete containing macro-synthetic fibers, adjustments required to provide required placement conditions may warrant use of additional water reducer. No additional water is permitted into concrete mixture after addition of macro-synthetic fibers.

4 Interior concrete sales floor: Concrete shall be designed to meet 4000 psi compressive strength @ 28 days and exhibit <0.04% shrinkage @ 28 days. The mix shall contain approximately 12 cubic feet of #467 aggregate (1-1/2" top size), the specified water reducing admixture and achieve a w/cm ratio of 0.53 (max.). Concrete shall be non air-entrained and in no case shall the concrete be designed for less than 4000 psi (27.6mpa) @ 28 days. Proposed mix design shall be similar to the following

Prototype mix:

Materials	**Prototype mix**
Cement	**517-564lbs.**
Fly ash/slag	**Prohibited**
Coarse aggregate	**12 cubic feet +/- .50 (#467 stone)**
Fine aggregate	**7 cubic feet +/- (adjust as necessary)**
Water content	**250 - 300lbs.**
Air content (Entrapped Air Only)	**3.0% (max.)**
Water Reducer (type a/f)	**3oz.-10oz./100wt +/- (mid range preferred)**
W/cm	**0.53 (max.)**
Initial slump (water)	**3"**
Final Slump (with water reducer)	**5.5" (max)**
Shrinkage	**<0.04% @ 28 days**

12) FLOOR SLAB FINISH AND TOLERANCES:

A. General: Unless otherwise noted by owner, concrete sales floor slab shall be cast in one continuous placement. Concrete shall be placed, screeded, re-straightened, and finished as necessary to meet the FF and FL tolerance requirements. Do not wet concrete surfaces during finishing operations.

B. Trowel finish (sales floor): Apply a hard trowel finish to surfaces as follows:

1. Laser screeds, vibratory screeds, highway straightedges and wood bull floats shall be used to initiate screeding and floating process to form a uniform and open-textured surface plane before excess moisture or bleed water appears on the surface. A back-up laser screed is required during concrete placement of the interior sales floor slab. Remove excess water before starting floating operations. Do not further disturb surfaces before starting finishing operations

2. Highway straightedge operations shall continue before, during and after troweling operation, until specified floor tolerances are achieved.

3. Trowel finish with gas operated troweling machine with adjustable blades on all finishing equipment. Use steel-reinforced blades on ride-on power trowels. Trowel the surface sufficiently to produce a smooth, tight, abrasion resistant surface. Care shall be taken not to overwork or burn the surface. Use 6" wide finish style steel-reinforced blades on final passes. Finishing blades shall be in new condition and completely clean of any deleterious materials. **Interior machine trowel finish shall be achieved within a 3" tolerance of all walls, columns and partitions.**

4. Protection: Care shall be taken to protect the interior sales floor. Entrances shall include clean floor mats to prevent mud stains and all equipment on the floor shall be diapered to prevent spills. Cutting oils, etc, are not allowed on the sales floor slab at any time during the construction process.

C. Comply with ACI 117, "Specifications For Tolerances For Concrete Construction and Materials." Interior sales floor slab shall meet the requirements of a type 5, single course, hard steel-troweled finish as described in ACI 302.

1. All perimeter areas and edges of the concrete floor shall exhibit the same finish as the sales floor, including but not limited to, hallways, offices, restrooms, etc.

2. The general contractor is responsible for contracting with the testing laboratory for all costs associated with floor tolerance testing. A copy of the final floor tolerance report shall be provided by the general contractor to the owner within 24 hours of receiving the report from the testing laboratory. The sales floor slab shall conform to the following flatness and levelness criteria:

Flatness	Overall Floor Flatness rating of at least 35
Levelness	Overall Floor Levelness rating of at least 30
Tolerance Band for Entire Floor	+/- 0.375 inch

D. Failure to achieve the above criteria shall be cause for replacement of the offending segments or grinding/polishing at no cost to the Owner or Tenant.

E. Trowel finish (other than sales floor): Apply a hard trowel finish to surfaces indicated and to floor and slab surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system.

F. Heavy broom finish: As noted on drawings.

13) CONCRETE PROTECTION AND CURING:

A. General: Normalize concrete set time and protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 305 for hot-weather protection and ACI 306 for cold-weather protection during curing. **During concrete placement operations, ventilate and exhaust all fumes from construction equipment and heaters to avoid potential early concrete carbonation.** Apply the specified curing compound as quickly as possible for maximum protection. For concrete placement during hot, dry and windy conditions, concrete contractor shall use evaporation retarder as per manufacturer's instructions to maintain a moist condition and to minimize plastic drying shrinkage cracking at the surface of the freshly placed concrete.

1. Curing - Exterior Slabs:

All **exterior concrete** slabs shall be cured using the specified liquid membrane-forming curing compound. Per manufacturer's instructions, application shall be applied evenly and uniformly as soon as possible after final finishing. Surface shall be clean and damp, but not wet and can no longer be marred by walking workmen. All applications shall be made by an approved applicator of the manufacturer, and when surface and air temperature is above 50º f. Apply "Super Rez Seal" or "Super Aqua Cure" at an application rate of 400sf/gallon. Begin curing immediately after finishing concrete, but not before free water has disappeared from concrete surface.

2. Curing - Interior slabs:

The **interior sales floor slab** shall be cured using the specified dissipating or removable liquid membrane-forming curing compound. Per manufacturer's instructions, application shall be applied evenly and uniformly as soon as possible after final finishing. Surface shall be damp, but not wet and can no longer be marred by walking workmen. All applications shall be made by an approved applicator of the manufacturer, and when surface and air temperature is above 50º f. Apply "Kurez DR VOX" (slab first) or "Kurez RC" (slab last) at an application rate of 350sf/gallon. Begin curing immediately after finishing concrete, but not before free water has disappeared from concrete surface.

14) CONTRACTION JOINTS IN SLABS-ON-GRADE:

A. Form weakened-plane contraction joints, sectioning concrete into areas as indicated on drawings. Contraction joints shall be sawn to a depth equal to at least one-fourth of the concrete thickness, as follows:

B. Sawed joints: All saw cutting shall be accomplished with a "Soff-Cut" saw and vacuum system equipped with a new blade and plate, as soon as the slab will support the weight of the saw and operator. **Note: Concrete dust shall be removed completely and immediately. If chalk lines are used for sawcuts, all chalk remaining on the slab shall be removed completely and immediately after sawing.**

15) INTERIOR SALES FLOOR SLAB PROTECTION:

A. Take the following measures to protect the interior sales floor slab:

1. Wrap or "diaper" all motorized and hydraulic equipment to prevent fluid leaks
2. Provide non-marking tires on rubber tired vehicles or equip rubber tires with tire boots made of nylon fabric
3. Provide mats at all entrances to prevent mud stains

16) TIMING OF JOINT FILLER, LIQUID DENSIFER AND POLISHING PROCESS:

A. Do not commence installation of semi-rigid polyurea joint filler, liquid densifier and sealer or polishing processes until the building is completely enclosed, permanent power and lighting is operating and the building is thermostatically controlled. Installation of these materials shall commence approximately two weeks prior to "fixture date."

17) INSTALLATION OF SEMI-RIGID POLYUREA JOINT FILLER:

A. All General Contractors bidding or negotiating a Dollar General project shall contact Euclid Chemical or RetroPlate to obtain a list of approved applicators located within the geographic region of the project. General contractors shall solicit and accept pricing only from those applicators as provided by Euclid Chemical or RetroPlate. **The approved applicator selected for the initial application of liquid densifier / sealer shall be the same as for the joint filling and additional application of liquid densifier / sealer.**

B. Joint filler installation: Comply with recommendations in ACI 302 for use of joint filler as applicable to materials, applications, and conditions indicated.

C. Surface cleaning of joints: Clean out joints immediately before installing joint filler. Remove foreign material from joint substrates that could interfere with adhesion of joint filler by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint filler. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air. Also remove all laitance and form-release agents from concrete surface. Clean nonporous surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues could interfere with adhesion of joint sealants. All surfaces to be filled shall be clean and dry.

D. For proper load transfer, joints must be filled full depth, but in no case should the joint filler be any less than 1" deep in the joint.

E. Mixing: Joint filler is a two part product requiring machine mixing and placing. Premix part b separately before using. Follow pump manufacturer's equipment instructions.

F. Placement: Joint filler shall be filled full depth. **No backer rod is allowed**. Joints should be overfilled and shaved even with the surrounding joint edge giving the floor joints a flat, smooth appearance. Shaving of excess joint filler can be approximately 30 minutes after placement, and up to 24 hours later, depending on jobsite conditions such as concrete and ambient temperatures.

G. Joint filler separation: The approved joint filling applicator shall include in their bid a cost per linear foot to make one return trip to refill joints if joint filler sidewall separation or splitting exceeds 1/16," or if surface profile is concave, chattered or if voids occur. This shall take place one week prior to grand opening.

18) INITIAL CLEANING FOR LIQUID DENSIFIER AND SEALER APPLICATION:

A. Interior sales floor slab: Thoroughly clean the interior sales floor slab prior to initial application of liquid densifier and sealer by completely removing the specified dissipating or removable curing compound from the floor surface. The following floor stripper or removal solution shall be applied to the floor to thoroughly strip, clean and remove all curing compound residue:

1. If Kurez DR VOX (slab first) was used to cure the slab, use "Euco Clean & Strip" by Euclid Chemical, applied at the proper water to floor stripper ratio and coverage rate that will completely remove the Kurez DR VOX. Contact: Phil Brandt (877) 438-3826

2. If Kurez RC (slab last) was used to cure the slab, use "Kurez OFF" by Euclid Chemical, applied at the proper water to floor cleaner ratio and coverage rate that will completely remove the Kurez RC. Contact: Phil Brandt (877) 438-3826

19) POLISHING PROCESS AND APPLICATION OF LIQUID DENSIFIER / SEALER:

A. All Applicators must be certified by Euclid Chemical or Retro-Plate.

B. The revised process can be used in both "Wet" and "Dry" applications.

C. This process assumes a quality concrete finish (meets and/or exceeds the specified floor tolerances) by the floor finisher. Failure to achieve the above criteria shall be cause for replacement of the offending segments or grinding/polishing at no cost to the Owner or Tenant.

D. Only the **Sales Floor** will receive the full 9 step process outlined below under item K.

E. All other areas will only receive steps 1, 3 & 4 (OMIT STEP 2), no additional work is necessary. The yellow safety striping will remain.

F. The Black painted border will not be required in areas behind fixtures, etc….it will only be installed at the main entry door, office doors, egress doors and doorways into the receiving area and transitions that can be seen by the customers.

G. Steps 2,3 & 5 are combo steps using different grits of resin bond diamonds on each pass.

H. This is a "Resin" only grind that does not tear away as much of the surface area. The Resin grind will remove a minimal top layer of the concrete surface and should greatly reduce the amount of Waste Product created when compared to the old Metal grind process.

I. If a Cure-n-Seal product is required at the time of slab placement only Water Based Dissipating Sealers are allowed. NO Acrylic Cure-N-Seals are allowed.

J. Prior to application, inspect interior sales floor slab to ensure that slab is clean and free of dust, grease, oils, or other contaminants that might prohibit the proper application and penetration of the liquid densifier and sealer.

K. Process Steps

1. Cut, clean out, prep and fill the concrete floor joints with the Euclid QWIKjoint UVR polyurea joint filler or "CreteFill Pro 75 by CureCrete.

2. (New) Grind concrete floor with combo set of 40/50 grit resin bond diamonds.

3. Depending on the final finish of the floor, this step may or may not be required. Grind concrete floor with a combo set of SASE metal bond gold series 80 and 150 grit segments or HTC EZ BB brown 4 series (60 grit diamonds) and HTC EZ BB Black 5 series (100 Grit Diamonds).

4. Thoroughly clean the concrete floor and apply **Euclid Diamond Hard liquid densifier and sealer** at 225 square feet per gallon or **("RetroPlate 99 liquid densifier at 200 square feet per gallon").**

5. Polish concrete floor with a combo set of SASE Triton 100 grit black resin diamonds, SASE Triton 200 grit blue resin diamonds or HTC EZ MR black series (100 Grit Diamonds) and HTC EZ MR blue series (200 Grit Diamonds).

6. Polish concrete floor with SASE Triton 400 grit red resin diamonds or HTC EZ SR red series (400 grit diamonds).

7. Thoroughly clean concrete floor and then apply **Euclid Diamond Hard liquid densifier and sealer** at 700 square feet per gallon (spiff coat). Or ("**RetroPlate 99 liquid densifier at 700 square feet per gallon as a spiff coat"**).

8. Burnish / Polish concrete floor with SASE Sure Shine white 800 grit diamond impregnated pads or HTC White Twister pads (800 grit diamond impregnated pads).

9. Burnish / Polish concrete floor with **1500 Grit Diamond Impregnated twister pads** (H.T.C. Yellow TWISTERS or equivalent)

L. All edges must be polished to match concrete floor with coinciding SASE 5" resin Polishing pads or HTC EZ Grind polishing 5" diamond tools.

M. Polish results: Perform polishing process to attain an overall gloss reading of ≥35 specified overall gloss value (SOGV) as measured using a Horiba IG-320, and a specified minimum gloss reading of ≥30 minimum local gloss value (MGLV). A minimum of 75 readings shall be taken throughout the interior sales floor. The approved applicator shall take four gloss measurement readings at 90° from each other, and then averaged for one reading at each location. The overall measurement shall be reported to Dollar General within 24 hours of the polishing process. Gloss shall be considered as a quantitative value that expresses the degree of reflection when light hits the concrete floor surface. Gloss measurements will be taken independent of ambient lighting and will be taken within a sealed measurement window located beneath the test unit.

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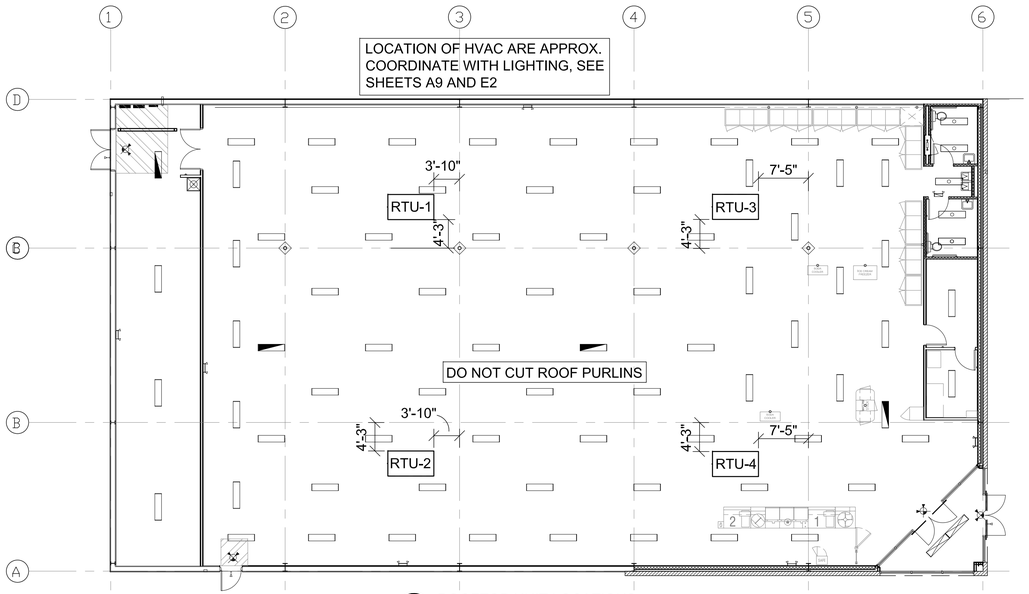
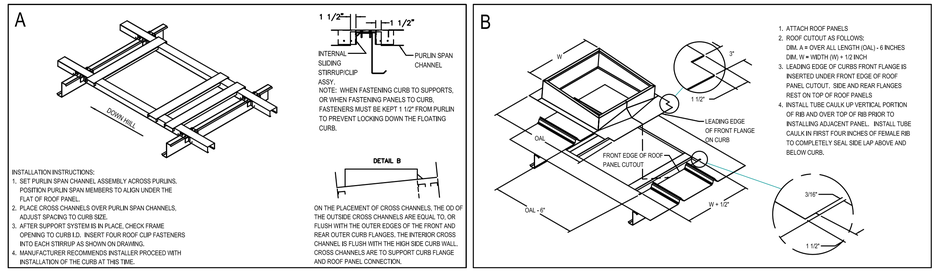
DOLLAR GENERAL (PLAN "E") (STORE #19146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

STRUC. SPEC'S
PROJECT # 1611
OCT. 24, 2016

S2
SHEET 2 of 3



3 / S3 ROOFTOP UNIT LOCATIONS
SCALE: 3/32"=1'-0"



CURB INSTALLATION INSTRUCTIONS

TRAPEZOIDAL STANDING SEAM PANEL - UNDER / OVER
FOLLOW MANUFACTURER'S SPECIFICATIONS

REQUIRED NATIONAL ACCOUNT ROOF CURB DG VENDORS:			
ROOF CURB SYSTEMS	GREG SMYTH	800-683-5848	GSMYTH@ROOFCURB.COM
CURBS PLUS INC.	ALAN THRAILKILL	888-639-2872	ALAN.THRAILKILL@CURBS-PLUS.COM
KCC INTERNATIONAL INC.	GREG CONRAD	800-382-2872	GCONRAD@KCCCURBS.COM

4 / S3 TYPICAL ROOF CURB UNIT
SCALE: NTS

ROOF NOTES

1. METAL ROOF MUST BE A STRUCTURAL STANDING SEAM METAL ROOF WITH MECHANICALLY ROLLED SEAMS. SEAMS TO BE A MINIMUM 1 1/2" HIGH. ALL FASTENERS TO BE CONCEALED.

2. ROOF PANELS TO BE A MINIMUM 24 GAUGE.

3. METAL ROOF SYSTEM TO BE EQUAL TO VP BUILDING SLR II ROOF.

4. CONDENSATE FROM HVAC UNITS TO BE PIPED TO GUTTERS.

CONCRETE ANALYSIS

Based on Standard Deviation Analysis: Please check box
Trial Mix Test Data: ☐

DESIGN CHARACTERISTICS

Density: _____ pcf
Strength: _____ psi (28 day)
Air: _____ % specified

If trial mixes are used the Mix Design is proportioned to achieve f'cr = f'c = 1500 psi (1400 psi for strength higher than 6000 psi at 28 days)

MATERIALS	Type/ Source	Specific Gravity	Weight/cu.	Absolute Vol. cu.ft.
Cement				
Coarse Aggregate				
Fine Aggregate				
Water				
Other				
TOTAL				27.0 cu. ft.

* Water/Cement Ratio (lbs. water/lbs. cement) = _____%

ADMIXTURER	Name/Indicator	Dosage oz/cwt
Air Entraining		
Water Reducing		
Water Reducing, Retarding		
High Range Water Reducing		
Non-Corrosive Accelerating		
Other		

Slump before HRWR _____ inches
Slump after HRWR _____ inches

Standard Deviation Analysis (from experience records):

# of Test Cylinders Evaluated:	
Standard Deviation:	

for-f'c = 1.34s or for = f'c + 2.33s - 500
(Refer to ACI 301 for increased deviation factor when less than 30 tests are available)

Slump before HRWR _____ inches
Slump after HRWR _____ inches

Standard Deviation Analysis (from experience records):

# of Test Cylinders Evaluated:	
Standard Deviation:	

for-f'c = 1.34s or for = f'c + 2.33s - 500
(Refer to ACI 301 for increased deviation factor when less than 30 tests are available)

LABORATORY TEST DATA

Compressive Strength

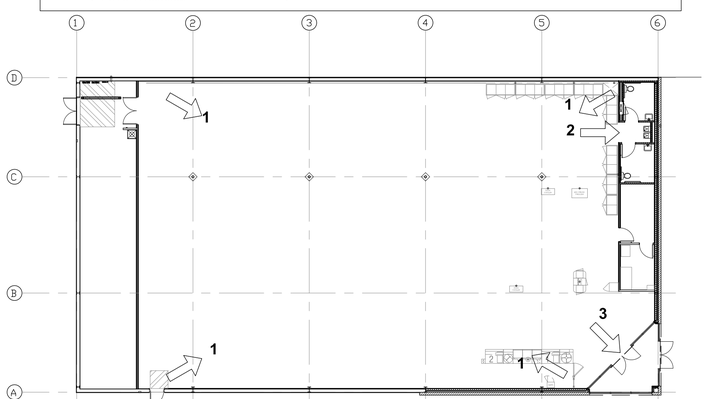
Age (days)	Mix # 1	Mix #2	Mix #3
3	psi	psi	psi
7	psi	psi	psi
14	psi	psi	psi
28	psi	psi	psi
28 average	psi	psi	psi

REQUIRED ATTACHMENTS

	Please Check
Coarse Aggregate Gradation Report	
Fine Aggregate Gradation Report	
Concrete Compressive Strength Data or Trial Mixture Test Data	
Admixture Compatability certification letter	

Submitted by:

Name: _____
Address: _____
Phone #: _____
Main Plant Location: _____
Miles from Project: _____
Secondary Plant Location: _____
Miles from Project: _____
Date: _____

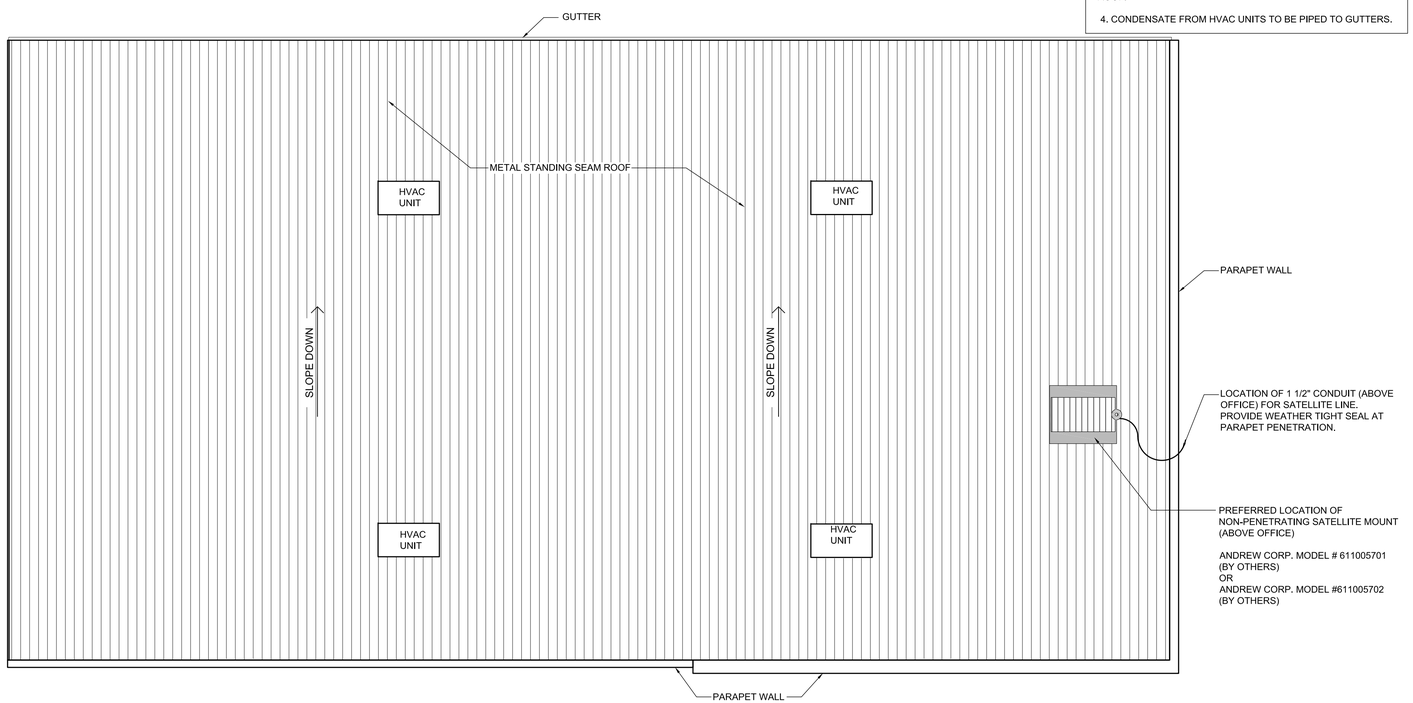


REQUIRED PHOTOS:

THE FOLLOWING LAYOUT SHOWS THE REQUIRED PHOTOS TO BE TAKEN AT COMPLETION. (MAKE SURE THE OVERHEAD LIGHTS ARE ON FOR YOUR PHOTOS.)

1. FROM EACH CORNER OF THE SALES AREA, FACING THE OPPOSITE CORNER.
2. CORRIDOR (ONE PICTURE FROM EACH END OF THE CORRIDOR).
3. STANDING 10' FROM THE ENTRANCE FACING THE ENTRANCE.

1 / S3 PHOTO KEY PLAN
SCALE: 1/16"=1'-0"



2 / S3 ROOF PLAN
SCALE: 1/8"=1'-0"

STATE OF ALABAMA
JAMES D. BARTLETT III
REGISTERED PROFESSIONAL ARCHITECT
No. 3256
COMMISSION EXPIRES 12/31/16

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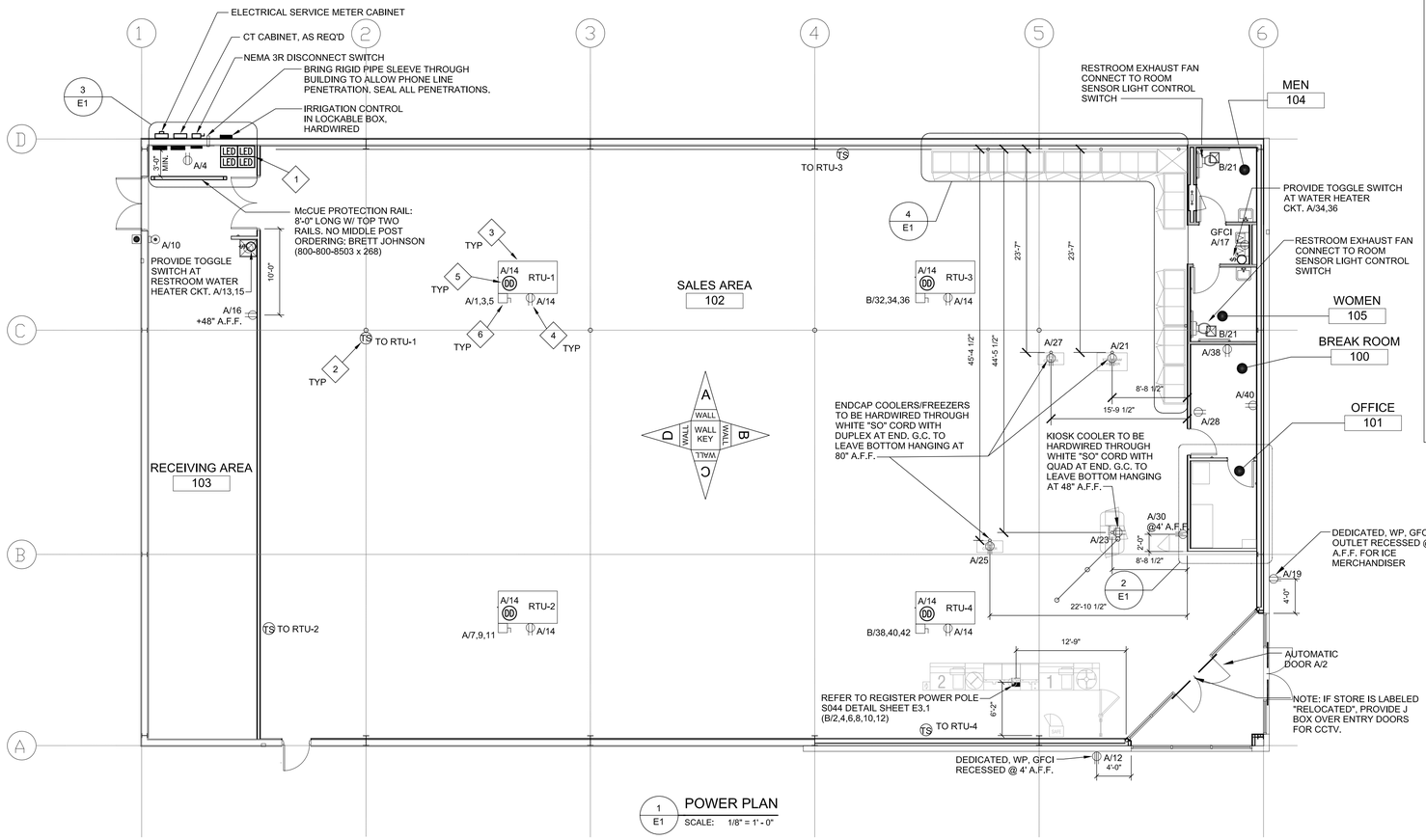
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

ROOF PLAN
PROJECT # 1611
OCT. 24, 2016

S3
SHEET 3 of 3



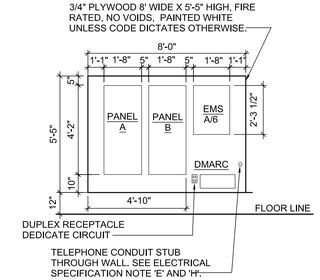
1 / E1 POWER PLAN
SCALE: 1/8" = 1'- 0"

ELECTRICAL KEYED NOTES

1. TEST/RESET STATION FOR STAND ALONE DUCT DETECTOR. ONE FOR EACH DEVICE. SEE KEY NOTE 5 ON THIS SHEET. SIMPLEX #4098-9842 IS SPECIFIED. WITH PIEZO AND LED INDICATOR
2. MECHANICAL THERMOSTAT AT 8'-0" A.F.F.
3. LOCATIONS SHOWN FOR MECHANICAL UNITS ARE ONLY APPROXIMATE, CONTRACTOR MUST CONSULT MECHANICAL OR STRUCTURAL DRAWINGS TO DETERMINE ACTUAL UNIT LOCATIONS. PROVIDE 1/2"C. PENETRATION THRU ROOF WITHIN FOOTPRINT OF UNIT FOR USE WITH CONTROL WIRING TO UNIT BY OTHERS. PROVIDE PROPER WATERSEAL. (TYPICAL)
4. FACTORY MOUNTED CONVENIENCE OUTLET, PROVIDED CIRCUIT AS SHOWN, WIRE ALL WITH THIS NOTE TO A SPARE BREAKER IN PANEL "A" IF THEY ARE NOT POWERED.
5. PHOTOELECTRIC DUCT DETECTOR WITH HOUSING. TIE TO LED READOUT RECESSED IN DUCT. STAND ALONE DEVICE, 120V. SIMPLEX #4098-9687 IS SPECIFIED WITH 4098-9842 CONTROL STATION. PROVIDE ONE DEVICE PER UNIT. MOUNT DEVICE IN SUPPLY AIR DUCTWORK. DEVICE SHALL BE PROVIDED AND WIRED TO THE CONTROL STATION BY THE ELECTRICAL CONTRACTOR. HIRE THE MECHANICAL CONTRACTOR FOR INSTALLATION IN DUCTWORK & CONNECTION TO SHUTDOWN CONTROLS. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED RELAYS AND 120V POWER. DO NOT POWER DUCT DETECTORS FROM HVAC UNIT LOW VOLTAGE. SUBMIT SHOP DRAWINGS FOR APPROVAL. PLACE ANY REQUIRED LABELING ON CEILING TILE DIRECTLY BELOW UNIT. RUN CONDUIT & WIRE UNDERGROUND FROM UNIT TO INSIDE OF SPACE.
6. MOUNT DISCONNECT SWITCH AT UNIT. ALL DISCONNECTS TO BE HEAVY DUTY. FUSES TO BE RK-5 TYPE, BUSSMANN FRN-R-(AMP) IS SPECIFIED. SEE EQUIPMENT SCHEDULE ON E5.1.

ELECTRICAL SPECIFICATIONS

A. ALL WIRING SHALL SHALL BE CONTAINED IN RIGID CONDUIT OF PROPER SIZE.
B. ALL WIRING SHALL CONFORM TO LOCAL, STATE AND FEDERAL CODES.
C. SERVICE IS TO BE A MINIMUM 400 AMP, 3 PHASE 208Y/120VAC.
D. REQUIRED CUSTOM BUILT POWER POLE ASSEMBLIES AVAILABLE FROM D&P CUSTOM LIGHTS & PRODUCTS INC., PHONE: (800) 251-2200 OR (615) 350-7800, 7111 COCKRILL BEND INDUSTRIAL ROAD, NASHVILLE, TN 37209. SEE E3.1.
E. EXTERIOR EXPOSED PHONE LINES TO BE INSTALLED IN RIGID CONDUIT. PROVIDE EMERSON 3/4" X 5-FT. METALLIC CABLE U-GUARD #755, OR EQUAL..
F. ELECTRICAL PANEL TO BE LABELED CORRECTLY WITH LEGIBLE PRINT.
G. LOW VOLTAGE VENDOR TO PROVIDE AND INSTALL ONE (1) 24 GA., 4 TWISTED-PAIR, CATEGORY-FIVE (CAT5) DATA CABLE WITH MODULAR COMBO RJ-11/RJ-45 JACK AT MANAGER'S OFFICE. CABLE TO BE RUN FROM JACK TO DATA HUB LOCATION WITH 6'-0" LEFT COILED FOR INSTALLATION TO DATA HUB. A RJ-45 MALE FITTING SHOULD BE CRIMPED ON THIS END. DOLLAR GENERAL STORE OPENING TEAM WILL MAKE FINAL CONNECTION INTO THE DATA HUB.
H. PROVIDE 1 1/2" EMT CONDUIT TO ACT AS ACCESS SLEEVE TO ALLOW PHONE COMPANY TO TERMINATE AT DMARC. CONTRACTOR TO PROVIDE AND INSTALL PHONE WIRING & RJ-11 PHONE JACK FOR COMPLETED WORKING SYSTEM PRIOR TO PHONE COMPANY FINAL HOOK UP.
I. ALL 120 VOLT OUTDOOR RECEPTACLES TO HAVE "WET LOCATION - IN USE" COVERS.
J. ALL CONDUCTORS TO BE COPPER, #12 AWG MINIMUM SIZE, OR AS REQUIRED BY LOAD AND OVER CURRENT PROTECTION.
K. SEE EMS SHEETS EMS1 AND EMS2 FOR ENERGY MANAGEMENT SYMBOLS AND INFORMATION.
L. ELECTRICIAN TO PROVIDE 1 1/2" CONDUIT WITH PULL STRINGS FOR SATELLITE LOCATION.
M. ALL POWER AND DATA TO BE ROUTED OVERHEAD. UNDER SLAB NOT ALLOWED. ALL DATA WIRING TO BE INSTALLED IN RIGID CONDUIT. NO FLEXIBLE CONDUIT SHALL BE USED.

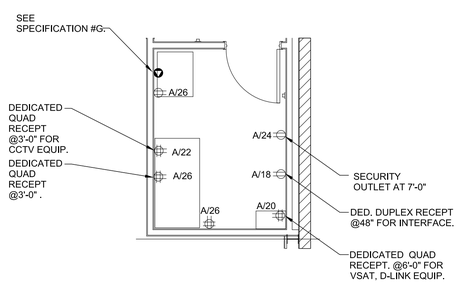


3 / E1 ELECTRICAL PANEL ELEVATION
SCALE: NTS

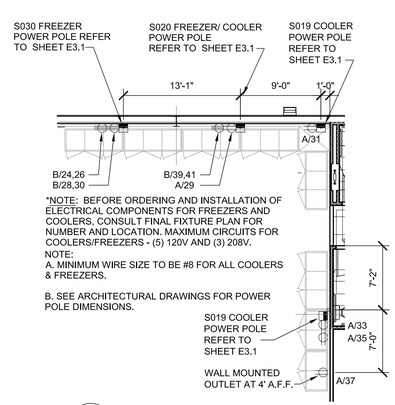
LEGEND

- BUZZER - TORK MDL #TA725 W/ TRANSFORMER MDL#TA592
- COMMERCIAL GRADE PUSH BUTTON
- 125V NEMA 5-20R DUPLEX.
- A/23 PANEL/CIRCUIT IN PANEL
- 125/250V NEMA L14-20-R 4 PRONG TWIST LOCK
- 125V NEMA 5-20R QUAD.
- DISCONNECT
- BLACK MAGIC POWER POLE
- PHONE JACK @ REGISTER
- VOICE/DATA PORT = RJ-11, RJ-45 DATA JACK, PHONE COMBO @ OFFICE
- A/23 PANEL/CIRCUIT IN PANEL
- $m PROVIDE OCCUPANCY LIGHT SENSOR- LEVITON ODS10-IDW
- $ 20 AMP TOGGLE SWITCH
- NL NIGHT LIGHT CIRCUIT

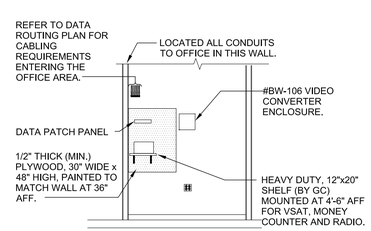
ALL EXIT LIGHTS AND EMERGENCY LIGHTS MUST BE ABOVE THE DRYWALL BAND. (MOUNT AT 10'-6" A.F.F.) TEMPERATURE SENSORS TO BE MOUNTED AT 8'-0" A.F.F.



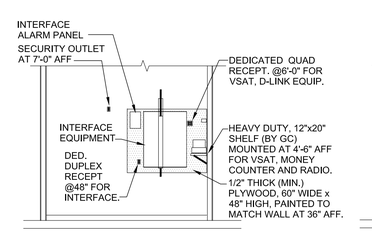
2 / E1 LARGE SCALE OFFICE PLAN
SCALE: NTS



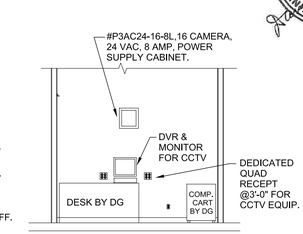
4 / E1 COOLER/FREEZER RECEPTACLE LAYOUT
SCALE: NTS



OFFICE WALL C
SCALE: NTS



OFFICE WALL B
SCALE: NTS



OFFICE WALL D
SCALE: NTS

5 / E1 OFFICE ELEVATIONS
SCALE: NTS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 4670 DANIEL L. JOHNSON

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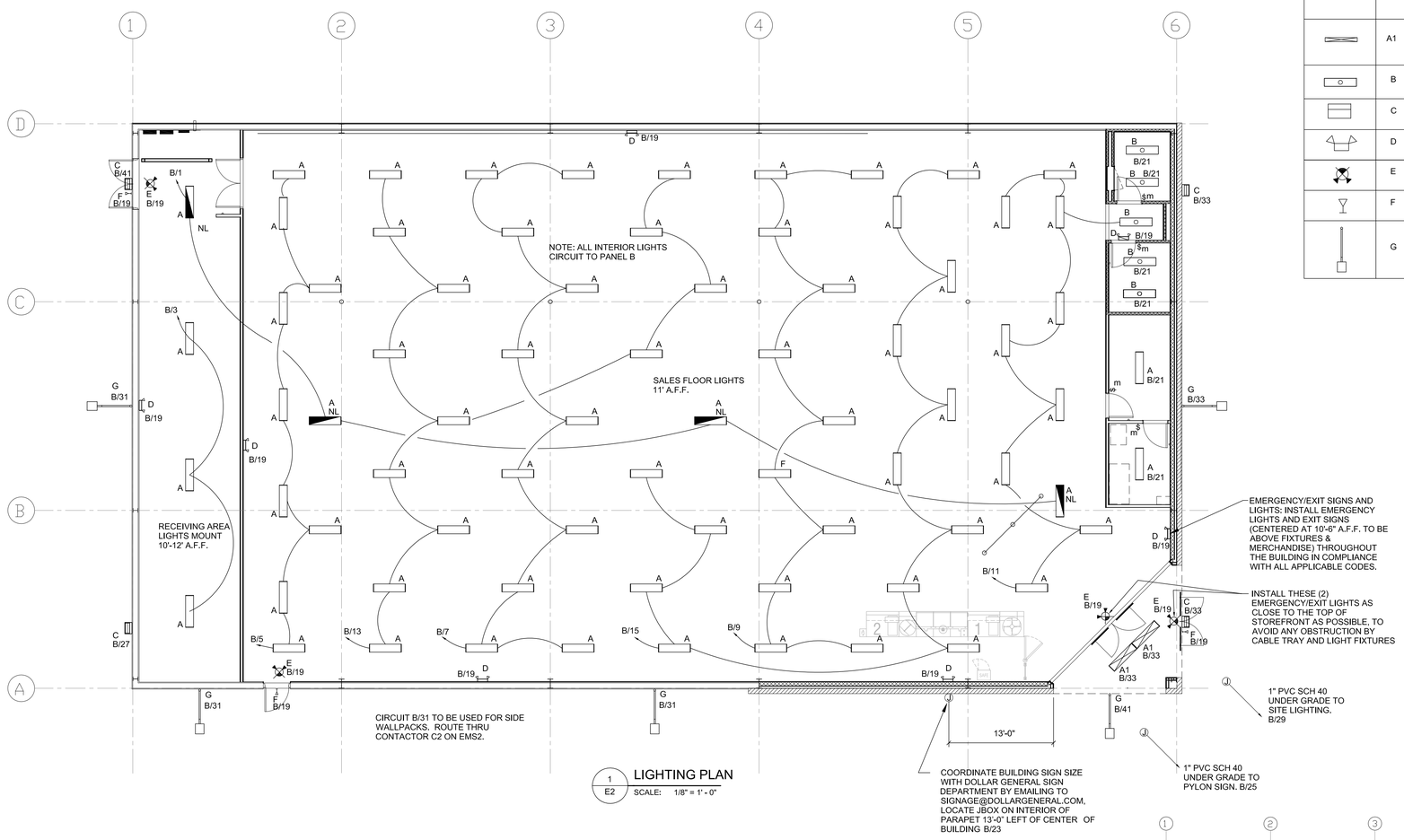
ALEXANDER, ARKANSAS

POWER PLAN
PROJECT # 1611
OCT. 24, 2016

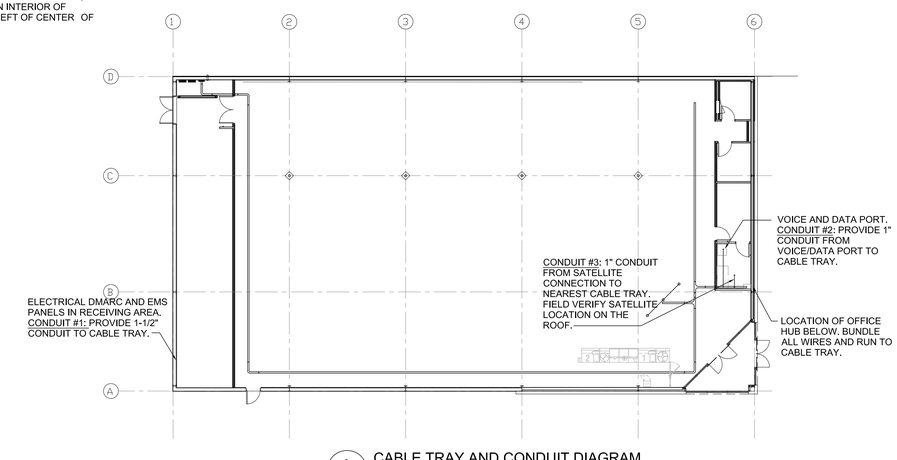
E1
SHEET 1 of 7

LIGHT FIXTURE DESCRIPTION						
SYMB	TYPE	MANF	PART #	DESCRIPTION	COUNT	WATTS
	A	LSG	LSPRO LBAR 48 CW 80 30W FR MVOLT	4' COMPACT LED HIGH LUMEN STRIP (45 W 5000 LUMENS) (SUSPENDED MOUNT, SEE SHT. A9 FOR MOUNTING INFORMATION)	75	45
	A1	LSG	LSPRO LBAR 48 CW 80 30W FR MVOLT-ST	4' COMPACT LED HIGH LUMEN STRIP (45 W 5000 LUMENS) (SURFACE MOUNT)	2	45
	B	LSG	LSPRO LBAR 24 CW 80 15W FR MVOLT-ST	2' COMPACT LED HIGH LUMEN STRIP (15 W) (SURFACE MOUNT)	5	45
	C	TECHLIGHT	LHSWP-C-4-H-BZ	SMALL LED HEAT SINK WALL PACK (COOL WHITE, 4LED, 2100mA, BRONZE)	4	58
	D	EXITRONIX	LED-90	EMERGENCY LIGHT (2) HEADS	7	2.2
	E	EXITRONIX	VLED--U-WH-EL90-R	EXIT SIGN/ EMERGENCY LIGHT COMBO (2) HEADS	4	2.2
	F	EXITRONIX	CLED-WP	LED REMOTE HEAD EMERGENCY LIGHT (WEATHERPROOF) USE IN CONJUNCTION WITH FIXTURE "E"	3	2.2
	G	HILUMZ	HN15-150-50K-D2N	HYPERNOVA HN15-150 LED FIXTURE UPSWEEP ARM MOUNT (MOUNT TOP OF FIXTURE 12" BELOW TOP OF PARAPET)	5	150



1 / E2 LIGHTING PLAN
SCALE: 1/8" = 1' - 0"

ALL EXIT LIGHTS AND EMERGENCY LIGHTS MUST BE ABOVE THE DRYWALL BAND. (MOUNT AT 10'-6" A.F.F.) TEMPERATURE SENSORS TO BE MOUNTED AT 8'-0" A.F.F.



3 / E2 CABLE TRAY AND CONDUIT DIAGRAM
SCALE: NTS

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 4670 DANIEL L. JOHNSON

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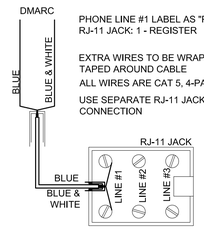
LIGHTING PLAN
PROJECT # 1611
OCT. 24, 2016

E2
SHEET 2 of 7



PHONE LINE #1 LABEL AS "PHONE"
RJ-11 JACK: 1 - REGISTER

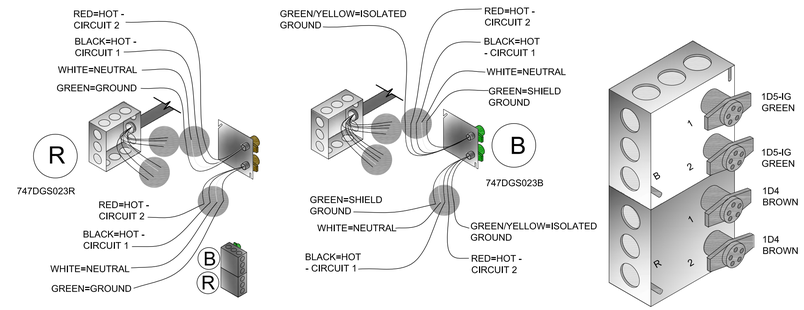
EXTRA WIRES TO BE WRAPPED AND TAPED AROUND CABLE

ALL WIRES ARE CAT 5, 4-PAIR

USE SEPARATE RJ-11 JACKS FOR EACH CONNECTION

1 / E3.1 PHONE WIRING FOR REISTER
SCALE: NTS

ALL POWER POLES TO BE BLACK

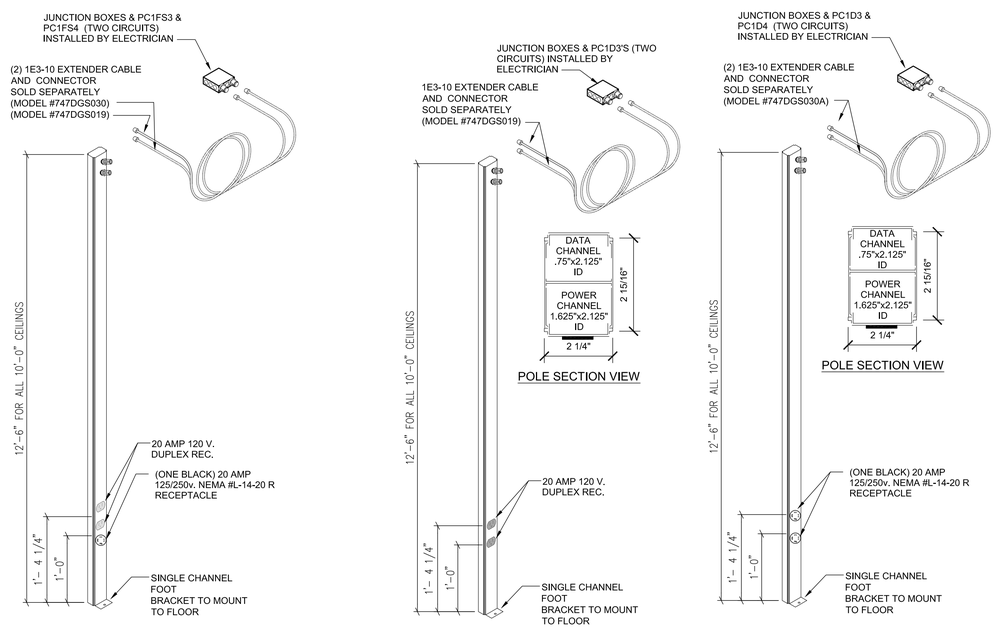


*NOTE: BEFORE ORDERING AND INSTALLATION OF ELECTRICAL COMPONENTS FOR REGISTERS, CONSULT FINAL FIXTURE PLAN FOR NUMBER AND LOCATION.

MAXIMUM CIRCUITS FOR REGISTERS -
CIRCUITS AT MAIN REGISTER - (9) 110V
CIRCUITS AT ISLAND REGISTER - (3) 110V

REGISTER ELECTRICAL COMPONENTS			
Qty.	D&P Part No.	Power Pole Description	National Account Provider
1	747DGS023B	Dual circuit power kit with isolated ground	D & P
1	747DGS023R	Dual circuit power kit	D & P
1	747DGS044-126BK	12' 2CH Regular Pole W/2-C & 1-D Connector DRW #2004-12	
1	747DGS032A	10' Cable Kit (Set of 4 whips)	

2 / E3.1 REGISTER ELECTRICAL DETAIL
SCALE: NTS

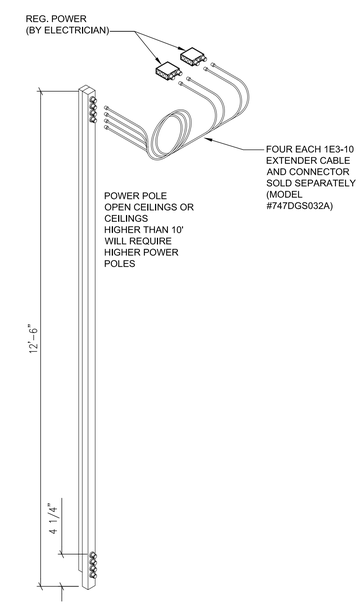


COOLER/FREEZER POWER POLES		
Qty.	D&P Part No.	Power Pole Description
1 1	747DGS030A 747DGS019A	125/250 Cable kit for freezer Cable kit for 120 volt cooler
1	747DGS020-12BK	125/250 volt Power pole with NEMA L1420 connection 120 Volt 1 CIR. Power pole

COOLER/FREEZER POWER POLES		
Qty.	D&P Part No.	Power Pole Description
2	747DGS019	Cable kit for 120 volt cooler
2	747DGS019-12	120 Volt 2 CIR. Power pole
2	747DGS030-12	125/250 volt Power pole with NEMA L1420 connection
2	747DGS030	125/250 Cable kit for freezer

3 / E3.1 FREEZER/COOLER POWER POLE
SCALE: NTS

ALL WHIPS ARE TO BE 10'-0"



4 / E3.1 REGISTER POWER POLE
SCALE: NTS

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ⊕ PLANNER ⊕ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

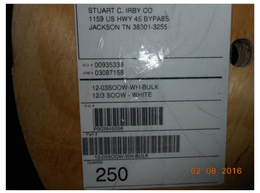
ELEC. DETAILS
PROJECT # 1611
OCT. 24, 2016

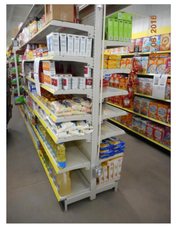
E3
SHEET 3 of 7

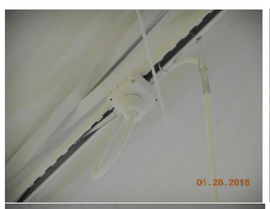
SAMPLE PHOTOS OF WHITE S/O CORD and DROPS

Sample Photos of the WHITE SO Cord Reel and Pictures of Installation. Cords need to be installed before fixtures arrive on site. The checkout counter pole must be in place before fixtures arrive also.

Refer to A1.A for height a.f.f. each drop

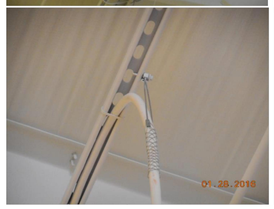


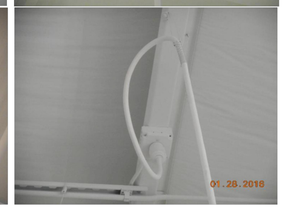




Leave the rolled up Cord and outlets hanging at 8 ft. AFF so merchandise team can drop it down for the fixtures.

Refer to A1.A for height a.f.f. each drop





NOTES	MOUNT: SURFACE			208Y/120VAC		3-PHASE, 4W	PANEL		A			CAPACITY: 200A			INT CAP: 200KA				NOTES
	LOCATION: INSIDE RECEIVING AREA						LUGS:		MCB			DEMAND LOAD: 103.0A			AV. FAULT:				
	CKT	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP	POLE	Φ	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	NP	CKT	
	1			2.6			RTU 1 (5 TON)	45	3	A	20	1	AUTOMATIC DOOR				0.1		2	C
	3			2.6						B	20	1	TELEPHONE BOARD				0.2		4	C
	5			2.6						C	20	1	ENERGY MANAGEMENT				0.2		6	C
	7			2.6			RTU 2 (5 TON)	45	3	A	20	1	SPARE						8	
	9			2.6						B	20	1	BUZZER				0.2		10	
	11			2.6						C	20	1	OUTDOOR DRINK VEND		0.4				12	
C	13				1.3		WATER HEATER (RECEIVING) (2.5KVA)	30	2	A	20	1	HVAC REC./SMOKE DET.		0.7		0.4		14	
	15				1.3					B	20	1	RECEIVING FREEZER				0.4		16	
	17				0.2		DRINKING FOUNTAIN	20	2	C	20	1	INTERFACE EQUIP				0.5		18	
C	19		0.4				OUTDOOR ICE REC	20	1	A	20	1	VSAT SATA HUB EQUIP				0.5		20	
C	21				0.4		ICE CREAM FREEZER	20	1	B	20	1	CCTV EQUIP				1.0		22	
C	23				0.8		DRINK COOLERS	20	1	C	20	1	SECURITY REC		0.2				24	C
C	25				0.4		SODA COOLER	20	1	A	20	1	OFFICE REC		0.7				26	C
C	27				0.4		SODA COOLER	20	1	B	20	1	BREAK ROOM REC		0.5				28	
C	29				1.4		COOLER #1	20	1	C	20	1	GATORADE		0.8				30	C
C	31				1.4		COOLER #2	20	1	A	20	1	SPARE						32	
C	33				1.4		COOLER #3	20	1	B	30	2	WATER HEATER (RESTROOMS) (2.5KVA)				1.3		34	C
C	35				1.2		COOLER #4	20	1	C							1.3		36	
C	37				1.2		COOLER #4	20	1	A	20	1	BREAK ROOM REC		0.2				38	
C	39				1.5		FREEZER #1	20	2	B	20	1	BREAK ROOM REC		0.2				40	
	41				1.5					C	20	1	SPARE						42	

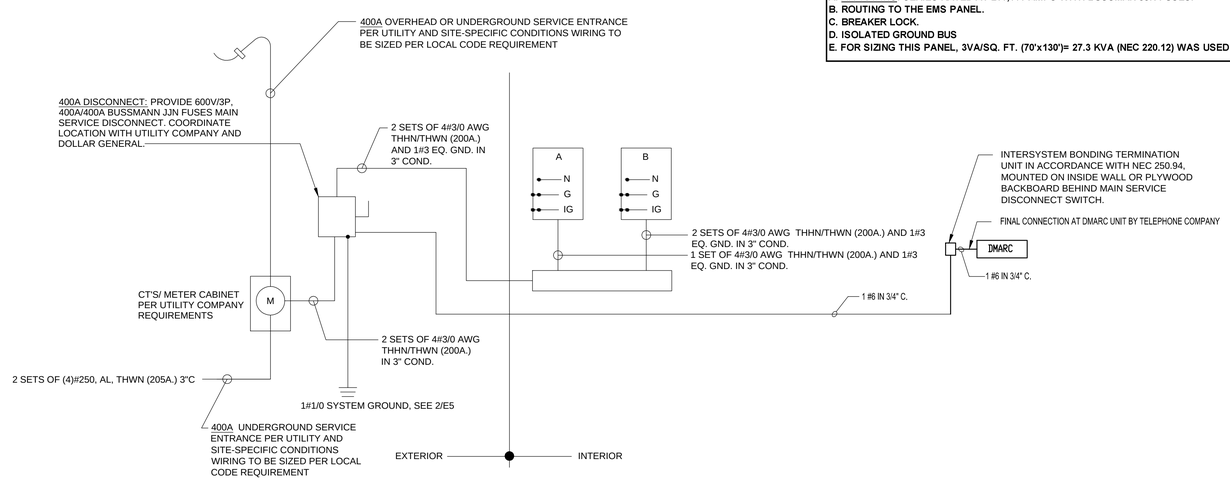
PHASE BALANCE			LOAD TYPE	CONNECTED	DEMAND	DEMAND FORMULA	TOTAL LOAD	
			LIGHTING	0.0 KVA	0.0 KVA	LOAD X 125% NEC 210.19 CONTINUOUS	CONNECTED	DEMAND
Φ	LOAD	%	RECEPTACLE	4.1 KVA	4.1 KVA	10KVA + 50% REMAINDER NEC 220.44	40.2 KVA	37.1 KVA
A	12.5 KVA	31%	HVAC	15.6 KVA	12.5 KVA	LOAD X 80% (USED MCA IN CALCULATION)	111.7A	103.0A
B	14.0 KVA	35%	MISC	20.5 KVA	20.5 KVA	LOAD X 100% NEC 210.19 NON-CONT.		
C	13.7 KVA	34%	NP	0.0 KVA	0.0 KVA	0 NONCOINCIDENTAL LOAD NEC 220.60		

NOTES:
A. AIC RATING: SERIES RATED AT 200,000 AMPS WITH BUSSMAN JJN FUSES.
B. ROUTING TO THE EMS PANEL.
C. BREAKER LOCK.
D. ISOLATED GROUND BUS.

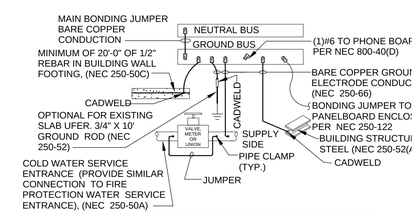
NOTES	MOUNT: SURFACE			208Y/120VAC		3-PHASE, 4W	PANEL		B			CAPACITY: 400A			INT CAP: 200KA				NOTES
	LOCATION: INSIDE RECEIVING AREA						LUGS:		MCB			DEMAND LOAD: 45.8 KVA			AV. FAULT: 32KA				
	CKT	LTG	REC	HVAC	MISC	NP	DESCRIPTION	AMP	POLE	Φ	AMP	POLE	DESCRIPTION	LTG	REC	HVAC	MISC	NP	CKT	
B,C	1	0.4					NIGHT LTS.	20	1	A	20	1	PWR TERM BROWN				1.2		2	
B,C	3	0.2					RECEIVING LTS	20	1	B	20	1	PWR TERM BROWN				1.2		4	
B	5	0.9					70% SALES LTS	20	1	C	20	1	PWR TERM GREEN				1.2		6	
B	7	1.4					70% SALES LTS	20	1	A	20	1	PWR TERM GREEN				1.2		8	
B	9	1.4					70% SALES LTS	20	1	B	20	1	PWR TERM GREEN				1.2		10	
B	11	0.8					70% SALES LTS	20	1	C	20	1	PWR TERM BROWN				1.2		12	
B	13	1.3					30% SALES LTS	20	1	A	20	1	SPARE						14	
B	15	1.0					30% SALES LTS	20	1	B	20	1	SPARE						16	
	17						SPARE	20	1	C	20	1	SPARE						18	
C	19	0.1					EMERGENCY/ EXIT LTS.	20	1	A	20	1	SPARE						20	
C	21	0.3		0.1			BR/OFFICE LTS/EF'S/RR	20	1	B	20	1	SPARE						22	
B	23	1.2					BUILDING SIGN	20	1	C	20	2	FREEZER #2				1.5		24	C
B	25	0.9					PYLON SIGN	20	1	A							1.5		26	
B	27	0.8					EXTERIOR LIGHTS	20	1	B	20	2	FREEZER #3				1.5		28	C
B	29	1.2					SITE LIGHTING	20	1	C							1.5		30	
B	31	0.8					EXTERIOR LIGHTS	20	1	A	45	3	RTU 3 (5 TON)			2.6			32	
B	33	0.9					FRONT/CANOPY LTS.	20	1	B						2.6			34	
B	35	0.9					FLOOD RIGHT	20	1	C						2.6			36	
	37						SPARE	20	1	A	45	3	RTU 4 (5 TON)			2.6			38	
B	39	0.9					FLOOD LEFT	20	1	B						2.6			40	
B	41	0.6					EXTERIOR DUSK/DAWN	20	1	C						2.6			42	

PHASE BALANCE			LOAD TYPE	CONNECTED	DEMAND	DEMAND FORMULA	TOTAL LOAD	
			LIGHTING	16.0 KVA	20.0 KVA	LOAD X 125% NEC 210.19 CONTINUOUS	CONNECTED	DEMAND
Φ	LOAD	%	RECEPTACLE	0.0 KVA	0.0 KVA	10KVA + 50% REMAINDER NEC 220.44	44.9 KVA	45.8 KVA
A	14.0 KVA	31%	HVAC	15.7 KVA	12.6 KVA	LOAD X 80% (USED MCA IN CALCULATION)	124.7A	127.1A
B	14.7 KVA	33%	MISC	13.2 KVA	13.2 KVA	LOAD X 100% NEC 210.19 NON-CONT.		
C	16.2 KVA	36%	NP	0.0 KVA	0.0 KVA	0 NONCOINCIDENTAL LOAD NEC 220.60		

NOTES:
A. AIC RATING: SERIES RATED AT 200,000 AMPS WITH BUSSMAN JJN FUSES.
B. ROUTING TO THE EMS PANEL.
C. BREAKER LOCK.
D. ISOLATED GROUND BUS
E. FOR SIZING THIS PANEL, 3VA/SQ. FT. (70'x130')= 27.3 KVA (NEC 220.12) WAS USED FOR THE INTERIOR LIGHTING LOAD.



400A STANDARD SERVICE



NOTE: ALL GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 250-50 OF THE NATIONAL ELECTRICAL CODE.

2 / E1 GROUNDING DETAIL
SCALE: NTS

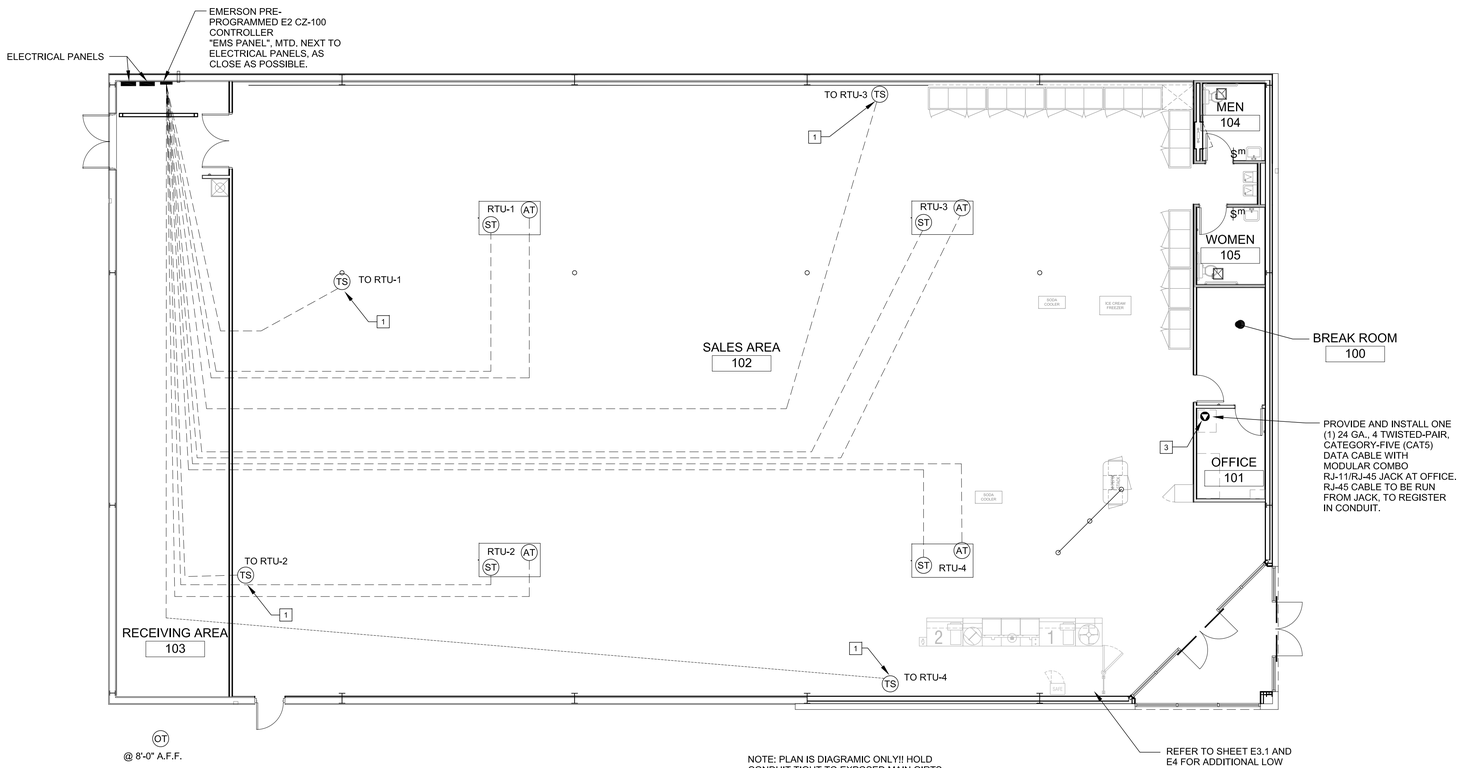
STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 4670 DANIEL L. JOHNSON 10/5/2016

BARTLETT, ARCHITECTURE, Inc.
ARCHITECT Φ PLANNER Φ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #16146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

ELEC. PANELS
PROJECT # 1611
OCT. 24, 2016

E4
SHEET 4 of 7



NOTE: PLAN IS DIAGRAMIC ONLY!! HOLD CONDUIT TIGHT TO EXPOSED MAIN GIRT'S AND RUN AS HIGH AS POSSIBLE ALONG PERIMETER WALLS TO RECEIVING AREA.

1 / EMS1 EMS/LOW VOLTAGE PLAN
SCALE: NTS

ALL EXIT LIGHTS AND EMERGENCY LIGHTS MUST BE ABOVE THE DRYWALL BAND. (MOUNT AT 10'-6" A.F.F.) TEMPERATURE SENSORS TO BE MOUNTED AT 8'-0" A.F.F.

SENSOR PLAN KEYED NOTES

1. ALWAYS INSTALL THESE SENSORS AT 8'-0" A.F.F. THE EXACT MOUNTING LOCATION OF THE HVAC SENSORS "TS" MAY VARY DEPENDING ON THE STORE LAYOUT & DUCT CONFIGURATION. REFER TO SITE SPECIFIC MECHANICAL DRAWINGS FOR HVAC ZONED SENSOR MOUNTING LOCATIONS. IF SENSORS ARE MOUNTED ON EXTERIOR WALLS DUE TO DUCT CONFIGURATION, THEY ARE THEN TO BE INSULATED TO PREVENT AIR INFILTRATION. IF ADDITIONAL HVAC UNITS ARE USED, ADD ADDITIONAL TEMPERATURE SENSORS "TS".
2. (NOT USED)
3. PHONE LINE #1 - TWO RJ-11 PORTS. ONE (1) LOCATED IN OFFICE W/RJ-45 DATA JACK COMBO AND ONE (1) AT REGISTER. 24 GA. CAT 5, 4-PAIR TWISTED WIRE ONLY. USE BLUE AND BLUE & WHITE WIRES. HOOK TO LINE #1 TERMINAL IN RJ-11 JACK EACH PHONE JACK TO HAVE DEDICATED, SEPARATE HOME RUN TO DMARC. LABEL AS "PHONE" AT THE DESTINATION AND AT DMARC. PHONE COMPANY PROVIDES FINAL HOOK UP TO DMARC ONLY.PHONE LINE #2 - RJ-11 PHONE JACK SUPPLIED AND WIRED BY CONTRACTOR.

NOTE:
A. REFER TO E1 FOR GENERAL CONTRACTOR RESPONSIBILITIES. E.C. MAY USE CABLE TRAY FOR LOW VOLTAGE CABLES, SEE 2/E2.

B. RUN CONDUIT FROM SENSORS TO BOTTOM OF STRUCTURE.

QTY.	SYMBOL	DESCRIPTION	CABLE TYPE	SUPPLIED BY:	INSTALLED BY:	NOTES
VERIFY	AT	AHU TERMINAL STRIP	8C T-STAT CABLE	EMS SUPPLIER	GENERAL CONTRACTOR	QTY. ONE (1) PER HVAC UNIT.
1	OT	OUTDOOR AIR TEMP MTD. @ 8'-0" A.F.F.	BELDEN 8761 OR EQUIVALENT (22AWG, 2C, STRANDED, SHIELDED)	EMS SUPPLIER	GENERAL CONTRACTOR	QTY. ONE (1) PER RECEIVING ENTRY.
VERIFY	ST	SUPPLY TEMP (501-1121) MTD. IN SUPPLY DUCT	BELDEN 8761 OR EQUIVALENT (22AWG, 2C, STRANDED, SHIELDED)	EMS SUPPLIER	GENERAL CONTRACTOR	QTY. ONE (1) PER HVAC UNIT.
VERIFY	TS	TEMPERATURE SPACE SENSOR (809-6590) MTD. @ 8'-0" A.F.F.	BELDEN 8761 OR EQUIVALENT (22AWG, 2C, STRANDED, SHIELDED)	EMS SUPPLIER	GENERAL CONTRACTOR	QTY. ONE (1) PER HVAC UNIT ZONE.
1		RJ-11/RJ-45 DATA JACK, PHONE COMBO.	24 GA., 4 TWISTED-PAIR, CATEGORY-FIVE (CAT 5) DATA CABLE .	GENERAL CONTRACTOR	GENERAL CONTRACTOR	QTY. ONE (1) AT OFFICE COMPUTER CART.
2	$m	MOTION SENSOR SWITCH.	LEVITON EZ-FIND ODS-10-IDW	GENERAL CONTRACTOR	GENERAL CONTRACTOR	QTY. ONE (1) PER MEN'S RESTROOM. QTY. ONE (1) PER WOMEN'S RESTROOM.

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ARCHITECT PLANNER DESIGNER
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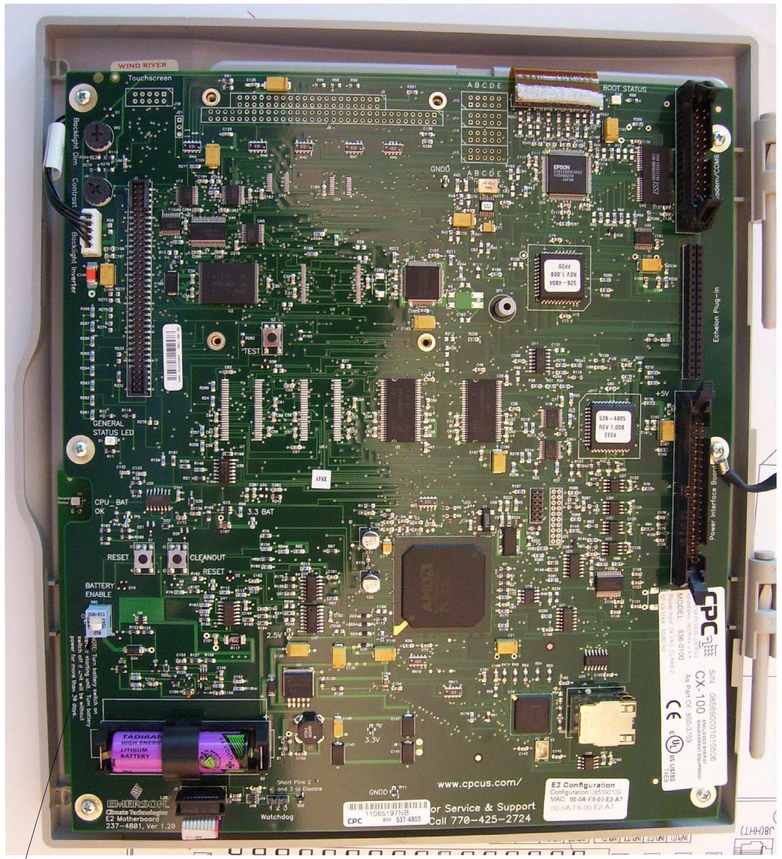
DOLLAR GENERAL (PLAN "E") (STORE #10146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

ELEC. DETAILS
PROJECT # 1611
OCT. 24, 2016

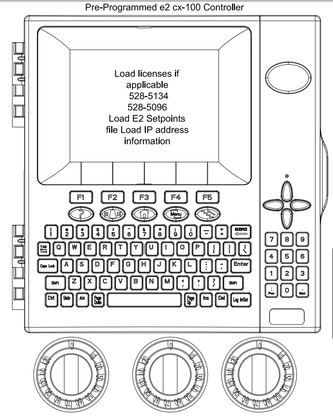
EMS1
SHEET 5 of 7



GENERAL CONTRACTOR TO ENSURE THAT THE BATTERY ENABLE IS SWITCHED TO THE "ON" POSITION

1 EMS2 CPU TERMIANL DIAGRAM
SCALE: NTS

Pre-Programmed e2 cx-100 Controller



Escalation Contact List

If you need HVAC Maintenance, call 866-300-0004, option 1.
If you have Temperature Set Point concerns, contact your District Manager.
If you are having problems with your Lights, call 866-300-0004, option 6.
If you are having problems with your Coolers, call 866-300-0004, option 2.
If you are having problems with your Sign, call 866-300-0004, option 1.
If your store hours change, call 866-300-0004, option 6.

⚠ CAUTION! ⚠
All power must be shut off prior to wiring, installation, or service. More than one disconnect may be required to de-energize this panel.

Verifying the Time and Date

From the Home screen.
1. The Date is in the upper left corner of the Home screen.
2. The Time is in the upper right corner of the Home screen.

HVAC Control Status

* Press the Home screen button.
* Select F1 AHU.
* Using the arrow keys, highlight the appropriated HVAC Unit, select enter.
* From the screen you can view:
  - i. Ctzl Temp (Control Temp - The sales floor temp).
  - ii. Values in [ ] represent the set point we are trying to maintain.
  - iii. Space Temp (Temperature at problem on Sales Floor).
  - iv. Supply Temp (Air Temp leaving AHU).
  - v. Status of Fan/Heat/Cools
* When complete, select the Home button.

Lighting Status

* The status of Store Lights can be viewed in the bottom left corner of the Home page, or by the following:
  * Press the Home screen button.
  * Select F2 Lighting.
  * Highlight the appropriate Lighting Control, then select enter.
  * When complete, select the Home button.

Refrigerated Case Status

* Case Temperature can be viewed from the Home screen.

To view a graph of the case temperature:
  - i. Highlight the Temp value and select enter.
  - ii. Select 1 for graph.

To zoom select F5 Zoom-In.
(Press F5 Zoom-In as many times as necessary, get to the desired scale/range).
(Use the left and right arrow keys to move to the time/date range desired).
* When complete, select the Home button.

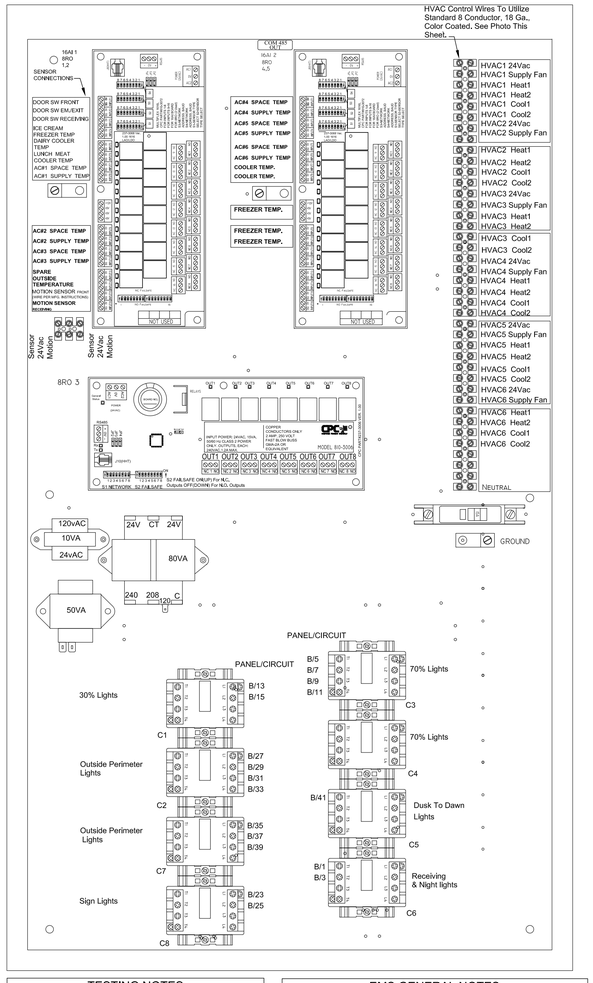
Alarm Status

From the Home screen, select Alarm button.
1. Date: The date the alarm occured.
2. Time: The time the alarm occured.
3. State: Notice, Alarm or Fail.
   * Notices are general warnings that notifiy a user of minor errors.
   * Alarms are warnings about important system conditions that need immediate attention.
   * Fails are high priority conditions, warning the user of a controller or device failure.
4. Property on Board and Point: The item that has generated the alarm.
5. Message: The description of the notice, alarm or fail.
   a. Using the up or down arrow keys, highlight the appropriate alarm and select F4 Expd. Info.
      - i. Expd. Info: Expanded Information will give the unit & detailed status on the alarm.
      - ii. When finished viewing detailed status, select enter.

* When complete, select the Home button.

NOTE:
EMS SYSTEM SHOULD BE TESTED FOR HVAC OPERATION, INTERIOR LIGHTING, EXTERIOR LIGHTING AND SIGN LIGHTING PRIOR TO CONTRACTOR'S ELECTRICAL POSSESSION DATE. USE OUTSIDE LIGHT AND SIGN LIGHT OVERRIDE FOR EXTERIOR TESTING.

2 EMS2 PROGRAMMER CONTROLLER
SCALE: NTS



TESTING NOTES

TESTING OF HVAC UNITS THRU EMS PANEL IS ACCOMPLISHED BY SIMPLY WARMING UP OR COOLING DOWN A SPACE TEMPERATURE SENSOR (USING A BLOW DRYER OR ELECTRONIC EQUIPMENT DUSTER AEROSOL) AND WATCH THE FAN, HEAT AND COOL STAGES CYCLE ON AND OFF. THIS REQUIRES TWO PEOPLE AT ALL TIMES....ONE TO WATCH THE SCREEN AND THE OTHER TO WATCH OPERATION OF THE AHU. WHEN COMPLETE, PRESS THE HOME BUTTON TO RETURN TO THE MAIN SCREEN.

EMS GENERAL NOTES

1. EMS SUPPLIER NOTE: CUSTOMIZED DOLLAR GENERAL EMS PANEL REQUIRES STORE #, CITY, STATE, ZIP CODE & QTY. OF HVAC UNITS OF THE INSTALL SITE WHEN ORDERING. EMS SYSTEMS INSTALLATION GUIDE WITH PHOTOS IS AVAILABLE ON NATIONAL ACCOUNT WEBSITE. ALL QUESTIONS PERTAINING TO THE EMS PANEL, SYSTEM INSTALLATION & SETUP SHOULD BE DIRECTED TO EMERSON'S DOLLAR GENERAL SUPPORT TEAM AT 770-425-2724.
2. ALL SIGN & LIGHTING CIRCUITS MUST BE FED THROUGH THE DESIGNATED CONTACTORS AS NOTED ON THIS PAGE.
3. ALL LOW VOLTAGE HVAC & DOOR SENSORS MUST BE CONNECTED TO THE PROPER TERMINAL. 24 GA. SHIELDED (SHIELD MUST BE GROUNDED) CABLE, BELDEN #8641, 2 CONDUCTOR WIRE OR IT'S EQUIVALENT IS REQUIRED.
4. COOLER & FREEZER HOME RUNS WILL BE TERMINATED AT ALL POINTS BY DOLLAR GENERAL REFRIGERATION DEPARTMENT.

3 EMS2 CONTROL WIRING DIAGRAM
SCALE: NTS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 4670
DANIEL L. JOHNSON
10-24-2016

BARTLETT, ARCHITECTURE, Inc.
ARCHITECT ✠ PLANNER ✠ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #10146)

2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

ELEC. DETAILS
PROJECT # 1611
OCT. 24, 2016

EMS2
SHEET 6 of 7

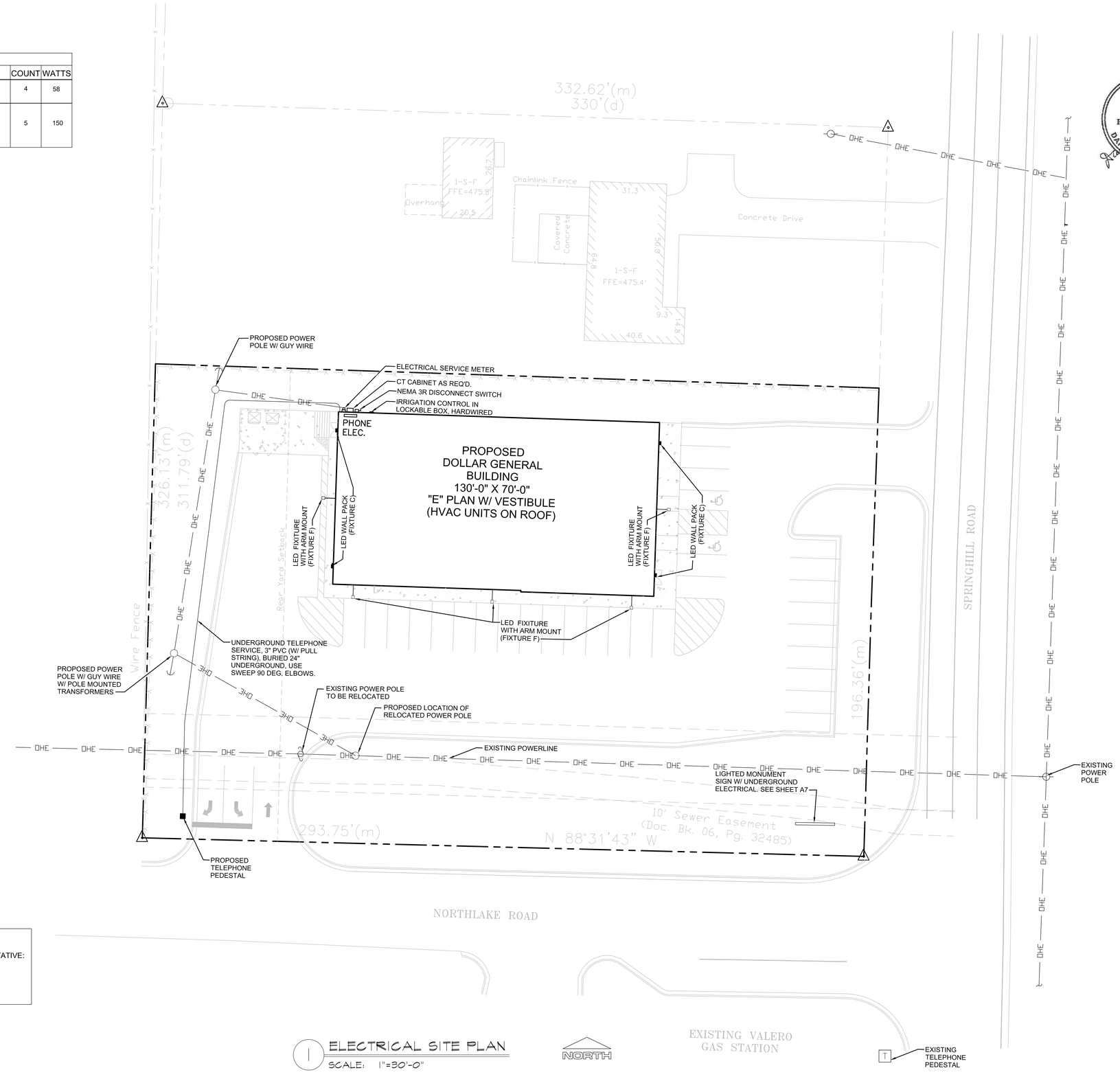
LIGHT FIXTURE DESCRIPTION						
SYMB	TYPE	MANF	PART #	DESCRIPTION	COUNT	WATTS
	C	TECHLIGHT	LHSWP-C-4-H-BZ	SMALL LED HEAT SINK WALL PACK (COOL WHITE, 4LED, 2100mA, BRONZE)	4	58
	F	HILUMZ	HN15-150-50K-D2N ARM MOUNT- WMV ARM EXTENSION- UPS190	HYPERNOVA HN15-150 LED FIXTURE UPSWEEP ARM MOUNT (MOUNT TOP OF FIXTURE 12" BELOW TOP OF PARAPET)	5	150

SITE LIGHTING NOTES

1. FINAL SIGN CONNECTION AND UNDERGROUND CONDUIT IS LANDLORD RESPONSIBILITY. PROVIDE CONDUIT FROM THE ELECTRICAL PANEL TO LOCATION OF THE PYLON SIGN BASE. BURY CONDUIT UNDER PARKING AREA. THE CONDUIT IS TO BE 1" AND HAVE ONE SET TO 10/2 WIRE WITH GROUND AND A 20-AMP TWO POLE BREAKER AT THE PANEL. A TEMPORARY 3' TALL STAKE SHALL BE PROVIDED TO DESIGNATE THE PYLON SIGN LOCATION UNTIL THE SIGN IS PERMANENTLY INSTALLED. REMOVE POST AFTER SIGN IS INSTALLED.
2. SITE / PARKING LOT LIGHTING: PROVIDE ADEQUATE POLE AND/OR WALL LIGHTING FOR NIGHT VISION AROUND ENTRY, PARKING AND DUMPSTER PAD AREAS.
3. MINIMUM OF TWO FOOT-CANDLES REQUIRED FOR ALL PAVED AREAS EXCLUDING 15' PERIMETER FROM EDGE OF PAVEMENT.
4. REQUIRED LIGHTING: A COMBINATION OF POLE LIGHTS AND WALL PACKS WILL BE USED. REFER TO ELECTRICAL SITE PLAN AND SHEET E2 FOR ADDITIONAL INFORMATION.
5. PLEASE NOTE THAT LIGHTING DESIGN AND LAYOUT SHOULD BE SITE SPECIFIC & MAY REQUIRE ADDITIONAL LIGHTING TO COMPLY WITH SITE DESIGN CONDITIONS. THEREFORE, MAKE PROVISIONS FOR MORE POLE LIGHTING WHEN A SPECIFIC SITE REQUIRES IT.
6. UNDERGROUND ELECTRICAL SHALL BE PROVIDED TO THE SITE LIGHT POLES.
7. WHERE LOCAL JURISDICTIONS DO NOT ALLOW DOLLAR GENERAL'S REQUIRED LIGHTING PLAN, AN ALTERNATE SITE LIGHTING PLAN & PHOTOMETRIC PLAN MUST BE SUBMITTED FOR APPROVAL TO THE DOLLAR GENERAL AUTOCAD-STORE PLAN DEPARTMENT.
8. PHOTO METRIC SITE ANALYSIS AVAILABLE THROUGH DOLLAR GENERAL VENDORS: ETI - KENT PETERS (920) 850-7287 DGorders@leds-llc.com
9. 9. DOLLAR GENERAL VENDOR PRICING FOR WALL PACKS OR POLE LIGHTING AVAILABLE FROM: ETI - KENT PETERS (920) 850-7287 DGorders@leds-llc.com
10. SEE SHEET E2 FOR MORE INFORMATION.
11. VERIFY LOCAL DARK SKY REQUIREMENTS AND CONTACT ORION ENERGY SYSTEMS FOR APPROVED ALTERNATES IF REQUIRED.

UTILITY INFORMATION:

1. COORDINATE ELECTRICAL SERVICE WITH FIRST ELECTRIC COOPERATIVE REPRESENTATIVE:
   RANDY JONES 501-413-1240 (JACKSONVILLE OFFICE)
2. COORDINATE TELEPHONE SERVICE WITH AT&T REPRESENTATIVE:
   PAUL ROMANTIO 501-321-3210 (LITTLE ROCK OFFICE)



1 ELECTRICAL SITE PLAN
SCALE: 1"=30'-0"

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 4670 DANIEL L. JOHNSON

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ELEC. SITE PLAN
PROJECT # 1611
OCT. 24, 2016

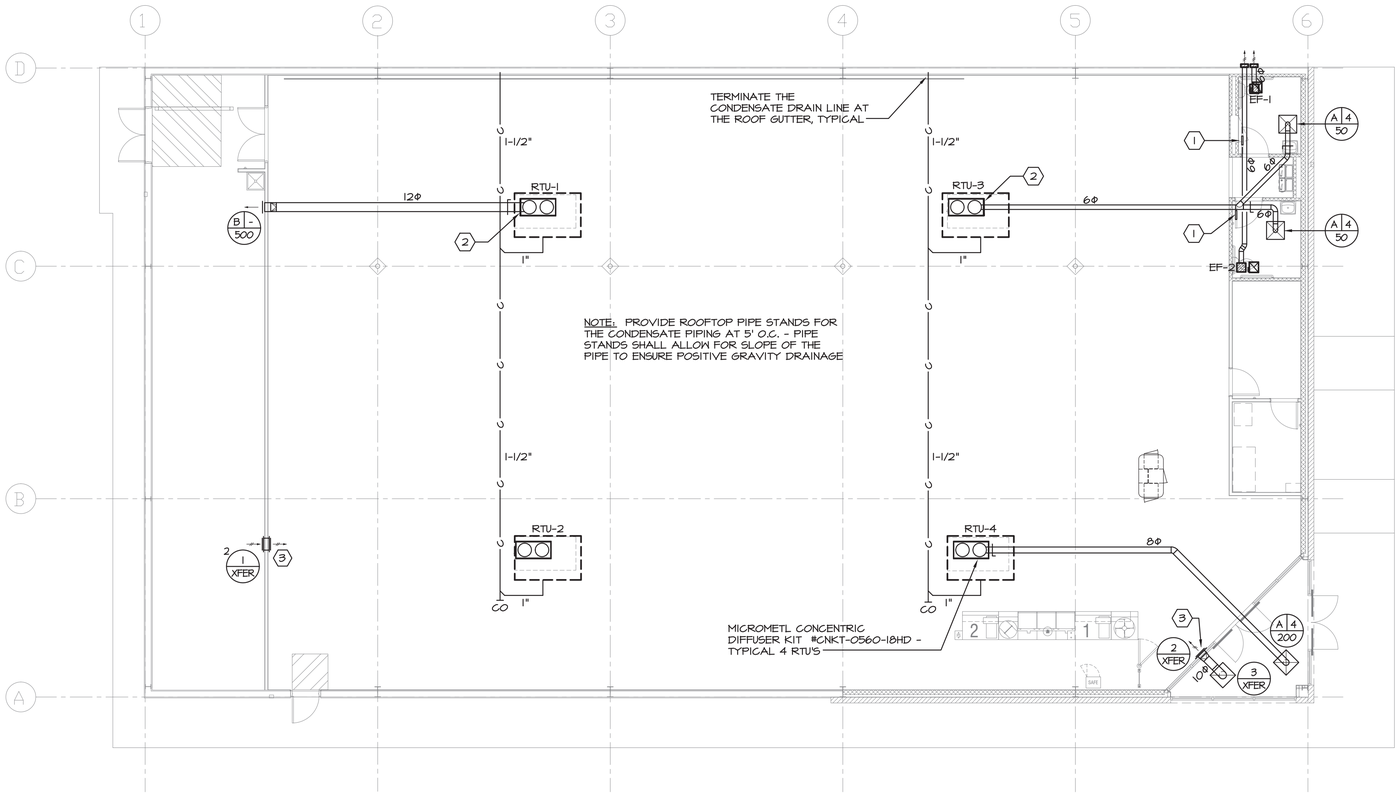
ES1
SHEET 7 of 7

TEMPERATURE SENSORS

PROVIDE A TEMPERATURE SENSOR IN EACH OF THE 4 HVAC ZONES SHOWN AS INDICATED BY THE "EMS" SHEETS

FIRE-RATED OPENING PROTECTION

PROVIDE FIRE DAMPERS AS REQUIRED IN ALL DUCT PENETRATIONS THROUGH FIRE RATED CONSTRUCTION. COORDINATE THE LOCATIONS OF ALL FIRE RATED CONSTRUCTION WITH THE ARCHITECTURAL PLANS.



1 HVAC PLAN
SCALE: 1/8" = 1'-0"

NORTH

GENERAL HVAC NOTES

1. REFER TO SHEET M2.A FOR ALL "GENERAL HVAC NOTES" AND "HVAC MATERIAL SPECIFICATIONS".

HVAC KEYED NOTES

1. 12"X12" DOOR GRILLE WITH THE VANES ORIENTED UPWARD TOWARD THE OUTSIDE OF THE RESTROOM.
2. BLANK OFF THE SUPPLY DIFFUSER ON THE SIDE OF THE CONCENTRIC DROP DIFFUSER/GRILLE INDICATED.
3. INSTALL THE TRANSFER AIR GRILLE(S) MINIMUM 12' A.F.F.

PACKAGED HVAC UNIT SCHEDULE - DX COOLING/GAS HEATING

GENERAL			FAN					COOLING					HEATING				ELECTRICAL				REMARKS
MARK	MANUF'R./MODEL	SERVES	DRIVE	S.A. (CFM)	O.A. (CFM)	ESP	FAN HP	MIN. TOT. CAPACITY	SENSIBLE CAPACITY	EDB (F)	EWB (F)	AMB (F)	INPUT (MBTUH)	OUTPUT (MBTUH)	AFUE	FUEL	VOLTAGE	MCA	BKR	SEER	
RTU-1	YORK ZF060N08N2	REFER TO PLANS	BELT	2,000	300	0.75"	1.5	54.8 MBTUH	45.3 MBTUH	80.0	67.0	45.0	100.0	80.0	80%	NG	208/3/60	25.1	35A	13.0	SEE NOTES
RTU-2	YORK ZF060N08N2	REFER TO PLANS	BELT	2,000	300	0.75"	1.5	54.8 MBTUH	45.3 MBTUH	80.0	67.0	45.0	100.0	80.0	80%	NG	208/3/60	25.1	35A	13.0	SEE NOTES
RTU-3	YORK ZF060N08N2	REFER TO PLANS	BELT	2,000	300	0.75"	1.5	54.8 MBTUH	45.3 MBTUH	80.0	67.0	45.0	100.0	80.0	80%	NG	208/3/60	25.1	35A	13.0	SEE NOTES
RTU-4	YORK ZF060N08N2	REFER TO PLANS	BELT	2,000	300	0.75"	1.5	54.8 MBTUH	45.3 MBTUH	80.0	67.0	45.0	100.0	80.0	80%	NG	208/3/60	25.1	35A	13.0	SEE NOTES

NOTES:
1. ROOF CURB
2. RETURN AIR SMOKE DETECTOR
3. HIGH/LOW PRESSURE SWITCHES
4. STARTING CAPACITOR
5. COMPRESSOR RESTART TIME DELAY
6. CRANKCASE HEATERS
7. LOW AMBIENT TO 30-DEGREES F
8. BLOWER PROVE SWITCH
9. DIRTY FILTER SWITCH
10. CONDENSER COIL HAIL GUARD
11. MANUAL OUTSIDE AIR DAMPER
12. INTEGRAL CONVENIENCE OUTLET - FIELD POWERED

EXHAUST FAN SCHEDULE

GENERAL			FAN						ELECTRICAL			REMARKS
MARK	MANUF'R./MODEL	SERVES	DRIVE	TYPE	CFM	ESP	RPM	SONES	VOLTAGE	MOTOR	CONTROL	
EF-1	GREENEHCK SP-B90	WOMENS RESTROOM	DIRECT	CENT.	75	1/8"	619	2.0	120/1/60	50W	MOTION DETECTOR	SEE REMARKS
EF-2	GREENEHCK SP-B90	MEN RESTROOM	DIRECT	CENT.	75	1/8"	619	2.0	120/1/60	50W	MOTION DETECTOR	SEE REMARKS

* OR APPROVED EQUAL

NOTES:
1. PROVIDE INTEGRAL DISCONNECT AND BACKDRAFT DAMPER.
2. MOTION DETECTOR WITH ADJUSTABLE 20-MINUTE TIME DELAY INTEGRAL TO THE FAN GRILLE PROVIDED BY FAN MANUFACTURER.
3. PROVIDE WALL CAP EQUAL TO GREENHECK WC-8 WITH BLACK ENAMEL FINISH, INTEGRAL BIRDSCREEN AND BACKDRAFT DAMPER FOR COMMON TERMINATION.

DIFFUSER AND GRILLE SCHEDULE

MARK	MANUF'R/MODEL	SIZE	FACE	MOUNTING	MATERIAL	FINISH	REMARKS
A	PRICE SCD	24x24	SQUARE CONE	LAY-IN CLG	STEEL	WHITE	NONE
B	PRICE 520	12x8	DBL DEFLECTION	SIDEWALL	STEEL	WHITE	NONE
1	PRICE 530	16x16	45-DEG FIXED BLADE	SIDEWALL	STEEL	WHITE	NONE
2	PRICE 530	12x12	45-DEG FIXED BLADE	SIDEWALL	STEEL	WHITE	NONE
3	PROCE 80	12x12	CUBE CORE	LAY-IN CLG.	STEEL FRAME/ ALUM. CORE	WHITE	NONE

* OR APPROVED EQUAL

MECHANICAL LEGEND

(NOT ALL MAY APPLY)

T	THERMOSTAT, MOUNT AT 54" A.F.F.	AD	DUCT ACCESS DOOR
	MANUAL BALANCING DAMPER	A.F.F.	ABOVE FINISHED FLOOR
M	DAMPER MOTOR	AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
P	PULL STATION, MOUNT AT 48" A.F.F.	ALUM.	ALUMINUM
C	CO2 SENSOR, MOUNT AT 54" A.F.F.	AMB.	AMBIENT
	SMOKE DAMPER	BHP	BRAKE HORSEPOWER
	FIRE DAMPER	BKR	BREAKER
	COMBINATION FIRE/SMOKE DAMPER	BTUH	BRITISH THERMAL UNITS PER HOUR
# MARK THROW CFM	SUPPLY AIR GRILLE (# INDICATES NUMBER OF EQUAL AIR DEVICES)	CAP.	CAPACITY
		CFM	CUBIC FEET PER MINUTE
		DB	DRY BULB
# MARK CFM	RETURN GRILLE OR TRANSFER AIR GRILLE (# INDICATES NUMBER OF EQUAL AIR DEVICES)	DBL.	DOUBLE
		DEF.	DEFLECTION
		E.A.	EXHAUST AIR
# MARK CFM	EXHAUST GRILLE (# INDICATES NUMBER OF EQUAL AIR DEVICES)	EAT	ENTERING AIR TEMPERATURE
		EDB	ENTERING DRY BULB
		ESP	EXTERNAL STATIC PRESSURE
	TURNING VANES	EWB	ENTERING WET BULB
		EXT.	EXTRUDED
		FLA	FULL LOAD AMPERAGE
	SQUARE-ROUND TRANSITION	FPM	FEET PER MINUTE
		HGRH	HOT GAS REHEAT
	DUCTWORK WITH 1" DUCT LINER	HP	HORSEPOWER
		LAT	LEAVING AIR TEMPERATURE
	DOUBLE WALL SPIRAL DUCT	LDB	LEAVING DRY BULB
		LWB	LEAVING WET BULB
	45-DEG BRANCH TAKE-OFF WITH 2" RAISED QUADRANT DAMPER	MAX.	MAXIMUM
		MBH	1000 BTUH'S
	45-DEG BRANCH TAKE-OFF WITHOUT DAMPER	MCA	MINIMUM CIRCUIT AMPACITY
		O.A.	OUTSIDE AIR
	MANUAL BALANCING DAMPER - ROUND DUCT	R.A.	RETURN AIR
		RPM	REVOLUTIONS PER MINUTE
M M	MOTORIZED DAMPER - ROUND OR RECTANGULAR	S.A.	SUPPLY AIR
		SENS.	SENSIBLE
UC	UNDERCUT DOOR MIN. 3/4" FOR TRANSFER AIR	SGL.	SINGLE
		TOT.	TOTAL
	FLEXIBLE DUCT CONNECTION	VEL.	VELOCITY
	FLEXIBLE DUCT RUNOUT (3' MAX.)		
R	REFRIGERANT LINES		
C	CONDENSATE LINE		

REVISIONS

NO	DATE	DESCRIPTION

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JAMIE L. GUNN 12355 10-22-24

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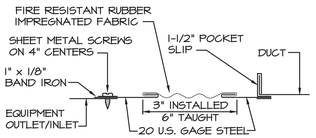
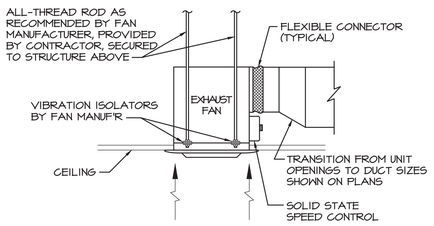
M1.A
HVAC PLAN AND SCHEDULES
PROJECT #1611
OCT. 24, 2016
SHEET 1 of 2



NOTE: PROVIDE FLEXIBLE DUCT CONNECTIONS AT INLETS AND OUTLETS OF ALL AIR HANDLING EQUIPMENT.

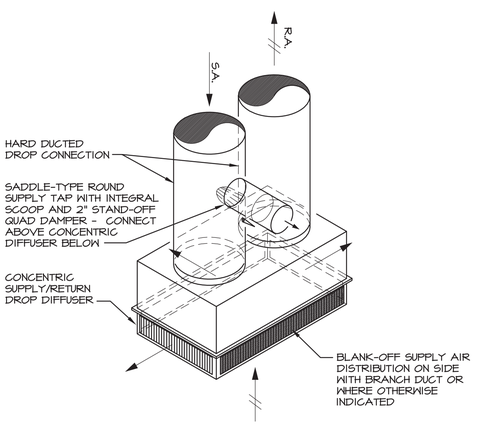
1 FLEX. DUCT CONNECTION DETAIL

SCALE: NONE



2 EXTERIOR DUCT INSULATION DETAIL

SCALE: NONE



NOTES:
1. CONCENTRIC DIFFUSER TO BE PROVIDED BY THE RTU MANUFACTURER PART OF A PACKAGED KIT. DIFFUSER KIT SHALL BE PURCHASED DIRECT THROUGH DOLLAR GENERAL HVAC NATIONAL ACCOUNTS (NO EXCEPTIONS ALLOWED).
2. DUCT DROPS SHALL BE GALVANIZED RIGID SHEET METAL. THE USE OF FLEXIBLE DUCT DROPS IS NOT PERMITTED (NO EXCEPTIONS).

3 CONCENTRIC SUPPLY/RETURN DROP WITH BRANCH CONNECTION

SCALE: NONE

GENERAL HVAC NOTES

A. GENERAL REQUIREMENTS:
1. UNLESS SPECIFICALLY NOTED OTHERWISE, THE TERM "CONTRACTOR" INDICATED ON ANY GIVEN DIVISION 15 PLAN SHEET SHALL REFER TO THE CONTRACTOR RESPONSIBLE FOR THE WORK OF THE SPECIFIC TRADE NOTED ON THAT PLAN SHEET.
2. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE ARKANSAS MECHANICAL CODE AND THE REQUIREMENTS OF ALL LOCAL, STATE, AND FEDERAL AUTHORITIES HAVING JURISDICTION, WHETHER OR NOT THE REQUIREMENTS ARE SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL VISIT ALL SITES AND FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO BID.
4. THE ENGINEERING DRAWINGS ARE DIAGRAMMATIC IN NATURE. WHILE A CONCERTED EFFORT HAS BEEN MADE TO PROVIDE SYSTEM ARRANGEMENTS AND LAYOUTS IN A NONCONFLICTIVE MANNER, THE FINAL RESPONSIBILITY FOR COORDINATION OF SYSTEM ROUTING, FABRICATION, AND INSTALLATION BETWEEN THE VARIOUS CONSTRUCTION TRADES SHALL BELONG TO THE INSTALLING CONTRACTORS. FABRICATION AND INSTALLATION OF THE VARIOUS ENGINEERING SYSTEMS SHALL NOT BEGIN UNTIL VERIFICATION OF ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DRAWINGS HAS TAKEN PLACE. NO ADDITIONAL COMPENSATION SHALL BE GRANTED FOR ANY CHANGES REQUIRED DUE TO INSTALLATION CONFLICTS BETWEEN TRADES. ALSO, THE "I WAS HERE FIRST" RULE DOES NOT QUALIFY AS COORDINATION.
5. WHEN A PROJECT MANUAL IS INCLUDED IN THE CONTRACT DOCUMENTS, THE WORK SPECIFIED HEREIN IS INTENDED TO COMPLIMENT THE RESPECTIVE DIVISION 15 SPECIFICATION SECTIONS AND GENERAL PROJECT REQUIREMENTS CONTAINED WITHIN THE PROJECT MANUAL. NEITHER THE PLANS NOR THE SPECIFICATIONS ALONE CONSTITUTE THE ENTIRE SCOPE OF WORK AND NEITHER SHALL BE USED EXCLUSIVELY AS AN INTERPRETATION OF THE SCOPE OF WORK CONTAINED IN THE CONTRACT. WHERE A CONFLICT EXISTS BETWEEN THE INFORMATION CONVEYED ON THE PLANS AND THAT STATED IN THE PROJECT MANUAL, THE CONTRACTOR SHALL REQUEST A CLARIFICATION IN WRITING. IN ALL CASES, UNTIL CLARIFICATION IS PROVIDED FROM THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
6. THE WORK SPECIFIED HEREIN SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, SUPPLIES AND SUPERVISION REQUIRED TO INSTALL AND PLACE IN OPERATION THE MECHANICAL SYSTEMS AND APPURTENANCES SPECIFIED HEREIN AND/OR INDICATED ON THE DRAWINGS OR REASONABLY IMPLIED AS NECESSARY FOR COMPLETION OF THE VARIOUS SYSTEMS. ALL WORK SHALL BE COMPLETED IN A NEAT, CLEAN, AND WORKMANLIKE MANNER IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS.
7. ALL WORK SPECIFIED HEREIN SHALL BE PERFORMED BY PROPERLY LICENSED, TRAINED, AND EXPERIENCED TRADESMEN. THE CONTRACTOR SHALL PROVIDE A FIELD SUPERVISOR WITH THE AUTHORITY AND EXPERIENCE REQUIRED TO INSTRUCT THE WORK, MAKE JOB DECISIONS, AND ACT ON BEHALF OF THE CONTRACTOR IN MATTERS PERTAINING TO THE CONTRACT DOCUMENTS.
8. THE CONTRACTOR SHALL REMOVE ALL RESPECTIVE CONSTRUCTION WASTE AND DEBRIS FROM THE SITE AND SHALL BE RESPONSIBLE FOR THE LAWFUL DISCARD OF SUCH WASTE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS. THE COMPLETED WORK AND THE ADJACENT AFFECTED AREAS SHALL BE THOROUGHLY CLEANED TO THE SATISFACTION ON THE OWNER, ARCHITECT, AND ENGINEER.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING, AND PAINTING REQUIRED BY THE RESPECTIVE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFACTORILY REPAIRING EXCESSIVE, UNNECESSARY PENETRATIONS OR OVERSIZED PENETRATIONS THROUGH CONSTRUCTION. IF THE ARCHITECT/ENGINEER DEEMS NECESSARY, ANY CONSTRUCTION DAMAGED FROM CUTTING OR PENETRATION ACTIVITIES SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER. THERE SHALL BE NO CUTTING OR PENETRATING OF CONSTRUCTION THAT WILL COMPROMISE THE STRUCTURAL INTEGRITY OF THE BUILDING SYSTEM. IF THE CONTRACTOR DEEMS IT NECESSARY TO ALTER, CUT, OR PENETRATE A STRUCTURAL MEMBER, EXPRESS PERMISSION SHALL BE GIVEN BY THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING. IT IS PERMISSIBLE FOR BEAMS TO BE PENETRATED WITH SMALL SCREWS WITHOUT PRIOR APPROVAL.
10. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS AS REQUIRED TO CAREFULLY COORDINATE THE REQUIRED MOUNTING HEIGHTS AND LOCATIONS OF ALL DIFFUSERS, REGISTERS, AND GRILLES RELATIVE THE VARIOUS CEILING AND WALL CONDITIONS/TYPES THROUGHOUT THE BUILDING.

B. FIRE/SMOKE DETECTION AND RATED OPENING PROTECTIVES:
1. SMOKE DETECTORS SHALL BE INSTALLED IN RETURN AIR SYSTEMS WITH A DESIGN CAPACITY OF 2,000 CFM OR GREATER. DUCT SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND SHALL BE CONNECTED TO A FIRE ALARM SYSTEM. ACTUATION OF THE DUCT SMOKE DETECTOR SHALL SHUT-DOWN THE AIR DISTRIBUTION SYSTEM AND ACTIVATE A VISIBLE AND AUDIBLE SUPERVISORY SIGNAL IN A NORMALLY ATTENDED LOCATION. IN OCCUPANCIES WHERE A FIRE ALARM SYSTEM IS NOT REQUIRED, ACTUATION OF THE DUCT SMOKE DETECTOR SHALL SHUT DOWN THE AIR DISTRIBUTION SYSTEM AND ACTIVATE A STAND-ALONE VISIBLE AND AUDIBLE SIGNAL IN AN APPROVED LOCATION. THE STAND-ALONE SIGNAL DEVICE SHALL BE LABELED "AIR DUCT DETECTOR TROUBLE". IN SYSTEMS THAT ARE INCAPABLE OF SPREADING SMOKE BEYOND THE ENCLOSING WALLS, FLOORS ND CEILINGS OF THE ROOM OR SPACE IN WHICH THE SMOKE IS GENERATED, SMOKE DETECTORS SHALL NOT BE REQUIRED.
2. DUCT SMOKE DETECTORS SHALL BE LOCATED AS FOLLOWS:
   (A) AIR HANDLING UNITS - LOCATE THE SMOKE DETECTOR IN THE RETURN AIR DUCT DOWNSTREAM OF THE LAST RETURN AIR BRANCH DUCT CONNECTION AND UPSTREAM OF ANY FRESH AIR DUCT CONNECTION, FILTERS, EXHAUST AIR CONNECTION, OR DECONTAMINATION EQUIPMENT AND APPLIANCES.
   (B) PACKAGED HVAC UNITS - LOCATE THE SMOKE DETECTOR EITHER IN THE RETURN AIR DUCT AS DESCRIBED ABOVE OR IN THE RETURN AIR SECTION OF THE UNIT CASING AS DIRECTED BY THE PACKAGED UNIT MANUFACTURER.
3. ALL PENETRATIONS THROUGH FIRE AND/OR SMOKE RATED CONSTRUCTION SHALL BE SEALED UTILIZING U.L. LISTED MATERIALS AND DESIGNS TO MAINTAIN THE RATING. ALL FIRE, SMOKE AND COMBINATION DAMPERS SHALL BE U.L. LISTED, APPROPRIATE FOR LISTED INSTALLATION TYPE, AND INSTALLED IN STRICT ACCORDANCE WITH THE DAMPER MANUFACTURER'S INSTRUCTIONS AND THE DAMPER'S LISTING. DUCT MOUNTED ACCESS DOORS SHALL BE PROVIDED AT ALL FIRE DAMPERS NOT LOCATED AT AIR DEVICES. ACCESS DOORS SHALL BE SIZED AS APPROPRIATE FOR FULL SERVICE ACCESS TO DAMPER FUSIBLE LINKS, MOTORIZED ACTUATORS, ETC.

C. ALL DUCT SIZES ARE METAL-METAL DIMENSIONS, EXPRESSED IN INCHES. DOUBLE-WALL SPIRAL DUCT SIZES (WHEN SHOWN) INDICATE THE INNER WALL DIAMETER.

D. ALL CHANGES IN DUCT DIRECTION 45-DEGREES OR GREATER SHALL BE FULL RADIUS TURNS WITH AN INSIDE RADIUS EQUAL TO THE DUCT WIDTH. IN RECTANGULAR DUCTWORK, WHERE SPACE CONSTRAINTS DO NOT PERMIT RADIUS TURNS, OR WHERE THE CONTRACT DOCUMENTS REFLECT OTHERWISE, MITERED ELBOWS WITH SINGLE THICKNESS TURNING VANES SHALL BE PROVIDED. RECTANGULAR 90'S WITH A RADIUS HEEL AND A MITERED THROAT ARE NOT ACCEPTABLE.

E. PROVIDE MINIMUM 3/4" GAP BENEATH THE DOOR FOR R.A. IN SPACES WITH 125 CFM S.A. OR LESS AND WHERE THERE IS NO DEDICATED R.A. DUCT OR TRANSFER DUCT.

F. ALL CEILING MOUNTED AIR DEVICES INSTALLED IN LAY-IN CEILINGS SHALL BE POSITIONED IN THE FULL GRID SPACE NEAREST TO THE LOCATION SHOWN ON THE PLANS.

G. ALL CONDENSATE DRAINS SERVING COOLING COILS SHALL BE TRAPPED AS RECOMMENDED BY THE COIL MANUFACTURER. INDIVIDUAL CONDENSATE DRAIN TRAPS AND LINES SHALL BE FULL SIZE OF CONNECTION TO COIL, BUT IN NO CASE SMALLER THAN 3/4".

H. PROVIDE ENGRAVED PLASTIC LAMINATE EQUIPMENT TAGS ON ALL HVAC UNITS. NOMENCLATURE SHALL BE PROPOSED BY HVAC CONTRACTOR AND APPROVED BY OWNER PRIOR TO FABRICATION.

I. HVAC CONTROLS:
1. THERMOSTAT LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. VERIFY ALL LOCATIONS WITH THE ARCHITECT/OWNER. IF THE FINAL LOCATIONS OF THE THERMOSTATS DIFFER FROM THOSE SHOWN ON THE PLANS, THE NEW LOCATIONS SHALL BE SUBMITTED TO THE MECHANICAL ENGINEER FOR APPROVAL. INSTALL WALL-MOUNTED THERMOSTATS AT 54" A.F.F. IN A HEAVY DUTY METAL LOCK BOX WITH KEYED LOCKING COVER.
2. THERMOSTATS AND TEMPERATURE SENSORS SHALL NOT BE MOUNTED ON EXTERIOR WALLS. WHEN MOUNTING OF THERMOSTATS OR TEMPERATURE SENSORS ON OUTSIDE WALLS IS UNAVOIDABLE, MINIMUM 1" THICK RIGID INSULATION SHALL BE PLACED BETWEEN THE WALL AND THE THERMOSTAT OR SENSOR BASE. THE RIGID INSULATION SHALL BE COVERED NEAT AND CLEAN WITH A PREFINISHED SHEET METAL COVER (COLOR TO BE SELECTED BY OWNER).
3. HVAC CONTROL CIRCUITS SHOWN ARE ONLY TO INDICATE CONNECTIVITY BETWEEN THE CONTROL DEVICES AND EQUIPMENT SERVED - NOT EXACT ROUTING. HVAC CONTROL WIRING SHALL BE MINIMUM 16 GAUGE MULTI-STRAND PLENUM-RATED WIRING. ALL WIRING LOCATED IN, ABOVE OR BEHIND INACCESSIBLE CONSTRUCTION SHALL BE INSTALLED IN 3/4" EMT CONDUIT. ALL WIRING SHALL BE ROUTED CONTINUOUS FROM THE CONTROL DEVICE TO THE CONTROLLER OR INTERFACE PANEL. SPLICE SHALL NOT BE PERMITTED. WIRING CONNECTIONS SHALL EITHER BE CRIMPED OR SOLDERED.
4. WHERE DIRECT DIGITAL CONTROL (DDC) SYSTEMS ARE SPECIFIED, THE CONTRACTOR SHALL SUBMIT CONTROL AND INTERLOCK DRAWINGS FOR APPROVAL. THE HVAC CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE DDC CONTROL SYSTEM COMPLETE AND OPERATIVE IN ITS ENTIRETY INCLUDING, BUT NOT LIMITED TO, CONDUIT, WIRING AND CONTROL DEVICES.
5. ALL DDC SYSTEM DEVICES, SENSORS, OPERATORS, CABINETS, ETC. SHALL RECEIVE AN ENGRAVED PLASTIC LAMINATE LABEL TO INDICATE FUNCTION AND CONTROL DIAGRAM IDENTIFICATION.
6. THE MECHANICAL CONTRACTOR SHALL PROVIDE TRAINING TO THE OWNER ON ALL HVAC CONTROL SYSTEMS. WHERE DDC SYSTEMS ARE SPECIFIED, THE CONTROLS CONTRACTOR SHALL PROVIDE THE OWNER WITH MINIMUM (2) DAYS TRAINING AND MINIMUM (1) YEAR OF ON-SITE TECHNICAL SUPPORT BY AN AUTHORIZED REPRESENTATIVE OF THE DDC SYSTEM MANUFACTURER.

J. PROJECT DOCUMENTATION:
1. THE CONTRACTOR SHALL MAINTAIN A CLEAN SET OF MECHANICAL AS-BUILT RECORD DRAWINGS SEPARATE FROM THE FIELD CONSTRUCTION SET. ALL CHANGES TO THE ORIGINAL MECHANICAL DESIGN SHALL BE NOTED ON THE AS-BUILT RECORD DRAWINGS IN A NEAT, CLEAN AND ORDERLY MANNER, AND IN RED INK OR PENCIL. AT PROJECT COMPLETION THESE DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO SUBMISSION TO THE OWNER.
2. THE CONTRACTOR SHALL PROVIDE (6) SETS OF SHOP DRAWINGS AND SUBMITTALS OF ALL SYSTEM COMPONENTS CONTAINED IN THE SCOPE OF WORK. SUBMITTALS AND SHOP DRAWINGS SHALL BE SUBMITTED IN BOUND FORM WITH TABS SEPARATING AND IDENTIFYING EACH RESPECTIVE MECHANICAL COMPONENT OR SYSTEM. MECHANICAL SUBMITTALS AND SHOP DRAWINGS SHALL NOT BE SUBMITTED PIECEMEAL.
3. THE CONTRACTOR SHALL EMPLOY THE SERVICES OF A THIRD-PARTY, NEBB CERTIFIED AIR TEST AND BALANCE CONTRACTOR. TAB REPORT SHALL INCLUDE SCHEDULED AND ACTUAL SYSTEM INFORMATION INCLUDING SYSTEM AIR FLOWS, INDIVIDUAL AIR DEVICE AIR FLOWS, ENTERING AND LEAVING STATIC PRESSURES, RUNNING VOLTAGE AND AMPERAGE, AND ENTERING AND LEAVING AIR TEMPERATURES ACROSS COILS/HEAT EXCHANGERS. AIR FLOWS SHALL BE BALANCED TO WITHIN +/- 5% OF SCHEDULED VALUES. (3) BOUND COPIES OF THE TAB REPORT SHALL BE SUBMITTED TO THE ARCHITECT.
4. START-UP SHALL BE PROVIDED BY THE INSTALLING CONTRACTOR IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S WRITTEN INSTRUCTIONS. THE MANUFACTURER'S PUBLISHED START-UP CHECKLIST SHALL BE COMPLETED FOR ALL NEW MECHANICAL EQUIPMENT. THE MANUFACTURER'S START-UP CHECKLIST SHALL BE COMPLETED BY THE MANUFACTURER'S AUTHORIZED TECHNICIAN (WHEN FACTORY START-UP IS SPECIFIED) OR THE CONTRACTOR'S START-UP TECHNICIAN AND SUBMITTED WITH THE AIR TEST AND BALANCE DOCUMENTATION. THE MANUFACTURER'S START-UP CHECKLIST SHALL BE SIGNED AND DATED BY THE START-UP TECHNICIAN, INCLUDING PRINTED NAME BELOW SIGNATURE AND AFFILIATION.
5. THE CONTRACTOR SHALL PROVIDE A WRITTEN ONE (1) YEAR WARRANTY TO KEEP ALL WORK EMBRACED IN THESE CONTRACT DOCUMENTS IN REPAIR AND PROPER WORKING ORDER, WITHOUT CHARGE, FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER.

HVAC MATERIAL SPECIFICATIONS

1. THE STANDARD OF QUALITY FOR ALL MECHANICAL EQUIPMENT PROVIDED SHALL BE AS ESTABLISHED BY THE BASIS OF DESIGN INDICATED FOR EACH PIECE OF EQUIPMENT. THE MATERIAL, MANUFACTURING, AND PERFORMANCE SPECIFICATIONS OF THE SPECIFIC MANUFACTURER AND MODEL NOTED FOR EACH PIECE OF EQUIPMENT SCHEDULED AND SPECIFIED HEREIN SHALL ESTABLISH THE MINIMUM ACCEPTABLE STANDARD OF QUALITY, PERFORMANCE, AND WORKMANSHIP. ALL EQUIPMENT SHALL BE PRODUCTS OF A MANUFACTURER REGULARLY ENGAGED IN THE MANUFACTURE OF COMMERCIAL EQUIPMENT WITH THE ABILITY TO PROVIDE PERFORMANCE DATA GENERATED BY ARI CERTIFIED SOFTWARE. ALTERNATE PRODUCTS SHALL MEET OR EXCEED THE BASIS OF DESIGN.

2. MECHANICAL PIPING:
   A. CONDENSATE DRAIN PIPING: ASTM D1785 SCH. 40 PVC PIPE AND ASTM D2665 FITTINGS -OR- ASTM B88, HARD DRAWN COPPER WITH ANSI B16.22 WROUGHT COPPER FITTINGS -OR- ASTM B306, TYPE DWV COPPER WITH ANSI B16.29 WROUGHT COPPER FITTINGS. JOIN COPPER PIPE WITH ASTM B32 LEAD FREE SOLDER, GRADE 95TA 95-5 TIN-ANTIMONY.

3. HVAC DUCTWORK CONSTRUCTION: ALL HVAC GALVANIZED DUCTWORK SHALL BE FABRICATED USING ASTM A653 COMMERCIAL GRADE LOCK FORMING G-90/G-60 MATERIALS. ALL HVAC DUCTWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS METAL AND FLEXIBLE" (2" w.c.). ALL LONGITUDINAL AND TRANSVERSE DUCT JOINTS SHALL BE SEALED UTILIZING LISTED AND LABELED UL 181-A OR UL 181-B TAPES AND MASTICS.

4. DUCT INSULATION: EXCEPT WHERE INDICATED OTHERWISE ON THE PLANS, DUCTWORK SHALL BE INSULATED AS FOLLOWS:
   A. S.A. AND R.A. DUCTS: 2" DUCT WRAP AS SPECIFIED HEREIN.
   B. O.A. AND E.A. DUCTS: 1" DUCT WRAP AS SPECIFIED HEREIN.
   C. INSULATION MATERIALS:
      (1) EXTERNAL DUCT INSULATION SHALL BE ASTM C 1290, TYPE 75, FLEXIBLE BLANKET, 0.75# DENSITY, KNAUF DUCT WRAP OR EQUAL.
      (2) INTERNAL DUCT LINER SHALL BE ASTM C 1071, TYPE I FLEXIBLE DUCT LINER, 1.5# DENSITY. KNAUF DUCT LINER E-M OR EQUAL.

5. HVAC DUCT ACCESSORIES:
   A. BRANCH DUCT TAKE-OFF FITTINGS:
      (1) RECTANGULAR-ROUND SUPPLY AIR DUCT TAKE-OFFS: EQUAL TO AIR-TITE MODEL HETDQ GALVANIZED HIGH-EFFICIENCY 45-DEGREE FITTING WITH NEOPRENE GASKET ON FLANGE, INTEGRAL DAMPER WITH LOCKING QUADRANT LEVER AND 2" STAND-OFF BRACKET.
      (2) RECTANGULAR-ROUND RETURN OR EXHAUST AIR DUCT TAKE-OFFS: EQUAL TO AIR-TITE MODEL CATDQ GALVANIZED FLAT FITTING WITH NEOPRENE GASKET ON FLANGE, INTEGRAL DAMPER WITH LOCKING QUADRANT LEVER AND 2" STAND-OFF BRACKET.
      (3) ROUND-ROUND SUPPLY AIR TAKE-OFFS: 45-DEGREE LATERAL TAKE-OFF.
   B. RECTANGULAR VOLUME DAMPERS: OPPOSED BLADE CONFIGURATION, 5-INCH DEEP 20 GAUGE GALVANIZED HAT CHANNEL FRAME, 16 GA. GALVANIZED STEEL BLADES, 1/2-INCH PLATED STEEL AXLES, OIL IMPREGNATED BRONZE BEARINGS, MANUAL HAND QUADRANT WITH STAND-OFF BRACKET, GREENHECK MBD-15 OR EQUAL.
   C. ROUND VOLUME DAMPERS: 6-INCH WIDE 20 GAUGE GALVANIZED STEEL FRAME, 20 GAUGE GALVANIZED STEEL BLADE, 3/8-INCH SQUARE PLATED STEEL AXLES TURNING IN ACETAL BEARINGS, MANUAL HAND QUADRANT WITH STAND-OFF BRACKET, GREENHECK MBDR-50 OR EQUAL.
   D. ROUND FLEXIBLE DUCTWORK: COATED FIBERGLASS WOVEN FABRIC OVER COATED HELICAL STEEL WIRE, FIBERGLASS SCRIM REINFORCED ALUMINIZED POLYESTER FILM OVER 2" 0.76# DENSITY FIBERGLASS INSULATION; U.L. 181, NFPA 90A, AND NFPA 90B COMPLIANT; THERMAFLEX M-KC OR EQUAL.

REVISIONS		
NO	DATE	DESCRIPTION

BARTLETT, ARCHITECTURE, Inc.
ARCHITECT ✦ PLANNER ✦ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #16146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

HVAC DETAILS AND NOTES
PROJECT #1611
OCT. 24, 2016

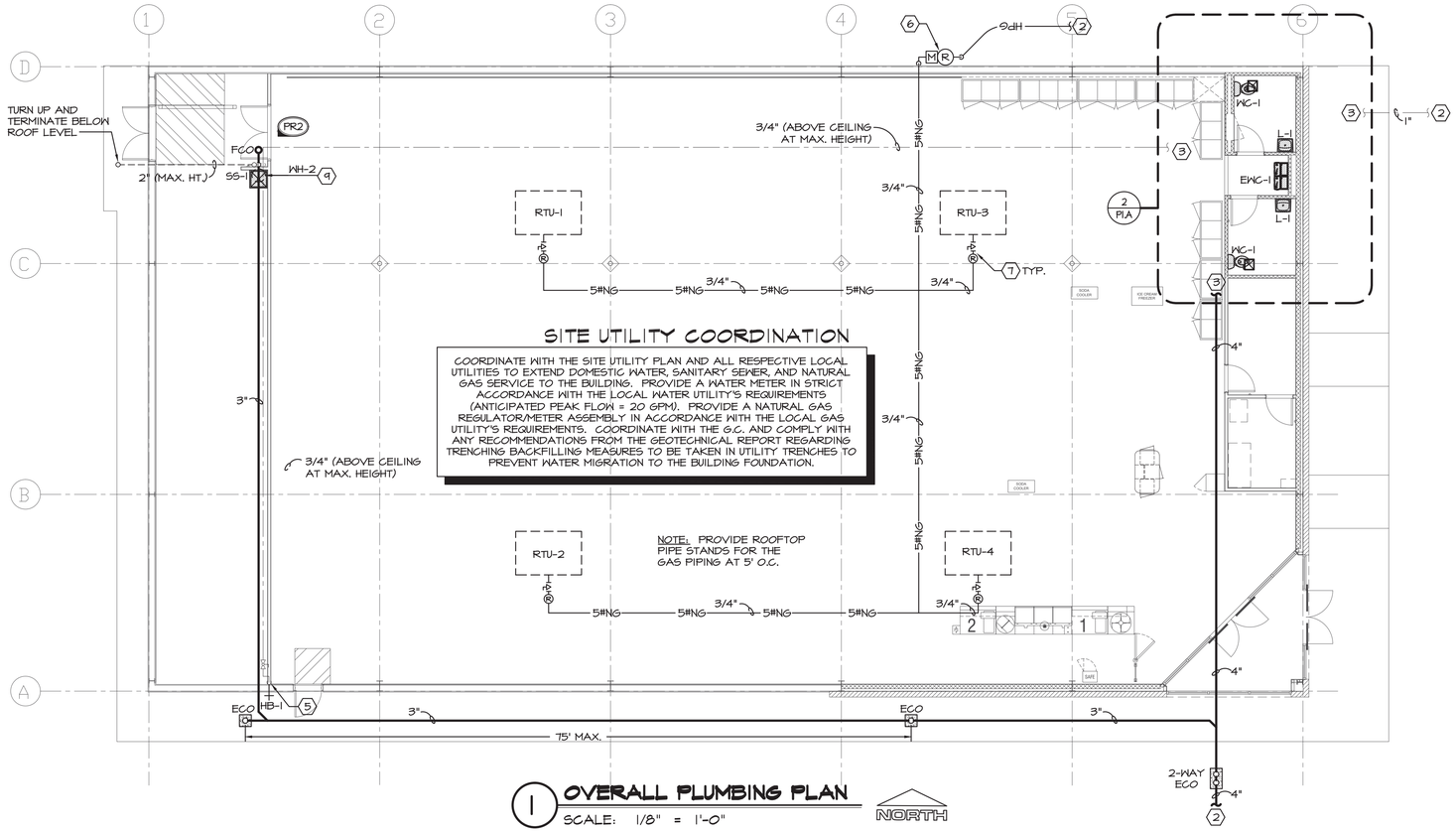
M2.A
SHEET 2 of 2

FIRE-RATED THROUGH PENETRATIONS

ALL PENETRATIONS THROUGH FIRE-RATED CONSTRUCTION SHALL BE SEALED UTILIZING U.L. LISTED MATERIALS AND DESIGNS TO MAINTAIN THE FIRE RATING. COORDINATE THE LOCATION OF ALL FIRE RATED CONSTRUCTION WITH THE ARCHITECTURAL PLANS.

ALT. HOT WATER HOSE BIBB

IF REQUIRED BY THE LOCAL JURISDICTIONAL AUTHORITY, THE HOSE BIBB CLOSEST TO THE GARBAGE CAN AREA SHALL BE SUPPLIED WITH HOT WATER. ALSO, THE WATER HEATER STORAGE CAPACITY SHALL BE INCREASED TO 30 GALLONS.



1 OVERALL PLUMBING PLAN

SCALE: 1/8" = 1'-0"

GENERAL PLUMBING NOTES

1. REFER TO SHEET P2.A FOR ALL "GENERAL PLUMBING NOTES" AND "PLUMBING MATERIAL SPECIFICATIONS".

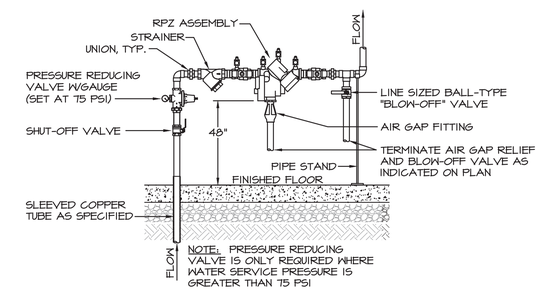
PLUMBING KEYED NOTES

1. PROVIDE A DOMESTIC WATER SHUT-OFF VALVE IN A CAST-IRON VALVE BOX WITH A CAST-IRON DROP COVER MARKED "WATER".
2. REFER TO THE SITE UTILITY PLAN FOR CONTINUATION.
3. REFER TO 2/P1.A FOR CONTINUATION.
4. RISE IN CHASE TO THE RPZ. RISE TO ABOVE THE CEILING DOWNSTREAM OF THE RPZ AND CONTINUE AS SHOWN. ROUTE RPZ AIR GAP RELIEF AND BLOW-OFF LINE TO THE EXTERIOR AND TERMINATE.
5. DROP IN WALL WITH A 3/4" COLD WATER LINE TO HOSE BIBB "HB-1" AT 24" A.F.G.
6. COORDINATE WITH THE LOCAL GAS UTILITY AND EXTEND GAS SERVICE TO A NEW REGULATOR/METER ASSEMBLY (HP6 TO 5#) AT THE BUILDING. RISE UP THE EXTERIOR WALL WITH A 3/4" 5 PSI NG LINE AND CONTINUE ON THE ROOF TO THE RTU'S AS SHOWN. THE TOTAL CONNECTED LOAD = 400 MBTUH. THE DISTANCE TO THE MOST REMOTE LOAD = 75'. PROVIDE GAS PIPING SUPPORTS AT 5' O.C.
7. PROVIDE A SECONDARY REGULATOR (5# TO OZ.), A LISTED GAS COCK AND 6" DIRT LEG AT THE CONNECTION TO THE HVAC UNITS.
8. REFER TO 1/P1.A FOR CONTINUATION.
9. INSTALL WATER HEATER "WH-2" OVER THE SERVICE SINK AT MAX. HEIGHT.
10. INSTALL WATER HEATER "WH-1" ABOVE THE CEILING OVER THE ELECTRIC WATER COOLER. SEE PLUMBING RISERS FOR HOT WATER DISTRIBUTION.

PLUMBING LEGEND

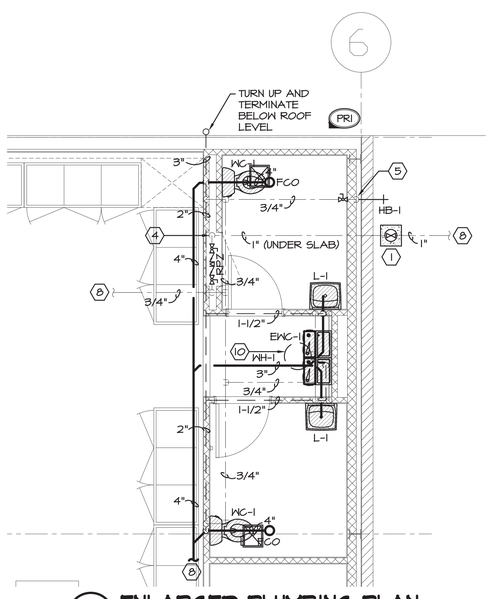
(NOT ALL MAY APPLY)

	COLD WATER	A.F.F.	ABOVE FINISHED FLOOR
	HOT WATER	A.F.G.	ABOVE FINISHED GRADE
	SANITARY SEWER	CLG	CEILING
	DRAIN/WASTE VENT	EQUIP.	EQUIPMENT
	MED/HIGH PRESS. NAT. GAS	EXIST.	EXISTING
		FT.	FEET
FCO	FLOOR CLEANOUT	GPM	GALLONS PER MINUTE
ECO	EXTERIOR CLEANOUT	HP	HORSEPOWER
		MAX.	MAXIMUM
2-WAY ECO	2-WAY EXTERIOR CLEANOUT	MBH	1000 BTUH'S
WCO	WALL CLEANOUT	MCA	MINIMUM CIRCUIT AMPACITY
	UNION	NPSH	NET POSITIVE SUCTION HEAD
		RECIRC.	RECIRCULATION
	ELBOW UP OR DOWN	RPM	REVOLUTIONS PER MINUTE
		RPZ	REDUCED PRESSURE ZONE
	TEE UP OR DOWN	SGL.	SINGLE
		TOT.	TOTAL
	BALL VALVE	VEL.	VELOCITY
	GATE VALVE	W.C.	WATER COLUMN
	ELBOW AND TEE	W.W.F.	WELDED WIRE FABRIC



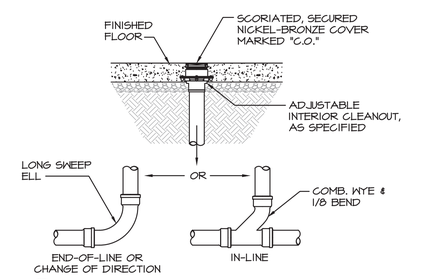
7 RPZ DETAIL

SCALE: NONE



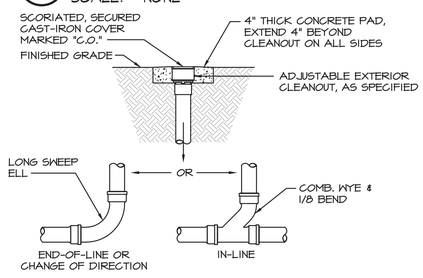
2 ENLARGED PLUMBING PLAN

SCALE: 1/4" = 1'-0"



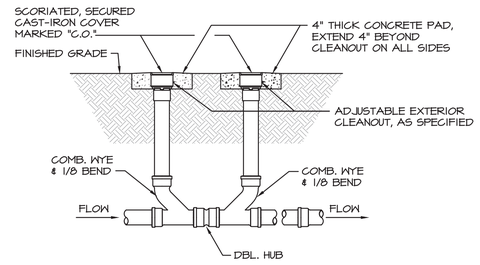
3 FLOOR CLEANOUT DETAIL

SCALE: NONE



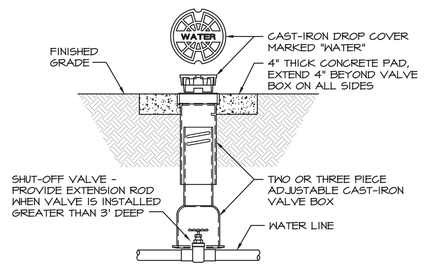
4 EXTERIOR CLEANOUT DETAIL

SCALE: NONE



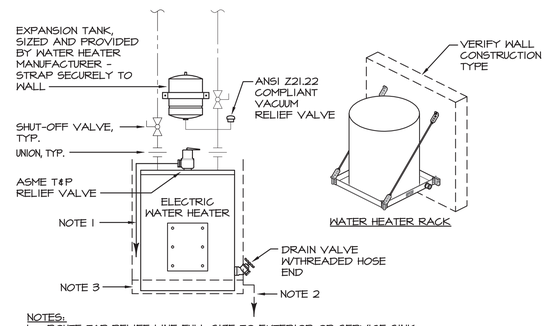
5 2-WAY EXTERIOR CLEANOUT DETAIL

SCALE: NONE



6 WATER SHUT-OFF VALVE DETAIL

SCALE: NONE



NOTES:
1. ROUTE T&P RELIEF LINE FULL SIZE TO EXTERIOR OR SERVICE SINK.
2. ROUTE 1-1/4" DRAIN PAN LINE TO EXTERIOR, SERVICE SINK, OR OTHER DRAIN AS INDICATED ON THE PLANS. DRAIN PAN LINE AND T&P LINE SHALL NOT BE COMBINED.
3. PROVIDE A PRE-ENGINEERED COMBINATION RACK AND DRAIN PAN SYSTEM EQUAL TO A HOLDRITE #50-SWHP-WM COMPLETE WITH 4" DEEP WATERTIGHT DRAIN PAN, 1-1/4" DRDRAIN FITTING, AND ALL APPURTENANCES REQUIRED FOR WALL MOUNTING. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR THE WALL CONSTRUCTION TO WHICH IT IS SECURED.

8 WATER HEATER DETAIL

SCALE: NONE

REVISIONS

NO	DATE	DESCRIPTION

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER JAMIE L. GUNN 12355 01-31-17

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DOLLAR GENERAL (PLAN "E") (STORE #18146)
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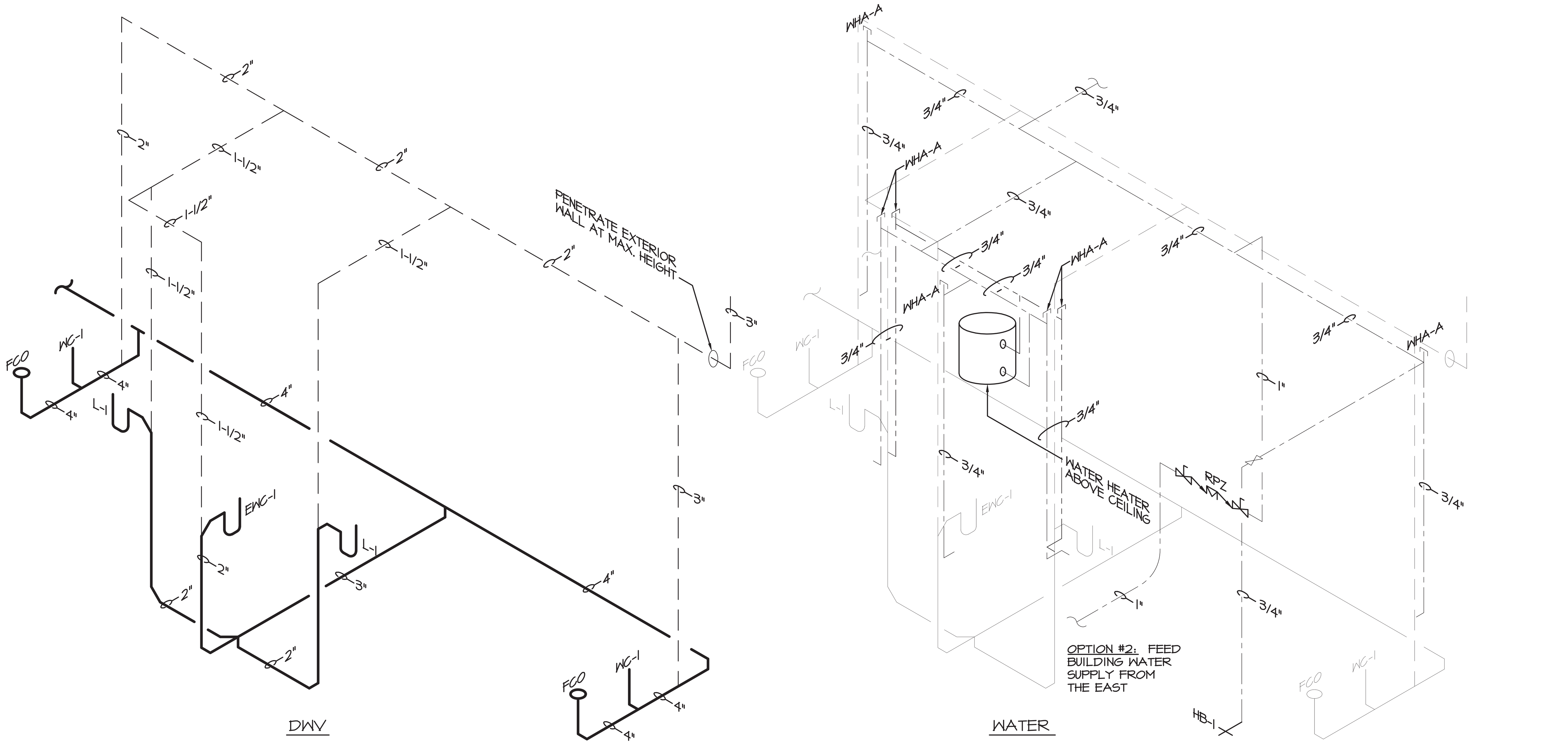
PLUMBING PLANS AND DETAILS
PROJECT #1611
OCT. 24, 2016

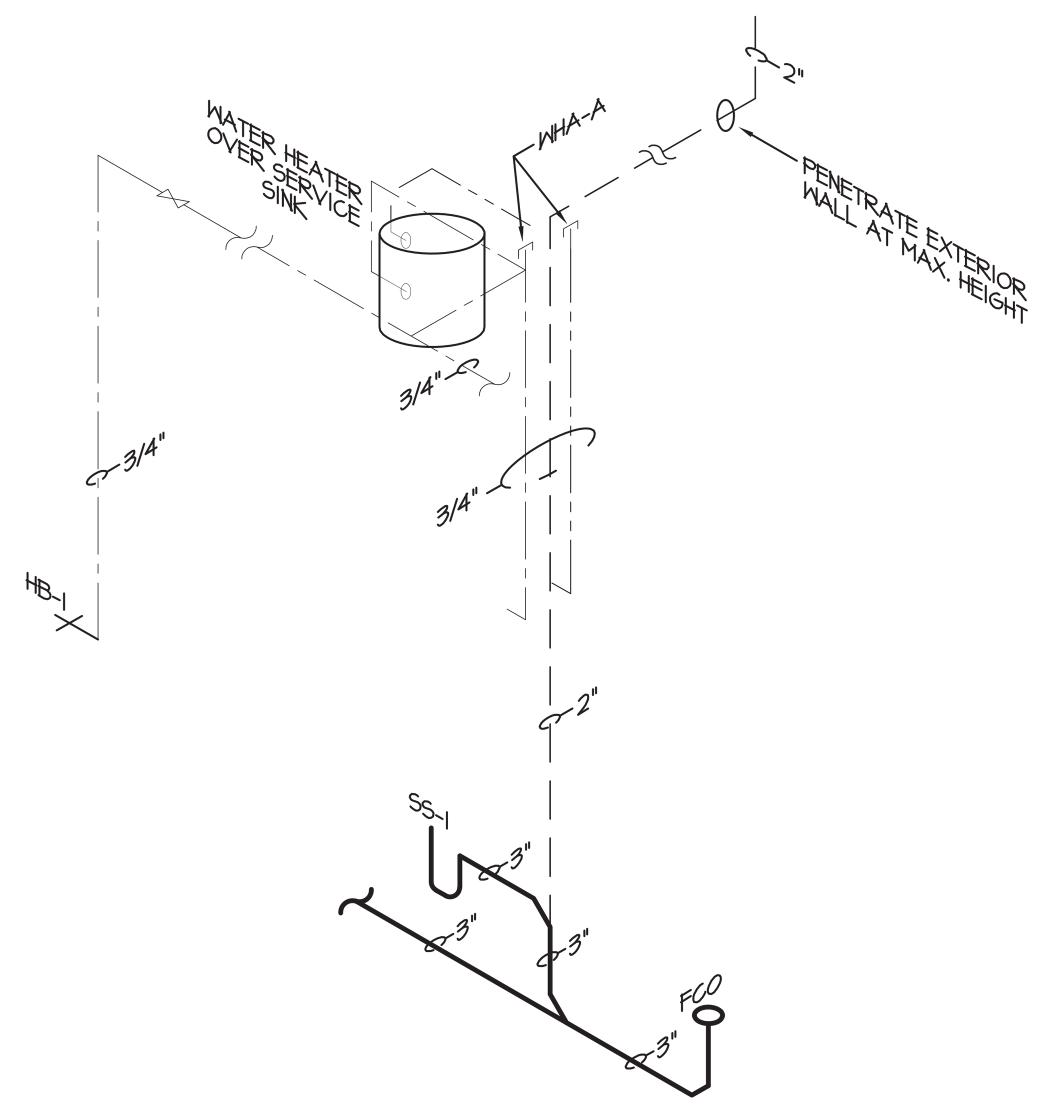
P1.A
SHEET 1 of 2



PR1 PLUMBING RISERS

SCALE: NONE

PLUMBING FIXTURE SCHEDULE							
MARK/ DESCRIPTION	MANUFACTURER/MODEL		SERVICES (INCHES)				DESCRIPTION
			WASTE	VENT	CW	HW	
WC-1 WATER CLOSET FLUSH TANK ADA COMPLIANT	BOWL/TANK SEAT STOP	KOHLER #K-3481 KOHLER #K-4670-C KOHLER #K-7637	4	2	1/2	--	WHITE VITREOUS CHINA, ELONGATED BOWL, 1.6 GAL FLUSH, 12" ROUGH-IN, SOLID PLASTIC OPEN FRONT WHITE SEAT, ANGLE SUPPLY W/ STOP, FLOOR SEAL, BOLT CAPS, ADA COMPLIANT WITH SEAT BETWEEN 17" MIN. AND 19" MAX. ABOVE FINISHED FLOOR.
L-1 LAVATORY VITREOUS CHINA WALL HUNG ADA COMPLIANT	BASIN FAUCET STOPS GRID STRAINER TRAP CARRIER INSULATION	KOHLER #K-1729 T&S BRASS #B-0871 BRASSCRAFT #OCR1912AZ C BRASSCRAFT #0701 BRASSCRAFT #0010 ZURN #Z1231 SERIES TRUEBRO LAV-GUARD 2	2	1-1/2	1/2	1/2	WHITE VITREOUS CHINA, WALL MOUNTED 20"x18" BASIN W/FRONT OVERFLOW, COMMERCIAL CHROME-PLATED SOLID BRASS 4" CENTER FAUCET, INDEXED LEVER HANDLES, GRID STRAINER W/TAILPIECE, CAST BRASS P-TRAP, ANGLE SUPPLIES W/STOPS, CARRIER, INSULATION ON DRAIN AND SUPPLIES. MOUNT AT 34" A.F.F. TO RIM.
SS-1 SERVICE SINK FLOOR BASIN	BASIN FAUCET BUMPER GUARDS MOP HANGER HOSE/CLAMPS WALL GUARD	MUSTEE #63M MUSTEE #63.600A MUSTEE #63.401 MUSTEE #63.600 MUSTEE #65.700 MUSTEE #63.2436	3	1-1/2	3/4	3/4	WHITE MOLDED FIBERGLASS FLOOR BASIN, 24"x24"x10" DEEP BASIN, REMOVABLE CHROME FLAT STRAINER, WALL FAUCET W/VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK, AND THREADED HOSE END, HOSE AND HOSE BRACKET, 3-CLAMP MOP HANGER, BUMPER GUARDS, AND STAINLESS STEEL WALL GUARDS.
EWC-1 ELECTRIC WATER COOLER	WATER COOLER STOPS TRAP CARRIER	OASIS #P8ACSL BRASSCRAFT #OCR1912AZ C BRASSCRAFT #0010 ZURN #Z1225 SERIES	2	1-1/2	3/4	--	ELECTRIC WATER COOLER, BARRIER FREE, SPLIT LEVEL, 8.0 GPH OF 50 DEG F WATER AT 90 DEG F AMBIENT AND 80 DEG F INLET. MOUNT WITH (1) SPOUT AT 36" A.F.F. AND THE OTHER SPOUT AT 40" A.F.F.
ECO EXTERIOR CLEANOUT	ZURN #Z1400-BP-HD		SEE PLAN	--	--	--	CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, BRONZE PLUG, AND ROUND SCORIATED AND SECURED CAST-IRON COVER. SEE PLUMBING PLAN FOR SEWER LINE CONNECTION SIZES.
FCO FLOOR CLEANOUT	ZURN #Z1400-BP		SEE PLAN	--	--	--	CAST IRON CLEANOUT WITH THREADED ADJUSTABLE HOUSING, FLANGED FERRULE AND ROUND SECURED NICKEL BRONZE TOP. SEE PLUMBING PLAN FOR SEWER LINE CONNECTION SIZES.
WHA WATER HAMMER ARRESTOR	WADE SHOKSTOP		--	--	SEE PLAN	--	PISTON TYPE, TYPE L COPPER CASING, AIR CHAMBER SEALED W/(2) BUNA-N RINGS AND POLY-PISTON - OR - BELLOWS TYPE, NITROGEN PRECHARGED, STAINLESS STEEL BELLOWS AND STAINLESS STEEL CASING. SEE PLANS FOR PDI RATING OF INDIVIDUAL ARRESTORS
RPZ REDUCED PRESSURE ZONE BACKFLOW PREVENTER	WATTS #909-NRS-S		--	--	2-1/2	--	USCFCCCHR AND ASSE 1013 APPROVED, U.L. LISTED CONSISTING OF (2) INDEPENDENTLY OPERATING CHECK VALVES WITH INTERMEDIATE RELIEF VALVE, (4) INTEGRAL TEST COCKS, INLET AND OUTLET NON-RISING STEM GATE VALVES, INLET Y-STRAINER, AND AIR GAP FITTING.
WH-1,2 WATER HEATER ELEC. TANK TYPE POINT OF USE	RHEEM EGSP-10 17 GPH RECOVERY @ 60 DEG F TEMP. RISE		--	--	3/4	3/4	TANK TYPE WATER HEATER, 10 GALLON STORAGE, ELECTRIC, 2.5 KW, 240-1-60, 10.4 AMPS, ASME T&P VALVE, VACUUM RELIEF VALVE, THERMAL EXPANSION TANK. SEE "WATER HEATER DETAIL".



PR2 PLUMBING RISER

SCALE: NONE

GENERAL PLUMBING NOTES

1. GENERAL REQUIREMENTS:
   - A. UNLESS SPECIFICALLY NOTED OTHERWISE, THE TERM "CONTRACTOR" INDICATED ON ANY GIVEN DIVISION 15 PLAN SHEET SHALL REFER TO THE CONTRACTOR RESPONSIBLE FOR THE WORK OF THE SPECIFIC TRADE NOTED ON THAT PLAN SHEET.
   - B. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ARKANSAS PLUMBING CODE, THE ARKANSAS FUEL GAS CODE, THE REQUIREMENTS OF ALL LOCAL UTILITIES AND THE REQUIREMENTS OF ALL LOCAL AUTHORITIES HAVING JURISDICTION, WHETHER OR NOT THE REQUIREMENTS ARE SPECIFICALLY INDICATED ON THE CONTRACT DOCUMENTS.
   - C. THE ENGINEERING DRAWINGS ARE DIAGRAMMATIC IN NATURE. WHILE A CONCERTED EFFORT HAS BEEN MADE TO PROVIDE SYSTEM ARRANGEMENTS AND LAYOUTS IN A NONCONFLICTIVE MANNER, THE FINAL RESPONSIBILITY FOR COORDINATION OF SYSTEM ROUTING, FABRICATION, AND INSTALLATION BETWEEN THE VARIOUS CONSTRUCTION TRADES SHALL BELONG TO THE INSTALLING CONTRACTORS. FABRICATION AND INSTALLATION OF THE VARIOUS ENGINEERING SYSTEMS SHALL NOT BEGIN UNTIL VERIFICATION OF ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DRAWINGS HAS TAKEN PLACE. NO ADDITIONAL COMPENSATION SHALL BE GRANTED FOR ANY CHANGES REQUIRED DUE TO INSTALLATION CONFLICTS BETWEEN TRADES. ALSO, THE "I WAS HERE FIRST" RULE DOES NOT QUALIFY AS COORDINATION.
   - D. THE WORK SPECIFIED HEREIN SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, SUPPLIES AND SUPERVISION REQUIRED TO INSTALL AND PLACE IN OPERATION THE MECHANICAL SYSTEMS AND APPURTENANCES SPECIFIED HEREIN AND/OR INDICATED ON THE DRAWINGS OR REASONABLY IMPLIED AS NECESSARY FOR COMPLETION OF THE VARIOUS SYSTEMS. ALL WORK SHALL BE COMPLETED IN A NEAT AND CLEAN MANNER IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS.
   - E. ALL WORK SPECIFIED HEREIN SHALL BE PERFORMED BY PROPERLY LICENSED, TRAINED, AND EXPERIENCED TRADESMEN. THE CONTRACTOR SHALL PROVIDE A FIELD SUPERVISOR WITH THE AUTHORITY AND EXPERIENCE REQUIRED TO INSTRUCT THE WORK, MAKE JOB DECISIONS, AND ACT ON BEHALF OF THE CONTRACTOR IN MATTERS PERTAINING TO THE CONTRACT DOCUMENTS.
   - F. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS PRIOR TO BID.
   - G. THE CONTRACTOR SHALL REMOVE ALL RESPECTIVE CONSTRUCTION WASTE AND DEBRIS FROM THE SITE AND SHALL BE RESPONSIBLE FOR THE LAWFUL DISCARD OF SUCH WASTE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS. THE COMPLETED WORK AND THE ADJACENT AFFECTED AREAS SHALL BE THOROUGHLY CLEANED TO THE SATISFACTION ON THE OWNER, ARCHITECT, AND ENGINEER.
   - H. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING, PATCHING, AND PAINTING REQUIRED BY THE RESPECTIVE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SATISFACTORILY REPAIRING EXCESSIVE, UNNECESSARY PENETRATIONS OR OVERSIZED PENETRATIONS THROUGH CONSTRUCTION. IF THE ARCHITECT/ENGINEER DEEMS NECESSARY, ANY CONSTRUCTION DAMAGED FROM CUTTING OR PENETRATION ACTIVITIES SHALL BE REMOVED AND REPLACED AT NO ADDITIONAL COST TO THE OWNER. THERE SHALL BE NO CUTTING OR PENETRATING OF CONSTRUCTION THAT WILL COMPROMISE THE STRUCTURAL INTEGRITY OF THE BUILDING SYSTEM. IF THE CONTRACTOR DEEMS IT NECESSARY TO ALTER, CUT, OR PENETRATE A STRUCTURAL MEMBER, EXPRESS PERMISSION SHALL BE GIVEN BY THE STRUCTURAL ENGINEER PRIOR TO PROCEEDING. IT IS PERMISSIBLE FOR BEAMS TO BE PENETRATED WITH SMALL SCREWS WITHOUT PRIOR APPROVAL.
2. WALL PENETRATIONS:
   - A. STAINLESS STEEL PIPE ESCUTCHEONS SHALL BE PROVIDED AT ALL INTERIOR, EXPOSED PIPE PENETRATIONS THROUGH WALLS. ESCUTCHEONS SHALL BE SECURED TIGHT TO WALL SURFACES.
   - B. ALL PIPING PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SLEEVED. THE INTERSTITIAL SPACE BETWEEN THE SLEEVE AND THE PIPE SHALL BE CAULKED/SEALED WEATHERTIGHT. STAINLESS STEEL ESCUTCHEONS SHALL BE PROVIDE ON BOTH SIDES OF THE SLEEVE FOR A NEAT AND CLEAN FINISH.
   - C. ALL PENETRATIONS THROUGH FIRE/SMOKE RATED CONSTRUCTION SHAL BE SEALED UTILIZING U.L. LISTED MATERIALS AND DESIGNS TO MAINTAIN FIRE-RATING. U.L. LISTED DESIGNS FOR EACH PENETRATION TYPE UTILIZED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE ARCHTIECT AND ENGINEER FOR APPROVAL.
3. FUEL-GAS PIPING:
   - A. ALL UNDERGROUND POLYETHYLENE FUEL GAS PIPING SHALL RECEIVE TRACER WIRE.
   - B. PROVIDE A GAS COCK AND A MINIMUM 6" DIRT LEG AT THE CONNECTIONS TO ALL FUEL-FIRED EQUIPMENT.
   - C. ABOVE GRADE EXTERIOR GAS PIPING SHALL BE SUPPORTED MINIMUM 3-1/2" ABOVE ALL HORIZONTAL FINISHED SURFACES INCLUDING, BUT NOT LIMITED TO, MECHANICAL PADS AND ROOFS. PIPE SUPPORTS SHALL BE PERMANENT AND SHALL SECURE PIPING IN PLACE IN A RIGID MANNER.
4. DUE TO THE SMALL SCALE OF THE PLANS, IT IS NOT ALWAYS POSSIBLE TO INCLUDE ALL PLUMBING LINE SIZES ON THE PLANS. REFER TO THE PLUMBING RISERS, DETAILS AND NOTES FOR ALL LINE SIZES NOT INDICATED ON THE PLUMBING PLANS.
5. THE CONTRACTOR SHALL COORDINATE AS REQUIRED TO ENSURE NO WATER LINES PASS OVER ELECTRICAL EQUIPMENT INCLUDING, BUT NOT LIMITED TO, POWER PANELS, FIRE ALARM CONTROL PANELS, TRANSFORMERS, AND PHONE/DATA BOARDS.
6. PROVIDE AN ACCESS DOOR FOR ALL VALVES INSTALLED BEHIND WALLS OR IN OTHER INACCESSIBLE CONSTRUCTION. ACCESS DOORS EXPOSED TO VIEW SHALL BE PAINTED TO MATCH THE ADJACENT SURFACE.
7. ALL PIPING SYSTEMS SHALL BE PROTECTED AGAINST DISSIMILAR METAL GALVANIC CORROSION BY SEPARATION, INSULATION, OR ENGINEERED CONNECTIONS SUCH AS DIELECTRIC UNIONS.
8. PIPE INSULATION SHALL BE CONTINUOUS AND UNBROKEN THROUGH ALL HANGERS, SUPPORTS, WALL PENETRATIONS, ETC.
9. WHERE EXISTING PAVEMENT, SLABS, WALLS, CEILINGS, OR ANY OTHER EXISTING CONSTRUCTION IS SELECTIVELY DEMOLISHED TO INSTALL NEW PLUMBING SERVICES, ALL DEMOLITION, INCLUDING BUT NOT LIMITED TO SAWCUT, SHALL BE PERFORMED IN A NEAT AND CLEAN MANNER. THE EXTENT OF ANY DEMOLITION INDICATED ON THE PLANS IS APPROXIMATE. THE EXACT EXTENT OF THE DEMOLITION REQUIRED SHALL BE DETERMINED BY THE CONTRACTOR. ALL EXISTING, SELECTIVELY DEMOLISHED FINISHES SHALL BE PATCHED TO MATCH EXISTING.
10. PROVIDE SHUT-OFF VALVE ON ALL WATER BRANCH LINES SERVING INDIVIDUAL FIXTURES. VALVES SHALL BE INSTALLED IN AN ACCESSIBLE LOCATION.
11. PROJECT DOCUMENTATION:
    - A. THE CONTRACTOR SHALL PROVIDE (6) SETS OF SHOP DRAWINGS AND SUBMITTALS OF ALL SYSTEM COMPONENTS CONTAINED IN THE SCOPE OF WORK. SUBMITTALS AND SHOP DRAWINGS SHALL BE SUBMITTED IN BOUND FORM WITH TABS SEPARATING AND IDENTIFYING EACH RESPECTIVE MECHANICAL COMPONENT OR SYSTEM. MECHANICAL SUBMITTALS AND SHOP DRAWINGS SHALL NOT BE SUBMITTED PIECEMEAL.
    - B. THE CONTRACTOR SHALL PROVIDE A WRITTEN ONE (1) YEAR WARRANTY TO KEEP ALL WORK EMBRACED IN THESE CONTRACT DOCUMENTS IN REPAIR AND PROPER WORKING ORDER, WITHOUT CHARGE, FOR A PERIOD OF ONE (1) YEAR FROM DATE OF FINAL ACCEPTANCE OF THE WORK BY THE OWNER.
12. PLUMBING SYSTEMS TESTING:
    - A. POTABLE WATER PIPING TEST THE WATER PIPING SYSTEM SHALL BE HYDROSTATICALLY TESTED AT 100 PSI FOR A PERIOD OF NOT LESS THAN EIGHT (8) HOURS WITH NO DISCERNIBLE PRESSURE LOSS.
    - B. SANITARY BUILDING DRAIN TEST: THE SANITARY BUILDING DRAIN SHALL BE HYDROSTATICALLY TESTED AT 5 PSI FOR ONE HOUR WITH NO DISCERNIBLE PRESSURE LOSS.
    - C. NATURAL GAS PIPING TEST: ALL GAS PIPING SHALL BE TESTED AT TWICE THE SYSTEM OPERATING PRESSURE OR 150 PSI, WHICHEVER IS GREATER, FOR A CONTINUOUS PERIOD OF NOT LESS THAN EIGHT (8) HOURS WITH DRY COMPRESSED AIR OR NITROGEN WITH NO LEAKS OR DISCERNIBLE PRESSURE LOSS.
13. POTABLE WATER SYSTEM CLEANING:
    - A. PROVIDE WATER DISINFECTION SAMPLING AND TESTING IN ACCORDANCE WITH THE REQUIREMENTS OF THE ARKANSAS DEPARTMENT OF HEALTH.
    - B. THE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED IN ONE OF THE FOLLOWING TWO WAYS:
      - (1) THE SYSTEM SHALL BE FILLED WITH A SOLUTION CONTAINING 50 PARTS PER MILLION OF AVAILABLE CHLORINE. THE SOLUTION SHALL BE ALLOWED TO STAND TWENTY-FOUR (24) HOURS BEFORE FLUSHING AND RETURNING TO SERVICE.
      - (2) THE SYSTEM SHALL BE FILLED WITH A SOLUTION CONTAINING 200 PARTS PER MILLION OF AVAILABLE CHLORINE. THE SOLUTION SHALL BE ALLOWED TO STAND THREE (3) HOURS BEFORE FLUSHING AND RETURNING TO SERVICE.
    - C. DURING STERILIZATION OPERATE ALL VALVES, FAUCETS, ETC., SO THAT ALL PORTIONS OF THE SYSTEM ARE REACHED. FLUSH SYSTEM WITH CLEAR CITY WATER UNTIL CONCENTRATION DROPS TO 0.5 PPM. OBTAIN BACTERIOLOGICAL CERTIFICATE FROM THE ARKANSAS DEPARTMENT OF HEALTH OR AN AUTHORIZED REPRESENTATIVE FOR WATER SAMPLE AND SUBMIT WITH FINAL DOCUMENTS AT COMPLETION.

PLUMBING MATERIAL SPECIFICATIONS

1. THE STANDARD OF QUALITY FOR ALL PLUMBING FIXTURES PROVIDED SHALL BE AS ESTABLISHED BY THE BASIS OF DESIGN INDICATED FOR EACH FIXTURE. THE MATERIAL, MANUFACTURING, AND PERFORMANCE SPECIFICATIONS OF THE SPECIFIC MANUFACTURER AND MODEL NOTED FOR EACH FIXTURE SCHEDULED SHALL ESTABLISH THE MINIMUM ACCEPTABLE STANDARD OF QUALITY, PERFORMANCE, AND WORKMANSHIP. ALTERNATE PRODUCTS SHALL MEET OR EXCEED THE BASIS OF DESIGN.
2. DOMESTIC COLD AND HOT WATER PIPING:
   - A. BELOW SLAB: ASTM B88 TYPE "K" ANNEALED WATER TUBE WITH ANSI B16.22 WROUGHT COPPER FITTINGS. PROVIDE ASTM B32 LEAD FREE SOLDER, GRADE 95TA, 95-5 TIN-ANTIMONY. PROVIDE CONTINUOUS POLYETHYLENE OR PVC SLEEVE, BLUE FOR COLD WATER SERVICE AND RED FOR HOT WATER SERVICE.
   - B. ABOVE SLAB: ASTM B88 TYPE "L" HARD COPPER TUBE WITH ANSI B16.22 WROUGHT COPPER FITTINGS. PROVIDE ASTM B32 LEAD FREE SOLDER, GRADE 95TA, 95-5 TIN-ANTIMONY.
3. PIPING INSULATION:
   - A. HOT AND COLD WATER PIPING ABOVE GRADE: MINIMUM 1" THICK ASTM C547, TYPE I, RIGID, MOLDED FIBERGLASS INSULATION WITH FACTORY APPLIED FIBER REINFORCED KRAFT-PAPER VAPOR BARRIER. INSULATION SHALL BE EQUAL TO KNAUF 1000 OR JOHNS MANSVILLE.
   - B. HOT WATER PIPING BELOW GRADE: MINIMUM 3/4" THICK ASTM C534, TYPE I ARMACELL AP ARMAFLEX FLEXIBLE CELLULAR INSULATION.
4. SANITARY WASTE AND VENT PIPING AND FITTINGS: HUB AND SPIGOT ASTM A74 SERVICE WEIGHT CAST IRON -OR- ASTM D3034 SDR 35 PVC PIPE AND ASTM D2855 FITTINGS -OR- ASTM D1785 SCH. 40 PVC PIPE AND ASTM D2665 FITTINGS.
5. NATURAL GAS PIPING AND ACCESSORIES:
   - A. BELOW GRADE: ASTM D2513 FUSION WELDED POLYETHYLENE, DR-11, LISTED AND LABELED "GAS".
   - B. ABOVE GRADE: ASTM A53 STEEL, SCHEDULE 40.
   - C. ACCESSORIES:
     - (1) EQUIPMENT SHUT-OFF VALVES SHALL BE CSA/AGA APPROVED BRASS BODY PLUG VALVES.
     - (2) ANODELESS RISERS SHALL BE EQUAL TO CENTRAL PLASTICS COMPANY OR WILLETT MANUFACTURERS PRODUCTS SHALL BE PROVIDED FOR TRANSITIONS FROM BELOW TO ABOVE GRADE NATURAL GAS SERVICE.
   - D. PIPE COATING: PROVIDES (2) COATS OF EPOXY PAINT ON ALL ABOVE GRADE NATURAL GAS PIPING ON THE BUILDING EXTERIOR. COLOR SHALL BE YELLOW UNLESS OTHERWISE STATED BY THE OWNER AND ARCHITECT.
6. TRAP SEAL PROTECTION: ALL FLOOR DRAINS SHALL HAVE ELASTOMERIC SELF-CLOSING TRAP GUARD PRODUCT EQUAL TO PROSET SYSTEMS TRAP GUARD.

REVISIONS		
NO	DATE	DESCRIPTION

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER NO. 12375 JAMIE L. GUIDRY 10.24.16

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ⊕ PLANNER ⊕ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

PLUMBING RISERS AND NOTES
PROJECT #1611
OCT. 24, 2016

P2.A
SHEET 2 of 2

SECTION 00000– GENERAL REQUIREMENTS
1.0 OMITTED
2.0 OMITTED
3.0 OMITTED
4.0 OMITTED
5.0 PROJECT AGREEMENT FORM
5.01 Forms used for this project; by the American Institute of Architect, 1735 New York Avenue N. W., Washington, D.C. 2006, are AIA documents:
5.02 FORM OF AGREEMENT
A. "The Standard Form of Agreement between Owner and Contractor" for Construction, AIA Document A101 & A201, current edition is to be the form of agreement between Owner and Contractor.
B. In the event of inconsistence in contract documents:
1. Agreement prevails over A.I.A. General Conditions and Supplementary Conditions.
2. Supplementary Conditions prevail over General Conditions.
END OF SECTION 5.0
6.0 OMITTED
7.0 GENERAL AND SUPPLEMENTARY CONDITIONS
7.01 GENERAL
The "General Conditions of the Contract for Construction," A.I.A. Document A201, 1997.
7.02 SUPPLEMENTARY CONDITIONS
Add Clause 1.2.1.1. to Subparagraph 1.2.1:
1.2.1.1 1. The Agreement
2. Addenda
3. The Supplementary Conditions
4. The General Conditions
5. Division 1
6. Drawings and Division 2–16 of the Spec=s.
In the case of conflicts or discrepancies between Drawings and Division 2–16 of the Spec=s. Or within either Document not clarified by Addendum, the Architect will determine which takes precedence in accordance with Subparagraph 4.2.11.
Add the following Clauses 4.3.7.3 and 4.3.7.4 to Subparagraph 4.3.7:
4.3.7.3 Claims for increase in the Contract time shall set forth in detail the circumstances that form the basis for the Claim, the date upon which each cause of delay ceased to affect the progress of the work and the number of days= increase in the Contract time claimed as a consequence of each such cause of delay. The Contractor shall provide such supporting construction schedule indicating all the activities affected by the circumstances forming the basis of the claim.
4.3.7.4 The Contractor shall not be entitled to a separate increase in the Contract time for each one of the number of causes of delay which may have concurrent or interrelated effects on the progress of the Work, or for concurrent delays due to the fault of the Contractor.
Add the following sentence to Subparagraph 4.3.10:
4.3.10 If, before expiration of the 30 days from the date of execution for this Agreement , the Owner obtains by separate agreement and furnishes to the Contractor a similar mutual waiver of all claims from the Architect against the Contractor for consequential damages which the Architect may incur as a result of any act or omission of the Owner or Contractor, then the waiver of consequential damages by the Owner and the Contractor contained in this Subparagraph 4.3.10 shall be applicable to claims by the Contractor against the Architect.
Add the following Subparagraph 7.1.4 to paragraph 7.1:
7.1.4 The combined overhead and profit included in the total cost to the Owner of a change in the work shall be base on the following schedule:
.1 For the Contractor, for Work performed by the Contractor=s own forces, ten percent of the cost.
.2 For the Contractor, for work performed by the Contractor=s Subcontractor, ten percent of the amount due the Subcontractor.
.3 For each Subcontractor involved, for work performed by that Subcontractor own forces, ten percent of the cost.
.4 For each Subcontractor involved, for work preformed by the Subcontracto=s Sub–contractor, ten percent of the amount due the Sub–contractor.
.5 Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 7.3.6
.6 In order to facilitate checking of quotations for extra or credit, all proposals, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of cost including labor, materials and Subcontracts. Labor and materials shall be itemized in the manner prescribed above. In no case will a change involving over $1000.00 be approved without such itemization.
Add the following Clause 9.3.1.3 through 9.3.1.5 to 9.3.1:
9.3.1.3 Until Substantial Completion, the Owner shall pay 90% of the amount due the Contractor on account of progress payments.
9.3.1.4 Ninety percent of value of labor executed and materials delivered on the premises will be paid to Contractor by Owner in monthly installments upon Architect's certificate as work progresses in proportion to amount of work executed during monthly period less previous payments. Final payment will be made within thirty (30) days after work is completed by Contractor and accepted by Architect.
9.3.1.5 Deliver three (3) copies of monthly estimates to Architect on form to be provided by Architect.
Add the following Clauses 11.1.2.1 through 11.1.2.4 to Subparagraph 11.1.2:
11.1.2.1 The Contractor shall purchase from and maintain such insurance as will protect the Contractor from claims which may arise out of or by anyone directly or indirectly employed by any of them, or by anyone for whose acts of them may be liable.
11.1.2.2 Liability insurance (the Contractor shall purchase and maintain Owner=s and Contractor=s Protective Liability Insurance with aggregate limit not less than $2,000,000.00, with the Architect as additional insured) should include all major divisions of coverage and be on a comprehensive general basis including:
1. Premises – Operation (including x – c – u)
2. Independent Contractor's Protective
3. Products and Completed Operations
Personal Injury Liability with Employment Exclusion deleted.
5. Contractual – including specific provision for contractor's obligation.
Owned, non–owned and hired motor vehicles.
Broad Form Property Damage including Completed Operations.
11.1.2.3 If the General Liability coverages are provided by a Commercial General Liability Policy on claims–made basis, the policy date or Retro–active Date shall predate the Contract; the termination date of the policy or applicable extended reporting period shall be no earlier than the termination date of coverage required to be maintained after final payment.
Delete Subparagraph 11.5.1 and substitute the following:
11.5.1 The Contractor shall furnish bonds covering faithful performance of the Contract and payment of obligations arising thereunder. Bonds may be obtained through the Contractor=s usual source and the cost thereof shall be included in the Contract Sum. The amount of each bond shall be equal to one hundred percent (100%) of the Contract Sum.
11.5.1.1 The Contractor shall deliver the required bonds to the Owner not later three days following the date the Agreement is entered into, of if the work to be commenced prior thereto in response to a letter of intent, the Contractor shall, prior to the commencement of the work, submit evidence satisfactory to the Owner that such bonds will be furnished.
11.5.1.2 The Contractor shall require the attorney–in–fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of the power of attorney.
Add the following Clause 12.2.2.4 to Subparagraph 12.2.2:
12.2.2.4 Upon request by the Owner and prior to the expiration of on eyear from the date of Substantial Completion, the Architect will conduct and the Contractor shall attend a meeting with the Owner to review the facility operations and performance.
END OF SECTION 7.0
8.0 OMITTED
END OF SECTION 00000

SECTION 01500 – TEMPORARY FACILITIES AND CONTROLS
PART 1 – GENERAL
1.1 QUALITY ASSURANCE
A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
PART 2 – PRODUCTS
A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self–contained, liquid–propane–gas or fuel–oil heaters with individual space thermostatic control.
1. Use of gasoline–burning space heaters, open–flame heaters, or salamander–type heating units is prohibited.
PART 3 – EXECUTION
3.1 TEMPORARY UTILITY INSTALLATION
A. General: Install temporary service or connect to existing service.
1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
B. Water Service: Install water service and distribution piping in sizes and pressures adequate for construction.
C. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
D. Heating: Provide temporary heating required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity.
E. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Insert gas or other utility services if required for Project.
F. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.
G. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
H. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
3.2 SUPPORT FACILITIES INSTALLATION
A. Parking: Use designated areas of Owner's existing parking areas for construction personnel.
B. Dewatering Facilities and Drains: Comply with requirements of authorities having jurisdiction. Maintain Project site, excavations, and construction free of water.
C. Waste Disposal Facilities: Provide waste–collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements.
D. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
E. Temporary Stairs: Until permanent stairs are available, provide temporary stairs where ladders are not adequate.
3.3 SECURITY AND PROTECTION FACILITIES INSTALLATION
A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil–bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
C. Stormwater Control: Comply with authorities having jurisdiction. Provide barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains.
D. Tree and Plant Protection: Install temporary fencing located as indicated or outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.
E. Pest Control: Engage pest–control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues at Substantial Completion. Obtain extended warranty for Owner. Perform control operations lawfully, using environmentally safe materials.
F. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
G. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
H. Temporary Partitions: Provide floor–to–ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner and tenants from fumes and noise.
I. Temporary Fire Protection: Install and maintain temporary fire–protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
1. Prohibit smoking in construction areas.
2. Supervise welding operations, combustion–type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
3. Develop and supervise an overall fire–prevention and –protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
4. Provide temporary standpipes and hoses for fire protection. Hang hoses with a warning sign stating that hoses are for fire–protection purposes only and are not to be removed. Match hose size with outlet size and equip with suitable nozzles.
3.4 OPERATION, TERMINATION, AND REMOVAL
A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
B. Maintenance: Maintain facilities in good operating condition until removal.
C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
END OF SECTION 01500

SECTION 01524 – CONSTRUCTION WASTE MANAGEMENT
PART 1 – GENERAL
1.1 DEFINITIONS
A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
B. Disposal: Removal off–site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
PART 2 – PRODUCTS (Not Used)
PART 3 – EXECUTION
3.1 DISPOSAL OF WASTE
A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on–site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
B. Burning: Burning of waste materials is permitted only at designated areas on Owner's property, provided required permits are obtained. Provide full–time monitoring for burning materials until fires are extinguished.
C. Disposal: Transport waste materials off Owner's property and legally dispose of them.
END OF SECTION 01524

SECTION 01700 – EXECUTION REQUIREMENTS
PART 1 – GENERAL
1.1 SUMMARY
A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
1. Construction layout, Field engineering and surveying, General installation of products, Progress cleaning, Starting and adjusting, Protection of installed construction, Correction of the Work.
PART 2 – PRODUCTS (Not Used)
PART 3 – EXECUTION
3.1 EXAMINATION
A. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.
B. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
3.2 PREPARATION
A. Existing Utility Information: Furnish information to local utility and Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents. Submit requests on CSI Form 13.2A, "Request for Interpretation."
3.3 CONSTRUCTION LAYOUT
A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.
B. General: Engage a land surveyor and professional engineer to lay out the Work using accepted surveying practices.
C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
D. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
3.4 FIELD ENGINEERING
A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
3.5 INSTALLATION
A. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
B. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
C. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
D. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
E. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.
G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
H. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
3.6 PROGRESS CLEANING
A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint–use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
B. Site: Maintain Project site free of waste materials and debris.
C. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
D. Waste Disposal: Burying or burning waste materials on–site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
3.7 STARTING AND ADJUSTING
A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
3.8 PROTECTION OF INSTALLED CONSTRUCTION
A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
B. Comply with manufacturer's written instructions for temperature and relative humidity.
3.9 CORRECTION OF THE WORK
A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 1 Section "Cutting and Patching."
B. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
END OF SECTION 01700

SECTION 02200 – EARTHWORK
PART 1 – GENERAL
a) RELATED DOCUMENTS
i) Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
b) SUMMARY
i) This Section includes the following:
(1) Preparing of subgrade for building slabs, walks, and pavements.
(2) Drainage fill course for support of building slabs is included as part of this work.
(3) Excavating and backfilling of trenches within building lines.
(4) Excavating and backfilling for underground mechanical and electrical utilities and buried mechanical and electrical appurtenances.
ii) Final Grading, together with placement and preparation of topsoil for lawns and planting.
c) DEFINITIONS
i) Excavation consists of removal of material encountered to subgrade elevations indicated and subsequent disposal of materials removed.
ii) Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of Owner. Unauthorized excavation, as well as remedial work directed by Owner, shall be at Contractor's expense.
(1) Under footings, foundation bases, or retaining walls, fill unauthorized excavation by extending indicated bottom elevation of footing or base to excavation bottom, without altering required top elevation. Lean concrete fill may be used to bring elevations to proper position.
(2) In locations other than those above, backfill and compact unauthorized excavations as specified for authorized excavations of same classification.
iii) Additional Excavation: When excavation has reached required subgrade elevations, notify Owner or testing lab, who will make an inspection of conditions. If Owner or testing lab determines that bearing materials at required subgrade elevations are unsuitable, continue excavation until suitable bearing materials are encountered and replace excavated material. The Contract Sum may be adjusted by an appropriate Contract Modification.
iv) Subgrade: The undisturbed earth or the compacted soil layer immediately below granular subbase, drainage fill, or topsoil materials.
v) Structure: Buildings, foundations, slabs, tanks, curbs, or other man–made stationary features occurring above or below ground surface.
d) SUBMITTALS
i) Test Reports: Submit the following reports directly to Owner from the testing services, with copy to Contractor:
(1) Test reports on borrow material.
(2) Verification of suitability of each footing subgrade material, in accordance with specified requirements.
(3) Field reports; in–place soil density tests.
(4) One optimum moisture–maximum density curve for each type of soil encountered.
(5) Report of actual unconfined compressive strength and/or results of bearing tests of each strata tested.
e) QUALITY ASSURANCE
i) Codes and Standards: Perform excavation work in compliance with applicable requirements of authorities having jurisdiction.
ii) Testing and Inspection Service: Contractors' testing laboratory will perform sampling and testing. This testing does not relieve Contractor of responsibility of providing earthwork in compliance with specifications. Contractor may perform additional testing as necessary, at no expense to Owner, to ensure quality of the earthwork.
f) PROJECT CONDITIONS
i) Site Information: Data in subsurface investigation reports was used for the basis of the design and are available to the Contractor for information only. Conditions are not intended as representations or warranties of accuracy or continuity between soil borings. The Owner will not be responsible for interpretations or conclusions drawn from this data by Contractor.
ii) Existing Utilities: Locate existing underground utilities in areas of excavation work. If utilities are indicated to remain in place, provide adequate means of support and protection during earthwork operations.
(1) Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
(2) Do not interrupt existing utilities serving facilities occupied by Owner or others, during occupied hours, except when permitted in writing by Owner and then only after acceptable temporary utility services have been provided.
(a) Provide minimum of 48–hour notice to Owner, and receive written notice to proceed before interrupting any utility.
(3) Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shutoff of services if lines are active.
iii) Use of Explosives: Use of explosives is not permitted.
iv) Protection of Persons and Property: Barricade open excavations occurring as part of this work and post with warning lights.
(1) Operate warning lights as recommended by authorities having jurisdiction.
(2) Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
(3) Perform excavation by hand within dripline of large trees to remain. Protect root systems from damage or dryout to the greatest extent possible. Maintain moist condition for root system and cover exposed roots with moistened burlap.
PART 2 – PRODUCTS
a) SOIL MATERIALS
i) Satisfactory soil materials are defined as those complying with ASTM D2487 soil classification groups GW, GP, GM, SM, SW, and SP.
ii) Unsatisfactory soil materials are defined as those complying with ASTM D2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT.
iii) Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, crushed slag, and natural or crushed sand.
iv) Drainage Fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, with 100 percent passing a 1–1/2 inch sieve and not more than 5 percent passing a No. 4 sieve.
v) Backfill and Fill Materials: Satisfactory soil materials free of clay, rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation and other deleterious matter.
PART 3 – EXECUTION
a) EXCAVATION
i) Excavation is unclassified and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered.
ii) Do not perform rock excavation work until material to be excavated has been cross–sectioned and classified by Owner or testing lab. Such excavation will be paid on basis of Contract Conditions relative to changes in work.
iii) Rock payment lines are limited to the following:
(1) Two feet outside of concrete work for which forms are required, except footings.
(2) One foot outside perimeter of footings.
(3) In pipe trenches, 6 inches below invert elevation of pipe and 2 feet wider than inside diameter of pipe, but not less than 3 feet minimum trench width.
(4) Outside dimensions of concrete work where no forms are required.
(5) Under slabs on grade, 6 inches below bottom of concrete slab.
b) STABILITY OF EXCAVATIONS
i) General: Comply with local codes, ordinances, and requirements of agencies having jurisdiction.
ii) Slope sides of excavations to comply with local codes, ordinances, and requirements of agencies having jurisdiction. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated. Maintain sides and slopes of excavations in safe condition until completion of backfilling. excav
iii) Shoring and Bracing: Provide materials for shoring and bracing, such as sheet piling, uprights, stringers, and cross braces, in good serviceable condition. Maintain shoring and bracing in excavations regardless of time period excavations will be open. Extend shoring and bracing as excavation progresses.
(1) Provide permanent steel sheet piling or pressure–creosoted timber sheet piling wherever subsequent removal of sheet piling might permit lateral movement of soil under adjacent structures. Cut off tops a minimum of 2'–6" below final grade and leave permanently in place.
c) DEWATERING
i) Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area.
(1) Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.
(2) Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rain water and water removed from excavations to collecting or runoff areas. Do not use trench excavations as temporary drainage ditches.
d) STORAGE OF EXCAVATED MATERIALS
i) Stockpile excavated materials acceptable for backfill and fill where directed. Place, grade, and shape stockpiles for proper drainage.
(1) Locate and retain soil materials away from edge of excavations. Do not store within drip line of trees indicated to remain.
(2) Dispose of excess excavated soil material and materials not acceptable for use as backfill or fill.
e) EXCAVATION FOR STRUCTURES
i) Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10 foot, and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, and other construction and for inspection.
(1) Excavations for footings and foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before concrete reinforcement is placed. Trim bottoms to required lines and grades to leave solid base to receive other work.
(2) Excavation for Underground Tanks, Basins, and Mechanical or Electrical Structures: Conform to elevations and dimensions indicated within a tolerance of plus or minus 0.10 foot; plus a sufficient distance to permit placing and removal of concrete formwork, installation of services, and other construction and for inspection. Do not disturb bottom of excavations, intended for bearing surface.
f) EXCAVATION FOR PAVEMENTS
i) Cut surface under pavements to comply with cross–sections, elevations and grades as indicated.
g) TRENCH EXCAVATION FOR PIPES AND CONDUIT
i) Excavate trenches to uniform width, sufficiently wide to provide ample working room and a minimum of 6 to 9 inches of clearance on both sides of pipe or conduit.
ii) Excavate trenches and conduit to depth indicated or required to establish indicated slope and invert elevations and to support bottom of pipe or conduit on undisturbed soil. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
(1) Where rock is encountered, carry excavation 6 inches below required elevation and backfill with a 6–inch layer of crushed stone or gravel prior to installation of pipe.
(2) For pipes or conduit less than 6 inches in nominal size, and for flat–bottomed, multiple–duct conduit units, do not excavate beyond indicated depths. Hand–excavate bottom cut to accurate elevations and support pipe or conduit on undisturbed soil.
(3) For pipes and equipment 6 inches or larger in nominal size, shape bottom of trench to fit bottom of pipe for 90 degrees (bottom 1/4 of the circumference). Fill depressions with tamped sand backfill. At each pipe joint, dig bell holes to relieve pipe bell of loads ensure continuous bearing of pipe barrel on bearing surface.
h) COLD WEATHER PROTECTION
i) Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees F.
i) BACKFILL AND FILL
i) General: Place soil material in layers to required subgrade elevations, for each area classification listed below, using materials specified in Part 2 of this Section.
(1) Under grassed areas, use satisfactory excavated or borrow material.
(2) Under walks and pavements, use subbase material, satisfactory excavated or borrow material, or a combination.
(3) Under steps, use subbase material.
(4) Under building slabs, use drainage fill material.
(5) Under piping and conduit and equipment, use subbase materials where required over rock bearing surface and for correction of unauthorized excavation. Shape excavation bottom to fit bottom 90 degrees of cylinder.
(6) Backfill trenches with concrete where trench excavations pass within 18 inches of column or wall footings and that are carried below bottom of such footings or that pass under wall footings. Place concrete to level of bottom of adjacent footing.
(a) Do not backfill trenches until tests and inspections have been made and backfilling is authorized by Owner. Use care in backfilling to avoid damage or displacement of pipe systems.
(7) Provide 4–inch–thick concrete base slab support for piping or conduit less than 2'–6" below surface of roadways. After installation and testing of piping or conduit, provide minimum 4–inch–thick encasement (sides and top) of concrete prior to backfilling or placement of roadway subbase.
ii) Backfill excavations as promptly as work permits, but not until completion of the following:
(1) Acceptance of construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.
(2) Inspection, testing, approval, and recording locations of underground utilities have been performed and recorded.
(3) Removal of concrete formwork.
(4)pl Removal of shoring and bracing, and backfilling of voids with satisfactory materials. Cut off temporary sheet piling driven below bottom of structures and remove in manner to prevent settlement of the structure or utilities, or leave in place if required.
(5) Removal of trash and debris from excavation.
(6) Permanent or temporary horizontal bracing is in place on horizontally supported walls.
j) PLACEMENT AND COMPACTION
i) Ground Surface Preparation: Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow strip, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface.
(1) When existing ground surface has a density less than that specified under "Compaction" for particular area classification, break up ground surface, pulverize, moisture–condition to optimum moisture content, and compact to required depth and percentage of maximum density.
ii) Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand–operated tampers.
iii) Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum dry density or relative dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
iv) Place backfill and fill materials evenly adjacent to structures, piping, or conduit to required elevations. Prevent wedging action of backfill against structures or displacement of piping or conduit by carrying material uniformly around structure, piping, or conduit to approximately same elevation in each lift.
v) Control soil and fill compaction, providing minimum percentage of density specified for each area classification indicated below. Correct improperly compacted areas or lifts as directed by Owner or testing lab if soil density tests indicate inadequate compaction.
(1) Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density, in accordance with ASTM D 1557:
(a) Under structures, building slabs and steps, and pavements, compact top 12 inches of subgrade and each layer of backfill or fill material at 95 percent maximum density.
(b) Under lawn or unpaved areas, compact top 6 inches of subgrade and each layer of backfill or fill material at 90 percent maximum density.
(c) Under walkways, compact top 6 inches of subgrade and each layer of backfill or fill material at 95 percent maximum density.

(2) Moisture Control: Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade or layer of soil material. Apply water in minimum quantity as necessary to prevent free water from appearing on surface during or subsequent to compaction operations.
(a) Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
(b) Stockpile or spread soil material that has been removed because it is too wet to permit compaction. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory value.
k) GRADING
i) General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated or between such points and existing grades.
ii) Grading Outside Building Lines: Grade areas adjacent to building lines to drain away from structures and to prevent ponding. Finish surfaces free from irregular surface changes and as follows:
(1) Lawn or Unpaved Areas: Finish areas to receive topsoil to within not more than 0.10 foot above or below required subgrade elevations.
(2) Walks: Shape surface of areas under walks to line, grade, and cross–section, with finish surface not more than 0.10 foot above or below required subgrade elevation.
(3) Pavements: Shape surface of areas under pavement to line, grade, and cross–section, with finish surface not more than 1/2 inch above or below required subgrade elevation.
iii) Grading Surface of Fill under Building Slabs: Grade smooth and even, free of voids, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1/2 inch when tested with a 10–foot straightedge.
iv) Compaction: After grading, compact subgrade surfaces to the depth and indicated percentage of maximum or relative density for each area classification.
l) PAVEMENT SUBBASE COURSE
i) General: Subbase course consists of placing subbase material, in layers of specified thickness, over subgrade surface to support a pavement base course.
(1) Refer to other Division 2 sections for paving specifications.
ii) Grade Control: During construction, maintain lines and grades including crown and cross–slope of subbase course.
iii) Shoulders: Place shoulders along edges of subbase course to prevent lateral movement. Construct shoulders of acceptable soil materials, placed in such quantity to compact to thickness of each subbase course layer. Compact and roll at least a 12–inch width of shoulder simultaneous with the compaction and rolling of each layer of subbase course.
iv) Placing: Place subbase course material on prepared subgrade in layers of uniform thickness, conforming to indicated cross–section and thickness. Maintain optimum moisture content for compacting subbase material during placement operations.
(1) When a compacted subbase course is indicated to be 6 inches thick or less, place material in a single layer. When indicated to be more than 6 inches thick, place material in equal layers, except no single layer more than 6 inches or less than 3 inches in thickness when compacted.
m) BUILDING SLAB DRAINAGE COURSE
i) General: Drainage course consists of placement of drainage fill material, in layers of indicated thickness, over subgrade surface to support concrete building slabs.
ii) Placing: Place drainage fill material on prepared subgrade in layers of uniform thickness, conforming to indicated cross–section and thickness. Maintain optimum moisture content for compacting material during placement operations.
(1) When a compacted drainage course is indicated to be 6 inches thick or less, place material in a single layer. When indicated to be more than 6 inches thick, place material in equal layers, except no single layer more than 6 inches or less than 3 inches in thickness when compacted.
n) FIELD QUALITY CONTROL
i) Quality Control Testing During Construction: Allow testing service to inspect and approve each subgrade and fill layer before further backfill or construction work is performed.
(1) Perform field density tests in accordance with ASTM D 1556 (sand cone method) or ASTM D 2167 (rubber balloon method), as applicable.
(a) Field density tests may also be performed by the nuclear method in accordance with ASTM D 2922, providing that calibration curves are periodically checked and adjusted to correlate to tests performed using ASTM D 1556. In conjunction with each density calibration check, check the calibration curves furnished with the moisture gages in accordance with ASTM D 3017.
(b) If field tests are performed using nuclear methods, make calibration checks of both density and moisture gages at beginning of work, on each different type of material encountered, and at intervals as directed by the Owner or testing lab.
(2) Footing Subgrade: For each strata of soil on which footings will be placed, perform at least one test to verify required design bearing capacities. Subsequent verification and approval of each footing subgrade may be based on a visual comparison of each subgrade with related tested strata when acceptable to Owner or testing lab.
(3) Paved Areas and Building Slab Subgrade: Perform at least one field density test of subgrade for every 2,000 sq. ft. of paved area or building slab, but in no case fewer than three tests. In each compacted fill layer, perform one field density test for every 2,000 sq. ft. of overlaying building slab or paved area, but in no case fewer than three tests.
(4) Foundation Wall Backfill: Perform at least two field density tests at locations and elevations as directed.
(5) If in opinion of Owner or testing lab, based on testing service reports and inspection, subgrade or fills that have been placed are below specified density, perform additional compaction and testing until specified density is obtained.
o) EROSION CONTROL
i) Provide erosion control methods in accordance with requirements of authorities having jurisdiction.
p) MAINTENANCE
i) Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
ii) Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.
iii) Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape, and compact to required density prior to further construction.
iv) Settling: Where settling is measurable or observable at excavated areas during general project warranty period, remove surface (pavement, lawn, or other finish), add backfill material, compact, and replace surface treatment. Restore appearance, quality, and condition of surface or finish to match adjacent work, and eliminate evidence of restoration to greatest extent possible.
q) DISPOSAL OF EXCESS AND WASTE MATERIALS
i) Removal to Designated Areas on Owner's Property: Transport acceptable excess excavated material to designated soil storage areas on Owner's property. Stockpile soil or spread as directed by Owner.
(1) Transport waste material, including unacceptable excavated material, trash, and debris to designated spoil areas on Owner's property and dispose of as directed.
ii) Removal from Owner's Property: Remove waste materials, including unacceptable excavated material, trash, and debris, and dispose of it off Owner's property.
(1) Remove excess excavated material, trash, debris, and waste materials and dispose of it off Owner's property.
END OF SECTION 02200

SECTION 02361 – TERMITE CONTROL
PART 1 – GENERAL
1.1 SUMMARY
A. This Section includes the following: 1. Soil treatment with termiticide.
1.1 SUBMITTALS
A. Product Data: For each type of product indicated. Include the EPA–Registered Label.
B. Product certificates. Soil Treatment Application Report: Include the following: Date and time of application. Moisture content of soil before application. Brand name and manufacturer of termiticide. Quantity of undiluted termiticide used. Dilutions, methods, volumes, and rates of application used. Areas of application. Water source for application.
1.2 QUALITY ASSURANCE
A. Installer Qualifications: A specialist who is licensed according to regulations of authorities having jurisdiction to apply termite control treatment and products in jurisdiction where Project is located.
B. Regulatory Requirements: Formulate and apply termiticides according to the EPA–Registered Label.
1.3 WARRANTY
A. Special Warranty: Manufacturer's standard form, signed by Applicator and Contractor certifying that termite control work, consisting of applied soil termiticide treatment, will prevent infestation of subterranean termites. If subterranean termite activity or damage is discovered during warranty period, re–treat soil and repair or replace damage caused by termite infestation. Verify available warranties and insert number below. Warranty Period: Five years from date of Substantial Completion.
PART 2 – PRODUCTS
2.1 MANUFACTURERS
A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
A. Manufacturers: Subject to compliance with requirements, provide products by one manufacture.of the following: 1. Termiticides: Aventis Environmental Science USA LP; Termidor. Bayer Corporation; Premise 75. Dow AgroSciences LLC; Dursban or TC Equity. FMC Corporation, Agricultural Products Group; Talstar, Prevail FT, or Torpedo. Syngenta; Demon TC.
2.2 SOIL TREATMENT
A. Termiticide: Provide an EPA–registered termiticide complying with requirements of authorities having jurisdiction, in an aqueous solution formulated to prevent termite infestation. Provide quantity required for application at the label volume and rate for the maximum termiticide concentration allowed for each specific use, according to product's EPA–Registered Label.
PART 3 – EXECUTION
3.1 PREPARATION
A. General: Remove all extraneous sources of wood cellulose and other edible materials such as wood debris, tree stumps and roots, stakes, formwork, and construction waste wood from soil within and around foundations.
B. Soil Treatment Preparation: Loosen, rake, and level soil to be treated except previously compacted areas under slabs and footings. Termiticides may be applied before placing compacted fill under slabs if recommended in writing by termiticide manufacturer.
3.2 APPLYING SOIL TREATMENT
A. Application: Mix soil treatment termiticide solution to a uniform consistency. Provide quantity required for application at the label volume and rate for the maximum specified concentration of termiticide, according to manufacturer's EPA–Registered Label, to the following so that a continuous horizontal and vertical termiticidal barrier or treated zone is established around and under building construction. Distribute treatment evenly. 1. Slabs–on–Grade and Basement Slabs: Under ground–supported slab construction, including footings, building slabs, and attached slabs as an overall treatment. Treat soil materials before concrete footings and slabs are placed. 2. Foundations: Adjacent soil including soil along the entire inside perimeter of foundation walls, along both sides of interior partition walls, around plumbing pipes and electric conduit penetrating the slab, and around interior column footers, piers, and chimney bases; also along the entire outside perimeter, from grade to bottom of footing. Avoid soil washout around footings. 3. Crawlspaces: Soil under and adjacent to foundations as previously indicated. Treat adjacent areas including around entrance platform, porches, and equipment bases. Apply overall treatment only where attached concrete platform and porches are on fill or ground.
4. Masonry: Treat voids. 5. Penetrations: At expansion joints, control joints, and areas where slabs will be penetrated.
B. Avoid disturbance of treated soil after application. Keep off treated areas until completely dry.
C. Protect termiticide solution, dispersed in treated soils and fills, from being diluted until ground–supported slabs are installed. Use waterproof barrier according to EPA–Registered Label instructions.
D. Post warning signs in areas of application.
E. Reapply soil treatment solution to areas disturbed by subsequent excavation, grading, landscaping, or other construction activities following application.
END OF SECTION 02361

SECTION 03310 – CONCRETE ALSO SEE SHEET S2.B FOR EXPOSED FINISHED CONCRETE SLAB
a) General:
i) Codes and Standards: ACI 301 "Specifications for Structural Concrete Buildings"; ACI 318, "Building Code Requirements for Reinforced Concrete"; comply with applicable provisions except as otherwise indicated.
ii) Concrete Testing Service: Employ acceptable testing laboratory to perform materials evaluation, testing and design of concrete mixes.
iii) Owner will employ separate testing laboratory to evaluate concrete delivered to and placed at site.
iv) Certificates, signed by concrete producer and Contractor, may be submitted in lieu of material testing when acceptable to Owner.
v) Quality Control: Owner's testing laboratory will perform sampling and testing during concrete placement, which may include the following, as directed by Owner. This testing does not relieve Contractor of responsibility of providing concrete in compliance with specifications. Contractor may perform additional testing as necessary, at no expense to Owner, to ensure quality of concrete.
(1) Sampling: ASTM C 172. (2) Slump: ASTM C 143, one test for each load at point of discharge. (3) Air Content: ASTM C 173, one for each set of compressive strength specimens. (4) Compressive Strength: ASTM C 39, one set for each 50 cu. yds. or fraction thereof of each class of concrete; one specimen tested at 7 days, one specimen tested at 28 days, and one retained for later testing if required. (5) When the total quantity of a given class of concrete is less than 50 cu. yds., strength tests may be waived by Owner if field experience indicates evidence of satisfactory strength.
vi) Test results will be reported in writing to Owner, Contractor, and concrete producer within 24 hours after tests are made.
vii) Manufacturer's Data: Submit manufacturer's product data with installation instructions for proprietary materials including reinforcement and forming accessories, admixtures, joint materials, hardeners, curing materials and others as requested by Owner.
viii) Laboratory Reports: Submit 2 copies of laboratory test or evaluation reports for concrete materials and mix designs.
ix) Mix Proportions and Design: Proportion mixes complying with mix design procedures specified in ACI 301. 3000 psi 28–day compressive strength. (1) Submit written report to Owner for each proposed concrete mix at least 15 days prior to start of work. Do not begin concrete production until mixes have been reviewed and are acceptable to Owner. (2) Mix designs may be adjusted when material characteristics, job conditions, weather, test results or other circumstances warrant. Do not use revised concrete mixes until submitted to and accepted by Owner. (3) Use air–entering admixture in all concrete, providing not less than 4 percent nor more than 6 percent entrained air for concrete exposed to freezing and thawing, and from 2 percent to 4 percent for other concrete.
b) Concrete Materials:
i) Portland Cement: ASTM C 150, Type as required.
ii) Fly Ash: NOT ALLOWED
iii) Aggregates: ASTM C 33, except local aggregates of proven durability may be used.
iv) Water: Drinkable.
v) Air–Entraining Admixture: ASTM C 260.
vi) Water–Reducing Admixture: ASTM C 494; type as required to suit project conditions. Only use admixtures which have been tested and accepted in mix designs, unless otherwise acceptable.
c) Related Materials:
i) Waterstops: Flat dumbbell or centerbulb type, size to suit joints, of either rubber (CRD C 513) or PVC (CRD C 572).
ii) Moisture Barrier: Clear 8–mils thick polyethylene; polyethylene– coated barrier paper; 1/8" thick asphalt core membrane sheet.
iii) Membrane–Forming Curing Compound: ASTM C 309, Type I.
iv) Joint Fillers: See Division–7.
d) Form Materials:
i) Provide form materials with sufficient stability to withstand pressure of placed concrete without bow or deflection.
ii) Exposed Concrete Surfaces: Suitable material to suit project conditions.
e) Reinforcing Materials:
i) Deformed Reinforcing Bars: ASTM A 615, Grade 60, unless otherwise indicated.
ii) Welded Wire Fabric: ASTM A 185.
f) Forming and Placing Concrete:
i) Job–Site Mixing: Use drum type batch machine mixer, mixing not less than 1–1/2 minutes for one cu. yd. or smaller capacity. Increase mixing time at least 15 seconds for each additional cu. yd. or fraction thereof.
ii) Ready–Mix Concrete: ASTM C 94.
iii) Formwork: Construct so that concrete members and structures are of correct size, shape, alignment, elevation and position.
iv) Provide openings in formwork to accommodate work of other trades. Accurately place and securely support items built into forms.
v) Clean and adjust forms prior to concrete placement. Apply form release agents or wet forms, as required. Retighten forms during concrete placement if required to eliminate mortar leaks.
vi) Reinforcement: Position, support and secure reinforcement against displacement. Locate and support with metal chairs, runners, bolsters, spacers and hangers, as required. Set wire ties so ends are directed into concrete, not toward exposed concrete surfaces.
vii) Install welded wire fabric in as long lengths as practicable, lapping at least one mesh.
viii) Joints: Provide construction, isolation, and control joints as indicated or required. Locate construction joints so as to not impair strength and appearance of structure. Place isolation and control joints in slabs–on–ground to stabilize differential settlement and random cracking.
ix) Installation of Embedded Items: Set and build into work anchorage devices and other embedded items required for other work that is attached to, or supported by cast–in–place concrete. Use setting diagrams, templates and instructions provided by others for locating and setting.
x) Concrete Placement: Comply with ACI, placing concrete in a continuous operation within planned joints or sections. Do not begin placement until work of other trades affecting concrete is completed.
xi) Consolidate placed concrete using mechanical vibrating equipment with hand rodding and tamping, so that concrete is worked around reinforcement and other embedded items and into forms.
xii) Protect concrete from physical damage or reduced strength due to weather extremes during mixing, placement and curing.
(1) In cold weather comply with ACI 306. (2) In hot weather comply with ACI 305. g) Concrete Finishes:
i) Exposed–to–view Surfaces: Provide a smooth finish for exposed concrete surfaces and surfaces that are to be covered with a coating or covering material applied directly to concrete. Remove fins and projections, patch defective areas with cement grout, and rub smooth.
ii) Slab Trowel Finish: Apply trowel finish to monolithic slab surfaces that are exposed–to–view or are to be covered with resilient flooring, paint or other thin film coating. Consolidate concrete surfaces by finish troweling, free of trowel marks, uniform in texture and appearance.
iii) Curing: Begin initial curing as soon as free water has disappeared from exposed surfaces. Where possible, keep continuously moist for not less than 72 hours. Continue curing by use of moisture– retaining cover or membrane–forming curing compound. Cure formed surfaces by moist curing until forms are removed. Provide protections as required to prevent damage to exposed concrete surfaces.
END OF SECTION 03310

SECTION 07200 – INSULATION
a) General:
i) Thermal resistivity or r–value represents the rate of heat flow through a homogeneous material exactly 1" thick and are expressed by the temperature difference in degrees F between the two exposed faces required to cause 1 BTU to flow through 1 sq. ft. per hr. at mean temperatures indicated.
ii) Fire Performance Characteristics: Provide insulation with fire performance characteristics indicated per ASTM E 119, ASTM E 84 and E 136, as applicable, and which correspond to products listed in UL "Fire Resistance Directory" or "Building Materials Directory".
iii) Maximum Allowable Asbestos Content: "NO ASBESTOS IS ALLOWED"
iv) Submittals: Submit product data for each form and type of insulation indicated.
b) Products:
i) General: Provide preformed units in sizes to fit applications indicated, selected from manufacturer's standard thicknesses, widths and lengths.
ii) Unfaced Mineral Fiber Blanket/Batt Insulation: ASTM C 665 for Type I (blankets without membrane facing); and as follows: (1) Mineral Fiber Type: Fibers manufactured from glass or slag. (2) Combustion Characteristics: Passes ASTM E 136 test. (3) Surface Burning Characteristics: Maximum flame spread and smoke developed values of 25 and 50, respectively.
iii) Faced Mineral Fiber Blanket/Batt Insulation: ASTM C 665 for Type III, Class A (blankets with reflective vapor–retarder membrane facing with flame spread of 25 or less); foil–scrim–kraft vapor– retarder membrane on one face, respectively; and as follows:
(1) Mineral Fiber Type: Fibers manufactured from glass or slag.
iv) Combustion Characteristics: Unfaced materials passes ASTM E 136 test.
(1) Surface Burning Characteristics: Maximum flame spread and smoke developed values of 25 and 50, respectively.
v) Adhesive for Bonding Insulation: Type as recommended by insulation manufacturer.
vi) Mechanical Anchors: Type and size recommended by insulation manufacturer.
vii) Protection Board: Premolded, semi–rigid asphalt/fiber composition board, 1/4" thick.
c) Installation:
i) General: Comply with insulation manufacturer's instructions for installation of insulation.
ii) Support insulation units by adhesive or mechanical anchorage or both as applicable to location and conditions indicated. 1. For cavity insulation, supplement adhesive attachment of insulation by securing boards with two–piece wall ties designed for this purpose and specified under Division–4 "Unit Masonry".
iii) Install protection board course over insulation before backfilling against or placing cast–in–place concrete against insulation.
END OF SECTION 07200

SECTION 07920 – JOINT SEALANTS
PART 1 – GENERAL
1.1 SUMMARY
A. This Section includes joint sealants for the following applications, including those specified by reference to this Section: 1. Exterior joints in vertical surfaces and horizontal nontraffic surfaces. 2. Interior joints in vertical surfaces and horizontal nontraffic surfaces.
1.2 PERFORMANCE REQUIREMENTS
A. Provide joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.
B. Provide joint sealants for interior applications that establish and maintain airtight and water–resistant continuous joint seals without staining or deteriorating joint substrates.
1.3 QUALITY ASSURANCE
A. Preconstruction Compatibility and Adhesion Testing: Submit samples of materials that will contact or affect joint sealants to joint–sealant manufacturers for testing according to ASTM C 1087 or manufacturer's standard test method to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.
1.4 WARRANTY
A. Special Installer's Warranty: Installer's standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.
1. Warranty Period: Two years from date of Substantial Completion.
PART 2 – PRODUCTS
2.1 MANUFACTURERS
A. Products: Subject to compliance with requirements, provide the products that best suit the application for the adjacent materials (substrates).

REGISTERED ARCHITECT
DANIEL BARTLETT
10-24-2016
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DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

SPECIFICATIONS
PROJECT #
1611
OCT. 24, 2016

SP-1
SHEET 1 of 3

2.2 MATERIALS, GENERAL
A. Compatibility: Provide joint sealants, backings, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer, based on testing and field experience.
B. VOC Content of Interior Sealants: Provide interior sealants and sealant primers that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24): 1. Sealants: 250 g/L. 2. Sealant Primers for Nonporous Substrates: 250 g/L. 3. Sealant Primers for Porous Substrates: 775 g/L.
C. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.
2.3 JOINT-SEALANT BACKING
A. General: Provide sealant backings of material and type that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.
B. Cylindrical Sealant Backings: ASTM C 1330, Type as required , and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance:
C. Elastomeric Tubing Sealant Backings: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D 1056, nonabsorbent to water and gas, and capable of remaining resilient at temperatures down to minus 26 deg F. Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and to otherwise contribute to optimum sealant performance.
D. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.
2.4 MISCELLANEOUS MATERIALS
A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.
PART 3 – EXECUTION
3.1 PREPARATION
A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants. 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant. 2. Remove laitance and form-release agents from concrete.
B. Joint Priming: Prime joint substrates, where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.
C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.
3.2 INSTALLATION
A. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.
B. Acoustical Sealant Application Standard: Comply with recommendations in ASTM C 919 for use of joint sealants in acoustical applications as applicable to materials, applications, and conditions indicated.
C. Install sealant backings of type indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
D. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.
E. Install sealants using proven techniques that comply with the following and at the same time backings are installed.
F. Installation of Preformed Silicone-Sealant System: Comply with manufacturer's written instructions.
G. Installation of Preformed Foam Sealants: Install each length of sealant immediately after removing protective wrapping, taking care not to pull or stretch material, producing seal continuity at ends, turns, and intersections of joints. For applications at low ambient temperatures where expansion of sealant requires acceleration to produce seal, apply heat to sealant in compliance with sealant manufacturer's written instructions.
H. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.
3.3 JOINT-SEALANT SCHEDULE
A. Joint-Sealant Application: Exterior horizontal nontraffic and traffic isolation and contraction joints in cast-in-place concrete slabs. 1. Joint Sealant: Single-component pourable neutral-curing silicone sealant Single-component pourable urethane sealant.
B. Joint-Sealant Application: Exterior vertical joints between different materials listed above. 1. Joint Sealant: Single-component nonsag polysulfide sealant Single-component neutral- and basic-curing silicone sealant Single-component neutral-curing silicone sealant Single-component nonsag urethane sealant.
C. Joint-Sealant Application: Exterior perimeter joints between adjacent surface and frames of doors windows and louvers. 1. Joint Sealant: Single-component nonsag polysulfide sealant Single-component neutral- and basic-curing silicone sealant Single-component neutral-curing silicone sealant Single-component nonsag urethane sealant.
D. Joint-Sealant Application: Exterior joints in vertical and horizontal nontraffic surfaces. 1. Joint Sealant: Single-component nonsag polysulfide sealant Single-component neutral- and basic-curing silicone sealant Single-component neutral-curing silicone sealant Multicomponent nonsag urethane sealant Single-component nonsag urethane sealant.
E. Joint-Sealant Application: Interior perimeter joints of exterior openings. 1. Joint Sealant: Single-component nonsag polysulfide sealant Single-component neutral- and basic-curing silicone sealant Single-component neutral-curing silicone sealant Multicomponent nonsag urethane sealant Single-component nonsag urethane sealant.
F. Joint-Sealant Application: Interior joints between plumbing fixtures and adjoining walls, floors, and counters. 1. Joint Sealant: Single-component mildew-resistant neutral-curing silicone sealant.
G. Joint-Sealant Application JS-[#]: Perimeter joints between interior wall surfaces and frames of interior doors and windows. 1. Joint Sealant: Latex sealant.
END OF SECTION 07920

SECTION 08211 – DOORS
PART 1 – GENERAL
1.1 SUMMARY
A. Section Includes: 1. Doors as selected by owner to meet requirements on drawings.
1.2 SUBMITTALS
A. Product Data: For each type of door indicated.
1.3 QUALITY ASSURANCE
A. Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.
B. Quality Standard: In addition to requirements specified, comply with AWI's "Architectural Woodwork Quality Standards Illustrated." WDMA I.S.1-A, "Architectural Wood Flush Doors." WI's "Manual of Millwork."
PART 2 – PRODUCTS
2.1 MANUFACTURERS
1. Industry standard duty.
PART 3 – EXECUTION
3.1 INSTALLATION
A. Installation Instructions: Install doors to comply with manufacturer's written instructions and the referenced quality standard, and as indicated. 1. Install fire-rated doors in corresponding fire-rated frames according to NFPA 80.
B. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels; do not trim stiles and rails in excess of limits set by manufacturer or permitted for fire-rated doors. Machine doors for hardware. Seal edges of doors, edges of cutouts, and mortises after fitting and machining. 1. Clearances: Provide 1/8 inch at heads, jambs, and between pairs of doors. Provide 1/8 inch from bottom of door to top of decorative floor finish or covering unless otherwise indicated. Where threshold is shown or scheduled, provide 1/4 inch from bottom of door to top of threshold unless otherwise indicated. a. Comply with NFPA 80 for fire-rated doors.
C. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.
D. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.
END OF SECTION 08211

SECTION 08410 – ALUMINUM ENTRANCES AND STOREFRONTS
a) General:
i) Performance Requirements: (1) Thermal Movement: Provide for expansion and contraction resulting from an ambient temperature range of 120 deg.F (67 deg.C). (2) Wind Loading: Withstand uniform test pressure PER LOCAL CODE inward and outward when tested in accordance with ASTM E 330.
ii) Fixed Framing Transmission Characteristics: (1) Air Infiltration: Not more than 0.06 CFM per sq. ft. when tested in accordance with ASTM E 283 at an inward test pressure differential of 6.24 psf. (2) Water Penetration: No penetration when tested in accordance with ASTM E 331 at an inward test pressure differential of 6.24 lbf. per sq. ft. (3) Condensation Resistance: Not less than 45 CRF when tested in accordance with AAMA 1502.
iii) Aluminum Entrance Transmission Characteristics: (1) Air Infiltration: Not more than 0.50 CFM for single doors and 1.0 for pairs of doors when tested in accordance with ASTM E 283 at an inward test pressure differential of 1.567 psf. (2) Condensation Resistance: Not less than 48 CRF when tested in accordance with AAMA 1502.
iv) Product Data: Include fabrication methods, finishing, hardware, accessories and installation recommendations.
v) Manufacturer's Qualifications: 5 years experience in fabrication.
vi) Installer's Qualifications: 5-years experience in installation.
b) Materials:
i) Aluminum Members: Alloy and temper recommended for strength, corrosion resistance, and application of finish; comply with ASTM B 221 for extrusions and ASTM B 209 for sheet or plate.
ii) Fasteners: Aluminum, nonmagnetic stainless steel, or other noncorrosive material. (1) Except for application of hardware, do not use exposed fasteners. For hardware, use Phillips flat-head machine screws; match finish of member or hardware being fastened.
iii) Weatherstipping: Replaceable compressible neoprene or molded PVC type gaskets or replaceable wool, polypropylene, or nylon woven pile, with nylon fabric or aluminum strip backing as suitable for type of door operation.
iv) Glass and Glazing Materials: 1" Insulated Clear Glass, per code.
v) Glazing Panels: Flush panels with resin-impregnated Kraft paper honeycomb or rigid closed-cell urethane core, laminated with waterproof glue between two sheets of aluminum.
vi) Storefront Framing: Inside-outside matched resilient flush-glazed framing with provisions for glass replacement. Shop-fabricate and preassemble.
vii) Stile-and-Rail Type Aluminum Doors: 1-3/4" thick; tubular frame members, with mechanical joints using heavy reinforcing plates and concealed tie-rods or j-bolts. (1) Design: Medium stile (3-1/2" nominal width).
viii) Hardware: Provide heavy-duty units; finish to match door, provide all hardware for a complete installation and per codes and ADA.
c) Fabrication:
i) Fabrication: Sizes of units and profile requirements, are indicated on drawings.
ii) Prefabrication: Before shipment, complete fabrication, assembly, finishing, hardware application, and other work to the greatest extent possible. Disassemble only for shipment and installation.
iii) Welding: Comply with AWS recommendations; grind exposed welds smooth and restore mechanical finish.
iv) Dissimilar Metals: Separate dissimilar metals with zinc chromate primer, bituminous paint, or other separator.
v) Continuity: Maintain accurate relation of planes and angles, with hairline fit of contacting members.
vi) Provide silencers on stops at interior doors.
vii) Finger Guards: Collapsible neoprene or PVC gasketing securely anchored into frame at hinge-jamb or center-pivoted doors.
d) Finishes:
i) Color Anodized Finish: NAAMM AA-M12C22A42/A44, Class I. (1) Color: Standard Colors.
e) Installation:
i) Installation: Comply with manufacturer's instructions. Set units plumb, level, and true to line, without warp or rack of framing members, doors, or panels. Provide proper support and anchor securely in place.
ii) Adjust operating hardware to function properly.
iii) Clean system promptly after installation.
END OF SLV SECTION 08410

SECTION 08710 – FINISH HARDWARE
a) General Hardware Requirements:
i) Refer to Drawings and as selected by Owner.
b) Weatherstripping: Provide manufacturer's standard weatherstripping of type, size and profile indicated, continuous at head and jamb edges of each exterior door opening. Provide non-corrosive fasteners.
c) Thresholds: Provide extruded aluminum threshold of type, design and profile indicated, complete with replaceable resilient vinyl wiper-type insert. Provide non-corrosive fasteners.
d) Installation:
i) Hardware Mounting Heights: Door and Hardware Institute "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames", except as otherwise indicated.
ii) Hardware Mounting Heights: Door and Hardware Institute "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames", except as otherwise indicated.
iii) Install each hardware item to comply with manufacturer's instructions and recommendations.
iv) Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant. Remove excess sealant and clean adjacent surfaces.
v) Hardware Adjustment: Return to project one month after Owner's occupancy, and adjust hardware for proper operation and function. Instruct Owner's personnel in proper maintenance and adjustment.
END OF SLV SECTION 08710

SECTION 09250 – GYPSUM DRYWALL
a) General:
i) Fire-Resistance Ratings: Provide gypsum drywall construction fire-resistance ratings indicated, conforming to assemblies tested per ASTM E 119 by inspecting and testing organization acceptable to authorities having jurisdiction.
b) Products:
i) Manufacturers: Subject to compliance with requirements, provide gypsum board and related products by one mfgr.
ii) Steel Framing for Walls and Partitions: Comply with ASTM C 754 and the following: (1) Steel Studs and Runners: ASTM C 645, 0.0179 inch base metal thickness unless otherwise indicated. (2) Steel Rigid Furring Channels: ASTM C 645, 0.0179 inch base metal thickness, hat-shaped.
(a) Where shown on "Resilient", provide mfr's special type designed to reduce sound transmission.
(3) Z-Furring Members: Zee-shaped, 0.0179 inch base metal thickness, steel, galvanized, ASTM A 525, G60; for mechanical attachment of insulation, to masonry/concrete walls.
iii) Gypsum Board: Provide gypsum board of types indicated in maximum lengths available to minimize end joints:
(1) Exposed Gypsum Board: ASTM C 36, thickness as indicated.
(2) Gypsum Backing Board for Multi-Layer Applications: ASTM C 442 or A 36, thickness as indicated.
(3) Water-Resistant Gypsum Backing Board: ASTM C 630, thickness as indicated.
(4) Exterior Gypsum Board: ASTM C 931, thickness as indicated.
iv) Trim Accessories: ASTM C 840: mfr's standard trim accessories, including cornerbead and edge trim of beaded type with face flanges for concealment in joint compound except where semi-finishing or exposed type is indicated. (1) Provide corner bead formed from zinc alloy. (2) Provide zinc-alloy cornerbead and edge trim for exterior gypsum board. (3) Provide one-piece control joints with 1/4 inch wide by 7/16 inch deep vee-shaped slot, covered with removable tape, of roll- formed zinc or extruded vinyl as recommended by gypsum board mfr.
v) Gypsum Board Joint Treatment Materials: ASTM C 475 and ASTM C 840, and as follows: (1) Joint Tape: Paper reinforcing tape, unless otherwise indicated. (2) Setting-Type Joint Compound: Factory-prepackaged, job-mixed chemical-hardening powder products formulated for uses indicated. (3) Drying-Type Joint Compounds: Factory-prepackaged vinyl-based products.
vi) Miscellaneous Materials: As follows, recommended by gypsum board mfr: (1) Laminating Adhesives: Product recommended by gypsum board mfr. (2) Fastening Adhesive for Wood: ASTM C 557. (3) Gypsum Board Screws: ASTM C 1002. (4) Gypsum Board Nails: ASTM C 514. (5) Concealed Acoustical Sealant: Comply with requirements specified in Division-7 Section "Joint Sealers." (6) Sound Attenuation Blankets: ASTM C 665, Type I, unfaced mineral fiber blanket insulation. (7) Thermal Insulation for Z-Furring Members: ASTM C 665, Type I, unfaced mineral fiber blanket insulation. (8) Thermal Insulation for Z-Furring Members: ASTM C 578, Type IV, extruded polystyrene board insulation with a flame spread and smoke developed ratings of not more than 25 and 450 per ASTM E 84.
c) Execution:
i) Install steel framing to comply with ASTM C 754 and ASTM C 840.
(1) Do not bridge building expansion joints with support systems, frame both sides of joints with furring and other supports as indicated. (2) Install steel studs with bottom and top runner tracks anchored to substrates. Isolate system from building structure to prevent transfer of loading and deflections into metal support system, both vertically and horizontally. (3) Frame door and other openings with studs and runners and gage, number and arrangement to comply with mfr's recommendations for size of opening, weight of doors and height and stud size, unless otherwise indicated. (4) Erect thermal insulation and Z-furring members to comply with mfr's directions. (5) Install supplementary framing, runners, furring, blocking and bracing at openings and terminations in gypsum drywall and where required for support of other work which cannot be adequately supported on gypsum board alone.
ii) Install and finish gypsum board to comply with ASTM C 840 and as follows: (1) Form "Floating" construction for gypsum boards at internal corners, except where special isolation or edge trim is indicated. (2) Isolate drywall construction from abutting structural and masonry work; provide edge trim and acoustical sealant as recommended by mfr. (3) Install sound attenuation blankets where indicated, without gaps; and support where necessary to prevent movement or dislocation. (4) Install water-resistant backing board where indicated to receive thin-set tile and similar rigid applied finishes at tubs, showers, and similar "wet" areas. (5) Install exterior gypsum board for exterior ceilings and soffits where indicated. (6) Install gypsum backing board where work is indicated to receive adhesively applied acoustical tile. (7) Screw gypsum board to wood supports. (8) Screw gypsum board to metal supports. (9) Laminate face layer to backing board layer where double-layer work is indicated or required to make up indicated thickness. (10) Screw both layers to supports where double-layer work is indicated or otherwise required. (11) Do not bridge building expansion joints. Leave space of the width indicated between boards, and trim both edges for installation of sealant or gasket. (12) Drywall Finishing: Apply joint tape and joint compound at joints between gypsum boards. Apply compounds indicated below at accessory flanges, penetrations, fastener heads and surface defects.
(a) Install compound in 3 coats (plus prefill of cracks where recommended by mfr); sand between coats and after last coat.
(b) Treat water-resistant gypsum backing board joints with tape and setting-type joint compound to comply with gypsum board mfr's directions.
(c) Treat water-resistant gypsum board joints, fastener heads, cut edges and penetrations in water-resistant backing board to comply with gypsum board mfr's directions.
(d) Finish exterior gypsum soffit board with tape and setting-type joint compound to comply with gypsum board mfr's directions.
END OF SECTION 09250

SECTION 09511 – ACOUSTICAL PANEL CEILINGS
PART 1 – GENERAL
1.1 SUMMARY
A. This Section includes acoustical panels and exposed suspension systems for ceilings.
1.2 QUALITY ASSURANCE
A. Fire-Test-Response Characteristics: Surface-Burning Characteristics: Acoustical panels complying with ASTM E 1264 for Class A materials, when tested per ASTM E 84.
a. Smoke-Developed Index: 450 or less.
1.3 EXTRA MATERIALS
PART 2 – PRODUCTS
2.1 ACOUSTICAL PANEL CEILINGS, GENERAL
A. Acoustical Panel Standard: Comply with ASTM E 1264.
B. Metal Suspension System Standard: Comply with ASTM C 635.
C. Wire Hangers, Braces, and Ties: Zinc-coated carbon-steel wire; ASTM A 641/A 641M, Class 1 zinc coating, soft temper. 1. Size: Select wire diameter so its stress at 3 times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch- diameter wire.
D. Seismic perimeter stabilizer bars, seismic struts, and seismic clips.
E. Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension system runners.
PART 3 – EXECUTION
3.1 INSTALLATION
A. Comply with design requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."
B. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders.
C. Suspend ceiling hangers from building's structural members, plumb and free from contact with insulation or other objects within ceiling plenum. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers, use trapezes or equivalent devices. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires. 1. Do not support ceilings directly from permanent metal forms or floor deck; anchor into concrete slabs. 2. Do not attach hangers to steel deck tabs or to steel roof deck.
D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet. Miter corners accurately and connect securely.
E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.
F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.
END OF SECTION 09511

SECTION 09900 – PAINTING
a) General:
i) This Section includes surface preparation and the application of paint materials to exposed interior and exterior items and surfaces scheduled. Surface preparation, prime and finish coats specified are in addition to shop-priming and surface treatments.
ii) Paint exposed surfaces whether or not colors are designated in "schedules," except where a surface or material is indicated not to be painted or is to remain natural. Where an item or surface is not mentioned, paint the same as similar adjacent materials or surfaces. If color or finish is not designated, the Owner will select from standard colors or finishes available.
iii) "Paint" includes coating systems materials, primers, emulsions, enamels, stains, sealers and fillers, and other applied materials whether used as prime, intermediate or finish coats.
b) Submittals:
i) Product Data: Submit manufacturer's technical information, label analysis, and application instructions for each paint material proposed for use.
ii) Submit samples for initial color selection in the form of manufacturer's color charts. After color selection, the Owner will furnish color chips for surfaces to be coated.
iii) Single Source Responsibility: Provide primers and undercoat paint produced by the same manufacturer as the finish coats.
c) Executions:
i) Coordination of Work: Review sections in which primers are provided to ensure compatibility of the total systems for various substrates. (1) Notify the Owner of problems anticipated using the materials specified.
ii) Material Quality: Provide the manufacturer's best quality trade sale type paint material of the various coating types specified. Paint material containers not displaying manufacturer's product identification will not be acceptable.
iii) Deliver materials to the job site in manufacturer's original, unopened packages and containers bearing manufacturer's name and label with trade name and manufacturer's instructions.
iv) Store materials not in use in tightly covered containers in a well ventilated area at a minimum ambient temperature of 45 deg F (7 deg C). Protect from freezing. Keep storage area neat and orderly. Remove oily rags and waste daily.
v) Project Conditions: Do not apply paint in snow, rain, fog or mist, when the relative humidity exceeds 85 percent, at temperatures less than 5 deg F (3 deg C) above the dew point, or to damp or wet surfaces.
vi) Preparation: Remove hardware and hardware accessories, plates, machined surfaces, lighting fixtures, and items in place that are not to be painted, or provide protection prior to surface preparation and painting. Remove items if necessary for complete painting of the items and adjacent surfaces. Following completion of painting, reinstall items removed using workmen skilled in the trades involved.
vii) Surface Preparation: Clean and prepare surfaces to be painted in accordance with manufacturer's instructions for each particular substrate condition.
viii) Materials Preparation: Mix and prepare paint in accordance with manufacturer's directions.
ix) Application: Apply paint in accordance with manufacturer's directions. Use applicators and techniques best suited for substrate and type of material being applied. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces, or conditions detrimental to formation of a durable paint film.
x) Scheduling Painting: Apply first-coat to surfaces that have been cleaned, pretreated or otherwise prepared for painting as soon as practicable, and before subsequent surface deterioration. Allow sufficient time between successive coats to permit proper drying. Do not recoat until paint has dried.
xi) Minimum Coating Thickness: Apply materials at the manufacturer's recommended spreading rate. Provide total dry film thickness of the system as recommended by the manufacturer.
xii) Block Fillers: Apply block fillers at a rate to ensure complete coverage with pores filled.
xiii) Prime Coats: Before application of finish coats, apply a prime coat as recommended by the manufacturer to material required to be painted or finished, and has not been prime coated by others.
xiv) Brush Application: Brush-out and work brush coats into surfaces in an even film. Eliminate cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Draw neat glass lines and color breaks. (1) Apply primers and first coats by brush unless manufacturer's instructions permit use of mechanical applicators.
xv) Mechanical Applications: Use mechanical methods for paint application when permitted by manufacturer's recommendations, governing ordinances, and trade union regulations. (1) Wherever spray application is used, apply each coat to provide the equivalent hiding of brush-applied coats. Do not double- back with spray equipment building-up film thickness of 2 coats in one pass, unless recommended by the manufacturer.
xvi) Completed Work: Match approved samples for color, texture and coverage. Remove, refinish or repaint work not in compliance with specified requirements.
xvii) Field Quality Control: The Owner reserves the right to engage the services of an independent testing laboratory to sample paint material being used. Samples of material delivered to the project will be taken, identified, sealed, and certified in the presence of the Contractor.
xviii) Clean-Up: At the end of each work day, remove empty cans, rags, rubbish, and other discarded paint materials from the site.
xix) Upon completion of painting, clean glass and paint-spattered surfaces. Remove spattered paint by washing, scraping or other proper methods, using care not to scratch or damage adjacent finished surfaces.
xx) Protect work of other trades, whether to be painted or not, against damage from painting. Correct damage by cleaning, repairing or replacing, and repainting.
xxi) Provide "Wet Paint" signs to protect newly-painted finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of painting operations. (1) At completion of construction activities of other trades, touch-up and restore damaged or defaced painted surfaces.
END OF SECTION 09900

SECTION 10522 – FIRE EXTINGUISHERS, CABINETS, AND ACCESSORIES
a) General: i) UL-Listed Products: Provide new UL-listed fire extinguishers bearing UL "Listing Mark" for type, rating, and classification of extinguishers indicated. ii) FM-Listed Products: Fire extinguishers approved by Factory Mutual Research Corporation for type, rating, and classification of extinguisher and carry appropriate FM marking. iii) Submittals: Submit product data and finish samples.
b) Products:
i) Manufacturers: Subject to compliance with requirements
ii) Fire Extinguishers: Provide fire extinguishers for each location indicated or as local fire department, and/or code requires.
iii) Multipurpose Dry Chemical Type: UL-rated 2-A:10:B:C, 5-lb. nominal capacity, in enameled steel container.
iv) Mounting Brackets: Provide brackets for extinguishers not located in cabinets.
c) Installation: i) Securely fasten mounting brackets and fire extinguisher cabinets to structure, square and plumb, to comply with manufacturer's instructions.
END OF SECTION 10522

SECTION 13122 – METAL BUILDING SYSTEMS
a) General:
i) Building Type: The building is a rigid-frame-type pre-engineered metal building with length, width, eave height, and roof pitch indicated on drawings. (1) Personnel & Overhead doors and frames and finish hardware. (2) Manufacturer's standard building components and accessories may be used, provided components, accessories, and complete structure conform to design indicated and specified requirements and local codes.
ii) Performance Requirements: Design, fabricate, and erect the building to withstand loads from winds, gravity, and structural movement, and resist in-service use without failure. Design members to withstand stresses resulting from combinations of loads that produce maximum allowable stresses prescribed in MBMA's "Design Practices Manual." (1) Design Loads: Basic design loads are indicated on the drawings, if not noted then per local codes.
iii) Structural Framing and Roof and Siding Panels: Design structural members and exterior covering for applicable loads and combinations of loads in accordance with the MBMA's "Design Practices Manual." (1) Structural Steel: Comply with AISC's "Specifications for the Design, Fabrication, and Erection of Structural Steel for Buildings" for design requirements and allowable stresses. (2) Light Gage Steel: Comply with AISI's "Specification for the Design of Cold-Formed Steel Structural Members" and "Design of Light Gage Steel Diaphragms" for design requirements and allowable stresses. (3) Welded Connections: Comply with AWS's "Standard Code for Arc and Gas Welding in Building Construction" for welding procedures.
iv) Submittals: Submit the following in accordance with Conditions of the Contract and Division 1.
(1) Product Data: Include manufacturer's product information for building components and accessories.
(2) Shop Drawings: Provide shop drawings for structural framing system, roofing and siding panels, and components and accessories not fully detailed or dimensioned in manufacturer's product data. (a) Structural Framing: Furnish erection drawings. Include fabrication and assembly details. Show anchor bolts settings and sidewall, endwall, and roof framing. (b) Roofing and Siding Panels: Provide panel layouts and details of edge conditions, joints, corners, custom profiles, supports, anchorages, trim, flashings, closures, and special details. (c) Sheet Metal Accessories: 1/4-inch-scale layouts and 1-1/2-inch-scale details of ventilators, louvers, downspouts, gutters, and other accessories; show profiles, methods of joining, and anchorages.
(3) Certification prepared and signed by a Professional Engineer, verifying that structural framing and covering panels meet loading requirements and codes.
b) Products:
i) Metals: Provide the following: (1) Hot-Rolled Structural Steel Shapes: ASTM A 36 or A 529. (2)Steel Tubing or Pipe: ASTM A 500, Grade B, ASTM A 501, or ASTM A 53. (3) Steel Members Fabricated from Plate or Bar Stock: ASTM A 529, A 570, or A 572. Provide 42,000-psi minimum yield strength. (4) Steel Members Fabricated by Cold Forming: ASTM A 607, Grade 50. (5) Cold-Rolled Carbon Steel Sheet: ASTM A 366 or ASTM A 568.
(6) Hot-Rolled Carbon Steel Sheet: ASTM A 568 or ASTM A 569. (7) Structural Quality Zinc-Coated (Galvanized) Steel Sheet: ASTM A 446 with G90 coating complying with ASTM A 525. (8) Aluminum Coated Steel Sheets: ASTM A 463 with T1-40 coating. (9) Aluminum Sheets: ASTM B 209 for Alclad alloy 3003 or 3004 temper required to suit forming operations. (10) Bolts for Structural Framing: ASTM A 307 or ASTM A 325 as necessary for design loads and connection details.
ii) Thermal Insulation: Glass-fiber blanket. Comply with ASTM C 991, 0.5 lb per cu. ft. density, thickness indicated, with UL flame spread classification of 25 or less, and 2-inch-wide continuous vapor tight edge tabs. (1) Vapor Barrier: Vinyl film. See drawings for AR@ ratings for walls and roof (Thermal blocks at roof).
iii) Paint Materials: Comply with performance requirements of federal specifications indicated. (1) Shop Primer for Ferrous Metal: Fast-curing, lead-free, universal primer. Comply with FS TT-P-645. (2) Shop Primer for Galvanized Metal Surfaces: Zinc dust-zinc oxide primer. Comply with FS TT-P-641.
iv) Structural Framing: As follows: (1) Rigid Frames: Factory welded, shop painted, built-up "I-beam" shape or open-web type consisting of tapered or parallel flange beams and tapered columns with attachment plates, bearing plates, and splice members. Factory drill for field-bolted assembly. Provide length of span and spacing indicated. (2) Primary Endwall Framing: Provide the following framing members fabricated for field-bolted assembly.
(3) Secondary Framing: Provide the following: (a) Roof Purlins, Sidewall, Endwall Girts, Fabricate purlin, Eave Struts, Flange and Sag Bracing, Base or Sill Angles, Secondary endwall structural . (4) Adjustable Wind Bracing: 1/2-inch-diameter threaded steel rods; comply with ASTM A 36 or ASTM A 572, Grade D. Locate interior end bay bracing only where indicated. (5) Bolts: Provide zinc- or cadmium-plated bolts when structural framing components are in direct contact with roofing and siding panels. In other cases provide shop-painted bolts. (6) Shop Painting: Clean surfaces of loose mill scale, rust, dirt, oil, grease, and other matter. Follow procedures of SSPC-SP3 for power-tool cleaning, SSPC-SP7 for brush-off blast cleaning, and SSPC-SP1 for solvent cleaning.
v) Roofing and Siding Panels: As follows: (1) Face Sheets: per Dollar General requirements (2) Standing-Seam Roof Panels: per Dollar General requirements (3) Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets, self-locking bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide metal- backed neoprene washers under heads of fasteners bearing on weather side of panels. (4) Accessories: Provide flashings, closers, fillers, expansion joints, ridge covers, fascias, and other accessories formed of the same material and finish as roof and wall panels. (a) Closure Strips: Closed-cell, self-extinguishing, expanded cellular rubber, flexible closure strips, shaped to match configuration of roofing and siding sheets. (b) Sealing Tape: Permanently elastic, pressure-sensitive, nonsag, nontoxic, nonstaining 100 percent solids grey polyisobutylene compound tape 1/2 inch wide and 1/8 inch thick with release paper backing. (c) Joint Sealant: One part elastomeric polyurethane, polysulfide, or silicone rubber sealant.
vi) Sheet Metal Accessories: Provide coated steel accessories with coated steel roof and wall panels.
vii) Fabrication: Design components and field connections required for erection to permit easy assembly and disassembly. (1) Fabricate components so once assembled, they may be disassembled, repackaged, and reassembled with a minimum amount of labor. (2) Clearly mark each part of the assembly to correspond with erection drawings, diagrams, and instruction manuals.
viii) Structural Framing: Shop-fabricate framing components to indicated size and section with base plates, bearing plates, and other plates required for erection welded in place. Provide holes for anchoring or connections shop-drilled or punched to template dimensions.
Person Doors: Materials: Fabricate personnel doors and frames from commercial quality, cold-rolled carbon steel sheet or commercial quality hot-rolled, pickled and oiled carbon steel sheet. Zinc-coated Steel Sheets: Comply with ASTM A 526; with G60 coating complying with ASTM A 525, mill phosphatized. Anchors and Accessories: Provide manufacturer's standard units. For items built into exterior walls, use galvanized units complying with ASTM A 153. Doors: Provide doors of types and styles indicated. Comply with SDI-100 for material quality, metal gages, and construction details. Frames: Provide frames of the types and sizes indicated. Comply with SDI-100 for material quality, metal gages, and construction details. Provide standard hollow metal frames for doors, transoms, sidelights, borrowed lights, and other openings as indicated. Prepare frames to receive 3 silencers on strike jambs of single door frames and 2 silencers on heads of frames for pairs of doors. Fabrication: Fabricate units to be rigid, neat in appearance, and free from defects, warp, or buckle. Provide continuous welds on exposed joints; grind, dress, and make welds smooth, flush, and invisible. Hardware: Prepare hollow metal units to receive mortised and concealed finish hardware, including cutouts, reinforcing, drilling, and tapping. Comply with ANSI A115. Reinforce to receive field-applied, surface-mounted finish hardware. Provide finish hardware with locks. Locate finish hardware in accordance with "Recommended Locations for Builder's Hardware," published by the Door and Hardware Institute. Provide hardware for each door leaf, as follows: Hinges: 1-1/2 pair, steel, template hinges, 4-1/2 inch by 4-1/2 inch. Lockset: Cylindrical type, key in knob. Threshold: Extruded aluminum (exterior doors only). Silencers: Pneumatic rubber type for metal frames. Shop-paint exposed surfaces, including galvanized surfaces, using manufacturer's standard baked-on rust-inhibitive primer.
I. c) Execution:
i) Erection: Erect framing true to line, plumb, level, rigid, and secure. Level base plates to true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use nonshrinking grout to obtain uniform bearing and maintain level baseline elevation. Moist-cure grout for 7 days after placement.
ii) Purlins and Girts: Provide rake or gable purlins with tight-fitting closure channels and fascias. Locate and space girts to suit door and window arrangements and heights. Secure purlins and girts to structural framing and hold rigidly to straight line by sag rods.
iii) Bracing: Provide diagonal angle bracing in roof and sidewalls. Use movement-resisting frames in lieu of sidewall rod bracing. Where diaphragm strength of roof or wall covering is adequate to resist wind forces, bracing will not be required.
iv) Framed Openings: Provide shapes of design and size to reinforce openings and carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to building structural frame.
v) Roofing and Siding: Arrange and nest sidelap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line. Protect factory finishes from damage.
vi) Roof Sheets: Provide sealant tape at lapped joints of ribbed or fluted roof sheets and between roof sheets and protruding equipment, vents, and accessories. (1) Apply continuous ribbon of sealant tape to clean, dry surface of weather side of fastenings on end laps and side laps of corrugated nesting-type ribbed or fluted panels and elsewhere as needed to make roof sheets weatherproof to driving rains.
vii) Wall Sheets: Apply elastomeric sealant continuously between metal base channel and concrete and where necessary for waterproofing. Apply sealant and backup in accordance with the sealant manufacturer's recommendations. (1) Align bottom of wall panels and fasten with blind rivets, bolts or self-tapping screws. Fasten flashings, trim around openings, and similar elements with self-tapping screws. Fasten window and door frames with machine screws or bolts. When building height requires two rows of panels at gable ends, align lap of gable panels over wall panels at eave height. (2) Install screw fasteners with power tools having controlled torque to compress neoprene washer tightly without damage to washer, screw threads, or panels. Install screws in predrilled holes. (3) Provide weatherproof escutcheons for pipe and conduit penetrating exterior walls.
viii) Sheet Metal Accessories: Install gutters, downspouts, ventilators, louvers, and other accessories for positive anchorage to building and weathertight mounting. Adjust operating mechanism for precise operation.
ix) Thermal Insulation: Install insulation concurrently with roof panels in accordance with manufacturer's directions. Install blankets straight and true in one-piece lengths with both sets of tabs sealed to provide a complete vapor barrier. Locate insulation on underside of roof sheets, extending across top flange of purlin members and held taut and snug to roofing panels with retainer clips. Install retainer strips at each longitudinal joint, straight and taut, nesting with roof rib to hold insulation in place.
x) Cleaning and Touch-Up: Clean component surfaces. Touch up abrasions, marks, skips, or other defects to shop-primed surfaces with same material as shop primer.
END OF SECTION 13122

SECTION 15000 –– MECHANICAL
PART 1 – GENERAL
1.01 CONTRACT DOCUMENTS
A. Refer to and comply with other sections of these specifications in the installation of all mechanical work.
B. Drawings are diagrammatic; therefore, all offsets, fittings, valves and accessories are not shown. Plan work around building details and other crafts.
1.02 CODES, ORDINANCES, INSPECTIONS AND PERMITS
A. Work is to be executed and inspected in accordance with local and state codes, laws, ordinances, rules and regulations applicable to particular class of work, and any fees in connection therewith are to paid by the contractor.
B. Arrange with City or State, if city has no ordinances covering work, for complete inspection, paying all charges pertaining thereto.
1.04 WARRANTY AND OPERATION INSTRUCTIONS
A. All materials and equipment shall carry a full year's warranty from time Owner accepts building or the date of substantial completion, whichever is earlier, regardless of start-up date of equipment.
B. Turn over to Owner all operation instructions and warranties furnished with equipment.
1.05 EQUIPMENT CONNECTIONS
A. Each equipment item with drain connections, shall be provided with a properly-sized drain run to the nearest floor drain or as directed.
B. Rough-in and make final connection to all equipment under other Divisions of these specifications or by the Owner.
C. Contractor shall install rough-ins only after he has received approved shop drawings or has obtained drawings and/or specifications for equipment provided by others.
1.06 FLASHINGS: Roof flashings are to be furnished and installed under the roofing division of these specifications.
1.07 CUTTING AND PATCHING
A. Provide all cutting and patching required to perform the mechanical work.
B. All patching will be done by workmen skilled in the trade required.
1.08 EXCAVATION, TRENCHING AND BACKFILLING
A. All excavation, trenching and backfilling in connection with the mechanical system is included as part of this Division.
B. All excavation required shall be done as part of the contract price regardless of any implied conditions on the drawings or in these specifications.
1.09 SUPPORTS AND FOUNDATIONS
A. The Contractor shall be responsible for the miscellaneous supporting systems.
B. Provide adequate pipe, equipment foundation and suspension systems in accordance with recognized engineering practices.
C. Pipe hangers shall be equal to those manufactured by Fee & Mason.
1.10 ELECTRICAL
A. Furnish and install all electrical interlock and control wiring for proper operation and control of all mechanical equipment.
B. Supervise and coordinate all electrical work in connection with mechanical system.
C. Furnish all motor controllers or contractors for proper operation of all motors.
1.11 VALVES
A. Per Codes
1.12 TESTING AND ADJUSTING
A. Test all piping systems. Test boring pipe before backfilling.
B. Operate all HVAC equipment for a sufficient period of time to demonstrate that it is operating properly.
C. Contractor will be required to make adjustment as necessary during the first year.
PART 2 – PLUMBING
2.01 FIXTURES AND TRIM
A. Fixtures shall be equal to those scheduled on drawings.
B. Provide all necessary support, trim and accessories required.
C. All exposed finished metal parts shall be chromium-plated.
D. All fixtures shall be provided with some form of supply stop.
2.02 PIPING:
A. Water: Type "K" copper.
B. Sanitary Waste and Vent: Service weight cast iron or "DWV" copper or PVC as allowed by code
C. Gas Piping: Schedule 40 black steel with M.I. fittings or plastic as allowed by code.
2.03 INSULATION
A. Domestic Cold Water (Above-Grade): Owens-Corning 1/2"thick fiberglas, one-piece, pipe insulation with factory-applied White All-Service (ASJ) Vapor Barrier Jacket. Fittings shall be molded or mitered fiberglas for sizes under 3" and molded fiberglas for sizes 3" and larger.
B. Domestic Hot Water (Above-Grade): Owens -Corning 1/2" thick fiberglas, one-piece, pipe insulation with factory-applied White All-Service (ASJ) Vapor Barrier Jacket. Fittings shall be OC-110 cement for sizes under 3" and molded fiberglas for sizes 3" and larger.
C. Domestic Hot and Cold Water (Below-Grade): Insulate underground piping with "Foamglas" 3/4" thick and apply asphaltic coating equal to PC Pitcote 300. Installation shall be in accordance with manufacturer's instructions.

SECTION 15000 –– MECHANICAL
PART 3 – HVAC
3.01 EQUIPMENT
A. All equipment shall be equal to that scheduled on the drawings.
B. All exposed rotating machinery shall be equipped with guards.
C. All refrigeration compressors shall carry an additional 4-year warranty.
3.02 PIPING
A. Refrigerant: Type "K" copper with wrought copper fittings for refrigerant use. Pre-charged lines may be used.
B. Condensate Drain: Type "L" or "DWV" copper or PVC as allowed by code
3.03 INSULATION
A. Condensate drain (Overhead Horizontal): Armstrong's Armaflex 22" pipe insulation, 1/2" thick.
B. Refrigerant Suction: Armstrong's "Armaflex 22", 3/4" thick.
3.04 SHEET METAL
A. Sheet metal ductwork shall be installed in accordance with ASHRAE "Guilde" and SMCNA "Low Velocity Duct Manual".
B. Ductwork shall be galvanized.
C. Provide flexible connections at each air-handling device with fan.
D. Provide adequate dampers so the dampers at the grilles are not required to balance the system.
E. Grilles, diffusers and registers shall be equal to those indicated on drawings.
F. Ductwork insulation: Owens-Corning, 1'1/2" thick fiberglas faced duct wrap type ED100 with factory-applied flame-retardant foil-reinforced Kraft facing. (Ductwork shall be wrapped unless indicated otherwise.)
G. Duct liner shall be equal to Owens-Corning Fiberglas Aeroflex Type 150B, 1" thick. (Duct sizes indicated are clear inside dimensions required.)
H. Flues shall be U.L. Approved Type "B" vent or as required by code.
3.05 CONTROLS
A. Provide all temperature controls in accordance with recommendations of the equipment manufacturer.
B. Controls shall be electric type.
C. Provide all wiring, etc., required for complete and operating system.
D. Furnish complete wiring diagrams showing all interlock wiring in addition to temperature control wiring diagrams. Wiring is to be color-coded and installed in accordance with NEC.
END OF SECTION 15000

SECTION 16000 – ELECTRICAL
Part 1 – GENERAL
1.1 CONTRACT DOCUMENTS
A. Refer to and comply with other sections of these Specifications for the installation of all Electrical Work.
B. Drawings are diagrammatic; therefore, all conduit routing, fittings and accessories are not shown. Plan work around building details and with Other Crafts.
1.2 CODES, ORDINANCES, INSPECTIONS AND PERMITS
A. Contractor shall give all necessary notices; obtain all permits, and pay all governmental taxes, fees and other costs in connection with his work; file all necessary plans; prepare all documents and obtain all necessary approvals of all governmental documents and obtain all necessary approvals of all governmental departments having jurisdiction; obtain required Certificates of Inspection for his work and deliver same to the Owner before request for acceptance and final payment of work.
B. Contractor shall include in the work, without extra cost to the Owner, all labor, materials, services, apparatus, drawings, etc. in order to comply with all laws, ordinances, codes, rules and regulations of local, State and Federal Governments, whether or not shown on the drawings and/or in these Specifications.
1.4 SITE UTILITIES
A. Exterior utilities shall include all conduit and appurtenances outside of the building or as shown on the Plans. Unless otherwise noted, utilities shall include complete tie-in with utility lines at no extra cost to the Owner. The Contractor shall pay all costs required by utility company pertaining to construction and tie-in. Deposits required for permanent service shall be paid by the Owner.
1.6 WARRANTY AND OPERATION INSTRUCTIONS
A. This contractor shall furnish a written certificate guaranteeing materials, equipment and labor furnished to be free of defects for a period of one (1) year from and after the date of final acceptance of the work by the Owner, and further agrees that if defects appear within stipulated guaranty period, same shall be replaced or made good without charge.
B. This contractor shall turn over to Owner all operation instructions and warranties furnished with equipment.
PART 2 – PRODUCTS
2.1 GENERAL
A. All material and equipment shall be new and of the best quality normally used in good commercial practice. Material and Equipment shall be products of a reputable manufacture showing no form of rust, wear, dirt, or other forms of deterioration. Each major component shall bear a name plate stating name and address of the manufacturer , and bear Underwriter's Laboratories, Inc. Label and the manufacturer's trade mark and model number.
2.2 NAMEPLATES
A. All Electrical Equipment shall be equipped with black laminated phenolic plastic nameplates with white core with lettering etched through the outer covering. One-fourth inch (1/4") high lettering shall adequately describe the function or use of the equipment involved. Nameplates for panelboards and switchboards shall include the panel's designation, voltage and phase of the supply.
B. Nameplates shall be securely fastened to the equipment with a thin coating of clear silicon caulk applied to back of nameplate. All traces of excess silicon caulk shall be removed from equipment.
2.3 MOTOR STARTERS
A. Manual starters shall be provided for single phase, fractional horsepower motors 1/2 horsepower and smaller or as noted on the drawings. Starters and Control Equipment for motors larger than 1/2 horsepower to be furnished under DIVISION 15000.
2.4 CONDUIT
A. Minimum size conduit shall be 1/2-inch, unless other wise indicated on the plans.
B. Where PVC conduit is not used, all conduit used in concrete on grade, earth, or wet locations shall be galvanized rigid, or IMC using only threaded couplings.
C. Electrical metallic tubing (EMT) shall be used in all areas where galvanized rigid or IMC is not required by these Specifications and the National Electrical Code. EMT shall not be used in wet locations. Couplings and connections shall be compression type. INDENTER TYPE OR SET SCREW TYPE FITTINGS SHALL NOT BE USED.
D. Rigid Polyvinyl Chloride (PVC) Conduit shall be Type 40 or Type 80 as manufactured by Carlon Products or approved equal. Galvanized rigid steel or IMC shall be used for all bends and where entering or leaving earth or concrete. PVC Conduit shall only be installed in concrete, in Earth, and as shown on the drawings.
E. Flexible steel conduit shall be used to connect all motors, control equipment requiring piping, such as solenoid valves, pressure controls, pneumatic-electric relays, etc. and other moving electrical equipment. Liquid-tight flexible steel conduit, type U.A. as manufactured by Anaconda or approved equal, shall be used in damp locations where flexible conduit is required.
G. All field bends shall be made with standard tools and equipment manufactured especially for this purpose.
H. Where embedded conduits cross building expansion joints, the Contractor shall furnish and install an offset expansion joint or a sliding expansion joint. Sliding expansion joints shall be with bonding strap and clamp. Where conduits are exposed, provide expansion joints as indicated on the Drawings or specified in subsequent sections.
I. Certain lighting fixtures will require flexible conduit connections to junction boxes, as shown on the Drawings or specified hereinafter.
J. Where conduits are run individually, they shall be supported by using 1/4" galvanized rods or No. 8 galvanized wire with clips equal to Caddy "Kon Clips." The hangers shall be secured by means of toggle bolts on hollow masonry; expansion shield and machine screws or standard preset inserts on concrete or solid masonry; machine screws or bolts on metal surfaces; and wood screws on wood construction. The use of perforated strap or steel tie-wire will not be permitted.
K. Where multiple conduits are run horizontally at the same elevation and grade, they may be supported on trapezes or suspension rods, shall be properly sized for number, size and loaded weight of conduits to be supported.
L. Lay out and install conduit runs to avoid proximity to hot water piping. In no case run conduit within 3" of such piping.
M. Conduits entering panelboards, pull boxes, support boxes or outlet boxes shall be secured in place by galvanized steel lock-nuts and bushings.
N. Conduit joints shall be made tight with approved couplings; turns and offsets made with long sweep ells or bends. Ends of conduit are to be cut square, reamed and brought butt-to-butt in couplings.
O. Bends in conduit shall be made with a approved bending device and conduit bends or off-sets in which conduit is crushed, deformed of otherwise injured is not to be installed. Field bends and offsets shall be uniform and symmetrical. Install factory elbows on 2" and larger conduit.
P. Conduit not embedded in concrete, all vertical risers, etc. shall be firmly secured by means of approved pipe clamps, hangers, etc. Run conduit without sags and pockets and in general drain or pitch toward boxes. Where conduit crosses building expansion joints, provide expansion fitting and approved ground jumper.
Q. Where conduits are supported under exposed steel beams or bar joists, approved type beam clamps and/or clamp/hangers shall be used.
R. Conduits shall be continuous from Main Distribution Panel through distribution panels, power panels, lighting panels, etc. to outlets. Conduit system shall be bonded throughout.
S. All hangers shall be so located as to properly grade and support horizontal conduits without appreciable sagging of these lines. (See Articles 345, 346 and 348, NEC). All conduits shall be of standard size and each length shall bear Underwriters' Laboratories Label and manufacturer's trademark.
T. Where lines of different contractors are racked on same supporting structures, each Contractor shall cooperate with the others involved to properly locate supporting members, and shall furnish a proportionate share of labor and materials involved in same installation; also shall cooperate with Other Contractors so that the same type hanger is used throughout.
U. Conduit shall be kept corked and dry during construction and shall be swabbed out before wires are pulled into conduit.
2.5 OUTLET BOXES
A. All outlet boxes shall be standard galvanized steel type at least 1-1/2" deep, single or gang style type of size to accommodate devices noted. All device shall be installed flush with finish surface.
2.6 WIRE AND CABLES
A. Conductors shall be soft-drawn copper with insulation type THHN or THWN as required by these specifications and the National Electrical Code.
B. Conductors No. 8 and larger shall be stranded.
2.7 EQUIPMENT DISCONNECT
A. All disconnect switches shall be heavy-duty type, quick-make, quick-break or as shown on the drawings. Disconnects for motor circuits shall be motor rated.
B. Disconnect switches shall be furnished in NEMA I Enclosures; except NEMA 3 R or NEMA 12 shall be used in damp locations.
C. Disconnect switches shall have a cover interlock, with defeat device, to prevent unauthorized personnel from opening the door when the switch is ON.
D. All disconnect switches shall be Square D. Equal units, as manufactured by G.E., Westinghouse, or Cutler-Hammer will be considered.
2.8 OVER-CURRENT PROTECTIVE DEVICES
A. Circuit breakers shall be molded-case, quick-make and quick-break thermal-magnetic type. They shall have a trip indication independent of the "ON" or "OFF" positions. Breakers shall have an interrupting capacity of 10,000 RMS Amps.
B. Fuses shall be the type as indicated on the drawings and as manufactured by Bussmann.
2.9 WIRING DEVICES
A. Wiring devices shall be Hubbell or equal as manufactured by Arrow-Hart, General Electric, or Leviton. Unless otherwise specified in subsequent sections or shown on the drawings, weatherproof convenience outlets shall consist of a grounding-type receptacle, as specified herein, installed in an Appleton, Killark or Crouse-Hinds Type FS cast box with weatherproof cover and gasket. Special receptacles shall be as shown on the Drawings. Installation height for receptacles is to be per ADA.
2.10 PANELBOARDS
A. Panelboards shall be equipped with the type, size and number of circuit breakers arranged and numbered as shown on the drawings. Panelboards shall be enclosed in a steel cabinet complete with a door, door lock, circuit identification, directory holder, neutral bar, equipment ground bus and lugs for all cable connections. Where "SPACE" is indicated, space shall be bussed for future breakers. Bus shall be copper.
B. All panelboards shall be as manufactured by Square D Company. Equal units as manufactured by G.E., Cutler-Hammer, or Westinghouse will be considered.
2.11 LIGHTING

A. The Contractor shall furnish all luminaries, lighting equipment and components as required for proper installation as listed in the fixture Schedule, shown on the Drawings and specified herein.
B. The Contractor shall furnish and install lamps and accessory wiring. Fixture to junction box wire insulation shall be rated at not less than 90 degrees C.
C. It shall be the responsibility of the Contractor to assure his count by type as well as voltage prior to ordering.
D. All fluorescent ballasts, as indicated, shall be electronic with resetting thermal protectors and their design and construction shall conform to the "Certified Ballast Manufacturer's Standards," for Class "P" Sound Rated A. Two-lamp, 40 watt ballasts shall be the lower power consumption type as required to match available voltage.
E. Lens for fluorescent troffers shall be clear acrylic, (.125"); except as shown on the Drawings.
F. Recessed incandescent fixtures shall have UL listed thermal cut-out protection.
PART 3 EXECUTION
3.1 GENERAL
A. Installation shall be carried out in such a manner that the many components will function as a complete workable system, including any accessories required to accomplish such installation. Equipment shall be left properly adjusted and in satisfactory working order. Work is to be executed in conformity with best acceptable standard practices for the equipment being installed to allow maximum accessibility and best appearance. Installation shall be such that future installations and expansions can be made with minimum of expenditure.
END OF SECTION 16000

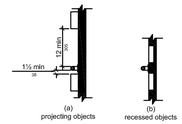
REGISTERED ARCHITECT
DANIEL BARTLETT
10-24-2016
NO. 2263
ARKANSAS

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ⊕ PLANNER ⊕ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

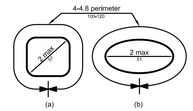
DOLLAR GENERAL (PLAN "E") (STORE #18146)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
SPRINGHILL ROAD AND NORTHLAKE ROAD
ALEXANDER, ARKANSAS

SPECIFICATIONS
PROJECT #
1611
OCT. 24, 2016

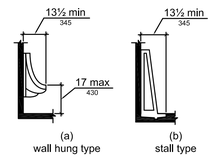
SP-2
SHEET 2 of 3



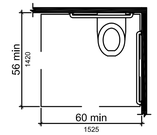
SPACING OF GRAB BARS



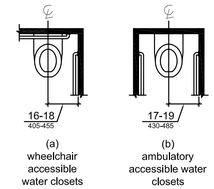
GRAB BAR NON-CIRCULAR CROSS SECTION



HEIGHT AND DEPTH OF URINALS



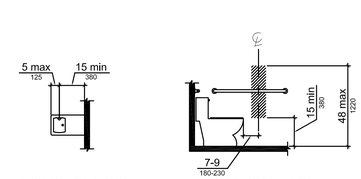
SIZE OF CLEARANCE AT WATER CLOSETS



WATER CLOSET LOCATION

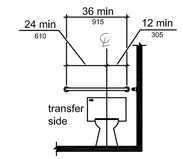
Convention	Description
36 / 915	dimension showing English units (in inches unless otherwise specified) above the line and SI units (in millimeters unless otherwise specified) below the line
6 / 150	dimension for small measurements
33-36 / 840-915	dimension showing a range with minimum - maximum
min	minimum
max	maximum
>	greater than
≥	greater than or equal to
<	less than
≤	less than or equal to
	boundary of clear floor space or maneuvering clearance
	centerline
	a permitted element or its extension
	direction of travel or approach
	a wall, floor, ceiling or other element cut in section or plan
	a highlighted element in elevation or plan
	location zone of element, control or feature

WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT TOE CLEARANCE

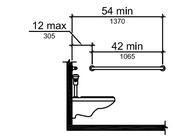


DRINKING FOUNTAIN SPOUT LOCATION

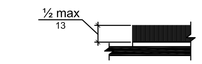
DISPENSER OUTLET LOCATION



REAR WALL GRAB BAR AT WATER CLOSETS

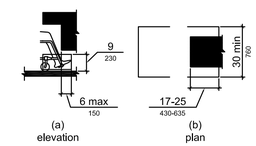


SIDE WALL GRAB BAR AT WATER CLOSETS

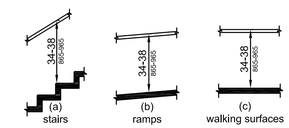


CARPET PILE HEIGHT

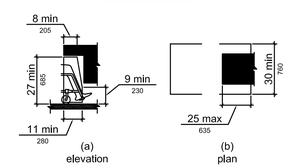
VERTICAL CHANGE IN LEVEL



TOE CLEARANCE



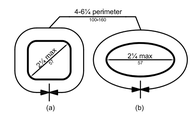
HANDRAIL HEIGHTS



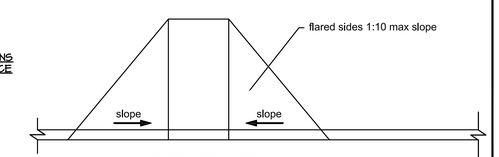
KNEE CLEARANCE

HANDRAIL CLEARANCE

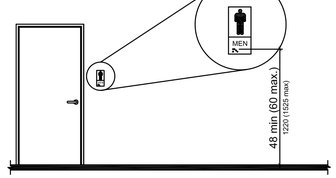
HORIZONTAL PROJECTIONS BELOW GRIPPING SURFACE



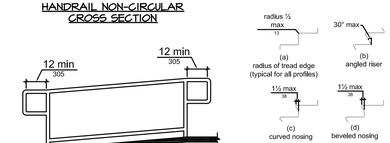
HANDRAIL NON-CIRCULAR CROSS SECTION



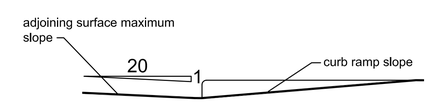
SIDE OF CURB RAMPS



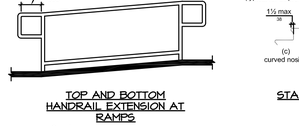
HEIGHT OF TACTILE SIGN CHARACTERS ABOVE FINISH FLOOR



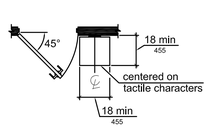
STAIR NOSINGS



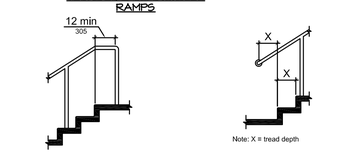
COUNTER SLOPE OF SURFACES ADJACENT TO CURB RAMPS



TOP AND BOTTOM HANDRAIL EXTENSION AT RAMPS

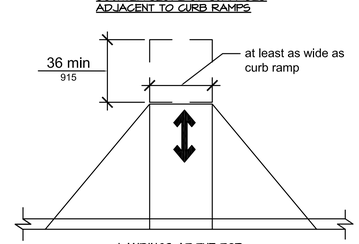


LOCATION OF TACTILE SIGNS AT DOORS



TOP HANDRAIL EXTENSION AT STAIRS

TOP HANDRAIL EXTENSION AT STAIRS



LANDINGS AT THE TOP OF CURB RAMPS

REGISTERED ARCHITECT
DANIEL BARTLETT
10-24-2016
AL2263
ARKANSAS

BARTLETT, ARCHITECTURE, inc.
ARCHITECT ✦ PLANNER ✦ DESIGNER
603 HWY #5 NORTH BENTON, ARKANSAS 72019
DANIEL BARTLETT A.I.A., NCARB 501-794-4448

DOLLAR GENERAL (PLAN "E") (STORE #17561)
2016 PROTOTYPE CRITERIA SET PLAN "E" (RELEASE 2-22-2016)
US HIGHWAY 67
MALVERN, ARKANSAS

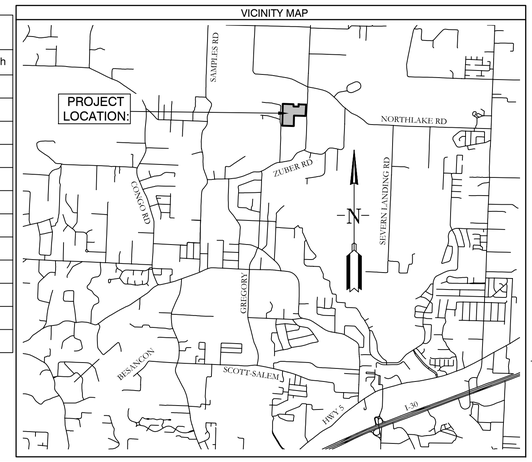
ADA DETAILS
PROJECT # 1607
JUNE 17, 2016

AD.1
SHEET 3 OF 3

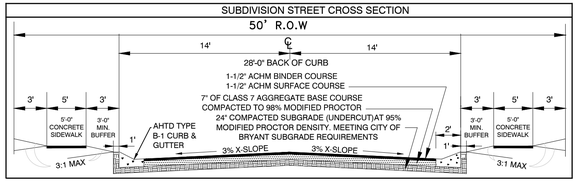
Curve Table

Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	38.58	25.00	88°24'49"	N47° 38' 40"E	34.86
C2	39.96	25.00	91°35'11"	N42° 21' 20"W	35.84
C3	38.58	25.00	88°24'49"	N47° 38' 40"E	34.86
C4	39.96	25.00	91°35'11"	S42° 21' 20"E	35.84
C5	39.28	25.00	90°00'48"	N46° 50' 41"E	35.36
C6	39.26	25.00	89°59'12"	S43° 09' 19"E	35.35
C7	7.36	50.00	8°25'57"	S0° 32' 25"E	7.35
C8	74.39	50.00	85°14'36"	S47° 22' 42"E	67.72
C9	71.16	50.00	81°32'27"	N49° 13' 46"E	65.30
C10	73.27	50.00	83°57'43"	N33° 31' 18"W	66.89
C11	15.67	14.00	64°08'11"	N43° 26' 04"W	14.87
C12	3.23	14.00	13°12'16"	N4° 45' 51"W	3.22

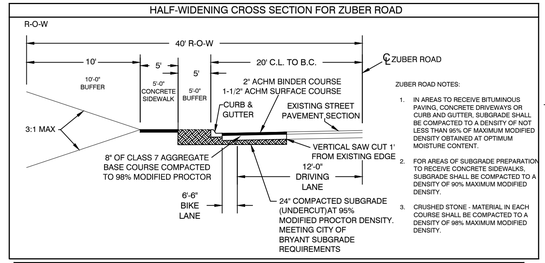
VICINITY MAP



SUBDIVISION STREET CROSS SECTION



HALF-WIDENING CROSS SECTION FOR ZUBER ROAD



ZUBER ROAD NOTES:

1. IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95% OF MAXIMUM MODIFIED DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT.
2. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO A DENSITY OF 90% MAXIMUM MODIFIED DENSITY.
3. CRUSHED STONE - MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF 98% MAXIMUM MODIFIED DENSITY.

50' 25' 0 50'

CERTIFICATE OF AUTHORIZATION — GarNat Engineering, LLC. No. 2174 — ARKANSAS

STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — NO. 7996 — KELLY D. VANLANDINGHAM — 11.2.16

PROPERTY SPECIFICATIONS:

ZONING CLASSIFICATION: R-1.S

MIN. LOT SIZE: 7,820 S.F.
NUMBER OF LOTS: 41
SOURCE OF WATER: SALEM WATER
SOURCE OF SEWER: CITY OF BRYANT

BUILDING SETBACKS:
FRONT - 25' OR AS SHOWN
REAR - 20' OR AS SHOWN
SIDE - 8' OR AS SHOWN

EASEMENTS: UTILITY & DRAINAGE (D.E. & U.E.)
FRONT - 10' OR AS SHOWN
REAR - 10' OR AS SHOWN
SIDE - 5' OR AS SHOWN
STREET RIGHT OF WAYS: 50' OR AS SHOWN
STREET WIDTH: 28' BOC TO BOC
LOT CORNERS: SET #4 REBAR WITH CAP

BASIS OF BEARINGS:

BENCHMARK(S) PROVIDED ARE REBAR AND COORDINATES ON BENCHMARKS ARE NORTH AMERICAN DATUM 1983, ARKANSAS SOUTH ZONE, US SURVEY FEET, GRID COORDINATES AND ELEVATIONS ARE NAVD 1988. COORDINATES AND ELEVATIONS WERE ESTABLISHED USING GPS AND WERE PROCESSED USING THE NATIONAL GEODETIC SURVEY'S "ONLINE POSITIONING USER SERVICE" (OPUS).

CERTIFICATIONS:

By affixing my seal and signature, I Kelly D. Vanlandingham, PLS No. 1447, hereby certify that this drawing correctly depicts a survey compiled under my supervision.

According the the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Saline County unincorporated areas, panel # 05125C0225D dated 6/19/2012 , no portion , dated of the property described hereon does lie within the 100 year flood hazard boundary.

STATE OF ARKANSAS — REGISTERED PROFESSIONAL SURVEYOR — NO. 1447 — KELLY D. VANLANDINGHAM — 11.2.16

PROPERTY DESCRIPTION:

PROPERTY DESCRIPTION: (DATE OF SURVEY JUNE 2016)
A PART OF THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 12; TOWNSHIP 1 SOUTH; RANGE 15 WEST; SALINE COUNTY, ARKANSAS; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 12; THENCE N 1° 30' 03" E A DISTANCE OF 630.67 FEET ALONG THE EAST LINE OF SAID SECTION 12 TO A POINT; THENCE N 88° 06' 35" W A DISTANCE OF 105.90 FEET, BEING ON THE WEST RIGHT OF WAY LINE OF ZUBER ROAD AND THE **POINT OF BEGINNING**; THENCE, LEAVING SAID RIGHT OF WAY, N 88° 06' 35" W A DISTANCE OF 644.88 FEET; THENCE N 1° 30' 03" E A DISTANCE OF 575.72 FEET; THENCE S 88° 08' 55" E A DISTANCE OF 31.73 FEET; THENCE N 1° 51'05"E A DISTANCE OF 115.00 FEET; THENCE S 88° 08' 55" E A DISTANCE OF 635.82 FEET, BEING ON THE WEST RIGHT OF WAY LINE OF ZUBER ROAD; THENCE, ALONG SAID WEST RIGHT OF WAY LINE, S 3° 26' 16" W A DISTANCE OF 691.41 FEET TO THE **POINT OF BEGINNING**. CONTAINING 10.33 ACRES, OR 449,955 SQ. FEET, MORE OR LESS.

SURVEY LEGEND
- △ - Computed point
- ● - Found monument
- ◉ - Set #4 RB/Plas. Cap
- (M)-Measured
- (R)-Record
- (P)-Platted

PLAT CERTIFICATES:

OWNER:
Name: Thomas D.B. Collins, Ltd.
Address: 39 Walnut Valley, Little Rock, AR 72211

DEVELOPER:
Name: Thomas D.B. Collins, Ltd.
Address: 39 Walnut Valley, Little Rock, AR 72211

CERTIFICATE OF OWNER:
We, the undersigned, owners of the real estate shown and described herein do hereby certify that we have laid off, platted and subdivided, and do hereby lay off, plat and subdivide said real estate in accordance with the within plat.

Date of Execution
Source of Title

Name
Address
D.R. _____ Page _____

Source of Title: _____
Saline County Document# 2016-11808 & 2016-12187

CERTIFICATE OF ENGINEERING ACCURACY:
I, Kelly D. Vanlandingham, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actually exist and their locations, size, type, and material are correctly shown; and that all requirements of the City of Bryant Subdivision Rules and Regulations have been fully complied with.

Date: _____ Signed: _____
Kelly D. Vanlandingham
Registered Professional Engineer
No. 7996, Arkansas

CERTIFICATE OF RECORDING:
This document, number_____is filed for record this_____day of_____, 20__, at a.m./p.m. in Plat or Deed Book_____Page_____.
For Bill of Assurance see Deed Record Book____Page___.

Circuit Clerk

CERTIFICATE OF FINAL PLAT APPROVAL:
Pursuant to the City of Bryant Subdivision Rules and Regulations, this document was given approval by the Bryant Planning Commission at a meeting held _____, 2016. All of the document is hereby accepted, and this certificate executed under the authority of said rules and regulations.

Date: _____
Name, Chairman
Bryant Planning Commission

Approval of the final plat shall become null and void unless said plat is filed for record within one hundred twenty (120) days from the date of execution of this certificate.

DATE	REVISION	BY

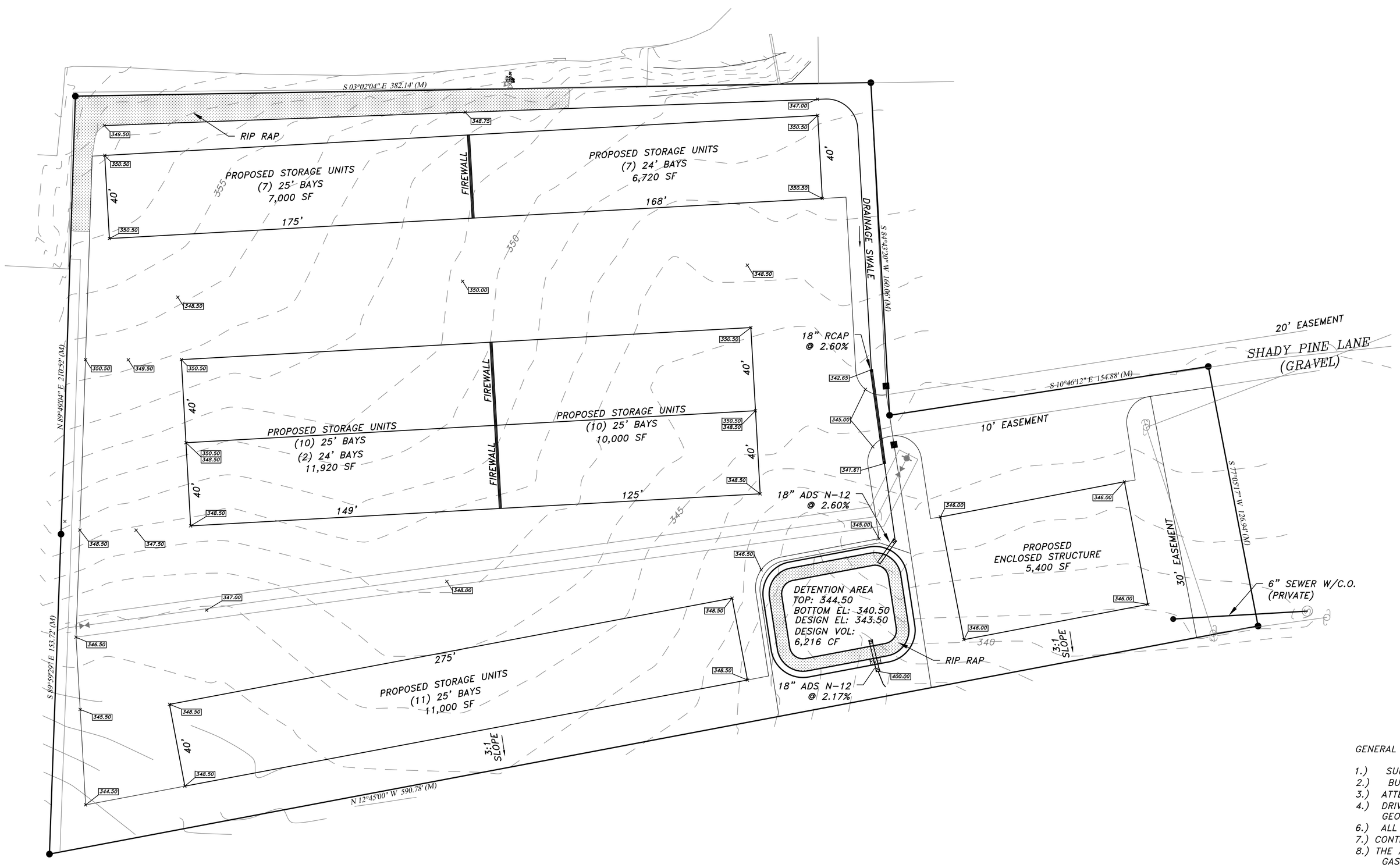
GNE Designing our client's success
GarNat Engineering, LLC
P.O. Box 116 (72018)
406 W. South St. Suite B
BRYANT, AR 72015
Ph (501) 408-4650
Fx (888) 900-3068
garnatengineering@gmail.com

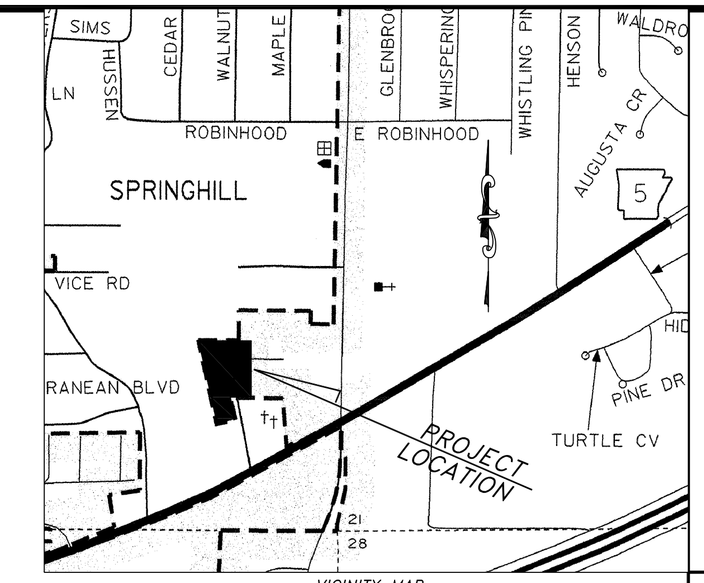
BENJAMIN GROVE SUBDIVISION
FOR THOMAS D.B.COLLINS, LTD.
PART OF THE SE/4 NE/4 OF
SECTION 12, T-1-S, R-15-W,
CITY OF BRYANT,
SALINE COUNTY, ARKANSAS

CONTENTS:
FINAL PLAT

PROJECT NO: 16025
DATE: NOV 2016
SHEET NO: 1

J:\Projects\2016 Projects\16025 Benjamin Grove Lee Perryman\DWG\16025 Benjamin Grove Subd - R15.dwg



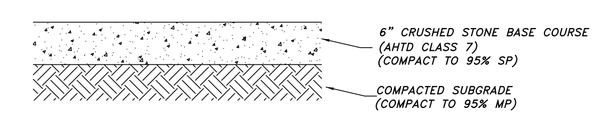


VICINITY MAP
N.T.S.

GRAPHIC SCALE

30 0 30 60 90

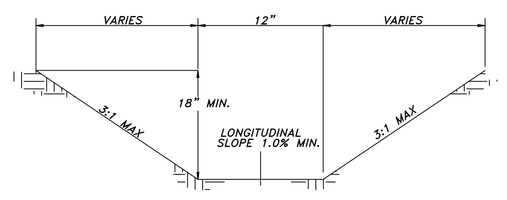
(IN FEET)
1 inch = 30 ft.



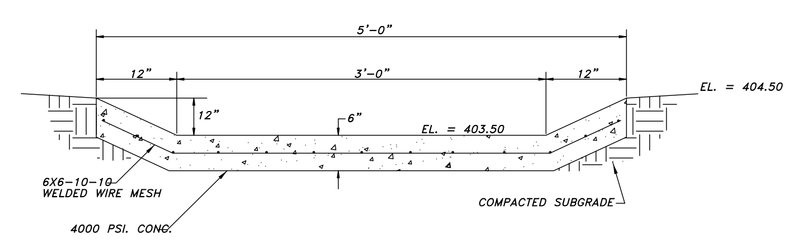
PAVEMENT STRUCTURE
NTS
(TO BE VERIFIED W/ GEOTECHNICAL CONSULTANT PRIOR TO CONSTR.)

GENERAL NOTES:

1.) SURVEYING PROVIDED BY SOUTH POINT SURVEYING, PLLC.
2.) BUILDING LINES TO BE AS NOTED ON SITE PLAN.
3.) ATTENTION IS CALLED TO CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
4.) DRIVING SURFACE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS PLAN AND BASED ON GEOTECHNICAL ANALYSIS OF THE SOIL CONDITIONS.
6.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY OF BRYANT, ETC.).
7.) CONTRACTOR TO ADHERE TO CURRENT OSHA EXCAVATION & TRENCH SAFETY REGULATIONS.
8.) THE APPROXIMATE LOCATION OF KNOWN SURFACE AND SUBSURFACE STRUCTURES, PIPES, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE DESIGN DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SOWN.



TYPICAL DITCH SECTION
N.T.S.



SPILLWAY DETAIL
N.T.S.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 14266
ERIC RYAN RICHARDSON

CERTIFICATE OF AUTHORIZATION
Richardson Engineering PLLC
No. 2519
ARKANSAS

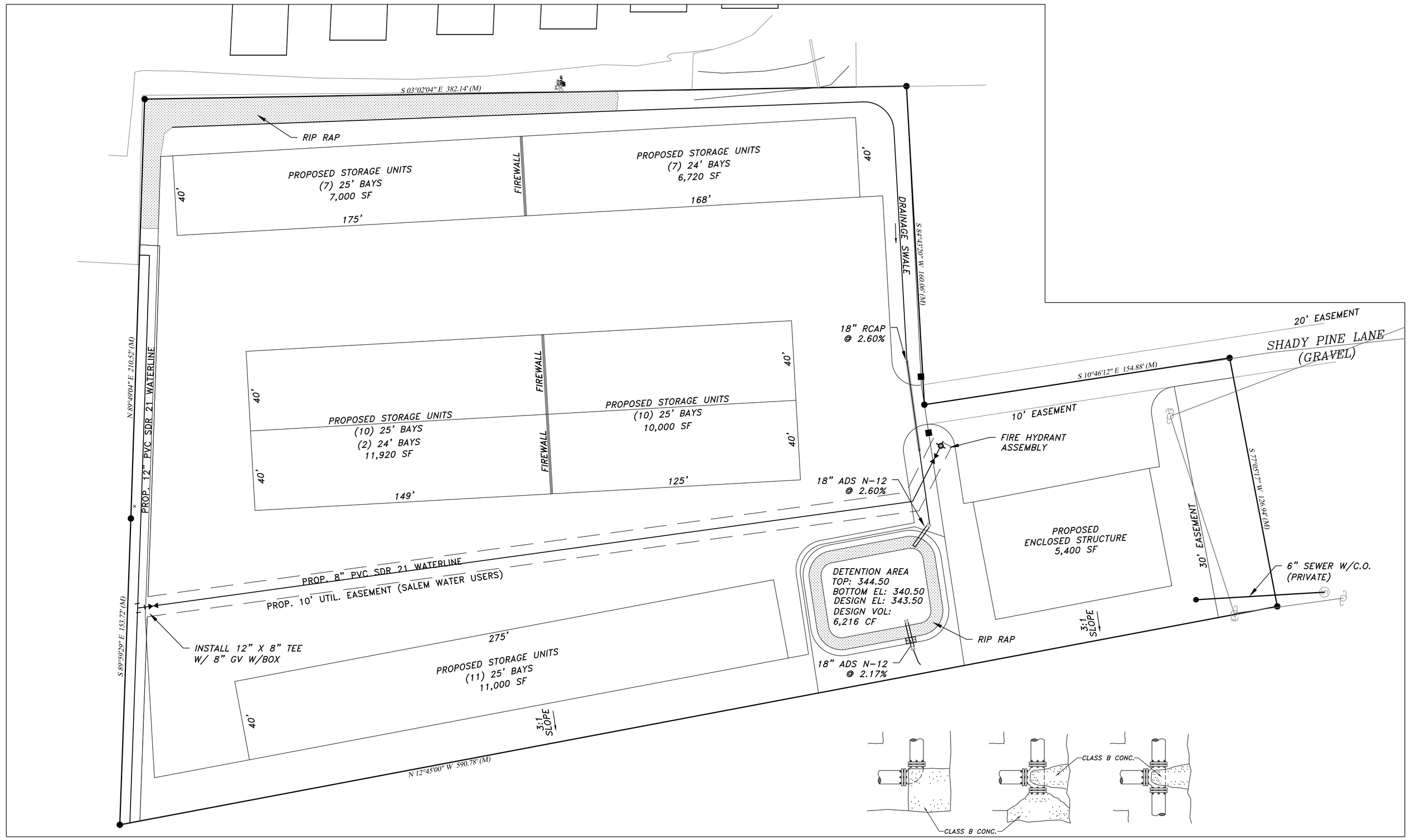
RICHARDSON ENGINEERING, PLLC
CIVIL ENGINEERING:
WATER/WASTEWATER • SITE
DEVELOPMENT • SUBDIVISIONS
P.O. BOX 192
BENTON, AR 72018
PHONE: (501) 249-3141

GRADING PLAN
LOT 1, SCHRADER COMMERCIAL ADDITION
PART OF THE SOUTHEAST 1/4 OF THE
SOUTHEAST 1/4, SECTION 20, T-1-S, R-14-W

Prepared For:
Alan Schrader
P.O. Box 824
Bryant, AR 72089

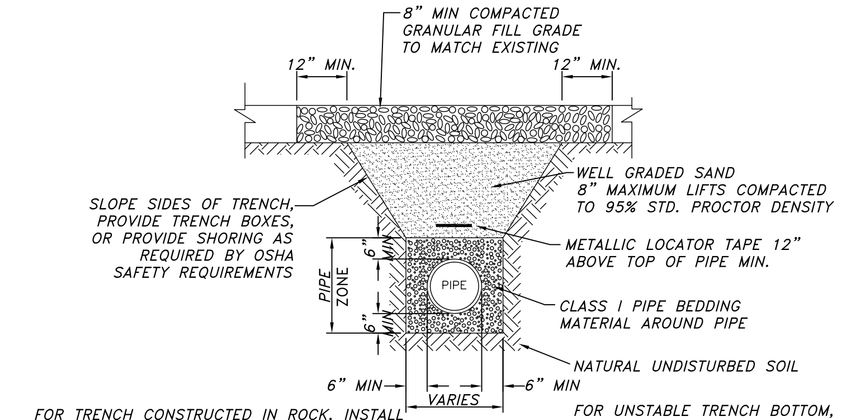
No.	Revisions	Date

Scale: 1" = 30'
Date: NOVEMBER 2016
Sheet: 3 of 5



NOTE: POLYWRAP TO EXIST BETWEEN FITTINGS & CONCRETE BLOCKING

TYPICAL BLOCKING FOR FITTINGS
NTS



FOR TRENCH CONSTRUCTED IN ROCK, INSTALL CRUSHED STONE OR WASHED GRAVEL, 3/4" TO 1/4", FROM 6" BELOW BOTTOM OF PIPE TO 6" ABOVE TOP OF PIPE.

FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED STONE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.

* SEWER FORCEMAIN CONSTRUCTION REQUIRES TRACER WIRE (12 GAUGE) PLACED ABOVE PIPE

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

SEWER MAIN TRENCH IN GRAVEL PARKING
N.T.S.

GRAPHIC SCALE

30 0 30 60 90

(IN FEET)
1 inch = 30 ft.

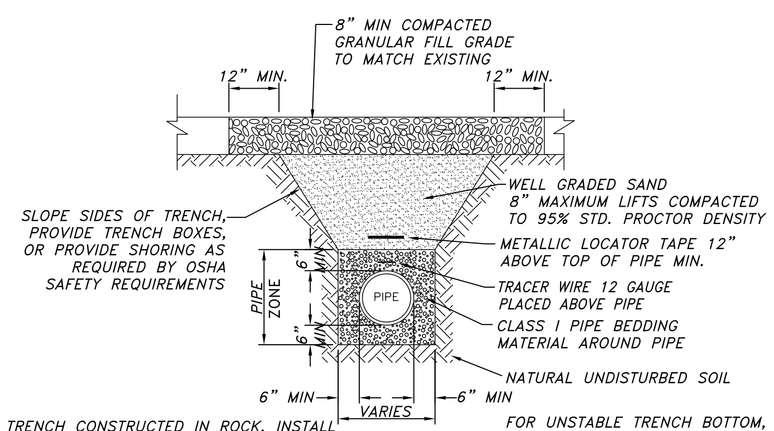
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 14266
ERIC RYAN RICHARDSON

GENERAL NOTES:

1.) ATTENTION IS CALLED TO CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
2.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.)
3.) MINIMUM HORIZONTAL SEPARATION BETWEEN WATERLINES AND SEWERLINES SHALL BE 10' UNLESS OTHERWISE SHOWN AND APPROVED.
4.) MINIMUM VERTICAL SEPARATION BETWEEN WATERLINES AND SEWERLINES SHALL BE 18" (WATER ON TOP).
5.) CONTRACTOR TO ADHERE TO CURRENT OSHA EXCAVATION & TRENCH SAFETY REGULATIONS.
6.) THE APPROXIMATE LOCATION OF KNOWN SURFACE AND SUBSURFACE STRUCTURES, PIPES, POWER GAS, PHONE, ETC. ARE SHOWN ON THE DESIGN DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SHOWN.

WATER NOTES:

1.) ALL CONSTRUCTION AND MATERIALS TO MEET OR EXCEED SALEM WATER USERS' SPECIFICATIONS.
2.) ALL WATER MAINS SHALL BE CL 200 SDR 21 PVC.
3.) ALL SERVICE LINES AND METER SETTINGS SHALL BE AS PER SALEM WATER SPECIFICATIONS.
4.) 14ga BLUE COATED COPPER TRACING WIRE TO BE INSTALLED WITH ALL WATERLINES (MAINS & SERVICES).
5.) ALL FITTINGS SHALL BE DUCTILE IRON M.J. (WHERE AVAILABLE).
6.) ATTENTION IS CALLED TO CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
7.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.)
8.) CONTRACTOR SHALL ADHERE TO CURRENT OSHA REGULATIONS FOR EXCAVATION & TRENCH SAFETY.
9.) VALVES SHALL NOT BE PLACED UNDER HARD SURFACES (PAVEMENT, CURB, ETC.) UNLESS ALLOWED BY THE UTILITY OWNER.).
10.) ALL VALVES SHALL HAVE A 2" OPERATING NUT.

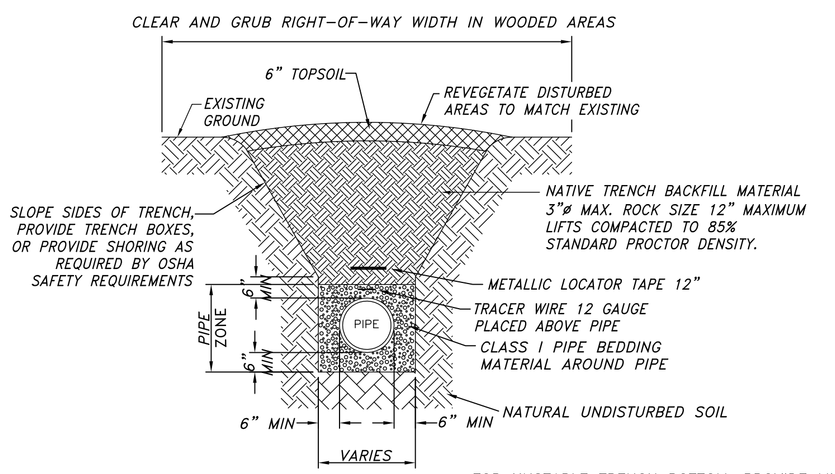


FOR TRENCH CONSTRUCTED IN ROCK, INSTALL CRUSHED STONE OR WASHED GRAVEL, 3/4" TO 1/4", FROM 6" BELOW BOTTOM OF PIPE TO 6" ABOVE TOP OF PIPE.

FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED STONE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

WATER LINE TRENCH IN GRAVEL PARKING
N.T.S.

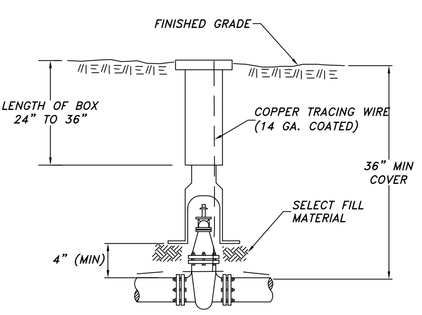


FOR TRENCH CONSTRUCTED IN ROCK, INSTALL CRUSHED STONE OR WASHED GRAVEL, 3/4" TO 1/4", FROM 6" BELOW BOTTOM OF PIPE TO 6" ABOVE TOP OF PIPE.

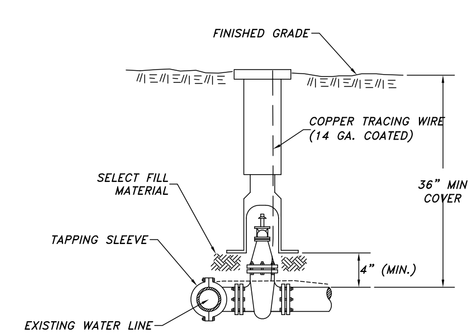
FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF 1 1/2" TO #4 SIZE CRUSHED STONE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.

DISPOSE OF EXCESS EXCAVATED MATERIAL OFF SITE

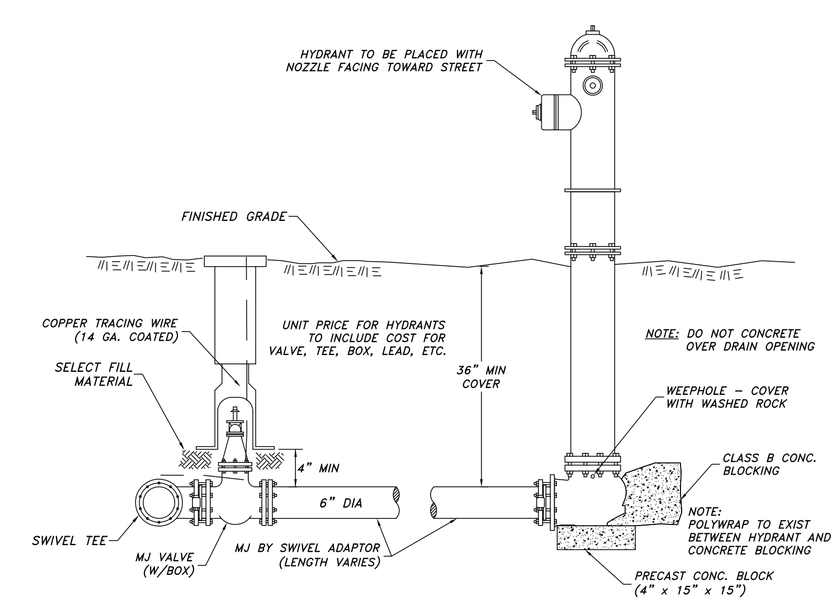
WATER LINE TRENCH IN UNPAVED AREAS
N.T.S.



TYPICAL VALVE SETTING
NTS



TYPICAL CONNECTION TAPPING SLEEVE & VALVE
NTS



TYPICAL - FIRE HYDRANT ASSEMBLY
NTS

RICHARDSON ENGINEERING, PLLC
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CERTIFICATE OF AUTHORIZATION
Richardson Engineering PLLC
No. 2519
ARKANSAS

UTILITY PLAN
LOT 1, SCHRADER COMMERCIAL ADDITION
PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 20, T-1-S, R-14-W

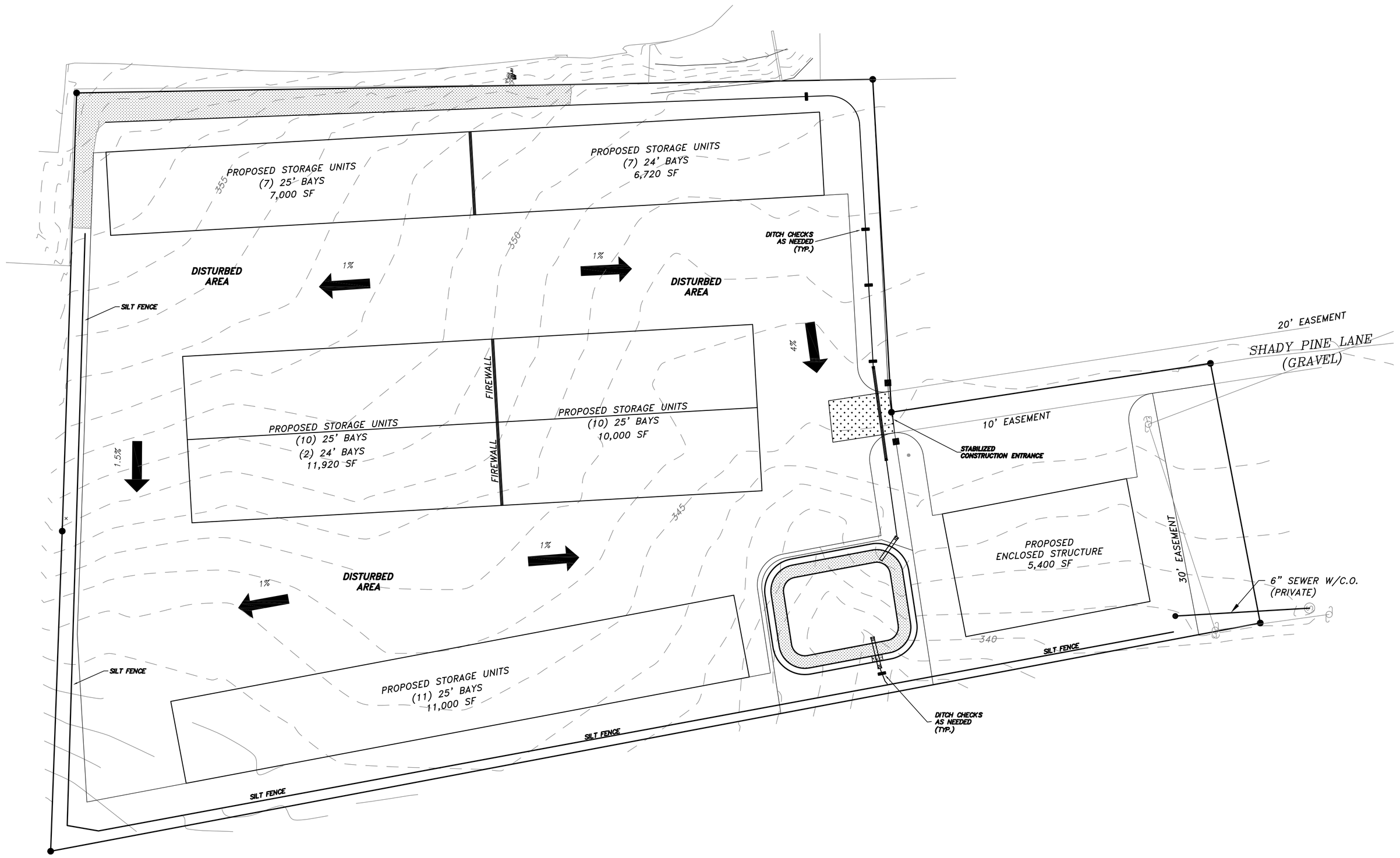
Prepared For:
Alan Schrader
P.O. Box 824
Bryant, AR 72089

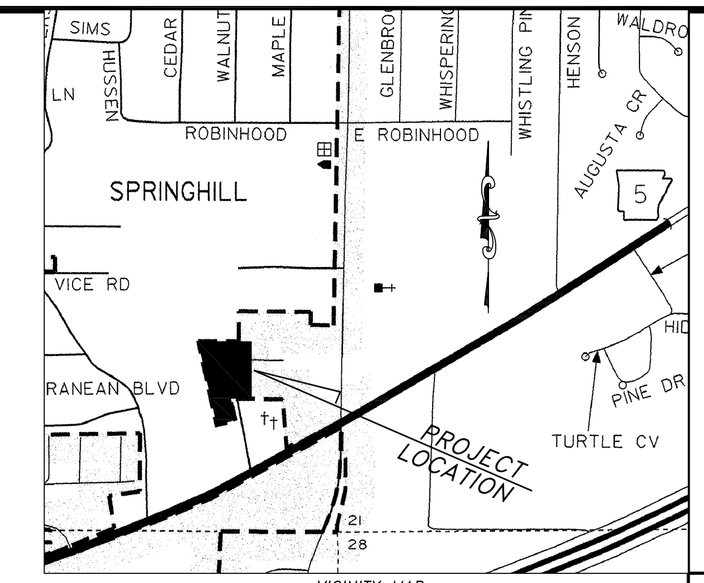
No.	Revisions	Date

Date: NOVEMBER 2016

Scale: 1" = 30'

Sheet: 4 of 5



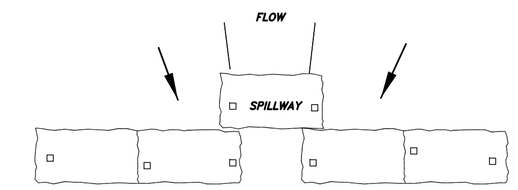


VICINITY MAP
N.T.S.

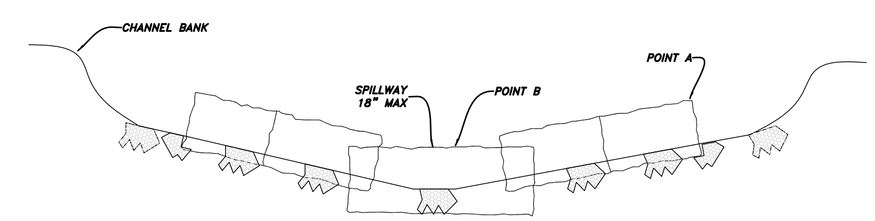
GRAPHIC SCALE

30 0 30 60 90

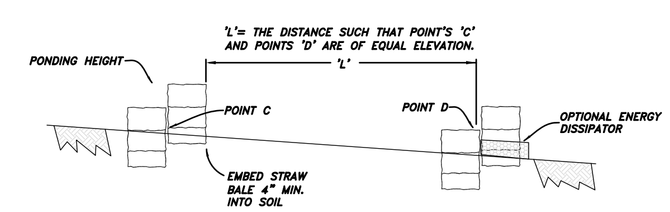
(IN FEET)
1 inch = 30 ft.



PLAN



VIEW LOOKING UPSTREAM

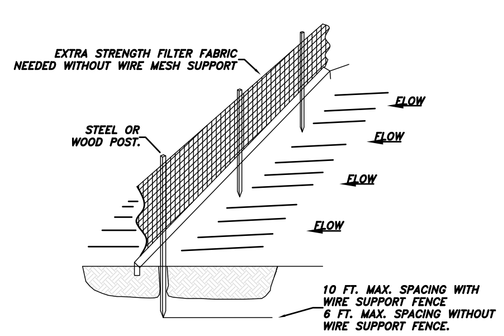


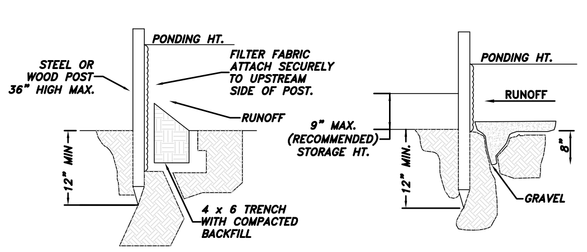
SECTION A–A
SPACING BETWEEN CHECK DAMS

NOTES:

1.) EMBED BALES 4" INTO THE SOIL AND "KEY" BALES INTO THE CHANNEL BANKS.
2.) POINT 'A' MUST BE HIGHER THAN POINT 'B' (SPILLWAY HEIGHT)
3.) PLACE BALES PERPENDICULAR TO THE FLOW WITH ENDS TIGHTLY ABUTTING. USE STRAW, ROCKS OR FILTER FABRIC TO FILL ANY GAPS AND TAMP BACKFILL MATERIAL TO PREVENT EROSION OR FLOW AROUND THE BALES.
4.) SPILLWAY HEIGHT SHALL NOT EXCEED 18".
5.) INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.
6.) SPACING OF CHECK DAMS ARE AS SHOWN.

STRAW BALE
CHECK DAM





STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL
TRENCH WITH GRAVEL

NOTE:
1.) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.

2.) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF–SITE AND CAN BE PERMANENTLY STABILIZED.

3.) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

SILT FENCE

3.0%

GENERAL NOTES:

1.) IMPROVEMENTS SHALL ADHERE TO CITY OF BRYANT AND ADEQ STORMWATER REQUIREMENTS.
2.) A SILT FENCE AND STRAW BALE DIKE SHALL BE PLACED AT POTENTIAL LOCATIONS OF HEAVY EROSION.
3.) TEMPORARY STRAW BALE DIKES ARE TO BE CONSTRUCTED NOT TO POND WATER ON ADJACENT PROPERTY.
4.) ROCK DIKE CHECK DAMS TO BE CONSTRUCTED TO MEET ADEQ REQUIREMENTS WHEN USED IN LIEU OF STRAW BALE DIKES.
5.) ALL TEMPORARY EROSION CONTROLS SHALL BE MAINTAINED UNTIL ALL CONSTRUCTION IS COMPLETE & PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
6.) ONE OF THE FOLLOWING GROUND COVER METHODS SHALL BE USED AT AREAS OF CLEARING OTHER THAN FUTURE PAVEMENT SURFACES.
STRAW OR HAY–LOOSE 2.0 TONS/ACRE
STRAW OR HAY–TIED, ANCHORED, OR TACKED 1.5 TONS/ACRE
7.) SOIL EXPOSED FOR MORE THAN 21 DAYS WITH NO CONSTRUCTION ACTIVITY SHALL BE SEEDED OR REEMITTED.
8.) CONSTRUCTION ENTRANCES/EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF MUD INTO PUBLIC RIGHT–OF–WAY.
9.) ADDITIONAL EROSION CONTROL MEASURES TO BE EMPLOYED WHERE NECESSARY BY SITE CONDITIONS.
10.) CONTRACTOR SHALL USE "BEST MANAGEMENT PRACTICES" (BMP'S) WHEN IMPLEMENTING & MAINTAINING SEDIMENT & RUN–OFF CONTROLS.

RICHARDSON ENGINEERING, PLLC
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CERTIFICATE OF AUTHORIZATION
Richardson Engineering PLLC
No. 2519
ARKANSAS

EROSION CONTROL/SWPPP
SITE MAP
LOT 1, SCHRADER COMMERCIAL ADDITION
PART OF THE SOUTHEAST 1/4 OF THE
SOUTHEAST 1/4, SECTION 20, T–1–S, R–14–W

Prepared For:
Alan Schrader
P.O. Box 824
Bryant, AR 72089

No.	Revisions	Date

Scale: 1" = 30'
Date: NOVEMBER 2016
Sheet: 5 of 5

ALAN SCHRADER COMMERCIAL ADDITION

CALC. UPSTREAM RUN OFF

$t_c = t_i + t_t$, $S = 18'/372' = 4.84\%$, $L = 372'$, $A = 3.06$ AC

$$t_i = 0.83\left(\frac{NL}{S^{.5}}\right)^{.467} = .83\left(\frac{(.4)(372')}{(.043)^{.5}}\right)^{.467} = 17.90 \text{ MIN.}$$

@ $t_c = 17.9$ MIN., $I_{100} = 7$

UPSTREAM RUN OFF $\Rightarrow Q_{100} = (.6)(7)(3.06) = \underline{12.85 \text{ CFS}}$

$Q_{25} = (.6)(5.7)(3.06) = \underline{10.47 \text{ CFS}}$

PROJECT SITE RUN OFF

PROPERTY DRAINS TO EAST SIDE AND TO WEST SIDE, BUT TO THE SAME DRAINAGE BASIN OFF SITE.

WEST SIDE OF PROPERTY – PRE DEV.

$A = 1.13$ AC

$t_c = t_i$ $L = 410$, $S = (359-339)/410 = 4.88\%$

$$t_c = .83\left(\frac{.3\,(410)}{(.0488)^{.5}}\right)^{.467} = 15.90 \text{ MIN}$$

I_{25} @ $t_c = 15.9$ MIN. $= 6.0$

I_{100} @ $t_c = 15.9$ MIN. $= 7.3$

$Q_{25} = (.35)(6.0)(1.13) = 2.37$ CFS

$Q_{100} = (.35)(7.3)(1.13) = 2.89$ CFS

WEST SIDE OF PROP. – POST DEV.

$A = 1.38$ AC

$t_c = t_i$, $L = 400$, $S = 1\%$

$$t_c = .83\left(\frac{(.2)(400)}{(.01)^{.5}}\right)^{.467} = 18.83 \text{ MIN.}$$

$I_{25} = 5.5$

$I_{100} = 6.8$

$Q_{25} = (.5)(5.5)(1.38 \text{ AC}) = 3.8$ CFS

$Q_{100} = (.5)(6.8)(1.38 \text{ AC}) = 4.69$ CFS

FLOW TO DETAIN $= 4.69 - 2.89 = 1.8$ CFS
(100 YR STORM)

EAST SIDE OF PROPERTY - PRE-DEV.

A = 2.35 AC

$t_c = t_i$, $L = 427$, $S = (356-338)/427 = 4.2\%$

$t_c = .83\left(\frac{.3(427)}{(.042)^{.5}}\right)^{.467} = 16.78$ MIN.

$I_{25} = 5.9$, $Q_{25} = (.35)(5.9)(2.35) = 4.85$ CFS

$I_{100} = 7.1$, $Q_{100} = (.35)(7.1)(2.35) = 5.84$ CFS

EAST SIDE OF PROPERTY - POST DEV.

FLOW TO DETAIN = 8.10 - 5.84 (100 YR STORM) = 2.26 CFS

A = 2.10 AC

$t_c = t_i + t_t$, $L = 200$, $S = .011$

$t_c = .83\left(\frac{.2(200)}{(.011)^{.5}}\right)^{.467} = 13.32$ MIN.

$t_t = 108/3.12$ FT/S $= 33.75/60 = .56$ MIN.

$t_c = 13.32 + .56 = 13.88$

$I_{25} = 6.3$, $Q_{25} = (.5)(6.3)(2.10) = 6.62$ CFS

$I_{100} = 7.7$, $Q_{100} = (.5)(7.7)(2.10) = 8.10$ CFS

- TOTAL RUNOFF TO DETAIN = (1.8 CFS + 3.1 CFS) = 4.9 CFS
- TOTAL RUN OFF TO ALLOW THROUGH DETENTION DISCHARGE =

$= Q_{25\ PRE\ DEV\ (E.SIDE)} + (Q_{25\ POST} - Q_{25\ PRE\ -W.SIDE}) =$

$Q_{DISCHARGE} = 4.85$ CFS + (3.8 - 2.37 CFS) = 6.28 CFS + 10.47 CFS (UPSTREAM 25 YR) = 16.75 CFS

- $Q_{SPILLWAY} = 8.10$ CFS - 6.28 CFS = 1.82 CFS + (12.85 - 10.47) UPSTREAM 100 YR = 4.20 CFS

DETENTION POND SIZED TO HANDEL DIFFERENTIAL FROM WEST SIDE + DIFFERENTIAL FROM EAST SIDE. VOL REQ'D FOR 100 YR STORM = 3194 CF + 2959 CF

TOTAL VOLUME = 6153 CF

SEE ATTACHMENTS "A" & "B" FOR DETENTION VOLUME CALCULATIONS

- SIZE OUTFALL PIPE FOR DET. BASIN:

16.75 CFS (FROM PAGE 2)

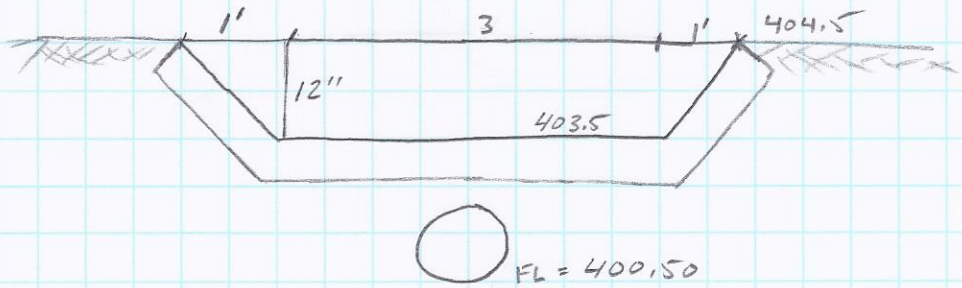
USE 18" ADS-N-12

$Q = 16.75$ CFS $\Rightarrow$ $16.75 \text{ CFS} = 113.8\sqrt{S}$

$S = 2.17\%$

<u>USE 18" ADS @ 2.17%</u>

- SIZE OVERFLOW: $Q = 3.367\,bH^{3/2} = 3.367(4)(1)^{3/2} = 13.47 \text{ CFS} > 4.2 \text{ CFS}$

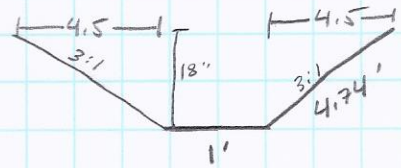


<u>DRAINAGE SWALE MIN. SECTION</u> -

<u>MUST HANDLE</u> 12.85 CFS (OFF SITE 100 yr) + N.E. 1/4 OF SITE (.5 x 8.1 CFS)

= <u>16.90 CFS</u>

CHECK MIN. SECT.:



$$Q = \frac{1.49}{.03}(8.25)\left(\frac{8.25}{10.48}\right)^{2/3}\sqrt{.01} = 34.93 \text{ CFS} \checkmark$$

- PIPE UNDER ROAD: $Q = 16.90$ CFS

$Q = 105.1\sqrt{S}$, FOR 18" RCAP

$S = 2.6\%$

ATTACHMENT "A"

Schrader Commercial Addition (West Side of Property)

STORMWATER DETENTION CALCULATIONS

	Condition	
	Undeveloped	Developed
Drainage Area (acres)	1.13	1.38
Runoff Coefficient, C	0.35	0.50
Time of Concentration (min)	16	19

Intensity (in/hr)				Increase
I_2	=	3.90	3.70	-0.20
I_5	=	4.60	4.40	-0.20
I_{10}	=	5.20	4.90	-0.30
I_{25}	=	6.00	5.50	-0.50
I_{50}	=	6.70	6.30	-0.40
I_{100}	=	7.30	6.80	-0.50

Maximum Release Rates (cfs)				Increase
Q_2	=	1.54	2.55	1.01
Q_5	=	1.82	3.04	1.22
Q_{10}	=	2.06	3.38	1.32
Q_{25}	=	2.37	3.80	1.42
Q_{50}	=	2.65	4.35	1.70
Q_{100}	=	2.89	4.69	1.80

Detention Volume Calculations (Design)
100 Year Design Storm

t min	I in/hr	Q_{in} cfs	$t \times Q_{in} \times 60$ cf	$.5 \times Q_{out} \times (t + tc) \times 60$ cf	Volume cf
5	10.00	6.90	2070	2064	6
10	8.50	5.87	3519	2497	1022
15	7.50	5.18	4658	2930	1727
20	6.70	4.62	5548	3363	2184
25	6.05	4.18	6263	3796	2467
30	5.50	3.80	6831	4229	2602
35	5.16	3.56	7479	4662	2817
40	4.75	3.28	7866	5096	2770
45	4.68	3.23	8723	5529	3194
50	4.25	2.93	8798	5962	2836
55	4.03	2.78	9165	6395	2770
60	3.80	2.62	9439	6828	2611
120	1.70	1.17	8446	12025	0
180	1.37	0.95	10209	17222	0
Estimated Storage Volume =			3194	At Time =	45

ATTACHMENT "B"

Schrader Commercial Addition (East Side of Property)

STORMWATER DETENTION CALCULATIONS

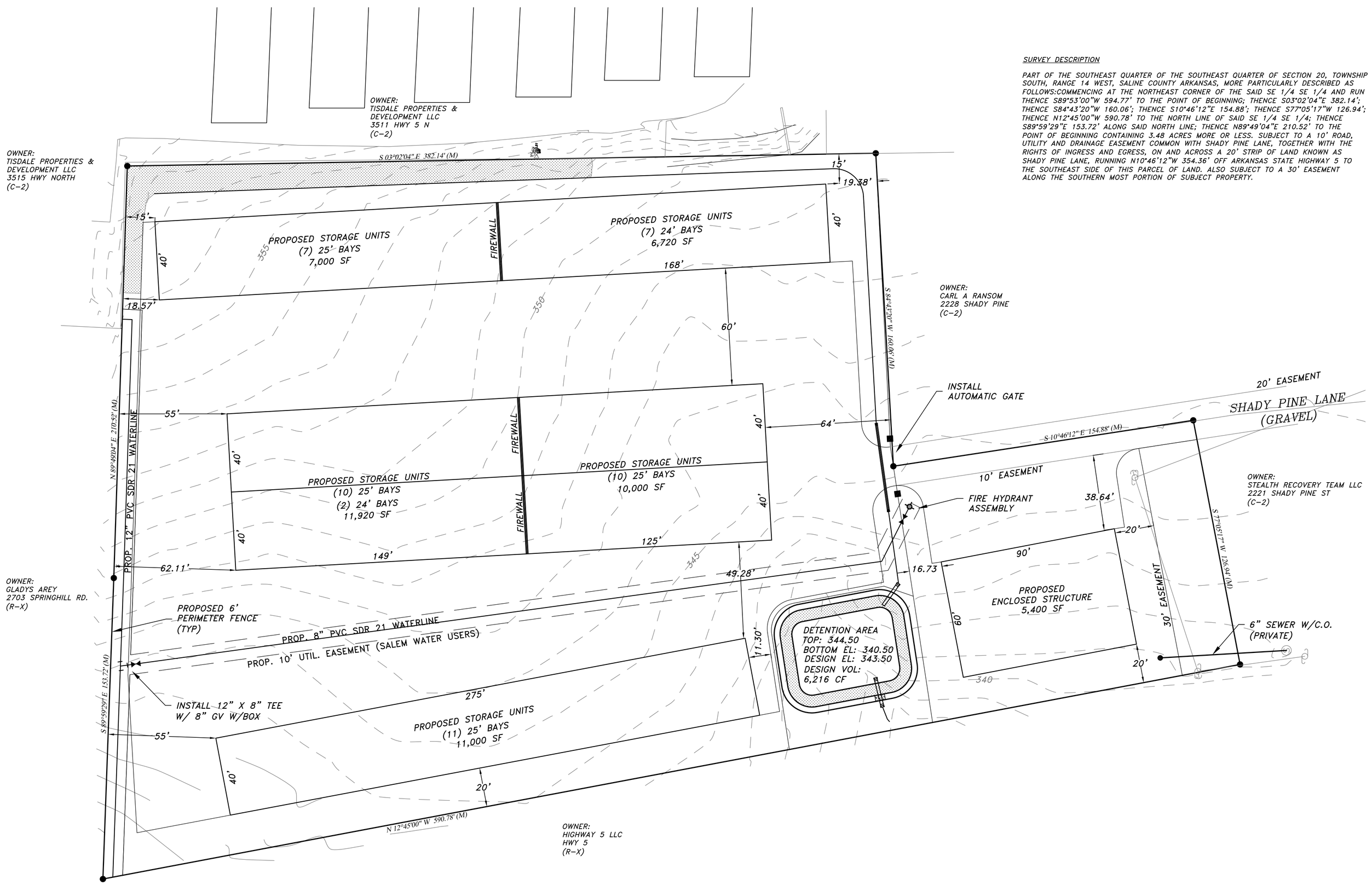
	Condition	
	Undeveloped	Developed
Drainage Area (acres)	2.35	2.1
Runoff Coefficient, C	0.35	0.50
Time of Concentration (min)	17	14

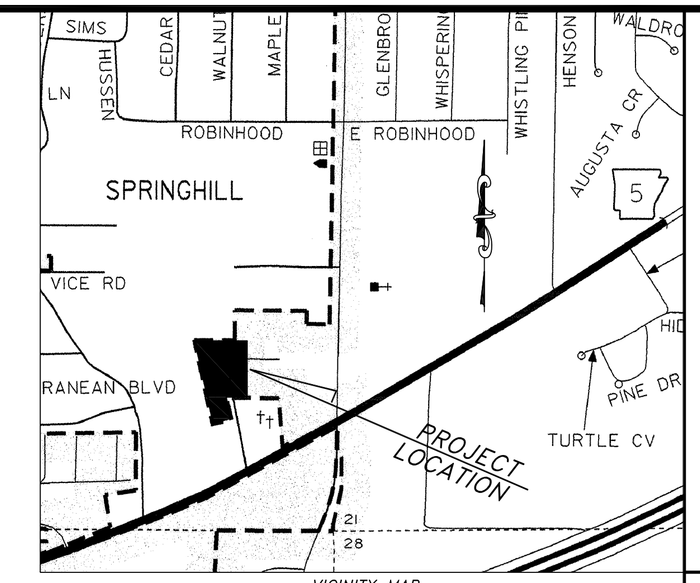
Intensity (in/hr)				Increase
I_2	=	3.80	4.10	0.30
I_5	=	4.60	4.90	0.30
I_{10}	=	5.10	5.40	0.30
I_{25}	=	5.90	6.30	0.40
I_{50}	=	6.60	7.00	0.40
I_{100}	=	7.10	7.70	0.60

Maximum Release Rates (cfs)				Increase
Q_2	=	3.13	4.31	1.18
Q_5	=	3.78	5.15	1.36
Q_{10}	=	4.19	5.67	1.48
Q_{25}	=	4.85	6.62	1.76
Q_{50}	=	5.43	7.35	1.92
Q_{100}	=	5.84	8.09	2.25

Detention Volume Calculations (Design)
100 Year Design Storm

t min	I in/hr	Q_{in} cfs	$t \times Q_{in} \times 60$ cf	$.5 \times Q_{out} \times (t + tc) \times 60$ cf	Volume cf
5	10.00	10.50	3150	3308	0
10	8.50	8.93	5355	4184	1171
15	7.50	7.88	7088	5060	2028
20	6.70	7.04	8442	5936	2506
25	6.05	6.35	9531	6811	2719
30	5.50	5.78	10395	7687	2708
35	5.16	5.42	11382	8563	2818
40	4.75	4.99	11970	9439	2531
45	4.68	4.92	13274	10315	2959
50	4.25	4.46	13388	11191	2196
55	4.03	4.23	13947	12067	1879
60	3.80	3.99	14364	12943	1421
120	1.70	1.79	12852	23455	0
180	1.37	1.44	15536	33966	0
Estimated Storage Volume =			**2959**	**At Time =**	**45**





VICINITY MAP
N.T.S.

SURVEY DESCRIPTION

PART OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:COMMENCING AT THE NORTHEAST CORNER OF THE SAID SE 1/4 SE 1/4 AND RUN THENCE S89°53'00"W 594.77' TO THE POINT OF BEGINNING; THENCE S03°02'04"E 382.14'; THENCE S84°43'20"W 160.06'; THENCE S10°46'12"E 154.88'; THENCE S77°05'17"W 126.94'; THENCE N12°45'00"W 590.78' TO THE NORTH LINE OF SAID SE 1/4 SE 1/4; THENCE S89°59'29"E 153.72' ALONG SAID NORTH LINE; THENCE N89°49'04"E 210.52' TO THE POINT OF BEGINNING CONTAINING 3.48 ACRES MORE OR LESS. SUBJECT TO A 10' ROAD, UTILITY AND DRAINAGE EASEMENT COMMON WITH SHADY PINE LANE, TOGETHER WITH THE RIGHTS OF INGRESS AND EGRESS, ON AND ACROSS A 20' STRIP OF LAND KNOWN AS SHADY PINE LANE, RUNNING N10°46'12"W 354.36' OFF ARKANSAS STATE HIGHWAY 5 TO THE SOUTHEAST SIDE OF THIS PARCEL OF LAND. ALSO SUBJECT TO A 30' EASEMENT ALONG THE SOUTHERN MOST PORTION OF SUBJECT PROPERTY.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 14266
ERIC RYAN RICHARDSON

GRAPHIC SCALE

30 0 30 60 90

(IN FEET)
1 inch = 30 ft.

GENERAL INFORMATION:

ZONE CLASSIFICATION: C-2

FRONT SETBACK: 19.38'

SIDE SETBACK: WEST= 10.00' EAST= 15.00'

REAR SETBACK: AS SHOWN

LOT COVERAGE: 37% (85% MAX)

FINISHED FLOOR ELEVATION SHALL PROVIDE FOR POSITIVE DRAINAGE AWAY FROM BUILDING (IN ALL DIRECTIONS)-AS DETERMINED IN THE FIELD.

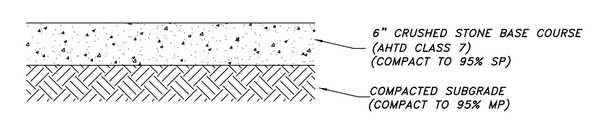
VARIANCES REQUESTED: SETBACKS WHERE PROPERTY BORDERS R-X ZONING

FLOOD CERTIFICATION:

NO PORTION OF THIS PROPERTY APPEARS TO LIE WITHIN ZONE A OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 0360D, WHICH BEARS AN EFFECTIVE DATE OF JUNE 19, 2012.

GENERAL NOTES:

1.) IRON PINS AT ALL LOT CORNERS.
2.) SURVEYING PROVIDED BY SOUTH POINT SURVEYING, PLLC.
3.) DRAINAGE EASEMENT SHALL BE PROVIDED AND DEDICATED TO THE CITY OF BRYANT FOR DRAINAGE IMPROVEMENTS AND DETENTION AREA.
4.) BUILDING LINES TO BE AS NOTED.
5.) THERE ARE NO KNOWN EXISTING EROSION PROBLEMS ON-SITE OR WITHIN 300' DOWNSTREAM OF PROPERTY.
6.) ATTENTION IS CALLED TO CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.
7.) DRIVING SURFACE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS PLAN AND BASED ON GEOTECHNICAL ANALYSIS OF THE SOIL CONDITIONS.
8.) CONTRACTOR SHALL INCLUDE IN BID THE COST FOR COMPACTION TESTS ON SUBGRADE AND BASE.
9.) ALL UTILITIES TO BE LOCATED PRIOR TO CONSTRUCTION (ONE CALL, CITY, ETC.).
10.) CONTRACTOR TO ADHERE TO CURRENT OSHA EXCAVATION & TRENCH SAFETY REGULATIONS.
11.) THE APPROXIMATE LOCATION OF KNOWN SURFACE AND SUBSURFACE STRUCTURES, PIPES, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE DESIGN DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SOWN.



PAVEMENT STRUCTURE
NTS
(TO BE VERIFIED W/ GEOTECHNICAL CONSULTANT PRIOR TO CONSTR.)

RICHARDSON ENGINEERING, PLLC
CIVIL ENGINEERING:
WATER/WASTEWATER • SITE
DEVELOPMENT • SUBDIVISIONS
P.O. BOX 192
BENTON, AR 72018
PHONE: (501) 249-3141

CERTIFICATE OF AUTHORIZATION
Richardson Engineering PLLC
No. 2519
ARKANSAS

SITE PLAN
LOT 1, SCHRADER COMMERCIAL ADDITION
PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION 20, T-1-S, R-14-W

Prepared For:
Alan Schrader
P.O. Box 824
Bryant, AR 72089

No.	Revisions	Date

Scale: 1" = 30'
Date: NOVEMBER 2016
Sheet: 2 of 5